

Test

17 December 2021

Contents

Test

```
options(width = 120)
sessioninfo::session_info()
## - Session info -----
## setting value
## version R version 4.1.2 (2021-11-01)
## os      macOS Big Sur 10.16
## system x86_64, darwin17.0
## ui      X11
## language (EN)
## collate en_US.UTF-8
## ctype   en_US.UTF-8
## tz      America/New_York
## date    2021-12-17
## pandoc  2.16.2 @ /usr/local/bin/ (via rmarkdown)
##
## - Packages -----
## package      * version   date (UTC) lib source
## AnnotationDbi 1.56.2    2021-11-09 [1] Bioconductor
## AnnotationHub 3.2.0     2021-10-26 [1] Bioconductor
## assertthat    0.2.1     2019-03-21 [1] CRAN (R 4.1.0)
## attempt       0.3.1     2020-05-03 [1] CRAN (R 4.1.0)
## beachmat      2.10.0    2021-10-26 [1] Bioconductor
## beeswarm      0.4.0     2021-06-01 [1] CRAN (R 4.1.0)
## benchmarkme   1.0.7     2021-03-21 [1] CRAN (R 4.1.0)
## benchmarkmeData 1.0.4     2020-04-23 [1] CRAN (R 4.1.0)
## Biobase       * 2.54.0    2021-10-26 [1] Bioconductor
## BiocFileCache 2.2.0     2021-10-26 [1] Bioconductor
## BiocGenerics  * 0.40.0    2021-10-26 [1] Bioconductor
## BiocIO        1.4.0     2021-10-26 [1] Bioconductor
## BiocManager   1.30.16   2021-06-15 [1] CRAN (R 4.1.0)
## BiocNeighbors 1.12.0    2021-10-26 [1] Bioconductor
## BiocParallel  1.28.3    2021-12-09 [1] Bioconductor
## BiocSingular  1.10.0    2021-10-26 [1] Bioconductor
## BiocStyle     * 2.23.1    2021-12-17 [1] Github (Bioconductor/BiocStyle@932ae2e)
## BiocVersion   3.14.0    2021-05-19 [1] Bioconductor
## Biostrings    2.62.0    2021-10-26 [1] Bioconductor
## bit           4.0.4     2020-08-04 [1] CRAN (R 4.1.0)
## bit64         4.0.5     2020-08-30 [1] CRAN (R 4.1.0)
## bitops        1.0-7     2021-04-24 [1] CRAN (R 4.1.0)
## blob          1.2.2     2021-07-23 [1] CRAN (R 4.1.0)
## bookdown      0.24      2021-09-02 [1] CRAN (R 4.1.0)
## bslib         0.3.1     2021-10-06 [1] CRAN (R 4.1.0)
## cachem        1.0.6     2021-08-19 [1] CRAN (R 4.1.0)
## callr         3.7.0     2021-04-20 [1] CRAN (R 4.1.0)
## cli           3.1.0     2021-10-27 [1] CRAN (R 4.1.0)
## codetools     0.2-18    2020-11-04 [1] CRAN (R 4.1.2)
## colorout      1.2-2     2021-11-23 [1] Github (jalvesaq/colorout@79931fd)
## colorspace    2.0-2     2021-06-24 [1] CRAN (R 4.1.0)
## config        0.3.1     2020-12-17 [1] CRAN (R 4.1.0)
## cowplot       1.1.1     2020-12-30 [1] CRAN (R 4.1.0)
## crayon        1.4.2     2021-10-29 [1] CRAN (R 4.1.0)
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```
