Introduction into machine learning and analyzes of Breast Cancer Proteomes

true

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Dataset

About Dataset

information about the data set and the three give files:

Context: This data set contains published iTRAQ proteome profiling of 77 breast cancer samples generated by the Clinical Proteomic Tumor Analysis Consortium (NCI/NIH). It contains expression values for ~12.000 proteins for each sample, with missing values present when a given protein could not be quantified in a given sample.

Content:

- File: 77cancerproteomesCPTACitraq.csv
 - **RefSeqaccessionnumber:** RefSeq protein ID (each protein has a unique ID in a RefSeq database)
 - gene_symbol: a symbol unique to each gene (every protein is encoded by some gene)
 - **gene_name:** a full name of that gene
 - Remaining columns: log2 iTRAQ ratios for each sample (protein expression data, most important), three last columns are from healthy individuals
- File: clinicaldatabreast_cancer.csv
 - **First column** "Complete TCGA ID" is used to match the sample IDs in the main cancer proteomes file (see example script).
 - All other columns have self-explanatory names, contain data about the cancer classification
 of a given sample using different methods. 'PAM50 mRNA' classification is being used in the
 example script.

- File: PAM50_proteins.csv
 - Contains the list of genes and proteins used by the PAM50 classification system. The column RefSeqProteinID contains the protein IDs that can be matched with the IDs in the main protein expression data set.

Past Research: Original research paper: https://www.researchgate.net/publication/303509927_Proteogenomics_connects_somatic_mutations_to_signaling_in_breast_cancer

Summary: the data were used to assess how the mutations in the DNA are affecting the protein expression landscape in breast cancer. Genes in our DNA are first transcribed into RNA molecules which then are translated into proteins. Changing the information content of DNA has impact on the behavior of the proteome, which is the main functional unit of cells, taking care of cell division, DNA repair, enzymatic reactions and signaling etc. They performed K-means clustering on the protein data to divide the breast cancer patients into sub-types, each having unique protein expression signature. They found that the best clustering was achieved using 3 clusters (original PAM50 gene set yields four different subtypes using RNA data). my question is are there different ways to categorize subtypes of breast cancer other than the PAM50 method, and define them as benign or malignant?

```
# packages
library(pander)
library(tidyr)
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
library(ggplot2)
library(gridExtra)
##
## Attaching package: 'gridExtra'
## The following object is masked from 'package:dplyr':
##
##
       combine
library(stringr)
```

Exploratory Data Analysis

loading of the dataframes and showing the successful loading and its dimensions. note only the first 5 columns of "77_cancer_proteomes_CPTAC_itraq.csv" are shown since after column 4 they are the same type.

```
clinical_data <- read.csv(file = "Data/clinical_data_breast_cancer.csv")</pre>
pam50_protein_data <- read.csv(file = "Data/PAM50_proteins.csv")</pre>
# showing successful loading of data
# only showing first 5 columns of proteomes
head(proteomes data[1:5], n = 5)
##
     RefSeq accession number gene symbol
                                                   gene name AO.A12D.O1TCGA
## 1
                   NP 958782
                                     PLEC plectin isoform 1
                                                                    1.096131
## 2
                   NP 958785
                                     <NA> plectin isoform 1g
                                                                    1.111370
## 3
                   NP 958786
                                     PLEC plectin isoform 1a
                                                                    1.111370
## 4
                                     <NA> plectin isoform 1c
                   NP_000436
                                                                    1.107561
## 5
                   NP_958781
                                     <NA> plectin isoform 1e
                                                                    1.115180
##
     C8.A131.O1TCGA
## 1
           2.609943
## 2
           2.650422
## 3
           2.650422
## 4
           2.646374
## 5
           2.646374
head(clinical_data, n=5)
##
     Complete.TCGA.ID Gender Age.at.Initial.Pathologic.Diagnosis ER.Status
## 1
         TCGA-A2-A0T2 FEMALE
                                                                66 Negative
## 2
         TCGA-A2-AOCM FEMALE
                                                                40 Negative
         TCGA-BH-A18V FEMALE
## 3
                                                                48 Negative
## 4
         TCGA-BH-A18Q FEMALE
                                                                56 Negative
## 5
         TCGA-BH-AOEO FEMALE
                                                                38 Negative
     PR.Status HER2.Final.Status Tumor Tumor..T1.Coded Node Node.Coded Metastasis
## 1 Negative
                        Negative
                                     Т3
                                                T_Other
                                                          NЗ
                                                                Positive
                        Negative
                                                T Other
                                                                                 MO
## 2
     Negative
                                     T2
                                                          NO
                                                                Negative
## 3
     Negative
                        Negative
                                     T2
                                                T Other
                                                          N1
                                                                Positive
                                                                                 MO
## 4
     Negative
                        Negative
                                     T2
                                                T Other
                                                          N1
                                                                Positive
                                                                                 MO
## 5 Negative
                        Negative
                                     Т3
                                                T_{Other}
                                                          NЗ
                                                                Positive
     Metastasis.Coded AJCC.Stage Converted.Stage Survival.Data.Form Vital.Status
## 1
             Positive
                        Stage IV
                                    No_Conversion
                                                             followup
                                                                          DECEASED
## 2
             Negative Stage IIA
                                        Stage IIA
                                                             followup
                                                                          DECEASED
## 3
             Negative Stage IIB
                                    No_Conversion
                                                           enrollment
                                                                          DECEASED
## 4
             Negative Stage IIB
                                                                          DECEASED
                                    No_Conversion
                                                           enrollment
## 5
             Negative Stage IIIC
                                    No\_Conversion
                                                             followup
                                                                            LIVING
     Days.to.Date.of.Last.Contact Days.to.date.of.Death OS.event OS.Time
## 1
                               240
                                                     240
                                                                 1
                                                                       240
## 2
                               754
                                                                 1
                                                                       754
                                                     754
## 3
                              1555
                                                    1555
                                                                 1
                                                                      1555
## 4
                              1692
                                                    1692
                                                                      1692
                                                                 1
## 5
                               133
                                                                       133
                                                      NA
                                                                 0
     PAM50.mRNA SigClust.Unsupervised.mRNA SigClust.Intrinsic.mRNA miRNA.Clusters
## 1 Basal-like
                                          0
                                                                 -13
## 2 Basal-like
                                        -12
                                                                 -13
                                                                                   4
## 3 Basal-like
                                        -12
                                                                 -13
                                                                                   5
```

proteomes_data <- read.csv(file = "Data//77_cancer_proteomes_CPTAC_itraq.csv")</pre>

```
## 4 Basal-like
                                        -12
                                                                -13
                                                                                  5
## 5 Basal-like
                                          0
                                                                -13
                                                                                  5
     methylation.Clusters RPPA.Clusters CN.Clusters
## 1
                        5
                                  Basal
## 2
                        4
                                  Basal
## 3
                        5
                                  Basal
                                                   1
## 4
                                  Basal
                        5
                                                   1
## 5
                        5
                                  Basal
                                                   1
     Integrated.Clusters..with.PAM50. Integrated.Clusters..no.exp.
## 1
                                     2
## 2
                                     2
                                                                  1
                                     2
                                                                  2
## 3
                                     2
                                                                  2
## 4
                                     2
                                                                  2
## 5
##
     Integrated.Clusters..unsup.exp.
## 1
## 2
                                    1
                                    2
## 3
## 4
                                    2
## 5
head(pam50_protein_data, n=5)
     GeneSymbol RefSeqProteinID
                                      Species
                                                                         Gene.Name
##
## 1
            MIA
                      NP_006524 Homo sapiens
                                                     melanoma inhibitory activity
## 2
          FGFR4
                      NP_002002 Homo sapiens fibroblast growth factor receptor 4
## 3
          FGFR4
                      NP_998812 Homo sapiens fibroblast growth factor receptor 4
## 4
          FGFR4
                      NP_075252 Homo sapiens fibroblast growth factor receptor 4
## 5
         GPR160
                      NP_055188 Homo sapiens
                                                  G protein-coupled receptor 160
# showing the structure/dimensions of dataframe
cat("77_cancer_proteomes_CPTAC_itraq [ number of rows:", nrow(proteomes_data), "number of columns:",nco
## 77_cancer_proteomes_CPTAC_itraq [ number of rows: 12553 number of columns: 86
cat("clinical_data [ number of rows:", nrow(clinical_data), "number of columns:",ncol(clinical_data),'\:
## clinical_data [ number of rows: 105 number of columns: 30
cat("pam50_protein_data [ number of rows:", nrow(pam50_protein_data), "number of columns:",ncol(pam50_p
## pam50_protein_data [ number of rows: 100 number of columns: 4
Checking if the Proteomes data has been correctly read.
str(proteomes_data)
## 'data.frame':
                    12553 obs. of 86 variables:
## $ RefSeq_accession_number: chr "NP_958782" "NP_958785" "NP_958786" "NP_000436" ...
                             : chr "PLEC" NA "PLEC" NA ...
## $ gene_symbol
```

```
$ gene name
                                    "plectin isoform 1" "plectin isoform 1g" "plectin isoform 1a" "plec
##
                             : chr
                                    1.1 1.11 1.11 1.11 1.12 ...
##
   $ AO.A12D.O1TCGA
                             : num
   $ C8.A131.O1TCGA
                             : num
                                    2.61 2.65 2.65 2.65 2.65 ...
                                    -0.66 -0.649 -0.654 -0.632 -0.64 ...
##
   $ AO.A12B.O1TCGA
                             : num
   $ BH.A18Q.02TCGA
                                    0.195 0.215 0.215 0.205 0.215 ...
                             : num
##
   $ C8.A130.02TCGA
                                    -0.494 -0.504 -0.501 -0.51 -0.504 ...
                             : num
   $ C8.A138.O3TCGA
                                    2.77 2.78 2.78 2.8 2.79 ...
                             : num
##
   $ E2.A154.O3TCGA
                             : num
                                    0.863 0.87 0.87 0.866 0.87 ...
##
   $ C8.A12L.O4TCGA
                             : num
                                    1.41 1.41 1.41 1.41 1.41 ...
##
   $ A2.AOEX.O4TCGA
                             : num
                                    1.19 1.19 1.19 1.19 1.2 ...
   $ AO.A12D.O5TCGA
                                    1.1 1.1 1.1 1.1 1.09 ...
                             : num
                                    0.385 0.371 0.371 0.378 0.375 ...
##
   $ AN.AO4A.O5TCGA
                             : num
   $ BH.AOAV.O5TCGA
                                    0.351 0.367 0.367 0.361 0.371 ...
                             : num
                                    -0.205 -0.162 -0.167 -0.184 -0.167 ...
##
   $ C8.A12T.O6TCGA
                             : num
##
                                    -0.496 -0.499 -0.496 -0.492 -0.488 ...
   $ A8.A06Z.07TCGA
                             : num
##
   $ A2.AOCM.O7TCGA
                                    0.683 0.694 0.698 0.687 0.687 ...
                               num
                             :
##
   $ BH.A18U.08TCGA
                                    -0.265 -0.252 -0.252 -0.252 -0.252 ...
                             : num
   $ A2.AOEQ.OSTCGA
                                    -0.913 -0.928 -0.928 -0.932 -0.928 ...
                             : num
                                    -0.0332 -0.0302 -0.0272 -0.0302 -0.0302 ...
##
   $ AR.AOU4.O9TCGA
                             : num
##
   $ AO.AOJ9.10TCGA
                             : num
                                    0.02 0.012 0.012 0.0039 0.012 ...
##
   $ AR.A1AP.11TCGA
                                    0.461 0.461 0.461 0.461 0.461 ...
                             : num
                                    0.974 0.977 0.977 0.97 0.985 ...
   $ AN.AOFK.11TCGA
                             : num
                                    0.831 0.857 0.857 0.837 0.865 ...
##
   $ AO.AOJ6.11TCGA
                             : num
                                    1.28 1.28 1.28 1.28 1.28 ...
##
   $ A7.A13F.12TCGA
                             : num
##
   $ BH.AOE1.12TCGA
                             : num
                                    0.762 0.762 0.766 0.758 0.766 ...
   $ A7.AOCE.13TCGA
                             : num
                                    -1.12 -1.12 -1.13 -1.13 ...
##
   $ A2.AOYC.13TCGA
                                    0.819 0.815 0.815 0.799 0.819 ...
                               num
   $ AO.AOJC.14TCGA
                             : num
                                    -0.307 -0.307 -0.307 -0.301 ...
##
                                    0.569 0.569 0.569 0.569 ...
   $ A8.A08Z.14TCGA
                             : num
                                    -0.583 -0.573 -0.567 -0.583 -0.573 ...
   $ AR.AOTX.14TCGA
                             : num
                                    1.87 1.87 1.87 1.86 1.87 ...
##
   $ A8.A076.15TCGA
                               num
                             :
##
   $ AO.A126.15TCGA
                                    0.196 0.196 0.196 0.219 0.2 ...
                             : num
##
   $ BH.AOC1.16TCGA
                                    -0.518 -0.51 -0.507 -0.518 -0.513 ...
                             : num
##
   $ A2.A0EY.16TCGA
                                    1.17 1.18 1.18 1.17 1.18 ...
                               num
##
   $ AR.A1AW.17TCGA
                                    0.578 0.582 0.578 0.59 0.586 ...
                             : num
##
                                    -0.76 -0.76 -0.749 -0.736 -0.749 ...
   $ AR.A1AV.17TCGA
                             : num
##
   $ C8.A135.17TCGA
                             : num
                                    1.12 1.14 1.14 1.14 1.12 ...
##
   $ A2.AOEV.18TCGA
                                    0.453 0.473 0.473 0.459 0.473 ...
                             : num
                                    1.5 1.51 1.5 1.5 1.5 ...
##
   $ AN.AOAM.18TCGA
                             : num
##
                                    0.539 0.542 0.542 0.535 0.542 ...
   $ D8.A142.18TCGA
                             : num
   $ AN.AOFL.19TCGA
                             : num
                                    2.46 2.48 2.48 2.46 2.48 ...
##
   $ BH.AODG.19TCGA
                                    -0.206 -0.206 -0.206 -0.215 -0.206 ...
                             : num
   $ AR.AOTV.2OTCGA
                             : num
                                    -1.51 -1.53 -1.53 -1.51 ...
##
                                    -0.787 -0.756 -0.756 -0.775 -0.772 ...
   $ C8.A12Z.20TCGA
                             : num
   $ AO.AOJJ.2OTCGA
                                    0.757 0.781 0.774 0.764 0.771 ...
                             : num
##
   $ AO.AOJE.21TCGA
                               num
                                    0.56 0.563 0.56 0.542 0.56 ...
##
   $ AN.AOAJ.21TCGA
                             : num
                                    -0.428 -0.406 -0.406 -0.406 -0.406 ...
##
   $ A7.AOCJ.22TCGA
                             : num
                                    -1.001 -1.005 -1.005 -0.998 -1.001 ...
   $ AO.A12F.22TCGA
                                    -1.95 -1.95 -1.96 -1.95 -1.96 ...
                             : num
##
   $ A8.A079.23TCGA
                                    1.05 1.05 1.05 1.06 1.05 ...
                             : num
                                    0.584 0.581 0.581 0.587 0.587 ...
##
   $ A2.A0T3.24TCGA
                             : num
##
   $ A2.AOYD.24TCGA
                             : num
                                    0.0638 0.0933 0.0845 0.0667 0.0845 ...
##
   $ AR.AOTR.25TCGA
                                    -1.1 -1.11 -1.11 -1.1 -1.11 ...
                             : num
   $ AO.AO3O.25TCGA
                             : num 1.05 1.06 1.06 1.06 1.06 ...
```

```
$ AO.A12E.26TCGA
                                   0.265 0.276 0.276 0.278 0.278 ...
                            : num
   $ A8.A06N.26TCGA
                                   0.239 0.25 0.244 0.25 0.25 ...
##
                            : num
   $ A2.AOYG.27TCGA
                            : num
                                   -0.0782 -0.0681 -0.0714 -0.0579 -0.0647 ...
   $ BH.A18N.27TCGA
                                   1.1 1.1 1.1 1.09 1.11 ...
##
                            : num
   $ AN.AOAL.28TCGA
                            : num
                                   0.324 0.327 0.327 0.33 0.327 ...
                                   0.794 0.818 0.815 0.801 0.818 ...
##
   $ A2.A0T6.29TCGA
                            : num
   $ E2.A158.29TCGA
                            : num
                                   -1.09 -1.1 -1.1 -1.1 -1.1 ...
##
   $ E2.A15A.29TCGA
                            : num
                                   2.18 2.18 2.18 2.18 2.18 ...
##
   $ AO.AOJM.3OTCGA
                                   1.4 1.41 1.41 1.41 1.41 ...
                            : num
##
   $ C8.A12V.30TCGA
                            : num
                                   0.674 0.689 0.689 0.678 0.689 ...
   $ A2.AOD2.31TCGA
                                   0.1075 0.1042 0.1075 0.0975 0.1042 ...
                            : num
                                   -0.482 -0.478 -0.482 -0.471 -0.482 ...
##
   $ C8.A12U.31TCGA
                            : num
##
   $ AR.A1AS.31TCGA
                            : num
                                   1.22 1.22 1.22 1.2 1.22 ...
   $ A8.A09G.32TCGA
##
                            : num
                                   -1.52 -1.51 -1.51 -1.52 -1.51 ...
   $ C8.A131.32TCGA
                                   2.71 2.73 2.74 2.73 2.75 ...
##
                            : num
##
   $ C8.A134.32TCGA
                                   0.14 0.126 0.133 0.112 0.126 ...
                            : num
##
   $ A2.AOYF.33TCGA
                            : num
                                   0.311 0.296 0.296 0.296 0.296 ...
##
   $ BH.AODD.33TCGA
                                   -0.692 -0.659 -0.664 -0.657 -0.662 ...
                            : num
  $ BH.AOE9.33TCGA
                                   1.47 1.48 1.47 1.46 1.47 ...
##
                            : num
##
   $ AR.AOTT.34TCGA
                            : num
                                   -0.511 -0.526 -0.526 -0.533 -0.53 ...
##
   $ AO.A12B.34TCGA
                                   -0.964 -0.938 -0.944 -0.935 -0.935 ...
                            : num
  $ A2.AOSW.35TCGA
                                   -0.488 -0.488 -0.488 -0.504 ...
                            : num
   $ AO.AOJL.35TCGA
                                   -0.107 -0.107 -0.107 -0.107 -0.107 ...
##
                            : num
                                   -0.0658 -0.0559 -0.0658 -0.0559 -0.0625 ...
##
   $ BH.AOBV.35TCGA
                            : num
##
   $ A2.AOYM.36TCGA
                            : num
                                   0.656 0.658 0.656 0.656 0.651 ...
   $ BH.AOC7.36TCGA
                            : num
                                   -0.552 -0.548 -0.552 -0.552 -0.557 ...
   $ A2.AOSX.36TCGA
                                   -0.399 -0.393 -0.393 -0.396 ...
##
                            : num
   $ X263d3f.I.CPTAC
                                   0.599 0.607 0.604 0.604 0.604 ...
                            : num
## $ blcdb9.I.CPTAC
                            : num
                                   -0.191 -0.184 -0.186 -0.186 -0.167 ...
   $ c4155b.C.CPTAC
                            : num 0.567 0.579 0.577 0.577 0.577 ...
```

Nothing strange about the Proteomes dat everything seems to be read correct.

Checking if the clinical data has been correctly read.

str(clinical_data)

```
105 obs. of 30 variables:
## 'data.frame':
   $ Complete.TCGA.ID
                                               "TCGA-A2-A0T2" "TCGA-A2-A0CM" "TCGA-BH-A18V" "TCGA-BH-A
                                        : chr
   $ Gender
                                        : chr
                                               "FEMALE" "FEMALE" "FEMALE" ...
  $ Age.at.Initial.Pathologic.Diagnosis: int
                                               66 40 48 56 38 57 74 60 61 67 ...
  $ ER.Status
                                               "Negative" "Negative" "Negative" "Negative" ...
                                        : chr
                                               "Negative" "Negative" "Negative" "Negative" ...
##
   $ PR.Status
                                          chr
##
   $ HER2.Final.Status
                                        : chr
                                               "Negative" "Negative" "Negative" ...
                                               "T3" "T2" "T2" "T2" ...
##
   $ Tumor
                                        : chr
   $ Tumor..T1.Coded
                                               "T_Other" "T_Other" "T_Other" "T_Other" ...
##
                                        : chr
##
   $ Node
                                               "N3" "NO" "N1" "N1" ...
                                        : chr
                                               "Positive" "Negative" "Positive" "Positive" ...
##
   $ Node.Coded
                                        : chr
                                               "M1" "M0" "M0" "M0" ...
   $ Metastasis
                                        : chr
                                               "Positive" "Negative" "Negative" "Negative" ...
##
   $ Metastasis.Coded
                                        : chr
                                               "Stage IV" "Stage IIA" "Stage IIB" "Stage IIB" ...
##
   $ AJCC.Stage
                                        : chr
                                               "No_Conversion" "Stage IIA" "No_Conversion" "No_Convers
## $ Converted.Stage
                                        : chr
  $ Survival.Data.Form
                                               "followup" "followup" "enrollment" "enrollment" ...
                                        : chr
## $ Vital.Status
                                               "DECEASED" "DECEASED" "DECEASED" ...
                                        : chr
```

```
$ Days.to.Date.of.Last.Contact
                                      : int 240 754 1555 1692 133 309 425 643 775 964 ...
## $ Days.to.date.of.Death
                                             240 754 1555 1692 NA NA NA NA NA NA ...
                                       : int
## $ OS.event
                                             1 1 1 1 0 0 0 0 0 0 ...
## $ OS.Time
                                             240 754 1555 1692 133 309 425 643 775 964 ...
                                       : int
## $ PAM50.mRNA
                                             "Basal-like" "Basal-like" "Basal-like" ...
## $ SigClust.Unsupervised.mRNA
                                       : int 0 -12 -12 -12 0 0 0 -12 -12 -12 ...
## $ SigClust.Intrinsic.mRNA
                                             -13 -13 -13 -13 -13 -13 -13 -13 -13 ...
                                       : int
## $ miRNA.Clusters
                                             3 4 5 5 5 5 3 5 2 5 ...
                                       : int
##
   $ methylation.Clusters
                                       : int
                                             5 4 5 5 5 5 5 5 5 5 ...
## $ RPPA.Clusters
                                             "Basal" "Basal" "Basal" ...
                                       : chr
## $ CN.Clusters
                                       : int 3 4 1 1 1 1 1 1 3 ...
                                      : int 2 2 2 2 2 2 2 2 2 2 ...
## $ Integrated.Clusters..with.PAM50.
## $ Integrated.Clusters..no.exp.
                                      : int 2 1 2 2 2 2 2 2 2 2 ...
## $ Integrated.Clusters..unsup.exp.
                                      : int 2 1 2 2 2 2 2 2 2 2 ...
```

Nothing strange about the clinical data everything seems to be read correct.

Checking if the pam50 protein data has been correctly read.

```
## 'data.frame': 100 obs. of 4 variables:
## $ GeneSymbol : chr "MIA" "FGFR4" "FGFR4" ...
## $ RefSeqProteinID: chr "NP_006524" "NP_002002" "NP_998812" "NP_075252" ...
## $ Species : chr "Homo sapiens" "Homo sapiens" "Homo sapiens" "Homo sapiens" ...
## $ Gene.Name : chr "melanoma inhibitory activity" "fibroblast growth factor receptor 4" "fibro"
```

Nothing strange about the pam50 protein data everything seems to be read correct.

codebook

loading of the created codebooks for the three dataframes. showing also its contents and successful loading

```
cancer_proteomes_CPTAC_codebook <- read.csv2("Data/77_cancer_proteomes_CPTAC_codebook.txt")
clinical_data_codebook <- read.csv2("Data/clinical_data_breast_cancer_codebook.txt")
PAM50_protein_codebook <- read.csv2("Data/PAM50_protein_codebook.txt", sep = ";")
cancer_proteomes_CPTAC_codebook</pre>
```

```
##
                      Column
                                        Description data.type unit
## 1 RefSeq_accession_number
                                  RefSeq protein ID
                                                        string
## 2
                 gene_symbol Gene abbreviation code
                                                        string
## 3
                   gene_name
                                   Name of the gene
                                                        string
                                                                 NA
## 4
           Remaining columns
                                  log2 iTRAQ ratios
                                                         float
                                                                 NA
```

```
clinical_data_codebook
```

```
## Column
## 1 Complete_TCGA_ID
## 2 Gender Gender
Description
TCGA_ID
TCGA_ID
```

```
Age_at_Initial_Pathologic_Diagnosis
                                                 Age at Initial Pathologic Diagnosis
                                 ER Status
## 4
                                                             Estrogen receptor Status
## 5
                                 PR Status
                                                         Progesterone receptor Status
## 6
                         HER2 Final Status Human Epidermal growth factor Receptor 2
## 7
                                      Tumor
                                                                                 Tumor
## 8
                           Tumor--T1 Coded
                                                                       Tumor--T1 Coded
## 9
                                       Node
                                                                                  Node
## 10
                                Node-Coded
                                                                            Node-Coded
## 11
                                Metastasis
                                                                            Metastasis
## 12
                          Metastasis-Coded
                                                                      Metastasis-Coded
## 13
                                 AJCC Stage American Joint Committee on Cancer Stage
## 14
                           Converted Stage
                                                                       Converted Stage
                        Survival Data Form
                                                                    Survival Data Form
## 15
                                                                          Vital Status
## 16
                              Vital Status
## 17
             Days to Date of Last Contact
                                                         Days to Date of Last Contact
## 18
                     Days to date of Death
                                                                Days to date of Death
## 19
                                                               OS event O= NO, 1= YES
                                   OS event
## 20
                                    OS Time
                                                                               OS Time
## 21
                                PAM50 mRNA
                                                                            PAM50 mRNA
## 22
               SigClust Unsupervised mRNA
                                                           SigClust Unsupervised mRNA
## 23
                   SigClust Intrinsic mRNA
                                                              SigClust Intrinsic mRNA
## 24
                            miRNA Clusters
                                                                        miRNA Clusters
## 25
                      methylation Clusters
                                                                 methylation Clusters
##
   26
                             RPPA Clusters
                                                                         RPPA Clusters
## 27
                                CN Clusters
                                                                           CN Clusters
## 28
         Integrated Clusters (with PAM50)
                                                     Integrated Clusters (with PAM50)
## 29
             Integrated Clusters (no exp)
                                                         Integrated Clusters (no exp)
   30
          Integrated Clusters (unsup exp)
                                                     Integrated Clusters (unsup exp)
##
##
             type data.type
                              unit
## 1
             name
                         chr
                               <NA>
## 2
             name
                         chr
                               <NA>
##
   3
      Descriptive
                         chr
                              <NA>
      Descriptive
                         chr
                               <NA>
      Descriptive
                               <NA>
## 5
                         chr
##
   6
      Descriptive
                               <NA>
                         chr
## 7
      Descriptive
                              <NA>
                         chr
## 8
      Descriptive
                         chr
                               <NA>
## 9
      Descriptive
                         chr
                               <NA>
## 10 Descriptive
                         chr
                               <NA>
## 11 Descriptive
                              <NA>
                         chr
## 12 Descriptive
                              <NA>
                         chr
## 13 Descriptive
                              <NA>
                         chr
## 14 Descriptive
                         chr
                              <NA>
## 15 Descriptive
                         chr
                              <NA>
## 16 Descriptive
                         chr
                               <NA>
## 17
             Time
                              Days
                         int
## 18
             Time
                         int
                              Days
                              <NA>
## 19 Descriptive
                         int
## 20
             Time
                         int Hours
## 21
      Descriptive
                         chr
                              <NA>
## 22
                              <NA>
            Count
                         int
## 23
            Count
                         int
                              <NA>
## 24
            Count
                         int
                              <NA>
## 25
            Count
                         int
                              <NA>
```

```
## 26 Descriptive
                                 <NA>
                            chr
## 27
                                 <NA>
              Count
                            int
## 28
              count
                            int
                                 <NA>
## 29
                                 <NA>
              count
                            int
## 30
              count
                            int.
                                 <NA>
```

PAM50_protein_codebook

```
##
                                        Description type
               Column
                                                                 unit
## 1
          GeneSymbol
                                  Gene abbreviation
                                                       chr
                                                                 <NA>
## 2 RefSeqProteinID Unique reference identifier
                                                       chr
                                                                 <NA>
## 3
             Species
                                             Species
                                                       chr latin name
## 4
           Gene.Name
                                   Name of the gene
                                                      chr
                                                                 <NA>
```

Data observation

there are 12553 rows in the data, these are proteins identifiable with a RefSeq ID number and have 86 columns of witch the last 83 are samples (with named with their identifiers and the last three from healthy individuals. to further use the data i shall reshape it to make the rows samples and each column a protein

```
# first making a data frame with only the numerical data, samples start at column number 4 til the end
proteomes_data_numerical <- proteomes_data[4:86]

# checking data
head(proteomes_data_numerical,n=5)</pre>
```

```
##
     AO.A12D.01TCGA C8.A131.01TCGA AO.A12B.01TCGA BH.A18Q.02TCGA C8.A130.02TCGA
## 1
           1.096131
                           2.609943
                                         -0.6598280
                                                          0.1953407
                                                                         -0.4940596
## 2
                                         -0.6487422
           1.111370
                           2.650422
                                                          0.2154129
                                                                         -0.5038992
## 3
           1.111370
                           2.650422
                                         -0.6542851
                                                          0.2154129
                                                                         -0.5006193
## 4
                           2.646374
                                         -0.6321133
                                                          0.2053768
                                                                         -0.5104589
           1.107561
## 5
                                         -0.6404277
           1.115180
                           2.646374
                                                          0.2154129
                                                                         -0.5038992
##
     C8.A138.O3TCGA E2.A154.O3TCGA C8.A12L.O4TCGA A2.A0EX.O4TCGA A0.A12D.O5TCGA
## 1
           2.765081
                          0.8626593
                                           1.407570
                                                           1.185108
                                                                           1.100688
## 2
           2.779709
                          0.8701860
                                           1.407570
                                                           1.192612
                                                                           1.100688
## 3
           2.779709
                          0.8701860
                                           1.410312
                                                           1.188860
                                                                           1.100688
## 4
           2.797995
                          0.8664226
                                           1.407570
                                                           1.185108
                                                                           1.100688
## 5
           2.787023
                          0.8701860
                                           1.413053
                                                           1.200116
                                                                           1.093358
##
     AN.AO4A.O5TCGA BH.AOAV.O5TCGA C8.A12T.O6TCGA A8.AO6Z.O7TCGA A2.AOCM.O7TCGA
## 1
          0.3845877
                                         -0.2049179
                                                         -0.4964091
                          0.3505357
                                                                          0.6834035
## 2
          0.3713928
                          0.3674053
                                         -0.1624185
                                                         -0.4985089
                                                                          0.6944241
                                                         -0.4964091
## 3
          0.3713928
                          0.3674053
                                         -0.1666684
                                                                          0.6980976
## 4
          0.3779903
                          0.3606575
                                         -0.1836682
                                                         -0.4922095
                                                                          0.6870771
## 5
          0.3746916
                          0.3707793
                                         -0.1666684
                                                         -0.4880099
                                                                          0.6870771
##
     BH.A18U.O8TCGA A2.A0EQ.O8TCGA AR.A0U4.O9TCGA AO.AOJ9.10TCGA AR.A1AP.11TCGA
## 1
         -0.2650304
                         -0.9126703
                                        -0.03322133
                                                        0.020007050
                                                                          0.4610875
## 2
         -0.2516423
                         -0.9279787
                                        -0.03021642
                                                        0.011955318
                                                                          0.4610875
         -0.2516423
## 3
                         -0.9279787
                                        -0.02721152
                                                        0.011955318
                                                                          0.4610875
## 4
         -0.2516423
                         -0.9318057
                                        -0.03021642
                                                        0.003903587
                                                                          0.4610875
## 5
         -0.2516423
                         -0.9279787
                                        -0.03021642
                                                        0.011955318
                                                                          0.4610875
     AN.AOFK.11TCGA AO.AOJ6.11TCGA A7.A13F.12TCGA BH.AOE1.12TCGA A7.AOCE.13TCGA
## 1
          0.9735642
                          0.8311317
                                           1.279185
                                                          0.7620444
                                                                          -1.123173
```

```
## 2
          0.9774761
                          0.8565398
                                           1.275167
                                                          0.7620444
                                                                          -1.123173
## 3
                          0.8565398
          0.9774761
                                           1.275167
                                                          0.7663844
                                                                          -1.116861
                                           1.279185
                                                          0.7577045
## 4
          0.9696523
                          0.8367780
                                                                          -1.129486
## 5
                                                          0.7663844
          0.9852998
                          0.8650092
                                           1.279185
                                                                          -1.129486
##
     A2.A0YC.13TCGA A0.A0JC.14TCGA A8.A08Z.14TCGA AR.A0TX.14TCGA A8.A076.15TCGA
                                          0.5688946
## 1
          0.8188241
                         -0.3072668
                                                         -0.5834286
                                                                           1.873982
## 2
          0.8148772
                         -0.3072668
                                          0.5688946
                                                         -0.5725489
                                                                           1.870383
## 3
          0.8148772
                         -0.3072668
                                          0.5688946
                                                         -0.5671090
                                                                           1.870383
## 4
          0.7990900
                         -0.3072668
                                          0.5688946
                                                         -0.5834286
                                                                           1.859587
## 5
          0.8188241
                         -0.3010327
                                          0.5688946
                                                         -0.5725489
                                                                           1.870383
     AO.A126.15TCGA BH.AOC1.16TCGA A2.AOEY.16TCGA AR.A1AW.17TCGA AR.A1AV.17TCGA
## 1
          0.1958767
                         -0.5183665
                                           1.174881
                                                          0.5783087
                                                                         -0.7598231
## 2
          0.1958767
                         -0.5100020
                                           1.183209
                                                          0.5822129
                                                                         -0.7598231
                         -0.5072138
## 3
          0.1958767
                                           1.183209
                                                          0.5783087
                                                                         -0.7491137
## 4
          0.2189346
                         -0.5183665
                                           1.174881
                                                          0.5900212
                                                                         -0.7357270
## 5
          0.1997197
                         -0.5127902
                                           1.179045
                                                          0.5861170
                                                                         -0.7491137
##
     C8.A135.17TCGA A2.A0EV.18TCGA AN.A0AM.18TCGA D8.A142.18TCGA AN.A0FL.19TCGA
                                           1.501967
           1.120502
                          0.4529859
                                                          0.5385958
## 1
                                                                           2.455138
## 2
           1.137618
                          0.4725901
                                           1.510348
                                                          0.5422105
                                                                           2.480137
## 3
           1.137618
                          0.4725901
                                           1.501967
                                                          0.5422105
                                                                           2.480137
## 4
           1.137618
                          0.4585871
                                           1.501967
                                                          0.5349810
                                                                           2.461956
           1.120502
                          0.4725901
                                           1.501967
                                                          0.5422105
                                                                           2.477864
##
     BH.AODG.19TCGA AR.AOTV.2OTCGA C8.A12Z.2OTCGA AO.AOJJ.2OTCGA AO.AOJE.21TCGA
## 1
         -0.2056375
                          -1.514278
                                         -0.7871950
                                                          0.7571881
                                                                          0.5597770
## 2
         -0.2056375
                          -1.528285
                                         -0.7559406
                                                          0.7808707
                                                                          0.5634069
## 3
         -0.2056375
                          -1.528285
                                         -0.7559406
                                                          0.7741042
                                                                          0.5597770
                                         -0.7746932
## 4
         -0.2150062
                          -1.531087
                                                          0.7639546
                                                                          0.5416274
## 5
         -0.2056375
                          -1.514278
                                         -0.7715678
                                                          0.7707210
                                                                          0.5597770
     AN.AOAJ.21TCGA A7.AOCJ.22TCGA AO.A12F.22TCGA A8.AO79.23TCGA A2.AOT3.24TCGA
##
## 1
         -0.4281815
                         -1.0012398
                                          -1.947792
                                                                          0.5837133
                                                           1.048959
## 2
         -0.4063780
                         -1.0046198
                                          -1.952718
                                                           1.052257
                                                                          0.5806231
## 3
         -0.4063780
                         -1.0046198
                                          -1.955180
                                                           1.052257
                                                                          0.5806231
## 4
         -0.4063780
                         -0.9978599
                                          -1.947792
                                                           1.058852
                                                                          0.5868034
## 5
         -0.4063780
                         -1.0012398
                                          -1.957643
                                                           1.052257
                                                                          0.5868034
##
     A2.A0YD.24TCGA AR.A0TR.25TCGA A0.A030.25TCGA A0.A12E.26TCGA A8.A06N.26TCGA
## 1
         0.06377853
                          -1.101675
                                           1.053225
                                                          0.2648591
                                                                          0.2385471
## 2
         0.09333637
                          -1.108783
                                           1.055948
                                                          0.2757113
                                                                          0.2498182
## 3
                                                                          0.2441826
         0.08446902
                          -1.108783
                                           1.055948
                                                          0.2757113
## 4
         0.06673431
                          -1.096937
                                           1.058671
                                                          0.2784244
                                                                          0.2498182
                                                          0.2784244
## 5
         0.08446902
                          -1.111152
                                           1.058671
                                                                          0.2498182
     A2.A0YG.27TCGA BH.A18N.27TCGA AN.A0AL.28TCGA A2.A0T6.29TCGA E2.A158.29TCGA
## 1
        -0.07820182
                           1.101261
                                          0.3236627
                                                          0.7939756
                                                                          -1.086529
## 2
        -0.06805814
                           1.101261
                                          0.3269726
                                                          0.8181815
                                                                          -1.095492
## 3
                                          0.3269726
                                                                          -1.095492
        -0.07143937
                           1.097767
                                                          0.8147235
## 4
        -0.05791445
                           1.090779
                                          0.3302826
                                                          0.8008915
                                                                          -1.095492
        -0.06467691
## 5
                           1.108248
                                          0.3269726
                                                          0.8181815
                                                                          -1.095492
##
     E2.A15A.29TCGA AO.AOJM.3OTCGA C8.A12V.3OTCGA A2.AOD2.31TCGA C8.A12U.31TCGA
## 1
           2.180123
                           1.395247
                                          0.6739047
                                                         0.10749090
                                                                         -0.4815502
## 2
           2.180123
                           1.408922
                                          0.6887176
                                                         0.10416449
                                                                         -0.4778898
## 3
           2.180123
                           1.412341
                                          0.6887176
                                                         0.10749090
                                                                         -0.4815502
## 4
           2.180123
                           1.408922
                                          0.6776079
                                                         0.09751166
                                                                         -0.4705692
## 5
           2.180123
                           1.408922
                                          0.6887176
                                                         0.10416449
                                                                         -0.4815502
##
     AR.A1AS.31TCGA A8.A09G.32TCGA C8.A131.32TCGA C8.A134.32TCGA A2.A0YF.33TCGA
## 1
           1.222507
                          -1.523343
                                           2.707250
                                                          0.1401818
                                                                          0.3113192
```

```
## 2
           1.218974
                          -1.512646
                                           2.733832
                                                         0.1260538
                                                                         0.2961771
## 3
           1.222507
                          -1.509972
                                           2.737629
                                                         0.1331178
                                                                         0.2961771
           1.204839
                                           2.733832
                                                         0.1119257
## 4
                          -1.517995
                                                                         0.2961771
## 5
           1.222507
                          -1.509972
                                           2.752819
                                                         0.1260538
                                                                         0.2961771
##
     BH.AODD.33TCGA BH.AOE9.33TCGA AR.AOTT.34TCGA AO.A12B.34TCGA A2.AOSW.35TCGA
                                                                        -0.4877725
## 1
         -0.6923158
                           1.466665
                                        -0.5114212
                                                        -0.9639039
## 2
         -0.6594687
                           1.482283
                                        -0.5260667
                                                        -0.9382095
                                                                        -0.4877725
## 3
         -0.6641611
                           1.474474
                                        -0.5260667
                                                        -0.9439194
                                                                        -0.4877725
## 4
         -0.6571224
                           1.458856
                                        -0.5333894
                                                        -0.9353546
                                                                        -0.4877725
## 5
         -0.6618149
                           1.474474
                                        -0.5297281
                                                        -0.9353546
                                                                        -0.5038532
     AO.AOJL.35TCGA BH.AOBV.35TCGA A2.AOYM.36TCGA BH.AOC7.36TCGA A2.AOSX.36TCGA
## 1
           -0.10668
                        -0.06583842
                                         0.6558497
                                                        -0.5522120
                                                                        -0.3985598
## 2
           -0.10668
                        -0.05589267
                                         0.6581426
                                                        -0.5477494
                                                                        -0.3926014
## 3
                                         0.6558497
                                                                        -0.3926014
           -0.10668
                        -0.06583842
                                                        -0.5522120
## 4
           -0.10668
                        -0.05589267
                                         0.6558497
                                                        -0.5522120
                                                                        -0.3926014
## 5
           -0.10668
                        -0.06252317
                                         0.6512639
                                                        -0.5566746
                                                                        -0.3955806
##
     X263d3f.I.CPTAC blcdb9.I.CPTAC c4155b.C.CPTAC
## 1
           0.5985845
                          -0.1912845
                                          0.5669753
## 2
           0.6066975
                          -0.1839177
                                           0.5787017
## 3
           0.6039931
                          -0.1860225
                                           0.5767473
## 4
           0.6039931
                          -0.1860225
                                          0.5767473
## 5
           0.6039931
                          -0.1670792
                                           0.5767473
```

 $transposing \ the \ created \ data \ frame \ "proteomes_data_numerical", and \ adding \ the \ refseq \ ID \ as \ column \ name$

```
proteomes_data_numerical_transposed <- t(proteomes_data_numerical)
colnames(proteomes_data_numerical_transposed) <- proteomes_data$RefSeq_accession_number

# checking is succesfull
head(proteomes_data_numerical_transposed)</pre>
```

```
##
                  NP_958782 NP_958785
                                       NP_958786
                                                 NP_000436
                                                            NP_958781
## AO.A12D.O1TCGA
                 1.0961312
                            1.1113704
                                       1.1113704
                                                  1.1075606
                                                            1.1151802
## C8.A131.O1TCGA 2.6099430
                            2.6504218
                                      2.6504218
                                                 2.6463739
                                                            2.6463739
## AO.A12B.01TCGA -0.6598280 -0.6487422 -0.6542851 -0.6321133 -0.6404277
## BH.A18Q.O2TCGA 0.1953407
                            0.2154129
                                      0.2154129
                                                 0.2053768
                                                            0.2154129
## C8.A130.O2TCGA -0.4940596 -0.5038992 -0.5006193 -0.5104589 -0.5038992
## C8.A138.O3TCGA
                 2.7650807
                            2.7797092 2.7797092
                                                 2.7979949
                                                            2.7870235
##
                  NP 958780
                            NP 958783
                                       NP 958784 NP 112598
                                                            NP 001611
                                                            0.4827537
## AO.A12D.O1TCGA
                 1.1075606
                            1.1113704
                                       1.1113704 -1.5173904
## C8.A131.O1TCGA 2.6463739
                            ## AO.A12B.O1TCGA -0.6542851 -0.6487422 -0.6487422 -0.6182559 1.2220027
## BH.A18Q.O2TCGA 0.2154129 0.2154129 0.2154129 -1.0357599 -0.5172257
## C8.A130.O2TCGA -0.5038992 -0.5006193 -0.5006193 -1.8453656 -0.4055031
## C8.A138.O3TCGA 2.7797092 2.7833664 2.7833664 2.2055384 0.7499970
##
                              NP 001367 NP 036222 NP 001138241 NP 001714
                   NP 076965
## AO.A12D.O1TCGA 0.26178538
                             0.92469026 -0.5801800
                                                   -0.01252008 -0.1877708
## C8.A131.O1TCGA -0.03737115
                             1.39962658 -0.1345203
                                                    0.75601351 0.1731187
## AO.A12B.O1TCGA 1.01968512 -1.23075167
                                         0.7813384
                                                   -1.09217797 -1.7850464
## BH.A18Q.O2TCGA -0.72463936 -0.08567142 -0.3064666
                                                    0.73729252 2.0419914
## C8.A130.02TCGA -0.70397119 -0.78596791 -0.9171627
                                                   -1.13363401 -0.5202985
## C8.A138.O3TCGA -0.15697353 1.50702479 -1.3053152 -0.50440175 -0.1825735
##
                  NP_002464 NP_001073936
                                          NP_061198 NP_001074248 NP_001074419
```

```
## AO.A12D.O1TCGA 2.0447709
                             -0.06585726 -0.35159212
                                                        0.3189324
                                                                     0.3189324
## C8.A131.O1TCGA 1.5939249
                             -0.87528250 -1.02100622
                                                      -0.4381114
                                                                    -0.4381114
## AO.A12B.O1TCGA -1.2667808
                             -2.28114026 0.01641158
                                                        0.0884699
                                                                     0.0884699
## BH.A18Q.02TCGA
                  1.0283407
                              1.86803158 -0.88187231
                                                        0.7807825
                                                                     0.7874732
## C8.A130.02TCGA
                  0.1094363
                             -0.97620030 -1.51737867
                                                       -0.6088550
                                                                    -0.6219745
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                  1.2546822
                              0.46474012 2.07388136
                                                       -0.3873733
                                                                    -0.3873733
                   NP 056009
                               NP 036355 NP 001155291
                                                       NP 002462 NP 000248
## AO.A12D.O1TCGA 0.97040784
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                                                       1.1113704 -0.5077938
## C8.A131.O1TCGA
                  1.64249943
                              2.92567769
                                           2.92567769 -0.6162181 1.3915308
## AO.A12B.O1TCGA -0.90648922 -2.38368480
                                          -2.38368480 -3.4673311 -2.7994059
## BH.A18Q.02TCGA
                  0.01803541 -0.75809318
                                          -0.75809318 -3.8659529 -3.8659529
## C8.A130.02TCGA
                  0.84740679
                             0.55549846
                                           0.55549846 -0.4481414 -0.5104589
  C8.A138.O3TCGA
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                                         -0.08383075 0.8011969 0.5122829
                             NP_004989 NP_001243024 NP_149043 NP_067047
##
                   NP 036467
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## AO.A12D.O1TCGA 0.08272487
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## C8.A131.O1TCGA 2.52493748
                              2.1849155
                                           0.5131407
                                                      1.2943817 -0.8388516
## AO.A12B.O1TCGA -2.46682901 -2.6414319
                                          -0.6736854 -1.9430205 -7.7631156
## BH.A18Q.02TCGA 1.92490308 1.9650477
                                          -0.8216554 2.0988629 1.1019391
## C8.A130.02TCGA -0.46454076 -0.2251103
                                           0.2307914 -0.5924556 -0.1496734
## C8.A138.O3TCGA -0.08017361 0.7390256
                                           1.3278250 -0.4202876 1.5326248
##
                  NP_002461 NP_060003 NP_003793 NP_060004 NP_005954
## AO.A12D.O1TCGA -0.4506469 1.0351744
                                       0.9627882 1.0351744 0.9627882
## C8.A131.O1TCGA 0.7681572 1.3915308 1.6991698 1.2336635
                                                              2.0189524
## AO.A12B.01TCGA -2.4806864 -2.7994059 -2.4806864 -2.7994059 -2.4806864
## BH.A18Q.02TCGA -2.3973303 -1.5676756 -0.5975148 -1.5676756 -1.5676756
## C8.A130.02TCGA -0.3989434 -0.1267143 -1.3993034 -0.4481414 -0.3989434
## C8.A138.O3TCGA
                            1.0169681 1.2217679 1.0901109 0.9511396
                  0.8085112
                  NP_002463
                              NP_689914 NP_001242941 NP_060227 NP_055796
## AO.A12D.O1TCGA
                  1.1113704
                             0.66181419
                                         2.0981081
                                                     1.3856758 -0.9116325
## C8.A131.O1TCGA 2.0189524
                             0.16907078
                                           ## AO.A12B.O1TCGA -2.4030851 -1.72130254
                                          -0.6625995 -0.2607358 0.1161846
## BH.A18Q.O2TCGA -1.3401896
                            0.18530451
                                          -0.8216554 -1.4104426 -7.5692906
  C8.A130.02TCGA -0.3989434 -0.07751624
                                           0.2340713 -0.3497454 0.3455868
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                  1.3607392
                             0.82679690
                                           1.2912536 -0.6031445 -0.2228020
                  NP 065935
                             NP 008974 NP 001156806 NP 000251 NP 001242970
## AO.A12D.O1TCGA 1.1113704 0.5703790
                                         -2.0317131 0.8637335
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## C8.A131.O1TCGA 2.0189524 -0.7943249
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## AO.A12B.O1TCGA -3.4673311 -1.0977209
                                          0.5596205 -5.2881894
                                                                -2.96846579
## BH.A18Q.02TCGA 0.8276178 -1.3836796
                                         -2.4910010 -1.6245471
                                                                -1.21306511
## C8.A130.02TCGA -0.4481414 1.3689059
                                         -2.5833360 -0.3792642
                                                                 0.07335773
## C8.A138.O3TCGA
                 1.2217679 -2.4097713
                                         -0.1789164 3.3465658
                                                               -0.45320181
                 NP 001094891 NP 057323
                                         NP 002465 NP 005955 NP 001035202
##
## AO.A12D.O1TCGA
                    1.2104251
                                     NA -0.2334884 2.1019179
                                                                -0.2296786
                                     NA -2.1787002 0.5131407
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                     NA -3.1236683 -0.6875428
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## BH.A18Q.02TCGA
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                                        0.6938026 -0.8216554
                                                                 0.6737303
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                            NP_000250
                                                        NP_878918 NP_892006
## AO.A12D.O1TCGA
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                                                       1.55711676
                                                                   0.3608401
                  -2.87898356 -2.90327085 0.92197663
## C8.A131.O1TCGA
                                                      1.39153082
                                                                   2.6342303
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.O2TCGA -0.04799742 -0.04143768 0.44726278 0.12255577 -0.1529532
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## C8.A138.O3TCGA
                   3.78176535 3.80370818 -0.28863055 2.21650978 0.8926254
##
                  NP 149062 NP 001138722
                                           NP 003118 NP 001123910 NP 001182461
## AO.A12D.O1TCGA
                  0.3608401
                                      NA -0.43159788
                                                     -0.44683707
## C8.A131.O1TCGA
                  2.6342303
                                          0.08811316
                                      NΑ
                                                       0.08406528
                                                                     0.1043047
## AO.A12B.O1TCGA -1.3083529
                                      NA -0.30507939
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                                                                    -0.3050794
## BH.A18Q.02TCGA 0.6068226
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                                                      -0.74471165
                                                                    -0.7815108
## C8.A130.02TCGA -0.1562331
                                      NA -0.54653748
                                                      -0.54653748
                                                                    -0.5465375
## C8.A138.O3TCGA
                 0.7463398
                                      NA
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                                                                     0.2416546
##
                 NP 001243000 NP 004406
                                          NP 689916
                                                     NP 060124 NP 443141
                                          2.2543098
## AO.A12D.O1TCGA
                   -0.5344624 0.4789439
                                                     0.7875375 -1.3269005
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                          0.7231374
                                                     0.9337694 -1.5272994
## BH.A18Q.02TCGA
                    0.9580877 -1.1863021
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                                                     0.7372925 0.7372925
## C8.A130.02TCGA
                   -0.8810841 -1.5173787 -0.5662167 -1.2484294 -0.2283902
## C8.A138.O3TCGA
                    1.0462253 -0.2228020
                                          0.8560540 -1.0566298
                                                                       NA
##
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                                          NP_001447 NP_001157789 NP_001448
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## AO.A12D.O1TCGA 0.64657500
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## C8.A131.O1TCGA -0.02117963
                              0.68315165
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## AO.A12B.01TCGA -1.37486831 -2.45020017 -3.5089032
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## BH.A18Q.02TCGA 0.58340495
                              0.01803541
                                         0.6636941
                                                      -2.5344909 -2.5177640
  C8.A130.O2TCGA 1.40498449
                              1.87728561 -0.1562331
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  C8.A138.O3TCGA -0.61045879 0.30748314
                                          1.3022250
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                  NP_001449 NP_001120959 NP_003119
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## AO.A12D.O1TCGA 1.3551975
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## C8.A131.O1TCGA 0.9260245
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                                                                  4.6824580
## AO.A12B.O1TCGA -1.8598762
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## BH.A18Q.02TCGA -1.4673141
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                  0.8450826
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##
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## AO.A12D.01TCGA 1.85047122 -2.4965085 -0.08109645
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## C8.A131.O1TCGA -0.62431388 4.6824580 -0.30857917
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## BH.A18Q.O2TCGA -0.74136627 -4.1938003 0.73394713
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                                                                 0.8999397
##
                 NP 001243417 NP 005742 NP 671714
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                                                                  NP 004360
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                   -0.3661447 -0.7630088 -0.7597290 0.36198619
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## C8.A138.O3TCGA
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## AO.A12B.01TCGA -3.2650135 -1.2168943 -0.99517639 -1.18363661 -1.9347060
## BH.A18Q.O2TCGA
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                  0.7293315
                             0.1815934 -0.15951296 -0.29398758
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                  0.2855403
                            0.4135402 0.09171193 0.52325435
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##
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## AO.A12D.01TCGA 0.901831476 -0.8087679 0.25416579 0.8027767
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## C8.A131.O1TCGA 0.302650848 -1.1262511 0.40384787
                                                   1.1648495
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## AO.A12B.01TCGA 1.022456596  0.9476268 0.03581190 -0.1471054
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## BH.A18Q.02TCGA 0.078252288 -1.1963382 0.23213985 0.9313247
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## C8.A130.O2TCGA 0.004480487 2.2052725 0.34558685 2.1855933
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## C8.A138.O3TCGA 0.592739994 0.1282833 0.01125487 -0.4568589
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                   NP_005045
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## AO.A12B.O1TCGA -0.06396116 0.03026895
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## BH.A18Q.O2TCGA 0.02807156 0.20203142
                                          0.1117061 -0.54733412 -0.4168642
## C8.A130.O2TCGA 0.37182580 0.37182580
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 1.O150779 -2.06535950 -1.5391350 3.0875929
                                                            3.0592578
## AO.A12B.01TCGA -0.2357925 -0.06673264 -3.3259859 -2.5832309 -2.5666021
## BH.A18Q.02TCGA -0.1893783 -1.10601289 -3.9395513 -2.0995913 -2.0962459
## C8.A130.O2TCGA 1.7788895 0.83428731 -0.1529532 0.6014166 0.5981368
## C8.A138.O3TCGA -0.5812017 -0.39468758 -0.0509165 0.4830258 0.4830258
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## C8.A131.01TCGA 3.0430662 0.2297890 1.3105732 -0.3207228 -0.3207228
## AO.A12B.O1TCGA -2.5915453
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## BH.A18Q.O2TCGA -2.1230090 1.0551038 2.9519353 2.0286099 2.0687545
## C8.A130.O2TCGA 0.5686179 -0.1431136 -0.8974835 -1.1073951 -0.7367699
## C8.A138.O3TCGA 0.4976544 1.2327393 -1.1334297 -1.4223437 -1.4223437
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## AO.A12D.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 0.05977799 4.633883 1.14056220 -0.23571732 -0.1952385
## AO.A12B.01TCGA -1.44415515 -0.770687 -0.03347495 -0.29676497 -0.4963111
## BH.A18Q.O2TCGA -0.06559913 -5.073636 -1.01903296 -0.12247062 0.6636941
## C8.A130.02TCGA -0.03159807 -4.187192 -1.04179768 0.31278816 0.8277276
## C8.A138.O3TCGA 0.99868244 -3.686113 3.02473754 0.06611196 0.2635975
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## AO.A12D.01TCGA -1.58215693 2.4028920 -0.06966706 0.002719109
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## AO.A12B.01TCGA -2.18413868 -2.9019504 -0.02516053 -0.055646742 -1.1254357
## BH.A18Q.02TCGA 0.16188683 -2.0828644 -0.19941441 -0.403482700 0.5967865
## C8.A130.O2TCGA 0.01759996 -0.2021513 -0.57933617 -0.772848434 -0.1103149
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## BH.A18Q.O2TCGA 0.7740917
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## C8.A131.O1TCGA 0.4645661
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## BH.A18Q.O2TCGA -1.6847640
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## C8.A138.O3TCGA
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## C8.A130.02TCGA
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                                         -0.3464655
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## C8.A138.O3TCGA
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                                                            NA 0.6256542
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0.8531627
## AO.A12B.O1TCGA -0.16373422 -0.09999032
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                                                             -0.8898604
## BH.A18Q.02TCGA -0.67780401 -0.50718954
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                                                              0.1919953
## C8.A130.O2TCGA 0.82444770 0.54237898 0.7719698 -0.4153427
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## C8.A138.O3TCGA 0.50862579 0.22702608 0.1319405 -0.2008592
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                NP 065700 NP 055107 NP 002151 NP 061978 NP 006436 NP 006717
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## C8.A131.O1TCGA -1.122203 -0.2640525 2.8163849 -2.1948917 -0.2640525 -2.0653595
## AO.A12B.01TCGA -1.022891 -1.2944956 -3.1153539 -2.3476556 -1.2556949 -0.4381101
## BH.A18Q.02TCGA 1.045068 11.0711771 5.0896343 0.5599873 0.6737303 -2.4709287
## C8.A130.O2TCGA 1.158994 2.6972528 0.5390991 -0.1660727 1.0245197 -1.0549172
  C8.A138.O3TCGA 1.689882 -0.7457729 -0.5702303 -1.4442865 0.4939972 0.7573113
                NP_001186211 NP_056493 NP_004230
                                                  NP_510880 NP_004516
                                       1.0504136 4.34969881 -2.366975
## AO.A12D.O1TCGA
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                 -2.0653595 -2.1625086
                                       0.2905072 0.71553470 -1.421746
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  -0.4381101 0.7009656 0.7175945 -0.52679730 5.362585
## BH.A18Q.02TCGA
                  -2.4709287 -2.3070050 -1.3636073 0.03476232 -3.641812
## C8.A130.02TCGA
                  -1.0549172 -0.7859679 1.1786735 -0.01847860 -3.377064
## C8.A138.O3TCGA
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                 NP_579899 NP_038479 NP_001124459 NP_001124453 NP_001229752
## AO.A12D.O1TCGA -0.2411080 -0.2068198
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## C8.A131.O1TCGA 0.8814978 0.8895936
                                      4.01050978
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## AO.A12B.O1TCGA -2.8492924 -2.8714642 -1.02566260
                                                 -1.0256626
                                                             -0.28290760
## BH.A18Q.O2TCGA -1.6044748 -1.6044748 -0.10239833
                                                  -0.1023983
                                                               0.08159767
## C8.A130.02TCGA -1.1205145 -1.1205145
                                     -0.42846220
                                                   -0.4973395
                                                               1.71001230
## C8.A138.O3TCGA 1.2839393 1.2766250 -0.05823078
                                                  -0.1423450 -0.14965926
                NP 001002029 NP 009224 NP 000543
                                                 NP 057336 NP 005551
## AO.A12D.O1TCGA -0.07728665 -0.1191944 -0.7630503
                                                 1.3247191 -0.8240071
## C8.A131.01TCGA -0.53526050 -0.6081224 1.6020206 0.4807576 -0.5271647
## AO.A12B.O1TCGA -0.29676497 -0.2912220 -2.1647384 -0.5572835 -0.4436531
## BH.A18Q.02TCGA
                 1.71001230 1.7592103 -0.2218305 0.4931809 0.1684739
## C8.A130.02TCGA
## C8.A138.O3TCGA
                 -0.18257351 -0.1386878 -0.9066871 1.1669108 -0.9542299
                 NP 937762
                           NP 004437 NP 005900 NP 002364 NP 055987
##
## AO.A12D.01TCGA -1.3688082 1.33995826 -3.1251252 0.1779698
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## C8.A131.O1TCGA -1.5715180 -0.03332327 0.6750559
                                                1.7032176
                                                           0.6386250
## BH.A18Q.02TCGA 0.9045616 -0.20945055 -1.1327759 -1.0825952 -0.2562859
## C8.A130.O2TCGA -0.6711725 0.39478488 2.5660581 0.7555705 0.5030206
## C8.A138.O3TCGA 2.2238241 -0.24474488 5.7310205 2.7943378 0.7755970
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NP 542417
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                                                                 NP 056372
## AO.A12D.O1TCGA 0.65800439
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                                                    -0.2982549 -0.206819790
                                                    -0.2600046 -0.563595671
## C8.A131.O1TCGA 0.29050720
                             0.5414758 -0.2802440
## AO.A12B.O1TCGA 0.02749747
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                                                    -0.2607358 -0.864917114
## BH.A18Q.O2TCGA -0.57744256 -1.0056514 0.2488668
                                                   -0.7012217 0.456280438
  C8.A130.02TCGA 1.14259498 -0.4383018 0.9654821
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  0.4647401 0.003940589
##
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## AO.A12D.O1TCGA
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                                           ## C8.A131.O1TCGA
                    0.7762529 0.82887537
                                           0.15287925 -2.0936947 -0.4502550
## AO.A12B.O1TCGA
                   -0.6487422 -0.65428510
                                         -0.01961758 -2.1065374 0.0358119
## BH.A18Q.02TCGA
                   -0.3834104 -0.29977586
                                          -0.44362728 -0.2663220 -2.1363905
## C8.A130.02TCGA
                    0.9064444 0.80476849
                                          0.65717439 -0.2447895 2.0347193
## C8.A138.O3TCGA
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                    0.8085112 0.93285394
                             NP_004332 NP_002449 XP_003960896 XP_003960532
##
                  NP_001084
## AO.A12D.O1TCGA -0.7973385
                            0.03319749 -5.411004
                                                    -6.161534
  -3.660225
                                                                       NA
  AO.A12B.01TCGA -0.1360195 -0.62379889 -3.758336
                                                                       NA
                                                   -4.041026
## BH.A18Q.02TCGA -1.9222861 -0.57744256 -5.515226
                                                                       NΑ
                                                    -6.468660
## C8.A130.02TCGA 1.2901891 -0.48421997 -6.174792
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                                                    6.049192
                                                                 4.611936
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                  NP 203754
## AO.A12D.01TCGA 1.2485231 -1.09069296
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                                         -0.6068486
                                                      0.8103963
## C8.A131.O1TCGA
                 0.7883966
                            0.09216104
                                         -0.3531059
                                                      0.8612584
                                                                   0.8491148
## AO.A12B.O1TCGA 0.2519869
                            0.30464486
                                         0.2907875
                                                     -0.1803631
                                                                  -0.1997634
## BH.A18Q.02TCGA -1.6212017 -1.36695268
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                                                     -2.1631536
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## C8.A130.02TCGA
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## AO.A12D.O1TCGA -2.1002895 -1.62406471
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## C8.A131.O1TCGA 1.1000834 0.50909278
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## AO.A12B.O1TCGA -1.5245279 -1.81553265
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## BH.A18Q.02TCGA -0.1759967 -0.09570757 -0.6042056 -0.1793421
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## C8.A130.02TCGA -1.6485734 -1.65513316
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## C8.A131.O1TCGA 1.1972325
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## AO.A12B.O1TCGA -0.3327941
                            -1.66587306 -1.6353869 -0.5489691
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## BH.A18Q.02TCGA 0.2421760
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                             1.11197528
                                                                1.1487745
## C8.A130.02TCGA -0.1660727
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 1.0919876 -0.3490580 1.10008339 0.62648132
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## AO.A12B.01TCGA -1.5494712 -1.5245279 -1.01180523 -0.95083280
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## BH.A18Q.02TCGA 2.0018469 1.2190275 0.13177840 0.24886676
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## C8.A130.O2TCGA -0.1824720 -0.7925276 -0.04799742 0.46366213
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                 0.7609684 -0.1167450 1.23639649 -0.16063067
                                                              -0.13503070
                 NP_001231509
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                  -0.2721482 -0.009035984 0.2095496 -0.9319528
## AO.A12B.O1TCGA
                  -1.0727777 -0.618255939 -0.4297957 -2.6636037 -1.7268455
## BH.A18Q.02TCGA
                   0.4562804 -0.206105170 -1.5476033 -2.0929005 1.6706541
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
                   0.5927400 0.918225380 1.0352538
                                                           NA 1.1595966
                 NP 004362 NP 001091868 NP 006297 NP 004990 NP 056234
                 1.4809208
                             1.4656816 -0.5839898 -0.3706411 2.5171859
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                 0.9665033
                             0.9624554 -0.3935847 -1.6119968 3.2171251
## AO.A12B.O1TCGA 0.1882430
                             ## BH.A18Q.O2TCGA -0.2462498
                            -0.2462498
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                 0.4407030
## C8.A130.02TCGA
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## C8.A138.O3TCGA
                 1.2912536
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##
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## AO.A12B.O1TCGA -0.32447971
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                            -0.02545455
                                        -0.09570757 -0.3834104 -2.0995913
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                        -1.11880114 0.8267969 1.0023396
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                             NP_000928
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## AO.A12D.O1TCGA 1.7399871
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## C8.A131.O1TCGA 0.7438699 -0.004988103
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## AO.A12B.O1TCGA -1.9679637 0.030268948
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## BH.A18Q.02TCGA -1.3167719 0.402754328
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## AO.A12B.O1TCGA -1.8903624 -2.64697482 -5.0664715 0.1078702 1.4991501
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## C8.A130.O2TCGA 0.3291875 1.04091905 2.2052725 0.5030206 -0.1529532
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## BH.A18Q.02TCGA 0.9380154 0.20537680 -1.06252293 1.128702192
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## BH.A18Q.02TCGA 1.03503150 0.4295174 0.57336880
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## C8.A130.02TCGA -0.26446876 0.1717538 -0.03159807
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## C8.A131.01TCGA -0.62836177 -1.3205494 0.379560586 0.08811316 0.08811316
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## AD.A12B.01TCGA -0.74020079 0.4459900 -0.130476537 -2.04833646 -2.04833646
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## BH.A18Q.02TCGA
## C8.A130.02TCGA
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## AO.A12D.O1TCGA 1.6523617
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## C8.A131.O1TCGA -1.3084058
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## AO.A12B.O1TCGA -1.8238471 0.45430445 0.95316975 -1.15869335 -2.3781419
## BH.A18Q.02TCGA 3.2128751 -0.44028190 -0.01876379 -0.04887222 -0.3733743
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## AO.A12B.01TCGA -0.5184829 -2.6442033 -2.3781419 -0.89540333
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  -1.6161721
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  -1.96672070 -0.11359479 1.0507587 0.6145361 -0.9237224
## C8.A138.O3TCGA
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## AO.A12B.O1TCGA 0.9199121 0.5041910
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## BH.A18Q.O2TCGA -0.9253623 -0.7948924
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## C8.A130.02TCGA -1.2681086 0.1750337
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## AD.A12B.01TCGA -2.0926800 -0.1859060 0.66216499 1.8178696 3.3892953
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## C8.A130.O2TCGA -1.5698566 -0.5170187 0.06351813 -0.6482134 2.7070924
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## AO.A12B.O1TCGA -0.4935396 -2.0732797 -0.216392227
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## BH.A18Q.02TCGA 0.9714692 1.2290636 -0.490462628 -0.4202096 -0.5774426
## C8.A130.02TCGA -0.1037552 0.1061564 0.762130195
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## AO.A12B.O1TCGA
                  -0.04733232 -0.5766838 -2.6386604
                                                     0.40164645
                                                                   0.2852445
## BH.A18Q.02TCGA
                  -0.56740641 -0.7346755
                                         2.9720076
                                                    -0.51053492
                                                                  -0.3599927
## C8.A130.02TCGA
                   0.18815314 1.7985688
                                        1.6444149
                                                     0.57189780
                                                                   0.7424510
## C8.A138.O3TCGA
                   0.32576883 1.1339966 4.4583361
                                                     0.15388329
                                                                   1.3497678
##
                   NP 003290
                              NP 057376 NP 001615 NP 001092693 NP 002408
```

```
## AO.A12D.01TCGA 1.69426949 0.09796406 -3.540393
                                                -0.5611310 -0.6258976
-1.1788736 1.7436965
1.4021485 -1.5078991
## BH.A18Q.02TCGA 1.67734482 0.79750939 -1.671382
                                                -0.8015831 -1.4639688
## C8.A130.02TCGA -0.72693027 0.87036587 6.925004
                                                -1.1795522 1.8838453
1.6386818 0.7390256
                   NP 055873 NP 001009814 NP 002263 NP 003371 NP 872313
## AO.A12D.O1TCGA 1.389485641
                            1.73998707 -2.0774307 -0.09252584 -1.1783183
## C8.A131.O1TCGA -0.000940222
                            0.03144283 -1.1748257 1.41986598 -0.5109732
## AO.A12B.O1TCGA 2.552310175
                            2.57171049 0.5651634 -2.35597006 0.5928781
## BH.A18Q.02TCGA -1.912249919 -2.05610134 -0.7447116 0.07490691 -0.4804265
## C8.A130.O2TCGA -1.291067715 -1.52393840 -1.8716045 -0.02175846 -2.2356699
## C8.A138.O3TCGA 0.815825483
                            0.74999698 1.6130818 -0.24474488 0.3147974
                NP_778253 NP_006112 NP_005373 NP_000414 NP_006253 NP_006149
## AO.A12D.01TCGA -2.519367 -2.2374422 -1.4602434 -2.4736497 -1.4411944 0.4560851
## C8.A131.O1TCGA -1.567470 -0.9400486 -0.6405054 1.7113134 1.3955787 2.2132506
## AO.A12B.01TCGA -2.040022 -0.7429723 -3.6862775 -3.9911396 -2.1065374 -3.2650135
## BH.A18Q.02TCGA -2.795431 -0.9889245 3.4102526 1.8245416 0.2756298 -0.3332297
## C8.A130.O2TCGA -3.783768 -2.5505374 -0.1726324 -3.4689006 -0.4907797 -0.2546292
## C8.A138.O3TCGA -4.000627 -0.5812017 -0.2447449 0.1429119 -0.3690876 -0.4678304
##
                NP_002275 NP_066554 NP_002272 NP_001243211 NP_476429
## AO.A12D.O1TCGA -1.437385 0.5170419 -1.585967
                                             -2.3441166 -4.1842491
## C8.A131.O1TCGA 3.545003 2.1120536 4.063132
                                             -1.1991130 -1.5634223
## AO.A12B.O1TCGA -2.901950 -3.3564721 -2.965694
                                              0.7979672 -4.0881412
## BH.A18Q.O2TCGA 2.593979 -0.5406434 2.654196
                                             -2.3471496 0.2823206
## C8.A130.02TCGA -2.278308 -0.3366259 -2.429182
                                              -1.7830480 -0.5924556
## C8.A138.O3TCGA -2.332971 -0.4495447 -2.468285
                                              0.9657682 2.2384526
                 NP_002046 NP_116116 NP_542785 NP_001099011 NP_057613
## AO.A12D.O1TCGA -2.3479264 -1.4602434 2.2657392 -1.46024339 1.7628459
## C8.A131.01TCGA -1.6443799 0.3593212 0.7479178 -0.64050541 0.9624554
-3.68627752 -1.9956785
## BH.A18Q.O2TCGA -0.5573703 3.5875579 3.1727305
                                               3.42028877 -2.3571857
## C8.A130.O2TCGA -1.3304261 -0.2546292 -0.8974835
                                              -0.06767663 0.1356752
## C8.A138.O3TCGA 2.4176524 -0.3508019 1.2546822
                                              -0.25205915 1.0974252
                 NP_778223 NP_005547 NP_149034 NP_258259 NP_778238 NP_775487
## AO.A12D.01TCGA -0.2753962 1.5990245 -4.1842491 -0.2753962 -2.397454 -2.3479264
## C8.A131.O1TCGA 1.2943817 0.7479178 -1.4865125 -0.6931279 2.945917 -1.5634223
## AO.A12B.01TCGA -2.7107187 -3.7638788 -4.1546566 -2.7107187 -2.741205 -3.5172176
## BH.A18Q.O2TCGA -1.2665912 0.6235495 0.2354852 -0.4804265 -1.607820 -1.2933543
## C8.A130.02TCGA -2.0651168 -0.5104589 -0.6678926 -1.1369139 -2.209431 -0.4612609
## C8.A138.O3TCGA 0.4098830 2.1909098 2.6151380 0.9657682 0.409883 3.5147942
                NP 149022 NP 001918 NP 000415 NP 005546 NP 005545 NP 004684
## AO.A12D.O1TCGA -1.646923 -3.9175632 -3.0565488 -2.2717304 -1.7916958 -1.665972
## C8.A131.O1TCGA 4.370771 -0.6202660 0.6588644 1.5777333 1.8529892 1.306525
## AO.A12B.01TCGA -4.329259 -4.1380278 -4.1213989 -3.5144461 -2.8492924 -3.123668
## BH.A18Q.O2TCGA 2.968662 -1.2364828 2.1824975 0.5800596 0.5800596 1.439823
## C8.A130.O2TCGA -4.311827 -0.8417257 -2.6390938 -2.2586290 -2.2586290 -1.927362
## C8.A138.O3TCGA -2.987599 -1.3711437 0.9438254 0.9511396 1.0352538 2.483481
                NP_787028 NP_001609 NP_001073867 NP_055816 NP_056069
                                   0.8599237 0.39893812 -1.0754538
## AO.A12D.O1TCGA -2.755575 0.9361197
                                   -0.4462071 -0.09808936 -0.9602880
## C8.A131.O1TCGA 1.221520 -1.7779599
## AO.A12B.O1TCGA -4.121399 -0.7485152
                                   -0.4214813 -0.18590601 3.0456325
## BH.A18Q.O2TCGA 1.045068 0.3325013 -0.8015831 -0.63431405 -0.9822338
```

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## C8.A138.O3TCGA 1.554568 -0.8847442
                                       ##
                  NP 006603 NP 008985
                                       NP 004789 NP 065810
                                                             NP 002245
## AD.A12D.O1TCGA -0.05061807 -0.5420820 -0.07728665 0.4751341 -0.03537887
## C8.A131.O1TCGA 0.11644833 -0.2600046 -0.19928639 -0.4219198 -0.16690334
## BH.A18Q.02TCGA -0.86514540 -1.4137880 -1.35022577 -1.7717439 -1.75501697
## C8.A130.O2TCGA -0.10375519 -0.1988714 -0.60885499 -0.9598010 0.35870632
## C8.A138.O3TCGA 0.94382535 1.9093101 2.13970986 1.3790249
                                                             1.96782432
##
                NP 001092763 NP 878905 NP 005541 NP 065867
                                                             NP 659464
## AO.A12D.O1TCGA
                  -1.1859379 -1.9517073 -1.5478687 -1.5478687
                                                             2.8181600
## C8.A131.O1TCGA
                  -1.5512786 0.1812144 -1.2517354 -1.2517354
                                                             0.2338369
## AO.A12B.O1TCGA
                  -1.5771859 -0.9452899 0.2159577 0.2159577 -0.8316594
## BH.A18Q.02TCGA
                  -0.9086354 -0.1358522 -2.1731897 -0.9420892 -0.4369365
## C8.A130.02TCGA
                   0.5390991 -0.5629368 -0.5924556 -0.1693526 -1.3632248
## C8.A138.O3TCGA
                  -0.0509165 1.8544530 3.0064518 1.9166244 1.5911390
##
                  NP_078980
                             NP_055889 NP_071396 NP_001099038 NP_001186795
## AO.A12D.O1TCGA -0.2449178
                           0.41036751 -0.2639668
                                                   -0.2639668
                                                               -0.1953904
## C8.A131.O1TCGA -1.0088626
                           0.44432668 -0.6566969
                                                   -0.6566969
                                                               -1.0979160
## AO.A12B.O1TCGA 2.7379989
                           0.19101443
                                      1.1804306
                                                   1.1804306
                                                                2.6936553
## BH.A18Q.O2TCGA -2.1698443 -0.04552684 -0.9487799
                                                  -0.9755430
                                                               -2.1932620
## C8.A130.02TCGA -1.8125669 0.63421531 -1.2746684
                                                  -1.2910677
                                                              -1.8289662
  C8.A138.O3TCGA 1.9531958 0.15022616
                                      0.2526261
                                                   0.2599403
                                                                1.9385672
                  NP_004312 NP_036442
                                                              NP_005886
##
                                       NP_904325
                                                  NP_036565
## AO.A12D.O1TCGA 0.41036751 -0.8621051
                                       1.1570880 -0.16872181
                                                             0.87897269
                                      1.1972325
## C8.A131.O1TCGA 0.44432668 -0.1466639
                                                 0.09620892 0.01929918
## AO.A12B.01TCGA -0.36605182 -1.5827288 -0.3050794 -0.69585721 -0.21639223
## BH.A18Q.02TCGA -1.64127399 -1.1963382 -0.2362136 -0.25628590 -0.56406103
## C8.A130.02TCGA 2.86452614 0.5390991 0.9523626
                                                 0.88348534 0.11271616
  C8.A138.O3TCGA -0.06188792 -0.0509165 0.2197118 0.81216834 1.53262476
##
                 NP_003161 NP_003237 NP_003238 NP_002102 NP_006608
## AO.A12D.01TCGA 1.1304194 3.4315375 3.7972781
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## C8.A131.O1TCGA -0.7214630 -1.7901036 -0.8428995
                                                0.1690708 -1.2193524
0.2547583 -2.1536525
## BH.A18Q.02TCGA -0.2362136 -1.2933543 -1.3535711 -0.4202096 -1.4539326
                                                0.2307914 -0.9138828
## C8.A130.02TCGA 0.6014166 -0.5662167 0.1783135
  C8.A138.O3TCGA -1.2614296 2.7175378 3.2002802
                                                0.3440545 -2.6291996
                 NP 056986 NP 062535 NP 003248
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## AD.A12D.O1TCGA 0.5703790 -0.2601570 -0.2106296 -0.1953904 0.7494395
## C8.A131.O1TCGA 0.3350339 0.7195826 0.4807576
                                                0.5819546
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## AO.A12B.O1TCGA -0.6016271 -0.1969919 0.1605282 0.1355850 -2.0705083
## BH.A18Q.02TCGA -0.1626152 -1.1996836 -0.3332297 -0.3432658 0.8878347
## C8.A130.O2TCGA 1.1557145 1.5492987 -0.7859679 -0.7630088
                                                          1.4017046
## C8.A138.O3TCGA 0.7317113 0.8048541 1.0462253
                                                1.1193680
                                                           0.2014261
##
                  NP_008832 NP_001952 NP_001716
                                                NP_004841
                                                           NP_005397
## AO.A12D.O1TCGA 0.07129548 0.2351168 -2.626042
                                                1.1266096 -0.2601570
## C8.A131.O1TCGA 1.17294525 0.9988864 5.900870
                                                0.5333801 1.3389084
## AO.A12B.01TCGA -1.48295579 -0.7180290 -1.308353 -0.4408816 -1.0173482
## BH.A18Q.02TCGA 0.17861374 -0.2696674 -3.066407
                                                0.5767142 0.3258105
                 0.07663760 1.4213838 -1.874884
## C8.A130.02TCGA
                                                0.2045525 -0.4055031
                                                1.0498824 1.4960534
  C8.A138.O3TCGA
                 0.07708337 -0.3654305 -1.250458
                NP_001181875 NP_886553 NP_937887 NP_937885 NP_001185730
##
## AO.A12D.O1TCGA
                   1.7323675 1.7285577
                                       1.7742753
                                                  1.7818949
                                                               0.4484655
## C8.A131.O1TCGA
                   0.4443267 0.4564703 0.4726618 0.4564703
                                                               0.2540763
## AO.A12B.O1TCGA
                  -1.0395200 -1.0450629 -1.0395200 -1.0450629
                                                               0.1799285
```

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## BH.A18Q.02TCGA
                  -0.4302458 -0.4402819 -0.4235550 -0.4235550
                                                              -0.9989607
## C8.A130.02TCGA
                   0.8736457  0.8736457  0.8736457  0.8736457
                                                               1.0048405
## C8.A138.O3TCGA
                   0.2160547
                              0.1977690
                                        0.1977690 0.1977690
                                                              -0.2703448
##
                NP_001263347 NP_055681
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                                       NP_056193
                                                               NP_072174
## AO.A12D.O1TCGA
                   0.8142061 0.8256355 0.9742176 -0.11157484
                                                              0.89040208
                   ## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   0.9337694 0.9559412 -0.3660518 -0.58499825 -1.31389588
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## BH.A18Q.02TCGA
                  -2.3638765 -2.3839488 -0.9052900 -0.09905295
## C8.A130.02TCGA
                  -1.5337780 -1.5108189 0.2176720
                                                  0.65717439
                                                              0.06351813
## C8.A138.O3TCGA
                   1.6496532 1.6789103 0.4427973 1.15228229
                                                              0.54885432
                  NP_073585
                             NP_056134 NP_065821 NP_002282 NP_001193583
## AO.A12D.O1TCGA
                 1.15708795 -0.25253737 -3.1746526 -0.9878284
                                                              0.08272487
## C8.A131.O1TCGA 1.53725453 -0.02522751 -1.4298422 2.3589744
                                                              0.27026780
## AO.A12B.01TCGA -1.58272885 0.75639510 0.1078702 -1.9042198
                                                              0.37947466
## BH.A18Q.02TCGA -0.05556299 0.28232058 -2.4240933 -0.4770811
                                                              0.04145309
## C8.A130.O2TCGA -0.72693027 -0.19559151 0.7030926 0.3226278
                                                              0.19799275
## C8.A138.O3TCGA 0.36965451 1.10108234 1.7922816 -0.4751446
                                                              0.75731126
##
                 NP 006303
                            NP 006302 NP 569707
                                                  NP 570924
                                                              NP_002841
## AD.A12D.O1TCGA 0.12463265 0.09796406 -1.1326007 -0.20681979 -0.20681979
## C8.A131.01TCGA 0.25812416 -0.01308386 -1.0412456 -0.26810036 -0.26810036
## AO.A12B.O1TCGA 0.36838876 1.18874503 0.4764762 -0.24133549 -0.24133549
## BH.A18Q.02TCGA 0.05148923 -0.06225375 -0.7447116 -0.78485623 -0.75809318
## C8.A130.O2TCGA 0.20127262 1.18523328 0.2537505 1.80512849 1.80184863
## C8.A138.O3TCGA 0.79753979 -0.27400199 -1.1553725 0.01491201 0.01491201
##
                  NP 002830 NP 663780 NP 056101 NP 000417 NP 001073291
## AD.A12D.01TCGA -0.02394948 -3.273707 -3.273707 0.2351168
                                                            0.2351168
## C8.A131.O1TCGA -0.48668593 -4.141922 -4.044773 -0.1709512
                                                           -0.1709512
## AO.A12B.01TCGA -0.51293993 -2.796634 -2.796634 -1.5078991
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## BH.A18Q.02TCGA -0.66107710 3.400216 3.667847 1.6004010
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## C8.A130.O2TCGA 0.05367852 -2.048717 -2.137274 0.2176720
                                                            0.2012726
## C8.A138.O3TCGA -0.47514464 -3.002228 -3.221656 -0.8847442
                                                           -0.8847442
##
                  NP_005550
                               NP_064505
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## AO.A12D.O1TCGA -1.26975348
                            1.579975549
                                         1.36662685 0.1665404 -0.14586302
## C8.A131.O1TCGA -0.03332327
                            ## AO.A12B.O1TCGA 0.22981507
                            0.005325683 -0.66259952 0.2686157
                                                              0.71482300
## BH.A18Q.O2TCGA 1.32273434 -0.095707569 -0.89190845 -0.9922699
                                                              0.16523222
## C8.A130.O2TCGA 0.36854593 -0.894203583 -0.49405958 1.8904051 0.57845754
NP 056121 NP 006026 NP 003598 NP 055641 NP 059995
##
## AO.A12D.O1TCGA 0.28464417
                           0.4027479
                                      1.1304194
                                                           2.0447709
                                                1.1304194
## C8.A131.O1TCGA 0.05977799
                           1.0798440 1.8732286 1.8732286 0.9705512
## AO.A12B.01TCGA 0.17715706 0.3351311 -0.1055333 -0.1055333 0.3933320
## BH.A18Q.02TCGA 0.28901134 -0.9119807 0.1284330 0.1284330 -0.2629767
## C8.A130.O2TCGA 0.08319734 0.1914330 -0.3694246 -0.3694246 -0.1267143
## C8.A138.O3TCGA 0.28919744 1.1303395 -0.2008592 -0.1935449 0.3001689
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##
## AO.A12D.O1TCGA
                  -0.3401627
                             1.1685173
                                         1.01993522 1.484730595
                                                                   1.7399871
## C8.A131.O1TCGA
                   1.0636525 0.2095496
                                         0.61028980 -0.000940222
                                                                   1.1041313
                   0.1993289 -0.8843174
                                       -0.83165943 4.118192915
## AO.A12B.O1TCGA
                                                                  -1.3693254
## BH.A18Q.02TCGA
                  -0.1391975
                              0.1853045
                                        -0.06225375 -2.447511017
                                                                  -0.7982378
## C8.A130.02TCGA
                   0.8966048 0.9523626
                                         0.89660482 1.418103968
                                                                   1.0507587
## C8.A138.O3TCGA
                   0.2014261 0.4866830
                                         0.09536907
                                                                   1.3424535
##
                 NP 056993 NP 001157968 NP 078789 NP 006188 NP 003461
## AO.A12D.O1TCGA 1.7209381
                           0.15511104 1.4199640 -1.9212290 -0.8201973
```

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## C8.A131.01TCGA 0.9503118 -0.02927539 -0.4462071 -1.8467739 -1.1464905
## AO.A12B.O1TCGA 0.2325865
                           -3.48395993 0.7591666 1.8843850 0.1189561
## BH.A18Q.O2TCGA -0.7112578
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## C8.A130.02TCGA -0.2644688
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## C8.A138.O3TCGA
                 0.8304540
                            2.24576690 1.8288530 0.5963971 -0.1386878
                 NP 000042 NP 705833
                                      NP 055791 NP 000480 NP 612114
##
## AO.A12D.O1TCGA
                 0.2884540
                           0.5589496 -0.09252584 -0.1534826 -0.1534826
## C8.A131.O1TCGA
                 0.9584076 1.2498550 -0.21547791 -0.1385682 -0.1385682
## AD.A12B.01TCGA 0.4182753 -0.8178021 -1.23075167 -0.3411086 -0.3411086
## BH.A18Q.02TCGA 1.5167665 -0.3767196 0.05818000 -1.1026675 -1.1227398
## C8.A130.O2TCGA -1.0844360 -0.4186226 1.68377335 0.8572464 0.8802055
                 0.6037114 -0.6031445 -0.33617335 1.7410817
## C8.A138.O3TCGA
                                                          1.8032531
                 NP_060473 NP_055928 NP_006466 NP_001129406 NP_001129407
## AO.A12D.O1TCGA
                 0.1817796
                          0.6046672 -2.8012923 -2.88129810
                                                             -2.8927275
## C8.A131.O1TCGA
                 -2.11798195
                                                             -2.0086892
## AO.A12B.O1TCGA
                 1.0224566 0.2353580 -3.3093571
                                                -3.38141539
                                                             -3.4091301
## BH.A18Q.O2TCGA 1.3060074 -0.2228321 1.0249954
                                                1.02834074
                                                              1.0183046
## C8.A130.02TCGA -0.3103869 -0.4547012 1.2901891
                                                 1.22459170
                                                              1.2705099
## C8.A138.O3TCGA 0.7829112 1.7374246 0.1355976
                                                 0.06976909
                                                              0.1538833
                  NP 597677 NP 002366 NP 001102 NP 056655 NP 001234926
## AO.A12D.O1TCGA -0.08490625
                           1.7476067 -0.2868256 -0.2982549
                                                          -0.77828951
## C8.A131.O1TCGA 1.07984399 0.4929013 -0.9886232 -0.9724316
                                                           -0.85099522
## AO.A12B.01TCGA -0.26905023 -0.6847713 0.3462170 0.3240452
                                                            0.12172759
## BH.A18Q.O2TCGA 0.40944509 -0.5774426
                                      0.2522121 0.3425375
                                                            0.05483462
## C8.A130.02TCGA 0.54565885 -0.1693526
                                      1.1622742 1.1393151
                                                           -1.15659309
  NP_937883 NP_115797 NP_001103132
                                                     NP_006411 NP_006412
## AO.A12D.O1TCGA -0.77447972
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## BH.A18Q.02TCGA 0.54326037 -0.25963128 0.52318807 1.8178509 -0.7313301
## C8.A130.O2TCGA 0.28654921 0.23407131 0.48662121 -0.1693526 -1.6256143
## C8.A138.O3TCGA -0.28863055 0.02222628 -0.22280204 0.2782260 2.3115954
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## C8.A131.O1TCGA 0.1164483
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## AO.A12B.O1TCGA -2.5250300
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## BH.A18Q.02TCGA 0.6837664
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## C8.A138.O3TCGA 1.4119392
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## AO.A12B.O1TCGA -3.3481577
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## BH.A18Q.02TCGA -1.6111656
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## AO.A12B.O1TCGA -0.2829076
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## AO.A12B.01TCGA -0.2191637 -0.6293418 -0.02516053 0.13558496
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## BH.A18Q.02TCGA -0.8082739 -0.3666835 -1.57102097 -0.09905295
                                                             -0.3666835
## C8.A130.O2TCGA 1.6575344 0.2996687 0.44726278 1.08355734
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## C8.A138.O3TCGA -0.8298871 1.4777677 0.20508324 0.05879768
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                 NP 055535 NP 005981 NP 002532 NP 001158508 NP 060715
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-0.3858803 -0.1191944
## C8.A131.O1TCGA 0.1933581 1.5898770 -0.6202660
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2.6215970 2.6631691
## BH.A18Q.02TCGA -0.8183101 0.8811439 -0.1659606
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## C8.A130.O2TCGA 0.3062284 -0.4514213 0.3882251
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## AO.A12D.O1TCGA 0.4941831
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## C8.A131.O1TCGA -0.2923876
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                                                      0.6750559 0.3714648
## AO.A12B.O1TCGA 0.5817922
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## BH.A18Q.02TCGA 0.5733688
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## C8.A130.02TCGA -0.7302101
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                                         -1.6026553
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## C8.A138.O3TCGA 0.6329685
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## AO.A12D.01TCGA -0.3630215 -0.2030100 0.7532493
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## C8.A131.O1TCGA 0.3309860 -0.8631389
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## AO.A12B.O1TCGA -1.1836366
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                                                  0.5817922 -1.4441552
## BH.A18Q.02TCGA -1.0391053
                           0.2053768 0.1418145
                                                  0.1418145 0.7540194
## C8.A130.02TCGA 0.4964608
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## C8.A138.O3TCGA -0.6945730
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##
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## AO.A12D.01TCGA 0.74562975 -1.7650272 -1.76502724
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## C8.A131.O1TCGA 0.15692713 -0.1952385 -0.19523851
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## AO.A12B.01TCGA -0.37436624 -1.1947225 -1.19472251 -0.3244797 -1.6797304
## BH.A18Q.02TCGA 1.81450547 0.3191198 0.31911978 -0.6811494 -0.5406434
## C8.A130.02TCGA -0.47766024
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## C8.A138.O3TCGA -0.02165938
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## AO.A12D.O1TCGA -0.06585726
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## C8.A131.O1TCGA -2.32442387
                            -0.53121262 -0.2721482 1.0191258 0.4078958
## AO.A12B.O1TCGA 1.92041413
                             1.11668671 0.2713872 -1.8349330 -0.3826807
## BH.A18Q.02TCGA 1.54687493
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## C8.A130.02TCGA -1.05163729
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## AO.A12D.O1TCGA 1.1723271 1.1875663 2.0942983
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## C8.A131.O1TCGA 0.8369711
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## AO.A12B.O1TCGA 1.7291824 1.7458113 -0.5877697 -0.02238906 -0.9785475
## BH.A18Q.02TCGA -0.3499566 -0.3499566 -0.4168642 -1.23982817 -2.2835873
## C8.A130.O2TCGA -1.2746684 -1.2746684 -0.9893198 0.06023826 1.4607423
  C8.A138.O3TCGA 0.8487397
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## AD.A12D.01TCGA 1.5799755 -2.2031540 -0.02394948 -0.02394948
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## AO.A12B.01TCGA -0.9813190 -0.1304765 -0.57945530
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## BH.A18Q.02TCGA -2.2869327 -1.4606234 -0.18937826
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## C8.A130.02TCGA 1.4345033 -1.8847240 -0.12015453
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## C8.A138.O3TCGA -0.2593734 3.9646223 0.01491201
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                                                               1.9605100
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                                                 NP_001894
                                                            NP_004380
## AO.A12D.O1TCGA 1.1418488
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## C8.A131.O1TCGA 2.4642193 -0.9238571 0.0800174 -0.31262705 -0.04546691
## AO.A12B.O1TCGA 0.4709333 0.6399932 0.6760224 -0.07504706
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## BH.A18Q.02TCGA -0.6744586 -0.8985992 -0.6209325 0.43955353
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## C8.A130.02TCGA 0.9589223 -0.3071071 0.6899731 0.51614003
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## AD.A12D.01TCGA -0.9344912 1.168517 0.1398718 0.9627882 0.257975586
## C8.A131.01TCGA -2.4499082 2.091814 -1.0655329 -0.1021372 -0.009035984
## AO.A12B.O1TCGA -0.5683694 -2.530573 -2.6192601
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## BH.A18Q.O2TCGA -0.4503180 -1.708182 -3.7923545
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## AO.A12D.01TCGA 0.280834375 0.3684597 -0.4506469 -0.4582665
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## C8.A131.01TCGA -0.009035984 -0.5959787 -0.6526491 -0.6081224 -0.3692974
## AO.A12B.O1TCGA 0.412732343 -0.6071700
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## BH.A18Q.O2TCGA -0.845073106
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## AO.A12D.O1TCGA 0.6618142
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## C8.A131.O1TCGA -0.1142809
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## AO.A12B.O1TCGA 0.3822461
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## BH.A18Q.O2TCGA -0.4335911
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## C8.A130.02TCGA -0.8318861
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                              ## C8.A130.02TCGA
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-0.4335911 -0.764783941
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## BH.A18Q.02TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA -2.2400973 -0.6978763 -0.4034827 -0.53729797 -0.2194867
## C8.A130.02TCGA 0.3455868 -0.4645408 0.2176720 0.36198619
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##
                                                               NP 031387
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## C8.A131.O1TCGA -0.3531059 -0.3733453 0.120496206 1.6667867
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## AO.A12B.O1TCGA 0.4349041 -0.7512867 0.421046765 -1.7628747 -1.26400935
## BH.A18Q.O2TCGA 0.1351238 1.4465135 -0.574097175 -0.9487799
                                                              0.03810771
## C8.A130.O2TCGA 1.0245197 0.2307914 0.447262784 0.7030926
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## C8.A138.O3TCGA -0.1862306 -1.1188011 -0.584858817 -1.0383441 -0.58851596
                  NP 002499
                             NP 060414
                                         NP 066997 NP 203752 NP 001139381
## AD.A12D.01TCGA -1.0183068 -0.06966706 -0.652566176 1.3742464
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## C8.A131.O1TCGA 1.0596046 0.13263985 -0.964335883 0.5617152
                                                                0.56171523
## AO.A12B.01TCGA -0.5739124 0.26584423 0.853396689 -0.3411086
                                                               -0.16650570
## BH.A18Q.02TCGA 0.7506740 -0.42020961 -0.480426483 -0.3064666
                                                               -0.08567142
## C8.A130.O2TCGA -0.2546292 -1.22219047 -0.002079251 -0.3202265
                                                               -0.38254404
  1.47776767
                  NP 004658 XP 003403905 NP 054831 NP 003472
                                                               NP 003931
## AO.A12D.O1TCGA 0.1474914
                            0.3684597 -1.9288486 -1.7154999 -1.62787451
                             -0.3490580 -2.4620518 -1.2517354 -1.52699133
## C8.A131.O1TCGA 0.4645661
                             0.3545314 0.3240452 0.2492154
## AO.A12B.O1TCGA -1.4496981
                                                             1.34671904
## BH.A18Q.O2TCGA -0.4804265
                             -0.1391975 1.1721922 0.5934411
                                                              0.62354953
## C8.A130.02TCGA -0.8154867
                             -1.4288222 2.0511187 1.0343593
                                                              0.01759996
  C8.A138.O3TCGA 1.2437108
                              2.0848528 -0.8884014 -0.8408586
                                                             1.48142481
                  NP_057662 NP_036425
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## AO.A12D.O1TCGA -0.7097131
                            0.8827825
                                       2.14001588 2.12477669
                                                             -0.16491201
## C8.A131.O1TCGA -0.6728885
                           1.0717482 0.86935418 0.82482749
                                                              1.35509989
## AO.A12B.O1TCGA -0.5184829 -2.2173964 0.78965279 0.77025247
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## BH.A18Q.02TCGA -0.3566474 -0.5607156 -0.15926982 -0.10239833
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## C8.A130.O2TCGA -0.3267863 0.3882251 -0.04799742 -0.03159807
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  C8.A138.O3TCGA -0.4202876 -1.5466864 1.15228229 1.15228229
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                                      NP_078837 NP_036387
                                                              NP_057212
## AO.A12D.O1TCGA 0.5246615
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                                     0.93230986 -0.6220878
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## C8.A131.O1TCGA 1.5493982 0.1650229 0.64672073 -0.2964355
                                                            1.302477437
## AO.A12B.01TCGA 0.1549853 -0.6376563 -0.15819127 -0.2995364 1.446492099
## BH.A18Q.02TCGA 1.6338549 -0.1291614 0.06487076 -0.4001373 -0.058908368
## C8.A130.02TCGA 0.4800615 0.5456589
                                      ## C8.A138.O3TCGA 0.3733116 -1.1517154 0.96576819 -0.1862306 1.645996074
                   NP 036265
                             NP 060090
                                         NP 036350 NP 060857 NP 060697
## AO.A12D.01TCGA -0.85067568 0.45227529 0.40655771 -0.4887449
                                                              1.0161254
## C8.A131.01TCGA -0.73765455 -0.28429189 -0.35310586 -1.9034443 0.9786470
## AO.A12B.O1TCGA 1.23586008 0.50973393 0.52636277 -0.5378832 -0.3161653
## BH.A18Q.02TCGA -1.57436635 -0.05221761 -0.05221761 -0.6410048 0.2522121
## C8.A130.O2TCGA 0.03399931 1.23771118 1.21147223 3.1728338 -0.4678206
## C8.A138.O3TCGA 0.06245481 -0.88840137 -0.89571565 0.4245116 -1.1078297
                  NP_620305 NP_115571 NP_004229 NP_001025177
##
                                                                 NP 663782
## AO.A12D.O1TCGA 0.78753753
                             0.7608689 -0.6373270
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## C8.A131.O1TCGA
                 0.14478349
                             0.2540763 1.0353173
                                                   0.39575211 0.699343179
                             0.3850176 -1.0090338 -0.06950411 -0.002988738
## AO.A12B.O1TCGA 0.47370477
## BH.A18Q.02TCGA -0.19272364 -0.2663220 -0.5774426
                                                 -0.04887222 0.549951130
## C8.A130.02TCGA 0.85396652 0.7883691 0.8244477
                                                   0.33246737 0.325907636
## C8.A138.O3TCGA 0.07708337 0.1099976 -0.1057736
                                                   0.95845391 0.504968654
```

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NP_477352 NP_001005360 NP_001005361 NP_004936 NP_001005336
## AO.A12D.O1TCGA 1.0275548
                               1.4847306
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## C8.A131.O1TCGA -0.4300156
                               0.7600614
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                                                                    0.9543597
## AO.A12B.O1TCGA -0.7374293
                              -0.3660518
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## BH.A18Q.02TCGA 1.0484130
                               0.5934411
                                            0.5834049 0.5934411
                                                                    0.3759913
## C8.A130.02TCGA -0.2939876
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## C8.A131.O1TCGA
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                             0.1002568 -1.2881664 0.5252843
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## AO.A12B.O1TCGA -0.3854521 -0.1609627 2.4525371 -0.1692772
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## BH.A18Q.O2TCGA 0.9246339
                             0.4428989 -1.0290691 -0.6610771
                                                              0.4562804
## C8.A130.02TCGA -0.0807961
                             0.4505427 -0.7334900 1.3328274 -0.1135948
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                                                              NP_055888
## AO.A12D.O1TCGA -0.3858803
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  AO.A12B.O1TCGA -0.2607358 -1.0589203
                                       4.5339140 0.2381295
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## BH.A18Q.02TCGA 0.9580877
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                                        0.1618868 -0.3064666 -1.1762659
## C8.A130.02TCGA -0.9270023
                             1.2836293 0.5161400 1.3361072
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##
  NP 065859 NP 001106189 NP 001106190
                  NP 056371
                                                                   NP 005076
## AO.A12D.O1TCGA
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                                          1.9647652
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## C8.A131.O1TCGA
                  0.7074389
                             1.0110300
                                          1.0555567
                                                       1.1284186
                                                                  0.16907078
## AO.A12B.O1TCGA -0.8593742 0.7563951
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## BH.A18Q.02TCGA -0.5506795 -1.7483262
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                                         -0.1529532
## C8.A130.02TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                          0.83428731
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## AO.A12B.O1TCGA -0.3577374
                              -0.8011732
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## BH.A18Q.02TCGA -0.1458883
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## C8.A130.02TCGA
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                                            0.2963888 0.13239537
                                                                   0.29310895
  C8.A138.O3TCGA
                                           -0.5044018 0.98771102 0.94748249
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## AO.A12D.O1TCGA -0.2563472
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## C8.A131.O1TCGA 0.2176453
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## AO.A12B.O1TCGA 0.4543045
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## BH.A18Q.02TCGA -1.7115270
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## C8.A130.02TCGA
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## C8.A131.O1TCGA 0.0152513
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                                                     0.2824114
                                                                 0.28241144
## AO.A12B.O1TCGA -0.2635073
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                                          0.2686157
                                                     0.1466709
                                                                 0.01086863
## BH.A18Q.02TCGA 0.2923567
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## C8.A130.02TCGA -0.2021513
                             -0.5235784 -0.4940596 -0.3497454 -0.34318561
## C8.A138.O3TCGA 0.7317113
                              0.4757115 0.1502262 0.1429119
                                                               0.09536907
                   NP 671494 NP 005115 NP 001036015
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## AO.A12D.01TCGA -0.12300423 0.15892083
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## C8.A131.O1TCGA 0.19335806 0.11644833
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## AO.A12B.O1TCGA 0.04689779 0.02195453
                                        -1.46355547
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## BH.A18Q.O2TCGA 0.22210371 0.71387484
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## C8.A130.02TCGA -0.46454076 0.95564246
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## C8.A138.O3TCGA 0.02954056 0.54154005
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## C8.A131.O1TCGA
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                                           0.8693542 -1.0412456 0.26217204
## AO.A12B.O1TCGA
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                                         -1.3665539 0.4764762 1.98970098
                  -0.20275979 0.6335857
## BH.A18Q.02TCGA
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                   0.38822514 -0.8417257
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                                                   NP_006006 NP_065783
## AO.A12D.O1TCGA
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                                       0.3227422
                                                  0.75705915
                                                             0.3951283
## C8.A131.O1TCGA 1.O191258 4.3505318
                                       1.3510520 0.34717754 0.3836085
## AO.A12B.O1TCGA -0.5711409 -1.5023561
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## BH.A18Q.02TCGA -1.7985069 0.4328628 -1.7583624 -0.53395259 -0.2328682
## C8.A130.O2TCGA -1.O253983 -1.5239384 2.O379992 0.63749518 0.7227718
## C8.A138.O3TCGA -0.4056590 -2.6182282 -0.1423450 0.22336894 -0.1972021
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 0.07192163 0.56171523
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## AO.A12B.O1TCGA -0.44088161 -0.09167590
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                                                       0.64830762
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## BH.A18Q.O2TCGA 0.01803541 0.05818000
                                           1.2390998 -1.85203305
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                                 NP 004477
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                                          0.6084770 0.05605628
                                                                1.86190061
## C8.A131.O1TCGA
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                                          3.3628488 -0.20333427 -0.05761056
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                    0.8978708 -0.07563528 -0.7313301 -2.57463553 -1.71152701
## C8.A130.02TCGA
                    ## C8.A138.O3TCGA
                    0.8487397 -0.37274474 -2.6401710 1.64599607 0.34405453
##
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                     -1.92897683
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## C8.A130.02TCGA
                    1.6640941 -1.5501774 -0.172632432 -0.19231165
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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  C8.A138.O3TCGA
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                                                                 1.18885368
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## AO.A12D.O1TCGA
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                                                        0.26559518 -0.8887737
## C8.A131.O1TCGA
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                                           1.96632991
                                                        1.97037779 -0.3288186
```

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## AO.A12B.O1TCGA
                  -0.1997634 0.60950699
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                                                       0.58733520 1.1665732
## BH.A18Q.O2TCGA
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                                                     -0.05890837 -1.0892860
## C8.A130.02TCGA
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                                          0.56205819
                                                       0.59157701 0.6768536
## C8.A138.O3TCGA
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                                                       0.40622590 0.1319405
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                             NP 005487
                                       NP 065910 NP 001640 NP 065768
## AO.A12D.O1TCGA 0.2655952 0.53990065 0.28464417 -0.9040129 -0.7744797
## C8.A131.01TCGA -2.0410722 -0.14666393 -0.16690334 -0.3773931 2.2456337
## AO.A12B.01TCGA 1.0335425 -1.31389588 -0.14710538 0.5568490 -0.2801361
## BH.A18Q.O2TCGA 1.1755375 -0.20275979 -0.51388030 -0.7413663 -0.1157799
## C8.A130.O2TCGA -0.5399777 -0.09063571 -0.06439676 0.7490107 1.3525066
## C8.A138.O3TCGA 0.2233689 0.47205440 -1.10782972 0.1867975 3.6501083
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                                                                 NP_689511
## AO.A12D.01TCGA -0.83162669 -0.4925547 -0.07347685
                                                   0.04081709 -0.75543073
## C8.A131.O1TCGA -0.91576131 -0.4300156 0.32289025
                                                   0.38765635 0.23383687
## AO.A12B.01TCGA 0.39610350 -0.1859060 -1.48849874 -1.83493297 -0.94251838
## BH.A18Q.02TCGA -0.92201689 -1.0290691 -0.87518154 -1.58774788
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## C8.A130.O2TCGA 1.21475210 1.3065884 0.92940351
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## C8.A138.O3TCGA -0.03628794 0.1904547 -1.88314322 -1.75880049 -2.00382881
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## AO.A12D.O1TCGA -1.4564336 0.89040208
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## C8.A131.O1TCGA -1.1181554 0.74791775
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                                                               -1.2112566
## AO.A12B.O1TCGA 0.5928781 -1.23906609
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## BH.A18Q.O2TCGA 3.2998550 0.9346700
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## C8.A131.O1TCGA -0.4340635 -3.271628
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## AO.A12B.O1TCGA 0.7979672 -1.843247
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## BH.A18Q.O2TCGA -0.3934466 1.346152
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## C8.A130.02TCGA 0.5882971 -1.412423
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## C8.A131.O1TCGA -0.1709512 -1.369124 -1.6970023 1.172945 0.4362309 2.2820646
## AO.A12B.01TCGA -1.5245279 1.172116 -4.9195834 -5.884056 -3.3564721 0.5014195
## BH.A18Q.O2TCGA 1.9182123 -4.722371 -1.0324145 3.617666 -3.3775272 -3.0095352
## C8.A130.O2TCGA 0.1159960 -3.580416 0.1717538 -3.078596 -1.6846520 -0.8745244
## C8.A138.O3TCGA 2.3262240 5.061764 4.1328507 2.205538 -0.5738874 -0.4714875
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## C8.A131.O1TCGA 0.06787375 -1.6970023 3.2576039 2.496602 0.4848055 1.172945
## AO.A12B.01TCGA -0.42425277 0.7342233 0.3600743 -3.916310 -3.4534737 -4.528806
## BH.A18Q.02TCGA -1.85537843 0.1618868 -2.8656838 2.319658 6.9162128 2.399947
## C8.A130.02TCGA -0.47438037 0.1717538 -3.5869759 -1.976560 -0.3235064 -1.579696
## C8.A138.O3TCGA 0.13925474 -1.3748009 5.4896493 1.415596 -2.5121712 1.806910
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## AO.A12B.01TCGA -2.6164886 -2.0760512 -2.9102648 -0.3272512
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## AO.A12B.O1TCGA -1.3249818 -1.2861811
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## AO.A12B.O1TCGA -1.0616918
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## BH.A18Q.O2TCGA -0.0154184
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## C8.A130.02TCGA 1.3656261
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## C8.A138.O3TCGA -0.2008592
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## C8.A131.O1TCGA
                  ## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -2.1230090 -1.116049 2.8549192 2.9485899 2.22933282
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                                                              0.31479449
## AO.A12B.O1TCGA 0.37116024
                           -0.80948764
                                       -0.88154596 0.7702525 -0.28567907
## BH.A18Q.02TCGA -0.52726183
                             0.75736481
                                         0.19199527 -1.4037519 -0.29643048
## C8.A130.02TCGA -0.42190247
                                         0.47350173 -0.5694966
                             0.18159341
                                                             0.69325295
## C8.A138.O3TCGA 0.01856914
                           -0.02165938
                                       -0.06554506 1.7739959
                                                              0.01491201
##
                   NP_055586
                            NP_002636
                                        NP_004784 NP_001076581
                                                              NP_056289
## AO.A12D.O1TCGA
                 0.242736393
                             0.4294165 -1.15926933
                                                    0.1170131
                                                              0.4294165
## C8.A131.O1TCGA
                 0.415991514
                             0.1447835 -0.04951479
                                                   -0.7133673
                                                              0.0152513
  AO.A12B.O1TCGA 0.002554209
                             0.2492154 2.13936057
                                                    3.7856160 -0.2939935
## BH.A18Q.02TCGA -0.453663428 -0.5406434 -0.96216147
                                                   -1.0658683
                                                              2.2560959
  -1.8683246 -0.3497454
  C8.A138.O3TCGA 0.267254609
                            0.8121683 -1.31628665
                                                    1.6021104 -0.4166304
                NP_001265387 NP_001265389
##
                                         NP 004738 NP 064627
                                                              NP 055129
## AO.A12D.O1TCGA
                 -0.6106584
                              -0.4620763 1.07327239 0.7608689
                                                              0.3646499
```

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## C8.A131.O1TCGA
                   -0.4502550
                               -0.4219198   0.89768934   0.8572105   -2.2070353
                  -1.4302978
## AO.A12B.O1TCGA
                               -1.3776398 0.17438559 -0.5794553 2.3444496
                  -0.5841333
## BH.A18Q.02TCGA
                               -0.5841333 -1.80854308 -1.4706595
## C8.A130.02TCGA
                   -0.8843640
                               -0.8843640 1.78216941 -0.6088550 0.2045525
## C8.A138.O3TCGA
                   -1.2943438
                              -1.2797153 0.02954056 0.6329685
                                                                1.6789103
##
                NP 001244957 NP 055699 NP 004810
                                                   NP 060225 NP 001180384
## AO.A12D.O1TCGA
                   0.8408747 -0.3592117
                                        0.5056125 -0.05442786 -0.06966706
## C8.A131.O1TCGA
                                                             -1.05338926
                   0.4969491 -1.4905604 0.2419326 -1.05338926
## AO.A12B.O1TCGA
                  -0.6210274 -0.2801361 -0.7152575 0.33790255
                                                               0.22427212
## BH.A18Q.02TCGA
                  -0.3901012 -1.0324145 0.3559190 0.10501534
                                                               0.10501534
## C8.A130.02TCGA
                   0.9818814 2.0412791 0.6670140 1.08683721
                                                               1.10979629
## C8.A138.O3TCGA
                  -0.5738874 -1.5832578 1.0571967 -1.29068668 -1.35285804
                  NP_002262 NP_036548 NP_001230131 NP_001030128 NP_001030126
                                                    -0.1725316
                                                                -0.2715864
## AO.A12D.O1TCGA
                 0.8294453 -0.02013968 -0.04299847
                 0.7722050 -0.09808936
                                                                 -1.8913006
## C8.A131.O1TCGA
                                        0.04763435
                                                     -1.8629654
## AO.A12B.O1TCGA -0.1775916 0.40164645
                                        0.43213266
                                                     -2.0455650
                                                                 -2.0982230
## BH.A18Q.02TCGA
                 0.6670395 1.38629660
                                        1.42644118
                                                      0.4395535
                                                                  0.4428989
## C8.A130.02TCGA
                 0.5063004 -0.70069132
                                       -0.55309722
                                                     -0.7761283
                                                                 -0.7761283
## C8.A138.O3TCGA -0.5409731 0.72439700
                                        0.41354018
                                                     -0.6982301
                                                                 -0.7348015
                 NP 001030129 NP 001257700 NP 001139145 NP 001139144 NP 003594
## AO.A12D.O1TCGA
                 -0.07728665
                               1.1685173
                                             1.038984
                                                         1.1075606 1.1075606
## C8.A131.O1TCGA
                 -1.85891757
                                1.1891368
                                             1.160802
                                                         1.1446101
                                                                  1.1446101
## AO.A12B.O1TCGA
                 -1.99290698
                                                         0.1522138 0.1522138
                               0.2464439
                                             0.130042
## BH.A18Q.O2TCGA
                  0.44289891
                               4.1897266
                                             4.270016
                                                         4.2700158 4.2599796
## C8.A130.02TCGA
                 -0.81876660
                              -1.5567371
                                            -1.369785
                                                       -1.5698566 -1.5993754
## C8.A138.O3TCGA
                 -0.46783036
                              -2.8083994
                                            -2.877885
                                                      -2.8815422 -2.8815422
                 NP_001139146 NP_003604 NP_001243778 NP_001399 NP_055061
## AO.A12D.O1TCGA
                  1.1075606 -0.2944451
                                        -0.1611022 -0.4239783 -0.9421108
                   1.1081792 -1.8184388
                                        0.2621720 -1.2395918 -0.6688406
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   0.1522138 -4.0687409
                                        -0.3300227 4.3842544 2.6853409
## BH.A18Q.02TCGA
                   4.1897266 -3.0429890
                                          1.4431681 -1.6245471 -2.0862098
## C8.A130.02TCGA
                  -1.5698566 3.6188960
                                          0.6571744 -1.7371299 -0.4547012
## C8.A138.O3TCGA
                  -2.8778851 2.5749094
                                         -0.9578870 -1.2504581 0.8597112
                                     NP_056989 NP_115921 NP_001419
##
                NP_001420 NP_004371
## AO.A12D.01TCGA 1.2942407 0.09796406 -0.58398981 3.3286729 -1.928849
## C8.A131.01TCGA 0.1771665 0.43623092 -0.02117963 0.7074389 1.083892
## AO.A12B.01TCGA 0.0773840 0.10232727 -0.49353961 -2.6802325 -2.048336
## BH.A18Q.02TCGA 1.0617946 0.97481463 -1.04579602 -1.9022138 2.252750
## C8.A130.O2TCGA 0.8277276 1.21475210 0.42758357 1.8641661 0.466942
## C8.A138.O3TCGA 0.3915973 1.02428242 0.67319706 3.3758229 -0.299602
                NP 001188412
                               NP 001966
                                          NP 001967
                                                      NP 003096 NP 003655
## AO.A12D.O1TCGA
                  -1.7497880 -2.27173040 -1.39166702 0.09034447 0.4179871
## C8.A131.O1TCGA
                   -1.7711891 -0.59608415 -1.50789905 1.57397990 1.6737530
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   ## C8.A130.02TCGA
                   0.4079044 0.24391091 0.09959668 -0.37926417 -0.1037552
## C8.A138.O3TCGA
                  -0.4239447 -0.02531652 -0.03263080 2.31890968 0.3330831
##
                   NP 004635 NP 001265440 NP 001106207
                                                      NP 055521 NP 055799
## AO.A12D.O1TCGA -0.08109645
                              -0.3706411
                                          0.56275944 -0.53446243 -1.2964221
## C8.A131.O1TCGA -0.22357367
                              -0.1911906
                                         -0.08594572 -0.60002660 -1.2598312
## AO.A12B.O1TCGA 1.96475771
                               2.0229587
                                         -0.11939064 0.07184106 0.6483076
## BH.A18Q.02TCGA 0.17526836
                             0.1083607
                                         ## C8.A130.02TCGA -0.16279283
                              -0.1431136 -0.11687466 0.17175380 -0.2152707
## C8.A138.O3TCGA 0.02954056
                              0.3696545
                                          1.42291058 0.01856914 -0.2118306
```

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NP 001138829 NP 055704 NP 001240628
                                                      NP 065845
                                                                  NP 056044
                   -0.3211137 -0.5535114
                                                                 1.63331272
## AO.A12D.O1TCGA
                                          0.03700729 1.92666718
## C8.A131.O1TCGA
                   -0.3126271 -0.4219198
                                         -0.32072281 1.20937618
## AO.A12B.O1TCGA
                   -0.4187098 1.9564433
                                         0.04689779 -3.36201508 -0.39930950
## BH.A18Q.02TCGA
                    0.4495897 -0.1124345
                                          0.47969811 0.94136081 -0.06225375
## C8.A130.02TCGA
                    0.8211678 2.1003167
                                        -0.21855060 -0.09719545 1.61489610
## C8.A138.O3TCGA
                    1.0023396 -0.2337735
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                   NP 039269
                              NP 056018
## AO.A12D.O1TCGA -0.73257194 -0.67542497 -0.01252008 -0.4201685 -1.7955056
## C8.A131.O1TCGA -0.88337826 -0.52716474
                                         ## AO.A12B.01TCGA 0.96702712 0.87833995 -0.69585721 0.3683888 -1.2141228
## BH.A18Q.02TCGA -0.02210917 -0.22617746
                                         0.57336880 -0.0154184
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## C8.A130.02TCGA 1.27378974 -0.32350640
                                         0.30950829 0.8211678
                                                               1.3557865
## C8.A138.O3TCGA
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                                        0.10634048 -0.1094307
                                                               0.2050832
                  NP_060022 NP_877423 NP_001245303 NP_067058 NP_001265119
## AO.A12D.O1TCGA -0.3554019 -0.6487564
                                        -0.7820993 -0.7363817
                                                                0.1665404
## C8.A131.O1TCGA -0.4340635 0.4119436
                                        -0.9440965 -1.0048147
                                                                0.8167317
## AO.A12B.O1TCGA -0.8870889 -2.0317076
                                        1.8788420 1.8926994
                                                               -1.9596493
## BH.A18Q.02TCGA -1.7282539 -0.2797036
                                        -0.6108964 -0.5975148
                                                               -0.4670450
## C8.A130.02TCGA 0.1455148 0.8998847
                                         0.9556425 0.9589223
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## C8.A138.O3TCGA 0.5707972 -1.8575432
                                        -1.1663439 -1.1480582
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                 NP 001138632 NP 001018008 NP 112600
                                                       NP 000357 NP 001018005
## AO.A12D.O1TCGA
                                0.3227422 0.3875087 0.68086318
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                   1.15327815
## C8.A131.O1TCGA
                   1.31866896
                                0.9381682 -0.1223767
                                                     1.33486049
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## AO.A12B.O1TCGA
                 -2.69408987
                               -2.3587415 -1.7684176 -2.45574312
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## BH.A18Q.02TCGA
                  -0.42020961
                               -1.6713824 0.2321399 -1.08259522
                                                                  -1.4438965
                               -0.5071791
## C8.A130.02TCGA
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##
                 NP_001018020
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                                           NP_003281
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                              1.6344037
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                                  -0.5707518
## C8.A130.02TCGA
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                  NP_689476
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## AO.A12D.O1TCGA
                 0.8180159 -0.10014544 -0.5877996
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## C8.A131.O1TCGA 1.1527058 -0.26405248 -1.0250541
                                                    -0.8590910 -2.8668399
## AO.A12B.O1TCGA -2.3448842 0.03026895
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## BH.A18Q.02TCGA -1.4740049 -1.06921369
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## C8.A130.02TCGA -0.4383018 0.93924311
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  0.3477117 -2.4207427
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                                           NP 006639
                                                      NP 115763
                                                                  NP 065973
## AO.A12D.O1TCGA -1.12117135
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## C8.A131.O1TCGA -0.95219224
                              0.46051820 0.31074661 0.61433768 0.19740594
## AO.A12B.O1TCGA 0.29633044
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## BH.A18Q.02TCGA 0.80420015
                             -0.52726183 -0.11243448
                                                      0.29904749
                                                                 0.14850531
## C8.A130.02TCGA
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                              1.91664404 1.16883393
                                                      2.24463092
                                                                1.99208102
  C8.A138.O3TCGA -0.31788766
                              0.13194046 -0.22280204
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                                                                NP_005769
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## C8.A131.O1TCGA
                           NA -0.1061851
                                          1.36724353 0.6467207
                                                                0.6548165
## AO.A12B.O1TCGA
                          NA 0.1993289
                                         -1.60212917 -0.2441070 0.2492154
## BH.A18Q.02TCGA
                   -7.7900858 -0.1693060
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## C8.A130.02TCGA
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                                         0.05039865 1.6280156 0.1815934
## C8.A138.O3TCGA
                  -0.5738874   0.6841685   -0.01068797
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## AO.A12D.01TCGA -0.4201685 -1.2202261 0.3113128
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## C8.A131.O1TCGA 0.6021940 -0.8105164 1.2984296 -0.41382408
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## AD.A12B.O1TCGA 0.1799285 -0.3106223 -0.4547390 0.06352663 -0.29676497
## BH.A18Q.02TCGA 0.3224652 0.2120676 0.1485053 -0.81831005
## C8.A130.O2TCGA -0.1759123 -0.6154147 0.5390991 2.25119066
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## C8.A138.O3TCGA -0.6104588 -0.2630306 1.7630245 -0.02897366
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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                                         -0.7402008 -0.84551680 0.0136401
                  -0.7815108 -1.6780732
                                          0.5231881 -0.01207302
## BH.A18Q.02TCGA
                                                                0.3224652
## C8.A130.02TCGA
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                                          -0.8417257 0.63093544
                                                                0.6998127
## C8.A138.O3TCGA
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                              0.3586831
                                         -0.9103442 -0.27034485 -0.1533164
                 NP_001124297
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##
## AO.A12D.O1TCGA
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                                         1.57235595 -0.1268140
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                         1.15271587 -2.1314807 -0.2274781
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                  0.70637242 0.1717538
## C8.A138.O3TCGA
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-0.7059034
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## C8.A131.O1TCGA -0.5312126 -0.7052715 -0.1183288
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-0.9425184 -0.18313454
## BH.A18Q.O2TCGA -1.0023061 -0.4235550 1.0952484
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## C8.A130.O2TCGA 0.1127162 0.7227718 0.9425230
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## C8.A138.O3TCGA
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                 -0.45025500 0.2014538
                                        0.1974059 -2.0775031 -0.03737115
                  0.06629811 0.7009656 0.7563951 -2.4696005 0.22427212
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  0.64027644 -0.2495951 -0.2495951
                                                   0.1250876 -1.64461937
                  1.66409413 -0.3103869 -0.3530252 5.8295276 1.40170462
## C8.A130.02TCGA
## C8.A138.O3TCGA
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                                       NP_056175 NP_001123917 NP_003857
## AO.A12D.O1TCGA -0.5687506
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## AO.A12B.O1TCGA -0.3189368 -1.1088068 0.44044708
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## BH.A18Q.O2TCGA -0.1826875 -0.1893783 0.75401942
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## C8.A130.O2TCGA 1.4148241 1.1622742 0.02743957
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## C8.A138.O3TCGA -0.4641732 -0.5592588 0.30382600
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                  NP_001681 NP_001025226 NP_003391 NP_001007554 NP_009089
## AO.A12D.O1TCGA 0.26940498
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                                                    1.33614847
                                                                1.3780562
## C8.A131.O1TCGA
                 0.16907078
                               0.5171885 -0.2964355
                                                     0.09620892 0.1366877
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA 0.98819615
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## C8.A130.02TCGA -0.33990574
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## C8.A138.O3TCGA -0.68360157
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                                       NP_002379 NP_001257401
                                                                NP 064504
## AO.A12D.01TCGA -0.4354077 0.95135885 -1.13260074 -1.04878519
                                                                0.45989489
## C8.A131.O1TCGA -0.5878830 -0.04141903 0.67100801
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                                                               0.16907078
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## AD.A12B.O1TCGA 2.0451305 -0.04733232 -2.27005437 -2.32271237 0.07738400
## BH.A18Q.O2TCGA -0.9220169 -1.23313740 -0.03214531 -0.06894451 -0.02210917
## C8.A130.02TCGA 0.5095803 0.62437570 0.94908272
                                                    0.97532167 0.15863432
## C8.A138.O3TCGA 0.5378829 2.63708079 -1.85388611
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## AD.A12B.O1TCGA 0.396103500 -0.2053063 -0.1997634 -0.2025349 -0.1997634
## BH.A18Q.02TCGA -0.005382259 3.1258952
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                                                              2.9218269
## C8.A130.O2TCGA 1.063878131 0.4833413 0.4833413 0.4275836 0.4505427
## C8.A138.O3TCGA
                 0.077083372 -0.4458875 -0.6214302 -0.6068017 -0.6214302
                  NP 150252 NP 150249 NP 002188 NP 000405 NP 001186221
## AO.A12D.O1TCGA 1.3323387
                            1.3780562 -0.3934999 1.4085346
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## C8.A131.O1TCGA 0.3390818 0.3714648 0.5576673 -2.6158713
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## AO.A12B.01TCGA -0.2330211 -0.2690502 -1.0090338 0.6787938
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## BH.A18Q.02TCGA 3.0957867
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## C8.A130.02TCGA 0.4505427
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## C8.A138.O3TCGA -0.7311444 -0.8079443 -1.9453146 2.0994813
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## AO.A12D.O1TCGA -0.6068486
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## C8.A131.O1TCGA -0.0899936
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## AO.A12B.O1TCGA -0.1138477
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## BH.A18Q.02TCGA -1.6145109
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## C8.A130.02TCGA 0.7030926
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## C8.A138.O3TCGA 0.1392547
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                                           0.4391401 0.16851185 -0.1642878
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## AO.A12D.O1TCGA 1.572356 1.2142349
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## C8.A131.O1TCGA -0.450255 -2.2353705
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                                                  2.0149045
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## AO.A12B.O1TCGA -2.588774 -2.0150788 -1.3637824
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## BH.A18Q.02TCGA -1.256555 -2.1464266 2.0654091
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## C8.A130.O2TCGA 0.316068 2.4512627 -0.8712445
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## C8.A138.O3TCGA 2.029996 0.6768542 1.4119392
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## AO.A12D.O1TCGA 1.09994098 -0.91544225
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## C8.A131.O1TCGA 1.O1507789 -0.28429189 -0.5959787
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## BH.A18Q.02TCGA -0.74136627 -0.21614132 -0.1358522 -5.9501258
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## C8.A130.02TCGA 0.65389452 0.46694200 -2.9080431 -4.0199186
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##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                    0.9665033 0.9381682 0.1933581 -0.39763255
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                   -0.8745244 -0.3202265 -1.5632968 -1.36978457
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -0.8735345
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## C8.A131.O1TCGA -0.6243139
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## AO.A12B.O1TCGA -0.3161653
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## BH.A18Q.02TCGA 1.1287022
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## C8.A130.02TCGA 0.6243757
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                                          0.6342153 -0.3103869
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## C8.A138.O3TCGA -0.1789164
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##
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## C8.A131.O1TCGA
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                                                        0.72363046 -0.9683838
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                       -0.26966743
                                                                     0.8711078
## C8.A130.02TCGA
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                                                        0.26031026 -0.8089270
  C8.A138.O3TCGA
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                                                       -0.22645918 -1.9745717
                     NP 057191
                                  NP 055596
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                                                        NP 115826 NP 001092750
## AO.A12D.01TCGA -0.008710286
                                1.339958265 -0.06966706
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                                                                       2.1476355
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A131.O1TCGA -0.1669033
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## AO.A12B.O1TCGA -1.8432474
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## C8.A130.02TCGA 0.5522186
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## C8.A138.O3TCGA -2.0184574
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## AO.A12D.01TCGA -0.24110797 -0.2106296 -0.23348838 -0.2334884
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## C8.A131.O1TCGA -0.28429189
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## AO.A12B.O1TCGA -0.61548446
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## BH.A18Q.02TCGA 0.29235673
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## C8.A130.02TCGA
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## C8.A138.O3TCGA -0.08017361
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA -0.3071071
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## C8.A131.O1TCGA 0.66291225
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## AO.A12B.O1TCGA -0.90926070
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## BH.A18Q.02TCGA -0.43359114
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## C8.A130.02TCGA 0.08975708
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA
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## AO.A12D.O1TCGA -0.50017425 0.09796406 -7.1177937 -0.66399557 -0.66399557
## C8.A131.O1TCGA 0.05977799 -1.45008159 -8.2262343 0.18121442
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## AO.A12B.01TCGA -0.42148129 -0.28013613 -5.7925977
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## BH.A18Q.02TCGA -0.67780401 0.80754553 -0.7346755 -0.00872764
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## C8.A130.O2TCGA 1.56569807 0.82772757 -0.8712445 -1.05819703
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## C8.A138.O3TCGA 1.19251082 1.71548172 -0.1898878 0.11365476
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## C8.A131.O1TCGA -1.603901
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## AO.A12B.O1TCGA 2.042359
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## BH.A18Q.O2TCGA -1.865415
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## C8.A138.O3TCGA 1.609425
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA -0.1391975
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##
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A131.O1TCGA
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## C8.A130.02TCGA
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## C8.A130.02TCGA
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## C8.A131.O1TCGA
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA -0.38822361 -0.05841822 -1.8321615
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-0.4369365 -1.4070973
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## C8.A130.02TCGA
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## C8.A131.O1TCGA 0.03144283 -0.3085792
                                        -0.3166749 -0.96028800 0.9179287
## AO.A12B.O1TCGA -0.83443090
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                                         0.2575298 -1.12543566 -2.3365697
## BH.A18Q.02TCGA 0.51315193 -0.2495951
                                        -0.1726514 1.97508380 -0.2395590
## C8.A130.02TCGA
                 0.68997308 -0.2972674
                                        -0.2972674 -0.40222325 1.0277996
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -0.43540768
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## C8.A131.O1TCGA -0.17904698 -0.3085792 -0.3409622
## AO.A12B.O1TCGA 0.09401285
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## BH.A18Q.02TCGA -0.73467550
                             0.8577263
                                       0.8376540
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## C8.A130.02TCGA 3.12035591
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                                                 0.1783135 -0.1004753
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## C8.A138.O3TCGA 0.44279729
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##
                 NP 001239007
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## AO.A12D.O1TCGA
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                             1.21804472 -0.2753962 0.570379035 -0.2487276
                 -0.06975420
                                                   1.253902866 -1.3893634
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                  0.36930051
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                  1.0529428
                                                             -0.48522519
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                             -0.7662887 -0.4284622 0.6407750
                                                             -0.55309722
## C8.A138.O3TCGA -0.8518300
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                 NP 001119526 NP 055045
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                               -0.3328665
## AO.A12B.O1TCGA
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                                                               -0.3882236
## BH.A18Q.O2TCGA
                 -0.48711725 -0.3231935 1.25248132 0.2154129
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                 ## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                               -1.2398282 -0.9989607 -0.07898066 -0.2730128
## C8.A130.02TCGA
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##
                 NP 689547
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## AO.A12D.01TCGA -0.6754250 1.23709371 0.543710448 -2.416503 0.0255779
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## C8.A131.01TCGA -0.4057283 0.37551271 0.711486822 -2.097743 0.9422160
## AO.A12B.01TCGA 1.1028293 -0.08890443 0.005325683 3.846588 -1.6520157
## BH.A18Q.02TCGA 0.6469672 -0.11243448 -0.383410409 -6.334845 0.3191198
## C8.A130.02TCGA 0.5194199 0.86052626
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## C8.A131.O1TCGA
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                                                   -0.54335627 -0.4502550
## AO.A12B.O1TCGA
                 -1.64924422 0.2215006 -1.8792766
                                                   -0.67368542 0.2880160
## BH.A18Q.02TCGA
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                                                    0.86776241
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## C8.A130.02TCGA
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                                                    0.27014986
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -4.0599851
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## C8.A130.02TCGA
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                                                     0.8310074 0.95892233
## C8.A138.O3TCGA
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                  NP 003578 NP 055578
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## AO.A12D.O1TCGA 0.19320902 -0.1877708
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## C8.A131.01TCGA -0.26810036 -1.4176985 0.3431297 2.2618252 -0.2195258
## AO.A12B.O1TCGA 0.01641158 2.1975615 -1.0201197 -2.0899086 -0.1886775
## BH.A18Q.02TCGA 0.02472618 1.3361159 -0.5272618 -0.3867558 -0.1960690
## C8.A130.02TCGA 0.97204180 -0.1201545 1.1196359 -1.3894638 -0.9270023
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## C8.A131.O1TCGA -0.08594572
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## AO.A12B.O1TCGA -1.0755491
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## BH.A18Q.02TCGA 3.0054614
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## C8.A130.02TCGA -0.3563051 -0.36286483
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## BH.A18Q.O2TCGA -1.5442579 -1.5643302 -0.6376594 -0.005382259
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## C8.A130.O2TCGA -2.3504654 -2.2914277 -1.2910677 0.230791439 -0.5530972
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                  NP 005086
## AO.A12D.01TCGA -0.1534826 -0.40492930 -0.404929295
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## C8.A131.O1TCGA 0.5212364 -0.18309486 -0.183094863
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## AO.A12B.O1TCGA -0.3688233 -0.64874215 -0.648742151
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## BH.A18Q.O2TCGA -0.4871172 -0.05556299
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## C8.A138.O3TCGA -1.2029153 0.76462553 0.764625535
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -0.8852177 0.1719230 0.11505149
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## BH.A18Q.02TCGA
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## AO.A12B.O1TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## BH.A18Q.O2TCGA -0.76143856 -1.37364344
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## AO.A12B.01TCGA -0.5572835 -0.756829633 -0.745743737 -0.8815460
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## BH.A18Q.02TCGA 0.2354852 0.054834615
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## AO.A12B.O1TCGA 0.6566220
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## BH.A18Q.02TCGA 0.5198427
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## C8.A130.02TCGA 1.7887291
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## AO.A12B.01TCGA -1.2944956 -0.7900873 0.12727053 -0.72634342 -0.047332320
## BH.A18Q.02TCGA 0.4462443 -0.3365751 -0.58413332 -0.09905295 -0.038836077
## C8.A130.O2TCGA 1.1065164 1.4968208 1.13275538 -0.19559151 0.161914192
## C8.A138.O3TCGA -0.2813163 -2.2634857 -0.03263080 0.99868244 0.007597728
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## AO.A12D.O1TCGA -0.3439725
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## C8.A131.O1TCGA -0.3085792 -0.09808936 -0.9602880 0.8855457 -0.03332327
## AO.A12B.01TCGA 0.5319057 0.30187339 -0.6431992 -0.1332480
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## BH.A18Q.02TCGA -0.7012217 -0.38006503 -0.7012217 -0.5439887
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## C8.A130.02TCGA 0.2078324 0.45710239 2.6414951 0.2176720
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## C8.A138.O3TCGA -0.5117160 -0.23011632 0.5013115
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## AO.A12D.01TCGA -0.9802088 0.2808344 -0.43921748
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## C8.A131.O1TCGA -0.7619418 0.5212364 0.27431568 -0.34905798
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## AO.A12B.01TCGA -3.2400702 -0.3854521 0.04966926
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## BH.A18Q.02TCGA 1.0718307 -1.4004065 0.13177840 0.38602742 -0.39010117
## C8.A130.02TCGA -0.3563051 2.6316554 1.51977990 0.38822514 -0.52685827
## C8.A138.O3TCGA 1.8105673 0.3440545 -1.00542982 -0.10943073 -0.66165874
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## AO.A12D.01TCGA 0.58942803 0.19320902 0.01795830 2.2124020
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## C8.A131.O1TCGA -0.05356267 -0.07784996 -0.03737115 -2.1220298
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## AO.A12B.01TCGA -0.88154596 0.35453139 -0.70417163 -2.5887739
## BH.A18Q.02TCGA 0.23213985 -0.77816547 0.40609971 -1.1963382
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## C8.A130.O2TCGA -0.09719545 -0.02503833 0.17175380 1.1425950 -1.1500334
## C8.A138.O3TCGA -0.07285933 0.24896891 0.66222564 -0.9652013 -0.4129733
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## AO.A12D.O1TCGA 1.70569889
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## C8.A131.O1TCGA -0.07380208 0.2743157
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## C8.A130.02TCGA 1.02123984
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## C8.A138.O3TCGA -0.33617335
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## AO.A12D.O1TCGA 1.56092656
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## C8.A131.O1TCGA -0.22762155
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## AO.A12B.O1TCGA -0.03347495
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## BH.A18Q.O2TCGA -0.11243448 0.1719230
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## C8.A130.02TCGA 1.56241820 -2.2127109
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 1.3475779
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## C8.A131.O1TCGA 1.2741423 0.36336906 0.1569271
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## AO.A12B.01TCGA -0.1360195 -0.92588954 -2.7827770 -1.8349330 -1.79058939
## BH.A18Q.02TCGA 0.3258105 -0.00872764 -0.5406434 0.1919953 -0.52057107
## C8.A130.02TCGA -1.2943476 -0.82860621 0.3488667 -1.7666487
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## C8.A138.O3TCGA 0.3952545 0.19411182 -1.4918293 -2.3805141
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## AO.A12D.O1TCGA -0.06204746 -0.5420820 -0.5420820
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## C8.A131.O1TCGA -0.17904698 1.0717482 1.0717482 0.6507686
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1.6543526 -1.164236292
## BH.A18Q.02TCGA 0.23213985 0.4562804 0.4562804
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## C8.A130.02TCGA -0.36286483 0.9195639
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## C8.A138.O3TCGA 0.60371141 -0.2776591 -0.2776591 0.6000543 0.003940589
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## AO.A12B.O1TCGA -0.05287527 -0.4658249 -2.7716911 -0.35773740 -0.4630534
## BH.A18Q.O2TCGA 0.11505149 2.0687545 -0.1291614 -0.19941441 0.7406379
## C8.A130.O2TCGA 1.07371774 -0.2743084 2.0937570 -0.02503833 -0.3661447
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## C8.A131.O1TCGA 0.4200394
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## AD.A12B.O1TCGA 2.6714836 -2.3836848 0.6483076 -0.5018540 -1.9042198
## BH.A18Q.02TCGA 0.2020314 2.0720999 -0.8383823 0.1050153 -0.3666835
## C8.A130.O2TCGA -0.3923836 -1.6223345 0.2898291 -0.1135948 0.2865492
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## AO.A12B.O1TCGA -1.06446323
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## BH.A18Q.O2TCGA 0.66369411
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## AD.A12D.01TCGA 3.081036026 3.081036026 0.2655952 0.26940498 -0.1534826
## C8.A131.O1TCGA -0.280244006 -0.272148244 0.2743157 0.59409828 2.4763629
0.1688426 -0.08613295 -2.2312537
## BH.A18Q.02TCGA -1.079249836 -1.099322127 -0.2529405 -0.22617746 -1.1060129
## C8.A130.O2TCGA 0.932683376 0.903164556 0.1717538 -0.43174207 0.3127882
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## BH.A18Q.O2TCGA
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## AO.A12B.01TCGA -0.70694310 -0.0390179 -2.1841387 -0.4963111 7.272130
## BH.A18Q.O2TCGA -0.65773172  0.2087222 -0.4837719 -2.6649608 -9.148311
## C8.A130.02TCGA 0.58829714 0.3226278 -1.7338500 -1.9306421 -6.237110
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                                           1.1052845 0.2221037
                                                                 -0.2797036
## C8.A130.02TCGA 0.93596325
                             -0.05127728
                                           0.9589223 -1.1795522
                                                                 -0.2251103
## C8.A138.O3TCGA -0.59948737
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                                                                  1.4777677
                 NP_078893 NP_001009881
##
                                         NP_055805
                                                    NP_919277 NP_065076
## AO.A12D.O1TCGA 2.1133473
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                                        0.09415427 0.09415427
                                                              1.374246
## C8.A131.O1TCGA 0.5171885
                              0.1164483 -0.54740415 -0.54740415
                                                              1.225568
## AO.A12B.O1TCGA -0.7540582
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## C8.A130.02TCGA -0.3956635
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## C8.A138.O3TCGA 1.2363965
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## C8.A131.O1TCGA 0.44027880 -1.39341126 0.32289025 0.4402788
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## AD.A12B.01TCGA -0.40208098 -1.59104327 -0.01684611 -0.8954033
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## BH.A18Q.02TCGA -0.08901681 -0.10908910 -0.78820161 0.5666780
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## C8.A130.02TCGA 0.45710239 -0.24150968 -0.06767663 0.1947129
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## C8.A138.O3TCGA 0.93285394 0.03685484 1.53628190 -1.3272581
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                NA 1.37129141 -0.39763255
## AO.A12B.O1TCGA
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                                                NA -1.11157829 0.75916658
## BH.A18Q.02TCGA
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                                                NA -0.41686423 -1.59109326
## C8.A130.02TCGA
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                                                NA -0.12343440 0.36854593
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 0.2198776 9.6681771 0.4027479 10.4453759 -1.5669177
## C8.A131.01TCGA -0.8226600 0.1974059 1.2458071 -0.1830949 -1.0655329
## AO.A12B.O1TCGA -0.1110762 -1.4912702 -2.3864563 -1.3416106 -0.3715948
## BH.A18Q.O2TCGA 0.3759913 -5.1873788 -1.9222861 -5.1639611 -0.4302458
## C8.A130.O2TCGA 0.1225558 -2.9605210 -2.4226225 -1.4157027 -2.4423017
## C8.A138.O3TCGA 0.5561686 -0.5044018 -2.6255425 -0.3105734 2.8126235
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## C8.A131.O1TCGA -1.2031609 -1.0129105 1.0919876 0.1083526 -1.28007059
## AO.A12B.01TCGA -0.5628265 -1.8155327 1.3217758 1.2081453 0.70096563
## BH.A18Q.02TCGA -0.4770811 -0.9521253 -0.5105349 -0.1325068 0.02807156
## C8.A130.02TCGA 1.8707259 1.5591383 -0.5498174 -0.3071071 2.75629047
## C8.A138.O3TCGA 0.3403974 0.4574258 1.8288530 0.8779968 -0.12771642
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12B.01TCGA -2.77446261 -0.997947860 -3.1818693 0.4459900 -0.7318864
## BH.A18Q.O2TCGA 2.13900751 0.007999269 -0.2596313 -1.0625229 -0.9153261
## C8.A130.O2TCGA 2.08063748 0.191433012 1.3295475 -0.9270023 0.5161400
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## C8.A131.O1TCGA 0.5009970 -0.7983728 2.9135340 -1.146490524
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## AO.A12B.O1TCGA -0.6736854
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## BH.A18Q.O2TCGA -1.2900089
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                                                                0.68376640
## C8.A130.02TCGA 0.6342153 1.2705099 -2.4619809 0.611256227
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                 1.3973106  0.3477117  -1.5832578  -0.442230390  -0.41297328
                    NP_006363 NP_001153149
                                            NP_065905 NP_055416 NP_006786
## AO.A12D.O1TCGA 0.779917934 0.75324935 0.33417155 -2.0698111 0.4560851
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## C8.A130.02TCGA 0.607976358
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## AO.A12B.01TCGA -1.6409298 -1.18363661 -0.3300227 -0.7873158
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## BH.A18Q.02TCGA 0.8242724 0.91125237 -0.7012217 -0.6343140
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## C8.A130.O2TCGA -0.2480694 -0.38910378 0.9556425 0.2045525
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## C8.A138.O3TCGA -0.2191449 -0.36177333 0.2197118 0.5671400
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## AO.A12B.01TCGA -0.7762299 0.61504994 0.42381824 2.3777073 -0.7402008
## BH.A18Q.O2TCGA -0.5941695 -1.15953900 0.08159767 1.2390998 -0.5540249
## C8.A130.02TCGA 0.1881531 0.07991747 -0.86796463 0.2209518 -0.5399777
## C8.A138.O3TCGA 0.5598257 0.69148275 0.73171128 -1.6490863
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## AO.A12B.O1TCGA -0.7263434
## BH.A18Q.02TCGA -0.8919085
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## C8.A130.O2TCGA 0.05367852 0.2996687
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA -1.07277766 -0.49353961 -0.8621456
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## BH.A18Q.O2TCGA -0.53060721 -0.64769558 -0.5774426
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## C8.A130.02TCGA -0.05783702 -0.01191886 0.1159960
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## C8.A138.O3TCGA 0.66222564 1.65331035 1.6203961
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## C8.A138.O3TCGA
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## AD.A12B.O1TCGA 0.30741634 0.87002553 3.8687603 -0.61825594 1.63772380
## BH.A18Q.02TCGA -0.27301281 -0.82500081 0.7807825 -1.04579602 -1.11270366
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## C8.A131.O1TCGA 1.24175922 -1.203160857 -0.1507118 4.415298 -0.46644653
## AO.A12B.01TCGA -1.46909842 0.357302865 0.9891989 -1.782275 0.81182458
## BH.A18Q.02TCGA 1.58367412 0.004653887 0.5666780 1.593710 -1.08928598
## C8.A130.O2TCGA -0.48094011 -0.297267449 1.6706539 -2.061837 -0.02175846
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                  -0.3409622 1.1203228 -1.2719748 0.5333801 0.1366877
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   1.9813866 0.3961035 0.9891989 -0.1110762 -0.4020810
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
                   NP 009178 NP 942583
                                       NP 982284
                                                   NP 002218
                                                              NP 003322
## AO.A12D.01TCGA -0.8049581 -0.8049581 1.94190638 -0.01632988
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## C8.A131.O1TCGA 0.4240873 0.4564703 0.70339106 0.35527330
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## AO.A12B.01TCGA 0.6566220 0.5097339 -1.26123788 -0.29676497
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## BH.A18Q.O2TCGA -0.4302458 -0.4436273 -0.39010117 -0.59082408
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## C8.A130.O2TCGA 0.5194199 0.5915770 -0.04143768 0.12583564 -0.35630509
## C8.A138.O3TCGA -0.2520592 -0.2264592 -0.10943073 -0.23377346 -0.85182998
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                 NP 001004019 NP_001989
## AO.A12D.O1TCGA
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                                                               -1.5669177
## C8.A131.O1TCGA
                   2.8487680 2.9094862 -0.06165844 -0.3854889
                                                               -0.8267079
                  -1.8293900 -1.8626477 -1.24460904 -1.5688715
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                   ## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.01TCGA 0.6770534 0.67705338 -1.8717016 0.665623989
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## C8.A131.O1TCGA 0.9219766 0.79649232 0.8248275 0.003107659
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## AO.A12B.01TCGA -1.0145767 -1.10880681 2.6215970 -0.099990324
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## BH.A18Q.02TCGA -1.1160490 -1.12943056 -0.1793421 -0.309812008
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## C8.A130.02TCGA -0.5366979 -0.55965696 -0.6318141 1.208192361
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## C8.A138.O3TCGA -0.1350307 -0.06188792 -2.3585713 -0.010687968
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                               NP_060167 NP_001116298 NP_001116297
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## AO.A12D.O1TCGA
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                                                       1.7437969
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## C8.A131.O1TCGA
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                                          -0.1790470
                                                       -0.1466639
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## AO.A12B.O1TCGA
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                                          -0.1692772
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## BH.A18Q.02TCGA
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                                                       0.7674010
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## C8.A130.02TCGA
                  -0.1759123 1.75265059
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                                                                  0.56533806
## C8.A138.O3TCGA
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                                          -1.1444011
                                                      -1.1151440 2.56393800
                  NP_000886 NP_001243573 NP_115812
                                                    NP 001145 NP 001150
## AD.A12D.01TCGA -0.90401285 -0.88115407 -0.1306238 -0.18396100 0.0217681
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## AO.A12B.O1TCGA 0.93654091
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## C8.A130.02TCGA 4.21255224
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## C8.A138.O3TCGA
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                              0.01491201 1.0937681 0.04416912
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## AO.A12D.01TCGA 3.1800908 0.3113128
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## AO.A12B.O1TCGA -0.5877697 -0.2302496
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## BH.A18Q.02TCGA -1.5643302 0.7439833
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## C8.A130.02TCGA -5.5417778 -0.1791922
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## C8.A138.O3TCGA -5.8438249 -1.7332005
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## AO.A12D.O1TCGA 2.3419352
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## C8.A131.O1TCGA 2.0634791
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## AO.A12B.01TCGA -1.1392930 -2.03170762
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## BH.A18Q.02TCGA -0.6443502 -0.09905295
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                                                               -0.1224706
## C8.A130.02TCGA 1.0540385 -0.23167007
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## C8.A138.O3TCGA
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## AO.A12B.01TCGA 2.0950170 -1.0506059 -0.62102741 -0.4658249
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## BH.A18Q.02TCGA -2.5947078
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## C8.A130.02TCGA 2.4709419
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## C8.A138.O3TCGA
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                                  NA 0.68782561 2.9259948
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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                 NP_001003800
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA -2.0847960
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## C8.A131.O1TCGA 0.4362309
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## AO.A12B.O1TCGA -0.3521944
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## BH.A18Q.02TCGA -0.5138803
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## C8.A130.02TCGA 0.7588503
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## BH.A18Q.02TCGA -0.7681293 -0.6510410 0.9748146 -1.36695268 -2.139736
## C8.A130.02TCGA 1.0376392 2.2708699 -0.5694966
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA 0.25047065
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## AO.A12B.01TCGA -0.5267973 -1.3720968 -0.6598280 0.9614842 1.19151650
## BH.A18Q.O2TCGA 0.7406379 -0.8149647 -0.9554707 -0.6577317 -0.78151085
## C8.A130.02TCGA -0.3628648 -1.7600890 -1.1041152 -0.4743804 -1.20579112
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## AO.A12B.O1TCGA
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## C8.A131.O1TCGA -1.4176985 -2.7170683 -0.4057283
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## AD.A12B.O1TCGA -3.6613343 -3.8193083 -3.8165368 0.03026895 -0.260735809
## BH.A18Q.02TCGA -3.9295152 -3.3039288 1.4398227 -0.78820161 -2.069482867
## C8.A130.O2TCGA -0.9696406 0.9490827 2.4479828 0.71293216 0.742450982
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## AO.A12B.O1TCGA
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##
                  NP_055665 NP_001258816 XP_003960178
## AO.A12D.O1TCGA
                 0.0141485
                              0.1360620
                                          0.9208805
                                                            NA -1.0830734
                  2.3023040
## C8.A131.O1TCGA
                              1.8772765
                                          2.5816078
                                                            NA
                                                               0.3998000
## AO.A12B.O1TCGA
                  1.6737530
                             -1.8404759
                                          -1.5217564
                                                            NA
                                                               0.5513060
## BH.A18Q.02TCGA
                 0.1819591
                              0.2823206
                                          1.6539271 -1.9457037 -0.1224706
## C8.A130.02TCGA -1.2746684
                             -0.1857519
                                          0.2996687 -0.5662167 -1.0909957
  C8.A138.O3TCGA
                 1.0352538
                              0.3221117
                                          -0.3983447
                                                    2.4688524
                                                               1.2363965
                  NP_006132 NP_001138887
##
                                        NP_055040
                                                    NP_002707
                                                               NP 742067
## AO.A12D.O1TCGA
                 0.9246903
                              0.0217681 -0.1649120 -0.74781113 0.43322630
## C8.A131.O1TCGA 1.4927278
                             -0.3450101 -0.5393084 -1.13839476 -0.02927539
## AO.A12B.O1TCGA -0.2718217
                             -0.4103954 0.9614842 1.42709178 0.54299162
```

```
## BH.A18Q.O2TCGA -0.1994144
                            ## C8.A130.02TCGA -0.7006913
                             ## C8.A138.O3TCGA -0.0326308
                             0.9730825  0.4062259  -0.01068797  2.10313847
##
                  NP_835461 NP_001185707
                                         NP_002800 NP_054908 NP_789771
## AO.A12D.O1TCGA -0.53446243 -0.001090689
                                        0.81039632 -0.2525374 -0.2525374
## C8.A131.O1TCGA 1.46439267 0.792444440
                                       0.00715554 0.9907906 0.9907906
## AO.A12B.01TCGA -0.35773740 -0.399309503 0.06352663 -0.4907681 -0.4907681
## BH.A18Q.02TCGA 0.16857760 -0.202759788 -0.61424176 0.2254491 0.2154129
## C8.A130.O2TCGA 0.73589124 -0.539977745 0.52925951 0.5030206 0.4899011
## C8.A138.O3TCGA -0.08017361 -0.361773328 -0.06554506 1.1339966
                                                            1.1339966
                 NP_057190
                           NP_000875 NP_000874 NP_001073312 NP_003904
1.1570880 0.78753753
## C8.A131.O1TCGA 0.2824114 -0.07784996 0.1650229
                                                 -1.6200926 0.02334706
## AO.A12B.O1TCGA 0.4543045 0.72590889 -1.4081260
                                                  0.9725701 0.32681665
## BH.A18Q.02TCGA -0.7647839 -1.88883225 -1.7717439
                                                 -1.7416354 0.38937280
## C8.A130.02TCGA 0.1487947 -0.42190247
                                      2.1855933
                                                  0.4505427 1.46730200
## C8.A138.O3TCGA 0.5342258 -0.03994508
                                     0.7280541
                                                  0.8194826 1.09742520
##
                  NP 005490 NP 057526
                                      NP 002044
                                                NP 004111
                                                           NP 060754
## AO.A12D.O1TCGA -0.09633564 0.1665404
                                      3.4924942
                                                3.8963328 3.01245966
                                                1.9906172 0.09620892
## C8.A131.O1TCGA -0.38953679 -0.8631389
                                      0.4929013
## AO.A12B.O1TCGA 0.29910191 -1.4053545 -3.9273957 -2.2894547 -4.53712000
## BH.A18Q.O2TCGA 1.31938896 2.5805979 4.6681162 2.8315016 3.93882296
## C8.A130.02TCGA 1.20491249 -0.5366979 -0.4579810 -0.9729204 -0.56293683
## C8.A138.O3TCGA -0.90668706 0.5086258 0.6512542 0.3221117 1.62039610
##
                NP 001139575 NP 000578 NP 852664
                                                 NP 005018
                                                             NP 852556
## AD.A12D.01TCGA 0.002719109 -0.3706411 1.1075606 -0.19539040 1.36662685
## C8.A131.O1TCGA -1.717241735 2.3306392 0.6507686 0.12454409 0.65076861
## AO.A12B.O1TCGA -0.066732638 -2.1869102 -1.4829558 0.02749747 -1.81553265
## BH.A18Q.02TCGA 1.881413111 -2.0159568 -0.1157799 -0.95547071 -0.08567142
## C8.A130.02TCGA 0.634215309 0.1258356 -0.5530972 1.09011708 -0.47766024
## C8.A138.O3TCGA 1.426567724 -1.6344578 -0.8628014 0.09171193 -0.26303057
##
                  NP_003620 NP_694985 NP_001191236
                                                   NP_060653 NP_001161328
## AO.A12D.O1TCGA
                 0.38750872 0.3113128
                                      -0.9725892 -0.54208203
                                                            -0.54208203
## C8.A131.O1TCGA
                 0.10430468 1.4846321
                                       -0.5514520 -0.16690334
                                                             -0.16690334
## AO.A12B.O1TCGA
                 0.02749747 -1.1226642
                                       -2.2173964 -0.60439857
                                                             -0.60439857
## BH.A18Q.02TCGA 0.10836073 0.2622483
                                       -0.4536634 0.04479847
                                                              0.07825229
## C8.A130.02TCGA -0.60557512 0.2996687
                                        0.6178160 0.94580285
                                                              0.92940351
-1.2724010 0.62931139
                                                              0.62931139
                NP_001093592 NP_001230368 NP_690868 NP_891554
                                                             NP 203744
##
## AO.A12D.O1TCGA
                -0.46207627
                                        2.0219121 0.7913473
                               2.1095375
                                                             0.6541946
## C8.A131.O1TCGA
                 -0.06570632
                              1.4239139 1.4239139 1.1041313
                                                             2.1363409
## AO.A12B.O1TCGA
                 -1.38318273
                              -0.9092607 -1.0755491 -0.4602819
                                                             0.6344503
## BH.A18Q.O2TCGA
                  0.03810771
                             -1.2732820 -1.4171334 -1.5275310
                                                             2.2828589
## C8.A130.02TCGA
                  0.41446409
                               ## C8.A138.O3TCGA
                  0.62931139
                               0.9584539 0.9584539 1.6021104
                                                             0.1721690
                NP_000519 NP_001073860 NP_001124160 NP_002119
##
                                                              NP_004500
## AO.A12D.O1TCGA 0.4446557
                            0.9132609
                                       -1.6354941
                                                  0.3836989 0.665623989
## C8.A131.O1TCGA 1.6222600
                            0.3593212
                                       -0.6000266
                                                 0.2621720 -0.535260504
## AO.A12B.O1TCGA 0.3157308
                            0.3268167
                                        ## BH.A18Q.O2TCGA 0.1551961
                            0.9279793
                                        0.3358467 -0.6610771 0.429517383
                                                 2.8842054 -0.480940105
## C8.A130.02TCGA 2.1199959
                           -0.2907077
                                       -0.0184786
  C8.A138.O3TCGA 0.2855403
                           -0.6799444
                                        0.1867975 1.8105673 0.007597728
##
                NP 001171944
                              NP 612411
                                        NP 009168
                                                   NP 787048 NP 060830
## AO.A12D.O1TCGA
                0.24273639 0.10177386 2.07524931 0.25035599 -0.2753962
```

```
## C8.A131.O1TCGA -0.60002660 -0.31262705 0.01120342 0.01120342 -0.5514520
## AO.A12B.01TCGA -0.06673264 -0.01407463 -1.06169176 -0.70694310 -0.2413355
## BH.A18Q.02TCGA
                  0.42951738 2.12562599 1.33611587 -0.87183616 -1.0123422
## C8.A130.O2TCGA -0.24150968 -0.51373879 -1.05819703 0.87036587 2.3036686
## C8.A138.O3TCGA
                  0.10999762 -1.14440111 -0.30325910 -0.38737330 -0.7457729
##
                  NP 005569 NP 003312
                                       NP 005078 NP 001013456 NP 000166
## AO.A12D.O1TCGA
                 0.9132609 -0.6830446 0.34179115
                                                    0.2808344 0.6732436
                                                   -0.6283618 -0.1061851
## C8.A131.O1TCGA
                 0.2540763 -0.8064685 -0.44215924
## AO.A12B.O1TCGA
                  1.0584858
                           2.6797980 0.08292695
                                                    0.0247260 0.2021003
## BH.A18Q.02TCGA
                 0.7941640
                           0.3893728 -0.50384416
                                                   -0.4804265 -1.9691214
## C8.A130.02TCGA 0.1717538
                           0.6079764 0.94908272
                                                    0.9490827 0.5554985
## C8.A138.O3TCGA -0.4568589 0.8633683 -0.64703018
                                                   -0.5446303 0.7938826
                 NP_000473 NP_064601 NP_008880 NP_001139280 NP_000878
                                                  -1.410716 -0.3744509
## AO.A12D.O1TCGA -3.970900 1.4237738
                                     0.8827825
## C8.A131.O1TCGA -1.235544 -0.9440965
                                                   5.504178 1.8084626
                                      0.5090928
## AO.A12B.O1TCGA -2.699633 -0.9868620
                                      1.1083723
                                                  -1.660330 -2.0427935
## BH.A18Q.02TCGA 1.493349 -0.7346755 -0.5908241
                                                  -1.477350 0.6268949
## C8.A130.02TCGA 1.372186 -1.2681086 -0.1037552
                                                  -1.756809 -1.2057911
-2.095257 -0.6580016
                  NP 005344
                             NP 061176
                                        NP 073609 NP 036580 NP 003143
## AD.A12D.01TCGA -2.3364970 -0.93830104 -0.43540768 -0.6868544 -0.5839898
## C8.A131.O1TCGA 2.4561235 2.06752693 0.08001740 -0.3369143 -0.6283618
## AO.A12B.O1TCGA -3.2566991 0.02749747
                                       1.92318561
                                                   0.1522138 -0.3411086
## BH.A18Q.O2TCGA -1.6345832 -1.19968358 0.75736481
                                                   0.6636941
                                                              0.7841279
## C8.A130.02TCGA -2.1471135 -1.54033775 -2.95068136 0.8867652 0.9458029
  NP_078900 NP_055865 NP_000054 NP_001171534 NP_001041666
## AO.A12D.O1TCGA -0.1230042 -0.5725604 0.4179871
                                                   0.4713243
                                                             -3.14417418
## C8.A131.O1TCGA 0.4281352 -1.0452935 -0.2195258
                                                  -0.2195258
                                                               0.71148682
## AO.A12B.O1TCGA -0.7402008 0.2852445 1.7485828
                                                             -2.69686135
                                                   1.8594417
## BH.A18Q.02TCGA -0.2897397
                            0.2522121
                                      0.2321399
                                                   0.1351238
                                                             -0.08232604
## C8.A130.02TCGA -0.5760563
                            0.8113282 0.9556425
                                                   1.0868372
                                                               3.09411696
## C8.A138.O3TCGA 0.4537687
                            0.2306832 -0.4202876
                                                  -0.4056590
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                  NP_690856 NP_001037
##
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## AO.A12D.O1TCGA 0.2998834 -1.0906930
                                       -0.1382434
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## C8.A131.O1TCGA -0.9886232 -1.6200926
                                      -2.4782434
                                                   1.37129141 -0.6728885
## AO.A12B.O1TCGA -0.1415624 -2.9740087 -1.9901355
                                                 -2.29499763 0.9143691
## BH.A18Q.O2TCGA 2.7144132 2.3430758 -11.3060822
                                                 -1.28666351 -0.6276233
## C8.A130.02TCGA -0.7302101 -1.4616209
                                      -2.7342100
                                                   0.09303695 -0.2447895
## C8.A138.O3TCGA 0.9255397 0.9182254
                                        0.7061113
                                                   0.21605466 -0.4093161
                               NP 006575 NP 001180458 NP 001157632 NP 001229827
                 NP 001009186
## AO.A12D.O1TCGA
                  -0.1039552 -0.48874485
                                          -0.2372982
                                                       0.32655195
                                                                    0.0217681
                                          -0.5312126
## C8.A131.O1TCGA
                  -0.6162181 -0.55954779
                                                      -0.40572832
                                                                    0.5333801
                   0.9559412 -0.99517639
## AO.A12B.O1TCGA
                                          -1.1143498
                                                       0.02472600
                                                                    1.3578049
## BH.A18Q.02TCGA
                  -0.6209325 -0.45700881
                                          -0.4770811
                                                      -1.22310126
                                                                   -0.5138803
                  -0.2119909 0.08647721
## C8.A130.02TCGA
                                           0.1127162
                                                       1.87400574
                                                                    -0.5465375
## C8.A138.O3TCGA
                  -0.3764019 -0.54097315
                                          -0.4276018
                                                       0.04782626
                                                                   -0.2154878
                   NP_061878 NP_002100 NP_036340 NP_006653 NP_001986
##
## AO.A12D.O1TCGA
                 0.37226953 -0.72114254 -0.5877996
                                                   0.6427652 2.3686038
## C8.A131.O1TCGA
                 0.58600251 -0.87123462 -1.6241405
                                                   0.5455237
                                                             0.8814978
## AO.A12B.01TCGA 1.26911777 0.96979859 1.8511273 -0.4879967 -2.3642845
## BH.A18Q.02TCGA -0.18603288 -0.08232604 -0.6610771 0.1652322 0.6101680
## C8.A130.O2TCGA -0.06111689 -0.52029853 -0.1923116 0.4013446 -0.7203705
## C8.A138.O3TCGA 0.29285458 0.31845456 1.3680535 0.9255397 -0.3983447
```

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NP 057318 NP 001009185
                                         NP 054749
                                                     NP 476510 NP 001128686
## AO.A12D.O1TCGA 4.4258948
                              2.5286153 1.82761243 0.14368164
                                                               0.117013054
## C8.A131.O1TCGA 2.1606282
                                                                0.221693229
                              1.5089194 -0.26405248
                                                    0.22978899
## AO.A12B.O1TCGA -1.9180772
                             -1.9541063 0.09401285 -0.01961758
                                                                0.008097157
## BH.A18Q.O2TCGA 0.7071841
                             -0.3399204 -0.12247062 1.35284278
                                                                1.382951214
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## C8.A138.O3TCGA 1.8069102
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                             NP 001395
                   NP 659496
                                         NP 821133 NP 006079
                                                               NP 001060
## AO.A12D.O1TCGA -0.32873333
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                                        0.24273639
                                                    0.1055837
                                                              0.01033871
## C8.A131.O1TCGA -0.17499910
                             1.1365143
                                       0.62648132 0.6871995
                                                              0.67910377
## AO.A12B.O1TCGA -0.05010379
                             0.1328135 -0.28290760 -0.1360195 -0.39099508
## BH.A18Q.02TCGA 1.73087093 -0.9788884 -0.08232604 -0.2295228 -0.17265135
## C8.A130.02TCGA -0.94012175
                             1.4968208 0.92940351 0.7752497
                                                              0.89004508
## C8.A138.O3TCGA -1.60154350
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                                          NP_006077
                   NP_821080
                                                     NP_115914
                                                                 NP_110400
## AO.A12D.O1TCGA
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                             0.16654043
                                         0.04843669 -0.05442786
                                                                0.08272487
## C8.A131.O1TCGA 0.67505589
                             0.71553470
                                        1.03126941
                                                    0.67100801
                                                                1.47653632
## AD.A12B.O1TCGA -0.36605182 -0.14987685 -0.53234025 -0.24687844 -0.61825594
## BH.A18Q.02TCGA -0.16596059 -0.23621361 -0.40682808 0.14850531 -0.54733412
## C8.A130.02TCGA 0.86052626 0.87692561 1.04419892 0.67685361
                                                               1.13275538
## C8.A138.O3TCGA -0.07285933 0.04782626 0.08439765 -0.13137356 -0.14234498
                  NP 817124 NP 000009 NP 001029031 NP 055935 NP 060322
## AO.A12D.01TCGA 0.3417911 -0.6601858 -0.686854359 -0.1382434 1.096131
## C8.A131.O1TCGA 0.9665033 -0.2883398 -0.328818577
                                                    0.1285920 -1.745577
## AO.A12B.01TCGA -0.1831345 2.2086474 2.186475624 0.1771571 -2.885322
## BH.A18Q.02TCGA -0.5406434 -0.0154184 0.007999269 0.2756298 -0.423555
## C8.A130.O2TCGA 1.0146801 -0.2808681 -0.303827187 -0.0709565 5.084997
## C8.A138.O3TCGA 0.5854257 1.3826821 1.382682054 0.6951399 -3.247256
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                                                   NP_002825
                                                               NP_001840
## AO.A12D.O1TCGA
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                                                   0.6122868 -0.46969586
                   -1.5512786 -0.7983728 0.2014538
## C8.A131.O1TCGA
                                                    0.3714648 -0.01713175
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                   -0.7079124 0.2957021 -0.7447116
                                                    0.6871118 0.12508763
## C8.A130.02TCGA
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                                                    0.3947849 0.80148862
  C8.A138.O3TCGA
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                    NP 478054
## AO.A12D.O1TCGA -0.671615166 -1.56691774 -1.8526526
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## C8.A131.O1TCGA -0.146663935 -0.40977620 -1.8508218
                                                     -1.8913006
                                                                 0.9665033
## AO.A12B.01TCGA -2.996180524 0.74808068 2.9181447
                                                       2.9181447
                                                                 0.1466709
## BH.A18Q.02TCGA 0.215412944 -0.00872764 1.1086299
                                                      1.1253568 -1.2498643
## C8.A130.02TCGA
                 0.794928884 -0.35630509 -0.6678926
                                                     -0.6547732 -0.5202985
## C8.A138.O3TCGA
                 0.003940589 1.21445365 1.6459961
                                                      1.6752532 1.4887391
                 NP 001127870 NP 001001521 NP 006750
                                                    NP 060077 NP 001258547
## AO.A12D.O1TCGA
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                                          0.8904021
                                                      0.5932378
                                0.8713531
                                                                 0.65800439
## C8.A131.O1TCGA
                    0.9300724
                                0.7155347 0.7195826
                                                      0.6912474
                                                                 0.71958258
## AO.A12B.O1TCGA
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                                                      0.3933320
                                                                 0.38778908
                                                                -0.39344655
## BH.A18Q.02TCGA
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                                0.6804210 0.5967865 -0.3934466
## C8.A130.02TCGA
                   -0.5301381
                                0.3226278 0.2701499 1.0310794
                                                                 1.03107944
## C8.A138.O3TCGA
                    1.4887391
                               -0.5812017 -0.6762873 0.1173119
                                                                 0.09902621
                   NP_056969
                             NP_060686 NP_006245 NP_006248 NP_001229342
## AO.A12D.O1TCGA -0.03537887
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                                                               0.9894568
## C8.A131.O1TCGA -0.38144103 -0.3207228 1.3510520 0.3836085
                                                               0.8936415
## AO.A12B.01TCGA 0.04135484 0.2298151 -1.4663269 -1.9513349
                                                               -2.3116265
## BH.A18Q.02TCGA -0.02879993 -0.6644225 -1.0591775 -1.2966997
                                                              -1.0156876
```

