

EUFLOW_DOCUMENTATION.R

Mcdade

Wed Aug 31 10:06:59 2016

```
##           X TCGA.04.1348 TCGA.04.1357 TCGA.04.1362 TCGA.04.1514
## 1 ACACA_v1      2.7465      1.7817      3.1331      7.7577
## 2 AKT1_v1      59.0196     56.3896     35.2372     53.8846
## 3 AKT2_v1      38.4897     20.8841     26.0161     19.7833
## 4 AKT3_v1       1.1253      1.3015      0.3474      1.5601
## 5 ANXA1_v1     77.4788    120.5428    303.1342     8.0768
```

```
##           X TCGA.04.1348 TCGA.04.1357 TCGA.04.1362 TCGA.04.1514
## 1 ACACA      0.137025    -1.878242    -0.043323    -0.337896
## 2 AKT1      0.164359     0.893065    -1.453180     0.620281
## 3 AKT2      0.164359     0.893065    -1.453180     0.620281
## 4 AKT3      0.164359     0.893065    -1.453180     0.620281
## 5 ANXA1     -0.169000     0.096700     1.540100    -2.791800
```

```
Workflow.Data<-WorkflowEvaluationData(EvaluationExperimentSet,ReferenceSet)
```

```
Merged.options<-merge.tag.options(Workflow.Data)
head(Merged.options,n=5)[1:5]
```

```
##           Symbol TCGA.04.1348 TCGA.04.1357 TCGA.04.1362 TCGA.04.1514
## ACACA_DRIVER  ACACA      0.137025    -1.878242    -0.043323    -0.337896
## AKT1_DRIVER   AKT1      0.164359     0.893065    -1.453180     0.620281
## AKT2_DRIVER   AKT2      0.164359     0.893065    -1.453180     0.620281
## AKT3_DRIVER   AKT3      0.164359     0.893065    -1.453180     0.620281
## ANXA1_DRIVER  ANXA1     -0.169000     0.096700     1.540100    -2.791800
```

```
row.names(Merged.options)
```

```
## [1] "ACACA_DRIVER"      "AKT1_DRIVER"      "AKT2_DRIVER"
## [4] "AKT3_DRIVER"      "ANXA1_DRIVER"     "AR_DRIVER"
## [7] "BAX_DRIVER"       "BCL2_DRIVER"      "BCL2L1_DRIVER"
## [10] "BCL2L1_DRIVER"    "BECN1_DRIVER"     "BIRC2_DRIVER"
## [13] "CAV1_DRIVER"      "CCNB1_DRIVER"     "CCND1_DRIVER"
## [16] "CCNE1_DRIVER"     "CDH1_DRIVER"      "CDH2_DRIVER"
## [19] "CDKN1B_DRIVER"    "CLDN7_DRIVER"     "COL6A1_DRIVER"
## [22] "CTNNA1_DRIVER"    "CTNNB1_DRIVER"    "DIABLO_DRIVER"
## [25] "DVL3_DRIVER"      "EEF2K_DRIVER"     "EGFR_DRIVER"
## [28] "EIF4E_DRIVER"     "EIF4EBP1_DRIVER"  "ERBB2_DRIVER"
## [31] "ERBB3_DRIVER"     "ERRFI1_DRIVER"    "ESR1_DRIVER"
## [34] "GATA3_DRIVER"     "GSK3A_DRIVER"     "GSK3B_DRIVER"
## [37] "IGFBP2_DRIVER"    "IRS1_DRIVER"      "KDR_DRIVER"
## [40] "KIT_DRIVER"       "MAP2K1_DRIVER"    "MAPK1_DRIVER"
## [43] "MAPK14_DRIVER"    "MTOR_DRIVER"      "NCOA3_DRIVER"
## [46] "NOTCH1_DRIVER"    "PCNA_DRIVER"      "PECAM1_DRIVER"
## [49] "PGR_DRIVER"       "PRKAA1_DRIVER"    "PRKCA_DRIVER"
```

