# Package 'mCSEAdata'

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Type Package

Title Data package for mCSEA package

<b>Version</b> 1.26.1
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<b>Description</b> Data objects necessary to some mCSEA package functions.  There are also example data objects to illustrate mCSEA package functionality.
<b>Depends</b> R (>= $3.5$ )
Imports GenomicRanges
Suggests BiocStyle, knitr, rmarkdown
VignetteBuilder knitr
<b>biocViews</b> Homo_sapiens_Data, MethylationArrayData, MicroarrayData, ExperimentData
License GPL-2
Encoding UTF-8
LazyData true
LazyDataCompression xz
git_url https://git.bioconductor.org/packages/mCSEAdata
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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.

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# **Examples**

data(mcseadata)
data(bandTable)

bandTable

Human chromosomes information

# Description

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

# Usage

data(bandTable)

#### **Format**

data.frame

# Source

Obtained with Gviz's IdeogramTrack() function.

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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**

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

#### **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.

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