Splicing Mouse embryo E8.5

Selina Dreesman

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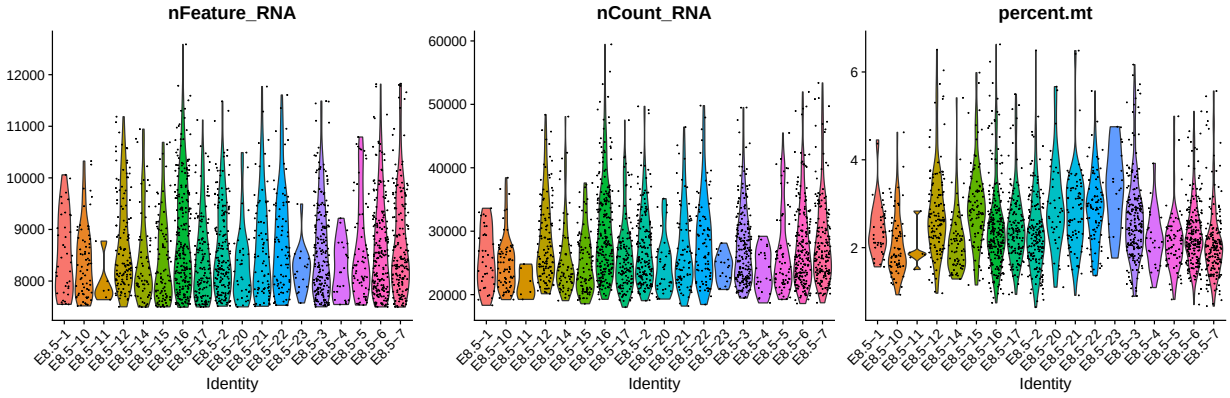
