Package 'EmpericalBrownsMethod'

September 4, 2015

Title Uses Brown's method to combine p-values from dependent tests.

Version 0.1

Author William Poole

Maintainer David Gibbs <dgibbs@systemsbiology.org>

Description Combining P-values from multiple statistical tests is common in bioinformatics. However, this procedure is non-trivial for dependent P-values. This package implements an empirical adaptation of Brown's Method (an extension of Fisher's Method) for combining dependent P-values which is appropriate for highly correlated data sets found in high-throughput biological experiments.

Depends R (>= 3.2.0)

Suggests BiocStyle, testthat, knitr

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VignetteBuilder knitr

URL https://github.com/IlyaLab/CombiningDependentPvaluesUsingEBM.git

LazyData true

Encoding UTF-8

NeedsCompilation no

R topics documented:

allPvals *Data used in tests*

Description

This data is used in the unit tests and shows a usage example.

Usage

```
testData
```

Format

data.frame

Source

GEO

dat *Data used in tests*

Description

This data is used in the unit tests and shows a usage example.

Usage

```
testData
```

Format

data.frame

Source

GEO

empiricalBrownsMethod *EmpiricalBrownsMethod*

Description

Combine p-values

Usage

```
empiricalBrownsMethod(data_matrix, p_values, extra_info)
```

Arguments

data_matrix	a
p_values	b
extra_info	c

Examples

```
## restore the saved values to the current environment
  data(testData)
#  glypGenes <- pathways$gene[pathways$pathway == "GLYPICAN 3 NETWORK"];
#  glypPvals <- allPvals$pvalue.with.CHD4[allPvals$gene %in% glypGenes];
#  glypDat   <- dat[dat$V1 %in% glypGenes, 2:ncol(dat)];
#  print(empiricalBrownsMethod(data_matrix=glypDat, p_values=glypPvals, extra_info=T));
```

pathways *Data used in tests*

Description

This data is used in the unit tests and shows a usage example.

Usage

```
testData
```

Format

data.frame

Source

GEO

randData *Data used in tests*

Description

This data is used in the unit tests and shows a usage example.

Usage

```
testData
```

Format

data.frame

Source

GEO

testData *Data used in tests*

Description

This data is used in the unit tests and shows a usage example.

Usage

```
testData
```

Format

Four items

Source

GEO and generated.

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