## curl 4.3.2 2021-06-23 [1] CRAN (R 4.1.0)
## data.table 1.14.2 2021-09-27 [1] CRAN (R 4.1.0)
## DBI 1.1.1 2021-01-15 [1] CRAN (R 4.1.0)
## dbplyr 2.1.1 2021-04-06 [1] CRAN (R 4.1.0)
## DelayedArray 0.20.0 2021-10-26 [1] Bioconductor
## DelayedMatrixStats 1.16.0 2021-10-26 [1] Bioconductor
## desc 1.4.0 2021-09-28 [1] CRAN (R 4.1.0)
## devtools * 2.4.3 2021-11-30 [1] CRAN (R 4.1.2)
## digest 0.6.29 2021-12-01 [1] CRAN (R 4.1.2)
## dockerfiler 0.1.4 2021-09-03 [1] CRAN (R 4.1.0)
## doParallel 1.0.16 2020-10-16 [1] CRAN (R 4.1.0)
## dotCall64 1.0-1 2021-02-11 [1] CRAN (R 4.1.0)
## dplyr 1.0.7 2021-06-18 [1] CRAN (R 4.1.0)
## dqrng 0.3.0 2021-05-01 [1] CRAN (R 4.1.0)
## DropletUtils 1.14.1 2021-11-08 [1] Bioconductor
## DT 0.20 2021-11-15 [1] CRAN (R 4.1.0)
## edgeR 3.36.0 2021-10-26 [1] Bioconductor
## ellipsis 0.3.2 2021-04-29 [1] CRAN (R 4.1.0)
## evaluate 0.14 2019-05-28 [1] CRAN (R 4.1.0)
## ExperimentHub 2.2.0 2021-10-26 [1] Bioconductor
## fansi 0.5.0 2021-05-25 [1] CRAN (R 4.1.0)
## fastmap 1.1.0 2021-01-25 [1] CRAN (R 4.1.0)
## fields 13.3 2021-10-30 [1] CRAN (R 4.1.0)
## filelock 1.0.2 2018-10-05 [1] CRAN (R 4.1.0)
## foreach 1.5.1 2020-10-15 [1] CRAN (R 4.1.0)
## fs 1.5.2 2021-12-08 [1] CRAN (R 4.1.0)
## generics 0.1.1 2021-10-25 [1] CRAN (R 4.1.0)
## GenomeInfoDb * 1.30.0 2021-10-26 [1] Bioconductor
## GenomeInfoDbData 1.2.7 2021-11-23 [1] Bioconductor
## GenomicAlignments 1.30.0 2021-10-26 [1] Bioconductor
## GenomicRanges * 1.46.1 2021-11-18 [1] Bioconductor
## ggbeeswarm 0.6.0 2017-08-07 [1] CRAN (R 4.1.0)
## ggplot2 3.3.5 2021-06-25 [1] CRAN (R 4.1.0)
## ggrepel 0.9.1 2021-01-15 [1] CRAN (R 4.1.0)
## glue 1.6.0 2021-12-17 [1] CRAN (R 4.1.2)
## golem 0.3.1 2021-04-17 [1] CRAN (R 4.1.0)
## gridExtra 2.3 2017-09-09 [1] CRAN (R 4.1.0)
## gtable 0.3.0 2019-03-25 [1] CRAN (R 4.1.0)
## HDF5Array 1.22.1 2021-11-14 [1] Bioconductor
## htmltools 0.5.2 2021-08-25 [1] CRAN (R 4.1.0)
## htmlwidgets 1.5.4 2021-09-08 [1] CRAN (R 4.1.0)
## httpuv 1.6.4 2021-12-14 [1] CRAN (R 4.1.0)
## httr 1.4.2 2020-07-20 [1] CRAN (R 4.1.0)
## interactiveDisplayBase 1.32.0 2021-10-26 [1] Bioconductor
## IRanges * 2.28.0 2021-10-26 [1] Bioconductor
## irlba 2.3.5 2021-12-06 [1] CRAN (R 4.1.0)
## iterators 1.0.13 2020-10-15 [1] CRAN (R 4.1.0)
## jquerylib 0.1.4 2021-04-26 [1] CRAN (R 4.1.0)
## jsonlite 1.7.2 2020-12-09 [1] CRAN (R 4.1.0)
## KEGGREST 1.34.0 2021-10-26 [1] Bioconductor
## knitr 1.37 2021-12-16 [1] CRAN (R 4.1.2)
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## later 1.3.0 2021-08-18 [1] CRAN (R 4.1.0)