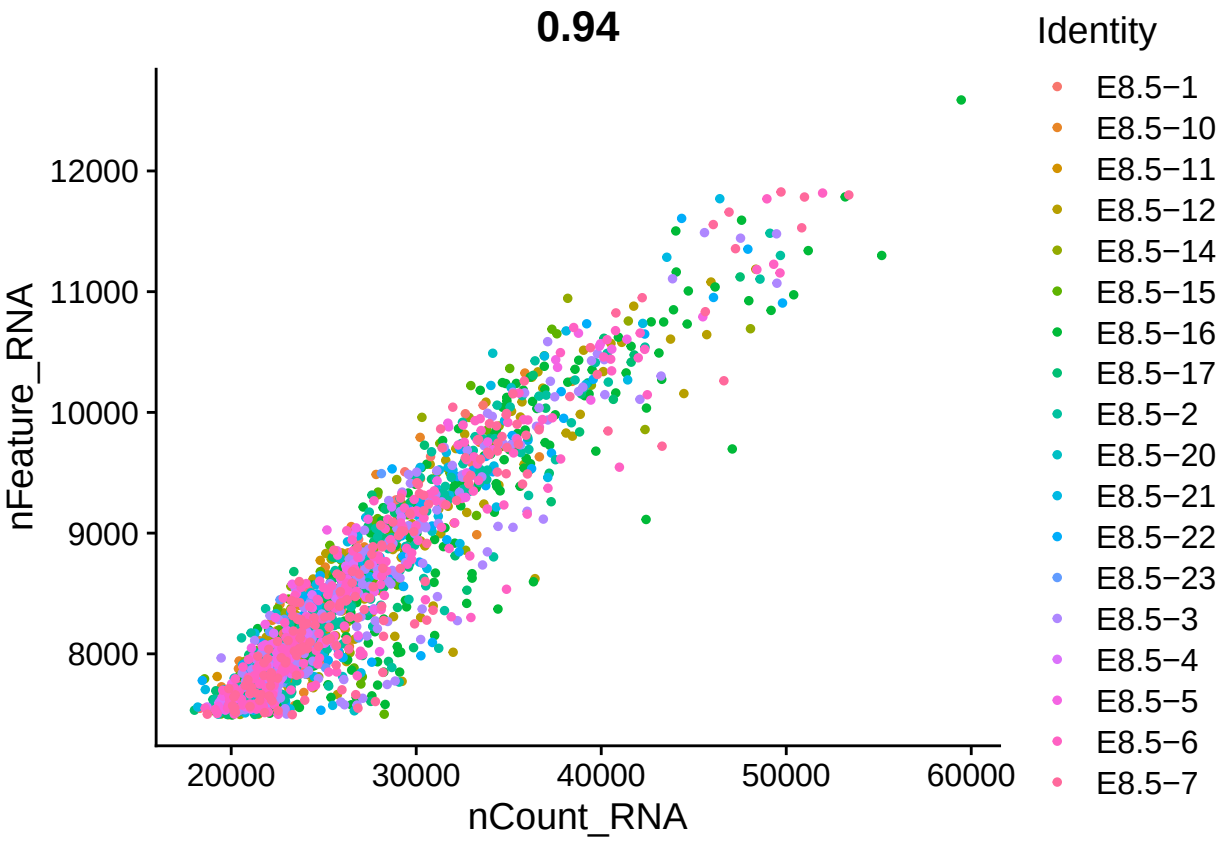
```
## Warning: Default search for "data" layer in "RNA" assay yielded no results;
## utilizing "counts" layer instead.
```




0.94
Identity
E8.5−1
E8.5−10
E8.5−11
E8.5−12
E8.5−14
E8.5−15
E8.5−16
E8.5−17
E8.5−2
E8.5−20
E8.5−21
E8.5−22
E8.5−23
E8.5−3
E8.5−4
E8.5−5
E8.5−6
E8.5−7
nFeature_RNA
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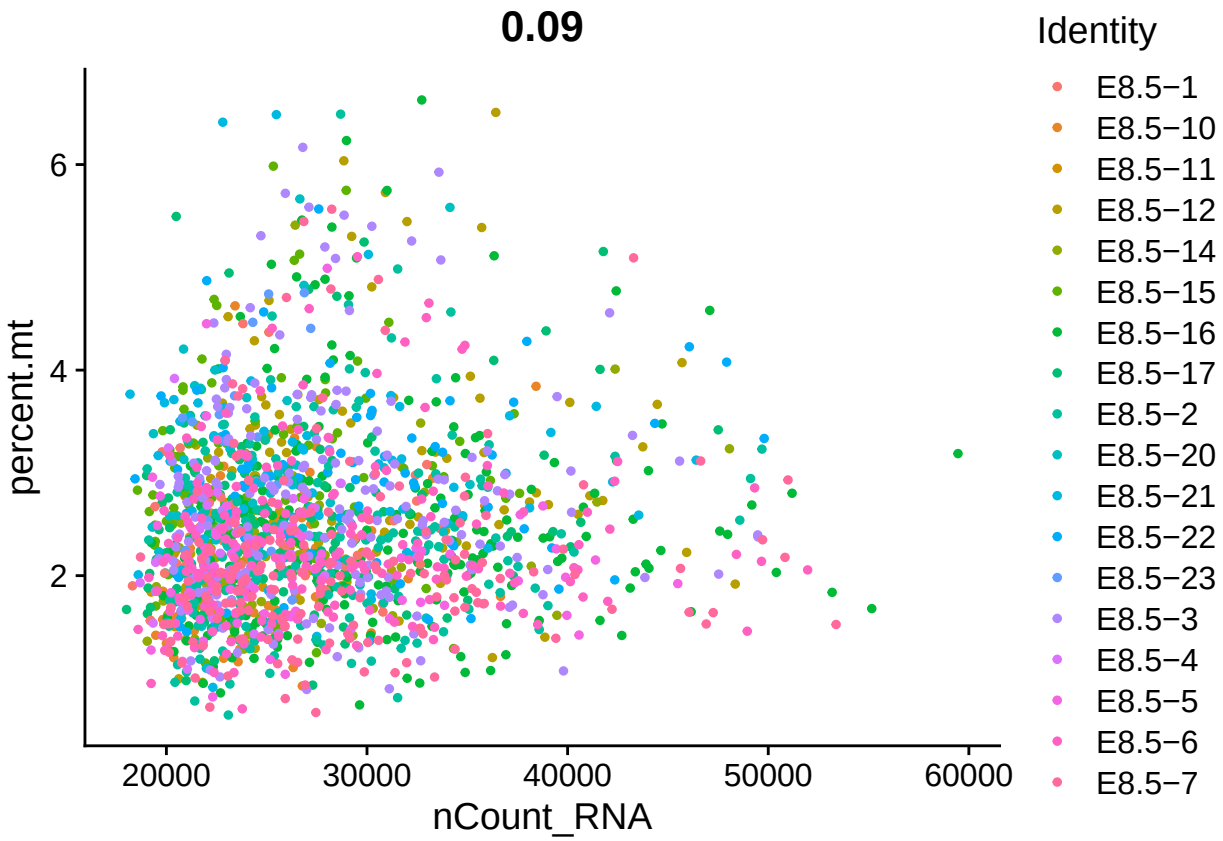
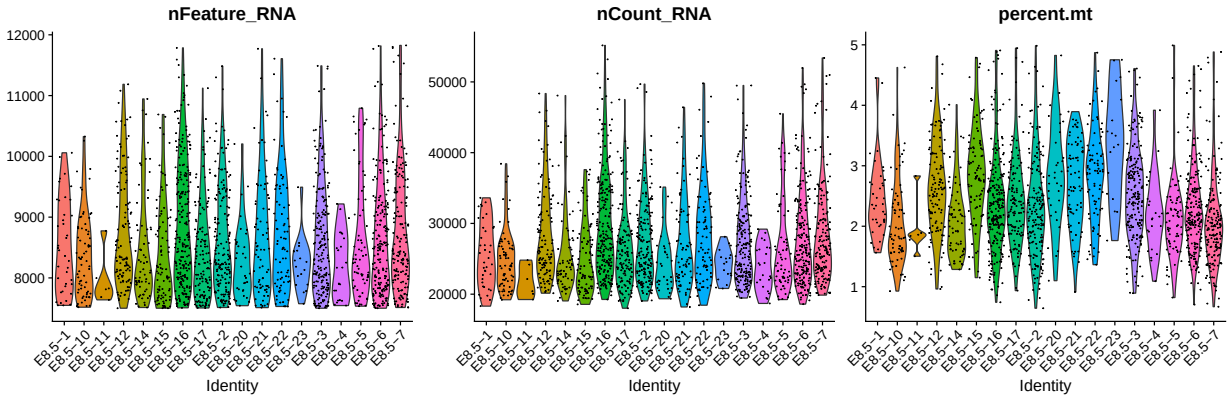
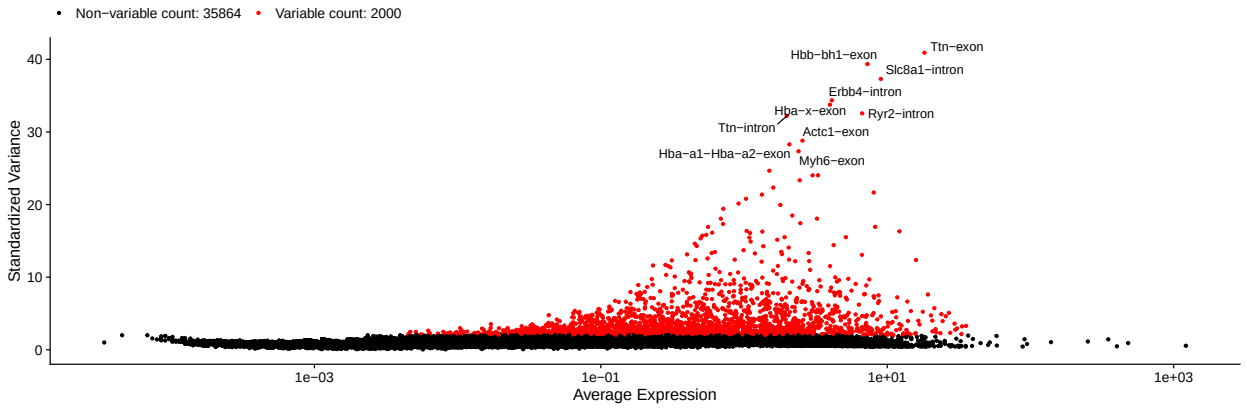
11000
10000
9000
8000
20000
30000
40000
50000
60000
nCount_RNA




```
## Normalizing layer: counts
```




```
## Finding variable features for layer counts
```

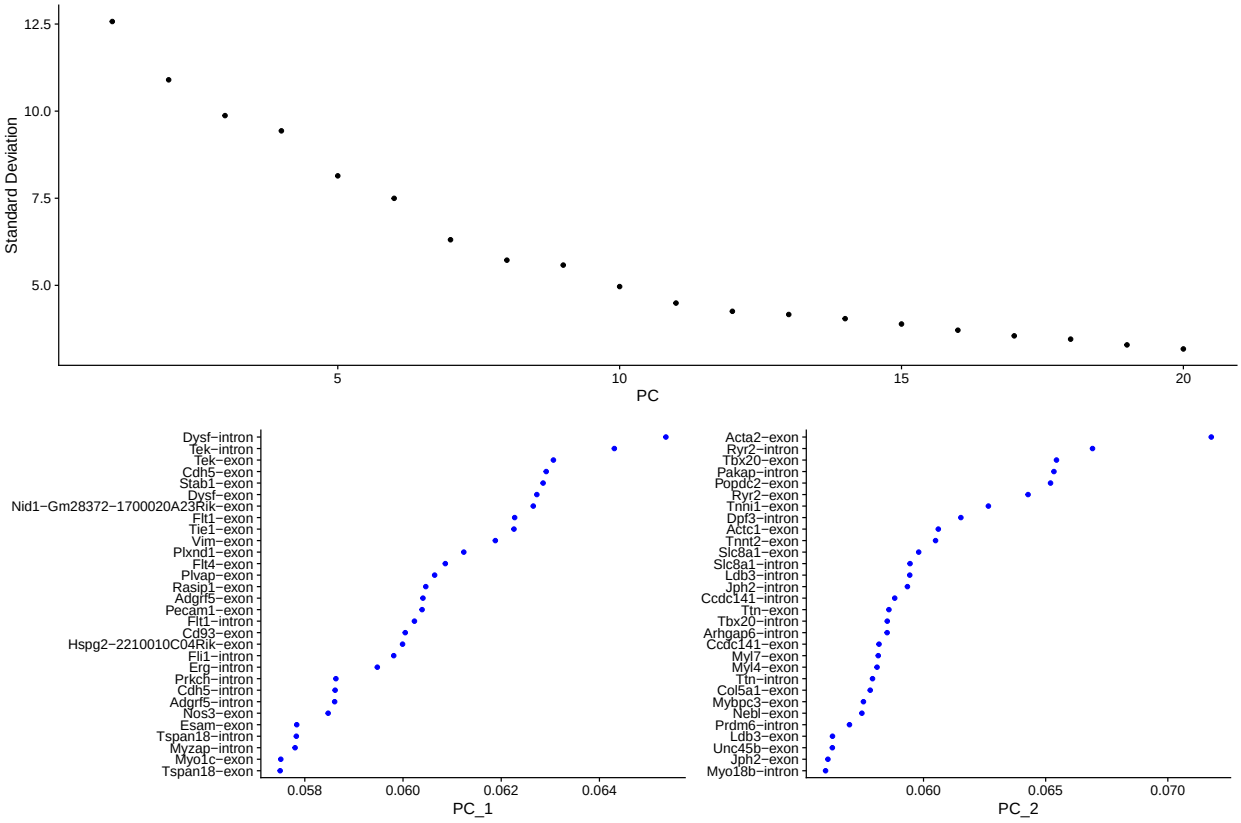



```
## Centering and scaling data matrix

## PC_ 1
## Positive:  Dysf-intron, Tek-intron, Tek-exon, Cdh5-exon, Stab1-exon, Dysf-exon, Nid1-Gm28372-1700020
##     Plxnd1-exon, Flt4-exon, Plvap-exon, Rasip1-exon, Adgrf5-exon, Pecam1-exon, Flt1-intron, Cd93-exon
##     Erg-intron, Prkch-intron, Cdh5-intron, Adgrf5-intron, Nos3-exon, Esam-exon, Tspan18-intron, Myzap
## Negative:  Nr6a1-intron, Cadm1-intron, Tenm3-Nxt1-intron, Tenm4-intron, Mllt3-intron, Pknox2-intron,
##     