Package 'Methplot'

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Type Package

Title Visualize the methylation patterns

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Imports ggplot2, grid, reshape

Description It plots the output from Methpup

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Methplot-package   *Methplot*

Description

This package plots the output from Methpup in a 2-D barcode

Author(s)

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getdata   *This function read the output from Methpup into R*

Description

This function read the output from Methpup into R

Usage

```
getdata(filelist, n, gene)
```

Arguments

filelist	the directory where the output files are saved in
gene	the region that you are interested to look at the methylation profile
n	the number of CpG sites in the region that you specified in "gene".

Value

This function could yield a dataframe saying the read number detected in each methylation pattern in the given region in all samples under "filelist" directory.

Author(s)

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Examples

```
foxp3<-getdata(system.file("extdata", package="Methplot"), 10, "foxp3")
```

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plotdata   *This function visualizes the dataframe yielded by function "getdata".*

Description

Prerequisites: You need to install packages: "ggplot2", "grid", and "reshape"

Usage

```
plotdata(x, x.title, condition, n, legendpos = "null")
```

Arguments

x	the dataframe name that is in the format of "getdata" output
x.title	the title of the output plot
condition	a character vector that gives the sample list that you want to plot. These samples will be merged together by adding up the read numbers to yield one plot.
n	the number of CpG sites in this region.
legendpos	the position of the legend. Default: "null" ("left", "right", "bottom", "top", or two-element numeric vector)

Value

Output plot: Rows indicate reads and are presented in percentage (y axis), showing whether each of CpG sites (x axis) in the target region is methylated (light green) or demethylated (dark green). Reads are sorted so that those with no demethylated positions are at the bottom, and those with most demethylated positions are at the top.

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Examples

```
data(mydata)
plotdata(mydata, x.title="Methylation Plot", condition="P1_A1", n=10, legendpos="right")
```

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