

Co-expression analysis of RNA-seq data with the HTSCluster package

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HTSCluster version 2.0.2

Abstract

This vignette explains the use of the *HTSCluster* package. For a presentation of the statistical method, please see our paper.

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1 Input data

In this vignette, we will work with the gene level read counts from the ... data package.

2 Inference: Identifying co-expressed genes

To be completed.

3 Further reading

For more information on the statistical method, see [1].

4 Session Info

```
> sessionInfo()

R version 3.1.1 (2014-07-10)
Platform: x86_64-w64-mingw32/x64 (64-bit)

locale:
[1] LC_COLLATE=French_France.1252  LC_CTYPE=French_France.1252    LC_MONETARY=French_France.1252
[4] LC_NUMERIC=C                  LC_TIME=French_France.1252

attached base packages:
[1] stats      graphics   grDevices  utils      datasets   methods    base

other attached packages:
```

```
[1] SweaveListingUtils_0.6.1 startupmsg_0.9           HTSCluster_2.0.2
[4] RColorBrewer_1.0-5      ggplot2_1.0.0          plotrix_3.5-7

loaded via a namespace (and not attached):
[1] colorspace_1.2-4   digest_0.6.4       edgeR_3.4.2      grid_3.1.1
[5] gtable_0.1.2      limma_3.18.13     MASS_7.3-33     munsell_0.4.2
[9] plyr_1.8.1        poisson.glm.mix_1.2 proto_0.3-10   Rcpp_0.11.2
[13] reshape2_1.4      scales_0.2.4      stringr_0.6.2   tools_3.1.1
```

References

- [1] Andrea Rau, Cathy Maugis-Rabusseau, Marie-Laure Martin-Magniette, and Gilles Celeux. Co-expression analysis of high-throughput transcriptome sequencing data with Poisson mixture models. (*submitted*), 2014.