Greb1l-intron, Dpysl5-intron, Celsr1-exon, Cdh2-intron, Plch1-intron, Dcc-intron, Gli2-intron, Rg
##     Cdh4-intron, Celsr1-intron, Efna5-intron, Ptn-intron, Tenm4-exon, Frmd5-intron, Fat3-intron, Gpc3
## PC_ 2
## Positive:  Acta2-exon, Ryr2-intron, Tbx20-exon, Pakap-intron, Popdc2-exon, Ryr2-exon, Tnni1-exon, Dpi
##     Slc8a1-exon, Slc8a1-intron, Ldb3-intron, Jph2-intron, Ccdc141-intron, Ttn-exon, Tbx20-intron, Arl
##     Myl4-exon, Ttn-intron, Col5a1-exon, Mybpc3-exon, Nebl-exon, Prdm6-intron, Ldb3-exon, Unc45b-exon
## Negative:  St6galnac3-intron, Arap3-exon, Rapgef5-intron, Ldb2-intron, Tmem164-intron, Cdh5-exon, Tie
##     Stab1-exon, Prex1-Olfr463-Olfr462-Olfr464-intron, Plxnd1-exon, Elmo1-intron, Plvap-exon, Cd93-exo
##     Flt1-exon, Calcrl-intron, Arhgef15-exon, Cdh5-intron, Esam-exon, Shank3-intron, Gm20532-intron, S
## PC_ 3
## Positive:  Apoa1-exon, Cubn-exon, Rbp4-exon, Apom-exon, Amn-exon, Apoc2-Gm44805-exon, Hnf4a-exon, Apo
##     Pdzk1-exon, Afp-exon, Aldob-exon, Apoa4-exon, Slc13a4-exon, Tdh-exon, Slc39a5-exon, Soat2-exon, S
##     Trf-exon, Rbm47-exon, Vil1-exon, Aqp3-exon, Clic6-exon, Mttp-exon, Slco4c1-exon, Slc7a8-exon, Cts
## Negative:  