

Package ‘mCSEAdata’

June 11, 2024

Type Package
Title Data package for mCSEA package
Version 1.24.0
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_19
git_last_commit 60f3e20
git_last_commit_date 2024-04-30
Repository Bioconductor 3.19
Date/Publication 2024-06-11

Contents

mCSEAdata-package	2
bandTable	2
mcseadata	3
Index	4

`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

* datasets

- bandTable, [2](#)
- mcseadata, [3](#)
- mCSEAdata-package, [2](#)

- annot450K (mcseadata), [3](#)
- annotEPIC (mcseadata), [3](#)
- assocCGI450k (mcseadata), [3](#)
- assocCGIEPIC (mcseadata), [3](#)
- assocGenes450k (mcseadata), [3](#)
- assocGenesEPIC (mcseadata), [3](#)
- assocPromoters450k (mcseadata), [3](#)
- assocPromotersEPIC (mcseadata), [3](#)

- bandTable, [2](#)
- betaTest (mcseadata), [3](#)

- exprTest (mcseadata), [3](#)

- mCSEAdata (mCSEAdata-package), [2](#)
- mcseadata, [3](#)
- mCSEAdata-package, [2](#)

- phenoTest (mcseadata), [3](#)