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## C8.A130.O2TCGA 0.29310895 -0.4087830 0.6571744 0.3980648
                                                             0.4636621
                0.47205440 -0.6616587 1.8032531 1.7191389
## C8.A138.O3TCGA
                                                             1.7739959
                NP 001013725
                               NP 060731
                                           NP 839955 NP 001024 NP 001005242
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                            0.002719109 -0.008710286 -0.9992578
## AO.A12D.O1TCGA
                                                                0.15511104
## C8.A131.O1TCGA
                   0.7924444
                             0.177166539
                                        0.241932634 0.3593212
                                                               -0.95624012
                  -0.8011732   0.681565309   0.681565309   -0.2801361
## AO.A12B.O1TCGA
                                                               -0.29676497
## BH.A18Q.O2TCGA
                  -0.6911855 -0.045526841 -0.045526841 -0.3332297
                                                                1.11866605
## C8.A130.02TCGA
                  0.03071944
## C8.A138.O3TCGA
                   0.3659974 0.991368163 0.969425328 1.0498824
                                                                0.45376871
##
                  NP_004563 NP_001026859 NP_003971 NP_001185537
                                                               NP_065143
## AO.A12D.O1TCGA 0.15511104
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## C8.A131.O1TCGA -0.95624012
                             0.03549071 -0.1426161
                                                   -0.2033343
                                                              1.56963758
## AO.A12B.O1TCGA -0.29676497
                            -0.48799667 0.6067355
                                                    0.6677079 -1.32498178
                                                   -1.5844025 -0.02210917
## BH.A18Q.O2TCGA 1.10862990
                             0.15854145 -1.6513101
## C8.A130.02TCGA
                0.02087983
                            -0.80236725 -0.7269303
                                                   -0.6842920
                                                              0.23735118
## C8.A138.O3TCGA
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                             1.15959656 0.7061113
                                                    0.7061113
                                                              0.82679690
                   NP_079100 NP_001153576
                                                              NP_071451
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## AO.A12D.O1TCGA 0.349410742
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## C8.A131.O1TCGA -0.004988103
## AO.A12B.O1TCGA 0.157756746
                               ## BH.A18Q.02TCGA -0.965506853
                              -0.9855791 -1.18964744 -0.8584546 0.6503126
## C8.A130.02TCGA 1.083557344
                              1.0835573 1.36562607 1.2442709 -0.3727044
## C8.A138.O3TCGA
                0.936511076
                               0.9145682 0.96942533 0.9291968 -1.2248582
                 NP 060469 NP 004078 NP 001191317
                                                  NP 065781
                                                             NP 066943
## AO.A12D.O1TCGA
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                           0.4294165
                                       0.5132321 -0.79733851 -0.82400709
## C8.A131.O1TCGA 0.2014538
                           0.3917042
                                       0.3998000 -0.91576131 -0.83885157
## AO.A12B.O1TCGA
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                                       0.8949688 1.29683251 1.19151650
                           0.9448553
## BH.A18Q.O2TCGA 0.1618868 0.2187583
                                       0.1284330 -1.03575987 -1.03575987
## C8.A130.02TCGA -0.6514933 -0.1726324
                                      -0.2054311 0.76213020 0.76213020
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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                              0.23892659
                                          0.73039056 -0.3020647
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## C8.A131.O1TCGA
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                             -0.02522751
                                         -0.60407448 -0.5433563
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                             -0.14967335
                                        -0.08407597 -0.5563771
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## C8.A138.O3TCGA
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                   ## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
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                   0.8853111
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## AO.A12D.O1TCGA 0.075105274
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## C8.A131.O1TCGA -0.017131745
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## AO.A12B.O1TCGA -0.002988738
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## BH.A18Q.02TCGA -0.313157390 -0.6844948 -0.5306072
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## C8.A130.02TCGA 0.568617932
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## C8.A138.O3TCGA -0.460516085
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                                                              NP 060391
## AO.A12D.O1TCGA 1.31709948 -0.56113102 -0.5611310
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## C8.A131.O1TCGA -0.47454229 0.79649232 0.7964923
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1.4963786 -0.05287527
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## C8.A138.O3TCGA -0.19720207 0.30016886 0.3038260
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  1.12841856
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.58105711
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 0.31893236
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## C8.A131.O1TCGA 0.61028980
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## AO.A12B.O1TCGA -0.42425277
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## BH.A18Q.O2TCGA 0.27228444
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## C8.A131.O1TCGA -1.17077781
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## AO.A12B.O1TCGA 0.81736753
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## BH.A18Q.02TCGA -0.33322968
                             -0.8216554
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                                                     -0.9253623
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## C8.A130.02TCGA 0.92940351
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## C8.A138.O3TCGA -1.62348634
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## C8.A131.O1TCGA -1.6727150 -0.5433563
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## BH.A18Q.O2TCGA 4.9892729 -1.6580009
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## AO.A12D.O1TCGA -0.2868256 3.3248631 1.0694626 1.0923214 -0.4277881
## C8.A131.O1TCGA 0.1245441 -0.5474041 0.4929013 0.4767097 0.1893102
## AD.A12B.O1TCGA -2.0455650 -1.1088068 -0.2884505 -0.3438800 -0.6459707
## BH.A18Q.02TCGA 0.8644170 -0.6476956 -0.7079124 -0.7079124 -1.4740049
## C8.A130.O2TCGA 0.3095083 1.1393151 1.0835573 1.1360352 0.1192759
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## C8.A131.O1TCGA -0.06165844 0.2905072 0.1731187
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## AO.A12B.01TCGA -1.87096213 -0.8482883 -0.4242528
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## BH.A18Q.02TCGA -0.91867151 -1.5476033 0.8811439
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## C8.A130.02TCGA 0.52597964 1.1524346 0.6309354
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## C8.A138.O3TCGA -0.14234498 1.7154817 1.6606246
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## AO.A12B.O1TCGA 0.54853456 0.6732509 -2.7384335 -0.34388002 -0.2967650
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## C8.A130.O2TCGA -0.92372240 0.2898291 0.7391711 0.81788797
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## AO.A12B.01TCGA -1.83770444 -1.29449557 1.98692950 -1.9153057
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## BH.A18Q.02TCGA -0.02210917 -0.33992045 0.43620815 0.1953407
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## C8.A130.02TCGA 1.08355734 -0.36942456 -0.06767663 0.2209518
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## AO.A12D.01TCGA -0.1001454 0.4560851 0.4675145 -0.2601570
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## C8.A131.O1TCGA 0.2014538 2.3873095 1.0677003 2.5694642 2.06752693
## AD.A12B.01TCGA -0.2856791 -1.9125342 -2.6552892 -0.2856791 -0.95914723
## BH.A18Q.02TCGA -0.8684908 1.8211962 0.8142363 -1.3000450 -0.05890837
## C8.A130.02TCGA -0.3202265 -0.9171627 0.1422350 -0.3825440 0.23735118
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## C8.A130.O2TCGA 0.2537505 -1.2615489 -1.45834103 -0.1299941 0.2209518
## C8.A138.O3TCGA 1.6423389 0.3038260 4.53147888 -0.2630306 -0.5117160
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## AO.A12D.O1TCGA
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## C8.A130.02TCGA
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## C8.A131.O1TCGA -0.22762155 -3.166383 -0.7417024 1.1000834 -1.23959179
## AO.A12B.01TCGA 0.04966926 -2.749519 1.1056008 -1.6243010 0.01641158
## BH.A18Q.02TCGA -0.62427790 -0.169306 0.3023929 -2.1731897 -0.18937826
## C8.A130.02TCGA -0.02831820 -1.468181 -1.2090710 -1.1205145 0.31934790
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## BH.A18Q.02TCGA 0.5332242 -0.1057437 0.4428989 0.1150515 -0.5473341 0.4094451
## C8.A130.O2TCGA 0.5882971 0.6309354 1.0671580 1.1721138 2.5463789
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## C8.A138.O3TCGA 0.1538833 0.2635975 -1.4333151 0.1136548 0.5122829 0.8158255
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## BH.A18Q.02TCGA -0.63765943 -0.2161413 0.7306018 -0.2328682
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## C8.A138.O3TCGA -0.25571629 -0.4934303 -0.7823443 -1.0602869
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## C8.A131.O1TCGA 0.6871995 -0.06165844
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## AO.A12B.O1TCGA -2.6331174
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## BH.A18Q.02TCGA -2.0594467
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## C8.A130.02TCGA 1.1360352 1.18523328
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## BH.A18Q.02TCGA -0.3198482 0.3458828 -0.89525383
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## C8.A138.O3TCGA -1.36748660 0.01125487 0.5086258 1.5253105 0.9840539
                   NP 004630 NP 055111 NP 778228 NP 001193723
                                                                 NP 002883
## AD.A12D.01TCGA 0.10939346 0.9094511 -0.8163875 -0.62208779 -0.18777080
## C8.A131.O1TCGA 0.53742794 -0.8267079 -0.7336067
                                                    0.03144283 -1.48246464
## AO.A12B.01TCGA 0.08292695 1.2358601 -0.5766838
                                                    0.01086863 -0.68477131
## BH.A18Q.02TCGA -0.10908910 -0.4001373 1.2156821
                                                    0.16857760 -0.01207302
## C8.A130.02TCGA 0.58173741 2.0248797 -0.3825440
                                                    0.27342973  0.81460810
## C8.A138.O3TCGA
                 1.32782497 0.4939972 1.6240532
                                                    0.21239752 1.19251082
##
                  NP_006383 NP_054872 NP_060060
                                                   NP_942595 NP_055726
## AO.A12D.O1TCGA -0.3744509
                            0.2389266 2.0219121 -0.27158636
                                                             0.3303618
## C8.A131.O1TCGA -0.1669033
                            0.1771665 0.3714648 0.92602451
                                                             0.8976893
## AO.A12B.O1TCGA -0.7845444
                            0.6316788 -0.4131669 -0.90648922
                                                             0.5762493
## BH.A18Q.02TCGA 0.6068226 -0.1960690 0.3860274 0.14515992
                                                             0.1719230
## C8.A130.02TCGA
                 0.8178880 -0.3563051 0.8047685 -0.34318561
                                                             0.5030206
## C8.A138.O3TCGA
                  0.1173119
                            1.2327393 -0.2228020 0.07708337 -0.2520592
                                        NP_057332 NP_001124427 NP_001035879
##
                  NP_065908 NP_065761
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## C8.A131.O1TCGA 0.9138809 -0.4340635 1.73155282
                                                                -0.2559567
                                                     1.3996266
## AO.A12B.O1TCGA -0.2413355 0.9448553 -0.55174057
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```

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## BH.A18Q.02TCGA -0.1090891 -0.5205711 -0.34326583
                                                 -0.2462498
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## C8.A130.02TCGA -0.3333460 0.6801335 0.17503367
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                                                              0.7063724
-0.1898878
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##
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-3.094647
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## C8.A131.O1TCGA 0.4929013 -5.372478 -5.522250
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                                                           -5.461532
## AO.A12B.O1TCGA -1.0755491 2.025730 2.017416
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-8.188186
                                                           -7.355186
## C8.A130.O2TCGA 0.7490107 1.152435 1.149155
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                                                            1.149155
## C8.A138.O3TCGA -0.7933157 -5.284283 -4.907597
                                               -5.309883
                                                           -4.636969
                 NP_059347 NP_001157852 NP_001032405 NP_001157854 NP_006775
## AO.A12D.O1TCGA 0.7418200
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                                         0.7189612
                                                    1.99143375 0.5132321
## C8.A131.O1TCGA -0.2681004
                             0.1852623
                                        -0.3490580
                                                    0.07192163 -0.5554999
                                                  -0.41316687 -1.3610109
## AO.A12B.O1TCGA -0.1859060
                           -0.4464246
                                       -0.2635073
## BH.A18Q.02TCGA -0.3165028
                                        -0.2964305 -1.71821777 0.7172202
                           -1.6446194
## C8.A130.02TCGA 1.1983528
                             2.7333314
                                         1.2245917
                                                    2.51358017
                                                              1.1721138
## C8.A138.O3TCGA 0.9328539
                             0.7463398
                                         0.9694253
                                                    0.79753979 -0.2447449
##
                 NP 079408
                           NP 000149 NP 079010 NP 001001924 NP 001001925
## AO.A12D.O1TCGA -1.4259552
                           0.8865923 2.2238314
                                                 1.8009438
                                                             1.8009438
## C8.A131.O1TCGA -1.1707778
                           0.7883966 0.1569271
                                                -0.5959787
                                                            -0.5959787
## AO.A12B.O1TCGA 1.0862005
                           1.3716623 -0.5849983
                                                 2.1864756
                                                             2.1864756
## BH.A18Q.O2TCGA -1.0357599 -0.1492337 -2.0427198
                                                -2.4575472
                                                            -2.4575472
## C8.A130.02TCGA -1.3074671
                          0.3619862 0.1455148
                                                -1.2221905
                                                            -1.2221905
## C8.A138.O3TCGA -0.1130879 0.1429119 3.1527374
                                                -1.3053152
                                                            -1.4040580
                 NP 065800 NP 001001931 NP 002874 NP 004448 NP 075266
##
## AO.A12D.O1TCGA 1.1151802
                            1.3094799 1.0770822 2.7305346 -0.2601570
## C8.A131.O1TCGA -0.2316694
                            -0.8024206 0.3755127
                                                 2.8325764
                                                           0.4321830
## AO.A12B.O1TCGA 2.1365891
                            ## BH.A18Q.02TCGA -3.0396436
                           -2.7720131 0.8276178 -0.7848562 2.3497666
## C8.A130.02TCGA -1.2221905
                           -1.2254703 0.1684739 -1.4747404 -0.6154147
## C8.A138.O3TCGA -1.4040580
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##
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## AO.A12D.O1TCGA 0.2008286
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## C8.A131.O1TCGA -0.2964355
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## AO.A12B.01TCGA 0.1716141 -0.9480613 -0.3383371 -0.4769108 0.005325683
## BH.A18Q.O2TCGA -0.5640610 -0.2562859 1.5134211 -1.8319608 -0.978888380
## C8.A130.02TCGA 0.4899011 -0.8482854 -0.7466095 -0.2283902 0.607976358
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## C8.A131.O1TCGA -1.06553291 -2.83040899 -1.5553265 2.334687 -1.43389007
## AO.A12B.01TCGA -2.63311745 -3.45624519 0.1660712 -2.877007 -2.48068638
## BH.A18Q.02TCGA 0.49642502 0.74063790 -0.2897397 1.583674 1.63720023
## C8.A138.O3TCGA -1.68931484 -0.07285933 0.7243970 -3.163142 -0.02165938
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##
                                                  NP_056477 NP_005410
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                   0.3947849 0.2963888 0.4243037 -0.14311361 -0.1824720
## C8.A130.02TCGA
## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA 0.2846442 2.6314798
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## AO.A12B.O1TCGA 0.3046449 -1.9929070
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## BH.A18Q.02TCGA -0.7948924 -1.2331374
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## C8.A130.02TCGA 0.3619862 0.5063004
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## C8.A138.O3TCGA
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## C8.A131.01TCGA 2.6787570 2.7475709 -3.12185642 1.027222 0.6426728
## AO.A12B.O1TCGA -0.8621456 -0.6127130 -0.08890443 -1.421983 -0.0279320
## BH.A18Q.02TCGA -0.4335911 -0.8818723 1.26586285 -1.922286 -0.4570088
## C8.A130.O2TCGA 0.2275116 0.1258356 -0.82860621 2.044559 0.5095803
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## C8.A131.O1TCGA -2.5551531 1.2660465 -1.1343469
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## AO.A12B.01TCGA 1.7347254 -1.9125342 1.2635748 0.64553615
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## BH.A18Q.02TCGA -1.6245471 0.9681239 -0.9052900 -2.77870382
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## C8.A130.O2TCGA 0.1192759 0.3357472 -0.5793362 -0.32350640
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## C8.A138.O3TCGA -2.6328568 -0.4605161 1.2327393 -0.61411593
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## C8.A131.O1TCGA 0.1083526 0.1083526 -1.24363967 -1.5512786 -0.40168043
## AO.A12B.01TCGA 2.4192794 2.4192794 0.72590889 -0.8372024 -0.57945530
## BH.A18Q.O2TCGA -0.3131574 -0.3131574 -1.00565144 -2.7218323 -1.41713340
## C8.A130.02TCGA -1.1893918 -1.1893918 -0.07423637 0.3062284 0.06679799
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                    -1.382904 -0.8745244 0.2865492
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -1.0030676 0.1284424 0.4865635
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## C8.A131.O1TCGA 0.3390818
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## AO.A12B.O1TCGA 0.9836560
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## BH.A18Q.O2TCGA -0.7915470 0.2555575 1.0919030
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## C8.A130.O2TCGA -0.6088550 -0.3202265 -0.3300661
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## C8.A138.O3TCGA 0.4903401
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## C8.A131.01TCGA -0.1628555 1.310573199 0.6791038 -1.01291045
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## AO.A12B.O1TCGA -0.4741393 -1.336067673 1.3245472
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## BH.A18Q.02TCGA -0.8250008 -0.005382259 -0.6644225
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## C8.A130.O2TCGA -0.3792642 0.607976358 -0.5957355 0.35542646 -1.21891060
## C8.A138.O3TCGA 1.0864538 1.163253704 0.2928546 -0.69457299 0.31479742
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                                                        1.6344037 -0.06165844
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## AO.A12B.O1TCGA 2.693655343
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## C8.A130.02TCGA -1.199231387
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## C8.A138.O3TCGA 0.329425974
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## BH.A18Q.O2TCGA -0.1960690 0.9380154 -1.5375672 -0.4335911
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## AO.A12B.O1TCGA -1.6797304
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## C8.A130.02TCGA -0.7236504
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## BH.A18Q.02TCGA
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## AO.A12B.O1TCGA -0.2662788
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                                                                       NΑ
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                                        NP 277028
                                                   NP 076916 NP 004438
## AD.A12D.O1TCGA -0.03537887 -0.2792060 -0.27920596 -0.16110221 -0.9459206
## C8.A131.O1TCGA -1.27602271 -0.2397652 -0.23976520 -0.16285546 -0.8024206
## AD.A12B.O1TCGA 1.93981445 -0.4020810 -0.40208098 -0.40762392 -0.3078509
## BH.A18Q.02TCGA 0.09497920 -0.1726514 -0.01207302 -0.03214531 0.8376540
## C8.A130.O2TCGA 0.46366213 0.4013446 0.40134462 0.25703039 -0.8220465
## C8.A138.O3TCGA 1.11205376 -0.5958302 -0.62874449 -0.76771577
                                                               0.5269115
##
                  NP_060641 NP_114098 NP_001019837
                                                    NP_001076
                                                                NP_061917
-0.2258688 -1.24689469
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## C8.A131.O1TCGA 0.2621720 0.8734021
                                        0.8734021 -1.00481469
                                                              0.78030080
## AO.A12B.O1TCGA -0.2718217 -1.6409298
                                       -1.6409298 -0.58222678 -0.11107622
                                      1.7777063 0.04814385 -0.03883608
## BH.A18Q.02TCGA -0.1224706 1.7777063
## C8.A130.02TCGA -0.9466815 -0.5793362
                                       -0.5793362 -0.32022653 -0.23167007
## C8.A138.O3TCGA 0.4647401 -0.7494301
                                       -0.7128587 -2.28177139 -0.03263080
                  NP_009223 NP_004026
                                      NP_004028 NP_001020561 NP_000027
##
## AO.A12D.O1TCGA -1.4564336 -1.4602434
                                       1.7361773
                                                   0.9780274
                                                             1.0961312
## C8.A131.O1TCGA 0.8491148 0.8491148
                                      1.3227168
                                                   1.9015638 2.5370811
## AO.A12B.O1TCGA -0.5572835 -0.5711409 -1.2058084
                                                  -2.1702813 -2.5860024
## BH.A18Q.02TCGA -2.9660452 -2.7987761 0.3023929
                                                   1.6137826 0.9580877
## C8.A130.02TCGA -1.6616929 -1.5928157 0.4603823
                                                  -0.6449335
                                                             0.3357472
## C8.A138.O3TCGA 2.1323956 2.0336528 0.4098830
                                                  -0.2666877 -0.4129733
                   NP 115941 NP 733793 NP 006763 NP 006282 NP 001123577
## AO.A12D.01TCGA 0.53228105 0.4141773 0.1246326 -1.5669177
                                                              0.53990065
## C8.A131.O1TCGA 0.44027880 0.7641093 0.9867427 -0.5797872
                                                            -0.03332327
## AO.A12B.01TCGA -0.08890443 -0.5351117 -1.9236201 -0.5295688
                                                              0.66493647
## BH.A18Q.02TCGA 1.02834074 0.8276178 -0.3432658 -0.4770811
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## C8.A130.O2TCGA 1.04747879 0.3291875 -0.6580530 -1.7043312
                                                            -0.59245565
## C8.A138.O3TCGA 0.57079716 0.8121683 1.1157109 -0.2081735
                                                            -0.04725936
                             NP_150229 NP_003184 NP_057308
                   NP_112729
                                                             NP 065070
## AO.A12D.O1TCGA 0.53990065
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                                                             0.5741888
## C8.A131.O1TCGA -0.03332327
                            2.3184956 -0.4462071 -0.9076656
                                                            0.5698110
## AO.A12B.O1TCGA 0.66493647 -0.8316594 0.1328135 0.5651634 -1.3970401
## BH.A18Q.02TCGA -0.38341041 -5.3078125
                                       0.3258105 -0.2027598 -1.9657760
## C8.A130.O2TCGA -0.58917578 -2.8162067 0.1979927 0.5784575 -1.3697846
## C8.A138.O3TCGA -0.04725936 -2.7315995 -0.4093161 0.1209690 2.9589090
                 NP_001035847 NP_112604 NP_004491 NP_001139653 NP_001130033
##
                    0.1893992 -0.5992290 -0.5992290
                                                   -0.6297074
## AO.A12D.O1TCGA
                                                               -0.62970739
## C8.A131.O1TCGA
                   0.8207796 -1.1545863 -1.1019638
                                                   -1.1505384
                                                               -1.15053841
## AO.A12B.O1TCGA
                  -0.1083047 0.2852445 0.2852445
                                                   0.3822461
                                                                 0.38224613
## BH.A18Q.02TCGA
                  -0.9119807 -0.6075510 -0.4938080
                                                   0.1150515
                                                                 0.07490691
## C8.A130.02TCGA
                   0.3488667 1.8313674 1.6837733
                                                    1.5165000
                                                                1.51650003
## C8.A138.O3TCGA
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                                                   -1.0200584
                                                               -1.00177268
                   NP_115971 NP_004496 NP_003265
                                                   NP_002622 NP_001191676
## AO.A12D.O1TCGA -0.52684284
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                                                  0.86373349
                                                               -0.3706411
## C8.A131.O1TCGA 0.28645932 4.0347971
                                       0.5090928
                                                  1.41986598
                                                                1.3510520
## AO.A12B.O1TCGA -1.84879034 -3.9301672
                                       0.3046449
                                                  0.02195453
                                                               -1.6880449
## BH.A18Q.O2TCGA -0.44362728 -0.5506795 0.7841279 -0.58413332
                                                               0.3893728
## C8.A130.02TCGA -1.11723467 -0.4087830 -0.6908517
                                                  0.01432009
                                                                1.4181040
-0.5373160
                  NP 078932
                             NP_061185 NP_003886 NP_001158213
                                                                NP 055555
## AO.A12D.O1TCGA 0.5056125 -0.54589183 0.4103675
                                                    0.5056125 -0.008710286
## C8.A131.O1TCGA 2.5249375 -0.86313886 0.8410190
                                                    3.1402154 -0.535260504
```

```
## AO.A12B.O1TCGA -1.5577856 -0.94806133 0.8533967
                                                    -1.0034908 -0.759601107
0.8844893 0.513151930
## C8.A130.02TCGA 0.5325394 0.85724639 -1.1467535
                                                    -0.3497454 1.044198918
## C8.A138.O3TCGA -0.4166304 -1.01640124 -0.1350307
                                                    -0.8884014 -0.734801523
                  NP 001407
                              NP 001958 NP 000509 NP 000510 NP 000550 NP 000175
## AO.A12D.O1TCGA 0.9589784
                            0.38750872 -4.4242664 -4.6757130 -6.306307 -6.306307
                            0.11644833 3.4357107 3.9416958 2.690901 2.601847
## C8.A131.O1TCGA 1.4036745
                            0.01086863 -0.7374293 -0.8538312 -2.189682 -2.175824
## AO.A12B.O1TCGA -0.5129399
## BH.A18Q.O2TCGA -0.2161413
                             0.77074633 -4.0131497 -4.1235473 -2.467583 -2.273551
## C8.A130.02TCGA 0.8474068 1.10323656 -5.1088351 -5.3548252 -6.138714 -5.348266
## C8.A138.O3TCGA -0.2374306 -1.51011503 -4.5674834 -4.6662261 -7.511480 -7.427366
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                 NP 005321
## AO.A12D.O1TCGA -6.466318 -0.02394948
                                       -0.7440013 -0.7706699
                                                                -0.7059034
## C8.A131.O1TCGA 6.147791 -0.18714274
                                        -1.0776765 -1.0776765
                                                                -1.1505384
## AO.A12B.O1TCGA -1.189180 0.32127371
                                        -1.1780937 -1.0034908
                                                                -1.2667808
## BH.A18Q.02TCGA -3.260439 -0.02879993
                                         0.7339471 0.6603487
                                                                 0.5633327
## C8.A130.02TCGA -6.286308 0.68669321
                                         -0.7761283 -0.7334900
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## C8.A138.O3TCGA -6.385082 -1.56131497
                                          1.9641672 1.8398245
                                                                 2.0775385
                   NP 006431 NP 078878 NP 057280 NP 001354 NP 057216
## AO.A12D.01TCGA -0.20300999 -0.17253161 0.1093935 -0.1039552 -3.2927563
## C8.A131.O1TCGA 0.08811316 0.20550171
                                        0.4848055 -1.0371977 -1.3974591
## AO.A12B.O1TCGA 2.30564900 1.31068988 -0.7817729 -1.7379314 0.9753415
## BH.A18Q.02TCGA 0.03141694 0.01134465 -0.1994144 0.3994089 -0.1927236
## C8.A130.02TCGA -0.43174207 -0.01519873 1.6772136 1.3098683 0.4997407
## C8.A138.O3TCGA 1.45582484 0.70976845 -0.6068017 -0.5885160 -6.0157105
                  NP 002705 NP 001018079 NP 001018077 NP 005913 NP 006517
## AO.A12D.O1TCGA 0.5741888
                             0.98564703
                                         1.01612542 -0.18015120 0.8904021
## C8.A131.O1TCGA -0.6081224
                             -0.21143003
                                         -0.21143003 0.51718854 0.6831517
## AO.A12B.O1TCGA -0.3993095
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                                         -0.40762392 -0.29122202 -0.1859060
## BH.A18Q.02TCGA -0.8450731
                             -1.65800090
                                         -1.76170774 -0.05890837 -1.7048362
## C8.A130.02TCGA 0.5456589
                              1.22787157
                                           1.22787157 -0.13327401 -0.1857519
## C8.A138.O3TCGA 1.0498824
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                                           0.02588342 1.36439636 1.6569675
##
                   NP_055465 NP_065704 NP_872321 NP_067092 NP_660281
                                   NA 2.4371801
## AO.A12D.O1TCGA 0.06748568
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## C8.A131.O1TCGA 3.17259843
                                   NA -1.0695808
                                                  0.8167317
                                                                    NA
## AO.A12B.O1TCGA -2.07327972
                                   NA -0.4187098 0.2963304
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## BH.A18Q.02TCGA -0.80158314 -5.488463 -3.7287923 -3.0730974 -5.7962383
## C8.A130.O2TCGA 0.27670960 1.870726 0.9294035 -0.4383018 2.5529386
## C8.A138.O3TCGA 2.42862386 3.920737 0.2782260 0.8597112 0.9255397
##
                 NP_001254645 XP_003960003 NP_258429 NP_001230967
                                                                    NP_057615
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                -2.4337167
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                                                  NΑ
## AO.A12B.O1TCGA
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                                                  NA
                                                               NA
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## BH.A18Q.02TCGA
                  -7.30500548
                                -7.5023830 -3.7287923
                                                       -4.7457884 -0.27970357
## C8.A130.02TCGA
                   1.40826436
                                -0.2185506 1.4312234
                                                        0.7358912 0.47678160
## C8.A138.O3TCGA
                   0.27822603
                                 0.7573113 -0.5738874
                                                        1.8617673 0.03685484
                  NP_612376 NP_001073886 NP_009069
                                                    NP_150376 NP_001070143
## AO.A12D.O1TCGA -3.7918399
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                                               NA -0.69828375
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## C8.A131.O1TCGA -0.2559567
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                                                               -3.36068139
## AO.A12B.O1TCGA -3.8747377
                             -0.23024960
                                               NA -1.69913075
                                                               -1.90699129
## BH.A18Q.02TCGA -7.3050055
                             -0.80158314 -1.102668 -0.78820161
                                                               -7.30500548
## C8.A130.02TCGA 1.4082644
                              0.23079144 1.431223 0.09303695
                                                               1.40826436
## C8.A138.O3TCGA 0.4354830
                              1.88736726 -0.851830 -0.71285869
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                 NP 612203 NP 001025168 NP 001034216 NP 065127
##
                                                                NP 001721
```

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## AO.A12D.O1TCGA
                         NA
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                                            3.8696642
                                                               NA
                                                                    1.0732724
                         NΑ
                                      NΑ
## C8.A131.O1TCGA
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                                                               NΑ
                                                                    0.9138809
                                           -1.1143498
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## AO.A12B.O1TCGA
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                                                               NA
## BH.A18Q.02TCGA -7.305005 -2.427438726
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  C8.A130.02TCGA
                  1.408264 -1.635453946
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                                                                    2.0248797
  C8.A138.O3TCGA
                   1.861767 0.007597728
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                                                                    1.3643964
                    NP 004226 NP 005603 XP 001715117 XP 003960812 NP 001243100
## AO.A12D.O1TCGA
                    2.6657680
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                                                   NA
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## C8.A131.O1TCGA
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                                                                              NA
                                      NA
## AO.A12B.O1TCGA
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                                                                 NA
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## BH.A18Q.02TCGA -14.8588777 -2.8623384
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                                                        -6.3682986
                                                                       -7.305005
## C8.A130.02TCGA
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                              0.8966048
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                               NP_699194
                                          NP_003700 NP_060913
                                                                NP_067039 NP_067678
##
                    NP_009180
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## AO.A12D.O1TCGA
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                                                                       NA
                                                                                 NA
## C8.A131.O1TCGA
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                                      NA
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                                                           NA
                                                                       NA
                                                                                 NA
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                                                                                 NA
                           NA
                                      NA
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## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA -10.1753431 -3.7287923 -12.517110 -4.090094 -9.3992145
                                                                                 NA
                    0.5784575 1.4312234
## C8.A130.02TCGA
                                           2.024880 -1.635454
                                                               0.3455868
                                                                                 NΑ
## C8.A138.O3TCGA
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                                           1.364396
                                                           NA
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##
                   NP_003421 NP_057354
                                          NP_001291
                                                     NP_872439 NP_116225 NP_872296
## AO.A12D.O1TCGA -1.1021224
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                                                            NA
                                                                       NA
## C8.A131.O1TCGA -0.6445533
                             1.5048715
                                          2.0958621
                                                            NA
                                                                       NA
                                                                                 NΑ
## AO.A12B.O1TCGA 1.2746607 -2.3116265
                                         -4.1019986
                                                            NA
                                                                       NA
                                                                                 NΑ
## BH.A18Q.02TCGA -3.7287923 -7.5692906 -14.8588777 -5.6390053 -2.373913 -8.224985
  C8.A130.02TCGA -0.5990154 0.1881531
                                          0.5784575 2.4512627
                                                                1.900245 2.726772
  C8.A138.O3TCGA 1.8617673 0.7170827
                                          1.3643964 -0.7128587
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                    NP_078947
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 0.44027880
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                                                   NA
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## AO.A12B.O1TCGA -0.05287527
                                      NA
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## BH.A18Q.02TCGA -1.07924984 -3.0028444
                                            -8.131315
                                                        -2.2802419 -2.2802419
  C8.A130.02TCGA 0.48006147
                               0.8014886
                                             0.316068
                                                         1.2245917 1.2245917
  C8.A138.O3TCGA 3.22222305 -2.5889711
                                             3.547708
                                                         0.3221117 0.3477117
                    NP 150091
                              NP 004485 NP 001119523
                                                        NP 066967
                                                                   NP 057157
## AO.A12D.O1TCGA -0.72876214 -0.3287333
                                           -0.5039840 -0.72876214 -2.9917822
## C8.A131.O1TCGA -1.50675193 0.5617152
                                            0.4321830 -1.13434688 -3.0004200
## AO.A12B.O1TCGA -0.18313454
                               0.4376756
                                            0.6150499 -0.08613295
                                                                   0.2464439
## BH.A18Q.02TCGA 2.24940512
                               1.4030235
                                            1.1420837 1.30935281
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## C8.A130.O2TCGA -0.67773224 0.6374952
                                            0.5292595 -0.51373879 -0.8745244
  C8.A138.O3TCGA
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                                                                   1.0498824
                  NP 001035026
                                 NP 872346
                                             NP 060537
                                                       NP 000932
                                                                   NP 065779
## AO.A12D.O1TCGA
                     0.2998834 -0.17634141
                                            1.80856344 6.7613011
                                                                   1.1570880
                     0.2257411 0.20145383
                                            0.80458808
                                                       1.5939249
## C8.A131.O1TCGA
                                                                   0.3390818
## AO.A12B.O1TCGA
                     0.4709333 - 0.02238906 - 1.75178875 - 1.4635555 - 1.2723238
## BH.A18Q.02TCGA
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                                            0.03141694 -1.9289768
                                                                   0.4562804
                     1.0245197 0.55877833
## C8.A130.02TCGA
                                            1.10323656 -0.7859679 -0.5694966
## C8.A138.O3TCGA
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                                                                   0.8816540
                   NP_443066 NP_115612 NP_001027005
                                                       NP_000284
                                                                  NP 056093
## AO.A12D.O1TCGA
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                                                      1.72855768
                                                                   1.1761369
## C8.A131.O1TCGA
                   0.7317262 -1.6362841
                                          0.09620892 0.05977799
                                                                  1.2700944
## AO.A12B.O1TCGA
                  0.1411279 -0.8954033
                                         -0.31062234 -0.18313454 -1.9236201
## BH.A18Q.O2TCGA 0.2522121 1.0350315
                                         -0.54398874 -0.47039034 0.5031158
## C8.A130.02TCGA -0.2087110 0.3357472 -0.75644909 -0.63509394 1.4049845
```

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## C8.A138.O3TCGA 0.4464544 -0.1972021
                                        ##
                 NP 001243299 NP 891988 NP 000926
                                                    NP 075447 NP 001035889
                              2.4524193
## AO.A12D.O1TCGA
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                                         2.1895433 -1.79550563
                                                                -1.6888313
## C8.A131.O1TCGA
                    0.3836085
                              2.6909006
                                         2.5492248 -0.94814436
                                                                -0.1911906
## AO.A12B.O1TCGA
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                                                   0.31573076
                                                                -0.6043986
                    1.3160436 0.2488668
                                        0.3157744
## BH.A18Q.02TCGA
                                                  0.08828843
                                                                -1.1528482
## C8.A130.02TCGA
                    0.1422350 -0.1824720 -0.2021513 -0.56949657
                                                                1.3853053
## C8.A138.O3TCGA
                   -0.5153732 -0.5336589 -0.5373160 -0.46783036
                                                                -0.5409731
##
                   NP 071900 NP 060248
                                         NP 004706
                                                   NP 000246
                                                               NP 000359
## AO.A12D.01TCGA -0.19920019 -1.2621339
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                                                   1.3971052
                                                              0.05605628
## C8.A131.O1TCGA -0.34096222 -0.9683838
                                        0.88149782 -0.9036177
                                                              0.12454409
## AO.A12B.O1TCGA -0.36050887
                             0.3489884 -0.44365309
                                                   1.8400414
                                                              0.45707592
  BH.A18Q.02TCGA 0.20537680 0.2187583 -0.01207302 -0.1425429 -0.90528998
  C8.A130.02TCGA -0.01191886 -0.6318141 -0.09391558 -0.1070351 -0.04471755
  0.25994033 0.1611976
                                                              0.65491136
##
                  NP_006386
                            NP_004159
                                       NP_005624 NP_008870
                                                            NP 006801
## AO.A12D.O1TCGA
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                            0.5513300
                                       0.3341715
                                                 0.1246326
                                                            1.8238026
  C8.A131.O1TCGA
                 1.1446101
                            0.3957521
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA 0.1937859 -0.22747812 2.58002491 -0.65151362 -1.7407029
## BH.A18Q.O2TCGA 0.6871118
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## C8.A130.02TCGA -0.8581250
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## AO.A12B.O1TCGA -0.84551680
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## BH.A18Q.O2TCGA 0.04814385
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## C8.A131.O1TCGA -0.4016804
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## AO.A12B.O1TCGA 0.4099609
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                 NP 060759 NP 001020119
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## BH.A18Q.02TCGA -2.3304227 -0.6410048
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## BH.A18Q.02TCGA 0.31911978 -0.79823776 0.7841279 0.7807825 0.1752684
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## C8.A130.O2TCGA -0.2152707 -0.1759123 -0.2218305 1.8707259 -0.5202985
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                            0.2014538 -0.69312786 1.37129141 0.22169323
## AD.A12B.O1TCGA 1.19428798 0.2769301 -0.79285879 -0.33279413 -1.83770444
## BH.A18Q.02TCGA -1.29669966 0.5332242 -0.81496467 -1.25990046 -1.27662737
## C8.A130.02TCGA -0.06111689 -0.6678926 2.63165545 0.44070305 1.55257859
## C8.A138.O3TCGA 2.32622396 0.5927400 0.06611196 0.86702543 -0.09114503
                 NP 057507
                             NP 060082 NP 569829 NP 569831 NP 569827
## AO.A12D.01TCGA -0.5116036 -0.87734427 0.2732148 0.3951283 0.2732148
## C8.A131.01TCGA -3.0854255 -0.82266005 -0.1952385 -0.1709512 -0.1952385
## AO.A12B.O1TCGA -2.9601514 0.57902078 1.4603495 1.3134614 1.4603495
## BH.A18Q.02TCGA -0.1960690 0.80420015 -0.9487799 -0.9989607 -0.9588161
## C8.A130.O2TCGA 1.2573904 -0.04799742 -0.3923836 -0.3956635 -0.3956635
  C8.A138.O3TCGA -1.0858869
                           0.69879703
                                       0.2891974 0.3038260
                                                           0.2891974
                  NP_036275
                            NP_057306
                                       NP_004309 NP_000628
                                                             NP 060802
## AO.A12D.O1TCGA 1.1304194 -0.05823766
                                      4.8564020 -0.5839898 -0.17253161
## C8.A131.01TCGA -0.3045313 -0.40572832 2.8851989 -0.4300156 0.62243344
## AO.A12B.O1TCGA -0.1498769 -0.42702424 -0.7152575 2.4331368 -0.70417163
## BH.A18Q.O2TCGA 0.6436218 -0.40682808 -0.8015831 -1.2231013 0.66034873
```

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## C8.A130.02TCGA 0.7260516 0.97860154 1.8969648 -0.6744524 0.09959668
## C8.A138.O3TCGA -0.4093161 1.90199582 -2.1354858 0.6987970 -0.40931614
                   NP 009173 NP 037396 NP 000959
                                                   NP 000267 NP 005531
## AO.A12D.01TCGA -0.45064687 -0.1115748 -1.1935575
                                                  1.81999283 -0.6830446
## C8.A131.O1TCGA 0.39170423 -0.2842919 2.2780167 0.33503390 -0.2154779
## AO.A12B.O1TCGA -0.64319920 -2.6580607 -0.6265704 -0.94528986 -0.3272512
## BH.A18Q.02TCGA 0.95474234 3.0790598 -0.4670450 -0.04552684 0.1585415
## C8.A130.O2TCGA 0.09959668 0.5587783 0.5423790 0.53909911 -1.4911397
## C8.A138.O3TCGA -0.33251622 -0.4239447 -2.0733145 0.85605401 0.8231398
##
                   NP_861447 NP_000161
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                                                     NP_006793
                                                                NP_055684
## AD.A12D.O1TCGA 0.14368164 -6.6339493 -0.18015120 -1.09831256 -0.09252584
## C8.A131.O1TCGA 0.03953859 -2.8506484 0.28645932 -0.10618513 -0.36929739
## AD.A12B.01TCGA -0.56559793 -3.8664233 0.02749747 0.06906958 0.20764328
## BH.A18Q.02TCGA 1.45989500 -0.5339526 0.19534065 0.64696720 -0.77482009
## C8.A130.O2TCGA -0.75644909 -5.2662688 -0.06439676 1.02779957 2.28398935
## C8.A138.O3TCGA -0.12040214 3.7415368 0.95845391 -0.58485882 0.34405453
                 NP_001127854 NP_001104595 NP_001164209 NP_056047
##
                                                                   NP_060264
## AO.A12D.O1TCGA
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                              0.2998834
                                            -0.7401915 -0.7401915 1.09613118
## C8.A131.O1TCGA
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                                0.2459805
                                            -0.5150211 -0.5150211 1.48463208
## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
                 -0.77482009
                               -0.1358522
                                           -2.6749970 -2.6749970 0.09832458
                               -0.1004753
## C8.A130.02TCGA
                   2.28398935
                                            3.6156161 3.6156161 -0.09719545
## C8.A138.O3TCGA
                   0.34405453
                                0.3367403
                                           -0.2228020 -0.2228020 -0.05457364
                  NP 037528 NP 004276 NP 001254490 NP 001254489 NP 001911
## AO.A12D.01TCGA 2.2847882 0.1132033 -0.23729818 -0.33635293 -1.6964509
## C8.A131.O1TCGA 1.3591478 0.3836085
                                        0.05977799
                                                    0.07596952 -4.0812042
1.41046294 -4.4345755
                                        1.48529273
## BH.A18Q.O2TCGA 0.5298788 0.7640556
                                       -2.07282825
                                                   -2.14642665 -0.2094506
## C8.A130.02TCGA -1.0385178 0.5653381
                                       0.66045426
                                                    0.46038226 1.8444869
## C8.A138.O3TCGA 1.0059967 -0.5885160
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## AO.A12D.O1TCGA -0.2906354
                            2.4181311 -0.26015697
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                                                            1.7247479
## C8.A131.O1TCGA -0.5474041 2.4966023
                                      0.24598052 3.083545 -0.8671867
## AO.A12B.O1TCGA -0.4685963 -3.1458401
                                      0.18824296 -1.837704 0.1383564
## BH.A18Q.O2TCGA 1.0049231 0.5733688
                                       0.57002342 -1.350226 -1.2966997
## C8.A130.O2TCGA 0.2209518 -1.1992314 0.48990108 1.185233 -0.7662887
## C8.A138.O3TCGA -0.3946876 -0.6397159
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## AO.A12D.O1TCGA -0.5916094 -0.8468659
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## C8.A131.O1TCGA -0.1426161 -0.7093194
                                      0.84911477 0.5009970
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## AO.A12B.O1TCGA 0.7453092 -0.6875428 -0.68754279 0.8700255
                                                             -0.89540333
## BH.A18Q.02TCGA 0.5666780 -1.0391053 0.63024030 0.1317784
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## C8.A130.02TCGA 0.6866932 1.2278716 0.12255577
                                                  1.2442709
                                                              -0.18903178
## C8.A138.O3TCGA -0.5519446 -0.1240593 0.92919680 0.4720544
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                                          NP_002387
                                                      NP_006671 NP_002638
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## C8.A131.O1TCGA -0.4259677
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                                                                0.4969491
## AO.A12B.O1TCGA -0.1859060
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## BH.A18Q.02TCGA -1.0391053
                             -1.0692137 1.60374642 0.90790699
                                                                0.4027543
## C8.A130.02TCGA 0.5194199
                              0.5194199 -0.27430837 -1.19923139 -0.2087110
## C8.A138.O3TCGA 0.2306832
                              0.2635975 -1.48817219 -0.99811554
                                                                0.1209690
                 NP 001229372 NP 006353
                                         NP_057227 NP_037386
## AO.A12D.O1TCGA
                   8.9786036 -0.2182492 -0.18777080 0.1779698 1.59902454
## C8.A131.O1TCGA
                    0.5414758 -0.6769363 -0.33691434 0.5131407 0.88554570
```

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## AO.A12B.O1TCGA
                 -1.4690984 0.4321327 -0.02238906 -0.1360195 -1.13652155
                 ## BH.A18Q.02TCGA
## C8.A130.02TCGA
                 -2.1438336  0.7785295  -1.00571912  0.3062284  -0.06767663
## C8.A138.O3TCGA
                  0.6293114 -0.8810871 0.72073986 0.8926254 -0.60314451
                 NP_055542 NP_001184033 NP_001129120 NP_001098714 NP_008981
                0.9742176
                          -0.7630503
                                      1.01612542
## AO.A12D.O1TCGA
                                                   0.18939922
## C8.A131.O1TCGA
                0.5698110
                            0.6224334
                                      -0.44215924
                                                   0.44027880
                                                                    NΑ
## AO.A12B.O1TCGA -0.2136208
                            0.2547583
                                       0.01641158 -0.80117322
                                                                    NA
## BH.A18Q.O2TCGA
                0.3559190
                           -1.2933543
                                       2.51703566 -0.02879993 0.5466057
## C8.A130.02TCGA
                0.3095083
                            0.4866212
                                      -0.82204647
                                                   0.15863432 -1.0450776
## C8.A138.O3TCGA -1.6454292
                           -0.1972021
                                      1.42656772 -0.79697289
                                                                    NA
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                                      NP 002094 NP 068776
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## AO.A12D.O1TCGA 0.9704078 0.29226377
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                                                0.3036932 -0.01252008
## C8.A131.O1TCGA -0.3166749 -0.13047241
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                                                0.5009970 -0.04141903
0.08292695
                                                0.2603013 1.25248893
## BH.A18Q.02TCGA -0.8149647 -0.08567142 0.17526836
                                                0.2187583 -0.37002888
## C8.A130.O2TCGA -0.5432576 1.34922672 -0.58261604 -0.6318141 0.12583564
## C8.A138.O3TCGA 0.9218825 -0.75308722 1.85079587 2.0738814 0.64393994
                 NP 008982
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                                        NP_003225
                                                  NP 003218
                                                             NP 612403
## AO.A12D.01TCGA -0.06204746 -0.660185772 1.23328392 1.56473636
                                                             0.12844245
0.03144283
## AO.A12B.01TCGA -0.42425277 2.178161202 -2.52780144 -4.68955106
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## C8.A130.02TCGA -0.05455715 -1.264828764 0.27998947 -4.81036701
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## C8.A138.O3TCGA -0.83354428 -0.365430467 -0.95422987 -5.78531071 -0.18988779
                NP 277050
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## AO.A12D.01TCGA 0.3341715 0.117013054 -0.7135229 -0.8773443 -1.0449754
## C8.A131.O1TCGA 1.4846321 -0.583835075 -0.9157613 -0.2478610 -0.4866859
## AO.A12B.O1TCGA -0.8566027 -0.002988738 0.7702525 0.8506252 -3.7306211
## BH.A18Q.02TCGA 0.4194812 0.168577598 -1.2933543 0.1250876 -1.2264466
## C8.A130.02TCGA -0.6318141 0.499740686 1.1589943
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0.6439399 0.8706826
##
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## AO.A12D.O1TCGA 0.5094223 3.5344020
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                                               0.38369893 -0.949730432
## C8.A131.O1TCGA 0.5050449
                          1.1122270
                                      0.3147945 -0.05761056 -0.919809192
## AO.A12B.O1TCGA -1.9929070 -2.6691466
                                    -0.5794553 0.36007434 0.703737100
## BH.A18Q.02TCGA -0.3633381 -1.6881093
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## C8.A130.02TCGA -0.8056471 -2.2750284
                                      0.4013446 1.14915472 -0.251349285
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## C8.A131.O1TCGA -1.9155879 -0.1952385 -0.1385682
                                              -0.06165844 0.3147945
-1.35269652 -1.2418376
## BH.A18Q.02TCGA -0.0154184 -1.4907318 0.2287945
                                               0.19534065 -0.2161413
## C8.A130.O2TCGA 0.6440549 1.5361792 1.1589943
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## C8.A138.O3TCGA -0.8737728 -0.3398305 -1.0127441 -0.86280139 -0.9103442
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                                         NP_113654 NP_005580 NP_001265523
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                  1.5129672 -0.000940222
                                       0.46051820 -1.5877095
                                                              -1.5715180
## AO.A12B.O1TCGA
                 -0.5905412 -1.172550714
                                       0.42658971 3.8632173
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## BH.A18Q.02TCGA
                 -0.3599927 3.851843027 0.52653346 -0.4302458
                                                              -0.4302458
## C8.A130.02TCGA
                 -0.5990154 -0.927002271 -0.69741145 -1.2910677
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## C8.A138.O3TCGA
                  0.4062259 0.589082855 -0.01068797 1.1339966
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##
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## AO.A12D.01TCGA -0.88496386 -0.05823766 0.3189324 -0.2334884 -0.2411080
## C8.A131.O1TCGA -0.75384607 -0.46239865 0.5252843 -0.6769363 -0.7740855
## AO.A12B.01TCGA 0.54299162 0.14112790 -0.1692772 -0.2551929 -0.3078509
## BH.A18Q.O2TCGA -0.09236219 -0.79489238 -0.2261775
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## C8.A130.02TCGA 0.31934790 0.47350173 1.1688339
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## AO.A12D.O1TCGA 1.0770822 0.2884540
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## C8.A131.O1TCGA 0.6993432 -0.6000266
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## AO.A12B.O1TCGA 0.1688426 -0.6016271
                                       -0.5739124 -0.56559793 -0.7429723
## BH.A18Q.O2TCGA -0.1325068 -0.1793421
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## C8.A130.02TCGA 0.3652661 0.9359632
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## BH.A18Q.O2TCGA 1.1989552
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## C8.A130.02TCGA -0.6088550
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## C8.A138.O3TCGA -0.3215448
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## C8.A131.O1TCGA 0.17716654 -0.3166749 -1.6605714
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## AO.A12B.O1TCGA -0.50462551
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## BH.A18Q.O2TCGA 1.85465006 0.3960636 -4.2473265
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                   -1.1809725 -1.1809725 -0.02165938 -0.3946876 -0.8262300
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                                                             NP 005737
## AO.A12D.01TCGA 1.7780851 1.195186 0.25035599 1.0999410
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## C8.A131.O1TCGA 0.5131407 0.229789
                                     0.16502290 -0.2842919 3.18069419
## AO.A12B.O1TCGA -1.4857273 -1.992907 0.43213266 1.1610303 -1.44969810
## BH.A18Q.02TCGA -0.6778040 -1.022378 -0.14588830 -0.5439887 -0.62427790
## C8.A130.O2TCGA 1.6312954 1.408264 -0.01191886 -1.1270743 -0.06439676
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## AO.A12B.O1TCGA 2.2031045 1.2386316 -2.3615130 -6.183375
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## BH.A18Q.O2TCGA -0.3198482 -1.7550170 -0.4034827 1.523457 2.319658 0.7138748
## C8.A130.O2TCGA 1.8969648 -3.0982755 0.7391711 0.191433 -0.457981
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## C8.A138.O3TCGA 3.0759375 1.6679389 -1.7990290 -0.537316
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## AO.A12B.01TCGA 1.70701064 3.829960 0.54299162 0.50973393 -0.08059001
## BH.A18Q.O2TCGA 0.03141694 -6.719564 0.11839687 0.04479847 -0.50718954
## C8.A130.02TCGA -1.14019375 -2.186472 0.81460810 0.71949190 1.16883393
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## C8.A138.O3TCGA 0.31845456 -3.207028 0.93285394 1.09011092 0.98771102
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## C8.A131.O1TCGA 1.95013839 -0.8307558 -0.89147403
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## AO.A12B.O1TCGA -1.03120555 0.2242721 -0.85937417 -0.06950411 -0.8732315
## BH.A18Q.O2TCGA -0.01207302 -0.6911855 -0.15926982
                                                  0.44624429 0.3391921
## C8.A130.O2TCGA 1.87072587 2.4873412 1.60505649
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## AO.A12D.O1TCGA
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-0.08999360 0.02334706
## AO.A12B.01TCGA -2.1093089 2.2225048 -0.22747812
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## BH.A18Q.02TCGA 1.8780677 -1.4204788 0.04814385
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## C8.A130.02TCGA -0.2415097 -0.5760563 0.38166541
                                                   0.37510567
                                                              0.44070305
  C8.A138.O3TCGA -0.4349161 -1.0529726 -0.33251622 -0.35445905 -0.32520194
##
                 NP_001258028 NP_060619 NP_955805
                                                    NP_003739
                                                               NP 000924
## AO.A12D.01TCGA -0.53065263 -0.2030100 0.9513589 -0.20300999
                                                              1.82761243
## C8.A131.O1TCGA
                 -0.11428089 -0.2438131 -0.6890800 -1.28816636 -0.31262705
## AD.A12B.O1TCGA -0.23024960 -0.6709139 -3.2234414 1.65712411 -0.43533866
## BH.A18Q.02TCGA
                  0.02472618 -0.3399204 -1.0658683 -1.63458323 1.94832075
## C8.A130.02TCGA
                  C8.A138.O3TCGA
                 -0.36908761 0.4427973
                                       2.0665671 0.50131152 -0.21548776
                                       NP_006216 NP_001124432 NP_055453
                 NP_006199 NP_001124436
##
## AO.A12D.O1TCGA 0.3417911
                             0.3608401 0.3608401
                                                    0.7722983
                                                                      NΑ
## C8.A131.O1TCGA -1.4581774
                            -0.8145643 -0.8145643
                                                    0.6021940
                                                                      NA
## AO.A12B.O1TCGA 1.7014677
                            -0.5933127 -0.5933127
                                                   -0.7208005
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## BH.A18Q.02TCGA -3.4210171
                             0.1418145 0.2221037
                                                    1.5301480
                                                               1.7576340
## C8.A130.02TCGA 4.0485588
                             -0.8154867 -0.7794082
                                                    -0.1299941 -1.3205865
## C8.A138.O3TCGA -0.3910304
                             -0.1423450 -0.1752592
                                                    1.3314821 -0.7457729
##
                  NP 055983
                             NP_064578 NP_002567
                                                   NP 002568 NP 001121640
## AO.A12D.O1TCGA 0.27321478
                             0.30369316 -1.3116613 -0.26015697
                                                              -0.84305608
## C8.A131.O1TCGA 0.37551271
                             0.45647032 -0.3531059
                                                   0.20145383
                                                              -0.06165844
## AO.A12B.O1TCGA -0.25242139
                             0.21595770
## BH.A18Q.02TCGA -0.31650277 -0.62093252 0.5265335
                                                  0.22544909
                                                               0.45962582
## C8.A130.02TCGA 1.02451970 0.29638882 -0.2480694
                                                  0.51941990
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  C8.A138.O3TCGA -0.08017361 -0.01434511 -1.9965145 -0.49343034 -0.94325846
##
                 NP 689749 NP 004085 NP 005403 NP 004160 NP 705831
## AD.A12D.O1TCGA 1.2256643 0.1627306 0.9856470 -3.8908946 0.5932378
## C8.A131.O1TCGA 4.4719682
                            0.1164483 1.3915308 -1.4865125 -0.4947817
## AO.A12B.01TCGA -0.9064892 0.5069625 -0.4796822 1.6016946 1.0335425
## BH.A18Q.02TCGA -0.1425429 -0.6376594 1.5602565 -0.4670450 -0.4302458
## C8.A130.02TCGA 1.8379272 0.4571024 1.0933970 0.3095083 -0.8548452
## C8.A138.O3TCGA -0.1057736
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                                       NP_110517 NP_115609 NP_057657
## AO.A12D.O1TCGA -0.1458630
                           1.0923214 -0.10395524 1.2028055
                                                           0.5475202
## C8.A131.O1TCGA -0.5069253 0.7033911 -0.09808936 -0.1952385
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## AO.A12B.01TCGA 0.5928781 -1.9374775 -0.03624642 -0.5572835 -1.0228911
## BH.A18Q.02TCGA -0.7948924 -0.5607156 0.60347724 -0.8049285 0.9079070
## C8.A130.O2TCGA 0.1291155 0.8802055 0.55549846 0.3587063 -0.5399777
  C8.A138.03TCGA 1.4997105 -2.1757144 0.44645443 1.5253105 -0.9213156
                NP_001258356 NP_001138771 NP_001138770
##
                                                       NP_056034
                                                                   NP_054767
## AO.A12D.O1TCGA
                  1.4123444 -0.05061807 -0.05061807 -0.05061807 -1.91360937
## C8.A131.O1TCGA
                   0.1245441
                               0.59814616
                                           0.59814616  0.59814616  -1.68890657
## AO.A12B.O1TCGA
                  -0.8150306
                               0.76748100
                                           0.76748100 0.76748100 0.20487180
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## BH.A18Q.02TCGA
                   1.2123367
                              -0.73133012 -0.73133012 -0.63431405 -2.34380418
## C8.A130.02TCGA
                  -0.1759123
                               0.44726278
                                           0.44726278 0.42102383 0.08647721
                                           0.79022551 0.68051133
## C8.A138.O3TCGA
                   0.3221117
                               0.79022551
                                                                  1.78862450
##
                  NP_065882 NP_001139784 NP_001257624 NP_001257628
                                                                  NP 005920
## AO.A12D.O1TCGA
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                             -3.1708428
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## C8.A131.O1TCGA
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                                          1.30652532
                                                       1.3065253 -2.00868916
## AO.A12B.O1TCGA
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                                        -0.07781853
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## BH.A18Q.O2TCGA -0.2429044
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
                 0.2732148
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                                          1.54187757
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                                                                   1.3932954
## C8.A131.O1TCGA
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                                          0.08406528
                                                       0.1366877
                                                                   0.2055017
## AO.A12B.O1TCGA -0.9646902
                             0.26307275
                                          0.26307275
                                                      -1.7517888
                                                                  -2.8714642
## BH.A18Q.02TCGA 0.3893728
                             0.30908364
                                         0.30908364
                                                      -1.6145109
                                                                  -2.0962459
## C8.A130.02TCGA
                 0.2963888
                             0.11927590
                                          0.11927590
                                                      -0.6908517
                                                                  -0.1431136
## C8.A138.O3TCGA -0.1130879
                             1.31319641
                                          1.31319641
                                                       0.6731971
                                                                  -0.4495447
##
                 NP 001096123 NP 005921 NP 001234919 NP 758441 NP 848656
## AO.A12D.O1TCGA
                   2.47908792 3.1800908
                                          3.2867651 3.050558 3.2981945
## C8.A131.O1TCGA
                  0.53338006 0.7641093
                                          0.7641093
                                                    1.318669 0.2297890
## AO.A12B.O1TCGA
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                                         -1.0312055 -1.225209 -0.3106223
                                         -2.8422661 -2.758632 -3.8124268
## BH.A18Q.02TCGA
                  0.11170611 -2.6716516
## C8.A130.02TCGA
                 -0.50717906 -1.9208025
                                          -1.6682526 -1.582976 -2.3537452
## C8.A138.O3TCGA
                  0.06976909 2.5675951
                                          2.5675951 2.443252 2.6919379
##
                  NP 940897 NP 116258 NP 787072 NP 056249 NP 061854
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 0.2297890 0.3998000
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## AO.A12B.O1TCGA -0.6903143 -1.3887257
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## C8.A130.02TCGA -2.3537452 -1.4517813 0.2603103 0.1815934 -0.5334180
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## C8.A138.O3TCGA 2.7431378 -0.4568589
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## AO.A12D.O1TCGA -0.4849351
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## AO.A12B.O1TCGA -0.1443339 -0.21084928
                                        -0.8011732
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## BH.A18Q.02TCGA -0.3633381 0.05148923
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## C8.A130.02TCGA 0.3357472 -1.25826903
                                        -1.8224065
                                                    -1.7994474 -1.7928877
## C8.A138.O3TCGA 0.3257688 3.17468024
                                        -1.5320579
                                                     -1.5320579 -1.3053152
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                                                     NP 055707 NP 065757
##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  ## BH.A18Q.O2TCGA
                  -0.5004988 -0.5506795 -0.9889245 -0.925362270 0.4930796
## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA 8.281411
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## C8.A131.O1TCGA 1.909660
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  AO.A12B.O1TCGA -1.721303 -0.70140015
                                       0.19932885 0.221500646
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## BH.A18Q.O2TCGA -8.382218
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  C8.A130.O2TCGA -6.965241
                           0.08319734 -0.42190247 -0.195591514
                                                              -1.01227886
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##
                 NP 079191
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## AO.A12D.01TCGA 0.7608689 1.10756058 0.68848278 0.71134157 -0.37826071
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## C8.A131.O1TCGA 0.3350339 -0.57573931 0.06787375
                                                   2.15253243
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## AO.A12B.01TCGA 0.5208198 -1.53007084 0.59010667
                                                  -2.08159414
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## BH.A18Q.02TCGA 0.2689391 1.78105165
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## C8.A130.02TCGA 1.4148241 0.06679799
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## AO.A12D.O1TCGA -5.540537 -5.799603
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## C8.A131.O1TCGA -5.242946 -4.060965
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## AO.A12B.O1TCGA -3.209584 -2.619260
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## BH.A18Q.02TCGA 1.724180 -1.892178
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## C8.A130.02TCGA 3.746811 -3.203231
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## C8.A138.O3TCGA -1.382115 -4.307826
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                   NP 689419 NP 689973 NP 055495 NP 057019 NP 004302
## AO.A12D.O1TCGA -0.27158636 -0.05061807
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## C8.A131.O1TCGA 0.16097501 -0.33286646 0.5617152 -0.3166749 -2.0005934
## AO.A12B.O1TCGA 0.02749747 -0.04733232 -0.7900873 -0.4076239 1.5213219
## BH.A18Q.O2TCGA 0.45293506 1.24913594 -1.0089968 -1.1762659 -1.6078202
## C8.A130.02TCGA -0.61541473 -0.58261604 -0.8712445 -0.6121349 -0.8220465
  NP 079436 NP 001108585
                                           NP 004272 NP 115890
                                                                NP 060555
## AO.A12D.O1TCGA 1.64093232
                              1.67522050 0.15892083 -2.7898629
                                                               1.71712828
## C8.A131.O1TCGA 0.23788475
                              0.25812416 -0.08189784 -2.1827480 0.09620892
                            ## AO.A12B.O1TCGA -0.28845055
## BH.A18Q.O2TCGA
                 0.09497920
                              0.08494305 -2.28693269 -1.0558322 -0.30646663
## C8.A130.02TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                                                  -0.7794082
## C8.A138.O3TCGA
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                                                                   0.7097684
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                    0.2014538 0.0800174
## AO.A12B.O1TCGA
                  -1.0256626 -2.40585659 -2.0233932 -4.0049970 -1.7628747
## BH.A18Q.02TCGA
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                   1.2573904 -0.94012175 -0.6482134 -0.7170907 0.7719698
## C8.A130.02TCGA
## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA -0.42016849
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## C8.A131.O1TCGA 0.14478349
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## AO.A12B.O1TCGA 0.68156531
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## BH.A18Q.02TCGA 0.72391099 0.4897343 -0.433591137
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## C8.A130.02TCGA 0.63749518 -0.1037552 -1.212350863 0.99172102 -0.2349499
## C8.A138.O3TCGA -0.02531652 1.4009677 0.541540046 1.04256811 -0.5263446
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## AO.A12D.01TCGA -0.5192232 -0.53827223 0.7456298 -0.6792348 0.63895540
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## AO.A12B.01TCGA -1.0367485 -1.69081633 -0.4270242 0.5429916
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## BH.A18Q.02TCGA 1.9550115 0.17526836 -0.3098120 -0.2730128
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## C8.A130.O2TCGA -0.8712445 0.01759996 0.2143921 -0.2579090 -0.04143768
## C8.A138.O3TCGA 1.2766250 0.42451159 0.6000543 1.2217679 -2.50119974
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## AO.A12B.O1TCGA -2.6719181
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## C8.A131.O1TCGA -0.1426161
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## BH.A18Q.02TCGA 0.6235495
## C8.A130.02TCGA 0.4079044
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## C8.A138.O3TCGA 0.6183400
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                                                   NP 002331 NP 004821
## AO.A12D.O1TCGA -0.6182780
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## AO.A12B.O1TCGA -0.5766838
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## BH.A18Q.O2TCGA 3.0255337
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## C8.A130.02TCGA -1.3894638
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## C8.A138.O3TCGA 1.6752532
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-0.2136208
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## BH.A18Q.O2TCGA 1.5836741 -0.4101735 0.7339471
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## C8.A130.O2TCGA -2.9375619 0.5325394 0.9654821
                                                  0.9654821 0.3718258
  C8.A138.O3TCGA -0.3105734 -0.5702303 -0.4751446
                                                 -0.5044018 -1.2943438
                  NP_115765 NP_009032 NP_004725 NP_001182345 NP_835365
## AO.A12D.O1TCGA -0.69066416 -1.2735633 -1.7955056
                                                   -2.847010 -1.7307391
## C8.A131.O1TCGA -0.48668593 0.4078958 0.1933581
                                                   -1.053389 0.8653063
## AO.A12B.O1TCGA 1.35780494 -1.3914971 4.9828928
                                                    5.623103 5.5150157
## BH.A18Q.02TCGA -0.73802089 -0.8283462 -1.1796113
                                                   -2.464238 0.2722844
## C8.A130.O2TCGA 0.04055904 0.9326834 -2.9769203
                                                   -3.291788 -2.5702166
## C8.A138.O3TCGA
                 0.99502530 -2.5085140 -2.9217707
                                                   -3.075371 -2.7023424
                NP 001182359
                              NP 079523
                                         NP 009208 NP 003397
                                                               NP 006752
## AO.A12D.O1TCGA
                  1.2675721 0.84849430 0.16654043 0.6656240 -0.83543649
## C8.A131.O1TCGA
                   1.0596046 -0.04951479 0.55361947 0.2905072 -0.11428089
                   4.5089707 0.05521221 0.57902078 -0.5739124 1.51577895
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -3.1232782 0.25221214 -0.27301281 -0.1826875 -0.03214531
## C8.A130.02TCGA
                  -3.2917877   0.84084705   -0.06111689   0.3980648   0.08647721
## C8.A138.O3TCGA
                  -0.7274872  0.34405453  0.85239688  0.9877110  0.76828267
                  NP_006817
                             NP_036611 NP_003395 NP_003396 NP_006133
## AO.A12D.O1TCGA
                 ## C8.A131.01TCGA 0.2824114 0.07596952 0.2986030 0.4200394 0.6183856
## AD.A12B.01TCGA -1.0395200 0.22981507 -0.1360195 0.1438994 -0.0916759
## BH.A18Q.02TCGA -0.2562859 -1.23313740 -0.2730128 0.4663166 0.7071841
```

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## C8.A130.02TCGA 0.8113282 0.28326934 0.4013446 0.3127882 0.2340713
## C8.A138.O3TCGA 0.9182254 0.05879768 1.1632537 0.2270261 2.3042811
                 NP 002930
                             NP 006074 NP 006182 NP 037377 NP 004860
## AD.A12D.01TCGA 0.2084482 0.040817090 -0.8621051 -0.7287621 -0.4163587
## C8.A131.O1TCGA 1.1162749 -0.454302886 -0.8752825 -0.4583508
                                                           0.3228903
## AO.A12B.01TCGA 1.4354062 0.199328855 0.3295881 0.3600743
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## BH.A18Q.02TCGA -0.3231935 -0.002036877 -0.2061052 0.3325013
                                                           0.7105295
1.3229878
## C8.A138.O3TCGA -0.2703448 0.113654764 0.2782260
                                                 0.4647401 -0.9359442
##
                NP_001036227 NP_006591
                                      NP_001728 NP_003452 NP_054774
## AO.A12D.O1TCGA
                 -0.7554307 -0.1801512
                                      1.1570880
                                                1.1761369 -0.5763702
                  -0.3652495 -0.9279050 0.7600614 1.7963189 -0.6283618
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  0.5152769  0.5374487  -2.0926800  -1.0312055  0.8201390
## BH.A18Q.02TCGA
                  1.3193890 -1.1160490 -0.1492337 -0.2629767 -1.5643302
## C8.A130.02TCGA
                   ## C8.A138.O3TCGA
                  0.2087404
                                                           1.2473679
                 NP_006203 NP_001018063 NP_004557 NP_004558
##
                                                          NP_002616
## AO.A12D.O1TCGA 0.3684597
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                                       1.6028343 -0.1649120
## C8.A131.O1TCGA -0.3328665
                           -0.3328665 0.9057851 -1.1586342 -1.1586342
## AO.A12B.O1TCGA -0.5212544
                           -0.5212544 -0.2108493 -1.1420645 -1.1420645
                            1.1922644 1.4398227 -0.4469727 1.7409071
## BH.A18Q.02TCGA 1.1086299
## C8.A130.02TCGA 2.1724738
                             2.0084804 1.2934690 1.1327554
                                                          2.7661301
## C8.A138.O3TCGA 0.7865684
                             0.6110257 -0.2520592 1.1157109 1.1157109
                 NP 060598 NP 002477
                                      NP 004199 NP 665811 NP 006654
## AO.A12D.O1TCGA -0.1839610
                          0.2541658 0.56656924 0.6046672
                                                         1.6333127
## C8.A131.O1TCGA -1.5796138 -0.8509952 -0.39763255 -0.3935847
                                                          1.2862859
## AD.A12B.O1TCGA -0.8510597 -0.9730046 0.65939352 0.6011926 -0.6043986
## BH.A18Q.02TCGA -0.1860329 0.4194812 -0.29643048 -0.3432658 0.6001319
## C8.A130.O2TCGA 0.8113282 -0.3300661 0.38822514 0.3849453
                                                         1.2245917
## C8.A138.O3TCGA -0.3581162 0.2233689 0.05879768 0.1611976 2.3298811
                  NP_001632 NP_006764 NP_006293 NP_892116
                                                         NP 446464
## AO.A12D.O1TCGA -1.38785722 -0.1687218
                                     1.0123156 0.5475202
                                                         4.8678314
## C8.A131.O1TCGA -1.09386807 0.6871995
                                     1.2741423 -0.1871427 -0.9602880
## AO.A12B.O1TCGA -0.18590601 -1.7850464 -0.7873158 -0.5545120 2.1670753
## BH.A18Q.02TCGA -0.72463936 -0.5172257 0.5532965 -1.4037519 -0.3834104
## C8.A130.O2TCGA 1.82480771 0.8703659 -0.7006913 0.6342153 -2.7899678
## C8.A138.O3TCGA 0.09536907 -1.1224583 0.2489689 0.9986824 2.4688524
                NP_001138890
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                                                             NP 000421
## AO.A12D.O1TCGA -0.008710286
                            1.37805625 -0.2182492 0.7494395 -0.42778808
## C8.A131.01TCGA 0.719582584 1.58582910 -0.2154779 0.5455237 0.30265085
## AO.A12B.O1TCGA -0.371594764 -3.09041064 -0.7568296 -1.1559219 0.52081982
## BH.A18Q.02TCGA 0.335846691 -0.07563528 1.0985938 0.1786137 0.25890291
## C8.A130.02TCGA 0.047118782 -2.71781067 -1.6748124 -2.3701446 -0.05127728
## C8.A138.O3TCGA -0.208173483 -0.26303057 3.6866797 1.0645109 0.47571154
                  NP 068756
                            NP_004896 NP_001191354 NP_000114 NP_001970
## AO.A12D.O1TCGA -0.02394948 -1.55548834
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                                        ## AO.A12B.O1TCGA -0.10276180 -0.01407463
                                       -0.6210274 -0.5600550 4.1209644
                           0.31242902
## BH.A18Q.02TCGA 0.98485077
                                        ## C8.A130.02TCGA
                0.80148862
                            0.40134462
                                        -0.2119909 -0.2119909 -2.3767043
## C8.A138.O3TCGA
                1.11936803
                            0.39159734
                                        1.1705680 1.1705680 -0.9505727
                NP 001243412
                             NP 060522
                                        NP_653205 NP_073600
## AO.A12D.O1TCGA
                  -0.1801512 0.75324935
                                       0.66943379 1.5837853 -0.366831313
## C8.A131.O1TCGA
                  -2.1584608 0.72767834
                                       0.91388087 2.8528158 -0.798372765
```

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4.1181929 -1.22798019 -0.37713771 -1.3831827 -2.159195414
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA
                   -1.4773503 0.55329651 -0.54733412 -1.0825952 -3.491270158
## C8.A130.02TCGA
                   -2.3767043 -0.01191886 0.92940351 -0.8909237 -0.002079251
                   -1.0164012 -0.32520194 0.03685484 0.7390256 3.211251637
## C8.A138.O3TCGA
                 NP 001138608 NP 001229804 NP 001116142 NP 000283 NP 006102
                               -1.2507045
                                           0.5208517 1.3399583 -0.7935287
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                            0.1285920 0.4483746 2.2577773
## AO.A12B.O1TCGA
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                                           -0.8649171 -0.2385640 -0.3438800
## BH.A18Q.02TCGA
                           NA
                                -1.0089968
                                            -0.1425429 -0.5807879 0.8242724
                           NA
## C8.A130.02TCGA
                                -1.4419417
                                            -0.7138108 -0.2316701 -0.2874278
## C8.A138.O3TCGA
                     1.009654
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                                            -0.8408586 0.5927400 -1.4406294
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## AO.A12D.O1TCGA -1.10974196
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## C8.A131.O1TCGA -0.11428089
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## AO.A12B.O1TCGA 0.72868036
                             1.43817768
                                          1.438177677
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## BH.A18Q.O2TCGA 0.09163381 -0.06894451
                                          0.001308505
                                                      0.4897343
                                                                 0.3224652
## C8.A130.02TCGA -0.22511033 0.98516128
                                          1.060598262 -0.1988714
                                                                0.2668700
## C8.A138.O3TCGA -0.83354428 -0.10577359 -0.109430725 0.7280541
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## AO.A12D.O1TCGA -0.6982838
                            0.72277096
                                         -0.7744797 -0.5497016
## C8.A131.O1TCGA -0.9643359 -0.04546691
                                         -0.2519088 5.4515554
                                                                -0.81051641
## AO.A12B.O1TCGA -1.4774128 0.62059288
                                         1.4049200 -2.3060835
                                                                 0.03026895
## BH.A18Q.O2TCGA 1.8780677 0.22210371
                                         -0.7748201 -2.2066435
                                                                 1.39967812
## C8.A130.02TCGA -0.6547732 0.29638882
                                          -0.5662167 -3.7017713
                                                                -1.65513316
## C8.A138.O3TCGA 0.1831404 -0.15331639
                                          0.2855403 -2.2634857
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                   NP 004721 NP 005683 NP 004243 NP 001025053
                                                                 NP 058197
## AO.A12D.01TCGA 0.09796406 -0.8201973 -2.3898341
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## C8.A131.O1TCGA -0.85099522 0.2945551 -3.6683203
                                                     0.4645661 -2.27584930
## AO.A12B.O1TCGA 0.77025247 -0.6792284 2.5800249
                                                     0.1660712 -0.05287527
## BH.A18Q.02TCGA 0.16523222 -1.2498643 -2.9058283
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## C8.A130.02TCGA -0.71053093 1.0245197 -1.3501054
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## C8.A138.O3TCGA -0.26668771 -0.2045163 0.3074831
                                                    -1.3089724 1.52531048
                  NP_002526 NP_078966 XP_003960891
##
                                                   NP_114437 NP_003602
## AO.A12D.01TCGA 1.2828113 -0.1306238
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## C8.A131.O1TCGA -2.0248807 -0.7619418
                                        -5.0607914
                                                    0.1488314 -1.0048147
                                        -5.2216740 -2.0982230 1.3134614
## AO.A12B.O1TCGA 0.1328135 -1.7767320
## BH.A18Q.02TCGA 0.4796981 1.9048308
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## C8.A130.02TCGA -0.6514933 -2.3734244
                                        -1.9306421 -0.9893198 -0.6744524
## C8.A138.O3TCGA 1.5253105 6.2649628
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                   NP_055970 NP_001238817
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## AO.A12D.O1TCGA 0.46751448
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## AO.A12B.O1TCGA -0.99794786
                               1.0169136 -0.02238906 -0.80948764
                                                                  -0.87046006
## BH.A18Q.02TCGA -0.06559913
                              -0.3867558 -0.91532612 -0.34661121
                                                                  -0.40013732
## C8.A130.02TCGA 1.07699761
                               0.6112562 0.55877833 0.77524967
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## C8.A138.O3TCGA -0.18257351
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## AO.A12D.O1TCGA 0.8751629 0.07891507
                                         0.2732148
                                                     1.2637623
                                                                  0.6846730
## C8.A131.O1TCGA 1.1000834 -0.24381308
                                          0.5090928
                                                     0.6021940
                                                                  0.0800174
## AO.A12B.O1TCGA -1.2002655 -1.96519224
                                          -1.3970401 0.4487615
                                                                  0.4515330
## BH.A18Q.02TCGA 0.9279793 0.10166996
                                         -0.5339526 -0.1191252
                                                                 -0.4804265
## C8.A130.02TCGA -0.2185506 1.56241820
                                         1.7920090 -0.1070351
                                                                  0.3915050
## C8.A138.O3TCGA 0.7755970 -0.16794495
                                          -0.6250873 -0.6726302
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##
                  NP 055662 NP 001245321
                                         NP 006319 NP 001185765 NP 003144
```

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0.09415427 -0.3096843
                             0.03953859 -0.11428089
## C8.A131.O1TCGA 0.1164483
                                                    -0.46644653 -1.0088626
                                                     0.58456372 -0.5323402
## AO.A12B.O1TCGA 0.4515330
                             0.98088449 0.59287815
## BH.A18Q.02TCGA -0.4804265
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                                         0.24886676
                                                     0.65700335 0.9748146
## C8.A130.02TCGA 0.3291875
                             3.02195984 1.71657203
                                                     1.82152784 -1.9798402
## C8.A138.O3TCGA -0.7201730 -0.76405864 -0.02897366
                                                     0.32942597
                                                                0.2928546
                               NP 006712 NP 060634 NP 001186848
                 NP 001171551
                                                                  NP 056414
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                  -1.0371977 -0.34096222 -0.4219198
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## AO.A12B.O1TCGA
                  -0.4381101 -0.07227559 0.2519869
                                                     1.02522807
                                                                1.05848576
## BH.A18Q.02TCGA
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                                                    -0.05556299 -0.05556299
                  -1.9470415 1.16555407 0.8211678
## C8.A130.02TCGA
                                                    -0.99915939 -0.99915939
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -0.8354365 -1.4907218 -1.7421685 -1.4754826 -1.1745085
## C8.A131.O1TCGA 2.4642193 -2.0613116 -1.8427260 -2.6887332 -2.0613116
## AO.A12B.O1TCGA -2.8215777 2.7518563 2.1476750 3.7218722 2.4275939
## BH.A18Q.O2TCGA -0.7279847 -0.3466112 -0.3265389 -0.7179486 -0.9454346
## C8.A130.O2TCGA 0.4341433 -1.1401937 -0.3399057 -0.7925276 -0.7662887
## C8.A138.O3TCGA -2.2488571 -0.1313736 0.2782260 0.2635975 0.9986824
##
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## C8.A131.01TCGA -0.7821812 -0.74575031 -0.49073381 -0.7012236 -0.6809842
## AO.A12B.O1TCGA 0.5125054 0.09678432 -0.12216212 -0.1332480 0.1134132
## BH.A18Q.02TCGA -0.9320530 0.05818000 -0.02545455 0.1384692 -0.8584546
## C8.A130.O2TCGA 0.3685459 1.05731839 1.07699761 1.0671580
                                                             1.3065884
## C8.A138.O3TCGA
                 0.1648547 -0.22645918 0.36234023 -0.1277164
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                                                                NP 004703
## AD.A12D.O1TCGA -0.2868256 -2.9689235 -0.3401627 -0.22205898 -0.001090689
## C8.A131.O1TCGA 3.4559501 -3.2149577 0.7074389 -0.32881858
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## AO.A12B.O1TCGA -1.6852734 2.6215970 0.6178214
                                                  1.07788607
                                                              0.443218556
## BH.A18Q.02TCGA -1.0759045 -2.7552861 0.8677624
                                                 -0.41686423 -0.326538917
## C8.A130.O2TCGA 0.6374952 1.9428830 -0.5530972
                                                 -0.01191886 0.171753799
## C8.A138.O3TCGA 1.3424535 0.5159401 -1.2065725
                                                   0.27091175 -0.010687968
                  NP 005952
                             NP 954712 NP 005712 NP 065178 NP 057371
## AO.A12D.01TCGA 3.43534725 0.09034447 0.5437104 0.2313070 -1.8907506
## C8.A131.O1TCGA 0.06787375 2.98639590
                                        1.9420426 2.2901604 2.7192358
## AO.A12B.01TCGA -1.13375008 -1.99844993 -0.5351117 -0.3189368 -1.1309786
## BH.A18Q.02TCGA -1.69814548 0.53656960 0.4328628
                                                   0.5164973 -1.8821415
## C8.A130.O2TCGA -2.61941461 -0.37270443 -0.2546292 0.2111122 -0.4973395
## C8.A138.O3TCGA 5.23730673 1.93125293 0.3038260 0.5232543 -2.3622285
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## C8.A131.O1TCGA 1.1810410 2.1646761 2.1646761 2.1646761 -0.1304724
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## BH.A18Q.02TCGA 0.5098065 1.3294251 1.3294251 1.3294251 -0.8551093
## C8.A130.02TCGA -0.2972674 -0.5006193 -0.5006193 -0.5006193 0.6178160
## C8.A138.O3TCGA 0.9401682 -1.0529726 -1.0529726 -1.1041726 1.2217679
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## C8.A131.O1TCGA 0.59005039 -0.28024401 -0.3207228
                                                   -1.28007059 0.7398220
## AO.A12B.O1TCGA -0.02238906 0.41550382 0.2991019
                                                   0.40441792 -0.2635073
## BH.A18Q.O2TCGA -0.40348270 0.21541294 0.4127905
                                                    0.11505149 0.2287945
## C8.A130.O2TCGA 0.86708600 0.13567524 0.2832693 -0.24478955 -0.4809401
```

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## C8.A138.O3TCGA -1.54302928 -0.08017361 0.4062259
                                                      0.44645443 0.4793687
##
                  NP 000052 NP 004521 NP 001121363
                                                      NP 056257 NP 848927
## AO.A12D.O1TCGA
                  0.5970476
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                                          1.0199352
                                                     0.86754329
                                                                 2.5095663
## C8.A131.O1TCGA 1.2862859
                             1.7356007
                                          1.7679837
                                                     0.29455509
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## AO.A12B.O1TCGA -1.6520157 -2.7328905
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## BH.A18Q.O2TCGA 0.9982323
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                                                     0.26224829 -0.7815108
## C8.A130.02TCGA -0.5858959
                             0.6538945
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                                                     0.01759996
                                                                0.1881531
## C8.A138.O3TCGA -0.6909159
                             0.9621110
                                          0.9694253
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                                                                0.6219971
##
                   NP 006256 NP 001130038 NP 009034 NP 068761 NP 001091981
## AO.A12D.O1TCGA -0.58018001
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## C8.A131.O1TCGA -0.44620712
                               -0.3895368 -0.1304724 0.1690708
                                                                 -0.35715374
## AO.A12B.O1TCGA
                  0.05521221
                               -3.4534737
                                          0.7674810 -0.2635073
                                                                 -0.06396116
## BH.A18Q.02TCGA
                  1.24913594
                                3.2195659 0.1451599 -0.1626152
                                                                  0.61685877
                                                                 -0.33990574
## C8.A130.02TCGA
                  0.46038226
                                0.9458029 -0.1988714 -0.8253263
## C8.A138.O3TCGA
                  0.18314041
                               -1.3236009 -0.4202876 0.1063405
                                                                 -0.49343034
##
                 NP_001230882 NP_006836
                                            NP_115948 NP_002197 NP_001138468
## AO.A12D.O1TCGA
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                                                                   -3.2127505
## C8.A131.O1TCGA
                  -0.30048341 2.4561235 -0.126424530 -2.4458603
                                                                   -3.3161547
## AO.A12B.O1TCGA
                  -0.06396116 -1.6104436 -0.000217265 -3.0793247
                                                                   -3.3675580
## BH.A18Q.02TCGA
                   0.64362182 0.1819591
                                          0.536569603 0.5131519
                                                                    0.6703849
## C8.A130.02TCGA
                  -0.38582391  0.5554985  0.506300423  -1.0877158
                                                                   -1.4976995
  C8.A138.O3TCGA
                  -0.46051609 -1.6344578 -0.211830622 -1.0895440
                                                                   -1.4369722
                  NP_066952 NP_789845 NP_789842 NP_004416
##
                                                               NP_060649
                  1.0427940 0.6427652 0.4637047 0.3303618 -0.04299847
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  0.4969491 -0.1264245 -0.5069253 -0.4826381 0.42813516
## AO.A12B.O1TCGA
                  0.1716141 -0.7928588 -0.7734585 0.7009656 -0.33002266
                  0.1384692 -1.1762659 -0.5506795 -1.8219246
## BH.A18Q.02TCGA
                                                             1.03168612
  C8.A130.02TCGA
                  1.9133642 2.4939010 2.4873412 -0.5891758
                                                              0.82772757
  C8.A138.O3TCGA -0.9944584 -0.2191449 -0.7384587 -1.2065725 0.37331164
##
                 NP_001001936 NP_115939 NP_000017
                                                      NP_004452
                                                                NP 073613
## AO.A12D.O1TCGA
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                                          2.1666845
                                                     0.09415427
                                                                 0.3036932
## C8.A131.O1TCGA
                    0.4200394 0.4200394
                                          0.2055017 -0.68503210
                                                                 0.5414758
## AO.A12B.O1TCGA
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                                          1.0529428 0.91714059 -1.0173482
## BH.A18Q.02TCGA
                   -0.2228321 -0.4101735
                                          0.4127905 -0.48711725
                                                                 0.3826820
                   -0.4514213 -0.4547012
                                          0.4899011
## C8.A130.02TCGA
                                                     0.84084705
                                                                 0.5259796
  C8.A138.O3TCGA
                   -0.3508019 -0.3325162 -0.9981155 -1.63080062 0.2306832
##
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                                                    NP 006249 NP 001091982
## AO.A12D.O1TCGA
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                                                  1.79332425
                                                                 1.4199640
## C8.A131.O1TCGA
                  1.2012804 -0.5757393 -0.3490580 0.04358647
                                                                 0.2459805
## AO.A12B.01TCGA -0.2662788 -0.7512867 0.7425377 -1.00071933
                                                                -1.4801843
## BH.A18Q.O2TCGA -0.7179486
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                                       0.1551961 0.54995113
                                                                 0.4495897
## C8.A130.02TCGA -1.8617649
                             0.6473348 0.2471908 -0.14311361
                                                                -0.1234344
  C8.A138.O3TCGA
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                                                                 0.5451972
##
                                NP_659400 NP_060224 NP_000958
                                                                NP_005052
                    NP_055437
## AO.A12D.01TCGA 3.378200283 -0.26015697 -0.5687506 0.2008286
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## C8.A131.O1TCGA 0.217645348 0.02334706 0.1609750 2.2537295 -0.8145643
## AO.A12B.O1TCGA -1.840475918
                               1.06402870 0.8921973 -0.5794553 -1.8016753
## BH.A18Q.02TCGA -0.002036877
                               0.20203142 -0.5439887 -0.9454346 -1.1227398
## C8.A130.02TCGA -1.146753485
                               0.09631682 -0.1135948 0.9654821 0.7686899
  C8.A138.O3TCGA -0.255716292
                               NP_065387 NP_004434 NP_004435
##
                                                   NP_004433 NP_004431
## AO.A12D.O1TCGA
                        NA 0.4065577
                                      1.0046960
                                                 0.90945107
                                                             1.2142349
## C8.A131.O1TCGA
                            0.8248275 1.2700944 1.50082360 1.1648495
                        NΑ
## AO.A12B.O1TCGA
                        NA -1.7434743 -1.0866350 -1.86541918 -2.1453380
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## BH.A18Q.02TCGA 2.6441602 2.4702003 0.8677624 -1.78512541 -0.5707518
## C8.A130.O2TCGA 0.5390991 -0.7859679 -1.0155587 0.06023826 0.3160680
## C8.A138.O3TCGA 1.5435962 -1.5759435 0.4757115 -0.97982985 -0.9798298
                  NP_004429
                            NP_004432
                                        NP_115285 NP_001073917
                                                                NP 004422
## AO.A12D.01TCGA 0.9094511 0.07891507 0.03319749
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## C8.A131.O1TCGA 0.8248275 1.29033380 0.97459908
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## AO.A12B.O1TCGA -1.8654192 -2.87146420 -0.32447971
                                                   -1.8654192 -0.71802900
                                                   2.7110678 0.98150539
## BH.A18Q.O2TCGA -5.6122423 3.64777473 0.68711179
## C8.A130.O2TCGA -0.3595850 -0.65805302 1.29018908
                                                    -0.2874278 -1.01883860
## C8.A138.O3TCGA -0.9798298 -0.97982985 -0.77137291
                                                   -1.5393721 -0.06188792
                  NP_003650 NP_066576 NP_004678 NP_003492 NP_001245238
## AO.A12D.O1TCGA -2.4850791 0.1932090
                                             NA -0.8316267
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## C8.A131.O1TCGA -1.6119968 0.3471775
                                             NA 1.0434131
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## AO.A12B.O1TCGA 0.2270436 -0.2163922
                                             NA -2.3227124
                                                          -2.40862806
## BH.A18Q.02TCGA -0.1726514 0.3927182 -3.946242 -2.8824107 -0.93205303
## C8.A130.02TCGA -0.6416537 0.2340713 1.257390 -1.1073951
                                                            1.58865715
## C8.A138.O3TCGA 1.7703388 -0.2557163
                                             NA 0.5086258 -1.18828678
##
                 NP 001244066 NP 008945 NP 008944 NP 001257384 NP 001245221
                   0.1398718 -0.4277881 0.1093935
## AO.A12D.O1TCGA
                                                    0.87897269
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## C8.A131.O1TCGA
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                                                    1.44010539
                                                                 -0.1426161
## AO.A12B.O1TCGA
                    0.7369948 -1.3748683 -1.4774128
                                                    1.89547087
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                  ## BH.A18Q.02TCGA
                                                                 0.5532965
                   -1.0647568 -0.2382298 -1.1861119
## C8.A130.02TCGA
                                                    0.40790436
                                                                 -0.7105309
                    0.1136548 1.9787957 -0.5153732
## C8.A138.O3TCGA
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                                                                 -0.8408586
##
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## AO.A12D.O1TCGA
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                                          0.4027479
                                                    0.23892659 0.4332263
                   -0.8914740 1.0434131
                                           1.0434131 -0.34096222 1.0596046
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                         -0.9119807
                                                       0.77743710 0.2020314
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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                                                             NP 002813
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 0.6426728
                                   NA 2.1201494 0.5252843 -0.87528250
## AO.A12B.O1TCGA -0.5877697
                                   NA 1.0612572 -0.6764569 -0.49631109
## BH.A18Q.02TCGA -0.2127959 3.42697953 -0.7815108 -0.3466112 -1.13612133
## C8.A130.02TCGA 0.2635901 0.08975708 -0.2087110 0.1028766 0.99500088
## C8.A138.O3TCGA 1.3790249
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## AO.A12D.O1TCGA -1.19355751
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## C8.A131.O1TCGA -0.86718674
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## AO.A12B.O1TCGA -0.28013613
                             -2.5666021 1.05017133
                                                     0.84231079 3.3449517
## BH.A18Q.02TCGA 1.09859376
                              0.3525736 0.09163381
                                                     0.11505149 1.0316861
## C8.A130.02TCGA 0.25047065
                              -0.3956635 -0.33662588 -0.41206286 -0.8220465
## C8.A138.O3TCGA 0.05514054
                               0.9474825 -0.03263080 -0.04360222 1.7995959
                  NP_055929 NP_036561 NP_203740 NP_777635 NP_001069
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## AO.A12D.01TCGA -0.4582665 -5.4833902 -5.677690 -0.3173039 -2.667949
## C8.A131.O1TCGA 0.1771665 -5.2308024 -5.113414 -0.1669033 -2.923510
## AO.A12B.01TCGA -0.6681425 -2.1591954 -1.987364 -0.7817729 -3.913538
## BH.A18Q.02TCGA -0.2529405 -2.7920853 -3.190186 -2.7920853 -2.086210
## C8.A130.O2TCGA -0.3333460 0.3619862 0.316068 -1.2221905 -3.918243
## C8.A138.O3TCGA 1.1083966 -4.2237123 -3.953084 -4.2237123 -3.693427
##
                 NP 001186763 NP 644810 NP 006400 NP 005711 NP 001177925
                 -2.778434 0.3379813 -0.74400133 0.7303906 -0.99544801
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   -2.927558 -0.3571537 0.44837456 1.2781902
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                   -3.946796 -1.3388391 0.09124137 -0.9508328 -0.19699191
## AO.A12B.O1TCGA
                   ## BH.A18Q.02TCGA
                                                                0.01803541
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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                           2.9324539 2.9324539 -0.7020936 0.4675145
## AO.A12D.O1TCGA -2.359356
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## C8.A131.O1TCGA 4.864613
## AO.A12B.O1TCGA -1.172551
                           -2.8631498 -2.8880930 -0.4907681 0.8561682
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## C8.A130.02TCGA -3.603375
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## C8.A138.O3TCGA -3.879941
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                 -0.07380208
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                               0.2741586 0.2713872
                                                       0.1716141 -0.5406547
## BH.A18Q.02TCGA
                 -2.44416564
                               -1.8018523 -1.6881093
                                                      -1.7650531 -1.3468804
## C8.A130.02TCGA -2.77684831
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                                                      1.3131482 1.3557865
## C8.A138.O3TCGA
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                               -0.3910304 -0.5738874
                                                     -0.4312590 -0.6506873
                  NP 932068 NP 000746 NP 110430 NP 110437 NP 003728
## AD.A12D.01TCGA -2.0583817 0.02557790 0.8904021 1.38948564 -0.4887449
## C8.A131.O1TCGA -1.0857723 -2.03297645 0.2216932 1.92989898 0.8126838
## AO.A12B.01TCGA 1.6876103 -0.01130316 -0.4713678 -0.14987685 -1.2362946
## BH.A18Q.O2TCGA -1.1695751 -6.04379652 -0.5941695 2.29289508 -1.0926314
## C8.A130.02TCGA 2.8514067 -5.10883508 1.0769976 0.03399931 0.6571744
## C8.A138.O3TCGA 0.8048541 5.22999246 0.3001689 0.64759708 1.3680535
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## C8.A131.O1TCGA 0.2297890 -0.07784996 1.7679837
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## AO.A12B.O1TCGA -0.5572835 -0.73188637 0.1300420
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## BH.A18Q.02TCGA 0.2321399
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## C8.A130.02TCGA 0.7293315
                             1.00812036 0.3160680
                                                     0.2570304
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## C8.A138.O3TCGA 1.0242824
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## C8.A131.O1TCGA -2.18679592 -0.03332327 -0.13047241 -1.4338901 -1.4379380
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA -0.99587952
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                                           0.09303695 -0.8810841 -0.9466815
## C8.A138.O3TCGA
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                  NP 004303
                                                              NP 071904
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## C8.A131.O1TCGA -1.1545863 0.45647032
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## AO.A12B.01TCGA -0.7180290 -1.14760745 -2.07050825 -0.8566027
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## BH.A18Q.02TCGA -1.9758122 0.69714793 -2.39398491 -0.9086354 0.3893728
## C8.A130.02TCGA -1.3599450 -0.01519873
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## C8.A138.O3TCGA -0.6909159 -1.86120039 -0.06188792 1.5618819 1.8837101
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## C8.A131.01TCGA -0.1952385 -0.1871427 -1.3165015 -1.0776765 -0.32881858
## AO.A12B.O1TCGA 0.4847907 0.6095070 1.7125536 1.2441745 -0.01130316
## BH.A18Q.02TCGA 0.3258105 -0.4436273 -1.7550170 0.4261720 -1.38033420
## C8.A130.O2TCGA 1.0999567 0.4505427 0.8539665 -0.5694966 -0.16279283
## C8.A138.O3TCGA -0.8298871 -0.4861161 3.4672514 -1.0127441 -0.42028755
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## C8.A131.01TCGA -1.25173543 0.27026780 -5.287473 0.4240873 3.1645027
## AO.A12B.O1TCGA -0.08336148
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## BH.A18Q.02TCGA 0.24886676 -0.35999274 -3.969660 -0.6443502
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## C8.A130.O2TCGA 0.95564246 0.20127262 2.703813 -1.0122789 -1.2943476
## C8.A138.O3TCGA 1.01696814 -0.06920219 -3.719027 -0.2740020 0.4830258
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## AO.A12D.01TCGA -0.4544567 -2.7327160 -0.7173327
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1.3389084 -1.7860557
## AO.A12B.O1TCGA -0.5877697 -2.1342521 1.1721162 0.0358119 -1.9263916
## BH.A18Q.02TCGA 0.1217423 1.4799673 -1.2431735 -0.5306072 -2.2902781
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## C8.A138.O3TCGA 0.6293114 1.7374246 0.8341112 -0.9066871 0.6512542
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                                        NP_003669 NP_004227
                  NP_006038
                                                             NP_056417
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## C8.A131.O1TCGA -0.47049441 0.67505589 0.15692713 -0.1466639
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## AO.A12B.01TCGA 0.11895611 -0.87600301 -0.33279413 1.4520350 -0.1360195
## BH.A18Q.02TCGA -0.34995659 -0.09236219
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## C8.A130.02TCGA 0.58829714 -0.74004975 0.86708600 0.6112562 -0.6580530
## C8.A138.O3TCGA 0.01856914 0.11731190 0.07708337 -0.6653159 0.6512542
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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## C8.A131.O1TCGA -3.012563633
                             -3.01256363 -0.06570632
                                                     0.12859197
                                                                0.09216104
## AO.A12B.O1TCGA 0.864482585
                              0.86448258 -0.49353961
                                                     1.11391523
                                                                0.91991206
## BH.A18Q.02TCGA -0.560715647
                             -0.57744256 -0.51388030
                                                     1.03168612 0.29570211
## C8.A130.02TCGA -0.923722402
                             -0.94012175   0.57189780   0.03399931   -0.57933617
  C8.A138.O3TCGA -0.007030829
                             -0.01434511
                                         0.22336894 -0.34714477
                                                                2.16530984
                NP_001266284 NP_001266282 NP_001677 NP_003648 NP_008996
## AO.A12D.O1TCGA
                  0.44084590
                             0.5475202 -0.4011195 -1.635494 1.1647075
## C8.A131.O1TCGA
                  0.11240044
                             0.1650229 -0.9602880 -5.481771 0.7964923
                  1.11114376
                               0.9559412 2.7379989 -1.696359 -0.8760030
## AO.A12B.O1TCGA
                               ## BH.A18Q.02TCGA
                 -0.01207302
## C8.A130.02TCGA
                 -0.62525434
                               -0.6252543 -0.8089270 -3.370505 0.7194919
## C8.A138.O3TCGA
                  2.15433842
                               2.0592528 -0.7530872 0.775597 -0.2813163
                 NP 000195 NP 775853 NP 000276 NP 057022 NP 001070
## C8.A131.O1TCGA 0.4402788 3.0997366 0.1569271 -0.3207228 0.8612584
## AO.A12B.O1TCGA -1.7601032 -1.3000385 0.1134132 0.0773840 -2.1342521
## BH.A18Q.O2TCGA -0.6644225 -2.4742741 1.0450676
                                                0.4295174 3.8250800
## C8.A130.02TCGA 0.3062284 0.5686179 1.3754657
                                                0.4439829 -0.7367699
  C8.A138.O3TCGA -2.0989144 -1.6893148 -1.3711437 0.7829112 0.0331977
                  NP_006531 NP_001092104 NP_061900 NP_659416 NP_001185748
## AO.A12D.O1TCGA 1.63331272
                              0.2503560 0.4294165 1.069463
                                                              1.7209381
## C8.A131.O1TCGA 0.72363046
                             -1.4176985 -1.3650761 -2.004641
                                                              -0.7214630
## AO.A12B.O1TCGA -0.05287527
                             1.1416300 1.1693447 1.080658
                                                              1.8344984
## BH.A18Q.02TCGA 0.34922822
                             -1.4806957 -1.4806957 -2.176535
                                                              -3.5247240
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## C8.A130.02TCGA 1.91992391
                              0.7030926 0.7129322 1.726412
                                                             0.4767816
## C8.A138.O3TCGA -3.04611347 -0.9542299 -0.9542299 -1.118801
                                                            -1.3711437
                 NP 783161 NP 001002909 NP 857597
                                                  NP 919226 NP 757366
## AO.A12D.O1TCGA 0.3379813
                            0.05224649 1.0008862 1.39710524
                                                            0.3608401
## C8.A131.O1TCGA 0.7195826
                            ## AO.A12B.O1TCGA -1.0700062
                           0.37116024 -0.6321133 -2.65528924 -2.2063105
## BH.A18Q.O2TCGA 2.4267104 -0.63431405 -6.1408126 -3.83918987 2.1958790
                            0.86380613 1.3131482 -0.03487794 -1.1664327
## C8.A130.02TCGA -0.9040432
## C8.A138.O3TCGA -0.5921731
                          -0.13868784 2.6187951 2.12142417 -0.5336589
                  NP_115949 NP_001116436 NP_056150 NP_005112 NP_001265557
##
## AO.A12D.O1TCGA 0.06748568
                            0.2808344 -0.62589759 -1.19736731
                                                               -1.1706987
## C8.A131.O1TCGA -0.12237665
                             0.2581242 -0.41382408 0.07596952
                                                               -1.1667299
## AO.A12B.O1TCGA -0.30785086
                            -0.5489691 0.29910191 -0.84828827
                                                               -0.2247066
## BH.A18Q.02TCGA -0.22952284
                           -0.5239164 -0.59751485 -0.04887222
                                                                0.4897343
## C8.A130.02TCGA 0.20127262
                            -0.3235064 0.43086344 -0.45142129
                                                                1.3361072
## C8.A138.O3TCGA 1.48508195
                             1.1705680 -0.09845931 1.65696749
                                                               -0.1240593
                 NP_000169 NP_116021 NP_075045 NP_001238936 NP_064529
##
## AO.A12D.01TCGA -1.2583241 -0.6944740 0.2122580 -0.4011195 -1.0678342
                                               -0.4502550 -1.0007668
-0.5240258 -0.6348848
## BH.A18Q.02TCGA -0.4335911 -0.3733743 0.5365696
                                               -0.3466112 -0.8584546
## C8.A130.O2TCGA -0.2710285 0.5095803 0.6276556
                                               1.0376392 0.2963888
## C8.A138.O3TCGA -0.7786872 0.1173119 0.4281687
                                               -0.2008592 -0.7421158
                 NP 054868 NP 000265 NP 001165285 NP 056274 NP 001129145
## AO.A12D.O1TCGA -0.1572924 -2.9651137
                                     -2.9308255 2.3305058
                                                             0.9170707
## C8.A131.O1TCGA 1.4360575 -1.9844019
                                      -2.7656429 1.0798440
                                                             1.3712914
## AO.A12B.O1TCGA -0.1526483 -0.2053063
                                      -0.2274781 -0.1332480
                                                           -1.4330693
                                                            -0.1893783
## BH.A18Q.02TCGA -0.3165028 -1.6613463
                                     -1.8587238 -0.8383823
## C8.A130.O2TCGA -0.1824720 1.3984248
                                     1.4312234 -0.4153427
                                                            -2.2914277
## C8.A138.O3TCGA 0.1758261 -0.1972021
                                      -0.3288591 1.6203961
                                                             0.9474825
                  NP_056999 NP_542775 NP_004732 NP_057383 NP_057421
## AO.A12D.O1TCGA -0.61065840 -2.237442 -1.6545431 -0.02013968 -2.3212578
## C8.A131.01TCGA 1.63035579 -1.875109 -0.6364575 -0.41787196 -2.4580039
## AO.A12B.O1TCGA -0.19144896 -3.287185 -1.5855003 -0.07227559 1.3356331
## BH.A18Q.02TCGA -0.01876379 -3.036298 -3.9495875 -0.96216147 -0.3499566
## C8.A130.O2TCGA -0.83516594 -1.399303 2.8317274 0.08975708 0.7850893
## C8.A138.O3TCGA 3.14542313 -1.071258 1.1303395 -0.80428717 0.4062259
##
                NP 001230022
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                   ## AO.A12D.O1TCGA
                  1.6829782 -0.71741515 -0.67693634 0.4159915 -0.1021372
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                 -2.8686927 0.46539035
                                        0.04412632 2.0479019 0.1189561
## BH.A18Q.02TCGA
                  1.9918107 -0.11243448
                                        0.30573825 -0.2562859 -2.3337680
                                        0.86380613 -0.2710285 -1.7797682
## C8.A130.02TCGA
                 -0.9368419 0.63749518
## C8.A138.O3TCGA
                 -0.3873733 -0.18623065 -0.06920219 0.1904547 -2.9766278
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## AO.A12D.O1TCGA -0.4544567
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## C8.A131.O1TCGA 1.2053283
                                  NA 0.4321830 -0.79432488
                                                           -0.79837276
## AO.A12B.O1TCGA -2.1869102
                                  NA 2.1116458
                                               1.46866389
                                                            0.95871270
## BH.A18Q.O2TCGA 1.3729151 0.90790699 -0.4503180
                                                0.72725637
                                                            0.83096321
## C8.A130.O2TCGA -0.3530252 0.02087983 -0.7859679
                                               -0.01191886
                                                            0.06023826
## C8.A138.O3TCGA -0.2740020 1.75205311 0.5561686 -0.41663041
                                                           -0.41663041
                  NP_000310 NP_065890 NP_002423 NP_060764 NP_002766
## AO.A12D.O1TCGA -0.58398981 0.29607357 -1.1478399 -1.2964221 -1.7612174
## C8.A131.O1TCGA -0.74979819 0.52933218 5.6863325 -0.1021372 -2.1706044
```

```
## AO.A12B.01TCGA 1.52409337 0.07184106 -2.0843656 -0.2219352 -2.9850946
## BH.A18Q.O2TCGA 0.59344109 -0.37671964 0.4562804 -0.4469727 -1.3669527
## C8.A130.02TCGA -0.01191886 -0.31694666 -1.6551332 0.9622022 -0.6514933
## C8.A138.O3TCGA -0.66165874 -0.06554506 -2.4170855 1.0718252 0.3879402
                   NP_003293 NP_000403 NP_001073964 XP_003403435 NP_055399
## AO.A12D.O1TCGA -0.24872757 -0.9649696
                                        0.6427652
                                                     1.10756058 1.7133185
## C8.A131.O1TCGA 0.74791775 2.2172985
                                         0.1812144
                                                     1.98252143 2.6342303
## AO.A12B.O1TCGA -0.08059001 -1.7989038
                                        -0.3882236 -1.48572726 -1.5633285
## BH.A18Q.02TCGA -0.27635819 -0.1425429
                                         -0.5038442
                                                      2.23936897 -1.3702981
## C8.A130.02TCGA -0.06111689 0.5456589
                                          0.3455868
                                                    -0.17919217 -1.3271463
## C8.A138.O3TCGA -0.57388740 -1.6125149
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                                                      0.01125487 0.4976544
                  NP_063944 NP_005794 NP_078994
                                                  NP_006364 NP_055615
## AO.A12D.01TCGA 1.3170995 0.9513589 -0.2182492 -0.92306184
                                                             0.6770534
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## C8.A131.01TCGA 1.7841753 0.2419326 0.5090928 0.38360847
## AO.A12B.O1TCGA -0.6459707 -0.1166192 1.2885181 0.28801602 -1.5245279
## BH.A18Q.02TCGA 0.6536580 -0.9956153 -0.7447116 -0.77147471
## C8.A130.O2TCGA -0.6547732 -0.8646848 -0.1332740 -0.08735584 -0.2841480
## C8.A138.O3TCGA 0.6293114 -0.9505727 0.2599403 -0.48977320 0.2526261
                  NP_877496 NP_002729 NP_997700 NP_002728 NP_002730
## AO.A12D.01TCGA 0.8599237 0.0217681 0.0217681 0.3494107
1.1122270 0.6831517
## AO.A12B.O1TCGA -1.3055815 -2.4169425 -2.5194870 -2.1203948 -2.2506541
## BH.A18Q.O2TCGA 0.3927182 1.9550115 2.3096220 0.9848508 1.2257183
## C8.A130.02TCGA 0.2307914 -1.0680366 -1.0647568 -1.2582690 -1.1172347
## C8.A138.O3TCGA
                 1.1705680 -0.8262300 -0.8225729 -0.3837162 -0.8920585
                 NP 001185688 NP 002340
                                         NP 065098 NP 001243423 NP 001243424
## AO.A12D.O1TCGA
                   0.2808344 0.9399295 -0.24872757
                                                     -0.9154422
                                                                  -0.9154422
## C8.A131.O1TCGA
                   0.5333801 0.1812144 -0.07380208
                                                     -0.2559567
                                                                  -0.2559567
                  -1.4774128 -1.6741875 0.90605469
## AO.A12B.O1TCGA
                                                     -0.8122591
                                                                  -0.8122591
## BH.A18Q.02TCGA
                   2.0219191 2.3263489 -0.19606903
                                                                   1.2491359
                                                     1.2491359
## C8.A130.02TCGA
                   -1.3435456 -1.5993754 -0.75972896
                                                      -0.6777322
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -0.8506757
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## C8.A131.O1TCGA -0.4866859
                                  NA -0.08189784 -0.1830949
                                                            -0.14666393
## AO.A12B.O1TCGA 3.5472693
                                  NA 0.47370477 -0.0279320
                                                            -0.05010379
## BH.A18Q.02TCGA -0.1358522 6.0464135 -0.83169158 -1.0156876
                                                            -0.61758714
## C8.A130.02TCGA -1.1992314 0.5194199 -0.95652109 -0.4415817
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## C8.A138.O3TCGA -0.6616587
                                  NA 0.17216899 0.8999397
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##
                   NP_003090 NP_001229862 NP_003091 NP_001265128 NP_056285
## AO.A12D.O1TCGA -0.48874485 -0.47350566 -0.46207627 -0.47350566
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## C8.A131.O1TCGA 0.02739495
                             0.03549071 0.02334706
                                                       0.01120342 0.7600614
## AO.A12B.O1TCGA 0.01641158
                              0.03304042 0.23812949
                                                       0.23258654 0.6843368
## BH.A18Q.02TCGA 0.57002342
                              0.49307964 0.92797928
                                                       0.92797928 -0.3934466
## C8.A130.02TCGA -0.58589591
                             -0.58589591 0.07335773
                                                       0.07335773 -0.1004753
## C8.A138.O3TCGA -0.02897366
                             -0.03994508 0.13925474
                                                       0.15754043 0.3074831
                  NP_057715 NP_037461 NP_000997 NP_001254628
                                                              NP 002204
## AO.A12D.O1TCGA 0.9018315
                            0.7799179 1.1075606
                                                    1.1113704
                                                              2.7724424
## C8.A131.O1TCGA 0.1043047
                            0.1043047 1.3874829
                                                    0.8086360 0.9988864
## AO.A12B.O1TCGA -0.4187098 -0.5434261 -0.4464246
                                                   -0.3743662 -1.6049006
## BH.A18Q.02TCGA 0.7071841 0.9212885 -0.2061052
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## C8.A130.02TCGA 0.6374952 0.6374952 0.9786015
                                                   1.4082644 -0.2480694
## C8.A138.O3TCGA -0.8152586 -0.7457729 -0.5665731
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```

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## AO.A12D.01TCGA -0.03537887 -0.6944740 -1.6240647 -0.2639668 3.68679393
## C8.A131.O1TCGA 3.48833314 2.6666133 -0.7862291 -0.8307558 1.44010539
## AO.A12B.01TCGA -2.36705596 -2.6774610 -1.2085799 0.1632997 -2.03170762
## BH.A18Q.02TCGA 1.32273434 1.3394612 -0.6476956 0.2923567 -0.00872764
## C8.A130.02TCGA -1.53377801 -1.5928157 -0.5071791
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  C8.A138.03TCGA -0.44223039 -0.9066871 0.5671400 -0.2520592 1.52531048
                 NP 061887 NP 055430 NP 003900
                                                 NP 705898 NP 689940
## AO.A12D.O1TCGA 0.3113128
                           1.1494684 0.4637047
                                               0.376079329
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## C8.A131.O1TCGA 0.3714648
                          0.4281352 -0.7781334 1.015077891
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## AO.A12B.O1TCGA -1.0228911 0.1716141 0.7009656 -0.418709820 -0.9286610
## BH.A18Q.O2TCGA -0.7079124 -1.5743664 -1.5844025 -2.046065194 0.6335857
## C8.A130.02TCGA 0.8277276
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                           0.6512542 -0.5446303 0.212397521 -1.0932012
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                 NP 065990
## AD.A12D.O1TCGA 0.1360620 1.54949716 2.7229150 2.7229150 -2.679379
## C8.A131.O1TCGA -0.1142809 -0.65264905 -0.6971757 -0.6971757 8.637238
## AO.A12B.01TCGA 0.9781130 0.95871270 2.6603977 2.6603977 -1.607672
## BH.A18Q.02TCGA -2.6381978 -2.04606519 -2.9994990 -3.9730051 -3.618395
## C8.A130.O2TCGA 0.5456589 0.06679799 0.3062284 0.5522186 -5.440102
## C8.A138.O3TCGA -0.5190303 -1.41868655 -1.1590297 0.2745689 -5.620739
##
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                                       NP_060130 NP_001248763 NP_005849
## AO.A12D.01TCGA 0.16273063 0.5513300
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## C8.A131.O1TCGA 0.84911477 0.5171885
                                      0.52123642
                                                 0.16097501 0.5819546
## AO.A12B.01TCGA -0.04733232 0.1161846 -0.57391236
                                                 -0.08059001 -0.2884505
-0.33657506 -0.4402819
## C8.A130.02TCGA -0.37926417 -0.1463935 2.01176023
                                                  1.50338056 1.4476228
## C8.A138.O3TCGA -0.27034485 -0.1460021 -0.07651647
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                                                           NP 005727
## AO.A12D.O1TCGA -0.3439725 -0.3401627 0.155111
                                              1.19137614 -0.58018001
## C8.A131.01TCGA -0.5069253 -0.4907338 3.370945 -0.04951479 0.35527330
## AO.A12B.01TCGA 0.4016464 0.4432186 -2.267283 0.32958813 -0.18867749
## BH.A18Q.02TCGA -0.4302458 -0.4269004 2.560526 -0.35330197 -0.04552684
  C8.A130.02TCGA 1.3754657
                           1.3361072 -1.159873 -0.32350640 -0.29398758
  C8.A138.O3TCGA
                0.2489689
                           NP 005726
                           NP 055227
                                      NP 004220 NP 061330 NP 001661
## AD.A12D.01TCGA -0.5497016 0.7608689 -0.08490625 0.8103963 0.2579756
## C8.A131.01TCGA 0.3066987 -0.2033343 -0.87123462 0.5050449
## AO.A12B.01TCGA 0.3600743 -0.2413355 -0.37159476 1.2358601
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## BH.A18Q.02TCGA 0.4529351 -0.4269004 0.27562982 -1.6780732 0.3693005
## C8.A130.O2TCGA -0.5629368 -0.2907077 0.57845754 -0.3005473 -0.1004753
  C8.A138.O3TCGA 0.1246262 0.2050832 0.27091175 -0.7165158 0.4866830
                  NP 001176 NP 110420
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                                                 NP 000240
                                                              NP 002511
## AO.A12D.01TCGA -1.18593792 -0.2906354 -1.82598401 0.13606204 -0.58779961
## C8.A131.O1TCGA 0.41194363 -1.0007668 -1.66057140 -0.07784996 -1.68485869
## AD.A12B.O1TCGA 2.03127309 0.8367678 0.63999320 0.19655738 0.03858337
## BH.A18Q.02TCGA 2.34642119 -0.7647839 0.05148923 -0.53060721 -0.97219762
## C8.A130.02TCGA -0.06439676 -0.6744524 -0.21199086 0.17175380 0.07663760
## C8.A138.O3TCGA -1.53571500 0.7426827 -1.33457235 0.15388329 -0.91400134
                NP_001092902
                              NP_057297
                                         NP_005713 NP_056075 NP_002818
## AO.A12D.O1TCGA
                 0.14368164 0.13225225 0.75705915
                                                   1.9380966 -0.2563472
                 -0.86718674   0.59005039   1.94609050   0.2338369   -0.9562401
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                -0.64319920 -0.07781853 -0.65982805 -1.0533773 -2.0427935
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA -0.47148750 0.54154005 0.33308311 -0.5994874 1.6862246
##
                                                                NP 060206
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                               0.2378848 -0.2802440 -0.4178720 -1.47436888
## C8.A131.O1TCGA
                    0.2378848
## AO.A12B.O1TCGA
                    0.5873352
                               0.5873352
                                          0.6621650 -0.1360195
                                                               0.11618464
## BH.A18Q.02TCGA
                   -2.2768965 -2.2768965
                                          2.7378309 -0.4369365
                                                               0.08494305
## C8.A130.02TCGA
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## C8.A138.O3TCGA
                                          0.1721690
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                   -0.5848588 -0.6104588
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                  -0.19928639
                               4.1319462
                                          0.39979999
                                                     0.39170423 -0.1304724
## AO.A12B.O1TCGA
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  BH.A18Q.O2TCGA
                  -0.02879993 -0.9220169
                                          0.02472618 2.27282279 -3.4176718
## C8.A130.02TCGA
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                                          0.11271616 -0.43174207
                                                                0.7490107
## C8.A138.O3TCGA
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                                          1.17788226
                                                    0.09902621 2.4615381
##
                  NP_006217 NP_001137854
                                          NP_006333
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## AO.A12D.O1TCGA -1.1783183
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                                                    0.5094223 -0.11157484
                              0.08653467
## C8.A131.O1TCGA -1.8710612
                              1.29033380
                                          1.6748825 -0.4664465 -0.99671893
## AO.A12B.O1TCGA -0.5822268
                             -0.43811014 -1.1143498 -0.4963111 -0.03624642
## BH.A18Q.02TCGA -1.4405511
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                                                    0.6469672 -1.51080410
  C8.A130.02TCGA -2.2127109
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                                         1.0769976 -0.8876438 1.43122344
  C8.A138.O3TCGA -1.9453146
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                                                    0.7792541 0.55251146
##
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                             NP 055134
                                          NP_002736
                                                     NP_002737 NP_002739
## AO.A12D.O1TCGA -0.66018577
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                                         0.69229258 -0.55351142
                                                                2.334316
## C8.A131.O1TCGA 0.19740594
                             0.8572105
                                         0.05977799 -0.02927539
                                                                1.488680
## AO.A12B.O1TCGA -2.07605120 -2.0178502
                                         0.24367244
                                                    0.15221380 -1.543928
## BH.A18Q.02TCGA -0.23286823 -0.4971534
                                         1.06848532
                                                    0.89787084
                                                                1.128702
  C8.A130.02TCGA -0.31038692 0.3127882 -0.31038692 -0.40878299 -0.257909
  1.09376806 1.708167
##
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                                                   -0.7668601
                                                                -0.7744797
  -0.2721482
                                                                -0.3085792
  AO.A12B.01TCGA -1.5383853 -0.5267973 -0.8593742
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                                                                -0.9231181
## BH.A18Q.02TCGA 1.1287022
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  C8.A130.02TCGA -0.2579090
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## AO.A12D.O1TCGA -0.3287333 -0.10395524
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## C8.A131.O1TCGA -0.1709512
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                                                     0.4402788 -0.1304724
## AO.A12B.O1TCGA -0.1942204
                             0.34344550 -1.30835293 -0.8787745
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## BH.A18Q.O2TCGA 0.5365696 -0.04218146
                                        0.30908364
                                                    0.5700234 -1.5810571
## C8.A130.02TCGA -1.5370579
                             0.77852954 -0.03487794 -2.1930317
                                                               2.2610303
  C8.A138.O3TCGA -0.3069162
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                                                     NP_005026 NP_079440
## AO.A12D.O1TCGA 0.6618142
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                                                    0.08272487 -0.4468371
## C8.A131.O1TCGA 0.6426728
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## AO.A12B.O1TCGA -0.7429723
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                                          0.2048718 -0.29953644 2.4303653
## BH.A18Q.O2TCGA 0.1919953
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                               0.5882971
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                             NP_005038 NP_001036010 NP_037518 NP_066974
##
                  NP_000032
## AO.A12D.O1TCGA -1.0525950
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## C8.A131.O1TCGA -1.0048147
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                                         -2.5875361 -1.1383948 -1.1788736
## AO.A12B.O1TCGA -3.8054509 -0.8981748
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                                       -2.3270773 -1.6312378 -2.8355753
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## C8.A130.02TCGA 1.7329714 0.1127162
## C8.A138.O3TCGA -0.4349161 -0.7896586
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##
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4.8106844
## C8.A131.01TCGA 0.2216932 2.3549265 -0.1142809 -0.08189784 0.9907906
## AO.A12B.01TCGA -1.7961323 -2.9019504 -0.4658249 -1.89313392 -1.1808651
## BH.A18Q.02TCGA -1.0692137 0.1585415 -0.5807879 -0.91532612 -0.4536634
## C8.A130.O2TCGA -1.3533852 -0.1496734 0.9622022 0.05367852 4.5241398
## C8.A138.O3TCGA 1.4119392 0.1282833 -0.1862306 0.98771102 -1.2138868
                  NP_036433
                             NP_001061
                                        NP_057521 NP_002797 NP_001186127
## AO.A12D.01TCGA -1.2811829 -0.27539616 -0.36302152 -0.4049293
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## C8.A131.O1TCGA -1.1626820 0.02334706 0.07596952 0.3836085
                                                             -0.28024401
                                                               0.64830762
## AO.A12B.01TCGA 4.5117422 1.87052760 1.91487118 0.5928781
## BH.A18Q.02TCGA 1.3963327 -0.58413332 -0.39010117 -0.7179486
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## C8.A130.O2TCGA -0.7269303 -0.39238365 -0.37598430 0.5784575
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## C8.A138.O3TCGA -0.3727447 0.30016886 -0.02165938 -0.7713729
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##
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## AO.A12D.O1TCGA -1.2468947
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## C8.A131.O1TCGA -2.5551531
                             -0.2802440 -0.3085792 -1.4622252 -1.9155879
## AO.A12B.O1TCGA 0.0247260
                            -0.3217082 -0.2163922 0.7841098 -0.2163922
                              0.2823206 -0.4402819 -0.0722899 -3.3106195
## BH.A18Q.02TCGA -0.3332297
                              0.0766376  0.1192759  0.7227718  0.9884411
## C8.A130.02TCGA -1.1795522
## C8.A138.O3TCGA 0.9694253
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##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12B.O1TCGA -0.7180290 -2.5416588 -1.2446090
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## BH.A18Q.02TCGA -1.2197559 -0.7547478 0.3458828
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## BH.A18Q.02TCGA -2.2166797
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## C8.A130.02TCGA 2.3659861
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## AO.A12D.O1TCGA -2.184105 -0.97639902
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## C8.A131.O1TCGA -1.207209 -0.88337826
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## AO.A12B.O1TCGA 5.531645 -0.31616529
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                                                                -0.90094627
## BH.A18Q.O2TCGA -2.243443 0.06487076
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## C8.A130.02TCGA -3.567297 0.02087983
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##
                                                       NP 006236 NP 001155198
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## C8.A131.O1TCGA 0.73577411
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## AO.A12B.01TCGA -0.90094627 -0.49908256 -0.49908256 -0.42425277
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## BH.A18Q.02TCGA 0.32915593
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## AO.A12B.O1TCGA -0.7651441 -0.76514405 0.2797016 -2.2977691
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## C8.A131.O1TCGA 0.6224334 -0.2235737 0.3269381
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## AO.A12B.O1TCGA 2.7296845
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## BH.A18Q.O2TCGA -0.5807879 1.1588106 -0.1224706
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## C8.A130.02TCGA -0.1398337 1.1032366 -0.5071791
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## C8.A138.O3TCGA -0.6653159 -0.8737728 0.2306832
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## C8.A131.O1TCGA -0.03737115  0.58195463 -0.3409622
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## BH.A18Q.O2TCGA -0.03883608  0.03141694 -0.2261775
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## AO.A12B.01TCGA 1.90378529 0.8533967 -0.7429723 -0.7429723 -5.4794211
## BH.A18Q.02TCGA -1.27997275 1.6037464 1.5033850
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## C8.A138.O3TCGA -0.08748789 0.4171973 -0.3544590 -0.3544590 -1.2394867
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## AO.A12D.O1TCGA -0.8049581
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## C8.A131.O1TCGA -0.9440965 0.12049621 1.9460905 0.1933581 -1.1667299
## AO.A12B.01TCGA 0.4681618 -1.19472251 0.5180484 0.1217276 0.4182753
## BH.A18Q.O2TCGA -0.3265389 0.14515992 0.6335857 -0.1994144 -0.2161413
## C8.A130.O2TCGA 0.7719698 -0.22183047 -1.3074671 -0.2579090 1.5624182
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## C8.A131.01TCGA -0.7781334 0.1731187 0.5131407 0.85316265 -0.9481444
## AO.A12B.01TCGA 0.2686157 -1.0145767 -0.1387910 -2.10099446 -0.2413355
## BH.A18Q.02TCGA 1.6204733 -0.4804265 -0.5306072 1.62047333 -0.5105349
## C8.A130.O2TCGA 0.7063724 1.6837733 0.5817374 0.03071944 0.6112562
## C8.A138.O3TCGA -1.1992582 0.1941118 1.0791395 -0.92497276 0.6658828
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## C8.A131.01TCGA 0.2864593 0.6629123 -0.15475970 -0.1588076 -0.63645753
## AD.A12B.O1TCGA 0.4903336 -0.8122591 1.56843695 1.4160059 -0.28290760
## BH.A18Q.02TCGA 0.9681239 0.2287945 -1.06586831 0.1853045 -0.06559913
## C8.A130.O2TCGA 0.1914330 0.9950009 -0.30054732 0.2209518 -0.30382719
## C8.A138.O3TCGA 0.9877110 0.8194826 -0.02165938 0.9072540 0.83411118
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## AO.A12D.O1TCGA 1.096131182 -1.2049869 -0.7592405
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## AO.A12B.01TCGA -0.3106223 0.5263628 -0.01407463 -0.005760212 0.27138717
## BH.A18Q.02TCGA -0.2696674
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## C8.A130.02TCGA -0.1004753
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## BH.A18Q.02TCGA -0.3231935
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## C8.A130.02TCGA
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                                                            NP 037387
## AO.A12D.01TCGA -1.07926357 -2.066001
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## AO.A12B.O1TCGA -0.94251838 1.044628 -0.9258895
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## BH.A18Q.O2TCGA 0.08159767 -1.604475 3.3935257
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                                                            1.35618816
## C8.A130.02TCGA -1.41242286 0.142235 -0.5891758
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                                                           0.79164901
  C8.A138.O3TCGA -1.60885778 1.466796 -0.9176585
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                NP 001138826 NP 065385
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## AO.A12D.O1TCGA
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                             3.5191628 -0.62589759 -0.4735057
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                 0.015251302 -0.54335627 -0.02927539
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-1.6159865
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-0.9989607
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```

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## C8.A130.02TCGA 0.083197340 0.48662121 0.91300416
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## C8.A138.O3TCGA -0.010687968 -0.36543047 0.89993968
                                                    2.0263385
                                                               2.0299957
                NP 000013 NP 001702 NP 001028229
                                                NP 056335 NP 001137307
## AO.A12D.01TCGA 1.3932954 -0.9802088
                                     0.14368164 -0.12300423
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## C8.A131.O1TCGA 0.9584076 -2.4499082 -0.18714274 -0.57573931
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## AO.A12B.O1TCGA -0.6487422 -2.5749165 -0.71248605 -0.66814247
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0.26559367 0.21541294
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## C8.A130.02TCGA 1.7460909 1.7723298 -1.26810863 -1.29434758
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## C8.A138.O3TCGA -1.5137722 -0.7677158 -0.01434511 -0.02165938
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##
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## AO.A12D.O1TCGA
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                  1.2781902 0.8086360 -0.2235737 6.884505 10.6126036
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
                1.2324090 -0.5640610 -0.1325068 -3.170113 -4.1837642
## C8.A130.02TCGA
                -0.3136668 -0.9466815 -0.1595130 -3.803447 -3.1245144
## C8.A138.O3TCGA
                  0.4939972 -0.5702303 0.3367403 -4.106684 1.2327393
                NP_056189 NP_115958 NP_002212 NP_002211 NP_060493
##
NA -0.1649120
## C8.A131.O1TCGA 0.8369711 -0.3085792 0.4159915
                                                     NA 0.2986030
## AO.A12B.O1TCGA -1.6880449 0.9060547 -1.7767320
                                                     NA -0.4297957
## BH.A18Q.02TCGA 2.6341240 1.2491359 3.3634173 0.4830435 0.4395535
## C8.A138.O3TCGA 1.5362819 1.0827966 0.5561686 -0.3215448 -0.9396013
                            NP 004389
                                      NP 005442 NP 976227
                  NP 006687
                                                            NP 998801
## AO.A12D.01TCGA -0.52684284 -0.06585726 1.28281129 1.1266096 1.35519746
## C8.A131.01TCGA -1.17887357 -0.15071182 0.87340206 0.7641093 1.51296725
## AO.A12B.01TCGA -0.09444738 -0.80671616 -2.28668321 -2.3365697 -2.02616467
## BH.A18Q.02TCGA -0.58413332 -0.14254291 -0.62427790 -0.5038442 -0.59082408
## C8.A138.O3TCGA 0.51228293 -0.14600212 1.71913886 1.6971960 2.06290994
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## AO.A12D.01TCGA 0.26559518 -2.0583817 -0.1611022 -0.1877708 -0.2258688
## C8.A131.01TCGA -0.06570632 -2.8911272 -0.4988296 -1.5553265 0.8410190
## AO.A12B.O1TCGA -0.19699191 -2.2783688 0.5429916 2.3195064 2.5356813
## BH.A18Q.02TCGA 0.84099935 -0.6945309 -1.1193944 0.8476901
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## C8.A130.02TCGA 0.65061465 -0.7006913 -0.5334180 -0.2513493 0.2996687
## C8.A138.O3TCGA 0.12828332 -1.0639440 1.4375391 -0.7421158 -1.4698865
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                                                   NP_000420 NP_071375
                -0.1877708 -0.09252584 0.23130700 0.12463265 -1.0106872
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                  0.6369311
                 0.3095083
## C8.A130.02TCGA
                            ## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.01TCGA 2.3278208 -1.56887148 0.9753415 0.1300420 0.052440739
## BH.A18Q.O2TCGA -0.6108964 2.01857377 0.1786137 0.5064612 0.004653887
## C8.A130.O2TCGA -0.5760563 1.68049348 -0.3530252 0.4669420 -0.015198726
## C8.A138.O3TCGA 0.1063405 -0.07651647 -0.2703448 0.5854257 0.530568629
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## AD.A12D.O1TCGA 0.23130700 -0.56113102 -0.59541920 -0.9649696 -3.974710
## C8.A131.O1TCGA 0.41599151 0.84911477 0.53338006
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0.1438994 4.298339
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## C8.A130.02TCGA 0.05367852 0.09303695 0.65061465
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.01TCGA 0.2135975 -2.0329764 0.93816815 0.9907906 -0.56764355
## AO.A12B.01TCGA -0.3660518 0.7120515 -0.65151362 -0.7762299 -0.48245372
## BH.A18Q.02TCGA -1.1227398 -1.3334989 -0.23621361 -0.6610771 -0.14254291
## C8.A130.O2TCGA 0.4472628 -3.4787402 1.15243459 0.6243757 1.26723000
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## BH.A18Q.02TCGA 0.9781600 -0.2194867 -0.50718954
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## AO.A12B.O1TCGA -0.04733232 2.3250493 -1.5993577 -3.76110731 -3.0848677
## BH.A18Q.02TCGA -0.34995659 -0.8885631 -2.1363905 -0.32319353 -0.4871172
## C8.A130.O2TCGA -0.76300883 0.2931089 -0.1135948 0.27342973 0.2898291
## C8.A138.O3TCGA 0.17948327 -1.1919439 -0.2593734 1.03891097 2.0117100
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## AO.A12B.01TCGA -2.5111726 -2.0788227 -4.3126306 1.3605764
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## AO.A12B.O1TCGA 1.1471729 -0.718028998 -1.37486831 -1.19749398 -1.3194388
## BH.A18Q.02TCGA -0.1960690 0.068216142 -0.01541840 -0.02879993 0.6335857
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## BH.A18Q.02TCGA 0.02472618 -0.45700881 -0.3064666 -0.4871172
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## C8.A130.O2TCGA -0.63181407 -1.39274365 -1.2287502 0.1159960
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## C8.A138.O3TCGA 0.48302582 -0.06188792 -0.6762873 0.6439399
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## AO.A12B.O1TCGA
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                  -0.13585215 -0.273012807
                                           0.6570033 0.4997704 -1.9523945
## BH.A18Q.02TCGA
  C8.A130.02TCGA
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## C8.A131.O1TCGA
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## C8.A130.02TCGA -0.3792642
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## C8.A138.O3TCGA -0.6836016
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## BH.A18Q.02TCGA -0.8852177
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## BH.A18Q.02TCGA -0.51388030
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## BH.A18Q.02TCGA -6.890178
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## AO.A12B.O1TCGA 1.6100091
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## BH.A18Q.02TCGA -0.3265389
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA -0.34388002 4.02396280
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## BH.A18Q.O2TCGA
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## AO.A12B.O1TCGA -1.93193456 -2.4862293 -0.3771377
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## BH.A18Q.O2TCGA
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                                                               -1.100835
##
  C8.A138.O3TCGA 0.8341112
                             0.8633683
                                         0.3403974 -3.477656
                                                              -3.956741
                NP 689966 NP 766638 NP 758962
                                              NP 004987 NP 003777
                                                                  NP 064693
                       NA -1.970756 1.583785 -0.07347685 -0.1230042
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                       NA -1.211257 -1.591757 0.18931018 2.8406722
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## AO.A12B.O1TCGA
                       NA 4.941321 -3.201270 -1.07554913 -1.3998116 1.0778861
## BH.A18Q.02TCGA -1.768398 -3.661885 -1.688109 0.09832458 -1.1662298 -4.4480494
## C8.A130.O2TCGA -2.094636 -1.087716 -2.573496 -0.67117250 -1.2287502 -1.5862559
  C8.A138.O3TCGA 4.451022 -2.947371 -1.583258 1.38268205
                                                              NA 0.1099976
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                 NP_000343
                           NP_055875
## AO.A12D.01TCGA -0.7249523 -0.07347685 -1.067834176 2.2733588
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## C8.A131.O1TCGA 4.8362775 -0.22762155 -0.430015600 0.2986030
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## AO.A12B.01TCGA -1.2889526  0.03858337  0.753623630 -1.1670078
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## BH.A18Q.02TCGA -4.4480494 -1.31008118 -1.065868308 -0.9186715
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## C8.A130.02TCGA -1.5862559 -0.35630509 -1.409142995 -1.9700006
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  -1.1261154
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                                                 NP 031372 NP 817092
## AO.A12D.01TCGA -0.7706699 -0.8125777 -0.74019153 0.06748568
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0.2864593
## BH.A18Q.02TCGA -0.5372980 0.3927182 -0.53060721 -0.08232604 -0.7547478
## C8.A130.O2TCGA 0.7326114 1.6411351 0.35542646 0.73261137
                                                            1.3065884
  C8.A138.O3TCGA
                          0.4354830 2.79799491 -0.55560170
                 3.5696513
                                                           0.6658828
                  NP 065897
                             NP 057023
                                        NP 000043 NP 000044 NP 002083
## AO.A12D.O1TCGA 0.55133004 -0.47350566
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                                                        NA -1.0983126
## C8.A131.O1TCGA 1.17294525 -0.08594572 0.01120342
                                                        NA -0.9764795
## AO.A12B.01TCGA -0.07781853 1.77352602 -0.75128668
                                                        NA
                                                           0.8533967
## BH.A18Q.02TCGA -0.76143856 0.80085477 -1.37029806
                                                        NA -1.3669527
## C8.A130.O2TCGA 0.21111222 -0.16607269 -0.38254404
                                                        NA
                                                           0.9622022
  NP_001091947 NP_003463
                                       NP_060222 NP_001095896 NP_001077362
## AO.A12D.O1TCGA
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                                       1.7895144
                                                   0.8103963
                                                              0.04843669
## C8.A131.O1TCGA
                  -0.9602880 -0.9360007 -1.1950651
                                                   0.6305292
                                                             -0.08594572
## AO.A12B.O1TCGA
                   0.7841098 -1.3859542 -0.9536043
                                                   0.9836560
                                                              0.50141951
## BH.A18Q.02TCGA
                  -1.4505872 1.0517584 -1.0959767
                                                  -0.6677679 -1.22310126
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## C8.A130.02TCGA
                    0.9786015 0.6407750 0.1520746
                                                      -1.2910677
                                                                   0.27342973
## C8.A138.O3TCGA
                   -1.0164012 0.7134256 -0.6214302
                                                      -0.1496593
                                                                   0.87068257
                   NP 055389 NP 001034966 NP 056244 NP 006254 NP 788955
## AO.A12D.O1TCGA 0.03319749
                                0.6656240 -3.5708716 -0.9840186 -1.0106872
## C8.A131.O1TCGA -0.07784996
                                0.3876563 -5.0405520 -2.5632488 -2.2879929
## AO.A12B.O1TCGA 0.56793488
                                0.7369948 -4.7034084 0.7979672 0.7536236
## BH.A18Q.02TCGA -1.22310126
                               -1.1662298 -0.1726514 0.9513970 0.7038387
## C8.A130.02TCGA 0.26687000
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## C8.A138.O3TCGA 0.91091110
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## C8.A131.O1TCGA -0.54740415 -0.5635957
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## AO.A12B.O1TCGA -0.30507939
                              1.0473999
                                         0.09401285
                                                     0.3018734
                                                                 -0.5683694
## BH.A18Q.O2TCGA -0.01207302 0.1317784
                                          1.22571827
                                                     0.7306018
                                                                   1.9449754
## C8.A130.02TCGA 0.81460810 0.5161400
                                          0.51941990 0.8900451
                                                                  -0.1595130
## C8.A138.O3TCGA
                  0.37331164 -0.2996020
                                         -0.64703018 -1.6637149
                                                                   0.4208545
##
                 NP_001028755
                                NP_005484 NP_065901
                                                       NP_001334 NP_001231800
                   1.62188333
                               1.30186028
                                           1.7552263 -0.02013968
## AO.A12D.O1TCGA
                                                                 -0.07728665
## C8.A131.O1TCGA
                   0.55361947 0.54147582
                                           1.5048715 3.66643990
                                                                   3.69882295
## AO.A12B.O1TCGA
                  -0.56836941 0.13558496
                                           0.1632997 -1.91807719
                                                                  -2.00399288
## BH.A18Q.02TCGA
                  1.81116009 -0.29643048 0.1819591 0.23883062
                                                                   0.29904749
                  -0.04471755 -0.09063571 -0.2546292 -0.44814142
## C8.A130.02TCGA
                                                                 -0.44814142
                   0.42451159 \quad 1.40462489 \quad -0.7128587 \quad -0.17160209
## C8.A138.O3TCGA
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                  NP 001985 NP 002637 NP 003959 NP 937838
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## C8.A131.O1TCGA 1.9987130 0.6386250
                                       0.4078958
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## AO.A12B.O1TCGA -1.0727777 -1.6132151
                                       0.2298151
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                                                              0.01364010
## BH.A18Q.02TCGA -0.4402819 -0.9320530 0.2589029
                                                   0.2589029 -0.08901681
## C8.A130.O2TCGA -0.5826160 -0.2972674 0.2176720 0.2176720 0.09303695
## C8.A138.O3TCGA -1.1261154 1.1047395 -0.6177731 -0.7092015 0.03319770
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                                                                 NP 037522
## AO.A12D.O1TCGA
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                                                                 0.1665404
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                          ## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 0.50942226 0.11701305
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## C8.A131.O1TCGA 0.01929918 0.09216104
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## AO.A12B.O1TCGA -3.78882205 -1.70744517 -1.5051276
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## BH.A18Q.02TCGA -0.59082408 -0.17599673
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## C8.A130.O2TCGA -1.37306444 0.70637242
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## C8.A138.O3TCGA -0.11308786 -0.48245892
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                            -0.5393084 1.2619986
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## AO.A12B.O1TCGA
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                                                                    -0.8566027
## BH.A18Q.02TCGA
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                               0.04479847
                                            -0.3533020
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## C8.A130.02TCGA
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                               0.60469649
                                             0.4243037
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                                                                     0.8178880
## C8.A138.O3TCGA
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                                                                     0.2965117
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                    1.2134241 -0.46239865 -0.62836177 2.5654163 0.2540763
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                  1.58209741 1.5853773 2.1659141
## C8.A130.02TCGA
                  0.8408470 0.02743957
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA -0.5554999 -1.52699133
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## AO.A12B.O1TCGA 0.6372217 -1.53007084
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                                                  -3.2871853 -1.7351599
## BH.A18Q.02TCGA 1.0517584 0.43286276
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                                                             1.4900034
## C8.A130.02TCGA -0.5629368 -0.04471755
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## C8.A131.O1TCGA -0.69717574 -0.2033343 -0.02522751
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## AO.A12B.01TCGA 1.78461191 1.2136883 -0.26073581 -0.4325672 -0.5184829
## BH.A18Q.02TCGA -0.17265135 -0.1893783
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## C8.A130.02TCGA -0.03815781 0.5161400
                                     1.01468010 0.2045525 -0.7170907
  C8.A138.O3TCGA -1.51742930 -0.8884014 -0.40565900 -0.5409731 -0.6250873
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## C8.A131.O1TCGA -0.4219198 -2.5753925 -0.50692534
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## AO.A12B.01TCGA -0.3106223 1.8095552 0.27693012
                                                -1.5106705 -1.7656461
## BH.A18Q.02TCGA -0.2094506 0.1217423 0.17861374
                                                 2.1758067 0.8911801
## C8.A130.02TCGA -0.5563771 -1.1139548 -0.03159807
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## AO.A12D.O1TCGA 2.5019467
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## C8.A131.O1TCGA -0.7497982 0.04763435 -0.004988103
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## AO.A12B.01TCGA -1.5661000 -0.87046006 -0.906489222 -1.0395200
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## BH.A18Q.02TCGA 2.2092605 1.06179456 1.202300593
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## C8.A130.O2TCGA -0.9663607 -1.94704149 -1.855205160 -0.9106029
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## AO.A12D.O1TCGA
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                                                 -0.20681979 -2.5650849
                  0.4159915 0.4159915 0.63862496
                                                  0.44027880
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                            1.2524813
## C8.A130.02TCGA
                 -1.5796962 -1.5796962 0.05695839
                                                  0.05367852 0.6801335
## C8.A138.O3TCGA
                  0.6585685 0.8085112 -0.29594482
                                                 -0.55560170 -2.3549142
##
                           NP_036585 NP_064560
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                                                NP_109587
                                                            NP 002746
## AO.A12D.O1TCGA
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## C8.A131.01TCGA 0.4807576 1.10413127 -0.5231169 0.58600251 1.330812604
## AO.A12B.O1TCGA -0.3771377 -1.01457670 0.6732509
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## BH.A18Q.O2TCGA -0.1994144 -2.32373189 0.8042002 0.09163381
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## C8.A130.O2TCGA 1.6312954 -1.15331322 -0.1595130 0.73261137 -0.231670071
                ## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.74170243
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## AO.A12B.O1TCGA 2.71028419
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## BH.A18Q.02TCGA 0.08494305
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## C8.A130.02TCGA -1.79944739
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## C8.A138.O3TCGA -0.38005902
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##
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```