Zfp423-intron, Zeb1-intron, Auts2-intron, Maml3-intron, Mest-exon, Aff3-intron, Fbn2-intro
##     Cdh2-intron, Zeb2-Slc6a5-intron, Dock4-intron, Tmem164-intron, Prkce-intron, Tenm3-Nxt1-intron, L
##     Ldb2-intron, Robo1-intron, Pknox2-intron, Mast4-intron, Notch3-Cep68-Samd4-intron, Meis2-intron,
## PC_ 4
## Positive:  Dlk1-exon, Bnc2-intron, Col1a2-exon, Col1a1-exon, Pmp22-exon, Svep1-exon, Col3a1-exon, Ria
##     Svep1-intron, Zfp469-exon, Foxf1-exon, Pdgfrb-exon, Myrf-Zbtb7c-Slc12a3-Krt35-exon, Stard8-exon,
##     Krt8-exon, Krt18-exon, Creb3l1-exon, Postn-exon, Smoc2-intron, Pmp22-intron, Meg3-Gm27000-exon, C
## Negative:  Mybpc3-exon, Myh6-exon, Ttn-intron, Myl4-exon, Myo18b-intron, 5430431A17Rik-intron, Erbb4-
##     Unc45b-exon, Myo18b-exon, Mybpc3-intron, Myh7-exon, Gm16076-intron, Actc1-intron, Xirp1-exon, Ldb
##     Myom1-exon, Actn2-exon, Actc1-exon, Rassf5-exon, Myl3-exon, Ankrd1-exon, Ldb3-intron, Slc8a1-exon
## PC_ 5
## Positive:  Hbb-bh1-exon, Alas2-exon, Spta1-exon, Hba-a1-Hba-a2-exon, Ank1-intron, Hba-x-exon, Ank1-ex
##     Gata1-exon, Nmnat3-intron, Cited4-exon, Ikzf1-intron, Spta1-intron, 5430401H09Rik-intron, Add2-ex
##     Blvrb-exon, Hbb-y-exon, Slc30a10-exon, Ikzf1-exon, Epor-exon, Slc4a1-exon, Epb42-exon, Snca-exon
