Package 'mCSEAdata'

May 15, 2025

Type Package

Title Data package for mCSEA package

Version 1.28.0

Author Jordi Martorell Marugán

Maintainer Jordi Martorell Marugán <jmartorellm@gmail.com>

Description Data objects necessary to some mCSEA package functions.
There are also example data objects to illustrate mCSEA package functionality.

Depends R (>= 3.5)

Imports GenomicRanges

Suggests BiocStyle, knitr, rmarkdown

VignetteBuilder knitr

biocViews Homo_sapiens_Data, MethylationArrayData, MicroarrayData,
ExperimentData

License GPL-2

Encoding UTF-8

LazyData true

LazyDataCompression xz

git_url https://git.bioconductor.org/packages/mCSEAdata

git_branch RELEASE_3_21

git_last_commit 479e388

git_last_commit_date 2025-04-15

Repository Bioconductor 3.21

Date/Publication 2025-05-15

Contents

---

mCSEAdata-package   *Data and examples for mCSEA package*

Description

Association files between Illumina's 450K and EPIC microarrays probes and promoters, CpG Islands and gene bodies. Annotation for the previous microarrays' probes. There are also sample data from EPIC platform and expression microarrays to test mCSEA functions and a necessary object for mCSEAPlot function.

Author(s)

Jordi Martorell Marugán

Maintainer: Jordi Martorell Marugán<jordi.martorell@genyo.es>

Examples

```
data(mcseadata)
data(bandTable)
```

---

bandTable   *Human chromosomes information*

Description

bandTable contains chromosomes band information and centromer location. It is used by mCSEAPlot() function to plot the chromosome track.

Usage

```
data(bandTable)
```

Format

data.frame

Source

Obtained with Gviz's IdeogramTrack() function.

---

mcseadata	*Data and examples for mCSEA package*

Description

Association files between Illumina's 450K and EPIC microarrays probes and promoters, CpG Islands and gene bodies. There are also sample data from EPIC platform to test mCSEA functions and annotation for 450K and EPIC probes.

Usage

```
data(mcseadata)
```

Format

matrix (betaTest and exprTest), data.frame (phenoTest), list (assocPromoters450k, assocPromotersEPIC, assocGenes450k, assocGenesEPIC, assocCGI450k and assocCGIEPIC) and GRanges (annot450K and annotEPIC)

Source

betaTest and phenoTest are simulated data. exprTest was obtained from leukemiasEset package. annot450K and annotEPIC were constructed with minfi package. assocPromoters450k, assocPromotersEPIC, assocGenes450k, assocGenesEPIC, assocCGI450k and assocCGIEPIC were constructed from IlluminaHumanMethylation450kanno.ilmn12.hg19 and IlluminaHumanMethylationEPICanno.ilm10b2.hg19 packages annotation data.

Index