## lattice 0.20-45 2021-09-22 [1] CRAN (R 4.1.2)
## lazyeval 0.2.2 2019-03-15 [1] CRAN (R 4.1.0)
## lifecycle 1.0.1 2021-09-24 [1] CRAN (R 4.1.0)
## limma 3.50.0 2021-10-26 [1] Bioconductor
## locfit 1.5-9.4 2020-03-25 [1] CRAN (R 4.1.0)
## magick 2.7.3 2021-08-18 [1] CRAN (R 4.1.0)
## magrittr 2.0.1 2020-11-17 [1] CRAN (R 4.1.0)
## maps 3.4.0 2021-09-25 [1] CRAN (R 4.1.0)
## Matrix 1.4-0 2021-12-08 [1] CRAN (R 4.1.2)
## MatrixGenerics * 1.6.0 2021-10-26 [1] Bioconductor
## matrixStats * 0.61.0 2021-09-17 [1] CRAN (R 4.1.0)
## memoise 2.0.1 2021-11-26 [1] CRAN (R 4.1.0)
## mime 0.12 2021-09-28 [1] CRAN (R 4.1.0)
## munsell 0.5.0 2018-06-12 [1] CRAN (R 4.1.0)
## pillar 1.6.4 2021-10-18 [1] CRAN (R 4.1.0)
## pkgbuild 1.3.0 2021-12-09 [1] CRAN (R 4.1.0)
## pkgconfig 2.0.3 2019-09-22 [1] CRAN (R 4.1.0)
## pkgload 1.2.4 2021-11-30 [1] CRAN (R 4.1.2)
## plotly 4.10.0 2021-10-09 [1] CRAN (R 4.1.0)
## png 0.1-7 2013-12-03 [1] CRAN (R 4.1.0)
## Polychrome 1.3.1 2021-07-16 [1] CRAN (R 4.1.0)
## prettyunits 1.1.1 2020-01-24 [1] CRAN (R 4.1.0)
## processx 3.5.2 2021-04-30 [1] CRAN (R 4.1.0)
## promises 1.2.0.1 2021-02-11 [1] CRAN (R 4.1.0)
## prompt 1.0.1 2021-11-24 [1] Github (gaborcsardi/prompt@7ef0f2e)
## ps 1.6.0 2021-02-28 [1] CRAN (R 4.1.0)
## purrr 0.3.4 2020-04-17 [1] CRAN (R 4.1.0)
## R.methodsS3 1.8.1 2020-08-26 [1] CRAN (R 4.1.0)
## R.oo 1.24.0 2020-08-26 [1] CRAN (R 4.1.0)
## R.utils 2.11.0 2021-09-26 [1] CRAN (R 4.1.0)
## R6 2.5.1 2021-08-19 [1] CRAN (R 4.1.0)
## rappdirs 0.3.3 2021-01-31 [1] CRAN (R 4.1.0)
## RColorBrewer 1.1-2 2014-12-07 [1] CRAN (R 4.1.0)
## Rcpp 1.0.7 2021-07-07 [1] CRAN (R 4.1.0)
## RCurl 1.98-1.5 2021-09-17 [1] CRAN (R 4.1.0)
## remotes 2.4.2 2021-11-30 [1] CRAN (R 4.1.2)
## restfulr 0.0.13 2017-08-06 [1] CRAN (R 4.1.0)
## rhdf5 2.38.0 2021-10-26 [1] Bioconductor
## rhdf5filters 1.6.0 2021-10-26 [1] Bioconductor
## Rhdf5lib 1.16.0 2021-10-26 [1] Bioconductor
## rjson 0.2.20 2018-06-08 [1] CRAN (R 4.1.0)
## rlang 0.4.12 2021-10-18 [1] CRAN (R 4.1.0)
## rmarkdown 2.11 2021-09-14 [1] CRAN (R 4.1.0)
## roxygen2 7.1.2 2021-09-08 [1] CRAN (R 4.1.0)
## rprojroot 2.0.2 2020-11-15 [1] CRAN (R 4.1.0)
## Rsamtools 2.10.0 2021-10-26 [1] Bioconductor
## RSQLite 2.2.9 2021-12-06 [1] CRAN (R 4.1.0)
## rsthemes 0.3.1 2021-11-23 [1] Github (gadenbuie/rsthemes@bbe73ca)
## rstudioapi 0.13 2020-11-12 [1] CRAN (R 4.1.0)
## rsvd 1.0.5 2021-04-16 [1] CRAN (R 4.1.0)
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## rtracklayer          1.54.0    2021-10-26 [1] Bioconductor