## Negative:  Efna5-intron, Col18a1-exon, Zfp423-intron, Tcf7l2-intron, Nhsl1-intron, Tenm3-Nxt1-intron
##     Palld-intron, Kank1-intron, Greb1l-intron, Plekha7-intron, Map1b-exon, Col18a1-intron, Adgrv1-int
##     Lrp2-exon, Rgma-intron, Gli2-intron, Lrp2-intron, Epb41l4a-intron, Fbxl7-intron, Cdh4-intron, Cdh

## PC_ 1
```

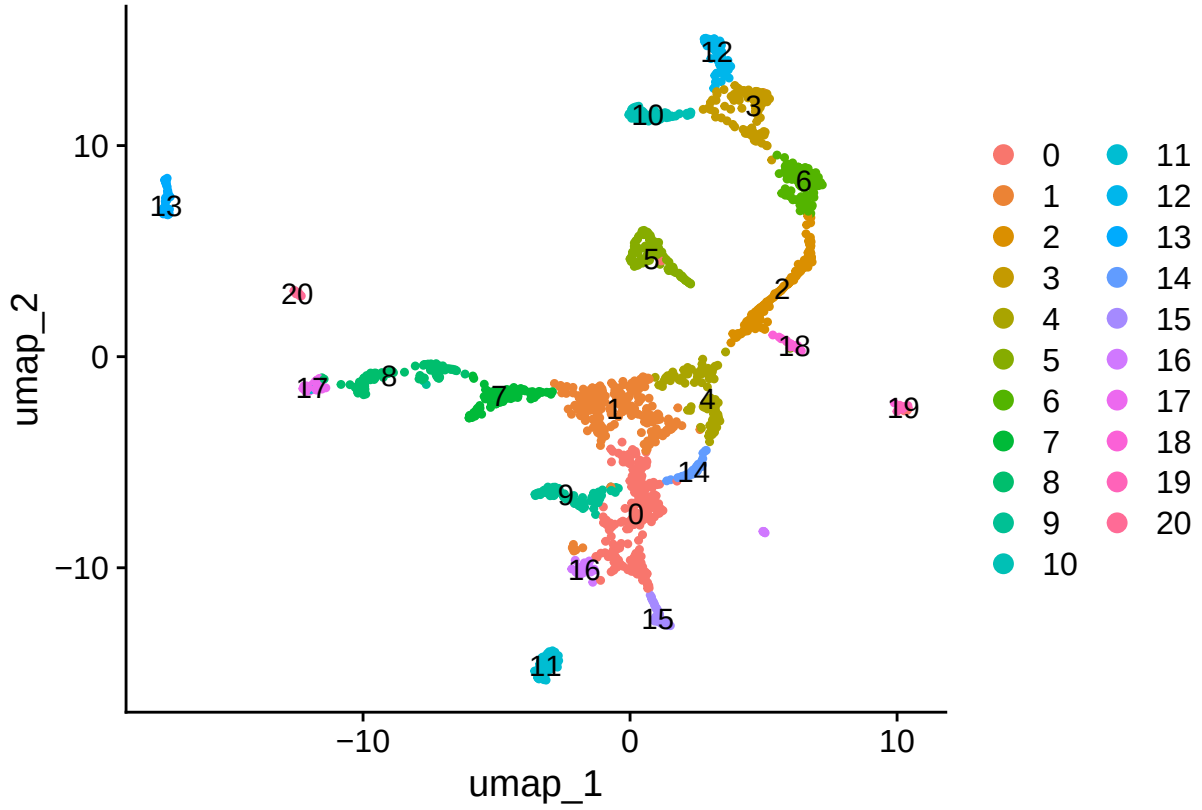
```
## Positive:  Dysf-intron, Tek-intron, Tek-exon, Cdh5-exon, Stab1-exon
## Negative:  Nr6a1-intron, Cadm1-intron, Tenm3-Nxt1-intron, Tenm4-intron, Mllt3-intron
## PC_ 2
## Positive:  Acta2-exon, Ryr2-intron, Tbx20-exon, Pakap-intron, Popdc2-exon
## Negative:  St6galnac3-intron, Arap3-exon, Rapgef5-intron, Ldb2-intron, Tmem164-intron
## PC_ 3
## Positive:  Apoa1-exon, Cubn-exon, Rbp4-exon, Apom-exon, Amn-exon
## Negative:  Zfp423-intron, Zeb1-intron, Auts2-intron, Maml3-intron, Mest-exon
## PC_ 4
## Positive:  Dlk1-exon, Bnc2-intron, Col1a2-exon, Col1a1-exon, Pmp22-exon
## Negative:  Mybpc3-exon, Myh6-exon, Ttn-intron, Myl4-exon, Myo18b-intron
## PC_ 5
## Positive:  Hbb-bh1-exon, Alas2-exon, Spta1-exon, Hba-a1-Hba-a2-exon, Ank1-intron
## Negative:  Efna5-intron, Col18a1-exon, Zfp423-intron, Tcf7l2-intron, Nhsl1-intron
```