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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -0.2562859
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## AO.A12B.O1TCGA -0.6819998 -1.43306926 -1.49958463 -1.6215295
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##
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## AO.A12B.O1TCGA -1.26123788
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## BH.A18Q.02TCGA 0.82092706
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                                      -0.29643048 -0.23955899 -0.162615206
## C8.A130.02TCGA 0.07991747
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                                        0.70637242 0.68669321 0.689973080
## C8.A138.O3TCGA -1.17731536 -1.24680101
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## BH.A18Q.02TCGA 1.279244 -1.2130651 -0.87518154 1.03503150 -0.8417277
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                                                           NP 004901
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## C8.A131.O1TCGA -3.02065939
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## AO.A12B.O1TCGA -2.41971396
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                           -0.68449478 -0.32988430 -2.196607 -0.02210917
## BH.A18Q.02TCGA -0.61424176
## C8.A130.02TCGA 0.61781597
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## C8.A131.O1TCGA -0.7174151 -1.21935238 0.5576673 -3.68855975 0.21359747
## AO.A12B.O1TCGA -1.3693254 0.75639510 -0.9009463 -1.01457670 -0.03347495
## BH.A18Q.02TCGA 3.1794213 0.88783470 2.1289714 4.05925670 -0.01876379
## C8.A130.02TCGA -0.0283182 -0.92372240 -1.7797682 0.04711878 0.78180941
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## C8.A131.O1TCGA -0.11023301 -1.64437988 -0.94814436 -0.07380208 -0.9117134
## AD.A12B.O1TCGA -0.71802900 -0.06118969 -0.01130316 0.72590889 -1.6104436
## BH.A18Q.02TCGA -0.21614132 0.10166996 0.88783470 -0.09236219 -1.5041133
## C8.A130.02TCGA 0.68013347 -0.74004975 -0.61213486 0.68013347 -1.5337780
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## C8.A138.O3TCGA -0.12771642 0.33674025 -0.61045879 1.06816809 -1.5430293
##
                               NP 690869 NP 001128647
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                   NP 005909
## AO.A12D.O1TCGA 3.74394091 -0.67542497
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## C8.A131.O1TCGA -0.82266005 -0.06975420
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                                                                      2.5816078
## AO.A12B.O1TCGA 2.07561667 -0.49631109
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## BH.A18Q.02TCGA -0.06225375 -0.95547071
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## C8.A130.02TCGA 1.01468010 4.38966516
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## C8.A138.O3TCGA -1.00542982 -0.07651647
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                                                                   -0.5306526
## C8.A131.O1TCGA
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                                            -0.7781334 0.3755127
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                                    -0.2264592
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA -1.8432474 -2.5167155 -1.9818211
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## BH.A18Q.02TCGA 0.4362081
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## AO.A12D.O1TCGA 1.0123156
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA -1.2723238
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## BH.A18Q.02TCGA
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  C8.A130.O2TCGA
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                                          0.6079764 0.78836915
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                                          1.0206253 -0.05457364
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## AO.A12D.O1TCGA -0.16872181
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## C8.A131.O1TCGA 0.89364146
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## AO.A12B.O1TCGA -1.33883915 -0.773458476 -1.7850464 -1.33883915 -1.02289112
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## BH.A18Q.O2TCGA -0.5975148
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## C8.A130.02TCGA 0.4407030
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## C8.A131.O1TCGA 0.5940983
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## AO.A12B.O1TCGA -0.1554198
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## BH.A18Q.02TCGA -0.3834104 -0.52391645 0.8644170
                                                     0.26559367 -1.01234220
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## AO.A12D.01TCGA 0.3532205 1.461871806
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                                                                0.85230410
## C8.A131.O1TCGA 1.9218032 0.954359677 0.33908178 -0.8833783
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## AO.A12B.O1TCGA -1.8183041 0.174385590 -0.46305340 -0.2302496
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## BH.A18Q.02TCGA 1.5201119 0.007999269 -0.18603288 -1.8085431 -0.18603288
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## C8.A138.O3TCGA 1.2327393 1.013310998 -0.15697353 1.2400536 0.00028345
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## C8.A131.O1TCGA -0.32881858 -0.32072281 -0.15071182
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## AO.A12B.O1TCGA 0.04689779 0.04412632 -1.15592187
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## BH.A18Q.02TCGA -1.08259522 -1.11270366 0.81089091
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## C8.A130.O2TCGA 2.28398935 2.29054909 -1.03523794
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AD.A12B.O1TCGA -1.9624208 0.6760224 -0.601627096 1.4160059 0.243672437
## BH.A18Q.02TCGA -1.7516716 -0.1960690 0.041453087 -0.2462498 0.252212145
## C8.A130.O2TCGA 1.0671580 0.3127882 1.713292166 -0.6482134 0.063518126
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA -0.8651454
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## AO.A12B.01TCGA -0.94251838 -1.5855003 -2.9185793 -0.7596011
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## BH.A18Q.02TCGA 0.08494305 -1.6379286 3.4035619 0.3759913
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## C8.A130.O2TCGA -1.62233447 0.9031646 -1.3730644 0.8474068
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## C8.A138.O3TCGA -1.18462964 -1.9270289 0.5634829 0.3879402
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                                                       -1.36912398 -0.9076656
## AO.A12B.O1TCGA
                   -0.9508328
                                -0.9064892
                                             1.1444014
                                                        -0.05010379 -1.1531504
## BH.A18Q.02TCGA
                    0.2187583
                                 0.1886499
                                            -0.4837719
                                                        -3.44108943 -3.3674910
## C8.A130.02TCGA
                   -0.8286062
                                -0.9138828
                                            1.0277996
                                                        -1.98639992 -1.1762723
## C8.A138.O3TCGA
                                 0.5159401
                    0.5232543
                                             0.6549114
                                                         2.64073793 1.9349101
                   NP_899195 NP_001007562
                                                                  NP_065074
                                           NP_005875
                                                       NP_064553
## AO.A12D.O1TCGA 0.46370469
                                0.4751341
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                                                     3.67536454
                                                                  2.4943271
## C8.A131.O1TCGA -0.01713175
                                0.1043047
                                          0.41599151 -1.43793795
                                                                  0.1124004
## AO.A12B.O1TCGA 0.71482300
                                          0.39610350
                                0.5845637
                                                     1.49360716
                                                                  0.9088262
## BH.A18Q.02TCGA -0.74136627
                               -1.6078202 -2.10628207 -1.88883225 -2.0627921
## C8.A130.02TCGA -0.72365040
                                0.9786015
                                          1.33282738
                                                     1.70345256
                                                                  2.0314394
##
  C8.A138.O3TCGA 0.34771167
                                0.1648547
                               NP 006695 NP 001036038 NP 001020766
                 NP 001124384
                                                                  NP 055262
## AO.A12D.O1TCGA
                    0.5703790
                                           0.1017739
                                                                   0.9856470
                               0.5056125
                                                        0.9551686
## C8.A131.O1TCGA
                    0.4605182
                               0.4483746
                                          -0.1385682
                                                        0.5900504
                                                                   0.6548165
## AO.A12B.O1TCGA
                    0.8284534
                               0.7563951
                                           0.5623919
                                                        0.4903336 0.4127323
## BH.A18Q.02TCGA
                    0.2187583
                               0.2254491
                                           0.7573648
                                                       -1.5643302 -1.5643302
## C8.A130.02TCGA
                   -0.6350939 -0.6482134
                                          -0.7334900
                                                       -0.3891038 -0.3464655
## C8.A138.O3TCGA
                    1.3131964
                               1.3643964
                                          -0.5336589
                                                       -0.3544590 -0.3434876
                                           NP_004298
                                                       NP_663722 NP_001002019
                   NP_037368 NP_001171846
## AO.A12D.O1TCGA
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                               -0.6601858
                                          1.26376230
                                                      0.55133004
                                                                   0.17796982
## C8.A131.O1TCGA
                  0.27431568
                               -1.4743689
                                          0.56576311 -0.39763255
                                                                  -0.77003760
## AO.A12B.O1TCGA
                  1.21368829
                               1.8677561
                                          0.21872917
                                                      0.40164645
                                                                   0.40441792
## BH.A18Q.02TCGA -0.08232604
                               0.5934411 -1.71487239 -0.93874380
                                                                   0.56667804
## C8.A130.02TCGA
                 0.19471288
                                          1.14259498
                                                      0.02743957
                               0.4308634
                                                                   1.06715800
  C8.A138.O3TCGA -0.84085856
                               -0.7969729
                                          0.01856914 0.19045469
                                                                  -0.07651647
                   NP 079491
                              NP_001266 NP_004306 NP_001070020 NP_004300
0.9551686 -0.5687506
## C8.A131.O1TCGA -0.77003760 -6.90662509 -0.5635957
                                                      1.3712914 -0.5190690
2.3028775
                                                      1.2691178 0.3711602
## BH.A18Q.02TCGA
                  0.56667804 -5.27435869 -0.4503180
                                                      0.3726459 -0.2863943
  C8.A130.02TCGA
                 1.06715800 -6.85044544 -2.3570251
                                                     -1.1139548 -0.8154867
  C8.A138.O3TCGA -0.07651647 0.05514054 -2.3146856
                                                     -1.1956011 -1.1882868
                  NP 149112 NP 997237
                                        NP 689558 NP 066301 NP 003147
## AO.A12D.O1TCGA
                  0.5856182 -1.1630791 -2.00504452
                                                   3.385820
                                                             5.4507305
## C8.A131.O1TCGA 0.1690708 -0.7214630 -2.44586030
                                                   1.537255 1.2336635
## AO.A12B.01TCGA -1.3388391 0.1799285 -0.03070348
                                                   1.097286 -0.2247066
## BH.A18Q.02TCGA
                 1.2257183 -0.2328682 -0.67111325
                                                  3.383490 0.6938026
## C8.A130.02TCGA
                  0.1028766 -0.4612609 -0.47766024 -0.208711 -2.1438336
  C8.A138.O3TCGA
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                 NP_001162589 NP_057737 NP_598407
                                                    NP_056156 NP_078881
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   0.03144283 -0.8631389 -1.2760227 -0.06570632 -0.6445533
## AO.A12B.O1TCGA
                   0.32958813 -0.1166192 -0.1914490 -3.15138306 -1.8848195
## BH.A18Q.02TCGA
                   1.50338496 -0.7346755 -0.6008602 -0.38675579 0.5432604
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## C8.A130.02TCGA -2.72765028 0.9589223 1.2311514 0.59157701 -1.1237944
                  1.22176793  0.3879402  0.2306832  0.27822603 -1.7149148
## C8.A138.O3TCGA
                 NP 078939 NP 077734 NP 037395
                                               NP 004929 NP 001339
## AO.A12D.O1TCGA -3.1289350 -1.452624 -1.0525950 0.04081709 1.4771110
## C8.A131.O1TCGA -2.0896468 -3.312107 -0.9117134 0.75196563 2.5411290
## AO.A12B.O1TCGA -0.8732315 -3.434073 0.8755685 -1.41644042 -1.4829558
## BH.A18Q.02TCGA 0.5900957 4.173000 -1.3033904 1.46658576 -0.2696674
## C8.A130.02TCGA -2.4390218 -2.196312 0.6801335 -0.34318561 0.5554985
## C8.A138.O3TCGA 0.7792541 -4.260284 1.8434816 -0.03994508 0.7024542
##
                  NP_055141
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## AO.A12D.01TCGA -0.06966706 -1.54786874 0.7875375
                                                  0.15511104 -0.336352928
## C8.A131.O1TCGA -0.03332327 -0.81456429 -0.3733453
                                                  1.13651432 0.723630465
                                                 -0.61271299 -1.045062916
0.43955353 -0.293085099
## BH.A18Q.O2TCGA 1.89144926 0.05148923 0.5031158
## C8.A130.O2TCGA -1.14347362 -0.42518234 0.6276556
                                                  0.01432009 0.007760356
## C8.A138.O3TCGA 0.00028345 -0.95422987 0.5013115
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                 NP_065881 NP_001973 NP_001248340 NP_056520 NP_065823
##
-0.1534826 3.7096527 2.3686038
## C8.A131.O1TCGA 0.6467207 -5.299616
                                      0.2905072 -0.4421592 -0.1588076
## AO.A12B.O1TCGA -0.1554198 -4.113084
                                      -0.4381101
                                                1.8150981 -0.2441070
## BH.A18Q.O2TCGA 0.8276178 -2.330423
                                    -0.0154184 -1.4104426 -1.0023061
## C8.A130.02TCGA -0.3825440 -1.100835
                                      1.0868372 -0.7662887 0.7260516
## C8.A138.O3TCGA 0.5269115 1.196168
                                      -0.6689730 1.3753678 -0.7677158
                 NP 003440
                             NP 808821 NP 002697 NP 001028729
                                                               NP 808907
## AO.A12D.O1TCGA 1.0656528 0.562759439 0.2770246
                                                  0.27702458 0.27702458
## C8.A131.O1TCGA -0.1871427 0.614337679 0.6102898
                                                  0.67100801 0.67100801
## AO.A12B.01TCGA 0.1632997 -0.002988738 -0.1443339
                                                  -0.06950411 -0.06950411
## BH.A18Q.O2TCGA 0.7406379 0.071561524 -0.3901012
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## C8.A130.02TCGA
                 0.6440549 0.171753799 -0.4022233
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## C8.A138.O3TCGA
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                                                -0.02897366 -0.17891637
##
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## AO.A12D.01TCGA 0.81420612 -0.2944451 -0.6601858
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## C8.A131.O1TCGA
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-1.3804113 0.6898797
## BH.A18Q.O2TCGA 0.05148923 0.3525736 -0.4636996
                                                  -0.3064666 -1.1361213
## C8.A130.02TCGA -0.81876660 -0.6121349 1.3131482
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## C8.A138.O3TCGA 0.85971115 1.3936535 0.5269115
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                NP_001099010
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##
## AO.A12D.01TCGA -0.77066992 -0.77066992 -2.1574365
                                                    0.1322522 -0.7668601
## C8.A131.O1TCGA
                  0.26217204  0.26217204  1.2053283
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## AO.A12B.O1TCGA
                  -0.1526483 -2.4363428
## BH.A18Q.02TCGA
                  0.38937280 0.30573825 1.1788829
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## C8.A130.02TCGA
                  0.45382252 0.50302055 0.5948569
                                                    0.1881531 0.4931809
## C8.A138.O3TCGA
                  0.85239688  0.85239688  1.0974252
                                                    0.3221117
                                                              0.7024542
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## AO.A12D.O1TCGA 0.4256067
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## C8.A131.O1TCGA -8.0967021
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## AO.A12B.O1TCGA -3.4701026
                                  NA -0.6043986 -1.1282071 -0.4907681
## BH.A18Q.O2TCGA 3.4671241 -0.6343140 -1.4873864 -0.8651454 -1.1863021
## C8.A130.O2TCGA -0.8384458 0.4931809 1.5066604 1.7395311 1.2541105
## C8.A138.O3TCGA -0.4422304 -2.9034850 0.2197118 0.2562832 2.0629099
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## AO.A12D.O1TCGA 1.3704367 2.32669599
                                       0.51323206
                                                   0.83706491
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## C8.A131.O1TCGA 0.2581242 1.34295625 -0.64050541 -1.06958079 -0.29238765
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0.82291048
## AO.A12B.O1TCGA -1.9845926 -1.64370127 -0.37436624
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## BH.A18Q.O2TCGA 0.3157744 0.09163381
                                                                 -0.02545455
                                       -0.61089638
                                                   -2.92924600
## C8.A130.02TCGA -0.1201545 -0.64165368
                                       -0.06111689
                                                     0.05695839
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## C8.A138.O3TCGA -0.5409731 0.75365412
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                                                     NP 056516 NP 786924
## AO.A12D.O1TCGA 0.32655195
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## C8.A131.O1TCGA 0.05977799 0.472661847 -0.9886232 -0.34096222 -1.0614850
                 0.69819415 -0.011303160 1.8899279 0.91159764 0.1411279
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                 0.18864989 -0.841727724 0.2221037 -0.30981201 -0.9922699
## C8.A130.02TCGA
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## C8.A138.O3TCGA -0.23743060 0.117311903 0.1355976 0.00028345
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## C8.A131.O1TCGA -0.4016804 -0.2478610 -0.2357173
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## AO.A12B.01TCGA 0.8145961 2.0174157 -0.1720486
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## BH.A18Q.02TCGA
                 0.5967865 -0.2362136 -0.4269004
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## C8.A130.02TCGA
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## C8.A131.O1TCGA -0.4300156 -0.18309486
                                        -0.5231169 -0.6121702 -0.11023301
1.0141422 0.9005117 1.21091682
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## BH.A18Q.02TCGA 0.8811439 -0.46704495
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## C8.A130.02TCGA -0.2185506 0.95236259
                                         0.6014166
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## C8.A138.O3TCGA -0.7128587 -0.09480217
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## AO.A12D.O1TCGA -1.1440301
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## C8.A131.O1TCGA -1.5998532
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## AO.A12B.O1TCGA 1.6709815
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## BH.A18Q.O2TCGA 0.4194812 -0.15592444
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.9076656
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## AO.A12B.O1TCGA -0.5406547
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                                        0.28801602 -1.6298439 0.4847907
## BH.A18Q.O2TCGA -0.5774426
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## C8.A130.02TCGA 3.5860973
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                                         1.08355734 0.1947129 -0.5038992
## C8.A138.O3TCGA
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##
                                                               NP_116584
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## C8.A130.02TCGA -0.2119909
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##
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## AO.A12B.O1TCGA -0.6515136
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## BH.A18Q.02TCGA -0.08567142
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## C8.A130.02TCGA
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                                           NP_000433
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## C8.A131.O1TCGA -0.13452029
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## AO.A12B.O1TCGA -0.32170823
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## BH.A18Q.02TCGA 0.58675033
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## C8.A130.02TCGA -0.08407597
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## C8.A131.O1TCGA -0.0697542 -0.4947817 -1.1424426 1.0838919 0.8288754
## AO.A12B.01TCGA 0.1355850 -0.1360195 0.6649365 -1.8986769 -2.7578338
## BH.A18Q.02TCGA 0.1050153 -0.7982378 -0.1124345 -1.2231013 2.7010317
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## C8.A131.O1TCGA -1.2436397
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## AO.A12B.O1TCGA 0.5041910
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## BH.A18Q.02TCGA -0.6309687
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                                 0.2986030 -1.6322362
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                   ## C8.A130.02TCGA
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## C8.A131.O1TCGA 0.2419326 -0.37739315
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## BH.A18Q.02TCGA -0.3867558
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## C8.A130.02TCGA -0.5760563
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## C8.A131.O1TCGA 0.6912474
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
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## AO.A12B.O1TCGA -0.4519675 -0.05841822
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## BH.A18Q.02TCGA -0.1224706 -0.25628590
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## AO.A12B.O1TCGA 0.215957698 1.7956978
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## BH.A18Q.O2TCGA -1.049141399 -0.6142418 -0.4971534 -0.7781655 1.5736380
## C8.A130.O2TCGA -0.189031776  0.5620582  0.3127882  0.5850173  0.3226278
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## BH.A18Q.02TCGA 1.2491359 -1.1796113 -2.2869327 -0.42020961
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## C8.A130.02TCGA -1.4452216 -1.1926716 0.3882251 -0.28086810
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## BH.A18Q.02TCGA -0.2629767 1.8044693 1.48665805
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## C8.A130.O2TCGA 0.9195639 -0.1955915 0.30950829 -0.85484516 -0.4350219
## C8.A138.O3TCGA -1.2614296 0.1831404 0.09902621 -1.22851531 0.9291968
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## C8.A131.O1TCGA -1.2719748 -0.089993602 -0.03737115
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## AO.A12B.O1TCGA 1.6404953 -0.936975435 0.82845342 -0.7069431 -0.3411086
## BH.A18Q.O2TCGA 0.6034772 -0.005382259 -0.11912524 1.5636018 0.9881962
## C8.A130.02TCGA 0.1815934 1.326267640 -1.07459637 -0.2611889 -0.6777322
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## AO.A12B.O1TCGA -1.826619 -0.587769726
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## BH.A18Q.02TCGA -1.350226 -0.005382259
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## C8.A130.02TCGA -1.625614 0.365266062
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## C8.A138.O3TCGA 2.457881
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                                                      0.6731971 0.804854066
                 NP_001130046
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                               NP_056216
## AO.A12D.O1TCGA
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                                          0.04081709
                                                       0.11701305 -0.004900488
                                                      1.91370746 -0.583835075
                   -1.2517354 0.379560586
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                     -0.97219762 -0.216141316
## C8.A130.02TCGA
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                                                     -0.06111689 -0.179192170
## C8.A138.O3TCGA
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                                        NP 006397 NP 777573 NP 003812
## AO.A12D.01TCGA -0.9725892 -1.2011771
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## C8.A131.O1TCGA -0.9886232 0.3674169
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## AO.A12B.01TCGA -0.1443339 1.5989232 -1.81830413 -1.0062623 -1.2667808
## BH.A18Q.02TCGA -0.6844948 -1.5409125 0.51649731 -0.7748201 0.3726459
## C8.A130.O2TCGA 0.6079764 0.2865492 0.83428731 1.4673020 -1.1401937
## C8.A138.O3TCGA -0.3800590 -1.4698865 -0.32154480 -0.4897732 -0.5775445
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## AO.A12D.O1TCGA 2.92864410
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## C8.A131.O1TCGA 1.30247744 2.0270481
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## AO.A12B.O1TCGA -0.47691077 -0.2995364
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## BH.A18Q.02TCGA -0.53729797 -1.7583624
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## C8.A130.02TCGA -0.09063571 2.2905491
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## AO.A12D.O1TCGA -0.8087679
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## C8.A131.O1TCGA 0.2662199
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## AO.A12B.O1TCGA 0.4681618
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## BH.A18Q.02TCGA -0.1425429
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## C8.A130.02TCGA -1.0450776
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## C8.A131.O1TCGA 0.31884237 -0.93195284 -0.33691434 -0.4259677 -0.9036177
                                         0.02749747 -0.2163922 -0.2551929
## AO.A12B.O1TCGA 0.18547148 -1.09772092
## BH.A18Q.O2TCGA -0.06894451 -0.60755099
                                         1.15546525 1.1688468 -0.2161413
## C8.A130.02TCGA
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                                         1.10839662 1.1888537 -0.5629160
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## AO.A12D.O1TCGA
                  ## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                   -2.3587415 -0.3161653 -0.7845444 -0.5406547 4.370397
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                             -0.5192232
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA -1.0614850
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## AO.A12B.O1TCGA -2.4917723
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## BH.A18Q.O2TCGA 0.8510355
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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                                          0.9948385
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## BH.A18Q.02TCGA -0.3064666 2.19587901
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## C8.A130.02TCGA -0.4776602 -0.25462915
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## C8.A138.O3TCGA 0.1209690 -0.34348763
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## C8.A131.O1TCGA -0.90766555
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## AO.A12B.O1TCGA 1.32731872
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## BH.A18Q.02TCGA -0.00872764 -0.91867151 -5.2208326 -2.50772789 -0.2429044
## C8.A130.02TCGA -0.47438037 0.11927590
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## AO.A12D.O1TCGA -0.5001742 -0.48493506
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA -2.58323092 -2.58323092 -0.8122591 0.3767032 0.3683888
## BH.A18Q.02TCGA -0.04218146 -0.04218146 -1.1595390 -1.1093583 -3.1165874
## C8.A130.02TCGA 0.11927590 0.11927590 0.1094363 -1.3730644 0.4243037
## C8.A138.O3TCGA -1.13342969 -1.13342969 -0.1313736 0.2197118 -0.5336589
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## AO.A12B.01TCGA -4.8613824 0.46539035 0.775795421 0.51804835 -0.460281928
## BH.A18Q.02TCGA -0.4536634 0.01134465 0.653657968 0.73729252 -3.019571315
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## BH.A18Q.O2TCGA 0.4696620
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## AO.A12B.O1TCGA -0.859374166
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## BH.A18Q.02TCGA -4.083402747
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## AO.A12B.O1TCGA
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## C8.A130.02TCGA
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## AO.A12B.O1TCGA -1.2224372 1.2802037 4.5976579
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## BH.A18Q.O2TCGA 0.6703849 -0.6911855 -0.4938080
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A130.O2TCGA 0.7621302 -0.2939876 -0.4481414 -2.2947076 1.273790
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## AO.A12D.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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##
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## AO.A12D.01TCGA -0.83543649 -0.68304456 0.2998834 -1.1135518 -0.2753962
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12B.O1TCGA 0.34344550 0.2630728 0.6898797 0.89496880 -0.1304765
## BH.A18Q.O2TCGA -0.30646663 -0.1994144 -0.1793421 -0.05890837 -0.3967919
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## C8.A138.O3TCGA -0.09480217 -0.1606307 -0.4056590 -0.42394469 -0.3837162
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## AO.A12B.O1TCGA -0.2357925 -1.6963593 -0.3023079 -0.3023079
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## BH.A18Q.02TCGA -1.4405511 -0.6945309 0.4428989 0.5599873
                                                             0.8945255
## C8.A130.O2TCGA -0.3497454 -0.9958795 0.7916490 0.7326114
                                                             0.4374232
## C8.A138.O3TCGA 0.2745689 -1.1188011 -0.1277164 -0.1277164
                                                            -0.1313736
##
                 NP_066407 NP_003511 NP_003512 NP_542160
                                                          NP 003519
## AD.A12D.O1TCGA -0.7173327 -0.7516209 -0.7516209 -0.6944740 -0.7706699
## C8.A131.O1TCGA -1.9439231 -1.9641625 -1.9641625 -1.8832049 -1.6039011
## AO.A12B.01TCGA -0.2302496 -0.2468784 -0.2579643 -0.2385640 -0.3133938
## BH.A18Q.02TCGA 0.8844893 0.8911801 0.8945255 0.8811439 0.8911801
## C8.A130.02TCGA 0.4472628 0.4472628 0.4374232 0.4472628 0.4899011
## C8.A138.O3TCGA -0.1204021 -0.1240593 -0.1240593 -0.1313736 -0.1533164
                 NP_778225 NP_733759
                                        NP_002630
                                                   NP_003898
                                                               NP_004815
## AO.A12D.O1TCGA -0.7706699 -0.1534826 -5.605303790 0.30750296 1.25614271
## C8.A131.01TCGA -1.7455769 -0.2721482 0.003107659 0.11240044 -0.06165844
## AD.A12B.01TCGA -0.3133938 -0.4769108 -4.894640130 0.63722173 -0.23579254
## BH.A18Q.02TCGA 0.9246339 -2.1363905 8.334654720 -0.02210917 -0.13585215
## C8.A130.O2TCGA 0.5259796 0.9523626 -0.825326336 -0.74332962 0.42102383
## C8.A138.O3TCGA -0.1642878 -0.2301163 -1.477200773 -0.58485882 -0.17525923
                 NP 004816 NP 004671 NP 055534 NP 653319 NP 808881
## AD.A12D.O1TCGA 1.4999698 1.4999698 0.2808344 0.6770534 -0.4354077
## C8.A131.01TCGA -0.2276216 -0.2276216 -0.4462071 0.2905072 -1.1262511
## AO.A12B.O1TCGA -0.6237989 -0.6237989 -1.3083529 1.1638018 0.7148230
## C8.A130.O2TCGA 0.1061564 0.6276556 -0.8548452 -1.1992314 -0.4120629
## C8.A138.O3TCGA -0.3105734 -0.3105734 -0.4934303 2.2128526 0.7024542
                 NP 886552 NP 006351 NP 001880 NP 055118 NP 001020114
## AD.A12D.01TCGA 1.9647652 -0.1077650 -0.6792348 -0.4582665
                                                            0.1208229
## C8.A131.O1TCGA -0.0697542 -0.2883398 -1.0412456 0.8491148
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## AO.A12B.O1TCGA -0.5572835 -0.5073970 0.7813384 -2.3531986
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## BH.A18Q.O2TCGA 0.1485053 0.4495897 -1.0625229 0.6636941
                                                            -0.3800650
## C8.A130.O2TCGA -0.2743084 0.2570304 0.2734297 1.2016326
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## C8.A138.O3TCGA 0.9072540 0.1246262 -1.8246290 -1.1114869
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## AO.A12D.01TCGA -0.3058745 -0.98020882
                                      -1.00306761
                                                   0.52085166 -0.1992002
                                      -0.21547791 0.03953859
## C8.A131.O1TCGA 0.4888534 -0.17904698
                                                              1.7436965
## AD.A12B.O1TCGA -1.2889526 -0.17759159 -0.16373422 1.95367182 3.1204623
## BH.A18Q.02TCGA -0.8417277 0.86107164
                                       0.80754553 -1.04245064 -0.7948924
## C8.A130.02TCGA 0.8047685 0.08975708
                                       0.04055904 -0.34646548 -0.9598010
```

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## C8.A138.O3TCGA 1.5838247 0.63662566
                                         NP 005561
##
                  NP 060115
                                         NP 005707
                                                     NP 573568 NP 060125
## AO.A12D.O1TCGA -0.1382434
                             2.0942983
                                       1.427583622
                                                    1.29043089 -2.2031540
## C8.A131.O1TCGA 0.6629123
                             0.2824114
                                       1.152705843 -0.06165844 -0.1264245
## AO.A12B.O1TCGA -0.9037177
                             0.3406740 -0.000217265
                                                    0.06352663 -2.0012214
## BH.A18Q.O2TCGA 0.1451599 -0.6978763 0.386027419 -1.20637435 0.7841279
  C8.A130.02TCGA -0.1627928 -1.4681806 1.336107247
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## C8.A138.O3TCGA 0.5305686 0.6695399 -0.409316137 -0.98714413 -1.0383441
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                   NP 004823 NP 891993
                                         NP 002721
                                                    NP 002722 NP 001229787
## AO.A12D.O1TCGA -3.79183986
                             0.9361197
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## C8.A131.O1TCGA 0.52933218 0.2581242 -0.25595672
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                                                                 0.2014538
## AO.A12B.01TCGA -0.03624642 -1.2667808 -1.25846640 -1.4358407
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  BH.A18Q.02TCGA 0.93467004 -0.1960690 -0.07898066 -0.2395590
                                                                -0.2061052
  C8.A130.O2TCGA 0.62437570 -0.6350939 0.06023826 -0.5891758
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  C8.A138.O3TCGA -0.21183062 -0.9322870 -0.29960196 -0.8006300
                                                                -0.9322870
##
                  NP_002723 NP_066272 NP_001101
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## AO.A12D.01TCGA 1.3628171 -0.6258976 0.3075030 -0.01632988
                                                              0.0293877
  C8.A131.O1TCGA -0.1345203 -0.3369143 2.8123370 3.32237002 -0.6121702
  AO.A12B.01TCGA -0.6598280 4.7750322 -0.7928588 -1.67141601
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## BH.A18Q.02TCGA 0.1786137 -0.4570088 -0.6711132 -1.76839850 -0.3365751
  C8.A130.02TCGA -0.4907797 -1.5436176 -1.6584130 1.48698121 0.5850173
  C8.A138.O3TCGA -0.8664585
                            2.2567383 0.1904547 -0.16428781 -0.7969729
                  NP_955392
##
                             NP_955393
                                         NP_003278 NP_071905 NP_653296
## AD.A12D.01TCGA -0.3668313 -0.43921748 -0.03156908 -0.8963933
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## C8.A131.O1TCGA 0.4726618
                            0.18526230 -1.10196383 -0.3369143 -0.9400486
## AO.A12B.O1TCGA 0.3573029
                             0.27138717 2.45808006 0.6649365 1.0446284
## BH.A18Q.02TCGA
                  0.2488668
                             0.03476232 -0.03883608 -0.3800650 -0.3399204
  C8.A130.02TCGA
                  0.1291155
                             C8.A138.O3TCGA
                  1.1230252
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## AO.A12D.O1TCGA 0.5818084
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## C8.A131.O1TCGA -0.6566969
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## AO.A12B.O1TCGA
                 0.4404471
                              -0.5600550
                                         1.313461353
                                                       1.30791840 -0.69308573
## BH.A18Q.02TCGA -0.3165028
                             -0.2930851 -0.968852235
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  C8.A130.O2TCGA
                                         0.099596684
                  2.5758977
                               2.9891612
                                                       0.09959668
                                                                   2.08719722
                 0.7573113
##
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                  NP 005601 NP 001185648 NP 001128727 NP 001128728
                                                                    NP 059990
## AO.A12D.01TCGA -0.6068486 -0.923061845
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                                                     -0.60684860 0.63133581
## C8.A131.O1TCGA
                 0.1366877 -0.725510908
                                           0.1002568
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## AO.A12B.O1TCGA
                  0.4875621 -0.560054987
                                           0.4127323
                                                       0.48756214 0.26307275
## BH.A18Q.02TCGA
                  0.4428989 -0.928707652
                                           0.4596258
                                                       0.44289891 -0.33322968
## C8.A130.02TCGA
                 1.5132202 2.110156299
                                           1.5328994
                                                       1.53289938 -0.03159807
  C8.A138.O3TCGA -1.6527435
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                                                      -1.83194327 0.74999698
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## C8.A131.O1TCGA 0.1488314 -0.1952385
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## AO.A12B.O1TCGA -1.8571048 0.7009656
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## BH.A18Q.O2TCGA 0.4562804 -0.5774426
                                       0.4663166 -2.4174026 -7.8937927
  C8.A130.02TCGA 0.8342873 0.2832693 -0.1693526 -1.4222625 -0.9794802
  C8.A138.O3TCGA -1.9197146 -0.3617733
                                       0.2270261 -0.5738874 1.0462253
##
                   NP_775882 NP_056290
                                          NP_000933
                                                      NP_003895 NP_056147
## AO.A12D.01TCGA -1.10974196 0.8180159 -0.084906249 -0.18396100
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## C8.A131.O1TCGA -0.28833977 0.9017372 2.698996358 0.06787375
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## AO.A12B.01TCGA 0.66493647 -0.4685963 -0.005760212 0.97257007 -0.0390179
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## BH.A18Q.02TCGA 0.68376640 -0.2897397 1.536838779 0.39606357 -1.1695751
## C8.A130.02TCGA 0.05695839 0.2963888 -0.694131582 0.58829714 1.3131482
## C8.A138.O3TCGA
                 ##
                  NP_060220 NP_006259
                                       NP_689928
                                                  NP_055639 NP_001265099
## AO.A12D.O1TCGA
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                                       0.5894280 -0.59160941
                                                               0.4751341
## C8.A131.O1TCGA 2.1120536 -0.1223767
                                       0.9705512 -0.05761056
                                                              -0.7417024
## AD.A12B.01TCGA -0.9120322 0.2630728 0.3489884 -0.23024960
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## BH.A18Q.02TCGA -2.2768965 0.1217423 -0.1592698 0.68711179
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## C8.A130.02TCGA -0.6875718 0.8572464 0.6407750 -0.39238365
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## AO.A12D.O1TCGA -0.8544855 -0.4315979
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## C8.A131.O1TCGA -0.7740855 -0.8874261
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## AO.A12B.O1TCGA 0.9975133 -3.7223067
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## BH.A18Q.02TCGA -2.0259929 -9.7805881
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## C8.A130.02TCGA 0.1159960 -0.3399057
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                                                     -0.2283902
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## C8.A138.O3TCGA 0.8597112 1.7776531
                                         0.9913682
                                                      0.9913682 2.3847382
##
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                                         NP 009084 NP 001103159 NP 001018854
## AO.A12D.O1TCGA
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                                                       1.58378535
## C8.A131.O1TCGA
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                                                       0.05573011
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## AO.A12B.O1TCGA
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                                                                   -3.8830522
## BH.A18Q.02TCGA
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                                                     -5.41821011
                                                                    -8.4658530
## C8.A130.02TCGA
                    0.2078324 -0.26118889
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                                                                    -0.2611889
## C8.A138.O3TCGA
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##
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                            NP 079038 NP 001131080 NP 001240728 NP 001123992
## AO.A12D.O1TCGA
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                                                                          NA
## C8.A131.O1TCGA
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                                                     -0.13324801
## AO.A12B.O1TCGA -2.0289361 0.02749747
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## BH.A18Q.02TCGA -3.4711979 -3.97635053
                                         -3.7287923
                                                     -3.67861154
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## C8.A130.02TCGA 1.9920810 -2.11759467
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## C8.A138.O3TCGA -0.3508019 -2.01114309
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                               -8.6665759 -8.2718208 -5.2576318
                                                                 -5.2576318
## C8.A130.02TCGA
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                               -1.1533132 -0.1791922 -1.9404818
                                                                 -1.9404818
                   -3.7190271
                                1.4448534 1.2693107 2.3847382
## C8.A138.O3TCGA
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##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
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                                           -6.1742664 -5.79623826
                                                                   -2.5880171
## C8.A130.02TCGA
                   0.03727918 -0.56949657
                                            0.5653381 2.55293860
                                                                    1.8018486
## C8.A138.O3TCGA
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                                            0.9986824 0.31479742
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                           NA
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## AO.A12B.O1TCGA
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                                        1.9619862 -2.5998598 -1.3720968
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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  C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA -0.4315979 -0.5116036
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-0.3207228
## C8.A131.O1TCGA -0.8874261 -3.0854255
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## AO.A12B.O1TCGA -3.7223067 -2.9601514
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## BH.A18Q.02TCGA -5.2910856 -8.3119654
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                                                                   -0.1240593
##
                 NP 001004301 NP 001166161 NP 612143 NP 001070146 NP 001252526
## AO.A12D.O1TCGA -1.50215117
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                  -1.12608518
                                 -5.7962383 -8.5126883
                                                         -3.7287923
                                                                      -9.9043672
## C8.A130.02TCGA
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                                                         -0.5990154
                                                                      -2.3799842
                                 -0.5738874 1.3387964
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -1.1973673
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                                           -2.1260777 -0.4097762 -0.5757393
## C8.A131.O1TCGA 0.4969491 0.60219404
## AO.A12B.O1TCGA 1.1222297 -0.74020079
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## BH.A18Q.02TCGA -6.9002143 -0.88521769
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## C8.A130.02TCGA 1.7100123 0.07335773
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  C8.A138.O3TCGA -0.3288591 -0.28131627
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                  NP 001018855 NP 001001668 NP 443084
                                                         NP 003416 NP 066971
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                    NA 2.43993198
## AO.A12B.O1TCGA
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                            NA
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## BH.A18Q.O2TCGA
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## C8.A130.02TCGA
                    -0.9794802
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## C8.A138.O3TCGA
                     2.0373100
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA -3.7287923
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## C8.A130.02TCGA 1.4312234
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                                                              -1.2316555
## C8.A131.O1TCGA -0.4583508 3.848595
                                              NA -0.6486012
                                                              -0.3207228
## AO.A12B.O1TCGA -2.4197140 -1.147607
                                              NA 0.9199121
                                                              -1.3720968
## BH.A18Q.O2TCGA 0.7540194 -3.307274
                                              NA -3.3173103
                                                              -3.4711979
## C8.A130.02TCGA 0.2242317 -4.820207
                                              NA
                                                  0.5620582
                                                               1.9920810
## C8.A138.O3TCGA -0.4970875 -4.545541
                                              NA
                                                 1.0023396
                                                              -0.3508019
                    NP 848639 NP 008922 XP 003846493
                                                        NP 055532 NP 001008727
## AO.A12D.O1TCGA 0.20082861 1.8199928
                                            1.1799467
                                                               NA
                                                                     0.3684597
## C8.A131.O1TCGA -2.00464128 -0.4097762
                                           -0.1992864
                                                               NA
                                                                    -0.6486012
## AO.A12B.O1TCGA -1.02011965 -1.7711891
                                                               NA
                                           -0.6459707
                                                                    -0.1332480
## BH.A18Q.02TCGA -4.52833853 -6.6325837
                                           -7.1578087 -0.01207302
                                                                    -3.1065512
## C8.A130.02TCGA 1.67065387 -0.1759123
                                           -0.9696406 -0.18575191
                                                                     0.7555705
                                                                     0.2270261
## C8.A138.O3TCGA -0.08017361 1.1705680
                                            1.7227960 -1.08588688
##
                  NP_001018857 NP_001129971 NP_997216 XP_003960942 NP_001121695
## AO.A12D.O1TCGA
                     0.1855894
                                         NA -1.2316555
                                                         2.00667294
                                                                     -0.43159788
## C8.A131.O1TCGA
                    -1.9601146
                                         NA -0.3207228
                                                         0.08811316
                                                                     -0.88742615
## AO.A12B.O1TCGA
                   -0.8482883
                                                         0.29633044
                                                                     -3.72230668
                                         NA -1.3720968
## BH.A18Q.02TCGA
                    -5.9133266
                                 -3.4477802 -1.1495029
                                                       -1.14950285
                                                                     -7.55256374
## C8.A130.02TCGA
                                 1.9920810 0.8900451
                                                                      0.07335773
                    -0.5563771
                                                         1.43122344
## C8.A138.O3TCGA
                     1.7227960
                                  0.2050832 -0.5738874 -0.12405928
                                                                      1.77765308
```

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NP 149350 NP 848618 NP 008890 NP 001007249 NP 008889
## AO.A12D.01TCGA -0.4315979 -1.2316555 -0.4620763
                                                  0.7342004 -0.4315979
                                                  0.4483746 -0.8874261
## C8.A131.O1TCGA -0.8874261 -0.3207228 -0.6486012
## AO.A12B.01TCGA 0.9199121 -1.3720968 -0.6709139
                                                  0.2436724 -3.7223067
## BH.A18Q.O2TCGA -5.4182101 -1.1495029 -5.8932543
                                                 -6.0471419 -9.7805881
## C8.A130.02TCGA -1.2746684 1.4312234 -1.7502494
                                                 -0.4087830 2.5529386
## C8.A138.O3TCGA 1.1705680 -0.3508019 1.4521677
                                                  1.4448534
                                                            1.1705680
                NP 689668
                            NP 009076 NP 001096127
                                                 NP 079009 NP 001229609
## AO.A12D.O1TCGA
                       NA 1.25995250
                                       -0.4620763
                                                         NA
                                                               1.7323675
## C8.A131.O1TCGA
                       NA -0.88742615
                                       -0.3207228
                                                         NA
                                                              -0.5959787
## AO.A12B.O1TCGA
                       NA -3.72230668
                                       -1.3720968
                                                         NA
                                                              -0.2496499
## BH.A18Q.02TCGA
                       NA -5.56206153
                                        0.1585415 -5.7962383
                                                              -2.4174026
## C8.A130.02TCGA
                       NA 1.21475210
                                       -0.5596570 2.5529386
                                                              0.6834133
## C8.A138.O3TCGA
                                       -0.9688584 -0.5738874
                                                              -0.5738874
                  -2.0148 0.09902621
                NP_001138906 NP_862828 NP_001191747 NP_003399 NP_065708
## AO.A12D.O1TCGA
                   1.5113992
                              0.8637335
                                        -1.2926123 -0.4620763 -0.4315979
## C8.A131.O1TCGA
                  -0.6486012 0.1690708
                                         -4.0690606 -0.6486012 -2.5794404
                  -0.1332480 0.2492154
                                          0.1438994 -0.6709139 -1.9069913
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -3.1065512 -3.6786115
                                         -3.2738203 -2.0025752 -9.8408049
## C8.A130.02TCGA
                   2.6644541 2.2019926
                                         -2.1175947 -0.7531692 -2.7637288
## C8.A138.O3TCGA
                  -0.2666877 -0.2666877
                                         -2.5011997 1.1778823
                                                              1.7227960
                NP 001156863
                              NP_699189 NP_001265102 NP_597730 NP_689475
                                                           NA 0.3722695
## AO.A12D.O1TCGA
                  -0.2677766 1.51139918
                                          0.4751341
## C8.A131.O1TCGA
                  -0.8874261 -0.11428089
                                          -0.7417024
                                                           NA -0.1142809
## AO.A12B.O1TCGA
                  -1.9069913 0.70096563
                                         -2.2478826
                                                           NA -0.1332480
## BH.A18Q.02TCGA
                  -9.7805881 -5.37806553
                                          -4.8528406 -7.305005 -3.1065512
                                          -0.2447895 1.408264
## C8.A130.02TCGA
                  -0.5990154
                              2.55293860
                                                              2.4217438
## C8.A138.O3TCGA
                   1.6313675 -0.08017361
                                          0.9913682 1.861767 -0.4532018
                 NP_116078 NP_055333 NP_872415 NP_940941
                                                           NP_694563
## AO.A12D.O1TCGA 0.9399295
                                  NA
                                           NA 0.5513300 0.03319749
## C8.A131.O1TCGA -0.3814410
                                  NA
                                            NA -0.1223767 -0.88742615
## AO.A12B.O1TCGA -2.4446572
                                  NΑ
                                            NΑ
                                               1.1499444 -1.90699129
## BH.A18Q.02TCGA -3.1065512 -7.8536481 -1.102668 -3.6786115 -4.63204537
## C8.A130.O2TCGA 1.2901891 2.7267716 1.431223 1.5984968 0.01759996
  NP 597717 NP 005764 NP 001129507 NP 065156 NP 060297
## AO.A12D.O1TCGA 0.01033871 -0.4735057
                                       0.97040784 1.8047536 -1.1249811
## C8.A131.O1TCGA -1.06553291 -1.9884498
                                      -0.11023301 0.2783636 -0.1142809
## AO.A12B.O1TCGA -2.14533804 -3.3398433
                                      -0.05010379  0.6067355  3.0151463
## BH.A18Q.02TCGA -9.84080493 -9.0479494
                                      -1.31008118 0.1117061 -0.1525791
## C8.A130.02TCGA -2.76372884 -0.8712445
                                       2.34958673 -1.7600890 0.6604543
## C8.A138.O3TCGA 2.03730996 1.7227960 -1.40040085 1.9093101 -0.7677158
                NP 001026971
                              NP 005560 NP 619634 NP 004270
                                                              NP 065861
## AO.A12D.O1TCGA
                  -0.4620763 -0.07728665 0.2198776 0.9627882 -0.16491201
## C8.A131.O1TCGA
                   -0.2995364 -0.40485245 0.4459900 2.2890202 -0.04456085
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   0.7607102 1.56694722 -2.1598082 -0.5540249 -0.18603288
## C8.A130.02TCGA
                   0.2635901 0.07007786 2.7169320 -0.4448615 1.53945912
## C8.A138.O3TCGA
                  NP_000300 NP_056114
                                      NP_065392 NP_009201
                                                             NP 000700
## AD.A12D.O1TCGA 0.3113128 -0.7249523 -0.75924052 1.0313646 0.006528907
## C8.A131.01TCGA -0.7052715 0.1650229 -0.07380208 3.1199760 -0.494781695
## AO.A12B.O1TCGA 2.3693929 1.4187774 -0.19422044 -2.1675098 2.607739653
## BH.A18Q.02TCGA -0.2161413 -1.4773503 -0.44697266 -0.5941695 2.162425187
```

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## C8.A130.02TCGA 0.1586343 1.1917930 -2.69813146 0.8966048 -1.402583257
## C8.A138.O3TCGA 0.7207399 0.4062259 1.07913950 1.2802822 -0.829887141
                 NP 001258395 NP 005474 NP 055238
                                                   NP 068746 NP 055871
                  -0.9154422 -1.4221454 0.1665404 -0.08490625
## AO.A12D.O1TCGA
                                                               1.1075606
## C8.A131.O1TCGA
                  -1.3772197 -0.3409622 -0.7052715 -1.68485869 0.8976893
                  -1.0783206 -0.6487422 0.2963304 0.89774027 -2.1037659
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -0.7380209 -0.5573703 0.4261720 -0.67445863 0.3759913
                   0.5981368 2.3889452 0.2111122 -0.66133289 1.4148241
## C8.A130.02TCGA
## C8.A138.O3TCGA
                    0.4464544 -1.6966291 1.4558248 -1.87582894 -0.5409731
##
                  NP_002336 NP_031377 NP_002681
                                                  NP_001659 NP_001184254
## AO.A12D.01TCGA -2.0317131 -2.4279321 -2.5422261 0.03319749
                                                              0.03319749
## C8.A131.O1TCGA -2.9963721 0.6305292 -2.3122802
                                                 0.60624192
                                                              0.60624192
## AO.A12B.O1TCGA -3.7638788 -3.4202160 3.4530392 0.08846990
                                                              0.08846990
## BH.A18Q.02TCGA 0.2287945 -1.0056514 -0.4168642 -0.23955899
                                                             -0.30312124
## C8.A130.02TCGA 1.4902611 -2.2553492 -1.5140988 0.27998947
                                                              0.28654921
## C8.A138.O3TCGA -0.6580016 -4.1981123 -1.7770862 0.51228293
                                                              0.62565425
                  NP_055677 NP_001026976 NP_000685
                                                    NP_000682
                                                                NP_000686
## AO.A12D.O1TCGA -1.5021512
                             1.93809658 0.2694050 2.02191214 0.89802168
## C8.A131.O1TCGA 0.3026508
                           -2.98018058 0.1164483 -1.33674093 -1.33674093
## AO.A12B.01TCGA 1.5684369 -2.65251776 -2.9740087 -3.80822237 -3.80822237
## BH.A18Q.02TCGA -4.6755353 -0.37002888 -0.6844948 -0.68449478 -0.68449478
## C8.A130.02TCGA 1.2541105
                            0.06023826 -0.2579090 -0.09063571 -0.09063571
## C8.A138.O3TCGA -2.7974280
                            -1.88314322 -1.4625722 -1.46257222 -1.46257222
                  NP 002709 NP 060561
                                        NP 003001 NP 071334 NP 071356
## AO.A12D.01TCGA 1.6180735 -0.9383010 0.78372773 0.9361197 1.644742
## C8.A131.O1TCGA 0.3998000 -0.8226600 -0.64050541
                                                  1.1688974 3.087593
## AO.A12B.O1TCGA -0.5212544 0.3295881 1.35780494
                                                  0.6566220 -1.200265
## BH.A18Q.02TCGA 1.5100757 -0.5908241 -0.27635819
                                                  0.4194812 1.563602
## C8.A130.O2TCGA 0.8572464 -0.3727044 -0.02175846 0.9162840 1.611616
## C8.A138.O3TCGA -0.2593734 0.3915973 0.94748249 -0.4056590 -1.206572
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                             NP_003747 NP_852478 NP_004292
                                                              NP 057272
## AO.A12D.01TCGA -1.6583529 -0.08871605
                                       1.8619006 0.0217681 0.05224649
## C8.A131.O1TCGA -2.2029874
                            0.09620892 1.1162749 -0.1709512 -1.68485869
## AO.A12B.01TCGA -0.3355656 0.31573076 -1.8377044 0.4543045 -0.02238906
## BH.A18Q.O2TCGA -3.4076356
                            0.18530451 -1.6145109
                                                  0.4362081 0.85772626
## C8.A130.O2TCGA 2.7694099 0.68997308 0.3488667 0.7424510 0.31606803
## C8.A138.O3TCGA -1.9818860 -0.39468758 0.8121683 -0.5702303 -1.23948673
                  NP_443122 NP_006615 NP_057594 NP_000033 NP_036266
## AO.A12D.O1TCGA -0.7668601
                            0.1932090 -0.9840186 -0.2601570 1.8314222
## C8.A131.O1TCGA 0.6791038 0.6791038 -1.4298422 0.4443267 -0.1385682
## AD.A12B.O1TCGA -0.9203466 -1.0201197 2.2031045 -3.2012696 -2.4612861
## BH.A18Q.02TCGA -0.2797036
                            0.7172202 -0.4503180 0.3191198 -0.2830490
## C8.A130.02TCGA 0.1323954
                           0.0766376 -1.4386618 1.2409911 -0.1726324
## C8.A138.O3TCGA -1.2724010
                           1.5801676 -1.0090870 -2.0623430 3.5586799
                   NP_059982 NP_001119595
                                           NP_056937
                                                       NP_004248
                                                                  NP 056340
                            -2.01647392 -0.08871605
## AO.A12D.O1TCGA -1.92122897
                                                     0.35322054
                                                                 0.20844821
## C8.A131.O1TCGA 0.42408728
                              0.42408728 0.16502290
                                                     0.54147582 -0.17499910
## AO.A12B.O1TCGA 4.19856566
                              4.27062398 -0.50185404
                                                     0.05244074 -0.06396116
                              0.07490691 -1.58440250
## BH.A18Q.02TCGA 0.07490691
                                                     0.88783470 -1.47065951
## C8.A130.02TCGA -2.06511677
                             ## C8.A138.O3TCGA -0.19354493
                              0.06611196  0.45011157  0.64028280  1.17056798
                    NP_116162 NP_001155251 NP_006288 NP_002824 NP_001013012
## AO.A12D.O1TCGA -0.001090689
                                2.6505288 -0.6144682 -0.5077938
                                                                 1.4009150
## C8.A131.O1TCGA -0.215477911
                                1.8853723 -1.2153045 0.7843487
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## AO.A12B.O1TCGA -0.892631853
                               0.4099609 1.1832021 -0.4685963
                                                                 1.2053739
## BH.A18Q.02TCGA 0.028071560
                              2.6441602 -0.3231935 0.8811439
                                                                -0.4938080
                              -0.4973395 0.8638061 0.0766376
## C8.A130.02TCGA 0.093036946
                                                                -0.7400497
## C8.A138.O3TCGA -0.742115801
                               -0.3581162 1.5033676 0.4208545
                                                                -1.1444011
                  NP 000496 NP 001830
                                       NP 004359 NP 002341 NP 001104567
## AO.A12D.O1TCGA 1.0618430 1.5761658
                                      1.87713981 -0.3439725
                                                             -0.3439725
## C8.A131.O1TCGA -0.7983728 1.6505952 2.31849555 2.2092028
                                                              2.2092028
## AO.A12B.01TCGA -1.1476074 -2.1481095 -2.50008670 -2.2561970
                                                             -2.2561970
## BH.A18Q.O2TCGA 0.6904572 -0.8283462
                                      1.14877448 2.6575417
                                                              2.6909955
## C8.A130.02TCGA 0.7260516 -0.1463935
                                      0.02743957 -0.7072511
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## C8.A138.O3TCGA -2.0660002 1.1193680
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                                                  NP_057712 NP_567823
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## C8.A131.O1TCGA 2.9094862 -0.4543029
                                      -0.45430289 0.91388087 0.5900504
## AO.A12B.O1TCGA -2.0372506 -0.5628265
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## BH.A18Q.02TCGA 1.8546501
                           0.8209271
                                      -1.83865152 -0.15257906 -0.1927236
## C8.A130.02TCGA -0.4940596
                           1.0212398
                                       0.03727918 0.49974069 0.3619862
## C8.A138.O3TCGA -0.9908013 1.1449680
                                       0.17582613 -0.01434511 0.2379975
                  NP_055496 NP_004690
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## AO.A12D.O1TCGA 0.10558366 -0.7516209
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## C8.A131.O1TCGA -0.82266005 -0.6000266 -1.0979160 0.6305292
                                                             0.15287925
## AO.A12B.01TCGA 0.69542268 -1.1115783 -0.1277051 -0.5157114
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## BH.A18Q.02TCGA 0.08494305 -1.7516716 -1.4338603 -0.2295228
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## C8.A130.O2TCGA 0.98188141 0.7326114 0.4177440 0.1094363
                                                             0.19799275
## C8.A138.O3TCGA
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                                                             NP 001177
## AO.A12D.O1TCGA
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                                       1.7514165 0.7532493
                                                             1.4923502
## C8.A131.O1TCGA
                  -0.4785902 1.2741423
                                        1.0515088 0.4929013
                                                             1.8165583
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                  -5.0602542 -2.7519408 0.4462443 -0.8216554
                                                             0.6436218
## C8.A130.02TCGA
                  -1.6288942 -0.6908517
                                        ## C8.A138.O3TCGA
                  -1.1992582 -3.5837129 0.6293114 0.6256542 0.3111403
                  NP_001738 NP_001185702
                                          NP_001803 NP_060401
## AO.A12D.O1TCGA -0.31730394
                            1.07327239 -0.14205322 -1.2621339
                                                              1.88475940
## C8.A131.O1TCGA 1.39557870
                            0.78030080 0.05977799 0.9705512 -0.74170243
## AO.A12B.O1TCGA -1.90976276
                            ## BH.A18Q.02TCGA -0.03883608
                              0.03476232 -0.45366343 1.6271641 0.05483462
## C8.A130.O2TCGA -0.04799742 -0.12343440 0.14551485 -0.8318861 -0.41534273
## C8.A138.O3TCGA 0.57079716
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                                                              0.34039739
##
                  NP_056210 NP_001138765
                                        NP_006550 NP_006549
                                                               NP 689901
## AO.A12D.O1TCGA -0.1611022
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## C8.A131.O1TCGA 0.3390818
                           -0.74170243 -0.30857917 1.5777333 -1.31650152
## AO.A12B.O1TCGA 0.6871083
                            -0.41870982 -0.31893676 -1.1891796 -2.79663440
                            0.05483462 0.01469003 0.8443447 1.19895521
## BH.A18Q.02TCGA -0.9521253
## C8.A130.02TCGA -0.4776602
                            ## C8.A138.O3TCGA 0.4427973
                             0.34039739 -0.07651647 -0.7201730 -0.03628794
                  NP 079359
                           NP_003829 NP_001106279 NP_006491 NP_000511
## AO.A12D.O1TCGA -1.0259264 -0.1458630
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## C8.A131.O1TCGA -0.5069253 -1.9317794
                                      -0.75384607 0.7317262
                                                            1.7194092
## AO.A12B.O1TCGA -1.0034908 0.7203659
                                       0.92268354 -1.3582395
                                                             1.3633479
## BH.A18Q.02TCGA -0.7848562 -0.4971534
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                                                             1.5201119
## C8.A130.02TCGA 1.2475508 -0.5662167
                                      -0.85484516 -0.6449335 0.5751777
## C8.A138.O3TCGA 0.6073686 -1.4808579 -1.48085791 -0.5921731 -1.0200584
                 NP 001124437 NP 001165415 NP 001165416 NP 001107579 NP 055291
##
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## AO.A12D.O1TCGA
                    1.9380966
                                 2.1552551
                                             1.343768
                                                         1.14184876 1.09613118
## C8.A131.O1TCGA
                    1.4522490
                                 1.5129672
                                              1.270094
                                                         2.28611250 2.17277184
                                                        -0.31339381 -0.52956877
## AO.A12B.O1TCGA
                   -1.2196658
                                -1.5882718
                                              -1.164236
                    1.2223729
                                               1.744252
                                                        -0.99561529 -1.01568758
## BH.A18Q.02TCGA
                                 1.2257183
## C8.A130.02TCGA
                   -0.7170907
                                -0.6744524
                                              -1.022118
                                                        -0.77284843 -0.93684188
## C8.A138.O3TCGA
                                               1.108397 -0.08017361 -0.08017361
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                                0.1355976
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                 NP 001244892
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                      -0.6162181 -0.36120162
## AO.A12B.O1TCGA
                   -0.2718217 0.04135484 2.4054221
                                                      -2.2894547 0.04689779
## BH.A18Q.02TCGA
                   -1.1628844 0.02807156 0.4529351
                                                       0.2154129 -0.14254291
                   -0.9302821 0.79820875 -0.5727764
## C8.A130.02TCGA
                                                       2.5266996 -0.22511033
## C8.A138.O3TCGA
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                                                       1.8983387 0.47205440
                              NP_078988 NP_001034813
##
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                                                      NP_056123 NP_060579
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## AO.A12D.O1TCGA -1.174509
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## C8.A131.O1TCGA 1.824654 -0.009035984
                                          -0.2357173 0.15287925
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## AO.A12B.O1TCGA -2.414171
                            2.050673404
                                          2.0257301 0.10232727 -0.5572835
## BH.A18Q.02TCGA -2.658270 0.559987276
                                          -2.6883785 -0.94877994 -0.2797036
## C8.A130.02TCGA 2.461102 -0.070956497
                                          -2.9506814 -0.50389919 1.5525786
## C8.A138.O3TCGA -1.049315 0.464740124
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##
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                                            1.2104251 0.326552 -0.7325719
## AO.A12D.O1TCGA
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                                            -0.3612016 3.419519 4.8281817
## C8.A131.O1TCGA
                    0.2864593
                                -0.3612016
## AO.A12B.O1TCGA
                    1.3633479
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                                             0.9947419 -1.796132 -1.7129881
## BH.A18Q.02TCGA
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                                 2.0553730
                                             1.4565496 3.426980 -5.1673065
## C8.A130.02TCGA
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                                -1.1926716
                                            -1.1041152 -1.396024 -2.3045472
## C8.A138.O3TCGA
                                             0.1721690 -1.495486 0.0514834
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                 XP_003960990
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                                      NA 1.0389842
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                   -0.2856791
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                 1.1376537 -0.81525858 -0.658001600
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                   NP 001074
                               NP 246273
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## C8.A131.O1TCGA -0.60002660 -0.37739315 -0.24786096
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## AO.A12B.01TCGA -1.13097861 -0.79008732 -0.45473898
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## BH.A18Q.02TCGA -0.23621361 -0.37002888 -1.31677195
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## C8.A130.02TCGA -1.47474037 -1.54033775 0.10287655
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                                                                  -0.10047532
## C8.A138.O3TCGA -2.33297134 -2.33297134 -0.08748789
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                                                                  -1.64542918
                 NP_001096654 NP_001264242 NP_005882
                                                        NP_003791
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## AO.A12D.O1TCGA
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                    0.1002568
## C8.A131.O1TCGA
                                -0.5069253 0.03953859 -0.15880758 0.65076861
## AO.A12B.O1TCGA
                    1.1887450
                               1.2774322 0.89496880 0.14944232 -0.28290760
## BH.A18Q.02TCGA
                    0.1418145
                               0.1618868 -0.26632204 1.57698336 0.02472618
## C8.A130.02TCGA
                   -1.1270743
                                -1.1926716 -1.68793185 -0.57277643 0.48006147
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## C8.A138.O3TCGA
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                               -0.5409731 -0.30325910 -0.01068797 -0.34714477
##
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## AO.A12D.01TCGA 0.04081709 -0.5649408
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## C8.A131.O1TCGA -0.30048341
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                            1.9865693
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## AO.A12B.O1TCGA 1.30237546 -1.9457919
                                         -4.883554
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## BH.A18Q.02TCGA -0.58078794 0.5967865
                                         -1.989194
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## C8.A130.02TCGA -0.41862260 1.9133642
                                         -1.806007
                                                      -1.760089 -1.806007
## C8.A138.O3TCGA 0.62199711 -2.6913710
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                                                      -4.706455 -4.706455
##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                       1.0393652 0.4888534
## AO.A12B.O1TCGA
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                                         1.8479593
## BH.A18Q.02TCGA
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                                -4.233945
                                                      -0.7313301 -0.4804265
## C8.A130.02TCGA
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                                -1.245150 0.6440549
                                                       0.7260516 -0.4547012
                   -4.706455
## C8.A138.O3TCGA
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##
                   NP_443157
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                 ## AO.A12B.O1TCGA -0.35496592 -0.04456085
                                       1.7153251 0.48756214 -0.2247066
## BH.A18Q.02TCGA 0.87110779 -0.47708110 0.2087222 -0.04887222 -0.6410048
## C8.A130.O2TCGA 0.48006147 -0.94340161 -0.3989434 -1.08115611 1.1753937
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                                                    NP_002606 NP_002755
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## C8.A131.O1TCGA -0.06165844
                            -8.877943 0.12049621 -1.58366166 -0.4704944
## AO.A12B.O1TCGA -0.28013613
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## AO.A12B.01TCGA -0.5794553 -1.0034908 1.6626671 0.83122490 1.0390854
## BH.A18Q.O2TCGA -0.5004988 -0.4737357 -1.0290691 -0.91867151 -1.4907318
## C8.A130.O2TCGA 0.3357472 1.3229878 -0.4284622 -0.10703506
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA -0.8427453
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## BH.A18Q.02TCGA -0.2830490
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## C8.A130.O2TCGA 1.3361072 -2.2783082 0.9950009 -2.0815161
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## AO.A12D.O1TCGA -0.2601570 -1.018307
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## C8.A131.O1TCGA -0.4340635 -0.381441 0.65481649 0.7195826 -4.0569169
## AO.A12B.O1TCGA 0.1411279 2.161532 -1.60767211 -1.1697792 -2.1287092
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## C8.A131.01TCGA 0.4686140 -0.69717574 -0.68098422 0.38765635 -1.4015070
## AO.A12B.01TCGA -1.1725507 0.06352663 -0.59054120 0.05798369 0.4875621
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## C8.A130.O2TCGA 1.4837013 -0.33006614 0.15863432 0.33246737 -0.1267143
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## AO.A12B.O1TCGA -0.05564674 -2.17582426 -4.7200373
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## BH.A18Q.02TCGA -0.45700881 -0.18268750 4.8654937
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## C8.A130.O2TCGA 0.77196980 0.64733478 3.2941890
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## AO.A12B.O1TCGA 0.7231374 0.6760224
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## BH.A18Q.02TCGA -1.3134266 -1.3134266
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## BH.A18Q.02TCGA
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## BH.A18Q.02TCGA -0.363338118 -0.7647839 -1.4706595
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 0.4321830 1.4077223 -0.4421592 -0.3085792 0.2540763
## AO.A12B.O1TCGA 0.6898797 0.9642556 -0.1720486 0.1965574 0.4543045
## BH.A18Q.02TCGA 1.5769834 1.0283407 -0.7748201 -0.8919085 -0.7580932
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## C8.A131.O1TCGA -0.3409622 -0.4340635 1.17294525 -0.3288186 0.5414758
## AO.A12B.01TCGA -0.8288880 0.1411279 -1.92916308 0.4071894 -1.5993577
## BH.A18Q.O2TCGA -0.7848562 -0.2061052 1.57029260 0.7774371 0.5700234
## C8.A130.O2TCGA -0.5858959 -0.3038272 -0.62197447 1.2344313 -0.9729204
## C8.A138.O3TCGA -0.4641732 -2.3805141 -0.03994508 0.4537687 -0.1606307
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## AO.A12D.01TCGA -0.2639668 1.5685462 1.5952147 0.1132033
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## C8.A131.O1TCGA -1.0412456 0.9786470 1.0191258 -0.9643359
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## AO.A12B.01TCGA 0.6760224 -0.3494230 -0.3688233 -2.0206217
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## BH.A18Q.02TCGA -0.6945309 0.1786137 0.1853045 2.5337626
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## C8.A130.O2TCGA -1.2746684 -0.2185506 -0.2185506 0.4407030
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## C8.A138.O3TCGA 1.7227960 -0.3983447 -0.6726302 -0.9615442
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                 NP 115706 NP 001171867
                                       NP 065960 NP 060894 NP 444504
## AO.A12D.01TCGA 0.3798891 -1.003067607 -1.10593216 0.5056125 -0.2296786
## C8.A131.01TCGA 0.7114868 -0.000940222 -0.02522751 -1.5958053 -1.0857723
## AO.A12B.O1TCGA 0.4404471 -0.366051816 -0.24410697 0.1244991 -0.7817729
## BH.A18Q.02TCGA 1.1855737 -2.577980910 -2.61812549 -0.2094506 -0.8116193
## C8.A130.O2TCGA -0.3825440 -1.346825486 -1.40914300 -1.0877158 -0.3267863
## C8.A138.O3TCGA -0.3837162 0.581768577 0.51959721 -1.3272581 -0.6250873
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## AO.A12D.O1TCGA 0.29988337 0.41417731 -1.15164973 0.398938118 0.04081709
## C8.A131.01TCGA -0.49882958 -0.77408548 0.73172623 -0.004988103
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## AO.A12B.01TCGA 3.45303919 1.95921477 -0.03624642 -0.826116480
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## BH.A18Q.02TCGA 0.87445317 -0.06559913 0.19534065 -0.406828082 0.96477848
## C8.A138.O3TCGA -0.00337369 0.50862579 -2.66211386 -0.065545055 -0.08017361
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## C8.A131.O1TCGA -0.2923876 -0.7093194 -0.77003760 0.4159915
## AO.A12B.O1TCGA 0.8007387 -1.4607840 2.54953870 -3.5532468 -0.66259952
## BH.A18Q.02TCGA -0.1325068 1.1588106 -0.41351885 -4.8595313
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## C8.A130.O2TCGA 1.7788895 -0.3103869 0.09303695 -2.9113229
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## C8.A138.O3TCGA -0.4239447 -0.4970875 -0.34348763
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                 NP 006704
                            NP 057195 NP 064575
                                                 NP 114415 NP 001139632
## AO.A12D.01TCGA -3.9709004 -0.83162669 0.1132033 -0.07728665
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## C8.A131.O1TCGA -2.7656429 -0.19928639 -1.0614850
                                                0.55766735
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## AO.A12B.01TCGA 1.6488097 -0.07504706 -1.9762781
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## BH.A18Q.02TCGA -0.7246394 -0.42355499 0.3893728
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## C8.A130.02TCGA -1.0549172 0.26687000
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                                                           3.251550665
## C8.A138.O3TCGA -4.0298839 0.02954056
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                 NP_570602
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## AO.A12D.O1TCGA -0.8697247 -1.52881975
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                                                  0.21987760
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## C8.A131.O1TCGA -0.3531059 -0.81051641 -0.000940222 -0.48668593 -0.25190884
## AO.A12B.O1TCGA -1.2168943 -0.02238906 -2.308855003
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## C8.A130.02TCGA 0.8506867 1.63457531 -1.012278862 -0.30382719
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## C8.A138.O3TCGA -2.0184574 -0.01434511 0.691482752 0.07708337
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                NP 001099026 NP 055752
                                       NP 060873 NP 438171
                                                              NP 002442
## AO.A12D.O1TCGA
                  -0.1191944 1.5075894 -0.23729818 0.0217681 -0.07347685
## C8.A131.O1TCGA
                   0.8531627 0.1852623 0.45242244 -0.8226600 0.07596952
## AO.A12B.O1TCGA
                  -1.4219834 -0.5406547 0.62059288 -0.5461976 0.39610350
## BH.A18Q.02TCGA
                  1.3193890 -0.5807879 0.02807156 -2.8021215 2.32969428
                  -0.7564491 0.7621302 -0.40550312 -1.2877878 -1.03195807
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  -1.2724010 0.9767396 -0.06920219 0.5488543 -1.12977255
                  NP_006107
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## AO.A12D.O1TCGA
                 ## C8.A131.O1TCGA
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## AO.A12B.O1TCGA -0.29399349 -0.77900142 1.6016946 1.5961517 1.02522807
## BH.A18Q.02TCGA
                 ## C8.A130.02TCGA
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                 0.07708337 -0.79331575 0.7353684 1.6679389 -0.04360222
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                                                                 NP 006828
## AO.A12D.O1TCGA
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                              0.3303618 -0.16491201
                                                     0.1017739 -0.60303880
                  -0.2842919
## C8.A131.O1TCGA
                              -0.3814410 -0.02927539
                                                      0.1366877 -0.01308386
## AO.A12B.O1TCGA
                   1.5795228
                              0.3767032 -1.23352314
                                                      0.1716141
                                                                0.83676785
## BH.A18Q.O2TCGA
                  -2.4943464
                              0.9513970 -0.75809318
                                                      0.5399150 0.10501534
## C8.A130.02TCGA
                   0.3127882
                              0.7293315 0.27998947
                                                      0.8244477 0.69981269
## C8.A138.O3TCGA
                   1.6679389
                               1.0608538 0.22336894
                                                     -0.5556017 -0.38371616
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.01TCGA 0.52081982 -0.73742932 -1.1254357 -0.1166192
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## BH.A18Q.O2TCGA -0.32653892 0.05483462 0.7540194 -0.1224706
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## C8.A130.02TCGA -0.04143768 0.24719078
                                      1.3459469 -1.6059351
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                 NP_892023
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## AD.A12D.O1TCGA 0.2046384 -0.40873909 -0.5039840 -7.742601 -0.1496728
## C8.A131.O1TCGA 0.3269381 -0.43001560 0.1043047 -8.404341 0.3957521
## AO.A12B.O1TCGA -0.7014002 -1.89590540 -1.6326154 -7.131220 -0.2468784
## BH.A18Q.02TCGA -0.1793421 -0.02879993 0.5599873
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NA -1.6551332
## C8.A130.02TCGA -1.2418697 -1.29762745 -1.2976275
## C8.A138.O3TCGA 0.9438254 0.44279729 0.1429119 4.626564 1.0864538
                 NP 001070957
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                                                      NP 006487 NP 002060
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   0.3957521 -1.25578331 1.9298990 1.11222703
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## AO.A12B.O1TCGA
                  -0.2468784 -1.01180523 -1.3277533 -1.23906609 -1.2390661
## BH.A18Q.O2TCGA
                   -0.1358522 -0.02879993 0.2756298 -0.08567142 0.5098065
## C8.A130.02TCGA
                   -1.6321741 -1.46162090 -1.4747404 -1.26482876 -1.5403377
## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.4138241 1.3874829
## AO.A12B.O1TCGA -0.6847713 -1.3000385
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## BH.A18Q.02TCGA 0.5064612 0.5733688
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## C8.A130.02TCGA -0.6285342 -1.5075391
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## C8.A138.O3TCGA -0.2264592 1.7630245
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## AO.A12D.O1TCGA 0.1093935
                             0.1093935 -1.3383298 -1.18593792 -2.222203
## C8.A131.O1TCGA -0.4623986
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## AO.A12B.O1TCGA 0.3794747
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## BH.A18Q.02TCGA -1.7014909
                             -1.8085431 0.9380154 0.86776241 -2.798776
## C8.A130.02TCGA -1.4878598
                             -1.4911397 -0.3563051 0.32262777 -1.897843
## C8.A138.O3TCGA 0.5488543
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## AO.A12D.O1TCGA -0.5306526
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## C8.A131.O1TCGA -0.1830949 2.4925544 2.010857 2.237538 3.0714014 8.1636356
## AO.A12B.01TCGA -0.1304765 -1.1337501 -2.411400 -1.920849 -0.2690502 -0.7679155
## BH.A18Q.O2TCGA 0.6536580 0.9112524 6.116667 6.367570 4.4138672 -5.2174872
## C8.A130.O2TCGA -1.6321741 -0.2743084 -1.022118 -0.484220 -0.6055751 -4.5742165
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## AO.A12B.01TCGA -3.539389 -1.99013551 -0.45473898 -0.5461976
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## BH.A18Q.02TCGA -5.455009 -0.54064336 -1.76839850 0.2589029
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## C8.A130.O2TCGA -2.826046 0.36198619 -1.25498916 -0.2480694 -0.3661447
## C8.A138.O3TCGA -6.487481 0.00028345 2.54565231 0.2343404 0.9255397
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                    0.4103675 1.0504136 0.9551686 -0.01252008 1.4390130
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   3.1038335 1.4354062 1.9703007 2.51350954 -1.2002655
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 1.313290
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## C8.A131.O1TCGA -1.081724
                             1.0231737 -0.4543029 -0.57169143
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## AO.A12B.O1TCGA -1.200265
                            -1.5522426 0.6399932 0.70928005
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## BH.A18Q.O2TCGA 1.372915
                             1.5669472 -0.5272618 0.04479847 0.007999269
## C8.A130.02TCGA -1.523938
                             -0.7203705 -1.2057911 -1.10739506 -0.936841878
## C8.A138.O3TCGA -1.440629
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                  NP_002906 NP_005350 NP_006308
                                                 NP_006532 NP_062539
## AO.A12D.01TCGA -0.8011483 -0.1953904 1.797134 -0.77066992 1.5342580
## C8.A131.O1TCGA 0.3066987 0.7519656 2.415645 -0.44620712 1.7072655
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## AO.A12B.01TCGA -0.1415624 0.4931051 1.105601 -0.65705657 2.4303653
## BH.A18Q.O2TCGA 1.0417223 0.3960636 -3.297238 -0.02545455 -0.9956153
## C8.A130.O2TCGA 0.1979927 0.1422350 1.769050
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## C8.A138.O3TCGA -0.1716021 -0.2045163 2.044624
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                                      NP 689588 NP 065952
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## C8.A131.O1TCGA -2.0086892 -3.5630754
                                            NA
                                                1.0231737 -0.094041483
## AO.A12B.O1TCGA -4.9001831 -7.2199067
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## BH.A18Q.O2TCGA 0.5164973 0.4629712 -1.8687600 -0.6309687
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## C8.A130.02TCGA -0.7531692 -1.1172347 0.0766376 -0.8810841
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## BH.A18Q.O2TCGA 1.4364773 -0.1124345 -1.6446194 -1.8587238
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## AO.A12D.01TCGA -0.309684341 -0.9154422 2.17811386 -3.8070791 3.8048977
## C8.A131.O1TCGA 0.003107659 -0.9562401 -0.05356267 -1.3488846 -0.1426161
## AO.A12B.O1TCGA 0.567934880 0.7342233 -1.87650508 -2.7772341 1.2552604
## BH.A18Q.02TCGA -0.477081101 -1.0357599 0.13846916 1.1119753 -2.0895552
## C8.A130.O2TCGA -1.245149551 -1.9995194 0.51941990 -3.3541052 1.8969648
## C8.A138.O3TCGA 1.678910327 -1.9050861 -1.91240033 -0.2886305 2.6187951
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                                                   1.0474609
                                                              1.0110300
                   0.8201390 3.0123748 2.6243685
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## BH.A18Q.02TCGA
                  -0.1391975 1.0015777 -0.3031212
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## C8.A130.02TCGA
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                                                   -0.1004753
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -1.3569165 0.37264589 -3.7421738 0.6737303 -0.065599132
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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                                         1.01231562 3.45820604 0.17035023
## C8.A131.O1TCGA
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                                        -1.12625112 -0.17095122 0.57790675
## AO.A12B.O1TCGA
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                                         1.07511460 -0.92866101 -0.30507939
                  0.01134465 -0.37671964
                                        -0.09236219 -0.12916139 0.38268204
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                 -0.50061932 0.33902711
                                         ## C8.A138.O3TCGA
                 -0.37274474 0.37331164
                                         -0.30325910 -2.81937085 -0.06554506
                  NP_006127 NP_001071168 NP_078888 NP_006409
                                                            NP 006065
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                                                             0.4484655
                             -0.1345203 -1.0857723 4.577213
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                 0.14181454
                              ## C8.A130.02TCGA 0.07991747
                              0.3882251 1.9855213 -1.012279 -0.6875718
## C8.A138.O3TCGA -0.63971590
                            -0.1386878 -0.4495447 -4.366341 -0.4129733
                  NP 065970 NP 001018146 NP 001018148 NP 937818 XP 003960919
##
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## AO.A12D.O1TCGA 0.01033871
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                                                                 -1.3345200
                                                                 -0.7781334
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                                          -1.0048147 -1.3772197
## AO.A12B.O1TCGA -0.09999032
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                                                                  0.8783400
## BH.A18Q.02TCGA -1.08928598
                              -0.5071895
                                          -0.7948924 -0.7279847
                                                                 -0.7179486
## C8.A130.02TCGA -1.18611191
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                                           0.7654101 1.1753937
                                                                  0.6374952
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                                          -1.5905721 -1.2980010
                                                                 -1.3748009
                 NP 004628
                           NP 116189 NP 006138 NP 075392 NP 001070254
                                                            0.24654619
## AO.A12D.O1TCGA 2.9934107
                            3.8620447 1.3399583 0.9132609
## C8.A131.O1TCGA 0.4767097
                            1.7477443 -1.0331499
                                                0.3390818
                                                            0.00715554
## AO.A12B.O1TCGA -2.2534255 -0.3965380 -0.2967650
                                                1.3550335
                                                            0.47647624
## BH.A18Q.O2TCGA 0.7908186
                           0.7473287 2.1356621 -0.6878402
                                                            0.28566596
## C8.A130.02TCGA
                 0.4472628 -0.2415097 -0.7138108 -0.4514213
                                                            0.21439209
  C8.A138.O3TCGA
                 1.1047395 -0.1057736  0.8670254 -0.0326308
                                                           -0.81525858
                  NP_005056 NP_065701 NP_775818 NP_060825
                                                             NP 031396
##
## AO.A12D.01TCGA 3.34010230 0.6199064 -1.1287909
                                                        NA -1.50215117
## C8.A131.O1TCGA -0.07784996 4.0064619 -0.9036177
                                                        NA -0.77813336
## AO.A12B.O1TCGA -1.44415515 -1.4940417 -0.1027618
                                                        NA -0.14987685
## BH.A18Q.O2TCGA -0.85176387 -2.0193021 0.8878347 -5.7962383 0.52987884
## C8.A130.O2TCGA -1.29434758  0.7949289  0.3226278  2.5529386 -0.07751624
## C8.A138.O3TCGA 1.48873909 0.3330831 -0.4568589 -0.5738874 -0.51903031
##
                NP 001123584
                              NP_073745 NP_001003722
                                                      NP 056473
                                                                  NP 006187
## AO.A12D.O1TCGA
                  -1.7764566 0.12844245
                                          0.17796982 -0.66780537 -0.41635869
## C8.A131.O1TCGA
                  -0.8348037 0.49694913
                                          0.31479449 -0.56764355 0.01525130
## AO.A12B.O1TCGA
                  -0.1027618 -0.48245372
                                        -0.42148129 -1.21412282 0.09124137
## BH.A18Q.02TCGA
                   0.7674010 0.52318807
                                          ## C8.A130.02TCGA
                  -0.2054311 0.35214659
                                          0.02087983 0.68997308 0.50958029
## C8.A138.O3TCGA
                  -0.6982301 -0.09845931
                                          0.11731190 -1.25045815 -0.55560170
                                                               NP_821068
                  NP_065389
                              NP_127501
                                          NP_004286 NP_996667
## C8.A131.O1TCGA 0.01120342 0.95435968 -0.004988103 -2.3729984 -0.92385707
## AO.A12B.O1TCGA -0.06950411 -0.03624642 -0.698628681 2.8682582 -0.03347495
## BH.A18Q.02TCGA -2.47761945 -0.48377187 -1.139466709 -3.1600774 -1.09263136
  C8.A130.02TCGA 0.54893872 1.06715800 0.148794717 -0.6908517 -1.96344083
                 C8.A138.O3TCGA
                 NP 065751 NP 005158 NP 000150
                                                 NP 839946 NP 001875
## AD.A12D.01TCGA -2.6793788 -1.7040705 -0.1839610 1.66379111 0.6160966
## C8.A131.01TCGA -3.5185487 -1.1829215 -0.3692974 -2.76969078 -0.3935847
## AD.A12B.O1TCGA -0.3605089 -0.3771377 3.0206893 -3.26224202 -0.8482883
## BH.A18Q.02TCGA -2.8054669 -0.8785269 0.1685776 5.76874683
                                                            4.9625098
## C8.A130.02TCGA -2.1864719 -1.5272183 1.9396031
                                                0.98844115 0.6735737
  C8.A138.O3TCGA 0.9877110 0.4427973 -2.0074860 0.06976909 -1.0895440
                 NP 075378 NP 001013455 NP 001649 NP 001650 NP 001651
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## AO.A12D.O1TCGA -1.7269293
                            -0.3973097 0.8637335
                                                  0.8370649
                                                             1.5037796
## C8.A131.O1TCGA -0.4583508
                            -0.4907338 0.3107466
                                                  0.3107466
                                                             0.6467207
## AO.A12B.O1TCGA -2.9518369
                            -0.1637342 0.6843368 0.7037371
                                                             0.6510791
## BH.A18Q.02TCGA 7.7391767
                              0.1317784 -1.2900089 -1.3033904 -1.6111656
## C8.A130.02TCGA 1.6378552
                              0.3587063 -0.6088550 -0.6088550 -1.0221185
## C8.A138.O3TCGA -2.2305714
                              0.3623402 0.6402828 0.6402828
                                                            0.9365111
                 NP_001653 NP_057660 NP_006868
                                                 NP_004044
                                                            NP_848018
## AO.A12D.01TCGA 0.2351168 -0.5077938 -1.9478976 0.04081709
                                                            0.8713531
## C8.A131.O1TCGA 0.2419326 -1.4743689 -0.9117134 -0.89956979
                                                            0.9098330
## AO.A12B.01TCGA 0.7453092 0.5596205 1.4021485 -1.56610000 -1.3637824
## BH.A18Q.O2TCGA -1.5108041 -1.2665912 -2.0293383 -0.16596059
                                                            0.8409994
## C8.A130.O2TCGA -0.1857519 -0.3366259 -0.9466815 0.68013347 0.2570304
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## C8.A138.O3TCGA 0.1794833 1.4485106 -0.9578870 -0.50805889 -0.2118306
##
                  NP 777568
                              NP 003894 NP 068806
                                                     NP 037453 NP 055886
## AO.A12D.O1TCGA
                  0.4027479 -0.01632988 0.7570591 -0.36683131
## C8.A131.O1TCGA
                             0.10025680 -0.2519088
                  0.9624554
                                                    0.86125842
                                                                1.2498550
## AO.A12B.O1TCGA -1.3637824
                             0.32404518
                                         1.7458113
                                                    0.03858337 -1.1697792
## BH.A18Q.O2TCGA 0.8978708
                            0.23213985
                                        0.6469672
                                                    0.31242902 1.8981400
  C8.A130.02TCGA 0.2570304 -0.47110050 -1.0450776
                                                    0.14879472 -0.6908517
## C8.A138.O3TCGA -0.6543445
                             0.10999762 1.1303395 -0.36177333 -1.4516008
##
                   NP 006076
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  AO.A12D.O1TCGA -0.6982838
                             4.5211397 -0.3401627
                                                    -0.3401627
                                                                  0.2732148
## C8.A131.O1TCGA -0.6121702 -0.4097762 -0.2154779
                                                    -0.2154779
                                                                  1.7315528
## AO.A12B.01TCGA 1.0778861 -1.8127612 -0.5849983
                                                    -0.5849983
                                                                  0.2381295
  BH.A18Q.02TCGA 0.2020314 3.0890960 0.2957021
                                                     0.4395535
                                                                 -0.1693060
  C8.A130.02TCGA -0.8023673 -1.7338500 -0.7630088
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                                                                  0.7097684
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## AO.A12D.O1TCGA 0.3113128
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## C8.A131.O1TCGA
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                                                                   -0.4138241
## AO.A12B.O1TCGA -1.4884987
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                                            1.6488097 -2.4141710
                                                                    1.4160059
## BH.A18Q.02TCGA -1.2799727
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                                                                    -1.2465189
  C8.A130.02TCGA 0.2603103
                               1.9396031
                                            1.9396031 -0.7990874
                                                                    0.3685459
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                              -0.3178877
                                           -0.4239447 -1.4077151
                                                                    -0.5629160
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##
                                                               NP_258261
## AD.A12D.01TCGA 0.2084482 -2.0736209 -2.3098284 1.1342292
                                                              0.73039056
## C8.A131.01TCGA 0.7155347 -2.0572637 -2.0653595 -0.1790470 -1.34483669
## AO.A12B.O1TCGA -0.4824537 -0.2330211 -0.3050794 -1.3471536
                                                              0.08015548
                  0.9079070 3.9287868 3.7213731 -0.7112578
## BH.A18Q.02TCGA
                                                                      NA
  C8.A130.02TCGA 0.2176720 -0.6449335 -0.6744524 -0.4055031
                                                                      NA
   C8.A138.O3TCGA -0.6982301
                             2.2347955
                                       2.3189097 1.1413109
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                             NP_{689473}
##
                  NP_653232
                                         NP_079055
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## AO.A12D.O1TCGA
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                             0.2351168 -0.27539616
                                                   0.09796406
                                                                 0.12082285
## C8.A131.O1TCGA
                         NΑ
                             0.7114868 -1.30840576 -0.83075581
                                                                -0.75789396
                         NA
                            -0.3383371 -1.10049239
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  AO.A12B.O1TCGA
                                                                 0.06075516
## BH.A18Q.02TCGA -7.8536481
                             0.6101680 -0.83503696
                                                    0.20537680
                                                                 0.12508763
                  2.7267716
                             0.5587783 -0.79252765
  C8.A130.02TCGA
                                                    1.13931512
                                                                 1.34922672
  C8.A138.O3TCGA
                  0.9255397 -0.5921731 0.09902621 -0.31057338
                                                                -0.25937343
##
                   NP 001887 NP 001091990
                                            NP 001350 NP 055623 NP 066953
## AO.A12D.O1TCGA 0.48656348
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## C8.A131.O1TCGA
                  0.16907078
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## AO.A12B.O1TCGA -1.64924422
                                0.1272705 1.60723758 0.2048718
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## BH.A18Q.02TCGA 0.53991499
                               -0.6610771 -0.04218146 -1.7282539 -0.1425429
## C8.A130.02TCGA -0.01191886
                               -0.6580530 -0.35630509 -0.6580530 0.9458029
  C8.A138.O3TCGA -0.12405928
                               -1.3236009 -0.69823013 -0.4861161 -0.8189157
##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                 0.1300420
                                             1.09451492
                                                         -4.02716881
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## BH.A18Q.02TCGA
                   0.11505149
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                                             0.15854145
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                                                                       -7.1812264
## C8.A130.02TCGA
                   1.25083066
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                                             1.34594685
                                                          1.70017269
                                                                        1.7756097
                                                         -0.03628794
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                   -2.61457105
                                 -0.6982301
                                            -2.61457105
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                 XP_001718975 XP_003960166
##
                                            NP_036277
                                                        NP_064715 NP_689481
## AO.A12D.O1TCGA
                  -0.08871605
                                 2.0866787 -1.4564336 0.36084014 -0.7249523
## C8.A131.O1TCGA
                   0.46456609
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## AO.A12B.O1TCGA
                   1.68483885
                                -4.1324848 2.0174157 -0.05564674 0.9476268
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## BH.A18Q.02TCGA
                  0.52318807
                               -5.9701981 -0.1492337 -1.03910525 -0.8250008
## C8.A130.02TCGA
                  0.99172102
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## C8.A138.O3TCGA
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##
                             NP_055203
                                       NP_003869 NP_000254
                 NP_078954
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## AO.A12D.O1TCGA -0.9154422 1.40091503 -1.66978229 -0.6639956
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## C8.A131.O1TCGA -0.7457503 -0.24381308 0.29455509 0.8531627
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## AO.A12B.01TCGA 0.9254550 -0.83443090 1.84558434 1.2220027 -2.53334439
## BH.A18Q.O2TCGA -0.8015831 0.07156152 0.07156152 -1.0223783 -2.67834236
## C8.A130.O2TCGA 0.4308634 0.53253937 5.36378622 0.4243037 1.61161623
## C8.A138.O3TCGA -0.4239447 -0.84451570 -5.48908244 -1.6637149 2.07388136
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                    2.3416782 -0.82888795 -0.7845444
                                                                 -0.3826807
## AO.A12B.O1TCGA
                                                    -0.5655979
## BH.A18Q.02TCGA
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                                                      0.6101680
                                                                  0.9279793
## C8.A130.02TCGA
                    0.4636621 0.30294855
                                         0.9917210
                                                     -0.5793362
                                                                 -0.4711005
## C8.A138.O3TCGA
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                                         0.1502262
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                                                                 -0.5044018
##
                NP 001076582
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                                          NP 689862 NP 065393 NP 722550
## AO.A12D.O1TCGA
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                                                    2.3419352
                                                               2.3419352
## C8.A131.O1TCGA
                  -0.8914740 0.02334706 0.55361947
                                                    0.9705512
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## AO.A12B.O1TCGA
                   0.3240452 -2.17305278 -0.03070348 -2.2478826 -2.2506541
## BH.A18Q.02TCGA
                    0.3458828 -1.58440250 1.27589899 -1.9691214 -1.8152338
                    ## C8.A130.02TCGA
## C8.A138.O3TCGA
                    0.6402828 -2.05502876 -0.07285933 0.3915973 0.3257688
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##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 1.1041313 -0.4664465 -0.2842919 -0.6324096 -0.9440965
## AO.A12B.O1TCGA -2.2506541 1.1748877 -0.1859060 0.1244991 -3.2372988
## BH.A18Q.O2TCGA -1.8152338 -0.4837719 -0.9989607 -0.3198482 -2.8589930
## C8.A130.02TCGA -0.9762003 0.2078324 -1.5009793 -0.1070351 1.3000287
## C8.A138.O3TCGA 0.3550259 1.4155963 1.9495386 -0.1057736 2.5163952
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                              0.30750296 0.36845973
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## C8.A131.O1TCGA
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                              0.45430445 -0.42425277
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                            0.4637047 -0.149672818 -0.3401627 0.3341715
## AO.A12D.O1TCGA -0.06585726
## C8.A131.O1TCGA 0.05573011 0.7155347 -0.782181241 -0.5150211 -0.4583508
## AO.A12B.O1TCGA -0.13047654 -1.6076721 2.034044560 0.1355850 0.2353580
## BH.A18Q.02TCGA 0.64696720 1.3294251 -0.155924442 -0.1994144 0.2053768
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                 -0.01961758
                                                    -2.8132632 -1.3914971
## BH.A18Q.02TCGA
                  0.41948124
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                                                      6.2103372 -3.5514870
## C8.A130.02TCGA
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                                                      0.1487947 -5.0399578
  C8.A138.O3TCGA
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##
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                                                              NP 079517
## AO.A12D.01TCGA -0.5801800 0.1703502 -0.5116036 0.6008574 -0.57256041
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## C8.A131.O1TCGA 1.5413024 1.0798440 -1.8913006
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## AO.A12B.01TCGA -1.7323884 -2.0566509 1.7513542
                                                  -1.6326154 2.17261825
## BH.A18Q.O2TCGA 0.8744532 2.1122445 -0.0722899
                                                  -1.5074587 -0.01207302
## C8.A130.O2TCGA -1.2517093 -0.6744524 -0.8318861
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## C8.A138.O3TCGA -1.2394867 -0.4568589 0.7426827
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## C8.A131.O1TCGA -0.2397652
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## BH.A18Q.02TCGA -2.1497720
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## C8.A130.02TCGA -2.5734964
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                                         1.8969648 2.6447749 2.6447749
## C8.A138.O3TCGA -4.8600545
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                    1.4482012 1.4482012
                                           0.8531627 0.18121442 0.3107466
## AO.A12B.O1TCGA
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                                           -0.3466515 0.06629811
                                                                  0.5263628
                   -1.3602619 -1.3234627
                                          -1.5509487 -3.63177620 -0.5239164
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                   -0.6121349 -0.5465375
                                           -0.4251823 -0.84828542 1.7854493
                    3.0942232 2.8455377
                                           3.2002802 1.50336765 -1.3345723
## C8.A138.O3TCGA
                  NP_009141 NP_004473 NP_001229811 NP_001245383 NP_056195
## AO.A12D.O1TCGA 3.2562867 4.0639640
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                                                    0.28083438 0.5018027
## C8.A131.O1TCGA -0.5676436 0.1690708
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## AO.A12B.O1TCGA -3.8969095 -1.2113513
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## BH.A18Q.02TCGA -3.1266235 0.1183969
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## AO.A12B.01TCGA 0.9587127 -0.21084928 1.42709178 -2.15088099
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## BH.A18Q.02TCGA -0.2094506 0.87110779 -0.71794859 -0.01207302
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## C8.A130.02TCGA -0.8220465 0.31606803 0.45710239 0.62109583
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## BH.A18Q.02TCGA -1.6278925 -1.6580009 -1.3000450 -1.1762659 -0.01876379
## C8.A130.O2TCGA -0.3202265 -0.2907077 -2.7965275 -1.4616209 -0.41534273
## C8.A138.O3TCGA 1.3314821 1.3570821 3.9499937 -1.1773154 -0.19354493
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## AO.A12D.01TCGA 0.6046672 3.6144078 -0.6106584 -0.4658861 -0.1611022
## C8.A131.01TCGA 0.3269381 -0.6445533 -0.5878830 1.2579507 -1.5715180
## AO.A12B.O1TCGA 0.3961035 -1.1032639 -3.2262129 1.2303171 0.1743856
## BH.A18Q.02TCGA -0.9688522 0.2823206 0.2053768 -0.1693060 -0.2763582
## C8.A130.O2TCGA -0.3497454 -0.1135948 1.2049125 -0.5662167 0.2012726
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## BH.A18Q.02TCGA 3.0522968 -0.4837719 0.54326037
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## C8.A130.02TCGA -0.7564491 0.9818814 0.09959668
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## BH.A18Q.O2TCGA 0.4596258 -0.9287077 -1.2063743 1.1588106 -1.1863021
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## AO.A12B.O1TCGA 1.4575780 -0.8094876
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## AO.A12B.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -5.91667201 -3.3975995 -1.5041133 0.4094451
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## C8.A130.02TCGA
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                                                               -1.58297604
                                0.3367403 3.2039374 1.7483960
## C8.A138.O3TCGA 0.775596953
                                                                0.26359747
                                                               NP_067045
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                            3.9953876 3.29438472 3.41248847 -0.17634141
## AO.A12D.O1TCGA 0.65800439
## C8.A131.O1TCGA 0.06382587 -0.1871427 -0.01308386 -0.06570632 -1.01695833
## AO.A12B.O1TCGA -0.39376656 1.0473999 -0.51848288 -0.41039540 1.46589242
## BH.A18Q.02TCGA -0.10574371 -1.5275310 -1.83865152 -1.83865152 -0.99226991
## C8.A130.O2TCGA -0.39566352 0.1783135 1.08355734 1.01140023 0.01104023
## C8.A138.O3TCGA -0.66897302 -1.4589151 -2.61091391 -2.74988520 -0.54828743
                 NP 001032208 NP 114152 NP 001137472 XP 003846541 NP 004611
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## AO.A12D.O1TCGA -0.17634141 -0.8049581
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## C8.A131.O1TCGA -0.20738215 0.4038479
                                      -0.3612016
                                                  -0.3612016 0.3836085
## AO.A12B.O1TCGA
                -0.73742932 -0.6293418
                                       -0.8427453
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## BH.A18Q.02TCGA
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                                       -1.2130651
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## C8.A130.02TCGA
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                                                  -3.3203989 0.4427973
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                            NP 060668
                                       NP 003609 NP 001257354 NP 004570
## AO.A12D.O1TCGA -1.23546530
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## C8.A131.O1TCGA -1.08172443 0.76006139
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## AO.A12B.O1TCGA 0.08015548 -0.70417163
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## BH.A18Q.02TCGA -1.19968358 -1.10935827 -0.72129398
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## C8.A130.02TCGA 0.61125623 -0.53341801
                                      0.54565885
                                                 0.54565885 0.4800615
  0.06611196 -1.1553725
##
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                                                 NP_079105 NP_001012768
## AO.A12D.01TCGA 0.7418200 2.2924078 0.052246485 -0.78971891 -0.042998469
## C8.A131.O1TCGA -0.1588076 0.8976893 0.403847871
                                                5.13986856 0.849114773
## AO.A12B.01TCGA -1.5051276 -0.4020810 -0.008531686 -0.33279413 0.820139003
## BH.A18Q.O2TCGA 0.7105295 -1.0190330 0.158541453 -1.94570374 0.151850689
## C8.A130.O2TCGA -1.7830480 -1.1664327 1.431223444 -2.49149972 -0.438301810
## C8.A138.O3TCGA 2.7833664 2.1982241 -2.234228581 -0.01434511 0.007597728
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## AO.A12D.01TCGA -0.054427864 -0.031569075 -2.016473919 -0.12681403
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## C8.A131.01TCGA 0.885545702 0.367416943 0.003107659 -0.40572832
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## AO.A12B.01TCGA 0.700965626 0.659393518 0.077384004 1.17765913
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## BH.A18Q.02TCGA 0.165232216 0.165232216 -0.403482700 -0.26632204 0.34253745
## C8.A130.O2TCGA -0.438301810 -0.418622597 -0.763008828 1.09011708 -0.22839020
  C8.A138.O3TCGA
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                                     NP_060895 NP_065733 NP_689853
## AO.A12D.O1TCGA
                ## C8.A131.O1TCGA
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                          0.3390818 1.24985499 -0.4826381 -0.5028775
                          0.4543045 -0.28845055 1.2635748 -0.1831345
## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA 0.4997704 -0.4636996 -0.09236219 -1.2632458
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                -0.58413332 -0.309812008 1.369570 -0.1927236 0.4863889
## BH.A18Q.02TCGA
                 ## C8.A130.02TCGA
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## AO.A12D.01TCGA 2.3647940 -0.3173039 -0.187770800 -0.393499900 -0.747811130
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## C8.A131.O1TCGA
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## BH.A18Q.O2TCGA -1.7483262 -0.8149647 0.004653887
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## C8.A138.O3TCGA 3.1710231 0.4062259 -0.274001988 -0.197202065 -0.588515956
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## C8.A131.O1TCGA 0.035490707 -1.2760227 -0.672888456 -0.004988103 0.16097501
## AO.A12B.O1TCGA -2.209081944 0.6427647 0.426589712 -0.155419802 0.30187339
## BH.A18Q.O2TCGA 1.861340820 -0.5607156 0.094979197 -0.149233679 -0.02545455
## C8.A130.O2TCGA 0.001200618 -0.7662887 0.788369146 0.886765212 0.78508928
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## C8.A138.O3TCGA -0.588515956 0.4537687 0.003940589 0.033197702 -0.18988779
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                   1.62716409
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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                              NP 078997
                                          NP 055979
                                                      NP 115521 NP 001093165
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA 0.3525736 -1.18630206 -4.0432582 -0.43693652
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## AO.A12B.01TCGA -1.0977209 -1.79058939 -2.29776911 -0.7180290 0.05521221
## BH.A18Q.O2TCGA 0.9647785 0.43286276 -0.80158314 0.4696620 -0.77816547
## C8.A130.O2TCGA -0.3694246 -0.06111689 -0.01519873 0.1028766 0.70309256
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12B.01TCGA -1.72684549 -1.0367485 -0.9369754 -1.7850464 -0.69308573
## BH.A18Q.O2TCGA -2.49434636 -0.3265389 0.2923567 2.4768911 -0.48711725
## C8.A130.02TCGA 0.64077505 -0.5596570 1.0540385 -1.0975555 2.10687643
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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                 -0.5372980 -1.1929928 -0.42355499 0.37599127 -0.06225375
## BH.A18Q.02TCGA
## C8.A130.02TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.01TCGA 1.44372063 -0.58222678 1.141630 1.0307710 -1.3332962
## BH.A18Q.02TCGA -2.15646279 -2.06948287 0.285666 -0.4703903
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## AO.A12B.O1TCGA -1.4192119 -2.4058566 1.24971745 -0.01407463 -0.60717004
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##
                                                           NP 002943
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## BH.A18Q.02TCGA 0.2722844 0.4696620 1.623818708 0.09832458 0.3325013
## C8.A130.02TCGA 0.6637341
                          0.6374952 -1.041797681 1.31642803 -0.1496734
## C8.A138.O3TCGA 0.4281687 0.2672546 -0.979829847 -0.13868784 0.9767396
                NP 060026 NP 001019386 NP 001009552 NP 002711
                                                            NP 002706
## AO.A12D.O1TCGA
                2.0866787
                            2.6810072
                                      -0.1039552 0.01033871 -0.20300999
                                       -0.8145643 -0.08999360 -0.90766555
## C8.A131.O1TCGA 2.6220866
                            2.8568637
                                      1.4243203 0.02195453 1.44649210
## AO.A12B.O1TCGA -1.0616918
                           -0.8566027
## BH.A18Q.O2TCGA 0.5198427
                            0.6670395
                                       -0.2429044 -0.43693652 -0.24290437
## C8.A130.02TCGA
                1.5853773
                            1.5853773
                                       0.2012726 0.01104023 0.20127262
## C8.A138.O3TCGA
                1.1376537
                            1.1376537
                                       0.0514834 -0.10943073 0.07342623
                 NP_114108 NP_078817
                                     NP_057562 NP_006088 NP_001138417
## AO.A12D.01TCGA 1.03898421 0.8675433 -0.53827223 1.8009438
                                                           1.5914049
## C8.A131.O1TCGA -0.19523851 -0.4866859 -0.07380208 1.3712914
                                                           0.7641093
## AO.A12B.O1TCGA 1.14717292 1.0363140 -0.23579254 -1.2085799
                                                          -0.5323402
## BH.A18Q.02TCGA -0.08901681 -0.2228321 0.24886676 1.3361159
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## C8.A130.O2TCGA 1.06059826 -0.3300661 0.61125623 -0.3858239
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## C8.A138.O3TCGA -0.28863055 1.2034822 0.24165463 0.8121683
                                                           0.5415400
                NP_006462 XP_373042
                                     NP_003468 NP_071414 NP_079498
## AO.A12D.O1TCGA 1.5914049
                          1.7857047 0.06367588 -6.4015516 -0.3249235
## C8.A131.01TCGA 0.7641093 1.7517922 -0.26810036 -5.0405520 -0.1628555
## AO.A12B.01TCGA -0.5323402 -0.5434261 3.63041351 -0.8178021 -0.5683694
## BH.A18Q.02TCGA 1.0484130 0.7874732 0.03810771 -5.3814109 0.3358467
## C8.A130.O2TCGA -0.2907077 -0.4809401 -1.15331322 1.0704379 0.6538945
## C8.A138.O3TCGA 0.5415400 -0.1057736 -0.70554441 1.7227960 0.9145682
                NP 000843 NP 065997
                                     NP 061820 NP 001005741 NP 001243692
## AO.A12D.O1TCGA -2.2679206 0.5132321 0.81801592
                                                0.5246615
                                                            1.8961888
## C8.A131.O1TCGA -2.2070353
                         0.7074389 -0.44215924
                                                1.8691808
                                                            0.1326398
0.9365409
                                                           -1.3610109
-0.2429044
                                                            0.6503126
## C8.A130.O2TCGA -0.7564491 1.5689779 -0.07751624
                                                 0.5981368
                                                            1.7624902
## C8.A138.O3TCGA 2.6736522 -0.5153732 0.24531177
                                                 0.6805113
                                                            0.7353684
                NP_110424 NP_006800 NP_059118 NP_057572 NP_958923
##
## AO.A12D.O1TCGA 1.0008862 0.2541658 3.2524769 0.1589208 0.1741600
## C8.A131.O1TCGA 1.0515088 -0.6040745 0.5333801 -1.5917574 -1.0614850
## BH.A18Q.02TCGA 1.0484130 0.7841279 -9.5229937 -1.3435350 -2.3304227
## C8.A130.O2TCGA 0.8506867 -0.9040432 -8.0607171 0.5882971 0.5882971
## C8.A138.O3TCGA 0.1685119 3.4050800 2.5858808 1.9787957 1.5326248
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NP 001137259 NP 694453
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                    0.4179871 -0.5268428 -0.33254313 -2.1726756 -2.0088543
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                   -0.2883398 -0.6728885 3.69072719 -1.3084058 2.2618252
## AO.A12B.O1TCGA
                   -0.7984017  0.3961035  1.43817768  3.1786633
                                                                0.3379025
## BH.A18Q.02TCGA
                  -2.4843102 0.0213808 -0.87852692 3.8116984
                                                                1.8178509
## C8.A130.02TCGA
                  0.7162120 1.6936130 0.03727918 -0.6121349 2.9563625
## C8.A138.O3TCGA
                    2.2823383 -0.4166304 -1.64908631 -3.0899991 -2.3219999
                  NP 057094 NP 005785 NP 878912
                                                 NP 073742 NP 001035830
## AO.A12D.01TCGA -0.3858803 -7.475915 -7.475915 0.60847702
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## C8.A131.O1TCGA -0.3207228 -6.424927 -6.254916 -0.25595672
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## AO.A12B.01TCGA -3.4534737 -3.386958 -3.306586 1.00859923
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## BH.A18Q.02TCGA -0.4636996 -3.093170 -3.534760 0.54660575
                                                             -1.7884708
## C8.A130.02TCGA 0.9359632 5.124356 4.894765 0.02087983
                                                             -0.4678206
## C8.A138.O3TCGA 3.0137661 -7.123824 -7.313995 -0.91765848
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                  NP_054742 NP_115517
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                                                    NP_115867 NP_006500
## AO.A12D.O1TCGA -0.7325719 -0.8773443 -0.80495810 -0.45445667 -0.6182780
## C8.A131.O1TCGA 0.1650229 -0.9805274 0.45647032 -1.09386807
                                                               0.6345771
## AO.A12B.01TCGA 0.7924243 -0.3909951 -0.41870982 2.07561667 -1.4247548
## BH.A18Q.02TCGA 0.2890113 -2.1598082 -0.08232604 -0.04887222 0.4328628
## C8.A130.02TCGA 0.3193479 0.9064444 0.32262777 -0.01519873 -1.1303541
## C8.A138.O3TCGA 0.7463398 0.4354830 -0.16428781 -0.90302992 -0.7311444
                  NP 620693 NP 001884 NP 001885
                                                   NP 055563 NP 001253989
## AO.A12D.01TCGA 1.2066153 1.1875663 1.2332839 -0.62970739
                                                               -0.6144682
## C8.A131.O1TCGA -0.7174151 -0.7376546 -1.1100596 0.28241144
                                                                0.2621720
## AO.A12B.O1TCGA -0.6127130 -0.6210274 -0.6542851 0.49310508
                                                                0.5152769
## BH.A18Q.02TCGA -1.0257237 -1.0257237 -1.4539326 0.06152538
                                                               -0.2061052
## C8.A130.O2TCGA 0.2340713 0.1192759 -0.1135948 0.35542646
                                                                0.3554265
## C8.A138.O3TCGA
                 1.0059967 0.9950253 1.1486251 -0.44223039
                                                               -0.4422304
                   NP_005643 NP_001202 NP_057373 NP_112187
                                                              NP_848632
## AO.A12D.01TCGA -0.26777656 -0.4696959 1.5304482 0.6122868
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## C8.A131.O1TCGA -0.43406348 2.1889634 1.4401054 0.7924444
                                                              5.0629588
## AO.A12B.O1TCGA -0.42702424 -1.1725507 -0.5240258 -1.5162135 -1.9541063
## BH.A18Q.02TCGA 1.67065405 -1.6847640 -0.2964305 -1.2231013
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## C8.A130.O2TCGA 0.09959668 0.1028766 -0.7433296 -1.4976995
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  C8.A138.O3TCGA
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                              NP_647473 NP_001166171 NP_001139478 NP_001070736
                   NP 004716
## AO.A12D.O1TCGA -0.49255465
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                                                        0.4408459
                                                                    0.03319749
## C8.A131.O1TCGA 0.36336906 0.36336906
                                          -0.5271647
                                                        0.3188424
                                                                    1.55749394
-1.4386122
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## BH.A18Q.O2TCGA 0.03476232 -1.07924984
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                                          -1.4673141
## C8.A130.02TCGA 1.36562607 -0.01519873
                                          -2.0191986
                                                        0.5882971 -0.20215125
## C8.A138.O3TCGA -0.39468758 0.81216834
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                                          -0.4166304
                                                                    0.83045404
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## AO.A12D.01TCGA -0.2106296 -1.3688082 -1.4221454
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## C8.A131.O1TCGA -1.4298422 2.8487680 -1.3448367 0.8410190
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## AO.A12B.01TCGA 2.3167349 -0.4713678 0.4071894 -0.1277051
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## BH.A18Q.O2TCGA 0.7205656 -0.2495951 1.0952484 0.5332242
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## C8.A130.O2TCGA 0.7982088 -1.4321021 0.8310074 1.9199239
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## C8.A138.O3TCGA -0.3032591 -1.6637149 -1.7149148 -1.2760581 -0.28497341
                    NP_006200 NP_001804
                                         NP_004897 NP_001229510
                                                                   NP_940873
## AO.A12D.O1TCGA -1.544058946 0.9323099 -0.52303304
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## C8.A131.O1TCGA -0.000940222 1.6586910 -0.28024401
                                                       0.5495716 0.82887537
## AO.A12B.O1TCGA -0.851059744   0.1494423 -0.43811014
                                                     -0.9203466 -0.42702424
## BH.A18Q.O2TCGA 0.787473242 -0.3298843 0.03476232
                                                     -0.7012217 -1.40375188
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## C8.A130.02TCGA -0.631814073 0.7686899 0.49318095
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## C8.A138.O3TCGA -0.284973405 1.6350247 -0.31788766
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                   NP 004993 NP 056386
                                         NP 065705 NP 079467 NP 003817
## AO.A12D.O1TCGA -0.30968434 0.3189324 -0.43540768
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## C8.A131.O1TCGA -0.04951479 0.2945551 -0.98862317
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## AO.A12B.O1TCGA -1.55778558 -0.2745932 -0.68754279 0.9171406 0.3157308
## BH.A18Q.02TCGA 1.35953354 0.1786137 0.65365797 0.4261720 -0.7346755
## C8.A130.O2TCGA -0.48749984 2.5332594 -0.02175846 -0.6383738 -0.2841480
## C8.A138.O3TCGA -0.47514464 1.1522823 0.89993968 0.3403974 -0.8774300
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## AO.A12D.O1TCGA 1.2828113 -5.456722 -0.1001454 -1.0754538 -1.06783418
## C8.A131.O1TCGA -0.7255109 -5.757027 -0.6283618 -0.4826381 -0.13452029
## AO.A12B.O1TCGA -1.3720968 -2.724576 0.3129593 1.6654385 0.01641158
## BH.A18Q.O2TCGA 0.2221037 4.280052 0.7272564 -0.5807879 0.11839687
## C8.A130.O2TCGA -0.4612609 -2.261909 -0.5006193 -0.3431856 0.33574724
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## AO.A12D.O1TCGA
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                   1.5493982 -3.3161547 -1.7496248 1.2903338 0.4159915
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   -0.4575105 -1.3499250 -1.5106705 -3.5698756 -0.4547390
## BH.A18Q.O2TCGA
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                  0.6374952 2.1101563 1.6148961 2.0707979 -0.2710285
## C8.A130.02TCGA
## C8.A138.O3TCGA
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## AO.A12D.01TCGA -0.5687506 -0.5382722 0.10177386 -0.8011483 -0.7820993
## C8.A131.01TCGA 0.3066987 1.6020206 -0.12642453 -0.1871427 -0.1871427
## AO.A12B.O1TCGA 1.2608033 -1.7601032 1.15825882 -0.7152575 -0.6404277
## BH.A18Q.02TCGA -1.7215632 0.3960636 -1.16288438 0.1518507 0.1518507
## C8.A130.O2TCGA -0.5498174 1.0114002 0.01432009 -0.4350219 -0.5432576
## C8.A138.O3TCGA -0.2045163 -0.3325162 0.04051198 -1.8831432 -2.3037142
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## AO.A12B.01TCGA 1.3716623 0.432132660 -0.4658249 0.1549853 -0.06118969
## BH.A18Q.02TCGA 2.4166742 -0.349956590 -0.4971534 -1.0457960
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## C8.A130.02TCGA -0.1103149 -1.304187191 -0.9302821 -0.2841480 -0.28414797
## C8.A138.O3TCGA -1.3199438 -0.672630157 -0.9505727 -0.1460021 -0.14600212
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## C8.A131.01TCGA -0.8712346 -0.7740855 -1.68485869 -1.70914597 -0.5352605
## AO.A12B.O1TCGA -1.7074452 -0.1665057 -0.16373422 -0.13879096 -1.5356138
## BH.A18Q.02TCGA -0.2930851 -0.2529405
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## C8.A130.02TCGA -1.5436176 1.2639501 -0.09391558 -0.09391558 -0.6449335
## C8.A138.O3TCGA -2.4317141 0.9291968 -1.28337240 -1.28337240 4.0377651
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## AO.A12B.01TCGA 0.0358119 2.31396342 -5.554251 -5.792598 -0.01684611
## BH.A18Q.O2TCGA -0.3700289 0.72391099 -5.802929 -5.789547 -0.57744256
## C8.A130.O2TCGA -0.2283902 -0.22183047 3.628736 3.609056 0.02743957
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## AO.A12D.01TCGA 0.3760793 -1.8526526 -0.95735003 -0.35159212
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## C8.A131.O1TCGA 1.9420426 -1.7253375 0.96650332 -0.25595672
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## AO.A12B.O1TCGA -0.4381101 1.4021485 -0.53788320 1.52686484
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## BH.A18Q.O2TCGA 0.1652322 -0.6844948 -0.04887222 -0.63765943
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## C8.A130.O2TCGA 0.4013446 -0.7531692 1.15243459 0.14551485
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## C8.A138.O3TCGA 1.2290822 -0.4422304 -0.59948737 -0.05823078
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## AO.A12B.O1TCGA 2.9985175 1.7291824 -1.5661000 1.0612572 0.6954227
## BH.A18Q.02TCGA -1.3636073 -1.5208402 -0.9922699 0.9681239 -0.8484185
## C8.A130.O2TCGA 1.3393871 0.7096523 0.5161400 0.1684739 -0.2021513
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## AO.A12B.01TCGA 0.792424264 -3.2012696 0.9697986 3.11491937 -0.47968225
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## C8.A130.O2TCGA -0.008638989 1.7001727 -1.1237944 -0.09063571 -0.32022653
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## C8.A131.O1TCGA 1.37129141 -0.6000266 0.4564703 0.298602967 0.4362309
## AD.A12B.O1TCGA -0.24410697 0.1605282 0.1244991 -0.002988738 -0.4159383
## BH.A18Q.O2TCGA 0.73729252 -1.0391053 0.9681239 0.479698111 0.2923567
## C8.A130.02TCGA -0.24806942 0.2471908 -0.2743084 -0.162792825 0.1717538
## C8.A138.O3TCGA 0.07342623 0.8085112 -0.8445157 -0.617773069 1.0864538
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## AO.A12D.O1TCGA -0.5230330
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## C8.A131.O1TCGA 0.3026508 0.29455509 8.297216 0.32693813 -1.2274481
## AO.A12B.01TCGA -0.2108493 -1.47186989 -2.530573 -1.61321506 -0.9536043
## BH.A18Q.02TCGA -1.0792498 0.71387484 -7.013957 0.05148923 0.6837664
## C8.A130.O2TCGA -0.5366979 -1.23203008 -8.529738 -1.85192529 0.7850893
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## AO.A12B.O1TCGA -1.1198927
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## BH.A18Q.O2TCGA 1.4632404
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## C8.A130.02TCGA 0.3849453
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## C8.A138.O3TCGA -1.1846296
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0.1854715 -0.60717004 -1.9457919
## BH.A18Q.02TCGA 0.74063790 0.02807156 0.2722844 -0.57409718 -1.1227398
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## C8.A130.02TCGA -0.3267863 1.0245197 -0.76300883
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## C8.A138.O3TCGA 1.1961680 -1.1517154 1.60942468
                                                   0.2453118  0.6073686
                 NP 001258115 NP 066361 NP 006408 NP 001120690 NP 057071
##
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## AO.A12D.O1TCGA
                    1.2028055 1.2028055 -2.2145834
                                                     -0.6563760 -4.0547159
## C8.A131.O1TCGA
                    0.5819546 1.6222600 -1.3448367
                                                     0.4119436 -3.6278415
## AO.A12B.O1TCGA
                   -1.4552410 -1.2501520 -0.6127130
                                                    0.0247260 -0.4103954
## BH.A18Q.02TCGA
                   -0.7480570 -0.3432658 3.6645016
                                                    0.8343086 -2.8656838
## C8.A130.02TCGA
                  -1.7043312 -1.6551332 1.0212398
                                                      0.5161400 -1.6780922
## C8.A138.O3TCGA
                    1.8910244 0.6914828 -0.4714875
                                                     -0.7421158 -2.8193708
                  NP 653176 NP 061004 NP 075066 NP 001788
                                                              NP 006589
## AO.A12D.O1TCGA 5.1611858 -0.5611310 -0.5116036
                                                  1.6904597
                                                            0.006528907
## C8.A131.O1TCGA -0.8388516 1.4927278 -2.2515620
                                                  0.8653063 0.695295298
## AO.A12B.O1TCGA -0.2912220 -1.1725507 2.0451305 -1.9347060 -1.075549128
## BH.A18Q.02TCGA -4.6922622 -0.5674064 -0.4402819 -1.2231013 -0.580787939
## C8.A130.O2TCGA -0.4481414 -0.1791922 -0.6678926
                                                 0.5390991 -0.854845156
## C8.A138.O3TCGA -0.1935449 0.5159401 -1.1663439
                                                  1.7483960 1.686224605
                  NP_057366 NP_056648 NP_001103
                                                  NP 598368 NP 009133
## AO.A12D.01TCGA -1.3154711 0.9856470 0.9856470
                                                  1.0885116 -0.5230330
## C8.A131.O1TCGA -0.4947817 -0.4664465 -0.4664465
                                                  1.9541863 0.3917042
## AO.A12B.01TCGA 2.2031045 -0.6321133 -0.6321133
                                                  0.2713872 1.9370430
## BH.A18Q.02TCGA 0.6469672 1.4866581 1.5970557
                                                  0.2120676 -0.3198482
## C8.A130.O2TCGA -1.7043312 -0.2579090 -0.2644688 -0.1923116 0.1127162
## C8.A138.O3TCGA -0.1094307 0.5269115 0.2343404 0.3038260
                                                            0.1246262
##
                   NP_057038 NP_071739 NP_064587 NP_005836 NP_009119
## AO.A12D.01TCGA -0.62589759 -1.1783183 -1.4183356 5.7021772 0.7913473
## C8.A131.O1TCGA -0.74979819 -0.7133673 -2.4822912 0.5981462 0.7600614
## AO.A12B.01TCGA 1.14162997 2.4608515 1.7291824 -0.4852252 -0.7014002
## BH.A18Q.02TCGA 1.40636889 -0.8350370 -0.0354907 0.2589029 -0.7948924
## C8.A130.02TCGA -0.17591230 0.1159960 -0.3858239 -1.5796962 -0.3891038
## C8.A138.O3TCGA -0.09845931 0.7426827 -0.7311444 -0.5738874 1.4777677
                  NP_775829 XP_003960280
                                         NP_073741 NP_056005 NP_006636
## AO.A12D.O1TCGA
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                            ## C8.A131.O1TCGA 0.9948385
                             0.91792875 -0.22357367 -0.1749991 -2.364903
## AO.A12B.O1TCGA -0.2995364
                            -0.09999032 -0.01130316 -0.3133938 2.208647
## BH.A18Q.O2TCGA 1.4565496
                            -0.98223376 -0.71460321 1.0852122 -3.973005
## C8.A130.02TCGA -0.5990154
                             0.78180941 1.75593046 1.7854493 -1.917523
## C8.A138.O3TCGA -0.7348015
                              0.50131152 -0.35080191 -0.9834870 -1.532058
                   NP 945327
                             NP 006766 NP 001190991
                                                     NP 036203 NP 995319
                             0.5437104
                                        -0.1687218 -0.28301575 1.0923214
## AO.A12D.O1TCGA -0.28682555
## C8.A131.O1TCGA 0.06382587
                             1.9582341
                                         -0.5271647 0.83697113 0.5293322
## AO.A12B.O1TCGA 0.08569843 -0.6653710
                                         -0.3577374 0.09124137 1.4215488
## BH.A18Q.02TCGA 0.05818000 1.1019391
                                          0.4730073 0.39271818 -0.7547478
## C8.A130.02TCGA 0.20455249 -0.1791922
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## C8.A138.O3TCGA -0.32885908 -1.1773154
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                  NP 006120 NP 036597
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## AO.A12D.01TCGA -0.2906354 -1.1097420 0.09034447 -0.3973097 -0.3973097
## C8.A131.O1TCGA 1.0798440 -0.2802440 0.44027880 -0.6607448 0.5738589
## AO.A12B.01TCGA -0.1942204 -1.8903624 -1.67695896 1.4714354 0.6954227
## BH.A18Q.02TCGA -1.5174949 -3.8425353 -2.24344272 -0.4971534 -1.0089968
## C8.A130.02TCGA 0.2406310 -2.2520693 0.99172102 -0.6941316 -0.5038992
## C8.A138.O3TCGA 0.6695399 -0.4532018 2.46519525 -0.4714875 -0.4312590
                 NP_001008661 NP_004050 NP_036269 NP_055577 NP_000775
## AO.A12D.O1TCGA
                  -0.6297074 -0.8963933 -0.9878284 2.060010 -1.1783183
                  -0.4785902 -0.4421592 2.2253943 3.698823 1.1527058
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   0.1411279 2.3666214 2.4553086 -1.668645 -0.7374293
## BH.A18Q.02TCGA
                  1.0484130 0.3927182 -1.5442579 -5.485118 0.4529351
                   1.1032366 -2.1011953 -2.0847960 1.513220 -1.2943476
## C8.A130.02TCGA
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## C8.A138.O3TCGA
                  -0.6836016 -1.4845151 0.3294260 3.587937 0.2745689
##
                  NP 055670 NP 002909 NP 602304 NP 000626
                                                             NP 060012
## AO.A12D.01TCGA 0.9780274 -0.6563760 -0.3515921 -1.083073 0.257975586
## C8.A131.O1TCGA 0.7236305
                            0.3066987 2.8285285 4.164329 -0.203334268
## AO.A12B.O1TCGA -0.1914490
                            0.2159577 -2.5472018 -2.743976 -0.357737395
## BH.A18Q.O2TCGA -0.4904626
                            ## C8.A130.O2TCGA -0.6908517 0.9884411 -1.1697126 1.031079 0.004480487
## C8.A138.O3TCGA 0.2233689 -0.2703448 1.7703388 1.521653 -1.652743453
##
                  NP 000704 NP 612409 NP 055199
                                                  NP 008830 NP 064530
## AO.A12D.O1TCGA
                 0.4789439 -0.7820993 -0.5077938 -0.50779385 -1.3040417
## C8.A131.01TCGA 0.3917042 -1.9277315 0.4038479 -0.48668593 -0.8590910
                                       3.2534931 1.52963632 0.4543045
## AO.A12B.O1TCGA 2.8183717 -2.6054027
## BH.A18Q.02TCGA -1.6212017 -1.6613463 0.9012162 0.09163381 -1.0324145
  C8.A130.O2TCGA -0.3989434 1.3164280 -1.7961675 -0.74988935 -1.1533132
  C8.A138.O3TCGA -1.9892003 -1.0017727 -1.3748009 0.20142610 0.3257688
##
                 NP_001121181 NP_005333 NP_000117 NP_001121188 NP_006796
                    0.5322811 -1.4069062
## AO.A12D.O1TCGA
                                         2.0409611
                                                     2.0638199 -1.0335460
                    1.5413024 -1.6524756
                                        1.8003668
## C8.A131.O1TCGA
                                                     1.7639359 -1.6565235
## AO.A12B.O1TCGA
                    1.0834290 -0.3327941 -3.6641057
                                                     -3.7749647
                                                                0.6095070
## BH.A18Q.02TCGA
                   -1.2665912 0.1418145
                                         1.0183046
                                                     1.3327705
                                                                0.2756298
## C8.A130.02TCGA
                   -0.9630808 0.1127162 0.4899011
                                                     0.4866212 0.5554985
                              0.3184546 -0.5775445
## C8.A138.O3TCGA
                   -2.0367431
                                                     -0.6104588 0.3623402
                 NP_001139443
                               NP_057390 NP_001137299 NP_001137298 NP_775102
##
## AO.A12D.O1TCGA
                    0.2846442 1.33614847
                                            2.1743041
                                                        2.1743041 -0.2753962
                                            1.0717482
                                                        1.0717482 -0.3166749
## C8.A131.O1TCGA
                    0.4605182 0.20550171
## AO.A12B.O1TCGA
                    1.6432667
                              0.06906958
                                           -1.6492442
                                                       -1.6492442 1.1527159
## BH.A18Q.02TCGA
                   -0.1358522
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                                            3.7514816
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                                           -0.3530252
## C8.A130.02TCGA
                    2.3299075 -0.76628870
                                                        -0.3530252 0.8539665
## C8.A138.O3TCGA
                    0.2818832 0.47571154
                                           -0.4093161
                                                        -0.4093161 0.3257688
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## AO.A12D.O1TCGA 0.1284424
                            1.2561427 -3.1975114 -0.8163875 -0.770669919
## C8.A131.O1TCGA -0.7740855
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## BH.A18Q.O2TCGA -1.0290691 0.5499511 -0.5774426 1.6940717 -1.821924609
## C8.A130.02TCGA -0.1660727 -1.7338500 -1.6616929 -1.5173787 -0.730210139
## C8.A138.O3TCGA 1.5582247 0.4501116 -0.1130879 -0.8006300 0.131940459
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                 NP 001116857 NP 001116856 NP 001230228 NP 000138 NP 001263181
## AO.A12D.O1TCGA
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                                            0.7646787 -2.8089119
                   0.60466722
                                                                    0.7799179
## C8.A131.O1TCGA
                 -1.99249764
                              -1.99249764
                                             0.4807576 0.1933581
                                                                   -0.1790470
                 -0.24133549
## AO.A12B.O1TCGA
                             -0.24133549
                                             1.6072376
                                                       4.6863451
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## BH.A18Q.02TCGA
                   0.09163381
                               0.09163381
                                             0.5098065 0.4997704
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## C8.A130.02TCGA
                 -0.22183047
                              -0.22183047
                                            -1.3665047 -1.3074671
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## C8.A138.O3TCGA
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                               0.32942597
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## AO.A12D.O1TCGA
                  -1.418336 1.831422 0.65419459 -0.4392175 0.2198776
## C8.A131.O1TCGA
                   8.248641 1.986569 -0.53121262 -0.4826381 0.1204962
## AO.A12B.O1TCGA
                  -2.383685 -2.921351 -0.03070348 -0.1138477 -2.3836848
## BH.A18Q.02TCGA
                  -7.442166 1.232409 -1.32011733 -0.2261775 -1.0391053
## C8.A130.O2TCGA -10.090956 1.224592 0.55877833 0.6309354 0.7096523
  C8.A138.O3TCGA
                 -8.977993 -4.402912
                                      1.42291058 0.4318259 1.4521677
##
                 NP_001035998 NP_060197
                                          NP_055744
                                                     NP_631908 NP_001193988
## AO.A12D.O1TCGA
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                                                                -0.8240071
## C8.A131.O1TCGA
                   -1.1586342 1.1000834 -0.03332327 -0.53930839
                                                                  0.1650229
## AO.A12B.O1TCGA
                   -1.3249818 -2.0705083 0.31850223 -0.05841822
                                                                  0.5651634
```

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## BH.A18Q.02TCGA
                    0.7975094 -0.2027598 -0.15257906 -0.78151085
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                    1.1589943 -1.2287502 0.89332495 1.61489610
## C8.A130.02TCGA
                                                                   0.9753217
## C8.A138.O3TCGA
                   -3.0497706 1.7081674 0.12462618 -0.24474488
                                                                   0.3733116
##
                 NP 001008530
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                                                         NP_569120 NP_004705
## AO.A12D.O1TCGA
                    1.1456586 -0.328733332 -0.32873333 0.33798135
                                                                   1.8123732
## C8.A131.O1TCGA
                    3.1766463 0.221693229
                                           0.22169323 -0.53526050 -0.4907338
## AO.A12B.O1TCGA
                   -0.9896334 -1.327753251 -1.32775325 0.17438559 -0.4353387
                                                                    0.5867503
## BH.A18Q.02TCGA
                    1.6405456 0.004653887 -0.04887222 0.44958967
## C8.A130.02TCGA
                    1.1786735 0.693252949
                                            0.76868993 0.13567524
                                                                    0.4407030
## C8.A138.O3TCGA
                   -0.4714875 -0.087487890 -0.40200186 0.00028345 0.7024542
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## AO.A12D.01TCGA -1.2545143 0.3189324 0.07129548
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## C8.A131.O1TCGA -0.1871427 -0.4583508 1.17294525
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## AO.A12B.01TCGA 0.2104148 0.3240452 -0.54619762 -0.2468784
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## BH.A18Q.02TCGA -0.6276233 0.2455214 -0.40348270 -0.6543863
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## C8.A130.O2TCGA -0.4120629 -0.2546292 -2.20615113 -0.2021513
                                                               -0.2021513
## C8.A138.O3TCGA -0.2996020 -0.0326308 3.20759450 0.1246262
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##
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                                                    NP 054861
                                                              NP 036530
## AO.A12D.O1TCGA 0.7608689
                            1.7933242 -1.34213964 -0.51160364 -0.4620763
## C8.A131.O1TCGA 0.1974059 0.6791038 0.22574111 1.20532829
                                                               1.2255677
## AO.A12B.01TCGA -0.1166192 -0.2551929 -0.89263185 0.27970160 -0.4464246
## BH.A18Q.O2TCGA -0.7547478 0.9447062 0.01803541 0.60013186
## C8.A130.02TCGA 1.1261956 -0.5891758 -0.24150968 0.02743957
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## C8.A138.O3TCGA 1.0023396 0.4245116 -0.17891637 -1.83194327 -0.2045163
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## AO.A12D.O1TCGA -0.7897189
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## C8.A131.O1TCGA -0.5433563
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                                                                 2.0230002
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## AO.A12B.O1TCGA -0.4020810
                            0.52653346 -1.0056514 -0.8015831
## BH.A18Q.02TCGA 0.5265335
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## C8.A130.02TCGA 0.1061564
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## C8.A138.O3TCGA 0.0514834
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##
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## C8.A131.O1TCGA 0.17311866 0.3795606 -0.4381114
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## AO.A12B.O1TCGA 0.25198686 0.1688426 -0.7124861
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## BH.A18Q.O2TCGA 0.08159767 1.0751761 -0.3733743
                                                 2.6240879 -5.214142
## C8.A130.02TCGA 0.60141662 0.5587783 2.0052005
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## C8.A138.O3TCGA 0.04051198 0.8158255 -1.3345723
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##
## AO.A12D.01TCGA -0.82400709 0.71896116 -1.36118863 -1.88694078 0.292263769
## C8.A131.01TCGA -0.47049441 -0.47049441 -0.15475970 -0.04546691 -0.004988103
## AO.A12B.O1TCGA 0.49587656 0.01918305 0.21041475 -0.72911489 1.141629972
## BH.A18Q.02TCGA 0.03476232 -0.37002888 -1.54760330 0.10501534 -0.651040958
## C8.A130.O2TCGA 0.51941990 -0.47766024 0.37838554 1.24755079 -0.674452368
## C8.A138.O3TCGA -0.40565900 0.08439765 0.03685484 -0.11308786 0.537882907
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##
                  NP_003307
## AO.A12D.01TCGA 0.2503560 -2.34411656 -0.4735057
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## C8.A131.O1TCGA -0.8955219 -0.38144103 0.2135975
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## AO.A12B.01TCGA -0.9203466 -0.25519286 0.2575298
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## BH.A18Q.02TCGA -1.9523945 0.02807156 -2.1363905
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## C8.A130.O2TCGA 0.5161400 1.01795997 -0.4448615
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  C8.A138.O3TCGA 1.1595966 -0.32520194 0.7280541
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##
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## AD.A12D.01TCGA 0.31512256 0.52847126 -4.363310 -0.6182780 -1.7154999
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## C8.A131.01TCGA -0.07380208 -0.30048341 5.143916 -0.9198092 -2.4296688
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## BH.A18Q.O2TCGA 0.82761783 0.87445317 -5.645696 -0.8952538 -1.0424506
## C8.A130.O2TCGA 1.47058187 0.06023826 -5.436822 2.7628502 -0.3628648
XP 003960482 NP 001280 NP 005538 NP 056651 NP 036534
##
## AO.A12D.O1TCGA
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                  1.16889737 -0.2721482 2.5573205 -1.13839476 -0.3045313
## C8.A131.O1TCGA
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## BH.A18Q.02TCGA -1.12608518 1.6104372 -3.2838565 0.84099935 -2.0594467
## C8.A130.O2TCGA -0.72037053 -0.1103149 -2.3570251 0.35870632 -1.4222625
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## C8.A131.O1TCGA -2.2313226 0.26217204 0.5900504 1.3834351 1.6182121
## AO.A12B.O1TCGA -1.2085799 -0.02793200
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## BH.A18Q.02TCGA -1.2966997 -0.19606903 -0.5473341 1.6572725 -1.2130651
## C8.A130.02TCGA 6.0951970 0.39150501 0.7654101 -0.4809401 -0.5202985
## C8.A138.O3TCGA 0.4062259 -0.08017361 0.4135402 -0.7384587 2.5566237
                  NP 001789
                           NP 001777
                                      NP 001249
                                                 NP 036557 NP 733779
## AO.A12D.01TCGA -1.65073329 -1.98980533 -1.47167278 0.94754905 -0.5916094
## C8.A131.O1TCGA -0.06570632 0.29860297 0.08811316 1.16889737 -1.3084058
## AO.A12B.01TCGA -1.53284232 -1.90976276 -1.56610000 -2.55828765 0.5984211
## BH.A18Q.02TCGA 1.14542910 0.02472618 1.40971427 1.29262590 -1.1829567
## C8.A130.02TCGA -0.39894338 0.18487328 0.48334134 0.08319734 0.4341433
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## AO.A12D.O1TCGA -0.8468659 5.1688054 0.315122558 -0.3744509 -0.8430561
## C8.A131.01TCGA 0.9017372 0.7155347 0.092161040 -0.3126271 -0.2519088
## AO.A12B.01TCGA -2.3116265 -0.4325672 -0.687542786 2.3832503 0.7508522
## BH.A18Q.02TCGA -1.6245471 -1.5576394 0.004653887 -0.8684908 -0.8183101
## C8.A130.O2TCGA -1.3107469 -2.0880759 1.083557344 -1.7305701 0.5194199
## C8.A138.O3TCGA -2.O550288 3.3721658 -0.665315879 -0.2154878 -0.5812017
                 NP_071324 NP_060228 NP_006218 NP_001961 NP_001137232
## AO.A12D.O1TCGA 1.3475779 -0.8811541 -1.6278745
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## C8.A131.O1TCGA 1.5008236 -0.1709512 -1.8913006 0.7195826
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## AO.A12B.01TCGA -1.1780937 1.6986962 -3.4922743 1.7291824
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## BH.A18Q.02TCGA -0.8551093 -0.9420892 -1.2331374 -0.5105349
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## C8.A130.O2TCGA -0.3464655 0.8211678 -0.5924556 1.0901171
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## C8.A138.O3TCGA -0.8262300 -0.8920585 3.1710231 -0.1350307 -0.08748789
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## C8.A131.O1TCGA 1.0677003 -0.25595672 0.4767097
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## AO.A12B.O1TCGA 1.6959247 -0.54065467
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                                     1.6349523 -0.73465784
## BH.A18Q.02TCGA -0.3967919 -0.04552684 -0.3165028
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## C8.A130.02TCGA 1.6640941 1.19835275
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## AO.A12D.01TCGA -2.0507621 -0.3973097
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## C8.A131.O1TCGA -3.5347403 2.4075489
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## AO.A12B.O1TCGA -1.0478344 0.5429916
                                      0.9088262 -1.0312055 -2.6054027
## BH.A18Q.02TCGA -2.1430813 -1.9858483
                                     -1.5977840 -0.4335911 -0.6543863
                                     0.4931809 1.4705819 -1.4353819
## C8.A130.02TCGA 0.2275116 -0.8253263
## C8.A138.O3TCGA -1.9636003 5.0361641
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## C8.A131.O1TCGA -1.3043579
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## AO.A12B.01TCGA 0.9088262 -1.10880681 -0.3909951
                                                   2.2363622 2.6049682
## BH.A18Q.02TCGA -1.2833181 -0.95881609 -2.4742741 0.1652322 -0.7748201
## C8.A130.02TCGA -0.4940596
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## AO.A12D.O1TCGA -1.4373846
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## AO.A12B.O1TCGA -3.3315289
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## BH.A18Q.02TCGA 1.6974171
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## C8.A130.02TCGA 0.6735737
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## C8.A138.O3TCGA -0.7238301
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## AO.A12D.O1TCGA -1.2164163 -1.2697535
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## C8.A131.O1TCGA 0.3390818 -0.1588076
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## AO.A12B.O1TCGA 1.9259571 1.9065568
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## BH.A18Q.02TCGA -1.6379286 -1.6379286 -0.99561529 -0.9220169 -0.2061052
## C8.A130.O2TCGA -0.5399777 -0.4809401 0.04383891 -1.9536012
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## AO.A12D.O1TCGA -1.0221166
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## C8.A131.O1TCGA -1.6484278
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## AO.A12B.O1TCGA -0.6210274
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## BH.A18Q.02TCGA 0.1083607
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## C8.A130.02TCGA 1.7329714
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## C8.A138.O3TCGA -1.9453146
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## AO.A12D.O1TCGA 0.43322630
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## C8.A131.O1TCGA 0.35527330 -1.19911298
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## AO.A12B.O1TCGA -0.01130316
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## BH.A18Q.02TCGA 0.67373026
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## C8.A130.02TCGA 1.43450331 -0.01519873 -0.4022233
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## AO.A12D.O1TCGA 2.0562003
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## C8.A131.O1TCGA -1.2193524
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## AO.A12B.O1TCGA -1.1254357
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## BH.A18Q.02TCGA -3.9696598 -1.90555916 0.2957021 0.1886499
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## C8.A130.O2TCGA 0.8342873 -1.04835742 -0.7039712 -0.9335620
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## C8.A131.O1TCGA -0.8874261
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                                                                  -0.60812236
## AO.A12B.O1TCGA 3.7468154 -1.5965862
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## BH.A18Q.02TCGA -8.5662144 1.0718307
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## C8.A131.O1TCGA -0.4462071
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## AO.A12B.O1TCGA -0.8815460
                              -1.5272994
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## BH.A18Q.02TCGA -4.3041979
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## C8.A138.O3TCGA 1.2619965
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## C8.A131.O1TCGA -0.3369143
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## BH.A18Q.O2TCGA 1.8814131
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA 0.1356752 0.3947849
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## C8.A138.O3TCGA -0.1277164 -0.1167450
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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## C8.A131.01TCGA -1.71319385 -0.79432488 0.77220504 -2.4134773
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## AO.A12B.01TCGA 0.76193805 0.27138717 0.03026895 -0.2163922 0.50419098
## BH.A18Q.02TCGA 1.83792315 -0.20610517 -0.32319353 0.1886499 -0.03883608
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##
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## AO.A12B.01TCGA 0.504190981 1.47143536 0.92268354 1.9564433 -1.33052473
## BH.A18Q.O2TCGA -0.002036877 -0.30312124 -1.09597674 -0.4235550 -1.79850694
## C8.A130.O2TCGA 0.732611375 -2.06511677 -0.36614470 -0.1135948 -0.66789263
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## AO.A12B.O1TCGA -0.7152575 -0.1471054
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## AO.A12B.01TCGA 0.3379025 0.04966926 2.08670256 1.1887450 -1.18640808
## BH.A18Q.O2TCGA 0.5633327 -0.71460321 -1.51749486 -2.0226475 2.63412403
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## AO.A12B.01TCGA 0.14944232 -0.23579254 1.36057641 -0.2053063 0.09401285
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## C8.A131.O1TCGA -1.2557833
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## AO.A12B.O1TCGA 0.8118246
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## BH.A18Q.02TCGA -0.1425429 -3.176804 -0.9922699
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## C8.A130.O2TCGA -0.2841480 -1.694492 -0.1693526
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## BH.A18Q.02TCGA -5.7962383
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -3.6685754 -4.9130574 0.1919953 -1.6111656 -1.1026675
## C8.A130.02TCGA 1.0901171 1.5984968 0.3915050 0.6571744 1.0507587
## C8.A138.O3TCGA 0.8011969 -0.5738874 0.5927400 -1.1041726 3.2039374
                           NP 055908 NP 006068 NP 000020 NP 006281
##
                 NP 005699
```

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## AO.A12D.01TCGA 1.7742753 0.28464417 1.5533070 -0.6982838 1.4580620
## C8.A131.O1TCGA 1.7922710 0.58195463 0.5819546 0.6791038
                                                         1.3591478
## AO.A12B.01TCGA -0.9369754 -0.32447971 -1.4302978 -1.2667808 -0.5018540
## BH.A18Q.02TCGA -1.9724668 -0.07563528
                                     0.8711078 0.4529351
                                                          1.8044693
  C8.A130.02TCGA 0.4111842 0.65717439
                                      1.5197799 -0.2611889 -0.4645408
  C8.A138.O3TCGA 1.6862246 -0.61777307 2.7650807 -1.6673720 -0.4129733
                 NP_067643 NP_789847 NP_001432
                                                NP 071440 NP 067067
## AO.A12D.O1TCGA 1.2218545
                          1.0046960 -0.8430561 -0.06585726 -0.3934999
## C8.A131.O1TCGA 0.6791038
                          ## AO.A12B.01TCGA -1.6076721 -1.1614648 -1.0367485 0.10787022 0.2159577
## BH.A18Q.02TCGA -0.3800650 -0.2562859 -2.5679448 -0.44362728 -0.2027598
                          0.1028766 -1.9700006 -0.77612830 -0.8614049
## C8.A130.02TCGA 0.1094363
  C8.A138.O3TCGA
                NP_976060 NP_001265488 NP_079017 NP_060200 NP_000894
## AO.A12D.O1TCGA -0.74019153
                              1.8809496
                                              NA 0.9246903 -7.270186
## C8.A131.O1TCGA -2.17870016
                              0.8531627
                                              NA
                                                 0.1366877 -7.627148
                                                 0.4432186 -6.327492
## AO.A12B.O1TCGA 3.88816058
                             -0.2995364
                                              NA
## BH.A18Q.02TCGA -0.05221761
                            -1.9958845
                                       0.3626097 -0.4369365 -3.618395
                             0.9097243 -0.0709565
## C8.A130.02TCGA 0.19143301
                                                 0.1979927 2.156074
## C8.A138.O3TCGA -0.18988779
                             -0.9396013
                                              NA 0.4939972 2.106796
##
                 NP_000365 NP_001127703 NP_073568 NP_112179
                                                            NP 005872
## AO.A12D.O1TCGA -0.3858803
                                       2.3609842 -0.2258688 -0.07347685
                            0.9627882
## C8.A131.O1TCGA 0.2297890
                             3.5288119 -0.3733453 -0.4583508 -0.67288846
## AO.A12B.O1TCGA 0.7314518
                            -2.4973152
                                       0.1688426 0.7037371
                                                           1.84558434
## BH.A18Q.O2TCGA
                0.5399150
                            -1.1193944 -4.3108887 -0.5038442
                                                           0.47969811
## C8.A130.02TCGA 0.1848733
                             1.0605983
                                      0.1684739 0.2570304 1.30658843
## C8.A138.O3TCGA -2.3329713
                                       2.0373100 -0.4349161 -1.22120103
                             4.0048508
                   NP_002538 NP_005717 NP_001139013 NP_079139 NP_525129
## AO.A12D.O1TCGA -0.401119497 -1.0106872
                                       0.26940498 -1.8221742 -1.9326584
## C8.A131.O1TCGA 0.322890253 -1.7253375
                                        0.65886437 -2.3932379 -2.4701476
## AO.A12B.O1TCGA -1.613215060
                             0.6538506
                                       -0.16373422 -1.7213025 -1.8266185
## BH.A18Q.O2TCGA 0.004653887 -0.1358522
                                        0.44289891 -2.4408203 -0.5674064
  C8.A130.02TCGA
                 0.726051638 -1.0024393
                                       -1.11723467 0.5423790 0.4866212
  C8.A138.O3TCGA
                 0.029540563 0.4098830
                                      NP 003192 NP 061857 NP 203747 NP 775922 NP 976225
                           0.9818372 -0.7782895 1.1685173 1.9152378
## AO.A12D.O1TCGA -0.03537887
## C8.A131.O1TCGA -1.89939638 0.5860025
                                     1.5170151 2.0675269 -1.0169583
## AO.A12B.O1TCGA 1.02799954 -0.6431992 -0.5988556 -0.2607358 1.8234125
## BH.A18Q.O2TCGA
                 ## C8.A130.02TCGA
                                     1.3131482 -0.9138828 0.2012726
                1.38530528 -0.6646128
  C8.A138.O3TCGA -0.07285933 2.0994813 0.5232543 4.3486219 -0.3837162
                NP 001238978 NP 055660 NP 057260 NP 057631 NP 000160
## AO.A12D.O1TCGA
                -0.34016273 0.7075318
                                       1.6676009
                                                 1.4275836 -1.2278457
## C8.A131.O1TCGA
                 -0.66479269 0.1002568
                                      0.5819546
                                                0.4605182 -0.4421592
## AO.A12B.O1TCGA
                  1.11114376 -1.1448360
                                      0.5208198
                                                0.4182753 0.7924243
## BH.A18Q.02TCGA
                 -0.08232604
                             0.8409994 -1.3234627 -1.4706595 -1.6078202
## C8.A130.02TCGA
                  0.33246737 0.1192759
                                       0.7719698
                                                 0.8506867 0.2078324
## C8.A138.O3TCGA
                  1.47776767 -0.3983447
                                       0.3111403
                                                 0.3477117 -1.1005154
                   NP_006362 NP_006446
                                       NP_036399
                                                 NP_742000 NP_001138827
## AO.A12D.O1TCGA
                 ## C8.A131.O1TCGA 3.338561544 2.152532 -0.04141903 -1.00481469 -0.850995217
## AD.A12B.O1TCGA -2.541658809 -1.106035 -0.16373422 -0.05010379 0.005325683
## BH.A18Q.02TCGA -0.547334120 -0.353302 -0.07228990 -0.91867151 -0.922016888
## C8.A130.O2TCGA 1.355786460 1.119636 1.49354095 -0.37270443 -0.320226531
```

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## C8.A138.O3TCGA 1.272967879 1.697196 0.57445430 -1.77708618 -1.908743195
##
                 NP_001138828 NP_001078926 XP_003960503 NP_671717 NP_001186621
## AO.A12D.O1TCGA -1.74597825
                              -1.76121744
                                            -1.6621627 -1.4373846
## C8.A131.O1TCGA -1.00481469
                               -0.95624012
                                            -0.9440965 -1.5472307
                                                                     1.1850889
## AO.A12B.O1TCGA
                   0.06352663
                                0.09124137
                                             -0.1166192 0.4155038
                                                                    -1.8709621
## BH.A18Q.02TCGA
                  -0.91867151
                              -0.92870765
                                            -0.9287077 0.4295174
                                                                    -3.4109810
## C8.A130.02TCGA
                  -0.37270443
                               -0.37270443
                                             -0.2152707 -0.6449335
                                                                    -0.5891758
## C8.A138.O3TCGA
                  -1.87948608 -2.00382881
                                             -1.9562860 -1.6015435
                                                                     0.4354830
##
                 NP 963868
                            NP 005524 NP 001184224
                                                     NP 055717
                                                                 NP 892118
## AO.A12D.01TCGA -1.936468 -1.60120592 -0.01252008 0.40655771
                                                                0.42941650
## C8.A131.O1TCGA 8.382221 -1.48246464
                                       -1.70105021 -0.61621812 -0.61217024
## AO.A12B.O1TCGA -2.907493
                            0.07461253
                                       -2.69686135
                                                   0.45153298 0.39887497
## BH.A18Q.O2TCGA -5.789547
                            0.83096321
                                        -0.61424176 -0.87852692 -0.87852692
## C8.A130.02TCGA -1.714171
                            0.05695839
                                        -1.22875021
                                                    0.01104023
                                                               0.01104023
  C8.A138.O3TCGA 3.602566
                            0.36965451
                                         1.20713937
                                                     1.77765308
                                                                 1.74108169
##
                   NP_057407
                              NP_060244
                                        NP_787050
                                                      NP_055439
                                                                 NP 055313
## AO.A12D.O1TCGA -0.17634141
                              0.4065577
                                         0.1779698
                                                    0.741819953
                                                                 2.4562291
## C8.A131.O1TCGA 0.07596952
                              0.5050449
                                         0.3147945
                                                   3.545003472 1.0353173
## AO.A12B.O1TCGA -0.12493359 -1.4607840
                                        0.6732509 -0.008531686 -2.3199409
                                                   1.426441178 -0.4335911
## BH.A18Q.02TCGA 2.68765014
                              0.4696620 -0.4302458
  C8.A130.02TCGA -0.84500555
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                              0.6731971
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##
                   NP_004555
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## C8.A131.O1TCGA -0.34501010 1.29033380
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## AO.A12B.01TCGA 1.57397990 -1.87096213 -0.9896334 0.1328135 -2.5472018
## BH.A18Q.02TCGA -0.45031805
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                             0.83756718 -0.2611889 0.9589223 -1.8355259
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   -0.4502550
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                 0.9212885
                                             0.9212885 0.9212885
                                                                     2.1523890
## C8.A130.02TCGA
                   -2.6390938
                                -2.6390938
                                             -2.6390938 -2.6390938
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## C8.A138.O3TCGA
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                                -1.3162866
                                            -1.3162866 -1.3162866
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##
                 NP 001104777 NP 001184151 NP 000914 NP 055986 NP 001186036
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                     2.152389
                                 0.8911801 2.152389 -0.3733743
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## C8.A130.02TCGA
                    -2.215991
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## C8.A138.O3TCGA
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##
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## AO.A12D.01TCGA 2.41432135 -0.4163587 1.21423492 -1.258324 -3.33466408
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## AO.A12B.O1TCGA 1.37997673 1.2441745 -1.27232377
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## BH.A18Q.02TCGA 0.52987884 -0.1325068 -0.05890837
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## AO.A12D.O1TCGA 0.80277672 0.7646787 -0.5916094 -0.5192232
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## C8.A131.O1TCGA -0.41382408 0.3552733 -0.7497982 -0.7457503
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## AO.A12B.01TCGA 1.41046294 -2.2312537 2.9264591 3.0982905
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```

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## BH.A18Q.02TCGA 0.17526836 1.2491359 0.1853045 0.2053768
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                                                             NP 036345
## AO.A12D.01TCGA -0.4354077 -1.6469235 -1.0221166 -0.19158060
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## C8.A131.O1TCGA 0.2864593 1.9258511 -1.6605714 0.07192163
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0.46539035
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## BH.A18Q.02TCGA -0.1726514 -0.8618000 -1.3836796 0.37933666
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## C8.A130.O2TCGA 0.2406310 0.4735017 -0.8679646 -0.74004975 -0.1496734
## C8.A138.O3TCGA
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                  NP_071933 NP_002200 NP_001116080
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## AO.A12D.O1TCGA
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                                         1.4199640 1.09232138
                                                                1.09232138
## C8.A131.O1TCGA 1.4765363 1.6667867
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## AO.A12B.O1TCGA -0.8815460 -0.4214813
                                       -2.8991789 -1.18086514
                                                               -1.18086514
## BH.A18Q.O2TCGA 0.1384692 1.6773448
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                                                               -0.59416947
## C8.A130.02TCGA -0.2087110 -1.3468255
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## C8.A138.O3TCGA -0.3398305 -0.3069162
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##
                 NP 001258671 NP 660204 NP 068811
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                                                               NP 005225
## AO.A12D.O1TCGA
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                                                               0.6770534
## C8.A131.O1TCGA
                 -0.09808936 -0.8267079 -1.0493414 -1.07362867 -0.2559567
## AO.A12B.O1TCGA
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                 -0.77482009 -0.4703903 0.5666780 -0.22952284 0.1183969
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA -1.6125149 0.87068257 0.4208545 1.6094247 1.8142245
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## C8.A131.O1TCGA 0.29455509 0.51314066
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## AO.A12B.01TCGA -0.83997385 1.77906896 -1.5300708 -0.7318864 -1.3028100
## BH.A18Q.02TCGA -1.29335427 -0.21614132 0.2622483 -1.3736434 -0.1258160
## C8.A130.02TCGA 0.05695839 0.24719078 -0.9893198 -0.6646128 1.6936130
## C8.A138.O3TCGA 0.09171193 -1.11148686 1.2400536 1.5618819 0.2160547
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                                                             NP 996895
## AO.A12D.01TCGA 0.0179583 1.5418776 1.3475779 2.726725 0.433226301
## C8.A131.01TCGA -0.2033343 -0.7255109 -0.6566969 1.071748 -0.009035984
## AO.A12B.01TCGA -0.7069431 -0.7956303 -0.4242528 -1.821076 1.573979897
## BH.A18Q.02TCGA -0.4402819 -0.9688522 -1.9089045 3.293164 0.068216142
## C8.A130.O2TCGA -1.O450776 -1.6452936 -1.8158467 -2.393104 -0.172632432
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  BH.A18Q.02TCGA -1.2966997 -0.02545455
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  C8.A130.O2TCGA -0.5465375 -3.89528359
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##
## AO.A12D.01TCGA -0.2106296 -0.2106296 0.8904021 -1.3573788
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```

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## C8.A131.O1TCGA 0.3512254
                             0.3512254 -0.0899936 -1.6929544
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                                                              -0.05287527
## AO.A12B.O1TCGA 0.2353580
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## BH.A18Q.02TCGA -1.1060129
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## C8.A130.02TCGA 1.4049845
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                  NP 006296 NP 006392 NP 036535 NP 079506 NP 060533
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## AO.A12D.01TCGA -1.4297650 -1.3116613 -1.0983126 -0.6411368 -2.0698111
## C8.A131.O1TCGA -0.8024206 -0.3409622 0.2743157 0.2824114 1.0150779
## AO.A12B.O1TCGA -0.7457437 -1.8626477 -1.0201197 0.9642556 -1.5938147
## BH.A18Q.O2TCGA -0.5272618 -0.1258160 -0.6309687 -0.8885631 1.2156821
## C8.A130.O2TCGA -0.5399777 -0.0283182 -0.5629368 0.4111842 0.2012726
## C8.A138.O3TCGA 0.O331977 -0.1423450 -0.2447449 1.4375391 0.6768542
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                                                    NP_009126 NP_001119575
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                                                                 -0.8430561
## AO.A12D.O1TCGA
## C8.A131.O1TCGA 1.8813244
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## AO.A12B.O1TCGA -0.8482883
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## BH.A18Q.02TCGA -0.1726514
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## C8.A130.02TCGA 1.4705819
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## C8.A138.O3TCGA -0.5153732
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                                                                  0.2416546
                  NP 055764 NP 387506 NP 001186779 NP 000476
                                                                NP 001003
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                                        -0.3058745 -0.2868256
                                                               0.09415427
## C8.A131.O1TCGA 0.2257411 -1.2355439
                                        -1.3003100
                                                   1.4077223
                                                               0.71958258
## AO.A12B.O1TCGA 1.0723431 2.2031045
                                          2.2419051 0.7175945 -0.90926070
## BH.A18Q.O2TCGA 0.8510355
                            1.3093528
                                         1.3093528
                                                    1.6271641 -0.10239833
## C8.A130.02TCGA 1.3295475
                            0.4931809
                                          0.4931809 0.7785295
                                                              1.09995669
  C8.A138.O3TCGA -0.2557163 -0.6982301
                                        -0.6982301 -1.5978864 -1.70394340
                  NP_005821
                            NP_997080 NP_001248394
                                                    NP_060606
                                                              NP_068593
## AO.A12D.O1TCGA 0.4217969
                             2.3419352
                                          2.3419352
                                                   4.1477795
                                                               1.2713819
## C8.A131.O1TCGA -0.5554999 1.5898770
                                        1.5898770 1.4077223 -0.3369143
## AO.A12B.O1TCGA 2.2502195 -0.3355656
                                        -0.3355656 -0.9397469
                                                               2.2252763
## BH.A18Q.02TCGA 0.5198427 -0.6443502
                                        -0.4703903 -5.7627844
                                                               0.2087222
## C8.A130.02TCGA 1.1130762 -1.4321021
                                         -1.5534572 -0.3530252 1.1819534
  C8.A138.O3TCGA -0.7128587
                            2.2640526
                                          1.4777677 2.3445097 -0.1277164
                                         NP_071922 NP_006807 NP_115805
                  NP_000850
                               NP_114402
## AO.A12D.01TCGA 0.1855894 -0.008710286 -0.02775928
                                                    2.2924078 -0.2030100
## C8.A131.O1TCGA -0.2073821 -0.045466912 -0.12237665 0.4240873 1.1243707
## AO.A12B.01TCGA -4.4900049 1.069571652 0.86448258 0.4737048 0.7148230
## BH.A18Q.02TCGA -2.9091737 0.268939054 0.34588284 -0.7748201 -0.8250008
## C8.A130.O2TCGA -0.1759123 0.178313537 0.21111222 -2.7834080 -0.4153427
## C8.A138.O3TCGA 1.2693107 -0.021659385
                                        0.50131152 1.9531958 0.4647401
                  NP 055546
                             NP 060337
                                         NP 690870 NP 001746 NP 074036
## AO.A12D.O1TCGA -0.6449466
                            0.01795830 -0.56875062 0.6808632 0.5551398
## C8.A131.O1TCGA 2.0837185 0.48480549
                                        0.01120342 0.7641093
                                                               0.8531627
## AO.A12B.O1TCGA -0.4685963 -0.49631109
                                        1.59060874 -0.8760030 -0.8676886
## BH.A18Q.O2TCGA 0.9881962 0.81089091 0.67038488 2.3731842 1.6405456
## C8.A130.02TCGA
                 1.4345033 -0.06767663 -1.30090732 -0.4579810 -0.5268583
## C8.A138.O3TCGA 0.1465690 -1.52840072 0.80119693 -0.5080589 -0.7457729
##
                 NP 113649 NP 002856
                                       NP_116235
                                                  NP 001004 NP 068749
## AO.A12D.O1TCGA
                        NA
                            3.3972493 3.03531845 0.16654043
                                                              1.7742753
## C8.A131.O1TCGA
                            0.6871995 0.38360847
                                                  2.37921376
                        NA
                                                              0.2297890
                        NA -0.9674616 -0.88154596 -2.82157767 -0.2025349
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 1.392987 -1.6948001 -1.69480010 -0.06894451 -0.8517639
## C8.A130.O2TCGA -1.500979 1.8608863 1.56241820 1.66737400 -0.6154147
## C8.A138.O3TCGA -3.528856 -0.9066871 0.01856914 -1.27971526 0.7024542
```

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NP 001028693 NP 000467 NP 777283 NP 061981
                                                             NP 000115
                  -0.6792348 -1.3421396 -2.2679206 0.8980217
## AO.A12D.O1TCGA
                                                             2.8067306
## C8.A131.O1TCGA
                  -0.1547597 -0.4826381 0.3228903 0.9260245 0.5252843
                   0.1134132 1.5822943 0.6760224 -0.5406547 -3.2317558
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -0.6142418 -1.1093583 -1.1260852
                                                   0.2321399 -0.4636996
                    0.5292595 -1.3140268 -0.1070351 0.1291155 0.9917210
## C8.A130.02TCGA
## C8.A138.O3TCGA
                    0.3330831 -0.6433730 -0.9432585 -0.1533164 1.1632537
                                         NP 079431
##
                 NP 001263987 NP 057070
                                                     NP 002785 NP 001186708
## AO.A12D.O1TCGA
                   0.69610238
                              0.2846442 -2.19934423 0.06367588
                                                               -0.01252008
## C8.A131.O1TCGA
                   2.15253243
                             1.7720316 0.07192163 -0.34096222
                                                               -0.31262705
## AO.A12B.O1TCGA
                 -1.07000618 -0.5184829
                                        1.51577895
                                                   0.90605469
                                                                0.86725406
## BH.A18Q.02TCGA
                 -0.04552684 1.3394612 -1.01234220
                                                    0.03810771
                                                               -0.07563528
## C8.A130.02TCGA
                  0.94580285 -0.6186946 1.36234620
                                                   0.78180941
                                                                0.79492888
## C8.A138.O3TCGA
                   0.32942597 -1.3821152 -0.06920219 0.07708337
                                                                0.01491201
                 NP_001186709
                               NP_005779 NP_001138639
##
                                                       NP_110396 NP_001153408
## AO.A12D.O1TCGA -0.34778232 0.06367588
                                          0.06367588 -0.02013968
                                                                  -0.9497304
## C8.A131.O1TCGA
                  0.31074661 -0.26405248
                                         -0.83075581 -0.45835077
                                                                   0.2014538
## AO.A12B.O1TCGA
                  0.85616816 0.04689779
                                          0.09678432 -1.32498178
                                                                  -0.7956303
## BH.A18Q.02TCGA
                 -0.34995659 -0.63431405 -0.50718954 2.34307581
                                                                  -1.1996836
## C8.A130.02TCGA
                  1.12619564 -0.71381079
                                         -0.71381079 -0.99587952
                                                                   0.9031646
## C8.A138.O3TCGA
                  0.06976909 -0.62874449 -0.66897302 -1.08222974
                                                                  -1.2138868
                NP 002506 NP 002507
                                      NP 006294 NP 149075 NP 060366
## AO.A12D.01TCGA -2.416503 -1.7916958 0.04081709 0.8675433 1.2561427
## C8.A131.O1TCGA -1.992498 -0.8267079
                                     0.52933218 1.9218032 0.1528793
## AO.A12B.01TCGA 4.193023 4.2789384 0.05244074 -1.4386122 -0.1498769
## BH.A18Q.O2TCGA -2.942628 -2.2133343 -0.28973972 -1.2465189 0.4395535
## C8.A130.O2TCGA 2.562778 1.6181760 0.68341334 0.4013446 -0.0283182
## C8.A138.O3TCGA -2.658457 -2.5889711 0.59273999 1.2875964 0.6000543
                  NP_002572
                                        NP_076415 NP_001139016
                            NP_006232
                                                                NP_000961
## AO.A12D.01TCGA -1.0411656 0.69610238 -0.66399557
                                                    0.4713243 -1.51739036
## C8.A131.O1TCGA 8.0341034 -0.76194184 -0.32477070
                                                    -0.2721482 3.04711412
-0.1526483 -1.05337734
## BH.A18Q.02TCGA -0.6778040 -0.46369957 -0.61758714
                                                    -0.6042056 0.02472618
## C8.A130.02TCGA -1.9831200 0.06679799 -2.64893343
                                                    -3.6230545 0.51941990
  C8.A138.O3TCGA -0.6543445 1.72279600 2.30428112
                                                     2.5090809 -2.96565641
                NP_003969 NP_060092 NP_001153803 NP_001004439 NP_116262
## AO.A12D.O1TCGA 0.307503
                           0.2351168
                                              NΑ
                                                    2.9857911 -0.6449466
## C8.A131.O1TCGA 3.107832
                                                    1.1486580 4.4193458
                           0.9017372
                                              NA
## AO.A12B.O1TCGA -1.258466
                           0.2852445
                                              NA
                                                   -1.7213025 -1.1143498
## BH.A18Q.02TCGA 1.111975 -0.8350370
                                       0.8844893
                                                   -2.2668604 0.3358467
## C8.A130.02TCGA -1.215631 -0.1004753
                                      -1.1401937
                                                   -0.9663607 -1.2385898
## C8.A138.O3TCGA -0.588516 0.6512542
                                       -0.9542299
                                                    0.7573113 -0.6031445
                 NP 061834 NP 149975 NP 003680 NP 036199 NP 056272 NP 037505
## AO.A12D.O1TCGA
                            1.9609554 -0.9649696 -2.751765 0.3646499 -0.9383010
                        NA
## C8.A131.O1TCGA
                        NA 0.6305292 -1.1748257 -1.668667
                                                          0.7236305 3.4964289
                        NA -1.0367485 3.0622614 3.173120 0.3600743 -0.4685963
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA -9.3891784
                           0.5532965 -0.6510410 -7.281588 -1.9557399 -0.3298843
## C8.A130.02TCGA -0.5006193 0.2111122 -0.4743804 -3.731290 1.3459469 0.4210238
  NP_001171953 NP_004636
                                        NP_115558
                                                     NP_065956 NP_001186032
## AO.A12D.O1TCGA
                          NA -1.9212290 -0.75924052 0.48656348
                                                                0.17035023
## C8.A131.O1TCGA
                          NA -1.7172417 0.05168223 -0.77408548
                                                              -0.85504310
## AO.A12B.O1TCGA
                          NA -0.3521944 0.17161412 -0.70417163 -0.37990919
## BH.A18Q.02TCGA
                   -5.301122 0.2287945 -0.66776787 -2.19660738 -0.63765943
```

```
## C8.A130.02TCGA
                    1.106516 1.3787455 0.73261137 0.68013347
                                                                0.76868993
## C8.A138.O3TCGA
                    1.459482 -0.3581162 0.25262605 -0.02531652 -0.02531652
                 NP 001186016 NP 037524 NP 689794 NP 004314 NP 002574
                          NA -0.1153846 0.5437104 -1.2278457
## AO.A12D.O1TCGA
                                                             1.0237450
## C8.A131.O1TCGA
                          NA 0.8369711 -1.4136507 -1.3569803
                                                             0.4362309
                          NA -0.4436531 -2.0926800 3.0484040 0.1965574
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA
                          NA -0.6309687 -1.0524868 -1.1595390 -0.7748201
## C8.A130.02TCGA
                          NA 0.3357472 -1.4255423 -1.6813721 0.4439829
## C8.A138.O3TCGA
                    2.977195
                              0.7609684 1.9129672 0.2197118 1.1632537
##
                   NP_003363
                              NP_057314 NP_065080
                                                     NP_851851 NP_001017526
## AO.A12D.O1TCGA -1.32690045
                            1.05422340 0.4522753 2.056200320
                                                                2.50956630
## C8.A131.01TCGA -0.70122362 0.75601351 -0.6769363 -0.004988103
                                                                0.01120342
## AO.A12B.01TCGA 0.10787022 -0.57114088 2.6132826 -1.931934556
                                                               -2.11762331
## BH.A18Q.02TCGA 0.04145309 1.17219216 -1.9189407 -2.169844323
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## C8.A130.02TCGA 0.53581924 -0.39894338 -1.9700006 0.896604819
                                                                1.09339695
## C8.A138.O3TCGA
                 0.77193981 0.05514054 2.3627954 2.563938005
                                                                2.90039481
                 NP_001185650 NP_001028733
##
                                           NP_060726 NP_775738 NP_001073948
## AO.A12D.O1TCGA
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                              0.9818372 -0.88115407 -0.1230042
                                                                0.73039056
                 -0.78622912
                              0.5050449 -0.28024401 -0.1021372
                                                                -0.43811136
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  1.46312094
                              1.0446284 -1.17255071 2.0201872
                                                                 1.10837229
## BH.A18Q.O2TCGA
                 -2.59470782
                              -1.0123422 0.61016800 -0.6911855
                                                                 1.27924438
## C8.A130.02TCGA
                 -0.03815781
                              0.2996687 -0.00535912 0.2471908
                                                                -1.64857342
## C8.A138.O3TCGA
                 -0.67628730
                               0.2928546 -1.37480088 -0.4751446
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## AO.A12D.01TCGA 1.587595145 -0.7782895 0.2960736 -0.1230042 0.1284424
## C8.A131.01TCGA -0.009035984 0.5252843 -0.9683838 0.1528793 -0.4138241
## AO.A12B.O1TCGA 0.290787492 0.1688426 -0.4879967 0.6289073 1.0169136
## BH.A18Q.02TCGA 1.443168087
                             1.1287022 0.5231881 -0.3365751 -1.3569165
## C8.A130.O2TCGA -1.763368832 -0.3694246 -0.5334180 -1.1434736 -0.6154147
## C8.A138.O3TCGA 0.091711929 0.4647401 -0.7457729 -0.4056590 0.0331977
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## AO.A12D.O1TCGA 0.51704186 -2.35554596
                                        -0.8621051 -0.8811541
                                                                -0.8811541
## C8.A131.O1TCGA 0.12454409 0.07596952
                                          1.7436965 1.7679837
                                                                1.7679837
## AO.A12B.O1TCGA 0.60950699 -0.75128668
                                        -3.1458401 -3.3287574
                                                                -3.3287574
## BH.A18Q.O2TCGA
                 0.04145309
                            3.13593131
                                        -2.8690291 -2.8757199
                                                                -2.8690291
## C8.A130.02TCGA 0.34230698 0.52925951
                                        -3.5016993 -3.4689006
                                                                -3.5016993
## C8.A138.O3TCGA -0.34714477 -0.36908761
                                         -2.8120566 -2.8120566
                                                                -2.8339994
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                                       NP_001892 NP_001003652
                                                               NP 005891
## AO.A12D.01TCGA 0.5170419 -0.5687506 0.10177386
                                                   -0.6068486 1.83904182
## C8.A131.O1TCGA -0.5069253 -0.9360007 -0.81861217
                                                    0.4402788 0.93412027
-0.3161653 0.06352663
## BH.A18Q.02TCGA -0.2362136 -6.3181178 0.86441702
                                                   1.2023006 -0.51053492
## C8.A130.02TCGA -0.1726324 -2.6062951 0.04711878
                                                   0.7227718 0.17831354
## C8.A138.O3TCGA 0.6878256 -0.5958302 -0.54097315
                                                   -1.1626868 -0.63240163
                 NP_005894 NP_005893 NP_001120689
                                                   NP_077315
                                                                NP_004795
1.02755482 -0.87353447 -0.51922324
## C8.A131.O1TCGA 0.5252843 0.4605182
                                       0.64267285 -0.76598972 0.09216104
## AO.A12B.O1TCGA -0.2635073 -0.4658249
                                       0.06352663 0.09401285 -0.47136782
## BH.A18Q.O2TCGA -0.9320530 0.5800596
                                      -0.37002888 0.79416401 0.17526836
## C8.A130.O2TCGA 0.3980648 0.9622022
                                       0.43086344
                                                   0.49646082 0.60141662
## C8.A138.O3TCGA -0.9213156 -1.0017727 -0.96154415 -0.30325910 -0.06188792
                  NP_005138 NP_001128582 NP_060329 NP_060531 NP_002780
## AO.A12D.O1TCGA -0.57637021
                             -0.6182780 -0.5573212 -0.2258688 -0.2830158
## C8.A131.O1TCGA -1.32459729 -1.2112566 -1.0938681 -0.1790470 -0.6971757
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```
## AO.A12B.O1TCGA 1.49637863
                               1.3993770 -1.0478344 -1.1115783 1.1194582
                              -0.6242779 -1.1929928 1.0249954
## BH.A18Q.02TCGA -0.54733412
                                                              0.4830435
## C8.A130.02TCGA 1.06059826
                              1.0605983 -0.2611889 0.4046245
## C8.A138.O3TCGA -0.04725936
                              -0.1130879 1.4192534 -0.1130879 -0.3764019
                 NP 001096138
                              NP 065773 NP 001017405
                                                      NP 005165 NP 001001973
                  -0.2830158
                              1.2142349
                                          1.49615999 -0.34778232
## AO.A12D.O1TCGA
                                                               -0.47350566
## C8.A131.O1TCGA
                   -0.7093194
                             0.8734021
                                          0.50099701 -1.10196383
                                                                -1.10196383
## AO.A12B.O1TCGA
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                                         -0.20530633 1.69592475
                                                                  1.73195391
## BH.A18Q.02TCGA
                    0.4863889 -0.7246394
                                          0.26559367 -0.45700881
                                                                -0.43359114
## C8.A130.02TCGA
                    1.3033086 -1.3960235
                                        -0.01519873 0.08975708
                                                                  0.09631682
## C8.A138.O3TCGA
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                              0.7390256
                                          1.14496801
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                                                                  0.19776896
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                                                       NP_057039
                                                                 NP_002063
## AO.A12D.O1TCGA
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                                        0.8942119 0.787537531
                                                                 0.5284713
                   0.89364146 -0.4543029
## C8.A131.O1TCGA
                                          0.4726618 1.557493936 -0.2033343
## AO.A12B.O1TCGA
                   1.24140303
                              2.2529910
                                          -1.4053545 -0.008531686 -0.6958572
## BH.A18Q.02TCGA
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                              0.1117061
                                          -0.5941695 -0.744711650 0.3124290
## C8.A130.02TCGA
                   0.09303695 -1.3894638
                                          ## C8.A138.O3TCGA
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                                          -0.1167450 0.088054790 1.4667963
                  NP 002058 NP 004288 NP 006451 NP 006388
                                                            NP 055706
## AO.A12D.O1TCGA
                 0.85230410 -0.2030100 -0.9840186 -1.3573788
## C8.A131.01TCGA 0.02739495 -0.4866859 -0.5595478 0.7519656 -0.5474041
## AO.A12B.O1TCGA
                 0.39610350 -0.9203466 0.4709333 0.4515330 0.6815653
## BH.A18Q.02TCGA 0.20537680 0.7607102 -1.7583624 0.1485053 -1.3702981
## C8.A130.O2TCGA -1.88472398 -1.4911397 2.0150401 0.4243037
                                                             0.4472628
## C8.A138.O3TCGA 1.02793955 1.4667963 -1.0895440 0.2489689 -0.1679450
                  NP 055926 NP 001070993 NP 001070994 NP 001026871 NP 059142
## AO.A12D.O1TCGA 1.90761819
                               0.3379813
                                           0.3379813
                                                        0.3456009 -0.1344336
## C8.A131.O1TCGA -0.69312786
                               0.2459805
                                           0.4078958
                                                       -0.4381114 -1.5674701
## AO.A12B.O1TCGA -1.11989271
                                                        0.3240452 2.7463133
                              -0.9258895
                                          -1.0755491
## BH.A18Q.02TCGA -1.23313740
                               0.7406379
                                           0.6135134
                                                       -0.8417277 0.5834049
## C8.A130.02TCGA 0.05695839
                              -1.1795522
                                           -1.1861119
                                                       -0.4907797 -0.5006193
## C8.A138.O3TCGA
                 2.89308053
                              -0.2154878
                                           -0.4312590
                                                       -0.8481728 -1.3748009
##
                  NP_055512 NP_054790
                                       NP_659407
                                                   NP_057078 NP_060666
## AO.A12D.O1TCGA -3.4756266
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## C8.A131.O1TCGA -4.0042945
                            0.8572105 -0.24786096 -0.34501010 -2.3891900
## AD.A12B.O1TCGA -0.4685963 0.1050987 -0.64597068 -0.21916370 0.7286804
## BH.A18Q.02TCGA -0.1023983 -0.5339526 -0.06559913 0.23213985 1.0584492
## C8.A130.02TCGA -2.9769203 0.4013446 -0.01519873 -0.06439676 -1.8880038
## C8.A138.O3TCGA -1.5210864 0.5525115 -0.59948737 -0.32154480 1.7739959
##
                 NP_001036083 NP_064519 NP_001801
                                                    NP_006346 NP_077308
                  -0.9078227 -1.5745373 -0.6792348   0.44084590 -0.4887449
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                    0.2176453 3.4235670 -0.6809842 -0.43811136 -0.2316694
## AO.A12B.O1TCGA
                  -0.7291149 0.5679349 0.2187292 0.08015548 0.2852445
## BH.A18Q.02TCGA
                    0.3425375 -2.2835873 -0.2529405
                                                   1.59036489 -0.1960690
## C8.A130.02TCGA
                    ## C8.A138.O3TCGA
                   -0.1167450 -0.1752592 0.6183400
                                                   0.42816873 -0.2228020
                 NP 001229569
                               NP 683720 NP 219499 NP 001002
                                                                NP 112594
## AO.A12D.O1TCGA
                 -0.27920596
                              1.00088623 -1.5973961
                                                    1.0618430 -0.54970162
## C8.A131.O1TCGA
                  -0.12642453 -0.38144103 -0.7093194 -1.1991130 0.04358647
## AO.A12B.O1TCGA
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                              0.94208385 4.5588573
                                                   0.2353580 1.28297514
## BH.A18Q.02TCGA
                 -0.06894451
                              1.43982271 -0.8718362 -0.2061052 -0.09570757
## C8.A130.02TCGA
                  0.36526606 -1.28450798 -0.1463935 0.7260516 0.81788797
## C8.A138.O3TCGA
                 ##
                  NP 060979
                             NP 060585 NP 001001669
                                                    NP 002784 NP 000124
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## C8.A131.O1TCGA -0.2519088 0.30669873
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                                                                1.9460905
## AO.A12B.O1TCGA -2.5998598 -1.53838527
                                          2.5024236 0.90051174 -1.6575586
## BH.A18Q.O2TCGA -0.8116193 -0.41351885
                                         -0.6844948
                                                    0.13846916
                                                                 0.4696620
## C8.A130.02TCGA -0.4842200 0.53253937
                                         -1.3369859
                                                    0.95564246
                                                                 0.9458029
  C8.A138.O3TCGA 1.4997105 -0.85914425
                                          0.9218825 -0.06188792 -3.7373128
                   NP 149098 NP 001036182
                                           NP 054699
                                                       NP 003678 NP 849193
## AO.A12D.O1TCGA -0.05442786
                               0.19320902 1.22947412 1.39329544
                                                                 4.7497276
## C8.A131.O1TCGA -1.18696933
                             -0.89552191 -0.76194184 -0.06570632 1.0434131
## AO.A12B.O1TCGA 1.36889083
                               1.06402870 -0.82334501 -2.92412220 -1.6658731
## BH.A18Q.02TCGA -0.09236219
                             ## C8.A130.02TCGA -0.44158168
                             -0.96636070 0.03399931 0.35542646 -1.8453656
## C8.A138.O3TCGA -0.15331639
                             -0.16428781 1.44851056 1.38999633 1.1047395
                  NP_057021 NP_060417 NP_071447 NP_068594 NP_660341
##
                                   NA -2.8317707 -0.5573212 1.4847306
## AO.A12D.O1TCGA 1.6942695
## C8.A131.O1TCGA 0.7114868
                                   NA -0.8348037 -0.9602880 -2.3527590
## AO.A12B.O1TCGA -0.5628265
                                   NA -1.9707352 -1.5245279 1.5906087
## BH.A18Q.02TCGA -0.1224706 0.2823206 2.3363850 1.6773448 0.8108909
## C8.A130.O2TCGA -0.4153427 -0.8745244 -0.7170907 -1.6518533 -0.3891038
## C8.A138.O3TCGA 0.4281687 -3.3386846 -2.2561714 0.3038260 -1.5357150
##
                   NP 055323
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                                                                   NP 056142
## AO.A12D.O1TCGA 1.14565856 -0.05061807
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## C8.A131.O1TCGA -0.98052741 0.13263985
                                           1.0838919 1.0838919 0.241932634
## AO.A12B.O1TCGA -1.91253424 0.54299162
                                          -0.7263434 -0.7263434 0.005325683
## BH.A18Q.O2TCGA 1.53349340 -0.25963128
                                          -1.2632458 -1.2632458 -0.022109168
## C8.A130.02TCGA -1.12379440 0.61125623
                                           1.1688339 1.1688339 -0.067676628
## C8.A138.O3TCGA
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                                          -0.4678304 -0.4678304 0.563482881
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## AO.A12D.01TCGA 0.9399295 -0.8735345
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## C8.A131.O1TCGA -2.1989396 -3.4213996
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## AO.A12B.O1TCGA -1.9956785 -2.6885469
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## BH.A18Q.O2TCGA 0.4362081
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## C8.A130.02TCGA -0.3464655
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  C8.A138.O3TCGA -3.3057704 -3.3789131
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## AO.A12D.O1TCGA -0.3249235 -0.82019730
## C8.A131.01TCGA -0.4462071 -0.54335627 -0.2316694 -1.2679270 0.6183856
## AD.A12B.O1TCGA -0.2579643 -0.64874215 1.7707545 1.0972864 -1.6547872
## BH.A18Q.02TCGA -0.6610771 -0.36668350 -0.5841333 0.3927182 -0.2629767
## C8.A130.O2TCGA 0.1323954 0.65389452 -0.7630088 1.1622742 -0.8614049
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## AO.A12B.O1TCGA -1.6547872
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## BH.A18Q.02TCGA -0.2629767
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## C8.A130.02TCGA -0.8614049
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## C8.A138.O3TCGA 1.3461107
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## AO.A12D.O1TCGA -1.4754826 -0.3477823 -2.3631656 1.1380390 -0.2334884
## C8.A131.O1TCGA -1.1222032 -0.9440965 -1.9763061 -0.7619418 -1.2234003
## AO.A12B.O1TCGA -0.2662788 -2.3365697 -0.2247066 2.1061029 0.3545314
## BH.A18Q.02TCGA -0.8684908 -0.8383823 1.2357544 -0.9420892 -0.8818723
## C8.A130.O2TCGA 0.5653381 0.6178160 1.8543265 0.1619142 0.5390991
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## C8.A138.O3TCGA 1.6715960 -1.6893148 -1.6271435 -0.4093161 0.9877110
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## AD.A12D.O1TCGA -0.35159212 -0.2868256 -0.25253737 -0.1801512 -0.06585726
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## AO.A12B.O1TCGA -0.51848288 -1.9180772
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## BH.A18Q.02TCGA 0.11170611 -1.7416354 -0.01541840 -0.4269004 -1.92897683
## C8.A130.O2TCGA 1.06059826 0.4177440 0.74901072 0.8310074 1.21475210
## C8.A138.O3TCGA -0.37640188 -2.1903429 0.02954056 0.5927400 0.20874038
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 1.5251109 0.8207796
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## AO.A12B.O1TCGA 0.5457631 -0.2912220
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## BH.A18Q.O2TCGA -0.7112578 -0.5807879 -0.714603213
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## C8.A131.O1TCGA -0.08189784 -4.9393550 -0.15880758 -1.5188956
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## AO.A12B.01TCGA -0.19699191 -3.5643327 1.42709178 4.9191489 -2.8492924
## BH.A18Q.O2TCGA 0.35591898 -2.5947078 -0.46704495 0.5131519 -0.7748201
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA 1.16884678 -1.7048362 -0.2730128 -0.11912524
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## C8.A131.O1TCGA
                    1.1486580
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## AO.A12B.01TCGA -0.09721885 0.5679349 0.9365409 -0.2801361 0.9670271
## BH.A18Q.O2TCGA 0.14515992 0.1853045 -1.8353061 -0.3432658 -2.2768965
## C8.A130.02TCGA -0.12671427 -1.0778762 -0.7630088 -0.3300661 3.4286636
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## C8.A131.O1TCGA -0.3612016 -0.69312786 -0.1142809 -0.85909098 -0.6728885
## AO.A12B.01TCGA -2.1148518 -0.83443090 0.4349041 0.93376943 -0.5351117
## BH.A18Q.02TCGA 1.2959713 2.18918824 0.2455214 -0.08567142 -3.5146878
## C8.A130.O2TCGA 0.2570304 1.39514489 -0.5530972 -0.18903178 -0.1562331
## C8.A138.O3TCGA -2.2049715 -0.06188792 -0.4897732 -0.36177333 1.0535395
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## C8.A131.01TCGA 1.06365246 1.7275049 -2.2313226 0.2783636 0.5374279
## AD.A12B.O1TCGA -2.07605120 -1.1864081 -0.6570566 0.1577567 -0.6986287
## BH.A18Q.02TCGA -0.03214531 -0.2462498 -1.9055592 0.1217423 -1.2331374
## C8.A130.02TCGA -0.13983374 0.0241597 -0.9762003
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                  NP 000627 NP 002196
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## BH.A18Q.O2TCGA 0.1953407 3.5975940 -1.68810934 -0.5573703 -3.8157722
## C8.A130.02TCGA 0.8211678 -1.8158467 -1.71417080 -0.7597290 0.6112562
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## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA
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## C8.A131.01TCGA 0.1366877 0.335033895 -0.25190884 -0.7578940 0.2986030
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## BH.A18Q.02TCGA -0.20610517 -1.55763944 -1.7315993 -1.8252700 -1.5342218
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## BH.A18Q.02TCGA -2.3036596
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                                        -2.7753584 -1.2565551
                                                              -4.33096100
## C8.A130.02TCGA 0.8014886
                            1.65097466
                                          0.9884411 -1.7600890
                                                             -1.10083532
  C8.A138.O3TCGA 0.9474825
                            0.78291123
                                          1.2656536 -0.2447449
                                                             -0.51903031
                NP 001012997 NP 002803
                                       NP 003550
                                                  NP 005019 NP 065071
## AO.A12D.O1TCGA
                  -3.2737073 -0.1687218 -0.6563760 -0.18777080 0.9894568
## C8.A131.O1TCGA
                  -2.8992230 -0.3733453
                                        0.5414758 1.27009439 -0.6890800
## AO.A12B.O1TCGA
                  -0.6321133 0.2464439
                                        0.3683888 -1.31943883 0.2104148
## BH.A18Q.O2TCGA
                  -3.1032059 0.4629712 -0.5138803 -0.44697266 -0.1090891
## C8.A130.02TCGA
                  C8.A138.O3TCGA
                   0.2635975 -0.3142305 0.3989116 0.09171193 0.2123975
                 NP_113637 NP_060729 NP_009016 NP_001494 NP_004883
## AO.A12D.01TCGA 0.4027479 1.6904597 -0.1496728 -0.4735057
                                                          2.8372089
## C8.A131.01TCGA -0.1830949 -0.3733453 1.4724884 0.4078958 0.6669601
## AO.A12B.01TCGA 0.3351311 0.8256820 -2.6026312 -1.9014483 -2.0123073
## BH.A18Q.02TCGA -0.4871172 0.2187583 -1.4840410 -0.3666835 -1.0524868
## C8.A130.O2TCGA 1.2705099 0.1750337 0.7326114 0.6998127 -0.5727764
  NP_001137160 NP_859066 NP_001002030 NP_001159884 NP_005623
##
## AO.A12D.O1TCGA
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                             0.3075030
                                         -1.5707275
                                                     -0.5954192 -0.5992290
## C8.A131.O1TCGA
                  0.04358647
                             0.3228903
                                        -0.7862291
                                                     -1.8305824 0.4402788
## AO.A12B.O1TCGA
                  0.17161412 1.5961517
                                         1.0778861
                                                      4.9191489 0.9753415
                  0.80085477 -0.5674064
## BH.A18Q.02TCGA
                                         1.1655014
                                                     -1.3636073
                                                                1.0718307
## C8.A130.02TCGA
                  0.05039865 -0.5465375
                                         -1.5731364
                                                     -1.1926716
                                                                1.0671580
## C8.A138.O3TCGA
                  1.26931074 0.1648547
                                          0.1758261
                                                      0.4171973 1.6789103
                  NP 004696 NP 001265432 NP 057439 NP 001138304 NP 001106962
## AO.A12D.O1TCGA -0.96115983
                              3.1267536 -0.8392463
                                                    -0.5497016
                                                                 1.2447133
## C8.A131.O1TCGA -0.53526050
                              1.4603448 -0.7255109
                                                    -2.1260777
                                                                -0.2964355
## AO.A12B.O1TCGA -0.70140015
                             -3.5698756 -0.5766838
                                                     1.1776591
                                                                -0.3383371
## BH.A18Q.02TCGA 0.24886676
                              0.7707463 0.5499511
                                                    -4.5651377
                                                                -1.1327759
## C8.A130.02TCGA 0.55877833
                             -1.7371299 1.4869812
                                                     0.8867652
                                                                -0.2349499
## C8.A138.O3TCGA -0.01068797
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                                                                 1.6569675
##
                  NP_570899 NP_057060 NP_060158 NP_056131 NP_001230575
## AO.A12D.01TCGA 0.30750296 -1.7154999 -0.8925835 -0.2525374
                                                           -1.42214540
## C8.A131.O1TCGA -0.03332327 -0.1142809 -2.0936947 0.2743157
                                                            -0.91576131
## AO.A12B.01TCGA 0.80628163 1.1471729 1.3855197 -0.5683694
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## BH.A18Q.02TCGA 0.46631658 -0.1391975 -2.4274387 -1.0825952
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## C8.A130.O2TCGA -0.26446876 -0.8745244 -3.2130709 1.4541825
                                                            1.17211380
## C8.A138.O3TCGA 1.03891097 0.2635975 -0.2191449 2.5675951 -0.05823078
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NP 056345 NP 060703 NP 076956 NP 001186744 NP 001186745
## AO.A12D.01TCGA 1.6866499 -1.0754538 1.6066441
                                                             0.42560670
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## C8.A131.O1TCGA 0.7438699 -0.1021372 0.5252843
                                               -0.08594572
                                                           -0.08594572
## AO.A12B.01TCGA 1.4686639 -1.0506059 -0.6653710 -0.61825594
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## BH.A18Q.O2TCGA -1.1327759 -0.2462498 -1.4405511
                                               -0.77482009
                                                            -0.77482009
## C8.A130.02TCGA 1.1393151 -0.5858959 1.2803495
                                                1.46402213
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## C8.A138.O3TCGA -1.0493155 -0.4970875 1.0791395
                                                0.43548301
                                                             0.43548301
                NP_001180237 NP_001123237 NP_079148 NP_001138347 NP_001138348
## AO.A12D.O1TCGA
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                               1.614264 0.3341715 -0.47731546
## C8.A131.O1TCGA
                -0.01713175
                               1.270094 2.5937515
                                                    1.58987698
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## AO.A12B.O1TCGA
                  3.15926295
                               -3.162469 -1.2556949 -1.08663502
                                                                        NA
## BH.A18Q.02TCGA
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                               -1.106013 0.0213808
                                                    0.15519607
                                                                 0.1551961
## C8.A130.02TCGA
                 0.05367852
                               -1.038518 -0.8056471 -0.84172568
                                                                -1.1697126
## C8.A138.O3TCGA
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                                0.830454 -1.5174293
                                                    0.02954056
                                                                -1.0932012
                 NP_037498 NP_073615 NP_116038
##
                                                NP_060716 NP_065715
## AO.A12D.O1TCGA 0.2503560 -0.9573500 -1.3764278 -0.56113102 -2.999402
## AO.A12B.01TCGA -0.1775916 0.2492154 -1.5744144 2.19479004 -1.219666
## BH.A18Q.02TCGA -0.9387438 -0.6978763 -1.1729205 -0.75140241 -2.072828
## C8.A130.02TCGA 0.2996687
                           0.6374952 -0.0184786  0.08647721 -3.049077
## C8.A138.O3TCGA 0.5415400 0.2379975 -1.7258862 -0.47514464 4.045079
                            NP 003911 NP 008909
                                                 NP 849192 NP 004778
                 NP 006419
## AO.A12D.01TCGA -0.1687218 -2.74414537
                                      0.1436816
                                                        NA 2.5133761
## C8.A131.O1TCGA -1.3853155 0.80054020 0.1690708
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## AO.A12B.O1TCGA 1.5434937 -1.70190222 -0.7263434
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## BH.A18Q.02TCGA 0.6603487
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                                                        NA 1.1119753
## C8.A130.02TCGA -0.3497454
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## C8.A138.O3TCGA -0.8225729 -0.03263080 0.1465690 -0.00337369
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## AO.A12D.01TCGA 0.5475202 -0.2982549 -0.6182780 0.006528907
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0.5333801
## AO.A12B.O1TCGA -5.0165850
                           0.7924243 -0.9951764 -2.694089872 -1.7573317
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                           NA
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## C8.A138.O3TCGA
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                 NP 065130
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2.2162118
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## C8.A131.O1TCGA 0.5940983
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                                        -0.2761961
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## AO.A12B.O1TCGA -1.7573317
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                                        -1.2252087
                                                    -1.2113513 -0.69585721
## BH.A18Q.02TCGA 1.6706541
                                                    -2.5344909 -0.94208918
                           1.132047574
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## C8.A130.02TCGA -0.5465375 0.155354455
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## C8.A138.O3TCGA -1.0200584 -0.705544409
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## AO.A12D.01TCGA -0.26777656 -0.2334884 0.20844821 -4.0166180 0.1246326
## C8.A131.O1TCGA -1.O4529350 1.7558401 -0.02927539 7.7224166 -0.1466639
## AO.A12B.01TCGA -0.68477131 -1.2778667 -0.41870982 -0.9286610 -1.0312055
## BH.A18Q.O2TCGA -0.87183616  0.8008548  0.38268204 -3.6986838  0.9413608
## C8.A130.02TCGA -0.04471755 -0.8614049 -0.35958496 0.2603103 -1.0417977
  C8.A138.O3TCGA 1.70816744 0.3623402 -0.45320181 -2.3219999
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                                                NP_061942
                                                            NP 789782
## AO.A12D.01TCGA -0.2525374 0.4256067 -1.1745085 -0.61827799 -0.59922900
## C8.A131.O1TCGA -0.3207228 1.1850889 -0.7376546 -2.12607771 0.48480549
## AD.A12B.O1TCGA -0.7208005 -0.8094876 -0.3217082 0.06629811 0.34621697
## BH.A18Q.O2TCGA 0.5432604 0.4395535 0.6202041 1.45320423 -0.58747870
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## C8.A130.02TCGA 1.6772136 0.2832693 0.1947129 0.27342973 -0.44486155
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## AO.A12D.01TCGA -0.008710286 -0.008710286
                                          -2.4050733 0.1855894 2.3838430
## C8.A131.O1TCGA 1.164849486 1.164849486
                                          -0.8226600 -0.3612016 -1.1991130
## AO.A12B.O1TCGA -0.510168458 -0.510168458
                                         -2.0261647 1.0695717 -0.4879967
## BH.A18Q.O2TCGA -0.376719645 -0.426900373
                                         0.4194812 -0.1325068 -4.0164951
## C8.A130.02TCGA 0.932683376 0.899884687
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## C8.A138.O3TCGA -1.992857396 -1.963600282
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##
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## AO.A12D.01TCGA -0.02013968 -0.3592117 -0.57637021 0.2655952 -1.2964221
## C8.A131.O1TCGA -0.10213725 2.6989964 -2.49038699 0.5293322 -0.8388516
## AO.A12B.01TCGA -0.64597068 0.2907875 1.05848576 -1.1614648 -0.6819998
## BH.A18Q.02TCGA 0.24552138 -1.0591775 -0.37671964 1.3160436 1.2993167
## C8.A130.O2TCGA 1.26067026 1.0409190 0.05039865 -0.9138828 0.7719698
## C8.A138.O3TCGA 0.69513989 -0.4239447 -1.02737266 -0.3873733 -1.0529726
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## AO.A12D.O1TCGA -5.20146518
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## C8.A131.O1TCGA -6.08085738
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## BH.A18Q.02TCGA -0.04552684 0.6570033 -5.2308687 2.4334011 -0.8484185
## C8.A130.O2TCGA -1.29106772  0.4505427  0.9523626 -1.2779482 -2.2389498
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## AO.A12D.01TCGA -0.9840186 0.0217681 8.506189 -1.18593792 1.12660957
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## AO.A12B.01TCGA 0.8727970 -1.2362946 -1.266781 -4.12971334 -0.87323153
## BH.A18Q.02TCGA -0.2228321 -0.4068281 -4.193800 -3.44108943 -1.58105711
## C8.A130.O2TCGA 0.2898291 2.1298355 -6.046878 -0.36942456 -0.08735584
## C8.A138.O3TCGA -0.2922877 -2.0257716 2.337195 -1.84657183 -0.95057273
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## AO.A12B.O1TCGA 0.93099796 -1.2113513
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## C8.A138.O3TCGA 0.02954056 -0.9578870
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## AD.A12D.01TCGA 2.6352896 0.3227422 -1.12498115 -2.6108024 -0.6982838
## C8.A131.O1TCGA 0.9381682 -1.2193524 -0.60002660 -1.9115400 -0.8428995
## AD.A12B.01TCGA -2.0261647 -0.7235719 0.50419098 0.8145961 -0.5600550
## BH.A18Q.02TCGA -1.3702981 2.4467826 -1.65465552 -0.2161413 -0.5607156
## C8.A130.O2TCGA -0.6842920 -2.0224785 1.12947551 -0.4120629 1.3885851
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## C8.A131.O1TCGA -0.8428995
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## AO.A12B.01TCGA 1.56289400 -2.2063105 -2.0123073 -2.785549
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-0.02210917
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## BH.A18Q.02TCGA -1.8152338 -0.48042648
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## C8.A130.02TCGA -1.6223345 -0.28414797
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## AO.A12B.01TCGA 1.20260240 0.8201390
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## BH.A18Q.02TCGA -0.06559913 -0.6911855
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## C8.A130.O2TCGA -1.60921500 0.9064444 -0.3792642 1.50994030 -1.1926716
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## C8.A131.O1TCGA 2.O351439 1.94609050 -0.6000266 0.4767097
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## AO.A12B.01TCGA -0.3993095 -1.30558146 0.3018734 -0.1637342
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## BH.A18Q.O2TCGA -1.4539326 1.28928052 -1.9055592 0.1183969
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## C8.A130.O2TCGA 0.1586343 -0.05127728 2.3200679 1.4279436
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                                                     NP 758961 NP 006865
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## C8.A131.O1TCGA
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                 -0.22470665 -0.44365309
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                         -1.8620692 -0.08232604 0.3425375
## C8.A130.02TCGA
                 -0.22839020 -0.35958496
                                         -0.9368419 -0.94996135 -0.7728484
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## AO.A12D.01TCGA -0.6258976 -1.2240359 -0.5725604
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## AO.A12B.O1TCGA 0.5291342 -0.3605089 -0.3106223 -1.4386122 0.3046449
## BH.A18Q.O2TCGA 0.3425375 0.3425375 -0.4168642 -1.7315993 2.2962405
## C8.A130.O2TCGA -0.7728484 -0.2710285 0.4144641 1.9986408 -1.3009073
## C8.A138.O3TCGA 0.5159401 1.1486251 1.2290822 0.1465690 -0.2593734
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## C8.A131.01TCGA 0.26217204 -0.20738215 -0.1385682 -0.02522751 5.378694
## AO.A12B.01TCGA -0.08613295 -0.13047654 -0.6431992 0.30464486 -1.097721
## BH.A18Q.02TCGA -0.77816547 -0.07898066 -2.5645994 0.50311578 3.694610
## C8.A130.02TCGA -1.06475676 -0.79252765 1.3492267 -0.58917578 -3.721451
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## C8.A131.O1TCGA
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                                                  1.1162749 -0.6931279
## AO.A12B.O1TCGA
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                   2.9753530 0.08828843 0.5800596 1.5334934 -0.1258160
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  -0.8679646 -0.17263243 -1.1959515 -0.6121349 -0.3071071
## C8.A138.O3TCGA
                   1.1010823 1.86542442 1.4814248 0.9913682 0.7719398
##
                 NP_003600 NP_001184252 NP_002834 NP_001189488
                                                               NP 002019
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## AO.A12D.O1TCGA -1.2278457
                             -1.4488140 -0.8354365
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## C8.A131.O1TCGA -0.8995698
                             -2.2515620 1.7234571
                                                    -0.1588076 -0.243813077
## AO.A12B.O1TCGA -0.6043986
                             -1.4690984 -1.1559219
                                                    -0.7679155 -0.493539614
## BH.A18Q.02TCGA -0.1358522
                              0.2488668 0.1485053
                                                    -0.0154184 -0.002036877
## C8.A130.02TCGA 0.5292595
                              0.9162840 -1.1565931
                                                     0.1159960 -0.484219974
## C8.A138.O3TCGA 1.8690816
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                                                    -0.3873733 -0.365430467
                 NP 001190992 NP 075050
                                         NP 542199
                                                   NP 000382 NP 006103
## AO.A12D.O1TCGA
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                              ## C8.A131.O1TCGA
                   1.0069821
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                                                   1.3915308 -0.2842919
## AO.A12B.O1TCGA
                  -0.7429723
                              0.6316788 -2.54997323 0.9060547 -0.1942204
## BH.A18Q.02TCGA
                  -0.3332297
                              0.1618868 -0.74471165 -0.4168642 -0.4737357
                   0.3029486 -0.3333460 0.71293216 -0.1201545 -0.5530972
## C8.A130.02TCGA
## C8.A138.O3TCGA
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##
                  NP_982281 NP_001018119 XP_003846661 NP_000066 NP_057301
                             -1.9898053 1.583785347 -1.3764278 -0.1153846
## AO.A12D.O1TCGA -1.1630791
## C8.A131.O1TCGA -0.2842919
                             -1.6362841
                                         0.298602967 -0.8024206 0.5293322
## AO.A12B.O1TCGA -0.1942204
                             -1.5356138
                                        1.377205252 -0.5434261 -0.2191637
## BH.A18Q.O2TCGA -0.4737357
                             -1.2364828
                                        0.004653887 1.3361159 1.1855737
                              ## C8.A130.02TCGA -0.5530972
## C8.A138.O3TCGA -0.3581162
                             -0.9505727 1.550910456 -0.4714875 -0.2081735
##
                 NP_004872 NP_001638
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## AO.A12D.O1TCGA -0.7440013
                           7.2413356 -0.35540192 -0.4392175 0.26940498
## C8.A131.O1TCGA 2.1849155 0.4929013 0.08811316 -0.3288186 0.38765635
## AO.A12B.01TCGA -2.6608322 -1.3000385 -0.01961758 0.6704794 0.34344550
## BH.A18Q.O2TCGA 0.5867503 -0.2663220 -0.99896067 0.5800596 0.06487076
## C8.A130.02TCGA 0.2931089 0.2898291 0.29966868 -0.6121349 0.83756718
## C8.A138.O3TCGA
                 0.6219971 -3.7190271 -0.60680165 1.8544530 0.57079716
                  NP_663612 NP_004077
                                        NP_612373 NP_115737 NP_001092315
## AO.A12D.O1TCGA
                                   NA 0.783727733 -0.9383010
                 3.5420216
                                                             -2.4507909
## C8.A131.O1TCGA -0.6000266
                                   NA -0.004988103 -0.7821812
                                                               1.6586910
## AO.A12B.O1TCGA -2.0843656
                                   NA -0.504625510 -1.3887257
                                                               -3.1707834
5.7720922
## C8.A130.O2TCGA -0.9794802 -0.7695686 -0.192311645 0.2832693
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## C8.A138.O3TCGA 0.5378829
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                 NP_001035173 NP_689594 NP_001186072 NP_001258762
                                                                  NP 079177
                                          2.7038660
                 -2.4165027 1.4237738
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   1.7922710 0.7438699
                                          0.7276783
                                                      -0.9926710 -0.35310586
                  -3.1430686 -1.3083529
                                                       0.1910144 0.08292695
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                         -1.2063743
                                                      -1.8888322 -1.78847079
## C8.A130.02TCGA
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                                          -0.8712445
                                                      -1.7732084 -1.81256686
## C8.A138.O3TCGA
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                                                       0.4208545 0.41719731
                  NP 006811 NP 055161 NP 001139287 NP 003004 NP 004640
## AO.A12D.O1TCGA -6.58442192 0.6427652
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## C8.A131.O1TCGA -4.59933296 0.4767097
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## AO.A12B.O1TCGA -3.59204741 -0.1415624
                                         -0.3327941 -3.7361640 2.8571723
## BH.A18Q.O2TCGA 3.56414019
                                         -0.2328682 -1.9992298 -0.4436273
                             0.6335857
## C8.A130.02TCGA 1.55257859
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                                         -0.1791922 2.1757537 -0.2546292
## C8.A138.O3TCGA -0.00337369
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                                                              NP_004263
## AO.A12D.01TCGA -0.9268716 -0.3820705
                                         0.3798891
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                                                             0.50942226
## C8.A131.O1TCGA -1.0331499 2.0230002
                                       -0.3733453
                                                   1.2053283 0.50909278
## AO.A12B.O1TCGA 2.8045143 -0.9369754
                                       -0.1332480 -0.7679155 -0.68754279
## BH.A18Q.02TCGA -2.0326837 1.7308709
                                        1.2859351 0.6837664 -0.09905295
## C8.A130.02TCGA -0.7072511 1.3065884
                                         0.1258356 1.2967488 -1.48457998
```