## [52]	"PTEN_DRIVER"	"PXN_DRIVER"	"RAF1_DRIVER"
## [55]	"RB1_DRIVER"	"RPS6_DRIVER"	"RPS6KB1_DRIVER"
## [58]	"SMAD1_DRIVER"	"SMAD3_DRIVER"	"SMAD4_DRIVER"
## [61]	"SRC_DRIVER"	"STAT5A_DRIVER"	"STMN1_DRIVER"
## [64]	"SYK_DRIVER"	"TP53_DRIVER"	"YAP1_DRIVER"
## [67]	"YBX1_DRIVER"	"ACACA_WFO_RS_1"	"AKT1_WFO_RS_1"
## [70]	"AKT2_WFO_RS_1"	"AKT3_WFO_RS_1"	"ANXA1_WFO_RS_1"
## [73]	"AR_WFO_RS_1"	"BAX_WFO_RS_1"	"BCL2_WFO_RS_1"
## [76]	"BCL2L1_WFO_RS_1"	"BCL2L11_WFO_RS_1"	"BECN1_WFO_RS_1"
## [79]	"BIRC2_WFO_RS_1"	"CAV1_WFO_RS_1"	"CCNB1_WFO_RS_1"
## [82]	"CCND1_WFO_RS_1"	"CCNE1_WFO_RS_1"	"CDH1_WFO_RS_1"
## [85]	"CDH2_WFO_RS_1"	"CDKN1B_WFO_RS_1"	"CLDN7_WFO_RS_1"
## [88]	"COL6A1_WFO_RS_1"	"CTNNA1_WFO_RS_1"	"CTNNB1_WFO_RS_1"
## [91]	"DIABLO_WFO_RS_1"	"DVL3_WFO_RS_1"	"EEF2K_WFO_RS_1"
## [94]	"EGFR_WFO_RS_1"	"EIF4E_WFO_RS_1"	"EIF4EBP1_WFO_RS_1"
## [97]	"ERBB2_WFO_RS_1"	"ERBB3_WFO_RS_1"	"ERRFI1_WFO_RS_1"
## [100]	"ESR1_WFO_RS_1"	"GATA3_WFO_RS_1"	"GSK3A_WFO_RS_1"
## [103]	"GSK3B_WFO_RS_1"	"IGFBP2_WFO_RS_1"	"IRS1_WFO_RS_1"
## [106]	"KDR_WFO_RS_1"	"KIT_WFO_RS_1"	"MAP2K1_WFO_RS_1"
## [109]	"MAPK1_WFO_RS_1"	"MAPK14_WFO_RS_1"	"MTOR_WFO_RS_1"
## [112]	"NCOA3_WFO_RS_1"	"NOTCH1_WFO_RS_1"	"PCNA_WFO_RS_1"
## [115]	"PECAM1_WFO_RS_1"	"PGR_WFO_RS_1"	"PRKAA1_WFO_RS_1"
## [118]	"PRKCA_WFO_RS_1"	"PTEN_WFO_RS_1"	"PXN_WFO_RS_1"
## [121]	"RAF1_WFO_RS_1"	"RB1_WFO_RS_1"	"RPS6_WFO_RS_1"
## [124]	"RPS6KB1_WFO_RS_1"	"SMAD1_WFO_RS_1"	"SMAD3_WFO_RS_1"
## [127]	"SMAD4_WFO_RS_1"	"SRC_WFO_RS_1"	"STAT5A_WFO_RS_1"
## [130]	"STMN1_WFO_RS_1"	"SYK_WFO_RS_1"	"TP53_WFO_RS_1"
## [133]	"YAP1_WFO_RS_1"	"YBX1_WFO_RS_1"	"ACACA_WFO_RS_2"
## [136]	"AKT1_WFO_RS_2"	"AKT2_WFO_RS_2"	"AKT3_WFO_RS_2"
## [139]	"ANXA1_WFO_RS_2"	"AR_WFO_RS_2"	"BAX_WFO_RS_2"
## [142]	"BCL2_WFO_RS_2"	"BCL2L1_WFO_RS_2"	"BCL2L11_WFO_RS_2"
## [145]	"BECN1_WFO_RS_2"	"BIRC2_WFO_RS_2"	"CAV1_WFO_RS_2"
## [148]	"CCNB1_WFO_RS_2"	"CCND1_WFO_RS_2"	"CCNE1_WFO_RS_2"
## [151]	"CDH1_WFO_RS_2"	"CDH2_WFO_RS_2"	"CDKN1B_WFO_RS_2"
## [154]	"CLDN7_WFO_RS_2"	"COL6A1_WFO_RS_2"	"CTNNA1_WFO_RS_2"
## [157]	"CTNNB1_WFO_RS_2"	"DIABLO_WFO_RS_2"	"DVL3_WFO_RS_2"
## [160]	"EEF2K_WFO_RS_2"	"EGFR_WFO_RS_2"	"EIF4E_WFO_RS_2"
## [163]	"EIF4EBP1_WFO_RS_2"	"ERBB2_WFO_RS_2"	"ERBB3_WFO_RS_2"
## [166]	"ERRFI1_WFO_RS_2"	"ESR1_WFO_RS_2"	"GATA3_WFO_RS_2"
## [169]	"GSK3A_WFO_RS_2"	"GSK3B_WFO_RS_2"	"IGFBP2_WFO_RS_2"
## [172]	"IRS1_WFO_RS_2"	"KDR_WFO_RS_2"	"KIT_WFO_RS_2"
## [175]	"MAP2K1_WFO_RS_2"	"MAPK1_WFO_RS_2"	"MAPK14_WFO_RS_2"
## [178]	"MTOR_WFO_RS_2"	"NCOA3_WFO_RS_2"	"NOTCH1_WFO_RS_2"
## [181]	"PCNA_WFO_RS_2"	"PECAM1_WFO_RS_2"	"PGR_WFO_RS_2"
## [184]	"PRKAA1_WFO_RS_2"	"PRKCA_WFO_RS_2"	"PTEN_WFO_RS_2"
## [187]	"PXN_WFO_RS_2"	"RAF1_WFO_RS_2"	"RB1_WFO_RS_2"
## [190]	"RPS6_WFO_RS_2"	"RPS6KB1_WFO_RS_2"	"SMAD1_WFO_RS_2"
## [193]	"SMAD3_WFO_RS_2"	"SMAD4_WFO_RS_2"	"SRC_WFO_RS_2"
## [196]	"STAT5A_WFO_RS_2"	"STMN1_WFO_RS_2"	"SYK_WFO_RS_2"
## [199]	"TP53_WFO_RS_2"	"YAP1_WFO_RS_2"	"YBX1_WFO_RS_2"