```
## PC_ 1
## Positive:  Dysf-intron, Tek-intron, Tek-exon, Cdh5-exon, Stab1-exon, Dysf-exon, Nid1-Gm28372-1700020A
##     Plxnd1-exon, Flt4-exon, Plvap-exon, Rasip1-exon, Adgrf5-exon, Pecam1-exon, Flt1-intron, Cd93-exon
##     Erg-intron, Prkch-intron, Cdh5-intron, Adgrf5-intron, Nos3-exon, Esam-exon, Tspan18-intron, Myzap
## Negative:  Nr6a1-intron, Cadm1-intron, Tenm3-Nxt1-intron, Tenm4-intron, Mllt3-intron, Pknox2-intron,
##     Greb1l-intron, Dpysl5-intron, Celsr1-exon, Cdh2-intron, Plch1-intron, Dcc-intron, Gli2-intron, Rg
##     Cdh4-intron, Celsr1-intron, Efna5-intron, Ptn-intron, Tenm4-exon, Frmd5-intron, Fat3-intron, Gpc3
## PC_ 2
## Positive:  Acta2-exon, Ryr2-intron, Tbx20-exon, Pakap-intron, Popdc2-exon, Ryr2-exon, Tnni1-exon, Dpf
##     Slc8a1-exon, Slc8a1-intron, Ldb3-intron, Jph2-intron, Ccdc141-intron, Ttn-exon, Tbx20-intron, Arh
##     Myl4-exon, Ttn-intron, Col5a1-exon, Mybpc3-exon, Nebl-exon, Prdm6-intron, Ldb3-exon, Unc45b-exon
```

```
## Negative:  St6galnac3-intron, Arap3-exon, Rapgef5-intron, Ldb2-intron, Tmem164-intron, Cdh5-exon, Ti
##     Stab1-exon, Prex1-Olfr463-Olfr462-Olfr464-intron, Plxnd1-exon, Elmo1-intron, Plvap-exon, Cd93-ex
##     