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## C8.A138.O3TCGA -0.5446303 -0.4824589
                                        0.1282833 -1.2760581 -0.28497341
##
                 NP_005814 NP_037536 NP_000178 NP_001303 NP_001257766 NP_000172
                                                        1.3094799 0.1132033
## AO.A12D.O1TCGA
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                       NA
## C8.A131.O1TCGA
                                 NA -1.725337 0.4119436
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                 NA 2.064238 -1.3665047
                                                          -1.4550612 2.3266276
## C8.A138.O3TCGA -2.135486 -2.135486 -4.472398 5.8041633
                                                          5.7346777 -1.1663439
##
                  NP 057111
                             NP 777571 NP 001433
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## AO.A12D.O1TCGA 1.3818660
                            1.69426949 -8.268353 -11.8038454
                                                           1.60283434
## C8.A131.O1TCGA -0.5393084
                            0.03549071 -6.809476
                                                 -8.7565067 -0.06165844
## AO.A12B.O1TCGA 0.3683888
                            0.63445025 -4.720037
                                                 -6.3829216 -2.48345786
## BH.A18Q.O2TCGA -1.0558322 -1.84534228 -0.169306
                                                 -0.1626152 -0.36668350
## C8.A130.02TCGA 3.2810695
                           1.78872915 -1.671533
                                                 -2.1044752 -0.50389919
## C8.A138.O3TCGA -2.9546850
                            1.44851056 -1.766115
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                  NP_004888
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                                                             NP 002778
## AO.A12D.01TCGA -1.0297362 -0.1115748 0.2922638 -0.83162669 -0.3363529
## C8.A131.01TCGA -1.1667299 0.9988864 -0.1466639 -0.30453129 -0.7700376
## AO.A12B.01TCGA 0.2409010 0.0136401 -0.1083047 0.06906958
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## C8.A130.O2TCGA 0.7391711 -1.4222625 0.4079044 -0.15951296 0.8605263
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##
                   NP 055488
                                                    NP_002006 NP_005929
## AO.A12D.O1TCGA 0.66181419
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## C8.A131.01TCGA 0.61028980 0.39575211 -0.5433563 0.42408728 0.4240873
## AD.A12B.01TCGA -0.65982805 -0.07504706 -0.8760030 -0.62379889 -0.6237989
## BH.A18Q.O2TCGA 1.56025645 -0.04218146 0.5566419 0.42282662 0.8242724
## C8.A130.O2TCGA 0.21767196 0.46038226 -0.1890318 -0.20215125 -0.1791922
  C8.A138.O3TCGA -0.01068797 -0.69457299 1.1339966 0.09536907 2.0775385
##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   -0.2316694
                               -0.2316694 0.3107466
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## AO.A12B.O1TCGA
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                               -0.8815460 -2.2007675
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                               -0.8154867
                                          0.5948569
                                                      -0.6580530 -0.41534273
## C8.A138.O3TCGA
                   0.4501116
                               0.4501116 1.6057675
                                                       0.6439399 0.77559695
                 NP 001234930
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## AO.A12D.O1TCGA
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                                         0.30750296 -0.6830446 -1.68121168
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA
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                                          1.2447133 -0.961159827 -0.30587454
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                          -0.2191637 -1.632615377 1.86498465
## BH.A18Q.02TCGA
                 -2.88575604 0.5198427
                                          ## C8.A130.02TCGA
                  2.45782240 -0.6646128
                                          -0.3923836 0.007760356 0.05367852
## C8.A138.O3TCGA
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                                          NP_003695 NP_003266 NP_037485
##
                 NP_076983
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## AO.A12D.O1TCGA -0.6830446 -0.11157484 -1.2392751
                                                         NA -1.44881399
## C8.A131.O1TCGA -0.8388516 0.50504489 1.3915308
                                                         NA -0.84694734
## AO.A12B.O1TCGA -1.3360677 -0.86491711 -0.2524214
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## BH.A18Q.02TCGA 0.2087222 -0.52391645 -0.8250008 -0.5607156 0.82761783
## C8.A130.02TCGA 0.6670140 -0.44814142 -2.1602330 -2.5603770
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                                                    NP_055682 NP_149989
## AO.A12D.O1TCGA -0.2372982
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## C8.A131.O1TCGA 0.3026508
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                                       -0.4178720 2.90139040
                                                              0.4848055
## AO.A12B.O1TCGA 1.1582588 2.1061029
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## BH.A18Q.O2TCGA 0.2555575 1.8981400
                                        0.8878347 -0.77147471 -4.4614309
## C8.A130.02TCGA -0.9073231 -0.6842920
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## C8.A138.O3TCGA -1.1114869 0.2526261
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## AO.A12D.01TCGA -0.01252008 -0.4925547 -2.2412520 -1.7459782 0.06748568
## C8.A131.01TCGA 1.31462108 0.5374279 -1.1626820 -0.3935847 -1.36102821
## AO.A12B.01TCGA 0.27138717 0.2713872 1.8261840 -1.2224372 -1.34161062
## BH.A18Q.02TCGA -0.86849078 -0.7212940 -0.3733743 1.6238187 -0.28973972
## C8.A130.O2TCGA 1.19835275 1.1753937 0.7030926 0.1520746 -1.28778785
## C8.A138.O3TCGA -0.43491611 -0.4349161 -2.3695427 1.8763958 1.34611066
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## AO.A12D.01TCGA 1.4237738 1.1342292 -0.1763414 -1.07164397
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## C8.A131.01TCGA 1.6465473 -0.3045313 -1.2112566 0.03144283 -0.04141903
## AO.A12B.01TCGA 0.3656173 1.2026024 -1.3194388 0.55684899 -1.07554913
## BH.A18Q.O2TCGA -1.1428121 0.8543809 -0.9889245 -1.21975587 -0.52391645
## C8.A130.02TCGA 2.6119762 -1.3271463 -0.4219025 1.43450331
                                                            1.35906633
## C8.A138.O3TCGA -3.9933125 -1.8392576 -2.1574287
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##
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## AD.A12D.01TCGA 0.8218257 -0.5916094 -0.7744797 -0.06966706 -0.6678054
## C8.A131.O1TCGA 0.2581242 -1.2760227 -1.9682104 0.70339106
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## AO.A12B.01TCGA -2.0233932 1.9980154 1.8982423 -0.88986038 2.7740281
## BH.A18Q.02TCGA -0.7012217 0.7004933 1.2859351 -0.54398874 -1.5609848
## C8.A130.02TCGA -0.1103149 -0.6252543 -1.0975555 0.11927590 -0.5399777
## C8.A138.O3TCGA -0.2813163 -1.2431439 0.1575404 0.13559760 1.0133110
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-0.4462071 -1.5269913
## AO.A12B.O1TCGA 1.9536718 -0.4103954 0.66493647
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## BH.A18Q.02TCGA 0.2622483 -6.4151339 -0.93874380
## C8.A130.02TCGA -0.6318141 0.9786015 0.05039865
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## C8.A138.O3TCGA -1.8502290 1.9019958 0.95479677
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                  ## C8.A130.02TCGA
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##
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                                                               0.31131276
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                               0.05244074 -0.7263434 -0.3715948 -0.02516053
## BH.A18Q.02TCGA
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                              -0.42355499 -1.2933543 -1.6713824 -1.28666351
## C8.A130.02TCGA
                  3.21875198
                               3.26139027 -0.1168747 1.3951449
                                                               1.32298777
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                                                   NP 003976 NP 001099009
## AO.A12D.01TCGA -0.2487276 0.25797559 -1.73835865 0.81039632
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## C8.A131.O1TCGA -0.8267079 -0.09808936 1.97442567 -0.39358467
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## AO.A12B.O1TCGA 2.3028775 -1.51898495 1.24971745 1.08897197
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## BH.A18Q.02TCGA -1.3167719 -0.07898066 0.06152538 -1.49073181
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## C8.A130.02TCGA -0.1857519 0.36198619 -0.74660948 -0.07423637
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##
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                                                              1.4237738
## C8.A131.O1TCGA 0.812683845 0.4686140
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## AO.A12B.01TCGA -0.723571946 0.0247260 0.1189561
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## BH.A18Q.O2TCGA -0.734675504 -0.6075510 -0.5506795
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## C8.A130.O2TCGA 0.001200618 0.6702939
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## C8.A138.O3TCGA
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                                                             NP 689821
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                 -1.04124562 -1.0088626 -0.7781334
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                 -0.63096867 -0.6911855 -1.0023061
                                                   0.08828843 -0.2797036
## BH.A18Q.02TCGA
## C8.A130.02TCGA
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                                                          NA -0.1240593
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                 NP 060851
                             NP 061153 NP 005013 NP 000430 NP 004481
## AD.A12D.O1TCGA 0.4217969 -0.56494082 -0.3439725 -1.3421396 -2.504128
## C8.A131.O1TCGA -0.6121702 -0.57978719 1.0191258 -0.8752825 -2.061312
## AD.A12B.O1TCGA 0.6566220 -0.01684611 -0.2108493 3.3116940 -2.901950
## BH.A18Q.O2TCGA -1.5844025
                           0.68376640 0.8510355
                                                         NA -5.026800
## C8.A130.02TCGA 0.1848733
                            0.87036587 0.2799895
                                                         NA -5.305627
  C8.A138.O3TCGA 0.2489689
                           1.35708208 -0.2959448 -1.0200584 -4.966112
                 NP_000037 NP_001033073 NP_005340
                                                  NP_055091 NP_003965
## AO.A12D.O1TCGA -0.1153846
                             3.08103603 -0.4963645 -0.10776504 0.4979929
                             0.49290125 -0.1588076 2.24968157 0.3512254
## C8.A131.O1TCGA 4.2250475
## AO.A12B.O1TCGA -1.6825019
                            -0.03347495 -0.6071700 -3.02943821 -1.7795035
## BH.A18Q.02TCGA -0.1258160
                            -0.60086023 1.0149592 0.24886676 2.4166742
## C8.A130.02TCGA -0.4120629
                            -1.19267165 0.3980648 -0.09391558 -1.0647568
  C8.A138.O3TCGA -0.1716021
                             0.33308311 -0.6287445 -3.33868461 -0.9798298
                 NP_490647
                            NP_006727
                                        NP_660157 NP_078974
                                                              NP_113669
## AO.A12D.O1TCGA -0.8697247 -0.2296786
                                      -0.35921172 -0.8506757 -0.77066992
## C8.A131.O1TCGA -1.8386782 1.4077223
                                       0.58195463 -1.4541295 -0.03737115
## AO.A12B.O1TCGA -0.9619187 -0.1110762
                                       0.04412632 0.3129593 0.18547148
## BH.A18Q.O2TCGA -0.4636996 -2.2434427 -13.56421494 -0.4770811 -0.71794859
## C8.A130.02TCGA -0.2021513 -0.2251103
                                      -2.23239008 -2.4718205 -2.39966339
1.97879574 0.1977690 -0.34714477
                 NP 660186
                            NP 036443 NP 003674
                                                   NP 006708 NP 001010862
## AO.A12D.01TCGA 1.4009150 -1.15164973 -0.1992002 0.55513984
                                                              0.47132428
## C8.A131.O1TCGA 0.5738589 0.64267285 -1.1222032 -0.27619613
                                                             -3.12995218
                 1.0224566 -0.62379889 -0.5517406 -0.21639223
                                                             -0.30785086
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 0.2756298 -0.06559913 -1.4204788 -0.13585215
                                                              0.05148923
## C8.A130.02TCGA 0.4603823 1.31314817 0.4603823 -0.01519873
                                                              0.28982908
## C8.A138.O3TCGA -1.3821152 -0.12771642 -0.5300017 -0.70554441
                                                             -0.85548711
                 NP 001006682
##
                               NP 054892
                                          NP 060874 NP 006860 NP 037520
## AO.A12D.O1TCGA
                   2.1514453
## C8.A131.O1TCGA
                  -2.4944349 -0.06165844 0.56171523 1.0312694 0.4443267
                  ## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   0.5098065 -0.56740641 0.44958967 2.0219191 -1.3201173
## C8.A130.02TCGA
                  -0.2546292  0.76868993  0.46366213  -0.8220465  -1.0450776
                  -1.4004009 -0.45685895 0.13925474 1.7301103 -0.3764019
## C8.A138.O3TCGA
```

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NP 001136028 NP 000779
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                  -1.2926123 -1.2735633 -0.08871605 -0.8506757 -0.3782607
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  -0.2114300 -0.7336067 0.61028980 0.1731187 2.2456337
## AO.A12B.O1TCGA
                  -1.2584664 -0.8732315 -1.00903375 -0.6681425
                                                            0.0247260
## BH.A18Q.02TCGA
                 -1.1729205 0.9112524 0.11839687 1.1454291
                                                            1.2859351
## C8.A130.02TCGA
                 -0.5891758 -0.2218305 0.53253937 -0.6678926 -0.7990874
## C8.A138.O3TCGA
                  -0.2410877 -1.0639440 0.13559760 0.1648547 -0.5958302
                                                  NP 004115 NP 004868
                  NP 003732
                             NP 872349 NP 067027
## AO.A12D.O1TCGA 1.03136461 -0.66018577 -0.9725892 -0.64113678 -0.5154134
## C8.A131.O1TCGA
                 0.27836356 1.43605751 -1.3084058 -0.01713175 0.7843487
## AO.A12B.O1TCGA 1.77352602 -0.31339381 1.0473999 -0.03901790 -1.3554680
## BH.A18Q.02TCGA -6.11739492 0.07825229 -0.5172257 -0.11912524 1.4230958
## C8.A130.O2TCGA 0.09631682 1.25739039 -0.4514213 -0.29726745 -0.7958075
                ## C8.A138.O3TCGA
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                                     NP_006417 NP_001263199 NP_055690
## AO.A12D.O1TCGA -2.782243 -0.9878284
                                    3.40486887
                                                            2.4105115
                                                        NA
## C8.A131.O1TCGA -1.656524 0.5252843 -1.00076681
                                                        NA 1.5777333
## AO.A12B.O1TCGA -2.369827 1.4132344 0.02195453
                                                        NA -1.3859542
## BH.A18Q.O2TCGA -1.607820 -1.6245471 0.28232058
                                               -0.08567142 -1.2030290
## C8.A130.02TCGA -1.504259 -0.4743804 -0.98603991
                                                1.40170462 -0.1168747
## C8.A138.O3TCGA 2.406681 4.0304508 -0.63240163
                                                 1.49605337 0.1941118
                 NP 005462 NP 612208 NP 001257810 NP 001612 NP 000588
## AO.A12D.01TCGA -0.9268716 -0.6716152
                                      -0.3630215 -0.5192232 -1.646923
## C8.A131.O1TCGA -0.6040745 -0.7902770
                                      -0.5554999 -1.1464905 3.095689
-0.5212544 -1.6520157 1.582294
## BH.A18Q.O2TCGA 0.4462443 0.2522121
                                       0.3258105 0.0213808 -5.100399
## C8.A130.02TCGA 0.1323954 -0.6482134
                                      -0.6842920 -0.7564491 -1.504259
## C8.A138.O3TCGA -1.4296580 -0.7640586
                                      -0.7640586 0.4866830 4.264508
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## AO.A12D.01TCGA -2.267920598 -2.267920598 2.0562003 -0.3744509
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0.8450669
## AO.A12B.01TCGA -0.002988738 -0.002988738 -1.0007193 2.5162810 -2.5084011
## BH.A18Q.02TCGA -1.112703655 -1.112703655 -0.5607156 0.3224652 0.8577263
## C8.A130.02TCGA 1.021239835 1.021239835 1.9199239 -0.2447895 -2.7014113
  C8.A138.O3TCGA -1.020058378 -1.020058378 -1.9636003 -0.8116014 1.4485106
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## AO.A12D.01TCGA 3.0657968 -2.542226 -1.3916670
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## C8.A131.O1TCGA 0.9260245 -2.733260 -0.2073821
                                                0.1326398 0.2257411
## AO.A12B.O1TCGA -2.9823232 2.505195 0.7453092
                                               2.1809327 0.6815653
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## BH.A18Q.02TCGA -5.6423507 -1.350226 -2.0126114
## C8.A130.02TCGA -1.0155587 -1.648573 1.7723298
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## C8.A138.O3TCGA 0.5634829 -1.027373 -1.8282861
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                                                 NP 067077 NP 006347
## AO.A12D.O1TCGA -0.8354365 -1.0602146 0.006528907 -0.05061807 0.1893992
## C8.A131.O1TCGA -0.4866859 -0.0697542 0.213597468
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0.14944232 0.4986480
## BH.A18Q.02TCGA -1.8118885 0.1083607 -0.691185540 -0.41686423 0.2589029
## C8.A130.02TCGA 1.8215278 1.1524346 1.680493478 -0.21527073 -1.2385898
## C8.A138.O3TCGA -1.1114869 -1.6161721 -0.793315749 0.51959721 0.8158255
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## AO.A12D.01TCGA -0.5458918 -1.03735579 -2.7022376 1.6790303
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## C8.A131.O1TCGA -0.2235737 -0.08594572 3.8324030 -0.3490580
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## AO.A12B.01TCGA 0.2104148 -0.17204865 -1.1725507 -0.1859060
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## BH.A18Q.02TCGA -0.4636996 0.52318807 -1.8687600 0.6971479
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## C8.A130.O2TCGA -0.7892478 0.52597964 0.1815934 -0.2349499
## C8.A138.O3TCGA 0.2745689 0.89262541 1.9824529 -0.3910304
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## AO.A12D.01TCGA 0.39131852 -0.78590911
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## C8.A131.O1TCGA -0.29643553 -0.54335627
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## AO.A12B.O1TCGA -0.04178937 -0.09444738
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## BH.A18Q.O2TCGA -0.77147471 -1.45058722
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## C8.A130.O2TCGA 0.48662121 -0.14639348 -0.03159807 -0.9729204 2.182313
## C8.A138.O3TCGA -0.14600212 -0.14600212
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##
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## AO.A12D.O1TCGA 1.7857047 0.04081709
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## C8.A131.O1TCGA -0.1669033 -0.05761056
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## BH.A18Q.O2TCGA -2.9192099 -0.45031805 0.007999269
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## C8.A130.02TCGA 2.2577504 1.11307616 0.243910914
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## C8.A138.O3TCGA 3.8366224
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## AO.A12D.01TCGA -2.2107736 -0.5839898 0.4979929 -1.1097420 -0.53827223
## C8.A131.01TCGA -0.9198092 -0.1183288 -0.1426161 -0.2802440 -0.01308386
## AO.A12B.01TCGA 4.0101054 0.4570759 0.7896528 -0.6792284 2.69088387
## BH.A18Q.02TCGA -1.1361213 -0.6811494 0.1451599 0.5231881 0.72391099
## C8.A130.02TCGA -2.1635128 0.3521466
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## C8.A138.O3TCGA 0.3659974 -0.4129733
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                  NP 003115
## AO.A12D.O1TCGA 0.2922638
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## C8.A131.01TCGA -2.3770463 1.4401054 0.42003939 -0.8064685 -1.2234003
## AO.A12B.O1TCGA 2.1005599 -0.1443339 -1.91530571 -1.8543333 -1.7019022
## BH.A18Q.02TCGA -1.8185792 0.4562804 0.03141694 -0.3901012 -2.1464266
## C8.A130.O2TCGA -2.0651168 -1.9306421 -0.34318561 -0.2283902 0.4505427
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## C8.A131.O1TCGA 1.8691808 0.01929918 0.05573011 0.3674169
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## AO.A12B.01TCGA -1.1476074 -2.85483536 -2.86037830 -2.2090819
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## BH.A18Q.O2TCGA 0.5164973 0.99488692 -3.04298899 -3.4277079
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## C8.A130.O2TCGA 0.1094363 -1.20251126 -1.87488437 0.7785295
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## C8.A138.O3TCGA 0.8194826 2.82359488 1.44851056 0.2672546
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## AO.A12D.O1TCGA -1.02592640 -0.3020647 -5.315759 -7.521632 -0.63732698
## C8.A131.O1TCGA -0.35715374 -1.3124536 -7.319509 -7.319509 -1.26792695
## AO.A12B.O1TCGA 1.86498465 3.9408186 -3.095954 -4.512177 2.33336374
## BH.A18Q.02TCGA 0.18195913 0.1016700 -7.010612 -2.879065 0.08828843
## C8.A130.02TCGA -0.03815781 -0.5235784 -2.448861 -2.550537 0.16519406
## C8.A138.O3TCGA 2.38839532 -0.8042872 3.002795 1.934910 -1.20657247
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                        2.0230002 0.31479449
## AO.A12B.O1TCGA
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                                          -1.2667808
                                                       -1.2279802 -1.36932536
## BH.A18Q.02TCGA
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                              -0.1860329
                                          -0.1860329
                                                       -0.1659606 0.05148923
## C8.A130.02TCGA -1.2057911
                              -0.6383738
                                          -0.6383738
                                                       -0.2546292 -0.09391558
## C8.A138.O3TCGA
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## AO.A12D.01TCGA -1.0068774 0.376079329 -1.4716728 -1.0144970 -1.64311370
## C8.A131.01TCGA -0.8186122 1.278190152 1.2498550 -1.0331499 0.43218304
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## AO.A12B.01TCGA 1.2968325 -2.048336459 -1.7407029 -0.8372024 -1.20857987
## BH.A18Q.02TCGA 0.5499511 -0.256285898 1.3093528 -1.3134266 -0.09236219
## C8.A130.02TCGA 0.1487947 1.775609675 -1.1565931 1.6280156 -0.21855060
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## AO.A12D.01TCGA -1.2659437 -0.5420820 0.5170419 -1.7802664
## C8.A131.O1TCGA 1.8287020 -1.1910172 -0.2559567 2.2780167
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## AO.A12B.O1TCGA -1.2418376 1.2247742 -0.9646902 -2.0483365
                                                                    NΑ
## BH.A18Q.02TCGA 1.9583569 0.1719230 -1.1193944 2.8448831 -0.6978763
## C8.A130.O2TCGA -0.9434016 -0.2415097 0.2963888 0.5358192 -0.9499614
  C8.A138.03TCGA -0.8810871 -0.1094307 -0.2118306 -0.9542299 3.3611943
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                                      NA -0.7214630 -2.7413556
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 2.3266960 0.3227422
                                             NA 0.0217681 0.2655952 -2.0279033
## C8.A131.O1TCGA 0.1204962 -0.3409622
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## AO.A12B.O1TCGA -0.7873158 -2.1259377
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## BH.A18Q.02TCGA 3.3567265 0.8409994 0.9748146 -0.1325068 0.1819591 -1.3000450
## C8.A130.O2TCGA -1.0581970 -0.3891038 0.1520746 -0.3235064 0.4407030 -2.2455096
## C8.A138.O3TCGA 1.2693107 0.4976544 0.3513688 0.1136548 1.8617673 -0.8664585
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 0.6669601
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## BH.A18Q.O2TCGA 1.7475978
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## C8.A130.02TCGA 0.8441269
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## C8.A138.O3TCGA -0.9249728 0.02954056
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                                     NA -0.05564674 -0.3161653 -1.9596493
## AO.A12B.O1TCGA 0.29078749
## BH.A18Q.02TCGA -0.10239833 -5.0033828 -1.10935827 0.9313247 -0.6108964
## C8.A130.O2TCGA 0.07991747 -0.3267863 1.42794358 1.5361792 0.2471908
## C8.A138.O3TCGA 1.09011092 3.8037082 0.56714002 -2.2744571 0.4866830
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## C8.A131.O1TCGA 2.512794
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## AO.A12B.O1TCGA -1.721303
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## BH.A18Q.O2TCGA 1.944975
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## C8.A130.02TCGA -1.789608
                             0.7490107 0.1455148 -0.6842920 -0.9171627
## C8.A138.O3TCGA 0.409883
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## AO.A12D.01TCGA 0.7342004 -0.3515921 -4.0737649 -0.97639902
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## C8.A131.01TCGA 2.3346871 0.2824114 4.0995632 -0.21143003 0.298602967
## AO.A12B.O1TCGA -2.7910915 -1.9901355 -5.3380760 0.09124137 -0.030703477
## BH.A18Q.O2TCGA -0.1927236 -0.8183101 -0.3332297 0.37599127 0.733947133
## C8.A130.O2TCGA -0.2054311 0.5915770 0.3193479 -0.49405958 -0.002079251
## C8.A138.O3TCGA 0.9035968 -0.2447449 2.9333091 -0.25571629 -0.906687064
                 NP 001028691 NP 001098016 NP 001258933 NP 056445 NP 001007238
##
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## AO.A12D.O1TCGA
                  0.17796982
                              -0.5039840 -0.60303880 -0.08490625
                                                                 -0.1496728
## C8.A131.O1TCGA
                  0.29860297
                              -0.6486012
                                          0.07596952 0.67100801
                                                                  0.7276783
                                                                 -0.6542851
## AO.A12B.O1TCGA
                 -0.04178937
                              -0.5184829
                                        -0.08890443 -0.12216212
## BH.A18Q.02TCGA
                  0.64696720
                               0.1317784
                                          0.79750939
                                                    1.73421631
                                                                 -1.0223783
## C8.A130.02TCGA
                 -0.05783702
                               0.8638061
                                          0.47350173
                                                     0.54893872
                                                                  0.7194919
  C8.A138.O3TCGA
                                                                  3.8073653
                 -0.90668706
                              -0.5812017
                                        -0.48245892
                                                            NΑ
                 NP 071801
                            NP 003392 NP 060528
                                                 NP 006573 NP 036516
## AO.A12D.O1TCGA 1.0466038 0.93230986 -0.8354365
                                               0.28083438
                                                           0.3417911
## C8.A131.O1TCGA -0.1223767 -0.28024401 0.5050449 -0.08594572
                                                           0.1245441
## AO.A12B.O1TCGA -0.0916759 -0.01684611 -0.8039447
                                                0.45707592
                                                           0.3074163
## BH.A18Q.02TCGA
                0.3425375
                          0.34253745 -1.1394667
                                                0.48638887
                                                           0.2221037
## C8.A130.02TCGA
                 0.3324674
                           0.50302055 -0.4251823 -0.89420358
                                                           1.7296915
  C8.A138.O3TCGA
                 ##
                  NP_149073 NP_004379 NP_783195 NP_543151
## AO.A12D.01TCGA 0.46370469 -0.8773443 -0.6220878
                                               0.9970764
                                                          1.5456874
## C8.A131.O1TCGA 0.01120342
                           2.0837185 -0.3166749
                                                0.7681572
                                                          0.1812144
0.3933320 -0.7485152
## BH.A18Q.02TCGA -0.10908910 -1.5910933 -2.1631536 0.1451599 -1.2264466
## C8.A130.02TCGA 0.78508928 -1.2320301 -0.4350219 -0.2316701 -1.2484294
## C8.A138.O3TCGA
                 0.17582613 -1.4625722 2.0299957 -0.1898878 -0.4458875
##
                 NP 004323
                            NP_005116 NP_005063 NP_005126 NP_001128243
## AO.A12D.01TCGA -1.3230907 -0.26015697 0.7418200 -0.2639668
                                     1.9906172 1.2781902
## C8.A131.O1TCGA -0.1264245 -0.43001560
                                                            1.7760795
## AO.A12B.01TCGA 0.8727970 0.06906958 -2.0206217 -2.5444303
                                                            -3.1541545
## BH.A18Q.02TCGA -1.1495029 -0.31650277 -0.1793421 1.5435295
                                                            -0.1793421
## C8.A130.O2TCGA 0.9720418 -0.21855060 -0.3661447 -0.4973395
                                                            -0.6810121
## C8.A138.O3TCGA -0.5665731 1.31685355 1.3717106 1.1559394
                                                            1.3131964
                  NP_000294
                             NP_002667
                                         NP_055418 NP_001041675 NP_005994
2.7076758 -1.4831022
## C8.A131.O1TCGA -0.27619613 0.96650332 1.517015127
                                                    -1.2193524 -0.7376546
-1.0506059 2.1005599
## BH.A18Q.02TCGA -0.40013732 -1.18964744 -0.624277903
                                                    -1.1495029 0.6503126
## C8.A130.O2TCGA 0.07335773 -0.06439676 0.542378981
                                                    -0.6350939 -1.1795522
  C8.A138.O3TCGA
                0.78656837  0.32942597  0.088054790
                                                     2.5968523 -0.3105734
                 NP 066972 NP 872620
                                      NP 003433 NP 003418
                                                           NP 056509
## AO.A12D.O1TCGA 0.5132321 -0.8849639 -0.20300999
                                                       NA 0.05986608
## C8.A131.O1TCGA 2.2172985 -1.0088626 0.34717754
                                                       NA -1.64033200
## AO.A12B.01TCGA -2.4585146 -1.2667808 -0.67368542
                                                       NA -1.37209683
## BH.A18Q.02TCGA 1.3461520 -0.7246394 0.19199527 -1.0324145
                                                          0.13177840
## C8.A130.02TCGA -0.4087830 0.8834853 0.06679799 2.0248797
                                                          1.55585846
  C8.A138.O3TCGA -0.8481728 -2.1281715 1.11936803 0.7061113 0.29285458
                NP 001041631 NP 741996 NP 002959 NP 001004309
##
                                                              NP 000358
## AO.A12D.O1TCGA
                         NA -0.1115748 0.2427364
                                                 0.03319749 -0.36302152
                         NA -1.6767629 -1.6767629
                                                 -1.71724173 -0.35310586
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                         NA -0.5572835 -1.5328423
                                                 -1.69358780 -0.04456085
## BH.A18Q.02TCGA
                  -6.1843026 -7.0541018 -4.6621538
                                                          NA 0.72391099
                                                          NA -0.38254404
## C8.A130.02TCGA
                  -0.2218305 -2.9867599 -0.1759123
## C8.A138.O3TCGA
                   0.1429119
                                   NA -5.7706822
                                                          NA -0.10943073
                NP_001172023 NP_001230 NP_056125
                                                 NP_001011 NP_659484
## AO.A12D.O1TCGA
                  -0.1649120 -0.5954192
                                      0.3303618
                                                 0.4370361 -3.414670
## C8.A131.O1TCGA
                  -0.7457503 0.1447835 0.9179287
                                                 0.1164483 -1.049341
## AO.A12B.O1TCGA
                  1.3023755 -0.1554198 -1.9818211 -1.5799574 0.603964
## BH.A18Q.02TCGA
                  -0.3533020 -0.2228321 -1.9155953 -0.5841333 -3.073097
                  ## C8.A130.02TCGA
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## C8.A138.O3TCGA
                   ##
                 NP 996668
                            NP 060277
                                      NP 443080 NP 689953 NP 001035937
## AD.A12D.O1TCGA -4.344261 -0.01632988 -0.61065840 -0.4811253 -0.69066416
## C8.A131.O1TCGA -2.955893 -0.06570632 -0.24381308 -1.2922142
                                                             -0.01713175
## AO.A12B.01TCGA 0.603964 1.14440145 0.21318622 3.7107863
                                                              1.26634630
## BH.A18Q.02TCGA -3.133314 -0.65773172 -0.06559913 1.2625175
                                                             -1.06921369
## C8.A130.02TCGA -3.065477 0.16519406 0.69325295 -0.9466815
                                                             -1.85192529
## C8.A138.O3TCGA 2.523709 0.85239688 -0.32154480 -1.6783434
                                                              1.75571025
##
                   NP 689891 NP 001001794 NP 001243893 NP 115744
                                                                  NP 071935
## AO.A12D.O1TCGA
                 0.51323206
                                      NA
                                           0.35703034 -0.1153846 -0.03156908
## C8.A131.O1TCGA
                 0.04358647
                                      NA
                                          -0.30453129 -0.2478610 0.19740594
## AO.A12B.O1TCGA
                 0.14667085
                                      NA
                                           ## BH.A18Q.02TCGA 0.09832458
                               0.1083607
                                          -0.03883608 -0.7982378 0.45293506
                                           0.01759996 1.2541105 0.80148862
## C8.A130.02TCGA -0.82860621
                              -1.0581970
## C8.A138.O3TCGA 0.65856850
                                           0.21239752 -0.6726302 -0.92497276
                               0.9291968
##
                  NP_057166 NP_937784 NP_057097 NP_002410
                                                             NP 653172
## AO.A12D.O1TCGA -0.1306238 -1.9517073 0.7875375
                                                 0.6199064 0.11320326
## C8.A131.O1TCGA -0.9360007
                            0.5698110
                                      0.1569271
                                                 0.1690708 -0.18714274
## AO.A12B.O1TCGA 0.2575298
                            0.6621650
                                       2.2391336 0.1411279 0.06629811
## BH.A18Q.O2TCGA 0.2087222
                            1.2424452 0.4763527 -0.5975148 1.02164997
## C8.A130.O2TCGA -1.1992314 0.6342153 1.3098683 -0.0283182 -0.19887138
  C8.A138.O3TCGA -0.2520592 -0.6836016 -0.0326308 -0.8737728 -0.47148750
                   NP_056270 NP_060340 NP_001107000
##
                                                     NP_072045 NP_001191819
## AO.A12D.O1TCGA -0.89639326 -0.8544855
                                       -0.38588030 0.82563551
                                                                 -0.5839898
## C8.A131.O1TCGA -0.37334527 0.1285920
                                       -0.03332327 -0.85099522
                                                                 -0.1142809
## AO.A12B.O1TCGA 0.59564962 -1.2196658
                                        1.33563314 -0.65705657
                                                                 -0.7679155
## BH.A18Q.02TCGA 0.06487076 -1.9155953
                                        -0.66776787 -0.37337426
                                                                 -0.5105349
## C8.A130.02TCGA -0.81220686 1.2180320
                                         0.27014986 1.64769479
                                                                  1.2245917
## C8.A138.O3TCGA -0.39834472 -0.6470302
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                                        NP 061913
                                                    NP 002848 NP 003738
## AO.A12D.O1TCGA -1.0373558 -0.18396100
                                        0.1855894 0.04843669 -0.4811253
## C8.A131.O1TCGA 4.7107932 0.95435968
                                        0.7114868 -1.08577231
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## AO.A12B.O1TCGA -1.6159865 -0.68199984
                                        1.1859736 1.59892316
## BH.A18Q.02TCGA -1.5476033 0.73394713
                                       0.1050153 -1.33684424 -1.0859406
## C8.A130.02TCGA 0.9884411
                            1.26395013 -0.1070351
                                                  0.38166541
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## C8.A138.O3TCGA -0.8920585 -0.01800225 0.7097684 0.04782626 -0.1716021
                  NP 079511 NP 002664 NP 001156729
                                                     NP 060909 NP 001138430
## AO.A12D.O1TCGA 0.8561139 0.9856470
                                       2.4067018 -1.28880247
                                                                -0.7363817
## C8.A131.O1TCGA 2.7597146 1.2498550
                                        0.3269381
                                                    0.03144283
                                                                 1.1446101
                                        -0.9342040 0.91714059
## AO.A12B.O1TCGA -1.8487903 -0.1415624
                                                                 0.3101878
## BH.A18Q.02TCGA -1.4070973 -5.9133266
                                                NA -1.25655508
                                                                 -1.5108041
## C8.A130.02TCGA -1.1073951 -0.3202265
                                                NA -0.43174207
                                                                 -1.4025833
## C8.A138.O3TCGA 1.2875964 1.2181108
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##
                 NP_001026866
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                                                        NP_775899 NP_001070913
## AO.A12D.O1TCGA
                 -0.06585726 0.09415427
                                           -0.9230618 1.00850582
                                                                   -1.2811829
                   2.41969257
## C8.A131.O1TCGA
                              0.23383687
                                            2.7556667 -0.47859017
                                                                    0.2621720
## AO.A12B.O1TCGA
                   0.50419098 -2.34211269
                                           -1.2473805 0.09124137
                                                                   -2.0178502
## BH.A18Q.02TCGA
                   1.72418016 0.42951738
                                           -4.7725514 -0.06559913
                                                                   -0.4001373
## C8.A130.02TCGA
                   0.32590764 0.19471288
                                            0.4111842 0.10287655
                                                                    0.8047685
## C8.A138.O3TCGA
                  -1.10051544 0.42085445
                                            1.3680535
                                                       2.69559501
                                                                    0.4281687
                   NP_056103 NP_955352
                                                    NP_079463 NP_001189367
##
                                         NP_073210
## AO.A12D.O1TCGA -0.08109645
                                   NA -0.22205898 -0.52303304
                                                                 1.4428228
## C8.A131.O1TCGA -0.33691434
                                   NA -0.06570632 -1.08172443
                                                                 1.2255677
## AO.A12B.O1TCGA 0.93931238
                                    NA -0.19699191 -1.18363661
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## BH.A18Q.02TCGA 1.52345725 -5.3044671 -0.30646663 0.79416401
                                                              -0.5372980
## C8.A130.O2TCGA 0.77196980 -0.1037552 0.58501728 0.18487328
                                                               1.4410630
## C8.A138.O3TCGA 0.29285458
                                   NA -0.72748724 -0.06554506
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##
                                        NP_037499 NP_002954 NP_789793
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## AO.A12D.O1TCGA 2.0752493
                           2.0752493 1.02755482
                                                   6.246978 7.069895
## C8.A131.O1TCGA -0.4300156
                            -0.4300156 -1.43389007
                                                   3.354753 2.816385
## AO.A12B.O1TCGA -3.2788709
                           -3.2788709 0.14389938 -2.558288 -2.156424
## BH.A18Q.O2TCGA -0.6644225
                            -0.6343140 0.05483462 -8.516034 -8.311965
## C8.A130.02TCGA -0.5268583
                            -0.4940596 -0.18903178 -10.159833 -9.972881
## C8.A138.O3TCGA 2.1323956
                            1.7118246 1.12668231 -10.159249 -9.917878
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## AO.A12D.01TCGA 0.5894280 -2.0050445
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## C8.A131.O1TCGA -1.1262511 -0.8955219
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                                            NA 0.13835643
## AO.A12B.O1TCGA 1.4908357 0.9088262
                                                            0.19655738
## BH.A18Q.02TCGA 0.3693005 0.5298788 -0.3800650 0.28232058
                                                          -0.07898066
## C8.A130.02TCGA
                 1.1196359 0.2373512 0.2701499 0.12255577
                                                           -0.91060293
## C8.A138.O3TCGA 0.2818832 -0.6068017 0.3184546 -0.49343034 -0.95788701
##
                XP 003846351
                              NP 877439 NP 001254711 NP 001864 NP 071412
                  1.93047698 1.50377959
## AO.A12D.O1TCGA
                                        0.68086318 3.5839294 -0.5382722
## C8.A131.O1TCGA
                  0.90578511 1.45629691
                                         1.82870196 2.8730552 -0.1911906
## AO.A12B.O1TCGA
                 -0.79840174 -0.78731584
                                        0.07461253 -0.5434261 0.7120515
                 -0.07898066 -0.07898066 -1.01234220 -2.1664989 -0.1592698
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                 -0.91060293 -1.04835742
                                        0.36198619 -2.0191986 -1.6518533
## C8.A138.O3TCGA -0.95788701 3.50747991 -0.48611606 -1.7185720 -0.8079443
                             NP 071902 NP 001139267 NP 001265618
                                                                  NP 078940
##
                NP 001028255
## AD.A12D.01TCGA -0.53827223 0.494183072 -0.001090689
                                                     1.29805049 -0.77066992
## C8.A131.O1TCGA -0.19119063 0.800540202 -0.478590171
                                                      1.15270584 -0.15071182
## AO.A12B.O1TCGA
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                                                     -1.25569493 -0.08059001
                -0.01876379 -0.557370266 0.496425021
## BH.A18Q.02TCGA
                                                     1.44651347 -1.43720570
## C8.A130.02TCGA
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                 ## C8.A138.O3TCGA
##
                 NP_620148 NP_003559 NP_116186 NP_659434
                                                            NP_658985
## AO.A12D.01TCGA 1.6295029 0.4979929 -0.4887449
                                               0.4903733 -0.824007093
## C8.A131.O1TCGA -0.8590910 -2.5349137 -1.0169583 0.2216932 -1.458177356
1.1083723 1.551808106
## BH.A18Q.O2TCGA 1.7442525 -2.3203865 0.3057383 -1.6479648 -0.995615289
## C8.A130.02TCGA -0.5399777 -0.6514933 -0.7138108 0.9786015 0.007760356
## C8.A138.O3TCGA -0.6141159 4.1950221 -1.1736582 1.1632537 -0.515373173
                NP 001010867 NP 036249 NP 057671 NP 001120700 NP 001138349
##
                 1.1761369 -0.8697247 -0.7859091 -1.056404781
## AO.A12D.O1TCGA
                                                              0.6313358
## C8.A131.O1TCGA
                   0.5212364 -0.5676436 -1.4217464 -1.842726044
                                                              -1.0169583
                   1.0501713 -0.8482883 0.2270436 -0.005760212
## AO.A12B.O1TCGA
                                                               0.2575298
## BH.A18Q.O2TCGA
                   1.3929874 1.7576340 0.3090836 0.285665963
                                                              -0.2863943
                  -0.1693526 -0.3792642 0.3455868 1.017959967
## C8.A130.02TCGA
                                                               3.6123362
## C8.A138.O3TCGA
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                            NP_077001 NP_002412 XP_003960188 NP_001451
##
                 NP_060383
## AO.A12D.01TCGA 1.3018603 -3.32704449
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## C8.A131.O1TCGA 0.4929013 -0.62431388 5.0710546
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-1.940249 -4.1380278
## BH.A18Q.02TCGA -0.6142418 -2.09290054 -0.8383823
                                                  -4.053294 -2.8221938
## C8.A130.02TCGA -1.1270743 1.18851315 -1.8781642
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  C8.A138.O3TCGA 1.5801676 -0.08383075 -0.4641732
                                                   5.365307 -0.4312590
##
                 NP 789794 NP 000938
                                      NP 057270 NP 077084 NP 002627
## AD.A12D.01TCGA -0.6678054 -2.2336324 1.26757210 -0.4544567 -0.2601570
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## C8.A131.01TCGA -0.3490580 -0.5433563 -1.09791595 -1.4500816 -0.8874261
## AO.A12B.O1TCGA -0.3715948 -2.3947707 -1.53007084 0.8312249 0.8312249
## BH.A18Q.02TCGA -0.7413663 1.2390998 0.24886676 0.6268949 0.6268949
## C8.A130.O2TCGA -1.1369139 0.8966048 -0.06439676 0.1520746 0.1127162
## C8.A138.O3TCGA -0.9834870 -0.5226875 -2.48291404 0.8816540 0.7426827
                NP 001165081
                              NP 009009 NP 001073583 NP 001165082 NP 001921
##
## AO.A12D.O1TCGA -0.05442786 -0.05442786
                                          0.7418200
                                                      -0.5497016 -0.4239783
## C8.A131.O1TCGA
                  0.71148682 0.71148682
                                         -0.7336067
                                                      0.9705512 -2.7332598
## AO.A12B.O1TCGA
                 -3.72230668 -3.72230668
                                         -2.7522908
                                                      -3.7223067 0.3379025
## BH.A18Q.02TCGA
                 -4.30419795 -4.30419795
                                         -5.9467804
                                                     1.7576340 -0.5573703
## C8.A130.02TCGA
                 -0.78924778 -0.78924778
                                         -1.0614769
                                                      -0.1955915 2.3594263
## C8.A138.O3TCGA
                 -0.96520129 -0.96520129
                                         -0.9652013
                                                      -1.2394867 -1.6381149
                NP 001193903
                              NP 078925 NP 002790 NP 060380 NP 003745
## AO.A12D.O1TCGA
                  -0.3173039 -1.31547106 -0.6258976
                                                  0.4332263 -0.2753962
                  -3.0004200 -1.49460828 -0.5514520 0.1245441 -0.3247707
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   0.3157308 0.76470953 1.6044661
                                                  0.8921973 0.4127323
                  -0.5372980 -0.61758714 -2.9727360 -1.8921776 0.1083607
## BH.A18Q.02TCGA
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                                        1.8608863 1.4640221 0.6834133
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  -1.6381149 0.08805479 0.6768542 0.9474825 -0.5117160
                NP 001027451
                              NP 003211 NP 001035890 NP 003213 NP 003212
## AO.A12D.O1TCGA
                 2.55528388
                            2.55528388
                                         2.55528388 2.0333415 2.0333415
## C8.A131.O1TCGA
                  0.05977799 0.05977799
                                         0.05977799 -1.0129105 -0.6809842
## AO.A12B.O1TCGA
                 -0.53511172 -0.53511172 -0.53511172 -1.3554680 -0.8954033
## BH.A18Q.O2TCGA -0.85176387 -0.85176387 -0.85176387 1.5100757 -0.3767196
## C8.A130.02TCGA
                  1.48370135 1.48370135
                                         1.48370135 -0.4350219 1.2245917
## C8.A138.O3TCGA
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## AO.A12D.01TCGA 2.53623489 2.0333415 -0.168721809 0.63895540
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## C8.A131.01TCGA -1.01291045 -0.5838351 -1.567470141 -0.58383507
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## AO.A12B.01TCGA -0.07227559 -0.7041716 -0.000217265 -0.53511172
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## BH.A18Q.02TCGA 0.24886676 1.5401842 1.058449173 0.16188683
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## C8.A130.02TCGA 1.33610725 2.0379992 -0.205431121 -0.03159807
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## C8.A138.O3TCGA -1.12611541 -1.1480582 0.965768189 0.25262605
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## AO.A12D.O1TCGA 0.55894964 -0.5801800
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## C8.A131.O1TCGA 0.55361947 -0.6850321
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## AO.A12B.O1TCGA 1.24140303 -0.9508328
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                                                         NA 0.68987973
## BH.A18Q.02TCGA -0.39010117 0.8978708
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## C8.A130.02TCGA 0.15863432
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                                         -1.779768
## C8.A138.O3TCGA -0.04360222 0.8633683
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                  NP 057705 NP 060810
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                                                               NP 003012
## AO.A12D.O1TCGA -0.15729241 0.6618142
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## C8.A131.O1TCGA 0.60624192 2.4399320
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## AO.A12B.O1TCGA 0.50973393 0.3683888 -1.34161062 -3.1070395 0.288016019
## BH.A18Q.02TCGA -0.08232604 0.4562804 1.16550139 1.2926259 -0.818310051
## C8.A130.O2TCGA 0.16191419 2.0740777 -0.46454076 0.1127162 -0.008638989
## C8.A138.O3TCGA -0.06920219 -1.9672574 0.02588342 -0.3434876 -1.506457887
                NP 001253975 NP 006582 NP 116098 NP 115500
##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   -1.3804113 -0.3854521 0.5817922 1.2968325 -0.26627876
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.1911906 -0.6202660 0.8653063
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## AO.A12B.O1TCGA -0.4879967 -0.2995364 0.1244991
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## BH.A18Q.02TCGA -0.9655069 0.3927182 -0.3031212 -1.60782017
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## C8.A130.02TCGA 0.4407030 -0.6088550 0.1520746 -2.04871742
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## C8.A138.O3TCGA 0.3842831
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                 NP 036380
                            NP 060156
                                        NP 000968
                                                   NP 004840 NP 066973
## AO.A12D.O1TCGA -0.6106584
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                                                             0.9475491
## C8.A131.O1TCGA 0.3269381
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                                                 0.76410927
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0.04135484 -1.7407029
## BH.A18Q.02TCGA -0.8183101
                          0.35591898 -1.450587222 -0.12916139 -1.4305149
## C8.A130.02TCGA -0.5301381 0.01759996 1.303308558
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## C8.A138.O3TCGA 0.5159401
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## AO.A12D.01TCGA 0.2160678 -0.02394948 0.8865923
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-0.5959787
                                                             -0.6809842
## AO.A12B.O1TCGA -0.1415624 -1.48572726 0.8811114
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## BH.A18Q.02TCGA -1.5643302 0.74732866 -0.8015831
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## C8.A130.02TCGA 0.2865492 -0.42190247 -0.1726324
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## C8.A138.O3TCGA -0.3727447 -1.25045815 -0.1569735
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                                                             NP 003462
## AO.A12D.01TCGA -0.2830158  0.60085742 -0.3592117
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## C8.A131.O1TCGA -0.6809842 -0.07380208 -0.2316694
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-3.22898433 -4.86138244
## BH.A18Q.02TCGA -0.6911855 3.14931284 3.0857506
                                                 3.08575058 2.55718025
## C8.A130.02TCGA -0.1267143 -0.24806942 -0.2546292
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## C8.A138.O3TCGA -1.0127441 0.28188316 0.3696545
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## C8.A131.O1TCGA 0.48885337
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## AO.A12B.O1TCGA -0.21916370
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## BH.A18Q.02TCGA -1.94235836
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## C8.A130.02TCGA -0.02175846
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.004988103 -0.1223767 -0.138568173 -0.01713175 -0.264052482
## AO.A12B.01TCGA 1.831726968 1.3578049 1.332861670 0.04966926 -0.249649913
## BH.A18Q.02TCGA -0.523916447 -0.2696674 0.004653887
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## C8.A130.O2TCGA -0.126714268 -0.2119909 -0.221830465 0.17503367 -0.031598071
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## AO.A12D.O1TCGA -0.6678054 0.4598949 -1.02211660
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## C8.A131.O1TCGA -1.3488846 0.1326398 1.18913677
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## BH.A18Q.O2TCGA 0.7975094 -1.0558322 0.97146924
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## C8.A130.02TCGA 0.3619862 -0.5957355 0.36526606
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## AO.A12B.01TCGA -1.04783439 -1.2778667 -0.35496592
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## BH.A18Q.O2TCGA -0.08901681 1.4766219 -0.80492852
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## C8.A130.O2TCGA 1.65097466 0.2176720 0.44398291
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## BH.A18Q.O2TCGA -0.03883608 -0.39344655 0.5934411
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## C8.A130.O2TCGA 0.66701400 0.29638882 0.6735737 0.37510567 0.4800615
## C8.A138.O3TCGA -1.O3102980 1.59479613 -1.O346869 -1.49914361 0.6110257
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## C8.A131.O1TCGA -0.55954779 -0.2923876 -2.611823 -0.3692974 -4.7369609
## AO.A12B.01TCGA 0.27415865 0.1799285 4.450770 -0.8954033 0.2686157
## BH.A18Q.02TCGA -1.45727799 -1.4004065 -4.795969 0.6770756 0.2087222
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## C8.A138.O3TCGA -0.61411593 -0.8189157 -1.279715 0.2599403 0.7317113
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## C8.A131.O1TCGA 0.3228903 -0.3450101 -0.43406348 0.07192163
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## AO.A12B.01TCGA -0.3688233 2.4275939 2.16707531 -1.20026545
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## C8.A130.02TCGA -1.33698588
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## BH.A18Q.02TCGA 3.3199273 -0.28304895 -0.04218146
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## C8.A130.02TCGA -2.1011953 0.08319734 -0.11359479
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## C8.A131.01TCGA -0.06570632 -0.5190690 -0.35715374 -1.68485869 -0.09404148
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## C8.A130.02TCGA
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                 0.58908286 0.3769688
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## AO.A12B.O1TCGA -0.8510597 -1.87096213 -1.36378241 -4.160200 -4.160200 -4.526034
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## BH.A18Q.02TCGA 6.70210837
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## BH.A18Q.02TCGA
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## AO.A12D.O1TCGA -0.66018577 -0.8849639 0.90564127
                                                      0.91707067 -1.4221454
## C8.A131.O1TCGA -2.O1273704 -1.9196358 0.90983299
                                                      1.01103001 3.5004768
## AO.A12B.O1TCGA 2.39987911 0.8783400 -0.26073581
                                                      0.09124137 0.8062816
## BH.A18Q.02TCGA 1.22237288
                                                     -0.04218146 -0.2997759
                              0.1886499 -0.08901681
  C8.A130.02TCGA 0.05367852
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                                        0.16191419
                                                      0.08647721 -0.3399057
  C8.A138.O3TCGA -0.56657312
                              3.5257656
                                        1.53262476
                                                      1.46679625 -0.6177731
                   NP 003840
                              NP 056526 NP 073570 NP 001030312 NP 001240693
                                                     -0.6449466
## AO.A12D.01TCGA -0.03918867
                              0.8180159 -0.2753962
                                                                  -0.8049581
## C8.A131.O1TCGA -0.05356267
                              0.7964923 0.1812144
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## AO.A12B.O1TCGA 1.47143536 -0.0916759 -0.2357925
                                                      0.2963304
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## BH.A18Q.02TCGA -0.03549070
                              0.3425375 -0.1492337
                                                     -0.9320530
                                                                  -0.7815108
## C8.A130.02TCGA -0.36614470
                              0.3652661 -0.9991594
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  0.8816540
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##
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                                                     NP_006327 NP_001032726
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## AO.A12D.O1TCGA 0.6351456
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                                                                  0.5018027
## C8.A131.O1TCGA 1.1931847
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## AO.A12B.O1TCGA -2.1730528 -1.04783439
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## BH.A18Q.O2TCGA -0.7346755
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                                        0.1418145
                                                    0.01803541
                                                                 -0.3165028
## C8.A130.O2TCGA -3.2524293 -0.68429198 -0.1037552 -0.75316922
                                                                 -0.2251103
## C8.A138.O3TCGA
                  4.3047362 -1.40771513
                                         0.4098830
                                                    0.66222564
                                                                  0.3733116
                              NP_004682
##
                  NP 001198
                                          NP 689778
                                                      NP 004681 NP 001257448
## AO.A12D.01TCGA 0.5018027 -1.07926357 -0.70209355
                                                     0.58561823
                                                                 -0.10395524
## C8.A131.O1TCGA -0.9683838 1.66678672
                                        0.78839656
                                                     0.95840756
                                                                 -0.38548891
## AO.A12B.O1TCGA -0.2856791 0.40441792
                                        0.68156531
                                                     0.77579542
                                                                  0.84508227
## BH.A18Q.02TCGA -0.3733743 -0.02545455 -0.09905295 -0.09570757
                                                                  0.07825229
  C8.A130.02TCGA -0.1955915 -0.19231165 -0.85156529
                                                     0.61781597
                                                                  0.54893872
  C8.A138.O3TCGA 0.3440545
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                                         0.54885432 1.08645378
                                                                  1.20348224
                  NP_055387
                              NP_005021 NP_002939 NP_001240313
                                                                  NP_002422
## AO.A12D.O1TCGA
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                                                                 0.23892659
## C8.A131.O1TCGA
                         NA -0.07784996 0.0800174 0.241932634
                                                                 0.88959358
## AO.A12B.O1TCGA
                         NA
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## BH.A18Q.02TCGA
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  C8.A130.02TCGA
                  0.5161400
                             0.39806475
                                        1.5624182 1.965842069 0.33902711
  C8.A138.O3TCGA -0.2886305
                             2.38839532
                                        0.2489689 -0.018002246 0.17582613
                                         NP 001008 NP 005702 NP 055814
                  NP 006160
                              NP 008976
## AO.A12D.01TCGA 0.9932666 -0.28682555
                                        0.4332263 -1.1402203 -0.1877708
## C8.A131.O1TCGA 3.8324030 -0.08189784
                                        1.3105732 0.4078958 -0.4138241
## AO.A12B.O1TCGA -3.0682388 1.80124076 -1.0810921 4.3703970 -1.3249818
## BH.A18Q.O2TCGA 1.6539271 -1.29335427
                                         0.1886499 -3.2403665 -0.2663220
## C8.A130.02TCGA -0.2021513 -1.18939178 1.3885851 -0.9991594 0.2045525
  C8.A138.O3TCGA 1.0206253 0.49765438 -0.3800590 0.2416546 0.6549114
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##
                                                                      NP 077007
## AO.A12D.O1TCGA 0.40655771
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## C8.A131.O1TCGA 0.09216104
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## AO.A12B.O1TCGA 0.79796721
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## BH.A18Q.02TCGA -0.62427790
                              -0.04552684
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                                                        -0.91867151 -1.03910525
## C8.A130.02TCGA -0.11359479
                              -0.18575191
                                            -0.0283182
                                                         0.36854593 0.07991747
## C8.A138.O3TCGA -0.01800225
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                                                    NP_055268
                                                                NP_114143
## AO.A12D.O1TCGA
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                                                               0.95516865
## C8.A131.O1TCGA 1.2053283 -0.9036177 0.1488314 -0.82670793
                                                               1.02317365
## AO.A12B.01TCGA 0.3212737 -2.3199409 -2.0067644 1.53517926
## BH.A18Q.02TCGA 0.4228266 -0.6844948 0.7205656 -2.64823393
                                                               0.54995113
## C8.A130.O2TCGA -1.0909957 0.7621302 1.3098683 2.83500732
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## C8.A138.O3TCGA 2.2677097 -1.1078297 -2.3512570 0.12462618 -1.40040085
##
                  NP_071357 NP_036313 NP_001185727 NP_001185728
                                                                   NP 000323
## AO.A12D.O1TCGA
                  1.0161254
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                                          0.8142061
                                                      1.2751917
                                                                  1.91142799
## C8.A131.O1TCGA
                  1.4927278
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## AO.A12B.O1TCGA -1.6547872 -0.7152575
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## BH.A18Q.02TCGA 0.5231881 0.9246339
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## C8.A130.02TCGA -0.5104589 -0.4350219
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## C8.A138.O3TCGA -0.1021164 -0.5373160
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##
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## AO.A12D.O1TCGA
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                                          0.8142061
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## C8.A131.O1TCGA 2.1363409
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## AO.A12B.O1TCGA -0.8676886 -0.5157114
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## BH.A18Q.O2TCGA 2.6843048
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## C8.A130.02TCGA 0.4013446 -0.2185506
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## C8.A138.O3TCGA -1.0529726 1.2912536
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## AO.A12D.O1TCGA -1.02592640
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## C8.A131.O1TCGA -1.81843876
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## AO.A12B.O1TCGA 0.02195453
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## BH.A18Q.02TCGA -0.24290437 -10.4362829
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## C8.A130.02TCGA 0.53909911
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## BH.A18Q.02TCGA -0.9889245
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## AO.A12D.O1TCGA -5.3729061
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## C8.A131.O1TCGA -6.5746988
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## AO.A12B.O1TCGA -7.0425324
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 2.7597146
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## AO.A12B.O1TCGA -1.6243010
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## BH.A18Q.02TCGA -1.7951616
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## C8.A130.O2TCGA 0.5358192 -1.32058653 -0.5596570 0.04383891
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA -0.1692772 4.0461346 4.035049
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## BH.A18Q.O2TCGA 0.5532965 -3.8492260 -4.300853
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## C8.A131.O1TCGA -0.13047241 -0.13047241 -0.1830949 -0.72551091 -0.95624012
## AO.A12B.O1TCGA -0.21916370 -0.21916370 -1.6935878 0.63999320 -0.18867749
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## BH.A18Q.02TCGA 0.23548523
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## C8.A130.02TCGA 0.55549846
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## C8.A131.O1TCGA 1.47653632
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## AO.A12B.O1TCGA -0.06673264
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## BH.A18Q.02TCGA -0.44697266
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 1.2660465 -1.2072087
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## AO.A12B.O1TCGA -1.3582395 1.1915165
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## BH.A18Q.02TCGA -1.5074587 -2.2334066
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## C8.A130.02TCGA -0.6974115 -0.7531692
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## C8.A138.O3TCGA 0.8304540 2.3883953
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##
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12B.O1TCGA -0.04733232 0.11064169
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## BH.A18Q.02TCGA 0.91794314 0.23548523
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## C8.A130.02TCGA 2.38894515 -0.03159807
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## C8.A131.O1TCGA -0.07380208 -1.3448367
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## BH.A18Q.02TCGA -0.54398874 -1.5509487 0.76071019 -0.39344655 -0.70456707
## C8.A130.02TCGA -2.65877303 0.7227718 0.14223498 -0.41534273 -0.01519873
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                 NP 006547 NP 689494
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## AO.A12D.01TCGA -0.1572924 1.1380390 0.18939922 -0.6106584
```

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## C8.A131.O1TCGA 0.2905072 -0.5393084 0.02739495
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## AO.A12B.01TCGA 0.7342233 -0.6154845 1.20537387
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                                                    0.4986480
## BH.A18Q.02TCGA -1.0089968 -0.6075510 0.59009571
                                                    1.2190275
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## C8.A130.02TCGA 0.6145361 -0.8450055 -1.23203008
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## C8.A138.O3TCGA -1.6308006 -0.2228020 0.58176858
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## C8.A131.O1TCGA -0.8631389
## AO.A12B.O1TCGA 1.6737530
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## BH.A18Q.O2TCGA -1.6178563
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## C8.A130.02TCGA 1.8379272
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## C8.A138.O3TCGA -1.1809725
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## AD.A12D.01TCGA 0.65038480 -1.3269005 0.2617854 -0.05442786 -0.05442786
## C8.A131.O1TCGA 1.39153082 -0.5554999 -0.4704944 -0.14261605 -0.15880758
## AO.A12B.01TCGA -1.68527338 2.3804788 -0.1110762 -0.06950411
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## BH.A18Q.O2TCGA 2.16577057 -1.4305149 -2.6080893 1.00157768
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## C8.A130.O2TCGA -0.49077971 -0.3399057 0.7654101 1.57225781
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## C8.A138.O3TCGA -0.01800225 -1.2029153 0.4281687 -0.80063003 -1.31262951
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## AO.A12D.01TCGA 0.06748568 -0.3744509
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## C8.A131.O1TCGA 0.41599151 0.7762529
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-2.67191808 0.299101914
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## BH.A18Q.O2TCGA 2.71775858 -0.3231935
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## C8.A130.O2TCGA 2.14295499 1.4705819 -0.36286483 0.096316815 0.096316815
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## AO.A12D.O1TCGA 0.1665404 -0.9992578 -1.6240647 0.120822852 -0.4735057
## C8.A131.O1TCGA -0.9967189 -0.5797872 -0.3895368 -0.223573673 -3.4537827
## AO.A12B.01TCGA 1.2220027 3.8549029 -1.7046737 -0.002988738 1.6488097
## BH.A18Q.O2TCGA -6.0571780 3.7146824 0.2321399 -0.875181542 -0.6778040
## C8.A130.O2TCGA -0.2021513 -1.0516373 0.8900451 -1.494419585 3.2777896
## C8.A138.O3TCGA 0.3806259 -1.9672574 -0.6872587 0.779254092 -1.7478291
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## AO.A12D.01TCGA -0.72876214 0.61990641 -1.6697823 -1.2507045
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## C8.A131.O1TCGA 1.16080161 4.92128299 -2.4944349 -1.7091460 -1.0452935
## AO.A12B.01TCGA 0.01918305 0.03026895 -3.1014965 1.9730721 0.4737048
## BH.A18Q.02TCGA 4.60120856 0.75736481 -1.2766274 -0.4068281 0.6168588
## C8.A130.O2TCGA -0.01191886 -1.17299244 -0.4284622 -1.1926716 -0.0709565
## C8.A138.O3TCGA -0.68725871 0.12462618 -1.2431439 0.5159401 -0.2922877
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## AO.A12D.01TCGA 2.060010118 -0.08109645 -0.8544855 -1.3954768 0.79134733
## C8.A131.O1TCGA 1.096035510 0.31884237 -0.3814410 -1.1019638 0.46456609
## AO.A12B.O1TCGA -0.177591593 3.04840400 1.6377238 1.5462652 -0.30230792
## BH.A18Q.02TCGA 0.007999269 0.34253745 0.4027543 1.1387383 -1.77843464
## C8.A130.02TCGA -0.310386924 -1.19595152 0.2537505 -1.7896078
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## C8.A138.O3TCGA 0.435483010 0.54154005 -0.4239447 -0.1313736
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## AO.A12B.O1TCGA -0.09167590 -2.660832 0.78133837
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## BH.A18Q.02TCGA 0.81423630 -1.678073 -0.31984815
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## C8.A130.02TCGA 0.55877833 -2.543978 0.22095183
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## C8.A138.O3TCGA -0.06554506 6.334448 0.07342623
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## BH.A18Q.O2TCGA 0.07490691 -1.3468804 -0.49715339 -1.0524868
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## C8.A131.O1TCGA 3.391184 -0.4623986 -0.93600072 -0.77813336 -0.50692534
## AO.A12B.O1TCGA -1.214123 1.3245472 0.06075516 0.06075516
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## BH.A18Q.02TCGA 2.052028 0.2957021 1.31604358 1.18891907
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## BH.A18Q.02TCGA -0.8517639 0.9212885 0.3492282 -1.63792861
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## AO.A12B.01TCGA -1.7989038 -1.30003851 -1.71298812 -0.5905412
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## BH.A18Q.02TCGA 2.3531120 -3.17011350 0.60347724 0.3559190
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## C8.A130.O2TCGA -0.1299941 -0.17591230 0.56533806 0.2307914
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 0.84099935 2.2293328 -0.1994144 -0.01541840 -4.2473265
## C8.A130.O2TCGA 0.08319734 0.4013446 -1.2221905 0.62765557 -2.0913557
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## AO.A12B.O1TCGA -2.4668290 -0.5184829 0.7951957
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## BH.A18Q.02TCGA -0.8618000 -0.8149647 0.1485053
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## C8.A130.02TCGA -1.1959515 -1.3468255 0.7457309
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## C8.A138.O3TCGA -0.2740020 2.5054238 -0.5775445
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## AO.A12B.01TCGA -0.72357195 1.028000 -0.46582488 -0.30785086 2.5218240
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## AO.A12B.01TCGA -1.0616918 -1.0589203 0.1854715 -1.94302045
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## AO.A12B.01TCGA -1.12543566 -1.2695523 -1.54392821 0.48756214 0.75639510
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NΑ
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## AO.A12B.01TCGA 0.07184106 -1.3831827 2.100559933 2.2003330
                                                               1.33286167
## BH.A18Q.02TCGA -1.63792861 -2.5344909 -5.100398833 0.5800596 -0.76478394
## C8.A130.O2TCGA 1.00484049 0.1619142 -1.104115190 0.6637341 0.44726278
## C8.A138.O3TCGA
                 0.08805479 1.3095393 -0.786001471 -0.5226875 -0.34714477
                 NP 001093634
                               NP_620602
                                           NP_689628 NP_001164432 NP_055921
## AO.A12D.O1TCGA
                    0.4827537
                              1.38948564 -0.36302152
                                                               NA
                                                                   0.6656240
## C8.A131.O1TCGA
                    0.9705512 1.10008339 -0.58788296
                                                               NΑ
                                                                   0.6750559
## AO.A12B.O1TCGA
                    2.4580801
                              1.00305628 1.30791840
                                                               NA
                                                                   0.1134132
                   -1.1762659 -0.95547071 -0.08567142
                                                        0.2321399
## BH.A18Q.02TCGA
                                                                  1.2524813
## C8.A130.02TCGA
                   -0.9434016 -0.01519873 -0.94012175
                                                       -3.7411298 -0.1791922
## C8.A138.O3TCGA
                    2.7175378 0.04051198 0.38794020
                                                       -0.7604015 0.1465690
##
                  NP_116264 NP_036289 NP_002890 NP_001124464 NP_004802
```

```
## AO.A12D.O1TCGA 7.3822982 11.3559176 -3.2660877
                                                 -3.3880013 0.87516289
## C8.A131.O1TCGA -0.3935847 0.7398220 1.2943817
                                                  1.7517922 0.73577411
## AO.A12B.O1TCGA -0.8593742 -1.7379314 -4.0798268
                                                 -4.3292595 -2.13702362
## BH.A18Q.02TCGA -1.1729205 -4.3610694 -2.6315070
                                                -2.8957922 1.83792315
## C8.A130.O2TCGA -0.9204425 -1.0352379 -0.7203705
                                                 -0.8614049 -0.04471755
  -5.9864534 -0.51537317
                  NP 036307 NP 612361 NP 001071087 NP 001893 NP 859526
## AO.A12D.O1TCGA -0.11157484 0.8027767
                                      0.80658652 -1.1935575 -0.3439725
## C8.A131.O1TCGA 0.08406528 -0.6121702
                                       0.73172623 -1.9479709 -0.2114300
## AO.A12B.O1TCGA 0.51527688 -0.3466515
                                       0.30741634 0.9503983 0.3185022
## BH.A18Q.02TCGA -0.32988430 -1.7583624
                                        0.02807156 -2.6984147 -0.1826875
## C8.A130.02TCGA 0.29310895 1.6247357
                                        2.46110227 -2.4324621 0.4243037
## C8.A138.O3TCGA -1.43331510 -0.4056590 -0.97617271 -1.2394867 0.2416546
                NP_057224 NP_116259 NP_065107 NP_001108488 NP_620156
## AO.A12D.01TCGA -2.599373 1.0999410 -0.2715864
                                               0.09034447 -0.9192520
## C8.A131.O1TCGA -1.231496 0.6669601 0.9705512
                                                0.22574111 -0.3895368
## AO.A12B.O1TCGA -1.025663 -0.9175751 -0.9286610
                                               -0.71248605 1.1111438
## BH.A18Q.02TCGA -3.293893 0.7439833 -0.8952538
                                                0.92797928 1.9750838
## C8.A130.02TCGA -0.759729 -0.1955915 0.1291155
                                                0.45054265 -0.7006913
## C8.A138.O3TCGA 5.643249 1.0791395 -0.3800590
                                                1.33148211 1.6386818
##
                NP_001171649 NP_004121
                                         NP_006744 NP_001265871 NP_002677
                   ## AO.A12D.O1TCGA
                                                            NA -2.149817
                   0.2055017 0.2055017 0.06382587
                                                            NA -4.542663
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   0.6205929  0.6067355  -1.22243724
                                                            NA -3.910767
## BH.A18Q.02TCGA
                   1.9550115 1.7475978 0.09832458
                                                    -1.7416354 -8.877335
## C8.A130.02TCGA
                  -0.3038272 -0.2972674 1.04419892
                                                     1.0901171 -8.487100
## C8.A138.O3TCGA
                  -1.2577724 -1.3199438 0.51228293
                                                     0.2855403 -4.231027
                 NP_000422 NP_003338 NP_004273 NP_002843
                                                            NP 000428
## AO.A12D.01TCGA -0.2982549 0.7570591 -0.7897189 -4.5880877 0.16273063
## C8.A131.01TCGA -0.1547597 -0.0697542 0.5536195 1.8975159 -1.12220324
## AD.A12B.01TCGA -0.5545120 1.0196851 2.3998791 -2.8049488 0.05521221
## BH.A18Q.02TCGA -1.0759045
                           0.2187583 -0.2295228 7.8495744 -1.12273980
## C8.A130.02TCGA -0.2710285
                           0.3718258 -0.5990154 -0.2480694 -0.37598430
  NP_055991 NP_064524 NP_064533
                 NP 000091
                                                            NP 005763
## AO.A12D.01TCGA 2.4905173 1.0885116 -0.9306814 -0.4201685
                                                          0.47513408
## C8.A131.O1TCGA 0.2176453 0.2176453 0.9179287 0.9138809 0.48480549
## AD.A12B.01TCGA -1.9596493 -0.3882236 -1.9430205 -0.3438800 -1.53561379
## BH.A18Q.02TCGA 0.1919953 -0.5506795 0.6904572 -0.1860329 -0.04218146
## C8.A130.O2TCGA -3.0589170 0.1192759 0.9720418 1.0212398 0.90316456
## C8.A138.O3TCGA -1.6856577 -0.1386878 -1.2358296 0.5598257 0.17216899
                NP 001010853 NP 003595 NP 004963 NP 004956 NP 001364
## AO.A12D.O1TCGA
                   -2.267921
                                   NA 0.1322522 0.9742176
                                                            1.0656528
                   -2.749451
                                   NA 0.4078958 -1.7293854
## C8.A131.O1TCGA
                                                           0.6871995
## AO.A12B.O1TCGA
                    1.269118
                                   NA -1.0090338 -1.8543333 0.5485346
                    2.764594 -1.293354 1.4866581 -4.2740895 -2.0159568
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                   -1.914243 4.665174 -1.1008353 3.7697699 -1.1237944
## C8.A138.O3TCGA
                   -1.499144
                                   NA -0.5556017 -1.7258862
                                                           3.2295373
                 NP_579917 NP_036226
                                       NP_113664 NP_056970 NP_001091977
## AO.A12D.01TCGA -0.2487276 -1.1592693 0.26940498 -0.3020647
                                                             0.06367588
## C8.A131.O1TCGA -0.3288186  0.4848055  1.14056220  5.5608482
                                                            -0.40168043
## AO.A12B.01TCGA 1.1277726 2.9430880 -2.09268004 -1.4358407
                                                             0.09955580
## BH.A18Q.02TCGA -0.2797036 -0.3131574 -0.03214531
                                                        NA -0.21614132
## C8.A130.O2TCGA -0.9073231 0.5522186 0.77524967
                                                        NA
                                                             0.98188141
```

```
0.20508324
                                                        NΑ
##
                NP_001027464 NP_009191 NP_997320 NP_001243404 NP_115587
## AO.A12D.O1TCGA
                  0.06367588 1.4694914 3.0391282
                                                           NA -1.0373558
## C8.A131.O1TCGA
                 -0.40168043 0.7519656
                                        1.5332066
                                                           NA -0.3166749
## AO.A12B.O1TCGA
                  0.09955580 -0.5212544
                                        1.4381777
                                                           NΑ
                                                              0.1300420
                                                    -2.307005 -9.7772427
## BH.A18Q.02TCGA
                 -0.35664735 -0.4670450 -3.5682139
## C8.A130.02TCGA
                  0.98516128  0.6276556  -5.1350740
                                                     1.444343 -2.6751724
                  0.18679755 -1.0164012 0.3477117
## C8.A138.O3TCGA
                                                           NΑ
##
                 NP 898871 NP 005245
                                      NP 002032 NP 963839 NP 001129671
## AO.A12D.01TCGA 0.1208229 -0.8163875 -1.18974772
                                                  1.8580908
                                                             1.27900149
## C8.A131.O1TCGA -1.5998532 0.2297890 0.86125842
                                                 0.1893102
                                                           -0.01308386
## AO.A12B.01TCGA 3.5805270 -0.3217082 -0.04456085
                                                 0.4764762
                                                            -0.46582488
## BH.A18Q.02TCGA 2.3564573 -0.5406434 1.10862990 -1.3736434
                                                            -1.11939442
## C8.A130.02TCGA -1.9700006 1.3525066 0.81788797 -0.9893198
                                                           -0.15951296
## C8.A138.O3TCGA -0.9322870 0.1173119 -0.10943073 0.3074831 -2.37685701
##
                 NP_001031
                             NP_612452
                                        NP_115814
                                                    NP_003014 NP_055760
## AO.A12D.O1TCGA -1.9593269
                            2.18573346
                                      0.22749720
                                                  0.18939922 -0.7135229
## C8.A131.01TCGA 0.8086360 0.11644833 -0.02522751 0.04358647 0.8288754
## AO.A12B.O1TCGA -1.3083529 -0.72911489 -2.05387941 0.17992854 -1.0533773
## BH.A18Q.02TCGA 1.8881039 -0.81161929 0.01134465 -0.41351885 -1.5041133
## C8.A130.O2TCGA -0.5366979 0.01432009 1.08683721 -0.26446876 0.2504707
  C8.A138.O3TCGA -0.1460021 -0.87377281 -0.38737330 -0.58851596 -0.5007446
                 NP_001095871 NP_570721 NP_068597 NP_115528
##
                                                              NP 002640
## AO.A12D.01TCGA -0.68304456 0.8180159 0.8218257 -0.4430273 -0.03537887
## C8.A131.01TCGA -0.55549991 -0.7578940 0.5293322 1.4562969 2.83662431
## AO.A12B.01TCGA -0.11384769 2.1255032 1.4076915 -1.1115783 -1.92916308
                  0.46966197 -1.6613463 0.1618868 -1.7148724 1.36287892
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  0.03071944 -0.9958795 -0.8876438 -1.4944196 -0.39238365
                  C8.A138.O3TCGA
                 NP_004627 NP_006014 NP_002643 NP_110394 NP_001688
## AO.A12D.O1TCGA -3.0755978 -0.4354077 -2.862249
                                               1.5761658 -0.2639668
## C8.A131.01TCGA -2.7899302 1.2458071 -2.587536 -0.7983728 -0.6850321
## AO.A12B.O1TCGA 1.4548065 -0.6321133 4.702974 0.7508522
## BH.A18Q.02TCGA -2.4776195 1.0852122 -3.789009 -1.9423584 0.2823206
## C8.A130.02TCGA -0.5662167 2.0675180 -6.168233 -0.1431136 -0.1890318
  C8.A138.O3TCGA -1.7807433 -0.9688584 -5.660968 0.6658828 -0.6982301
                  NP 620130 NP 689600 NP 079351
                                                   NP 006244 XP 003960220
## AO.A12D.01TCGA -0.06966706 -0.9916382 -0.2487276 -0.19158060
                                                               0.5208517
## C8.A131.O1TCGA 0.14073561 0.5576673 -0.4381114 -0.92385707
                                                               0.3269381
## AO.A12B.O1TCGA 1.27466072 0.8339964 -0.2274781 0.82845342
                                                              -0.4464246
## BH.A18Q.02TCGA -0.35330197 0.4863889 -0.6108964 0.02807156
                                                               1.0985938
## C8.A130.O2TCGA -0.79580752 -0.2283902 0.9720418 -0.97292044
                                                              -0.6154147
## C8.A138.O3TCGA -0.21914490 0.1721690
                                      0.1611976
                                                 1.53993904
                                                               2.2055384
##
                 NP_056356 NP_700356
                                       NP_112574 NP_056176
                                                           NP_055740
0.28083438 1.0275548
                                                            0.5170419
## C8.A131.O1TCGA 0.5981462
                           0.2662199
                                      0.43218304
                                                 1.0353173
                                                            0.2702678
## AO.A12B.01TCGA -0.8981748 -1.7102166 -0.97577607 -1.4081260 -0.1554198
## BH.A18Q.02TCGA
                        NA
                                   NA
                                      0.68376640 -0.1826875
## C8.A130.02TCGA
                        NΑ
                                   NΑ
                                      0.09631682 0.5161400
                                                            0.4931809
## C8.A138.O3TCGA
                 2.3810810
                                   NA -0.10943073 0.3074831
                                                            0.4501116
                            NP_001713 NP_064507 NP_054891 NP_001129333
##
                NP_057384
## AO.A12D.01TCGA 2.3495548 -0.86972467
                                      1.1456586 -1.4069062
                                                            -2.4393615
## C8.A131.O1TCGA 2.1484846 -1.06553291 0.5131407 -1.9479709
                                                            -2.1220298
## AO.A12B.01TCGA 0.3933320 0.87833995 0.7813384 1.8511273
                                                            -0.5212544
```

```
## BH.A18Q.02TCGA 0.4395535 -0.37337426 -0.1258160 -1.2699366
                                                              -2.1096274
## C8.A130.O2TCGA 2.7628502 0.30950829 0.4374232 -1.6387338
                                                              -1.7600890
  C8.A138.O3TCGA 0.5159401 0.04051198 -0.1533164 0.8523969
                                                               0.8121683
                             NP_060590 NP_001193594 NP_001094346 NP_777593
##
                  NP_000388
## AO.A12D.O1TCGA
                  1.3132897
                            1.10756058
                                          0.5132321
                                                      -3.0870272 -3.6318283
## C8.A131.O1TCGA 4.3829148 0.15287925
                                         -0.2438131
                                                      -2.6968289 -3.9557199
## AO.A12B.O1TCGA -2.4917723 -0.16096275
                                         1.8788420
                                                       3.0123748 3.3283229
## BH.A18Q.02TCGA 1.6639633 -0.11243448
                                         -2.0661375
                                                      -1.6379286 -1.6646917
## C8.A130.02TCGA -1.8486454 1.35250659
                                         -1.6518533
                                                      -0.9630808 -0.9794802
## C8.A138.O3TCGA -0.7384587 -0.02897366
                                          0.3659974
                                                      -1.7368577 -1.6783434
                   NP_003759 NP_112217
                                         NP_002124 NP_065118 NP_653182
## AO.A12D.O1TCGA -0.30587454
                             0.3341715 -0.57256041 -1.0221166
                                                              0.9780274
## C8.A131.O1TCGA 0.29050720 0.6629123
                                        3.71096659 -1.5391350
                                                              1.1810410
## AO.A12B.01TCGA 0.59287815 -1.4884987 -0.99517639 -1.8321615 -1.0561488
## BH.A18Q.02TCGA
                 0.40275433 -2.2936235
                                       ## C8.A130.02TCGA
                  0.05695839
                             1.4443429
                                        0.08647721
                                                    1.6312954 -0.1267143
## C8.A138.O3TCGA
                             3.3246230 -0.98714413 -0.6506873
                 0.01125487
                                                              0.2965117
##
                   NP 065207 NP 443149
                                         NP 653168
                                                   NP 055634
## AO.A12D.O1TCGA 2.20478245 -0.2296786
                                       0.76086894
                                                    0.1093935
                                                                     NΑ
## C8.A131.O1TCGA 1.77607951 -0.9036177 -0.78218124
                                                    0.1043047
                                                                     NA
## AO.A12B.O1TCGA -0.64319920 -0.3383371 1.82341255
                                                   0.7397663
                                                                     NΔ
## BH.A18Q.02TCGA 0.54326037 0.4997704 -0.47039034 0.2421760 -2.0193021
## C8.A130.02TCGA -0.02175846 0.4702219 -0.09719545 -0.4350219 0.6735737
## C8.A138.O3TCGA 1.51433906 -1.6088578 0.22336894 -0.2118306 -1.6929720
##
                  NP 003005 NP 000437
                                        NP 000931 NP 004070 NP 000537
## AD.A12D.O1TCGA 0.8523041 -1.0487852 0.05224649 -0.7973385 0.193209
## C8.A131.01TCGA 1.2336635 0.1650229 -1.21935238 2.0230002 1.614164
## AD.A12B.O1TCGA -2.6081742 -2.2922262 -0.81780206 -2.2146249 -1.715760
## BH.A18Q.02TCGA -1.1963382 -0.8049285 0.28566596 3.9789675
## C8.A130.O2TCGA 0.3488667 0.7424510 1.31314817 -0.6941316
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## C8.A138.O3TCGA -1.5210864 -1.7222291 -2.25251428 0.2087404 -5.339140
##
                   NP_612393
                               NP_060389 NP_689786 NP_001002836 NP_055037
## AO.A12D.O1TCGA -0.45445667
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                                         1.705699
                                                      0.8256355
                                                                0.2808344
## C8.A131.O1TCGA -0.55145203 -0.519068981
                                         0.160975
                                                     -0.8145643 0.1690708
## AO.A12B.O1TCGA 1.38274820 0.118956112 1.540722
                                                     -0.6210274 -1.5162135
## BH.A18Q.02TCGA 0.32246516 -1.380334203 -3.220294
                                                      0.3927182 -0.3967919
## C8.A130.02TCGA 0.17175380 0.004480487 -3.478740
                                                      1.2639501 1.9953609
## C8.A138.O3TCGA 0.00028345 0.596397134 1.393653
                                                      0.9255397 -0.6945730
                  NP 000253 NP 001139400 NP 005081 NP 001108104
##
                                                                 NP 057090
## AO.A12D.01TCGA -0.6525662 -0.01252008 -1.0183068 -1.829793809 -0.83162669
## C8.A131.O1TCGA 1.0838919
                             ## AO.A12B.O1TCGA 0.7120515
                             0.47924772  0.1716141  -0.005760212  0.72868036
## BH.A18Q.02TCGA -0.2562859
                            -0.63765943 0.1752684 1.055103791 -0.29643048
                             0.24391091 -1.4714605 -1.953601226 0.04711878
## C8.A130.02TCGA 0.4669420
## C8.A138.O3TCGA
                 0.3586831
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                                        0.1611976  0.472054402  -1.96725742
##
                              NP_065128
                                         NP_006109 NP_001018238
                   NP_004539
                                                                 NP_060036
## AO.A12D.O1TCGA 1.82761243
                             0.08653467
                                         0.2427364
                                                      0.1817796
                                                                1.62569313
## C8.A131.O1TCGA -1.47841676
                             0.19335806 -0.4300156
                                                     -0.6566969
                                                                2.54112900
  AO.A12B.O1TCGA -1.39149715 -0.29399349
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  BH.A18Q.02TCGA -0.09905295 -0.25294052 -0.6978763
                                                     -0.8283462 -1.49407719
  C8.A130.O2TCGA -0.00535912 1.45418253 0.1520746
                                                      0.1979927 -0.04143768
  C8.A138.O3TCGA 0.09171193 0.92919680 -1.2358296
                                                     -1.2468010 0.62565425
##
                  NP 067026 NP 002922
                                        NP 009143
                                                    NP 064528 NP 054786
## AO.A12D.01TCGA 3.7820389 0.48275368 -0.18777080 0.64276520 -1.4107160
```

```
## C8.A131.01TCGA 0.2176453 0.04763435 -0.21143003 -0.45430289 0.3107466
## AO.A12B.O1TCGA -2.1259377 0.06075516 0.55962046 -1.05337734 1.5795228
## BH.A18Q.O2TCGA 1.1621560 0.94136081 0.46966197 0.01469003 -0.6276233
## C8.A130.02TCGA -1.0516373 0.94580285 0.04383891 0.27342973 1.8182480
  C8.A138.03TCGA 2.1031385 1.45216770 0.77193981 -0.50805889 1.1010823
                 NP 001005339 NP 057651 NP 510868 NP 001006618 NP 001258
##
                   -1.2735633 -1.8069350 -2.7898629 -0.26396676 -3.109886
## AO.A12D.O1TCGA
                                                    0.25002840 -3.704751
## C8.A131.O1TCGA
                   -0.9845753 -0.7862291 -0.5474041
## AO.A12B.O1TCGA
                    0.6011926 0.3462170 0.5540775
                                                     0.15498527 2.566168
## BH.A18Q.02TCGA
                    2.2694774 -0.6945309 -0.6844948
                                                   -0.65104096 -2.611435
## C8.A130.02TCGA
                   1.0540385 0.8146081 0.7326114
                                                   -0.20543112 -1.966721
## C8.A138.O3TCGA
                    1.0462253 0.3952545 0.5854257
                                                     0.03685484 -2.596285
                   NP_004454 NP_055431 NP_002576 NP_002577 NP_006186
## AO.A12D.01TCGA -4.50427212 0.8980217 -0.1611022 0.1246326 0.2236874
## C8.A131.O1TCGA -0.77003760 1.5048715 0.1528793 0.2621720 0.9260245
## AO.A12B.01TCGA -4.06596944 -1.3831827 0.3600743
                                                   0.4432186 0.1632997
## BH.A18Q.O2TCGA 0.02807156 1.8947946 -0.1124345 0.1919953 0.9714692
## C8.A130.02TCGA 0.34886672 -0.6613329 1.2278716 0.1717538 1.2869092
## C8.A138.O3TCGA -1.90874320 1.7922816 0.2014261 -0.2374306 0.4574258
                  NP 079521 NP 997227 NP 006558
                                                   NP 055100 NP 057726
## AD.A12D.O1TCGA 1.3780562 -0.1039552 0.3417911 -0.83543649 -0.4506469
## C8.A131.01TCGA -2.8304090 -0.6162181 -0.4057283 -0.03737115 2.9499650
## AO.A12B.01TCGA 0.7175945 2.6326829 1.1166867 0.55130604 -0.1360195
## BH.A18Q.O2TCGA 5.0695620 -0.6108964 -0.7714747 -0.31315739 -2.1196636
## C8.A130.02TCGA -2.2783082 -1.4714605 0.1619142 -0.45798102 0.2832693
  C8.A138.O3TCGA 0.2855403 1.3095393 1.7483960 -0.82257286 -1.5540007
                  NP_060633 NP_149080 NP_000582 NP_004662
                                                              NP_057250
## AO.A12D.01TCGA -1.4640532 -1.5821569 -1.7840762 0.1513012
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## C8.A131.O1TCGA 0.1933581 1.6627388 -0.1669033 0.2297890
                                                            0.03549071
                                                             0.03858337
## AO.A12B.O1TCGA 0.9670271 -0.7014002 -1.4302978 -0.2635073
## BH.A18Q.02TCGA 0.3626097 -1.3669527 1.9650477 2.0955175
                                                             1.20564597
## C8.A130.02TCGA 0.3390271 -1.4550612 -1.1565931 0.2635901 0.79820875
## C8.A138.O3TCGA 0.1538833 -0.9542299 -2.5341140 -1.5796007 -1.01640124
                 XP_003960206 XP_003960203 NP_077005 NP_001193769 NP_001030331
##
## AO.A12D.O1TCGA
                    1.1151802
                                0.5703790 0.3341715
                                                         2.269549
                                                                  -0.04680827
## C8.A131.O1TCGA
                    0.1974059
                               -0.2478610 0.7762529
                                                         1.334860
                                                                    0.14073561
## AO.A12B.O1TCGA
                    0.4626189
                                0.4626189 -0.4242528
                                                        -1.435841
                                                                   -0.23856402
                                                        -2.999499
## BH.A18Q.02TCGA
                    1.1956098
                                1.3193890 0.4462443
                                                                   -0.68784016
## C8.A130.02TCGA
                    0.7555705
                                0.7555705 0.5325394
                                                        -1.025398
                                                                    1.38202541
## C8.A138.O3TCGA
                    0.5488543
                                -0.3690876 -0.6287445
                                                         3.639137 -0.37640188
                   NP 005810 NP 003756 NP 001258538 NP 001243549 NP 001243548
## AO.A12D.O1TCGA 1.46949140
                              1.0123156
                                         1.33233867 -0.938301038 -0.938301038
## C8.A131.O1TCGA 0.55766735 0.5900504
                                         0.14478349 -0.000940222 -0.000940222
## AO.A12B.O1TCGA -0.44365309 -0.1055333
                                        -0.31616529 -1.804446758 -1.804446758
## BH.A18Q.02TCGA 0.05148923 -1.2599005
                                        -1.58440250 -0.286394335 -0.262976662
## C8.A130.02TCGA -2.14711349 0.1717538
                                        -0.04799742 -0.349745351 -0.218550596
## C8.A138.O3TCGA 2.50908092 -0.4276018
                                        -0.41297328 -0.405658998 -0.405658998
##
                  NP 004759
                             NP 055969 NP 001171940
                                                     NP_113614 NP_060104
## AO.A12D.O1TCGA -0.6373270 -0.39349990
                                         -0.6106584 -2.29839898 -0.5001742
## C8.A131.O1TCGA -0.2397652
                            0.39170423
                                          -0.1102330 0.10025680 0.2338369
## AO.A12B.O1TCGA 0.3767032
                            1.79292633
                                         -0.8954033 -3.24284170 -0.2357925
## BH.A18Q.02TCGA -0.3901012 1.02499535
                                         0.3425375 4.84207606 0.6302403
## C8.A130.02TCGA 0.8900451 -0.09391558
                                         -0.6547732 -0.98276004 -0.8450055
## C8.A138.O3TCGA -0.7713729 0.06611196
                                          -0.2776591 0.04416912 -0.8481728
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NP 000615 NP 006212 NP 003249 NP 112240
## AO.A12D.01TCGA -3.0984566 -0.3096843 0.3684597 0.1817796
                                                           0.006528907
## C8.A131.01TCGA -0.9238571 -0.5150211 1.0231737 1.4320096 0.488853371
## AO.A12B.01TCGA -2.6220316 1.2912896 -1.5411567 -0.3743662 -1.757331702
## BH.A18Q.O2TCGA 1.0015777 -0.7647839 -0.1759967 -0.6610771 -0.875181542
## C8.A130.O2TCGA 0.9228438 1.1885131 0.3685459 0.8047685 -0.805647123
## C8.A138.O3TCGA -0.8445157 -1.2138868 -2.8193708 -0.7238301 1.536281899
                  NP 068744
                             NP 000967
                                         NP 060241
                                                    NP 001902 NP 997244
## AO.A12D.O1TCGA 1.1037508
                            0.61990641 -0.36302152 -2.35173616
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## C8.A131.O1TCGA 0.6548165
                            0.31074661 -0.85099522 5.05486306
## AO.A12B.O1TCGA -0.3411086
                           0.07184106 -1.08386355 -2.44465722
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                                                                    NA
## BH.A18Q.02TCGA 0.0213808 -1.43051493 0.39606357 -3.98638667
## C8.A130.02TCGA -1.0549172 1.13275538 -0.03815781 0.03071944
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## C8.A138.O3TCGA -0.4276018 -0.14600212 0.57811144 -5.15628277
                                                               3.331937
                   NP_006051 NP_001207695 NP_057344 NP_071910
                                                               NP_038474
## AO.A12D.O1TCGA -0.06204746
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                                                               0.5475202
## C8.A131.O1TCGA -0.36524950
                            -0.36524950 -0.7214630 0.1245441
                                                               0.3269381
## AO.A12B.O1TCGA -4.09091271
                            -4.09091271 -4.6978655 -1.7129881
## BH.A18Q.02TCGA 0.72391099
                             ## C8.A130.02TCGA -0.37270443 -0.37270443 -1.4780202 -2.0126389 0.6374952
## C8.A138.O3TCGA 0.03319770
                            0.51959721 1.6569675 1.3973106 -0.6799444
                  NP 005655 NP 115766 NP 071895
                                                  NP 057558 NP 004568
## AO.A12D.01TCGA -0.1801512 -0.6525662 1.4771110 -1.05259498 -1.0602146
## C8.A131.01TCGA 3.5652429 0.1609750 0.8531627 -0.76194184 2.6747091
## AO.A12B.01TCGA -0.9231181 -1.4025830 -0.6210274 -1.43584073 -0.3494230
## BH.A18Q.02TCGA -4.0198405 -1.4806957 -0.1559244 -0.06894451 -3.4678525
## C8.A138.O3TCGA -1.5832578 -1.6966291 1.2729679 0.13559760 -3.4593702
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## AO.A12D.01TCGA -0.1992002 0.3836989
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## C8.A131.O1TCGA -0.1102330 -1.0574371
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## AO.A12B.O1TCGA 0.6372217
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                                                               -1.1697792
## BH.A18Q.02TCGA 0.4696620
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                                         0.4897343
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## C8.A130.02TCGA 0.8605263
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                                                               NP 004996
## AO.A12D.O1TCGA 1.4809208
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## C8.A131.O1TCGA -0.2761961 0.1407356 -0.5919308
                                                   0.1124004 0.01120342
## AO.A12B.01TCGA 1.8317270 -1.6631016 -2.6414319
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## BH.A18Q.02TCGA 0.1050153 1.6606179 -0.2161413
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## C8.A130.02TCGA -0.7006913 -0.4251823 -1.2353099
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## AO.A12D.O1TCGA
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                         NA 1.4441533 0.00715554
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -0.67111325
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                                                         NA 0.81039632
## C8.A131.O1TCGA -0.4178720 1.8125104
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                                                         NA -1.15053841
## AO.A12B.O1TCGA -0.9979479 -0.5517406
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## BH.A18Q.02TCGA -0.2395590 -4.2473265
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                                                         NA 1.18222830
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## C8.A130.02TCGA 0.8605263 -1.2681086
                                          0.4505427
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## C8.A138.O3TCGA -0.4861161 0.6878256
                                          1.1778823
                                                            NA 0.06245481
                              NP 002792 NP 005092 NP 937872 NP 060609
                  NP 116199
## AO.A12D.01TCGA 0.6694338 0.97802744 -2.454601 -0.3439725
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## C8.A131.O1TCGA 0.6224334 -1.38531550 -2.219179 -1.1424426
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## AO.A12B.O1TCGA -1.5744144 -0.05564674 2.635454 1.0834290 -0.8787745
## BH.A18Q.O2TCGA 0.9948869 1.98177457 -2.909174 -3.1533866 -1.2398282
## C8.A130.02TCGA 0.3291875 -1.46490077 -1.648573 0.3291875 -0.6318141
## C8.A138.O3TCGA 2.5639380 -0.05091650 -2.888856 -0.9688584 2.9589090
##
                     NP_057258 NP_689478
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## AO.A12D.01TCGA -0.004900488 -0.1801512 1.61426373
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## C8.A131.O1TCGA 3.459997972 -0.8874261 -0.16690334
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## AO.A12B.O1TCGA -1.710216646 -1.3720968 -0.30785086
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## BH.A18Q.02TCGA -1.544257915 -1.3201173 0.50646117
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## C8.A130.02TCGA 1.388585149 0.7260516
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## C8.A138.O3TCGA 1.675253187 -0.9725156
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                                                                     NP_004979
##
## AO.A12D.O1TCGA -1.18593792
                                2.5133761 4.8678314
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## C8.A131.O1TCGA 0.09620892
                                2.4885065 -5.7610748
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                                                                            NΑ
## AO.A12B.O1TCGA -0.49353961
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                                                                            NA
## BH.A18Q.02TCGA 0.03141694
                               -2.3404588 8.3413455
                                                       11.0209964
                                                                   8.43167079
## C8.A130.02TCGA 0.94908272
                               -0.6022953 -0.1168747
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## C8.A138.O3TCGA -1.27971526
                                4.2096506 -8.3745652
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                                                                            NA
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## AO.A12D.O1TCGA
                           NA -0.6639956 -0.4849351 0.6122868
                                                                 -0.2715864
## C8.A131.O1TCGA
                           NA -1.4298422 0.3026508 -1.2112566
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## AO.A12B.O1TCGA
                           NA -0.6542851
                                          0.7231374 -0.1692772
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## BH.A18Q.02TCGA
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                                                                  0.6034772
                  -0.09063571
## C8.A130.02TCGA
                               1.8576064 -0.2349499 -0.1234344
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## C8.A138.O3TCGA
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                               0.38360847 1.31462108
                                                              NA
                                                                 0.3309860
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## AO.A12B.O1TCGA 0.31295928
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## BH.A18Q.O2TCGA
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## C8.A130.02TCGA 0.58501728
                             -2.26518877 0.05695839 0.2439109 -0.7039712
## C8.A138.O3TCGA -0.05457364
                               2.07753850 0.03319770 0.9218825 0.2782260
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##
                   -0.9306814 -1.9821857 -0.4925547
## AO.A12D.O1TCGA
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                                                                   0.5894280
## C8.A131.O1TCGA
                    0.4807576 -0.5190690 -0.7336067
                                                     0.4038479
                                                                 -2.1139341
## AO.A12B.O1TCGA
                   -1.2667808 -0.1471054 0.8894258 1.3384046
                                                                 -2.3337983
## BH.A18Q.02TCGA
                   -0.9119807 -0.9487799 -0.6175871 -0.7346755
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## C8.A130.02TCGA
                   -0.7006913 0.2603103 0.4603823 -0.8154867
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## C8.A138.O3TCGA
                   -0.3946876 1.1522823 -0.4422304 -0.5080589
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## AO.A12D.O1TCGA
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                                          0.3608401 -0.7516209
                                                                 0.9246903
## C8.A131.O1TCGA
                  5.3422626
                               -1.660571 -0.2721482 1.7032176
                                                                 1.7760795
## AO.A12B.O1TCGA -1.7213025
                               -4.456747 0.3379025 -0.8316594 -1.7434743
## BH.A18Q.02TCGA -0.9688522
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                    NP_057226
## AO.A12D.O1TCGA 0.2389266
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## C8.A131.O1TCGA -1.4743689
                             0.6062419
                                          0.12454409 2.1525324 0.703391060
```

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## AO.A12B.O1TCGA -0.2551929 -1.9208487
                                        0.27970160 -2.6552892 0.712051522
## BH.A18Q.02TCGA -2.7017600 0.6469672 -1.93566759 0.3994089 -0.617587139
                                        1.46730200 -0.7236504 1.431223444
## C8.A130.02TCGA -0.6154147 -1.3009073
## C8.A138.O3TCGA -1.6637149 1.7374246
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## AO.A12D.O1TCGA -2.1231483 -3.6051598 -3.048929
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## AO.A12B.O1TCGA -0.4381101 -1.1198927 -1.823847
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## BH.A18Q.02TCGA -0.1525791 -1.9791576 -2.397330
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## C8.A130.02TCGA -0.1529532 2.9530826 -1.448501
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## C8.A138.O3TCGA -0.4385733 4.1547935 -2.468285
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## AO.A12D.O1TCGA 0.1703502 3.058177
                                      -0.2487276 -1.650733 -1.517390 5.0468919
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## C8.A131.O1TCGA 1.1891368 -2.296089
## AO.A12B.O1TCGA 0.7619381 -1.956878
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## BH.A18Q.02TCGA -1.1294306 4.427249
                                       -2.2334066
                                                         NA
                                                                   NA -0.3332297
                                                         NA
## C8.A130.02TCGA -0.6613329 -1.753529
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## C8.A138.O3TCGA -0.7640586 -1.886800
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                                                         NA
                                                                   NA -1.8831432
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                    -4.2957419 -1.7172417
                   -2.6746896 -2.8797786 -2.1481095
## AO.A12B.O1TCGA
                                                    0.8035102 0.8949688
                   -3.2403665 -0.8651454 -1.2231013
                                                    -3.8124268 -4.5350293
## BH.A18Q.02TCGA
                    0.8769256 0.8736457 -1.7240104
## C8.A130.02TCGA
                                                     -0.4055031 -0.4055031
## C8.A138.O3TCGA
                    0.5744543 2.4030239 0.3294260
                                                      0.7280541 1.1120538
                  NP 002043 NP 536721 NP 851996 NP 000606
                                                              NP 116204
## AD.A12D.O1TCGA -1.9097996 -1.9097996 -0.1230042 -0.1230042 -1.65073329
## C8.A131.O1TCGA -2.3163281 -2.3163281 0.2662199 0.2662199 -1.58770955
## AO.A12B.01TCGA 1.3744338 1.3744338 0.2409010 0.2409010 0.24921538
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## BH.A18Q.02TCGA -3.4578163 -3.4578163 4.4941563
## C8.A130.02TCGA -0.2775882 -0.2775882 -0.6941316 -0.6941316 -0.32678627
## C8.A138.O3TCGA 1.2619965 1.2619965
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                                                         NΑ
                                                            0.02222628
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## C8.A131.O1TCGA -0.6162181 -0.3004834 0.4240873
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## AD.A12B.01TCGA -2.3393412 -1.3222103 -0.4436531 -0.6986287 0.44044708
## BH.A18Q.02TCGA 0.1083607 -1.1026675 -0.3432658 -2.1430813 0.55329651
## C8.A130.O2TCGA -0.4711005 -0.4514213 0.4407030 -0.1726324 -0.37598430
## C8.A138.O3TCGA 2.7431378 1.4777677 -0.1130879 -1.9709146 -0.08017361
                   NP_378663 NP_001243785
                                           NP_004595 NP_055502
##
                                                                  NP 036311
## AO.A12D.O1TCGA -0.29825495
                            ## C8.A131.O1TCGA 1.05960458
                               1.05960458 0.09216104 -0.1830949 1.24580710
## AO.A12B.O1TCGA 0.04412632
                               0.04412632 -1.93747750 -0.7706870 -0.09721885
## BH.A18Q.02TCGA 1.00826844
                               1.00826844 -1.27662737 0.2555575 -0.12581601
## C8.A130.02TCGA -0.05783702
                             -0.05783702 -0.39566352 0.3915050 -0.01191886
                               0.13194046 1.20713937 0.2526261 -0.50805889
## C8.A138.O3TCGA 1.22176793
                  NP_055482 NP_001121691 NP_060521 NP_075394 NP_000777
                  0.8827825
## AO.A12D.O1TCGA
                              1.3742464 -1.0906930
                                                    0.3303618 0.5056125
## C8.A131.O1TCGA 0.5293322
                               0.5536195 0.1043047
                                                    0.3755127 -1.9884498
## AO.A12B.O1TCGA -1.0422914
                              -0.9840905 -2.6580607
                                                    0.2270436 -1.0949494
## BH.A18Q.02TCGA 1.2758990
                               1.2758990 -2.6013986
                                                   0.2087222 -1.3000450
## C8.A130.02TCGA 0.4735017
                               0.4735017 -0.8646848 -0.3563051 -2.1897518
## C8.A138.O3TCGA 1.1998251
                              1.1998251 2.7687378 0.2343404 2.3079383
##
                  NP 061845
                             NP 002544 NP 054888 NP 066552
                                                               NP 036204
```

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## AO.A12D.01TCGA -3.3422837 -0.56494082 -1.9021800 -1.0183068 -0.43540768
## C8.A131.O1TCGA -1.4743689 -0.75384607 -0.1547597 -0.2842919 0.53338006
## AO.A12B.01TCGA 1.2469460 0.03858337 0.4820192 0.7841098 -0.51848288
## BH.A18Q.02TCGA -1.9691214 -0.36668350 -1.5743664 0.1551961 -0.72798474
  C8.A130.O2TCGA 2.5070204
                           0.51286016  0.8277276  -0.3235064  1.48042148
  NP 036595 NP 006471 NP 000185
                                                  NP 065928
## AO.A12D.O1TCGA 1.09994098
                            0.2313070 -2.8889177 -0.23348838
                                                            0.55894964
## C8.A131.O1TCGA -0.13452029
                            1.4643927 -1.1545863 -0.35310586
                                                            0.49694913
## AO.A12B.O1TCGA -1.36378241
                            0.4792477 -0.3494230 -0.63488478 -1.71021665
## BH.A18Q.02TCGA 0.08494305
                            1.2123367 0.7908186 -0.32988430 -0.05556299
## C8.A130.O2TCGA -1.19595152 -2.1372739 -0.6285342 0.08975708 -0.17263243
  C8.A138.O3TCGA 0.79753979 0.6439399 -1.5686293 0.65491136 -0.47514464
                 NP_115700 NP_001070914
                                        NP_060453 NP_079345 NP_116161
##
                            -0.7516209 -0.78209931 -2.6717592 1.4885404
## AO.A12D.O1TCGA 1.1075606
## C8.A131.O1TCGA
                 1.1365143
                            -1.2598312 -0.84694734 -2.5875361 1.3389084
## AO.A12B.O1TCGA 2.9015159
                             0.1882430 -1.44138368 0.0247260 -1.3914971
## BH.A18Q.02TCGA -0.9956153
                             0.3291559 -0.34661121 -4.6989530 -2.0828644
                             1.7165720 0.04383891 -0.1496734 -0.2808681
## C8.A130.02TCGA -3.6886519
## C8.A138.O3TCGA -3.8579984
                            -1.4223437 1.36439636 -0.5336589 -1.2541153
##
                  NP_056465 NP_001009894 NP_071926 XP_003119578 NP_001029366
## AO.A12D.01TCGA -0.02013968
                             -0.5801800
                                               NA
                                                   1.4771110
## C8.A131.O1TCGA 0.37956059
                             -0.5271647
                                               NA
                                                                 0.2824114
                                                     1.1810410
## AO.A12B.O1TCGA 0.69819415
                              0.2935590
                                               NA
                                                     1.7264110
                                                                 0.4016464
## BH.A18Q.02TCGA -3.26378419
                             -0.6476956
                                        1.5435295
                                                   -0.9220169
                                                                 0.1585415
## C8.A130.02TCGA
                 0.16519406
                              2.2052725 0.7457309
                                                     1.7592103
                                                                -0.5924556
## C8.A138.O3TCGA
                 1.31319641
                             -0.4020019 -0.9725156
                                                    -3.7190271
                                                                -0.3690876
                  NP_060023
                            NP_115729 NP_000937
                                                  NP_057480 NP_055731
## AO.A12D.01TCGA 2.15144527 -0.3058745 -1.4831022 -0.26015697 -0.5306526
## C8.A131.O1TCGA 2.20515488 -0.2195258 -0.6445533
                                                0.57790675
                                                            0.4929013
## AO.A12B.O1TCGA -2.03725056
                            1.6100091 -0.8399738 -1.50235611
                                                            0.8450823
## BH.A18Q.02TCGA -1.17961129
                            0.9313247
                                      1.5334934
                                                 1.58701951 -0.7313301
  0.2111122
                                                 0.08319734 -0.5596570
  C8.A138.O3TCGA
                 0.14291188 0.0514834
                                      0.1429119
                                                 0.32942597
                                                            1.7081674
                 NP 689939 NP 112597
                                       NP 005391
                                                 NP 006246
                                                            NP 542398
## AO.A12D.O1TCGA 1.1532782 0.9094511 -0.65256618
                                                 0.1513012 -0.84686588
## C8.A131.O1TCGA 0.2257411
                           0.5738589 1.95013839
                                                 1.7679837 -0.81456429
## AO.A12B.01TCGA -1.0894065 -0.2191637 -2.24511110 -3.8276227 0.49587656
                                                 0.9313247 -2.44416564
## BH.A18Q.02TCGA
                 1.2792444 0.1919953 1.31604358
## C8.A130.02TCGA
                 0.6965328 -0.2907077 0.08975708
                                                 0.5259796 -0.06111689
  C8.A138.O3TCGA
                 3.2002802 -0.3069162 0.64028280
                                                 2.0190243 1.55456759
                 NP 006053
                             NP 060480 NP 060545 NP 001191763 NP 001191761
## AO.A12D.O1TCGA -0.3287333 -0.283015754 6.212690
                                                  6.338413
                                                               5.7250360
3.411423
                                                               2.5451769
-1.762875
                                                              -1.4108975
## BH.A18Q.O2TCGA
                 0.6135134 -0.978888380 -1.504113
                                                   -1.423824
                                                              -1.6881093
## C8.A130.02TCGA
                 1.0933970 0.004480487 -1.523938
                                                   -1.451781
                                                              -0.6941316
## C8.A138.O3TCGA -0.5702303 1.850795867
                                       2.403024
                                                    2.282338
                                                               2.5785666
                  NP_787103 NP_940887
                                        NP_114429
                                                   NP_001870
                                                              NP_624302
## AO.A12D.O1TCGA -1.63549410 -6.8815862
                                       0.97421764 -0.34778232 -0.06966706
                                                  2.08776634
## C8.A131.O1TCGA 0.38360847 -5.9229900
                                      0.59409828
                                                            2.54112900
## AD.A12B.O1TCGA 1.89269939 0.3656173 -1.03674849 -1.34715357 -0.88431743
## BH.A18Q.02TCGA 0.27897520 -1.6814186 0.98485077 -0.96885223 -1.06921369
## C8.A130.02TCGA 0.04711878 -3.0851560 0.05367852 -0.79252765 -0.43174207
```

```
## C8.A138.O3TCGA -0.58485882 -6.5130814 1.66428177 -0.08748789 -0.52268745
##
                  NP 001027019 NP 071441
                                           NP 057490 NP 065108
                                                                   NP 055610
                                                      0.6465750 -0.02394948
## AO.A12D.O1TCGA
                  -0.06966706 -2.7289062 -1.07545377
## C8.A131.O1TCGA
                    2.54112900 -2.7534993
                                          0.02739495
                                                      0.1285920 2.33468707
## AO.A12B.O1TCGA
                  -0.88431743 2.6742550
                                           0.19378591 -1.0866350 -0.80117322
## BH.A18Q.02TCGA
                  -1.06921369 -0.1291614
                                           1.20899136 0.7439833 1.00492306
## C8.A130.02TCGA
                  -0.43174207 -0.3497454 -0.21855060 -0.4776602 -0.42846220
## C8.A138.O3TCGA
                  -0.52268745 -2.1720572 -0.05457364 -1.4113723 -0.60680165
##
                  NP 001167567
                                NP 005709 NP 001185722 XP 003960151
                                                                      NP 004672
## AO.A12D.O1TCGA
                    1.0085058
                                0.6427652
                                           0.71896116 -0.21824919 -0.21824919
## C8.A131.O1TCGA
                   -1.8143909
                                1.3429562
                                            1.44415327
                                                       -1.92368366 -1.92368366
## AO.A12B.O1TCGA
                   -2.5555162 -0.9286610
                                           -0.48245372
                                                         0.72313742 0.69819415
## BH.A18Q.02TCGA
                                            1.06513994
                                                         0.07490691
                            NA
                                1.3160436
                                                                    0.08159767
## C8.A130.02TCGA
                            NA -0.3431856
                                           -0.20543112
                                                         1.30658843
                                                                    1.41810397
                    0.6219971
## C8.A138.O3TCGA
                                0.4720544
                                            0.09902621
                                                       -0.69457299 -0.48245892
##
                    NP_851808 NP_001229344 NP_443723 NP_001138501 NP_060379
## AO.A12D.O1TCGA
                  0.40274792
                               -0.46588607 -0.3477823
                                                         0.3951283 -3.1784624
## C8.A131.O1TCGA
                   0.87340206
                               -0.03737115 -0.9036177
                                                        -0.2519088 -2.7858823
## AO.A12B.O1TCGA
                  0.08015548
                                0.02195453 -2.3033121
                                                        -1.9956785 0.7425377
                                                        -0.2328682 -4.3577241
## BH.A18Q.02TCGA -0.48377187
                                0.39940895 -2.1397359
  C8.A130.02TCGA
                  0.40790436
                                0.57517767 2.3659861
                                                         0.4505427 -1.7633688
  C8.A138.O3TCGA
                  0.70245417
                                0.84508260 -2.3658856
                                                         1.3351392 -6.2607388
                    NP_056091 NP_001138545 NP_958443
##
                                                        NP_055250
                                                                    NP_006784
## AO.A12D.O1TCGA 1.14565856
                                0.39893812 -0.2868256 -0.60684860 -0.82400709
## C8.A131.O1TCGA -0.15071182
                              -0.15071182 -0.3207228 -0.40572832 -0.07784996
## AO.A12B.O1TCGA -0.44365309
                              -1.66864454 -1.2030369
                                                      4.90252002
                                                                  2.70751271
## BH.A18Q.02TCGA 0.05148923
                                1.66396329 1.5368388 0.01803541 -0.91198074
  C8.A130.O2TCGA -0.58589591
                               -0.03487794 -0.6449335 -2.46854064
                                                                  1.41810397
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                                0.23068322 1.1925108 0.44645443 -0.30691624
##
                  NP_001157567 NP_001172110 NP_056020 NP_006629
                                                                    NP 000046
## AO.A12D.O1TCGA
                    -0.5001742
                                 -0.5992290
                                            1.1723271 -0.2792060 -0.78971891
## C8.A131.O1TCGA
                    -0.9845753
                                 -0.2154779
                                            1.4724884 -0.3450101
                                                                   0.71148682
## AO.A12B.O1TCGA
                     1.8317270
                                  0.4875621 -0.9757761 -0.2496499
                                                                   1.79569781
                    -0.1224706
                                            1.8078147
                                                       0.8476901
## BH.A18Q.02TCGA
                                  0.3626097
                                                                  0.04145309
                                  0.6899731 -0.6678926
                                                       0.6899731 -0.33006614
## C8.A130.02TCGA
                     1.2147521
##
  C8.A138.O3TCGA
                   -0.2301163
                                  0.1246262 -6.2790245 -0.6872587 -1.82828613
##
                   NP 065142
                               NP 059993 NP 954590
                                                      NP 006684 NP 001123357
## AO.A12D.O1TCGA -0.3249235
                              0.04462689 -0.1344336 -0.38207051
                                                                          NΑ
## C8.A131.O1TCGA -1.6808108
                                          0.3552733 -0.21547791
                              0.32289025
                                                                          NA
## AO.A12B.O1TCGA
                 1.0002848
                              1.54349368
                                          1.5185504
                                                    0.42936119
                                                                          NΑ
## BH.A18Q.02TCGA
                  1.0684853
                              1.41305965
                                         1.4130596
                                                    0.10501534
                                                                          NA
## C8.A130.02TCGA
                  0.1553545 -0.30054732 -0.3300661 0.06679799
                                                                          NΑ
  C8.A138.O3TCGA -0.6287445
                             1.27662502
                                         0.7463398 -0.20451634
                                                                          NA
##
                     NP_005855
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## AO.A12D.O1TCGA 2.345744980
                                3.4543962
                                           2.5362349 -0.5954192 -1.136410543
## C8.A131.O1TCGA 2.075622695
                                0.3026508
                                           0.1852623 -0.3976326 -0.454302886
## AO.A12B.01TCGA -0.005760212 -0.5683694 -1.1780937 -0.8954033 -1.311124408
  BH.A18Q.02TCGA -0.356647354 -0.6108964
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  C8.A130.O2TCGA
                  1.503380559
                                0.6079764 -1.3927437 -0.3333460 -0.008638989
  C8.A138.O3TCGA
                  1.770338806
                                0.8670254 -0.5702303 -1.3674866 -1.126115413
                 NP_001265280
##
                               NP_004801
                                           NP_060745
                                                         NP_056284 NP_060846
## AO.A12D.O1TCGA
                           NA -0.5954192
                                          0.07510527 -0.389690102 -0.7859091
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                           NA -2.8964075 0.24644391 -1.139293028 -1.4441552
```

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## BH.A18Q.02TCGA
                  -0.9554707 2.6709232 -1.43386031 -0.380065027 0.1786137
                  -0.2349499 -0.9663607 -0.82860621 -0.467820630 -1.6321741
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  -2.5085140 0.3659974 0.37696878 0.003940589
##
                 NP_002008 NP_001161153 NP_001129626 NP_001257939 NP_001129627
## AO.A12D.O1TCGA -0.5992290
                            -0.3592117
                                          0.8637335
                                                      -0.3592117
                                                                  0.4027479
## C8.A131.O1TCGA 0.5252843
                              1.3510520
                                          0.2378848
                                                      1.3510520
                                                                  -0.6121702
## AO.A12B.O1TCGA -1.1448360
                            -1.7019022
                                        -0.8261165
                                                     -1.7019022
                                                                  -0.6792284
                                                                  -0.8952538
## BH.A18Q.02TCGA 0.8042002
                             0.8042002
                                         -0.6242779
                                                      0.8042002
## C8.A130.02TCGA -0.3136668
                             -0.4120629
                                          0.4111842
                                                      -0.4120629
                                                                   0.3619862
## C8.A138.O3TCGA -1.1919439
                             -1.2175439
                                         -1.7368577
                                                     -1.2175439
                                                                  -1.7368577
                 NP_059991 NP_001020419 NP_001122080
                                                      NP_000296 NP_653265
## AO.A12D.O1TCGA
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                            -1.5592981
                                                NA 2.433370338
                                                                1.2485231
## C8.A131.O1TCGA
                       NA
                             1.1365143
                                                NA -0.004988103
                                                                2.1120536
                       NA
## AO.A12B.O1TCGA
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                                                NA -1.142064501 -0.7124861
                       NA
                                      ## BH.A18Q.02TCGA
                            -1.2063743
## C8.A130.02TCGA
                       NA
                            -0.5235784
                                       -0.05783702 -0.815486730
                                                                0.7785295
## C8.A138.O3TCGA
                       NA
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                                        0.45011157 -3.155827650 0.9877110
##
                  NP 689873 NP 001137384
                                        NP 060089 NP 004090 NP 005987
## AO.A12D.O1TCGA
                 1.4999698
                             1.4999698 -1.34213964 -0.5573212 -2.4926987
## C8.A131.O1TCGA
                 0.4240873
                              0.4240873 -0.01308386 2.7354273 -0.5312126
## AO.A12B.O1TCGA 0.5014195
                              ## BH.A18Q.02TCGA 0.3425375
                              0.3425375
                                       ## C8.A130.02TCGA 0.7982088
## C8.A138.O3TCGA -1.6966291
                             -1.6966291 0.32576883 0.2343404 -0.8884014
                  NP 005985 NP 001182665 NP 001186506 NP 570115
##
                                                                NP 000970
## AO.A12D.O1TCGA -1.3726180
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## C8.A131.O1TCGA 0.2014538
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                                          2.0310960 2.0472875
                                                               0.67910377
## AO.A12B.O1TCGA 0.5291342
                             1.5019216
                                        -1.5965862 -1.7296170 -2.84929241
## BH.A18Q.02TCGA -0.9588161
                             -2.1832258
                                        0.5365696 0.3258105 -1.38033420
## C8.A130.02TCGA 2.0379992
                             -1.1697126
                                         -0.7531692 -0.6186946 2.02159984
## C8.A138.O3TCGA -0.1460021
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                                         -1.0273727 -0.7055444 -0.07651647
##
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## AO.A12D.O1TCGA -1.4297650
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## C8.A131.O1TCGA -0.7659897
                              0.1083526 -0.5271647 -0.1992864 -0.1588076
## AO.A12B.O1TCGA 3.1038335
                             -0.6348848 -0.9813190 -0.9397469 4.1514506
## BH.A18Q.02TCGA -2.0259929
                            -0.7915470 0.6302403 0.7239110 -0.5272618
## C8.A130.02TCGA -1.2057911
                             -0.9925996 -0.3333460 -0.3563051 -0.1824720
## C8.A138.O3TCGA -0.8847442
                             0.1465690 -1.0529726 1.0974252 -1.7917147
                  NP 065851 NP 001026882 NP 006001 NP 001129206 NP 689706
##
## AO.A12D.O1TCGA -0.2982549
                                        1.4123444 -0.23729818 4.2963616
                            -1.1516497
## C8.A131.O1TCGA 0.2500284
                             -1.7010502 1.9541863
                                                   0.21359747 -0.2923876
## AO.A12B.O1TCGA 1.0085992
                              1.7180965 0.3046449
                                                  -1.64092980 0.1965574
## BH.A18Q.02TCGA -0.8316916
                              0.5666780 0.1652322
                                                  -0.25294052 -3.6919931
## C8.A130.02TCGA -0.2546292
                             -1.3533852 -0.9106029
                                                   1.22131184 1.2672300
## C8.A138.O3TCGA 1.7374246
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                                                  -0.08017361
                                                               1.6021104
##
                             NP_076959 NP_001034937
                                                   NP_061989
                  NP_055288
                                                               NP_003253
## AO.A12D.O1TCGA -1.13260074
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                                                               2.8410187
## C8.A131.O1TCGA -0.83885157
                             0.8693542
                                        0.00715554 -0.83885157 0.5536195
## AO.A12B.O1TCGA -0.71802900
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                                        2.43313680 0.19101443 -2.7994059
## BH.A18Q.O2TCGA 1.52345725 -0.8584546
                                       -0.52391645 -0.95212533 -2.8088123
## C8.A130.02TCGA 0.05367852 -0.4448615
                                      -1.30746706 0.62765557 -2.2487894
  C8.A138.O3TCGA -0.84085856 -0.4788018 -2.09525729 -0.04360222 1.1413109
##
                NP 056325 NP 665807 NP 004547 NP 006369 NP 055585
## AO.A12D.01TCGA 2.601001 -1.0030676 -0.2830158
                                                     NA -3.0413096
```

```
## C8.A131.O1TCGA 1.278190 -0.5554999 -0.3935847
                                                     NA -1.0979160
## AO.A12B.O1TCGA -2.286683 -1.5078991 0.1743856
                                                     NA -0.7512867
## BH.A18Q.02TCGA -1.296700 0.2053768 -0.3867558 0.7339471 1.0116138
## C8.A130.O2TCGA -1.241870 0.1323954 -0.5202985 -0.7466095 -0.2611889
## C8.A138.O3TCGA 3.372166 -1.2687438 -0.1642878 0.2014261 -0.5226875
                NP 001116244 NP 057269 NP 001002033 NP 689505 NP 000987
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## AO.A12D.O1TCGA
                 -0.7173327 -1.6202549
                                       -1.6202549 -0.37445091 1.031365
## C8.A131.O1TCGA
                   5.6782367 0.3228903
                                       0.3228903 -0.88337826 -1.207209
## AO.A12B.O1TCGA
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                                       -1.6049006 0.73422331 -3.589276
## BH.A18Q.02TCGA
                   0.4529351 -1.4238242
                                       -1.4204788 -1.45058722 -1.042451
## C8.A130.02TCGA
                 -0.2021513 -0.2119909
                                       -0.2119909 0.08319734 1.595217
## C8.A138.O3TCGA
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                                        -1.8612004 -1.25777242 1.346111
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## AO.A12D.01TCGA -1.7231195 -0.1801512 0.3760793 0.11320326 0.1132033
## C8.A131.O1TCGA -1.0412456 -1.2760227 0.8086360 1.35914777 1.0636525
## AO.A12B.01TCGA 0.5485346 0.8284534 -0.9452899 -2.70794724 -0.2579643
## BH.A18Q.O2TCGA -1.6914547
                          1.6171279 -0.2830490 -0.53060721 -1.0558322
## C8.A130.02TCGA 1.5525786 1.6378552 0.4702219 -0.06439676 2.1659141
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                                                 NP 612366
                                                              NP 612142
## AO.A12D.01TCGA -1.3573788 1.80094384 -0.42778808 2.75339338 -0.336352928
## C8.A131.O1TCGA -0.3247707 1.99466508 -2.66444587 1.03126941 -0.300483410
## AO.A12B.01TCGA -0.6321133 -0.10553327 0.37947466 -2.43079985 0.268615701
## BH.A18Q.O2TCGA -0.6744586 -0.02210917 -2.30031422 0.91794314 0.135123780
## C8.A130.O2TCGA 1.8641661 -0.39566352 1.52961951 -0.06111689 0.007760356
  C8.A138.O3TCGA -0.7713729 -0.67994444 0.06611196 4.15479354 -0.998115543
                  NP_085151
                           NP_073571 NP_808807
                                                 NP_665858 NP_036359
## AD.A12D.01TCGA 0.49418307 -0.52303304 1.8580908 -0.03918867 -0.8925835
## C8.A131.O1TCGA -0.07784996 -0.45025500 0.3795606 0.38360847 -2.1260777
## AO.A12B.01TCGA 1.99247245 -0.06673264 1.5906087 -0.57945530 1.2802037
## BH.A18Q.02TCGA -1.06252293 -1.95239450 -0.9588161 1.70410787 0.6436218
## C8.A130.O2TCGA -0.77940817 -0.69413158 -1.5436176 0.44726278 -0.3694246
## C8.A138.O3TCGA -0.93228704 0.78656837 -0.1716021 0.55251146 0.5671400
                 NP_003816 NP_115584 NP_477520 NP_116032
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## AO.A12D.01TCGA 0.8713531 2.8219698 3.5610706 0.1284424 -0.66018577
## C8.A131.01TCGA 1.4320096 1.8610850 2.5694642 0.7843487 -0.33286646
## AO.A12B.01TCGA -1.7767320 -1.7573317 -1.6825019 -1.5550141 1.75412570
## BH.A18Q.O2TCGA -1.0023061 -1.2030290 -0.2863943 1.3093528 -1.13277595
## C8.A130.O2TCGA -1.6912117 0.5325394 -0.9532412 -0.1923116 -0.03159807
## C8.A138.O3TCGA 1.7593674 1.7118246 1.0498824 -1.3528580 0.83045404
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## AO.A12D.01TCGA -0.60303880 0.52847126 -0.7973385 -0.7211425 0.25797559
## C8.A131.01TCGA -0.19119063 2.48041079 0.3836085 0.5050449 -0.13452029
## AO.A12B.O1TCGA -0.02238906 -1.04506292 0.4182753 2.7573992 0.06629811
## BH.A18Q.02TCGA 1.54352954 -3.25374805 -0.5406434 1.4431681 0.06487076
## C8.A130.O2TCGA 0.34886672 -0.05455715 0.3127882 -0.3169467 -0.14639348
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## AO.A12B.O1TCGA -0.73188637 -0.10276180 -0.03070348 0.1549853 0.4044179
## BH.A18Q.02TCGA -0.15592444 -0.05556299 -0.48711725 -1.7617077 -0.3466112
## C8.A130.O2TCGA -2.01263887 0.50958029 -0.20871099 1.3262676 0.7522906
## C8.A138.O3TCGA 0.82679690 -0.40200186 -0.29960196 0.7170827 -0.1496593
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## AO.A12D.01TCGA 0.46370469 -0.2944451 -2.02409352
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## C8.A131.O1TCGA 0.08406528 1.0838919 0.09620892 1.2498550
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## AO.A12B.01TCGA -0.52125435 -0.3106223 -2.48622933 -1.6159865
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## BH.A18Q.O2TCGA 0.40609971 0.6369311
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                                                                -3.0563705
## C8.A130.02TCGA 0.33246737 -0.1562331
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## C8.A131.O1TCGA -2.0936947
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                                        0.2176453 0.62648132
                                                               1.4805842
## AO.A12B.O1TCGA -1.4884987 -0.47691077
                                        0.5762493 -1.23906609 -3.8802807
## BH.A18Q.O2TCGA 0.2120676
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## C8.A130.O2TCGA -0.5694966 -0.03815781 -0.8384458 0.04055904 2.3856653
## C8.A138.O3TCGA -0.2081735 1.36805350 -1.9782288 -0.06554506 0.9767396
                  NP_919424 NP_077284 NP_056950
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                                                              NP_073567
## AO.A12D.01TCGA 0.2846442 -2.2183932
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                                                         NA -0.06204746
## C8.A131.O1TCGA 0.4078958 -2.5834883
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## AO.A12B.O1TCGA -3.0682388 1.5213219
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## BH.A18Q.O2TCGA -0.3165028 -0.7112578 -0.2897397 -1.2398282
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## C8.A130.02TCGA 0.6014166 -1.8060071 0.4243037
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## AO.A12D.01TCGA -8.386456 -1.2507045 -0.4582665
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## C8.A131.O1TCGA -9.270588 -0.3328665 -0.1709512
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## AO.A12B.O1TCGA -4.581464 0.9143691 0.8811114
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## BH.A18Q.02TCGA -5.190724 -0.7848562 -0.3399204
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## C8.A130.02TCGA -4.321667 1.5788175 1.4607423
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## AO.A12B.O1TCGA -0.66814247 -0.2053063 0.451532977 -0.3466515 1.0030563
## BH.A18Q.02TCGA -7.96070032 -4.6721900
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## AO.A12B.O1TCGA -0.9785475 -2.57214502
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## BH.A18Q.02TCGA -1.0792498 4.84876682
                                        -1.13946671 -0.6242779
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                        0.4103675 1.5799755 -0.7249523
## C8.A131.O1TCGA 2.37111800 0.6305292 0.5617152 0.5617152 2.6909006
## AD.A12B.01TCGA -1.89313392 -2.1675098 -2.1813672 -2.6968613 -3.2262129
## BH.A18Q.O2TCGA 1.49000343 0.5298788 0.1050153 -0.2663220 -0.1191252
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## C8.A130.02TCGA -0.73349001 -0.5760563 -1.1697126 -1.2221905 -1.1434736
## C8.A138.O3TCGA -0.47148750 -0.1898878 0.1977690 0.2599403 -0.1789164
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## AO.A12D.O1TCGA -0.7249523
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## C8.A131.O1TCGA 3.3102264
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                             1.1194582 -0.58499825 1.668210 1.715325
## BH.A18Q.O2TCGA -0.1191252
                            -2.1430813 -0.34995659 -1.263246 -1.156194
                              1.9560025 -0.55637709 1.641135 1.729692
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## AO.A12B.01TCGA 1.6127805 -1.5494712 1.2109168 0.9309980 -0.29953644
## BH.A18Q.02TCGA -1.8252700 -2.6248163 -0.1525791 0.1652322 -0.15257906
## C8.A130.O2TCGA 1.7526506 3.4024246 -0.6974115 0.3652661 -0.27758824
## C8.A138.O3TCGA 0.6402828 0.0514834 0.2379975 -1.2650867 1.29491071
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## C8.A131.01TCGA -0.5150211 0.326938134 -3.166383 -0.8590910 -2.7211162
## AO.A12B.01TCGA -3.4396163 -4.024397332 0.656622 1.7762975 1.1942880
## BH.A18Q.02TCGA -0.3633381 0.004653887 1.921558 0.4897343 -1.0156876
## C8.A130.02TCGA -0.1398337 -1.428822208 -0.933562 1.0901171 -0.5662167
## C8.A138.O3TCGA 1.9641672 2.198224088 1.009654 -0.3946876 -0.4824589
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                                      0.1783135 -0.08407597
## C8.A138.O3TCGA
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                                                     -0.1313736 -0.31788766
##
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## C8.A130.02TCGA 0.71621203
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## C8.A130.02TCGA -0.6318141 0.2340713
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## AO.A12B.O1TCGA
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## C8.A138.O3TCGA
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0.38501760 0.46261887
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## BH.A18Q.02TCGA -0.06559913 -0.50384416
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## C8.A138.O3TCGA -0.26668771 -1.23948673
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## C8.A131.O1TCGA
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## C8.A130.02TCGA
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                   0.4243037 0.5948569
## C8.A138.O3TCGA
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## C8.A131.O1TCGA 0.07596952 1.011030010 1.2781902 1.4279617
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## AO.A12B.01TCGA -0.03070348 -1.369325359 -0.1859060 -0.7623726
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## BH.A18Q.02TCGA -1.24986431 0.961433099 0.1083607 -2.0661375
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## C8.A130.02TCGA 0.32590764 0.001200618 -0.2743084 1.4345033
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## AO.A12B.O1TCGA -0.01961758 -2.389228 -1.200265 0.7730239
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## AO.A12D.01TCGA -0.7287621 -1.9288486 -0.5535114 2.3076470
                                                         1.19899573
## C8.A131.O1TCGA -0.1830949 0.5455237 -0.3976326 0.7317262
                                                          0.34312966
## AD.A12B.O1TCGA 0.2741586 -1.1032639 0.5180484 -1.5106705 -1.54115674
## BH.A18Q.02TCGA -1.1595390 0.4562804 -1.1127037 -2.0326837 -0.56406103
## C8.A130.O2TCGA 0.1356752 1.5820974 0.7719698 0.4144641 0.66701400
## C8.A138.O3TCGA 0.7353684 -1.7368577 -3.7007414 1.9166244 0.08074051
##
                NP_001108224 NP_004381 NP_612377 NP_075566 NP_689488
                  0.4865635 -2.3326872 -0.7020936  0.1436816 -1.025926
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  -0.4097762 1.0110300 0.1326398 0.2743157 -2.008689
## AO.A12B.O1TCGA
                 -4.4234896 0.5596205 0.2797016 1.2885181 1.407691
                   0.1719230 1.4364773 0.6536580 -0.6410048 -1.651310
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  -0.3727044 1.3590663 0.1094363 -1.0319581 -0.559657
                   1.7264531 0.7609684 -0.1350307 0.7280541 2.128738
## C8.A138.O3TCGA
                 NP_689730 NP_005555 NP_055730 NP_612486
                                                        NP_000845 NP_004209
## AO.A12D.O1TCGA -0.9954480 -3.601350
                                    2.7419640 -2.149817 -1.10593216 1.2523329
## C8.A131.O1TCGA -2.5753925 8.333647 0.4848055 -1.761768 -0.83075581 1.2498550
## AD.A12B.01TCGA 0.8007387 -1.693588 0.6954227 -1.214123 4.88311971 -1.0339770
## BH.A18Q.02TCGA -2.1497720 -7.080865 -3.0630613 -1.273282 -0.61089638 -0.6644225
## C8.A130.02TCGA -0.5760563 -7.463781 -1.1697126 -0.133274 -1.63217408 0.3455868
## C8.A138.O3TCGA 2.3371954 -6.275367 1.0023396 3.244166 0.06245481 2.2018812
                 NP 004654 NP 003977
##
                                       NP_065109 NP_001879 NP_004214
```

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## AO.A12D.01TCGA 1.0847018 4.7344884 0.162730632 0.2808344 0.5170419
## C8.A131.O1TCGA 1.1810410 1.2296156 -0.640505408 1.9258511 -2.2110832
## AO.A12B.01TCGA -1.0339770 -2.1120804 0.504190981 -1.4386122
## BH.A18Q.02TCGA -0.9721976 7.7124137 -0.002036877 -0.2194867
                                                                 0.7740917
  C8.A130.02TCGA 0.2668700 -0.5858959 -0.986039911 -2.5898958
                                                                 0.5325394
  C8.A138.O3TCGA 2.5017666 -4.3626836 -1.433315103 -2.7974280 -0.3544590
                   NP 003152
                               NP 003286 NP 997305 NP 004315 NP 001138792
## AO.A12D.O1TCGA -1.4754826
                             0.95516865
                                          1.2370937
                                                     0.9208805
## C8.A131.O1TCGA -0.7174151
                              1.74369646
                                          2.0918142
                                                     1.5251109
                                                                         NA
  AO.A12B.01TCGA -0.3133938 -0.36605182 -0.2829076 0.4459900
                                                                         NA
  BH.A18Q.O2TCGA -0.2830490 -0.06225375 -0.1124345 -1.2699366
                                                                 -1.2063743
## C8.A130.02TCGA 0.2570304 -0.18575191
                                         0.2439109 -0.0283182
                                                                 -0.5399777
  C8.A138.O3TCGA -0.4276018 1.37171064
                                          1.6642818 -0.3252019
                                                                  0.6475971
##
                  NP_001186284 NP_057479
                                            NP 000478 NP 056028
                                                                  NP 659410
                     0.5932378 -0.3020647 -1.98980533
## AO.A12D.O1TCGA
                                                      0.1322522
                                                                  0.0217681
## C8.A131.O1TCGA
                     1.8853723 -1.1869693
                                           4.06313223
                                                       1.2053283
                                                                  1.3672435
                                           1.81509812 -0.7041716 -0.7041716
## AO.A12B.O1TCGA
                    -1.4358407 -3.4534737
                    -1.4372057 -2.3337680
                                           0.77743710
                                                      0.4161359 -1.2063743
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                     1.4705819 -2.9474015
                                           0.09959668 -1.0352379 -1.0647568
## C8.A138.O3TCGA
                    -0.0326308
                                4.6046217 -0.99811554 -0.3617733 -0.6909159
##
                  NP_001122400
                                NP_997263
                                            NP_055557
                                                      NP 057107
                                                                   NP 006782
## AO.A12D.O1TCGA
                    -0.9192520
                                2.0904885
                                           3.03150865
                                                       1.3704367 -0.06966706
## C8.A131.O1TCGA
                     0.3998000
                                4.1764729
                                           0.01120342
                                                       1.5979727 -0.23976520
## AO.A12B.O1TCGA
                     2.9430880 -0.8094876 -0.71248605
                                                       0.3240452
                                                                 0.21318622
## BH.A18Q.02TCGA
                     2.3698389 -1.2398282
                                           0.04145309 -1.5275310
                                                                  1.79777856
## C8.A130.02TCGA
                    -0.8614049 -0.2907077 -2.29798746 -0.1398337
                                                                  0.86708600
                                           2.13239558 -0.4568589
## C8.A138.O3TCGA
                    -1.2102296
                                2.7175378
                                                                  0.57445430
                    NP_996670 NP_001135891
                                            NP_612505
                                                        NP 065228
                                                                  NP_689968
## AO.A12D.01TCGA -0.06966706
                                0.52466146
                                            1.0542234
                                                               NA -0.3744509
## C8.A131.O1TCGA -0.23976520
                                            0.3593212
                                                                   0.4443267
                               -0.45835077
                                                               NA
## AO.A12B.O1TCGA
                  0.21318622
                               -0.47413930 -0.4713678
                                                               NA
                                                                   1.1416300
## BH.A18Q.02TCGA
                   1.82119624
                               -1.29335427
                                            1.1287022 0.07156152 -1.4539326
  C8.A130.02TCGA
                   0.64733478
                               -0.11031492
                                            0.1979927 -1.73057014 -0.8253263
                                            0.0514834 -2.77914232 1.2107965
  C8.A138.O3TCGA
                                0.05514054
                   0.60371141
                    NP_005680 NP_001136202 NP_001245151 NP_001123466 NP_689608
## AO.A12D.O1TCGA 0.17796982
                                -1.9974249
                                             -1.9974249
                                                          -0.1420532 -0.5763702
## C8.A131.O1TCGA 0.04358647
                                -0.1385682
                                             -0.1385682
                                                          -0.2842919 -0.5514520
## AO.A12B.O1TCGA -0.85660269
                                -1.7656461
                                             -1.7656461
                                                          -1.5771859
                                                                      1.4409492
## BH.A18Q.02TCGA -2.33711342
                                 0.7339471
                                              0.7339471
                                                          -1.4004065
                                                                      0.7038387
                                                           2.0675180 0.1815934
## C8.A130.02TCGA -0.99259965
                                 2.7005327
                                              2.7005327
  C8.A138.O3TCGA -2.02211451
                                -0.1313736
                                             -0.1313736
                                                           0.1392547 -0.5117160
##
                    NP 115725 NP 001165377
                                            NP 694950
                                                         NP 663781 NP 001545
## AO.A12D.O1TCGA -2.71366698
                               -0.65637597
                                            0.5399006 -0.008710286
                                                                    1.4885404
## C8.A131.O1TCGA -1.12625112
                               -0.55145203
                                            1.7072655 -1.478416761
                                                                    0.6467207
## AO.A12B.O1TCGA 2.14490352
                               -0.08890443 -0.7402008 2.557853123 -1.0450629
## BH.A18Q.02TCGA -0.56740641
                                0.62689491
                                           1.1588106 0.539914985 -0.8785269
## C8.A130.02TCGA -0.28414797
                                0.19799275 -0.7170907 -0.674452368
                                                                    0.1914330
## C8.A138.O3TCGA -0.08017361
                               -0.42760183
                                           0.2270261 -0.581201678 -0.5994874
                  NP_001073982
                                NP_001013
                                             NP_002563 NP_149163 NP_001107609
## AO.A12D.O1TCGA
                     0.2617854
                                0.9285001
                                           0.124632650
                                                        1.7476067
                                                                     -1.6583529
                     1.8327498
                                0.4200394 -0.009035984 0.4483746
                                                                     3.1806942
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                    -1.7739605 -0.4575105
                                          1.130544077 -1.7822750
                                                                    -0.6099415
## BH.A18Q.02TCGA
                    -0.2429044 -1.0056514 0.546605748 -0.5774426
                                                                    -1.4137880
## C8.A130.02TCGA
                     0.5095803 1.4213838 -0.736769877 -4.5184587
                                                                     -0.0184786
```

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## C8.A138.O3TCGA
                  -1.4662294 -0.8554871 0.446454428 -0.1789164
                                                                 -1.8575432
##
                               NP 078846 NP 008987 NP 919261 NP 001243370
                 NP 001107607
## AO.A12D.O1TCGA
                  -1.1973673 -0.66780537 0.0179583 1.2370937
                                                                 0.2770246
                    3.2454603 0.05977799 -0.4259677 -0.4219198
## C8.A131.O1TCGA
                                                                 0.9017372
## AO.A12B.O1TCGA
                  -0.8094876
                              0.12449906 -0.6570566 -2.4086281
                                                                -0.7900873
                  -0.3098120 -0.69787630 -0.6878402 -2.3672219
## BH.A18Q.02TCGA
                                                                -0.6878402
## C8.A130.02TCGA
                   -0.2874278 0.29310895 0.3095083 0.4013446
                                                                 1.6509747
## C8.A138.O3TCGA
                   -1.5064579 1.35342494 -0.1825735 2.1360527
                                                                 0.1319405
##
                  NP 003038
                              NP 060116 NP 001689 NP 005477
                                                              NP 065843
## AO.A12D.O1TCGA
                  1.7780851 -0.008710286  0.5437104 -3.0032116
                                                              2.5857623
## C8.A131.O1TCGA
                  0.4483746
                            0.229788991 -0.5028775 -1.9358273 -0.1709512
## AO.A12B.O1TCGA -0.5517406
                            0.817367529
                                         2.8959729 1.2164598 -2.1841387
## BH.A18Q.O2TCGA -3.6618846
                            0.499770402 -0.8183101 -2.4174026 -2.1932620
## C8.A130.O2TCGA -0.3858239 0.365266062 -0.7466095 -0.9040432 -2.0683966
## C8.A138.O3TCGA 0.7573113 -0.135030700 -2.1025716 -3.6385700 1.7739959
##
                 NP_001013679
                               NP_114430 NP_002140 NP_061882 NP_005435
## AO.A12D.O1TCGA
                   -0.6364575 2.81638491 1.2417592 0.4281352 0.1852623
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   -0.8205735 -0.05010379 -0.2330211 1.5434937 -0.3549659
## BH.A18Q.02TCGA
                    0.3458828 5.98285127 1.1353930 -0.6945309 0.2789752
## C8.A130.02TCGA
                    0.6473348 -0.27102850 0.3488667 -1.7568091
                                                              0.7194919
  C8.A138.O3TCGA
                   -1.1736582 -0.84817284 0.2123975 -1.3345723
                  NP_000601 NP_057042
                                        NP_115898
##
                                                    NP_694587
                                                                NP_055836
## AO.A12D.01TCGA -0.1687218 0.2770246 -1.72692926
                                                   0.726580760 -0.02775928
## C8.A131.O1TCGA 1.6101164 -1.1586342 -1.37317186
                                                  0.707438941 1.03531730
## AO.A12B.O1TCGA -0.8538312  0.0884699 -0.14156243
                                                  0.185471485 -0.84828827
1.232409030 -1.54425791
  C8.A130.02TCGA -1.8748844 -0.5924556 -0.45798102 0.001200618 -2.10119532
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                  NP_116245 NP_056494 NP_003901 NP_998766 NP_006822
## AO.A12D.01TCGA -1.3573788 -0.4049293 -0.1382434 -0.8125777 -0.1915806
## C8.A131.O1TCGA -0.6283618 -0.5514520 -0.6971757 -0.4097762 -0.5433563
  AO.A12B.01TCGA 0.5402201 1.2524889 -0.6653710 1.0529428 0.1827000
## BH.A18Q.O2TCGA -0.6376594  0.7640556  0.8577263 -1.3636073 -0.3934466
## C8.A130.02TCGA 0.3619862 -0.0184786 1.0901171 -0.4186226 1.8969648
  C8.A138.O3TCGA -0.8810871 -1.6308006 -0.7823443 0.2709117 -0.1130879
##
                 NP 001124198 NP 001123553
                                             NP 002653 NP 006469 NP 071942
## AO.A12D.O1TCGA
                   1.7361773 2.261929421 2.261929421 0.3836989 0.7342004
                    0.6345771 2.334687074 2.334687074 -1.0857723 -1.3084058
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   -0.6681425 -1.147607449 -1.147607449 -0.2025349
                                                                  1.7236395
## BH.A18Q.02TCGA
                   -1.4572780 -6.381680085 -4.561792353 0.8075455
                    0.8113282 -0.008638989
## C8.A130.02TCGA
                                          0.001200618 -0.1037552 0.9195639
## C8.A138.O3TCGA
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                                                   NA 1.4741105 0.4171973
##
                   NP_036373 NP_001229756
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## AO.A12D.O1TCGA 0.08653467
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## C8.A131.O1TCGA -0.14261605
                              -0.1709512  0.56576311  -0.6850321  -1.0452935
## AO.A12B.O1TCGA 1.79015486
                               1.8816135 -0.08890443 0.9282265
                                                               2.9957460
## BH.A18Q.02TCGA -0.17599673
                              -0.2964305 -0.30646663 0.1418145 -0.7012217
## C8.A130.02TCGA
                 1.72313177
                               1.7296915 -0.56949657
                                                     0.1684739 0.6998127
## C8.A138.O3TCGA
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                               0.2197118 -0.94325846 -1.5869149 -1.1334297
##
                 NP_001035350
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                                                       NP_057128 NP_955368
## AO.A12D.O1TCGA
                  -0.1572924 0.35322054
                                           -0.5801800 0.28845397 0.1665404
## C8.A131.O1TCGA
                   -0.4543029 -0.07380208
                                           -1.3084058 1.24580710 1.2781902
## AO.A12B.O1TCGA
                    3.6886145 -1.07554913
                                           -1.0561488 1.41600589 1.9703007
```