## S4Vectors            * 0.32.3    2021-11-21 [1] Bioconductor
## sass                 0.4.0.9000 2021-11-23 [1] Github (rstudio/sass@f7a9540)
## ScaledMatrix        1.2.0      2021-10-26 [1] Bioconductor
## scales              1.1.1      2020-05-11 [1] CRAN (R 4.1.0)
## scater              1.22.0     2021-10-26 [1] Bioconductor
## scatterplot3d       0.3-41     2018-03-14 [1] CRAN (R 4.1.0)
## scuttle             1.4.0      2021-10-26 [1] Bioconductor
## sessioninfo         1.2.2      2021-12-06 [1] CRAN (R 4.1.0)
## shiny               1.7.1      2021-10-02 [1] CRAN (R 4.1.0)
## shinyWidgets        0.6.2      2021-09-17 [1] CRAN (R 4.1.0)
## SingleCellExperiment * 1.16.0     2021-10-26 [1] Bioconductor
## spam                2.7-0      2021-06-25 [1] CRAN (R 4.1.0)
## sparseMatrixStats   1.6.0      2021-10-26 [1] Bioconductor
## SpatialExperiment   * 1.4.0      2021-10-26 [1] Bioconductor
## spatialLIBD         * 1.6.4      2021-12-08 [1] Github (LieberInstitute/spatialLIBD@ea2c037)
## stringi             1.7.6      2021-11-29 [1] CRAN (R 4.1.2)
## stringr             1.4.0      2019-02-10 [1] CRAN (R 4.1.0)
## SummarizedExperiment * 1.24.0     2021-10-26 [1] Bioconductor
## testthat            * 3.1.1      2021-12-03 [1] CRAN (R 4.1.0)
## tibble              3.1.6      2021-11-07 [1] CRAN (R 4.1.0)
## tidyr               1.1.4      2021-09-27 [1] CRAN (R 4.1.0)
## tidyselect          1.1.1      2021-04-30 [1] CRAN (R 4.1.0)
## usethis             * 2.1.5      2021-12-09 [1] CRAN (R 4.1.0)
## utf8                1.2.2      2021-07-24 [1] CRAN (R 4.1.0)
## vctrs               0.3.8      2021-04-29 [1] CRAN (R 4.1.0)
## vipor              0.4.5      2017-03-22 [1] CRAN (R 4.1.0)
## viridis             0.6.2      2021-10-13 [1] CRAN (R 4.1.0)
## viridisLite         0.4.0      2021-04-13 [1] CRAN (R 4.1.0)
## withr              2.4.3      2021-11-30 [1] CRAN (R 4.1.2)
## xfun                0.29       2021-12-14 [1] CRAN (R 4.1.0)
## XML                 3.99-0.8   2021-09-17 [1] CRAN (R 4.1.0)
## xml2                1.3.3      2021-11-30 [1] CRAN (R 4.1.2)
## xtable              1.8-4      2019-04-21 [1] CRAN (R 4.1.0)
## XVector             0.34.0     2021-10-26 [1] Bioconductor
## yaml                2.2.1      2020-02-01 [1] CRAN (R 4.1.0)
## zlibbioc            1.40.0     2021-10-26 [1] Bioconductor
##
## [1] /Library/Frameworks/R.framework/Versions/4.1/Resources/library
##
## -----
```