Flt1-exon, Calcrl-intron, Arhgef15-exon, Cdh5-intron, Esam-exon, Shank3-intron, Gm20532-intron, 
## PC_ 3
## Positive:  Apoa1-exon, Cubn-exon, Rbp4-exon, Apom-exon, Amn-exon, Apoc2-Gm44805-exon, Hnf4a-exon, Ap
##     Pdzk1-exon, Afp-exon, Aldob-exon, Apoa4-exon, Slc13a4-exon, Tdh-exon, Slc39a5-exon, Soat2-exon, 
##     Trf-exon, Rbm47-exon, Vil1-exon, Aqp3-exon, Clic6-exon, Mttp-exon, Slco4c1-exon, Slc7a8-exon, Cts
## Negative:  Zfp423-intron, Zeb1-intron, Auts2-intron, Maml3-intron, Mest-exon, Aff3-intron, Fbn2-intr
##     Cdh2-intron, Zeb2-Slc6a5-intron, Dock4-intron, Tmem164-intron, Prkce-intron, Tenm3-Nxt1-intron, 
##     Ldb2-intron, Robo1-intron, Pknox2-intron, Mast4-intron, Notch3-Cep68-Samd4-intron, Meis2-intron, 
## PC_ 4
## Positive:  Dlk1-exon, Bnc2-intron, Col1a2-exon, Col1a1-exon, Pmp22-exon, Svep1-exon, Col3a1-exon, Ria
##     Svep1-intron, Zfp469-exon, Foxf1-exon, Pdgfrb-exon, Myrf-Zbtb7c-Slc12a3-Krt35-exon, Stard8-exon, 
##     Krt8-exon, Krt18-exon, Creb3l1-exon, Postn-exon, Smoc2-intron, Pmp22-intron, Meg3-Gm27000-exon, 
## Negative:  Mybpc3-exon, Myh6-exon, Ttn-intron, Myl4-exon, Myo18b-intron, 5430431A17Rik-intron, Erbb4-
##     