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## BH.A18Q.02TCGA
                  -1.1929928
                                          -0.7480570 1.88475849 1.4230958
                                     NA
                                     NΑ
## C8.A130.02TCGA
                   0.5882971
                                           0.4571024 -0.49405958 -0.3103869
## C8.A138.O3TCGA
                  -1.8392576
                                     NA
                                          -1.4442865 0.00028345 0.4610830
                NP_001186102 NP_733468
                                         NP_055685 NP_001092198
##
                                                                NP 001506
## AO.A12D.O1TCGA
                 -0.36302152 0.9246903 -0.59922900
                                                   0.05986608
                                                                0.02938770
                 -0.63645753 0.7479178 -0.04546691
## C8.A131.O1TCGA
                                                    0.31884237
                                                                0.73982199
## AO.A12B.O1TCGA
                  0.92545501 -2.5943168 0.30741634
                                                   -0.07781853
                                                                0.01086863
                                                   -0.06559913 -0.06559913
## BH.A18Q.02TCGA
                 -0.05221761 -1.1963382 -0.90863536
## C8.A130.02TCGA
                 -0.40550312 1.0277996 -0.26446876
                                                    0.45710239
                                                                0.45710239
## C8.A138.O3TCGA
                 -0.58851596 1.5655390
                                                NA
                                                    0.87433971 0.80851120
                 NP_003784 NP_061720 NP_060292
                                                 NP_057047
                                                             NP 060085
## AO.A12D.01TCGA -0.4735057 -0.2411080 0.35703034
                                                0.46751448
                                                            0.07129548
1.46844055
                                                            0.36741694
## AO.A12B.01TCGA 2.6991983 -1.2750952 0.24090096 -0.01407463
                                                            0.05521221
## BH.A18Q.02TCGA 2.0486822 -4.2406357 0.76071019 -1.50745871
                                                            0.20537680
## C8.A130.O2TCGA 1.0802775 -1.4911397 1.41482410 -0.55309722 -1.45834103
## C8.A138.O3TCGA -2.2269143 2.4688524 0.35868309 -1.70394340 0.05148340
##
                 NP 113638 NP 037541
                                       NP 065090 NP 937802 NP 001171896
                                                              0.1932090
## AO.A12D.01TCGA -0.1801512 0.1703502 -0.50779385 0.1932090
## C8.A131.O1TCGA 0.2378848 -0.2964355 -0.67693634 1.2336635
                                                              1.2336635
## AO.A12B.01TCGA 0.1217276 -1.0284341 -0.52125435 -1.8349330
                                                             -1.8349330
## BH.A18Q.02TCGA 0.6804210 0.7707463 -0.08232604 -3.1433504
                                                             -3.2872019
## C8.A130.02TCGA 0.6440549 -0.8974835 0.05367852 0.6538945
                                                              0.6440549
## C8.A138.O3TCGA -0.3215448 2.2823383 0.95479677 0.1941118
                                                              1.1266823
                 NP 006512 NP 001161299 NP 060093 NP 663786 NP 001010
##
## AO.A12D.O1TCGA 0.8751629
                            0.1132033 0.1893992 -0.9954480
                                                             0.4027479
## C8.A131.O1TCGA 1.1527058
                              0.6791038 -0.2397652 -0.5109732
                                                             0.8693542
## AO.A12B.O1TCGA -1.8349330
                            -1.8349330 -0.3466515 -3.6280766 -0.8621456
## BH.A18Q.02TCGA -3.4310533
                            -0.6911855 0.3391921 0.6101680
                                                             0.6603487
## C8.A130.02TCGA 0.8113282
                             1.0245197 -1.0549172 -1.1270743
                                                             0.8670860
## C8.A138.O3TCGA 0.6549114
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                                                             0.2709117
##
                  NP_006067
                            NP_277037
                                        NP_679211 NP_057569
                                                             NP 115721
## AO.A12D.01TCGA 0.2922638 -0.16872181 0.41798711
                                                  0.2160678 -0.2715864
## C8.A131.O1TCGA -0.3045313 1.07579611 -0.12237665
                                                  0.7803008
                                                            0.3512254
## AO.A12B.O1TCGA 2.0063298 -0.02516053 -0.61825594 -0.2302496
                                                             0.5485346
## BH.A18Q.O2TCGA -1.0156876 -1.78847079 0.07825229
                                                  1.1454291 -1.2766274
1.7821694 -0.5924556
## C8.A138.O3TCGA 0.4135402 0.39525448 0.78291123
                                                  1.3534249 1.1888537
                NP 001137325
                               NP 061326 NP 002370
                                                  NP 115598 NP 001076047
##
                  -0.3173039 -0.42397829
## AO.A12D.O1TCGA
                                              NA 0.2808344
                                                               0.8637335
## C8.A131.O1TCGA
                   0.3593212 0.09216104
                                               NA 0.4605182
                                                               0.6912474
                   0.3794747 0.25198686
## AO.A12B.O1TCGA
                                              NA 1.2081453
                                                              -0.1443339
## BH.A18Q.O2TCGA
                  -1.2498643 0.15854145 4.3436142 -2.6917239
                                                              -0.1559244
                  -0.5694966 -0.01519873 0.2963888 0.4997407
## C8.A130.02TCGA
                                                               0.8244477
## C8.A138.O3TCGA
                   0.7390256 -0.63240163 2.4542238 2.9991376
                                                               0.2965117
##
                  NP_061193 NP_006322 NP_057673 NP_036330 NP_006735
## AO.A12D.O1TCGA
                 1.2599525 -1.7764566 3.3324827 -1.3649984 -2.9079667
## C8.A131.O1TCGA 0.7843487 -1.7415290 0.7964923 4.4233936 1.0798440
## AO.A12B.O1TCGA -0.5046255 -0.3327941 -3.0599244 -1.9402490 -2.7495193
## BH.A18Q.O2TCGA -1.7382901 2.0520276 -1.3937157 0.3525736 0.5599873
## C8.A130.O2TCGA 1.0081204 0.4964608 0.2996687 0.9490827 0.8900451
  ##
                 NP 001912 NP 005015
                                       NP_055321 NP_001131147 NP_619649
## AO.A12D.01TCGA 0.2427364 -1.1897477 -1.66978229 -0.2220590 -0.1039552
```

```
## C8.A131.O1TCGA 1.2781902 6.1639824 -0.61621812
                                                   0.3107466 0.1285920
## AO.A12B.01TCGA -0.9480613 -0.8011732 -0.52125435
                                                   -0.1277051 -0.2856791
-0.4202096 0.3826820
## C8.A130.02TCGA -0.7728484 -2.8654048 -0.85812502
                                                   0.2963888 -0.8220465
  C8.A138.O3TCGA -1.6564006 -3.2911418 -0.01434511
                                                    1.0498824 0.8048541
                 NP 003003 NP 056054 NP 689549 NP 000305 NP 055939
##
## AO.A12D.01TCGA -2.6412808 0.5779986
                                             NA -0.1420532 1.6409323
## C8.A131.O1TCGA -0.1021372 1.5332066
                                             NA
                                                 0.1164483 0.6224334
## AO.A12B.O1TCGA -2.5887739
                           0.1688426
                                             NA
                                                 0.4349041 -1.2501520
## BH.A18Q.O2TCGA 7.4180201 0.3693005 -1.4037519
                                                 0.5666780 -0.1860329
## C8.A130.O2TCGA -0.7498894 -0.7039712 -0.7039712
                                                 1.1360352 -0.4645408
                                                 0.7719398 2.5346809
## C8.A138.O3TCGA -3.7482842 -0.9322870
                                             NA
                  NP 689619 NP 060667
                                       NP_955459 NP_065177 NP_005772
## AO.A12D.O1TCGA 3.30581412 1.2218545
                                       1.6904597 0.1017739 -0.8887737
## C8.A131.O1TCGA 1.90965958 1.3429562 0.8734021 -1.2072087 0.6264813
## AO.A12B.01TCGA -0.28845055 -0.6625995 -0.9840905 1.4991501
                                                           0.1882430
## BH.A18Q.02TCGA -1.25990046 1.5268026
                                      1.1019391 -0.7346755 -0.2061052
## C8.A130.02TCGA 0.08975708 0.4341433
                                      0.6342153 -0.1988714 0.5161400
## C8.A138.O3TCGA 0.16119757 0.7207399
                                       2.8528520 0.2928546 0.7207399
                NP 001010938 NP 694946 NP 000594 NP 003851
                                                             NP 003423
## AO.A12D.O1TCGA -0.88877366
                                    NA 0.3875087 -2.7327160 -0.61827799
## C8.A131.O1TCGA
                  0.62648132
                                    NA
                                       1.0757961 -1.4986562 0.70743894
                                    NA -1.9402490 -1.1836366 0.13835643
## AO.A12B.O1TCGA
                  0.18824296
## BH.A18Q.O2TCGA
                 -0.07898066 1.22906365 -0.1693060
                                                  2.4501280 -0.00872764
## C8.A130.02TCGA
                  0.53581924 0.43742318 0.5095803 0.6079764 -0.07095650
  C8.A138.O3TCGA
                  0.72073986 0.00028345 0.8487397 1.0315967 0.02954056
                NP_001177203 NP_001015052 NP_006806 NP_061901 NP_056151
## AO.A12D.O1TCGA
                   0.6160966
                              -1.3764278 3.5877392 1.81999283 0.1360620
## C8.A131.O1TCGA
                   0.9867427
                              -0.4826381 -0.6243139 -0.06570632 -0.2357173
## AO.A12B.O1TCGA
                              0.8118246 -0.4990826 -0.25796433 0.1854715
                  -0.1554198
## BH.A18Q.02TCGA
                  -1.5342218
                               0.1551961 -0.7915470 -1.17626591 -0.5205711
## C8.A130.02TCGA
                   1.9560025
                                1.5066604 -1.5534572 -2.68829185 -1.2025113
## C8.A138.O3TCGA
                  -0.1350307
                               1.1705680 2.5017666 2.64073793 1.9458815
                  NP_620162
                               NP_149014 NP_057044 NP_000982 NP_001129606
## AO.A12D.O1TCGA 0.38750872
                            1.934286778 -1.1173616 1.294241
                                                               0.8408747
## C8.A131.O1TCGA -0.05761056 1.423913865 -1.2638791 1.545350
                                                               1.8651329
## AO.A12B.01TCGA -1.45801252 -1.261237878 0.9836560 -3.015581
                                                              -2.6303460
## BH.A18Q.02TCGA 0.88114393 -1.062522927 0.6971479 -4.675535
                                                              -3.4310533
## C8.A130.O2TCGA 0.10287655 -0.002079251 -0.2611889 2.379106
                                                               2.1626342
## C8.A138.O3TCGA -1.72222910 1.104739478 0.3001689 1.660625
                                                               1.4229106
                 NP 004093 NP 001185986 NP 004848
                                                   NP 004822
                                                                NP 612423
## AO.A12D.O1TCGA -2.9460647
                             0.32655195 -1.2316555 0.04081709
                                                              0.006528907
## C8.A131.O1TCGA -2.5470573
                            -0.12642453 -1.3205494 0.24193263 -0.138568173
## AO.A12B.O1TCGA -6.0946883
                           -0.09444738 2.0922455 -0.82888795 -0.346651499
## BH.A18Q.O2TCGA -0.5038442
                            0.13177840 -3.0998605 -0.26966743 0.295702109
                             1.22459170 -1.7272903 1.19507289 0.758850326
## C8.A130.02TCGA -0.9138828
## C8.A138.O3TCGA -2.1098858
                             ##
                 NP 112182
                             NP 543023 NP 001026854
                                                    NP 003008 NP 859067
## AO.A12D.O1TCGA -2.9651137
                           0.41798711
                                        ## C8.A131.O1TCGA -1.3893634 -0.11428089
                                       -0.08189784 -0.08594572 -1.3731719
## AO.A12B.O1TCGA 0.1632997 -0.45196751
                                       0.16884264 0.19101443 2.9929745
## BH.A18Q.02TCGA 1.4197504 0.61016800
                                      -1.50411333 -0.27635819 0.5666780
## C8.A130.02TCGA -0.9663607 0.43742318
                                        0.95564246 1.20491249 0.1159960
## C8.A138.O3TCGA -0.9286299 -0.08748789
                                      -0.82988714 -0.20085921 -0.9396013
```

```
NP 000851
                            NP 005185 NP 059980 NP 872353 NP 694942
## AO.A12D.O1TCGA -3.628019
                           0.73039056 2.6124309
                                                 1.0999410 -0.5001742
## C8.A131.O1TCGA 2.193011 1.94204262 0.9422160
                                                 1.5089194 0.9057851
## AO.A12B.O1TCGA -3.325986 -1.75178875 -0.3327941 -0.0390179 -2.1425666
## BH.A18Q.O2TCGA -2.778704 1.82788700 0.1384692 0.9681239 -1.1662298
## C8.A130.O2TCGA -2.527578 -0.99915939 -0.9335620 -0.1398337 -0.7269303
  C8.A138.O3TCGA -2.493885 -0.02531652 0.2599403 0.6512542 1.0827966
                 NP_001001890 NP_001019801 NP_001026850 NP_055053
                                                                 NP 004130
## AO.A12D.O1TCGA
                   1.69807929
                                0.2960736
                                             0.7189612 -3.1327448
                                                                  3.0467478
## C8.A131.O1TCGA
                   1.05960458
                                1.5332066
                                            1.5332066 -1.1545863
                                                                  2.4561235
## AO.A12B.O1TCGA
                  -0.54619762
                               -0.2524214
                                           -2.0788227 0.1743856 -1.6575586
## BH.A18Q.02TCGA
                   1.03168612
                               -0.4436273
                                            -0.2997759 -0.7681293 -0.3800650
## C8.A130.02TCGA
                   0.40790436
                                0.5128602
                                           -1.1270743 -0.8351659 0.3127882
## C8.A138.O3TCGA
                  -0.04360222
                                1.0059967
                                            1.1742251 -2.8193708 -3.1887419
                                           NP_078838 NP_003148 NP_055565
                 NP_001108225 NP_001231319
##
## AO.A12D.O1TCGA
                   1.22185452
                               0.41798711
                                           0.0141485 0.2046384
                                                               0.5094223
                   2.16872396
                              -0.66479269
                                          0.8288754 0.6102898
## C8.A131.O1TCGA
                                                               2.3711180
## AO.A12B.O1TCGA
                  -0.87323153
                               0.03026895 -0.4935396 1.8511273 -0.3023079
## BH.A18Q.02TCGA
                 -0.63765943
                              -0.05890837
                                          1.1922644 0.1485053 0.2287945
## C8.A130.02TCGA
                  -0.06767663
                              -0.57605630 -0.5334180 1.6247357
                                                               1.1589943
## C8.A138.O3TCGA
                   0.34039739
                               1.48142481 0.6073686 1.3863392 0.9365111
                  NP 060009 NP 443167 NP 000651 NP 003229 NP 001981
## AO.A12D.01TCGA 1.8885692 -2.9193961 0.7646787
                                                 1.0427940 -0.3896901
## C8.A131.O1TCGA -1.7779599 -3.2351971 0.1407356 0.3026508 -0.5312126
## AO.A12B.01TCGA -1.7711891 -0.4048524 -0.9951764 -2.0261647 0.1494423
## BH.A18Q.O2TCGA -3.9663144 -0.7279847 -0.8618000 0.6302403 0.3191198
C8.A138.O3TCGA 3.4453085 -1.2212010 -0.6250873 -0.7713729 -0.2740020
                  NP_002686 NP_001005498
                                          NP_078875 NP_005608 NP_115813
## AO.A12D.O1TCGA -0.5916094
                             0.93992946 0.93992946
                                                    0.6084770 -0.2753962
## C8.A131.O1TCGA -0.1628555
                             2.09990998
                                         2.09990998
                                                    1.1000834 -0.3328665
## AO.A12B.O1TCGA 0.2381295
                            -1.92916308 -1.92916308
                                                    0.2436724 0.8339964
## BH.A18Q.02TCGA -0.2127959
                            -2.58132629 -2.58132629
                                                    0.3023929 -2.2902781
## C8.A130.02TCGA 0.7260516
                             C8.A138.O3TCGA -0.4276018 -1.48085791 -1.48085791 -0.6324016 0.3403974
                 NP_001003681 NP_000262 NP_004335 NP_004057 NP_085153
## AO.A12D.O1TCGA
                  -0.5649408  0.7418200  -2.3174480  -3.6927851
                    0.4524224 1.6991698 -0.8793304 -0.2438131
## C8.A131.O1TCGA
                                                             0.8329233
                   -0.3411086 -0.5849983 0.2076433 -1.9956785 -2.2728258
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA
                    0.4027543 -0.1759967 -0.6476956 -3.3875633 -1.2331374
## C8.A130.02TCGA
                    0.5784575 -1.5042592 0.6801335 1.9100843 0.8113282
                    0.1465690 -0.5226875 1.7118246 3.3063373 1.0206253
## C8.A138.O3TCGA
                  NP_002014 NP_004375 NP_001257502 NP_071331 NP_001310
## AO.A12D.O1TCGA
                 0.1093935
                            1.0618430
                                         0.8218257 0.82182571 1.0618430
## C8.A131.O1TCGA 1.1243707
                            1.0029342
                                         1.9177553 0.08811316 1.0029342
                                         0.6427647 0.01641158 0.3295881
## AO.A12B.O1TCGA -1.4302978
                            0.3295881
## BH.A18Q.O2TCGA -0.9019446
                            0.1183969
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## C8.A130.02TCGA -0.3464655 -0.2808681
                                         0.5423790 0.20455249 0.1323954
  C8.A138.O3TCGA -2.1976572
                            1.8727387
                                         1.9093101 2.02268141 1.8325102
                   NP_079091
                              NP_775965
                                         NP_003874 NP_006834 NP_116253
## AO.A12D.O1TCGA -0.30206474
                            1.43520322
                                         0.7875375 -1.7574076 -0.4392175
## C8.A131.01TCGA -0.08189784 1.70321765 -0.3854889 -0.5919308 -0.1466639
## AO.A12B.O1TCGA 1.95921477 1.21091682
                                        0.2353580 -1.3665539 -0.3189368
## BH.A18Q.02TCGA -0.56406103 1.28928052
                                        1.2959713 -1.9657760 0.7573648
```

```
## C8.A130.02TCGA -0.04471755 0.01759996 0.8146081 1.7657701 0.2701499
## C8.A138.O3TCGA -0.70920155 -5.99011050 0.6256542 -0.9066871 -0.1313736
                  NP 006261 NP 036382
                                       NP 076998
                                                   NP 065945
                                                                NP 001250
## AO.A12D.O1TCGA 1.3742464
                            1.9419064 -0.65637597
                                                          NA
                                                             0.570379035
## C8.A131.O1TCGA 0.8207796
                           1.5696376 -0.98052741
                                                          NΑ
                                                              0.982694844
## AO.A12B.O1TCGA -1.7684176 -1.3720968 1.21091682
                                                          NA
                                                             0.875568480
## BH.A18Q.02TCGA -1.4940772 -0.2562859 0.33919207 -1.64127399
                                                             1.851304674
## C8.A130.O2TCGA -1.7174507 0.3357472 0.21767196 -0.05455715 -0.077516235
## C8.A138.O3TCGA 0.7499970 -0.5336589 -0.04725936 -1.57594353
                                                              0.003940589
##
                  NP_009152 NP_001186583 NP_002344 NP_116321
                                                              NP_055515
## AO.A12D.O1TCGA -0.7859091 -0.785909111 0.9551686 1.7285577 -3.4641972
## C8.A131.O1TCGA 0.2297890 0.148831373 1.6951219
                                                   1.3348605 -4.6438596
## AO.A12B.01TCGA 0.6095070 0.609506988 -1.2972670 -0.7956303 -2.4003136
## BH.A18Q.O2TCGA
                 0.3860274
                            0.004653887 -1.9089045 -3.5247240 -0.2462498
## C8.A130.02TCGA
                 0.5718978
                            0.493180948 -3.8920037 1.5689779
                                                             0.1553545
## C8.A138.O3TCGA
                 0.3001689
                            0.406225897 1.9824529 -0.1130879
                                                             1.4009677
##
                  NP_714913
                             NP_060818 NP_005898 NP_003493 NP_219484
## AO.A12D.O1TCGA 6.1707823 -0.03156908 0.5132321
                                                  0.8751629
                                                             0.3189324
1.0434131
                                                            0.1569271
## AO.A12B.01TCGA -0.7984017 -1.07832060 0.3739317 -0.5905412 -1.0034908
## BH.A18Q.02TCGA -2.2032981 -0.55067950 -1.4372057 -1.9323222 0.1117061
## C8.A130.02TCGA -1.6518533 0.05367852 -1.8060071 0.3882251 1.3328274
## C8.A138.O3TCGA 0.6622256 -0.34348763 -1.4954865 2.2969668 -1.7039434
                  NP 699179 NP 056136 NP 115568 XP 003846564 NP 061967
## AO.A12D.O1TCGA 0.8370649
                           0.2922638 6.8717852
                                                 1.8161830 1.4313934
## C8.A131.O1TCGA 0.1285920 -0.3895368 1.2943817
                                                  -0.6162181 -0.8712346
## AO.A12B.O1TCGA 0.1411279 1.7430398 -0.4685963
                                                 -2.4502002 -2.4502002
-1.3301535 -1.0993221
## C8.A130.02TCGA -0.3235064 1.2901891 -1.4517813
                                                   2.2839893 2.2839893
## C8.A138.O3TCGA -0.8445157 -0.8664585 3.5440513
                                                   2.0117100 1.3424535
                 NP_060629
                            NP_054758 NP_001009880
                                                     NP_056442 NP_000147
## AO.A12D.O1TCGA 1.968575
                           0.45227529
                                        0.4522753
                                                   2.048580723 -2.6222318
  C8.A131.O1TCGA -1.312454 -1.29626212
                                       -0.5554999
                                                   0.080017397 -1.0007668
## AO.A12B.O1TCGA -2.799406
                           2.73799892
                                         2.4359083 -0.000217265 4.0461346
## BH.A18Q.02TCGA -1.601129
                           0.02472618
                                        0.3358467 -1.196338201 -2.1129728
## C8.A130.02TCGA 2.539819 -0.17263243
                                       0.2635901 -0.556377089 -0.8286062
## C8.A138.O3TCGA 2.999138 -0.15331639
                                       -0.1277164 -0.848172837 -0.4458875
                            NP_060670
                                      NP_076425 NP_005473 NP_001166038
##
                 NP_064708
## AO.A12D.O1TCGA 0.9627882
                           1.13803896
                                      0.5399006
                                                 2.1323963
                                                              0.7684885
## C8.A131.O1TCGA 0.4605182 0.11644833 -0.2114300 0.7803008
                                                              0.6629123
## AO.A12B.O1TCGA 0.2963304 0.75085216
                                      1.0113707 -0.6625995
                                                            -0.8787745
## BH.A18Q.02TCGA 0.7540194 0.01134465
                                      0.8409994 0.3659551
                                                              0.3325013
## C8.A130.O2TCGA 1.1524346 0.86380613 1.5263396 -0.3563051
                                                              0.1192759
## C8.A138.O3TCGA 1.7374246 -0.46783036 -0.2813163 0.9950253
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                  NP_001136
                             NP_694968
                                        NP_000597 NP_057487
                                                             NP 690000
## AO.A12D.O1TCGA 0.9513589 -0.05061807
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                                                             0.0293877
## C8.A131.O1TCGA -2.3203760 0.56576311 0.36741694 0.1609750
                                                             0.4159915
## AO.A12B.01TCGA -1.1642363 -1.39426862 -1.72407402 0.1937859 -0.5351117
## BH.A18Q.02TCGA -0.7447116 2.72444934 -0.02545455 0.2488668 -0.8049285
## C8.A130.O2TCGA 2.8874852 -1.52721827 0.80804836 0.8474068
                                                             0.2143921
## C8.A138.O3TCGA -0.4641732 -0.08748789 -2.43902837 0.3513688
                                                             0.6841685
                 NP_001025067 NP_954655 NP_001135 NP_076990
## AO.A12D.01TCGA -0.42778808 -1.6697823 1.1875663 0.8827825 -1.867891790
## C8.A131.01TCGA -0.24786096 4.1117068 0.5414758 0.5293322 -0.915761312
```

```
## AO.A12B.O1TCGA
                  0.22704359 -0.6431992 -3.0626959 -1.0034908 -1.663101590
## BH.A18Q.02TCGA -0.40682808 -1.9423584 -0.9822338 -2.1129728 -1.269936602
                 -0.05127728 -0.4809401 -0.2710285 -1.2648288 -0.008638989
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  0.34039739 -1.8356004 0.7829112 0.2416546 -0.976172708
                   NP_001271 NP_001264003 NP_653317 NP_078832
                                                               NP 079353
## AO.A12D.O1TCGA -3.064168414
                             -1.0335460 -1.0335460 0.3913185 -0.06585726
## C8.A131.O1TCGA -3.263532250
                             -1.5229435 -1.5229435 1.2377113 0.31884237
## AO.A12B.O1TCGA 2.097788460
                             ## BH.A18Q.02TCGA -0.814964669
                              -0.5941695 -0.5941695 0.2823206 -0.27301281
## C8.A130.02TCGA 0.007760356
                               ## C8.A138.O3TCGA 0.548854324
                               NP_115736 NP_001747 NP_001928 NP_036613 NP_777553
## AO.A12D.01TCGA -0.73257194 -1.6735921 -2.5612751 -0.1725316 -0.2334884
## C8.A131.O1TCGA 0.93412027 -0.2964355 -2.5672967 -0.7214630 -0.2033343
## AD.A12B.O1TCGA 0.34898844 -0.7956303 -3.4202160 -4.6978655
                                                          1.8982423
## BH.A18Q.O2TCGA -0.05556299 0.1284330 0.2087222 0.5566419
                                                           0.2388306
## C8.A130.O2TCGA 1.16227420 -1.1500334 1.6706539 -0.8810841
                                                           0.8342873
## C8.A138.O3TCGA -0.08383075 -1.7990290 -1.7405148 0.3184546 1.1083966
                             NP_006768 NP_001177809
                NP 001136271
                                                      NP 056286
                                                                 NP 006847
## AO.A12D.O1TCGA -0.233488377 0.52466146
                                        -0.9763990 -0.36683131 -0.02394948
## C8.A131.O1TCGA -0.235717316 -0.50287746
                                        0.6386250 -0.09808936 -0.13856817
## AO.A12B.O1TCGA 1.898242341 -0.39099508
                                        1.4742068 0.25475833 0.49587656
## BH.A18Q.O2TCGA 0.007999269 0.38937280
                                         0.3626097
                                                     0.42951738 -0.47373572
-0.2087110
                                                     0.64733478 1.09339695
## C8.A138.O3TCGA 1.090110921 0.08074051
                                         -1.3089724 0.84873974 0.30016886
                  NP 001871 NP 001243020
                                          NP 037392 NP 002487 NP 060510
## AO.A12D.01TCGA -0.09633564 -0.2258688 -1.258324084 -1.2087967 -0.1191944
## C8.A131.O1TCGA 0.13668773
                             0.1812144 -0.065706317 -0.5474041 0.1974059
## AO.A12B.O1TCGA 1.00305628
                              0.3379025 -0.000217265 0.1078702 -0.3743662
## BH.A18Q.02TCGA -1.03241449
                             -0.9454346 0.402754328
                                                     0.6536580 -1.4572780
## C8.A130.02TCGA 2.20855237
                              2.2708699 0.430863440
                                                     0.2734297 0.5653381
## C8.A138.O3TCGA 0.58176858
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## C8.A131.O1TCGA -1.0776765 7.0949950
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## AO.A12B.01TCGA 0.2713872 -0.7152575 2.07838814
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## BH.A18Q.02TCGA -0.9387438 -1.8419969 -3.09651510
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## C8.A130.02TCGA 2.9268436 -3.1769923 0.08319734
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## C8.A138.O3TCGA 2.2823383 -3.2801704 -0.17891637
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                                                     NP_061919 NP_115514
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                  0.85724639
                             -0.31038692 -0.33006614 1.04091905 -1.3927437
                             -1.10782972 -0.86280139 -0.78600147 0.6622256
## C8.A138.O3TCGA
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                   NP 690867 NP 001164606
                                          NP 005359 NP 003401 NP 003402
## AO.A12D.O1TCGA -1.075453772
                             -1.8678918 -0.03918867 0.3189324
                                                              0.7532493
## C8.A131.O1TCGA 0.031442826
                               0.0800174 -0.92790495 -2.3810942 -3.3080589
## AO.A12B.O1TCGA 0.631678779
                               0.2048718 1.71532507 -0.8233450 -1.1808651
                               0.4863889 1.15546525 -2.5445271 -5.1673065
## BH.A18Q.02TCGA -0.376719645
## C8.A130.02TCGA -1.392743650
                              1.1622742 -0.34974535 1.1688339 1.7854493
## C8.A138.O3TCGA 0.003940589
                              -1.2870295 3.92439377 2.0738814
                                                               2.9077091
                NP 068838 NP 057134 NP 001116
##
                                                NP 003007
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## AO.A12B.01TCGA -1.970735 2.2696198 -0.1775916 0.080155478 -0.43256719
## BH.A18Q.02TCGA -3.504652 0.9079070 1.8713770 -0.821655433 -1.03241449
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  C8.A138.O3TCGA 2.011710 -0.4714875 -1.4296580 -0.555601704 -0.87377281
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## AO.A12D.01TCGA 0.2960736 0.5208517 1.2485231 0.7799179
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## C8.A131.O1TCGA 0.7924444 0.3066987 0.3998000 -3.4861657
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## AO.A12B.O1TCGA -0.2635073 -2.0150788 -2.0039929 -4.1130845 -1.9596493
## BH.A18Q.O2TCGA -1.7182178 2.1155898 0.6871118 -4.6454269 0.9012162
## C8.A130.02TCGA -0.6678926 -0.8384458 0.6801335 3.3040286 0.1619142
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                                         NP_036271
                                                    NP_056453 NP_001185619
## AO.A12D.O1TCGA 0.17796982
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                                                                0.3989381
## C8.A131.O1TCGA -0.07380208
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## AO.A12B.O1TCGA 2.42482238
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## BH.A18Q.02TCGA -1.14281209
                           -1.49073181 0.22879447 0.44289891
                                                                -1.0424506
## C8.A130.02TCGA 1.40498449
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## C8.A138.O3TCGA -0.07651647
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                                                                -1.3126295
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## AO.A12D.O1TCGA 0.6656240 1.252333
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## C8.A131.O1TCGA -1.4703210 1.160802
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## AO.A12B.O1TCGA 1.9481289 -3.165240
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                                                -2.41417101 0.9781130
## BH.A18Q.02TCGA -0.7514024 4.745060
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## C8.A130.02TCGA -0.0283182 1.145875
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -1.0210062 -1.8224866 -0.8550431
-2.1093089 0.0247260
## BH.A18Q.O2TCGA 1.3361159 -1.4740049 -1.3769888
                                                -3.3173103 0.3726459
  0.1323954 0.3029486
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## AO.A12D.O1TCGA -10.523753
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## C8.A131.O1TCGA -12.970351
                            -12.091961 -0.32881858
                                                 0.6548165
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## AO.A12B.O1TCGA -7.336309
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## BH.A18Q.02TCGA -10.794239
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                            -10.445182 -1.23203008 -1.3993034 0.8506867
## C8.A130.02TCGA -10.582936
## C8.A138.O3TCGA
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                  0.17716654
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -1.0898202 -2.6765895
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## AO.A12B.O1TCGA 3.1620344 0.7841098
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## BH.A18Q.02TCGA -0.3901012 -0.7079124 -10.68384116 -2.0828644 0.8644170
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                                                                NP 003246
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA 1.54687493 0.8042002
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.36524950 -2.2232269
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## AO.A12B.O1TCGA 2.80174282
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## BH.A18Q.02TCGA 1.61378256
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## C8.A131.O1TCGA 0.9422160
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## AO.A12B.O1TCGA 0.8478537
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## BH.A18Q.02TCGA -0.9119807
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## AO.A12B.O1TCGA 0.7730239 0.8589396
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## BH.A18Q.02TCGA -0.6510410 -0.8116193
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## AO.A12B.O1TCGA -0.155419802
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## BH.A18Q.02TCGA 0.001308505
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## AO.A12B.01TCGA 0.2436724 0.63999320 0.2769301 0.2547583 -2.76060524
## BH.A18Q.02TCGA -0.9721976 1.03503150 -0.4335911 -0.5205711 -0.27970357
## C8.A130.02TCGA -0.2316701
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## C8.A131.01TCGA 0.70743894 -0.02927539 -0.3004834 -0.1021372 -0.13047241
## AO.A12B.O1TCGA 0.67879384 0.83953932 -0.7596011 1.9120997 0.05521221
## BH.A18Q.O2TCGA 0.01469003 -2.67499698 -0.2863943 -0.7514024
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## C8.A130.02TCGA -1.76336883 -1.09755545 0.8244477 0.6899731
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## BH.A18Q.02TCGA 0.7640556 0.85438088 -0.55402488 -0.9420892 -2.1798805
## C8.A130.O2TCGA -0.5694966 -0.64821342 0.57845754 1.1196359
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## C8.A130.O2TCGA -0.47766024 -0.9335620 -0.9335620 -1.9568811
                                                            -1.3796242
## C8.A138.O3TCGA 0.04782626 0.7024542 0.2891974 3.0722803
                                                              0.5269115
                 NP 689880 NP 002680 NP 075046 NP 001154 NP 005494
##
## AD.A12D.01TCGA -0.2258688 -0.6068486 -0.9878284 3.6829841
                                                           0.3379813
## C8.A131.O1TCGA 0.2297890 -0.9683838 0.1043047 0.8531627
                                                           0.8167317
## AO.A12B.O1TCGA 1.0085992 -3.6391625 -0.3327941 -1.6963593 -0.6625995
## BH.A18Q.O2TCGA 0.1050153 0.2354852 -0.2897397 1.5769834 0.5298788
## C8.A138.O3TCGA -1.4918293 -0.1021164 -0.7530872 0.8011969 3.5440513
                  NP 065995
                              NP 065912 NP 005756 NP 940983
                                                              NP 009027
## AO.A12D.01TCGA -0.06966706 -0.008710286 0.3456009 -1.3459494 -0.87353447
## C8.A131.01TCGA 1.62630791 0.177166539 0.5090928 0.6507686 0.49290125
## AO.A12B.O1TCGA 0.33513107
                            0.590106671 -0.2108493 -0.4575105 -1.72407402
## BH.A18Q.02TCGA -0.16596059 0.205376799 -0.4737357 -0.2061052 -0.92536227
## C8.A130.02TCGA -0.06111689 0.680133473 -0.2743084 0.4079044 0.03071944
## C8.A138.O3TCGA 0.05879768 -0.222802040 0.1575404 1.1632537 1.63868180
                  NP 001824 NP 113611 NP 057253 NP 057692 NP 055148
## AO.A12D.O1TCGA -0.75543073 1.2332839 -0.4163587 -2.6222318 -0.1839610
## C8.A131.01TCGA 0.53742794 0.4848055 -0.2883398 -2.3729984 -0.4219198
## AO.A12B.O1TCGA -1.49681316 1.1416300 0.2104148 -0.3078509 -1.0949494
## BH.A180.02TCGA -0.83838234 -2.0360290 -1.1461575 -1.0056514 -0.6945309
## C8.A130.02TCGA -0.03487794 0.6243757 0.9425230 -0.9499614 -1.5731364
  C8.A138.O3TCGA 1.61308182 -0.6909159 0.6658828 -0.7750301 1.3973106
                NP_001020272 NP_002376 NP_055135
                                                  NP_004461 NP_004467
## AO.A12D.O1TCGA
                  0.45608509 -0.7744797 -0.3477823 0.04081709
                                                                   NA
                                                                   NA
                 -0.41787196 -6.0322828 0.3876563 -1.07767655
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                 -1.91530571 -4.7449805 0.3988750 3.21192096
                                                                   NA
## BH.A18Q.O2TCGA
                 -0.58413332 -0.8751815 2.1155898 -0.35664735
## C8.A130.02TCGA
                 -0.99915939 -1.2418697 -0.4907797 -0.37270443 -1.697771
## C8.A138.O3TCGA
                  0.08805479
                                    NA -0.4056590 -1.19925820 -1.415029
                 NP_710163 NP_001020787 NP_112595 NP_077025
                                                             NP_003657
## AO.A12D.O1TCGA
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                                                            0.81801592
                        NA
## C8.A131.O1TCGA
                        NΑ
                            -0.1304724   0.1043047   -1.5107998   0.07596952
## AO.A12B.O1TCGA
                        NA
                            -0.7817729 -1.0478344 1.1250011 0.09401285
## BH.A18Q.02TCGA 0.6770756
                             1.3862966 1.2324090 0.2221037 -0.54733412
                              ## C8.A130.02TCGA -2.1602330
## C8.A138.O3TCGA -1.4150294
                            -2.2781143 -1.8868004 -1.9965145 0.17582613
                                          NP 059128 NP 000048 NP 000782
                   NP 005331
                              NP 112235
## AO.A12D.O1TCGA -0.500174249 -1.26975348
                                                NA -0.1230042 0.2465462
## C8.A131.O1TCGA -1.996545519 -0.19523851
                                                NA 1.9541863 -0.8874261
## AO.A12B.O1TCGA 1.227545663 -0.43811014
                                                NA -0.9757761 -1.7822750
## BH.A18Q.02TCGA -0.590824084 -0.09905295 2.42001959 0.7205656 1.0651399
## C8.A130.O2TCGA -0.533418007 0.33902711 -0.05455715
                                                    0.6342153 -0.2054311
## C8.A138.O3TCGA -0.007030829 0.42816873 0.38794020 0.9547968 -1.9197146
                NP 001182572
##
                              NP 079514 NP 060267
                                                    NP 258412 NP 002820
                   1.0961312 0.01033871 -1.2583241
## AO.A12D.O1TCGA
                                                   0.51704186
                                                              3.4734452
## C8.A131.O1TCGA
                   0.1650229
                            1.18104101 0.8086360
                                                   1.48867996
                                                              0.1204962
                  -2.0455650 -1.06723471 0.2907875 0.47370477
                                                              0.5041910
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  2.0252645 -0.58078794 -1.7148724 -0.06559913 -4.2305995
                   ## C8.A130.02TCGA
## C8.A138.O3TCGA
                  -1.9306860 -0.20085921 -0.6543445 -0.78965861 2.7541092
```

```
0.2579756 -0.02013968
## AO.A12D.O1TCGA -0.039188671
                                                     0.4484655
                                                                  1.24471331
                               -0.9117134 0.58600251
## C8.A131.O1TCGA 1.403674461
                                                      0.8734021
                                                                  0.02739495
## AO.A12B.O1TCGA 0.296330440
                               3.2784363
                                         0.96425564
                                                     -0.6903143
                                                                 -0.79008732
## BH.A18Q.02TCGA 1.081866846
                              -2.1062821
                                         1.66730867
                                                      0.1551961
                                                                 -0.85176387
## C8.A130.02TCGA -0.297267449
                              -1.7994474 -0.59901538
                                                     -0.7236504
                                                                 -2.58661592
## C8.A138.O3TCGA 0.003940589
                              1.0535395
                                         0.65856850
                                                       0.4793687
                                                                  2.51639519
                   NP 003754 NP 001001433 NP 115810 NP 597719 NP 001601
## AO.A12D.O1TCGA 1.221854522
                              1.22185452 -0.3706411 0.1741600
                                                              0.1741600
## C8.A131.O1TCGA 0.003107659
                              0.04763435 4.1278983 -0.6971757
                                                              0.6912474
## AO.A12B.O1TCGA -0.815030584
                             -0.76237258 -1.4801843 0.3961035 2.0423590
## BH.A18Q.02TCGA -0.851763869
                             -0.85176387 -1.5743664 -1.3535711 -1.2599005
## C8.A130.02TCGA -2.586615918
                             -2.58661592 1.1229158 0.2078324 -0.4055031
                              2.51639519 -1.3236009 2.2567383 -0.1204021
## C8.A138.O3TCGA 3.306337255
                 NP_055157 NP_003230
                                       NP_006597 NP_001847 NP_065101
## AO.A12D.01TCGA 1.6142637 0.2313070 -1.18212812 1.298050 -0.4354077
## C8.A131.O1TCGA -0.2276216 -0.6526491 -1.67271504 1.436058 0.5009970
## AO.A12B.01TCGA -0.7152575 -0.2080778 0.08292695 -1.064463 -1.6631016
## BH.A18Q.O2TCGA -0.7313301 -4.0499489 -0.16596059 -6.157540 -1.4171334
## C8.A138.O3TCGA 1.0791395 1.6789103 -1.81000044 1.854453 -1.1261154
                   NP_004168 NP_006328 NP_056485 NP_001267
                                                            NP 056518
## AO.A12D.01TCGA 0.616096613 0.36084014 -0.9192520
                                                        NA 0.28083438
## C8.A131.O1TCGA 1.148657962 0.57385887 0.5212364
                                                        NA -0.02927539
## AO.A12B.O1TCGA -1.826618549 0.11064169 -0.2441070
                                                        NA -1.72961696
## BH.A18Q.O2TCGA -2.956009060 0.15519607 0.2823206 4.169654 0.31911978
## C8.A130.O2TCGA -0.615414729 0.02743957 0.7490107 -2.468541
                                                            0.76213020
## C8.A138.O3TCGA -0.007030829 0.73536842 0.1794833
                                                        NA 0.50862579
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## AO.A12D.O1TCGA -0.4049293
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                                                   1.1456586 3.6563155
## C8.A131.O1TCGA 0.1083526
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## AO.A12B.O1TCGA 0.4182753
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## BH.A18Q.02TCGA -0.8584546 -1.4405511
                                       -0.7748201
                                                   -0.6142418 -1.3134266
## C8.A130.02TCGA 1.3557865 -0.4055031
                                       0.3423070
                                                   0.3521466 -0.1463935
## C8.A138.O3TCGA
                 0.6037114 0.4171973
                                       -1.2906867
                                                   -1.7295434 1.4485106
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                                                  NP 653171 NP 003355
## AO.A12D.O1TCGA -0.3934999
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                                      0.8523041
                                                  0.01033871 0.9856470
## C8.A131.O1TCGA 1.6060685 0.2743157
                                      1.2822380 -0.69312786 2.6099430
## AO.A12B.O1TCGA -0.9425184 -1.8238471
                                       -0.8870889 -0.49353961 -1.6298439
## BH.A18Q.02TCGA 1.7910878 -1.5342218
                                       -1.3769888 -2.07282825 0.9045616
## C8.A130.02TCGA -0.6646128
                           0.6046965
                                       -0.8253263 1.36234620 -0.8154867
## C8.A138.O3TCGA
                 0.2343404
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                                        1.1522823 1.62039610 -1.2431439
                 NP 003912
                           NP 689805 NP 036553 NP 775821 NP 060259
## AO.A12D.O1TCGA
                 0.2960736
                                  NA -0.4468371 -1.5440589 0.4827537
## C8.A131.O1TCGA 3.1604548
                                  NA -0.3247707 6.2408922 0.1124004
## AO.A12B.O1TCGA -0.5794553
                                  NA -2.2284823 -0.8621456 -1.3443821
## BH.A18Q.O2TCGA -0.4436273 -0.1057437 -1.4806957 -3.5815955 -2.8556476
## C8.A130.02TCGA 0.8146081 -1.2320301 0.8146081 -2.8096470 -1.8945636
## C8.A138.O3TCGA 0.5451972 0.8962825 0.4025688 0.8633683 -0.1606307
                 NP_006818
                            NP_001544 NP_620775 NP_006432 NP_001186689
## AO.A12D.01TCGA 2.5895721 0.04081709 0.2694050 -2.0279033
                                                             -1.2964221
## C8.A131.O1TCGA 0.4119436 -0.16690334 -0.6405054 -1.1505384
                                                             -1.1829215
## AO.A12B.01TCGA -0.1166192 -0.37159476 0.9781130 0.7231374
                                                             1.5102360
## BH.A18Q.02TCGA 0.5298788 -1.08259522 0.3325013 -0.6242779
                                                             -0.4703903
```

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## C8.A130.O2TCGA -1.0581970 0.80148862 -0.9335620 -0.1529532
                                                              -0.2316701
## C8.A138.O3TCGA 0.8670254 0.19776896 -0.8298871 -0.1057736
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                              NP 000995
                                          NP 000994
                                                      NP 006336 NP 002504
## AO.A12D.01TCGA 1.21804472 -0.15348262
                                        0.002719109 1.08089199 -1.1630791
## C8.A131.O1TCGA -0.06975420 0.01120342
                                       0.108352563 -0.05356267 -0.7457503
## AD.A12B.O1TCGA 2.45530859 -0.07504706 -0.075047059 -0.08336148 2.0867026
## BH.A18Q.O2TCGA -0.02879993 -0.45366343 0.968123863 -0.58078794 -1.1260852
## C8.A130.O2TCGA 1.48698121 0.72605164 0.686693211 -0.39566352 -0.4940596
## C8.A138.O3TCGA -0.98348699 -0.22645918 -0.339830493 -0.34348763 1.9056530
##
                  NP_056251 NP_612426 NP_001107803 NP_733746 NP_001138740
## AO.A12D.01TCGA 2.6924366 -0.2106296
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## C8.A131.O1TCGA -0.1345203 0.1528793
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## AO.A12B.O1TCGA -0.2025349 -0.6515136
                                       -0.8510597 2.3084205
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                                       -1.3201173 -0.8484185
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## BH.A18Q.02TCGA -1.0391053 0.2522121
## C8.A130.02TCGA 0.6145361 0.0241597
                                       -1.0647568 -1.5862559
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## C8.A138.O3TCGA -1.3272581 -0.2191449
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                  NP_006233 NP_054765 NP_009039
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## AO.A12D.01TCGA 0.7189612 -0.5763702 -1.0373558 -0.76305032
                                                             -1.7421685
## C8.A131.O1TCGA 0.8491148 -1.1100596 -0.1102330 -0.04951479
                                                              -0.5231169
## AO.A12B.01TCGA 1.4437206 1.7042392 0.8866544 0.94762680
                                                               0.2935590
## BH.A18Q.02TCGA -0.6945309 0.6503126 -1.1294306 -1.02237834
                                                              -1.6178563
## C8.A130.O2TCGA -3.2065111 0.5259796 0.9720418 1.39842475
                                                               0.5587783
## C8.A138.O3TCGA 3.3977657 -0.2922877 0.5232543 0.34039739
                                                               1.2034822
                 NP 056245
                            NP 612430
                                       NP 612432 NP 000425
                                                              NP 996925
## AO.A12D.O1TCGA
                       NA 0.84849430 0.66181419 -1.2926123 -0.73257194
## C8.A131.O1TCGA
                       NA -1.11410748 -0.30048341 -0.4543029
                                                             0.03549071
                       NA -0.13601948 -0.04456085 2.2723913
## AO.A12B.O1TCGA
                                                             0.89496880
## BH.A18Q.02TCGA 2.0353007 0.34922822 -1.88883225 -0.4570088 -0.43693652
## C8.A130.02TCGA 0.6604543 -0.11687466 -1.13691388 -0.1759123 -0.77284843
## C8.A138.O3TCGA 0.9365111 0.05879768 0.74633984 0.4135402 0.52691149
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                              NP_996928
                                         NP_619727
                                                     NP 006859
                                                                 NP 065724
## AO.A12D.01TCGA -0.72495234 -1.01068720 -0.99163821
                                                   0.07129548 -0.05823766
## C8.A131.O1TCGA -0.08594572 0.04763435 -0.72551091 1.51701513 0.39170423
## AO.A12B.01TCGA -1.01734818 0.96425564 -0.90648922 -2.29499763 -1.01734818
## BH.A18Q.O2TCGA -0.63765943 -0.28304895 2.71775858 -1.35357115 -0.18937826
## C8.A138.O3TCGA -0.69091585 0.36234023 0.19411182 0.58176858 1.61673896
                  NP_005773 NP_006521 NP_001139643
                                                    NP_150280 NP_055302
-0.2601570 1.53425797
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## C8.A131.O1TCGA -1.6686672 -0.5150211
                                       -0.1223767 -0.57573931 0.6062419
## AO.A12B.O1TCGA -1.1725507 0.2824731
                                        1.0612572 -1.01457670 -0.6847713
## BH.A18Q.O2TCGA -1.4104426
                                       -1.2599005 -1.51080410 -1.1762659
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## C8.A130.02TCGA 0.9162840
                           0.8474068
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## C8.A138.O3TCGA -0.1094307
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## AO.A12D.O1TCGA -0.06585726
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## C8.A131.O1TCGA -0.14666393
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                                                        1.5372545 1.5372545
## AO.A12B.O1TCGA -3.05438148
                             -3.05438148
                                          -3.3897298
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## BH.A18Q.02TCGA 1.89814002
                              1.94832075
                                           1.8981400
                                                        0.4194812
                                                                  2.2828589
## C8.A130.02TCGA
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                              1.12619564
                                            0.8047685
                                                        0.2963888
                                                                  0.8047685
## C8.A138.O3TCGA 0.43182587
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                 NP_001156685 NP_659547
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## AO.A12D.O1TCGA -0.06585726 -0.5687506 -0.717332744 1.3590073 -1.544059
## C8.A131.O1TCGA
                   3.22522088 -0.4178720 0.181214420 -0.5474041 -1.138395
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## AO.A12B.01TCGA -3.05438148 -0.9258895 0.002554209 -0.3300227 1.837270
                  2.28285893 -0.4101735 -0.651040958 -0.6343140 -2.491001
## BH.A18Q.02TCGA
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 0.29226377 -2.1726756
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## C8.A131.O1TCGA -1.77391207 0.1447835
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## AO.A12B.O1TCGA 0.19378591 -2.0843656
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## BH.A18Q.02TCGA -0.59082408 1.5836741
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## C8.A130.02TCGA -0.04471755 0.8080484
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                                                                  1.2278716
## C8.A138.O3TCGA -0.64703018 1.1925108
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                                                    NP_075565
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## AO.A12D.O1TCGA 1.2409035 -0.9992578
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                                                              0.65038480
                                       1.34700413 -0.07784996 0.81673173
## C8.A131.O1TCGA 0.4443267 -1.5350871
## AO.A12B.O1TCGA -2.1647384 0.7286804
                                      -0.57114088 -0.45196751 -1.85156181
## BH.A18Q.02TCGA 1.6940717 -0.2395590
                                       0.78747324 -0.26966743 -1.18964744
## C8.A130.02TCGA 1.7854493 1.0704379
                                       0.21439209 1.24099105 5.05219867
## C8.A138.O3TCGA -1.6417720 -1.3601723
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                 NP 077002
                            NP 667339
                                       NP 115644 NP 848613
                                                              NP 064582
## AO.A12D.O1TCGA -1.2126065
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                                       -1.3954768 0.4294165
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## C8.A131.O1TCGA -0.5838351
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                                        9.3901435 -0.6728885 -0.52311686
## AO.A12B.O1TCGA -0.4935396 0.76470953
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## BH.A18Q.02TCGA -1.2331374 -0.02879993 -10.7340219 -1.2331374
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## C8.A130.02TCGA -0.3628648 0.22751157
                                       -5.5844161
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## C8.A138.O3TCGA -1.2541153 -0.24840201
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                             NP 079437
                                        NP 065191 NP 057714
                                                                NP 004271
## AO.A12D.01TCGA 0.09796406 -0.72495234 0.41036751 1.0961312 -0.142053222
## C8.A131.O1TCGA 1.44010539 -0.46239865 -0.23976520 0.8329233 -0.077849959
## BH.A18Q.O2TCGA -0.12916139 0.02807156 2.84153770 0.2722844 0.007999269
## C8.A130.O2TCGA 0.75229059 -0.69085171 -1.01883860 -0.7039712 0.250470652
## C8.A138.O3TCGA -0.76771577 -0.81160144 0.09171193 1.2619965 -0.347144771
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## AO.A12D.O1TCGA 0.32274215
                              -0.656376 2.9934107 -0.3287333 -0.66018577
## C8.A131.O1TCGA 0.28645932
                               -2.255610
                                         1.1162749 -0.9602880 -1.45412948
## AO.A12B.O1TCGA -0.09444738
                              -1.873734 1.1416300 -1.8099897 0.76748100
## BH.A18Q.02TCGA 0.11839687
                              -1.668037 -1.8118885 -1.3535711 1.27589899
## C8.A130.02TCGA 0.32918750
                               -1.333706 0.3160680 -0.8810841 0.18159341
## C8.A138.O3TCGA -0.33251622
                                1.700853 0.7207399 -1.6490863 -0.08383075
                 NP_689813 NP_057698 NP_001265409 NP_001094896 NP_061159
##
## AO.A12D.01TCGA -0.2449178 -0.4277881
                                               NA
                                                   -1.5326296 1.1037508
## C8.A131.O1TCGA -1.9034443 -0.6809842
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                                                   -1.0655329 3.3547531
## AO.A12B.O1TCGA 1.7319539 0.3850176
                                               NA
                                                    2.0118728 -0.2829076
## BH.A18Q.O2TCGA -0.8718362 1.0517584
                                       -0.6242779
                                                    0.9948869 -0.6543863
## C8.A130.02TCGA 2.0084804 -0.4383018
                                       -0.5530972
                                                    -2.3734244 -1.8584850
## C8.A138.O3TCGA 2.1872527 0.1099976
                                        0.1685119
                                                    0.2306832 -0.4641732
                                      NP_060218 NP_002203 NP_058642
                  NP 065104 NP 001553
## AO.A12D.O1TCGA 0.6961024 1.0123156 -0.4049293 -0.4163587 0.3989381
## C8.A131.O1TCGA 1.7841753 -0.1911906
                                      0.1933581 -0.4421592 -0.5595478
## AO.A12B.O1TCGA -1.0783206 -1.8460189
                                      0.3212737 1.6155520 -1.8210756
## BH.A18Q.02TCGA -1.2498643 0.6703849 -1.1093583 -0.2027598 -1.5977840
## C8.A130.O2TCGA -0.2021513 -0.9138828 1.3459469 -0.1004753 -2.2619089
## C8.A138.O3TCGA -0.8006300 -1.0822297 0.8011969 0.1246262 1.7410817
##
                  NP 037374 NP 001092872 NP 003860
                                                   NP 690049 NP 775786
```

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## AO.A12D.O1TCGA 0.1551110
                            2.07905911 -0.7592405 -0.004900488 0.4522753
## C8.A131.O1TCGA 0.4969491
                           -0.41382408 1.7356007 -0.199286387
                                                              0.1933581
## AO.A12B.O1TCGA -0.8926319
                             0.06075516 -1.6215295 0.008097157
                                                               3.3089225
## BH.A18Q.02TCGA 1.0283407
                           -0.58413332 1.8613408 0.004653887
                                                               1.4331319
## C8.A130.02TCGA
                 0.2504707
                             1.17539367 -1.7338500 -0.615414729 -0.2808681
## C8.A138.O3TCGA
                 0.8523969
                             1.06451095 -1.0237155 0.259940330 -0.9176585
                NP 001230631
                              NP 665741 NP 291022 NP 056511 NP 001968
## AO.A12D.O1TCGA
                 -0.06585726
                             -0.6297074 0.09796406 -0.5077938 -0.3058745
## C8.A131.O1TCGA
                 -0.54740415
                              1.0029342 1.01912577 4.1926644
                                                              0.1164483
## AO.A12B.O1TCGA
                 -0.05841822
                             -0.5877697 -0.34942297 -2.6164886 -0.2441070
## BH.A18Q.02TCGA
                  1.3628789
                               3.0121202 -0.04143768 1.6181760
## C8.A130.02TCGA
                 -0.02503833
                                                              0.2242317
## C8.A138.O3TCGA
                  0.68416847
                              0.8304540 1.21079651 -0.2849734
                                                              0.6183400
                  NP_937859 NP_000978 NP_057177 NP_848599
##
                                                             NP 741999
                             0.3265520 0.4598949 0.4675145 0.09034447
## AO.A12D.O1TCGA -0.48112526
## C8.A131.O1TCGA -0.28024401
                            1.5089194 1.1810410
                                                 1.4239139 -1.27602271
## AO.A12B.O1TCGA -0.05287527 -2.0344791 -2.0344791 -1.5051276 2.55508165
## BH.A18Q.O2TCGA 1.17553754 -3.6618846 -3.2671296 -0.5908241 0.02472618
## C8.A130.O2TCGA 0.85396652 1.2705099 1.2770696 1.3590663 -0.98603991
## C8.A138.O3TCGA -0.03628794 -0.3764019 -0.2886305 -0.5007446 -1.55034356
##
                 NP_001861 NP_065137 NP_004468 XP_003846787 XP_001721838
## AO.A12D.01TCGA -4.5461799 1.6866499 -0.4201685
                                               -0.80114830
                                                              -0.6106584
## C8.A131.O1TCGA -6.6597043 0.6021940 -0.4016804
                                                -0.17095122
                                                              -0.2842919
## AO.A12B.O1TCGA -5.1607016 -0.4464246 1.4658924
                                                  0.05244074
                                                               0.7591666
## BH.A18Q.02TCGA -1.8219246 -1.8453423 0.7540194
                                                  0.45628044
                                                              -0.9521253
## C8.A130.02TCGA 0.3357472 0.6014166 0.4931809
                                                  0.92940351
                                                               0.8572464
-0.6177731
                XP_002343932 XP_003403890
                                           NP_653218
                                                      NP_071936 NP_071898
## AO.A12D.O1TCGA
                 -0.7935287 -0.28682555 -3.71564390 -0.72495234 -1.3192809
## C8.A131.O1TCGA
                  -0.3571537 -0.55549991 -3.17043099 -0.03737115 0.7033911
## AO.A12B.O1TCGA
                   1.0945149
                              0.05244074 -3.56156119 0.39333203 0.4210468
## BH.A18Q.02TCGA
                   0.7540194
                              0.69380255 -0.05890837 -0.78485623 -1.4372057
## C8.A130.02TCGA
                   0.2471908
                              1.37218580 -1.03851781 -0.03159807 -0.8220465
## C8.A138.O3TCGA
                  -1.2797153 -0.57388740 -1.67834343 -0.18623065 1.1815394
                 NP_002791 NP_116229 NP_115647 NP_004992 NP_005176
## AD.A12D.O1TCGA 0.2351168 1.0123156 -0.5001742 -0.3096843 -0.5611310
## C8.A131.01TCGA 0.2055017 0.1124004 0.8572105 0.4200394 0.2945551
## AO.A12B.O1TCGA 0.5984211 -0.4519675 -0.2607358 -0.2801361 -1.6547872
## BH.A18Q.O2TCGA 1.1052845 0.6670395 -0.7982378 -1.0089968 1.0316861
## C8.A130.O2TCGA -0.9138828 -0.5399777 0.3521466 -0.2415097 1.0901171
  C8.A138.O3TCGA -0.2886305  0.2782260  1.7118246 -0.4312590  0.6146828
                  NP 057600 NP 620048
                                       NP 004873 NP 001034782 NP 085139
##
## AO.A12D.01TCGA 0.81420612 -0.3630215 1.47330120
                                                  -1.3421396 0.6084770
-0.0697542 -0.9238571
## AO.A12B.01TCGA -0.75960111 -0.6237989 0.60673551
                                                   -0.2385640
                                                              0.7813384
## BH.A18Q.02TCGA 0.21541294 0.9413608 -0.06225375
                                                   -0.5372980
                                                               0.2421760
                                                   -0.3694246
## C8.A130.02TCGA
                 0.06023826 -2.2553492 2.14951473
                                                              2.5332594
## C8.A138.O3TCGA
                 1.52531048 -2.8266851 0.19411182
                                                    0.7682827 -2.2817714
                   NP_005701
                              NP_652766 NP_296373
                                                    NP_057399 NP_001026883
## AO.A12D.01TCGA -0.008710286 -0.02013968 1.4199640
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                                                                 1.5380678
## C8.A131.O1TCGA 0.634577084 0.06382587
                                        0.3714648
                                                   1.99871296
                                                                -0.4704944
## AO.A12B.01TCGA 0.260301280 0.52636277 0.5041910 -0.86768859
                                                                1.7042392
## BH.A18Q.02TCGA -0.346611208 0.33250131 -2.4843102 0.09832458
                                                                 0.7004933
## C8.A130.02TCGA 0.539099112 0.65061465 0.3291875 -0.08407597
                                                                -1.5862559
```

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## C8.A138.O3TCGA -0.032630803 -0.57023026 0.2965117 2.67365218
                                                                    0.9694253
##
                                        NP 055494 NP 001230705
                  NP 006379 NP 872418
                                                                 NP 057228
                         NA -0.2106296 -0.08871605 -0.08871605 -0.73638174
## AO.A12D.O1TCGA
                            0.4200394 0.18931018
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## C8.A131.O1TCGA
                         NΑ
                                                                0.14073561
## AO.A12B.O1TCGA
                         NA
                             0.4265897
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                                                                0.31295928
                            0.7473287
                                                     0.48638887 -0.43024576
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                                       0.48638887
## BH.A18Q.02TCGA
## C8.A130.02TCGA 0.6801335 -0.7826880 0.07663760
                                                     0.07663760 -0.86468476
## C8.A138.O3TCGA -0.2191449 -0.9286299 0.68416847
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##
                   NP 006577
                               NP 004976
                                          NP 203524 NP 002515
                                                                 NP 005334
## AO.A12D.O1TCGA -0.25253737
                              0.33417155
                                         0.38750872
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                                                                 0.38750872
## C8.A131.O1TCGA 1.41986598 0.85316265 0.98269484
                                                     0.5090928
                                                                0.63862496
## AO.A12B.01TCGA 0.95039827 -0.41593835 -0.07227559 -0.3549659
                                                                0.03304042
## BH.A18Q.02TCGA 1.41975041 -0.07563528 -0.23955899 -0.3365751 -0.33657506
## C8.A130.02TCGA 0.04383891 -0.06767663 -0.16935256 -0.2710285 -0.49405958
  C8.A138.O3TCGA -0.55925884
                             1.09376806 1.10108234 0.4903401 0.47205440
##
                   NP_057623
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                                          NP_004948
                                                     NP_002154 NP_006113
## AO.A12D.O1TCGA -0.74400133
                             0.50942226 -0.67923476
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## C8.A131.O1TCGA -0.15475970 3.38308824 -0.91980919
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## AO.A12B.O1TCGA -0.08059001 -2.92135073 0.26584423
                                                            NA -0.3327941
## BH.A18Q.02TCGA 0.27228444 -0.09236219 -1.40375188 1.6171279
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  C8.A130.02TCGA 0.27342973 -0.41862260 -0.03487794 -0.4415817 -0.6875718
  C8.A138.O3TCGA -0.46783036 -1.02737266 -0.37640188 -0.4385733
                   NP_542937 NP_004383
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##
## AO.A12D.01TCGA -1.04497539 -0.8925835 -2.06600129
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## C8.A131.O1TCGA 0.05977799 -0.3207228 0.05977799
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## AO.A12B.O1TCGA 3.29506517 3.1897492 3.46135361
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## BH.A18Q.02TCGA -3.13331430 -3.0396436 -5.31450327 -4.8796036 -1.48404104
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## C8.A131.01TCGA 0.7641093 0.788396559 0.2014538 -0.36120162
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  AO.A12B.O1TCGA -1.3388391 -1.191951031
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## BH.A18Q.02TCGA 1.3461520
                            1.382951214 -0.6476956 -1.03241449
                                                                   0.4964250
## C8.A130.02TCGA 0.5489387
                            0.234071308 -0.8482854 -0.77940817
                                                                  -0.8679646
  C8.A138.O3TCGA -1.1736582 -1.382115155 1.0791395 0.95845391
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## AD.A12D.O1TCGA -0.5192232 0.2503560 -1.1745085 0.9704078 0.07129548
## C8.A131.01TCGA 0.2378848 0.3147945 -0.0899936 4.2169517 -0.66884058
## AO.A12B.01TCGA -0.3715948 -0.9175751 0.9005117 -1.2113513 1.26911777
## BH.A18Q.O2TCGA 1.6773448 2.5337626 -0.1726514 -0.2964305 -0.25963128
## C8.A130.02TCGA 0.1323954 -0.4809401 -1.7830480 -0.8614049 -0.16279283
## C8.A138.O3TCGA
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## AO.A12D.01TCGA 4.9859351 -0.11919443 1.4123444 -1.68883128
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## C8.A131.O1TCGA 0.9584076 -0.78622912 1.2053283 -0.02927539
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## AO.A12B.O1TCGA -1.3360677
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## BH.A18Q.02TCGA 6.0029236 -0.01207302 -1.3836796 -1.83530614 0.9012162
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                            0.58173741 -0.5235784 0.71949190 -1.5993754
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                             1.53628190 -1.0200584 -0.37640188 0.8450826
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## AO.A12D.01TCGA -0.9687794 -0.1001454 -0.6258976 -0.39730970 -1.0297362
## C8.A131.01TCGA -0.9440965 0.0152513 -0.8631389 -0.35310586 -1.0452935
## AD.A12B.01TCGA 2.2363622 -0.3549659 1.2718892 0.70096563 -1.0062623
```

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## BH.A18Q.02TCGA 0.7439833 -0.6978763 -0.1492337 1.21233674 0.1485053
## C8.A130.O2TCGA -0.5202985 -1.4058631 -0.8548452 -0.52357840 1.6378552
## C8.A138.O3TCGA -1.0200584 -0.1094307 0.2306832 -0.05823078 1.3241678
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## C8.A131.O1TCGA -0.316674934 -0.8348037
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                                                     0.81268385 1.06365246
## AO.A12B.O1TCGA -0.008531686 -0.5849983
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## BH.A18Q.02TCGA 1.908176166 0.1485053
                                        1.16215601
                                                     1.69741711 2.97200760
## C8.A130.O2TCGA -0.966360698 0.1356752 -0.48094011
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## C8.A138.O3TCGA 1.137653730 -0.8481728 -0.85548711 -0.84817284 -1.27240098
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## AO.A12D.O1TCGA 1.5761658
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## C8.A131.O1TCGA 0.7964923
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                                                          0.6750559
                                                                    0.9462639
## AO.A12B.O1TCGA -1.4940417
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## BH.A18Q.02TCGA 1.2692082 -0.9387438 0.4395535 1.3160436 0.8878347
                                                                    1.4030235
## C8.A130.02TCGA -1.1041152 -2.2291102 0.1684739 0.8998847
                                                          0.6243757
                                                                     0.4899011
## C8.A138.O3TCGA -1.0602869
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## AO.A12D.O1TCGA 1.4047248
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                                                            -0.2296786
## C8.A131.O1TCGA 1.0474609
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## AO.A12B.01TCGA -1.5383853 -0.5184829 0.2880160 -0.25519286
                                                             -0.2773647
## BH.A18Q.O2TCGA 1.4866581
                           1.4264412 0.6034772 -1.89552301
                                                             -1.8955230
## C8.A130.O2TCGA 0.4931809 -0.9565211 -0.9663607 0.29638882
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## C8.A138.O3TCGA 0.8450826
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                                                NP 000717 NP 009130
## AO.A12D.O1TCGA
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                                      0.5360909
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## C8.A131.O1TCGA
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                                      2.9256777
                                                 1.5939249
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## AO.A12B.O1TCGA 0.5762493
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## BH.A18Q.O2TCGA -7.6529252 -3.3942541 -2.7686677 -3.3942541 1.3595335
## C8.A130.02TCGA -3.0654768 -0.8745244 -2.1536732 -0.8745244 -1.1172347
## C8.A138.O3TCGA 1.2656536 1.2656536 1.2656536 -0.1094307 -1.8063433
##
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## AO.A12D.O1TCGA -0.2372982
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                            -0.2802440 -0.3247707 3.3183221 -0.6081224
## C8.A131.O1TCGA -0.2802440
## AO.A12B.O1TCGA 0.3489884
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## BH.A18Q.02TCGA -0.9688522
                            -0.9755430 -0.5473341 -0.9287077 -0.6644225
## C8.A130.02TCGA -0.3333460
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## C8.A138.O3TCGA -0.1679450
                             NP 001120650 NP 079480
                                        NP 001974
                                                     NP 065822 NP 002823
##
                  1.75903606 2.0866787 0.8561139 -0.130623827
## AO.A12D.O1TCGA
                                                              1.5647364
## C8.A131.O1TCGA
                  1.81655831 0.1812144 -0.8105164 -1.057437144 1.8732286
## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
                 -5.48511775
                              0.5767142 -0.4269004 1.001577682 1.1554652
                  ## C8.A130.02TCGA
## C8.A138.O3TCGA
                 -0.01068797 -0.2447449
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##
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                                                              NP_077307
## AO.A12D.O1TCGA -1.7955056
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## C8.A131.O1TCGA -0.5028775
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                                        -0.29238765 -0.7174151 -0.4057283
## AO.A12B.O1TCGA -1.0644632
                             -1.1088068
                                         1.02522807 0.5291342 -0.4464246
## BH.A18Q.02TCGA -0.8417277
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                                        -0.01876379 -0.5506795 -0.3298843
## C8.A130.02TCGA -1.5272183
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                                         0.34558685 0.7522906 0.2570304
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                             -0.1277164
                                        -0.32520194 -1.4406294 -0.7055444
##
                  NP 060793
                             NP 055259
                                        NP 478144 NP 079090 NP 115560
## AO.A12D.01TCGA 1.33995826 0.07129548 -0.51541344 0.1932090 2.1476355
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## C8.A131.01TCGA 0.53338006 0.47266185 -0.31262705 0.2014538 2.0958621
## AD.A12B.O1TCGA -1.03951997 0.22981507 3.74404394 0.5263628 -0.1969919
## BH.A18Q.02TCGA 1.39298736 0.24552138 -0.07563528 -1.4606234 -1.1561936
## C8.A130.O2TCGA -1.09427558 -0.22183047 -0.92372240 0.4931809 0.8769256
NP 001003819 NP 001003818 NP 777549
                                                   NP_115724 NP_001138732
##
## AO.A12D.O1TCGA
                  0.05224649
                                3.694414 -0.9687794 0.41798711
## C8.A131.O1TCGA
                -0.17095122
                                1.735601 -1.3731719 -1.66461928
## AO.A12B.O1TCGA
                  0.04135484
                                0.504191 1.7153251 -1.85156181
                                                                       NA
## BH.A18Q.02TCGA
                 -2.26351501
                                     NA -1.1796113 -1.90555916
                                                                 0.6235495
## C8.A130.02TCGA -1.30418719
                                     NA -0.4940596 -0.02175846
                                                                 0.8178880
                                      NA -1.0017727 0.21971180
## C8.A138.O3TCGA
                  1.31319641
                                                                -1.1846296
                 NP_775956 NP_000206
                                      NP 003214 NP 060482 NP 056471
## AO.A12D.O1TCGA
                0.2922638 -0.7897189 -2.035522910
                                                 1.7323675
## C8.A131.O1TCGA 1.4684406 -0.7417024 -1.474368880
                                                  2.3832616
                                                                  NΑ
## AO.A12B.01TCGA -0.6570566 1.3578049 -0.000217265 -0.4297957
## BH.A18Q.O2TCGA -0.1191252
                                  NA 0.894525462 -4.4580855 -9.004459
## C8.A130.02TCGA 2.4086244
                                  NA 0.371825800 0.6965328
                                                            2.333187
## C8.A138.O3TCGA 0.8377683 0.6329685 -1.422343686 1.7008532
                                                           3.789080
                 NP 002220 NP 001185890 NP 057222
                                                  NP 078943
                                                            NP 001825
## AO.A12D.O1TCGA 1.7590361
                            -0.3439725 -0.8811541 0.5551398 0.2274972
                             0.5009970 -0.1426161 1.3753393 -0.1466639
## C8.A131.O1TCGA 0.8045881
                             2.4081935 1.1610303 -1.1448360 0.7591666
## AO.A12B.O1TCGA -1.3166674
## BH.A18Q.02TCGA -0.4670450
                             0.2923567 0.4428989 -0.1927236 -1.4539326
## C8.A130.02TCGA 0.2570304
                            -1.4321021
                                      1.6444149 -0.2710285 -0.0184786
## C8.A138.O3TCGA 0.6000543
                            -1.2541153
                                      1.0352538 -0.1642878
                                                           0.8194826
                  NP_009028
                            NP_689996
                                      NP_849157 NP_219485
                                                            NP_003359
## AO.A12D.O1TCGA 0.25416579 -2.59175344
                                       1.5685462 -0.3554019
                                                           1.70188909
## C8.A131.01TCGA -0.19523851 -1.87510909 2.1930112 0.9179287 1.72345705
## AO.A12B.01TCGA 0.70928005 -0.29122202 -2.5666021 0.1383564 -0.67368542
## BH.A18Q.02TCGA -1.87879610 -2.09290054 0.1016700 -0.9822338 -0.06894451
## C8.A130.O2TCGA -0.07423637 0.07991747 -0.4874998 0.5194199 -0.20871099
  NP_001284 NP_065943 NP_001035807 NP_002096
                                                             NP_003503
## AO.A12D.O1TCGA -1.34975924
                            2.0866787
                                     -1.09450276 -1.4792924 -1.03735579
## C8.A131.O1TCGA -0.59193084 0.4159915 -1.24768755 -0.8388516 -1.00076681
## AO.A12B.O1TCGA -0.08059001 -1.9236201
                                     -1.48295579 -2.5167155 -1.73515991
## BH.A18Q.02TCGA -0.61089638 -1.1361213
                                       1.69741711 1.0684853 1.41975041
## C8.A130.02TCGA 0.53253937 1.9461629
                                       0.89988469 0.9654821 0.88020547
## C8.A138.O3TCGA -0.99445840 1.2912536
                                       0.06245481 0.1319405 0.08805479
                 NP 778235 NP 002097
                                      NP 619541
                                                 NP 079350 NP 061888
## AO.A12D.01TCGA -2.0926699 -0.9840186 -1.18974772 4.50590054 -0.4658861
## C8.A131.01TCGA -3.0247073 0.1083526 0.34717754 1.23771134 0.6467207
## AO.A12B.O1TCGA -1.9679637 -1.7296170 -1.82939002 0.04689779 -0.4547390
## BH.A18Q.02TCGA 0.2722844 -0.4603542 -0.58078794 -2.30700498
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## C8.A130.02TCGA 0.8047685 0.6702939 0.69981269 1.38202541
                                                                   NA
## C8.A138.O3TCGA 0.2928546
                           NA
##
                 NP 899050
                           NP 071925
                                      NP 689729 NP 001865 NP 115726
## AO.A12D.O1TCGA 0.9665980
                           3.5115432 -0.03537887 -0.4963645 -0.5382722
## C8.A131.01TCGA 1.7396486 0.6629123 0.97459908 -0.1547597 -1.0210062
## AO.A12B.O1TCGA -1.5023561 -3.6668772 -0.10553327 0.7674810 -0.6986287
## BH.A18Q.O2TCGA 1.2390998 -0.7514024 0.13177840 -0.5306072 -0.6376594
## C8.A130.O2TCGA 0.5620582 -0.2939876 -0.03487794 -2.6915717 0.6046965
## C8.A138.O3TCGA 1.5143391 0.7792541 -0.27034485 -2.7974280 0.2891974
```

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NP_001508 NP_001239051 NP_001239053 NP_001252543 NP_919247
## AO.A12D.01TCGA -0.38588030
                                                      -0.48493506 -0.4315979
                                      NA
                                                   NA
## C8.A131.O1TCGA 0.31884237
                                      NA
                                                       -1.12220324 -0.5878830
## AO.A12B.O1TCGA 0.02749747
                                      NΑ
                                                   NΑ
                                                       -1.13375008 0.3545314
## BH.A18Q.02TCGA -0.21279593
                               0.1451599
                                          -0.07898066
                                                       -2.62481626 -0.6242779
## C8.A130.02TCGA -0.14967335
                              -1.4058631
                                          -1.23203008
                                                        0.06351813 -0.1988714
## C8.A138.O3TCGA 0.22336894
                              -0.5665731
                                          -0.56657312
                                                        0.32942597 0.3550259
                 NP 001035247
                               NP 000387
                                           NP 002397 NP 002735 NP 060739
## AO.A12D.O1TCGA 0.002719109
                              0.36464993
                                          1.19518593 -1.4030964
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## C8.A131.O1TCGA 0.545523704
                              5.72681129
                                         0.19335806 -0.5595478
                                                                1.0838919
## AD.A12B.O1TCGA -0.030703477 -2.42525691 -0.03070348 -0.9757761 -2.4307999
## BH.A18Q.02TCGA -0.246249753
                              1.36622430 -0.53060721 -2.6047440
                                                                0.4696620
## C8.A130.02TCGA -1.094275583
                              0.08647721 -0.60885499 0.1127162
                                                                1.1032366
## C8.A138.O3TCGA -1.199258197
                              1.52165334 0.60005427 -0.4458875 -0.2666877
                   NP_852480 NP_775782 NP_612435 NP_001171597 NP_003921
## AO.A12D.01TCGA -1.02211660 -1.4145258 -0.4849351
                                                    0.37607933 -0.2563472
## C8.A131.O1TCGA 1.O1912577 -0.4947817 -0.2842919
                                                    1.78417527 2.3630222
-2.60540271 -1.4580125
## BH.A18Q.02TCGA 0.01803541
                                    NA -0.3967919
                                                  -0.59751485 2.4166742
## C8.A130.02TCGA -0.42518234
                                    NA -1.2648288
                                                    0.08319734 -0.7269303
## C8.A138.O3TCGA -0.09845931 -1.7368577 1.1998251
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                   NP 060357 NP 001007 NP 078822 NP 116296 NP 001252518
## AO.A12D.O1TCGA -1.26213388
                             0.2808344 0.8751629
                                                  0.6503848
                                                              3.0200793
## C8.A131.O1TCGA 0.14478349
                             0.3593212 1.0110300
                                                  0.1893102
                                                               0.3795606
## AO.A12B.01TCGA 0.60396404 0.2713872 0.1522138 0.2353580
                                                              -0.8843174
-1.4305149
## C8.A130.O2TCGA 0.25703039 1.5689779 0.1553545 1.7034526
                                                               0.5653381
  C8.A138.O3TCGA -0.79331575 -0.7018873 2.0226814 -1.2504581
                                                               2.2165098
                  NP_006045 NP_078982 NP_001120716
                                                     NP_115646 NP_079337
## AO.A12D.O1TCGA 3.1381830 -1.1745085
                                        0.7951571 -0.58398981 1.5075894
## C8.A131.O1TCGA 0.4929013 -0.4704944
                                         1.5858291 -0.12237665
                                                               1.9420426
## AO.A12B.O1TCGA -0.9702331 -0.7318864
                                        -1.4635555
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## BH.A18Q.02TCGA -1.3702981 -1.3401896
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## C8.A130.02TCGA 0.5325394 1.1655541
                                        -0.6318141 -0.55309722 -0.5104589
  C8.A138.O3TCGA
                 2.2165098 1.3497678
                                        -0.9652013
                                                    2.14336700 1.5253105
                 NP 001127948 NP 004487 NP 004488 NP 001263236 NP 001263248
## AO.A12D.O1TCGA
                   -1.2735633 -0.7706699 -1.0335460
                                                     0.9551686
                                                                   0.9551686
## C8.A131.O1TCGA
                    3.4235670 -0.5959787 -2.5430094
                                                     -0.3773931
                                                                  -0.3773931
                   -2.3476556
## AO.A12B.O1TCGA
                              1.6072376
                                         3.6636712
                                                      2.2280477
                                                                   2.2280477
                                                     -2.0594467
## BH.A18Q.O2TCGA
                           NA -5.5486800 -5.2308687
                                                                 -2.0594467
## C8.A130.02TCGA
                           NA
                              1.1130762
                                         1.6444149
                                                     -0.1267143
                                                                 -0.1267143
                                         0.7938826
                                                     -0.2484020
## C8.A138.O3TCGA
                    0.1502262
                              0.6183400
                                                                  -0.2484020
                 NP 001171986
                               NP 004260 NP 001240811 NP 055210
                                                                 NP 690876
## AO.A12D.O1TCGA
                    0.9285001 -0.45064687
                                           -0.4506469 -1.0183068
                                                                 1.7552263
## C8.A131.O1TCGA
                   -0.3692974 -0.56359567
                                           -0.5635957 -0.4097762 -1.0776765
                                                                 2.4525371
## AO.A12B.O1TCGA
                    1.6709815 -0.51293993
                                           -0.5129399 -0.3605089
## BH.A18Q.02TCGA
                   -1.8018523 0.02807156
                                            0.2488668 2.5571802 -0.8751815
## C8.A130.02TCGA
                   -0.1267143
                              0.25375052
                                            0.2537505 - 1.7272903
                                                                 1.0671580
  C8.A138.O3TCGA
                   -0.3654305
                              1.00599672
                                            1.0133110 -0.5007446
                                                                 1.8690816
                 NP_001098673
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                                                        NP_057310
                                                                   NP_476528
## AO.A12D.O1TCGA
                  -3.1441742 -3.45276783
                                           -3.4527678 -0.26777656 -0.47350566
## C8.A131.O1TCGA
                   -0.4543029 -1.05743714
                                           -1.0574371 0.31884237
                                                                  0.44432668
## AO.A12B.O1TCGA
                   0.9975133 0.90051174
                                            0.9005117
                                                       0.35730287
                                                                  0.44599003
## BH.A18Q.02TCGA
                   -1.9724668 -1.93901297
                                           -1.9390130 0.33584669 0.19534065
```

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## C8.A130.02TCGA
                  -1.3107469 -1.54689749
                                          -1.5468975 -0.04143768 0.06679799
## C8.A138.O3TCGA
                  -0.4129733 -0.04725936
                                         -0.3069162 -0.59583023 -0.41663041
                 NP 853553 NP 114408 NP 695005 NP 997715 NP 954699
## AO.A12D.O1TCGA 0.4598949 -0.1801512 0.1474914 -0.2525374 -0.4582665
## C8.A131.O1TCGA 0.4686140 0.1488314 0.2621720
                                               0.7438699 0.9300724
## BH.A18Q.02TCGA -0.9153261 0.3057383 -0.1358522 -0.2830490 -0.5004988
## C8.A130.O2TCGA -1.1172347 -0.7826880 -0.6711725 1.0999567 -0.5202985
## C8.A138.O3TCGA 1.1998251 0.1685119 1.3387964 -0.1094307 -0.3178877
                NP_001137381 NP_056385 NP_056227 NP_001011713 NP_001346
##
## AO.A12D.O1TCGA
                 -1.22022610
                             2.4828977 -1.4602434
                                                   0.9094511 0.4408459
## C8.A131.O1TCGA
                  0.49694913
                            1.6060685 -0.2235737
                                                   0.1933581 -0.8631389
## AO.A12B.O1TCGA
                 -2.93520810 -0.6487422 -1.7240740
                                                   0.7148230 2.9098303
## BH.A18Q.02TCGA
                                                  -1.1528482 -0.6410048
                  0.01803541 -8.4591622 -2.4742741
## C8.A130.02TCGA
                 -0.14967335 2.5070204 0.8375672
                                                   0.2832693 -0.1168747
## C8.A138.O3TCGA
                 -0.29960196
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                                        0.2672546
                                                   0.8341112 -0.1606307
                              NP_689629 NP_003339 NP_001258558 NP_001165365
##
                NP_001138403
                  0.66943379
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## AO.A12D.O1TCGA
                                                     0.9589784
                                                                 1.6904597
                                                                 2.0958621
## C8.A131.O1TCGA
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                                                     0.8005402
                                                    -0.1471054
## AO.A12B.O1TCGA
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                             1.45203505 -0.2302496
                                                                 0.7813384
## BH.A18Q.02TCGA
                 -0.72129398
                            1.75428860 -0.1425429
                                                     0.2823206
                                                               -0.1358522
                 -0.08735584 -0.45142129 3.4942610
## C8.A130.02TCGA
                                                     0.1619142
                                                                 0.2406310
## C8.A138.O3TCGA
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                                                               NP 061867
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                 2.095862099
                               2.2577773 2.257777 0.81673173 -1.66866716
## AO.A12B.O1TCGA 0.781338369
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## BH.A18Q.02TCGA -0.169305970
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## C8.A130.02TCGA -0.002079251
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                              -0.8664585 -1.206572 0.07708337 -0.39834472
                 NP_060674 NP_036294 NP_006485 NP_001138784 NP_005231
## AO.A12D.O1TCGA 1.9342868 -1.075454
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                                                        NA
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## AO.A12B.O1TCGA -2.0178502 -1.455241
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## BH.A18Q.O2TCGA -0.8651454 -0.353302
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## C8.A130.02TCGA 1.4017046 -1.504259 -0.4219025
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                                                                 NA
## C8.A138.O3TCGA -0.1642878 2.044624 0.4025688
                                                -0.2813163 -0.668973
                  NP_036250 NP_060741
                                       NP_059116 NP_787071
                                                             NP 694992
## AD.A12D.O1TCGA -0.83543649 -0.7897189 -0.07728665 -0.2601570 -0.54208203
## C8.A131.O1TCGA -0.08189784 -2.4822912 0.86530630 -0.2478610 1.18508889
## AO.A12B.O1TCGA 1.23308861 0.1189561 0.04412632 1.5074645
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## BH.A18Q.02TCGA -0.97888838 -1.3201173 -1.36695268 -1.1561936 0.24886676
## C8.A130.02TCGA -1.01227886 -1.3632248 -0.26446876 0.7030926 -1.72401041
## C8.A138.O3TCGA -2.08794301 -0.3215448 1.46679625 0.9950253 -0.01800225
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## C8.A131.01TCGA -1.0331499 -0.2640525 -0.7214630 -0.1223767 -2.28799295
## AO.A12B.01TCGA 0.5901067 -0.4685963 -2.8576068 1.7319539 -0.34665150
## BH.A18Q.02TCGA 0.6871118 0.4495897 -0.1258160 -0.6744586 -1.46062337
## C8.A130.02TCGA -0.5629368
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## C8.A138.O3TCGA
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6.4260388 6.3727016
## C8.A131.O1TCGA 0.3066987 -1.5634223 1.41581810
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```

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## AO.A12B.O1TCGA -0.8455168 -2.3504271 -2.25619700
                                                   -0.8455168 -0.2163922
## BH.A18Q.02TCGA 0.4428989 -0.5205711 0.08494305
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## C8.A130.02TCGA -0.6219745 -1.4222625 0.34558685
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## C8.A138.O3TCGA -0.9615442 1.6350247 -0.62874449
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                 NP 612367
                             NP_005844 NP_150366 NP_077312
                                                             NP 077313
## AD.A12D.O1TCGA 0.6884828 0.46370469 -0.5458918 -0.3820705 -0.04680827
## C8.A131.01TCGA -0.5028775 -0.39763255 -0.6040745 -0.4057283 -1.38126762
## AO.A12B.01TCGA 0.1771571 1.62663790 3.4890683
                                                            2.53013838
                                                 1.6848389
## BH.A18Q.O2TCGA -0.6644225 0.04479847 -0.5540249 0.5733688 0.84769012
## C8.A130.O2TCGA 1.2377112 0.16519406 0.2865492 0.1651941 0.39478488
## C8.A138.O3TCGA 0.7938826 -0.65434446 -4.4211978 -0.6104588 -2.23057144
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## C8.A131.01TCGA -0.03332327 -0.6121702 1.3186690 -1.8710612 -0.53121262
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                            NP 036308
## AO.A12D.01TCGA -0.8049581 1.1380390 -0.8963933 1.4618718 -0.89258346
## C8.A131.O1TCGA -1.2679270 0.9341203 -1.7496248 1.5048715 -0.07380208
## AD.A12B.01TCGA 2.1199603 -0.5683694 0.7369948 -1.4912702 1.00305628
## BH.A18Q.O2TCGA -1.8419969 -0.1893783 3.3098912 -1.1327759 -0.27301281
## C8.A130.O2TCGA -0.9696406 0.5620582 -0.2874278 0.9392431 -2.55053736
## C8.A138.O3TCGA 1.4411963 1.4667963 -1.2760581 0.1685119 -0.53365887
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## AO.A12D.O1TCGA -1.1859379
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                                                   1.95714557
                                                               1.2142349
                            1.2498550 0.22169323 0.98674273 4.1845687
## C8.A131.O1TCGA -2.5146743
## AO.A12B.O1TCGA 1.2469460
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## BH.A18Q.O2TCGA -0.3265389
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                              ## C8.A130.02TCGA -0.3038272
## C8.A138.O3TCGA 0.9840539
                              1.6094247 1.06085381 0.04416912 -2.5597140
                 NP_057136
                             NP_056492 NP_055679
                                                   NP_065850 NP_001203
## AO.A12D.01TCGA -0.5497016 2.70005621
                                       2.3914626 0.48275368 -1.9021800
## C8.A131.O1TCGA -1.2881664 -0.01713175
                                       0.5050449 0.69934318 -1.3691240
## AD.A12B.O1TCGA -2.6469748 -0.54896909 0.6898797 -1.62430096 3.4170100
## BH.A18Q.02TCGA -1.4171334
                                   NA -0.3365751 -0.34661121 -0.3499566
## C8.A130.02TCGA 1.3492267
                                   NA -1.4222625 -0.40878299 0.8014886
## C8.A138.O3TCGA -0.3581162 -0.39103044 -0.5848588 0.04416912 -0.9432585
                  NP_000973 NP_078912 XP_003960227 NP_001238994 NP_444281
##
                           3.9420504 -0.78209931 1.32852887 -0.8430561
## AO.A12D.O1TCGA 0.4103675
## C8.A131.O1TCGA 1.9015638 0.3431297 -0.52716474
                                                   0.87340206 -0.1669033
## AO.A12B.O1TCGA -0.6653710 -1.8681907
                                      -0.06673264
                                                   0.98088449 0.3434455
## BH.A18Q.02TCGA -0.8417277 -3.8626075
                                       0.36930051
                                                  -1.88548686 0.1016700
## C8.A130.02TCGA 1.6148961 -4.7414898
                                       1.11635603
                                                  -0.07751624 0.1487947
## C8.A138.O3TCGA -0.2118306 -3.2911418
                                      -0.93594418
                                                    3.44165140 -0.5409731
                 NP_115498 NP_060923
                                       NP 036463 NP 061036
                                                             NP 005841
## AO.A12D.01TCGA -0.1306238 -0.6944740 -0.07728665 -0.8316267 -0.30587454
## C8.A131.01TCGA 0.3917042 -1.3326930 1.45224903 3.2616518 -0.49882958
## AO.A12B.01TCGA 0.6289073 1.0224566 -0.60994152 -0.5489691 -0.63488478
## BH.A18Q.02TCGA -0.8417277 -1.1428121 -0.09905295 -3.3273464 1.12201143
## C8.A130.02TCGA -0.1004753 0.8146081 -1.42226247 0.7719698 0.04055904
## C8.A138.O3TCGA 0.5049687 1.6898817 -1.89777178 0.1794833 -0.25205915
                 NP 001138785 NP 001025030 NP 001171172 NP 001007528 NP 775858
##
```

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## AO.A12D.O1TCGA
                   -1.8907506
                                -1.3688082
                                             1.07708219
                                                          0.42941650 1.3666269
## C8.A131.O1TCGA
                   -1.0007668
                                -0.5919308
                                             0.01929918
                                                          0.03549071 0.5050449
## AO.A12B.O1TCGA
                    1.9841580
                                 1.1915165
                                             0.04412632
                                                          0.07184106 -0.3327941
## BH.A18Q.O2TCGA
                                                         -1.54425791 -0.1224706
                   -0.9889245
                                -0.3901012
                                           -0.58078794
## C8.A130.02TCGA
                    1.4312234
                                 0.5325394
                                             0.71293216
                                                         -1.26810863 0.2471908
## C8.A138.O3TCGA
                                           -2.62554247
                           NA
                                -1.0237155
                                                          2.94428048 0.6146828
                                            NP_079504 NP_001153880 NP_004154
                 NP 001207417 NP 001073005
                                                        -0.4925547 1.625693
## AO.A12D.O1TCGA
                    0.3494107
                                 0.1932090
                                                   NA
## C8.A131.O1TCGA
                    3.3830882
                                 0.2945551
                                                   NA
                                                        -0.9157613 -2.255610
                                                   NA
## AO.A12B.O1TCGA
                   -1.2750952
                                 0.6011926
                                                        -1.1503789 -1.474641
## BH.A18Q.02TCGA
                   -0.6644225
                                 0.4495897 2.4400919
                                                         0.2287945 -4.678881
## C8.A130.02TCGA
                    0.1717538
                                -0.9171627 -1.1467535
                                                         0.4079044 -4.518459
## C8.A138.O3TCGA
                   -0.9322870
                                 0.1538833 -0.9725156
                                                         1.6350247 2.607824
##
                  NP_899058 NP_001129673 NP_001129674 NP_001032895 NP_001002926
                  0.5741888
                                          0.9246903
## AO.A12D.O1TCGA
                              1.19518593
                                                         0.6961024
                                                                     0.5703790
## C8.A131.O1TCGA
                  2.4318362
                             -0.77813336
                                           -0.5919308
                                                         0.9017372
                                                                      0.4362309
## AO.A12B.O1TCGA -0.6071700
                              2.98743157
                                            1.8566702
                                                        -0.5267973
                                                                    -0.7429723
## BH.A18Q.02TCGA 1.1420837
                              0.03141694
                                                        -0.3399204
                                            0.1050153
                                                                    -0.9119807
                                                        -0.1267143
## C8.A130.02TCGA -2.4849400
                              1.05403852
                                            0.6670140
                                                                      0.4833413
                                                                     -0.7055444
## C8.A138.O3TCGA
                  1.7959388
                             -1.62714348
                                           -1.4772008
                                                         0.3221117
##
                  NP_055113
                             NP_060516 NP_001026887
                                                      NP_005988 NP_002787
## AO.A12D.O1TCGA 1.1913761
                             0.5018027
                                        1.8999986 -0.17253161 -0.2220590
## C8.A131.O1TCGA 2.7030442
                             0.2338369
                                          0.1731187 -0.49073381 -0.6202660
## AO.A12B.O1TCGA -1.7739605
                             0.6787938
                                         -1.8848195 0.44044708 1.1305441
## BH.A18Q.02TCGA -3.2872019 -1.0825952
                                          1.2357544 -1.06921369 0.2154129
## C8.A130.02TCGA -2.7374899 -0.5924556
                                         -1.4583410 0.25375052 0.3816654
## C8.A138.O3TCGA
                  0.1173119
                             0.1246262
                                          1.7447388 -0.02165938
                                                                0.1831404
                  NP_005928 NP_001036046 NP_061029 NP_001186673 NP_954630
## AO.A12D.O1TCGA -1.3649984
                             -0.50398405
                                         0.3341715
                                                    1.0008862 5.0583213
                                                     1.4279617 2.4277883
## C8.A131.O1TCGA -0.1385682
                              0.27431568 -0.1021372
## AO.A12B.O1TCGA 0.4459900
                             -0.54065467
                                          0.4071894
                                                      -2.4197140 -2.6996328
## BH.A18Q.02TCGA -4.0131497
                              0.01469003 -2.3538403
                                                       0.2221037
                                                                  1.8345778
## C8.A130.02TCGA 2.0806375
                              1.12947551
                                          0.4439829
                                                       1.6837733 0.2537505
## C8.A138.O3TCGA 0.5305686
                             -0.50805889
                                          0.4464544
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                   NP_110381 NP_001120852 NP_001035147 NP_000573 NP_001035149
                                            -1.723119 -1.723119
## AO.A12D.O1TCGA 4.85259217
                               5.1421368
                                                                    -1.612635
## C8.A131.O1TCGA 2.62613450
                                1.9703778
                                             -3.769517 -3.769517
                                                                    -2.615871
## AO.A12B.O1TCGA -3.58927593
                                             -4.343117 -4.343117
                               -4.2267149
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## BH.A18Q.02TCGA 2.34642119
                                             -4.652118 -4.565138
                                2.5337626
                                                                    -4.732407
## C8.A130.02TCGA -0.08735584
                                0.2931089
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## C8.A138.O3TCGA -7.44930903 -12.9569606
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##
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                                           NP 005611
                                                       NP 057230 NP 001005505
## AO.A12D.O1TCGA
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                                          2.09810810 -0.33635293
                                                                    0.1246326
                    -2.154413 2.2537295
                                          0.71148682 -0.43811136
## C8.A131.O1TCGA
                                                                   -1.1586342
## AO.A12B.O1TCGA
                    -1.469098 -3.7195352 -1.54669969 0.49864803
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## BH.A18Q.02TCGA
                    -4.404559 -4.4815032
                                          1.17219216 0.40944509
                                                                           NA
## C8.A130.02TCGA
                    -3.065477 -0.8646848
                                          0.02743957 -0.38254404
                                                                           NA
## C8.A138.O3TCGA
                     3.225880 -0.1167450 1.25833932 -0.08748789
                                                                    1.3461107
                  NP_000371 NP_079198 NP_003834 NP_659001 NP_001154178
## AO.A12D.O1TCGA -0.6639956 5.0887997
                                       4.0106268 4.010627
                                                               4.010627
1.634404
## AO.A12B.O1TCGA 0.7951957 -1.1559219 -1.3443821 -1.344382
                                                               -1.344382
## BH.A18Q.02TCGA 0.1317784 -0.5841333 -2.2066435 -3.116587
                                                               -3.116587
## C8.A130.O2TCGA -0.2218305 -0.4317421 -0.3267863 -1.028678
                                                               -1.028678
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## C8.A138.O3TCGA 0.3038260 3.5147942 3.2075945 3.207594
                                                              3.207594
##
                  NP 115522 NP 110386 NP 001852 NP 055501
                                                             NP_005379
                                                 0.1741600 0.83325511
## AO.A12D.O1TCGA -0.5001742
                            0.4065577
                                       2.1819237
## C8.A131.O1TCGA -1.9924976
                            2.2334901
                                      0.3957521
                                                 1.2053283 -0.21547791
## AD.A12B.01TCGA 0.3711602 -1.2473805 -1.7379314 0.4570759 -0.66537099
## BH.A18Q.02TCGA 0.6670395
                            ## C8.A130.02TCGA -1.0319581
                            0.6178160 -0.5104589 -0.6318141 1.79856876
## C8.A138.O3TCGA 2.1360527
                            0.5598257 2.3006240 0.3623402 0.08074051
##
                  NP 078800
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## AO.A12D.O1TCGA
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                                        0.1589208 -1.2354653 -0.1801512
## C8.A131.O1TCGA
                 0.3876563
                            1.3348605
                                        -0.0697542 -1.6808108
                                                              1.5332066
## AO.A12B.O1TCGA -1.4358407
                            1.3966056
                                         1.2164598 0.8284534
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## BH.A18Q.O2TCGA 1.3327705
                            0.3860274
                                         0.1786137 -0.2462498
                                                              1.6271641
## C8.A130.02TCGA -0.8909237 -1.2517093
                                         0.2209518 -0.5596570
                                                              0.4144641
## C8.A138.O3TCGA 2.0885099 2.0226814
                                        -1.6161721 -0.3398305
                                                              0.7975398
##
                 NP_001258570 NP_009197 NP_057049
                                                    NP_054779
                                                                NP 570981
## AO.A12D.O1TCGA
                   0.5779986 -1.0449754 -1.4945316 -0.03918867 -0.24110797
                   -1.2153045 -0.2195258 -0.4097762 -1.21125662 1.05150882
## C8.A131.O1TCGA
                   -2.4113995 -0.2912220 -1.6437013 0.47647624 -0.61825594
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   1.1454291 -0.5239164 0.9012162 -0.63096867 -0.60420561
## C8.A130.02TCGA
                  2.1872527 0.2343404 -0.6836016
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                                                   0.65491136 0.97308247
                   NP_115861 NP_056263
                                         NP_006592
                                                   NP_003705 NP_665683
##
## AO.A12D.01TCGA -0.34778232 -0.9611598 -0.66399557
                                                   -8.077863 -2.782243
## C8.A131.01TCGA 1.05150882 0.4524224 -2.00464128 -10.023493 -3.514501
## AO.A12B.O1TCGA -0.51571141 0.6039640 0.96979859
                                                   -3.647477 -2.511173
## BH.A18Q.02TCGA -0.81496467 -1.9089045
                                                   -1.002306 8.889988
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## AO.A12D.O1TCGA -2.782243
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## C8.A131.O1TCGA -3.514501
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                                            NA 0.5252843
                                                          1.5008236 -0.4340635
## AO.A12B.O1TCGA -2.511173
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                                            NA -0.5655979 -0.5378832 0.6593935
## BH.A18Q.02TCGA 8.709337 9.348305
                                    8.8732612 0.2756298 -3.0463344 -0.4101735
  C8.A130.02TCGA -1.963441 -1.704331 -0.9532412 -2.0454376 -0.8450055 -0.1890318
  C8.A138.O3TCGA -4.337084 -5.031940 -4.3517122 2.6992522 2.0336528 0.9767396
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## AO.A12D.01TCGA -0.85067568 1.1418488 -3.9328024
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## C8.A131.O1TCGA 2.73542729 3.2373645
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## AO.A12B.O1TCGA -2.82157767 -2.7273476 2.2751628
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## BH.A18Q.02TCGA -0.26632204 -1.1829567 -1.9791576
                                                   -0.6108964 0.61685877
## C8.A130.02TCGA 0.01104023 -0.1660727
                                       0.0241597
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## AO.A12D.O1TCGA -0.004900488 -0.073476855
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## C8.A131.O1TCGA 0.403847871 -1.191017215
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## AO.A12B.01TCGA 0.462618873 1.499150102 0.8367678 -0.8870889 -1.7711891
## BH.A18Q.O2TCGA -0.938743798 0.603477240
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## C8.A130.02TCGA -0.323506400 -0.395663515 0.9195639 2.2938290
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  C8.A138.O3TCGA -0.135030700 -0.007030829 -1.4881722 2.6590236 -1.9050861
                  NP_060263 NP_004424 NP_001193545 NP_068577
                                                               NP_057543
##
## AO.A12D.01TCGA -0.2792060 1.0656528
                                       0.31512256 -1.0830734 1.60283434
                                        1.42391387 -2.4215730 -0.09404148
## C8.A131.O1TCGA 0.3026508 -0.4138241
## AO.A12B.O1TCGA -0.5877697 -1.9291631 -0.34942297 0.5014195 -2.05942235
```

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## BH.A18Q.02TCGA 0.2923567 0.3325013 4.14289125 -2.7653223 1.36622430
## C8.A130.02TCGA 0.1815934 -0.4907797 -0.59245565 -4.2101510 -1.62233447
## C8.A138.O3TCGA 0.0514834 -0.8554871
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##
                 NP_001165161 NP_001001414
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                                                       NP_037486 NP_001108072
## AO.A12D.O1TCGA
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                                7.9423385 2.82958935 0.04081709
                                                                    0.2122580
                  -4.3119334
## C8.A131.O1TCGA
                                1.9137075 -0.01713175 -0.01713175
                                                                    0.5900504
                                                                    0.0773840
## AO.A12B.O1TCGA
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                              -1.8959054 -2.15088099 0.60950699
                   -1.9858483
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## BH.A18Q.02TCGA
## C8.A130.02TCGA
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## AO.A12B.O1TCGA -1.11434976 -3.4756455
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## BH.A18Q.02TCGA 0.41948124 -3.9529329
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## C8.A130.02TCGA -0.26118889 -0.2775882
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## C8.A138.O3TCGA -0.49708748 2.5383380 0.2891974 -1.0420012 -1.05297263
                  NP 057395 NP 569055
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## AO.A12D.01TCGA 0.4903733 0.9856470 1.05422340
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## C8.A131.O1TCGA -2.5470573 -0.3004834 0.64672073
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## AO.A12B.01TCGA 1.8677561 0.1688426 -0.01407463
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## BH.A18Q.02TCGA -5.5553708 0.3960636 0.26224829 -0.4168642 -1.3569165
## C8.A130.O2TCGA -1.2451496 0.4046245 0.10943629 -0.8679646 -0.8154867
## C8.A138.O3TCGA 1.9385672 0.5598257 -0.15697353
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##
                  NP 116211
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## AO.A12D.01TCGA -0.7097131 -0.67542497 1.2142349 1.5190188 -0.8049581
## C8.A131.O1TCGA -1.0898202 -0.77813336 -0.6850321 -0.4947817
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## AO.A12B.01TCGA -1.4386122 -1.03951997 0.7342233 -3.5892759 0.2409010
## BH.A18Q.02TCGA -2.3036596 -0.08232604 -0.1258160 0.3325013 -0.4837719
## C8.A130.02TCGA 1.4082644 0.82444770 0.6899731 -1.3271463 0.1323954
## C8.A138.O3TCGA -0.6177731 -0.35080191 0.1794833 1.8507959 0.3111403
##
                   NP_055891
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                                                                 NP_068766
## AO.A12D.01TCGA 0.06748568 0.64276520 2.700056
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## C8.A131.O1TCGA 0.34717754 0.41194363
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                                                     1.023174 0.05573011
## AO.A12B.O1TCGA -0.65705657 -0.26627876 -3.636391
                                                    -3.636391 2.87657262
## BH.A18Q.02TCGA 4.28005190 2.55383486
                                               NΑ
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## C8.A130.02TCGA 0.47350173 1.30986830
                                               NA
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## C8.A138.O3TCGA -0.23743060 -0.07285933
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##
                  -0.3744509 -0.4354077 -1.3688082 -1.3726180 -0.3630215
## AO.A12D.O1TCGA
                  -0.3571537 -0.3409622 -0.4745423 -0.7619418 -0.4543029
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   1.1554873 0.9642556 0.3545314 0.7175945 0.9725701
## BH.A18Q.O2TCGA
                   0.3391921 1.1554652 -0.1994144 0.4395535 -1.7985069
                  -0.7892478 -0.7531692 0.8867652 0.3062284 -0.3366259
## C8.A130.02TCGA
## C8.A138.O3TCGA
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##
                  NP_057174
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## BH.A18Q.02TCGA 1.7107986 0.03476232
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                                         -0.3825440 0.05039865
                                                                0.755570457
## C8.A138.O3TCGA 0.3513688 0.46474012
                                         NP_064703 NP_001157940 NP_001008240
                                                        NP 659492 NP 079469
## AO.A12D.01TCGA 0.17035023 1.2790015 -1.11355175 -1.00306761
```

```
## C8.A131.O1TCGA 0.60219404
                              -0.4583508 -1.32864517 -1.51079981
                                                                         NA
## AO.A12B.O1TCGA 0.55962046
                             1.1915165 -0.09999032 -0.09999032
                                                                         NA
## BH.A18Q.02TCGA 0.19868604
                               1.2156821
                                          0.11170611 -0.04218146 -2.2300612
                              -1.5928157 -0.25462915 0.23735118 -0.6121349
## C8.A130.02TCGA 0.03071944
## C8.A138.O3TCGA -0.37274474
                               1.5143391 -1.80268616 -1.85754325 1.1888537
                  NP 006850 NP 001010923 NP 077718
                                                   NP 689837 NP 001152850
##
## AO.A12D.O1TCGA -0.9573500
                            -0.5230330 -1.1935575 -0.36683131
                                                                0.05605628
## C8.A131.O1TCGA -0.8793304
                              0.9057851 -1.2436397 0.84101901
                                                                0.37551271
## AO.A12B.O1TCGA 1.0945149
                              2.2613054 -0.4907681 -0.58222678
                                                              -0.48245372
## BH.A18Q.02TCGA -1.0424506
                              2.2694774 0.9045616 0.82092706
                                                                0.52653346
## C8.A130.02TCGA 1.2049125
                             -0.5957355 0.7457309 0.09631682
                                                                0.81132823
## C8.A138.O3TCGA -1.6820006
                              0.2306832 -0.6726302 0.91091110 -1.51377217
                 NP_001152849 NP_001152852 NP_060308 NP_054905 NP_060378
## AO.A12D.O1TCGA
                   0.05605628
                              0.3875087 -0.5801800 -0.70590335 -1.2773731
                   0.37551271
## C8.A131.O1TCGA
                               0.5617152 -1.7496248 0.72363046 -2.7858823
## AO.A12B.O1TCGA
                  -0.48245372
                               -0.3854521 -1.3138959
                                                     0.13835643
                                                                 0.9725701
                   1.32273434
                              1.3227343 -0.1191252 0.03476232 -2.7853946
## BH.A18Q.02TCGA
                   0.21767196
                               0.2176720 0.8966048 -0.09391558
## C8.A130.02TCGA
## C8.A138.O3TCGA
                 -1.27971526
                               -1.2797153 -0.3617733 -0.27034485 0.2306832
                 NP 001243338
                               NP 258257
                                           NP 005362
                                                       NP 075422 NP 001168
## AO.A12D.O1TCGA
                   0.1246326
                             0.021768100 0.06748568
                                                              NA 2.0371513
                    0.9179287 -0.000940222 -1.05338926
## C8.A131.O1TCGA
                                                              NA 0.3390818
## AO.A12B.O1TCGA
                    NA -0.1249336
## BH.A18Q.O2TCGA
                    0.2957021
                              0.258902908 1.37291507 -1.55094868 -0.1090891
## C8.A130.02TCGA
                   1.0474788 2.008480364 1.57553767 2.36270620 -0.8843640
## C8.A138.O3TCGA
                   0.2343404 - 1.290686676 - 0.47514464 0.09902621 1.2839393
                  NP_060734 NP_001138912
                                        NP_067036
                                                    NP_056265 NP_001026870
## AO.A12D.O1TCGA
                  1.0008862
                                     NA -1.14783994 -0.03918867
                                                                        NA
                                                                         NA
## C8.A131.O1TCGA
                 0.3755127
                                     NA -0.07784996 0.56171523
## AO.A12B.O1TCGA -0.1720486
                                     NA -1.95687782 0.06906958
                                                                        NA
## BH.A18Q.02TCGA -0.5607156
                             0.06487076
                                         2.82146541
                                                    0.34922822
                                                                 -1.3937157
## C8.A130.02TCGA 0.1127162
                             0.65061465 0.77524967
                                                    0.05695839
                                                                 -1.4321021
  C8.A138.O3TCGA
                 2.1250813
                                     NA -0.57754454 0.09536907
                                                                 -0.7713729
                 NP_001010982
                               NP_660358
                                          NP_689497
                                                      NP_000980 NP_001005340
## AO.A12D.O1TCGA
                  1.70569889 -0.14967282
                                          1.11518017
                                                     0.51704186
                                                                -1.87551139
                                                                -0.02522751
## C8.A131.O1TCGA
                 -0.01308386 -0.82670793 0.07192163 0.01120342
## AO.A12B.O1TCGA
                   1.25803187 1.79292633 0.07461253 -0.41593835
                                                                -3.51167467
## BH.A18Q.O2TCGA
                 -2.42409334 0.92797928 -0.42020961 0.06487076
                                                                  3.17607589
## C8.A130.02TCGA
                  -0.84500555 -1.25170929 0.18487328
                                                    1.26067026
                                                                  0.55221859
## C8.A138.O3TCGA
                 -0.17160209 -0.06554506 0.15022616 0.06976909 -1.01640124
                 NP 001243353 NP 599030
                                         NP 005536
                                                     NP 116120 NP 004256
## AO.A12D.O1TCGA
                  -0.1649120 -1.2811829 1.13041937 0.26940498 -1.7535978
## C8.A131.O1TCGA
                   1.0312694 -1.7172417 -1.27602271 -0.68503210 3.7757327
                  -0.9591472 -2.2257108 -2.46405754 1.50192158 -2.5610591
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -2.1230090 1.7877424 1.51676649 -1.46731413 -4.1770734
                   -0.1267143 -0.4481414 0.06023826 1.49026108 0.2078324
## C8.A130.02TCGA
## C8.A138.O3TCGA
                   0.1465690 -0.7384587 0.70611131 0.05879768 6.3637056
##
                  NP_008950 NP_054885 NP_114172
                                                 NP 079204 NP 002075
## AO.A12D.01TCGA -2.2298226 -0.4544567 1.0313646 -1.38404742 0.7532493
## C8.A131.01TCGA -0.2357173 -0.1385682 1.3227168 0.06382587 -0.9764795
## BH.A18Q.02TCGA -0.4804265 -0.3901012 -0.5908241 -0.73802089 0.6570033
## C8.A130.O2TCGA 0.8474068 0.8408470 0.6538945 -0.07423637 -0.5563771
## C8.A138.O3TCGA -0.1789164 -0.4020019 -0.6104588 -3.90188404 -0.6141159
```

```
NP 004713
                            NP 569057 NP 001092741 NP 075388 NP 002888
## AO.A12D.O1TCGA -0.3096843 0.09415427
                                        0.09796406 0.4865635
                                                              1.5304482
## C8.A131.O1TCGA 0.2743157 0.42408728
                                       -2.01273704 -0.6971757
-0.88431743 -0.6764569 -0.9342040
## BH.A18Q.O2TCGA -0.9989607 -0.70791245
                                       -0.27635819 0.2154129
                                                              1.0049231
## C8.A130.02TCGA 0.1487947 -2.14055375
                                        0.47350173 1.3557865
                                                             1.1196359
## C8.A138.O3TCGA 0.8743397 6.02359165
                                        2.39205246 -0.6433730 -0.2849734
                            NP 002889 NP 001003793 NP 071344 NP 057092
                 NP 058520
## AO.A12D.O1TCGA 1.8923790
                           1.27138190
                                        0.8294453 -0.9840186 -0.4354077
## C8.A131.O1TCGA 1.7517922
                           2.44802774
                                        1.6829782 -1.1141075 -1.4096028
## AO.A12B.O1TCGA -0.9369754 -1.26955230
                                       -1.1836366 -0.3355656 0.2298151
## BH.A18Q.02TCGA 0.9948869 1.09859376
                                         1.5870195 0.9781600 -5.3278848
## C8.A130.02TCGA 1.0933970 1.19507289
                                         1.2705099 -0.1660727 -1.4419417
                                        -0.2922877 -1.0676012 3.4891942
## C8.A138.O3TCGA -0.2922877 -0.07651647
                NP_003991 NP_001543 NP_008846 NP_116254
                                                           NP_653251
## AO.A12D.O1TCGA
                       NA -1.2507045 -0.6030388
                                               5.6259812 -1.64692350
                       NA -0.3369143 1.9744257 0.5212364 -0.59597872
## C8.A131.O1TCGA
                       NA 3.7606728 -2.6719181 -1.4746414 3.38929529
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 4.959164 -3.8626075 0.4629712 2.1323168 -0.85176387
## C8.A130.02TCGA -2.986760 -1.2320301 -1.0581970 0.5292595 2.47422174
## C8.A138.O3TCGA
                       NA -0.7311444 1.8251959
                                                      NA -0.00337369
                 NP 055277 NP 055463 NP 001062
                                                  NP 059988
                                                             NP 003215
## AO.A12D.O1TCGA -1.1935575 1.515209 -1.4335748 -1.159269332 0.05605628
## C8.A131.O1TCGA -1.0574371 1.642499 5.4920342 -0.717415146 -0.57978719
## AO.A12B.01TCGA -1.5799574 -3.666877 -0.3050794 -0.668142469 -0.09444738
## BH.A18Q.02TCGA 0.2321399 -3.213603 1.2190275 -0.296430480
                                                            0.55329651
## C8.A130.O2TCGA -0.1201545 -1.284508 -0.1529532 0.007760356
                                                            0.12583564
## C8.A138.O3TCGA -1.3674866 1.349768 -0.1533164 0.164854712 1.67891033
                 NP_068753 NP_006375 NP_001157650 NP_542407 NP_001028259
## AO.A12D.O1TCGA 0.3760793
                            2.8181600
                                       -0.5306526 0.3341715
                                                                      NA
## C8.A131.O1TCGA -0.1669033
                            0.7883966
                                       -0.8307558 -2.0815510
                                                                      NA
## AO.A12B.O1TCGA 0.1577567
                            0.9836560
                                       -2.5139441 2.6215970
                                                                      NA
## BH.A18Q.02TCGA -1.3602619
                            0.5900957
                                        2.0319553 -0.3131574
                                                               -2.009266
## C8.A130.02TCGA -0.7236504
                                                                5.235871
                           1.5328994
                                        0.6768536 4.5733378
  C8.A138.O3TCGA -0.5629160 -0.5336589
                                        2.8894234 -3.5617701
                                                               -2.936399
                NP 001258804 NP 079349
                                          NP 005649
                                                    NP 036524 NP 003055
## AO.A12D.O1TCGA
                  -0.9268716  0.4560851  -0.008710286  -0.40492930  7.618506
                   1.7558401 0.8612584 -0.292387649 -0.73765455 -1.348885
## C8.A131.O1TCGA
                  -0.1498769 -0.1554198 -1.128207132 -0.08613295 -1.793361
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                  -1.3535711 -0.6209325 1.694071727 1.03503150 -1.186302
## C8.A130.02TCGA
                  -0.8089270 -0.2874278 -1.277948240 -0.03487794 -2.888364
                  -2.0367431 0.4318259 -1.093201161 -1.16268681 -2.274457
## C8.A138.O3TCGA
                NP 000812 NP 003960 NP 006043 NP 620152 NP 056163 NP 001813
## AO.A12D.O1TCGA
                 4.345889 0.3417911 -0.7363817
                                               0.7608689
                                                                 NA 2.5933819
## C8.A131.O1TCGA 1.464393 -0.4057283 0.7519656 -0.3814410
                                                                 NA -1.5107998
## AO.A12B.O1TCGA -0.770687
                           0.9254550
                                     0.6178214 0.5845637
                                                                 NA -0.7180290
## BH.A18Q.02TCGA
                       ## C8.A130.02TCGA
                       NA 1.5296195 -0.4547012 0.4964608 -0.4907797 2.2610303
  C8.A138.O3TCGA
                       NA 0.2709117 -0.4751446 -0.1094307 1.3022250 -2.9437136
                 NP_940888 NP_803877 NP_955469 NP_079224 NP_001036148
## AO.A12D.01TCGA -0.6639956 -1.1326007 0.3113128
                                                0.1093935
                                                             0.1513012
## C8.A131.O1TCGA 0.8005402 -2.0491680 -0.1628555
                                                1.0717482
                                                             0.7519656
-2.3060835
## BH.A18Q.02TCGA -0.8149647 -0.5372980 -1.5676756 -0.4235550
                                                             0.7138748
```

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## C8.A130.O2TCGA 0.9064444 -0.5006193 -0.7695686 -0.2677486
                                                          0.2799895
## C8.A138.O3TCGA -1.1956011 1.2437108 -0.4276018 -0.3690876
                                                          1.5362819
                 NP 057501
                           NP 057178 NP 001128712 NP 001078844
                                                              NP 037366
## AO.A12D.01TCGA -1.9783759 -0.38207051
                                      -1.7916958
                                                  -1.7916958
                                                             0.22749720
## C8.A131.O1TCGA -1.1141075 0.17716654
                                      -1.8305824
                                                  -1.8305824
                                                             0.69529530
## AO.A12B.O1TCGA 1.2663463 -0.91203217
                                      0.3323596
                                                   0.3323596 0.71205152
## BH.A18Q.O2TCGA -0.7146032 -0.02210917
                                     -0.9989607
                                                  -0.6644225 -0.02545455
## C8.A130.02TCGA 1.4968208 0.27342973
                                      -3.9477615
                                                  -3.7181707 0.03399931
## C8.A138.O3TCGA 0.5195972 -0.17525923
                                      -0.3690876
                                                  -0.3178877 0.32576883
##
                 NP_060557
                           NP_000936 NP_671709
                                                NP_872375 NP_443730
## AO.A12D.O1TCGA 2.6314798
                          0.87135309 0.63895540 -1.04497539
## C8.A131.O1TCGA 0.5171885 1.30247744 1.54130241 -1.89534850 -1.6484278
## AO.A12B.01TCGA -2.4557431 -0.03070348 0.53467719 0.34067402 -0.4353387
## BH.A18Q.02TCGA -1.1160490 0.79416401 0.66369411 -1.99922985 0.1351238
## C8.A130.O2TCGA -0.9991594 0.50958029 0.23079144 -0.61213486 0.2504707
NP_001002837
                              NP_115488 NP_789762 NP_005673 NP_699163
## AO.A12D.01TCGA -0.07347685 -0.229678579 -0.2296786 -0.3592117 -1.5821569
## C8.A131.O1TCGA -0.81456429 -0.519068981 -0.5190690 -1.0695808 -0.7376546
                 0.78688132 1.795697807 1.7956978 -1.9845926 0.1854715
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -5.32453942 0.891180080 1.1052845 0.7975094 0.6335857
                 ## C8.A130.02TCGA
## C8.A138.O3TCGA
                NP 079058 NP 068759 NP 001037770
                 NP 003234
                                                             NP 478126
## AO.A12D.O1TCGA -3.5365834 -1.39166702 0.6694338
                                                0.6694338 -0.702093552
## C8.A131.O1TCGA -2.9680369 -0.04546691 -0.1345203
                                                -0.1345203 0.658864370
## AO.A12B.01TCGA 2.0091013 -0.10830475 0.0358119
                                                 0.0358119 -0.293993495
## BH.A18Q.02TCGA 4.9022929 0.90790699 -0.7882016
                                                -0.6811494 -0.610896375
## C8.A130.02TCGA -0.5957355 -0.65477315 1.8608863
                                                1.8740057 0.004480487
## C8.A138.O3TCGA -1.7953719 -1.16268681 0.5525115
                                                 0.4537687 -0.383716163
                 NP_057532 NP_055751 NP_848638
                                               NP_003126 NP_001836
## AO.A12D.O1TCGA 4.1668285 -1.7916958
                                           NA -0.04299847 -0.5954192
## C8.A131.O1TCGA 1.3591478 -2.3122802
                                           NA -0.38953679 0.2419326
## AO.A12B.O1TCGA -0.4131669 0.2131862
                                           NA 0.51804835 -1.4524696
## BH.A18Q.02TCGA -5.0937081 -0.8116193 0.58340495 -1.98250294 -0.8651454
## C8.A130.O2TCGA 0.8572464 -0.3759843 0.08647721 -0.01191886 0.3095083
## C8.A138.O3TCGA 0.4427973 -1.8100004
                                           NA -0.63971590 -0.7567444
                 NP_203699
                          NP_000082 NP_612390 NP_061893
                                                         NP 000472
## AO.A12D.O1TCGA -0.1953904
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## C8.A131.O1TCGA 0.6426728
                           1.6546431 -1.8670133 -0.1466639
## AO.A12B.01TCGA -1.4912702 -1.1060353 -1.3720968 -0.3965380
## BH.A18Q.02TCGA -3.7655915 -11.2157569 -1.1829567 -3.8726437 -2.6883785
## C8.A130.02TCGA 0.3095083
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## C8.A138.O3TCGA 1.5362819
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## AO.A12D.O1TCGA -0.4011195
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## C8.A131.O1TCGA 0.1124004
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## AO.A12B.O1TCGA 0.8617111
                           ## BH.A18Q.02TCGA -0.2529405
                           ## C8.A130.02TCGA 1.1327554
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## C8.A138.O3TCGA -1.8136576 -2.39148556 0.46108298 -0.914001342 -0.43857325
                NP_001254772 NP_001185882 NP_064550 NP_000085 NP_001167013
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                 0.85721053 -0.312627053
                                              NA 2.0310960
                                                             0.59005039
```

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## AO.A12B.O1TCGA
                  0.02195453 -0.515711405
                                                NA -0.8344309
                                                              -0.40762392
## BH.A18Q.O2TCGA -0.82165543 -0.901944597 -2.5880171 1.3929874
                                                               0.44289891
## C8.A130.02TCGA
                 -0.58589591 -0.008638989 1.2737897 -0.3792642
                                                               0.22751157
## C8.A138.O3TCGA
                  0.82313976 1.283939297
                                         0.4391401 0.6110257
                                                               0.13194046
                NP_001167014 NP_001165358 NP_056448 NP_653247
                                                              NP 006536
                 -0.03918867
                             0.2122580 0.2122580 -0.3477823 -0.2868256
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  0.59005039
                               0.7519656 0.7519656 1.9015638 -0.8226600
## AO.A12B.O1TCGA
                 -0.40762392
                               ## BH.A18Q.02TCGA
                  0.24217600
                              -0.1693060 -0.1693060 1.4431681 -0.3231935
## C8.A130.02TCGA
                  0.22751157
                              -0.9368419 -0.9368419 0.3193479 -0.9663607
## C8.A138.O3TCGA
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                                                                  NP_219489
## AO.A12D.O1TCGA -1.845033001 -0.7401915 1.717128283
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## C8.A131.O1TCGA -0.174999102 -0.1992864 -0.000940222
                                                      0.4564703 -0.498829576
0.1522138 1.302375457
1.2023006 -0.901944597
## C8.A130.02TCGA -0.002079251 -0.3891038 -2.698131459
                                                     -2.1569531 -0.225110334
## C8.A138.O3TCGA -0.946915594 -0.1789164 2.808966329
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                NP_006017 NP_115570 NP_001034444 NP_001135865 NP_001230301
## AO.A12D.O1TCGA -3.925183 -1.6621627 -0.34016273
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                                                               0.4789439
## C8.A131.O1TCGA 1.047461 4.6865059
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                                                   0.9422160
                                                               0.3026508
## AO.A12B.O1TCGA -3.320443 -1.8127612
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                                                  -1.5799574
                                                              -0.8843174
## BH.A18Q.02TCGA -3.962969 -1.1729205
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                                                  -1.1294306
                                                               -1.7081816
## C8.A130.02TCGA 1.214752 0.6210958
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                                                   0.9228438
                                                               -1.2287502
## C8.A138.O3TCGA -1.100515 -1.9453146
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                                                               1.1010823
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## AO.A12D.O1TCGA 0.7608689
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## C8.A131.O1TCGA 0.5374279
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                                              NA -5.1012702
                                                            0.5090928
## AO.A12B.O1TCGA -0.9480613
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                                              NA -5.1385298 1.2330886
## BH.A18Q.O2TCGA -0.6376594
                             -2.755286 -2.534491 -1.5576394 0.7975094
## C8.A130.02TCGA -0.7400497
                             -1.254989 -2.288148 0.2471908 -0.7302101
## C8.A138.O3TCGA 0.3477117
                              1.349768 2.004396 -1.7185720 -0.0326308
##
                NP_001171610 NP_001073861 NP_001006659 XP_003960485
                                                                   NP 878908
                                                  NA -1.18593792 -0.66780537
                          NA
                               0.6237162
## AO.A12D.O1TCGA
                          NA
                               0.7479178
                                                  NA
                                                      -0.34096222 -0.34096222
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                          NΑ
                              -2.2312537
                                                  NΑ
                                                      -0.15819127 -0.15819127
## BH.A18Q.02TCGA
                  -0.2429044
                              -2.5478725
                                                  NΑ
                                                       0.06487076 0.06487076
## C8.A130.02TCGA
                              -1.3533852
                                                      -0.48094011 -0.12015453
                   0.5554985
                                                  NA
## C8.A138.O3TCGA
                  -1.0456584
                               -0.7055444
                                            -2.395143
                                                       0.17948327 0.13925474
##
                NP_001156793 NP_444283
                                        NP_078804 NP_001007532 NP_009014
                  0.22749720 -0.4887449 -0.08490625
## AO.A12D.O1TCGA
                                                   0.4256067 -0.5382722
## C8.A131.O1TCGA
                  0.02739495 -1.2922142 -0.50692534
                                                    -2.2879929 0.2864593
## AO.A12B.O1TCGA
                  0.49310508 2.3305923 -1.56887148
                                                    -2.9573799 2.3721644
## BH.A18Q.02TCGA
                 -0.36668350 1.2491359 -1.27997275
                                                    -3.8692983 -3.3741818
## C8.A130.02TCGA
                 -0.64493355 -0.6646128 1.09011708
                                                     1.1589943 -0.7728484
## C8.A138.O3TCGA
                 -0.14965926 -2.4646283 2.16896698
                                                     3.6537655 -2.1281715
                 NP_660207 NP_003668 NP_064631 NP_001012772 NP_003320
                 0.7913473  0.2579756  0.6313358
## AO.A12D.O1TCGA
                                                -1.8069350 0.2313070
## C8.A131.O1TCGA 1.4927278 -1.2153045 0.8491148
                                                  0.4159915 -0.3409622
1.1416300 -0.3327941
## BH.A18Q.02TCGA -1.3468804 -1.8118885 -1.2231013
                                                  0.4127905 -0.4436273
## C8.A130.02TCGA -0.3333460 0.4472628 0.1422350
                                                -0.6974115 -0.0807961
## C8.A138.O3TCGA 3.5586799 0.5049687 -1.1114869
                                                -0.4312590 -0.5409731
                  NP 009172 NP 001096080 NP 003376 NP 036366 NP 115670
##
```

```
## AO.A12D.O1TCGA 0.22749720
                                0.2922638 -0.05442786 1.5037796 -0.3211137
## C8.A131.O1TCGA 0.08406528
                                0.3714648 1.22961558 0.1852623 -0.7417024
## AO.A12B.O1TCGA 0.85062521
                               1.6903818 -2.53611586 0.6732509 0.9282265
## BH.A18Q.02TCGA -0.47039034
                               -1.6212017 1.13204757 -3.9328606 -1.0926314
  C8.A130.02TCGA -0.15295322
                                0.3357472 -0.46782063 -0.4383018 -0.4383018
  C8.A138.O3TCGA 1.04256811
                                0.5378829 -1.54302928 1.1157109 2.8126235
                 NP 001124151 NP 115710 XP 003960183
                                                       NP 055130 NP 079049
## AO.A12D.O1TCGA
                    1.7285577 -0.1953904
                                         -0.4354077 0.09034447 -0.1649120
## C8.A131.O1TCGA
                    0.3795606 -0.9886232
                                           -0.2559567 -0.36929739
                                                                  1.3955787
## AO.A12B.O1TCGA
                   -0.1775916 -2.0732797
                                           3.6193276  0.37670318  -0.6625995
## BH.A18Q.02TCGA
                   -0.2830490 -0.5406434
                                           -2.6315070 -0.53395259 0.2756298
## C8.A130.02TCGA
                    0.4669420 1.8018486
                                           0.0241597
                                                      0.33246737 -0.1037552
  C8.A138.O3TCGA
                   -1.5101150 -2.0257716
                                           2.1031385 0.87068257 1.8800530
                 NP 006507
##
                           NP_060717 NP_001017970 NP_612355
                                                               NP 835227
## AO.A12D.O1TCGA 1.385676
                            1.4733012
                                                NA 2.7838718 0.94754905
## C8.A131.O1TCGA 2.873055
                            0.5576673
                                                NA -0.7619418 -0.32072281
                                                NA -0.5018540 -0.50185404
## AO.A12B.O1TCGA -2.225711 -1.0810921
## BH.A18Q.02TCGA -2.404021 -1.0692137
                                                NA -0.4670450 -4.11685657
## C8.A130.02TCGA -1.664973 -0.2119909
                                               NA -0.7826880 1.21803197
                                                  1.7886245 -0.07285933
  C8.A138.O3TCGA -2.113543  0.4647401
                                          1.485082
##
                 NP 001954 NP 660289
                                       NP_002420
                                                  NP 612410 NP 114111
## AO.A12D.O1TCGA
                        NA
                                  NA -0.35159212
                                                 0.28083438 1.3018603
## C8.A131.O1TCGA
                        NA
                                     1.21747194
                                                 0.01929918 -0.1223767
                                  NA
## AO.A12B.O1TCGA
                        NA
                                  NA -0.12493359
                                                 0.02472600 -1.1420645
## BH.A18Q.02TCGA -7.589363 0.2589029 -0.74136627 -0.06894451 -0.8618000
## C8.A130.02TCGA 4.107596 0.4046245 -1.52721827 -0.03487794 -1.0352379
  C8.A138.O3TCGA
                  1.587482 1.3387964 0.00028345 -0.08748789 -0.0326308
                 NP_001154481 NP_001135942
                                             NP_115722 NP_653287 NP_001138775
## AO.A12D.O1TCGA
                   1.27519170
                                -0.2487276 -0.008710286
                                                        4.1477795 5.595502815
## C8.A131.O1TCGA
                  -0.02522751
                                -1.9924976 -0.041419031
                                                        0.8248275
                                                                   0.347177538
## AO.A12B.O1TCGA
                  -1.13929303
                                0.005325683
## BH.A18Q.02TCGA
                  -0.86180002
                                -1.1863021 -0.801583141
                                                        0.5967865
                                                                   0.797509388
  C8.A130.02TCGA
                  -1.03523794
                                 6.6658942 1.237711181
                                                        0.2176720
                                                                   0.558778325
  C8.A138.O3TCGA
                  -0.03263080
                                -0.8957156 -1.451600799 1.9239387
                                                                   2.125081305
                  NP_443182 NP_059110 XP_001718697 NP_001121557 NP_004865
-1.7154999
                                                     -1.4411944 -1.0754538
## C8.A131.O1TCGA
                 1.1162749 -2.2596578
                                        -3.5590276
                                                      -2.0815510 -0.2195258
## AO.A12B.O1TCGA -1.2861811 2.9264591
                                                      2.2529910 0.6649365
                                          3.4946113
## BH.A18Q.O2TCGA 0.4763527
                            0.4930796
                                         -0.1693060
                                                      0.4763527 -0.1626152
                                                      -1.7240104 -0.5137388
## C8.A130.02TCGA 0.6145361 -0.2480694
                                         -0.3989434
  C8.A138.O3TCGA -0.3361734 -1.0127441
                                         -1.4808579
                                                      -1.6637149 -1.3711437
                  NP 078898
                              NP 060932 NP 001120708 NP 001120707
##
                                                                 NP 037375
## AO.A12D.O1TCGA 1.4047248 -0.04299847
                                         -0.60684860
                                                     -0.60684860
                                                                         NA
                                                                         NA
## C8.A131.O1TCGA -0.6364575
                            1.30652532
                                        -0.94409648
                                                     -0.94409648
## AO.A12B.O1TCGA 1.7402683 0.14389938
                                         -0.95360428
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                                                                         NA
## BH.A18Q.02TCGA -0.4837719 -1.01568758
                                         -0.26297666
                                                      -0.23621361
                                                                 0.5599873
## C8.A130.02TCGA -0.2841480 -0.11359479
                                         -0.08735584
                                                      -0.41862260 -0.4317421
## C8.A138.O3TCGA 1.2729679 -1.12245827
                                          0.66588278
                                                      -0.06554506 0.6073686
                 NP_001158729
                               NP_001444
                                           NP_005242
                                                     NP_003101 NP_872319
## AO.A12D.O1TCGA
                           NA
                                      NA
                                                  NA -0.1458630 -0.8278169
                                                     0.2297890 1.0636525
## C8.A131.O1TCGA
                           NA
                                      NA
                                                  NA
## AO.A12B.O1TCGA
                           NA
                                      NA
                                                  NA -0.3521944 -2.1481095
## BH.A18Q.02TCGA
                               0.7607102
                                         1.81116009 -0.5071895 -0.4001373
                    0.5599873
## C8.A130.02TCGA
                   -0.7662887 -0.3858239 -0.09391558 0.9195639 0.8375672
```

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## C8.A138.O3TCGA
                  -0.6689730 2.4615381
                                                NA 1.3424535 -0.3617733
                 NP_005552 NP_068595 NP_536856 NP_071327 NP_115992
##
## AO.A12D.01TCGA -0.2449178 -1.0144970 -1.9821857
                                                2.2085922
## C8.A131.O1TCGA 3.1442633 0.1326398 -3.4780699
                                                 0.4929013
                                                                 NΔ
## AO.A12B.O1TCGA 1.1388585 -0.9286610 -1.0145767
                                                 1.0141422
                                                                 NA
## BH.A18Q.02TCGA -0.3633381 0.4696620 -0.4001373 -0.1693060
                                                                 NA
## C8.A130.O2TCGA -1.6748124 -0.2283902 -3.2360300 -0.8351659
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## C8.A138.O3TCGA 1.9019958 1.8837101 0.1685119 -0.3544590
                                                           2.168967
##
                   NP 938020
                             NP_002438 NP_001003796 NP_006773
                                                               NP 061335
## AO.A12D.O1TCGA
                 0.07891507
                            3.18390058
                                        -0.1687218 2.3305058
                                                               1.5266384
## C8.A131.O1TCGA
                 1.73560070 1.88942017
                                         -0.5474041 -0.4016804
                                                               1.4846321
## AO.A12B.O1TCGA -0.57391236 -0.37159476
                                          0.2464439 -0.1387910 -1.1226642
0.5566419 -0.4603542
                                                              0.3425375
                                          ## C8.A130.02TCGA
                 1.47058187 -1.88144411
## C8.A138.O3TCGA 1.09011092 0.05514054
                                         -1.0200584 1.5582247 1.1632537
##
                 NP_001161771 NP_001161773
                                          NP_001790 NP_004426
                                                                 NP_009165
## AO.A12D.O1TCGA
                   1.2599525
                                1.2599525
                                         0.06748568 -2.0736209 -1.31547106
                   0.2702678
                                0.2702678 -0.01308386 -0.8024206
## C8.A131.O1TCGA
                                                                0.49694913
## AO.A12B.O1TCGA
                  -0.8122591
                               -0.8122591 0.04689779 -1.3194388
                                                                0.04689779
## BH.A18Q.02TCGA
                   0.3425375
                                0.3425375 -0.28973972 -1.0524868
                                                                0.28901134
## C8.A130.02TCGA
                  -0.8187666
                               -0.8187666 0.51286016 -1.4813001 -0.01519873
                                ## C8.A138.O3TCGA
                   0.1099976
                             NP_003767 NP_940919 NP_005430 NP_001003701
##
                  NP_149103
## AO.A12D.O1TCGA
                 0.3379813 -1.12498115
                                       0.4027479 -0.8697247
                                                             -0.6639956
                                       1.2781902 -0.6809842
## C8.A131.O1TCGA 0.2176453 -0.61217024
                                                             -0.6243139
## AO.A12B.O1TCGA -0.1277051 1.60169464 -0.8732315
                                                 1.1416300
                                                              1.4076915
## BH.A18Q.02TCGA -1.7416354 -1.05583216
                                       1.6639633
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  C8.A130.02TCGA 1.7985688 0.07663760 -0.5498174 2.1232758
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  C8.A138.O3TCGA -0.3800590 -0.07651647 0.5342258 -2.0038288
                                                             -0.5336589
##
                 NP_001137434 NP_981951 NP_113676
                                                    NP 060113 NP 001078956
## AO.A12D.O1TCGA
                   6.0679178 -0.6182780
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                                                                       NA
## C8.A131.O1TCGA
                   2.1080057 -0.4947817
                                               NΑ
                                                                       NA
                                                  1.16484949
## AO.A12B.O1TCGA
                   2.6105111
                                                                       NA
                             1.6044661
                                               NA -0.64874215
                          NA 0.3860274 0.04814385
## BH.A18Q.02TCGA
                                                   0.81423630
                                                               -1.4338603
                          NA -1.2057911 0.72277177
## C8.A130.02TCGA
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                                                                0.6309354
## C8.A138.O3TCGA
                   0.2965117
##
                  NP 061881
                              NP 067017 NP 005169 NP 006734 NP 003575
## AO.A12D.01TCGA 1.23328392 1.21042513 -0.2601570 -1.2621339 -0.9497304
## C8.A131.O1TCGA 0.20954959 1.00293425
                                        1.2093762 -0.5757393 -0.6000266
## AO.A12B.O1TCGA -0.12770506 -0.08336148 -0.7152575 -2.6303460 -0.3411086
## BH.A18Q.02TCGA 0.07490691 -0.93874380 -1.1662298 -0.7547478 -0.1525791
## C8.A130.02TCGA 0.31606803 -0.61213486 0.7785295 0.6407750 0.6998127
  C8.A138.O3TCGA -1.08588688  0.94016822 -0.1972021  1.4594820  0.2745689
##
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## AO.A12D.O1TCGA -1.014497 -0.8887737
                                     -0.01252008 -0.01252008 -0.7782895
## C8.A131.O1TCGA 1.201280
                           0.3309860
                                      0.20954959
                                                   0.20954959 -1.9763061
## AO.A12B.O1TCGA -2.807720 0.4376756
                                     -3.62807657
                                                  -3.62807657 3.2119210
## BH.A18Q.O2TCGA -1.664692 -1.0692137
                                     -0.16596059
                                                 -0.13919753 -2.9560091
## C8.A130.02TCGA 1.926484 0.8211678
                                      0.43742318
                                                   0.51286016 1.4345033
  C8.A138.O3TCGA -1.367487 1.6715960 -0.17891637
                                                 -0.17891637 -1.1956011
                   NP_075561 NP_001159435 NP_000213 NP_001123500
##
                                                                 NP_006371
## AO.A12D.O1TCGA 0.37607933
                               2.9248343 -0.1230042
                                                   -1.4792924 -1.57072753
                               0.7195826 0.4240873
## C8.A131.O1TCGA 1.14865796
                                                    -0.2519088 0.32289025
## AO.A12B.O1TCGA -1.06169176
                              -5.7205393 -1.0700062
                                                    -0.7263434 -0.76514405
```

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## BH.A18Q.02TCGA -1.55763944
                             -9.8842949 4.8320399
                                                   -0.1626152 -1.43386031
## C8.A130.02TCGA -0.05455715
                             -4.1347140 -0.5596570
                                                     1.3131482 -0.05127728
## C8.A138.O3TCGA 1.00965386
                              6.0345631 -1.8538861
                                                     0.3111403 0.42816873
##
                   NP_065811
                                                                 NP 005679
                              NP_055867
                                          NP_004208
                                                    NP_003591
## AO.A12D.O1TCGA
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                              0.05224649 -0.09252584
                                                     0.1779698
                                                                       NΑ
                  0.18931018
## C8.A131.O1TCGA
                             -0.04141903 1.65059520
                                                     1.2862859
                                                                       ΝA
## AO.A12B.O1TCGA
                  0.77302395
                              1.74026833 -0.88708891 -1.2058084
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## BH.A18Q.O2TCGA -12.24613449 -12.24613449 0.02472618 -2.0226475 -2.748595384
## C8.A130.02TCGA
                 -0.89748345
                            -0.89748345 1.82152784 -0.4448615
                                                               0.001200618
## C8.A138.O3TCGA
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                 NP_076971 NP_060816 NP_004336 NP_958928
                                                          NP_001169
0.40274792
## C8.A131.O1TCGA -0.7052715
                           1.3267647 9.001547 -2.0936947
                                                          0.69934318
## AO.A12B.O1TCGA 0.7231374 0.8672541 -1.399812 -0.7734585
                                                         0.05798369
## BH.A18Q.02TCGA 0.3458828 -0.1759967 -9.134929 0.9781600 -0.43024576
## C8.A130.O2TCGA 0.1094363 -0.8614049 -8.647814 -1.8486454 -1.12051453
## C8.A138.O3TCGA -1.6344578
                                  NA -8.765879 3.1234803 -0.11674500
##
                 NP 783859
                           NP 620132 NP 004169 NP 000977
                                                           NP 115728
## AO.A12D.O1TCGA -1.2468947
                                     0.9437393 -0.7325719 0.44084590
                           1.1647075
## C8.A131.O1TCGA -1.8305824 -1.3084058
                                      1.9218032 2.7961455
                                                          0.08001740
## AD.A12B.O1TCGA 2.6825694 0.7203659 0.5790208 -2.7661482 -0.44919603
## BH.A18Q.02TCGA 0.3492282 -0.7246394 -0.8751815 -1.9992298 0.38602742
## C8.A130.02TCGA 0.1619142 2.1363953 0.9490827
                                               1.2442709 0.05039865
## C8.A138.O3TCGA -1.1041726 -0.9505727 0.9474825
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                 NP 000156 NP 660286 NP 056287 NP 036274 NP 000303
##
## AO.A12D.O1TCGA -0.3477823
                           1.1723271
                                     0.3036932 -0.2792060 -1.5364393
## C8.A131.O1TCGA 0.1285920 0.2864593 0.6912474 1.3672435 -1.6727150
## AO.A12B.O1TCGA -2.4723720 -0.2136208 -1.1753222 -1.0367485 -2.1397951
## BH.A18Q.02TCGA -2.7720131 -0.8183101 1.7910878 1.5201119 -0.8417277
## C8.A130.02TCGA -0.9893198 -1.6518533 0.3882251 -0.5891758 1.6017766
## C8.A138.O3TCGA -0.2630306 0.4208545 -2.2305714 -0.3325162 -0.1167450
##
                  NP_054884 NP_078812 NP_001004127 NP_001245235 NP_001231191
## AO.A12D.O1TCGA 0.04462689
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                                                   -0.8811541
## C8.A131.01TCGA -1.53103921 1.2417592 0.003107659
                                                   -0.4462071
                                                                -1.1910172
5.4789866
                                                                 0.4349041
## BH.A18Q.02TCGA 1.53014802 -0.4335911 -0.731330122
                                                   -7.2414432
                                                                 0.4328628
## C8.A130.O2TCGA 0.42430370 0.1914330 -1.523938405
                                                     2.0314394
                                                                -0.1037552
## C8.A138.O3TCGA 0.04782626 1.2875964 2.984509009
                                                     0.7280541
                                                                 0.6914828
                 NP 536316
                            NP 003454 NP 938408 NP 619729 NP 002436
##
## AO.A12D.01TCGA -0.5497016 0.19701882
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                                                 1.0885116
                                                           1.5266384
## C8.A131.O1TCGA -1.4986562 -0.45430289 0.1771665
                                                1.8772765
## AO.A12B.O1TCGA 0.3018734
                           0.40718940 -1.4912702 -0.4020810 -0.9813190
## BH.A18Q.O2TCGA -0.3064666
                           0.25555753 -1.9791576 -0.3967919 -0.5306072
C8.A138.O3TCGA -0.4239447 -1.21388675
                                      2.3591382 0.4098830
                                                           0.4098830
##
                  NP_077292 NP_001853
                                      NP_008833
                                                 NP_038463
                                                           NP_703149
## AO.A12D.O1TCGA 0.07891507
                            0.6884828
                                      0.8142061
                                                 0.7646787
                                                           0.7646787
## C8.A131.O1TCGA -0.25595672 0.4159915 2.5249375
                                                 1.2053283
                                                           1.2053283
## AO.A12B.01TCGA 0.37393171 -0.8510597 -1.4746414 -3.3370718 -3.3370718
## BH.A18Q.02TCGA -1.67807319
                            1.5937103 -0.5406434
                                                 0.5800596
                                                           2.1490437
## C8.A130.O2TCGA 1.25739039 0.4275836 0.9786015 0.6801335
                                                          1.1130762
  C8.A138.O3TCGA 2.90770909 1.0754824
                                      1.1486251 1.0864538 1.0864538
##
                 NP 006483 NP 116142
                                       NP_057391 NP_001073930 NP_008913
## AO.A12D.O1TCGA 0.7646787 0.7646787 1.25614271
                                                 0.9551686 0.7646787
```