Performing correlations...

drivers workflow_options_merged spearman

```
## 1 ACACA_DRIVER      ACACA_WFO_RS_1  0.53894840
## 2 ACACA_DRIVER      ACACA_WFO_RS_2  0.56452003
## 3 AKT1_DRIVER       AKT1_WFO_RS_1   0.52934338
## 4 AKT1_DRIVER       AKT1_WFO_RS_2   0.54777270
## 5 AKT2_DRIVER       AKT2_WFO_RS_1  -0.04651546
## 6 AKT2_DRIVER       AKT2_WFO_RS_2  -0.04524932
```

```
Posterior.dataframe<-Workflow.posteriorestimate(Model.quality.object,Model.Quality)
```

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## Performing bootstrap R= 200 on correlations...
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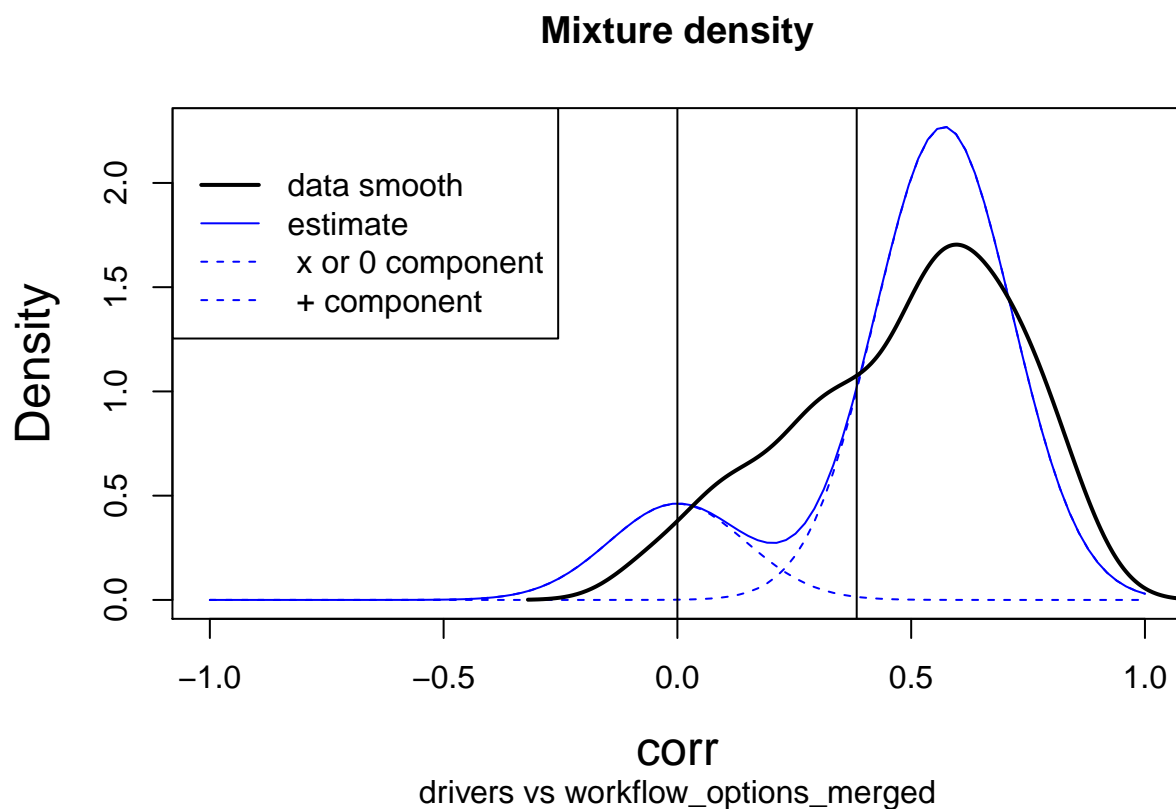
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```



```
Workflow.Evaluation.table(Posterior.dataframe)
```

```

##          label Utp Lfp deltaPlus nPairs   PrPlus   PrTrue   PrFalse
## Use All Use All  1   1         1    133 0.9573690 0.9573690 0.04263095
## 1         1   1   1         1     67 0.9440893 0.9440893 0.05591067
## 2         2   1   1         1     66 0.9707239 0.9707239 0.02927611
##          Utrue    Lfalse Eutility1 Eutility
## Use All 0.9573690 0.04263095 0.9147381 121.66017
## 1      0.9440893 0.05591067 0.8881787  59.50797
## 2      0.9707239 0.02927611 0.9414478  62.13555

```

```
“““
```