Unc45b-exon, Myo18b-exon, Mybpc3-intron, Myh7-exon, Gm16076-intron, Actc1-intron, Xirp1-exon, Ldb
##     Myom1-exon, Actn2-exon, Actc1-exon, Rassf5-exon, Myl3-exon, Ankrd1-exon, Ldb3-intron, Slc8a1-exon
## PC_ 5
## Positive:  Hbb-bh1-exon, Alas2-exon, Spta1-exon, Hba-a1-Hba-a2-exon, Ank1-intron, Hba-x-exon, Ank1-ex
##     Gata1-exon, Nmnat3-intron, Cited4-exon, Ikzf1-intron, Spta1-intron, 5430401H09Rik-intron, Add2-ex
##     Blvrb-exon, Hbb-y-exon, Slc30a10-exon, Ikzf1-exon, Epor-exon, Slc4a1-exon, Epb42-exon, Snca-exon
## Negative:  Efna5-intron, Col18a1-exon, Zfp423-intron, Tcf7l2-intron, Nhsl1-intron, Tenm3-Nxt1-intron
##     Palld-intron, Kank1-intron, Greb1l-intron, Plekha7-intron, Map1b-exon, Col18a1-intron, Adgrv1-int
##     Lrp2-exon, Rgma-intron, Gli2-intron, Lrp2-intron, Epb41l4a-intron, Fbxl7-intron, Cdh4-intron, Cdh

## Warning: The default method for RunUMAP has changed from calling Python UMAP via reticulate to the R-
## To use Python UMAP via reticulate, set umap.method to 'umap-learn' and metric to 'correlation'
## This message will be shown once per session
```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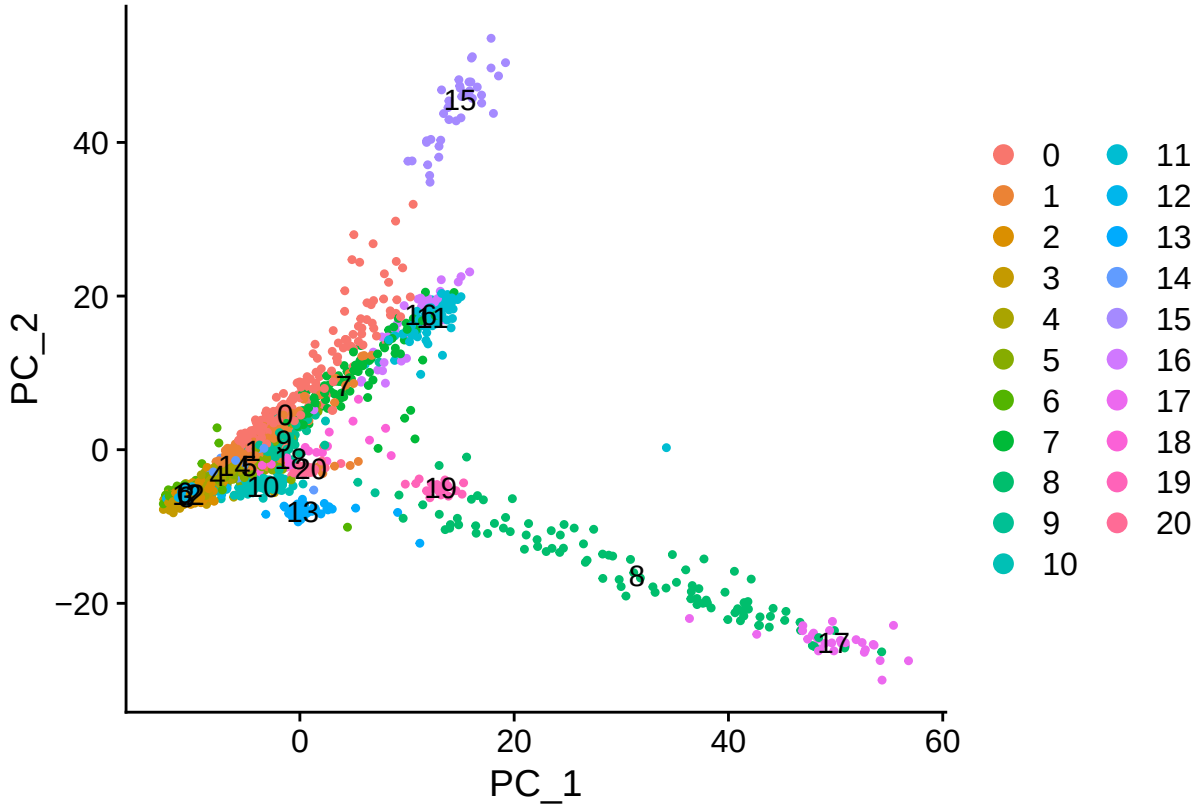
PC_2
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