```
## C8.A131.O1TCGA 1.2053283 1.2053283 1.27414227
                                                   1.0474609 1.2053283
## AO.A12B.01TCGA -3.3370718 -3.3370718 -1.63815833
                                                  -3.9246243 -3.3370718
## BH.A18Q.02TCGA 1.1655014 2.1490437 -0.00872764
                                                 -11.5603312 2.1490437
## C8.A130.02TCGA 0.3980648
                           1.1130762 0.97860154
                                                    1.1130762 1.1130762
## C8.A138.O3TCGA
                 1.0169681
                            1.0864538 0.44645443
                                                    1.5326248 1.0864538
                 NP 003915 NP 620689 NP 005160 NP 068745 NP 003021
##
## AO.A12D.O1TCGA 0.9551686
                           0.7646787 0.7646787
                                                 0.7646787 0.7646787
## C8.A131.O1TCGA 1.0474609
                           1.2053283 1.2053283
                                                1.2053283 1.2053283
## AO.A12B.O1TCGA -2.7495193 -3.3370718 -3.3370718 -3.3370718 -3.3370718
## BH.A18Q.02TCGA -1.2398282 -1.2398282 -1.2398282 2.1490437 2.1490437
## C8.A130.02TCGA 0.5489387
                           0.5489387 0.5489387
                                                1.1130762 1.1130762
                           1.3790249 1.3790249 1.0864538 1.0864538
## C8.A138.O3TCGA
                 1.3790249
                 NP_835471 NP_001186976
                                        NP_689822 NP_877437 NP_001028204
## AO.A12D.O1TCGA -2.2488716
                            -2.2488716 -0.07347685
                                                  0.7418200
                                                                1.5723560
## C8.A131.O1TCGA -5.4129570
                            -5.7205960 0.68719954 1.6505952
                                                                0.5333801
## AO.A12B.O1TCGA -3.6363910
                             -3.7167637 -0.20253486 -0.3438800
                                                               -0.6321133
## BH.A18Q.02TCGA 0.9614331
                            0.4529351 0.20203142 0.3124290
                                                                0.7406379
## C8.A130.02TCGA 1.8313674
                             1.8904051
                                       1.07371774 0.0241597
                                                                0.2143921
## C8.A138.O3TCGA -3.1704562
                             -3.3752560
                                       1.10839662 -0.6909159
                                                                0.6878256
                  NP 055683 NP 004251
                                        NP 001275 NP 115997 NP 001010904
## AO.A12D.01TCGA -0.09252584 -0.9078227 0.62752601 1.1037508
## C8.A131.O1TCGA -1.13839476
                             0.4281352 -0.88337826  0.6831517
## AO.A12B.O1TCGA 0.29078749
                            0.4792477
                                       2.65208324 -2.8686927
                                                                     NA
## BH.A18Q.O2TCGA 0.27897520
                             0.4663166
                                       0.34588284 -4.0967843
                                                               -1.293354
## C8.A130.O2TCGA 0.81788797 0.7293315 0.05039865 -0.4448615
                                                               -1.094276
## C8.A138.O3TCGA 0.20508324 0.2782260
                                       0.62565425 -2.1501144
                                                                2.644395
                  NP_690610
                            NP_690611
                                       NP_002957
                                                   NP_005783
                                                              NP_060699
## AO.A12D.O1TCGA 1.11898997
                            4.6392435 -1.12498115 -1.85646240 -0.21824919
## C8.A131.01TCGA 1.46844055 4.0833716 0.00715554 -0.45835077 -0.22762155
## AO.A12B.01TCGA -2.03447909 -1.8155327 -1.27509525 -0.65705657 -0.26350728
## BH.A18Q.O2TCGA 3.48719640 -5.8899090 -0.55067950 0.45962582 0.15185069
## C8.A130.O2TCGA -0.02175846 0.1815934 -0.12343440 0.03727918 -0.19887138
## C8.A138.O3TCGA 0.16485471 0.5817686 2.45788097 -0.13503070 -0.02897366
                 NP_036223 NP_004321 NP_056040 NP_001129277 NP_005005
-1.2735633 -4.001379
## C8.A131.O1TCGA 0.4888534 1.9865693 2.1606282
                                                 -1.8386782 -1.227448
## AO.A12B.O1TCGA -0.6127130 -1.3388391 -0.6043986
                                                -2.7273476 -5.825855
## BH.A18Q.02TCGA 0.7004933 1.4063689 0.3057383
                                                 -7.4856561 -5.491809
## C8.A130.02TCGA -1.0122789 -0.4645408 0.2963888
                                                  -7.7491295 -2.386544
## C8.A138.O3TCGA -0.6616587 0.1648547 0.7975398
                                                  -0.3032591 3.971937
                 NP 000679 NP 001106674
                                        NP 006361 NP 612508 NP 001072987
## AO.A12D.01TCGA 0.2313070 0.029387696 2.02572193 0.4751341
                                                              -0.6144682
## C8.A131.O1TCGA 0.5009970 -0.668840575 0.88554570 0.8045881
                                                               0.1285920
-0.4408816
## BH.A18Q.O2TCGA -0.1358522 0.007999269 -1.56767559 -1.0625229
                                                               -0.5975148
## C8.A130.02TCGA 0.3357472 0.171753799 0.02087983 0.4800615
                                                               -0.7400497
## C8.A138.O3TCGA 0.5671400 -1.056629769 2.91136623 0.5707972
                                                               -0.7494301
                                       NP 004575 XP 003960338 NP 060755
##
                 NP 006003 NP 065120
## AO.A12D.01TCGA -1.1554595 0.9970764 -1.33071025
                                                 -0.59541920 -0.5497016
## C8.A131.O1TCGA -0.2519088 -0.4219198 -0.36929739
                                                  0.93412027 -0.3450101
## AO.A12B.01TCGA 2.2031045 -0.4907681 0.06629811
                                                  0.80905311 -0.2884505
## BH.A18Q.02TCGA -0.1224706 -1.0892860 1.70076249
                                                  0.07825229 0.3726459
## C8.A130.02TCGA -0.1955915 -0.2841480 1.54601885
                                                  0.35870632 0.5259796
## C8.A138.O3TCGA -1.3784580 0.9584539 0.29651172 -0.85182998 -1.6966291
```

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NP 005605 NP 612433 NP 057475 NP 001243469 NP 000337
## AO.A12D.O1TCGA 0.6008574
                                  NA -2.3517362
                                                 -2.2260128 -3.6432577
                                                 -0.2154779 0.4929013
## C8.A131.O1TCGA 0.1488314
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## AO.A12B.O1TCGA -0.6071700
                                  NA -1.6159865
                                                 -2.1009945 -1.1614648
## BH.A18Q.02TCGA -1.2331374
                                  NA -1.0926314
                                                 -0.9454346 -0.4971534
## C8.A130.02TCGA 0.9294035
                                  NA 0.7916490
                                                  0.7555705 0.7555705
## C8.A138.O3TCGA -0.8957156
                                  NA -0.4129733
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                  NP_008872 NP_055402 NP_060889
                                                NP 065154
                                                            NP 055763
## AO.A12D.O1TCGA -1.5897765
                                  NA
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## C8.A131.O1TCGA -2.5794404
                                  NA
                                            NA
                                               0.06787375
                                                          1.34295625
## AO.A12B.O1TCGA -0.6016271
                                  NA
                                           NA 1.74303980 0.92822648
## BH.A18Q.02TCGA 5.3639556 5.2569034
                                            NA -1.36360729 -0.06559913
## C8.A130.02TCGA -0.8646848 0.3652661
                                           NA -0.49077971 0.01432009
## C8.A138.O3TCGA -3.9750268 5.2811924 1.155939 1.20713937 -1.03102980
                  NP_079103 NP_003146 NP_000230 NP_036371 NP_057056
## C8.A131.O1TCGA -0.9926710 -2.5268179 5.6620452 -0.9683838 -0.8995698
## AO.A12B.01TCGA 1.0557143 1.1388585 -2.1536525 3.0955191 0.6011926
## BH.A18Q.02TCGA -1.0491414 -5.3211940 -0.7748201 -0.6610771 -0.7079124
## C8.A130.02TCGA 1.7788895 -1.3697846 -3.2294702 -2.7768483 0.8441269
  C8.A138.O3TCGA -0.8591443 -1.3382295 -4.0042839 0.6695399 0.1355976
                   NP 689918
                               NP 079416
                                          NP 112236 NP 659480 NP 060091
## AD.A12D.O1TCGA -1.04878519 0.177969824 -0.09633564 -1.5478687 -0.9344912
## C8.A131.01TCGA -0.01713175 -0.579787194 0.44432668 -1.7455769 -0.0899936
## AO.A12B.01TCGA 0.21595770 -0.562826461 -0.65428510 3.3782094 0.3573029
## BH.A18Q.02TCGA 1.99850148 0.483043493 -0.48042648 -0.2094506 -0.5707518
## C8.A130.O2TCGA 1.19507289 0.001200618 -0.71053093 -0.5334180 -0.4973395
  C8.A138.O3TCGA
                 2.20553837 1.071825225 1.04622525 -1.9343432 -1.5796007
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                                                   NP_057142 NP_001070818
## AO.A12D.01TCGA 4.3001714 0.2503560 -0.9002031 -0.347782322
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## C8.A131.O1TCGA 1.3753393 1.7882231 -0.2033343 -0.466446528
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## AO.A12B.01TCGA -0.6071700 -0.1083047 1.0806575 0.986427435
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## BH.A18Q.O2TCGA 2.3263489 -1.1060129 -0.4971534 -0.323193535
                                                              -0.34661121
## C8.A130.O2TCGA 0.4144641 -0.8810841 -0.2611889 -0.002079251
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  C8.A138.O3TCGA -1.6161721 -0.1862306 -1.1261154 0.420854454
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                                         NP 005002 NP 964011 NP 005613
                 NP_001034565 NP_064517
## AO.A12D.01TCGA -0.38207051 3.7325115 -0.23729818
                  0.01929918 -0.6566969 -1.40555490
## C8.A131.O1TCGA
                                                          NΑ
                                                                    NΑ
                  1.17488766 -1.9263916 0.05521221
## AO.A12B.O1TCGA
                                                          NΑ
                                                                    NΑ
## BH.A18Q.02TCGA
                 -0.50384416 -0.5607156 -0.61424176 1.316044
                                                                    NΑ
## C8.A130.02TCGA
                 -0.78268804 -1.6944916 0.53581924 -2.291428
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  C8.A138.O3TCGA
                 -1.55400070 1.1925108 -0.67994444
                                                          NA
                                                                    NA
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## AO.A12D.O1TCGA -0.7554307
                            -0.81257770
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                                                    0.08653467
                                                               -0.97258922
## C8.A131.O1TCGA 0.5617152
                            -0.01308386
                                         0.2338369
                                                   -0.33691434
                                                               -1.24768755
## AO.A12B.O1TCGA -3.6003618
                            -0.45751045
                                         1.2802037
                                                    1.23031714
                                                                 2.63268292
                            -0.28304895
## BH.A18Q.O2TCGA 1.4230958
                                         0.6235495
                                                    0.58675033
                                                                 0.04145309
## C8.A130.02TCGA
                 0.7785295
                             2.31350817
                                         0.3882251
                                                   -0.01191886
                                                               -0.63181407
  C8.A138.O3TCGA -1.7514862 -0.67628730 -1.6746863
                                                   -1.48817219
                                                               -1.69662912
                 NP_001010891 NP_001036013 NP_005093
                                                     NP_077288 NP_000272
## AO.A12D.O1TCGA
                  -1.1973673
                             -0.63351718 -0.6335172 2.36479397 -1.1706987
## C8.A131.O1TCGA
                  -0.5474041
                             -0.68098422 -0.6809842 0.99888637 -1.0655329
## AO.A12B.O1TCGA
                   2.7712566
                             -0.63765626 -0.6376563 -0.58499825 1.2414030
                               ## BH.A18Q.02TCGA
                   -0.2228321
```

```
## C8.A130.02TCGA
                  -0.5104589 -0.33334601 -0.4186226 -1.50425919 1.0769976
## C8.A138.O3TCGA
                  -2.0623430
                              0.08074051 -0.0326308 2.03730996 0.2562832
                 NP 001758 NP 001121077 NP 001153865 NP 056166 NP 004580
                 1.9990533
                           -1.3878572
## AO.A12D.O1TCGA
                                       -0.4354077
                                                  1.6790303
                                                             0.7837277
## C8.A131.O1TCGA 0.2540763
                             1.3510520
                                         0.2095496 1.0919876
                                                             0.2945551
## AO.A12B.O1TCGA -2.9407510
                             2.0589878
                                         1.3439476 -1.7989038
                                                            1.6876103
## BH.A18Q.02TCGA -2.2267158
                             2.4902726
                                        -1.3636073 -0.3733743 -0.5473341
## C8.A130.02TCGA -2.0355979
                            -1.1500334
                                         1.2705099 -0.3530252 2.0937570
## C8.A138.O3TCGA 1.9385672
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                                         0.0331977 2.7943378 -0.2520592
##
                  NP_872584 NP_006085 NP_036576 NP_005862 NP_001004304
## AO.A12D.O1TCGA
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                                 NA -0.6487564 -0.2525374
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                        NA
## C8.A131.O1TCGA
                                 NA -0.3733453 -0.2478610
                                                          -0.3531059
## AO.A12B.O1TCGA
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                                 NA -1.7185311 0.3988750
                                                           0.4709333
## BH.A18Q.02TCGA -0.51388030 0.4228266 -0.5071895 -0.8015831
                                                          -0.2596313
0.4931809
## C8.A138.O3TCGA
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                                                           0.7646255
                 NP_003434 NP_057484 NP_001186814 NP_060123
##
                                                           NP_001735
## AO.A12D.O1TCGA -0.1306238 -0.2296786
                                     0.9437393 0.8713531
                                                          0.09415427
## C8.A131.O1TCGA -2.1422692 -0.1952385
                                      -0.1102330 0.6588644
                                                          1.60606851
## AO.A12B.O1TCGA -3.2151270 -0.2385640
                                      -1.0228911 0.2824731 -1.70190222
## BH.A18Q.02TCGA
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                                    -10.5901705 0.3391921
                                                         1.66730867
## C8.A130.02TCGA
                       NA -0.3366259
                                      0.9294035 0.3193479 -0.55637709
## C8.A138.O3TCGA
                                       0.9365111 0.5854257 -0.59583023
                       NA -0.8262300
                 NP 002382 NP_775930
                                       NP 001910 NP 001454
                                                            NP 004223
## AO.A12D.O1TCGA 1.0313646 -2.0583817 -3.456577625
                                                       NA
                                                         0.143681641
## C8.A131.O1TCGA -1.0210062 -1.9155879 -2.154412876
                                                       NA
                                                          0.233836872
## AO.A12B.O1TCGA 0.4626189 1.1083723 2.984660100
                                                       NA
                                                          0.437675608
## BH.A18Q.O2TCGA -1.1193944 0.8409994 0.620204149 0.7941640 -1.189647437
## C8.A130.O2TCGA 2.6972528 0.1028766 -0.002079251 0.9097243 3.008840369
## C8.A138.O3TCGA 1.6496532 -0.1789164 1.313196410 0.1721690 0.007597728
                NP_001129491
                              NP_958437 NP_001819 NP_689490
                                                             NP 079230
## AO.A12D.O1TCGA
                 -1.04497539 -0.10776504 -4.2261569 1.4542522
                                                            2.68862682
## C8.A131.O1TCGA
                  2.21729853 1.46844055 4.4152979 -0.2721482
                                                            0.06382587
## AO.A12B.O1TCGA
                 ## BH.A18Q.02TCGA
                 -0.09236219 -1.90555916 -5.8999451 -0.9688522 -0.77816547
                 ## C8.A130.02TCGA
## C8.A138.O3TCGA
                  0.55251146  0.84142546  0.5525115  0.2672546
##
                 NP_078865 NP_001034796 NP_003964 NP_073607
                                                             NP_060886
## AO.A12D.O1TCGA 0.1970188
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                            0.1043047 1.7963189 0.3957521 -0.211430030
## C8.A131.O1TCGA
                 0.2945551
## AO.A12B.O1TCGA 0.5956496
                            -0.3466515 -2.7522908 -0.9120322 -1.053377337
## BH.A18Q.O2TCGA -0.3064666
                            -0.6108964 -3.1968766 0.3759913 -0.443627282
## C8.A130.02TCGA -0.5662167
                            -0.2841480 1.5165000 0.2111122 0.660454260
## C8.A138.O3TCGA -0.5409731
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                 -0.01684611
                                                              -3.5005888
                                                 -7.17119021
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                              -3.6019986
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## AO.A12D.O1TCGA -1.4792924 -0.8240071 -0.1153846 -0.5954192
                                                              NA 0.2770246
## C8.A131.O1TCGA 0.5293322 -0.1952385 0.3188424 0.4362309
                                                               NA 3.8850255
```

```
## AO.A12B.01TCGA 0.4737048 -0.1471054 -0.2163922 1.0612572
                                                                 NA -1.0145767
NA -3.3240011
## C8.A130.O2TCGA -0.1955915 0.8408470 0.4308634 -0.1168747
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## C8.A138.O3TCGA -1.0529726 -0.2557163 0.0514834 0.6512542
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## AO.A12D.01TCGA -1.0297362 -0.42778808 -0.70971315 -0.2258688
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## C8.A131.O1TCGA 0.4726618 -2.04512009 -2.27180142 -0.9440965
                                                               -0.9440965
## AO.A12B.01TCGA -2.1647384 2.11441730 0.56793488 1.0418569
                                                               1.0418569
## BH.A18Q.02TCGA -0.4335911 0.76740095 0.31242902 -0.6209325
                                                               -0.3800650
## C8.A130.O2TCGA 1.6050565 -0.05455715 0.68997308 0.4636621
                                                                0.7260516
## C8.A138.O3TCGA -2.8303423 -0.41297328
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                  NP_003661
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## AO.A12D.O1TCGA 0.3265520 0.76086894 -5.5329176 0.6465750 -1.22784570
## C8.A131.O1TCGA -0.5231169 -0.05761056 0.9179287 -0.8509952 0.03549071
## AO.A12B.01TCGA 0.8339964 0.77302395 -4.0354832 0.4820192 0.69542268
## BH.A18Q.O2TCGA -1.9758122 -2.37056723 -1.1996836 0.9145978 -0.73467550
## C8.A130.O2TCGA 0.4997407 0.38166541 -0.5137388 0.7883691 0.23735118
## C8.A138.O3TCGA -1.3016581 3.07593749
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                  NP_073614 NP_054740 NP_003607
                                                  NP 055215 NP 002105
## AO.A12D.01TCGA -0.7973385 -0.4773155 -1.67359208 0.28083438
## C8.A131.O1TCGA -0.3773931 -0.6283618 -0.79837276 -0.66074481 -1.7293854
## AO.A12B.01TCGA 0.7730239 0.2353580 -1.13375008 -0.04456085
## BH.A18Q.02TCGA -1.8553784 -4.2004911 -0.06225375 -1.97915756 1.4766219
## C8.A130.02TCGA -1.1205145 -2.1667927 2.51030030 0.01104023
                                                              0.1553545
## C8.A138.O3TCGA 0.7426827
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## AO.A12D.O1TCGA 0.5665692
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## C8.A131.O1TCGA 1.8651329
                                   NA
                                      1.3389084 -0.2397652 -0.150711816
## AO.A12B.O1TCGA -1.2307517
                                   NA 0.2519869 1.0612572 -1.724074015
## BH.A18Q.02TCGA -1.5944386 -1.0692137 -0.8818723 0.1819591 1.352842777
## C8.A130.O2TCGA -1.1205145 -0.1824720 1.0769976 0.0241597 0.099596684
## C8.A138.O3TCGA 2.2091955 -0.1752592 -1.3711437 0.3367403 -0.562915982
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## C8.A131.01TCGA -6.582795 -0.36120162 3.50857254 0.05977799 -0.4826381
## AD.A12B.O1TCGA -5.656795 0.44599003 -0.56005499 -1.26400935 -2.7800056
## BH.A18Q.02TCGA -1.751672 0.67038488 -2.20998890 0.97481463 7.8462290
## C8.A130.O2TCGA -5.833686 -0.12671427 1.52633964 0.69653282 0.1258356
## C8.A138.O3TCGA -6.845881 0.52691149 0.00028345 1.55456759 -8.5427936
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## AO.A12D.01TCGA -1.197367313 -0.4468371 -0.50779385 0.1093935 -0.6563760
## C8.A131.O1TCGA 0.201453825 0.3066987 -0.06165844 1.3510520 -0.6445533
## AO.A12B.O1TCGA -0.970233121 -1.2917241 -0.80117322 -2.2894547 3.4197815
## BH.A18Q.02TCGA 0.837653970 0.7874732 0.41948124 -1.5676756 -1.8018523
## C8.A130.O2TCGA 0.001200618 -0.2513493 0.93924311 -1.3337060 -2.3996634
## C8.A138.O3TCGA 0.307483139 -0.8920585 -1.82097186 2.9881661 -1.4406294
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## AO.A12D.O1TCGA -0.2106296 -0.6792348
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## C8.A131.O1TCGA 0.3593212 0.3593212
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## AO.A12B.O1TCGA -1.8737336 -2.7245761
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                                                                  NA -2.4668290
## BH.A18Q.O2TCGA 0.4696620 2.0720999 0.610168 2.0720999 0.6101680 1.8446139
## C8.A130.02TCGA 1.4181040 2.5332594 2.5332594 2.5332594 2.5332594 -1.6092150
## C8.A138.O3TCGA 0.4574258 -1.2724010 -1.272401 -1.2724010 -0.7640586 -0.1021164
##
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## AO.A12D.O1TCGA 2.86387753
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                               0.1528793 -1.72128962 0.23383687
## C8.A131.O1TCGA 1.68702613
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## AO.A12B.O1TCGA -2.46682901
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## BH.A18Q.02TCGA 1.72083478
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## AO.A12D.O1TCGA -0.9230618
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## C8.A131.O1TCGA 0.1974059
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## AO.A12B.O1TCGA -0.4658249
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## BH.A18Q.02TCGA 0.4863889
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## C8.A130.02TCGA
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                  NP 919255
                               NP_057163
## AO.A12D.01TCGA -1.4107160 -0.157292414
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## C8.A131.O1TCGA
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                                          0.68315165
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                                                           NA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                  NP_004605 NP_001258864
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## C8.A130.02TCGA -0.3071071
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## AO.A12B.O1TCGA -2.32548385
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                   NP 112181
## AO.A12D.01TCGA 0.42179691 1.03517441 -0.93449124 1.5723560
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## C8.A131.O1TCGA 0.07596952 1.04341306 -2.44586030 -1.3205494
-0.29399349
## BH.A18Q.O2TCGA -1.20637435 -0.87518154 -0.82165543 3.6979555
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## C8.A130.02TCGA 0.05367852 1.07371774 1.00812036 -1.1369139
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## AO.A12D.O1TCGA -0.02775928 -3.468007 -1.0792636 1.5418776 6.2317391
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## AO.A12B.O1TCGA -0.59331267 4.154222 0.3323596 -0.5600550 -0.7984017
## BH.A18Q.02TCGA 2.17246133 1.894795 -1.0290691 -0.2997759 -2.5545632
## C8.A130.02TCGA -0.62853420 -1.228750 0.1323954
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## AO.A12B.01TCGA -2.3698274 -3.3731010 -0.1831345 3.02068926 0.9559412
## BH.A18Q.02TCGA -0.9320530 3.5139595 -0.5239164 1.56360183 -2.2735512
## C8.A130.O2TCGA 2.4840614 -0.2415097 -2.2192706 -0.85812502 0.3521466
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## C8.A131.O1TCGA
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## AO.A12B.01TCGA -0.70417163 1.654352639 -0.47968225 -1.1282071
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## BH.A18Q.02TCGA
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## C8.A130.O2TCGA -0.10375519 -0.251349285 0.03727918 1.3131482 0.1586343
## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## BH.A18Q.02TCGA -0.62093252 -1.4070973 -3.12662353 -4.32761562 -1.1127037
## C8.A130.O2TCGA 1.77888954 0.3488667 -2.08807585 -0.60229525 1.8510467
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## C8.A130.02TCGA -0.06767663 -1.327146 0.94908272 0.54565885 -0.08407597
## C8.A138.O3TCGA -0.86280139 1.938567 0.01491201
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## C8.A131.O1TCGA -1.4986562 1.5979727 0.3471775 -0.8307558 -0.4138241
## AO.A12B.01TCGA 0.7979672 -0.6376563 -0.4491960 0.4986480 0.4709333
## BH.A18Q.O2TCGA -0.5841333 2.4969634 0.9212885 -0.7781655 -0.6142418
## C8.A130.02TCGA -0.7269303 0.8047685 -1.5829760 2.3627062 0.3587063
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## AO.A12B.O1TCGA -1.419211889 0.35730287
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## AO.A12B.O1TCGA 0.9032832 2.4137365 -2.37537038 -0.51848288 0.7259089
## BH.A18Q.02TCGA 0.2589029 2.6040156 1.15546525 -0.71794859 -1.8721053
## C8.A130.O2TCGA 0.2767096 -1.9142428 -1.14347362 1.92320377 1.2081924
  C8.A138.03TCGA 0.4208545 -0.7604015 0.06611196 -0.29594482 -0.8116014
##
                 NP_001035533 NP_001128573 NP_940863 NP_001658 NP_653219
## AO.A12D.O1TCGA 1.26757210 1.4085346
                                                 NA -0.7592405 1.9076182
```

```
## C8.A131.O1TCGA -0.89552191
                                0.9665033
                                                  NA -1.5674701 0.7641093
## AO.A12B.O1TCGA
                 0.86725406
                                2.0118728
                                                  NA 0.1050987
                                                                1.0584858
## BH.A18Q.02TCGA
                  1.82119624
                              2.2494051
                                                  NA 0.6636941 0.4997704
## C8.A130.02TCGA -0.12015453
                                                  NA 0.7194919 -0.7826880
                               -1.1631528
## C8.A138.O3TCGA
                 -0.07651647
                              -1.0749155 -0.6068017 -0.2849734 0.1136548
##
                   NP 036360 NP 115909 NP 056327 NP 001003787 NP 001159441
## AO.A12D.O1TCGA 0.07510527 -1.0678342 -2.5422261
                                                    -0.2525374
                                                                -0.2525374
## C8.A131.O1TCGA -0.25595672 0.3633691 0.7033911
                                                    0.3188424
                                                                 0.3188424
## AO.A12B.01TCGA 1.11945818 1.0501713 -0.7208005
                                                    0.3351311
                                                                 0.3351311
## BH.A18Q.02TCGA -0.04552684 -0.2362136 -1.4171334
                                                    0.2823206
                                                                 0.1986860
## C8.A130.02TCGA 1.32954751 0.4210238 -1.2090710
                                                    -0.9073231
                                                                -0.6482134
## C8.A138.O3TCGA -1.63445776 -0.3361734 2.0299957
                                                    -0.7201730
                                                                -0.7201730
                  NP 699166
                             NP 057709 NP 001258763
                                                    NP 004417 NP 001162580
## AO.A12D.O1TCGA -0.2525374 0.30369316
                                        0.60847702
                                                            NA
                                                                  2.7533934
## C8.A131.O1TCGA 0.3188424 0.04358647
                                                                  0.2338369
                                         0.34312966
                                                            NA
-0.08336148
                                                            NA
                                                                  0.2630728
## BH.A18Q.O2TCGA 0.1986860 0.61685877
                                       0.76740095 -0.05890837
                                                                 -0.5306072
## C8.A130.02TCGA -0.6482134 0.98844115
                                        1.02779957 1.71001230
                                                                 1.4246637
## C8.A138.O3TCGA -0.8701157 -0.94691559 -0.97982985 -0.24840201
                                                                 -0.4641732
                 NP 057510 NP 054762
                                        NP 076423 NP 055289 NP 620419
## AO.A12D.O1TCGA
                        NA 0.9246903 1.549497164 0.2541658 5.279290
                        NA 0.6143377 -1.850821806 2.7151879 -1.118155
## C8.A131.O1TCGA
                       NA -2.9684658 -2.979551681 0.7480807 -1.205808
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA -6.716218 -2.7251777 -0.858454633 -0.7614386 -4.595246
## C8.A130.02TCGA -1.432102 1.3918650 -1.012278862 -0.9893198 -5.016999
## C8.A138.O3TCGA -3.814113 1.8837101 -0.007030829 -0.7860015 -3.283828
                  NP_689498 NP_055962 NP_006692 NP_002789 NP_005481
## AO.A12D.01TCGA 0.6503848 -0.67923476 -0.2106296 -1.2545143 -0.4696959
## C8.A131.O1TCGA -0.1507118 -1.04934138 -0.4178720 -0.4178720 0.6871995
## AO.A12B.01TCGA 0.7453092 1.25803187 0.2686157 1.2081453 0.8561682
## BH.A18Q.02TCGA -0.3934466 -1.64127399 0.7306018 -3.5180332 0.4094451
## C8.A130.O2TCGA 0.2143921 0.08975708 -0.2185506 2.0052005 0.9982808
## C8.A138.O3TCGA 0.5744543 0.73536842 -0.9432585 0.3403974 -0.3325162
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                             NP_002494
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## AO.A12D.01TCGA 1.30186028 -0.01252008 0.002719109
                                                      -2.6260416 -2.6260416
## C8.A131.O1TCGA -0.02522751 0.29050720 0.974599082
                                                       1.9420426 1.9420426
## AO.A12B.O1TCGA 3.45581066 -0.39376656 1.014142174
                                                      -3.7749647 -3.7749647
## BH.A18Q.O2TCGA -1.71821777 -1.60112941 -0.346611208
                                                      2.9117907 2.9151361
## C8.A130.02TCGA -0.10703506 1.64113505 -0.028318202
                                                      -2.0913557 -2.4685406
## C8.A138.O3TCGA 0.61833997 1.31319641 0.695139891 -0.2264592 -0.2557163
                  NP 055082 NP 005202
                                       NP 057259
                                                  NP 005639 NP 060212
## AO.A12D.01TCGA -1.2545143 -0.6068486 -1.19736731 -0.93830104 0.6846730
## C8.A131.01TCGA -0.3652495 0.4807576 -0.96433588 0.04763435 3.6016738
## AO.A12B.01TCGA 1.6959247 -2.2340252 2.32227784 0.44044708 -2.4557431
## BH.A18Q.02TCGA -1.8353061 0.6034772
                                               NA -0.70791245 -1.8118885
## C8.A130.02TCGA -1.0549172 -0.1332740
                                               NA 1.60505649 0.9523626
## C8.A138.O3TCGA -0.9432585 -2.2086286
                                       0.09902621 0.45011157 -1.2358296
                                       NP_113618 NP_056525 NP_055622 NP_689529
##
                  NP_938080 NP_115649
## AD.A12D.01TCGA 2.5705231 0.7837277 -0.3401627 -1.6050157 1.160898 -0.1496728
## C8.A131.O1TCGA 1.5939249 -0.3652495
                                       1.3753393 -0.7821812 1.731553 -0.4340635
## AO.A12B.O1TCGA -0.9979479 -0.4685963 0.9642556 -0.1997634 1.058486 -0.2080778
## BH.A18Q.02TCGA -9.9445118 0.6168588
                                            NA -0.7681293 -6.518841 0.7339471
## C8.A130.02TCGA 1.9920810 0.4144641
                                             NA 0.8670860 -1.769929 0.4669420
## C8.A138.O3TCGA 1.2839393 -0.2849734
                                            NA -0.9615442 3.686680 0.2745689
```

```
NP_004278 NP_116019 NP_001092755 XP_001126659 XP_003119575
2.2733588
                                                    2.30002740
                                                                 3.9268112
## C8.A131.O1TCGA 0.5333801 0.6912474
                                        0.4200394
                                                    0.03549071
                                                                 1.1729452
## AO.A12B.O1TCGA -0.7873158 1.2247742
                                       -1.0118052
                                                  -2.33656974
                                                                -0.7485152
## BH.A18Q.02TCGA -0.7045671 -0.9822338
                                       -4.7457884
                                                   -5.11043498
                                                                -7.6161260
## C8.A130.02TCGA 0.6473348 -0.7728484
                                       0.1159960
                                                   0.23079144
                                                                -0.7236504
## C8.A138.O3TCGA -1.0749155 -1.3784580
                                       -0.5702303
                                                  -0.14965926
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                  NP 079479 NP 056303
                                       NP 072094 NP 001070867 NP 115712
## AO.A12D.O1TCGA
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                                                    0.1970188 -2.9384451
## C8.A131.O1TCGA
                        NA
                           2.1930112 2.24968157
                                                    1.3672435 1.1041313
## AO.A12B.O1TCGA
                        NA -0.7873158 -0.85660269
                                                   -0.7318864 -1.5162135
## BH.A18Q.02TCGA -0.1994144 -1.8386515 -1.83865152
                                                   1.0183046 1.0517584
## C8.A130.02TCGA -1.3566651 -1.0811561 -2.12087454
                                                   0.2996687 0.9753217
                                                   -0.4385733 -1.2102296
## C8.A138.O3TCGA 0.5159401 2.6187951 2.61879509
                 NP_116242 NP_001026847
                                        NP_776183
                                                   NP_115970 NP_059136
## AO.A12D.O1TCGA
                 0.6618142
                            0.9132609 -0.22205898 1.00850582
                                                               0.6046672
                 0.5900504
                            0.3552733 -1.53508709 -0.05761056 -0.8550431
## C8.A131.O1TCGA
## AO.A12B.O1TCGA 0.8007387
                            -0.3438800 -0.77622995 -1.27786672 1.7901549
                            -1.6814186 0.09163381 2.92517225 -1.0926314
## BH.A18Q.02TCGA 0.4328628
## C8.A130.02TCGA -0.2513493
                            -1.6748124 -2.30782706 -0.46782063 -0.3399057
## C8.A138.O3TCGA 0.8962825
                             1.6789103 -0.42760183 0.10999762 2.4944524
                            NP 056948 NP 002198
                 NP 055537
                                                 NP 660275 NP 055733
## AO.A12D.O1TCGA 0.6846730
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                                                 0.04843669 -0.1382434
                                             NΑ
## C8.A131.O1TCGA -0.3328665 -0.3328665
                                             NA
                                                 0.97055120 0.7398220
## AO.A12B.O1TCGA -0.9785475 -0.9785475
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                                                 0.10787022 -0.8205735
## BH.A18Q.02TCGA 1.6305095 1.6305095
                                             NA
                                                 0.87779855 0.6603487
## C8.A130.02TCGA -2.0585570 -2.0585570
                                                 0.53253937 -0.6547732
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## C8.A138.O3TCGA 4.2864506 2.0190243 -0.7274872 -0.55560170 -1.9526289
                  NP_787052 NP_001243750 NP_008843 NP_001243749 NP_055762
## AO.A12D.O1TCGA -0.72876214
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## C8.A131.O1TCGA 0.29455509
                               0.3471775 0.3431297
                                                    0.33908178 -0.4462071
## AO.A12B.O1TCGA -4.54266295
                              -1.1060353 -1.0533773
                                                   -1.00349081 -1.4358407
## BH.A18Q.02TCGA -4.42797708
                             1.0283407 0.9480516
                                                    0.65031259 -0.3298843
                              0.1553545 0.0241597
## C8.A130.02TCGA 0.05695839
                                                    0.02087983 -0.1365539
## C8.A138.O3TCGA -0.98714413
                             -0.1752592 -0.1752592 -1.34920090 0.3001689
                 NP 004998
                                       NP 060831 NP 057589 NP 001209
                             NP 689520
## AO.A12D.01TCGA 1.1418488 -0.03537887 0.79515713 -1.0449754 -4.7404796
## C8.A131.O1TCGA -3.6156979 0.41599151 -0.88337826 -1.2922142 -3.0044679
## AO.A12B.O1TCGA -4.4151751
                            1.30791840
                                       1.00582775
                                                   0.3406740 0.7259089
## BH.A18Q.02TCGA 0.1853045
                           0.92128852  0.08494305  0.8744532  -2.6716516
## C8.A130.02TCGA 0.7588503 -0.04799742 -1.97656031 0.9261236 -2.6850120
## C8.A138.O3TCGA -1.3053152 0.04051198 0.03685484 -0.3434876 -1.6381149
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## AO.A12D.O1TCGA -0.3287333
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## C8.A131.O1TCGA -0.3328665
                            1.2215198 2.2982561 -1.2274481
                                                           0.2095496
## AO.A12B.O1TCGA -3.1790978
                           0.8866544 -1.0644632 -1.4829558 0.1189561
## C8.A130.02TCGA 0.2143921 -0.6875718 -0.0807961 -0.1398337 -1.2451496
## C8.A138.O3TCGA 1.4082820 -0.3069162 -2.3073714 0.2891974 2.7870235
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## AO.A12D.O1TCGA 0.1208229
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                                      0.04081709 -0.2258688 0.7456298
## C8.A131.O1TCGA -0.1142809
                                  NA
                                      1.81251043 -0.3692974 -0.6526491
## AO.A12B.O1TCGA 1.1139152
                                  NA
                                     1.65435264 -1.2917241 1.7402683
## BH.A18Q.02TCGA -0.7748201 3.9053691
                                      0.07825229 -0.6175871 -0.1826875
```

```
## C8.A130.02TCGA 0.6670140 0.7949289 -0.97620030 1.0376392 0.7686899
## C8.A138.O3TCGA 0.1904547
                                  NΑ
                                               NA -0.8847442 0.2123975
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## AO.A12D.01TCGA 1.64855192 1.0046960 0.7189612
                                                    1.4923502
                                                                 0.6884828
0.2338369
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## AO.A12B.01TCGA -0.07781853 0.3074163 0.2852445
                                                    0.3462170
                                                                 1.0862005
## BH.A18Q.O2TCGA -0.57744256 -0.5038442 -1.5308764
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## C8.A130.02TCGA -0.52685827 -0.5662167 2.9498027
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                                                                -2.8227665
## C8.A138.O3TCGA -0.58120168 -0.7640586 1.1669108
                                                    2.7797092
                                                                -0.7713729
                            NP_689506 NP_003943 NP_001181927 NP_775937
##
                 NP_055104
## AO.A12D.O1TCGA
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                                   NA -0.9916382
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## C8.A131.O1TCGA
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                                   NA 0.2986030
                                                   2.9054383 -0.4097762
## AO.A12B.O1TCGA
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                                   NA -1.5993577
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                                                  -5.7025676 -0.6242779
## BH.A18Q.02TCGA -3.253748 -1.81523385 -0.8283462
## C8.A130.02TCGA -4.620135 0.10943629 1.8969648
                                                  -0.4547012 -1.0549172
## C8.A138.O3TCGA 2.944280 -0.09480217 1.8471387
                                                  -2.1025716 2.1762813
                 NP_001189477 NP_001191019
##
                                            NP_060843 NP_003717 NP_003920
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                              1.28662109 0.44084590 -0.5992290
## AO.A12D.O1TCGA
                 -0.81051641 -0.08594572 -1.09386807 -1.3772197 1.1162749
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                 -1.38595420
                               1.39937704 -1.81830413 -1.9901355 -2.4917723
## BH.A18Q.02TCGA
                 -2.19326200
                              0.31911978 -2.23675196 2.7244493 -0.5038442
                 -0.83516594
                               2.34630686 -1.31730667 -1.9404818 -1.9929597
## C8.A130.02TCGA
## C8.A138.O3TCGA
                 -0.07651647
                             -0.66165874 -0.04725936 -0.4641732 -1.1846296
                   NP 006825 NP 071732
                                        NP 004991
                                                    NP 036588 NP 001005463
## AO.A12D.01TCGA 0.79134733 2.0790591 -0.90782265 -0.35159212
## C8.A131.O1TCGA 1.62226003 0.8126838 -0.53930839 0.08811316
                                                                        NA
## AO.A12B.01TCGA -2.84652094 -0.6099415 0.54853456 0.82845342
                                                                        NA
## BH.A18Q.02TCGA -0.07563528 -1.0023061 0.03476232 -2.10962745
                                                                -0.3533020
## C8.A130.02TCGA -0.73349001 -1.0319581 -0.67773224 1.47714161
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## C8.A138.O3TCGA -0.06920219 -1.1846296 -1.38211515 -0.60680165
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                                    NA 0.87135309
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                       NA
                                    NA
                                       1.30652532
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## C8.A131.01TCGA
## AO.A12B.O1TCGA
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                                       0.07184106
                                                    1.12500113
                                    NA
                                                               1.2441745
                                                   -0.04218146
## BH.A18Q.O2TCGA 0.2522121
                            -0.9621615 -0.33992045
                                                                0.2421760
## C8.A130.02TCGA 0.3751057
                             0.3587063 1.63129544
                                                    0.59813675 0.5751777
## C8.A138.O3TCGA 0.6329685
                             ##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                2.8366243
                                            0.7560135 0.3674169
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## AO.A12B.O1TCGA
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                               -0.7263434
                                           1.2524889 -0.5711409
                                                                    0.1716141
## BH.A18Q.02TCGA
                              -3.5314147
                   0.05148923
                                           -2.6582701 3.3266181
                                                                    0.2555575
## C8.A130.02TCGA
                  0.69653282
                                0.7162120
                                           -1.3107469 -0.7958075
                                                                   -0.8548452
## C8.A138.O3TCGA
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                 -1.68565771
                                0.1502262
                                                                   -0.2264592
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## AO.A12D.O1TCGA
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                                                  0.3608401 -3.5632520
                                                  1.0312694 -0.6445533
## C8.A131.O1TCGA
                 1.95013839 -0.9076656 0.7074389
## AO.A12B.01TCGA 1.75135423 1.1859736 0.6178214 -2.2589685 -2.7051758
## BH.A18Q.02TCGA -2.20998890 0.5967865 -0.2529405 1.2491359 -2.0929005
## C8.A130.02TCGA
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                                                             3.5073804
                 0.06611196 -0.9030299 -0.5263446 -0.2959448 0.2233689
## C8.A138.O3TCGA
                   NP_996994 NP_149015 NP_055126 NP_071411 NP_000593
## AD.A12D.01TCGA -1.41833561 1.038984 -0.58018001 -2.2145834 2.0790591
## C8.A131.01TCGA -1.13029900 -1.267927 0.70339106 -2.0046413 2.7151879
```

```
## AO.A12B.01TCGA 0.99474186 1.363348 0.83122490 1.3439476 -2.7245761
## BH.A18Q.02TCGA -2.52110942 -2.959354 0.07156152 -0.1860329 -2.6114347
## C8.A130.02TCGA 0.02743957 -2.658773 0.07663760 0.6538945 0.3127882
## C8.A138.O3TCGA -0.43491611
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                                                 0.4025688 -0.7677158
                 NP 110409
                             NP 006198 NP 060565
                                                NP 002589 NP 056315
## AD.A12D.01TCGA 1.3437681 -0.01632988 -1.1935575 0.7646787 -1.0183068
## C8.A131.01TCGA 0.2783636 -2.01678492 -0.9076656 -0.4583508 -0.7012236
## AD.A12B.01TCGA -0.1360195 -1.55501411 0.2353580 0.9864274 -2.1564239
## BH.A18Q.02TCGA 1.0249954 -1.15284824 -1.1026675 0.7707463 -1.7717439
## C8.A130.O2TCGA -0.1004753 1.23443131 -0.2087110 0.3127882 1.2967488
## C8.A138.O3TCGA 0.9328539 1.32782497 2.1506813 -0.2740020 1.2217679
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                                                  NP_116184
                                                              NP_065723
## AO.A12D.01TCGA -2.359356 -1.0945028
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                                                             2.59338186
                                       0.2621720 -0.95219224 0.05573011
## C8.A131.O1TCGA -2.555153 -0.8550431
## AO.A12B.O1TCGA 1.804012 2.0201872
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                                     4.0525659 -2.54118171 -5.36468400
## BH.A18Q.02TCGA -1.738290 -1.0692137
## C8.A130.02TCGA -1.202511 -0.2316701
                                      ## C8.A138.O3TCGA 1.989767 -1.3236009
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                 NP_055452 NP_001138773 NP_001036193
                                                     NP_055131 NP_002765
## AO.A12D.O1TCGA 1.4085346
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## C8.A131.O1TCGA 0.4807576
                            -0.8550431
                                       -1.21125662 1.05960458 -1.4298422
## AO.A12B.O1TCGA 0.4792477
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                             0.4349041
                                        -0.88521769 0.03141694 -2.6749970
## BH.A18Q.02TCGA -1.1662298
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## C8.A130.02TCGA 1.5525786
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## C8.A138.O3TCGA 0.9255397
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                                         1.58016757 1.38633919
                NP_536737 NP_004641 NP_004918
                                                NP 612449 NP 003255 NP 115675
## AO.A12D.01TCGA 1.892379 -2.4012635 -1.1135518 0.91707067
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## C8.A131.O1TCGA 1.500824 -1.3448367 -1.2153045 1.90965958
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NA -0.0279320
## BH.A18Q.02TCGA -3.106551 -1.1695751 0.4094451 0.13512378
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## C8.A130.02TCGA -2.642374 0.7424510 0.1127162 -0.03159807
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## C8.A138.O3TCGA -2.076972 0.3257688 -1.6454292 1.34245352
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                                                      NP_055068 NP_001116151
## AO.A12D.O1TCGA -0.17253161
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                                          1.22947412 1.85047122
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## C8.A131.O1TCGA 1.26604651
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                                                     3.53690771
                                                                  0.55361947
## AO.A12B.O1TCGA 2.37493585 -0.60994152
                                        -2.20076752 -2.99063758
                                                                -2.39754217
## BH.A18Q.02TCGA 0.01469003 -5.16730647 -6.21775637 -2.24678810
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## C8.A130.02TCGA -1.21235086
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## C8.A138.O3TCGA 1.43022486 -0.03994508
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## AO.A12D.O1TCGA -0.1191944 0.9246903
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## C8.A131.O1TCGA -2.3203760 -0.3814410
                                       -0.5757393 0.71958258 0.9138809
## AO.A12B.O1TCGA 2.5578531 -1.0173482
                                       -0.9785475 -2.06219383 1.0030563
## BH.A18Q.O2TCGA -0.2261775 -2.0995913
                                      -2.1531174 -5.38141091 0.9815054
## C8.A130.02TCGA -0.7302101 1.4017046
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## C8.A138.O3TCGA 0.8414255
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                                        NP 073746
                           NP 036526 NP 008990
                                                 NP 055688 NP 079163
## AO.A12D.01TCGA -3.1098860 -1.0487852 -0.5687506
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## C8.A131.O1TCGA -3.5104530
                           0.1407356 -0.2761961 0.05168223
                                                                   NA
## AO.A12B.O1TCGA -2.4307999
                            0.4626189 0.9282265 -1.22798019
                                                                   NA
## BH.A18Q.02TCGA -0.3934466 0.0581800 0.1986860 0.43286276 -1.7683985
## C8.A130.O2TCGA 0.5423790 -0.1955915 0.9654821 -1.77976818 0.7555705
## C8.A138.O3TCGA -1.7112577 0.2526261 -0.1496593 0.27822603
                                                                   NΑ
                  NP 055029 NP 000228 NP 002349 NP 001220
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## AO.A12D.01TCGA -4.5880877 -7.1482720 -0.3096843 -0.1839610 -0.98401862
## C8.A131.01TCGA 1.0919876 -3.4173517 0.4321830 0.8126838 -0.02117963
## AO.A12B.01TCGA -1.6575586 -2.8409780 -1.0478344 1.0141422 0.09124137
## BH.A18Q.02TCGA -0.5908241 -1.4907318 -0.7614386 -0.3633381
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  C8.A130.02TCGA 2.0740777 -0.9794802 -0.3694246 -0.1135948 -0.38254404
  NP 997716 NP 699205 NP 079081
                                                 NP 004879
## AO.A12D.01TCGA -1.2621339 -0.7859091 -0.3020647 -0.67161517 -1.28880247
## C8.A131.O1TCGA 0.2986030 -0.2154779 -1.2679270 0.04763435
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## AO.A12B.01TCGA 1.2220027 0.9808845 1.6155520 -2.21739636
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## BH.A18Q.O2TCGA -1.0524868 1.3126982 0.2321399 2.69768629 -0.04552684
## C8.A130.02TCGA 0.6079764 -0.5170187 -0.2054311 -0.26118889 -0.95980096
  C8.A138.O3TCGA -0.8554871 -1.1078297 -1.5357150 -1.53205786 -1.46622936
                  NP_996846 XP_003960228 NP_055098 NP_071748 NP_006323
## AO.A12D.O1TCGA -1.00306761
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## C8.A131.O1TCGA 0.02739495
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                                                  0.2743157
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## AO.A12B.O1TCGA -4.13802776
                            -0.62102741 0.7286804 1.1222297
                                                             0.8644826
## BH.A18Q.02TCGA 1.31269820
                            -0.59751485 0.3793367 -0.8852177 -1.0792498
## C8.A130.02TCGA -3.02283848
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## C8.A138.O3TCGA -6.91536671
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##
                 NP_000592
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                                                   NP 660322
                                                             NP 079037
## AO.A12D.O1TCGA 2.9095951 -0.76305032
                                       0.3570303
                                                 0.24273639
                                                             0.4027479
                                       1.5534461 -0.56764355
## C8.A131.O1TCGA 2.7070921 -0.35715374
                                                             1.4360575
## AO.A12B.O1TCGA -0.9591472 0.12172759 -0.2191637
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## BH.A18Q.O2TCGA -6.8098890 -0.63096867 0.5900957
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## C8.A130.02TCGA -1.0253983 -0.08079610 -0.3497454
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  C8.A138.O3TCGA -0.2666877 -0.01434511 0.2489689
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                                                             NP_714923
  AO.A12D.O1TCGA -0.3020647 -1.5478687
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                                                             0.0217681
## C8.A131.O1TCGA 0.5171885 -2.5470573 1.5048715
                                                   0.7681572 -0.2842919
0.3323596 -0.5101685
0.1418145 0.8577263
  C8.A130.O2TCGA -0.6022953 -0.3005473 -0.5629368
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  C8.A138.O3TCGA -0.2410877 1.7191389 1.0096539
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                  NP 110382 NP 060573 NP 116139
                                                 NP 612122
                                                             NP 055050
## AO.A12D.O1TCGA 1.56473636 3.7896585
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## C8.A131.O1TCGA 1.07174822 0.8005402 -1.0898202
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## AO.A12B.O1TCGA -2.53057291 -0.2274781
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## BH.A18Q.02TCGA -0.07898066 -2.3371134 0.2053768 -3.1968766
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## C8.A130.02TCGA -1.05491716 -1.2287502 -1.0253983
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## AO.A12D.O1TCGA -0.50398405 -0.7478111
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## C8.A131.O1TCGA -0.15071182 1.4967757
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## AO.A12B.O1TCGA 0.94762680
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## BH.A18Q.O2TCGA -0.68114939
                            1.3026620
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## C8.A130.02TCGA 0.09959668 -1.2320301
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## C8.A138.O3TCGA -0.67994444 -0.5592588
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## AO.A12D.O1TCGA
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                                                 NA -1.003067607
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                                      NA
                          NA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                                   0.7774371
## C8.A130.02TCGA -0.00535912
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## C8.A138.O3TCGA
                  1.27296788
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##
                 NP_112573 NP_001128323 NP_067547 NP_061980 NP_003872
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                        NΑ
                                     NΑ
                                         1.5767514 2.3333637 -1.0589203
## BH.A18Q.02TCGA 0.5733688
                             1.00157768 -0.8919085 0.3157744 -1.5609848
## C8.A130.02TCGA 0.4505427
                             0.01759996 1.9396031 0.4374232 -1.8912837
## C8.A138.O3TCGA 0.2709117 -0.73480152 -2.0989144 -1.3455438 -1.7039434
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## AO.A12D.O1TCGA
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                                           0.6922926 -1.6088255 -0.8925835
## C8.A131.O1TCGA 0.73982199
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                                           1.3834351 -1.8224866 0.7317262
## AO.A12B.O1TCGA -0.05564674
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## BH.A18Q.02TCGA 1.23909979
                                -1.146157
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## C8.A130.02TCGA -0.71709066
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## C8.A138.O3TCGA 0.68416847
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## AO.A12D.O1TCGA -0.04299847
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## C8.A131.O1TCGA 0.28241144
                              -2.53086580
                                                 NA
                                                       3.3264179 -1.0857723
## AO.A12B.O1TCGA -0.61825594
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                                                 NA
                                                      -1.3360677 1.2885181
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## BH.A18Q.02TCGA -1.61451093
                             -3.08647895 -1.480696
## C8.A130.02TCGA -0.19231165
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## C8.A138.O3TCGA -0.38005902 -0.08383075
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                                                      -0.1862306 0.6585685
                 NP_004195 NP_116250 NP_077027
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## AO.A12D.O1TCGA 0.155111 0.2313070 0.8789727
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## C8.A131.O1TCGA 2.448028 0.9745991 -1.7779599
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## AO.A12B.01TCGA -2.397542 1.2608033 0.8506252 0.09124137
                                                             -2.05942235
## BH.A18Q.O2TCGA -1.290009 0.6971479 0.4428989
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## C8.A130.02TCGA -1.031958 0.3423070 0.6899731 -0.41862260
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## AO.A12D.O1TCGA -0.6030388 0.76848854
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## AO.A12B.O1TCGA -1.1559219 -0.06396116
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## BH.A18Q.02TCGA -0.8718362 0.78078248
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## C8.A130.02TCGA -0.4973395 0.99500088
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## C8.A138.O3TCGA -0.8847442 -0.44954467
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##
                 XP 003960107 XP 003846583 XP 003960247 NP 899228 NP 060410
## AO.A12D.O1TCGA
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                                2.30002740
                                             1.7476067 1.7476067 1.7476067
                    0.5414758
                                0.54147582
                                             -0.8145643 -0.8145643 0.2297890
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
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                              -3.75556437
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## BH.A18Q.02TCGA
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                              -4.66549919
                                             -4.4681217 -4.4681217 -4.4681217
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -1.9250388
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                                                     0.05605628 -1.620255
## C8.A131.O1TCGA -1.3205494
                             0.5414758
                                          0.2864593
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## AO.A12B.O1TCGA -1.4358407 1.5739799
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## BH.A18Q.O2TCGA -1.5342218 -0.3834104
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                                                      0.99823230 -5.013419
## C8.A130.02TCGA 0.7883691 -0.2087110
                                                 NΑ
                                                     0.27998947 -2.668613
## C8.A138.O3TCGA -0.8298871 -0.5629160
                                         -0.4385733 -1.46988649 2.216510
##
                  NP_056503 NP_078928
                                       NP_079095
                                                   NP_079104 NP_001161047
## AO.A12D.O1TCGA
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                                                               0.77229834
                         NA
                                    NA 0.5495716 -0.04546691
## C8.A131.O1TCGA
                                                              -0.09808936
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -7.6529252 1.7609794 -0.5272618 0.02807156
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## C8.A130.02TCGA 0.1586343 -0.7433296 -0.8351659 -0.68101211
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## C8.A138.O3TCGA 1.5106819 -0.4020019 -0.9030299 0.09171193
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## AO.A12D.01TCGA 0.14368164 -0.3363529 -0.67161517 -3.4603874
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## C8.A131.O1TCGA -0.03332327 -0.3409622 0.38360847 1.0191258
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## AO.A12B.01TCGA 0.33790255 0.7453092 0.99474186 -2.1065374
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## BH.A18Q.02TCGA -0.28304895 1.1922644 -0.07898066 -1.4204788
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## C8.A130.02TCGA 0.84084705 -0.1103149 -0.45798102
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## C8.A138.O3TCGA -0.05091650 -1.3492009 -0.14965926 0.8706826 -4.113998
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                  -2.6641396 -0.1725316  0.8027767  4.7497276 -0.126814
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                   -0.3166749 0.5171885 -0.8105164 2.1403888 2.403501
## AO.A12B.O1TCGA
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                   -1.4204788 -0.6410048 -3.8927160 0.0581800 -2.862338
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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##
                  NP 036569
                             NP 000328 NP 000985 NP 660087 NP 003712
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## C8.A131.01TCGA 0.3390818 0.38360847 -1.6889066 -0.4745423 -0.7781334
## AO.A12B.O1TCGA 1.5379507 -2.72457608 -0.7762299 -0.1692772 0.2963304
## BH.A18Q.02TCGA -0.2930851 -1.22644664 -0.1291614 -1.4974226 1.1621560
## C8.A130.02TCGA 0.5620582 0.05039865 1.1589943 0.2603103 -0.1627928
## C8.A138.O3TCGA -0.6836016 2.43959527 1.2985679 0.4391401 -0.7604015
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## AO.A12D.O1TCGA 0.1703502
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## C8.A131.O1TCGA 1.7841753 1.8165583 3.6178653 -0.3854889 -0.1345203
## AO.A12B.01TCGA -1.9873640 -1.7711891 0.1383564 -0.4630534 -0.5960841
## BH.A18Q.02TCGA -1.9992298 -1.3000450 -5.7761660 0.6034772 -1.3268081
## C8.A130.02TCGA -2.2815881 -2.1635128 -0.4776602 -1.2681086 1.7001727
## C8.A138.O3TCGA 0.5707972 0.1575404
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## AO.A12D.01TCGA 0.07129548 1.5037796 -2.1536267 1.57997555
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## C8.A131.O1TCGA -0.66074481 1.4724884 5.1317728 1.87727653
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## AO.A12B.01TCGA -0.60162710 -1.6603301 -0.5378832 0.05521221
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## BH.A18Q.02TCGA -4.91305745 2.7645939 -1.0591775 0.20203142
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                             0.5620582 -1.6354539 1.16227420
## C8.A130.02TCGA 1.59849676
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## C8.A138.O3TCGA 0.72073986
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## BH.A18Q.02TCGA 1.28593514
                               1.28593514 3.4503972 1.26586285
                                                                   1.66061791
                  0.38494527
                               0.38494527 -0.9598010 -0.27758824
## C8.A130.02TCGA
                                                                 -0.44814142
## C8.A138.O3TCGA
                          NA
                                       NA -0.1862306 0.30748314
                                                                   0.55982574
##
                   NP 057413
                              NP 006484 NP 644812 NP 001180353
                                                                 NP 002527
## AO.A12D.O1TCGA
                          NA
                              1.1837565 0.05224649
                                                                 0.1474914
```

```
## C8.A131.O1TCGA
                         NA 1.3348605 -0.04951479
                                                           NA 1.6344037
                         NA 1.8622132 2.25853394
## AO.A12B.O1TCGA
                                                           NA 0.4681618
## BH.A18Q.O2TCGA -0.17265135 2.2928951 1.09859376
                                                  -0.56406103 -0.8885631
## C8.A130.O2TCGA 0.09959668 -0.7400497 -0.04471755
                                                   0.08975708 -0.2677486
NA -0.3946876
                  NP 149977 NP 067544 NP 001172019 NP 001172020 NP 066934
##
## AO.A12D.O1TCGA 0.7913473 8.1328284
                                      11.9197678
                                                  11.9197678
## C8.A131.O1TCGA 0.9422160 0.6588644
                                        2.2375379
                                                    2.2375379
## AO.A12B.O1TCGA -3.2289843 -2.8409780
                                       -2.5194870
                                                    -2.5194870
                                                                      NA
## BH.A18Q.02TCGA -0.6008602 -0.5205711
                                       -0.5205711
                                                   -0.5205711 -5.6423507
## C8.A130.02TCGA -0.5071791 -0.7269303
                                      -0.7269303
                                                    -0.7269303 -1.0155587
## C8.A138.O3TCGA 1.6240532
                                                           NA 0.5890829
                                   NA
                                               NA
                  NP_061910 NP_057293
                                      NP_689645 NP_110403 NP_001153890
## AO.A12D.O1TCGA -0.6868544 -0.1268140
                                      1.4961600 -0.3287333
                                                           -0.3287333
## C8.A131.O1TCGA -0.3652495 0.2945551
                                      1.8975159 0.8329233
                                                             0.8329233
## AO.A12B.O1TCGA -0.1332480 0.5263628
                                     1.7070106 0.8866544
                                                             0.8866544
## BH.A18Q.O2TCGA -0.3800650 0.3994089 -0.1057437 0.6938026
                                                             0.6938026
## C8.A130.O2TCGA -0.6055751 -0.5038992 -0.3235064 -1.2812281
                                                            -1.2812281
## C8.A138.O3TCGA -0.1569735 -0.4605161 1.7410817 -1.5028007
                                                            -1.0310298
                  NP 003656 NP 055316
                                       NP 005629 NP 001172112 NP 055165
## AO.A12D.O1TCGA -0.2677766 -1.41452581 2.43337034
                                                   1.59140494 0.4141773
## C8.A131.O1TCGA 2.7759061 -0.45430289 0.80863596
                                                   0.04358647 0.5536195
## AD.A12B.01TCGA -1.7351599 -1.51067053 -1.09772092 -0.31616529 -2.0039929
## BH.A18Q.O2TCGA -0.8684908 -0.00872764 0.01469003
                                                   0.01469003 2.1122445
## C8.A130.02TCGA 0.4997407 2.97276181 -0.24806942
                                                  -0.04471755 -1.1073951
## C8.A138.O3TCGA -2.0111431 -1.13708683 2.65902362
                                                   2.77605208 0.9474825
                  NP_054753
                            NP_060624 NP_079352 NP_001240804 NP_115715
## AO.A12D.01TCGA -0.6411368 -1.04497539 -0.9878284
                                                  -0.9878284 5.0430821
-0.5393084 -1.5634223
                                                 -0.9203466 -0.3660518
## AO.A12B.O1TCGA -0.4297957 -0.74020079 -0.9203466
## BH.A18Q.O2TCGA 1.6472364 0.06152538 1.0149592
                                                  1.0149592 -2.8088123
## C8.A130.02TCGA -0.2087110 0.86380613 -0.3661447
                                                   -0.3661447 0.3423070
## C8.A138.O3TCGA -0.3581162  0.03319770 -1.0237155
                                                   -1.0237155 1.7337674
                 NP_006604 NP_001035257 NP_004166 NP_060917 NP_061956
## AO.A12D.O1TCGA 0.6046672
                                    NA -0.34778232 1.6066441 -0.5077938
## C8.A131.O1TCGA 0.3188424
                                    NA 0.04763435 0.6264813 -1.8386782
## AO.A12B.O1TCGA -1.5633285
                                     NA -0.14156243 -1.2030369 -1.0256626
## BH.A18Q.02TCGA 1.4933488
                              -1.373643 1.09190299 0.7239110 1.2324090
## C8.A130.02TCGA -0.1070351
                              -1.533778 1.13931512 -1.0352379 0.4013446
## C8.A138.O3TCGA -0.7457729
                               3.379480 -1.02005838 0.2599403 1.5143391
                  NP 057036 NP 443077
                                       NP 056980 NP 000353 NP 006398
## AO.A12D.01TCGA -0.28682555 -3.319425 -2.21077362 -2.4774595 1.2256643
## C8.A131.01TCGA -0.52311686 -1.458177 -0.06570632 -2.8223132 0.8653063
## AO.A12B.O1TCGA 1.46034947 1.867756 -0.23024960 -2.9961805 -1.8931339
## BH.A18Q.O2TCGA -0.36333812 -0.721294
                                              NA -1.6680370 -0.3733743
## C8.A130.02TCGA -1.56985657 1.339387
                                              NA -2.0159187 -1.3205865
## C8.A138.O3TCGA 0.02954056 2.289653 6.63067676 -0.9798298 2.1031385
                  NP_689555 NP_001035972 NP_000979 NP_002903 NP_001053
##
## AO.A12D.O1TCGA -1.1440301
                             -1.528820 0.2160678 0.2008286 -2.309828
## C8.A131.O1TCGA -1.6200926
                              -2.777787 1.5251109 -0.3126271 5.702524
## AO.A12B.O1TCGA 0.2824731
                              -3.611448 -1.3443821 -1.5633285 -2.624803
## BH.A18Q.02TCGA -2.3304227
                              2.132317 -1.0892860 1.7609794 -4.411250
                              -1.166433 1.4837013 -0.7531692 -4.882524
## C8.A130.02TCGA -2.1733524
                            -3.031485 -0.8847442 1.8471387 -8.323365
## C8.A138.O3TCGA -0.5446303
```

```
NP 002886
                              NP 004699 NP 004811 NP 008854 NP 000534
                                                   2.4105115 -0.2715864
                        NA -0.492554653 0.4408459
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                            0.003107659
                                        2.5856557
                                                   1.5089194 -0.3490580
## AO.A12B.O1TCGA
                            0.944855327 -1.5965862 -1.1974940 0.8339964
                        NA
## BH.A18Q.02TCGA -0.3365751 -0.226177461
                                                NA
                                                   0.4261720
                                                              0.7740917
## C8.A130.02TCGA 0.3980648 1.559138330
                                                NA -0.3071071 0.1881531
## C8.A138.O3TCGA
                        NA -1.363829459
                                               NA 0.1246262 -0.1789164
                  NP 699196 NP 000233
                                        NP_075383 NP_689866 NP_006348
## AO.A12D.01TCGA 1.1570880 -0.5916094
                                               NA
                                                   2.7305346
                                                             2.3952724
## C8.A131.O1TCGA 0.6102898 3.3466573
                                               NA
                                                  1.0069821
                                                            1.0717482
## AO.A12B.O1TCGA -1.5577856 -0.5933127
                                               NA -0.9785475 -0.3466515
## BH.A18Q.02TCGA
                        NA -1.7282539 -0.89859921
                                                  1.5468749
                                                             1.4465135
## C8.A130.02TCGA
                        NA 1.4541825 -0.12015453
                                                  1.0769976
                                                             1.0048405
0.3184546
                                                             0.1685119
                 NP_003332 NP_071736 NP_001002901 NP_694957
                                                              NP_660339
## AO.A12D.O1TCGA 1.4047248 -1.0678342
                                       -1.9021800 1.9761946
                                                             1.48092080
## C8.A131.O1TCGA 0.5171885 1.3024774
                                       -0.1992864 -2.3406154
                                                             0.97055120
## AO.A12B.O1TCGA 0.1660712 0.1383564
                                       4.6226012 -3.0959536
                                                             1.24694598
## BH.A18Q.02TCGA 1.5468749 0.8811439
                                      -4.2305995 0.5265335
                                                             0.04814385
## C8.A130.02TCGA 1.4443429 -1.6551332
                                       -3.4131429 -0.6842920
                                                             0.13895511
## C8.A138.O3TCGA 0.6000543 0.9950253
                                       -7.5151375 -2.0550288 -1.52108644
                  NP 009231 NP 004562 NP 071345 NP 569056 NP 653284
## AO.A12D.01TCGA -0.7287621 -0.1992002 -1.4107160 1.9876240 2.3990822
## C8.A131.O1TCGA 2.2618252 -1.6646193 -2.8061217 0.6264813 -0.4340635
## AO.A12B.01TCGA -0.8482883 0.5069625 -0.2357925 -1.4053545 -0.3521944
## BH.A18Q.O2TCGA -0.4302458 1.1755375 1.2123367 -1.1160490 -2.6315070
## C8.A130.O2TCGA 0.9097243 0.7326114 1.5853773 -1.0385178 -1.9011233
## C8.A138.O3TCGA -0.9249728 -0.2191449 -0.6470302 0.6402828 -0.8993728
                              NP_620157 NP_789784 NP_003335
                   NP_612157
## AO.A12D.O1TCGA 0.73801016 0.21225801
                                               NA -1.0983126 2.09810810
## C8.A131.O1TCGA 0.73982199 0.61433768
                                               NA -0.4745423 0.18931018
NA 1.0473999 -0.19144896
## BH.A18Q.02TCGA -0.31315739 -1.26659122 -1.4271695 -1.9691214 -1.60447479
## C8.A130.O2TCGA 0.28326934 -0.69085171 -0.0709565 0.2963888 -1.98639992
## C8.A138.O3TCGA
                 0.02588342  0.97673961  -0.9505727  -1.4260008  -0.02531652
                  NP 071329 NP 071762
                                       NP 002650 NP 001005376 NP 653213
## AO.A12D.O1TCGA
                        NA 0.6618142 3.14580260
                                                   2.74958359 -2.0240935
## C8.A131.O1TCGA
                        NA 0.1124004 2.67066119
                                                   2.21325065 0.2864593
                        NA -0.6099415 -1.15592187
                                                  -1.32775325 -1.4718699
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 0.5298788 0.2254491 -0.83838234
                                                  -0.99561529 -3.2738203
## C8.A130.02TCGA -2.2651888 -0.7892478 -1.11395480
                                                 -1.27138850 -0.7236504
## C8.A138.O3TCGA
                        NA -0.9871441 0.08074051 -0.02531652 0.9365111
                 NP 001008528 NP 940932 NP 001008529 NP 776158 NP 060774
## AO.A12D.O1TCGA
                   1.819993 2.341935
                                        1.9800044 0.1284424
                                                                     NA
## C8.A131.O1TCGA
                    2.180868 1.460345
                                         0.9300724 -0.4097762
                                                                     NA
                                                                     NA
## AO.A12B.O1TCGA
                   -2.347656 -2.192453
                                         -2.5056296
                                                    0.1383564
## BH.A18Q.02TCGA
                    -4.672190 -4.568483
                                         -5.3278848
                                                    1.3060074
                                                                     NA
                                                                     NA
## C8.A130.02TCGA
                   -2.071677 -1.691212
                                         -2.2586290
                                                   1.7132922
                    2.487138 2.531024
## C8.A138.O3TCGA
                                          2.4871381 -0.7567444 0.4391401
                    NP_115495 NP_001245139 NP_065849 NP_001156946 NP_733787
## AO.A12D.O1TCGA 1.595214742
                               -0.5992290 -1.025926
                                                     -7.8568945
                                                                        NΑ
                                                                        NA
## C8.A131.O1TCGA 3.459997972
                               -0.4016804 -2.016785
                                                      2.4885065
                              2.1809327 -1.061692
## AO.A12B.O1TCGA -0.008531686
                                                     -5.4738782
                                                                        NΑ
## BH.A18Q.02TCGA -3.765591470
                               -2.9225552
                                                     -0.4904626 0.8008548
                                                NΑ
```

```
## C8.A130.02TCGA -0.763008828
                                -0.8548452
                                                 NA
                                                       1.1294755 0.8539665
## C8.A138.O3TCGA
                                                 NΑ
                           NΑ
                                -2.8815422
                                                      -4.4285121 -0.8225729
                 NP 001182149
##
                               NP 036388 NP 001018121 NP 001265234
                                                                    NP 006732
                                           -0.9268716
## AO.A12D.O1TCGA
                           NA
                                      NA
                                                       -0.1382434
                                                                   4.89830975
## C8.A131.O1TCGA
                           NA
                                      NA
                                           -1.4946083
                                                       -0.1830949 0.47670973
## AO.A12B.O1TCGA
                           NA
                                      NA
                                           0.9642556
                                                        0.4210468 -1.32221030
## BH.A18Q.O2TCGA
                    0.1317784
                               0.1317784
                                          -1.4338603
                                                       -0.2863943 5.37064639
## C8.A130.02TCGA
                    1.5558585
                               1.5558585
                                          -0.5858959
                                                       -0.6318141 -0.07423637
## C8.A138.O3TCGA
                   -1.4296580 -1.4296580
                                          -2.6474853
                                                       -0.5848588 -4.49799772
##
                  NP_620074 NP_001017536
                                           NP_954587 NP_001120836
                                                                    NP_060494
## AO.A12D.O1TCGA
                  2.9972205
                              1.3018603
                                                  NA
                                                               NA
                                                                   0.29607357
## C8.A131.O1TCGA
                 1.5696376
                               1.1365143
                                                  NA
                                                               NA
                                                                   0.70743894
## AO.A12B.O1TCGA -1.2141228
                                                  NA
                                                               NA
                                                                   0.37947466
                               0.1217276
                                                      0.646967204
                                                                  0.07490691
## BH.A18Q.02TCGA -0.8885631
                               1.5803287
                                         0.646967204
## C8.A130.02TCGA -0.4284622
                                        -0.2677486
## C8.A138.O3TCGA 1.5362819
                               0.2306832 -0.284973405 -0.284973405 -1.88314322
                  NP_001174 NP_057204
                                        NP_055223 NP_077270 NP_001092102
##
## AO.A12D.01TCGA 0.6961024 -4.8700127 0.06367588 -0.1001454
                                                                0.4789439
## C8.A131.O1TCGA 0.5293322 0.6305292 0.20145383
                                                  0.2581242
                                                               -0.3612016
## AO.A12B.O1TCGA -1.9291631 -1.9430205 -0.19144896
                                                   0.6178214
                                                                0.6538506
## BH.A18Q.02TCGA -0.1592698 -1.0257237 -0.27970357
                                                   0.1953407
                                                               -1.5275310
## C8.A130.O2TCGA -0.6055751 0.6276556 -0.38254404 0.4505427
                                                                0.9326834
## C8.A138.O3TCGA 0.1977690 -0.8993728 -0.32885908 -0.4312590
                                                               -0.2154878
                  NP 003245 NP 076933 NP 001243614
                                                     NP 055606
                                                                 NP 005345
## AO.A12D.01TCGA -1.8526526 -1.464053 0.840874705 0.840874705
                                                               0.07891507
## C8.A131.O1TCGA 0.3228903 -1.012910 0.901737225
                                                  0.901737225
                                                                0.10835256
## AO.A12B.01TCGA 1.7929263 1.313461 0.213186224
                                                   0.213186224
                                                               0.58179225
## BH.A18Q.02TCGA -0.5707518 -1.069214 0.001308505
                                                   0.001308505 -1.32011733
## C8.A130.O2TCGA -0.5826160 -2.150393 -0.592455647 -0.592455647 0.69981269
## C8.A138.O3TCGA -2.0111431 -2.003829 4.641193051
                                                   4.641193051 -0.85182998
                   NP_060416
                             NP_003029 NP_004163 NP_001854 NP_057670
## AO.A12D.O1TCGA 0.61228682 -1.10593216
                                                NA 0.4179871 -0.8354365
  C8.A131.O1TCGA 3.58953016 -0.64050541
                                                NA
                                                    0.3431297
                                                              0.7722050
## AO.A12B.O1TCGA -1.39981157 -0.07781853
                                                NA
                                                    0.5817922 -0.5739124
## BH.A18Q.02TCGA -0.62093252 -3.18684041 -7.7131421 -0.3666835
                                                               0.3358467
## C8.A130.O2TCGA 0.05367852 -3.47874025 -3.4787402 0.8441269 0.2340713
## C8.A138.O3TCGA 0.18679755 -0.36543047 -0.1752592 -0.2154878 -1.2431439
                 NP_001026873 NP_659489
                                          NP_056998 NP_005970 NP_000794
                    1.1570880 -0.3554019
                                         1.24471331 -2.8508197 0.4637047
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                    0.7883966 - 1.8305824 \quad 0.95031180 - 0.5150211 \quad 2.0513354
## AO.A12B.O1TCGA
                    2.7934284 -1.0312055 -0.09999032 -0.1997634 -3.7361640
## BH.A18Q.02TCGA
                   -0.3332297 -0.8751815 -0.59082408 -0.9655069 1.3494974
## C8.A130.02TCGA
                   -1.0253983 -0.9171627 -0.91060293 -2.0552772 -1.6452936
## C8.A138.O3TCGA
                    NP_000795 NP_056349 NP_060065 NP_758869 NP_002380
## AO.A12D.O1TCGA
                  1.4999698 -0.1534826
                                       1.0351744 0.1017739 -0.2182492
## C8.A131.01TCGA 1.8732286 1.4927278 0.2095496 -0.6931279 -0.4583508
## AO.A12B.O1TCGA -5.0526141 -1.4108975
                                       1.3744338 -1.5855003 -1.5855003
## BH.A18Q.O2TCGA 0.5700234 -0.1860329 -0.7179486 -1.1996836 -1.1394667
## C8.A130.02TCGA -1.3697846 -0.1365539
                                       0.8474068 -3.1540332 -2.9933197
                                       0.9328539 -0.3764019 -0.4824589
## C8.A138.O3TCGA -0.2703448 0.5854257
                  NP_758860
                             NP_002614
                                         NP 006638
                                                     NP 060209 NP 002389
## AO.A12D.O1TCGA -0.2182492 -1.74216845
                                        0.05224649
                                                            NA 0.1893992
## C8.A131.O1TCGA -0.4583508 -0.64050541 0.66291225
                                                               4.2614784
```

```
NA -1.4136689
## BH.A18Q.02TCGA -1.1996836 0.03476232 -1.73159930 0.06821614 1.2758990
## C8.A130.02TCGA -3.0589170
                          ## C8.A138.O3TCGA -0.5921731
                          0.85971115 1.55456759
                                                         NA -0.0509165
                 NP_064545 NP_663622 NP_055589 NP_004356 NP_009140 NP_054902
## AO.A12D.O1TCGA -0.9230618
                                NA 1.6904597 -3.0374998 -0.2258688 -0.1877708
## C8.A131.O1TCGA 4.0914674
                                NA 0.7681572 -0.3166749 1.7558401 0.6548165
                                 NA -0.4325672 1.7319539 -1.7573317 0.6122785
## AO.A12B.O1TCGA -0.5046255
## BH.A18Q.02TCGA 2.4902726 1.463240 -2.9024830 -1.7315993 -2.9994990 -0.6309687
                          1.792009 -0.6810121 -1.1795522 2.2675900 -1.2057911
## C8.A130.02TCGA 1.1983528
## C8.A138.O3TCGA -2.7754852 4.714336 0.9218825 1.2217679 -0.5885160 0.5232543
                  NP_076945
                           NP_000446 NP_003103 NP_057161
                                                            NP_060910
## AO.A12D.O1TCGA -0.80876790 -0.66018577 -0.4087391 -1.6012059 -0.23729818
## C8.A131.O1TCGA 1.03936518 -0.41787196 -1.1950651 -2.0167849 1.12841856
## AO.A12B.O1TCGA -0.09167590 1.44926357 -1.7296170 -2.0843656 -0.03347495
## BH.A18Q.02TCGA 0.01134465 -0.08901681 -1.6981455 -1.4037519
                                                           1.11866605
## C8.A130.O2TCGA 1.69689282 -0.35630509 0.4341433 -1.1729924 0.14879472
## C8.A138.O3TCGA -0.81160144 -0.72748724 2.5163952 0.0331977 -0.08748789
                           NP_113657 NP_683685 NP_061833 NP_004350
                 NP 055613
## AO.A12D.01TCGA 1.4352032 0.10939346 -0.5877996 -3.574681 0.1703502
## C8.A131.O1TCGA 2.7880497 -0.99267105 -2.7251641 -1.907492 0.4443267
## AO.A12B.O1TCGA -0.7457437 -0.04456085 2.3361352 3.428096 -0.4103954
## BH.A18Q.O2TCGA 0.3592644 0.27897520 0.9246339
                                                      NA -0.1826875
## C8.A130.O2TCGA -0.1660727 -1.58297604 0.2931089
                                                      NA 0.3259076
## C8.A138.O3TCGA 1.9056530 -0.42760183 -1.0968583
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                 NP_000912 NP_001231612 NP_036514 NP_067640 NP_942559
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## AO.A12D.O1TCGA
                       NA
                                                           1.7857047
## C8.A131.O1TCGA
                       NA
                                   NA 1.0717482 -0.2154779 0.9907906
                       NA
## AO.A12B.O1TCGA
                                   NA 0.5623919 -3.2234414 0.7757954
## BH.A18Q.02TCGA -0.2529405
                            -0.2529405 0.6971479 0.9580877 -7.9941541
## C8.A130.02TCGA -0.9893198
                            -0.9893198 -0.1135948 0.3193479 -0.5629368
## C8.A138.O3TCGA -0.5007446
                            -0.5007446 -0.4093161 0.3952545 0.5744543
                   NP_005084 NP_001185608 NP_005178 NP_004877 NP_060687
                             2.2009727 2.2009727 0.8865923
## AO.A12D.O1TCGA 2.517185898
                                                                    NA
## C8.A131.O1TCGA -0.235717316
                              -0.9521922 -0.9521922
                                                  1.4360575
                                                                    NA
                             -0.1221621 -0.1221621 0.2381295
## AO.A12B.O1TCGA 1.490835681
                                                                    NΑ
## BH.A18Q.02TCGA -0.005382259
                             1.0584492 1.0584492 -1.8988684 2.3631481
## C8.A130.02TCGA -1.163152830
                              -1.5009793 -1.5009793 0.7129322 -0.6547732
## C8.A138.O3TCGA 0.461082984
                               NP_671722 NP_036221 NP_003675 NP_116115 NP_060184 NP_476502
##
## AD.A12D.01TCGA 1.2675721 4.1592089 -1.1706987 -1.3307102 0.2960736
## C8.A131.01TCGA 0.2621720 1.8570371 -1.5148477 0.2216932 0.3269381
                                                                         NA
## AO.A12B.01TCGA 1.6266379 -1.3388391 -2.4030851 2.5218240 0.1189561
                                                                         NA
## BH.A18Q.02TCGA -5.2877402 1.3896420 0.4663166 -0.2462498 0.3893728 0.5332242
## C8.A130.O2TCGA 3.1990728 -0.6416537 -0.5038992 -1.0450776 0.9162840 0.5915770
## C8.A138.O3TCGA -0.4714875 -0.2959448 -1.7295434
                                                      NA 0.7499970 -0.3764019
                                                               NP_542382
                NP_001158220 NP_001008398 NP_056049
                                                   NP 079420
## AO.A12D.O1TCGA
                         NA
                              1.3894856 -1.5897765 0.65800439 -0.46207627
## C8.A131.O1TCGA
                         NA
                               2.9378213 2.2294422 -2.36895057 -0.55549991
## AO.A12B.O1TCGA
                         NA
                              -1.2030290
## BH.A18Q.02TCGA
                              -0.3666835
                                        1.3494974 -5.03683658 0.49977040
## C8.A130.02TCGA
                   0.1848733
                              ## C8.A138.O3TCGA
                   1.1632537
                               2.3335382 -0.4788018
                                                          NA 0.04051198
##
                  NP_003202 NP_006278 NP_001027452 NP_061969 NP_004036
```

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## AO.A12D.O1TCGA -1.34594944
                                   NA
                                                NA -0.3973097 -0.4735057
## C8.A131.O1TCGA -1.21530450
                                   NΑ
                                                NA -0.2276216 -1.5998532
## AO.A12B.O1TCGA -1.49127021
                                                NΑ
                                                    0.1827000 0.2880160
## BH.A18Q.02TCGA -0.02545455 -2.056101
                                         -1.607820
                                                    0.8677624 -1.8118885
## C8.A130.02TCGA
                 1.02779957 -1.090996
                                         -1.215631
                                                    0.6998127 -1.1697126
  C8.A138.O3TCGA
                          NA -2.106229
                                         -2.106229
                                                   0.8304540 1.3095393
                  NP 003163
                             NP 660304
                                        NP 065189 NP 055701 NP 001258594
## AO.A12D.O1TCGA -0.5649408 -1.53262955
                                        3.1153242 0.0293877
                                                                 3.416298
## C8.A131.O1TCGA -1.3853155 -1.62414047
                                        1.1931847 -0.2519088
                                                                 2.715188
## AO.A12B.O1TCGA 1.2275457 -0.06396116
                                        0.2270436 0.3628458
                                                                 2.635454
## BH.A18Q.02TCGA -1.0257237 -1.49407719 -0.1793421 -0.5138803
                                                                -5.103744
## C8.A130.02TCGA -1.5796962 2.65789440
                                        0.2176720 1.5033806
                                                                 1.464022
  C8.A138.O3TCGA -1.1151440 -0.77868719
                                        2.8601663 -0.9066871
                                                                      NA
                   NP 998814
                               NP_000308 NP_443168 NP_938023 NP_001136060
## AO.A12D.01TCGA -0.50398405 -0.911632451 -0.1725316 -0.4849351
                                                                -0.35540192
## C8.A131.O1TCGA 0.18526230 -0.413824076 -0.1749991
                                                    1.3186690
                                                                -0.89956979
## AO.A12B.01TCGA 0.07184106 0.368388761 -0.4048524 -1.2030369
                                                                 0.37947466
## BH.A18Q.02TCGA -1.11270366 0.760710188 0.1317784 0.9212885
                                                                 0.57671419
## C8.A130.O2TCGA 0.64405492 -2.019198604 0.4275836 -1.8224065
                                                                 0.59485688
## C8.A138.O3TCGA 0.83045404 0.003940589 -0.5263446 1.7227960
                                                                 0.06245481
##
                 NP_001136061 NP_057579 NP_001137438 NP_061871
                                                                NP 004144
                  -0.3554019 -1.0030676
## AO.A12D.O1TCGA
                                         -1.0030676 -0.1115748
                   -2.3325196 0.9381682
## C8.A131.O1TCGA
                                           0.9381682 0.1852623
                                                                       NΑ
## AO.A12B.O1TCGA
                   -0.3438800 -0.2219352
                                          -0.2219352 0.3185022
                                                                       NA
## BH.A18Q.02TCGA
                    0.3860274 -0.1492337
                                          -0.1492337 -0.9688522 -0.4135188
## C8.A130.02TCGA
                    0.4439829 0.1520746
                                           0.1520746 -0.7039712 -0.1693526
                                          -1.3857723 0.5671400 0.2855403
## C8.A138.O3TCGA
                    0.1136548 0.6768542
                  NP_443076
                            NP_006225 NP_009199 NP_001244332 NP_055269
## AO.A12D.01TCGA -1.7650272 -1.15545953 -0.2753962
                                                   -0.2753962 -0.1153846
## C8.A131.O1TCGA -0.8874261 -0.11832877
                                       3.4073755
                                                    3.4073755 1.2417592
## AO.A12B.O1TCGA -0.1304765 0.23535802 -1.5023561
                                                    -1.5023561
                                                               1.9758436
## BH.A18Q.O2TCGA 0.1451599 0.95808772 -4.4513948
                                                    -4.4513948 -0.6476956
  C8.A130.02TCGA -2.0979155 -0.06111689 -1.1467535
                                                    -1.1467535 -0.9860399
  C8.A138.O3TCGA 1.1998251 -0.07285933 -0.2301163
                                                    -0.2301163
                                                               1.0096539
                 NP_653266 NP_001258523
                                          NP 060678 NP 004835
                                                                NP 002510
## AO.A12D.O1TCGA
                        NΑ
                                    NΑ
                                                 NA -0.3896901 2.21240204
## C8.A131.O1TCGA
                        NA
                                    NA
                                                 NA -0.3733453 -0.09808936
## AO.A12B.O1TCGA
                        NA
                                                 NA -0.2219352 -0.15541980
                                    NA
                             0.7607102 -2.186571232 -0.5205711 -2.87906528
## BH.A18Q.02TCGA 0.6436218
## C8.A130.02TCGA 0.5390991
                              0.6670140
                                       1.011400229 1.2081924 -1.24842942
## C8.A138.O3TCGA
                        NA
                                    NA
                                        0.007597728 1.7410817 2.29696685
                  NP 038286
                              NP 006701
                                           NP 937832 NP 002406 NP 000123
## AO.A12D.01TCGA -1.1897477 -0.595419203 -0.595419203 1.4009150 1.1075606
## C8.A131.O1TCGA -1.1302990
                            ## AO.A12B.O1TCGA 0.0247260
                             1.607237584 1.748582751 1.9010138 -0.7706870
## BH.A18Q.02TCGA 0.5432604
                             0.058179997 -0.002036877 0.7807825 -0.0154184
## C8.A130.02TCGA -0.3825440
                            ## C8.A138.O3TCGA -1.0858869 -1.557657835 -1.411372268 -1.0968583 -0.2703448
                  NP_000707
                             NP_002481
                                         NP_066545
                                                    NP_060302
                                                                NP_003333
## AO.A12D.01TCGA -0.6258976 -0.08871605 -0.03156908
                                                    0.07510527 -0.50779385
## C8.A131.O1TCGA 3.1240239 -0.69312786 0.03144283
                                                    0.57790675 0.03953859
## AO.A12B.01TCGA -2.2340252 -0.57668383 -0.53234025
                                                    0.36561729 0.13558496
## BH.A18Q.O2TCGA -0.6844948 -0.21279593 -0.85845463
                                                    0.99823230 -1.32346271
## C8.A130.O2TCGA 0.3685459 0.07991747 0.46038226 -0.79908738 0.71621203
```

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## C8.A138.O3TCGA -1.9745717 -1.01274410 -2.03308593 0.36234023 -0.33617335
##
                   NP_064706 NP_001099043 NP_002927 NP_002996 NP_001017368
                              0.70753177 -0.7897189
## AO.A12D.O1TCGA -0.23348838
                                                    0.1474914
## C8.A131.O1TCGA -0.04141903
                             -0.03332327 -0.6647927
                                                                         NA
                                                     0.8248275
## AO.A12B.O1TCGA 1.49637863
                             -0.72357195 -0.2302496 -0.6099415
                                                                         NΑ
## BH.A18Q.02TCGA 0.51984269
                             -0.09570757 -0.1157799 1.7710155
                                                                  0.5700234
## C8.A130.02TCGA 1.94944272
                             -0.11031492 0.2832693 -1.4386618
                                                                 -0.5235784
## C8.A138.O3TCGA
                 0.62565425
                               0.28188316 -1.6308006 -1.9087432
                                                                  1.9934243
##
                   NP 000279 NP 653267
                                         NP 001507 NP 001258796 NP 003556
## AO.A12D.O1TCGA -1.10974196 -2.1841050
                                        0.17035023
                                                     0.08653467 -4.123292
## C8.A131.O1TCGA -0.08594572 1.1365143
                                        1.49677572
                                                     1.34700413 12.677023
## AO.A12B.O1TCGA 3.02068926 -2.2866832
                                        0.02749747
                                                     0.17715706
                                                                       NA
## BH.A18Q.O2TCGA -0.53729797 -4.1202019 -0.33657506
                                                    -0.33657506 -1.300045
## C8.A130.02TCGA 0.13567524 1.2147521 -0.15623309
                                                    -0.15623309 0.991721
  C8.A138.O3TCGA -0.03263080 0.3477117
                                        0.72805414
                                                    0.72805414 -1.557658
##
                  NP_006396 NP_004891
                                        NP_689639 NP_001180218
                                                                NP_878907
## AO.A12D.O1TCGA 2.6619582 -0.3020647
                                       0.89802168
                                                            NΑ
                                                                0.2389266
## C8.A131.O1TCGA -0.8348037 -2.2677535 0.43218304
                                                            NΑ
                                                               1.7113134
## AO.A12B.01TCGA 0.7286804 -1.2640094 -1.17255071
                                                            NA -1.2002655
## BH.A18Q.02TCGA -3.1901858 0.6302403 0.08828843
                                                      2.403293 -2.4174026
  C8.A130.02TCGA -1.4944196 -2.0159187 -1.33698588
                                                     -2.029038 -0.2939876
  C8.A138.O3TCGA 2.0702242 -2.9254279 -1.30531523
                                                     -5.551254 0.2745689
                  NP_665906 NP_665910 NP_653280 NP_057016 NP_000050
##
## AO.A12D.01TCGA 1.8238026 1.9990533 -0.5839898 -2.5079379 0.8180159
## C8.A131.O1TCGA -3.9435762 -2.8101696 0.5617152 0.6831517
                                                             0.9260245
## AO.A12B.01TCGA -0.7623726 -2.7689197 -0.1277051 -1.7379314
                                                             0.7175945
## BH.A18Q.O2TCGA 1.8981400 0.3693005 -0.4636996 -1.7617077
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  C8.A130.02TCGA 0.5686179 0.6571744 -0.4547012 2.4479828 -0.9401217
  C8.A138.03TCGA 0.1136548 -0.4312590 -0.9140013 -0.2886305 0.8450826
                  NP_068839 NP_055101 NP_078857 NP_001164263 NP_653314
## AO.A12D.01TCGA 1.3704367 -0.9421108 0.7075318
                                                  1.62950292
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## C8.A131.O1TCGA 1.0919876 2.0877663 -1.2881664
                                                  0.01120342 -0.2519088
## AO.A12B.O1TCGA -0.3521944 -1.5189849 -1.7434743
                                                  1.43540620 1.1083723
-0.84172772 -1.0491414
## C8.A130.02TCGA -2.4849400 -1.3074671 0.6899731
                                                  -0.91716266 -1.0221185
  C8.A138.O3TCGA -0.1021164 0.9474825 -0.7311444 -0.67263016 -0.6689730
                  NP 060182 NP 891549 NP 001177915
                                                    NP 115686 NP 001026879
## AO.A12D.O1TCGA -3.1594134 -0.5611310
                                         5.401203 -2.19934423
                                                                  1.8352320
## C8.A131.O1TCGA -1.7981994 1.8044147
                                          6.682111 0.12049621
                                                                 -0.1790470
                                         -1.574414 -0.29953644
## AO.A12B.O1TCGA 0.9642556 -0.2385640
                                                                 -1.5965862
## BH.A18Q.02TCGA -0.1291614 -0.9655069
                                         -5.254286 0.04145309
                                                                  1.0919030
## C8.A130.02TCGA 0.2767096 0.3783855
                                         -5.118675 -0.30054732
                                                                  0.6506147
## C8.A138.O3TCGA -3.0387992 -0.8884014
                                         -4.329769 -0.97251557
                                                                  0.2123975
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##
                                         1.1342292 3.279146
## AO.A12D.O1TCGA 0.002719109 1.347578
                                                               1.1342292
## C8.A131.O1TCGA 0.205501706 1.678930
                                          6.3582807 2.941869
                                                               6.3582807
## AO.A12B.O1TCGA -0.659828047 -1.028434
                                          -0.5267973 -1.011805 -0.5267973
                                     NA
## BH.A18Q.02TCGA
                 0.248866763
                                                 NA
                                                           NA
                                                                      NA
## C8.A130.02TCGA
                  1.086837213
                                     NΑ
                                                           NΑ
                                                                      NA
                                                 NΑ
  C8.A138.O3TCGA
                  0.995025303 -6.582567
                                          -6.5825670 -4.117655 -6.5825670
                                                              NP_036412
##
                  NP_006562 NP_775846
                                       NP_003327 NP_003328
## AO.A12D.O1TCGA -1.2468947 -1.7231195
                                       0.4179871 -0.2030100
## C8.A131.O1TCGA -0.5514520 0.4119436
                                       0.1812144 -0.1061851
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## AO.A12B.01TCGA 0.0136401 -1.0228911 0.5402201 1.1942880 0.01918305
```

```
## BH.A18Q.02TCGA 0.1117061 -1.0625229 -0.7413663 -0.1726514 -1.72156315
## C8.A130.O2TCGA 0.1061564 0.8638061 0.4046245 -0.9302821 0.31606803
## C8.A138.O3TCGA 0.1136548 0.4720544 -0.1679450 -0.7274872 -0.08383075
##
                   NP_803183 NP_001025056 NP_001136113
                                                       NP_060411 NP_064577
## AO.A12D.O1TCGA
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                               1.0656528
                                            1.4009150 -0.54970162 -0.6639956
## C8.A131.O1TCGA 0.76815716
                               0.0152513
                                            0.8572105 -1.44603371 0.5293322
## AO.A12B.O1TCGA 0.01918305
                              -0.3743662
                                            1.2136883 -0.08890443 -1.0810921
## BH.A18Q.02TCGA -1.72156315
                              -0.9019446
                                           -4.5283385 0.08159767 -3.2470573
## C8.A130.02TCGA 0.31606803
                               1.1393151
                                            0.6538945 -0.21855060 1.4443429
## C8.A138.O3TCGA -0.08383075
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                                            2.1909098 0.78656837 -1.4333151
                  NP_002940
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## AO.A12D.O1TCGA -0.5077938
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## AO.A12B.01TCGA 1.5324078 -0.330022656 -0.5323402 -0.7180290 0.1106417
## BH.A18Q.O2TCGA 0.3960636
                            1.476621906 0.4964250 0.8409994 -0.7313301
## C8.A130.O2TCGA 0.5063004 0.050398651 0.4079044 0.5456589
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## C8.A138.O3TCGA -1.9124003 -1.802686159 -1.0858869 -2.3951427
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##
                  NP 757345
                             NP 003909
                                         NP 061861
                                                    NP 054880
                                                                NP 004137
## AO.A12D.O1TCGA 3.9344308 0.08653467
                                        0.69229258 -0.23729818 1.59521474
## C8.A131.O1TCGA -1.2436397 -1.72533750
                                        0.03549071 -2.04512009 0.38765635
## AD.A12B.01TCGA -1.4718699 -3.66964868 0.54299162 1.76521159 -2.94906547
## BH.A18Q.02TCGA 2.6809594 -3.49796092 -1.90890454 -0.58747870 -0.11912524
## C8.A130.02TCGA -1.5796962 -1.39602352 -0.92372240 0.08647721 0.11599603
## C8.A138.O3TCGA -0.4276018 0.49399724 0.37331164 -1.21022961 0.08805479
##
                 NP 001119800 NP 612457
                                         NP 073750
                                                    NP 005776 NP 001230618
## AO.A12D.O1TCGA
                    2.1285865 -0.2753962 0.31893236 0.07129548
                                                                 0.39893812
                    1.7436965 -1.2679270 -0.11428089 0.39575211
## C8.A131.O1TCGA
                                                                 0.09216104
## AO.A12B.O1TCGA
                    0.4238182 -2.1342521 1.21645977 0.08015548
                                                                 0.25475833
## BH.A18Q.02TCGA
                   -1.1561936 0.3325013 0.06152538 -0.06559913
                                                               -3.16342274
## C8.A130.02TCGA
                   -0.6547732 3.0219598 0.78180941 -0.28086810
                                                                -0.49733945
## C8.A138.O3TCGA
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                                                                 1.33148211
##
                 NP_001017979 NP_115682 NP_057075
                                                    NP_115990 NP_005698
## AO.A12D.O1TCGA
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                                         0.7113416 -0.35540192
## C8.A131.O1TCGA
                   0.37146482 -0.9724316  0.4888534 -1.45817736
                                                                      NΑ
                 -0.60717004 2.2114189 -3.1957266 3.04286105
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                 -0.23286823 -1.8654146 1.5100757 -0.62093252 -0.6978763
## C8.A130.02TCGA
                 -0.09719545 1.2672300 0.6965328 -1.73385001 -1.1762723
## C8.A138.O3TCGA
                 -1.09320116 -0.5519446 -0.1862306 0.08074051 1.7264531
                  NP 835465
                             NP 085143 NP 005229 NP 001137292 NP 001243224
##
## AO.A12D.01TCGA 1.4809208 5.66407918
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## C8.A131.O1TCGA -2.9194624 -1.93987519
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                                                    1.63845155
                                                                        NΑ
## AO.A12B.O1TCGA -1.7240740 7.25827282 -2.4003136
                                                  -2.77723409
                                                                        NΑ
## BH.A18Q.O2TCGA
                         NA -1.44055108 1.5535657
                                                    2.35645733
                                                                 1.0116138
## C8.A130.02TCGA
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                                                  -0.18575191
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## C8.A138.O3TCGA -0.4788018 -0.01434511 -0.4641732
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                                                                 0.2672546
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##
                   NP_078796 NP_068762
## AO.A12D.O1TCGA 0.20463841 2.8676873
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## C8.A131.O1TCGA -0.04951479 -0.2964355
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                                                                    NA
## AO.A12B.O1TCGA 0.52359130 0.5707064
                                        0.7924243 2.4109650
                                                                    NΑ
## BH.A18Q.02TCGA -0.24624975 -2.3739126
                                        3.0288791 -0.1291614 -0.9019446
## C8.A130.O2TCGA -0.86796463 2.5726178 -0.7925276 -1.5272183 -1.0942756
  C8.A138.O3TCGA 2.80530919 1.1778823 2.0921671 1.3351392 -2.0221145
##
                   NP_114105 NP_001138600 NP_001760 NP_570968 NP_001098719
## AO.A12D.O1TCGA 1.88094960
                               0.5970476 -2.252681 3.8506153
```

```
## C8.A131.O1TCGA -0.19928639
                              0.2459805 -2.583488 1.8691808
                                                                       NA
## AO.A12B.O1TCGA 0.29355897
                              0.7037371 -4.553749 -0.5184829
                                                                       NΑ
## BH.A18Q.02TCGA -2.07282825
                              -1.6881093 -1.637929 -0.9454346
                                                                       NΑ
                             -1.1729924 -1.635454 -1.1959515
## C8.A130.02TCGA -0.02175846
                                                                       NA
## C8.A138.O3TCGA 0.45011157
                              -1.6564006 0.907254 1.1486251
                                                                -1.491829
                 NP 001107593 NP 004385 NP 060343
                                                   NP 821066 NP 443131
##
                              1.2409035 -0.2830158 -0.39730970 1.72474788
## AO.A12D.O1TCGA
                   -0.7325719
## C8.A131.O1TCGA
                   0.7317262  0.7560135  -0.1102330  -0.13856817  0.07192163
## AO.A12B.O1TCGA
                   -1.2390661
                              0.9282265 1.1998309 1.50192158 1.04185691
## BH.A18Q.02TCGA
                   -1.2933543 0.3023929 -0.1693060 -0.09236219
                                                                      NA
## C8.A130.02TCGA
                  -1.4976995 -0.1431136 -0.6350939 -0.71709066
                                                                      NA
## C8.A138.O3TCGA
                           NA 0.1173119 -0.4385733 -0.82623000
                                                                      ΝA
                 NP_542776 NP_997719 NP_689622 NP_116213 NP_031370
## AO.A12D.01TCGA 1.149468 -1.3002319 -0.3363529 1.6333127 1.7590361
## AO.A12B.01TCGA -4.706180 -0.2939935 1.8566702 -2.6054027 -0.4879967
## BH.A18Q.02TCGA -2.925901 0.1485053 0.2689391 -2.1765351 -8.8606080
## C8.A130.O2TCGA -1.789608 1.0277996 -0.1332740 -1.7174507 -0.5301381
## C8.A138.O3TCGA 2.388395 0.9182254 0.3513688 2.5310238
                 NP 001158101 NP 612639 NP 115883 NP 115946
                                                               NP 689592
## AO.A12D.O1TCGA
                  1.3666269 0.2160678 -0.1115748 1.8733300 0.93992946
## C8.A131.O1TCGA
                    1.3834351
                             1.2498550 0.1528793 0.9219766
                                                             0.93007239
## AO.A12B.O1TCGA
                   -0.4297957 0.1189561 -1.8875910 -0.9480613 0.29078749
## BH.A18Q.O2TCGA
                   -0.1659606 0.8309632 -2.1631536 0.5198427 -1.74163544
## C8.A130.02TCGA
                   -0.3956635  0.6506147  1.2377112  -0.5826160  0.06023826
## C8.A138.O3TCGA
                   -1.9014289 -0.7567444 -1.1261154
                                                          NA -0.03994508
##
                 NP_001153242 NP_631916 NP_002683 NP_872307 NP_036394
## AO.A12D.O1TCGA
                    3.0048401 3.0048401
                                        1.0808920 0.9627882 1.5494972
                  1.5372545 1.5372545
## C8.A131.O1TCGA
                                        1.7436965 -1.7010502 -0.7943249
## AO.A12B.O1TCGA
                   -1.1392930 -1.1392930 -0.3882236 0.7286804 -0.6043986
## BH.A18Q.02TCGA
                   -1.7683985 -1.7683985 -3.1032059 -0.6911855 0.1953407
## C8.A130.02TCGA
                   -0.2874278 -0.2874278 -0.4776602 -0.6514933 -1.1369139
## C8.A138.O3TCGA
                   1.1303395 1.1303395 0.3659974 -0.4788018
                              NP_055675 NP_001078868 NP_777591
                                                                NP_057529
##
                    NP_036460
## AO.A12D.O1TCGA 1.004696026
                                     NA
                                          -0.1953904 -1.3383298
                                                                       NA
                                     NA
## C8.A131.O1TCGA 0.003107659
                                         -1.0776765 -0.5838351
                                                                       NΑ
## AO.A12B.O1TCGA 3.040089577
                                     NA
                                         0.5485346 -0.8787745
## BH.A18Q.02TCGA -0.517225683 -0.8818723
                                          -2.5043825 -3.2704750 -0.5740972
## C8.A130.02TCGA -0.667892631 -0.1070351
                                          -1.9044032 0.5456589 -1.3533852
## C8.A138.O3TCGA
                           NA 0.2526261
                                          0.8048541 -0.1898878 1.5984533
                   NP 003640 NP 004480 NP 940820
                                                    NP 001889 NP 001258862
## AO.A12D.O1TCGA -1.18593792 -0.3477823
                                               NA
                                                          NΑ
                                                               0.42179691
## C8.A131.O1TCGA -1.50675193 -0.1952385
                                               NA
                                                          NA
                                                               0.02739495
## AO.A12B.O1TCGA -0.03347495 -0.9924049
                                                          NA
                                               NA
                                                              -2.78277704
## BH.A18Q.O2TCGA -0.69118554 -2.6448885 -1.1528482 -2.00926599
                                                              -7.65292519
## C8.A130.O2TCGA -1.01555873 1.8772856 -0.9204425 0.94580285
                                                               1.16883393
## C8.A138.O3TCGA -2.40245698 1.8069102 0.1355976 0.09902621
                                                               0.54885432
                  NP_932343 NP_612464 NP_937875 NP_001015 NP_055182
##
## AO.A12D.O1TCGA 0.4713243 1.1266096 -0.5535114 0.6237162 3.0238891
## C8.A131.O1TCGA 2.1201494 1.6344037 -2.2434663
                                                 0.9988864 -1.2557833
## AO.A12B.01TCGA -0.1997634 -2.6552892 -3.1264398 -0.3023079 -0.2607358
## BH.A18Q.O2TCGA -0.8751815 0.7908186 -0.3901012 0.3425375 -1.1561936
## C8.A130.O2TCGA -0.3825440 1.2344313 -1.3041872 0.7949289 0.1028766
## C8.A138.O3TCGA -0.8920585 1.2839393 -0.8664585 0.2489689 -0.9322870
```

```
NP 003796 NP 997002 NP 067000 NP 054752 NP 795361
## C8.A131.01TCGA -0.8469473 -0.3045313 -0.7376546 -2.2758493 -0.9805274
## AO.A12B.O1TCGA 0.1411279 1.2718892 0.5429916 -3.7250782 0.3157308
## BH.A18Q.O2TCGA 0.5700234 0.3023929
                                      1.7141440 2.2895497
                                                           0.4796981
## C8.A130.02TCGA 0.8572464 1.4968208 0.5554985 -0.8745244 2.0379992
  NP 604391
                             NP 005162
                                        NP 898829
                                                    NP 874389 NP 001230587
## AO.A12D.01TCGA -0.5801800 -0.07728665
                                       -1.2735633
                                                   -2.8698687
                                                               -1.0945028
## C8.A131.O1TCGA 0.2419326 -0.89552191
                                       -0.7174151
                                                   -0.8064685
                                                               -0.7255109
## AO.A12B.O1TCGA -0.4214813 -1.59658622
                                      -2.8603783
                                                   -2.2284823
                                                                3.4364103
## BH.A18Q.02TCGA -0.7212940 -5.99027041 -10.3225399 -10.5031905
                                                                2.9251723
## C8.A130.02TCGA 0.6965328 -0.28414797
                                        0.7194919
                                                    0.8375672
                                                               -1.7568091
                 0.6695399 -0.13503070
                                        2.2311383
## C8.A138.O3TCGA
                                                    1.9970814
                                                               -1.2065725
                  NP_003098 NP_003099 NP_008874 NP_005827 NP_001120729
## AO.A12D.O1TCGA
                        NA
                                   NA
                                            NA -0.8849639
                                                            -2.9308255
                        NA
                                   NA
                                            NA -1.8548697
## C8.A131.O1TCGA
                                                            0.3026508
                        NA
## AO.A12B.O1TCGA
                                   NA
                                            NA 0.6067355
                                                           -0.9480613
## BH.A18Q.02TCGA -1.4472418 -0.8216554
                                            NA -0.5004988
                                                           -4.9097121
## C8.A130.02TCGA 1.0015606
                            1.0245197
                                            NA 1.0409190
                                                            -1.4189826
## C8.A138.O3TCGA
                 0.5451972
                                   NA
                                            NA -2.5816568
                                                            0.1685119
                                       NP 057149 NP 061865
                 NP 075568
                             NP 057141
                                                             NP 056168
## AO.A12D.O1TCGA 0.6199064
                            0.07129548 -2.3745949 -1.2164163 -1.60120592
## C8.A131.O1TCGA 1.3429562
                            0.70743894 -1.4500816 0.4726618
                                                            0.47266185
## AO.A12B.O1TCGA -0.3494230
                           1.52409337
                                       0.8506252 0.4349041
                                                           0.04135484
## BH.A18Q.02TCGA -0.1626152 -0.28304895
                                       0.4663166 -0.4570088 -0.76812932
## C8.A130.02TCGA -0.1004753 -0.34646548
                                       1.2803495 0.1422350 -0.71381079
## C8.A138.O3TCGA 2.2055384 0.82313976 0.3294260 -0.8189157 -1.91971461
                             NP_291027 NP_001074008 NP_068801 NP_077302
                 NP_060943
## AO.A12D.01TCGA -0.2030100 -0.99163821
                                        0.06748568
                                                          NA -0.6144682
## C8.A131.O1TCGA -0.9198092 -0.13047241
                                        0.98674273
                                                          NA
                                                             0.0152513
## AO.A12B.01TCGA 2.1920186 -0.07781853
                                       -1.51898495
                                                          NΑ
                                                             0.7342233
## BH.A18Q.02TCGA -0.4369365 -1.10935827
                                       -4.29081642 1.593710 -0.7948924
                                        0.40462449 -3.206511 -0.5038992
## C8.A130.02TCGA 0.7752497 -0.28414797
  C8.A138.O3TCGA -1.7405148 -0.67994444
                                        1.71548172 -1.755143 -1.7551433
                 NP_078843 NP_060326
                                                              NP_065141
                                       NP_060377 NP_037507
## AO.A12D.01TCGA -0.6220878 -1.3535690 -0.18777080 1.3437681 -0.302064744
## C8.A131.O1TCGA -0.7821812 -1.7496248 -1.69295445 1.2255677 -0.000940222
## AD.A12B.O1TCGA 0.7785669 -2.5250300 -0.39930950 -0.9480613 0.928226484
## BH.A18Q.02TCGA 0.3258105 -2.0427198 -0.46704495 -0.6744586 -0.042181459
## C8.A130.O2TCGA -0.9204425 0.5390991 0.03399931 1.6673740
                                                            1.860886265
  C8.A138.O3TCGA -3.1594848 1.6496532 0.04416912 -0.5556017 0.958453911
                NP 001003803 NP 065184 NP 003466 NP 076955 NP 005322
## AO.A12D.O1TCGA
                  -0.5116036 -1.1211714 1.33614847 -0.3287333 -0.1611022
## C8.A131.O1TCGA
                  -0.1749991 0.7560135 1.22556770 -0.1102330 4.4152979
                   2.7851140 -0.6930857 0.06906958 -0.6376563 -0.9286610
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   0.9447062 0.6135134
                                               NA -1.9390130 -3.3708364
## C8.A130.02TCGA
                   0.5095803 2.7825294
                                               NA
                                                  1.6017766 -4.1281543
  C8.A138.O3TCGA
                   1.9239387 -0.6580016 1.98611002 0.1538833 -2.7059995
                  NP_061945 NP_003801
                                       NP_060316 NP_001028260 NP_064554
## AO.A12D.O1TCGA -1.5250100
                            3.7058429
                                      0.28464417
                                                   -0.7478111 0.1665404
## C8.A131.O1TCGA 0.5576673 0.5860025 0.38765635
                                                   -0.4543029 1.1850889
                                                   -0.2773647 -1.6769590
## AO.A12B.01TCGA -1.9956785 -1.5965862 -0.19422044
## BH.A18Q.02TCGA 1.2324090 -5.5553708 0.07490691
                                                   -0.1626152 2.2494051
```

```
## C8.A130.02TCGA 0.1553545 -1.9240824 1.04091905
                                                    -0.1660727 -0.4383018
## C8.A138.O3TCGA -0.4495447 0.8670254 -0.88474423
                                                     0.1867975 -1.2138868
                             NP 059523
                                         NP 079175 NP 078977 NP 653209
                  NP 002192
## AO.A12D.01TCGA 0.1665404 -0.41254889
                                        1.21423492 -2.5955632 -2.0088543
## C8.A131.O1TCGA -0.7619418 1.14056220
                                        1.26604651 -2.3810942 -0.1021372
## AO.A12B.O1TCGA 0.3268167 -0.65428510 -0.18590601 1.6903818 -0.7596011
## BH.A180.02TCGA 1.3896420 0.05483462 -0.00872764 -2.1363905 -1.5609848
## C8.A130.O2TCGA -1.3140268 1.72969151 1.16883393 1.9166440 1.4377832
## C8.A138.O3TCGA -1.2431439 -0.25937343 4.23159346 -0.8847442 -0.6104588
##
                  NP_056517
                              NP_006433 NP_066957 NP_115527 NP_001095146
## AO.A12D.01TCGA -1.1745085 -1.37261803 0.1932090 -2.3098284
                                                               0.5094223
## C8.A131.O1TCGA -0.1102330 -1.65247564 -1.5269913 -2.0532159
                                                               -0.9764795
## AO.A12B.O1TCGA -0.2496499 -1.13097861 2.2779343 3.4890683
                                                              -0.3965380
## BH.A18Q.02TCGA -0.8618000 0.08828843 1.3227343 -1.7617077
                                                              -1.3702981
## C8.A130.02TCGA -0.6416537 1.03435931 -0.5924556 -1.7764883
                                                               0.4702219
## C8.A138.O3TCGA -0.9505727
                            1.18885368 -0.9725156 -0.1094307
                                                                0.4391401
                  NP_001324 NP_009044 NP_006488 NP_006667
##
                                                              NP_005180
## AO.A12D.O1TCGA 2.0219121 -2.4126929
                                              NA 1.7590361 -0.75162093
## C8.A131.O1TCGA 4.5731652 1.0798440
                                              NA 1.7113134 1.53320665
## AO.A12B.O1TCGA -2.0261647 -2.9407510
                                              NA 0.6871083 0.11895611
## BH.A18Q.02TCGA -1.6847640 -0.1458883 0.93132466 -0.4335911 -0.09905295
## C8.A130.O2TCGA 1.7132922 -0.1890318 0.04055904 -0.6613329 1.71657203
## C8.A138.O3TCGA 0.6951399 4.4912503 0.54519719 -0.7860015 -0.25937343
                 NP 001017395 NP 060287
                                         NP 258441 NP 001243804
                                                                   NP 542381
## AO.A12D.01TCGA -0.05442786 0.9170707 0.07510527 -0.49636445 -1.70407047
## C8.A131.O1TCGA
                  0.16097501 -0.8267079 -4.91101979
                                                     2.92162981 -0.74979819
## AO.A12B.O1TCGA -1.96242077 -1.7268455 3.39760971
                                                    -3.28164233 0.26584423
## BH.A18Q.02TCGA -0.55402488 -2.4307841 -1.53087639
                                                    -0.05221761 0.54660575
                  ## C8.A130.02TCGA
                                                     0.48662121 -0.32022653
## C8.A138.O3TCGA
                   2.29696685 3.5733084 -1.39308657 -1.17000108 -0.08383075
                  NP_000018 NP_001135764 NP_005496 NP_008924
                                                               NP 776171
## AO.A12D.O1TCGA -0.4506469
                            0.62371621 -2.477459 -1.7421685 -0.04299847
## C8.A131.O1TCGA 0.7357741
                             0.09216104 -3.263532 -2.0653595 0.09620892
## AO.A12B.01TCGA -0.2856791 -0.57945530 -1.075549 -0.6625995 -2.48622933
## BH.A18Q.O2TCGA -0.5506795
                            -0.21948670 -7.458893 -0.9320530
                                                              0.98150539
                            -0.58917578 -4.426622 1.7034526 1.31970790
## C8.A130.02TCGA 0.7063724
## C8.A138.O3TCGA 0.4830258
                              0.87068257
                                               NA -1.9014289 0.95113963
##
                  NP_061872 NP_001092871 NP_076972
                                                     NP_004519
                                                                 NP 689531
## AO.A12D.O1TCGA 3.0429380
                                     NA 0.1627306 1.93809658
                                                                1.30186028
## C8.A131.O1TCGA 0.4807576
                                     NA -2.1948917 -2.52681792 0.80863596
## AO.A12B.O1TCGA -0.5434261
                                     NA -1.1032639 -1.56887148 -1.44138368
## BH.A18Q.O2TCGA -0.1358522
                            -1.20302896 0.0581800 -0.06225375 0.08828843
## C8.A130.02TCGA 0.3062284
                            -0.03487794 0.5161400 -2.39310365
                                                                0.19799275
## C8.A138.O3TCGA
                         NA
                             1.20348224 -0.2337735 6.67090529
                                                                1.66428177
                  NP_066273
                              NP_004756
                                         NP_001698
                                                     NP_036590
                                                                NP 115685
## AO.A12D.01TCGA -0.5877996 -0.02394948 0.35703034 -0.29825495
                                                                0.3951283
## C8.A131.01TCGA -0.1790470 -0.48263805 -0.38144103 0.03953859 -1.4096028
## AO.A12B.O1TCGA -1.2141228 0.17715706 -1.27232377 -0.46582488 -1.7767320
## BH.A18Q.02TCGA -0.2562859 0.28901134 -0.55402488 -0.48711725 -1.9992298
## C8.A130.O2TCGA 0.4702219 0.97204180 -0.05455715 1.77560968 -1.0450776
## C8.A138.O3TCGA 1.1961680 -0.03994508 -1.19194392 -0.96520129 -0.1898878
                 NP_001963 NP_001017921
                                         NP_689695
                                                    NP_060281 NP_001243725
## AO.A12D.O1TCGA -1.555488
                             -1.5554883 1.03517441 -0.79352871 -1.52881975
## C8.A131.O1TCGA 3.549051
                             -0.1830949 0.52123642 0.04763435
                                                                 0.18931018
```

```
## AO.A12B.O1TCGA -1.300039
                             1.2608033 -0.03347495 0.85339669
                                                               -0.04178937
                            -1.0023061 -2.34045880 0.26224829
## BH.A18Q.02TCGA -7.201299
                                                               -4.36106944
## C8.A130.02TCGA -7.080036
                             0.6276556 -0.45470115 0.81788797
## C8.A138.O3TCGA -6.856852
                             1.5106819 -0.43125897 -0.89205851
                                                                1.80691020
                  NP_998760 NP_060836 NP_659473 NP_001032402
                                                              NP 079341
## AO.A12D.01TCGA 0.3760793 -0.5649408 -0.3896901
## C8.A131.O1TCGA -0.6202660
                           0.9260245 -2.0086892
                                                          NΑ
                                                                     NΑ
## AO.A12B.O1TCGA 1.6709815 0.8921973 -3.2594705
                                                          NA
                                                                     NΑ
-0.2161413 -1.9089045
## C8.A130.02TCGA
                 1.1360352 0.2471908 -0.4907797
                                                  -0.8810841 0.2012726
## C8.A138.O3TCGA
                 0.1904547 -0.7274872 1.2912536
                                                  -0.3434876 -0.5629160
                  NP 002844 NP 115613 NP 008840
                                                 NP 002882
                                                             NP_002405
## AO.A12D.O1TCGA -0.4239783 -0.2258688
                                              NA -0.7059034 -0.05442786
                                              NA 2.2820646 3.69882295
## C8.A131.O1TCGA -0.7578940 -0.5109732
## AO.A12B.O1TCGA 0.5790208 -1.1697792
                                              NA -1.7795035 -1.42198336
## BH.A18Q.02TCGA
                 0.6101680
                                   NA 0.3492282 -5.3044671 -4.16703729
## C8.A130.02TCGA
                 0.6309354
                                   NA -1.0155587 1.1229158 0.28654921
## C8.A138.O3TCGA
                 0.7024542
                            0.3623402  0.3294260  -1.6015435  2.22382406
                  NP_116307 NP_001177655
                                           NP 808880
                                                      NP 000981 NP 059973
## AO.A12D.O1TCGA -0.1191944
                             -0.1191944 -0.797338506
                                                     0.04081709 -1.3611886
## C8.A131.O1TCGA -0.6890800
                             -0.6890800 -0.470494409 2.44397986 -0.8631389
## AO.A12B.O1TCGA 3.1786633
                              3.1786633 1.895470867 -0.60162710 -0.7984017
                             -1.9724668 -0.002036877 0.05148923 -8.2818570
## BH.A18Q.02TCGA -1.8118885
## C8.A130.02TCGA 0.1553545
                              0.2275116 -0.986039911 1.20819236 0.2734297
## C8.A138.O3TCGA -1.5905721
                             -1.5905721 -2.691370976 -1.31628665 0.7829112
                   NP 036593 NP 001077430 NP 085053 NP 073737 NP 060899
## AO.A12D.O1TCGA -1.15164973
                               0.3684597  0.5475202  1.4352032  1.5304482
## C8.A131.O1TCGA -1.25173543
                              -0.7214630 1.9906172 0.2864593 0.6143377
## AO.A12B.O1TCGA -0.79285879
                               0.2824731 -1.0034908 -1.5245279 -1.1060353
## BH.A18Q.02TCGA -2.20329814
                              ## C8.A130.02TCGA 1.70017269
                               0.4669420 -0.4809401 1.1261956 0.7326114
## C8.A138.O3TCGA -0.02165938
                               0.1831404 0.2526261 2.0629099 2.7029093
##
                 NP_001138
                            NP_004086 NP_004246
                                                  NP_733832 NP_064539
                       NA -0.32492353 -0.2944451
                                                 0.87516289 2.5133761
## AO.A12D.O1TCGA
                       NA
                           0.28645932 -0.5109732 0.48075761
## C8.A131.O1TCGA
                                                            0.7519656
                       NA 0.35453139 -0.9674616 -0.23024960 -1.1143498
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                       NA -1.08928598 1.7041079 0.47969811 -0.2395590
## C8.A130.02TCGA
                       NA 0.09959668 0.6342153 -0.04799742 -0.3366259
## C8.A138.O3TCGA
                       NA -1.08588688 0.2526261 0.13925474 0.5086258
##
                            NP_945341 NP_036545 NP_065833 NP_891847
                   NP_115865
## AO.A12D.01TCGA 1.04279401 -1.57453733 -3.1327448 -0.8544855
## C8.A131.O1TCGA -0.89147403 -0.03737115 1.8408456 0.5009970
                                                                    NA
## AO.A12B.01TCGA 2.70474124 3.91310385 2.2031045 0.2852445
                                                                    NA
## BH.A18Q.02TCGA 0.17526836 -0.31315739 -2.5211094 -2.0594467 -1.353571
## C8.A130.O2TCGA 1.16555407 -0.88436398 -3.0523573 -1.8683246 -0.359585
## C8.A138.O3TCGA -0.06920219 -1.90508606 -0.5482874 -1.3126295 1.258339
                 NP_001073986 NP_001121 NP_113612 NP_653229 NP_001166994
## AO.A12D.O1TCGA
                           NA -0.7135229
                                                NA 1.1532782
                                                                 2.128586
## C8.A131.O1TCGA
                           NA -1.1100596
                                                NA 0.6669601
                                                                 2.172772
## AO.A12B.O1TCGA
                           NA 1.4963786
                                                NA -0.3438800
                                                                -0.659828
## BH.A18Q.02TCGA
                   -1.6881093 -1.9323222 -1.0926314 0.9212885
                                                                -2.005921
## C8.A130.02TCGA
                    0.9851613 -0.6711725 -0.5694966 -1.0680366
                                                                 1.090117
## C8.A138.O3TCGA
                    0.4866830 -0.3398305 0.5525115 -2.4243998
                                                                 1.152282
##
                  NP 009075 NP 005323 NP 006423
                                                NP 004538
                                                             NP 079414
```

```
## AO.A12D.01TCGA -2.7898629 -4.675713 -0.2068198 0.38750872 0.81801592
## C8.A131.01TCGA -0.8469473 4.018606 4.5448301 0.13668773 1.55749394
## AO.A12B.01TCGA -1.6880449 -1.857105 -0.6570566 -0.97023312 -0.04456085
## BH.A18Q.O2TCGA 0.6636941 -4.889640
                                   1.1822283 0.60013186 -1.52084024
  C8.A130.O2TCGA 1.3131482 -5.440102 0.9786015 -0.00535912
                                                         1.53617925
  C8.A138.O3TCGA
                1.8581101 -3.152171 1.2217679 -0.46783036
                                                                 NA
                 NP 665803 NP 001018082 NP 110446 NP 000223 NP 001183955
## AO.A12D.O1TCGA 1.6523617
                                   NA 0.1208229 0.8713531
                                                             0.9399295
## C8.A131.O1TCGA
                1.4320096
                                   NA
                                       2.0513354 0.9341203
                                                             0.3512254
## AO.A12B.O1TCGA -0.2413355
                                   NA
                                       0.1965574 -1.0866350
                                                             0.1217276
## BH.A18Q.02TCGA -1.0759045
                             -2.959354
                                       0.6938026 -0.5841333
                                                            -1.5777117
## C8.A130.02TCGA -0.7269303
                             -0.759729 -0.5432576 0.1258356
                                                             1.6542545
## C8.A138.O3TCGA
                       NA
                              0.278226 -0.2191449 1.4448534
                                                            -0.2520592
                NP_001183956
##
                            NP_116028 NP_001001551 NP_001014 NP_001107573
## AO.A12D.O1TCGA
                   1.0237450
                             1.0237450
                                        -0.6297074 0.19701882
                                                               0.4141773
## C8.A131.O1TCGA
                   1.2619986
                             1.2619986
                                        -0.5069253 0.08406528
                                                               0.8167317
                   0.2686157
                                         1.1277726 0.40164645
## AO.A12B.O1TCGA
                            0.2686157
                                                              -3.1957266
## BH.A18Q.O2TCGA
                  -1.5777117 -0.6711132
                                        -1.0825952 0.89452546
                                                               1.0183046
                            1.6837733
## C8.A130.02TCGA
                   1.6542545
                                        -1.4944196 1.14259498
                                                               1.1852333
## C8.A138.O3TCGA
                   0.2672546 0.2672546
                                        -0.1716021 0.14656902
                                                              -0.7128587
                                                NP_056177 NP_001185838
##
                 NP_005204 NP_612431 NP_852127
                 1.7590361
                          0.3684597 -1.4640532 -0.33635293
## AO.A12D.O1TCGA
                                                           -0.3249235
## C8.A131.O1TCGA 1.8691808 2.5451769 -2.3851421 -0.03737115
                                                           -0.1588076
## AD.A12B.01TCGA -3.5199891 -0.6570566 3.3920668 1.94812887
                                                           -0.3189368
## BH.A18Q.02TCGA 0.8242724 0.1685776 -0.4034827 -0.07228990
                                                            0.6268949
## C8.A130.02TCGA -1.6518533
                          0.7457309 0.2701499 0.07007786
                                                            0.2176720
  C8.A138.O3TCGA
                 2.1470241 0.2526261 -0.8554871 1.54725332
                                                           -0.3800590
                  NP_073593 NP_060596 NP_991330 NP_002088 NP_055067
## AO.A12D.01TCGA 0.07891507 1.9076182 -0.9459206
                                                         3.7629899
NA 0.2216932
## AO.A12B.O1TCGA -0.47691077 -0.7374293
                                     1.3356331
                                                      NA -2.4529716
## BH.A18Q.O2TCGA 0.17192298 0.3458828
                                     0.8711078 -3.494616 -1.7115270
  C8.A130.02TCGA -0.38910378 -1.6518533
                                     0.9064444
                                                3.468022 -1.6452936
  2.373767 1.3424535
                 NP 001253
                            NP 291028
                                      NP 057578 NP 001242954 NP 001230679
## AO.A12D.01TCGA 0.6770534 0.05986608 -0.9954480 -7.09112507
                                                             0.7646787
## C8.A131.O1TCGA 0.5252843 -0.70931938 2.8325764
                                               -3.28377165
                                                             -2.4175251
## AO.A12B.01TCGA 2.1698468 -0.07781853 0.3046449
                                               -4.24611524
                                                              0.2298151
1.49669420
                                                             -1.0558322
## C8.A130.02TCGA -0.5465375 0.87036587 0.4177440
                                                 0.05695839
                                                             -0.5727764
  C8.A138.O3TCGA 0.7207399 0.43548301 0.3915973 -0.10577359
                                                              0.5415400
                  NP 116147 NP 001329 NP 001193992 NP 056003
##
                                                           NP 055115
## AO.A12D.O1TCGA -0.83543649 3.050558
                                       3.050558 -1.9593269
                                                           2.9515029
## C8.A131.O1TCGA 0.58195463 2.561368
                                       2.561368 -2.4863391
                                                           0.4078958
## AO.A12B.O1TCGA 0.26030128 -1.582729
                                       -1.582729 -1.4053545 -3.8581089
                 0.72056560 1.965048
## BH.A18Q.O2TCGA
                                       1.965048 -1.5910933 -0.1927236
## C8.A130.02TCGA
                 1.83464731 -3.514819
                                       -3.514819 -0.4481414 -0.4153427
## C8.A138.O3TCGA -0.05457364
                                  NA
                                             NA 0.8889683 1.3717106
                NP_001258848
                              NP_112577
                                         NP_689450 NP_004393
                                                              NP_000220
## AO.A12D.O1TCGA
                   2.9629323 -0.42016849 -0.79352871 -2.0202837 -0.01252008
                   ## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  -2.9019504 0.06075516 1.46866389 -0.1748201 -0.65151362
## BH.A18Q.02TCGA
                  -0.7794082 1.09667682 -0.06111689 1.4640221 0.49318095
## C8.A130.02TCGA
```

```
## C8.A138.O3TCGA
                   1.3717106 0.27456889 -1.07491546 -2.1025716 -1.40771513
##
                  NP 005215 NP 001017363 NP 003024 NP 008858 NP 001106878
## AO.A12D.O1TCGA
                                     NΑ
                                         3.1915202 5.8240907
                                                               0.45227529
## C8.A131.O1TCGA
                        NΑ
                                     NΑ
                                        0.9381682
                                                   1.7517922
                                                               0.13263985
## AO.A12B.O1TCGA
                        NΑ
                                     NA -1.0866350 -0.9037177
                                                               0.07461253
## BH.A18Q.02TCGA -1.8988684
                              0.5666780 -3.6284308 -2.4475110
                                                               2.14235290
  C8.A130.02TCGA -0.1070351
                             -0.5137388 -0.9532412 0.1094363
                                                               1.84776679
## C8.A138.O3TCGA
                 0.2526261
                              0.2526261
                                        0.7207399 -0.5080589
                                                               0.07708337
##
                  NP 057158
                             NP 006224
                                         NP 068805
                                                   NP 001019
                                                              NP 115548
## AO.A12D.01TCGA -0.2334884 -1.17069873 -1.29642207
                                                   0.6884828
                                                              0.3189324
## C8.A131.O1TCGA 0.8774499 -0.70122362
                                       0.48885337
                                                   0.2176453
                                                              2.1727718
## AO.A12B.O1TCGA 0.4404471
                            0.39887497
                                       1.27466072 -0.2219352 -1.2141228
  BH.A18Q.02TCGA -0.8785269
                            0.24217600 -0.08567142
                                                   0.5031158 -0.3733743
  C8.A130.02TCGA 0.2603103
                           0.68013347 -0.59901538
                                                   1.5394591 -0.3858239
  0.3257688
                                                              0.1648547
##
                 NP_001243063 NP_002479 NP_079157
                                                   NP_005032
                                                             NP_057483
## AO.A12D.O1TCGA
                 -1.48310218 -0.5839898 3.9306210
                                                          NA -0.5039840
## C8.A131.O1TCGA
                  2.48041079 -0.3166749 -2.5065785
                                                          NA -0.6040745
  AO.A12B.O1TCGA
                 -2.23125374 1.0640287 -1.1420645
                                                          NA
                                                             0.2492154
## BH.A18Q.02TCGA
                 -1.65465552 -1.1963382 -0.3633381
                                                   5.1498512 -0.8283462
  C8.A130.02TCGA
                  C8.A138.O3TCGA
                 -0.04725936 -1.7514862 -0.2886305 -1.0273727 -0.1606307
                  NP_055073
                             NP_004313 NP_064585
##
                                                   NP_071358 NP_001073863
## AO.A12D.O1TCGA
                 0.9094511 -1.86027219 -2.7136670
                                                 1.17613694
                                                                      NA
## C8.A131.O1TCGA 0.8693542 -1.62414047 -1.3326930 -0.05356267
                                                                      NA
## AO.A12B.O1TCGA -0.2080778
                           1.99801540 -3.3315289 -2.12870920
                                                                      NA
## BH.A18Q.O2TCGA -2.7218323 -0.97888838 2.2460597 -3.69533845
                                                                -1.152848
  C8.A130.02TCGA -0.5924556
                            0.06023826 -0.7105309 -1.81912660
                                                                2.572618
  C8.A138.O3TCGA -3.2106847
                            0.72805414 -0.7823443 1.01331100
                                                               -1.393087
                                                    NP_054754 NP_003769
##
                  NP_734465 NP_001193541 NP_775901
## AO.A12D.O1TCGA
                 1.3437681
                              1.7171283 -1.1516497
                                                   0.07891507
                                                                    NA
## C8.A131.O1TCGA 0.2540763
                              4.8484211 0.8450669 -0.84694734
                                                                    NA
  AO.A12B.O1TCGA -1.2058084
                             -0.9508328 -4.1019986 0.94762680
                                                                     NA
                             -0.8551093 -2.4240933 -0.71460321 -4.387832
## BH.A18Q.02TCGA 0.1551961
  C8.A130.02TCGA -0.2972674
                              1.1393151 -1.0844360
                                                   0.78508928 -1.474740
                             ##
  C8.A138.O3TCGA
                 1.3790249
##
                  NP 997239
                             NP 068765 NP 001177875 NP 001020128
                                                                 NP 060945
## AO.A12D.O1TCGA 0.81420612
                                    NΑ
                                                NΑ
                                                     -0.5725604 3.51916282
## C8.A131.O1TCGA 0.69124742
                                    NΑ
                                                NΑ
                                                     -2.0329764 -0.49882958
                                                      0.8478537 -1.17532219
## AO.A12B.O1TCGA -1.10049239
                                    NA
                                                NA
## BH.A18Q.02TCGA 0.26559367 -0.8618000
                                          -1.085941
                                                     -0.1090891 -0.07563528
## C8.A130.02TCGA -0.09719545 1.9494427
                                          -0.457981
                                                      0.8014886 -0.94668148
  C8.A138.O3TCGA 1.05719667 -0.9652013
                                          1.064511
                                                      1.6350247
                                                                0.45011157
##
                 NP_060134 NP_009216
                                      NP_009209 NP_113600 NP_065827
## AO.A12D.O1TCGA
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                                      1.00850582 0.7799179 -1.4602434
## C8.A131.O1TCGA
                       NA 0.7843487
                                      1.11222703
                                                 1.0272215 -2.5794404
## AO.A12B.O1TCGA
                       NA -2.1869102 -1.79613234 -1.5550141
                                                           1.3273187
## BH.A18Q.02TCGA
                       NA
                           2.6040156
                                     0.53322422 0.3592644
                                                            0.1250876
  C8.A130.02TCGA
                       NA -0.2251103
                                     0.06679799 -0.2152707
                                                           1 2081924
  C8.A138.O3TCGA 0.2306832 -0.3837162
                                     NP 001020280 NP_001193570
##
                                           NP_443158 NP_945187 NP_001035362
## AO.A12D.O1TCGA
                 -0.06966706
                               -0.1992002 -5.20146518 0.4294165
## C8.A131.O1TCGA -0.09404148
                               -1.2153045 0.18121442 1.9218032
                                                                  0.9745991
## AO.A12B.O1TCGA -3.47010256
                                1.7264110 -3.86919479 -1.2113513
                                                                 -1.1753222
```

```
## BH.A18Q.02TCGA -4.33430639
                              -0.5841333
                                                 NA 0.4796981
                                                                -8.9743510
## C8.A130.02TCGA -0.17263243
                               2.2380712
                                                 NA 0.3259076
                                                                -0.8286062
## C8.A138.O3TCGA -1.09685830
                              -1.5320579 -0.08383075 1.0279396
##
                  NP_005697 NP_005195
                                      NP_001302 NP_115605 NP_056382
## AD.A12D.01TCGA 0.02938770 -1.1973673 -3.17084276 -2.6184220 5.134517
## C8.A131.01TCGA -0.03332327 -1.4743689 -6.50993276 1.1972325 -1.025054
## AO.A12B.01TCGA 1.60446611 -0.4658249 0.01918305 -0.4381101 -2.253426
## BH.A18Q.02TCGA -0.10574371 0.2254491 -4.81604137
                                                        NA -7.070829
## C8.A130.O2TCGA -0.51373879 -1.3402657 -2.03559795
                                                        NA 2.762850
## C8.A138.O3TCGA 0.30748314 -0.8701157 5.76759191 -1.6783434 4.260851
                 NP_001905 NP_001139256 NP_001139255 NP_061108
                                                                NP_064628
## AO.A12D.O1TCGA 1.3170995
                             0.1932090
                                       -0.1153846 -0.53827223 0.20082861
## C8.A131.O1TCGA -1.6079489
                             0.9503118
                                         1.0555567 -0.02522751 -0.07380208
## AO.A12B.O1TCGA -0.2385640
                             0.9476268
                                       0.7009656 -1.52729937 -0.53788320
## BH.A18Q.O2TCGA -3.7187561
                            -0.7413663
                                        -0.4971534 0.47969811 0.94805157
## C8.A130.02TCGA -0.1004753
                             0.1487947
                                         0.4341433 -0.57277643 0.22751157
## C8.A138.O3TCGA -1.0822297
                            -0.7896586
                                        ##
                  NP 054887
                            NP 003185 NP 950248 NP 055365 NP 068834
## AO.A12D.01TCGA -0.38588030 -0.82400709 -0.2982549 1.4885404
                                                                  NΑ
## C8.A131.O1TCGA 0.24193263 -0.94814436 -2.1220298 0.5333801
                                                                  NA
## AO.A12B.01TCGA -0.29953644   0.31850223   0.7092800 -2.0760512
## BH.A18Q.02TCGA -0.68449478 -0.07563528 0.5399150 3.6009394 -1.691455
## C8.A130.O2TCGA 1.20163262 1.03435931 1.4738617 1.2639501 1.903525
## C8.A138.O3TCGA 0.09171193 0.98405389 0.6585685 -0.5044018
                 NP 002153 NP 031376 NP 115982 NP 001139647
##
                                                            NP 115746
## AO.A12D.01TCGA 0.8561139 -0.2677766 -2.4279321
                                                  0.250356 0.9437393
## C8.A131.O1TCGA 1.6748825 -0.0697542 -2.4175251
                                                   1.318669 1.3834351
## AO.A12B.01TCGA -2.3421127 -0.7928588 4.1154214
                                                  -0.296765 -0.5683694
## BH.A18Q.O2TCGA 2.9552807 2.2126059 0.7908186
                                                 -1.356917 -1.1227398
## C8.A130.02TCGA -0.7859679 -3.6624129 -0.8482854
                                                  1.532899 1.9756817
                        NA 0.9218825 0.4830258
## C8.A138.O3TCGA
                                                  -1.663715 -1.6637149
##
                 NP_002419 NP_060164 NP_612207 NP_001092287
                                                            NP_919257
## AO.A12D.01TCGA 0.2808344 1.073272 1.2028055
                                               -0.6335172 -0.63351718
-2.0127370 -2.01273704
## AO.A12B.O1TCGA -0.8621456 -1.288953 -0.7873158
                                                -0.6709139 -0.67091394
## BH.A18Q.02TCGA -0.5841333 -2.521109 -0.4001373
                                               0.2823206 0.28232058
## C8.A130.02TCGA 0.2537505 -2.094636 0.8047685
                                                -0.5858959 -0.58589591
## C8.A138.O3TCGA -0.6580016 2.790681 0.2087404
                                                -1.1297726 -0.02165938
                NP 001186088
                              NP 068778 NP 525127 NP 001137291 NP 037504
##
## AO.A12D.O1TCGA
                   -5.586255 0.06367588 0.7913473
                                                    4.5782867 1.8809496
## C8.A131.O1TCGA
                   -1.777960 -0.43406348 0.3066987
                                                    1.5777333 -3.5064051
## AO.A12B.O1TCGA
                   -2.472372 -0.82611648 -3.7500214
                                                    5.7117904 -4.5232626
## BH.A18Q.O2TCGA
                   -1.213065 -0.71125783 -2.8656838
                                                   -0.6175871 0.3258105
                   -1.586256 0.72277177 -0.6744524
## C8.A130.02TCGA
                                                   -2.7342100 -0.3530252
## C8.A138.O3TCGA
                   -1.499144 0.67319706 2.6224522
                                                    0.6366257 2.6626808
                NP_001178251 NP_071914
##
                                         NP_002026 NP_542763 NP_116205
## AO.A12D.O1TCGA
                   3.1572320 1.8809496 0.696102375 -0.3211137
                                                              3.2105692
## C8.A131.O1TCGA
                  -4.2755025 -5.0405520 -0.000940222 0.3957521 2.8082891
## AO.A12B.O1TCGA
                  -4.5537488 -4.5842351 -1.607672113 0.1494423 0.6843368
## BH.A18Q.02TCGA
                   ## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
                   2.6626808 1.7374246 0.603711412 -0.3544590 1.3826821
##
                 NP_060740 NP_620154 NP_055724 NP_057211 NP_005006 NP_001926
## AO.A12D.01TCGA -0.1458630 4.4335144 -2.1269581
                                               NA 2.9324539
```

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## C8.A131.O1TCGA -0.4543029 0.2135975 -1.5715180
                                                       NA -1.1262511
## AO.A12B.01TCGA -0.1831345 -1.2224372 -1.6132151
                                                       NA -1.0367485
                                                                           NΑ
## BH.A18Q.02TCGA -0.3733743 -4.4413586 -0.8584546
                                                       NA -0.6343140 0.1786137
## C8.A130.02TCGA 1.4640221 -1.0253983 0.4243037
                                                       NA -0.5170187 1.1688339
## C8.A138.O3TCGA -0.7933157 4.4034790
                                              NA
                                                       NA 0.8377683 0.8085112
##
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## AO.A12D.01TCGA -1.4945316 0.8789727 0.4294165 -1.5250100 -2.9994018
## C8.A131.O1TCGA -1.6322362 -1.5593744 -0.5271647 1.0919876 -2.9316060
## AD.A12B.O1TCGA 0.2492154 2.9846601 -0.0279320 0.3268167 -0.8399738
## BH.A18Q.02TCGA -1.2164105 -3.2938926 -4.7524791 -3.4511256 -1.8888322
## C8.A138.O3TCGA -0.2849734 -0.5556017 1.2363965 -0.2410877 0.1758261
                  NP_005971 NP_938051 NP_938052 NP_777588 NP_001351
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA -0.8752825 -1.0371977 -1.0371977 0.63457708 0.7924444
## AO.A12B.01TCGA -4.6562934 0.4487615 0.4127323 0.07461253 -4.2488867
## BH.A18Q.02TCGA -13.3735282 -1.5141495 -1.8721053 -0.37337426 1.1721922
## C8.A130.02TCGA -6.9422818 -1.3566651 -1.4124229 -0.34318561 1.0901171
## C8.A138.O3TCGA -0.2520592 1.2546822 1.4229106 0.31479742 2.9515948
                 NP 076419 NP 115662 NP 001703 NP 004354 NP 001807 NP 057513
## AO.A12D.01TCGA -1.681212 -0.9421108 3.107705 2.8943559
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## C8.A131.O1TCGA -2.316328 -0.1345203 1.650595 -1.4541295
                                                          10.41831 3.1402154
## AO.A12B.01TCGA 6.460088 -0.6127130 -1.108807 0.4155038
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## BH.A18Q.O2TCGA 5.082944 -0.1090891 2.667578
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## C8.A130.O2TCGA -1.773208 0.5095803 -2.222550
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## C8.A138.O3TCGA -4.636969 0.4830258 -1.963600 6.5575340
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                       NA 0.5860025
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -2.347150 0.5399150
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                                       0.4144641 3.002281 -0.06439676
## C8.A130.02TCGA -1.228750 -1.0089990
## C8.A138.O3TCGA -4.095712
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## C8.A131.O1TCGA 1.2296156 -0.5433563 1.5170151 -1.8265345
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## AO.A12B.01TCGA -1.2501520 -1.9956785 -1.1143498 -0.9646902
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## BH.A18Q.02TCGA 2.7478670 -0.1224706 0.3358467 -1.5208402
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## C8.A130.O2TCGA -0.4907797 -0.4055031 0.6735737 0.7096523
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## C8.A138.O3TCGA -2.2598286 1.5326248
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## C8.A131.O1TCGA -0.0899936
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## AO.A12B.O1TCGA 2.0395875
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## BH.A18Q.O2TCGA 0.7105295
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## C8.A130.02TCGA -0.8056471
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## C8.A138.O3TCGA 0.8999397
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##
                                                 NP 004498
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## C8.A131.O1TCGA 0.1366877
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## AO.A12B.O1TCGA 1.1333156
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## BH.A18Q.02TCGA 0.2522121 3.1493128 -0.02210917 0.46297120 -14.1128576
## C8.A130.02TCGA 1.3000287 0.2701499 -0.44486155 1.07371774 -0.5006193
## C8.A138.O3TCGA 0.4866830
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## AO.A12D.O1TCGA 0.3265520
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## C8.A131.O1TCGA -1.0088626
## AO.A12B.O1TCGA 0.7480807 -0.32447971 -0.3605089 -4.9195834 -1.0450629
## BH.A18Q.02TCGA -0.5573703 -0.70791245 -0.6878402 -1.1561936
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## C8.A130.O2TCGA 0.3554265 2.56277820 0.4407030 1.7428110
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                                                          NP 955452
## AO.A12D.01TCGA -0.7668601 -1.212606506 -1.2697535 -2.5841338
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## C8.A131.O1TCGA 9.7261177 -0.927904954 -0.4826381 -0.7862291
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## BH.A18Q.02TCGA -7.8670296 -1.591093261 1.1922644 0.6168588 -6.3482263
## C8.A138.O3TCGA -3.1741133 -0.475144642 -2.7498852 -0.9688584 2.9589090
                 NP_056052 NP_940929 NP_005309 NP_060479 NP_001167555
## AO.A12D.01TCGA 2.4409899 0.3532205 -3.1860820 -0.1115748
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## C8.A131.O1TCGA 0.4078958 -0.6566969 5.4798906 0.5536195
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## AO.A12B.O1TCGA -5.1523872 -0.6043986 -2.2617399
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## BH.A18Q.O2TCGA 1.0383769 0.2856660 -5.2777041 2.1022083
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## C8.A130.O2TCGA -0.4874998 -0.3431856 0.5817374 -1.9208025
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## AO.A12D.01TCGA 0.27321478 -0.1915806
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## C8.A131.01TCGA 0.43218304 -0.3328665 -0.09808936 -0.94409648 1.128419
## AO.A12B.01TCGA -1.09494945 1.8982423 -0.87600301 0.08292695 -2.156424
0.40275433
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA -0.03332327
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## AO.A12B.O1TCGA 0.02749747
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## BH.A18Q.O2TCGA -1.84868766 2.5404533 -0.06894451 -2.357186 -2.792085
## C8.A130.O2TCGA -0.13327401 -1.3304261 -0.67445237
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## C8.A131.O1TCGA 0.6831517 -0.4947817 -1.0210062 0.59409828 -1.7496248
## AD.A12B.O1TCGA 0.4044179 0.5956496 -0.6321133 0.76748100 1.9869295
## BH.A18Q.02TCGA -0.5406434 -1.2063743 3.6210117 0.01134465 -1.2833181
## C8.A130.02TCGA 0.3619862 -0.4448615 0.2865492 0.48334134 1.6673740
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## BH.A18Q.02TCGA -1.4740049 -1.58440250 -0.67780401 -1.4606234 -0.3231935
## C8.A130.02TCGA -0.2546292 3.77632968 -1.27794824 0.3488667 -0.4612609
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## AO.A12D.O1TCGA -0.02394948
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                                      3.4696354
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## C8.A131.O1TCGA -2.52681792 1.49677572 2.3792138 -2.6603980
## AO.A12B.O1TCGA 2.22250478 0.12727053 -1.4192119 -1.0367485
                                                          0.2381295
## BH.A18Q.02TCGA -0.13250677 1.03168612 -2.7117962 -3.6819569 0.4663166
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## C8.A130.02TCGA 0.88020547 -0.61541473 -0.7400497 2.5201399 1.1589943
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## C8.A138.O3TCGA
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                   0.4865635 -0.6106584
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                   1.8982423 0.5901067
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                                                                   0.9420839
## BH.A18Q.02TCGA
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                                                                   0.2689391
                   -0.4809401 0.6670140
## C8.A130.02TCGA
                                           0.3521466 -1.0745964
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## C8.A138.O3TCGA
                   -0.7713729 0.7682827
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                           1.0889720 1.08897197 0.7259089 1.1776591
## BH.A18Q.02TCGA 0.2856660 0.5900957 1.11532067 -1.9457037 -0.5306072
## C8.A130.O2TCGA 1.7132922 -0.1529532 -0.04799742 -4.1707926 -2.7899678
## C8.A138.O3TCGA 0.2233689 -0.9396013
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## AO.A12D.O1TCGA -0.97258922 -0.48493506 -0.48493506
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## C8.A131.01TCGA 0.93412027 -2.17060440 -2.17060440 0.71553470
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## AO.A12B.O1TCGA -0.22470665
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## BH.A18Q.02TCGA -1.88214148
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                            -0.36942456 1.49026108 -0.05783702
## C8.A130.02TCGA -0.01519873
## C8.A138.O3TCGA -2.85959938 -1.47720077 -1.47720077 0.30016886
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## AO.A12D.O1TCGA 0.5779986 0.3494107 -1.6050157
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## C8.A131.O1TCGA 0.1366877 1.5008236 -1.0817244
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## AO.A12B.O1TCGA -1.5328423 -2.1009945 -1.1614648
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## BH.A18Q.02TCGA -0.7547478 -2.8757199 -0.1291614 0.4295174 -0.94208918
## C8.A130.O2TCGA 0.2471908 -0.3858239 0.1947129 -1.7863279 0.12583564
## C8.A138.O3TCGA -1.0676012 3.4160514 -2.2196000 -0.6689730 -0.03994508
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## AO.A12B.O1TCGA 0.40164645 -0.5933127
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## BH.A18Q.02TCGA -0.02879993 -1.0123422 -1.2565551 0.16523222
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## C8.A130.O2TCGA -0.41862260 1.0441989 -0.7859679 1.27706961
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## C8.A138.O3TCGA -1.23217245 -0.4422304 0.4574258 0.70611131
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## AO.A12D.O1TCGA
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## BH.A18Q.02TCGA
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## BH.A18Q.O2TCGA -0.3265389 -0.3599927 -1.7717439
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## C8.A138.O3TCGA -0.9322870 -0.8628014 0.3440545
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## C8.A131.O1TCGA -0.1992864
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```

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## AO.A12B.O1TCGA -0.8482883
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## BH.A18Q.02TCGA 1.4833127
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                                                      NP 004087
                  -0.1611022 -0.28682555 -1.2811829 -0.06585726
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                    0.1488314  0.12454409  -0.6162181  0.22169323
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## AO.A12B.O1TCGA
                                                                         NA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.01TCGA -0.4773155 -2.4698399 0.3417911 0.09034447
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## C8.A131.01TCGA -0.5959787 -0.2761961 1.4562969 -0.84694734 0.2419326
## AD.A12B.O1TCGA 1.5296363 -0.1415624 -0.4408816 0.06906958 -1.3416106
## BH.A18Q.O2TCGA 1.7944332 1.3929874 -1.8252700 -0.41017346 -1.1026675
## C8.A130.02TCGA -0.8154867 -0.1267143 0.2570304 -1.11395480 0.4439829
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                           NA 0.06629811 -1.0478344
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                   -0.1124345
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                              NA 1.3241678
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## C8.A131.O1TCGA -1.1343469
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## AO.A12B.O1TCGA 0.2353580
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## BH.A18Q.O2TCGA -1.6513101 -1.2431735 3.0924413 -0.88521769 0.08494305
## C8.A130.O2TCGA 0.3816654 0.7227718 -1.4813001 0.02415970 -0.12015453
## C8.A138.O3TCGA -1.1773154 -0.6580016 3.6171941 -0.01068797 -0.78600147
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## C8.A131.O1TCGA -0.07380208 -1.08577231 1.29033380
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## AO.A12B.01TCGA 0.10232727 1.54072221 -0.83997385
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## BH.A18Q.O2TCGA 1.90817617 -1.79850694 0.14181454
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## C8.A130.02TCGA 0.94908272 0.16847393 -0.91060293
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##
                  NP_060691 NP_597998 NP_006601
                                                    NP_055569 NP_001001655
## AO.A12D.01TCGA -0.5039840 -1.3497592 -0.09252584 4.23921467
                                                                0.31893236
## C8.A131.O1TCGA 0.2621720 -0.0899936 3.21307724 0.05168223
                                                                0.09620892
## AO.A12B.O1TCGA -0.9064892 3.9214183 -1.36932536 -1.51621348
                                                               -0.31339381
## BH.A18Q.O2TCGA 0.8644170 1.1521199
                                               NA -0.54398874
                                                                0.44958967
## C8.A130.02TCGA -0.3300661 -0.6318141
                                               NA -0.47438037
                                                               -1.13363401
## C8.A138.O3TCGA -0.3617733 -0.9432585 -2.45365693 -0.11674500 -2.07331446
                 NP_068818 NP_057043 NP_001075955 NP_004813 NP_001161339
## AO.A12D.01TCGA -2.351736 2.4409899 -0.08871605 -0.5801800
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## C8.A131.O1TCGA 1.832750 -0.4259677
                                      1.39962658
                                                  1.5413024 0.573858870
## AO.A12B.O1TCGA -2.865921 -0.9175751
                                       0.23258654
                                                   0.2021003
                                                              0.930997958
## BH.A18Q.02TCGA -4.267399 -1.3970611
                                       0.53656960 0.2722844
                                                              0.007999269
## C8.A130.02TCGA 2.156074 0.4341433
                                      1.41154423 1.6083364 -0.061116890
## C8.A138.O3TCGA 1.221768 2.0519385 -2.25617142 4.2937648 1.287596436
                  NP 859052 NP 060809 NP 001242959 NP 997251 NP 001122088
##
```

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## AO.A12D.O1TCGA
                          NA -1.47929238
                                             0.5665692 -2.5079379
                                                                   -0.04680827
## C8.A131.O1TCGA
                          NA -1.16672993
                                             0.7074389 -0.4381114
                                                                    0.73982199
                                                       0.1328135
## AO.A12B.O1TCGA
                          NΑ
                             1.42154883
                                            -1.3998116
                                                                   -0.03901790
  BH.A18Q.O2TCGA
                   0.4997704 -0.08567142
                                             2.0587183
                                                        2.0587183
                                                                   -0.64435019
  C8.A130.02TCGA -0.6350939 -0.44814142
                                            -0.7695686
                                                       0.6538945
                                                                   -1.12051453
   C8.A138.O3TCGA
                  0.4171973 -0.22645918
                                             0.1611976 -1.7368577
                                                                    0.43914015
                  NP 001122087 NP 060129 NP 001011663
                                                          NP 065876
                                                                    NP 060607
## AO.A12D.O1TCGA
                   -0.04680827 0.5360909
                                             -1.6088255
                                                         0.68848278 -1.0221166
## C8.A131.O1TCGA
                    0.73982199
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                                             -0.3166749
                                                         1.40772234
                                                                     0.6629123
## AO.A12B.O1TCGA
                   -0.03901790 -1.5993577
                                             -0.1332480 -1.05892028
                                                                     0.6067355
  BH.A18Q.O2TCGA
                   -0.64435019
                                0.6770756
                                              0.3525736
                                                        0.41948124
                                                                     0.5499511
## C8.A130.02TCGA
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                                0.6342153
                                              0.4505427
                                                         1.02779957
                                                                     1.3525066
  C8.A138.O3TCGA
                    0.43914015
                                1.4667963
                                             -0.2228020
                                                        0.09536907 -1.1590297
                               NP_061825 NP_005506
##
                    NP_149017
                                                    NP_073149 NP_055436
## AO.A12D.O1TCGA
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                                                 NA
                                                            NA
                                                                      NA
## C8.A131.O1TCGA
                   4.03074918
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                                                 NA
                                                            NA
                                                                      NA
                                                                      ΝA
                                       NA
                                                 NA
                                                            NA
## AO.A12B.O1TCGA
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  BH.A18Q.02TCGA -1.18964744 -1.7550170
  C8.A130.02TCGA -0.06439676
                               3.0842774
                                                     1.2213118
                                                                2.900605
                                                 NA
  C8.A138.O3TCGA
                  0.30382600
                               0.3550259
                                                 NA -0.6287445
                                                                      NΑ
##
                    NP_076921
                                NP_062458 NP_076920
                                                      NP_002132
                                                                  NP 004493
## AO.A12D.O1TCGA
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                                                  NA
                                                             NA
                                                                         NA
## C8.A131.O1TCGA
                           NA
                                       NA
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## AO.A12B.O1TCGA
                           NA
                                       NA
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                                                                         NA
## BH.A18Q.02TCGA
                   0.02472618 -0.47708110 -1.022378
                                                      1.5502203 -0.05221761
  C8.A130.02TCGA
                   2.08391735 0.03727918 2.900605
                                                     2.9006047
                                                                 2.08391735
  C8.A138.O3TCGA -0.25571629 -0.61045879 0.962111 -0.2557163 -0.25571629
                   NP_055435
                              NP_002138
                                         NP_061826
                                                     NP_004494
                                                                NP_115731
## AO.A12D.O1TCGA
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                                     NA
                                                 NA
                                                            NA
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## C8.A131.O1TCGA
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                                     NA
                                                 NA
                                                            NA -0.2073821
## AO.A12B.O1TCGA
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                                     NA
                                                 NA
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  BH.A18Q.02TCGA -0.1592698 -1.2498643 -1.2498643 -1.2498643
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   C8.A130.02TCGA
                   3.2810695
                              2.4775016
                                         2.4775016 2.4775016
   C8.A138.O3TCGA
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                                                                1.9531958
                   NP 003086
                              NP 778250 NP 001243042
                                                        NP 001478
                                                                     NP 542161
## AO.A12D.O1TCGA -0.7516209
                              1.6066441
                                           1.1227998 -0.98782841
                                                                  0.082724870
## C8.A131.O1TCGA -0.7052715 -1.0452935
                                          -0.8833783
                                                      0.57790675 -0.179046983
## AO.A12B.O1TCGA -0.3438800 -1.3416106
                                          -2.0871371
                                                       0.04412632 -0.127705063
## BH.A18Q.02TCGA 0.3559190 -0.3599927
                                           -0.3533020
                                                       0.18195913
                                                                  0.208722181
                                                                  0.906444425
  C8.A130.02TCGA
                  1.5263396
                              0.5751777
                                            0.8408470
                                                       0.46038226
  C8.A138.O3TCGA -0.7311444
                              0.8962825
                                            1.6057675 -0.97617271
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##
                   NP 057525 NP 001093392
                                          NP 060936
                                                                  NP 001599
                                                       NP 004964
## AO.A12D.O1TCGA -0.6449466
                               -1.3992866 -1.4488140
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                                                                         NA
                                                                         NA
## C8.A131.O1TCGA 1.9420426
                               -1.8143909 -1.7981994 -0.8793304
## AO.A12B.O1TCGA -0.1775916
                                1.2469460
                                           1.2469460 -4.0049970
                                                                         NA
## BH.A18Q.02TCGA
                          NA
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  C8.A130.02TCGA
                          NA
                                0.1061564
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                                                       0.5554985
                                                                  -1.307467
## C8.A138.O3TCGA
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                                                                  NP_036323
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                          NA -0.6688406 0.4969491
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## AO.A12B.O1TCGA
                          NA -5.4018198 -0.3882236
                                                       0.2935590 0.4127323
## BH.A18Q.02TCGA -0.3198482 -1.9490491 0.1919953
                                                      -1.4539326 -0.1124345
## C8.A130.02TCGA -1.0319581 -0.8515653 -0.1660727
                                                      -0.3530252 -0.4579810
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## C8.A138.O3TCGA 4.8825642 -2.4061141 0.9547968
                                                     -0.2301163 -0.3544590
##
                   NP_000557 NP_852100 NP_777572 NP_149074 NP_002399
## AO.A12D.O1TCGA 0.3189324 1.6256931
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## C8.A131.O1TCGA -0.3733453 -1.7131939
                                                   0.2824114
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                                                               1.2377113
## AO.A12B.O1TCGA -3.2705564 -4.1019986
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## BH.A18Q.O2TCGA -1.6111656 -7.4856561 -3.3975995 -1.2799727
  C8.A130.02TCGA -0.8712445 0.2209518 -0.9630808
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## C8.A138.O3TCGA 1.8325102 4.0560508 2.1397099 -0.1716021
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##
                    NP 056955 NP 997717 NP 065690 NP 001245146 NP 004415
## AO.A12D.O1TCGA -0.79733851 -1.2430849
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                                                    -0.5954192 -0.2106296
## C8.A131.O1TCGA -1.05338926 -0.1992864
                                                NA
                                                     -1.2355439 0.1083526
## AO.A12B.O1TCGA -1.35546799 -0.2274781
                                                NA
                                                     -1.3416106
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  BH.A18Q.02TCGA 0.07490691 -0.1793421 -1.323463
                                                    -1.9891937 -3.5983224
  C8.A130.02TCGA -0.70725106 0.9490827
                                         2.762850
                                                      0.2799895 -0.3300661
                                                      1.9385672 0.3294260
  C8.A138.O3TCGA -0.21183062 -0.0509165 2.746795
##
                  XP_003960943 NP_057206 NP_001127666 NP_612476 NP_783313
## AO.A12D.O1TCGA
                            NA 1.3437681
                                            3.11532421 -1.1897477 -1.2240359
                                            3.94979156 -0.5271647 -0.4866859
## C8.A131.O1TCGA
                            NA -0.1304724
## AO.A12B.O1TCGA
                            NA -1.5910433
                                           -0.72911489 0.5208198 -2.1065374
## BH.A18Q.02TCGA
                  -1.85203305 -8.1413509
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## C8.A130.02TCGA
                   1.75265059 0.1783135
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  C8.A138.O3TCGA
                  -0.05457364 1.5838247
                                            0.06611196
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                   NP_004798 XP_003960581
##
                                            NP_073749 NP_001244109 NP_004844
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                           0.74386987
                                                        -0.1709512 2.1282451
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -3.0229167
                               0.89452546
                                           1.24913594
                                                         1.3327705 0.1117061
  C8.A130.02TCGA
                  0.6768536
                              -0.09391558
                                           2.19543289
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                                         NP 057506
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                   NP_112202
## AO.A12D.O1TCGA -0.4849351 -2.16505605
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  AO.A12B.O1TCGA 2.0395875 -4.48723347
                                         1.2081453 0.56793488
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## BH.A18Q.O2TCGA -1.5476033 6.55156619 -0.6510410 -0.68114939
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  C8.A130.02TCGA -0.7695686 -0.06111689 -0.7794082 -0.56949657
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##
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                             NP 060288 NP 077283 NP 036523
## AO.A12D.O1TCGA 1.4656816
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                                                                       NA
## C8.A131.O1TCGA
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                                                    1.7315528
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                             1.2053739
## AO.A12B.O1TCGA 0.9531697
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## BH.A18Q.02TCGA -2.4073664 -1.8353061 -0.6242779 -2.0092660
                                                               0.05483462
                  0.1684739 -0.4219025 -0.7236504  0.6145361 -0.51373879
## C8.A130.02TCGA
  C8.A138.O3TCGA
                  2.1762813 -1.3894294 7.2414190 1.8105673 -0.17160209
                  NP_001096034 NP_005867 NP_001166947 NP_001028741 NP_444269
##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                    1.9120997
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                                                   NA
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## BH.A18Q.02TCGA
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                                                       -1.58105711 0.1652322
## C8.A130.02TCGA
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                                            0.8178880
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  C8.A138.O3TCGA
                     1.7191389 0.4318259
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                                                        0.92919680 0.1026833
##
                   NP_000135 NP_057197
                                         NP_055739
                                                     NP_002351
                                                                 NP_002350
## AO.A12D.O1TCGA 0.1589208
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## C8.A131.O1TCGA -1.1788736 0.2500284
                                         1.2822380 1.96228203 0.35122542
## AO.A12B.01TCGA -0.8898604 -1.2002655 0.5152769 -1.07000618 -0.62934183
```

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## BH.A18Q.02TCGA -1.4639688 -0.6309687 -0.3298843 0.37264589 1.19226445
## C8.A130.O2TCGA -1.3533852 -0.7269303 0.1487947 0.05695839 0.03399931
## C8.A138.O3TCGA -1.2833724 -0.9286299 1.6825675 -0.63605877 -1.58691495
##
                 NP_115904 NP_689895
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## AO.A12D.01TCGA 1.7399871 1.0199352 -0.336352928 -0.336352928
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## C8.A131.O1TCGA 2.4763629 -0.2964355 0.003107659 0.003107659 0.5900504
## AO.A12B.01TCGA -0.6154845 0.1328135 -0.366051816 -0.366051816 -0.9646902
## BH.A18Q.02TCGA -2.7686677 -0.7647839 -1.085940600 -1.085940600 -2.9593544
## C8.A130.02TCGA -0.1070351 -0.4874998 2.677573613 3.441783059 -2.1143148
## C8.A138.O3TCGA
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                                                            NA -2.2305714
                  NP_116052
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                                                     NP_000607
                                                               NP_003302
## AO.A12D.O1TCGA 0.9056413
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                                                NA
                                                   0.05605628
                                                               5.6755086
## C8.A131.O1TCGA -1.2800706
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                                                NA
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## AO.A12B.O1TCGA -1.5328423
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                                                NA -1.30280999
                                                              1.2053739
## BH.A18Q.02TCGA -0.5506795
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                                         0.8911801 1.20899136 -2.1731897
## C8.A130.02TCGA -0.7662887
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                                         0.6670140 -1.48457998 -0.1201545
## C8.A138.O3TCGA 2.0043957 -0.08383075
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##
                 NP 004919 NP 598395 NP 060189 NP 073728 NP 001137544
## AO.A12D.01TCGA -0.8468659 -0.5154134 1.1608978 -1.2583241
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## C8.A131.O1TCGA 0.3471775 -0.3166749 -0.1183288 -1.2355439
                                                             0.5009970
-0.7402008
## BH.A18Q.O2TCGA 1.1320476 -1.2933543 -4.8227321 -2.6616155
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## C8.A130.O2TCGA -0.8122069 0.9064444 0.6768536 0.2570304
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## C8.A138.O3TCGA 0.3659974 -0.1313736 1.7630245 1.1925108
                                                             1.9458815
                             NP 002862 NP 065746 NP 001068566 NP 775498
##
                  NP 115497
## AO.A12D.O1TCGA 4.7687766 -0.53827223
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## C8.A131.O1TCGA 0.9260245 -0.22762155
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## AO.A12B.O1TCGA -2.4529716 -0.16096275
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## BH.A18Q.02TCGA 0.0581800 0.19199527
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## C8.A130.02TCGA -2.1307141 -0.46126089
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##
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## C8.A131.O1TCGA 3.9781267 -0.7093194
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## AO.A12B.O1TCGA -0.6875428 0.3905606
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## BH.A18Q.02TCGA -5.6222784 0.3960636
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## C8.A130.02TCGA -0.5399777 -0.1726324 -0.24150968
                                                  -3.0753164 -0.50717906
## C8.A138.O3TCGA 2.7541092 -0.8701157
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                  NP 060142 NP 002484 NP 004827
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##
## AO.A12D.01TCGA 1.4047248 2.079059 0.7532493 -0.22586878 -0.2487276
## C8.A131.01TCGA 0.4767097 -1.118155 1.0838919 0.01525130 -2.0046413
## AO.A12B.01TCGA -0.4769108 -3.677963 2.0007869 0.33235960 -2.4502002
## BH.A18Q.02TCGA -1.3435350 -1.189647
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## C8.A130.02TCGA -2.4127829 -1.022118
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## C8.A138.O3TCGA -4.0518267 2.190910
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## AO.A12B.O1TCGA -0.269050230
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## BH.A18Q.O2TCGA 0.506461166
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## C8.A130.02TCGA -1.287787846
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##
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## AO.A12D.01TCGA 0.4332263 1.62950292 0.155111035 2.631479843
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## C8.A131.O1TCGA 1.1405622 -0.11023301 0.375512705 0.549571585
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## C8.A130.02TCGA -1.1401937 0.51941990 -1.133634010 0.007760356
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## C8.A138.O3TCGA -0.2666877 0.02588342
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                                                                -0.4422304
                 NP 001017 NP 060727
                                      NP 079133 NP 055228 NP 113679
##
## AO.A12D.01TCGA 0.2846442 -4.4242664 0.72658076 -0.40492930 -0.1077650
## C8.A131.O1TCGA -1.1181554 -1.1626820 0.05977799 0.10430468 -1.7131939
## AO.A12B.O1TCGA 0.3600743 1.5656655
                                     1.13885850 -0.15819127 -3.1984981
## BH.A18Q.O2TCGA 0.1685776 -0.7547478 -2.39398491 -3.77897300 2.0520276
## C8.A130.O2TCGA 0.5882971 1.1393151 0.19143301 -0.21527073 -0.6777322
## C8.A138.O3TCGA -0.4422304 -1.3126295 0.94016822 -0.09114503 -3.3533132
                 NP_065139 NP_689565 NP_919442 NP_003498 NP_003496
## AO.A12D.01TCGA -0.7135229 1.1113704 -0.8621051 1.7133185 2.2695490
## C8.A131.O1TCGA 5.6863325 -1.0533893 1.3631957 0.7033911 1.3186690
## AO.A12B.O1TCGA -2.0843656 -1.4552410 0.9143691 -2.3282553 -0.8233450
## BH.A18Q.02TCGA
                        NA -0.7146032 -0.4904626 -0.5306072 -1.3970611
## C8.A130.02TCGA
                        NA -1.1959515 -1.1500334 -0.9958795 -0.1103149
                        NA 0.7682827 -1.2321724 2.0811956 3.8585653
## C8.A138.O3TCGA
                 NP 001457 NP 001997 NP 127490 NP 444278 NP 002590
## AO.A12D.O1TCGA 1.7133185 -1.585967
                                           NA -1.2430849 0.2160678
## C8.A131.O1TCGA 0.7033911 -1.324597
                                           NA -1.5796138 2.5087460
## AO.A12B.01TCGA -2.3282553 5.362585
                                           NA 2.4386797 -1.6492442
## BH.A18Q.02TCGA -0.3198482 2.644160 -1.0625229 0.2722844 1.0350315
## C8.A130.02TCGA 0.6538945 -1.743690 0.7686899 -0.1201545 -0.7630088
## C8.A138.O3TCGA 2.0811956 -4.914912 -0.4824589 -1.5613150 -0.6031445
                  NP_005530 NP_002418 NP_663768 NP_116016 NP_001243661
## AO.A12D.01TCGA 0.44084590 -0.1915806 -2.4888889
                                                        NA
                                                            -2.4888889
## C8.A131.O1TCGA 1.O1912577 2.9580607 -3.9759593
                                                        NA
                                                            -3.9759593
NA
                                                            -1.2279802
## BH.A18Q.02TCGA -1.21641049 -1.4606234 1.7375617 -0.5205711
                                                             3.7849354
1.5132202
## C8.A138.O3TCGA 1.51433906 0.8853111 0.1611976 0.1611976
                                                             0.8121683
                 NP_114428 NP_004099 NP_036560 NP_055767 NP_066925
## AO.A12D.O1TCGA 0.3036932
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## C8.A131.O1TCGA 2.1080057
                                  NA 1.0150779 -1.2072087 3.3709446
## AO.A12B.O1TCGA -1.4857273
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## BH.A18Q.02TCGA -0.2228321 -0.2997759 -0.4168642 0.4127905 -0.9353984
## C8.A130.O2TCGA -0.2447895 0.3980648 0.6079764 -0.8286062 -0.9827600
## C8.A138.O3TCGA 1.7301103 -1.5137722 1.6496532
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                 NP 054896 NP 000992
                                      NP 066357 NP 113615 NP 000152
## AO.A12D.01TCGA 1.4047248 -1.0449754 -0.07728665 -0.2906354 -0.8430561
## C8.A131.01TCGA 0.6710080 4.5286385 4.18052078 0.2540763 -1.3610282
## AO.A12B.O1TCGA -0.3106223 -3.5809615 -3.78882205 1.1915165 1.7374969
## BH.A18Q.02TCGA -2.1163182 -2.8891014 -3.14335044 -0.6878402 2.8415377
## C8.A130.O2TCGA -0.1595130 1.8805655 2.09375695 -0.9270023 -1.6584130
## C8.A138.O3TCGA 0.8048541 0.2635975 0.26359747 1.1632537 -2.9400564
                 NP_036324 NP_001124396 NP_001229338 NP_001122064 NP_001247441
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## AO.A12D.O1TCGA -0.9383010
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                                                                  2.2238314
## C8.A131.O1TCGA -0.6162181
                            0.09216104
                                                NA
                                                     0.15692713
                                                                 -0.9805274
## AO.A12B.O1TCGA 0.5901067
                           -1.51898495
                                                NA
                                                   -0.09999032
                                                                -1.8072182
## BH.A18Q.02TCGA -0.9621615
                           -1.79850694
                                         -5.6155876
                                                     1.30935281
                                                                 -0.8484185
## C8.A130.02TCGA 1.8936850
                            0.26031026
                                         -0.4743804 -0.77612830
                                                                 -2.8752444
## C8.A138.O3TCGA -0.5373160 -0.34714477
                                         2.6224522 -0.48977320
                                                                 -1.6052006
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NP 001254527
                                NP 000073
                                            NP 114131 NP 001243635 NP 057251
                    2.2238314 -0.08490625 4.68877085 0.917070668 -0.8697247
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                   -0.9805274 1.50487148 0.42408728 -0.000940222 0.4605182
## AO.A12B.O1TCGA
                   -1.8072182 1.04185691 -1.66864454 -0.914803644 -2.2395682
## BH.A18Q.02TCGA
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                                       NA -0.77147471 -0.142542915 -3.1734589
## C8.A130.02TCGA
                   -2.8752444
                                       NA 0.06023826 -0.047997415 1.3820254
## C8.A138.O3TCGA
                   -1.6052006
                                       NA 1.19982510 0.340397392 -0.5592588
##
                   NP 001528 NP 612434 NP 005784
                                                     NP 951032
                                                                NP 951033
## AD.A12D.O1TCGA 0.05224649 -0.6144682 1.1189900 -0.03537887 -0.29825495
## C8.A131.O1TCGA 0.26217204 -1.0898202 1.1648495 -0.93195284 -1.25173543
## AO.A12B.01TCGA -1.08386355 0.9254550 -0.3882236 0.88942585 0.73699479
## BH.A18Q.02TCGA -0.52057107
                              0.1317784 -3.4845794 0.61016800 0.74063790
## C8.A130.02TCGA 0.25047065 -1.4714605 0.8834853 0.09631682 -0.04143768
## C8.A138.O3TCGA
                 0.41719731 0.6183400 -1.3967437 -0.23377346 -0.32154480
                   NP_003334 NP_001034933
                                             NP_872357
                                                         NP_057284 NP_001154829
## AO.A12D.O1TCGA -0.77447972
                               -2.1650560
                                           2.456229127 -1.43357480
## C8.A131.O1TCGA -0.08594572
                               -0.2073821 1.148657962 0.52123642
                                                                            NA
## AO.A12B.O1TCGA 0.31295928
                                0.5540775 -2.702404294 0.43213266
                                                                            ΝA
## BH.A18Q.02TCGA 0.50311578
                               -1.8921776 -0.005382259
                                                        0.91459775
                                                                      -4.906367
## C8.A130.02TCGA -0.10047532
                                1.0835573 -0.654773155 0.01104023
                                                                      -0.533418
## C8.A138.O3TCGA -0.21914490
                               -0.5007446 3.233194472 -1.39308657
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                 NP 001026893 NP 001265239 NP 110429 NP 079305 NP 001078834
## AO.A12D.O1TCGA
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                                                                   -1.2164163
                    1.1761369
## C8.A131.O1TCGA
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                                -0.7700376 -0.6162181 -0.6121702
                                                                   -0.7862291
## AO.A12B.O1TCGA
                   -2.4612861
                               -4.3070877
                                           1.2192312 1.3494905
                                                                   1.3716623
## BH.A18Q.02TCGA
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                                        NA 0.4562804 0.4763527
                                                                   -0.3131574
                                           0.5423790 0.1028766
## C8.A130.02TCGA
                   -0.7006913
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                                                                   -0.1431136
## C8.A138.O3TCGA
                    0.6987970
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                  NP_444292
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## AO.A12D.01TCGA -0.6830446 0.05605628 3.431537 1.1685173
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## C8.A131.O1TCGA 0.2783636 -0.82670793
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## AO.A12B.O1TCGA -1.1420645 -0.47968225 -2.020622 0.1300420
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## BH.A18Q.O2TCGA -0.5975148 -0.43693652 -2.300314 1.1554652
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## C8.A130.02TCGA -1.0089990 -0.86796463
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                                                                   NP 071450
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                                         -0.87734427 4.2430245 -0.458266469
## C8.A131.O1TCGA 0.5212364
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                              -0.6809842
                                          -0.03347495 2.1421320 -1.133750080
## AO.A12B.O1TCGA 0.7536236
                              -1.5106705
## BH.A18Q.02TCGA -1.2532097
                               0.1485053
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## C8.A130.02TCGA 0.1487947
                               1.4968208
                                         -0.58589591 -0.5858959
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## C8.A138.O3TCGA -0.2813163
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                         NA
                             0.03549071
                                               NA
                                                     0.5293322
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA -0.4837719 -1.18630206 -2.447511
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## C8.A130.02TCGA -0.6646128 -0.80892699 -1.254989
                                                    -0.5432576
                                                                 1.96256220
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                 1.9787957 0.67685419 1.038911
                                                     0.6914828
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                                            NP_068602 NP_057121 NP_067007
## AO.A12D.O1TCGA 0.54752025
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                                                                 4.0220562
## C8.A131.O1TCGA -0.49882958
                                1.1162749 0.18526230 2.7030442 0.4443267
                               -3.0682388 1.74858275 -2.5666021 -3.6114477
## AO.A12B.O1TCGA 0.50973393
## BH.A18Q.02TCGA 0.50646117
                               -3.6886477 0.57671419 -2.4843102 -9.4092507
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## C8.A130.02TCGA -0.90076332
                               -1.3632248 0.07335773 1.0573184 -0.2677486
## C8.A138.O3TCGA -0.08748789
                                      NA 0.06976909 -2.7791423 5.1129640
                  NP 653237 NP 079016 NP 002609 NP 543026 NP 694983 NP 057437
## AD.A12D.O1TCGA 0.7189612 2.8714971 2.2124020 -1.0259264 4.3992262
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## C8.A131.O1TCGA -1.1626820 0.3431297 1.6586910 0.3755127 1.1850889
## AO.A12B.01TCGA 0.9614842 -0.3965380 -1.8377044 0.7785669 -0.5822268 -1.749017
## BH.A18Q.02TCGA -1.4004065 -1.1561936 -0.5975148 -0.5941695 -0.6175871
## C8.A130.O2TCGA 2.8907651 -1.0975555 -0.8876438 -0.0283182 1.8444869
## C8.A138.O3TCGA -0.4861161 3.0613089 0.2818832
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##
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## AO.A12D.O1TCGA -0.5535114
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## C8.A131.O1TCGA 0.6588644
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## AO.A12B.O1TCGA -0.6764569
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## BH.A18Q.02TCGA -0.1659606
                             -3.2671296 -1.4405511 -1.5542941 -6.9035597
## C8.A130.02TCGA 1.7034526
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                                                               1.5624182
## C8.A138.O3TCGA -1.1297726
                               3.8329653 1.5362819
                                                    1.1083966
                                                               1.4741105
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##
                  NP_001325
                                                              NP_005035
## AO.A12D.O1TCGA -0.6944740
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## C8.A131.O1TCGA 0.6507686 -0.5150211 -0.6850321
                                                    0.5576673 0.9341203
## AO.A12B.O1TCGA 2.5024236
                            0.8866544 0.6815653
                                                    0.5402201 -0.5018540
## BH.A18Q.02TCGA -0.2863943 -1.3836796 0.6938026
                                                           NA 1.7777063
## C8.A130.02TCGA -0.9335620 0.2635901 -1.7371299
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## C8.A138.O3TCGA -1.2285153 -0.4349161 -0.4020019
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                  NP 116175 NP 001005291 NP 001424 NP 056276 NP 060375
## AO.A12D.O1TCGA 0.6541946
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## C8.A131.O1TCGA -5.0891265
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## AO.A12B.O1TCGA -6.8596151
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## BH.A18Q.02TCGA -7.6830336
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                                                          NA -2.8891014
## C8.A130.02TCGA 1.9002447
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                                                          NA -0.9663607
## C8.A138.O3TCGA 3.5623370
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                              0.95435968
                    0.2603013 -0.4214813 0.95039827 3.641499 -1.05892028
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
                    2.0848528 1.9019958 -1.58691495
                                                           NA 1.34976780
                  NP_036451 NP_478070 NP_005457 NP_078867
                                                             NP 057130
##
## AD.A12D.01TCGA -1.6774019 0.3836989 0.6770534 -0.1534826 -1.04497539
## C8.A131.O1TCGA -1.9196358 -0.5595478 -1.2760227 1.6141643 0.03549071
## AD.A12B.01TCGA -0.3605089 -1.3166674 -0.2330211 -2.1148518 0.77302395
## BH.A18Q.02TCGA -0.6410048 0.6202041 -0.1191252 -2.2267158 0.39271818
## C8.A130.02TCGA -0.8351659 0.3193479 0.1553545 -0.2775882 0.18487328
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                                                                      NA
## AO.A12B.O1TCGA 0.9891989 1.5379507
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## BH.A18Q.O2TCGA -1.3736434 -0.6677679
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## C8.A130.02TCGA -2.3012673 0.1947129
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## C8.A138.O3TCGA 0.1904547
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA -1.0558322 1.3628789 -4.749134
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## C8.A130.02TCGA -0.4514213 1.3328274 -1.638734
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## C8.A138.O3TCGA 2.4725095 -0.5117160 3.160052
                                                 -2.9729707 -0.782344332
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                                     0.4675145 -0.8811541 -2.542226
## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                      -0.8712445 -0.5006193 -2.419343
## C8.A138.O3TCGA
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                                       -0.1606307 -2.0806287 -1.627143
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## AO.A12D.O1TCGA 0.07129548
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## C8.A131.O1TCGA -0.22357367
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## AO.A12B.O1TCGA 0.66493647
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## BH.A18Q.02TCGA 0.90456161
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## C8.A130.02TCGA -1.63217408 -1.4255423
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## C8.A138.O3TCGA 1.24005363 0.6256542
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                  NP 002764 NP 001257323 NP 065835
                                                   NP 036528
                                                                NP 001678
## AO.A12D.O1TCGA 0.01033871
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## C8.A131.O1TCGA -0.13047241
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                                                NA -0.04951479 0.41194363
## AO.A12B.O1TCGA -2.06496530
                             2.6326829
                                                NA -1.72407402 2.55785312
## BH.A18Q.02TCGA 0.04814385
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## C8.A130.02TCGA -3.52465841
                              -3.5738564 0.9884411 -1.07787624 -0.59901538
## C8.A138.O3TCGA 3.43433713
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                   NP 758455
                             NP 000485 NP 001503 NP 871629 NP 077268
## AO.A12D.O1TCGA -0.957350029
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## C8.A131.O1TCGA -2.271801423
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## AO.A12B.O1TCGA 2.923687675
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## BH.A18Q.O2TCGA 0.513151930 -0.1559244 0.5834049 -0.5272618 -0.5372980
## C8.A130.02TCGA -0.520298532 1.3787455 -0.7269303 -0.6547732 1.2213118
## C8.A138.O3TCGA -0.007030829 3.2917087 -0.3910304 -1.9050861 -0.2849734
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NA -1.126251
## AO.A12B.01TCGA 2.020187 -2.0206217 -0.5933127
                                                      NA -1.646473
## BH.A18Q.02TCGA -1.380334 0.3023929 -0.1191252 -1.0424506 -1.393716
## C8.A130.02TCGA -4.039598 -0.1857519 0.5161400 0.3390271 -1.888004
## C8.A138.O3TCGA
                       NA 1.3241678 -0.2008592 2.1835955 1.389996
                 NP_001258867 NP_001012987 NP_001152752
##
                                                      NP_061168 NP_115963
                   0.9361197
                              -0.5230330
## AO.A12D.O1TCGA
                                           -0.4696959 -1.79550563 -1.3992866
                   0.3107466
                               -0.2195258
                                           -0.1547597 -0.26000460 -0.6121702
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  -0.6487422
                               0.9254550
                                           0.9115976 -3.68904899 0.4820192
## BH.A18Q.02TCGA
                  -1.3602619
                              -0.4436273
                                           -0.9353984 0.94136081 0.8610716
## C8.A130.02TCGA
                   0.7457309
                               -1.6059351
                                           -1.5731364 0.52597964 1.2114722
## C8.A138.O3TCGA
                  -0.3215448
                               -0.1094307
                                            NP_002952 NP_116291 NP_976075 NP_059121
                                                           NP 000915
## AO.A12D.01TCGA 1.1113704 0.5551398 -0.5077938 -1.845033
## C8.A131.O1TCGA 1.7315528 0.9786470 -1.0574371 -1.587710
                                                                  NΑ
## AO.A12B.O1TCGA -4.5482059 -0.5406547 -3.3204430
                                                3.253493
                                                                  NA
## BH.A18Q.02TCGA -0.7580932 -0.7413663 4.4941563
                                                      NA
                                                                  NA
## C8.A130.02TCGA -1.2385898 -0.6350939 -1.3632248
                                                       NA
## C8.A138.O3TCGA 0.6110257 1.3826821 -0.6726302 7.113419 -0.02531652
                 NP 001159447 NP 056190 XP 003960230 NP 001026862 NP 055443
##
```

```
## AO.A12D.O1TCGA
                           NA
                                                               NA -0.1458630
                                     NA
                                                  NA
                           NΑ
## C8.A131.O1TCGA
                                     NΑ
                                                  NΑ
                                                               NA -0.8914740
## AO.A12B.O1TCGA
                           NA
                                     NA
                                                  NA
                                                               NΑ
                                                                  0.8700255
## BH.A18Q.O2TCGA
                           NA -7.0607926
                                           -5.267668
                                                       -3.9395513
                                                                   0.8878347
## C8.A130.02TCGA
                           NA
                               0.5686179
                                           -2.806367
                                                       -0.6219745 -1.1565931
  C8.A138.O3TCGA
                    0.4793687
                               1.5874818
                                            4.900850
                                                        2.2786812 0.7207399
                   NP 057144 NP 001107605
                                           NP 057109 NP 001070648
                                                                  NP 061921
## AO.A12D.O1TCGA -0.72114254
                               0.3075030
                                           1.13422916
                                                        0.4294165
## C8.A131.O1TCGA -0.08594572
                               -1.8548697
                                          0.39979999
                                                        0.7924444
                                                                          NA
## AO.A12B.O1TCGA 0.28524455
                              -2.5139441
                                          0.29355897
                                                        0.4044179
                                                                          NA
## BH.A18Q.02TCGA -0.49715339
                               -3.7990453
                                          0.13846916
                                                        0.9513970 -0.4068281
## C8.A130.02TCGA 0.64077505
                               -0.7695686 -0.03815781
                                                        0.2111122 0.2078324
  C8.A138.O3TCGA 1.02062528
                              -1.1736582 -0.29960196
                                                       -0.4532018 0.2965117
                 NP_115899 NP_113662
                                       NP_057588 NP_775872
##
                                                             NP 057488
## AO.A12D.01TCGA -1.353569 -0.9573500 -0.54208203
                                                        NA -1.10212236
## C8.A131.O1TCGA -1.782008
                            0.7519656 -1.98035400
                                                        NA -0.77813336
## AO.A12B.O1TCGA -2.001221 1.3356331
                                      2.47748038
                                                        NA 0.34344550
  BH.A18Q.02TCGA -4.484849 2.8348469
                                     0.53656960 0.1752684 -0.00872764
## C8.A130.02TCGA -1.087716 -0.2611889 -0.09391558 1.2606703 0.58173741
  C8.A138.O3TCGA -1.396744 -2.6474853 -0.75308722 0.1246262 -1.58325781
##
                  NP_078924 NP_787098 NP_001098117 NP_001020 XP_003846586
## AO.A12D.01TCGA 1.2370937 1.2370937
                                        1.92666718 1.3170995
                                                                1.8314222
## C8.A131.O1TCGA 1.5210630 1.5210630
                                       -0.19119063 1.3672435
                                                                -1.0331499
## AO.A12B.O1TCGA -0.4048524 -0.4048524
                                        1.71532507 -0.4353387
                                                                -1.1032639
## BH.A18Q.02TCGA -0.3365751 -0.3365751
                                        0.86776241 -0.8183101
                                                                 0.2689391
## C8.A130.02TCGA -0.7695686 -0.7695686
                                       -0.37270443 1.1327554
                                                                 2.3266276
  -0.08383075 0.7755970
                                                                 0.9072540
                                       NP_001436 NP_003000 NP_612480 NP_004724
                  NP_722541 NP_001314
## AO.A12D.01TCGA -0.1611022 -1.0373558
                                              NA 1.336148
                                                                   NA 3.7287017
## C8.A131.O1TCGA 3.0268747 1.8246541
                                              NA 2.966156
                                                                   NA -0.8064685
## AO.A12B.O1TCGA -1.3582395 0.1466709
                                              NA -1.236295
                                                                   NA -0.7318864
## BH.A18Q.O2TCGA 1.2959713 -5.6490415 -0.5105349 -2.611435 -0.1124345
                                                                      0.9647785
  C8.A130.02TCGA -0.3595850 -0.3727044 4.4126242 1.624736 0.6866932 -0.1135948
  C8.A138.O3TCGA -0.6799444 4.7033644 -1.0676012 2.311595 -1.2468010
                 NP 001177768 NP 057654 NP 078908
                                                     NP 004156
                                                                 NP 005252
## AO.A12D.O1TCGA
                   -2.027903 0.9361197 0.5551398
                                                            NΑ
                                                                        NΑ
## C8.A131.O1TCGA
                    -2.340615 1.4036745 -1.8953485
                                                            NA
                                                                        NA
## AO.A12B.O1TCGA
                    5.090980 0.1577567 -0.5406547
                                                            NA
                                                                        NΑ
## BH.A18Q.02TCGA
                    -3.140005 0.7540194
                                         0.6068226
                                                   1.11532067 -0.06559913
## C8.A130.02TCGA
                    -2.265189 -0.2775882 0.4636621 -0.77284843 -0.13983374
## C8.A138.O3TCGA
                    -6.809310 2.5419952 1.0279396 -0.01068797 -1.34920090
##
                  NP 054731
                             NP 002815
                                         NP 115607 NP 000122 NP 065190
## AO.A12D.O1TCGA
                         NA -1.95170735 0.24273639 -1.0678342 -0.5497016
                         ## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                         NA -0.80117322 0.09678432 1.5434937 -0.7679155
                  1.5970557 -1.80519770 0.44958967 -1.3870250 1.9081762
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  0.5620582 -0.03487794 -0.88108411 -0.8187666 0.1258356
  C8.A138.O3TCGA -0.2447449 3.83662243 0.46108298 -1.7112577 -0.4093161
                   NP_660295 NP_003491 NP_073594 NP_036605 NP_775919 NP_000205
## AO.A12D.O1TCGA -2.02409352
                                   NA
                                             NA -0.4696959
                                                           1.4961600
                                    NA
## C8.A131.O1TCGA -0.03737115
                                             NA -0.7619418 1.7517922
                                                                            NΑ
## AO.A12B.O1TCGA -0.44088161
                                   NA
                                             NA 2.7906569 -1.1725507
                                                                            NA
## BH.A18Q.02TCGA 6.55491157 -1.504113 -5.250941 0.5666780 -1.4271695
                                                                            NΑ
## C8.A130.02TCGA -1.91752267 -2.658773 -1.694492 0.2176720 -0.1135948
```

```
## C8.A138.O3TCGA 2.81993775 2.483481 3.756165 -1.2468010 0.5854257 0.5707972
##
                                         NP 004443 NP 001191455 NP 001017420
                  NP 004995
                             NP 004442
## AO.A12D.O1TCGA 0.7875375
                            0.89421188 -2.72128658
                                                    2.91721471
## C8.A131.O1TCGA 0.6831517
                             0.33503390 -1.26387907
                                                                          NΔ
                                                     0.38360847
## AO.A12B.O1TCGA -3.3952728
                            0.05244074 0.02749747
                                                     0.31850223
                                                                          NA
## BH.A18Q.O2TCGA -0.8417277 -1.77508926 0.07490691
                                                   -0.33992045
                                                                   -1.554294
## C8.A130.O2TCGA -1.5272183 -1.39274365 -0.74332962 -0.09391558
                                                                   -1.753529
## C8.A138.O3TCGA 0.4208545 -0.92497276 -2.98028497 -0.29960196
##
                  NP 542399 NP 076997 NP 067033 NP 002742
                                                             NP 057315
## AO.A12D.O1TCGA -1.6354941 1.766656
                                      0.2427364 -0.6678054 -0.08109645
## C8.A131.O1TCGA -0.4057283 0.671008
                                      0.2500284 1.2660465 0.60219404
## AO.A12B.O1TCGA -1.9873640 -1.344382
                                      0.6095070
                                                 1.3328617 -2.15642394
                                                 2.2627866 2.98873451
## BH.A18Q.02TCGA 0.9614331 -2.196607
                                      0.4730073
                                      0.6440549 0.4177440 0.41774396
## C8.A130.02TCGA 0.8966048 -1.212351
## C8.A138.O3TCGA -0.8042872 1.806910 -1.3601723 -1.6015435 -3.00954208
##
                  NP_005864 NP_068380 NP_114157 NP_006820 NP_057124
                                                                       NP_060956
## AO.A12D.O1TCGA -0.4773155
                                   NA 1.0351744 -5.582445 2.3571744
                                                                       1.1989957
## C8.A131.O1TCGA 2.6787570
                                   NA 0.7074389 -3.737134 -0.9440965 1.0029342
## AO.A12B.O1TCGA -2.3088550
                                   NA -1.5245279 2.272391 -0.7706870 -1.0062623
## BH.A18Q.02TCGA
                         ## C8.A130.02TCGA
                         NA -0.8351659
                                       1.0441989 1.378746 -0.9171627 -0.7859679
## C8.A138.O3TCGA -0.6104588 -1.7002863
                                              NA 4.023137 1.7886245 -1.2468010
                 NP_001159894 NP_079375 NP_060351
##
                                                     NP_004994 NP_612448
                           NA 3.5839294 -0.3554019 -1.61644511 -3.2127505
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                           NA 1.5898770 -1.1302990 -1.51484769 -1.0210062
## AO.A12B.O1TCGA
                           NA -1.7102166 1.5434937 1.78738339 -1.5882718
                   -0.7614386
## BH.A18Q.02TCGA
                               1.4431681 0.8510355 -0.19272364 -1.5375672
## C8.A130.02TCGA
                   -0.7498894 -0.4153427 -1.6912117
                                                    1.27378974 1.3000287
                           NA 0.9950253 -0.9761727
## C8.A138.O3TCGA
                                                    0.08805479 0.9657682
##
                  NP_004365 NP_060797 NP_001093148 NP_055508 NP_115707
## AO.A12D.O1TCGA
                  0.8027767 2.2771686
                                       -0.2830158 -1.0906930 -1.0906930
## C8.A131.O1TCGA
                  0.2257411 1.0434131
                                         0.4605182 1.1243707 1.1243707
## AO.A12B.O1TCGA -3.9412531 -3.1347542
                                        -1.4690984 -2.5444303 -2.5444303
## BH.A18Q.O2TCGA
                  0.2221037 -0.8985992
                                        -3.2370211 -0.1492337 -0.1492337
## C8.A130.02TCGA
                  0.4538225
                                        -2.7768483
                            1.1524346
                                                    0.9884411
                                                               0.9884411
## C8.A138.O3TCGA
                  1.4375391
                            2.7687378
                                         0.4098830 3.7744511
                                                                      NΑ
##
                  NP 776169
                              NP 003092 NP 001071639 NP 001071640 NP 001071641
## AO.A12D.O1TCGA -0.8735345 -0.09633564
                                        -0.46207627
                                                      -0.2563472
                                                                   -0.2563472
## C8.A131.O1TCGA -0.3814410 0.38765635
                                         0.03953859
                                                       1.0838919
                                                                   -1.0007668
## AO.A12B.O1TCGA 3.8853891 -2.07605120
                                        -1.82384707
                                                      -1.7434743
                                                                   -1.9042198
## BH.A18Q.02TCGA
                         NA 1.03837688
                                         1.34949739
                                                      -0.2127959
                                                                    1.3494974
## C8.A130.02TCGA
                         NA -2.01263887
                                        -0.83516594
                                                      -0.1988714
                                                                   -0.8351659
## C8.A138.O3TCGA
                         NA -1.53937214 -1.07491546
                                                      -1.4040580
                                                                   -1.1882868
                   NP_003907 NP_001107648 NP_001182760
##
                                                       NP_699198 NP_001107595
## AO.A12D.O1TCGA
                  0.05986608
                               1.3018603
                                                   NA 0.62752601
                                                                    -0.1230042
## C8.A131.O1TCGA
                 1.14461008
                                2.3954053
                                                   NA -0.64860117
                                                                     0.3066987
                               -2.7412049
## AO.A12B.O1TCGA -1.69358780
                                                   NA -0.09999032
                                                                    -1.0450629
## BH.A18Q.O2TCGA 2.21595130
                               -0.1994144
                                           0.09163381 -1.04914140
                                                                     0.2622483
## C8.A130.02TCGA 0.27670960
                               0.1192759
                                           0.95892233
                                                       0.84740679
                                                                     0.7621302
## C8.A138.O3TCGA -1.24314387
                               -3.2691990
                                           0.73536842
                                                       1.69353888
                                                                    -0.7896586
                 NP_001091110 NP_002025 NP_000141 NP_004060 NP_113601
##
## AO.A12D.O1TCGA
                  1.0008862 1.008506 1.008506 0.6808632 3.7248919
## C8.A131.O1TCGA
                    0.8531627
                               1.071748 1.071748 1.1931847 -0.9198092
## AO.A12B.O1TCGA
                    2.4663945 1.460349
                                        1.460349 -1.9014483 3.5583552
```

```
## BH.A18Q.02TCGA
                                               NA -0.0722899
                           NA
                                     NA
                                                                     NA
                                                                     NΑ
## C8.A130.02TCGA
                           NΑ
                                     NΑ
                                               NA 0.1061564
## C8.A138.O3TCGA
                                               NA 0.7097684 -0.2776591
                           NA
                                     NA
##
                   NP_653192 NP_004657
                                         NP_150592
                                                     NP_076957 NP_003603
## AO.A12D.O1TCGA -1.40690621
                                    NA
                                        0.03700729 0.08653467
                                                                       NA
## C8.A131.O1TCGA 0.46051820
                                    NA
                                        3.52881195 -0.78218124
## AO.A12B.O1TCGA 0.72036594
                                    NA -1.48572726 0.21595770
## BH.A18Q.02TCGA -0.08232604
                                    NA -1.26324584 -2.41071182 -2.9660452
## C8.A130.02TCGA -0.60229525
                                    NA 0.58173741 -0.37598430 -0.5038992
## C8.A138.O3TCGA -0.50074462
                                    NA -0.77868719
                                                            NA -1.5942292
                   NP_057179 NP_005759 NP_054890 NP_001017927 NP_001137530
## AO.A12D.01TCGA -2.34030676 -2.8051021
                                                                          NA
                                        0.3646499
                                                     -1.3878572
## C8.A131.O1TCGA -0.11832877 -3.2392450 -1.6808108
                                                     -0.3854889
                                                                          NA
                                                                          NA
## AO.A12B.O1TCGA -1.67695896 -4.5094053 -0.3133938
                                                     0.4570759
## BH.A18Q.02TCGA 0.03810771 0.5265335 2.1691160
                                                     -2.0427198
                                                                  -0.3800650
## C8.A130.02TCGA -0.40222325 -1.4550612
                                         1.1458749
                                                                   0.6604543
                                                      1.3820254
## C8.A138.O3TCGA -1.60154350 1.5326248
                                         2.1067956
                                                     -1.0529726
                                                                   1.7081674
##
                 XP 003403688 NP 057520
                                         NP 003453
                                                    NP 065798 NP 064573
## AO.A12D.O1TCGA
                                                NA 2.0295317 0.9018315
                           NA
                                     NA
## C8.A131.O1TCGA
                           NA
                                     NA
                                                NA 2.1282451
                                                               0.6831517
## AO.A12B.O1TCGA
                           NA
                                     NA
                                                NA -2.7301190 -2.6746896
## BH.A18Q.02TCGA
                   -0.3800650
                                     NA -3.1466958 -4.2841257 0.4629712
## C8.A130.02TCGA
                    0.6604543
                                         0.5784575 -0.6810121 0.3554265
                                     NA
## C8.A138.O3TCGA
                    1.6240532 2.600509
                                         1.4741105 -0.9103442 -1.2138868
##
                   NP 003809 NP 620134 NP 115893 NP 057098
                                                              NP 849144
## AO.A12D.O1TCGA
                   1.5418776 1.4580620 -2.3364970
                                                           NA 9.2567189
                  -0.5312126 -0.2923876 0.1893102
## C8.A131.O1TCGA
                                                           NA 0.8126838
## AO.A12B.O1TCGA
                  -2.6331174 -0.3133938 -0.9092607
                                                           NA -1.0284341
## BH.A18Q.02TCGA -11.5001143 3.4704695 0.1685776
                                                           NA
## C8.A130.02TCGA
                  -4.5348580 0.1881531 -0.3825440
                                                                      NA
                                                           NA
## C8.A138.O3TCGA
                   2.4907952
                              1.2875964
                                                NA 0.08074051
##
                   NP_079508
                              NP_073208
                                          NP_851030 NP_001157915
                                                                  NP_112174
## AO.A12D.O1TCGA
                  0.02176810
                                     NA
                                                 NA
                                                      1.10375078
## C8.A131.O1TCGA 0.40384787
                                     NA
                                                     -1.06958079
                                                 NA
                                                                  0.4726618
## AO.A12B.O1TCGA -1.42475484
                                     NA
                                                     -0.04178937
                                                 NA
                                                                  1.3411761
## BH.A18Q.02TCGA -2.00257523 -1.6747278 -0.02210917
                                                      0.01134465 -1.1227398
-0.88436398 -0.9762003
## C8.A138.O3TCGA 1.44851056 -0.1496593 -0.14965926
                                                              NA 0.1685119
                  NP 653198
                              NP 060109 NP 001136024 NP 059453 XP 001717815
##
## AO.A12D.O1TCGA -0.6106584 -1.89456038
                                            2.513376 -1.018307
                                                                 0.09415427
## C8.A131.O1TCGA -1.5431829 0.42408728
                                           -4.360508 -0.179047
                                                                 1.58582910
## AO.A12B.O1TCGA -0.1360195 0.39056055
                                            8.289261 -4.800410
                                                                 0.32958813
## BH.A18Q.02TCGA -0.0722899 -0.85176387
                                            2.262787 -2.363876
                                                                 0.28232058
## C8.A130.02TCGA -1.0221185 0.04383891
                                            2.339747 1.490261
                                                                -0.79908738
  C8.A138.O3TCGA 0.6439399 2.32256682
                                                  NA 1.635025 -0.46417323
##
                 NP_001157787 XP_003119912 XP_003960344 XP_003960355 NP_588609
## AO.A12D.O1TCGA
                    0.8370649
                                0.09415427
                                              0.8370649
                                                           0.8370649 -1.094503
## C8.A131.O1TCGA
                    1.6546431
                                1.58582910
                                              0.8855457
                                                           0.8855457 -1.591757
## AO.A12B.O1TCGA
                   -0.6321133
                                0.32958813
                                              1.5324078
                                                           1.5324078 -3.386958
## BH.A18Q.02TCGA
                    0.2823206
                                0.28232058
                                              0.2823206
                                                           0.5365696
                                                                            NA
## C8.A130.02TCGA
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                               -1.00243926
                                             -0.7990874
                                                          -1.1828320
                                                                            NΑ
  C8.A138.O3TCGA
                   -0.4641732
                              -0.46417323
                                             -0.4641732
                                                          -0.4641732
##
                 NP_001177757 NP_001002274 NP_001257820 XP_003960691 NP_733745
## AO.A12D.O1TCGA
                    0.6618142
                                 0.6618142
                                            -0.6449466 -0.46969586 5.065941
```

```
## C8.A131.O1TCGA
                   -0.4300156
                               -0.4300156
                                           -0.6728885
                                                        1.49272784 3.387136
## AO.A12B.O1TCGA
                  -1.0007193
                               -1.0007193
                                           1.8816135
                                                       -0.34665150 -3.982825
## BH.A18Q.02TCGA
                    0.6469672
                                0.6469672
                                                       -0.51388030 -2.260170
                                            0.8543809
## C8.A130.02TCGA
                   -1.6190546
                                                        1.09995669 1.273790
                               -1.6190546
                                             1.7264116
## C8.A138.O3TCGA
                    1.2181108
                                1.2181108
                                           -3.6019986 -0.07651647
##
                 YP 003024029 NP 006867 NP 057133 NP 001091081 NP 620133
                   2.0257219 -0.4925547 -1.7726468
## AO.A12D.O1TCGA
                                                   3.0886556
                                                                0.7761081
## C8.A131.O1TCGA
                   0.1447835 -1.1424426 -0.2357173
                                                    -0.4502550
                                                                0.7357741
## AO.A12B.O1TCGA
                   -2.1758243 2.5966538 1.1139152
                                                    -1.3554680
                                                                0.7369948
## BH.A18Q.02TCGA
                  1.5669472 -0.5674064 -0.8751815
                                                   -0.5841333 0.4863889
## C8.A130.02TCGA
                  -1.1106749 -0.7892478 -0.3300661
                                                    -1.2484294 1.2803495
                   2.9662233 1.8581101 -0.2959448
                                                     0.8853111 -1.3821152
## C8.A138.O3TCGA
                  NP 997264 NP 001161414 NP 071890
                                                   NP 001021
                                                                 NP 057004
## AO.A12D.O1TCGA -0.5725604
                            -0.6944740 -0.9230618 0.63133581 0.277024577
## C8.A131.O1TCGA -0.1830949
                            ## AO.A12B.O1TCGA 0.5291342
                             -1.2002655 -0.6986287
                                                   0.07184106 0.980884488
## BH.A18Q.O2TCGA -0.8283462
                             -2.1932620 2.4133288 -0.39344655 -0.002036877
## C8.A130.02TCGA -0.8909237
                             1.3164280 -1.5829760
                                                   0.83428731 -0.234949940
## C8.A138.O3TCGA 0.6878256
                             -0.2959448 1.3497678
                                                  0.59273999 0.446454428
                   NP 004173 NP 997698 NP 065950
                                                   NP 079051 NP 113650
## AO.A12D.01TCGA 1.10756058 0.1322522
                                               NA -1.14403014 0.3456009
## C8.A131.O1TCGA -0.78218124 0.7276783
                                               NA -0.48263805 0.3714648
## AO.A12B.O1TCGA 0.17161412 -0.8094876
                                              NA 0.80073869 -0.4990826
## BH.A18Q.O2TCGA -1.27662737 -3.3507641 -5.5453346 -0.07898066 -0.6844948
## C8.A130.02TCGA 0.04711878 0.1291155 0.7162120 0.58173741 -0.4153427
  C8.A138.O3TCGA -0.89937278 4.2425649 -0.2045163 0.17582613 0.5890829
                  NP_065145
                             NP_004863
                                        NP_055060
                                                   NP_689578 NP_115879
## AO.A12D.O1TCGA -0.8430561 1.13422916 0.50942226 0.83706491 -0.3173039
## C8.A131.O1TCGA -0.0697542 -0.70931938 0.07596952 -0.30453129 -0.3531059
## AD.A12B.01TCGA -2.2257108 0.03304042 0.87556848 -0.66537099 0.7009656
## BH.A18Q.02TCGA -3.4444348 -2.02933828 0.48638887 -0.37671964 -1.2599005
## C8.A130.O2TCGA 2.1199959 -1.12379440 -0.74988935 1.75921033 -0.3267863
## C8.A138.O3TCGA 0.9438254 -2.13548582 -2.18302863 -0.02531652 0.3842831
                 NP_001165419 NP_067652 NP_066979
                                                   NP_006173 NP_001265358
## AO.A12D.O1TCGA -0.28301575
                              0.6656240
                                         4.0601542
                                                          NA
                                                               -1.5173904
                  0.06787375 0.2500284 0.9867427
                                                          NA
## C8.A131.O1TCGA
                                                                3.7797806
## AO.A12B.O1TCGA
                   -1.4192119
## BH.A18Q.O2TCGA
                 -0.71460321 0.1853045 0.3693005 1.3896420
                                                                0.2488668
## C8.A130.02TCGA
                  -0.39238365
                              0.7326114 -2.0355979 -0.1463935
                                                               -0.6908517
## C8.A138.O3TCGA
                 -1.56862925 -1.6381149 1.0242824 -0.3508019
                                                                1.2802822
                 NP 001265356 NP 001075106 NP 006856 NP 005865 NP 001074919
## AO.A12D.O1TCGA
                                1.6104539 -0.1572924 -0.1572924
                  -1.5173904
                                                                 -0.1572924
## C8.A131.O1TCGA
                   3.7797806
                                1.3793872 2.9094862 2.9094862
                                                                  2.9094862
                              -3.4839599 -1.3582395 -1.3582395
                  -1.4192119
## AO.A12B.O1TCGA
                                                                 -1.3582395
## BH.A18Q.02TCGA
                    0.2488668
                                0.7640556
                                                  NA
                                                            NA
                                                                -13.2865482
                                                            NA
                                                                  1.1852333
## C8.A130.02TCGA
                   -0.6908517
                                2.9071644
                                                  NA
## C8.A138.O3TCGA
                    1.2802822
                               -4.0957124
                                                  NA
                                                            NA
##
                 NP 079203 NP_001004125 NP_065907
                                                  NP_116130 NP_065944
## AO.A12D.O1TCGA 0.6351456
                            0.09034447 17.623036
                                                 1.86952021 -1.5059610
## C8.A131.O1TCGA 2.2415858
                            0.14883137 2.541129
                                                 1.39153082 3.1037845
## AO.A12B.O1TCGA 0.7563951
                            0.29355897 -3.104268 -1.85710476 -1.0783206
## BH.A18Q.O2TCGA 0.1150515
                           -1.28331813 -2.772013 -0.08232604 -0.8049285
## C8.A130.02TCGA 1.0343593
                           -0.93028214 1.880565 -0.31038692 0.6407750
                            1.63868180 1.126682 1.01696814 0.3330831
## C8.A138.O3TCGA
                       NA
```

```
NP_001240605 NP_789744 NP_060108 NP_112578 NP_006020
                  -0.2906354
## AO.A12D.O1TCGA
                                  NA 0.8180159 0.1817796 -1.2354653
## C8.A131.O1TCGA
                                   NA -0.3854889 0.5009970 -0.1992864
                   0.8734021
                  -1.4995846
                                   NA -0.6321133 -0.8011732
## AO.A12B.O1TCGA
                                                           0.1189561
## BH.A18Q.02TCGA
                   0.5834049 1.0417223 -0.6075510 0.5198427
                                                                 NA
## C8.A130.02TCGA
                   2.2675900 0.2963888 0.8047685 0.3783855
                                                                 NΑ
## C8.A138.O3TCGA
                  -0.8591443 2.6114808 0.2014261 0.2014261
                NP_001191375 NP_689985 NP_061817 NP_006510 NP_001018060
##
## AO.A12D.O1TCGA
                  -2.3326872 -0.8544855 -1.9021800
                                                 0.4865635
                                                             -0.9611598
## C8.A131.O1TCGA
                  -0.8226600 -1.0533893 0.5455237 1.7113134
                                                             -0.9886232
## AO.A12B.O1TCGA
                  -0.9702331 -1.0755491 -3.5116747 -0.5240258
                                                             1.3827482
## BH.A18Q.02TCGA
                  1.5468749
## C8.A130.02TCGA
                  -0.6449335 -0.7039712 -1.1861119 -0.0709565
                                                            -0.3267863
                   0.5378829 -0.7128587 2.7650807 1.6021104
                                                              0.4281687
## C8.A138.O3TCGA
                NP_006518 NP_653201 NP_071894 NP_004217
                                                          NP_072088
## AO.A12D.O1TCGA -1.460243 -1.8526526 -1.5707275
                                               1.2028055 -0.32111374
## C8.A131.O1TCGA 1.120323 2.5613684 -1.4784168 2.0027608
                                                        0.91388087
## AO.A12B.01TCGA -1.300039 0.4681618 -0.8482883 -2.6802325
## BH.A18Q.O2TCGA 0.355919 -2.5211094 -2.4274387 1.8379231 0.04479847
## C8.A130.02TCGA 1.854327 0.3226278 -3.4984195 -0.5694966 -1.10739506
NA
                  NP 003122
                             NP 057485
                                        NP 821158 NP 004770
                                                              NP 036592
## AD.A12D.O1TCGA -0.13443363 -0.51160364 0.09796406 0.6427652 -0.27158636
## C8.A131.O1TCGA -0.09404148 0.07596952 2.54112900 -0.1669033 -1.25173543
## AO.A12B.01TCGA -0.70971458 0.70650857 -2.05387941 -1.2473805 2.23913363
## C8.A130.02TCGA 0.77524967 -0.71053093
                                      1.08027747 -0.6580530 2.49718083
## C8.A138.O3TCGA -0.25937343 -0.23377346
                                               NA 2.1762813 0.07708337
                  NP_005793 NP_036351
                                      NP_996261 NP_055239 NP_002505
## AO.A12D.O1TCGA 0.86754329
                                      2.2809784 1.5533070
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## C8.A131.O1TCGA
                 0.18121442
                                   NA
                                      1.1648495 0.2500284
                                                                 NA
## AO.A12B.O1TCGA 0.60673551
                                   NA -0.5129399 -0.2856791
                                                                 NΑ
## BH.A18Q.02TCGA -0.25294052 2.7512124 0.8476901 -4.1101658
## C8.A130.O2TCGA -0.02503833 -0.4350219 0.7030926 -0.3464655 -0.8154867
## C8.A138.O3TCGA -0.78965861 -0.6762873 -0.5190303 0.2197118 -0.4641732
                  NP_005082 NP_057283 NP_064574
                                                 NP 114403
                                                            NP 009011
## AO.A12D.01TCGA -1.5554883 -0.4239783 -1.2468947 1.46187181 -0.38588030
## C8.A131.O1TCGA
                  0.5402201 -1.5106705
                                                 0.83399637
## AO.A12B.O1TCGA
                  0.3822461
                                                            0.40164645
## BH.A18Q.02TCGA
                 -5.6858407 1.3428066 -0.3533020
                                                1.36956969 1.85130467
## C8.A130.02TCGA -4.6693326 0.2832693 0.4013446 1.09011708 0.54237898
## C8.A138.O3TCGA -11.6001620 -2.0623430 0.2123975 -0.05457364 -1.07857260
                 NP 060553 NP 004282 NP 001161707 NP 001124336 NP 001258448
## AO.A12D.O1TCGA
                           -6.957782
                                              NA
                 0.1665404
                                                   1.1532782
                                                                      NA
## C8.A131.O1TCGA 0.4767097
                           -6.959248
                                              NA
                                                   1.3793872
                                                                      NA
## AO.A12B.O1TCGA -1.3748683
                            3.328323
                                              NA
                                                  -0.4824537
                                                                      ΝA
## BH.A18Q.02TCGA -2.2802419 -13.313311
                                      -0.2529405
                                                   1.8814131
                                                                      NA
## C8.A130.02TCGA 0.4603823 -12.295028
                                      -0.1004753
                                                    0.1947129
                                                                      NA
  C8.A138.O3TCGA -0.6104588 -10.894334
                                       0.8560540
                                                          NA
                                                                2.403024
                NP_001129425 NP_001257965 NP_000560 NP_001158243
                                                               NP 003036
## AO.A12D.O1TCGA
                 -0.3477823
                               0.7684885 1.1113704
                                                    -0.2144394
                                                                0.4560851
## C8.A131.O1TCGA
                  -2.9154145
                               0.9786470 -0.4988296
                                                    -2.4377645 0.9260245
## AO.A12B.O1TCGA
                  -0.4547390
                              -3.9052240 -1.5993577
                                                     2.3305923 -0.5129399
                              -0.1191252 1.2257183
## BH.A18Q.02TCGA
                  -0.8852177
                                                    -0.8015831 -1.0023061
```

```
## C8.A130.02TCGA
                    0.6866932
                               -0.1824720 0.1192759
                                                      -2.2159907 -0.8253263
## C8.A138.O3TCGA
                              -1.6673720 -2.0989144
                  -0.7018873
                                                     1.3534249 2.0738814
                  NP 003755 NP 114413 NP 057461 NP 061859 NP 065974
## AO.A12D.01TCGA 0.6046672 -0.46207627 -2.2183932 0.7303906 4.022056
## C8.A131.01TCGA 1.1081792 0.74386987 2.6989964 1.0798440 -1.875109
## AD.A12B.O1TCGA 0.9697986 -0.24687844 -0.3494230 -0.6570566 -1.083864
## BH.A18Q.O2TCGA -3.4210171 0.48304349 0.1183969 0.1652322 -3.053025
## C8.A130.O2TCGA -1.1073951 -0.08407597 4.6225359 2.3463069 -3.885444
## C8.A138.O3TCGA
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                                              NA -1.9892003 -2.687714
##
                  NP_061118 NP_079231 NP_079526 NP_777579 NP_001006611
## AO.A12D.O1TCGA -0.3134941 0.3303618 1.4999698 0.4332263
                                                            0.8332551
## C8.A131.O1TCGA -1.4824646 0.9341203 7.9855288 1.3753393
                                                             1.8003668
## AO.A12B.01TCGA -1.8931339 3.0123748 -0.2884505 -0.8787745
                                                           -0.5351117
## BH.A18Q.02TCGA -0.2897397 0.8376540
                                           NA -4.4815032
                                                           -1.5442579
## C8.A130.02TCGA 0.9556425 0.1323954
                                            NA 2.6218158
                                                            1.1294755
## C8.A138.O3TCGA -1.0420012
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                                            NA 1.1888537
                                                             0.5671400
                 NP_005058
                            NP_001744
                                       NP_115678 NP_001034761 NP_291035
##
## AO.A12D.O1TCGA
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                                                   1.3132897 3.0315087
                        NA -1.19911298 -0.88337826
## C8.A131.O1TCGA
                                                   -0.1264245 -1.1667299
## AO.A12B.O1TCGA
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                                                   -0.5461976 -0.8538312
                                                   0.6469672 0.6469672
## BH.A18Q.O2TCGA -3.3039288 -4.92978436 0.31242902
## C8.A130.02TCGA -0.3727044 -0.97620030 -0.74332962
                                                   -0.6514933 -0.6514933
## C8.A138.O3TCGA -1.2212010 0.83776832 -0.30325910
                                                   1.0169681 2.3225668
                    NP 114124 NP 057550
                                        NP 113640 NP 001244030 NP 660143
## AO.A12D.01TCGA -0.001090689 -0.8011483 -0.09252584
                                                   -0.8621051 1.4352032
## C8.A131.O1TCGA 0.994838487 1.0393652 0.93412027
                                                    -1.2760227 -1.6767629
## AO.A12B.01TCGA -1.530070844 0.8949688 -1.38318273
                                                      0.5319057 -1.3083529
## BH.A18Q.O2TCGA -1.079249836 -1.7048362 0.54326037
                                                     1.4130596 0.0949792
## C8.A130.02TCGA -1.008998993 0.3718258 1.11963590
                                                    -0.8286062 0.6768536
## C8.A138.O3TCGA -0.069202195 -0.4568589 0.28919744
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                 NP_001099033 NP_067037 NP_112490 NP_001010989 NP_001628
## AO.A12D.O1TCGA
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                                                               2.1857335
## C8.A131.O1TCGA
                          NA 0.8005402
                                              NA
                                                   0.44432668 2.4480277
## AO.A12B.O1TCGA
                          NA 0.5125054
                                              NA -2.04556498 -1.7656461
## BH.A18Q.02TCGA
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                                              NA
                                                 -3.51468783 1.6940717
                   2.6972528 -0.4809401
## C8.A130.02TCGA
                                              NA
                                                   1.13603525 -0.4219025
## C8.A138.O3TCGA
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                                                   0.05879768 5.8590204
##
                 NP 001170977
                              NP_000791 NP_078995 NP_116257 NP_057568
                   3.1572320 0.006528907 -0.2144394 -0.98020882 -0.1115748
## AO.A12D.O1TCGA
                   2.0877663 0.177166539 -0.4097762 0.03953859 0.3471775
## C8.A131.O1TCGA
                  -4.7228087 0.019183053 4.0932496 0.08292695 0.1882430
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
                   0.7339471 1.178882920 -4.4748124 -0.94543456 -0.1124345
## C8.A130.02TCGA
                  -0.4645408 -0.740049746 -3.2327501 0.12911550 -0.2710285
## C8.A138.O3TCGA
                   NP_899229 NP_055676 NP_004100 NP_060844 NP_940848
                         NA 13.5198830 0.4027479 2.4219409 -0.4011195
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                         NA 6.1680303
                                       1.8165583 1.0393652 0.3390818
                         NA
                            0.7314518 2.4054221 -0.2413355 -0.8344309
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 2.443437264
                                    NA 2.3096220 -1.5743664 -1.4271695
## C8.A130.02TCGA 0.004480487
                                    NA -0.8318861 -0.9893198 1.4640221
## C8.A138.O3TCGA 1.598453265 -1.3345723 0.3879402 1.3790249 -1.9270289
                 NP 055812
                           NP 066918 NP 004405 NP 001238907 NP 001238911
## AO.A12D.O1TCGA
                     NA 0.05986608 3.7667997
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## C8.A131.O1TCGA
                       NA 1.04341306 0.5333801
                                                          NA
                                                                      NA
```

```
## AO.A12B.O1TCGA
                         NA -1.13375008 0.2021003
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## BH.A18Q.02TCGA -2.106282 -0.75140241 -0.7948924
                                                    -0.4034827
                                                                 -1.35022577
                                                                 -0.49077971
## C8.A130.02TCGA 1.227872 -1.75680909 1.0146801
                                                     -0.4973395
  C8.A138.O3TCGA 1.536282 -0.36543047 -0.9578870
                                                     -0.1642878
                                                                  0.09536907
                   NP 001776 NP 115656 NP 001541
                                                    NP 065078 NP 001138505
## AO.A12D.O1TCGA -0.89639326
                                     NA 1.4352032
                                                   1.1723271
                                                              -0.15348262
## C8.A131.O1TCGA 5.55275241
                                     NA -0.8105164 -1.5998532
                                                               -0.61217024
                                                               -0.76237258
## AO.A12B.O1TCGA -0.09721885
                                     NA -0.7762299 2.1310461
## BH.A18Q.O2TCGA -1.92563145 0.1953407 -1.4773503 -0.4202096
                                                                0.52653346
## C8.A130.O2TCGA -1.67153250 1.3689059 -0.3169467 -1.9142428
                                                                0.94908272
  C8.A138.O3TCGA -2.33662848
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                   NP_061993
                                        NP_061760
                                                    NP_061759 NP_061763 NP_061756
                             NP_061758
## AO.A12D.O1TCGA 2.0562003
                                     NΑ
                                                NA
                                                           NA
                                                                     NA
                                                                               NA
                                                           NA
                                                                     NA
                                                                               NA
## C8.A131.O1TCGA 2.4075489
                                     NA
                                                NA
## AO.A12B.O1TCGA -0.1193906
                                                                     NA
                                     NA
                                                NA
                                                           NΑ
                                                                               NΑ
## BH.A18Q.O2TCGA -0.9119807 -0.9119807 -0.9119807 -0.9119807
                                                               0.496425 -2.317041
## C8.A130.O2TCGA -0.7400497 -0.7400497 -0.7400497 -0.7400497 -1.415703 -1.415703
  C8.A138.O3TCGA -2.7498852 -0.5336589 -2.7498852 -2.7498852 -1.085887 -2.749885
                  NP_061761 NP_061754 NP_056484 NP_001129691 NP_963857
## AO.A12D.O1TCGA
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                                     NA
                                               NA
                                                  0.09034447 0.5437104
## C8.A131.O1TCGA
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                                     NA
                                               NA
                                                    1.10008339 -0.1426161
## AO.A12B.O1TCGA
                          NA
                                     NA
                                               NΑ
                                                  -1.35823946 -2.4280284
                                                    1.61378256 1.0116138
## BH.A18Q.02TCGA -0.9119807 -0.9119807 -2.317041
## C8.A130.O2TCGA -0.7400497 -0.7400497 -1.415703
                                                   -0.09719545 -0.6449335
## C8.A138.O3TCGA -0.5336589 -2.7498852 -2.749885
                                                    0.43548301 0.9109111
                  NP 001555 NP 060520
                                       NP 056203 NP 006262
                                                              NP 079412
                         NA -1.353569 -0.03918867 -4.7061914
## AO.A12D.O1TCGA
                                                              2.79530116
## C8.A131.O1TCGA
                         NA -0.721463 0.71148682 -4.0366775
                                                             0.08811316
                         NA 1.125001 0.75085216 -0.6182559 -0.45473898
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -1.186302 3.420289 -0.93539842 7.2373695 -8.20825858
## C8.A130.02TCGA
                  1.352507 -2.124154 -1.22547034 -0.9663607
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## C8.A138.O3TCGA
                         NA 2.318910 1.05353953 -5.6975394 1.71913886
##
                  NP_001017989 NP_002719 NP_071319 NP_001093140 NP_001241
                    3.0200793 -2.744145
                                         0.7570591
## AO.A12D.O1TCGA
                                                      -0.9116325 1.6676009
                                                      -0.4947817 -1.4298422
## C8.A131.O1TCGA
                   -0.6202660 1.897516
                                         0.8369711
                                                      -0.3605089 -3.7139923
## AO.A12B.O1TCGA
                   -1.8460189 -2.247883
                                         1.3772053
## BH.A18Q.02TCGA
                    -6.7128729 -5.966853 -3.0898243
                                                      -3.7053746 0.8677624
## C8.A130.02TCGA
                     0.6014166 -2.265189 -1.1270743
                                                      -0.6547732 -0.5038992
## C8.A138.O3TCGA
                     1.4960534 2.494452 1.5655390
                                                       0.9291968 0.7317113
                  NP_001074011 NP_001073379 NP_000900 NP_001128123 NP_001032755
##
## AO.A12D.O1TCGA
                            NA
                                  0.5970476
                                                   NA
                                                        1.20661533
                                                                       1.206615
                            NA
                                  1.1972325
                                                       -0.71336727
## C8.A131.O1TCGA
                                                   NΑ
                                                                       1.804415
## AO.A12B.O1TCGA
                            NA
                                  0.9226835
                                                   NA
                                                        1.86498465
                                                                       1.033542
## BH.A18Q.02TCGA
                    -5.3044671
                                 -2.3638765 -8.348765
                                                        1.13873834
                                                                      -2.146427
## C8.A130.02TCGA
                    -0.1037552
                                 -1.5632968 -5.604095
                                                        0.08319734
                                                                       3.054759
## C8.A138.O3TCGA
                    -0.4129733
                                  0.5451972
                                                   ΝA
                                                        1.30953927
                                                                      -2.095257
                  NP_001138536 NP_001138535
                                             NP_005054
                                                        NP 620153 NP 004692
## AO.A12D.O1TCGA
                    1.38567584
                                  0.2274972
                                             2.5705231
                                                        1.8733300 -0.4163587
## C8.A131.O1TCGA
                    0.93007239
                                  0.8895936 0.4524224
                                                       1.8489414 2.5694642
## AO.A12B.O1TCGA
                   -0.33279413
                                  0.1771571 -1.6908163 -0.8538312 -1.3998116
## BH.A18Q.02TCGA
                   -0.64435019
                                 -1.4606234 -4.2305995 0.1719230 -1.1729205
## C8.A130.02TCGA
                   0.94908272
                                  0.8375672 -1.6912117 -1.0024393 -0.9958795
## C8.A138.O3TCGA
                    0.07342623
                                 -0.4714875 3.9975366 -0.4970875 -2.4646283
##
                   NP 659498 NP 620158 NP 005946 NP 060320
                                                               NP 659449
```

```
## AO.A12D.01TCGA -1.4297650 2.1971629 0.4865635 -1.0906930 2.31526660
## C8.A131.01TCGA 1.2377113 0.9988864 0.9219766 -0.8469473 1.72345705
## AD.A12B.01TCGA -0.7540582 -3.6336195 -0.6792284 1.1028293 -0.05287527
## BH.A18Q.02TCGA 0.1150515 -6.0839411 -1.0926314
                                                 0.5599873 0.45628044
  C8.A130.02TCGA
                 1.2049125
                            0.4210238
                                      0.5489387 -1.1303541
                                                            1.34594685
  C8.A138.O3TCGA
                 3.2258802 0.4830258
                                              NA -1.1151440 0.76462553
                  NP 071927
                            NP 689920
                                        NP 477511 NP 001153777 NP 056475
                                                    -2.2374422
## AO.A12D.O1TCGA
                         NA
                            0.9399295 -0.84305608
## C8.A131.O1TCGA
                         NA -0.9886232 -1.30031000
                                                     1.8691808
                                                                     NΔ
                                                                     NA
## AO.A12B.O1TCGA
                         NA -1.9707352 -1.32221030
                                                    -1.3914971
## BH.A18Q.O2TCGA -0.7948924 -0.5473341
                                       0.04479847
                                                    -0.4636996
                                                                     NA
                                                                     NA
## C8.A130.02TCGA
                  0.2898291
                            0.3029486
                                       1.03435931
                                                    -0.2677486
  C8.A138.O3TCGA
                         NA
                            0.5707972 -0.39834472
                                                                     NA
                                                            NA
                  NP 000456
##
                            NP_002342 NP_001025035
                                                     NP_004772
                                                               NP 055047
## AO.A12D.01TCGA -0.3477823 -0.4963645
                                         -1.738359
                                                    0.07891507 -0.1230042
## C8.A131.O1TCGA -0.1830949 -1.2679270
                                          2.245634 -0.23166944 -0.9238571
## AO.A12B.O1TCGA -2.1896816 -3.2456132
                                                    0.36561729 0.9503983
                                         1.723639
## BH.A18Q.02TCGA 0.6570033 2.5337626
                                         -2.102937
                                                    0.12174225 -0.2094506
## C8.A130.02TCGA -0.1759123 -1.8814441
                                         2.625096 -0.95652109 -0.7203705
## C8.A138.O3TCGA -3.6970842 -0.1386878
                                         -4.589426 1.23273935 1.2437108
##
                  NP_060294 NP_757385
                                        NP_057556 NP_005573
                                                              NP 775889
## AO.A12D.01TCGA 2.6162406 3.3629611 -0.03537887 -1.5021512 -0.37064111
## C8.A131.O1TCGA -1.O250541 -0.8388516 -0.42191984 -2.0734553
                                                              0.08406528
## AD.A12B.01TCGA -0.6986287 -1.4607840 0.03304042 -0.9619187
                                                              0.23258654
## BH.A18Q.O2TCGA -0.1559244 -3.1098966 -0.89190845
                                                          NA -0.33322968
  C8.A130.02TCGA -1.8322461 -0.5826160 0.51286016
                                                          NΑ
                                                              0.15535446
  C8.A138.O3TCGA 1.5399390 3.0210804 -0.19720207 -1.6856577
                                                              0.55616860
                  NP_079411 NP_055300 NP_001008389 NP_742086
                                                              NP_067066
                                  NA
## AO.A12D.O1TCGA 0.3494107
                                      2.0523905 -2.3098284
                                                              1.41615423
## C8.A131.O1TCGA -1.0007668
                                  NA
                                       -0.1669033 1.1122270 -0.95624012
## AO.A12B.O1TCGA -2.9518369
                                  NA
                                       -2.9490655
                                                  0.6954227 -0.04456085
## BH.A18Q.02TCGA -8.1814955 -2.631507
                                        0.1284330 -0.7781655 3.20952971
  C8.A130.02TCGA -0.1693526 -1.415703
                                       -0.4022233
                                                  0.3390271 -0.01847860
  C8.A138.O3TCGA
                            0.592740
                                        0.8853111
                                                   1.2875964 -1.00542982
                         NA
                 NP 001007468
                               NP 031367 NP 057131 NP 055668 NP 005688
                    1.061843 -4.82429517 0.0255779 0.7227710 0.9589784
## AO.A12D.O1TCGA
## C8.A131.01TCGA
                     2.290160 -6.79328442 0.4443267
                                                   1.2498550
                    -1.929163 -2.31439795 0.2991019 0.7259089 -1.5106705
## AO.A12B.O1TCGA
                   -10.171998 1.15881063 0.2154129 -2.1832258 -1.7483262
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                     C8.A138.O3TCGA
                     1.196168 -1.19925820 0.1685119 2.9113662 0.6878256
                  NP 640339 NP 055580 NP 065727 NP 001015882 NP 001180583
## AO.A12D.O1TCGA
                  0.8942119 -0.9154422 0.9589784
                                                           NA
                                                                 2.7686326
                 0.5009970 -0.6121702 1.5655897
                                                           NA
## C8.A131.O1TCGA
                                                                 0.1812144
NA
                                                                -2.7855485
## BH.A18Q.02TCGA -1.3468804 -1.1695751
                                              NA
                                                           NA
                                                                -1.3937157
## C8.A130.02TCGA -0.1791922 0.3849453
                                              NA
                                                           NA
                                                                -0.5137388
## C8.A138.O3TCGA 0.1063405 -0.9761727
                                       1.7081674
                                                     1.492396
                                                                 1.8946815
                   NP_057145 NP_872329
                                         NP_665805
                                                     NP_055217
                                                                 NP_001472
## AO.A12D.O1TCGA
                  0.71515137
                             0.7875375 -1.43357480
                                                    0.006528907
                                                                       NA
                             1.1608016 0.11240044 -0.158807578
## C8.A131.O1TCGA 0.41599151
                                                                       NA
## AO.A12B.01TCGA 0.04412632 -0.2579643 0.19101443 0.044126317
                                                                       NA
## BH.A18Q.02TCGA -0.27301281 1.4766219 -0.79154700 0.429517383 -24.553794
## C8.A130.O2TCGA -0.05455715 -1.0286782 0.94908272 -1.389463781
```

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## C8.A138.O3TCGA -0.47880178 1.3534249 -0.05457364 2.147024140
##
                 NP 002603 NP 057339 NP 006275
                                               NP 612427
                                                            NP 063949
## AO.A12D.01TCGA -1.4602434 2.8829265 -0.9992578
                                                       NA -1.33452005
## C8.A131.O1TCGA -2.0896468 0.3471775
                                                        NA -0.61217024
                                    0.4969491
## AO.A12B.O1TCGA 1.3772053 0.5623919 0.2409010
                                                       NA -0.54065467
## BH.A18Q.O2TCGA -0.3934466
                                 NA -0.1191252 -5.63900531 0.05483462
## C8.A130.02TCGA 1.0245197
                                 NA 1.2278716 0.01432009 -0.01847860
## C8.A138.O3TCGA -0.9359442 1.3607392 -0.2520592 0.87068257 -0.96154415
##
                  NP_000990 NP_001001790 NP_036547 NP_001018864 NP_037431
## AO.A12D.O1TCGA 0.86373349
                             1.71712828
                                               NA
                                                           NA 0.6351456
## C8.A131.O1TCGA 0.23788475
                             1.35509989
                                               NA
                                                           NA 1.2336635
                            -1.70467370
## AO.A12B.O1TCGA -1.34161062
                                               NA
                                                           NA 0.5679349
## BH.A18Q.02TCGA 1.52345725
                            -0.86180002 -2.782049
                                                     0.2823206 0.3057383
## C8.A130.02TCGA 1.09011708
                            -0.08735584 1.362346
                                                     0.7916490 1.0409190
## C8.A138.O3TCGA -0.08383075
                              2.13239558
                                               NA
                                                    -0.2264592 0.6951399
##
                    NP_115680
                              NP_573438
                                          NP_859056
                                                    NP_982293 NP_612446
## AO.A12D.O1TCGA -3.140364377 -0.71733274 2.77244237
                                                    2.2276412 -0.9649696
## C8.A131.O1TCGA -0.956240121 0.44837456 -0.90766555
                                                    0.9665033 -0.9360007
## BH.A18Q.02TCGA -0.503844156
                                     NA -1.88548686
                                                           NA -0.5740972
## C8.A130.02TCGA -0.008638989
                                     NA -0.16607269
                                                           NΑ
                                                              1.0441989
## C8.A138.O3TCGA 0.208740382 -0.09480217 1.64233893 2.4432524 0.2087404
                              NP_055653 NP_061960 NP_542387 NP_004327
##
                 NP_001171656
## AO.A12D.O1TCGA
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                                    NΑ
                                        1.1342292 -1.7040705
                                    NA
                                                                   NΑ
## C8.A131.O1TCGA
                          NA
                                        1.1567537 -0.5352605
## AO.A12B.O1TCGA
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                                    NA
                                       0.2519869 -1.0007193
                                                                   NA
                  -4.4815032 -7.1277002 0.1953407
                                                                   NA
## BH.A18Q.02TCGA
                                                  1.4598950
## C8.A130.02TCGA
                  -0.0709565  0.6112562  -1.5960955  0.4210238
                                                                   NA
                  ## C8.A138.O3TCGA
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                                                    NP 859064 NP 057581
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                         NA
                            0.4764762 -0.687542786 -1.24183756 0.5291342
## BH.A18Q.02TCGA -1.82861537
                             0.1150515 -1.798506936 -0.00872764 0.9246339
## C8.A130.02TCGA 0.17831354
                             0.7752497
                                       1.404984493 -0.17591230 -0.3989434
                            ## C8.A138.O3TCGA -0.00337369
                 NP 006848
                             NP 443731
                                       NP 060211 NP 060827 NP 776170
## AO.A12D.O1TCGA -1.6202549
                           1.66379111 -0.64875638 -0.3782607 -0.8544855
## C8.A131.O1TCGA 0.5090928
                           0.54147582 -0.41787196 0.5981462
                                                             0.9503118
## AO.A12B.O1TCGA 0.9282265
                           0.02195453 -0.05841822 1.1832021 0.4071894
## BH.A18Q.O2TCGA 1.6238187
                           0.67373026 -0.65773172 0.3358467 -0.5205711
## C8.A130.02TCGA 0.3521466 -1.74368962 1.20491249 0.5718978 0.7883691
## C8.A138.O3TCGA -0.2191449 -0.44223039 -1.02371552 0.7792541 -0.9176585
                             NP_060935 NP_001001683
##
                 \mathtt{NP}\_061899
                                                   NP_005995 NP_001182225
## AO.A12D.O1TCGA 1.5494972 -0.09633564
                                      -0.08109645 0.04081709
                                                                 8.6242924
## C8.A131.O1TCGA -0.3854889 -2.79802594
                                       -0.97647953 -0.06975420
                                                                 0.3188424
## AO.A12B.O1TCGA -3.4867314 -0.89263185
                                       -0.27459318 -0.49353961
                                                                 1.2330886
## BH.A18Q.02TCGA -3.8759891 -0.67780401
                                       -1.78512541 -0.31315739
                                                              -12.4334759
## C8.A130.02TCGA -0.4383018 -2.06511677
                                        0.04055904 -1.33698588
                                                                -6.4634209
## C8.A138.O3TCGA 2.4249667 3.31730867
                                       -0.29228768 -1.18828678
                                                                 3.1198232
                NP_112494 NP_001252506 NP_085056 NP_733796 NP_068581
##
## AO.A12D.O1TCGA
                       NA
                                  NA 1.3094799 1.0770822 1.0961312
                                   NA -0.8955219 1.0191258 1.3510520
## C8.A131.O1TCGA
                       NΑ
## AO.A12B.O1TCGA
                       NA
                                   NA -3.9828252 -0.5295688 -0.7984017
```

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## BH.A18Q.O2TCGA 0.4796981
                             2.0215998 -2.8096470 0.8802055 1.9789615
## C8.A130.02TCGA 0.1455148
                            -4.1542266 1.8251959 0.6951399 1.4155963
  C8.A138.O3TCGA 1.0718252
                                NP_848602 NP_001073966 NP_620777
##
                 NP_001018024
                                                                   NP_060489
## AO.A12D.O1TCGA
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                                                       0.7494395 -0.75543073
## C8.A131.O1TCGA
                   -1.1343469 -1.239591786
                                           ## AO.A12B.O1TCGA
                   -1.3194388 0.404417921
                                            -1.1254357 -0.5489691 -0.04456085
## BH.A18Q.02TCGA
                    1.1788829 -0.821655433
                                                   NA 0.4930796 -0.12581601
## C8.A130.02TCGA
                    0.9458029 -0.008638989
                                                   NA 0.2635901 0.57517767
## C8.A138.O3TCGA
                   -0.3178877 -1.349200903
                                             1.9275958 -1.1919439 -0.59948737
                   NP_060921 NP_060915 NP_002560
                                                  NP_116195 NP_001093254
## AO.A12D.O1TCGA 0.87135309 4.749728
                                              NA
                                                         NA
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## C8.A131.O1TCGA -0.08189784 -1.150538
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## AO.A12B.O1TCGA -4.32094504 -2.028936
## BH.A18Q.O2TCGA -4.67553534 -1.453933 0.2321399
                                                 0.18195913
                                                               0.2957021
## C8.A130.02TCGA -2.20287126 -1.894564 -0.6285342 -0.62197447
                                                               0.7654101
## C8.A138.O3TCGA -0.92131562 1.214454
                                              NA -0.08017361
                                                              -0.4897732
                  NP 818931
                             NP 612206 NP 653320 NP 002988 NP 037403 NP 001534
## AO.A12D.O1TCGA -1.9555171 0.07510527 -0.2906354
                                                 2.0333415
                                                                            ΝA
                                                                   NA
## C8.A131.O1TCGA -0.1142809 0.15692713 -0.3045313 2.2618252
                                                                   NA
                                                                             NA
## AO.A12B.01TCGA -1.4524696 -1.82939002 -0.8233450 -1.7656461
                                                                   NΑ
                                                                             NA
## BH.A18Q.02TCGA -1.3000450 -0.10574371 -4.6554630 -0.7413663 -3.939551 -4.019840
## C8.A130.O2TCGA 0.5128602 -0.06767663 1.0933970 -0.9434016 2.142955
                                                                       1.099957
## C8.A138.O3TCGA 1.5874818 0.21605466 1.1266823 4.3669076
                                                                   NA
##
                 NP 001073921 NP 061977 NP 001074260 NP 003159
                                                                NP 055616
## AO.A12D.O1TCGA
                    3.1762810 -0.3287333
                                         -0.2258688 -0.6258976 0.7799179
                                           0.1164483 -2.5430094 -0.8631389
## C8.A131.O1TCGA
                    0.3674169 -0.5757393
## AO.A12B.O1TCGA
                    0.5901067 0.7369948
                                           ## BH.A18Q.02TCGA
                  -0.2429044 -1.2565551
                                           ## C8.A130.02TCGA
                   -1.1729924 0.2111122
                                          -0.6121349 1.5656981 -0.4481414
## C8.A138.O3TCGA
                    3.8146796 1.7045103
                                           1.4265677 -0.6031445 -0.1935449
##
                   \mathtt{NP}\_\mathtt{055976}
                              NP_150597 NP_001167579 NP_009099 NP_525022
## AO.A12D.01TCGA -1.60882551 -0.13824342
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                                                                     NA
                                                                     NA
## C8.A131.O1TCGA 0.03144283 -0.35715374
                                                 NA
                                                           NA
## AO.A12B.O1TCGA -4.38191746 2.94863094
                                                 NA
                                                                     NA
                                           1.1956098
## BH.A18Q.02TCGA 0.28232058 -0.71125783
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                                                              1.764325
## C8.A130.02TCGA 1.31642803 0.08319734
                                           0.1258356
                                                           NA -0.182472
## C8.A138.O3TCGA 3.32462295 -0.32885908
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                                                           NA
                                                                     NA
                 NP 001026909 NP 001162002 NP 115871 NP 001182412 NP 001229668
##
## AO.A12D.O1TCGA
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                               -1.1821281
                                                NA
                                                     4.87926076
                                                                          NΑ
## C8.A131.O1TCGA
                   -0.3652495
                               -0.3652495
                                                NA
                                                     0.47266185
                                                                         NA
## AO.A12B.O1TCGA
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                                1.0584858
                                                NA
                                                     0.04412632
                                                                         NΑ
## BH.A18Q.O2TCGA
                   -0.1826875
                               -0.1826875 -5.317849
                                                    -2.87237451
                                                                  -3.8057361
                               -2.0683966 0.640775
                                                    -4.30198733
                                                                  -0.5563771
## C8.A130.02TCGA
                   -2.0683966
## C8.A138.O3TCGA
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                               -0.9652013 -1.202915
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##
                  NP_114109
                             NP_003842 NP_112571 NP_001182317
                                                               NP_079540
## AO.A12D.O1TCGA -0.3325431 -1.43738460 -1.700261
                                                   -1.700261 -0.04680827
## C8.A131.O1TCGA -1.9439231 1.58582910 3.476189
                                                    3.476189 0.19335806
  AO.A12B.01TCGA 1.8954709 -0.62102741 -2.691318
                                                   -2.691318 -0.90648922
## BH.A18Q.02TCGA
                 0.2187583 2.26613203
                                                          NA -0.76478394
                                              NA
  C8.A130.O2TCGA
                 0.1487947
                                              NA
                                                          NA 0.50958029
                            0.04383891
  NA
                                                          NA -0.62508735
##
                  NP_775746 NP_056978 NP_115866 NP_690002
                                                             NP 775969
## AO.A12D.01TCGA 0.4408459 -1.9593269 -0.4506469 -1.1364105 -1.13641054
```

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## C8.A131.01TCGA 1.6222600 -0.8348037 -1.7658163 -0.2357173 -0.07784996
## AD.A12B.01TCGA 0.7508522 0.7009656 3.3394088 -1.6658731 -0.61271299
## BH.A18Q.02TCGA -3.7187561 -4.5484108 1.2792444 -1.2264466 0.38268204
## C8.A130.O2TCGA 1.2869092 3.9370433 -0.4743804 1.7526506 1.76904994
## C8.A138.O3TCGA 0.9438254 2.7285093 -0.6360588 0.5195972 -0.27034485
                 NP 036477 NP 001138424 NP 001014765 NP 904320 NP 000234
##
## AO.A12D.O1TCGA
                        NA
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                                          -1.109742 -1.109742 -0.2868256
## C8.A131.O1TCGA
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                                           -6.064666 -6.064666 6.8237870
## AO.A12B.O1TCGA
                        NA
                                     NA
                                           1.199831 1.199831 0.5402201
## BH.A18Q.O2TCGA 0.5298788
                              -1.463969
                                           -1.005651 -1.025724 -2.3973303
## C8.A130.02TCGA 1.0835573
                              1.231151
                                           -1.097555 -1.438662 -0.6613329
                                           -1.568629 -0.932287 0.6695399
## C8.A138.O3TCGA 1.4667963
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                  NP_054701 NP_002285 NP_001229410
                                                     NP 001841 NP 722523
## AO.A12D.01TCGA -1.2430849 -1.2430849
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                                                     3.38962968 0.0293877
## C8.A131.O1TCGA 0.4929013 0.4929013
                                         0.7681572
                                                     2.14443667 -0.9319528
-0.9064892
                                                     0.08292695 0.7674810
## BH.A18Q.02TCGA -0.3533020 -0.7079124
                                          0.2555575 -0.79154700 -0.0354907
## C8.A130.02TCGA -1.2713885 -1.2943476
                                          1.4017046 1.00812036 -0.1660727
## C8.A138.O3TCGA -1.4589151 -1.6234863
                                         0.3001689 -0.10943073 -1.3674866
                  NP 078905 NP 620160 NP 067061 NP 001107561 NP 055087
## AO.A12D.O1TCGA
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                                   NA -0.4811253
                                                    1.0123156 5.660269
                         NA
                                   NA -0.3207228
                                                   -0.1304724
## C8.A131.O1TCGA
                                                             1.367244
                                   NA -1.0118052
                                                    0.9171406 1.044628
## AO.A12B.O1TCGA
                         NA
## BH.A18Q.02TCGA -1.9256314
                             2.015228
                                       1.0116138
                                                           NA
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## C8.A130.02TCGA 0.1717538
                            1.017960 0.3587063
                                                           NA
                                                                     NΑ
  C8.A138.O3TCGA -2.1684001 2.545652 2.8272520
                                                    0.5927400 1.188854
                 NP_001028222 NP_115789 NP_995325 NP_001185903 NP_001129970
## AO.A12D.01TCGA -0.04299847 -2.3517362 0.1970188
                                                    -1.5326296 -0.915442249
## C8.A131.O1TCGA -0.22357367 2.3427828 -0.5028775
                                                     -2.6684938 -1.433890070
## AO.A12B.O1TCGA
                  -0.49908256 0.4459900 -0.9064892
                                                     -0.5351117 2.513509541
## BH.A18Q.02TCGA
                  -1.45393260 -1.7617077 -0.7882016
                                                      -0.2027598 -3.230330372
## C8.A130.02TCGA
                  -0.39566352 -3.3311461 -2.9867599
                                                      -4.1740724 0.004480487
## C8.A138.O3TCGA
                           NA -0.9688584 -2.0733145
                                                      -2.0733145 4.304736247
                  NP_005098 NP_689733 NP_848026
                                                   NP_612395 NP_001159506
## AO.A12D.01TCGA -0.3401627 0.2198776 -0.3896901 -1.23165550
                                                                0.6884828
## C8.A131.O1TCGA -1.7455769 -0.3854889 -2.6320628 -1.98440188
                                                                 1.9379947
## AO.A12B.01TCGA -2.1481095 3.9103324 2.3222778 -0.06396116
                                                                -0.8372024
## BH.A18Q.02TCGA -7.6462344
                                    NA -3.5247240 -0.58078794
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## C8.A130.02TCGA 1.9691219
                                    NA 0.4636621 0.19471288
                                                                       NA
## C8.A138.O3TCGA -0.9944584
                                    NA -1.2321724 -2.78279946
                   NP 079047 NP 001182399 NP 115733 NP 055608 NP 997397
## AO.A12D.01TCGA -1.27356328
                                       NA -0.9154422 -0.04299847
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## C8.A131.O1TCGA 1.59392486
                                       NA 0.8369711 -0.47859017
                                                                 1.5858291
## AO.A12B.O1TCGA -0.33556560
                                       NA -0.5212544 0.01364010 -0.4159383
## BH.A18Q.02TCGA 0.25555753
                                       NA -0.3901012 0.09163381
                                                                 1.5736380
## C8.A130.02TCGA 2.03471931
                                       NA 0.3783855 -2.10119532 0.8113282
## C8.A138.O3TCGA -0.01434511
                                       NA -1.1297726 2.51273806 -0.8042872
                 NP_001180265 NP_001124334 NP_004656 NP_787077
##
## AO.A12D.O1TCGA
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                                        NA -4.054716 1.2675721
                                                                       NΑ
## C8.A131.O1TCGA
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                                        NA 7.341916 0.2055017
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## AO.A12B.O1TCGA
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                           NA
                                                                        NΑ
## BH.A18Q.02TCGA
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                                 0.6335857
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                                                            NA -4.21721802
## C8.A130.02TCGA
                    1.277070
                                 1.6214558
                                                  NΑ
                                                            NA 0.07335773
## C8.A138.O3TCGA
                    -5.660968
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                                                  NA
                                                            NA -0.88108709
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NP 065157 NP 067032 NP 005405 NP 003944 NP 008868
## AO.A12D.O1TCGA -0.8697247
                            1.3628171 0.2579756 1.5837853 -0.48493506
## C8.A131.O1TCGA -0.4543029
                            0.9867427 1.7558401 0.8531627 -1.27197483
## AO.A12B.O1TCGA 3.4668966
                            0.9836560 3.8050164 -1.8266185 -0.88154596
## BH.A18Q.O2TCGA -0.7212940
                            1.1688468
                                             NA -1.4004065 0.08159767
## C8.A130.02TCGA 1.5853773 -1.8453656
                                             NA -1.3730644 0.95564246
## C8.A138.O3TCGA -0.5592588 -2.2488571
                                            NA -0.4422304 -0.66897302
                  NP_008867 NP_001002255 NP_056321 NP_872114 NP_954988
## AO.A12D.O1TCGA 1.1189900
                             -3.1365546
                                              NA -0.3973097
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## C8.A131.O1TCGA -1.0736287
                             -2.6320628
                                              NA 1.2862859
                                                                    NA
## AO.A12B.O1TCGA -2.1979960
                             1.0834290
                                              NA -1.3416106
                                                                    NA
## BH.A18Q.O2TCGA 0.7172202
                              3.1058229
                                         1.841269 -5.5787884 -0.8149647
## C8.A130.02TCGA 0.7522906
                              0.5554985 -2.570217 -2.3537452 -0.5858959
## C8.A138.O3TCGA 0.2745689
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                                                         NA -0.9542299
                 NP_079146 NP_001128690
                                        NP_003792 NP_060639 NP_059129
## AO.A12D.O1TCGA
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                                        2.6276700 -0.1153846
                                                             1.3666269
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                            ## C8.A131.O1TCGA
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                             0.9725701 -0.4658249 0.2686157
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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                             0.1418145 -0.2930851
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                                                         NΑ
## C8.A130.02TCGA
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                                                         NA
                                                                    NA
## C8.A138.O3TCGA
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                            NP 057155 NP 002013 NP 872433 NP 937886
## AO.A12D.O1TCGA -3.0413096
                            1.3209093 2.4562291
                                                        NA -1.7459782
## C8.A131.O1TCGA -1.2355439 -1.0291020 1.8125104
                                                        NA 0.8572105
## AO.A12B.O1TCGA -0.2025349
                           1.6792959 -1.4469266
                                                        NA -0.2385640
## BH.A18Q.02TCGA -1.2164105
                            ## C8.A130.02TCGA -2.3832640
                            1.3295475 -1.8880038 -1.6157747 0.8310074
## C8.A138.O3TCGA
                        NA -0.4568589 -2.3402856 -0.2630306 -2.1062287
                  NP_000624 NP_001008749 NP_057046 NP_002384 NP_005515
                                                         NA 0.8751629
## AO.A12D.O1TCGA -3.5442030
                             -3.0489292 1.7247479
## C8.A131.O1TCGA -2.3122802
                             -1.0250541
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## AO.A12B.O1TCGA -1.6437013
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## BH.A18Q.02TCGA -0.6276233
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## C8.A130.02TCGA -2.5406978
                             -4.7250904 0.7424510 -1.376344 -0.2185506
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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                                                             2.1057277
## C8.A131.O1TCGA
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                        NA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -0.1391975
                            2.1423529
                                             NA -2.588017
                                                            -3.7087200
## C8.A130.02TCGA 0.8933250
                            0.4702219
                                             NA 0.617816
                                                             1.1393151
                        NA -2.3439428 -0.3764019 1.115711
## C8.A138.O3TCGA
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                  NP 006306
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                                                            NP 004709
## AO.A12D.O1TCGA 0.03700729
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                                                       NA -0.15348262
## C8.A131.O1TCGA 0.38360847
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                                                       NA 1.61416427
## AO.A12B.O1TCGA 0.44876150
                                   NA -1.2806382
                                                       NA -0.06950411
## BH.A18Q.O2TCGA 0.09497920 -4.3409971 -0.3834104 0.7908186
                                                           0.05148923
## C8.A130.02TCGA 0.61781597 0.8670860 0.5522186 1.0114002 -1.61249486
  C8.A138.O3TCGA 0.87799685 0.6841685 0.8085112
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                                                           1.58016757
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                                                           NP 003961
## AO.A12D.O1TCGA
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                                                                  NA
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## C8.A131.O1TCGA
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                                             NA 0.3917042
## AO.A12B.O1TCGA
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                        NA
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## BH.A18Q.02TCGA -0.4436273 -4.170383 -7.9573549 -4.5684831 -4.6521177
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## C8.A130.O2TCGA -0.4645408 2.064238 0.8310074 -0.2874278 -0.9401217
## C8.A138.O3TCGA 0.2562832
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                                             NA 1.9239387 -0.1386878
                  NP 006062 NP 203526
                                       NP 003551 NP 000031
## AO.A12D.01TCGA -0.05823766 1.1989957 -1.41833561 -1.6278745
                                                              0.33036175
## C8.A131.O1TCGA -1.00481469 -0.9319528 -0.09404148 1.4036745
                                                              0.62243344
## AO.A12B.O1TCGA -2.04556498 0.5956496 -1.02843407 -2.5167155 -2.06219383
## BH.A18Q.02TCGA -2.38394876 -0.1626152 -4.78593294 -0.3432658
                                                             1.08186685
## C8.A130.O2TCGA 0.25047065 1.2803495 -1.18283204 1.4377832 0.09631682
NP_055714 NP_004366
                                        NP_835260 NP_060179 NP_002866
## AO.A12D.O1TCGA -0.5192232
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## C8.A131.O1TCGA -0.2883398
                                  NA 1.209376176 0.5981462
                                                            0.4969491
## AO.A12B.O1TCGA 0.8811114
                                  NA -0.002988738 -1.6631016
                                                            1.0196851
## BH.A18Q.02TCGA 0.2890113 2.533763 -1.514149478 -8.0777887 -6.4017524
## C8.A130.O2TCGA -1.0516373 -1.556737 -0.389103777 1.6312954 0.4669420
## C8.A138.O3TCGA -0.9359442 -1.213887
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                  NP_003990 NP_078902 NP_005610
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## AO.A12D.01TCGA 1.1266096 5.6945576 4.928788 0.79896692 -1.5973961
## C8.A131.O1TCGA 1.1972325 -0.9238571 0.468614 -0.28429189 -0.9036177
## AO.A12B.01TCGA -0.1471054 -4.2156290 -2.996181 -2.08436562 2.0395875
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
                   NP 056180 NP 001186069 NP 079143 NP 036586 NP 000988
## AO.A12D.O1TCGA 1.22185452
                                      NA 2.0676297 -2.1269581 0.5170419
## C8.A131.O1TCGA 1.82465408
                                      NA 0.9219766 5.7470507 -2.0694074
## AO.A12B.O1TCGA -0.46859635
                                      NA 1.4354062 -3.0848677 -2.7716911
## BH.A18Q.02TCGA -1.79181617
                              -0.7748201 -2.8757199 -1.4706595 -5.9735435
                              0.2111122 0.1783135 -0.5071791 1.4705819
## C8.A130.02TCGA -0.06767663
## C8.A138.O3TCGA -1.68200057
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                             NP_003330
                                        NP_862821 NP_003329 NP_057067
## AO.A12D.01TCGA -0.2411080 -0.24110797 -0.24110797
                                                   0.1817796 -0.1534826
## C8.A131.O1TCGA 0.1285920 0.02739495 0.02739495
                                                   0.8410190 0.3552733
## AO.A12B.01TCGA 0.7314518 0.73145184 0.73145184 0.5152769 0.6205929
## BH.A18Q.O2TCGA -0.3533020 -0.35330197 -0.27970357
                                                   0.1083607 -0.3633381
## C8.A130.O2TCGA 0.9982808 0.88020547 0.88676521 1.5919370 0.9458029
## C8.A138.O3TCGA -1.3382295 -1.25411528 -1.40771513 -1.0968583 -0.5629160
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                                                             NP 940878
## AO.A12D.O1TCGA -4.9576381
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## AO.A12B.O1TCGA -5.0553856
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## BH.A18Q.O2TCGA -6.4686600
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## C8.A130.02TCGA -0.6974115
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## C8.A138.O3TCGA -0.8116014
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                   1.0999410 -0.9078227 -5.654831 -1.1402203 -1.6545431
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                   -1.6524756 -2.2677535 -3.611650 1.1041313 -0.5554999
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                  -1.0023061 0.6135134 -7.308351 0.4261720 0.5164973
## C8.A130.02TCGA
                   1.2541105
                             0.6702939 -8.441182 -0.8745244 -1.6846520
## C8.A138.O3TCGA
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                    NP_036562 NP_057160
                                        NP 057108 NP 000986 NP 057079
## AO.A12D.01TCGA 3.408678668 0.4865635 -0.34778232 0.551330
## C8.A131.01TCGA -0.009035984 1.1648495 -0.25595672 1.767984
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## AO.A12B.O1TCGA -0.446424559 0.6344503 -0.32725118 -3.633620
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA 2.300623985 0.6585685 0.12828332 1.942224
                                                               2.8272520
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                             NP 002592
                                        NP 940910 NP 003167
                                                               NP 005828
                        NA -0.74019153 -2.91558629 4.0258660
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA 0.951397 0.60682262 -1.94235836 -3.3139649 -1.9523945
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                     -5.2388981
                   0.03858337
                                0.5513060 2.9818886 -0.183134540
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                   NA 1.707453254
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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                           NA
## C8.A130.02TCGA
                           NA
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## C8.A138.O3TCGA
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                                     NA 0.5927400 1.1998251 -3.8579984
                   NP 002327
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## AO.A12D.01TCGA -2.90415689 -2.90415689
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                                                                       NA
## AO.A12B.O1TCGA -5.05261414 -5.05261414
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                                                             NA
## BH.A18Q.O2TCGA 0.71722022 0.71722022
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                                                             NA 0.6101680
## C8.A130.02TCGA -0.01519873 0.16847393
                                           -4.3839841
                                                             NA 0.4341433
## C8.A138.O3TCGA 0.47205440 0.47205440
                                            1.9934243 -3.064399 1.3351392
                  NP_009188 NP_076931 NP_002990 NP_066011 NP_958802
## AO.A12D.01TCGA 1.5342580 -0.5801800 -0.2563472 2.3876528
## C8.A131.O1TCGA 1.1324664 -1.0169583 -0.7781334 0.2095496
                                                                     NA
## AO.A12B.01TCGA 2.6853409 2.3860217 -0.3826807 -0.8372024
                                                                     NΑ
## BH.A18Q.02TCGA -0.1626152 0.5432604 -3.3507641 -0.4503180 -1.4070973
## C8.A130.O2TCGA -1.3829040 -0.1496734 0.1422350 -0.7695686 -0.2119909
## C8.A138.O3TCGA -4.0810839 -0.1423450 1.7739959 0.1282833
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##
                                                                     NP 002219
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                                                                NA 0.34560094
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                                        NA
## C8.A131.O1TCGA
                                                   NΑ
                                                                NA 0.99888637
## AO.A12B.O1TCGA
                   -5.2521603
                                        NA
                                                   NA
                                                                NA -1.22520872
## BH.A18Q.02TCGA
                    0.2388306
                                -3.4611617 -0.1425429
                                                                NA -2.93593677
## C8.A130.02TCGA
                    0.8408470
                                -0.8286062 -0.2874278
                                                                NA 0.04055904
## C8.A138.O3TCGA
                                                           7.45719 -1.38942943
                           NA
                                        NA
                                                   NA
                   NP_057139 NP_115487 NP_008869 NP_003752 NP_061178
## AO.A12D.01TCGA -0.83162669 -0.3782607 -0.6868544 1.5113992 -0.2449178
## C8.A131.01TCGA -1.68081081 -1.2476875 0.6143377 4.1238504 -0.8509952
## AO.A12B.O1TCGA 1.73195391 1.2885181 -0.4963111 -2.5582877 0.5208198
## BH.A18Q.O2TCGA -0.50049877 0.7573648 0.3826820 -0.7547478 -9.0780579
## C8.A130.O2TCGA 0.01759996 0.3127882 0.8277276 -0.7466095 -0.2021513
## C8.A138.O3TCGA 0.40622590 -0.7823443 0.6402828 0.8011969 -0.2081735
                 NP 001137146 NP 066996 NP 003867 NP 002838 NP 570857
##
```

```
## AO.A12D.O1TCGA
                    2.3228862 -0.4354077 0.65800439
                                                                      NA
                                                            NA
                                                                      NΑ
## C8.A131.O1TCGA
                   -1.4865125 0.2824114 0.55361947
                                                            NΑ
## AO.A12B.O1TCGA
                   -2.8215777 -0.2607358 -0.76791553
                                                            NA
                                                                      NA
                    ## BH.A18Q.02TCGA
## C8.A130.02TCGA
                    0.4767816 1.1360352 0.24063104 1.1983528
                                                              1.1983528
                    1.0462253 -0.1240593 -0.08017361 -0.2191449 -0.2191449
  C8.A138.O3TCGA
                   NP 789788 NP 703152 NP 003611 NP 057646 XP 003960602
## AO.A12D.O1TCGA -0.17634141 -0.5077938
                                               NA 3.7629899
                                                               0.9246903
## C8.A131.O1TCGA -0.27619613 1.2619986
                                               NA -0.7093194
                                                               1.8206062
## AO.A12B.O1TCGA 0.83122490 -2.0511079
                                               NA -1.3332962
                                                               -2.7550623
## BH.A18Q.02TCGA -0.08232604 -3.1834950 -0.3432658 -2.4776195
                                                               -0.7279847
## C8.A130.02TCGA 2.22823158 1.5328994 -1.3501054
                                                  0.2143921
                                                               0.6571744
                                                               -0.9761727
  C8.A138.O3TCGA 0.21605466 -1.3492009
                                               NA -0.3325162
                                                                NP 703151
                   NP_874364 NP_689677 NP_009000
                                                   NP 003970
## AO.A12D.01TCGA -1.94027795 2.0028631 -2.340307
                                                  -1.5669177 -1.098312561
## C8.A131.O1TCGA 1.50082360
                             0.9988864 -1.284118
                                                  -3.3323462 -0.324770696
## AO.A12B.O1TCGA -1.97350666 -1.0533773 1.809555
                                                  -4.7255802
                                                             0.249215384
## BH.A18Q.02TCGA 0.39940895 -1.3000450 -2.072828 -12.3699136
                                                             0.001308505
## C8.A130.02TCGA 0.01759996 -0.8154867 3.805849
                                                 -4.4725405
                                                             0.975321671
## C8.A138.O3TCGA -0.02165938 -0.5629160 -1.886800
                                                   0.8048541 -0.888401368
##
                   NP_110448 NP_057053
                                         NP_057678 NP_612455
                                                             NP 004751
## AO.A12D.01TCGA -0.01632988 0.3113128 5.16499562 -0.3668313 0.2770246
## C8.A131.O1TCGA -0.98052741 -0.1749991
                                       1.96228203 -2.6482543 -0.3369143
## AD.A12B.O1TCGA 1.34949051 1.7818404 -0.03624642 2.0700737 -0.9840905
## BH.A18Q.02TCGA -4.53168392 0.4830435 -0.37002888 -0.3064666 0.5700234
## C8.A130.02TCGA 2.19543289 1.7329714 -1.30418719 -0.7170907 -1.5796962
  C8.A138.O3TCGA
                 0.49034010 -0.8445157 1.58016757 -0.5812017 2.9040519
                  NP_006770 NP_003071 NP_005973 NP_775931 NP_001231693
## AO.A12D.O1TCGA -0.8240071
                            0.3036932
                                             NA -0.9992578
                                                             2.0790591
## C8.A131.O1TCGA 0.5495716
                                                0.5374279
                            0.4443267
                                             NΑ
                                                              0.1204962
## AO.A12B.O1TCGA -1.4884987 -0.2884505
                                             NA
                                                 2.7684851
                                                             -0.5683694
## BH.A18Q.02TCGA 0.2120676
                                   NA -5.565407
                                                 0.1685776
                                                           -11.1421585
## C8.A130.02TCGA -0.4481414
                                   NA
                                       1.910084
                                                 0.2537505
                                                             -0.7728484
                                       4.355936
                                                              0.7207399
  C8.A138.O3TCGA 0.3659974
                            3.5403942
                                                        NA
                  NP 694566
                            NP 004590
                                       NP 001953 NP 001008396 NP 001243084
                            1.5875951
## AO.A12D.O1TCGA -2.1764854
                                      3.3362925
                                                 -0.70590335
                                                                       NΑ
## C8.A131.O1TCGA 0.8814978
                            1.2579507 0.3795606
                                                   0.88959358
                                                                       NA
## AO.A12B.01TCGA -5.2216740 -1.1198927 -0.2496499
                                                   0.72036594
                                                                       NA
## BH.A18Q.02TCGA -2.7920853 -2.1430813 5.3606102
                                                  -0.01876379
                                                                 0.1685776
## C8.A130.02TCGA -0.8187666
                            0.7555705 -2.4226225
                                                  -0.04799742
                                                                 0.1717538
  C8.A138.O3TCGA 1.2437108
                            5.4603922
                                              NA
                                                  -0.50805889
                                                                 1.1705680
                  NP 006511
                             NP 036455 NP 055725 NP 001243794 NP 002768
## AO.A12D.O1TCGA -1.1021224
                            2.13620608 -2.0888601
                                                    -2.2907794 -0.8468659
## C8.A131.O1TCGA -0.1466639
                           2.39540529 -0.1223767
                                                     1.6263079 5.7996731
-3.6419339 0.2159577
## BH.A18Q.02TCGA -0.2027598 4.14958201 2.3464212
                                                    -4.9532020 -3.9796959
## C8.A130.O2TCGA -1.0155587 -0.02175846 -0.3038272
                                                     2.6119762 -5.7057712
## C8.A138.O3TCGA -1.3162866
                                    NA 1.9824529
                                                     0.1941118 -7.8259944
                  NP_653191 NP_001248370 NP_003351
                                                     NP_057385 NP_001157844
## AO.A12D.O1TCGA 0.7913473
                             -0.1763414 -2.5879436
                                                    0.08272487
                                                               -0.43159788
## C8.A131.O1TCGA -1.5593744
                              0.8450669 0.8248275
                                                    0.31884237
                                                               -0.17904698
## AO.A12B.O1TCGA -0.8732315
                              0.9947419 -2.4418857
                                                    0.11341316
                                                                 0.01918305
## BH.A18Q.02TCGA 0.1183969
                                     NA 0.7740917
                                                    0.35926436
                                                                 0.35926436
## C8.A130.02TCGA 0.6112562
                                     NA -2.5570971 0.52925951
                                                                 0.52925951
```

```
## C8.A138.O3TCGA
                                       NA -1.6052006 -0.48245892
                                                                  -0.51903031
                          NA
##
                   NP_004698 NP_078858 NP_001177908 NP_001243333
                                                                  NP 619527
## AO.A12D.O1TCGA -1.4373846
                             0.326552
                                          0.8256355
                                                      -0.7249523
## C8.A131.O1TCGA -0.7497982
                             1.249855
                                                                          NΔ
                                          0.9826948
                                                       2.8285285
## AO.A12B.O1TCGA -2.1647384 -2.245111
                                          0.7674810
                                                      -2.0400220
                                                                          NA
## BH.A18Q.02TCGA 2.1122445
                                    NA
                                        -13.3735282
                                                                  0.4696620
                                                      -1.9624306
  C8.A130.02TCGA -0.4317421
                                    NA
                                          0.1586343
                                                       -1.5403377 -0.1988714
## C8.A138.O3TCGA 2.2494240
                                    NA
                                          0.6439399
                                                       -0.2740020 -0.9908013
##
                  NP_001191038 NP_001073893 NP_689699 NP_001245177 NP_000380
## AO.A12D.O1TCGA
                            NA
                                 -2.5803240
                                                    NA
                                                          4.6049553
## C8.A131.O1TCGA
                            NA
                                  4.9010436
                                                    NA
                                                           6.3461371
                                                                            NA
                                                    NA
                                                                            NA
## AO.A12B.O1TCGA
                            NA
                                 -3.5061317
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## BH.A18Q.02TCGA
                      1.132048
                                 -0.1191252 -0.6175871
                                                          -3.9964228
                                                                            NA
## C8.A130.02TCGA
                      1.303309
                                  0.4374232 1.8444869
                                                          0.3226278
                                                                            NA
## C8.A138.O3TCGA
                            NA
                                  2.3664525 -0.2484020
                                                          0.8194826 2.585881
##
                    NP_115714 NP_005969
                                          NP_003723
                                                     NP_620175 NP_001229476
## AO.A12D.O1TCGA -1.47167278 -8.150249 -0.45826647
                                                     0.2122580 -0.267776561
  C8.A131.O1TCGA -2.08964678 -5.331999 -0.18714274 -0.6890800 -0.276196125
## AO.A12B.O1TCGA -0.34665150 -4.675694 1.92041413
                                                    0.1605282 0.390560552
## BH.A18Q.02TCGA -0.05890837 4.086020 -3.74217380
                                                     1.1655014 0.509806548
  C8.A130.02TCGA -1.18283204 -6.273189 0.08647721 0.4931809 -0.002079251
   C8.A138.O3TCGA -0.47148750 5.478678 -2.21228575
                                                    1.6240532 -0.124059282
                    NP_002109 NP_001636 NP_001017998 NP_004116 NP_001171694
##
## AO.A12D.O1TCGA 1.78570465 -0.9535402
                                          -0.5001742 0.9285001
                                                                    1.24471331
## C8.A131.O1TCGA -0.09808936 -0.2883398
                                            0.7155347
                                                       0.5131407
                                                                    1.50891936
## AO.A12B.O1TCGA -1.99844993 -3.7832791
                                           -0.8787745
                                                       0.4044179
                                                                    0.14112790
## BH.A18Q.02TCGA 4.11278281 -1.6111656
                                            0.5098065
                                                       0.6001319
                                                                   -6.54225842
  C8.A130.02TCGA -0.18247204 0.9589223
                                           -0.9630808 -1.3041872
                                                                    2.31678804
  C8.A138.O3TCGA 1.05353953 -2.8486280
                                            0.9291968 0.9657682
                                                                    0.08805479
##
                  NP 001007023
                                 NP_667338 NP_112190 NP_981942 NP_612402
## AO.A12D.O1TCGA
                    1.24471331
                                 0.8484943
                                            3.1915202 -1.7345489
                                                                   3.134373
## C8.A131.O1TCGA
                    1.50891936
                                -2.3487112
                                            1.6222600 -0.2195258
                                                                   2.751619
## AO.A12B.O1TCGA
                    0.14112790
                                -2.5305729
                                            0.5762493
                                                      2.3610785
                                                                   1.388291
## BH.A18Q.02TCGA
                   -7.47896534 -13.6813033 -7.7633228
                                                      0.1351238 -8.519379
## C8.A130.02TCGA
                    6.52485979
                                -0.7990874
                                           2.3397471 -0.6219745 -2.120875
                    0.08805479
                                 1.6386818 1.1595966
  C8.A138.O3TCGA
                                                              NA 4.589993
                   NP 054889 NP 001004431 NP 060661 NP 001259 NP 001186048
                                                 NA 0.5246615
## AO.A12D.O1TCGA
                          NΑ
                                       NΑ
                                                                   0.2808344
                          NA
                                       NA
## C8.A131.O1TCGA
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                                                     1.7275049
                                                                  -2.6077755
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## AO.A12B.O1TCGA
                                       NΑ
                                                 NΑ
                                                     0.4958766
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## BH.A18Q.02TCGA
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                                -1.868760 -1.557639
                                                     2.2192967
                                                                   1.0216500
## C8.A130.02TCGA
                                -0.559657 -0.959801 -0.2644688
                          NΑ
                                                                   0.3029486
  C8.A138.O3TCGA -0.5263446
                                -1.828286
                                                 NA
                                                             NA
                                                                  -0.9578870
##
                  NP_001186049
                                NP_067076
                                            NP_071436 NP_057717
                                                                  NP_689967
## AO.A12D.O1TCGA
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                                0.3151226
                                                   NA -1.2087967
                                                                   0.2198776
                                                   NA 5.1398686
## C8.A131.O1TCGA
                    -2.6077755 -0.8469473
                                                                  0.1366877
## AO.A12B.O1TCGA
                     0.1189561 -0.1055333
                                                   NA -0.2773647 -0.4741393
## BH.A18Q.02TCGA
                     1.0216500 -1.8787961 -7.97408185 -2.9158645 -1.2900089
## C8.A130.02TCGA
                     0.3029486 -0.5891758 -1.71417080 -3.3836241 -0.4711005
## C8.A138.O3TCGA
                    -0.9578870
                                       NA 0.05879768 -2.0440573 0.6731971
                  NP_001034842
                                NP_064570 XP_003403836 NP_001008910 NP_055293
##
## AO.A12D.O1TCGA
                    -2.7593846
                                       NA
                                                    NA
                                                           0.6732436 -0.6297074
## C8.A131.O1TCGA
                     3.9821746
                                       NΑ
                                                    NΑ
                                                           0.3107466 -1.2476875
## AO.A12B.O1TCGA
                     0.0884699
                                       NA
                                                    NA
                                                           0.9420839 0.5235913
```

```
## BH.A18Q.02TCGA
                          NA 0.6570033
                                           0.5800596
                                                       -0.4703903 -1.0524868
## C8.A130.02TCGA
                          NA -0.2316701
                                         -0.2251103
                                                      -1.2648288 0.6702939
## C8.A138.O3TCGA
                          NA -2.3037142
                                          -2.3037142
                                                        3.3941086 -0.6580016
##
                  NP_002064 NP_789786 NP_919224 NP_079421 NP_001073918
## AO.A12D.O1TCGA
                  2.2924078 2.3800332
                                              NA 1.7704655
                                                               2.2505000
## C8.A131.O1TCGA 1.1000834 -0.3531059
                                              NA -0.2478610
                                                               3.6542963
## AO.A12B.O1TCGA 0.2963304 2.2807057
                                              NA 1.4908357
                                                              -1.0589203
                                                              -2.0427198
## BH.A18Q.02TCGA -3.9897321 -1.1662298 -0.8183101 -5.3881017
## C8.A130.O2TCGA -0.2579090 -2.8391658 0.3751057 0.1455148
                                                              -0.2513493
## C8.A138.O3TCGA 0.5013115 0.7755970 1.0315967 1.8946815
                                                               0.3586831
                 NP_001091953
                               NP_733752 NP_006166 NP_919290 NP_060807
                   1.07708219 0.37226953
## AO.A12D.O1TCGA
                                                 NA
                                                            NA
                                                                       NA
## C8.A131.O1TCGA
                   0.75601351 0.45647032
                                                 NA
                                                            NA
                                                                       NA
                  -0.52956877 -0.39099508
## AO.A12B.O1TCGA
                                                                       NA
## BH.A18Q.02TCGA
                  1.70745325 -0.01876379 0.1752684 -5.3713748
## C8.A130.02TCGA
                  -1.02539834 0.99500088 -0.9138828 1.8510467
                                                                2.0740777
                   0.04416912
## C8.A138.O3TCGA
                                      NA
                                                 NA 0.6439399 -1.2504581
##
                 NP 006143 NP 060132 NP 001257313 NP 006263 NP 036577 NP 079001
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## AO.A12D.O1TCGA
                                                                             NΑ
                        NΑ
                                 NA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                 NA
                                              NA -7.4028240 -3.0349812
                                                                             NΔ
## BH.A18Q.02TCGA
                        NΑ
                                 NA
                                      -0.5874787 11.3889884 -1.3468804
                                      -0.6416537 -0.2546292 -0.3694246
## C8.A130.02TCGA
                        NA
                                 NA
## C8.A138.O3TCGA
                        NA
                                 NA
                                       -0.4129733 -6.1839389 -0.2081735 -1.166344
##
                                         NP 899243 NP 004066 NP 066940
                  NP 060934 NP 987091
## AD.A12D.01TCGA -0.8049581 -0.5001742 0.006528907 -0.4277881
NΑ
## AO.A12B.O1TCGA -0.5184829 -0.3854521 -2.452971645 0.4404471
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## BH.A18Q.02TCGA 1.4030235 1.3193890
                                                NA -2.6749970 -9.606628
                                                NA -1.0450776 1.647695
## C8.A130.02TCGA -1.0516373 0.4964608
## C8.A138.O3TCGA 0.2050832 -1.3894294 0.124626181 3.4855371 1.181539
##
                  NP_004551 NP_005003 NP_001103224 NP_001193901
                                                                  NP 006260
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA 1.0757961
                                                                        NA
                                   NA -0.44215924 -0.44215924
## AO.A12B.O1TCGA 0.1438994
                                   NA
                                        0.02195453
                                                                        NA
                                                    0.02195453
## BH.A18Q.02TCGA -1.0257237 -2.2902781
                                       -5.49515389 -5.49515389 -11.3462268
## C8.A130.O2TCGA 0.5423790 -1.2910677 -0.93028214 -0.93028214
## C8.A138.O3TCGA
                         NA -0.1569735 -0.43491611 -0.43491611
                                                                  2.1653098
                  NP 004914 NP 006250
                                       NP 067680 NP 003590 NP 055632
##
                         NA 2.5133761 0.32655195 -0.3211137 0.4027479
## AO.A12D.O1TCGA
                         NA 0.7398220 -0.21952579 -0.8348037 0.2055017
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                         NA 2.4857948 -0.01130316 0.9531697 0.0884699
## BH.A18Q.02TCGA -3.0864790 1.5569111 -0.71460321
                                                         NA -2.8924468
## C8.A130.O2TCGA 0.4111842 0.2635901 -0.41862260
                                                         NA 0.7326114
## C8.A138.O3TCGA 0.1173119 1.0242824
                                                         NA
                                              NA
##
                 NP_001124171 NP_001243055 NP_000423 NP_002468 NP_001106997
## AO.A12D.O1TCGA
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                                                                  0.50561247
## C8.A131.O1TCGA
                           NA
                                -1.854870 1.0474609 0.9624554
                                                                  0.77220504
                                -4.875240 -3.7333926 -3.1375257
## AO.A12B.O1TCGA
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                                                                  0.09401285
## BH.A18Q.02TCGA
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                                       NA -7.7900858 -7.6060898
                                                                -4.02318587
## C8.A130.02TCGA
                           NΑ
                                       NA -0.7400497 -0.5924556
                                                                -0.24150968
## C8.A138.O3TCGA
                   0.01125487
                                 1.371711 0.3659974 0.1721690
                                                                  0.81216834
##
                  NP 068767
                             NP_003667 NP_001026788 NP_001002034
                                                                 NP 036591
## AO.A12D.O1TCGA
                         NA 2.89435592
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                                                             NA -0.99544801
```

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## C8.A131.O1TCGA
                        NA -0.15475970
                                        -0.2438131
                                                            NA -0.02117963
                        NA -1.69358780
## AO.A12B.O1TCGA
                                         0.4155038
                                                            NA -0.97854754
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## BH.A18Q.02TCGA 2.1691160
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                                         1.1420837
## C8.A130.02TCGA -0.1759123
                                                    0.21767196 1.22459170
                                   NA
                                        -0.1791922
## C8.A138.O3TCGA
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                                        -0.7750301
                                                    0.08074051 -1.92702889
##
                           NP 061749
                                       NP 061747
                                                  NP 061742 NP 061741
                 NP 060468
## AO.A12D.O1TCGA
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                                  NA
                                     0.69229258 1.36662685
## C8.A131.O1TCGA
                        NA
                                  NA 0.07596952 0.02334706
                                                                   NΑ
## AO.A12B.O1TCGA
                        NA
                                  NA -0.22747812 -0.35496592
                                                                   NA
## C8.A130.O2TCGA -0.8614049 -0.4120629 -0.41206286 -0.41206286 -0.4120629
                        NA 3.3099944 3.65010834 3.30999439 3.4782228
## C8.A138.O3TCGA
                NP_061739 NP_003726 NP_061751 NP_061750 NP_061735
                                                                   NP 061752
## AO.A12D.O1TCGA
                       NA
                                NA
                                           NA
                                                     NA
## C8.A131.O1TCGA
                       NA
                                NA
                                           NA
                                                     NΑ
                                                                NΑ
                                                                          NΑ
## AO.A12B.O1TCGA
                       NA
                                NA
                                           NA
                                                     NA
                                                                NA
                                                                          NA
## BH.A18Q.O2TCGA 1.0617946
                          1.309353 -2.7787038 0.1250876 0.1250876
                                                                   0.1250876
## C8.A130.O2TCGA 0.2996687 0.942523 -0.4120629 -0.4120629 -0.4120629 -0.4120629
  C8.A138.O3TCGA 1.1266823 3.309994 3.4782228 3.4782228 3.4782228 3.4782228
                 NP 002579 NP 061736
                                     NP 061748 NP 061746 NP 061740
## AO.A12D.O1TCGA
                        NA
                                 NA
                                             NA 3.9153818
                                                                  NΑ
## C8.A131.O1TCGA
                        NA
                                 NA
                                             NA -0.4826381
                                                                  NΑ
## AO.A12B.O1TCGA
                        NA
                                             NA -3.2068125
                                                                  NΑ
                                 NA
## BH.A18Q.02TCGA -0.1893783 -1.075904 -0.25963128 -2.3170411 0.1250876
## C8.A130.02TCGA -1.9109629 -1.071317 -0.02503833 -0.4120629 -0.4120629
  ##
                  NP_061743
                            NP_061738 NP_061744 NP_006157 NP_005851 NP_149988
## AO.A12D.O1TCGA
                        NA
                                  NA
                                            NA 0.3608401
                                                                NA 0.6351456
## C8.A131.O1TCGA
                        NA
                                   NA
                                            NA -0.6486012
                                                                NA -0.4138241
## AO.A12B.O1TCGA
                        NA
                                  NA
                                            NA 0.3240452
                                                                NA 0.6039640
## BH.A18Q.02TCGA -2.9760814 0.1250876 1.988465 -2.6013986 -2.240097 -1.5174949
## C8.A130.O2TCGA -0.3202265 -0.4120629 -1.018839 0.4046245 -2.688292 -0.8942036
## C8.A138.O3TCGA 3.4782228 3.4782228 3.650108 0.5378829 -1.096858 0.3806259
                NP_066189 NP_478056 NP_073622 NP_001164982 NP_644808
##
## AO.A12D.O1TCGA
                       NA -0.1763414 0.3075030
                                               0.55513984
                                                            0.6237162
## C8.A131.O1TCGA
                       NA -0.1426161 1.5413024
                                                ## AO.A12B.O1TCGA
                       NA 0.6954227 -1.6270724
                                                1.90101381 2.4303653
## BH.A18Q.02TCGA -1.704836 0.5098065 0.3458828
                                                0.37264589 0.1250876
## C8.A130.O2TCGA -1.215631 -0.3595850 0.5226998
                                               -0.53997774 -0.3727044
## C8.A138.O3TCGA -1.751486 -0.7055444 -2.9437136 -0.93960132 -1.2248582
                 NP 787083 NP 064571 NP 056183 NP 620168 NP 001171473
## AO.A12D.O1TCGA 0.1055837
                                  NA 4.2430245 4.163019
                                                             4.163019
## C8.A131.O1TCGA -0.2316694
                                  NA 1.7841753 1.634404
                                                             1.634404
## AO.A12B.O1TCGA 0.2187292
                                  NA -2.1785957 -2.026165
                                                            -2.026165
## BH.A18Q.O2TCGA -4.2339449 -0.3901012 -0.5941695
                                                      NA
                                                                   NA
## C8.A130.02TCGA -0.6219745 2.9530826 0.3455868
                                                      NA
                                                                   NA
## C8.A138.O3TCGA 3.5989084 -3.7153699 1.0791395 3.452623
                                                             1.364396
##
                NP_001007227 NP_001001664 NP_002926
                                                     NP 005265 NP 079034
## AO.A12D.O1TCGA
                  1.0123156
                                4.2011167 -0.7554307 -0.05061807
                                                                     NΑ
## C8.A131.O1TCGA
                   1.8044147
                                1.6222600 4.8281817 0.01120342
                                                                      NA
## AO.A12B.O1TCGA
                               -3.3509292 -1.1337501 -3.08763916
                  -0.5351117
                                                                     NΑ
## BH.A18Q.02TCGA
                  -0.6844948
                              1.4900034
                                                NA -1.18630206
                                                                     NA
## C8.A130.02TCGA
                   0.1061564
                               -0.1135948
                                                NA -0.58589591
                                                                     NΑ
                               -0.7384587 0.5598257 2.54930945
## C8.A138.O3TCGA
                  -1.6161721
                                                                     NA
```

```
NP_699165 XP_003960213 NP_872304 NP_036454
                        NA 0.017958301 -1.3535690 -0.66399557 -1.65835289
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                        NA -0.818612169 0.1407356 -0.51502110 1.99466508
                        NA 0.002554209 2.3111919 1.16657324 -2.17028131
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -3.056371 -0.048872223 -0.4369365 0.53322422 -0.78820161
## C8.A130.O2TCGA 1.434503 -1.051637288 1.4410630 -0.00535912 0.03071944
## C8.A138.O3TCGA 3.423366 -0.895715646 -0.1057736 -1.11514400 -0.60680165
                  NP 002695 NP 001257365 NP 002113 NP 291032 NP 054769
## AO.A12D.O1TCGA -0.8506757
                              0.43322630 1.648552 1.8199928 -1.1821281
## C8.A131.O1TCGA 7.0302290
                             0.52933218 1.083892 0.1528793 -0.6971757
## AO.A12B.O1TCGA 0.1078702
                             1.05571428 -2.128709 -2.5721450
                                                               2.3416782
                             -0.46035419 6.976430 6.3207348
## BH.A18Q.02TCGA -4.3610694
                                                               0.3090836
## C8.A130.02TCGA -1.6124949
                             -1.05163729  0.516140  -1.7699286  1.0835573
## C8.A138.O3TCGA -1.1736582
                             0.08805479 -1.283372 0.3915973 -0.8957156
                  NP_065869
                             NP_071939 NP_001138462
                                                     NP_002596 NP_003710
## AO.A12D.O1TCGA
                         NA
                             2.9134049
                                          0.4294165 0.42560670 2.7762522
                         NA 0.4240873
                                          3.8162115 -2.24346626 -0.1588076
## C8.A131.O1TCGA
                         NA -0.8649171
                                        -0.1775916 -0.09999032 1.3550335
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -0.6577317 -3.4611617
                                         -6.3448809 1.50338496
                                                                       NΑ
## C8.A130.02TCGA -1.9503214 1.2049125
                                         -0.6842920 -0.51373879
                                                                       NΑ
## C8.A138.O3TCGA 1.6569675 -0.7567444
                                        -1.5942292 1.13765373 -1.1992582
                    NP 061929 NP 877435 NP 060600
                                                     NP 008844
## AO.A12D.O1TCGA 1.846661421
                                      NA 1.7857047
                                                            NA
                                                                        NA
## C8.A131.O1TCGA 0.003107659
                                      NA -3.2351971
                                                            NA
                                                                        NA
## AO.A12B.O1TCGA -2.430799854
                                      NA 5.1131520
                                                            NA
                                                                        NΑ
## BH.A18Q.02TCGA -1.203028965 -0.4737357 -2.4341295 -4.8294229 -0.35330197
## C8.A130.02TCGA -1.176272305 -1.1041152 -2.4783802 -0.8745244
                                                               0.08647721
## C8.A138.O3TCGA 1.543596177 -2.5341140 0.8048541
                                                            NA 0.50131152
                               NP_071355 NP_037525 NP_001257870 NP_689835
                   NP_055917
## AO.A12D.O1TCGA 0.09796406
                                                      2.2543098
                                      NA 0.5437104
                                                                        NA
## C8.A131.O1TCGA -0.40572832
                                      NA -0.3247707
                                                      0.7641093
                                                                         NA
## AO.A12B.O1TCGA 0.71205152
                                      NA 1.4104629
                                                      -2.8188062
                                                                         NΑ
## BH.A18Q.02TCGA 0.87779855 -0.00872764 -1.0959767
                                                      -1.9992298 -0.4536634
## C8.A130.O2TCGA 0.85396652 -0.35958496 -0.2316701
                                                      0.7260516 -1.3697846
  C8.A138.O3TCGA -0.70920155 1.60942468 1.2217679
                                                      0.2965117
                                                                 1.1705680
                 NP_060020 NP_659399 NP_000474 NP_006403 NP_001012745
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                        NA -0.7012236 0.432183
                                                       NA
                                                                    NA
## AO.A12B.O1TCGA
                        NA
                            3.4336389 -3.065467
                                                       NΑ
                                                                    NA
                        NA 0.6636941 -0.493808 -2.912519
## BH.A18Q.02TCGA
                                                             -2.912519
## C8.A130.02TCGA
                        NA -0.6154147 1.178674 -1.727290
                                                             -1.727290
                        NA -1.7441719 -3.243599 3.284394
## C8.A138.O3TCGA
                                                              3.317309
                   NP 115554 NP 004633 NP 001229247 NP 066928 NP 077008
## AO.A12D.O1TCGA -0.30206474 0.7189612
                                         0.2503560 -1.0640244 0.2808344
## C8.A131.O1TCGA 0.96650332 -0.1264245
                                         0.6345771 -0.2640525 9.9689905
## AO.A12B.O1TCGA -0.14433391 -2.3088550
                                         -0.5323402 -0.5849983 3.7191007
## BH.A18Q.02TCGA -0.02545455 -1.2966997
                                          0.3191198 2.7746301 0.4161359
## C8.A130.02TCGA -0.15295322 1.0638781
                                         -1.0811561 -0.9466815 -0.3169467
                                         -0.2081735 1.0242824 0.5122829
  C8.A138.O3TCGA 2.42130958 -1.0566298
                  NP_060034 NP_003087
                                         NP_057622 NP_036426 NP_006334
## AO.A12D.O1TCGA 2.5057565 0.0255779
                                                NA 3.0162695 0.7989669
## C8.A131.O1TCGA 0.2581242 -0.6850321
                                                NA -0.9845753 0.2014538
## AO.A12B.O1TCGA 2.6631691 -1.2030369
                                                NA 1.3605764 0.5402201
## BH.A18Q.O2TCGA -0.5740972 -1.8386515 1.98177457 -2.2969688 -0.5138803
```

```
## C8.A130.02TCGA 0.2865492 1.5952169 -0.06111689 1.4246637 1.2147521
## C8.A138.O3TCGA 2.3079383 0.5451972 -0.80428717
                                                         NA -0.5482874
                  NP 653181 NP 002483 NP 954697 NP 055296 NP 066991
## AO.A12D.01TCGA -0.3515921 1.4733012 1.4847306
NΑ
                                                                  NA
NA
                                                                  NA
## BH.A18Q.02TCGA 1.2625175 -1.2900089 -4.8561860
                                                       NA -1.7884708
## C8.A130.02TCGA 0.3095083 -0.6121349 1.0966768
                                                       NA 1.7362512
## C8.A138.O3TCGA -2.5926282 1.2217679
                                             NA
                                                       NA 0.4574258
                 NP_001138502 NP_116267 NP_001034624 NP_057388
##
                                                                NP_036238
## AO.A12D.O1TCGA
                          NA 1.972385
                                        2.2847882 -0.8316267
                                                               1.22947412
## C8.A131.O1TCGA
                          NA 1.662739
                                         3.1564069 -0.7943249 1.80441467
## AO.A12B.O1TCGA
                          NA 1.130544
                                        -3.4229875 -0.7734585 -0.22747812
                  -0.3666835
                                        0.8711078 -0.7346755 0.74732866
## BH.A18Q.02TCGA
                             1.771016
## C8.A130.02TCGA
                   0.9261236 3.848487
                                         0.6440549 0.4013446 -1.30090732
## C8.A138.O3TCGA
                          NA -1.550344
                                         2.0848528 -2.9071422 0.06976909
                 NP_114432 NP_001138341 NP_065699
##
                                                   NP_077289 NP_543136
                       NA
                           -2.0431425 0.2694050 1.62188333 0.6884828
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                       NA
                            -0.9562401 2.8487680 0.03144283 0.4726618
## AO.A12B.O1TCGA
                       NA
                             3.8853891 -0.6515136 -2.54720176 3.1564915
## BH.A18Q.O2TCGA 1.1186660
                            -1.1762659 0.0581800 -5.96016197 -1.6178563
## C8.A130.02TCGA 0.2603103
                            -0.5924556  0.1619142  0.03071944  -1.7732084
                            -0.8774300 0.4354830 3.37216576 3.1307946
## C8.A138.O3TCGA
                       NA
                 NP 054726
                           NP 001321 NP 065698 NP 065166 NP 001035521
## AO.A12D.O1TCGA
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                                                           0.8256355
## C8.A131.O1TCGA
                       NA 0.6710080 4.403154 1.5736855
                                                           -0.4219198
## AO.A12B.O1TCGA
                       NA -0.4575105 -3.459017 -0.1055333
                                                           -0.3965380
## BH.A18Q.02TCGA -1.085941 -6.1541941 -6.030415
                                                      NA
                                                            0.4495897
## C8.A130.02TCGA 2.520140 0.1455148 -1.989680
                                                      NA
                                                            1.0540385
## C8.A138.O3TCGA
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                                                      NA
                                                            0.6293114
                  NP_061821 NP_001891 NP_060519
                                               NP_003460 NP_848543 NP_055154
## AO.A12D.O1TCGA
                        NA
                                  NA -1.578347 0.5094223
                                                               NA -5.3005199
                        NA
                                  NA 1.593925
                                               0.1124004
                                                               NA 0.3512254
## C8.A131.01TCGA
## AO.A12B.O1TCGA
                        NA
                                  NA -1.028434 1.4908357
                                                               NA -4.9084975
## BH.A18Q.02TCGA -0.9956153 -4.859531 -1.052487 -3.0530251
                                                               NA 0.8711078
## C8.A130.02TCGA -1.6813721 -5.958321 1.296749 0.5423790
                                                               NA 1.0737177
## C8.A138.O3TCGA
                        NΑ
                                  NA -1.283372
                                                      NΑ
                  NP_065749
                            NP_065853 NP_003206 NP_789776 NP_065148 NP_064633
##
                                             NA -0.8125777 -2.515557
## AO.A12D.O1TCGA
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                            0.8827825
                                                                     0.5856182
## C8.A131.O1TCGA
                        NA
                           0.2621720
                                             NA -1.9358273 12.065793 0.7317262
## AO.A12B.O1TCGA
                        NA -5.3824195
                                             NA 1.8178696 -1.288953 0.5319057
## BH.A18Q.02TCGA -0.1124345 -5.5286077 -2.5478725 0.2053768 -7.736560 -1.2732820
## C8.A130.O2TCGA 0.9228438 0.5981368 0.3226278 -1.1598730 -7.916403 -0.5301381
## C8.A138.O3TCGA
                        NA 2.5675951 1.0462253 -1.2760581 -7.394452 -2.0404002
                  NP_001771
                             NP_110442
                                        NP_005249 NP_612213 NP_254274
## AO.A12D.O1TCGA -4.2718744 0.40655771 -0.05442786 -7.2816150
## C8.A131.O1TCGA 0.3512254 -0.05761056 -0.02117963 -0.8793304
                                                                   NA
## AO.A12B.01TCGA -2.0178502 0.75639510 1.84835581 -6.5214953
                                                                   NA
## BH.A18Q.O2TCGA -1.1394667 -1.07255907 -1.92228606 -5.0870173
                                                                   NΑ
## C8.A130.O2TCGA -2.3898238 1.20163262 -1.36322483 -1.6288942
## C8.A138.O3TCGA -0.2703448 -1.73320052 -1.51011503 1.4704534 -2.658457
                 NP_001073910 NP_001023
                                         NP_060771 NP_569082 NP_006849
## AO.A12D.O1TCGA
                  -0.7059034 -0.2296786 1.145658558 1.34757786
                                                               3.6677449
## C8.A131.O1TCGA
                  -0.1628555 -0.6971757 0.800540202 2.39540529 1.5170151
```

```
## AO.A12B.O1TCGA
                    1.9509003 -0.1443339 -1.685273381 0.06906958 -0.9203466
                           NA 1.2156821 -0.804928523
## BH.A18Q.02TCGA
                                                              NA -0.6008602
## C8.A130.02TCGA
                           NA 1.7920090 0.004480487
                                                              NA -0.3267863
## C8.A138.O3TCGA
                           NA -0.8664585
                                                              NA 0.3111403
                                                   NA
                 NP_001231121 NP_001231118 NP_001231122 NP_001121170 NP_001255973
                   -1.6431137
                               -1.6431137
                                           -1.6431137
                                                        5.229762 -1.54024915
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                   -1.7901036
                                -1.7901036
                                            -1.7901036
                                                            1.023174
                                                                      2.97830014
                                                                     -2.55828765
## AO.A12B.O1TCGA
                   -1.3111244
                                -1.3111244
                                            -1.3111244
                                                           -3.386958
## BH.A18Q.02TCGA
                    0.8811439
                                 0.8811439
                                              0.8811439
                                                           -9.850841
                                                                       0.67707564
## C8.A130.02TCGA
                    2.5168600
                                 2.5168600
                                              2.5168600
                                                           -0.582616
                                                                     -0.04143768
## C8.A138.O3TCGA
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                                        NA
                                                     NA
                                                            1.613082
                                                                       0.36234023
                   NP_057183 NP_001008392
                                            NP_000983 NP_036469 NP_055551
## AO.A12D.O1TCGA -0.09252584
                                2.3647940 -0.99163821
                                                               NA -0.9383010
                                1.8165583 2.21325065
                                                               NA 3.3668967
## C8.A131.O1TCGA -0.71741515
## AO.A12B.O1TCGA -0.73465784
                                2.7740281 -2.20353900
                                                               NA -1.2584664
## BH.A18Q.02TCGA
                          NA
                               -0.7212940 -1.61451093 -5.26097716 -1.0993221
                          NA
                               -3.3311461 1.83136744 -0.09719545 0.6210958
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  0.34039739
                                0.3221117 -0.04360222 1.77765308 0.2672546
                              NP_542378 NP_004419 NP_114107
                 NP 001025160
                                                              NP 002169
                                      NA -1.559298 0.4332263
## AO.A12D.O1TCGA
                  -0.1649120
                                                               0.9094511
## C8.A131.O1TCGA
                    5.0629588
                                      NA -3.931433 -0.9279050
                                                              1.3955787
                   -0.7651441
                                      NA -3.048839 2.3638500 -0.7263434
## AO.A12B.O1TCGA
                   -4.7892783 -0.8350370 -1.035760 1.1119753 -0.8618000
## BH.A18Q.02TCGA
                   -4.1478335 0.3685459 -2.061837 0.7850893
## C8.A130.02TCGA
                                                               0.8900451
## C8.A138.O3TCGA
                   -0.6616587
                                      NA 1.861767 -1.2321724 0.3733116
                   NP 000945 NP 057232 NP 951009 NP 057538 NP 001092255
## AO.A12D.O1TCGA -1.26594368
                                     NA -0.6678054 1.7247479
                                                               -0.6030388
## C8.A131.O1TCGA 0.08406528
                                     NA -0.6971757 1.1972325
                                                                1.8003668
                                     NA 0.8256820 -2.5776880
## AO.A12B.O1TCGA 1.93427150
                                                                 0.6289073
## BH.A18Q.02TCGA 1.93493922 -4.0164951 -0.7514024 0.3626097
                                                                -8.0142264
## C8.A130.O2TCGA -0.75644909 0.6998127 -0.8023673 -0.4842200
                                                                 1.6903331
## C8.A138.O3TCGA -2.06965732 -0.5482874 -2.8010852 0.7463398
                                                                 1.3497678
                  NP_001817 NP_001034779
                                          NP_036471 NP_001171506 NP_004677
## AO.A12D.O1TCGA -1.2849927
                             -2.3669754 1.50377959
                                                      -0.3401627 1.0123156
## C8.A131.O1TCGA 0.9219766
                               1.9137075 2.65851755
                                                      -1.8953485 -0.2114300
## AO.A12B.O1TCGA -1.9097628
                             -2.3421127 0.04135484
                                                      -3.4784170 -2.3809133
## BH.A18Q.O2TCGA 0.6636941
                             3.2898189 -0.63765943
                                                      -6.8299613 -3.2938926
## C8.A130.02TCGA -0.1332740
                              -0.5432576 -1.62889421
                                                        0.4341433 0.7227718
## C8.A138.O3TCGA 1.2217679
                               0.5232543 1.09376806
                                                        1.4338820 0.6183400
                 NP_001094284 NP_061180 NP_777555 NP_001139345
##
                                                                 NP 068747
                   -0.3592117
                                  NA -3.555632
## AO.A12D.O1TCGA
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                                                               1.69045970
## C8.A131.O1TCGA
                   -0.9400486
                                     NA -1.539135
                                                  -0.97647953 0.03953859
## AO.A12B.O1TCGA
                   -4.0604265
                                     NA 1.064029
                                                   -1.46355547 -0.65705657
## BH.A18Q.02TCGA
                   -1.5174949
                                     NA -1.316772
                                                   2.86830076 1.09524837
## C8.A130.02TCGA
                   -1.7141708
                                     NA -1.963441
                                                   -0.85812502 -0.24478955
## C8.A138.O3TCGA
                    4.0085080
                                     NA -2.442686
                                                   2.56028087 -0.16428781
                 NP_000724 NP_002480
                                      NP 689830 NP 061039 NP 078828
                        NA -2.4926987 1.49235019 -0.4735057 4.7992550
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                        NA -0.6728885 -0.78622912 0.8329233 -0.9643359
## AO.A12B.O1TCGA
                        NA -2.1342521 0.06352663 0.3850176 -3.1707834
## BH.A18Q.02TCGA
                        NA 0.2589029 0.88114393 -2.9660452 -6.9169412
## C8.A130.02TCGA
                        NA 1.0671580 -0.12343440 -0.3661447 -0.3267863
                                               NA 0.6256542 5.3104495
## C8.A138.O3TCGA
                        NA 1.5362819
##
                  NP_919267 NP_001136156 NP_001034739 NP_872302 NP_061329
```

```
## AO.A12D.O1TCGA 4.8602118
                                      NA
                                                   NA -0.9802088 2.7229150
## C8.A131.O1TCGA 3.3830882
                                      NΑ
                                                   NA -3.0894734 1.1648495
## AO.A12B.O1TCGA -0.6487422
                                      NA
                                                   NA -3.5643327 -0.4214813
## BH.A18Q.02TCGA 0.6135134
                              -0.5908241
                                                   NA -8.6699213 -5.8731820
## C8.A130.02TCGA 0.3259076
                               0.6604543
                                                   NΑ
                                                      1.4476228 -1.2221905
  C8.A138.O3TCGA 0.3111403
                              -0.8628014
                                            -1.341887 0.3769688 -1.0602869
                 NP_061092 NP_077275 NP_071390 NP_085150 NP_006496
## AO.A12D.O1TCGA
                        NA -4.2833038 -0.2792060
                                                         NA 0.1208229
## C8.A131.O1TCGA
                        NA -3.7695174 2.1039579
                                                         NA 2.7435230
## AO.A12B.O1TCGA
                        NA 2.0867026 -0.4907681
                                                         NA -0.9425184
## BH.A18Q.02TCGA -0.537298 -1.4472418 2.8482285 -1.0056514 -1.8085431
## C8.A130.02TCGA -0.884364 0.1389551 -1.2451496 0.7063724 0.4669420
## C8.A138.O3TCGA
                        NA -1.8758289 -2.3475999 -1.3199438 -0.4020019
                   NP_005634 NP_001159968 NP_110416 NP_848697 NP_543010
##
                              -0.7363817 3.023889 1.877140 1.484731
## AO.A12D.O1TCGA
                          NΑ
## C8.A131.O1TCGA
                          NA
                               -0.5028775 1.286286
                                                     2.261825
                                                               1.585829
                          NA
                               -2.2700544 -1.505128 -1.588272
                                                               2.671484
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -0.32319353
                               -2.0561013 -1.624547 -1.895523
## C8.A130.02TCGA 0.04711878
                               -2.1011953 -3.324586 -3.429542 2.172474
## C8.A138.O3TCGA -1.03468693
                              -0.9469156 3.039366 3.291709 -1.327258
##
                  NP_000118 NP_006755 NP_009192 NP_001034786 NP_001073905
## AO.A12D.O1TCGA 0.6160966
                                 NA -0.1191944
                                                           NΑ
                                                                -0.3896901
                                   NA 2.4115968
## C8.A131.O1TCGA 0.2824114
                                                           NA
                                                                 0.8167317
## AO.A12B.O1TCGA -1.2473805
                                   NA -1.0616918
                                                           NA
                                                                 0.5762493
## BH.A18Q.O2TCGA 1.1220114 0.9748146 -1.2799727
                                                    0.7239110
                                                                -1.8921776
## C8.A130.02TCGA 0.2537505 0.4702219 -1.0778762
                                                   -0.1595130
                                                                 1.4213838
## C8.A138.O3TCGA
                  1.5691962 0.1209690
                                              NA
                                                    0.5451972
                                                                -0.6141159
                  NP_114427 NP_001015038 NP_997222
                                                     NP_003471
                                                                  NP_991111
## AO.A12D.O1TCGA -0.5839898
                             -12.249592 -11.560018 -0.43159788
                                                                1.78570465
## C8.A131.O1TCGA 0.4605182
                              -12.848914 -9.813004 -3.44568689
                                                                1.56558970
## AO.A12B.O1TCGA -0.4270242
                               -8.478156 -9.911008 -3.16801191
                                                                1.39937704
## BH.A18Q.02TCGA -1.2732820
                               -9.011150 -8.894062 -3.61170391 -0.05221761
## C8.A130.02TCGA -0.4284622
                              -12.521339 -11.960481 -0.08407597 -1.51737867
  C8.A138.O3TCGA -1.7588005
                               -6.725195
                                         -6.725195 1.07913950 0.53788291
                  NP 694570 NP 001258837 NP 443714 NP 001138845 NP 060328
## AO.A12D.O1TCGA -1.2545143
                              -1.2545143 -1.9631367
                                                              NΑ
                                                                         NΑ
## C8.A131.O1TCGA 0.2621720
                               0.2621720 4.0226534
                                                              NA
                                                                         NA
## AO.A12B.O1TCGA -0.2163922
                              -0.2163922 -1.0062623
                                                              NA
                                                                         NΑ
                              -2.0527560 -3.1701135
## BH.A18Q.02TCGA -2.0527560
                                                       1.0116138 -1.0123422
## C8.A130.02TCGA 0.2471908
                               0.2471908 -0.8318861
                                                      -0.4383018 -0.9729204
## C8.A138.O3TCGA 1.8581101
                               1.8581101 1.3461107
                                                      -0.3800590 -3.3423417
                  NP 005825 NP 001161419 NP 057223
                                                    NP 076416 NP 001137453
## AO.A12D.O1TCGA -0.5839898
                             -0.5839898 -0.2753962
                                                     3.6182176
                                                                         NA
## C8.A131.O1TCGA 0.9260245
                               NA
## AO.A12B.O1TCGA -0.8843174
                              -0.8843174 -1.1614648 -0.3106223
                                                                         NA
## BH.A18Q.02TCGA -0.7580932
                              -0.6343140 -0.1358522 -2.9091737
                                                                         ΝA
## C8.A130.02TCGA 0.4308634
                               0.2603103
                                          1.5624182 -2.5242984
                                                                         NA
## C8.A138.O3TCGA 0.8853111
                               0.3074831
                                          0.6366257
                                                            NA
                  NP_116295 NP_001073988
                                          NP_079193
                                                    NP_000352 NP_001092007
## AO.A12D.O1TCGA -1.8640820
                                      NA
                                                 NA
                                                     0.7684885
                                                                  -1.041166
                                      NA
## C8.A131.O1TCGA -2.6401586
                                                 NA
                                                     2.4480277
                                                                   6.499957
## AO.A12B.O1TCGA 0.4293612
                                      NA
                                                 NA -4.0465691
                                                                  -2.292226
## BH.A18Q.02TCGA -0.8952538
                              -5.1739972 0.5298788
                                                                  -4.652118
                                                            NΑ
## C8.A130.02TCGA -0.2611889
                               0.1651941 -0.3595850
                                                            NA
                                                                   4.140395
```

```
-3.133885
## C8.A138.O3TCGA -2.1720572
                                      NA -0.4166304
                                                            NA
##
                 NP_942094 NP_001010974 NP_055974
                                                      NP 003085 NP 067041
## AO.A12D.O1TCGA -2.214583
                            -1.734549 -0.2487276 -0.004900488 -0.9878284
## C8.A131.O1TCGA -1.644380
                              -1.308406 -0.1264245 -1.818438759 -0.4219198
## AO.A12B.O1TCGA 1.745811
                               1.864985
                                        0.1965574 -0.086132955 0.5014195
## BH.A18Q.02TCGA
                        NA
                                        0.6302403 1.071830701 -0.2429044
                                     NA
## C8.A130.02TCGA
                        NΑ
                                     NΑ
                                         0.1520746 1.450902657 1.0868372
## C8.A138.O3TCGA -2.164743
                              -2.164743
                                         0.1721690 -0.690915853 0.4391401
##
                 NP 001001481 NP 065877 NP 002440 NP 006839 NP 037380
## AO.A12D.O1TCGA
                    0.3646499
                               2.6429092
                                          0.9246903
                                                            NA -1.0868832
## C8.A131.O1TCGA
                    2.0958621
                               4.5367343
                                          0.4969491
                                                            NA 0.4969491
## AO.A12B.O1TCGA
                    0.8062816
                               0.3517599 -0.4464246
                                                            NA -2.1370236
## BH.A18Q.02TCGA
                   -0.8751815 -3.5648686
                                                 NA -4.3844871 0.5365696
## C8.A130.02TCGA
                    0.3816654 -0.4776602
                                                 NA
                                                    0.8802055 -0.3628648
## C8.A138.O3TCGA
                   -0.1423450 3.8037082
                                          0.4025688 -0.5190303 -1.1188011
##
                  NP_835225 NP_001093859 NP_001028774
                                                        NP_932342 NP_000341
## AO.A12D.O1TCGA -2.5917534
                             0.9361197
                                          -0.05061807 0.02938770
                                                                         NΑ
## C8.A131.O1TCGA -2.0289286
                              -1.3084058
                                          -1.40555490 0.02334706
                                                                         NA
## AO.A12B.O1TCGA -0.9480613
                              -0.6293418
                                          -7.69937169 -0.51016846
                                                                         NΑ
                                          -5.59551535 0.35926436
## BH.A18Q.02TCGA -1.8018523
                              -1.9055592
                                                                         NA
## C8.A130.02TCGA 1.5952169
                              -2.0749564
                                          -1.27466837 0.37182580
                                                                         NΑ
  C8.A138.O3TCGA -2.5341140
                              -0.6068017
                                          -0.62508735 -1.21754389 -3.821427
                  NP_003298 NP_001241667
                                           NP_078907 NP_001034864
##
                                                                   NP_078792
## AO.A12D.O1TCGA
                         NA
                               0.5437104
                                          0.67705338
                                                               NA
                                                                   0.5208517
## C8.A131.O1TCGA
                         NA
                               1.4643927
                                         1.44010539
                                                               NA 0.9786470
## AO.A12B.O1TCGA
                         NA
                              -0.9009463
                                          0.62336436
                                                               NA 1.5434937
## BH.A18Q.02TCGA -0.2930851
                              -0.8985992
                                                  NA
                                                               NA -0.1860329
## C8.A130.02TCGA 0.7424510
                              -0.3628648
                                                  NA
                                                               NA
                                                                   2.3692659
                 6.7550195
                              -0.7165158 -0.02531652
                                                         4.725307
  C8.A138.O3TCGA
                                                                  0.7097684
##
                 XP_003960361 XP_291007 NP_653185 NP_064603 NP_001253994
## AO.A12D.O1TCGA
                   -1.4640532 -1.4640532
                                          0.6922926 -1.3078515
## C8.A131.O1TCGA
                    0.6993432 0.6993432
                                         0.1164483 1.0393652
                                                                         NA
## AO.A12B.O1TCGA
                   -3.9412531 -3.9412531 -0.8039447 -0.8981748
                                                                         NA
                   -2.6950693 -1.1528482 -0.5038442 -0.1626152
## BH.A18Q.02TCGA
                                                                 -4.1770734
## C8.A130.02TCGA
                               1.1196359
                                          1.3623462 0.9490827
                    1.2311514
                                                                 -1.6387338
## C8.A138.O3TCGA
                    1.2693107
                               1.2693107 -1.5210864 -1.5978864
                                                                 -0.4934303
##
                 NP 001253996
                              NP 001988 NP 000291 NP 003135
                                                                NP 055132
                                                NA 3.2372378 -0.06966706
## AO.A12D.O1TCGA
                           NA 0.8027767
                           NA -4.2795504
                                                NA 2.1322930 -2.46205183
## C8.A131.O1TCGA
                                                               1.46312094
## AO.A12B.O1TCGA
                           NA 0.4737048
                                                NA -1.4774128
## BH.A18Q.02TCGA
                    -4.177073 -1.2331374 -4.200491
                                                   1.1487745
## C8.A130.02TCGA
                    -1.638734
                                                                       NA
                               1.1425950 -3.495140 -0.7498894
## C8.A138.O3TCGA
                           NA -0.3398305 -2.746228 0.7207399
                                                                       NA
##
                 NP_001092086 NP_710142 NP_783640 NP_055232
                                                               NP_055094
## AO.A12D.O1TCGA
                    2.0371513
                               2.4828977 -2.2717304
                                                     3.1153242 -1.9898053
                    2.0918142 -0.6769363
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                    1.4852927 -0.7512867
                                          3.7080148 -2.7439764 0.1244991
## BH.A18Q.02TCGA
                   -5.4148647 -6.7362906 -0.2495951
                                                     1.0551038 -5.1405434
## C8.A130.02TCGA
                   -2.8686846
                               2.1626342 -1.1139548
                                                     0.3095083
                                                                0.7260516
## C8.A138.O3TCGA
                    0.1173119
                               3.0357090
                                                 NA
                                                     0.7902255
                                                                0.9401682
##
                 NP_001170858 NP_076422
                                            NP_055519 NP_065868 NP_008955
## AO.A12D.O1TCGA
                           NA 0.0179583
                                         0.570379035 -0.7516209
                                                                 0.2351168
## C8.A131.O1TCGA
                           NA -1.6160447 0.278363562 0.3836085 0.2621720
## AO.A12B.O1TCGA
                           NA -1.0118052 -0.005760212 -3.4451593 -0.6099415
```

```
## BH.A18Q.02TCGA
                          NA 0.4027543 1.132047574 -8.5059976 -0.1893783
                          NA 0.4341433 0.463662128 -0.5924556 -1.2812281
## C8.A130.02TCGA
## C8.A138.O3TCGA
                    2.845538 2.4944524 -5.324511176 1.7739959 0.4793687
                  NP_112561 NP_057701 NP_003477 NP_078983 NP_060972
##
## AO.A12D.O1TCGA
                 ## C8.A131.O1TCGA 0.3998000 -0.8145643 0.6629123 0.9138809 0.2986030
## AO.A12B.01TCGA 0.3046449 2.0257301 -4.7643809 1.0473999 0.2603013
## BH.A18Q.02TCGA 1.5167665 -0.4503180 -3.2738203 1.0183046
## C8.A130.O2TCGA 3.4680220 -0.2316701 -0.6547732 0.3291875
                                                                   NA
## C8.A138.O3TCGA -1.9928574 0.3915973 -3.5690844 -0.3361734
                                                            2.5968523
                  NP_689755
                            NP_775816 NP_060173 NP_061189 NP_612635
                                                         NA 1.0123156
## AO.A12D.O1TCGA
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                                   NA -0.98401862
## C8.A131.O1TCGA
                        NA
                                   NA -1.08982019
                                                         NA 0.4483746
                                   NA 0.03026895
                                                         NA 1.3661194
## AO.A12B.O1TCGA
                        NA
## BH.A18Q.02TCGA 0.1886499 -2.6415432
                                              NA 3.87526070 -0.4536634
## C8.A130.02TCGA -0.9040432 0.7785295
                                               NA 0.05367852 0.8375672
## C8.A138.O3TCGA -0.2886305
                                   NA -1.07491546 2.01170999
##
                   NP 443197 NP 009144 NP 620128 NP 116221 NP 055278
## AO.A12D.O1TCGA -0.03918867 0.5208517
                                            NA 1.27519170 -1.1897477
## C8.A131.O1TCGA -1.68890657 -0.2316694
                                             NA 1.15675372 0.4686140
## AO.A12B.O1TCGA 0.09124137 -0.6792284
                                             NA 0.04966926 -0.6348848
## BH.A18Q.02TCGA 0.27897520 -1.8888322
                                             NΑ
                                                        NA 2.1758067
## C8.A130.02TCGA 0.25703039 -0.5465375
                                             NA
                                                        NA 0.7030926
## C8.A138.O3TCGA -1.57594353 0.7938826
                                             NA 2.22748120 -1.6527435
                  NP 078970 NP 055722 NP 112592 NP 640338 NP 001008723
##
## AO.A12D.01TCGA 3.8087075 2.1628747 2.77244237 0.7265808
## C8.A131.O1TCGA 1.4158181 0.3431297 0.45647032 0.1650229
                                                                      NA
## AO.A12B.01TCGA -1.5439282 -3.2511561 -0.09167590 0.1106417
                                                                      NA
## BH.A18Q.02TCGA -0.7313301 -0.3365751 1.42644118 -2.0092660
                                                              -2.815503
## C8.A130.O2TCGA 2.1429550 1.7428110 0.06351813 -1.9306421
                                                               -1.474740
## C8.A138.O3TCGA 2.2311383 -2.6401710
                                               NA 0.4098830
                                                               1.027940
##
                  NP_112200
                            NP_115599 NP_619542
                                                   NP_001768
                                                              NP_536724
## AO.A12D.01TCGA 1.6904597 0.73420036 -0.5877996 -0.92687164
## C8.A131.O1TCGA -0.5271647 0.01120342 2.8892468 0.05573011 0.4969491
## AO.A12B.01TCGA -1.4912702 -0.33556560 0.1854715 -3.89413806 -1.5217564
                        NA -0.48711725 -1.2030290 1.05844917 2.7512124
## BH.A18Q.O2TCGA
## C8.A130.02TCGA
                        NA 1.18523328 -1.8322461 -2.20943100 -0.5432576
## C8.A138.O3TCGA 2.4213096 -1.47354363 -3.2289704 0.02222628 1.5618819
                  NP_005181 NP_002935 NP_001136235 NP_001136243 NP_071937
## AO.A12D.O1TCGA 0.21225801 1.5914049
                                       -1.776457 -1.77645663
## C8.A131.O1TCGA 0.04763435 1.5089194
                                         -1.385315 -0.02117963
                                                                      NΑ
## AO.A12B.O1TCGA 0.14112790 -2.4779149
                                        -1.338839
                                                  -1.33883915
                                                                      NΑ
## BH.A18Q.02TCGA 0.23548523 -5.0803265
                                                NA
                                                            NA
                                                                      NA
                                                NA
## C8.A130.02TCGA 0.37510567 0.4472628
                                                            NA
                                                                      NA
## C8.A138.O3TCGA 0.38062592 0.8450826
                                                NA
                                                            NA 3.525766
                  NP_079452
##
                            NP_055749
                                       NP_997186 NP_060169 NP_002428
## AO.A12D.O1TCGA
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                            0.7189612
                                             NA 2.42575074 -1.3611886
                        NA
## C8.A131.O1TCGA
                            0.2662199
                                             NA 0.62243344 -0.6243139
## AO.A12B.O1TCGA
                        NA 2.7684851
                                             NA 0.03858337 -1.3166674
## BH.A18Q.02TCGA -2.6415432 -3.0262621 -6.0772503 -7.89044731 0.8844893
## C8.A130.O2TCGA -0.7958075 -2.0585570 -0.2251103 1.88056548 -0.8220465
## C8.A138.O3TCGA -1.4698865
                            NA 1.1669108 2.51639519 1.6715960
##
                 NP_115740 NP_001186 NP_001265536 NP_001637 NP_115830
## AO.A12D.O1TCGA
                    NA 1.9723848
                                         2.410512
                                                         NA
```

```
## C8.A131.O1TCGA
                        NA 1.0231737
                                         0.262172
                                                                    NA
                                                          NΑ
## AO.A12B.O1TCGA
                        NA -3.3259859
                                        -2.148110
                                                                    NΑ
## BH.A18Q.02TCGA
                        NA -3.8826798
                                        -6.090632 0.5800596 1.3394612
## C8.A130.02TCGA
                                        -2.612855 0.1455148 0.3619862
                        NA
                            2.1560745
## C8.A138.O3TCGA
                        NA 0.6878256
                                         3.631823 -0.1240593
##
                   NP 004170 NP 705838
                                        NP 002496 NP 000302 NP 006349
## AO.A12D.O1TCGA
                          NA 0.9780274 -1.19355751 1.5875951 4.8678314
## C8.A131.O1TCGA
                          NA -0.7619418 -0.06165844 -0.1345203 -0.3935847
## AO.A12B.O1TCGA
                          NA -0.2884505 0.63999320 -4.1380278 0.1272705
## BH.A18Q.02TCGA -0.09905295 -8.5729052 0.74063790 2.2393690 -0.7045671
## C8.A130.02TCGA
                  1.15243459 1.3229878 0.10287655 -2.1667927 -0.1431136
                  0.08074051 1.1083966 0.51594007 0.2526261 1.5143391
## C8.A138.O3TCGA
                 NP_001010870 NP_005606 NP_003794 XP_003960229 NP_653252
## AO.A12D.O1TCGA
                    0.9970764 -2.1498169 3.6067882
                                                    -0.4849351 2.9400735
                    1.2943817 0.9907906 -6.7082789
                                                    -0.5635957 1.6870261
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   -1.5300708 -1.3028100 -4.8696969
                                                      1.4187774 -4.7228087
                   -2.6582701 2.9051000 -5.7226399
                                                     -2.0661375 -3.7789730
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                    0.3095083 0.5423790
## C8.A138.O3TCGA
                   -0.6580016
                                      NA -1.0529726
                                                      0.2014261 0.9913682
                 NP 001092253 NP 000766 NP 002925
                                                    NP 075053 NP 001001660
## AO.A12D.O1TCGA
                   -0.3782607
                                    NA 0.0217681 -2.28696959
                                                              -0.03918867
                                     NA 2.4399320 -0.50692534
## C8.A131.O1TCGA
                   -1.6281884
                                                               -1.68890657
                                     NA -0.2579643 -3.51998909
## AO.A12B.O1TCGA
                   -0.2801361
                                                                0.81459605
                                     NA -1.6312378 0.04479847
## BH.A18Q.O2TCGA
                    1.2357544
                                                                2.15907981
## C8.A130.02TCGA
                    0.1258356
                                     NA -1.3927437 -2.27502838
                                                                1.76577007
## C8.A138.O3TCGA
                   -0.2520592 1.042568 -0.8262300
                                                               -0.47880178
                 NP_066921 NP_066919 NP_694941 NP_001078841
                                                               NP_002489
## AO.A12D.O1TCGA
                    NA -0.7592405 0.3684597 0.273214778
                                                                      NA
                                                                      NA
                        NA 8.6817644 -1.7536727 1.488679960
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                        NA -1.7490173 -3.5809615 1.526864841
                                                                      NA
## BH.A18Q.02TCGA -4.223909
                                   NA -9.4895398 -1.741635444 -0.76143856
## C8.A130.02TCGA 1.181953
                                   NA 0.2504707 -0.969640566
                                                              0.05695839
## C8.A138.O3TCGA 1.101082 -0.8152586 2.9918233 0.003940589
                  NP_057389 NP_001994 NP_001035887 NP_065695
                                                               NP_000542
## AO.A12D.O1TCGA
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                                                          NA -1.54024915
                         NA 5.2208262
## C8.A131.O1TCGA
                                          3.787876
                                                          NA 0.05168223
## AO.A12B.O1TCGA
                         NA -2.4723720
                                         -1.438612
                                                          NA -2.36982743
## BH.A18Q.02TCGA 0.1150515 -6.7563629
                                         -1.022378 -2.792085 -0.20610517
## C8.A130.02TCGA -0.8286062 -5.6303342
                                          -1.359945 -0.257909 0.34886672
## C8.A138.O3TCGA 0.9657682
                                          2.604167 2.556624 -0.02165938
                                    NA
                             NP 931045 NP 001265360 NP 000558 NP 065155 NP 006542
                  NP 937799
## AO.A12D.O1TCGA -1.6164451
                                        -0.8811541 4.833543
                                                                    NA 7.313722
                                    NΑ
## C8.A131.O1TCGA 1.7436965
                                    NA
                                         0.3390818 0.128592
                                                                    NA -4.065013
## AO.A12B.O1TCGA -2.7134902
                                    NA
                                        -3.0432956 -1.025663
                                                                    NA -4.010540
## BH.A18Q.02TCGA -0.5205711 -1.4104426
                                                NA -1.213065
                                                                    NA -4.287471
## C8.A130.02TCGA 0.2242317 3.2581104
                                                NA -1.120515
                                                                    NA -3.445942
## C8.A138.O3TCGA 0.2233689 -0.6031445
                                          0.4866830 -3.163142 2.253081 -4.296855
                 XP 003960392 NP 001028174
                                           NP_665698 NP_001193884
                                                                     NP 783302
##
## AO.A12D.O1TCGA
                   -0.5116036
                                -1.7916958 2.91340491
                                                         2.6429092
                                                                     2.6429092
## C8.A131.O1TCGA
                   -1.9115400
                                -0.8914740 -0.08594572
                                                        -0.3207228
                                                                    -0.3207228
## AO.A12B.O1TCGA
                    0.2131862
                                1.1582588 0.04689779
                                                        -2.9407510
                                                                    -2.9407510
## BH.A18Q.02TCGA
                  -11.0183793
                                1.3093528 -3.25709343
                                                        -3.7120654 -12.0086124
## C8.A130.02TCGA
                   -0.7826880
                                -0.7039712 0.46694200
                                                        -0.1496734
                                                                     0.4439829
## C8.A138.O3TCGA
                           NA
                                -1.7588005 1.05353953
                                                         1.4923962
                                                                     1.4923962
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NP_001010852 NP_001028284 NP_079119 NP_937983 NP_001157413
                    2.841019
                              1.00088623 1.3399583 0.6961024
## AO.A12D.O1TCGA
                                                                0.9208805
## C8.A131.O1TCGA
                   -2.085599 -0.44620712 -0.9764795 2.5006502
                                                                 0.9786470
## AO.A12B.O1TCGA
                   -3.858109 -0.77900142 1.3550335 -1.6464727
                                                                -1.4441552
## BH.A18Q.02TCGA
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                              0.07490691 -2.4174026
                                                           NΑ
                                                                -0.6677679
                                                            NA
## C8.A130.02TCGA
                 -1.320587
                               0.62109583 -2.4587010
                                                                -0.7498894
## C8.A138.O3TCGA
                   2.311595 0.51959721 0.4464544 0.8889683
                                                                -0.8957156
                 NP 110433 NP 001098549 NP 060331 NP 071428 NP 036248
##
## AO.A12D.O1TCGA -1.3078515
                                    NA
                                         NA -2.2298226 -1.4716728
                                    NA
## C8.A131.O1TCGA -1.6362841
                                              NA 1.7234571 -0.3692974
## AO.A12B.O1TCGA -2.6026312
                                    NA
                                              NA -1.6547872 -1.4940417
                               2.814775 -6.0170335 0.2890113
## BH.A18Q.02TCGA -3.7087200
                                                                    NA
## C8.A130.02TCGA -0.3464655
                               0.191433 -0.4415817 -0.4776602
                                                                    NA
## C8.A138.O3TCGA 2.8016520
                                     NA 3.8402796 -2.1135430
                NP_005208 NP_001245249 NP_075051 NP_000012 NP_000438
## AO.A12D.O1TCGA -1.201177
                             6.567001
                                             NA 3.8810936 5.3745345
## C8.A131.O1TCGA 8.078630
                             2.205155
                                             NA 1.0960355 2.5046981
## AO.A12B.O1TCGA -1.543928
                          -2.159195
                                             NA -1.1614648 -0.1969919
## BH.A18Q.02TCGA -8.676612 -3.635122 -4.046604 -3.5146878
## C8.A130.02TCGA -7.703211
                             -1.363225 -1.317307 0.1225558
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## C8.A138.O3TCGA -8.615936
                             3.266109
                                             NA 1.2327393
                NP 001121070 NP 478061
                                         NP 065111 NP 060394 NP 612417
                   ## AO.A12D.O1TCGA
                  -3.3728250 0.5536195 1.62630791 0.9422160 -2.2029874
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                 -2.7218046 1.3328617 -0.96746165 -0.8676886 1.5157789
## BH.A18Q.02TCGA
                 -0.7848562 -1.6345832 0.12843302 -0.1023983 -0.2362136
                   0.5128602 -0.7039712 -0.31694666  0.3882251 -0.5465375
## C8.A130.02TCGA
## C8.A138.O3TCGA
                  -0.2191449 -3.4483988 2.54565231 -0.4458875 -0.4568589
                  NP_056207 NP_065099 NP_945173 NP_002951 NP_079357
## AO.A12D.O1TCGA -0.7820993
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                                                   NA 0.9780274
                                                                            NA
## C8.A131.O1TCGA -0.6971757
                                  NA -0.5797872
                                                      NA -0.5433563
                                                                            NA
## AO.A12B.O1TCGA 1.0446284
                                  NA 0.1993289
                                                     NA -2.2118534
                                                                            NΑ
## BH.A18Q.02TCGA -2.9593544 -6.140813 -1.3067358
                                                     NA -1.1528482 -4.51161162
## C8.A130.O2TCGA -3.4065831 -1.425542 2.3430270
                                                    NA 1.8707259 1.59193702
## C8.A138.O3TCGA 2.0373100 2.995480 -0.9286299 -2.815714 0.6878256 0.06976909
                NP 001127835 NP 001984 NP 065744 NP 001025051 NP 115696
## AO.A12D.O1TCGA
                 0.5703790 2.1400159 0.6427652
## C8.A131.O1TCGA
                  -0.8550431 1.5129672 0.6345771
                                                            NA
                                                                     NΑ
                  -0.9591472 -1.7296170
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## AO.A12B.O1TCGA
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                                                                     NΑ
## BH.A18Q.02TCGA
                 -1.8319608 0.8075455
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                                                    -0.7313301
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## C8.A130.02TCGA
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                                               NA
                                                    1.8084084
                                                                     NA
## C8.A138.O3TCGA
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                                                    -0.2484020
                 NP 976043 NP 003753 NP 068809 NP 001002759 NP 001004316
## AO.A12D.01TCGA 0.1551110 3.3286729 0.2122580
                                                   2.2047824
                                                             0.45227529
## C8.A131.O1TCGA -0.6162181 1.0393652 -0.9481444
                                                 -1.4419858
                                                             1.02317365
## AO.A12B.O1TCGA 2.0894740 -0.1332480 1.6709815
                                                  -0.7817729 -3.55324677
## BH.A18Q.O2TCGA 0.3659551
                                   NA 0.4395535
                                                  -6.3314994 -1.52084024
## C8.A130.02TCGA 0.9982808
                                   NA 0.6670140
                                                  -0.4481414 -0.40550312
                                                  0.1502262 -0.01800225
## C8.A138.O3TCGA -0.6616587 0.7865684 -0.3983447
                  NP_060323 NP_005186 NP_000407 NP_525021 NP_004279 NP_079218
## AO.A12D.O1TCGA -0.36302152 1.522829
                                             NA
                                                       NA 0.5779986 2.6314798
## C8.A131.O1TCGA -0.14261605 1.654643
                                             NA
                                                       NA 0.1974059 -4.9636422
## AO.A12B.O1TCGA -0.30507939 -2.768920
                                                       NA 1.7679831 1.6931533
                                             NA
## BH.A18Q.02TCGA 1.20230059
                             NA -0.4202096
                                                       NA 4.7182969 0.4295174
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## C8.A130.02TCGA 0.01759996
                                    NA -1.3763443
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## C8.A138.O3TCGA -0.95057273
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                                                         NΑ
                                               NΑ
                                                                    NA 0.5451972
                                                        NP 542172
                 NP 001243342
                                NP 006071
                                            NP 054796
                                                                    NP 659494
                    1.9723848 -1.66978229 0.28083438
                                                        0.5094223
## AO.A12D.O1TCGA
                                                                   1.89618880
## C8.A131.O1TCGA
                    1.6263079 0.53338006 0.03144283
                                                        5.8968223
                                                                   0.48885337
## AO.A12B.O1TCGA
                   -3.1957266 -0.28567907 -0.80948764
                                                       -1.7213025 -1.10603534
## BH.A18Q.O2TCGA
                    0.9547423 -0.04552684 1.40636889 -11.5937850 -0.10908910
                   -1.7043312 -0.29070771 0.55549846 -1.4976995 -0.88108411
## C8.A130.02TCGA
## C8.A138.O3TCGA
                    0.8048541 -0.27400199 -0.64703018
                                                               NA 0.09536907
##
                   NP_543011 NP_065186 NP_997246 NP_003587 NP_004420
## AO.A12D.01TCGA 3.8353761 -1.8374134 0.5589496 -1.0906930 -0.9078227
## C8.A131.O1TCGA 0.2662199 -0.9764795 1.5332066 0.8976893 -0.1142809
## AO.A12B.01TCGA -4.0604265 -0.2967650 1.4686639 -1.1642363
                                                              1.1194582
## BH.A18Q.O2TCGA -1.3401896 -4.0064590 -7.3986762 1.1721922
## C8.A130.O2TCGA -1.5337780 -0.7531692 -3.1343540 -1.1139548
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## C8.A138.O3TCGA 4.5205075 -0.2630306
                                               NA 1.0169681
                                                                     NA
                   NP_001856 NP_060229
                                          NP_057725 NP_058649 NP_001070665
##
## AO.A12D.O1TCGA 2.18573346 0.8599237
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                                                                 0.8789727
## C8.A131.O1TCGA 0.02334706 1.1000834
                                         -1.2841185
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                                                                -2.6523022
## AO.A12B.O1TCGA -0.95360428 -2.0954515
                                         -2.4113995
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                                                                 -2.1314807
## BH.A18Q.02TCGA 2.17580671 -1.4706595 -14.7752432 -1.517495
                                                                -1.5174949
## C8.A130.O2TCGA -0.32022653 -0.5793362 -15.0041994 -1.569857
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## C8.A138.O3TCGA -0.01800225 -1.0237155
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                                                                        NA
                 NP 001070826 NP 061907 NP 001002292 NP 057150 NP 001257513
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                            2.7070921 -0.5433563
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## AO.A12B.O1TCGA
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                                             0.2242721 0.5568490
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## BH.A18Q.02TCGA
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                                                   NA 1.3796058
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                    -1.569857 -0.6875718
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                             NA 7.0464205
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -0.5774426
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## C8.A130.02TCGA -1.2582690 -0.1463935 1.51650003
                                                     -0.7728484 3.6254557
## C8.A138.O3TCGA 1.5911390
                                    NA -0.09845931
                                                             NA -0.1533164
                 NP_703150 NP_689521 NP_000431 NP_444513 NP_619639
##
## AO.A12D.O1TCGA 2.021912
                                       0.7494395 8.3118889 -0.2411080
                                   NA
                                   NA 0.2216932 0.5657631 2.5856557
## C8.A131.O1TCGA 7.046420
## AO.A12B.O1TCGA -1.751789
                                   NA 2.0700737 0.3739317 -0.6016271
## BH.A18Q.02TCGA -2.470929 0.7607102 -1.3368442 -0.7212940 1.1320476
## C8.A130.02TCGA -2.048717 -0.7597290 -1.4616209 -4.2855880 1.8740057
## C8.A138.O3TCGA -1.894115
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## AO.A12D.O1TCGA
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                                                              NA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                           0.11505149
                                                       1.0183046 -0.02879993
## C8.A130.02TCGA
                   1.08027747 -1.11395480 -0.03159807
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                                                                  1.19179302
## C8.A138.O3TCGA
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                                          0.09902621 -2.8230280 0.55251146
                  NP_778230 NP_001035755
                                           NP_775741 NP_112211 NP_004749
## AO.A12D.O1TCGA -1.7116901
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                                          2.99722047 1.5342580
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## C8.A131.O1TCGA 0.1326398
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                                                                        NA
```

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## AO.A12B.O1TCGA -1.0145767
                              -0.6265704 -3.45624519 -0.5517406
## BH.A18Q.02TCGA -2.2267158
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## C8.A130.02TCGA 0.4407030
                                      NA -0.23494994 -2.4718205 0.4866212
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                 NP 861452
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                                                             NP 660327
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## C8.A131.O1TCGA
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                                                         NA -0.62431388
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                   -1.6524756 1.7153613
                                                 NA -1.13029900
                                                                 0.3350339
                   -0.7568296 -4.0715124
## AO.A12B.O1TCGA
                                                 NA -0.09167590
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## BH.A18Q.02TCGA
                    1.8747223 -1.4104426 -2.5947078
                                                     1.42978656
                                                                 0.8343086
## C8.A130.02TCGA
                   -0.6678926 -0.2119909 1.3229878 -0.08735584 -1.4976995
  C8.A138.O3TCGA
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                 NP_001030013 NP_001070148 NP_113634 NP_060420 NP_001230271
##
## AO.A12D.O1TCGA
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                                                             NA
## C8.A131.O1TCGA
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                                -0.8348037
                                                   MΔ
                                                             NΔ
                                                                          NΔ
                                                                          NA
## AO.A12B.O1TCGA
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                                                   NΑ
## BH.A18Q.02TCGA
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                                                                   -1.738290
                                 0.7719698 0.1881531 -1.018839
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                                          NΑ
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                                                  NP 002989
                                                             NP 057425 NP 006703
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## C8.A131.O1TCGA -1.2719748 -0.4178720 -2.300137
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## AO.A12B.O1TCGA -2.7578338 -2.5943168 4.547771
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                                                                    NA
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## C8.A130.02TCGA -1.4976995 -0.9958795 -2.835886
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## C8.A138.O3TCGA 3.1783374 0.7463398 3.057652 2.4469096 -0.4861161 0.7061113
##
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                                                         1.1418488
## AO.A12D.O1TCGA
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                     8.082678 -2.8546963
                                            1.8489414
                                                         0.3674169
## C8.A131.O1TCGA
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                    -2.383685 -0.4020810
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                         1.9784292 -3.6919931
## C8.A130.02TCGA
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                                           -1.4714605
## C8.A138.O3TCGA
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                                                        -0.9615442
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA -0.7295588
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                                              NΑ
                                                        NΑ
                                                             -0.5878830
## AO.A12B.O1TCGA 0.9587127
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                                              NA
                                                        NA
                                                             -1.2529235
## BH.A18Q.02TCGA -0.2596313
                                   NA -0.7346755
                                                        NA
                                                              0.3726459
## C8.A130.02TCGA -1.4091430
                                   NA -0.5563771
                                                        NA
                                                              0.9195639
## C8.A138.O3TCGA
                  1.5143391 2.757766
                                       1.9934243
                                                        NA
                                                             -1.2358296
                 NP_001157871 NP_859065 NP_003623
                                                      NP 690850 NP 066951
## AO.A12D.O1TCGA
                    3.1381830
                               3.8125173
                                          1.0999410
                                                     1.18375654 -2.1421973
## C8.A131.O1TCGA
                    0.5940983
                              0.3998000
                                          0.3026508 -0.06165844 -2.3972857
## AO.A12B.O1TCGA
                   -0.3050794 -0.9064892
                                          0.4376756 -0.32170823 -0.3494230
## BH.A18Q.02TCGA
                   -2.7987761
                                      NA
                                                 NA
                                                             NΑ
                                                                0.7205656
## C8.A130.02TCGA
                    1.1097963
                                      NA
                                                 NA
                                                             NA
                                                                0.7588503
## C8.A138.O3TCGA
                    1.7045103 1.8288530 -0.6653159
                                                     0.65856850 -0.3764019
##
                   NP 127491 NP 001002261
                                          NP_848930
                                                      NP 036229
                                                                  NP 003084
```

```
## AO.A12D.O1TCGA 0.2274972
                                      NA 1.8123732 1.48092080 0.01414850
                                      NA -0.4219198 2.33468707 0.68315165
## C8.A131.O1TCGA 1.5291588
## AO.A12B.O1TCGA -0.5018540
                                      NA -1.3000385 -1.30003851 -0.04178937
                         NA -12.52045580 -0.5573703 0.07490691 0.17861374
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                         NA
                              0.02743957 0.7654101
                                                     0.20127262  0.83428731
                         NA
                                      NA 0.6841685 4.01947939 -0.34348763
  C8.A138.O3TCGA
                  NP 065983 NP 006393 NP 057367 NP 859060 NP 060662
## AO.A12D.01TCGA 0.9285001 -1.0335460 -1.7955056 0.1208229
                                                              2.2809784
## C8.A131.O1TCGA 1.5777333
                             0.2905072 -1.3650761 1.9987130
                                                              4.0590844
## AO.A12B.01TCGA -1.4025830 0.5457631 1.6266379 -2.1148518
                                                             1.0002848
## BH.A18Q.O2TCGA -1.8687600 -1.6379286 -0.3298843 0.7205656 -0.7714747
## C8.A130.O2TCGA -0.2874278 -0.5957355 -0.6186946 -3.2327501
                                                             1.9232038
  C8.A138.O3TCGA 0.7280541 -0.6470302 0.2599403 0.9218825
                                                              0.8267969
                  NP_004861 NP_001098668 NP_057074 NP_001781 NP_061952 NP_065986
## AO.A12D.O1TCGA -0.2030100
                             0.5932378
                                                NA
                                                          NA 2.7457738 1.1608978
## C8.A131.O1TCGA 1.5574939
                               0.7600614
                                                NA
                                                          NA -0.5271647 0.2176453
## AO.A12B.O1TCGA -0.3078509
                              -0.6986287
                                                NA
                                                          NA -0.7235719 1.9758436
## BH.A18Q.02TCGA -1.3870250
                               0.2421760 -1.380334 -3.675266 -8.8672988
## C8.A130.02TCGA -0.3202265
                               0.6473348 -1.238590 -1.881444
                                                             0.9556425
                                                                               NΑ
## C8.A138.O3TCGA 2.2238241
                              -1.0237155 2.889423 1.784967
                                                              2.5675951
                                                                               NA
                 NP_055906 NP_001035545 NP_116000 NP_036397 NP_001158137
##
                        NA
## AO.A12D.O1TCGA
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                                                           NΑ
                                                                 2.1819237
## C8.A131.O1TCGA
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                              0.1285920 -3.8545229
                                                           NA
                                                                 0.2176453
## AO.A12B.O1TCGA
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                             -0.9563758 1.2441745
                                                           NΑ
                                                                -0.2080778
## BH.A18Q.02TCGA 1.001578
                              1.2491359 -0.5038442 -1.3435350
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## C8.A130.02TCGA -0.457981
                             -1.6551332 0.3587063 -0.5629368
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  C8.A138.O3TCGA -1.184630
                              2.5968523 -1.3053152 0.8889683
                                                                        NA
                 NP_861449 NP_689807 NP_006625 NP_078861 NP_001036096
                                  NA 1.6676009 -0.7325719
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                  NA 0.8126838 -0.3652495
                                                                     NA
## AO.A12B.O1TCGA
                        NA
                                  NA -1.5494712 0.5984211
                                                                     NA
## BH.A18Q.02TCGA
                        NA 2.6475056
                                     1.2993167 0.5700234
                                                              -7.164499
## C8.A130.02TCGA
                        NA 0.2635901 0.3521466 0.7391711
                                                               3.448343
  C8.A138.O3TCGA
                        NA
                                  NA -0.6726302 -0.7274872
                                                                     NA
                  NP 775798
                             NP_653249 NP_065824 NP_001188472
                                                                NP 008980
## AO.A12D.O1TCGA
                         NA 2.3152666 -0.1725316
                                                   -7.6130674 -0.06585726
## C8.A131.O1TCGA
                         NA -3.0044679 0.6629123
                                                   -2.2596578 0.13263985
                         NA -2.8659213 0.6871083
## AO.A12B.O1TCGA
                                                   -5.2438458 2.70474124
## BH.A18Q.O2TCGA -3.6217401 -0.2696674 -7.4722746
                                                     0.5599873 -2.31704112
## C8.A130.02TCGA -0.1726324 -0.8220465 2.8710859
                                                     0.7391711 -0.63837381
  C8.A138.O3TCGA 1.1120538
                                    NA
                                               NA
                                                     0.4208545 0.15022616
                 NP 001184162 NP 057017
                                          NP 077296
                                                     NP 631957 NP 006197
##
## AO.A12D.O1TCGA -0.06585726 -2.671759
                                        0.74943955 1.98381415 1.522829
                   0.13263985 -2.559201 0.55361947 -0.38548891 1.452249
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   2.70474124 2.779571 2.28347721 -0.48245372 -1.070006
                  -2.31704112 -6.813234 -1.74163544
                                                     0.66703950 1.563602
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                  -0.63837381 1.014680 0.60797636 -0.03159807 1.126196
## C8.A138.O3TCGA
                  -0.39103044 1.346111 -0.01800225 0.24531177 -1.554001
                  NP_055455 NP_057394 NP_065199 NP_001011668 NP_001010922
                                                      1.0351744
## AO.A12D.O1TCGA
                         NA -1.24689469 -2.0012347
                                                                          NA
                                                                          NA
## C8.A131.O1TCGA
                         NA -0.88337826 -1.1829215
                                                      0.2864593
## AO.A12B.O1TCGA
                         NA 0.04966926 1.6931533
                                                      1.2053739
## BH.A18Q.02TCGA -4.3376518 0.85103550 -2.3070050
                                                      0.6603487
                                                                  -1.4137880
## C8.A130.02TCGA -0.9794802 0.80804836 0.5817374
                                                      1.4640221
                                                                  -0.7302101
```

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## C8.A138.O3TCGA -3.6714843 -0.08748789 4.0633651 -0.1313736
##
                    NP 478072 NP 055804 XP 003846627 NP 002244
                                                                 NP 008911
## AO.A12D.O1TCGA 1.050413604 1.8047536
                                                   NA -0.1611022
## C8.A131.O1TCGA -0.009035984 -0.1345203
                                                                         NA
                                                   NA -1.6241405
NA -0.1249336
                                                                         NΑ
## BH.A18Q.02TCGA -2.002575230
                                      NA
                                           -11.252556 2.9887345 -0.1224706
## C8.A130.02TCGA 1.103236557
                                      NA
                                            -1.809287 -0.7236504 -0.4284622
                                                   NA -0.7348015 -0.2228020
## C8.A138.O3TCGA 1.002339581
                               5.8699918
##
                 YP 003024036 NP 620482
                                          NP_065706 NP_001182555 NP_076946
## AO.A12D.O1TCGA
                   3.15342219 -1.3116613
                                                 NA
                                                       1.587595
## C8.A131.O1TCGA
                   0.07596952 3.5126204
                                                 NA
                                                        4.050989
                                                                        NA
## AO.A12B.O1TCGA
                   0.40996087 -3.5089032
                                                 NA
                                                       -1.028434
                                                                        NA
## BH.A18Q.02TCGA
                  -1.36695268 0.9513970 -0.2696674
                                                                        NA
                                                       -4.103475
                  -1.96672070 1.2606703 -0.8220465
                                                        2.638215
## C8.A130.02TCGA
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  C8.A138.O3TCGA
                   1.33879638 -0.3837162 1.0279396
                                                       -3.382570
                                                                        NΑ
##
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## AO.A12D.O1TCGA -1.155460
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                                          -0.8049581 -0.8049581
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## C8.A131.O1TCGA -2.134173
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                                                     1.2498550
## AO.A12B.O1TCGA -4.379146
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                                                                       NΑ
## BH.A18Q.02TCGA
                        NΑ
                                     NA
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## C8.A130.02TCGA
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                                     NA
                                           0.9228438 0.8342873
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                                     NA
## C8.A138.O3TCGA
                        NA
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                                                                       NΑ
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##
                                                                   NP_056305
## AO.A12D.O1TCGA
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                                          0.2236874
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## C8.A131.O1TCGA
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                                          2.8285285
                                                              NΑ
                                                                 0.53338006
## AO.A12B.O1TCGA
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                                                              NA -2.45297164
## BH.A18Q.O2TCGA
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                                                              NA -0.07751624
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##
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## AO.A12D.O1TCGA -2.3707851
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                                         2.2009727 0.9665980
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## C8.A131.O1TCGA -1.5796138
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                                         0.7276783 -0.6405054 -0.9400486
## AO.A12B.O1TCGA -4.4844620
                                        -1.4247548 -6.9649311 -2.4806864
## BH.A18Q.02TCGA -0.4503180 -4.026531
                                                NA 5.7654015
                                                              1.2123367
## C8.A130.02TCGA 0.1487947 -1.622334
                                                NA -3.1901118 -0.4514213
                 1.4448534 1.960510
  C8.A138.O3TCGA
                                         3.7269083 -6.4765100 -0.5044018
                  NP 001376 NP 056505 NP 690865 NP 075601 NP 001098991
## AO.A12D.O1TCGA -1.8983702
                                    NA -4.1042433 -2.2793500
                                                               1.8580908
## C8.A131.O1TCGA -1.0129105
                                    NA -0.6243139 -1.4298422
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## AO.A12B.O1TCGA -4.9750129
                                    NA -3.9800538 0.4598474
                                                               -0.9314325
## BH.A18Q.02TCGA 2.9619715 -0.7447116 -3.2002219 -2.5712901
                                                               -3.4611617
## C8.A130.O2TCGA 0.4899011 1.3918650 -5.7320102 3.4877012
                                                                0.1258356
  C8.A138.O3TCGA
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                                                          NA
                                                               -0.6324016
##
                  NP_055964 NP_001092903 NP_653321 NP_001018118 NP_066010
## AO.A12D.O1TCGA 0.6122868
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                                                      1.34376806
                                                                         NA
                                                                         NA
## C8.A131.O1TCGA 0.2986030
                               1.8287020
                                          1.8287020
                                                      1.93394686
                                                     -0.54896909
## AO.A12B.O1TCGA -0.9314325
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## BH.A18Q.02TCGA -2.9158645
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                                                     -5.90663586 -3.7087200
## C8.A130.02TCGA 0.6243757
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                                                      0.08975708
                                                                 0.6538945
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                              -2.2452000 -0.8262300
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##
## AO.A12D.O1TCGA
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                                       -6.6225199 -6.6225199 0.5589496
## C8.A131.O1TCGA
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                                        -2.0653595 -2.0653595 1.2255677
## AO.A12B.O1TCGA
                        NA -1.8709621
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```

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## BH.A18Q.02TCGA 1.5435295 0.5532965
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## C8.A130.02TCGA 1.8182480 -1.0089990
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## C8.A138.O3TCGA 0.8743397 0.4391401
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                 NP_001128476 NP_001034451 NP_005642
                                                      NP_006724 NP_612362
##
## AO.A12D.O1TCGA
                    0.3722695
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                                                  NΑ
                                                      0.9475491
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                    1.3996266
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                                        NA
                   -1.2732820
## BH.A18Q.02TCGA
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                                                                1.379606
## C8.A130.02TCGA
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                                -0.6908517 1.723132
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -3.46419722
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## C8.A131.O1TCGA 2.55327264
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## AO.A12B.O1TCGA -4.07705534
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                                                                        NA
## BH.A18Q.02TCGA
                          NA
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## C8.A130.02TCGA
                          NA
                                    NA 0.52269977 1.0048405
                                                                0.6014166
## C8.A138.O3TCGA -0.02531652 -2.896171 1.33148211 -2.2671428
                                                                -1.1188011
                 NP 001153695 NP 919307 NP 112177 NP 004483
                                                                 NP 478123
                           NA 0.2770246 0.8294453 -0.81638750 -2.79748254
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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                                          1.3591478 -0.04951479 0.09216104
## AO.A12B.O1TCGA
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                    -2.209989 -3.6150493 1.1253568 -2.02599290 -3.10989663
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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                                NP 110422 NP 000484 NP 001264262 NP 001121903
##
                    NP 542390
## AO.A12D.O1TCGA 0.551330044
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## AO.A12B.O1TCGA -1.882048026
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## BH.A18Q.02TCGA -0.687840158 -10.4061745 -2.5880171
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## C8.A130.02TCGA -2.114314801
                                2.0904771 -0.7564491
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## C8.A138.O3TCGA 3.851250991
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##
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## C8.A131.O1TCGA 1.4158181
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## AO.A12B.O1TCGA -1.7905894
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## BH.A18Q.02TCGA 0.1217423 -3.802390671 -8.0309533 -5.21748720 0.6603487
## C8.A130.O2TCGA 0.2963888 -0.002079251 3.0645981
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1.61308182 -0.7311444
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                                                     NP 055240 NP 001033729
##
## AO.A12D.O1TCGA 1.7247479
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## C8.A131.O1TCGA
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                                                NA 1.12841856
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## AO.A12B.O1TCGA 1.3439476
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## BH.A18Q.02TCGA -2.0862098
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## C8.A130.02TCGA 0.6571744
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA 2.1889634
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## AO.A12B.O1TCGA -2.9490655
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## BH.A18Q.02TCGA -7.2113348
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## C8.A130.02TCGA -3.0621969
  C8.A138.O3TCGA 3.3099944
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##
                   NP 057162
                               NP_660344 NP_001159603 NP_001257935 NP_116166
## AO.A12D.O1TCGA 1.81999283 1.81999283
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## C8.A131.O1TCGA 1.35105201 1.35105201
                                                      -4.7410088
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## AO.A12B.O1TCGA -1.51621348 -1.51621348
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                                                                       NΑ
                                                      -2.2728258
## BH.A18Q.O2TCGA 0.02472618 0.05148923
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                                                                       NA
## C8.A130.02TCGA -0.57605630 -0.41862260
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                                                             NΑ
                                                                       NΑ
## C8.A138.O3TCGA 1.97879574 1.97879574
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                  NP 003697 NP 002546 NP 714542 NP 060103 NP 001258769
##
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.8453423
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## C8.A130.02TCGA -0.8154867
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## C8.A138.O3TCGA
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                  NP_112192 NP_006809 NP_859075 NP_775107 NP_055438
## AO.A12D.01TCGA 2.16668447 -4.458555 -0.1420532 0.9627882 -0.9916382
## C8.A131.O1TCGA -0.46644653 2.395405 0.6588644 1.5089194 -0.5109732
## AD.A12B.O1TCGA -1.97904961 -1.710217 -2.5582877 -0.9813190 0.7868813
## BH.A18Q.02TCGA -0.24959513 -0.791547 -0.5674064 -0.8818723 -0.3165028
## C8.A130.02TCGA -0.32350640 -1.199231 0.4866212 -0.8712445 1.8969648
## C8.A138.O3TCGA -0.06920219
                                  NA 3.3099944 2.8309092 -0.7274872
                 NP 001229735 NP 001770 NP 036416 NP 004206 NP 277048
## AO.A12D.O1TCGA
                  1.0542234 1.3247191
                                               NA 1.09994098
                                                                     NΔ
                  -0.3166749 1.4805842
                                               NA -0.02927539
## C8.A131.O1TCGA
                                                                     NΑ
                                               NA -1.46078400
## AO.A12B.O1TCGA
                  -0.3189368 -0.8787745
                                                                     NA
                  -7.2280617 -0.1759967 -0.0354907 0.35257360 -1.5241856
## BH.A18Q.O2TCGA
## C8.A130.02TCGA
                  -0.5071791 -1.7469695 1.0245197 -0.64165368 -0.3202265
## C8.A138.O3TCGA
                   2.8053092
                                    NA 1.1376537 0.46839726 1.3534249
                  NP_055244 NP_060347 NP_803237 NP_006084 NP_001096
## C8.A131.O1TCGA -0.11832877 -1.1991130 1.6627388 6.204461 2.3873095
## AO.A12B.01TCGA 0.06629811 -1.4496981 -3.0460671 -3.325986 -0.2053063
## BH.A18Q.02TCGA -1.23648278 -3.3942541 -3.8726437 -4.899676 -1.6412740
## C8.A130.O2TCGA 2.17575368 -1.9863999 2.2151121 -5.020279 0.8408470
## C8.A138.O3TCGA
                         NA -0.1752592 -4.5053120 1.704510 0.9621110
                  NP_004603 NP_005944 NP_783316 NP_005943 NP_005941
## AO.A12D.O1TCGA
                  1.0199352 1.5609266 0.6389554 1.2180447
                                                            1.0656528
                  0.2500284 4.6581707 4.3626754 4.8241338 4.5488779
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  0.5319057 -4.7893241 -4.5786921 -4.7061799 -4.4124037
## BH.A18Q.O2TCGA -10.6269697 -1.4505872 -3.1901858 -0.9287077 -2.7519408
## C8.A130.02TCGA
                  ## C8.A138.O3TCGA
                  2.2055384 -2.6255425 -1.6454292 -1.4772008 -1.4150294
                                     NP 065192 NP 004536
                 NP 789846 NP 005937
                                                            NP 277055
## AO.A12D.01TCGA 1.000886 1.8923790 1.22566432 1.9076182
                                                           -2.5193673
## C8.A131.O1TCGA 5.479891 3.9821746 2.25372946 -0.1952385
                                                           -0.7862291
## AO.A12B.O1TCGA -4.789324 -3.5671041 0.51527688 -1.3637824
                                                            1.2829751
## BH.A18Q.02TCGA -1.908905 -8.4691984 -0.85176387 -0.9420892 -13.2497491
## C8.A130.02TCGA 1.316428 0.9753217 0.03399931 -0.7203705
                                                           -7.5457776
## C8.A138.O3TCGA -2.318343 -0.7530872 0.10999762 1.5947961
                                                            5.8297633
                 NP_001092688 NP_443099 NP_758872
                                                   NP 647479 NP 057608
## AO.A12D.O1TCGA
                   -8.039765 -0.9497304 -1.803125
                                                         NΑ
                                                                   NA
## C8.A131.O1TCGA
                    1.512967 -0.9076656 -3.595458
                                                          NA
                                                                   NA
                   -4.545434 -0.8566027 -8.259209
## AO.A12B.O1TCGA
                                                         NA
                                                                   NA
## BH.A18Q.02TCGA
                   -1.447242 -3.0965151
                                              NA 0.80420015
## C8.A130.02TCGA
                    0.391505 3.0809975
                                              NA -0.05127728 -1.48458
## C8.A138.O3TCGA
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                                              NA
                                                         NA -2.06600
                                     NΑ
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                             NP_689912 NP_001138483 NP_065874 NP_714922
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                                    NΑ
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                    NA
                                           3.136167 0.7074389 0.1204962
                        NA
## AO.A12B.O1TCGA
                                          -2.439114 -0.5184829 -0.6986287
                                    NA
## BH.A18Q.02TCGA -6.679419 -11.4900782
                                         -10.232215 1.8646862
## C8.A130.02TCGA -1.156593
                             0.2898291
                                           1.929764 -0.3891038
                                                                       NA
## C8.A138.O3TCGA 2.863823
                                    NA
                                                 NA 1.9678243
                  NP 001878 NP 001106853
                                           NP 055273 NP 699202 NP 078957
## AO.A12D.O1TCGA
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                                      NA
                                                  NA
                                                      2.1438257
                                                                       NA
                                      NA
                                                                       NA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.2966997
                                      NA -0.34326583
                                                             NA
## C8.A130.02TCGA -0.2021513
                                      NA 0.08975708
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## C8.A138.O3TCGA 0.5195972
                               -1.356515 2.07022422
                                                     0.9328539
                  NP_689613
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                                                      NP_071417 NP_852091
## AO.A12D.O1TCGA
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                             2.5819525
                                          0.6122868
                                                      3.7401311 7.534690
## C8.A131.O1TCGA
                         NA 0.6912474
                                          1.6101164
                                                      0.9219766 4.909139
## AO.A12B.O1TCGA
                         NA -5.0082706
                                        -1.1226642 -3.9440246 -1.643701
## BH.A18Q.02TCGA -0.9019446 -9.4928852
                                         0.6938026 -11.2525561 -9.466122
## C8.A130.02TCGA -5.3285863 -3.0523573
                                         0.9818814
                                                      3.1662741 -0.159513
## C8.A138.O3TCGA
                         NA 6.0126202
                                        -0.9322870
                                                     2.9442805 3.598908
                  NP 054886 NP 001122084 NP 644809 NP 057551 NP 612437
## AO.A12D.O1TCGA
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                                      NA 5.8850475
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## C8.A131.O1TCGA
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                                      NA 0.1002568 -0.5595478 0.7924444
## AO.A12B.O1TCGA
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                                      NA -3.2095840 -1.9513349 -0.7928588
## BH.A18Q.02TCGA -1.7349447
                              -0.6309687   0.9815054   0.9815054   -0.1927236
## C8.A130.02TCGA 0.5325394
                               0.9589223 -2.9310021 -2.9310021 1.2737897
## C8.A138.O3TCGA 1.3022250
                              -0.3983447 3.7013083 4.9447356 -0.3837162
                 NP_055324 NP_001072 NP_001005920 NP_055109 NP_001034201
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                       1.30247744 1.2093762
                                                                1.3631957
## AO.A12B.O1TCGA
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                                     -2.11208036 -0.9619187
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## BH.A18Q.O2TCGA -7.589363
                                  NA
                                       0.14850531 -0.9822338
                                                               -1.3836796
## C8.A130.02TCGA 4.107596
                                  NA -0.11031492 0.1619142
                                                               -1.4616209
                                                                0.8706826
## C8.A138.O3TCGA 1.587482 1.993424 -0.07651647 -1.5796007
                 NP_001128522 XP_003846820 NP_477515 NP_689943 NP_001070966
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                              NA
## AO.A12B.O1TCGA
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                   -3.9161337
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## BH.A18Q.02TCGA
                                                                   -4.6889169
## C8.A130.02TCGA
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                                -0.1168747 -0.6482134 0.4079044
                                                                   -0.9696406
## C8.A138.O3TCGA
                                 0.6512542 -0.4714875 0.5269115
                           NA
                                                                    0.3477117
                   NP 004364 NP 116248
                                           NP 057706
                                                      NP 659482 NP 001007795
## AO.A12D.01TCGA 0.49037327 1.7895144 -0.203009992 -1.993615130
## C8.A131.O1TCGA -0.01713175 -0.7538461 -1.761768426 -0.025227507
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## AO.A12B.01TCGA 0.62059288 0.1383564 2.374935847 -1.092177972
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## BH.A18Q.02TCGA 0.08828843 -2.1664989 1.048413028 1.898140020
                                                                     -1.192993
## C8.A130.O2TCGA -0.07423637 0.3127882 0.001200618 0.729331506
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## C8.A138.O3TCGA -0.39468758 2.7467950 -0.866458533 0.007597728
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                 NP_776190 NP_525023 NP_001243624 NP_115800 NP_740753
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                        -0.7457503 1.65059520 -0.3773931
## AO.A12B.O1TCGA
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                                       1.2996040 -0.03347495 0.2104148
## BH.A18Q.02TCGA
                        NA
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## C8.A130.02TCGA
                                         0.6210958 2.32990751 0.6342153
                        NΑ
                                   NA
## C8.A138.O3TCGA
                        NA -1.4845151
                                                NA -0.33983049 -1.8282861
                 NP 001120936 NP 542383 NP 003217 NP 004110 NP 775836
                  -0.5954192 4.2468343 -3.822318 -0.08109645
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                    3.0997366 -0.2316694 -4.287646  0.60219404
                   -0.4602819 -2.8160347 3.877075 -2.15642394
## AO.A12B.O1TCGA
                                                                     NΑ
## BH.A18Q.O2TCGA
                   -3.0530251
                                      NA -5.461700 2.98873451
                                      NA -1.802727 0.41774396
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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                                                        NP_689736 XP_001717260
## AO.A12D.O1TCGA
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                                            2.49051731 3.18390058
                                                                    4.66972186
                   -1.4096028 1.68297824
## C8.A131.O1TCGA
                                            2.11205362 2.81233702
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## AO.A12B.O1TCGA
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                                                                    1.10837229
                   -3.9362059 1.08855761
## BH.A18Q.02TCGA
                                            0.07156152 0.07156152
                                                                    3.82507997
## C8.A130.02TCGA
                   -1.1270743 -0.93356201
                                           -1.16315283 -1.16315283
                                                                    1.40170462
## C8.A138.O3TCGA
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                                           1.88005298 1.88005298 -1.88314322
                  NP_036211 NP_054775 NP_001103089
                                                      NP_612815 NP_004265
##
## AO.A12D.O1TCGA 3.8277565 3.4963040
                                        5.5764538 -1.052594983
## C8.A131.O1TCGA 1.5777333 -0.7700376
                                        -0.8267079 -0.543356266
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## AO.A12B.O1TCGA -0.3743662 3.0012889
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## BH.A18Q.02TCGA
                         NA -0.6577317
                                        ## C8.A130.02TCGA
                         NA -1.4025833
                                        -1.3829040 -0.261188891 -1.166433
                                                 NA 2.403023881 2.066567
## C8.A138.O3TCGA 4.9301070 0.4537687
                 NP 005117 NP 001129595 NP 054766 NP 005224 NP 004430
## AO.A12D.O1TCGA
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                            1.0161254 -0.7135229 2.7114856
## C8.A131.O1TCGA
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                             -0.8833783 -1.5148477 1.9056117
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## AO.A12B.O1TCGA
                             -2.6663751 -2.0427935 2.5744820
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                        NA
## BH.A18Q.02TCGA 1.406369
                             -6.9336681 -3.0664067 1.7141440 -0.5707518
                              0.5718978 2.9268436 0.6309354 0.9458029
## C8.A130.02TCGA -1.314027
## C8.A138.O3TCGA 0.120969
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##
                  NP_078962 NP_002222
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## AO.A12D.O1TCGA
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                         NA
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                                                                      NA
## C8.A131.01TCGA
                         NA -4.232258 -1.9929070
## AO.A12B.O1TCGA
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                                                                     NA
## BH.A18Q.02TCGA 0.06152538 -5.000037 -13.6679218
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                                                               0.837654
## C8.A130.02TCGA 3.51066031 -3.882164
                                                     -4.659493 2.867806
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## C8.A138.O3TCGA 5.17513537
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##
                        NA 0.4408459
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA 0.1026833 1.5472533
                                                NA
                                                     0.4208545 4.0341079
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## AO.A12D.O1TCGA -0.9878284
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## C8.A131.O1TCGA 0.2216932
                                      NA 0.1852623 -1.9034443 -0.4097762
## AO.A12B.O1TCGA -0.7041716
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                               -3.307274
## BH.A18Q.02TCGA -0.5071895
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## C8.A130.02TCGA -0.7466095
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## C8.A138.O3TCGA -0.6177731
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                                                 NA -2.5231426 3.4087372
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## C8.A131.O1TCGA 1.3834351
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## AO.A12B.O1TCGA 0.1632997
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## BH.A18Q.02TCGA
                                                                      NΑ
                         NA
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                                      NA 3.1433150 -0.2382298
## C8.A130.02TCGA
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## C8.A138.O3TCGA 0.5451972
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## AO.A12D.O1TCGA -1.7497880
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## C8.A131.O1TCGA 0.9543597
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## AO.A12B.O1TCGA
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                                                         NA 0.5984211
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.1762659 -16.2338297
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## C8.A130.02TCGA 0.1192759
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## C8.A138.O3TCGA 0.3038260
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                                                                    NP 116129
## AO.A12D.O1TCGA 6.768921
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## C8.A131.O1TCGA 1.962282
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## AO.A12B.O1TCGA -3.719535
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                             NP 940891
## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.6145109 2.02191915 2.9318630 -2.778704 -4.0800574
## C8.A130.O2TCGA 4.1928730 0.09631682 0.2045525 3.310588 0.7063724
## C8.A138.O3TCGA 0.3330831 0.12828332 0.1282833 3.708623 0.6878256
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                       NA 0.4848055 1.40772234
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## AO.A12B.O1TCGA
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                                       NA -3.3010427 1.49083568
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## BH.A18Q.02TCGA
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## C8.A138.O3TCGA
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##
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## BH.A18Q.02TCGA 1.9851199 -1.90890454
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## C8.A130.02TCGA 1.6214558 0.08319734
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## C8.A138.O3TCGA -0.4166304 1.59845327 0.5854257 -0.43125897
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                            NΑ
                                       NΑ
                                                    NA
                                                               NΑ
                                                                            NΑ
## AO.A12B.O1TCGA
                            NA
                                       NA
                                                    NA
                                                               NA
                                                                            NA
## BH.A18Q.02TCGA
                    -0.5674064 -3.7622461
                                             3.7748992 -0.4804265
                                                                    -0.8450731
## C8.A130.02TCGA
                     1.7624902 -1.1697126
                                            -0.7859679
                                                        0.4111842
                                                                     0.2439109
## C8.A138.O3TCGA
                            NA 0.7390256
                                             0.7390256
                                                               NΑ
                                                                     5.0032498
##
                  NP 001121897 NP 001254514 NP 054772 NP 006486 NP 150375
```

```
## AO.A12D.O1TCGA
                                                 NA -0.3668313
                           NA
                                        NA
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## C8.A131.O1TCGA
                           NΑ
                                        NΑ
                                                 NΑ
                                                    1.6708346
                                                                       NΑ
## AO.A12B.O1TCGA
                           NA
                                        NA
                                                 NA -1.0672347
                                                                       NA
## BH.A18Q.O2TCGA
                    0.5967865
                                        NΑ
                                                 NΑ
                                                    0.3559190 -3.5414509
  C8.A130.02TCGA
                    0.2767096
                                        NΑ
                                                  NA -1.4157027 -0.0184786
  C8.A138.O3TCGA
                    5.0032498
                                        NA 0.4757115 -0.1240593 7.3547903
                  NP 065203 NP 932348 NP 006414 NP 001230696 NP 065806
## AO.A12D.O1TCGA 0.9894568
                            4.3001714 2.273359
                                                   0.3570303 0.6160966
  C8.A131.O1TCGA -0.4381114 2.5451769
                                       1.217472
                                                  -2.8142175 -1.4824646
  AO.A12B.01TCGA -1.6603301 -2.2977691 -2.170281
                                                  -3.7638788 1.1000579
  BH.A18Q.02TCGA -0.5740972 -1.4171334 -1.236483
                                                  -9.2553631 -4.1804188
  C8.A130.02TCGA -1.5108189
                            0.8474068 -1.497699
                                                   2.4250237 -3.6853720
  C8.A138.O3TCGA 3.7525082
                            1.6350247
                                                   1.3717106
                                       2.417652
                                                              2.6370808
##
                  NP_056496 NP_056979
                                       NP 004330
                                                   NP_443155
                                                              NP 077010
  AO.A12D.O1TCGA -1.0411656 -2.0698111
                                        1.3894856
                                                          NΑ
                                                              2.1819237
## C8.A131.O1TCGA -6.1213362
                            1.3591478
                                       0.9826948
                                                          NΑ
                                                              0.3026508
## AO.A12B.O1TCGA 3.2257783 -0.8510597 0.7203659
                                                          NA -0.4408816
  BH.A18Q.O2TCGA 1.9717384 1.4164050 -4.1670373 -6.36495318 -1.5509487
  C8.A138.O3TCGA 2.2091955 -1.2687438 -0.1533164 -0.32154480 1.4192534
##
                 NP_060790 NP_006842 NP_002553
                                                 NP_001159 NP_690909
                                                                      NP 775735
## AO.A12D.O1TCGA
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                                   NΑ
                                            NA -1.98980533
                                                                  NΑ
                                                                      0.2884540
## C8.A131.O1TCGA
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                                   NΑ
                                            NA 0.86530630
                                                                  NA 1.5898770
## AO.A12B.O1TCGA
                        NA
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                                            NA -2.25619700
                                                                  NA -2.7107187
## BH.A18Q.02TCGA -4.391178 -8.4123269
                                            NA -0.88856307 -1.330153 -0.7313301
  C8.A130.O2TCGA
                 1.585377 -0.7269303
                                            NA -0.00535912 -1.287788 1.8084084
  C8.A138.O3TCGA
                                            NA -2.07697160 1.752053 -0.2484020
                  2.973538 1.2619965
                    NP_001532 NP_689597 NP_079400 NP_001129737 NP_001180386
                                               NA
## AO.A12D.O1TCGA
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                                                    -1.2719748
## C8.A131.O1TCGA
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                                      NA
                                               NA
                                                                 -1.2719748
## AO.A12B.O1TCGA
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                                                NA
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  BH.A18Q.O2TCGA
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                                                    -1.0725591
                                                                 -1.0725591
  C8.A130.02TCGA -0.677732237
                               0.1947129 1.3590663
                                                    -0.1693526
                                                                 -0.1923116
  C8.A138.O3TCGA
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                                                     5.0690783
                                                                  5.0690783
                  NP 361012 NP 001241658
                                          NP 036604
                                                     NP 065766
                                                                NP 071442
## AO.A12D.O1TCGA
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                                          2.9934107
                                                     1.1875663
                                                                       NΑ
## C8.A131.01TCGA
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                                         -3.5892759
## AO.A12B.O1TCGA
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                              0.77409171 -10.4329375 -2.4307841
## BH.A18Q.02TCGA -6.2378287
                                                                0.1083607
  C8.A130.02TCGA -0.4579810
                              0.43414331
                                         -0.1955915
                                                    0.9884411
                                                                2.0052005
  C8.A138.O3TCGA
                 0.6695399
                              1.79228164
                                           2.0775385 2.4432524 -0.2191449
                  NP 004878
                              NP 055835 NP 000354 NP 001073949 NP 079503
##
## AO.A12D.O1TCGA -3.1517938
                            0.08653467 -2.2603010
                                                            NA
                                                                      NA
                                                                      NA
## C8.A131.O1TCGA -4.0488212 -1.11410748 0.9422160
                                                            NA
## AO.A12B.O1TCGA 3.0678043 2.81560019 -3.6973634
                                                            NA
                                                                      NA
## BH.A18Q.02TCGA -7.1511179 -7.94397341 -7.2146802
                                                            ΝA
                                                                1.122011
  C8.A130.02TCGA -3.4361020 -1.67153250 -0.5071791
                                                            NA
                                                                1.099957
  NA -2.442686
                 NP_001139541 NP_055187 NP_001136272 NP_001017969 NP_775788
  AO.A12D.O1TCGA
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                                           0.03319749
                                                               NA
                                                                   2.9362637
                   0.99888637
                              1.1729452
                                           0.64267285
                                                               NA -0.6121702
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                  -2.70517577 -0.9120322
                                           1.68483885
                                                               NA -4.3154021
## BH.A18Q.02TCGA
                   0.05818000 -2.0527560
                                                        -2.792085 0.6503126
                                           0.17192298
## C8.A130.02TCGA
                   0.08647721 0.1225558
                                           0.26687000
                                                         2.051119 -0.3891038
```

```
## C8.A138.O3TCGA
                    1.63136752 -0.3910304 -0.11674500
                                                                  NA 0.4391401
##
                    NP 116738 NP 542159 NP 149351 NP 001074020 NP 060887
                           NA 1.6256931 1.2332839
## AO.A12D.O1TCGA
                                                       -0.1306238
                              2.1363409 -0.4462071
                                                                         NΔ
## C8.A131.O1TCGA
                           NΑ
                                                       -0.9562401
## AO.A12B.O1TCGA
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                                      NA -0.6343140
                                                                         NA
## BH.A18Q.02TCGA -11.3294999
                                                       -0.5339526
  C8.A130.O2TCGA
                    0.9195639
                                      NA -1.8912837
                                                        0.3685459
                                                                         NΑ
## C8.A138.O3TCGA
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                                          1.3899963
                                                       -0.7311444
                                                                         NA
##
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## AO.A12D.O1TCGA
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                                      NA
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                                                          2.4943271
                                                                    1.4656816
## C8.A131.O1TCGA
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                                      NA
                                             1.8246541
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## AO.A12B.O1TCGA
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                                      NA
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                                            -7.2581701
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                                         -1.8322461 -0.4481414
                            NA 1.225425
## C8.A138.O3TCGA
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                                                                     2.4907952
##
                   NP_006418 NP_001065243
                                            NP_057576 NP_001171273
                                                                    NP_078834
## AO.A12D.O1TCGA -0.7935287
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                                                                    0.2579756
                                                                NA
## C8.A131.O1TCGA
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                               0.04358647
                                            1.5372545
                                                                NA
                                                                    0.3552733
## AO.A12B.O1TCGA 0.2409010
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                                            0.1937859
                                                                NA
                                                                    0.8145961
## BH.A18Q.02TCGA -2.5077279
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                                                       -1.23313740 -2.8924468
## C8.A130.02TCGA
                   1.4738617
                              -0.68429198 -0.5858959
                                                       -1.19267165
                                                                    0.2209518
## C8.A138.O3TCGA
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                              -0.07285933
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##
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                                NP_066287
                                            NP_006473
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                    0.7074389
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## AO.A12B.O1TCGA
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                                                                             NA
## BH.A18Q.02TCGA -10.0850178 -10.0850178
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  C8.A130.02TCGA
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                               -4.0592770
                                           1.1885131
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##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                             NA 0.3552733
## AO.A12B.O1TCGA
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                                                             NA -3.3786439
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                      4.773410
                               -1.5928157
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                                                                 0.4603823
                                        NA 7.449876
  C8.A138.O3TCGA
                            NΑ
                                                             NA -2.9217707
##
                  NP 110410
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                                         NP 689823 NP 065433 NP 001326
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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                                                 NA -1.1706987
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -11.82127099
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## C8.A130.02TCGA
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                                          1.618176 -0.8614049
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                                      NA 2.812623 -1.0639440 -0.7128587 -8.593994
                   NP_862830 NP_001034485 NP_004526 NP_001128521 NP_775259
##
## AO.A12D.O1TCGA -0.8430561
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## C8.A131.O1TCGA -1.3893634
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                                                                          NΑ
## AO.A12B.O1TCGA -0.1415624
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                                                                NA
                                                                           NA
```

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## BH.A18Q.02TCGA
                         NA
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                                                       0.7540194 -5.642351
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA -0.73638174 -0.7973385
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## C8.A131.O1TCGA -0.03332327
                              1.3105732 -0.4947817
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## AO.A12B.O1TCGA 0.66216499
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## BH.A18Q.02TCGA -2.36387647
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                              1.1721138 -1.4321021 -2.091356 1.0507587
## C8.A138.O3TCGA
                 0.17216899 1.8654244 -0.7823443 4.802107 -0.3288591
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                                              NA
                                                                   -0.6653159
##
                 NP 001264156 NP 002199 NP 055782
                                                    NP 078991
                                                                NP 054747
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                     NA 2.4439799 -0.12237665
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                  NP 659469 NP 060280
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##
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## BH.A18Q.O2TCGA -1.1628844 -5.4282463 -11.4733513
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## C8.A130.O2TCGA 0.2668700 0.3193479
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## C8.A138.O3TCGA -2.1976572
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##
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                                                               NP 002761
## AO.A12D.O1TCGA 1.4390130
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## C8.A131.O1TCGA 0.6224334 -0.81051641
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## AO.A12B.O1TCGA -0.6265704 -1.21135135
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## BH.A18Q.02TCGA -0.6911855 4.32354187
                                               NA -3.2269850 -4.75916988
## C8.A130.02TCGA 0.2471908 0.04055904
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## C8.A138.O3TCGA
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                                                      NP 057286 NP 003261
##
## AO.A12D.O1TCGA -0.66399557
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## C8.A131.O1TCGA 0.04358647
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                                                             NA 3.1725984
## AO.A12B.O1TCGA -0.49076814
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## BH.A18Q.02TCGA -6.07055957
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##
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                    0.3652661 0.18487328
## C8.A130.02TCGA
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  C8.A138.O3TCGA
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                                             2.424967 -1.246801 0.1099976
##
                  NP 653309
                             NP 056519 NP 149132 NP 001242914 NP 997255
## AO.A12D.O1TCGA
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```

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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -0.9989607 0.88783470 -8.572905
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## C8.A130.02TCGA -1.2189106 0.21767196 1.014680
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NA
                                                              3.635480
##
                 NP 065743 NP 000822 NP 000821 NP 002011 NP 689624 NP 078868
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA -1.617856 -7.6228168 1.7609794 2.9887345
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## C8.A130.02TCGA 1.195073 -2.7079711 -0.4874998 0.4177440
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## C8.A138.O3TCGA 1.561882 0.7902255 -0.1679450 -2.5414283
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## AO.A12D.O1TCGA
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                                                         NA 3.2737955
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                       NA -1.7684176 -2.0233932
                                                         NA -1.9790496
## BH.A18Q.02TCGA 3.671192 -3.7555553 -8.8572627
                                                 -8.8572627
                                                                    NΑ
## C8.A130.02TCGA 1.250831 -0.4448615 -0.7203705
                                                 -0.7203705
## C8.A138.O3TCGA -2.076972
                                                                   NΑ
                                 NA
                                            NA
                                                         NA
                  NP 660349 XP 003118897 XP 003119818 NP 150638 NP 006395
## AO.A12D.O1TCGA
                        NA
                            -0.9878284 -0.9878284 -1.8069350 -3.0108312
                        NA
                                        1.9865693 -0.6688406 0.2297890
## C8.A131.O1TCGA
                             1.9865693
                                        -0.7208005 -1.1282071 -1.9457919
## AO.A12B.O1TCGA
                        NA
                             -0.7208005
## BH.A18Q.O2TCGA -0.4636996
                             -0.5874787
                                        -0.5874787 -1.1896474 0.2120676
## C8.A130.02TCGA -0.3333460
                             -1.0319581
                                        -1.0319581 -0.7564491 -0.2972674
## C8.A138.O3TCGA 0.5415400
                             -2.4061141
                                          -2.4061141 -1.2724010 -2.1757144
                  NP_003216 XP_003960722
                                         NP_057619 NP_001185947 NP_689663
## AO.A12D.O1TCGA -1.4488140
                                      NA 1.122799769
                                                      8.1937852 -1.083073
## C8.A131.O1TCGA -0.7255109
                                      NA -1.021006216
                                                      4.1117068 -1.097916
## AO.A12B.O1TCGA
                 3.6414994
                                      NA -0.005760212
                                                      -3.0848677 -4.747752
## BH.A18Q.O2TCGA -11.3428814
                              -0.8283462 0.456280438
                                                       -2.6515793 -2.778704
## C8.A130.02TCGA -6.3158268
                              -1.9044032 3.418823977
                                                       -0.6252543 3.310588
## C8.A138.O3TCGA -1.9782288
                            -2.2744571 -0.431258972
                                                       -0.2922877 3.708623
                  NP_776195 NP_619646 NP_001157196 NP_004870 NP_005661
## AO.A12D.O1TCGA 5.0887997 -1.0335460
                                      6.9289322 1.9533358 -1.0564048
## C8.A131.O1TCGA 0.5860025 -3.9354805
                                       0.5050449 0.1366877 -0.7133673
## AO.A12B.O1TCGA -0.6154845 1.4936072
                                      -1.4884987 -1.5162135 1.2802037
## BH.A18Q.02TCGA -0.9554707 0.6135134
                                       -4.2607080 -0.1693060 -0.5105349
## C8.A130.02TCGA -0.4448615 0.4210238
                                       -2.1438336 -2.9146028 -0.9696406
                                      0.5049687 1.7995959 -2.0477145
## C8.A138.O3TCGA 1.7410817 1.6533104
                NP 003311 NP 620126 NP 055377 NP 653188 NP 848595 NP 071400
## AO.A12D.O1TCGA 1.4580620
                                                      NA -0.6716152 0.5551398
                                  NΑ
                                           NA
## C8.A131.O1TCGA 1.0919876
                                  NA
                                            NA
                                                      NA 0.1731187 -1.5269913
## AO.A12B.O1TCGA 0.2686157
                                  NA
                                                      NA 2.0146442 0.3074163
                                            NA
## BH.A18Q.02TCGA
                       NA -0.1826875 3.457088 -3.2671296 1.6271641
                       NA -1.0909957 1.106516 0.4046245 1.0310794
## C8.A130.02TCGA
                                                                           NA
## C8.A138.O3TCGA 4.0304508 -2.0879430
                                           NA -5.9827962 0.4501116 1.2875964
##
                  NP_803875 NP_001074294 NP_060021 NP_001129734 NP_006326
## AO.A12D.O1TCGA
                        NΑ
                             0.38750872 0.6351456
                                                  -0.01632988
                                                                      NΑ
## C8.A131.O1TCGA
                        NA
                             0.73982199 -2.2394184
                                                   0.31884237
                                                                      NA
                             0.09678432 -5.8175409 -1.38318273
## AO.A12B.O1TCGA
                        NA
                                                                      NA
## BH.A18Q.02TCGA -0.7012217
                                     NA -0.8183101 -0.17265135
                                                                      NA
## C8.A130.02TCGA -0.3792642
                                     NA 1.1589943
                                                   0.44398291
                                                                     NA
## C8.A138.O3TCGA 0.2782260
                            0.31845456 4.3083934
                                                   0.53422577
                                                                      NΑ
```

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NP 001032852 NP 065185 NP 115666 NP 443090
## AO.A12D.O1TCGA
                           NA
                                     NA -1.8945604
                                                          NΑ
                                                                      NΑ
## C8.A131.O1TCGA
                           NA
                                     NA -1.0129105
                                                                      NA
## AO.A12B.O1TCGA
                                        1.8705276
                                                                      NA
                           NΑ
                                     NΑ
                                                           NΑ
## BH.A18Q.02TCGA
                  -14.5076126 -4.585210
                                        0.1853045
                                                          NA -3.4210171
                   -0.3235064 2.392225
## C8.A130.02TCGA
                                                          NA 0.2209518
                                        0.8244477
                    6.5941054 1.269311
## C8.A138.O3TCGA
                                         3.2149088
                                                          NA 1.0352538
                 NP 001127965 NP 004966
                                          NP 997194 XP 003960637 NP 008957
## AO.A12D.O1TCGA
                   -0.2525374
                                     NA
                                                  NA
                                                              NA -1.9250388
                                     NA
## C8.A131.O1TCGA
                   -1.1383948
                                                  NA
                                                              NA -3.6318894
## AO.A12B.O1TCGA
                   -0.9702331
                                     NA
                                                  NA
                                                              NA -0.5988556
                                                                  1.2324090
## BH.A18Q.02TCGA
                    0.1418145
                                     NA -0.88856307
                                                       -5.3044671
                                                       -0.1037552 1.9297635
## C8.A130.02TCGA
                   -0.4973395
                                     NA 0.06679799
## C8.A138.O3TCGA
                    0.4208545
                                     NA -0.45685895
                                                              NA -0.7348015
                   NP_996879 NP_683513 NP_073619 NP_001104740 NP_001074016
## AO.A12D.O1TCGA
                          NA
                                     NA
                                              NA -0.94973043
                                                                 -0.1763414
                          NA
## C8.A131.O1TCGA
                                     NA
                                              NA
                                                  -1.54318285
                                                                  0.1731187
## AO.A12B.O1TCGA
                          NA
                                              NA
                                                   0.44599003
                                                                 -1.2168943
## BH.A18Q.02TCGA -5.38141091 -4.197146
                                              NΑ
                                                   0.05148923
                                                                 2.9385538
## C8.A130.02TCGA -0.09063571 -1.327146
                                              NA
                                                   0.29310895
                                                                 -0.3103869
## C8.A138.O3TCGA -0.18988779 -1.996515
                                              NA
                                                   1.44851056
                                                                -0.1935449
                  NP 659475 NP 071373 NP 112583
                                                  NP 061932 NP 078953
                         NA 0.1893992 -7.742601
## AO.A12D.O1TCGA
                                                         NA
## C8.A131.O1TCGA
                         NA -0.9926710 -8.404341
                                                         NA
## AO.A12B.O1TCGA
                         NA -3.2151270 -7.131220
                                                         NA
                                                                     NA
## BH.A18Q.02TCGA 1.28593514 1.5435295
                                              NA 0.5566419 -1.3836796
## C8.A130.02TCGA 0.07335773 2.2938290
                                              NA -0.6055751 -0.3399057
## C8.A138.O3TCGA 0.29285458 -0.8591443 5.723706 1.2473679 -1.5869149
                 XP_001719673 YP_003024030 NP_878901 NP_006195 NP_004764
## AO.A12D.O1TCGA
                    1.6980793
                                2.42575074 0.2160678 -0.83543649
## C8.A131.O1TCGA
                    2.7313794
                                0.65076861 -0.7821812 -0.70527150
## AO.A12B.O1TCGA
                   -0.6542851
                               -0.42702424 -0.5628265 -1.79613234
## BH.A18Q.02TCGA
                            NA
                               -0.09570757 -3.2537480 -3.01957131 0.7105295
                               -0.31366679 2.3364673 0.02743957 0.9326834
## C8.A130.02TCGA
                            NA
                                0.71342559 2.0482814 -1.97457170
## C8.A138.O3TCGA
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                              NP_653170 NP_001264301 NP_981948 NP_004084
                 NP 001185879
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                           NA 2.0837185
                                            -2.239418
                                                             NA 2.4237405
                           NA -0.1166192
                                                             NA -0.6986287
## AO.A12B.O1TCGA
                                            -3.630848
## BH.A18Q.O2TCGA
                    0.7205656
                                      NA
                                          -14.186456 -1.547603
                                                                         NΑ
## C8.A130.02TCGA
                    1.1557145
                                      NA
                                            -2.081516 -2.268469
                   -1.6893148
                                             7.109762 1.236396 1.4119392
## C8.A138.O3TCGA
                                      NA
                   NP_004071 NP_938012 NP_116251 NP_001161693 NP_001019845
## AO.A12D.O1TCGA -0.51160364 -1.8602722 -5.258612
                                                     2.2885980
## C8.A131.O1TCGA -0.07380208 -0.8955219 -4.931259
                                                     0.3917042
## AO.A12B.01TCGA 0.41550382 -6.2110902 0.398875
                                                     2.0035583
                                                                          NA
## BH.A18Q.02TCGA 2.64416018 -3.4310533 4.029148
                                                     -5.5118808
                                                                   0.9580877
## C8.A130.02TCGA -0.56293683 1.2836293 -1.012279
                                                   1.7296915
                                                                   0.3783855
  C8.A138.O3TCGA 1.36439636 -0.5812017 1.667939
                                                            NA
                                                                  -0.9103442
                  NP_079040 NP_115512 NP_001165347 NP_005468 NP_066550
## AO.A12D.O1TCGA
                        NA -0.2944451 -0.94973043
                                                           NA
                                                                      NA
## C8.A131.O1TCGA
                         NA -0.8024206 -1.54318285
## AO.A12B.O1TCGA
                         NA -3.5975904
                                        0.44599003
                                                           NΑ
                                                                      NA
## BH.A18Q.O2TCGA -12.306351 0.5064612 -0.26297666
                                                                      NΑ
```

```
## C8.A130.02TCGA
                   1.437783 -1.0877158 0.02087983
                                                                    NA
## C8.A138.O3TCGA
                                                          NΑ
                         NA -0.9798298 0.66953992
                                                                    NΑ
                   NP 071379 NP 001027535 NP 001035546 NP 000187 NP 789790
## AO.A12D.01TCGA 2.95150289
                                      NA
                                           4.9059293
                                                             NA -1.6545431
## C8.A131.O1TCGA 1.64249943
                                      NA
                                           -0.2681004
                                                             NA -0.2600046
## AO.A12B.O1TCGA 0.65662204
                                      NA
                                           -0.1775916
                                                             NA 0.4626189
## BH.A18Q.O2TCGA 1.22237288
                              -1.2030290
                                                   NΑ
                                                             NA 1.5669472
## C8.A130.02TCGA -0.01191886
                             -0.9073231
                                                   NA
                                                             NΑ
                                                                1.6345753
## C8.A138.O3TCGA 2.66268076 1.2071394
                                            1.6313675 -3.199713 -0.7018873
                 NP_689630 NP_000918 NP_689986 NP_001015072 NP_848661
##
## AO.A12D.01TCGA 2.429561 -1.4831022 -0.05442786 -1.41071601
                           -0.1749991 1.06365246 -0.98052741
## C8.A131.O1TCGA 1.808463
                                                                      NA
## AO.A12B.O1TCGA -2.466829
                           -4.4789190 -0.85383122
                                                    1.09451492
                                                                      NA
                       NA -10.3593391
## BH.A18Q.02TCGA
                                               NA -0.06894451
                                                                      NA
## C8.A130.02TCGA
                        NA
                                               NA -0.93356201
                            0.6965328
                                                                      NΑ
## C8.A138.O3TCGA
                        NA
                             3.0942232
                                               NA
                                                            NA -1.788058
##
                  NP_001556 NP_060470 NP_001019978
                                                     NP_006276 NP_003586
## AO.A12D.O1TCGA 9.1500445 -2.0621915
                                                NA
                                                            NA
## C8.A131.O1TCGA -0.7740855 -2.5713446
                                                NΑ
                                                                      NΑ
                                                            NΑ
## AO.A12B.O1TCGA -2.4363428 -2.0039929
                                                NA
                                                            NΑ
                                                                      NA
                                       -0.7146032 0.53656960 -3.280511
## BH.A18Q.02TCGA 2.2928951 -4.0064590
## C8.A130.02TCGA -1.6452936 -0.0807961
                                       0.7818094 -0.05127728 -1.127074
                                   NA -2.4646283 1.32416783
## C8.A138.O3TCGA -1.5357150
                                                                      NΑ
                  NP 057032 NP 037454 NP 055370 NP 060792 NP 857596 NP 005235
                                                 NA -0.3401627
## AO.A12D.O1TCGA
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                            NA -2.7289062
## C8.A131.O1TCGA
                         NA
                                  NA 2.1646761
                                                        NA -1.7131939
                                                                             NΑ
## AO.A12B.O1TCGA
                         NA
                                  NA -0.3272512
                                                        NA -1.5633285
                                                                             NΑ
                                             NA -3.0396436 0.9580877 -7.502383
## BH.A18Q.02TCGA 0.2254491
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## C8.A130.02TCGA -2.5013393
                                   NA
                                             NA -0.2939876 1.6017766 1.339387
## C8.A138.O3TCGA 2.4834809
                                   NA 2.9698805
                                                        NA 0.8121683 4.096279
##
                   NP_067021 NP_940969 NP_056074 NP_003398 NP_001013671
## AO.A12D.01TCGA 2.08286891 1.0542234
                                               NA 1.1189900
                                                               0.15511104
## C8.A131.O1TCGA -0.01308386 -0.2438131
                                               NA 1.1769931
                                                               1.44415327
## AO.A12B.O1TCGA 1.31623283 -1.6963593
                                               NA -1.0700062
                                                               0.46539035
## BH.A18Q.02TCGA -1.60447479 -3.2303304 -0.1090891 -0.6510410
                                                              -2.34380418
## C8.A130.O2TCGA -1.15987296 0.9130042 -0.5826160 0.7490107
                                                               0.01104023
## C8.A138.O3TCGA 0.24165463 2.9223376
                                               NA -3.2874847
                                                               2.88210911
                 NP_001030177 NP_001034589 NP_060247 NP_056323 NP_037469
##
                  -0.5268428
                                1.4237738 5.923145 2.5324251
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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                                0.8450669 2.541129 -0.3004834
## AO.A12B.O1TCGA
                   -2.4169425
                              -2.2894547 -3.525532 1.8483558
## BH.A18Q.02TCGA
                   -8.5160337
                              -3.6585393 -9.466122 -3.1333143 -0.8852177
## C8.A130.02TCGA
                  -0.1496734
                                3.0154001 -0.159513 -4.1084751 0.1783135
## C8.A138.O3TCGA
                    3.8731938
                              -0.7055444 2.344510 -1.5649721 0.5269115
                  NP_689480 NP_689801
                                      NP_002821 NP_001012986 NP_115536
## AO.A12D.O1TCGA
                  2.8333991 -3.243229 0.20463841
                                                  1.2066153
## C8.A131.O1TCGA 0.8976893 -2.037024 0.02739495
                                                   -0.6971757
                                                                      NA
## AO.A12B.O1TCGA -1.5300708 -1.402583 -2.31716942
                                                    0.1272705
                                                                      NA
## BH.A18Q.02TCGA
                        NA 2.547144 -4.48150319
                                                   -2.0159568 3.0790598
## C8.A130.02TCGA
                        NA 1.208192 -0.73021014
                                                    0.5063004 0.6801335
## C8.A138.O3TCGA 2.5639380 -2.080629 -1.20657247
                                                           NA -0.2264592
                 NP_001029058 NP_078963 NP_945346
                                                    NP_005940 NP_110404
## AO.A12D.O1TCGA
                 -0.9992578 1.179947
                                               NA -1.12117135 4.006817
## C8.A131.O1TCGA
                   1.6263079 2.784002
                                               NA 0.61838556 1.464393
```

```
## AO.A12B.O1TCGA
                     0.9781130 -1.998450
                                                NA -4.74775201 -2.344884
                    1.2792444 -3.049680 -1.8319608 -4.19045497
## BH.A18Q.02TCGA
                    -0.4645408 1.641135 0.2471908 -0.78596791
## C8.A130.02TCGA
## C8.A138.O3TCGA
                    -3.0790277 -1.257772
                                                NA 0.09902621 5.540849
                  NP_001079990 NP_055489 NP_705841 NP_001005404 NP_115732
## AO.A12D.O1TCGA
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                            NA
## C8.A131.O1TCGA
                            NA
                                     NA 10.0661397
                                                              NA -3.1785268
                                                              NA -2.9934091
## AO.A12B.O1TCGA
                            NA
                                     NA -1.4496981
## BH.A18Q.02TCGA
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                                     NA -0.1592698
                                                       0.1485053
                                                                 0.3927182
                                                      -0.6252543
## C8.A130.02TCGA
                     2.644775
                                      NA
                                         6.4035046
                                                                 1.1032366
## C8.A138.O3TCGA
                    -2.969314 2.220167 -0.8079443
                                                              NA 0.7353684
                   NP_077271 NP_056487 NP_001025125 NP_001139334 NP_001264993
## AO.A12D.01TCGA 4.90592935 1.2332839
                                         -0.08871605
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                                                                   -0.4354077
## C8.A131.O1TCGA 2.54517688 0.2702678
                                         -0.62431388
                                                                NA
                                                                     -0.6202660
## AO.A12B.O1TCGA -2.04833646 -2.7024043
                                           1.86498465
                                                                     -2.3781419
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## BH.A18Q.02TCGA -0.07563528 -7.9640457
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                                                                             NA
## C8.A130.02TCGA -0.41534273 0.8670860
                                                                NA
                                                   NA
                                                                             NΑ
## C8.A138.O3TCGA 0.80851120
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                                                   NA
                                                                NA
                                                                      3.9499937
                  NP_064455 NP_060166 NP_008969 NP_001073885 NP_476515
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                             NA
                                                                       NΔ
## AO.A12B.O1TCGA
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                                                             NΑ
## BH.A18Q.02TCGA -0.2261775
                                    NA -6.4853869
                                                     -7.3953308
                                                                       NΑ
## C8.A130.02TCGA -1.1795522
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## C8.A138.O3TCGA -2.1464572
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                  NP_004347 NP_001001436 NP_001244220 NP_001139020 NP_001036075
## AO.A12D.O1TCGA 1.9685750
                                                                 NA
                                       NA
                                                    NA
                                                                       1.2523329
## C8.A131.O1TCGA 1.9744257
                                       NA
                                                    NA
                                                                 NA
                                                                       1.2619986
## AO.A12B.O1TCGA -1.1753222
                                       NA
                                                    NA
                                                                 NA
                                                                      -0.7014002
                                -1.192993
## BH.A18Q.O2TCGA -0.2094506
                                            -3.4845794
                                                                 NA
                                                                      -0.6276233
## C8.A130.02TCGA -1.9339220
                                 1.503381
                                            -0.7367699
                                                                 NA
                                                                      -0.1496734
## C8.A138.O3TCGA -0.5153732
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                                                                 NA
                                                                       2.3225668
                  NP_997001 NP_835463
                                        NP_066362 NP_006426 NP_003632
## AO.A12D.O1TCGA 1.7133185 6.2355489 0.63514560 -0.1763414 -0.2906354
## C8.A131.01TCGA 1.3105732 3.6259611 0.79649232 0.2581242 0.6426728
## AD.A12B.O1TCGA -0.6043986 1.5046930 0.42381824 -1.1032639 0.8949688
## BH.A18Q.O2TCGA 0.6603487
                                    NA 0.02807156 -0.1157799 -0.8049285
## C8.A130.02TCGA 0.2045525
                                    NA -0.66461276 -1.6190546 -0.9598010
## C8.A138.O3TCGA 0.3440545 0.2270261 -0.82623000 -2.8230280 -0.6543445
                  NP_001073970 NP_004885 NP_001120865 XP_003846622 NP_757351
##
## AO.A12D.O1TCGA
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                                            -1.197367
                                                          0.4141773
## C8.A131.O1TCGA
                           NA -1.4743689
                                             -1.474369
                                                          1.2174719
                                                                           NΑ
## AO.A12B.O1TCGA
                           NA -3.3647865
                                             -3.364787
                                                          0.6427647
## BH.A18Q.02TCGA
                     0.9112524 -4.5751739
                                                        -7.9740819 2.135662
                                            -4.575174
## C8.A130.02TCGA
                   -0.3563051 -1.8125669
                                            -1.812567
                                                         1.4902611 -1.389464
## C8.A138.O3TCGA
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                                              0.278226
                                                         -0.5629160
                   NP_689656 NP_115693
                                         NP_001479 NP_001034636 NP_001129735
## AO.A12D.O1TCGA -0.1039552 4.34207922
                                          3.5153530
                                                              NA
## C8.A131.O1TCGA 2.4763629 0.25002840
                                          1.1243707
                                                              NΑ
                                                                           NA
## AO.A12B.O1TCGA -3.2511561 0.07461253
                                         -0.8011732
                                                              NA
                                                                           NA
## BH.A18Q.O2TCGA -7.1511179
                                    NA -10.6135881 -0.51388030
                                                                     1.245791
## C8.A130.02TCGA -1.6977715
                                    NA
                                        -0.1463935 -0.01519873
                                                                     2.434863
## C8.A138.O3TCGA 2.5054238
                                    NA
                                                      0.15388329
                                                                    -3.247256
                                                 NA
                  XP_003960882 XP_003846818 NP_848594 NP_006666 NP_001073954
##
```

```
## AO.A12D.O1TCGA
                            NA
                                         NA -0.1230042
                                                                      5.446921
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## C8.A131.O1TCGA
                            NΑ
                                         NA 1.7598880
                                                               NΑ
                                                                     -1.004815
## AO.A12B.O1TCGA
                            NA
                                         NA -1.3443821
                                                               NA
                                                                     -4.276601
## BH.A18Q.O2TCGA
                                  -4.739098 -2.8924468
                    -2.6850331
                                                               NA
                                                                     -9.466122
  C8.A130.02TCGA
                    -0.3267863
                                  -1.113955
                                             0.8244477
                                                               NA
                                                                     -0.159513
  C8.A138.O3TCGA
                            NA
                                         NA
                                                               NA
                                                                      3.598908
                                                     NA
                  NP_001243276 NP_001033043 NP_219500 NP_067638
                                                                   NP 078993
                                 0.09415427
## AO.A12D.O1TCGA
                    -0.6906642
                                                    NA
                                                              NA
                                                                  6.27745669
## C8.A131.O1TCGA
                     6.9816544
                                -0.28429189
                                                    NA
                                                              NΔ
                                                                  0.09216104
## AO.A12B.O1TCGA
                    -1.7684176
                                -0.02793200
                                                    NA
                                                              NA
                                                                 -3.90245248
## BH.A18Q.02TCGA
                    -9.6601543
                                 0.05818000
                                                    NA 2.2393690
                                                                 -5.04687272
## C8.A130.02TCGA
                    -0.8810841
                                 0.13239537
                                                    NA 0.1389551
                                                                  0.54237898
  C8.A138.O3TCGA
                    -0.3288591
                                 0.22702608 1.415596 2.2603955
                                                                  0.35868309
                  NP_001071174
##
                                NP_115809 NP_057540 NP_689732 NP_001136155
## AO.A12D.O1TCGA
                            NA
                                       NA
                                            2.7686326 -1.959327
                                                                   0.7113416
## C8.A131.O1TCGA
                            NA
                                            0.5738589 -1.348885
                                                                   2.8042413
                                        NΑ
                            NA
                                        NA -1.1420645 -2.821578
## AO.A12B.O1TCGA
                                                                  -3.5837330
  BH.A18Q.O2TCGA
                    -1.3000450 -1.1026675 -6.5121500
                                                       1.603746
                                                                  -1.8118885
  C8.A130.02TCGA
                    -0.1463935
                                1.4312234
                                           0.8867652
                                                                  -0.4973395
                                                      1.493541
  C8.A138.O3TCGA
                     0.2928546 -0.5738874
                                           2.3920525
                                                       0.120969
                                                                   0.4976544
                  NP_001026904
##
                                NP_085127 NP_733828 NP_660312 NP_002537 NP_005447
                   -1.30404166
## AO.A12D.O1TCGA
                                       NA
                                                  NA
                                                            NA
                                                                      NA 0.0255779
                    0.12859197
## C8.A131.O1TCGA
                                       NA
                                                  NΑ
                                                            NΑ
                                                                          2.0310960
                                                                      NA
## AO.A12B.O1TCGA
                    1.99247245
                                       NA
                                                  NA
                                                            NΑ
                                                                      NA -1.0312055
                                                            NA -7.204644 -1.5476033
## BH.A18Q.02TCGA
                   -0.05890837 -1.6680370 -6.247865
  C8.A130.02TCGA
                    0.84412692
                                0.6932529 -1.970001
                                                            NA -2.265189
                                                                          0.1455148
  C8.A138.O3TCGA
                                                                1.942224
                   -1.16268681
                                       NA
                                            4.037765
                                                            NA
                                                                                  NA
                  XP 003960780
                                NP_524558 NP_689540 NP_001009923
                                                                   NP_003924
## AO.A12D.O1TCGA
                    -0.6601858 -0.3134941 -2.3479264
                                                        3.48487463
                                                                    6.8032088
                                                        0.00715554 -0.6809842
## C8.A131.O1TCGA
                     2.0310960
                                2.1646761 -0.4704944
## AO.A12B.O1TCGA
                     0.2021003 1.0584858 -2.3282553
                                                       -0.93420396
                                                                   2.2945631
  BH.A18Q.O2TCGA
                    -2.5846717 -1.1361213 -6.5288769
                                                        0.33250131 -5.2609772
  C8.A130.02TCGA
                    -2.4259023 -1.3337060 -7.6343341
                                                       -0.98276004 -1.5665767
  C8.A138.O3TCGA
                            NA -0.8335443 -7.3395949
                                                        2.32256682 3.7525082
                  NP 001104768
                                NP 076426
                                            NP 852610 NP 006040 NP 001033796
## AO.A12D.O1TCGA
                     NΑ
                                                                           NΑ
## C8.A131.01TCGA
                     0.7641093 -1.8143909
                                           1.85298924
                                                              NA
                                                                           NA
## AO.A12B.O1TCGA
                    -0.6043986 1.8372699 -1.40258305
                                                                           NΔ
                                                              NΑ
## BH.A18Q.02TCGA
                    -3.2537480 -0.3599927
                                            2.55048948
                                                              NΑ
                                                                           NA
## C8.A130.02TCGA
                     0.8310074 -0.6055751 1.82808758
                                                              NΑ
                                                                           NΔ
  C8.A138.O3TCGA
                     3.6025655 -1.0237155 -0.00337369
                                                              NΑ
                                                                           NA
##
                   NP_004043 NP_872434
                                       NP 064629
                                                    NP 000824
                                                              NP 060689
## AO.A12D.O1TCGA
                          NA
                                    NA
                                                NA
                                                           NA
                                                               1.0732724
                          NA
                                                NA
                                    NA
                                                           NA
## C8.A131.O1TCGA
                                                               2.4277883
## AO.A12B.O1TCGA
                          NA
                                    NA
                                                NA
                                                           NA -1.4524696
## BH.A18Q.02TCGA -4.0700212
                                    NA
                                        1.5401842 -2.8723745 -0.3566474
  C8.A130.02TCGA
                   1.6640941
                                    NA -0.5793362 -0.4842200
                                                               2.5430990
  C8.A138.O3TCGA
                   0.9986824
                                    NA -0.7640586 -0.2337735
                  NP_001180442
                                 NP_598004 NP_001096036 NP_619636 NP_207837
                                                                NA -4.1347217
  AO.A12D.O1TCGA
                    -0.3744509 -0.19920019
                                                      NA
                     0.4524224 -2.93160601
## C8.A131.O1TCGA
                                                      NA
                                                                NA -7.5340466
## AO.A12B.O1TCGA
                    -0.8649171 -2.43357133
                                                      NA
                                                                NA -4.2904588
## BH.A18Q.02TCGA
                            NA -6.65265602
                                                2.911791 -9.392524 -0.8216554
## C8.A130.02TCGA
                            NA
                                2.17575368
                                               -1.809287 1.801849 1.9068044
```

```
## C8.A138.O3TCGA
                           NA 0.02222628
                                              6.458791 -1.294344 2.1104527
##
                  NP 940938 NP 002293 NP 001007560 NP 976054 NP 848642
## AO.A12D.O1TCGA 2.6505288
                                   NA
                                         -0.2030100 0.70753177 -2.6489004
## C8.A131.O1TCGA -0.1790470
                                   NA
                                         -0.4664465 0.83292325 -0.2033343
## AO.A12B.O1TCGA -0.6570566
                                   NA
                                         -0.5267973 0.06075516
                                                                0.3517599
## BH.A18Q.02TCGA -3.6485031
                                   NA
                                         0.1183969 1.99515609 0.1183969
## C8.A130.02TCGA -1.2517093
                                   NA
                                         -0.3038272 0.87364574 0.4439829
## C8.A138.O3TCGA 5.6542206
                                   NA
                                          0.2160547 2.79799491 -0.7457729
##
                 NP_001239225 NP_443142 NP_006167 NP_775886 NP_055214
## AO.A12D.O1TCGA
                           NA 4.616385 0.3722695 -3.0108312 -0.9687794
## C8.A131.O1TCGA
                           NA -1.215305 2.0270481 0.4078958 -3.1218564
## AO.A12B.O1TCGA
                            NA -2.095452 -0.8621456 -4.4789190 -3.6059048
## BH.A18Q.02TCGA
                   -0.5306072 -7.070829 -4.1536558 4.2231804 -2.4140572
## C8.A130.02TCGA
                     0.4472628 2.762850 -0.7925276 0.4899011 -2.1307141
## C8.A138.O3TCGA
                            NA 2.271367 1.1230252 -2.1830286 2.1799384
##
                    NP_005025 NP_001164163 NP_995586 NP_954983 NP_149985
## AO.A12D.O1TCGA -0.30206474
                                1.1608978 -0.6449466 -0.5154134 5.3097680
## C8.A131.O1TCGA
                  0.50909278
                                2.2456337 -0.1669033 2.2780167 2.4520756
## AO.A12B.O1TCGA 2.10887436
                               -3.0377526 -0.2939935 -0.8372024 -0.7873158
## BH.A18Q.02TCGA 0.09163381
                               -6.4385516 -6.1541941 -5.8865636
## C8.A130.02TCGA 0.70309256
                               -2.6522133 -3.4885799 -0.7203705
  C8.A138.O3TCGA -0.71651583
                                0.9255397 3.7525082 0.3221117 -1.0273727
                 NP_203528 NP_054728 NP_055598 NP_000404
                                                             NP_004561 NP_055179
##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                              NA
                                                        NA
                                                                    NΑ
                                                                      1.136514
## AO.A12B.O1TCGA
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                                  NA
                                              NA
                                                       NA
                                                                    NA -1.906991
## BH.A18Q.02TCGA -8.138006 -6.870106
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                                                                       1.630509
## C8.A130.02TCGA
                  2.028160
                            1.418104 2.7890892
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                            1.686225 -2.5926282
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                                                             2.7687378 -1.682001
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## AO.A12D.O1TCGA -0.9383010
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## C8.A131.O1TCGA 0.5657631
                                     NA 7.8721882 3.1523590 0.8126838
## AO.A12B.O1TCGA -1.0727777
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## BH.A18Q.02TCGA -0.5540249 -14.7150263 -0.6476956 -1.4104426 -5.5319531
## C8.A130.02TCGA -1.5895358
                             -0.5465375 -0.8778042 0.5686179
                              2.1287384 1.2583393 -1.6234863
  C8.A138.O3TCGA 1.4338820
                                                                       NΑ
                  NP 005105
                            NP 689672 NP 001916 NP 003713 NP 001108451
## AO.A12D.O1TCGA -0.2411080
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                                              NA -7.605448
                                                                      NΑ
## C8.A131.O1TCGA 2.5856557
                             2.9013904
                                              NA 2.257777
                                                                      NΑ
## AO.A12B.O1TCGA -0.6016271 -0.1609627
                                              NA -5.886828
## BH.A18Q.02TCGA 0.5332242 -2.6147801
                                              NA -3.086479
                                                               2.2460597
## C8.A130.02TCGA 0.8146081 0.9458029
                                                               0.7686899
                                              NA 3.248271
  C8.A138.O3TCGA -4.0627982 -0.5812017
                                              NA -2.651142
                                                                      NΑ
                 NP_001012267 NP_064450
                                           NP_005067 NP_001011657 NP_076985
##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                            NA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                       -0.7045671
                                                                  3.3065458
                                         3.36634608
## C8.A130.02TCGA
                  -0.05783702
                                     NA
                                                       -1.1729924
                                                                   0.4210238
## C8.A138.O3TCGA
                   1.99708143 1.287596
                                         0.96942533
                                                       0.1136548
                             NP_001189 NP_005406 NP_004532 NP_037519
##
                 NP_037490
## AO.A12D.O1TCGA -1.483102
                            0.31512256 3.1381830 -0.8849639 -1.0945028
## C8.A131.01TCGA 6.014211 1.46034479 -0.1142809 -1.4500816 0.3228903
## AO.A12B.01TCGA -1.726845 -3.62807657 -1.9069913 -0.4159383 -0.4436531
```

```
## BH.A18Q.O2TCGA -4.394523 0.74732866 0.5432604 -6.2211018 -0.9521253
## C8.A130.O2TCGA -2.609575 0.01759996 -0.3792642 0.3127882 -2.3143868
## C8.A138.O3TCGA -5.324511 0.18314041 2.1177670 0.6146828 1.1632537
                  NP_001195 NP_699192 NP_001156896 NP_079333
                                                                NP 612439
## AO.A12D.O1TCGA 12.6664882 5.5764538
                                       -2.4088831
                                                           NA 0.74943955
## C8.A131.O1TCGA 0.1407356 -1.9074921
                                                           NA 0.83292325
                                        -1.7779599
## AO.A12B.O1TCGA -2.8548354 -0.1803631
                                         1.1416300
                                                           NA 0.98642743
## BH.A18Q.02TCGA -6.7095275 -0.8383823
                                        -0.8785269 -0.8952538 -3.93620595
## C8.A130.02TCGA -0.5104589 1.2475508
                                         -0.7072511
                                                    2.0543985 -3.09171572
## C8.A138.O3TCGA
                         NA
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                                         -0.6945730 4.1657650 -0.09845931
                 NP 001027006
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                                          NP_599023 NP_005051 NP_065198
## AO.A12D.O1TCGA
                   -1.4716728 -0.08109645
                                                   NA 2.4676585 -1.2392751
## C8.A131.O1TCGA
                    4.4800640 -1.10196383
                                                   NA 1.3470041 -0.8388516
                   -1.5965862 -3.93016722
                                                   NA -1.7462458 -1.9069913
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                   -2.4816601
                                       NA 0.09959668 0.4931809
                                                                        NA
                   -0.4970875 4.63387877 -0.05457364 1.4814248
## C8.A138.O3TCGA
                                                                        NΑ
                 XP 370934 NP 001034795 NP 002142 NP 852662 NP 001129467
## AO.A12D.O1TCGA 2.4028920
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## C8.A131.O1TCGA 4.7553199
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                                                         NA
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## AO.A12B.O1TCGA 0.2436724
                                     NA -6.454980
                                                         NA
                                                              0.6205929
## BH.A18Q.02TCGA
                        NΑ
                             -2.9727360 -4.243981
                                                         NΑ
                                                               0.9045616
## C8.A130.02TCGA
                        NA
                             0.2439109 -1.389464
                                                         NA
                                                              0.6965328
## C8.A138.O3TCGA 0.3440545
                              0.4793687 -5.284283
                                                        NA
                                                               2.4834809
                                NP 060804 NP 001025459 NP 689692 NP 001009993
##
                   NP 477521
## AO.A12D.O1TCGA
                   2.7762522 0.193209017
                                                   NA 1.9266672
                                                                    2.0676297
## C8.A131.O1TCGA
                  -0.3247707
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## AO.A12B.O1TCGA -7.3806522 -0.000217265
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## BH.A18Q.02TCGA -6.2010295 -5.434937019 -1.300045039 -4.7524791
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## C8.A130.02TCGA -10.7830082 -0.353025220 -0.002079251 -0.2775882
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## C8.A138.O3TCGA -5.5805109 -0.807944306 0.289197444 -5.0319400
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##
                 NP_001092302 NP_001177695
                                            NP_002437 NP_001229 NP_001025034
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                        NA 2.28611250 0.1083526
                                                                    -0.9764795
## AO.A12B.O1TCGA
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                                                                    -0.2912220
                           NA
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## BH.A18Q.02TCGA
                                        NA -4.98331047 -3.5815955
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## C8.A130.02TCGA
                   -0.5924556
                                        NA -0.02175846 1.1327554
                                                                           NA
## C8.A138.O3TCGA
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                                                                     1.4448534
                           NA
                 NP 001138904 NP 115688 NP 690008 NP 002968
##
                                                               NP 060838
                    0.2732148 1.1037508 -3.250849 2.9248343
## AO.A12D.O1TCGA
                                                              1.89618880
## C8.A131.O1TCGA
                    0.4929013 -0.7497982 -4.927211 0.7195826
## AO.A12B.O1TCGA
                   ## BH.A18Q.O2TCGA
                   -0.4971534 -0.9688522
                                                NA -9.6869174 0.42282662
## C8.A130.02TCGA
                   -0.3136668 -0.7958075
                                                NA -3.4721805 -1.24186968
## C8.A138.O3TCGA
                   -1.0090870 -1.5393721 -3.397199 6.0345631 3.65376548
                               NP_115811 NP_000411 NP_037474 NP_057423
##
                 NP_001025031
## AO.A12D.O1TCGA
                    2.7495836 2.82958935
                                                NA 0.9399295 -0.5306526
## C8.A131.O1TCGA
                    2.7273315 -0.74170243
                                                 NA 1.9379947 -1.2679270
## AO.A12B.O1TCGA
                   -3.8608804 -1.60212917
                                                 NA -2.5111726 3.4280959
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                                 NA -2.6194146 3.6385752
## C8.A138.O3TCGA
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                                                 NA 2.0190243 -0.6324016
                 NP 056297
                             NP_872381 NP_001186978 NP_742105 NP_001120838
## AO.A12D.O1TCGA -3.292756
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                                                          NA
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```

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## C8.A131.O1TCGA -1.875109
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                                                         NA
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## AO.A12B.O1TCGA -5.096958
                                   NΑ
                                               NΑ
                                                         NΑ
                                                              -5.3075897
                                         -4.765861
## BH.A18Q.02TCGA -6.953740 -10.8644918
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                                                             -7.9439734
## C8.A130.O2TCGA 1.457462 -0.4055031
                                        -2.196312
                                                         NΑ
                                                              0.6046965
## C8.A138.O3TCGA -2.585314
                                   NA
                                        -1.466229 0.8999397
                                                              0.3403974
##
                 NP 852124 NP 002575 NP 002407
                                                NP 000325 NP 009206
## AO.A12D.O1TCGA -3.8489868 -3.8489868 7.7404192
                                                 2.8600677 0.4522753
## C8.A131.O1TCGA -4.3483643 -4.3483643 -0.2842919
                                                 0.8167317 -0.0697542
## AD.A12B.O1TCGA -5.3075897 -5.3075897 -3.5366179 -5.6013660 -0.3050794
## BH.A18Q.02TCGA -7.9439734 -9.0512948 4.3335780 -10.0850178 -0.3332297
## C8.A130.02TCGA 0.6046965 1.2344313 -1.5632968
                                                -4.0592770 -1.8912837
## C8.A138.O3TCGA 0.2197118 0.2197118 0.5561686 6.0345631 2.0921671
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                      NA
                                                                  NA
## BH.A18Q.02TCGA 2.343076 0.6938026 0.6938026
                                                      NA
                                                            -3.641812
## C8.A130.02TCGA -1.317307 -1.2943476 -1.2943476
                                                           -1.448501
## C8.A138.O3TCGA
                       NA -1.2175439 -1.2175439 1.422911
                 NP 001012991 NP 859057 NP 079195 NP 653242 NP 001265374
## AO.A12D.O1TCGA
                 -2.4660301 -1.464053
                                        4.643053
                                                         NA -0.53065263
                 -1.9884498 -1.818439
                                      -1.798199
## C8.A131.O1TCGA
                                                         NA -0.11023301
                  -1.8099897 0.504191 -3.301043
                                                         NA -0.37159476
## AO.A12B.O1TCGA
## BH.A18Q.O2TCGA
                  -0.7346755
                                    NA -10.245596 0.16523222 -0.35330197
## C8.A130.02TCGA
                  -0.3005473
                                    NA
                                       1.250831 0.03727918
                                                             0.01104023
## C8.A138.O3TCGA
                  -0.3361734
                                   NA 1.053540 0.23068322
                  NP_112566 NP_001026915 NP_115799 XP_003960648 NP_653226
## AO.A12D.O1TCGA -2.48507909
                                     NA 1.2599525
                                                      1.888569 -8.192157
## C8.A131.O1TCGA -0.07784996
                                      NA -2.4337167
                                                       2.601847 -4.170258
## AO.A12B.O1TCGA -1.22243724
                                     NA -3.8830522
                                                      -3.381415 -4.672922
## BH.A18Q.02TCGA -4.77255141
                                     NA -4.8026598
                                                      -3.648503
                                                                      NA
## C8.A130.02TCGA -0.77940817
                                      NA -0.2185506
                                                      -1.664973
                                                                      NA
-2.519485
                                                                      NA
                 NP_996662 NP_872299 NP_066307 NP_714925 NP_000762 NP_000760
## AO.A12D.01TCGA 0.7494395 -5.018595 2.7876816
                                                     NA
                                                                          NA
                                                                NA
## C8.A131.O1TCGA 1.2700944 1.334860 0.7641093
                                                      NA
                                                                NA
                                                                          NA
## BH.A18Q.O2TCGA 0.1016700 2.262787 0.4796981
                                                      NA -5.3412663 -4.548411
## C8.A130.02TCGA 0.9786015 0.417744 -1.3993034
                                                      NA -0.2480694 -1.874884
                                            NA 0.8377683 -2.5267997
## C8.A138.O3TCGA -0.1204021 -2.804742
                 NP 003276 NP 001073895 NP 037451 NP 997329 NP 057263
## AO.A12D.O1TCGA 1.225664
                            0.0255779 1.1380390 2.0866787
## C8.A131.O1TCGA 5.840152
                             1.6910740 -0.9886232 0.3917042
                                                                  NA
## AO.A12B.O1TCGA -1.053377
                           -2.8631498 -1.4746414 0.3517599
## BH.A18Q.02TCGA
                       NA
                            -1.3937157 -2.3371134 5.7386384 -3.3942541
                            -2.7571691 -1.8060071 0.6506147 -0.6383738
## C8.A130.02TCGA
                       NA
## C8.A138.O3TCGA 1.543596
                                    NA
                                              NA 2.0409671 -0.9140013
                 NP_001254637 NP_004882 XP_003846609 NP_001106873 NP_037487
## AO.A12D.O1TCGA
                   0.6046672 -0.9535402
                                          0.6046672
                                                      1.2294741 1.7285577
## C8.A131.O1TCGA
                   0.2743157 -3.2351971
                                          3.3102264
                                                       1.7356007
                                                                 1.4077223
                                                      -0.5184829 -2.3171694
## AO.A12B.O1TCGA
                  -1.4413837 2.3416782
                                        -1.9042198
## BH.A18Q.02TCGA
                 -0.8852177 1.2023006
                                         -2.7352139
                                                             NA 2.9720076
## C8.A130.02TCGA
                 1.6312954 -0.2119909
                                          0.3226278
                                                             NA 2.2315114
## C8.A138.O3TCGA
                  -1.2248582 -1.3674866
                                          1.3314821
                                                             NA 0.4647401
```

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NP 660323
                             NP_031374 NP_689658
                                                    NP_722576 NP_055579
## AO.A12D.O1TCGA -2.1802952
                             NA -0.2296786
                                                           NA -0.8811541
## C8.A131.O1TCGA -1.1505384
                                                           NA -1.3205494
                                    NA -1.1302990
## AO.A12B.O1TCGA -2.0206217
                                    NA -3.0155808
                                                           NA 0.3129593
## BH.A18Q.02TCGA -0.8383823 0.06821614 -6.3549170 -0.09570757 -0.5372980
## C8.A130.O2TCGA -1.2156307 -1.18611191 1.5722578 -1.06147689 -0.1332740
## C8.A138.O3TCGA -0.3434876 0.02588342 0.9182254 1.65331035 0.8743397
                  NP 002891 NP 001229243 NP 037471
                                                   NP 612641 NP 060534
## AO.A12D.O1TCGA
                        NA
                             1.0351744
                                                NA
                                                   -0.02013968
                                                                       NA
## C8.A131.O1TCGA
                        NA
                              0.7074389
                                                NA
                                                   -2.61587130
                                                                       NA
## AO.A12B.O1TCGA
                        NA
                             -1.5245279
                                                NA -1.20303693
                                                                       NA
## BH.A18Q.02TCGA -11.961777
                              0.3358467 -3.3106195 -10.56675279 -0.2328682
## C8.A130.02TCGA
                  2.841567
                              1.0441989 -0.8286062
                                                    1.86744600 -0.6088550
## C8.A138.O3TCGA
                  5.273878
                                     NA 1.4448534
                                                    0.98405389 1.1010823
                  NP_057560 NP_001258468
                                         NP_976046 NP_001073929 NP_001167561
## AO.A12D.O1TCGA -0.4696959
                                     NA
                                                NA
                                                   -0.6716152
                                                                   2.962932
                                                NA
## C8.A131.O1TCGA 0.7519656
                                     NA
                                                     0.3350339
                                                                  -0.381441
## AO.A12B.O1TCGA 0.7397663
                                     NA
                                                NA
                                                     -0.2468784
                                                                  -1.327753
## BH.A18Q.02TCGA 1.1822283
                                        1.4063689
                              -3.337383
                                                            NA
                                                                 -12.754633
## C8.A130.02TCGA 1.2377112
                               0.867086 -0.1463935
                                                            NA
                                                                  -1.776488
## C8.A138.O3TCGA -1.3418866
                             -2.398800
                                                NΑ
                                                            NA
                                                                   2.563938
                 NP_115827 NP_002607
                                      NP 006508 NP 000092 NP 001258745
## AO.A12D.O1TCGA
                        NA
                                 NA 4.63543368 1.8542810
                                                              5.797422
## C8.A131.O1TCGA
                        NA
                                 NA 2.20515488 3.1361675
                                                              1.541302
                        NA
## AO.A12B.O1TCGA
                                 NA -1.64092980 -3.8497945
                                                              2.264077
## BH.A18Q.02TCGA
                        NA
                                 NA -2.79877611 -0.1693060
                                                             -5.060254
## C8.A130.02TCGA
                        NA
                                    0.01104023 0.9228438
                                                             -3.072037
                                 NA
## C8.A138.O3TCGA 1.009654
                                 NA
                                             NA 0.5305686
                                                              3.017423
                 NP_001035197 NP_001073862 XP_003959997 XP_003403509 NP_775933
                                                       -1.5669177
                          NA
                                2.1171571
                                            -1.3269005
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                           NA
                                4.8767563
                                            -0.1183288
                                                        -0.1183288
## AO.A12B.O1TCGA
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                               -2.3476556
                                            2.7352275
                                                         2.7352275
                                                                          NΑ
## BH.A18Q.02TCGA
                          NA
                               -1.8419969
                                           -4.1034750
                                                        -7.4287846 -4.391178
                                                        -2.0421577 1.585377
                                           -1.0286782
## C8.A130.02TCGA
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                     3.064966
                                7.0256478
                                            NA
                                                                NA 3.917079
## C8.A138.O3TCGA
                 NP_001020118 NP_071768 YP_003024026 NP_001297 NP_689810
## AO.A12D.O1TCGA
                  1.6561715 3.5305922
                                                 NA 1.38567584 17.6230356
## C8.A131.O1TCGA
                   -0.1749991 -0.5109732
                                                  NA 0.02334706 2.5411290
                   -2.4058566 -1.3776398
## AO.A12B.O1TCGA
                                                  NA -3.07378179 -3.1042680
                    0.6436218 -1.1595390 -0.00872764 0.20872218
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                   ## C8.A138.O3TCGA
                   2.7614235 1.6459961
                                         1.51433906 2.77239494 -0.2520592
                  NP_115513 NP_000093 NP_057687 NP_114147 NP_115981
## AO.A12D.01TCGA 0.3836989 -5.7729349 2.776252 1.6104539 2.3000274
## C8.A131.01TCGA 0.4362309 -0.7700376 -1.393411 -0.2559567 0.9381682
## AO.A12B.O1TCGA 1.0668002 -4.2766015 0.551306 -0.7097146 -1.9457919
## BH.A18Q.02TCGA -7.6629613 -0.7882016 -1.744981 -1.8955230 -5.5386439
## C8.A130.02TCGA -1.1697126 0.4899011 -1.386184 0.2996687 -0.6646128
## C8.A138.O3TCGA 0.4427973
                                   NA
                                             NA -2.4682855 -0.2374306
                   NP_955374 NP_776252 NP_071920 NP_976328
                                                              NP 056162
## AO.A12D.01TCGA -0.85067568 -0.21824919 -0.5839898 2.3647940
                                                                     NA
## C8.A131.O1TCGA 0.68315165 0.02334706 -0.6162181 4.6946017
## AO.A12B.01TCGA -0.53788320  0.52636277 -2.1093089 -3.3620151
## BH.A18Q.O2TCGA 0.07156152 -1.15284824 0.1250876 -0.9119807 -10.476427
```

```
## C8.A130.O2TCGA 0.15207459 -0.68101211 -0.6974115 0.3029486
## C8.A138.O3TCGA -0.59948737 0.48668296 0.1575404 -5.0941114
                                                                  2.143367
                 NP 061963 NP 055827 NP 001158502
                                                     NP 004097
                                                                NP 077817
                        NA 4.9516469
## AO.A12D.O1TCGA
                                         4.9516469 2.47527812
                                                                3.2562867
## C8.A131.O1TCGA
                        NA -0.8428995
                                        -0.8428995 2.87305524 -0.3773931
## AO.A12B.O1TCGA
                        NA -2.1619669
                                       -2.1619669 -3.04329558 -3.1486116
## BH.A18Q.O2TCGA
                        NA -4.6253546
                                        -4.6253546 1.84795929 -8.7970458
## C8.A130.02TCGA
                        NA -1.0483574
                                         -1.0483574 -0.78596791 0.9261236
## C8.A138.O3TCGA
                        NA
                            6.5648483
                                          4.8935357 -0.02897366
                                                                 3.6062227
##
                   NP_055213
                              NP_005859 NP_689829 NP_001258781 NP_039258
## AO.A12D.O1TCGA 0.1360620
                            4.31541063 2.7533934
                                                              NA
## C8.A131.O1TCGA -0.1669033 1.15270584 -0.6809842
                                                              NA
                                                                         NA
## AO.A12B.O1TCGA -1.7545602 -0.04178937 0.5069625
                                                              NΑ
                                                                         NA
## BH.A18Q.02TCGA 2.9853891 -0.52726183
                                                 NA
                                                      -0.3767196 -0.7748201
## C8.A130.02TCGA -1.5895358 -1.09755545
                                                      -0.2185506
                                                NA
                                                                 0.1586343
## C8.A138.O3TCGA
                         NA
                             0.31845456
                                                NA
                                                       0.4793687
##
                             NP_542403 NP_001224 NP_000833 NP_001002860
                   NP_006324
## AO.A12D.O1TCGA -1.0525950
                             1.0732724
                                           NA -1.3078515
                                                               1.2028055
## C8.A131.O1TCGA 0.2702678 0.3188424
                                              NA -0.6081224
                                                                2.5006502
## AO.A12B.O1TCGA -0.2302496 -0.9452899
                                              NA -2.3393412
                                                               -0.6598280
## BH.A18Q.02TCGA -1.9691214 2.4400919
                                              NA -3.0262621
                                                               -4.8695675
## C8.A130.02TCGA -0.2972674 1.1852333
                                              NA -1.7732084
                                                               -0.3038272
## C8.A138.O3TCGA 0.5854257
                                        2.512738 5.3982209
                                                               -1.7076005
                                    NA
                                           NP_056179 NP_001154848 NP_001012276
                 NP 001191335 NP 115501
## AO.A12D.O1TCGA
                   -1.1630791
                                       NA
                                                  NA
                                                       -3.3613327
## C8.A131.O1TCGA
                   -0.2519088
                                       NA
                                                  NA
                                                       -3.2918674
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                   -2.1342521
## AO.A12B.O1TCGA
                                       NA
                                                   NA
                                                         0.5014195
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## BH.A18Q.02TCGA
                    2.2928951 0.4930796 0.09832458
                                                      -13.9589700
                                                                             NA
## C8.A130.02TCGA
                   -5.7320102 -1.4813001 -0.71381079
                                                         0.2242317
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## C8.A138.O3TCGA
                   -1.3382295 1.2729679 -0.22645918
                                                         2.5163952
                                                                             NA
##
                 NP_001074299 NP_001035037 NP_848605 NP_064618
                                                                    NP 955387
## AO.A12D.O1TCGA
                            NA
                                        NA 1.0199352 -3.6394479 -2.90034709
                            NA
                                         NA 2.5937515 -0.8307558 1.04341306
## C8.A131.01TCGA
## AO.A12B.O1TCGA
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                                        NA -2.3060835 -5.2161311 -8.89387693
                                                               NA -7.10093719
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                           NΑ
                                                               NA 0.07335773
## C8.A138.O3TCGA
                     -5.225768
                                        NA -0.6726302 0.6037114 -1.64908631
                  NP_003208 NP_001335 NP_005945
                                                   NP 055959 NP 055916
##
## AO.A12D.O1TCGA -2.8660589 3.6906037
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                                                           NA
                                                                      NΑ
## C8.A131.O1TCGA 0.8167317 1.0596046
                                              NA
                                                           NΑ
                                                                      NΑ
## AO.A12B.O1TCGA -2.6719181 -1.0561488
                                              NA
                                                           NA
                                                                      NA
## BH.A18Q.02TCGA -1.0558322 -2.0527560 -9.633391 -10.2389054 -1.5576394
## C8.A130.02TCGA -0.7138108 -3.4820201 -2.124154
                                                   1.7198519 0.6735737
## C8.A138.O3TCGA 3.2551373 0.6402828 3.507480
                                                   0.2197118 -0.7713729
                   NP_000432
                              NP_775859
                                           NP_694962 NP_001034450 NP_001038945
                                                  NA
## AO.A12D.O1TCGA
                  0.4065577
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## C8.A131.O1TCGA 0.5576673
                                      NA
                                                  NA
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## AO.A12B.O1TCGA -0.7512867
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                                                  NA
                                                       0.8035102
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## BH.A18Q.02TCGA 1.8646862 0.97146924 -7.46892919
                                                       -1.5007679
                                                                    -2.4542018
## C8.A130.02TCGA 1.5689779 -0.02503833 -0.61869460
                                                       1.1753937
                                                                    -0.4874998
## C8.A138.O3TCGA 0.1721690 0.12096904 0.04782626
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                 NP_001035100 NP_036396 NP_004254
                                                     NP_060385 NP_001191015
## AO.A12D.O1TCGA
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                                                                   0.3875087
## C8.A131.O1TCGA
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```

```
## AO.A12B.O1TCGA
                           NA -4.5038623 2.2031045 -1.7129881
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## BH.A18Q.02TCGA
                           NΑ
                                      NA -1.2431735
                                                             NΑ
                                                                 -1.4070973
## C8.A130.02TCGA
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                                                                   0.4866212
## C8.A138.O3TCGA
                    -0.6506873 1.1303395 -1.3016581 -0.9688584
                                                                  -0.4166304
                  NP_001191017 NP_005636 NP_001012338 NP_054760
                                                                    NP 852607
## AO.A12D.O1TCGA
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                                                   NA 4.6468631
                   -0.6850321 -5.7205960
                                                   NA 0.2945551
## C8.A131.O1TCGA
                     2.3056490 1.5213219
## AO.A12B.O1TCGA
                                                   NA -1.8820480
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## BH.A18Q.02TCGA
                    -1.4070973 -0.7514024
                                            -4.886294 -0.1358522 0.35926436
                                            -1.579696 -2.3701446 -0.00535912
## C8.A130.02TCGA
                     0.4866212 1.2475508
## C8.A138.O3TCGA
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                             NP_002509 NP_071742 NP_001940 NP_001071643
                   NP 061909
## AO.A12D.01TCGA -2.9346353 -0.90782265 -0.6220878
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## C8.A131.O1TCGA -4.4414656 0.85721053 0.8491148
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## AO.A12B.O1TCGA -3.9966826  0.02195453  0.3988750
                                                            NA
                                                               -1.18917956
## BH.A18Q.02TCGA -8.8438811 2.26278664 -0.5071895 0.7038387
                                                                 0.02472618
## C8.A130.02TCGA -1.7896078 -0.58589591 -0.3858239 1.3557865
                                                                -4.07567638
## C8.A138.O3TCGA 0.8779968 -2.78279946 -2.1172001 -7.7272516
                 NP_001010868 XP_003960127 NP_848611 NP_060321 NP_982278
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                             NΔ
                                                                       NΔ
## AO.A12B.O1TCGA
                            NΑ
                                 -2.7467479
                                                             NΑ
## BH.A18Q.02TCGA
                    -7.6696521
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                                                             NA
                                                                       NΑ
## C8.A130.02TCGA
                    -1.2320301
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                                                             NA
## C8.A138.O3TCGA
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                                                  NA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                              NΑ
                         NA
                                  NA 2.807286
                                                       NA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -2.802121
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                                                       NA
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                                  NA
                                                             1.3996781
## C8.A130.02TCGA -1.425542
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                                             NA
                                                       NA
                                                             1.5230598
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## C8.A138.O3TCGA
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                                                                         1.85811
##
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                     NA -0.4103954 -3.25947054
                                                                           NΑ
## BH.A18Q.02TCGA
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                                                   -0.19941441
                                                                   -2.6047440
## C8.A130.02TCGA
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                                                                    2.9235638
## C8.A138.O3TCGA 4.769193
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                                                                    0.3111403
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##
                                          NP_620590 NP_002967
                                                                  NP 000390
                  -1.09831256
                                     NA -0.12300423 -0.1268140
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                  -1.54318285
                                     NA 0.03144283 -0.9724316
                                                                         NΑ
## AO.A12B.O1TCGA
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                                     NA -2.58600239 5.4595863
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## BH.A18Q.02TCGA
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                                     NA 2.98873451
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## C8.A130.02TCGA
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                                                             NA
                                                                  0.5784575
## C8.A138.O3TCGA
                                     NA -3.00954208 5.0617641
                  -1.93434317
                                                                  0.7170827
                   NP_003073 NP_065180 NP_079490 NP_277045 NP_001138466 NP_078919
## AO.A12D.O1TCGA -1.5326296
                                    NA 3.252477
                                                        NA
                                                             -2.6679494 2.4790879
                                    NA 1.152706
## C8.A131.O1TCGA 0.7398220
                                                        NΑ
                                                              0.5819546 1.3631957
## AO.A12B.O1TCGA 0.2547583
                                    NA
                                       0.767481
                                                        NA
                                                             -0.7512867 -1.5356138
                                             NA -1.711527
## BH.A18Q.02TCGA 0.4629712 -4.458086
                                                             -0.8450731 -2.1731897
                                              NA -1.530498
## C8.A130.02TCGA -1.2812281 1.300029
                                                             1.0507587 0.5226998
## C8.A138.O3TCGA
                         NA 1.605768
                                             NA
                                                        NA
                                                             -1.0932012 0.5488543
                  NP 001171915 NP 940907 NP 004728
##
                                                     NP 689525 NP 055209
```

```
## AO.A12D.O1TCGA
                   -0.1992002 -0.4696959 1.431393 0.92469026 -0.3973097
                    1.0515088 -0.1952385 1.278190 -0.03332327 -0.5271647
## C8.A131.O1TCGA
## AO.A12B.O1TCGA
                   -3.0377526 -1.4635555 -1.757332 0.39610350 -3.7167637
                    2.1456983 -1.6646917 -4.739098 -0.32988430 -0.5607156
## BH.A18Q.02TCGA
## C8.A130.02TCGA
                   -0.2119909 -0.8876438 -1.451781 -2.95724110 -0.1759123
                     0.3623402 4.5826788 3.858565
## C8.A138.O3TCGA
                                                             NA 2.5346809
                   NP 660156 NP 001135389 NP 001070731 NP 001139113 NP 683696
## AO.A12D.O1TCGA 0.0255779
                                       NA
                                                    NA
                                                          1.7476067
## C8.A131.O1TCGA -0.4543029
                                       NA
                                                    NA
                                                          1.8206062
                                                                            NA
## AO.A12B.O1TCGA -0.2635073
                                       NA
                                                    NA
                                                         -1.1309786
                                                                            NA
## BH.A18Q.02TCGA -3.7722822
                             -11.9216325
                                            -7.3819493
                                                         -0.7079124 -1.8118885
                               0.4997407
## C8.A130.02TCGA -2.6128549
                                             0.6309354
                                                         -0.3595850 0.8900451
  C8.A138.O3TCGA 2.9406233
                                       NA
                                             2.4542238
                                                          0.2782260 3.8402796
                 NP_705691 NP_872426 NP_004846 NP_060888 NP_998821
## AD.A12D.O1TCGA 2.429561 -2.0774307 -3.8642260 1.80856344 -2.881298
## C8.A131.01TCGA 0.160975 1.0069821 -1.1505384 1.22961558 1.079844
## AO.A12B.01TCGA -2.153652 -0.9619187 0.7591666 0.02749747 -1.308353
## BH.A18Q.02TCGA -1.872105 1.4565496 -1.5877479 1.29597129
## C8.A130.O2TCGA 2.188873 0.7555705 0.4243037 1.80840836
                                                                    NΑ
## C8.A138.O3TCGA 1.049882 -1.5137722 -0.4276018 1.33513924
                                                                    NΑ
##
                 NP_001244953 XP_003118768 NP_940912 NP_061157 NP_005718
## AO.A12D.O1TCGA
                     4.113491
                               -2.9308255
                                                  NA -0.6068486 -5.6434018
                                                   NA 0.2905072 -0.7821812
## C8.A131.O1TCGA
                                 -2.7980259
                     -1.579614
## AO.A12B.O1TCGA
                     -4.359746
                                 3.9047894
                                                   NA -0.9175751 -2.9407510
## BH.A18Q.02TCGA
                    -5.157270
                                 -4.1034750
                                                   NA
                                                             NA -1.1495029
## C8.A130.02TCGA
                     1.680493
                                 -0.5170187
                                                   NΑ
                                                             NA -3.2786682
## C8.A138.O3TCGA
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                                 -0.1935449
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                                                              NA 6.3344485
                  NP_001265486
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                                           NP_003264 NP_001254747 NP_001078940
## AO.A12D.O1TCGA
                   1.4733012
                               1.9342868
                                         3.82013687
                                                         0.9970764
                                                                      0.1398718
                     0.2500284 -0.4502550 -0.04141903
## C8.A131.01TCGA
                                                       -0.6324096
                                                                     -0.4462071
## AO.A12B.O1TCGA
                     0.5097339 -0.4879967 -3.68627752
                                                        -0.9619187
                                                                     -2.2284823
## BH.A18Q.O2TCGA
                            NA -0.4001373
                                                   NA
                                                         2.4635096
                                                                     -2.9794267
## C8.A130.02TCGA
                            NA -1.6846520
                                                   NA
                                                        -1.2189106
                                                                      0.4899011
  C8.A138.O3TCGA
                            NA 2.8638234 3.88416524
                                                         1.6862246
                                                                      0.3147974
                   NP 002149 NP 940684 NP 006064
                                                   NP 060019 NP 001027549
                                                           NA
## AO.A12D.O1TCGA 0.1398718 4.4792320 2.2847882
                                                                 3.7172723
## C8.A131.O1TCGA -0.4462071 0.9624554 1.2174719
                                                           NA
                                                                 1.2174719
## AO.A12B.O1TCGA -2.2284823 -6.6739264 -0.6237989
                                                           NΑ
                                                                 1.2608033
## BH.A18Q.O2TCGA -2.9794267 -8.5260699 -0.8751815 0.1551961
                                                                -7.8871019
## C8.A130.O2TCGA 0.4899011 -0.3202265 0.8998847 -0.5465375
                                                                -1.3402657
  C8.A138.O3TCGA 2.5639380
                             4.4144504 -0.9213156 -0.0509165
                                                                 0.4537687
                   NP 060768
                              NP 000060 NP 001185521
                                                         NP 003467 NP 057359
## AO.A12D.O1TCGA -0.1915806
                             0.08653467
                                                   NA 2.098108099 1.8923790
## C8.A131.O1TCGA -0.2883398
                                                   NA -0.000940222 -0.1588076
                             1.61416427
## AO.A12B.O1TCGA -1.3194388 -3.31490002
                                                   NA -2.630345973 -1.8377044
## BH.A18Q.02TCGA 0.4395535 -3.62843081
                                            -5.495154 -1.744980826 -0.3901012
## C8.A130.02TCGA 0.3291875
                             0.30950829
                                            1.739531 -2.212710867 -1.4911397
## C8.A138.O3TCGA 0.1575404
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                                            1.675253 2.615137953
                 NP_114113 NP_001258074
                                         NP_060399 NP_001238774
                                                                  NP_277040
## AO.A12D.O1TCGA 1.652362
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                                                 NA
                                                              NA -0.13062383
                                                 NA
## C8.A131.O1TCGA 1.950138
                              2.1444367
                                                              NA -3.43354325
## AO.A12B.O1TCGA
                  1.185974
                             -2.7689197
                                                 NA
                                                             NA 0.88942585
## BH.A18Q.02TCGA
                        NA
                              3.3199273 -0.8852177
                                                             NA -0.93539842
## C8.A130.02TCGA
                        NA
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                                                             NA -1.11723467
```

```
## C8.A138.O3TCGA
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##
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                             2.8600677 -1.2888025
## AO.A12D.O1TCGA -1.6469235
                                                       0.6961024
                                                                  2.8600677
## C8.A131.O1TCGA -1.1626820
                               0.6912474
                                            4.7269847
                                                       0.9300724
                                                                  0.6912474
## AO.A12B.O1TCGA 1.2829751
                              -5.7205393
                                           -1.2085799 -0.4824537 -5.6013660
## BH.A18Q.02TCGA -1.5108041
                             -10.0850178
                                          -3.5983224
                                                               NA -9.8842949
## C8.A130.02TCGA 0.6440549
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                                            2.6054165
                                                              NA -3.7673687
## C8.A138.O3TCGA
                         NA
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                                           -0.8737728 -0.4568589 6.0345631
                  NP_064562 NP_005439 NP_001177658 NP_079534 NP_003629 NP_612369
##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                          NA 2.0877663
                                                                                NA
## AO.A12B.O1TCGA
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                                                          NA -1.6935878
                                                                                ΝA
## BH.A18Q.02TCGA -0.6978763 1.152120
                                        -1.5375672
                                                           NA
                                                                      NA
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  C8.A130.02TCGA -1.3238664 2.247911
                                        -1.6124949
                                                           NA
                                                                      NA
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                                        -5.3976540
  C8.A138.O3TCGA 0.2635975 -1.733201
                                                          NA 1.2473679 4.469308
##
                 NP_001012520 NP_004869 NP_001091999 NP_001107047 NP_001230678
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## AO.A12D.O1TCGA
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                                                                NA
                                                                    -0.21062959
## C8.A131.O1TCGA
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                               -7.465233
                                                   NA
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## AO.A12B.O1TCGA
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                           NA -8.952078
                                                   NΑ
                                                                NΑ
## BH.A18Q.02TCGA
                    -8.890716 -21.793854
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                                                           3.360072
## C8.A130.02TCGA
                     1.464022 -11.088036
                                                   NA
                                                           1.962562
## C8.A138.O3TCGA
                            NA -2.596285
                                                   NA
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                                                                  NP_004638
                   NP_076938 NP_005972 NP_057617 NP_001128627
##
## AO.A12D.01TCGA -0.21062959 0.8865923
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                                                   -0.86210507 -0.86210507
## C8.A131.O1TCGA 0.58195463 -2.0775031
                                                NA
                                                     ## AO.A12B.O1TCGA -0.05010379 -2.0012214
                                                NA
                                                    -1.26955230 -1.26955230
## BH.A18Q.02TCGA
                          NA -0.5172257 -2.1999528
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## C8.A130.02TCGA
                          NA -3.7345700 0.8736457
                                                     1.83464731 1.83464731
  C8.A138.O3TCGA -0.07651647 3.0759375 1.8617673
                                                     0.02588342 0.02588342
                  NP_060835 NP_201575 NP_006505 NP_073623 NP_077272
## AO.A12D.O1TCGA 5.6564596
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## C8.A131.O1TCGA -0.9400486
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## AO.A12B.O1TCGA 8.1590018
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## BH.A18Q.02TCGA -8.1580779
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## C8.A130.02TCGA -4.2659088
                                   NA -3.7673687 -2.4357420 1.0212398
  C8.A138.O3TCGA -1.0858869
                                   NA 6.0565059 5.5042779 -0.2666877
                   NP 001501 NP 001838 NP 001035948 NP 001012301 NP 060251
                          NA
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                                                 NA
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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                                     NA
                                                 NA
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                                     NA
## AO.A12B.O1TCGA
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                                                 NA
                                                       -2.3753704 -1.0783206
## BH.A18Q.02TCGA -14.3838335 -9.359070
                                         -8.9375518
                                                       -3.8525714 0.4897343
## C8.A130.02TCGA
                  -0.3563051 1.198353
                                                       0.9982808 2.9826014
                                         -0.6777322
## C8.A138.O3TCGA
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                                                       0.1794833 1.5472533
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##
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                      NA
## AO.A12B.O1TCGA
                         NA
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                                         -0.1083047
                                                           NA
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## BH.A18Q.02TCGA -4.4179409 -4.073367
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                                                           NA 11.7904342
## C8.A130.02TCGA -2.4587010 -2.183192
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                   NP_004139 NP_775970 NP_060352 NP_001071062
##
                                                                 NP 008817
## AO.A12D.O1TCGA -1.82598401
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                                               NA
                                                     0.5703790 0.09796406
## C8.A131.O1TCGA 0.94626392
                                     NΑ
                                               NΑ
                                                    -1.4946083 -2.30013659
## AO.A12B.O1TCGA -0.78731584
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```

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## BH.A18Q.O2TCGA 0.06152538 11.7904342 -0.353302
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## C8.A130.02TCGA -4.09535560 -0.1168747 -1.389464
                                                      0.9490827 1.73625125
## C8.A138.O3TCGA 1.15228229 0.8560540 2.271367
                                                      2.3006240 -0.99080126
##
                   NP_006799 NP_001229434 NP_113623 NP_001092690 NP_006111
## AO.A12D.O1TCGA
                  3.3743905
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                                                 NΑ
                                                       -3.3156151
                                                                          NΑ
                                       NA
                                                 NA
                                                                          NA
## C8.A131.O1TCGA 1.5817812
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## AO.A12B.O1TCGA -1.6520157
                                       NA
                                                 NA
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                                                                          NΑ
## BH.A18Q.O2TCGA 1.0718307
                              -1.82861537 2.7545578
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                                                                   3.3232727
## C8.A130.02TCGA 0.5128602
                             -0.06111689 0.9950009
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## C8.A138.O3TCGA -0.3398305 -1.69297198
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                  YP_003024028 NP_003027
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                    -0.9764795 0.5940983 0.8612584
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                    -2.2506541 -0.1831345 -4.5121767
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
                     2.2460597   0.3391921   3.4470518   -10.5600620
                                                                   -8.66992128
## C8.A130.02TCGA
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                                                      -1.0253983
                                                                    2.44470292
## C8.A138.O3TCGA
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##
                  NP 003939 NP 001034976 NP 001197 NP 848658 NP 001137236
## AO.A12D.O1TCGA
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                         NA
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## C8.A131.O1TCGA
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                                                                   0.6629123
## AO.A12B.O1TCGA
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                                      NA 1.3411761
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                   3.360072
## BH.A18Q.02TCGA
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                                                                  -6.3281540
## C8.A130.02TCGA
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                                                                   2.3266276
## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA -0.1725316
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## C8.A131.O1TCGA 1.7234571
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                                                 NA -1.2881664
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## AO.A12B.O1TCGA -3.0931821
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## BH.A18Q.02TCGA 3.8719153
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## C8.A138.O3TCGA 0.6914828
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## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.O2TCGA
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                     1.3951449
                                      NA -5.226910
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## C8.A130.02TCGA
## C8.A138.O3TCGA
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                                                             NA -2.651142
                                                NA
##
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                                                                      NP_073599
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                             3.0645981 0.01432009
                                                                      0.6210958
                  0.7573113 2.220166923
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                                                                      3.3026801
##
                   NP_001298 NP_940857
                                         NP 775924
                                                     NP 008959 NP 005942
## AO.A12D.O1TCGA 0.4751341
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                                                            NA 1.8923790
```

```
## C8.A131.O1TCGA 1.7234571
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                                   NA
                                               NA
## AO.A12B.O1TCGA -0.4685963
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                                               NΑ
                                                           NA -3.5671041
                                   NA 0.10501534 -13.1962229 -8.4691984
## BH.A18Q.02TCGA -0.7346755
## C8.A130.02TCGA -1.1139548
                                   NA -0.60229525 -0.3300661 0.9753217
## C8.A138.O3TCGA 2.0958242
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##
                 NP 115507 NP 001129624
                                          NP 064610 NP 542119 NP 061927
                                               NA -5.8224623
## AO.A12D.O1TCGA 1.214235
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## C8.A131.O1TCGA 1.533207
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                                                 NA -0.4947817
## AO.A12B.O1TCGA -1.000719
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                        NA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA 1.4885404
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## C8.A131.O1TCGA -0.3976326
                                1.865133
                                                 NA -1.42579431
                                                                   -6.683992
## AO.A12B.O1TCGA -1.4912702
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                                                 NA -0.14987685
                                                                   -5.969972
## BH.A18Q.02TCGA
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                             -1.453933
                                                 NA -0.44362728
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## C8.A130.02TCGA
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                                                 NA 1.30002869
                                                                   5.508100
## C8.A138.O3TCGA
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                               -1.619829 -0.3727447 2.71022357
                                                                   -1.612515
                  NP 115540
                              NP 065785 NP 997201 NP 997297 NP 660296
## AO.A12D.O1TCGA -0.3134941
                                     NA
                                                NA
                                                           NΑ
## C8.A131.O1TCGA -0.2397652
## AO.A12B.O1TCGA -0.5461976
                                     NA
                                                           NΑ
                                                                     NΑ
                                                NA
## BH.A18Q.O2TCGA -1.7784346
                             0.07825229 -1.9958845
                                                           NA 1.0116138
## C8.A130.02TCGA 1.5919370 0.48990108 0.3423070
                                                           NA 0.5325394
  C8.A138.O3TCGA
                         NA -0.29960196  0.4683973 -0.8628014  0.2745689
                 NP_001012418 NP_997210 NP_056963 NP_004618
                                                              NP 003250
## AO.A12D.O1TCGA
                  -5.018595
                                      NA 3.3820101
                                                                      NA
                                      NA 3.4114234
## C8.A131.O1TCGA
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                    -4.354203
## AO.A12B.O1TCGA
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                                                           NA
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## BH.A18Q.02TCGA
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                                                 NA
                                                           NA -1.9791576
## C8.A130.02TCGA
                    0.417744 0.5817374
                                                 NA
                                                           NA 0.8703659
## C8.A138.O3TCGA
                    -1.601544
                                      NA
                                                NA
                                                           NA -1.3638295
                  NP_004787 NP_001258949 NP_001128320 XP_001132754 NP_001131141
## AO.A12D.O1TCGA 4.2125461
                             2.9324539
                                            -1.033546
                                                         -2.930825 -0.78971891
## C8.A131.O1TCGA -0.9764795
                                                         -2.798026 -3.00851575
                             0.2216932
                                             4.297909
## AO.A12B.O1TCGA -2.7384335
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                                            -1.258466
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                                         -1.760089
                                                                     0.07991747
                         NA
## C8.A138.O3TCGA
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                                      NA
                                             4.538793
                                                                NA
                 NP 001034463 YP 003024031 NP 001157903 NP 689932 NP 001153505
## AO.A12D.O1TCGA
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                               0.1322522
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                                               NA
                                                                     -7.579327
                   -1.9273623
                                -3.5246584 -0.03159807
                                                               NA
## C8.A130.02TCGA
                                                                     0.817888
## C8.A138.O3TCGA
                   -1.5649721
                                0.5963971
                                                 NA
                                                               NA
                                                                      6.166220
##
                 NP_689737 NP_689482 NP_689598
                                                 NP_060656 NP_001245344
## AO.A12D.O1TCGA
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                                              NA
                                                         NΑ
                                                                      NΑ
## C8.A131.O1TCGA
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                                              NA
                                                         NA
                                                                      NA
## AO.A12B.O1TCGA
                        NA 0.6122785
                                              NA
                                                         NA
                                                                      NA
## BH.A18Q.02TCGA -7.579327 0.4863889 -3.9060975 -0.4770811
## C8.A130.02TCGA 0.817888 0.5095803 0.2373512 -0.1070351
                                                              -0.7531692
## C8.A138.O3TCGA 6.166220 -0.4276018 0.3403974 0.7061113
                                                               0.9072540
```

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NP_060363 NP_008940 NP_776155 NP_002137 NP_620129
## AO.A12D.01TCGA -0.4658861 0.9513589 3.2029496
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## C8.A131.O1TCGA -3.6035542 2.0999100 -1.7658163
## AO.A12B.O1TCGA -2.1730528 -0.5794553 0.3877891
                                                         NΑ
                                                                   NΑ
## BH.A18Q.02TCGA -0.7012217 -3.9261698
                                               NA -2.059447
## C8.A130.02TCGA -2.4193426 -2.2750284
                                               NA 2.562778
## C8.A138.O3TCGA
                         NA 1.9897672 2.3737668
                                                         NA
##
                 NP_001158283 NP_001167594 NP_116174 NP_001011552
                                                                   NP 998885
## AO.A12D.O1TCGA -0.05061807
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                                                  NA
                                                               NA
                                                                   1.5533070
## C8.A131.O1TCGA
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                                        NA
                                                  NA
                                                               NA
                                                                  1.4077223
## AO.A12B.O1TCGA
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                                                               NA -1.6104436
                                                  NA
## BH.A18Q.02TCGA
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                                 -3.056371
                                                  NA
                                                         -6.652656
                                                                   0.4495897
## C8.A130.02TCGA
                                 -2.452141
                                                  NA
                                                         2.129836 0.3521466
                  1.60177663
## C8.A138.O3TCGA -0.60680165
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                                                  NA
                                                         1.905653 -2.3512570
                 NP_115881 NP_695002 NP_001159349 NP_036321
                                                               NP_057682
## AO.A12D.O1TCGA 4.704010
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                                         0.2198776 -1.7307391
                                   NA
## C8.A131.O1TCGA 4.500303
                                        -3.2635322 -1.7901036
                                                                      NA
## AO.A12B.O1TCGA -1.979050
                                   NA
                                        -3.4950458 -4.3015447
                                                                      NA
## BH.A18Q.02TCGA -6.947050 -0.1358522
                                       -11.8747971 -6.8667605 -0.7279847
## C8.A130.02TCGA -1.914243 0.6998127
                                        -1.4321021 0.9818814 -1.2320301
## C8.A138.O3TCGA 3.774451 2.3810810
                                         1.7666817 0.3586831 4.5131932
                  NP 015564 NP 899230 NP 001034931 NP 005932 NP 001258635
                         NA
                                   NA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                   NA
                                        -1.1910172 -2.5592010
                                                                        NA
## AO.A12B.O1TCGA
                         NA
                                   NA
                                         1.7347254 -2.8548354
                                                                        NA
## BH.A18Q.02TCGA 1.5234573 -3.865953
                                        -0.1023983 -6.1207403
                                                               -10.9715440
## C8.A130.02TCGA -0.5202985
                                         -0.7662887 -0.5990154
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                                                                 1.3262676
## C8.A138.O3TCGA -0.2886305 1.565539
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## AO.A12D.O1TCGA -0.40111950
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                                         -3.6089696 -0.1572924
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## C8.A131.O1TCGA 0.64672073
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                                         -0.2478610 0.7155347
                                                                0.8450669
## AO.A12B.O1TCGA -2.00953582
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                                         -2.9518369 -0.7069431 -1.5162135
## BH.A18Q.02TCGA -0.33992045 -1.326808
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## C8.A130.02TCGA 0.01104023 -0.933562
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                                                            NA 0.1520746
## C8.A138.O3TCGA -0.67628730 1.737425
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                                            3.6109755 0.76740095
                    1.1755375
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## C8.A130.02TCGA
                    1.1360352
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                                            3.0219598 -1.32714627
                                                                     2.2610303
                                                   NA 1.28393930
## C8.A138.O3TCGA
                   -0.6982301 -0.1789164
                                                                     0.7573113
                    NP 004824 NP 037412
                                         NP 076869 NP 001170787 NP 002033
## AO.A12D.O1TCGA -11.37714801 1.8161830
                                          2.4067018
                                                       1.492350
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## C8.A131.O1TCGA -6.89448144 1.1850889
                                          0.6224334
                                                        3.609770
                                                                        NA
## AO.A12B.O1TCGA
                   3.03177516  0.8838829  -2.6830040
                                                       -3.032210
                                                                        NA
                                                              NA -8.040989
## BH.A18Q.O2TCGA
                  -0.04887222 -6.4452423 1.0116138
## C8.A130.02TCGA
                  -2.17007257 0.7883691 -1.8420857
                                                              NA -5.082596
## C8.A138.O3TCGA
                                                       1.869082 -2.215943
                  -2.77914232 1.2290822 2.7358235
                  NP_777550 NP_149109 NP_056219 NP_954870 NP_954863 NP_689627
## AO.A12D.O1TCGA 4.8945000 -5.018595
                                             NA -0.2411080 -0.2411080
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## C8.A131.O1TCGA 0.5131407 1.334860
                                             NA 2.5856557 2.5856557
                                                                             NA
## AO.A12B.O1TCGA 0.4099609 -4.354203
                                             NA -0.6016271 -0.6016271
                                                                             NΑ
## BH.A18Q.02TCGA -0.3967919 3.062333 -9.399215 2.3196581 2.3196581
                                                                              NA
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## C8.A130.O2TCGA -0.5596570 1.178674 -1.510819 0.9425230 0.9425230
                         NA -2.804742 4.410793 -3.6897700 -4.0627982 -3.97137
## C8.A138.O3TCGA
                  NP 060749 NP 079497 NP 114095 NP 059112 NP 062815
## AO.A12D.O1TCGA 1.3971052
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                                                       NA -0.7097131
## C8.A131.O1TCGA -0.7497982
                                   NA
                                             NA
                                                       NA -0.2438131
## AO.A12B.O1TCGA -1.4635555
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                                                       NA -0.9231181
## BH.A18Q.O2TCGA -6.6727283
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## C8.A130.02TCGA -2.0027993
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                                            NA 1.3361072 1.5394591
## C8.A138.O3TCGA 0.5451972 -2.994914 5.976049 -1.0127441 -1.6015435
##
                 NP_001073887 NP_002771 NP_002775 NP_115753 NP_001103373
## AO.A12D.O1TCGA
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                                                                 0.9094511
## C8.A131.O1TCGA
                           NA 1.5574939 1.5574939 -0.8145643
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## AO.A12B.O1TCGA
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                                                               -2.8770071
                  -11.1655761 -3.0965151 -1.0357599 0.6034772
## BH.A18Q.O2TCGA
                    0.5358192  0.7227718  0.1914330  0.7129322
## C8.A130.02TCGA
                                                                 2.3299075
## C8.A138.O3TCGA
                    4.6923930 0.5049687 0.5049687 -1.4442865
                                                                -0.9725156
                  NP_078853 NP_115510 NP_694573 NP_542193 NP_005651
##
## AO.A12D.01TCGA 3.7591801 -0.7173327 3.3096239 4.479232 4.5020907
## C8.A131.01TCGA 0.6183856 2.2901604 0.3917042 -1.304358 -0.7052715
## AO.A12B.01TCGA 2.6021967 -2.9296652 -2.5167155 -1.136522 -0.7235719
## BH.A18Q.02TCGA -4.8294229 0.9881962 -8.2283309 -8.853917 -3.5481416
## C8.A130.02TCGA -0.9598010 1.4345033 -0.4317421 -2.675172 -2.7178107
## C8.A138.O3TCGA 0.5963971 -1.0858869 3.5989084 4.410793 3.2880516
                   NP 612459 NP 004211 NP 061962 NP 001774 NP 003018 NP 659402
## AO.A12D.O1TCGA 4.15539911
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                                         4.978316
                                                        NA -0.5306526
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## C8.A131.O1TCGA 1.08389187
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                                         1.537255
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                                                                              NA
## AO.A12B.O1TCGA 1.00582775
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## BH.A18Q.02TCGA -3.47454325 -1.0089968 -11.814580
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## C8.A130.O2TCGA -0.09063571 0.8638061 -1.474740
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## C8.A138.O3TCGA 1.49605337 2.6041665
                                         3.218566
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                  NP_000209 XP_003960863 NP_114121 NP_004818 NP_001127846
## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -8.8539173
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## C8.A130.02TCGA -0.4743804
                             -1.4353819 1.106516 -1.5206585 -0.08407597
## C8.A138.O3TCGA 0.9291968
                               0.3586831 1.459482 -0.7677158
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## AO.A12D.O1TCGA 2.03715133
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## C8.A131.O1TCGA 3.05925776 0.3390818
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## AO.A12B.O1TCGA 0.16884264 -2.7301190
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                                                                  -3.38972981
## BH.A18Q.02TCGA -0.53729797 2.1891882
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                                                                   4.67146158
## C8.A130.02TCGA 0.03071944 -1.9175227
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## C8.A138.O3TCGA 0.53788291
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                   NP_751897 NP_001130 NP_061846 NP_078848 NP_006681
## AO.A12D.01TCGA -0.04680827 -5.887229 3.1038948 3.6867939 -1.547869
## C8.A131.01TCGA 1.25390287 -5.659878 1.3955787 0.0800174 1.330813
## AO.A12B.O1TCGA -2.78000556 -6.327492 -4.1574281 -2.3310268 -3.159697
## BH.A18Q.02TCGA -6.59912991 -3.976351 -1.8085431 -8.7267928 -0.450318
## C8.A130.O2TCGA -7.64745358 5.508100 0.7063724 0.6178160 -1.087716
## C8.A138.O3TCGA
                          NA -1.612515 3.3538801 0.9511396
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## AO.A12D.O1TCGA 0.09034447 2.943883
                                                NA -5.2014652
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## C8.A131.O1TCGA -0.19523851 2.184915
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```

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## AO.A12B.O1TCGA -2.05665088 -2.525030
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## BH.A18Q.02TCGA -4.89633054 -6.829961
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                                                  NA 0.8966048 0.3652661
## C8.A130.02TCGA 0.69325295 -1.458341
                                            2.582224 -0.2447449 1.1047395
## C8.A138.O3TCGA 2.56393800 1.627710
                  NP 000740 NP 061722
                                        NP_776245 NP_006821 NP_060512
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## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                            1.2357544 -14.919095 -0.7212940 4.8387307
## C8.A130.02TCGA
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                           1.2278716 -2.261909 -0.5760563 -0.8843640
## C8.A138.O3TCGA
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##
## AO.A12D.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                    -0.8843640 0.9622022 0.004480487
## C8.A130.02TCGA
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                                                    NP_075555 XP_003960164
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                          NP 543013 NP 005997 NP 775844
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                                      NA
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
                            NA
                                      NA
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## C8.A138.O3TCGA
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##
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## AO.A12D.01TCGA -0.7401915 -7.9749982 -7.9749982 2.0257219
## C8.A131.O1TCGA 0.8126838 -1.6970023 -1.6970023 1.3267647
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## AO.A12B.01TCGA -1.6991307 -8.3423536 -8.3423536 -1.6159865
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## BH.A18Q.02TCGA -1.6580009 3.3333088 3.3333088 -2.2802419
## C8.A130.O2TCGA -1.6748124 -0.7236504 -0.7236504 -0.7662887
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## C8.A138.O3TCGA -1.7185720 -1.8465718 -1.8465718 -0.9652013 2.673652
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                   0.08811316
## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                 -0.5235784 0.2931089 1.4574624
                                                                  -1.86176490
## C8.A138.O3TCGA
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                                         NA 2.1360527
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                   NP_612412 NP_742093
                                        NP_776194 NP_001138482 NP_570124
## AO.A12D.O1TCGA
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                                               NA
                                                     3.8658544
## C8.A131.O1TCGA 0.2419326
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                                               NΑ
                                                     0.5455237
                                                                      NΑ
## AO.A12B.O1TCGA -3.1375257
                                    NA
                                               NA
                                                     1.0668002
                                                                      NA
## BH.A18Q.02TCGA -5.3847563 -7.248134 -3.7555553
                                                            NA
                                                               1.496694
## C8.A130.02TCGA -4.2560692 3.625456 2.0215998
                                                            NA 2.123276
## C8.A138.O3TCGA -0.5848588 1.587482 -0.5812017
                                                            NA 1.386339
                   NP_079321 NP_060946 NP_004874 NP_001035706 NP_001129131
##
```

```
## AO.A12D.O1TCGA 1.6485519
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                                                NA
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## C8.A131.O1TCGA 1.3227168
                                    NΑ
                                                NΑ
                                                     -1.4379380
                                                                  -0.6081224
## AO.A12B.O1TCGA -0.2524214
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                                                NA
                                                     -0.1665057
                                                                  -2.7024043
## BH.A18Q.02TCGA
                                                     -0.7045671
                         NA -8.4558168 -4.7223707
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## C8.A130.02TCGA
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                             0.2832693 0.1586343
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  C8.A138.O3TCGA -0.3142305 -0.5117160
                                                NA
                                                             NA
                                                                   1.9568529
                              NP 849158 NP 892030 NP 078936 NP 001034930
                  NP 620072
## AO.A12D.O1TCGA -0.9878284
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                                                 NΑ
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## C8.A131.O1TCGA -0.6081224
                              2.50065019
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                                                           NA
                                                                        NA
## AO.A12B.O1TCGA -2.7024043 -0.53511172
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                                                 NA
                                                           NA
## BH.A18Q.02TCGA
                         NA -4.66215381 -0.1492337
                                                           NA
                                                                 0.3057383
                         NA -0.06439676
                                         1.0376392
                                                                 2.7890892
## C8.A130.02TCGA
                                                           NA
## C8.A138.O3TCGA 1.9568529 -2.49754260 0.6878256
                                                           NΑ
                                                                        NA
                  XP_003846812 NP_001034892 NP_001243528
                                                          NP_116136 NP_955777
                    2.2657392
                                -3.3079955 -0.68304456
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                 1.5372545
                                            -1.85082181
                                                                 NA 0.9462639
                   -4.7228087
## AO.A12B.O1TCGA
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                                             1.09451492
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                     0.2471908
                                 0.4833413
## C8.A138.O3TCGA
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                                            -2.04040021 -0.0326308 2.5602809
                     NP_061831 NP_001180247 NP_004056 NP_005459
                                                                 NP 067650
## AO.A12D.O1TCGA -0.008710286
                                                  NA 3.252477 -3.02226063
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## C8.A131.O1TCGA -0.340962220
                                                   NA 1.152706 11.83101573
                                         NA
## AO.A12B.O1TCGA -0.512939932
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                                                   NA 0.767481 -0.09444738
## BH.A18Q.02TCGA -0.202759788
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                                                   NA -2.802121 -4.06667584
## C8.A130.02TCGA 0.522699768
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                                                   NA 3.756650 -3.35410523
## C8.A138.O3TCGA 0.585425716
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                                                             NA -2.84862796
                 NP_109377 NP_653273 NP_775908 NP_659430 NP_775815 NP_803251
## AO.A12D.O1TCGA
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                                                         NA
                        NA
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                                                                   NA
## C8.A131.O1TCGA
                        NA
                                    NA
                                              NA
                                                         NA
                                                                   NA
                                                                              NA
## AO.A12B.O1TCGA
                        NA
                                    NA
                                              NA
                                                         NA
                                                                   NA
                                                                              NA
## BH.A18Q.02TCGA -2.059447 -0.5540249 -7.589363 -5.6390053 -4.136929 11.7904342
  C8.A130.O2TCGA 2.562778 -4.0625569 4.107596 1.2049125
                                                            1.155714 -0.1168747
                        NA -0.1460021 1.587482 -0.5592588 2.995480
  C8.A138.O3TCGA
                 NP_005059 NP_001007091 NP_065394
                                                      NP 085076 NP 001159365
## AO.A12D.O1TCGA 3.305814
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                                                             NΑ
                                                                          NΑ
## C8.A131.O1TCGA 1.423914
                              1.6060685 0.4726618
                                                             NA
                                                                          NA
## AO.A12B.O1TCGA 2.740770
                              -2.5499732 -1.4053545
                                                             NΑ
## BH.A18Q.O2TCGA -1.939013
                                     NA -5.6758045 -3.63512158
                                                                  -7.6428890
## C8.A130.02TCGA -1.268109
                                      NA 0.4111842 0.03399931
                                                                   0.8014886
                              0.8085112 -1.3455438
## C8.A138.O3TCGA
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                   NP_001652 NP_443196 NP_071753 NP_060743 NP_443071 NP_001294
                                   NA -2.043143 3.4048689
## AO.A12D.O1TCGA 0.2351168
                                                                   NA -1.5783471
## C8.A131.O1TCGA -0.4421592
                                    NA 2.468267 -0.4543029
                                                                   NA 1.0393652
## AO.A12B.O1TCGA 1.9509003
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                                                                   NA -2.5860024
## BH.A18Q.02TCGA 0.7071841
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                                    NA
                                                                   NA
                                                                       2.1490437
## C8.A130.02TCGA 1.6640941
                                    NA 1.181953 0.6571744
                                                                   NA 1.2016326
## C8.A138.O3TCGA -3.4264559 0.9145682 -1.733201 -1.3492009 0.7829112 -0.5848588
                   NP_057051 NP_002458 NP_005238
                                                   NP_060147
                                                                 NP 835231
## AO.A12D.O1TCGA
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                                    NA -4.3175920 1.01231562
                                                                        NA
                           NA
                                                                        NA
## C8.A131.O1TCGA
                                    NA 0.1771665 1.27819015
## AO.A12B.O1TCGA
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                                    NA -0.9563758 -2.38091332
                                    NA -2.3739126 -1.25990046 -2.53114556
## BH.A18Q.02TCGA -9.95120253
## C8.A130.02TCGA 0.01759996
                                    NA 0.9097243 -0.05783702 -1.24186968
```

```
## C8.A138.O3TCGA 4.23159346 1.554568 -0.7677158 0.83045404 0.07708337
##
                 NP 001004432 NP 054729 NP 003314 NP 060926 NP 009157 NP 001421
## AO.A12D.O1TCGA
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                                                          NA
## C8.A131.O1TCGA
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                                               NA
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                                                                    NA 1.3146211
## AO.A12B.O1TCGA
                           NA -4.329259
                                               NA
                                                          NΑ
                                                                        1.5739799
                                     NA 1.403024 -1.4974226 1.1387383 -0.8250008
## BH.A18Q.02TCGA
                    0.2622483
                                     NA 1.368906 2.6939730 0.2635901 -1.5108189
## C8.A130.02TCGA
                    3.2253117
                                                                    NA 1.4558248
## C8.A138.O3TCGA
                   -6.8239382
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                                               NA -0.1716021
##
                 NP 001035267
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                                                      NP 003826 NP 076964
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                   6.111360
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## AO.A12B.O1TCGA
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                                       NA 0.5457631
                                                                  -3.248385
## BH.A18Q.02TCGA
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                    -0.559657 -0.03159807 2.5693379 0.09303695
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                   NP_002404 NP_057181 NP_001171532 NP_001071121 NP_002633
## AO.A12D.O1TCGA 3.2258084 2.726725
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                                                             NA -3.479436
## C8.A131.O1TCGA -0.5919308 1.525111
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                                                             NA 1.857037
## AO.A12B.O1TCGA -0.4214813 -1.541157
                                                             NA -2.452972
                                                NA
## BH.A18Q.O2TCGA -2.3839488
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                                                             NA -1.922286
## C8.A130.02TCGA -3.0129989
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                                                              NA 1.257390
## C8.A138.O3TCGA 0.9145682 1.777653
                                                       0.3623402 1.547253
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                  NP_000470 NP_001004489 NP_001138671 NP_036537
##
                         NA
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## AO.A12D.O1TCGA
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                         NA
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                                                                          NΑ
## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -1.6044748
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## C8.A130.02TCGA 0.6932529
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## C8.A138.O3TCGA 0.1319405
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                 NP_057324 NP_067025 NP_001129042 NP_976223 NP_001137150
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                        1.4777677 2.483481
## C8.A138.O3TCGA
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                  NP 003136 NP 000071 NP 963925 NP 689603 NP 001185839
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA -8.6097044 -3.5247240
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## C8.A130.02TCGA 1.6608143 -1.8880038
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                                                                      NΑ
                                               NA
## C8.A138.O3TCGA 0.7134256
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                                                         NA
                                                               1.8032531
                  NP_060330 NP_683691 NP_659411 XP_002344489
                                                              NP_695001
##
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## AO.A12D.O1TCGA -1.5973961
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                                             NA
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## C8.A131.O1TCGA -1.5188956
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## AO.A12B.O1TCGA 3.0179178
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## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                                        NP_055794 NP_004761 NP_001185837
## AO.A12D.O1TCGA -0.9687794
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                                                         NA -2.8165315
## C8.A131.O1TCGA -1.8346303
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                                               NΑ
                                                         NΑ
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## AO.A12B.O1TCGA -0.4602819
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                                                         NA
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## BH.A18Q.02TCGA -9.5698290 -2.681688 -3.35410950
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## C8.A130.02TCGA -0.8515653 -3.370505 -0.09719545
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                                                                      NΑ
## C8.A138.O3TCGA 1.7520531 1.982453
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                        NA 4.7148411 -1.2922142 1.176993
## AO.A12B.O1TCGA
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                                        NA -1.5661000 -0.1914490 2.147675
## BH.A18Q.02TCGA
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                                                   NA 0.2923567 3.811698
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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                 NP_001129575 NP_001010903 NP_004378 NP_683684 NP_001159439
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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                                                                   -1.704674
                                -1.0156876 -4.956547 1.5134211
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
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## BH.A18Q.02TCGA
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                             2.48078148 2.4119042 2.244631
## C8.A130.02TCGA
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## C8.A138.O3TCGA 2.600509
                             2.11045275 -1.9782288
                                                          NA 3.562337
                               NP 055117 XP 003403796 NP 001514 NP 006059
##
                 NP 001181887
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                    NA
                                                              NA
                                                                         NA
## AO.A12B.O1TCGA
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                                                              NA
                                                                         NA
## BH.A18Q.02TCGA
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                                           -11.2993914
                                                              NA -3.7154107
## C8.A130.02TCGA
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## C8.A138.O3TCGA
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##
                  NP_612424 NP_001177945 XP_001716411 NP_776159 NP_003562
## AO.A12D.O1TCGA -1.8145546
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## C8.A131.O1TCGA -0.9562401
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                                                             NA 5.160108
## AO.A12B.O1TCGA -5.9478002
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## BH.A18Q.02TCGA -8.4056361
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## C8.A130.02TCGA 0.6670140
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## C8.A138.O3TCGA 1.6715960
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## AO.A12D.O1TCGA -0.33635293
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## C8.A131.O1TCGA -0.01308386
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## AO.A12B.O1TCGA -0.42425277
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                                                    NA 0.01086863
## BH.A18Q.O2TCGA 0.55329651
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                                            -0.9466815 -1.23530995 -0.06439676
## C8.A130.02TCGA 1.03435931
## C8.A138.O3TCGA
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##
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## AO.A12D.O1TCGA 0.006528907
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## C8.A131.O1TCGA 0.533380061
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## AO.A12B.O1TCGA -2.428028380
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## BH.A18Q.02TCGA -2.410711817
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## C8.A130.02TCGA -1.802727259
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## C8.A138.O3TCGA 3.390451456
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                  NP_443118 NP_443724 NP_079273 NP_068775 NP_663696
## AD.A12D.01TCGA 5.2640504 -0.7592405 NA 1.1532782 0.7380102
```

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## C8.A131.O1TCGA 0.4038479 -0.3612016
                                           NA 1.0717482 -1.1950651
## AO.A12B.O1TCGA -0.4796822 -6.0364874
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## BH.A18Q.02TCGA -0.2462498 -5.0167643
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## C8.A130.02TCGA -1.0811561 1.0671580
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## C8.A138.O3TCGA 1.1413109 2.5566237
                                           NA -0.1679450
##
                NP 001139313
                             NP 778232 NP 699207 XP 003960847 NP 001008536
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                           NA
                                                                       NΑ
## AO.A12B.O1TCGA
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                                                           NA
                                                                       NA
## BH.A18Q.02TCGA
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                                                                -3.1500412
## C8.A130.02TCGA
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                                                                 0.4046245
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA -11.8000356
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                                             NA 3.6664399
## C8.A131.O1TCGA -6.8620984
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## AO.A12B.O1TCGA
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                                             NA -1.8404759
                                  NA -0.6677679 -4.8963305 0.5967865
## BH.A18Q.02TCGA
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## C8.A130.02TCGA
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                                 NA -3.6641700 2.5639380
## C8.A138.O3TCGA
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## AO.A12D.O1TCGA
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                             -2.7098572 0.05605628
                                                              NA 2.9781715
## C8.A131.O1TCGA
                   1.201280
                               -1.5350871 -1.97630612
                                                              NA -2.2556099
                              -1.1365216 -6.10023127
## AO.A12B.O1TCGA
                   -4.296002
                                                             NA -0.8316594
## BH.A18Q.02TCGA
                  -15.169998
                              -1.9825029
                                                 NA
                                                      -12.573982 -5.7126037
                                                 NA
## C8.A130.02TCGA
                   -3.419703
                              -0.7662887
                                                      2.188873 -0.3169467
## C8.A138.O3TCGA
                   1.064511
                               -0.4349161 1.37171064
                                                       4.440050
                NP_001139108 NP_036386 NP_660329 NP_001017403 NP_001017404
## AO.A12D.O1TCGA
                 0.8637335 -3.8642260 -1.1516497 -3.479436
                                                                 -3.738503
                                                                  2.484459
## C8.A131.O1TCGA
                 0.3431297 -1.1505384 0.8855457
                                                    1.857037
                                                  -3.057153
## AO.A12B.O1TCGA
                 -5.2881894 0.7591666 -0.4575105
                                                                 -2.755062
                  -9.1416201 -1.6379286 2.7746301
## BH.A18Q.02TCGA
                                                    -1.922286
                                                                 -1.922286
## C8.A130.02TCGA
                  -0.4711005 0.7129322 -0.7170907
                                                    1.257390
                                                                  1.257390
## C8.A138.O3TCGA
                 1.5655390 -0.4276018
                                               NA
                                                           NA
                ## AO.A12D.O1TCGA
                   NA -1.74978805
                                            NA
                                                  2.6543386
                                                 0.7155347
                       NA 2.29825615
                                            NA
## C8.A131.O1TCGA
                                                                     NΑ
## AO.A12B.O1TCGA
                       NA -3.69459194
                                            NA
                                               0.1605282
## BH.A18Q.02TCGA
                       NA 0.31577440
                                            NA
                                               -8.7167566
                                                             -5.7995836
## C8.A130.02TCGA 3.635295
                                            NA
                                                 0.3882251
                           0.07991747
                                                              2.5890172
## C8.A138.O3TCGA -1.009087 0.05514054
                                            NA
                                                 1.4960534
                                                            -0.5958302
                NP 569157 NP 443175 NP 955369
                                                NP 056002 NP 001857
## AO.A12D.O1TCGA
                       NA -1.231655 0.8675433
                                               1.42758362 2.098108
## C8.A131.O1TCGA
                       NA
                           -4.279550 0.6467207 2.65042179 -1.680811
                       NA
                          -4.462290 1.8123266 -0.97854754 -5.418449
## AO.A12B.O1TCGA
## BH.A18Q.02TCGA -3.695338 -11.864761 -2.8589930 -2.16649894 -6.043797
## C8.A130.02TCGA -1.005719
                            ## C8.A138.O3TCGA
                       NA
                            6.755019 0.3769688 0.13925474 3.631823
##
                  NP_689975 NP_002176 NP_001164626 NP_443073 NP_001193949
## AO.A12D.O1TCGA
                         NΑ
                                   NA
                                               NA -0.1191944
                                                              -1.7040705
## C8.A131.O1TCGA
                         NA
                                   NA
                                                NA 1.1446101
                                                               -2.8466005
## AO.A12B.O1TCGA
                         NA
                                   NA
                                                NA -1.2030369
                                                              -0.8954033
## BH.A18Q.02TCGA -5.26097716 1.1287022
                                          3.828425 1.7007625
                                                              -3.6719208
## C8.A130.02TCGA -0.09719545 0.9064444
                                         2.562778 0.3718258
                                                              -1.1500334
## C8.A138.O3TCGA -1.67102915 -0.1752592
                                         -1.480858 -1.7185720
                                                               1.0571967
```

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NP_660352 NP_001138779 NP_037464 NP_443165 NP_001121687
                                         NA 0.1665404 1.49235019
                 4.6963904
                              4.6963904
## AO.A12D.O1TCGA
                  5.5648961
                               5.5648961
## C8.A131.O1TCGA
                                              NA -2.7494514 -0.69717574
## AO.A12B.O1TCGA
                               0.9725701
                                              NA -1.6714160 -2.48900080
                  0.9725701
## BH.A18Q.02TCGA -14.1730744
                               NA -7.743251
                                                         NA -6.91025042
## C8.A130.02TCGA -0.3956635
                                     NA 2.064238
                                                         NA -0.07751624
## C8.A138.O3TCGA
                         NA
                                    NA 2.147024 3.6501083
                                                            3.21856592
                 NP_115950 NP_001026907 NP_620169
                                                  NP 945193 NP 055281
                           -1.4716728
## AO.A12D.O1TCGA 2.1743041
                                             NA -0.04680827 6.890834
## C8.A131.O1TCGA -0.8105164
                            -0.4057283
                                              NA 1.12437068 1.634404
## AO.A12B.O1TCGA -0.2607358
                            0.7536236
                                             NA -1.27786672 -2.677461
## BH.A18Q.02TCGA -5.1472342
                            -0.3131574 -5.097053
                                                         NA -8.509343
                            1.5984968 -1.412423
## C8.A130.02TCGA 0.1717538
                                                         NA 1.398425
## C8.A138.O3TCGA -0.8189157
                                    NA 2.216510 -0.77503005
                 NP_115743
                            NP_777569 NP_653326 NP_710141 NP_065954 NP_775806
## AO.A12D.O1TCGA
                        NA
                                 NA 1.3475779
                                                       NA
                                                                NA
                        NA
                                                       NA
## C8.A131.O1TCGA
                                  NA -1.1869693
                                                                NA
                                                                          NA
## AO.A12B.O1TCGA
                        NA
                                  NA 1.0834290
                                                                          NA
## BH.A18Q.02TCGA
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                                                                NΑ
                                                                          NΑ
## C8.A130.02TCGA
                       NA -4.5446976 -0.9860399 0.7293315
                                                                 NA
## C8.A138.O3TCGA -0.2410877 1.1083966 -0.1386878
                                                       NA
                                                                 NΑ
                NP 001264236 NP 001243586 XP 001129515 NP 004786 NP 000991
## AO.A12D.O1TCGA
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                               1.8923790
                                          0.8827825
                                                             NA 1.0961312
                          NA
## C8.A131.O1TCGA
                               1.3591478
                                           0.2783636
                                                             NA -0.7255109
## AO.A12B.O1TCGA
                          NA
                               0.1411279 -0.2274781
                                                             NA -2.6358889
## BH.A18Q.O2TCGA
                  11.7904342
                              -6.5991299
                                          1.2324090 -9.901022 0.8577263
## C8.A130.02TCGA
                  -0.1168747
                                            1.0835573 -11.744010 2.0281596
                               0.8900451
## C8.A138.O3TCGA
                          NA
                              -0.4093161
                                                 NA
                                                             NA -1.9599431
                NP_001093391 NP_002243 NP_542787 NP_001164102 NP_689846
## AO.A12D.O1TCGA
                          NA 0.3379813 -0.6335172
                                                  1.1989957
## C8.A131.O1TCGA
                          NA 3.5409556 4.8403254
                                                   -0.1385682
## AO.A12B.O1TCGA
                          NA -2.3171694 -1.9651922
                                                    0.7203659
                                                                    NΑ
## BH.A18Q.02TCGA
                  11.7904342 -2.1163182
                                               NA
                                                                    NA
                                                  0.2154129
                 -0.1168747 2.9563625
## C8.A130.02TCGA
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                             NA -1.9928574 -3.3935417
## C8.A138.O3TCGA
                         NA
                 NP 057700 NP 001288 NP 000551 NP 742099 NP 002659 NP 071765
## AO.A12D.O1TCGA 0.2122580 2.5819525
                                                NA 1.385676
## C8.A131.O1TCGA -2.7575471 2.4480277
                                            NA
                                                       NA 3.265700
                                                                          NΑ
## AO.A12B.O1TCGA 2.4774804 -0.3965380
                                        NA
                                                       NA -1.433069
                                                                          NΑ
## BH.A18Q.O2TCGA -5.3613386 -1.7282539 -1.4472418 -11.647311 -2.076174
## C8.A130.O2TCGA -0.2152707 -0.1201545 -0.3169467 1.486981 -2.422622
## C8.A138.O3TCGA
                                 NA 1.1413109
                                                       NA 4.008508 3.906108
                       NA
                 NP_078945 NP_940893 NP_055716 NP_115995 XP_003960169
## AO.A12D.O1TCGA
                        NA 1.1266096 0.9094511
## C8.A131.O1TCGA
                        NA 1.5291588 1.6020206
                        NA 1.1250011 -2.8770071
## AO.A12B.O1TCGA
                                                      NA
                                                                   NA
-6.0772503
## C8.A130.O2TCGA 1.5853773 -0.0283182 1.5033806 2.182313
## C8.A138.O3TCGA -0.6580016
                            NA -3.1667991 1.335139
                                                                  NA
                NP_006813 NP_777552 NP_542778 NP_115996 NP_849150 XP_003960895
                                NA
                                                              NA
## AO.A12D.O1TCGA
                       NA
                                          NA -0.8963933
                                                                          NA
## C8.A131.O1TCGA
                       NA
                                NA
                                          NA 0.3350339
## AO.A12B.O1TCGA
                       NA
                                NA
                                          NA -5.6124519
                                                              NΑ
                                                                          NΑ
## BH.A18Q.02TCGA 1.466586 -2.738559 -5.635660 -4.6287000 -9.553102
```

```
## C8.A130.O2TCGA 3.372906 -2.776848 1.572258 -0.3202265 1.962562
                        NA -4.871026
## C8.A138.O3TCGA
                                           NA 1.1925108 2.622452
                 NP 001124183 NP 699167 NP 001004456 NP 002034 NP 057156
                           NA 4.7344884
                                         -2.0240935
                                                            NA 1.0237450
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
                           NA 1.0029342
                                          -0.1669033
                                                            NA 2.8082891
                                         -3.0710103
                                                            NA 0.0358119
## AO.A12B.O1TCGA
                          NA -0.5849983
## BH.A18Q.O2TCGA
                           NA -9.4661222
                                          2.3531120 -4.039913
## C8.A130.02TCGA
                           NA -0.1595130
                                           -1.4452216 -3.409863
## C8.A138.O3TCGA
                           NA 2.2859954
                                           0.1977690 -8.630565
                 NP_001005234 NP_001017980 NP_001087199 NP_068575
## AO.A12D.O1TCGA
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                               1.95333577
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## C8.A131.O1TCGA
                           NA
                                                    NA
                                                               NA
                                                                          NA
## AO.A12B.O1TCGA
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                               -0.14156243
                                                    NA
                                                               NA
                                                                          NA
                     1.667309
                                           -12.7813956
## BH.A18Q.02TCGA
                                                        1.5033850 -1.6513101
## C8.A130.02TCGA
                     2.628376
                                        NA
                                             0.1061564 0.5948569 -0.2152707
## C8.A138.O3TCGA
                   -1.042001
                                0.72805414
                                             3.3721658 -0.7201730 1.3131964
                 NP_808211 NP_001093260 NP_005622 NP_001138640 NP_006845
                        NA
                                     NA
                                              NA
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
                                     NΑ
                                              NΑ
                                                           NΑ
                                                                     NΑ
## AO.A12B.O1TCGA
                        NA
                                     NA
                                              NA
                                                           NA
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## BH.A18Q.02TCGA
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                                     NA 0.1652322
                                                           NA -3.564869
## C8.A130.02TCGA
                                     NA 3.4450629
                        NA
                                                           NA -3.531218
                                                      1.817882 4.103594
## C8.A138.O3TCGA
                        NA
                                     NA
                                              NA
                 XP 003960233
                                NP 003262 NP 001004339 NP 443116 NP 476509
## AO.A12D.O1TCGA
                   -2.881298 0.35322054
                                                   NA
                                                             NA -0.6830446
## C8.A131.O1TCGA
                    1.079844 0.97459908
                                                   NA
                                                             NA 2.0108566
## AO.A12B.O1TCGA
                    -1.308353 -0.03347495
                                                   NA
                                                             NA 1.7624401
                                           -0.7480570
## BH.A18Q.02TCGA
                           NA 0.91125237
                                                             NA 2.0787906
## C8.A130.02TCGA
                                           -0.4022233
                           NA -0.76628870
                                                             NA 2.3003887
## C8.A138.O3TCGA
                   -2.003829 -0.82257286
                                             2.8053092
                                                             NA -5.3245112
                 NP_848648 NP_001792 NP_115928 NP_149040 NP_775928
## AO.A12D.O1TCGA
                    NA -5.9405660 5.656460 0.8256355 -1.5859667
## C8.A131.O1TCGA
                        NA 0.2662199 -1.215305
                                                0.1366877 5.3948851
                        NA -3.4617881 -2.530573
## AO.A12B.O1TCGA
                                                1.8871564 -1.6880449
## BH.A18Q.02TCGA
                        NA 0.7506740 -7.070829
                                                2.8950638 0.6703849
                        NA 0.9294035 2.762850 1.7559305 2.7464509
## C8.A130.02TCGA
## C8.A138.O3TCGA 0.8999397 -1.3126295 4.260851 -0.2557163
                 NP_001185982 NP_001001850 NP_005369 NP_001013642 NP_073618
## AO.A12D.O1TCGA
                           NA
                                0.9437393
                                                 NA
                                                              NA 0.9094511
                           NA
## C8.A131.O1TCGA
                                1.1081792
                                                 NA
                                                              NA 1.6020206
## AO.A12B.O1TCGA
                           NA
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                                                 NA
                                                              NA -2.8770071
## BH.A18Q.02TCGA
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                  -12.7813956
                                -6.5690215
                                                 NA
## C8.A130.02TCGA
                    0.1061564
                                0.1750337
                                                 NA
                                                      -1.0385178 1.5033806
## C8.A138.O3TCGA
                                 3.3063373 1.075482
                                                              NA -3.1667991
                    3.3721658
                   NP_848578 NP_996805 NP_001161940
                                                     NP_997625 NP_003270
## AO.A12D.O1TCGA -0.04299847 -5.0795516
                                                     1.6371225 -0.2525374
                                                 NA
## C8.A131.O1TCGA -4.25121520 -5.4331964
                                                 NA
                                                     1.0596046 2.1930112
NA
                                                     1.6488097 -2.8132632
                                          3.18945742   0.4228266   0.3893728
## BH.A18Q.O2TCGA 3.46712411
                                     NA
## C8.A130.02TCGA -1.28450798
                                     NA
                                         0.09959668 0.4931809 2.3692659
## C8.A138.O3TCGA 1.93125293 0.9767396 -3.01685636 -2.3549142 -0.3544590
                  NP_078879 NP_060152 NP_036314 NP_849155 NP_001012414
## AO.A12D.O1TCGA -5.4757707 -4.8662029
                                             NA
                                                        NΑ
## C8.A131.O1TCGA 0.1245441 -1.5553265
                                             NA
                                                        NA
```

```
## AO.A12B.O1TCGA -7.3501660 -3.5643327
## BH.A18Q.02TCGA 0.5131519 2.7177586 -7.094246 -8.4290538
                                                              -0.7179486
## C8.A130.02TCGA -0.1004753 -0.6744524 2.467662 -8.3231066
                                                               0.1520746
## C8.A138.O3TCGA 0.2160547 -1.6454292
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## AO.A12D.O1TCGA
                                               NA
                                                            NA
                        NA
                                     NA
                                                            NA
## C8.A131.O1TCGA
                                               NΑ
## AO.A12B.O1TCGA
                        NA
                                     NA
                                               NΑ
                                                            NA
                                                                         NΑ
## BH.A18Q.02TCGA
                        NA
                                     NA -2.410712
                                                     -7.094246
                                                                 -11.249211
                        NA
                                                      2.467662
## C8.A130.02TCGA
                                     NA 3.012120
                                                                  -6.145274
## C8.A138.O3TCGA
                        NA
                               1.861767 -9.511936
                                                            NA
                                                                  10.602330
                    NP_057655 NP_937858 NP_005363 XP_003118572 NP_001009606
## AO.A12D.O1TCGA 1.038984210 2.5781427
                                                NA
                                                     4.7497276
## C8.A131.O1TCGA 0.658864370 3.9578873
                                                NA
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                                                     -0.2681004
## AO.A12B.O1TCGA -0.000217265 0.4238182
                                                      0.6954227
                                                NA
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## BH.A18Q.02TCGA 0.101669961 -2.5779809
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                                                                 -2.89244680
## C8.A130.02TCGA 0.450542653 0.3390271
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                                                             NA
## C8.A138.O3TCGA -1.356515181
                                                NA
                                                      1.5399390
                  NP_057125 NP_036318 NP_066009 NP_653179 NP_068741 NP_112590
                            NA 2.185733 -1.4107160 -0.8468659 1.374246
## AO.A12D.O1TCGA -0.5344624
## C8.A131.O1TCGA 1.9703778
                                   NA -1.114107 0.1569271 -0.3207228 1.019126
## AO.A12B.O1TCGA -0.1055333
                                   NA 6.041596 -0.3327941 -1.1309786 -2.513944
## BH.A18Q.02TCGA -0.8015831 -7.094246 -6.699491 -1.1160490 -0.3131574
## C8.A130.O2TCGA -1.1500334 2.467662 -3.468901 -0.8154867 1.5984968
## C8.A138.O3TCGA 1.4960534
                                   NA 1.503368 -0.1862306 -3.9347983
                                                                             ΝA
                  NP_872416 NP_001007596 NP_002460 NP_115956 NP_006685
## AO.A12D.O1TCGA
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                         NA
                                      NA 0.6669601
## C8.A131.O1TCGA
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                                      NA -1.4275263
                         NA
## AO.A12B.O1TCGA
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                                                           NA 0.4495897
## BH.A18Q.02TCGA -0.7313301
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                                                 NA
## C8.A130.O2TCGA 1.8084084
                               0.8539665
                                                 NA
                                                           NA -2.9375619
## C8.A138.O3TCGA -0.2484020
                               0.1941118 1.8361673
                                                           NA 0.9986824
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                                       1.25995250 -5.239563
## AO.A12D.O1TCGA
## C8.A131.O1TCGA
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                                       0.56171523 -1.919636
                                                                     NA
## AO.A12B.O1TCGA
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                                      -1.57164295 -5.509907
                                                                     NA
## BH.A18Q.02TCGA -7.094246
                                       0.27562982 -2.112973 -9.7504796
## C8.A130.02TCGA 2.467662
                                   NA -0.09063571 2.064238 0.7457309
## C8.A138.O3TCGA
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                  NP_699178 NP_955523 NP_006140 NP_001138229
##
                                                                  NP_068835
## AO.A12D.O1TCGA -0.2944451 2.5019467
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                                                            NA 0.547520246
## C8.A131.O1TCGA 1.2053283 0.1731187
                                                            NA 0.274315681
                                               NΑ
## AO.A12B.O1TCGA -2.5804594 -1.9568778
                                               NA
                                                            NA 4.023962803
                                    NA -1.5542941
## BH.A18Q.02TCGA 1.2926259
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## C8.A130.02TCGA -0.9335620
                                    NA 2.7530106
                                                   0.14551485 1.165554066
## C8.A138.O3TCGA 0.3623402 1.8654244 0.8085112 -0.02531652 0.099026207
                 NP 001906
                             NP_112509 NP_065933 NP_872308 NP_055176
                                                                        NP 997279
                        NA 1.50758938
                                            NA -0.8659149
## AO.A12D.O1TCGA
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## C8.A131.O1TCGA
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                                                                       2.86900736
## AO.A12B.O1TCGA
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                                              NA -2.1287092
                                                                   NA -0.87323153
## BH.A18Q.02TCGA
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                                              NA -9.6400820
                                                                   NΑ
                                                                               NΑ
## C8.A130.02TCGA
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                                              NA -1.2845080
                                                                               NA
## C8.A138.O3TCGA
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                        NA
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                                                                   NΑ
##
                 NP 060529 NP 001129479 NP 004051 NP 114404 NP 612382
```

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## AO.A12D.O1TCGA
                         NA
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                                                               NA 2.9362637
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## C8.A131.O1TCGA
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## AO.A12B.O1TCGA
                         NA
                               -2.0538794 -6.2304905
                                                               NA -3.0128094
## BH.A18Q.02TCGA -1.336844
                               -1.5810571 -6.4318608
                                                               NA -4.2406357
  C8.A130.02TCGA 3.002281
                               -2.9277223 -0.3497454
                                                               NA -2.4095030
  C8.A138.O3TCGA -2.640171
                               4.0158223
                                                  NA -0.02165938 1.7995959
                              NP 061841 NP 001014979
                   NP 003927
                                                        NP 848561 NP 000331
## AO.A12D.O1TCGA 4.6468631
                                      NA
                                           0.02557790 -0.10014544
## C8.A131.O1TCGA -0.5716914
                                      NΔ
                                           1.69107401
                                                        0.00715554
                                                                            NA
                                      NA
                                                                            NΑ
## AO.A12B.O1TCGA -4.6119498
                                          -2.86314978 -0.59331267
  BH.A18Q.02TCGA -9.0713671 -20.331922
                                          -3.21025808 -2.59805320 -3.9362059
                                3.425384
  C8.A130.02TCGA -0.7958075
                                          -0.04143768
                                                       0.59813675 -0.4940596
   C8.A138.O3TCGA 3.2770801
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                                                   NA
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                  NP_690591 XP_003960234
                                            NP_000237
                                                        NP_057387 NP_004187
##
                                                        -2.058382
## AO.A12D.O1TCGA
                         NA
                                -2.881298
                                                   NA
                                                                         NΑ
## C8.A131.O1TCGA
                         NA
                                 1.079844
                                                   NA
                                                        -5.890607
                                                                         NA
                         NA
## AO.A12B.O1TCGA
                                -1.308353
                                                   NA
                                                        -6.413408
                                                                         NΑ
  BH.A18Q.O2TCGA
                         NA
                                       NA -10.6804958 -12.028685
  C8.A130.02TCGA
                         NΑ
                                            0.4603823
                                                       -3.678812
                                                                   1.962562
                                       NA
  C8.A138.O3TCGA
                         NA
                                       NA
                                            1.8398245
                                                         6.517305
##
                  NP_065087 NP_004953 NP_001034806 NP_065119
                                                                 NP_110392 NP_620138
                                    NA
                                          1.2751917 0.7875375
## AO.A12D.O1TCGA
                         NA
## C8.A131.O1TCGA
                         NΑ
                                    NΑ
                                          1.3146211 0.6629123
                                                                        NA
                                                                                   NΑ
## AO.A12B.O1TCGA
                         NA
                                    NA
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                                                                        NA
                                                                                   NΑ
                         NA -2.159808
## BH.A18Q.02TCGA
                                         -3.4143264
                                                             NΑ
                                                                        NA
                                                                                   NA
  C8.A130.02TCGA
                         NA
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                                         -1.6190546
                                                             NΑ
                                                                        NA
                                                                                   NA
  C8.A138.O3TCGA
                                         -0.8262300 -1.4040580 -0.9359442
                                                                                   NA
                         NA
                                    NA
                                                          NP_005279 NP_998761
                   NP_062558 NP_001005163 NP_665813
                   0.8256355
## AO.A12D.O1TCGA
                                  1.454252
                                            0.8408747
                                                                 NA 0.1398718
## C8.A131.O1TCGA
                   0.1366877
                                  1.002934
                                            1.4684406
                                                                 NA -0.4462071
## AO.A12B.O1TCGA
                   1.8871564
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                                                                 NA -2.2284823
  BH.A18Q.O2TCGA
                   2.8950638
                                        NA
                                                   NA -13.54748803 -4.8963305
  C8.A130.02TCGA
                   1.7559305
                                        NA
                                                   NA
                                                        -0.06111689
                                                                     0.6932529
  C8.A138.O3TCGA -0.2557163
                                 -5.960853
                                            1.0169681
                                                         4.96302130
                                                                     2.5639380
                  YP_003024032 NP_001165887 NP_001010893 NP_872303 NP_000871
                             NA
                                  0.9323099
                                                                  NA
## AO.A12D.O1TCGA
                                                        NΑ
## C8.A131.O1TCGA
                             NA
                                   1.2296156
                                                                  NA
                                                                            NA
## AO.A12B.O1TCGA
                                   0.7563951
                                                                  NA
                             NA
                                                        NΑ
                                                                            NΑ
## BH.A18Q.02TCGA
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                                                        NA -2.865684
                                                                      0.723911
                                          NΑ
  C8.A130.02TCGA
                                          NA
                     -1.648573
                                                        NA -3.586976
                                                                      3.120356
                                  -0.7311444
  C8.A138.O3TCGA
                      5.420164
                                                0.1575404
                                                           5.489649
                  NP_690872 NP_683762 NP_060064 NP_699174 NP_001164045
## AO.A12D.O1TCGA
                         NA
                                    NA
                                              NA
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                         NA
                                                         ΝA
## C8.A131.01TCGA
                                    NΑ
                                              NA
                                                               -4.279550
## AO.A12B.O1TCGA
                         NA
                                    NA
                                              NA
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                         NA
## BH.A18Q.02TCGA
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  C8.A130.02TCGA
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                                    NA
                                              NA 0.3324674
                                                                0.115996
## C8.A138.O3TCGA
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                              3.617194
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                                                         NA
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                                           NP_932347 NP_003593 NP_997203
                  NP_001193600 NP_061134
## AO.A12D.O1TCGA
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                             NA
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## C8.A131.O1TCGA
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                                                  NΑ
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## AO.A12B.O1TCGA
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                                                  NA -1.7185311
                                                                        NA
## BH.A18Q.02TCGA
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                    0.04814385
## C8.A130.02TCGA
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                                           1.7100123 0.2963888 -1.753529
```

##	C8.A138.O3TCGA	-3.25091327	1.711825 -	-0.2484020	NA	4.707022
##		NP_001191293	NP_775791	NP_004065	NP_068752	NP_219494
##	AO.A12D.O1TCGA	NA	NA	NA	-0.6335172	12.66648821
##	C8.A131.O1TCGA	NA	NA	NA	4.8403254	0.14073561
##	AO.A12B.O1TCGA	NA	NA	NA	-1.9651922	-2.85483536
##	BH.A18Q.O2TCGA	-16.029761	-2.0460652	-1.7784346	NA	-3.06975204
##	C8.A130.O2TCGA	1.729692	-0.4251823	-0.1496734	NA	-0.04799742
##	C8.A138.O3TCGA	4.107251	-3.2033705	1.9714815	NA	NA