

Package ‘a4Reporting’

April 9, 2015

Type Package

Title Automated Affymetrix Array Analysis Reporting Package

Version 1.14.0

Date 2010-06-08

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Description Automated Affymetrix Array Analysis Reporting Package

Depends methods, annaffy

Imports xtable, utils

biocViews Microarray

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annotationTable	<i>Function to Create an annotationTable</i>
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Description

This function takes data to be displayed as well as data containing hyperlinks corresponding to displayed data and constructs an object of class annotationTable

Usage

```
annotationTable(displayData, displayCols = NULL, hrefData = NULL)
```

Arguments

displayData	data frame containing data that is meant to be displayed in a LaTeX table
displayCols	list of named character vectors (of length one) that function as key-value pairs; the names (keys) correspond to columns for which the hyperlinks should be generated whereas the strings (values) indicate what kind of link should be produced based on the corresponding column in the displayData. The values should be one of "EntrezId" or "GOId".
hrefData	data frame containing hyperlink information for the columns of the same name in the displayData data frame

Details

If hrefData is given, the displayCols are not taken into account. If no hrefData is given, the information in displayCols allows to automatically create the hrefData.

Value

object of class 'annotationTable'

Author(s)

Tobias Verbeke

Examples

```
## some dummy data
dData <- data.frame(someSymbol = LETTERS[1:5],
                   accessionNumber =
                     c("X83928", "V00540", "U21090", "L38487", "M34057"))

at <- annotationTable(displayData = dData,
                      displayCols = list(accessionNumber = "EntrezId"))
```

annotationTable-class *Class "annotationTable"*

Description

Class to represent both displayed information and hyperlink information to prepare tabular output for LaTeX (with hyperlinks)

Objects from the Class

Objects can be created by calls of the form `new("annotationTable", ...)` or using the wrapper function `annotationTable`

Slots

`displayData`: Object of class "data.frame" containing the columns to be displayed in the table

`displayCols`: Object of class "list" giving key-value pairs that allow to automatically generate the hyperlinks for the corresponding columns of the `displayData`

`hrefData`: Object of class "data.frame" giving the hyperlink information for the corresponding columns of the `displayData`

Methods

`show` signature(object = "annotationTable"): print an annotationTable (without displaying the hyperlink information)

Author(s)

Tobias Verbeke

Examples

```
showClass("annotationTable")
```

`generateEntrezIdLinks` *Transform an ENTREZ ID into a hyperlink*

Description

Utility function to transform an ENTREZ ID into a hyperlink on the NCBI Entrez page for the given gene

Usage

```
generateEntrezIdLinks(x)
```

Arguments

x vector of Entrez IDs

Value

vector of hyperlinks for the corresponding Entrez IDs

Note

Snippet taken from the `annaffy` package

Author(s)

Tobias Verbeke

See Also

[generateGOIdLinks](#)

generateGOIdLinks *Transform a GO ID into a hyperlink*

Description

Utility function to transform a GO ID into a hyperlink to the corresponding page on the gene ontology website

Usage

```
generateGOIdLinks(x)
```

Arguments

x vector of GO IDs

Value

vector of hyperlinks

Note

Snippet taken from the annafy package

Author(s)

Tobias Verbeke

See Also

[generateEntrezIdLinks](#)

print.xtableAnnotationTable
Print method for 'xtableAnnotationTable' objects

Description

Print or export 'xtableAnnotationTable' objects

Usage

```
print.xtableAnnotationTable(x, ...)
```

Arguments

x	Object of class 'xtableAnnotationTable'
...	Further arguments passed to print.xtable

Details

Wrapper to be able to use a specific sanitize.text function in the print.xtable call

Author(s)

Tobias Verbeke

See Also

[print.xtable](#)

xtable-methods *Methods for Function xtable in Package 'annotationTable'*

Description

xtable methods for several a4 objects, such as annotationTable objects, topTable objects etc.

Methods

x = "annotationTable", caption = "missing", label = "missing", align = "missing", digits = "missing", display = "missing"
generates a LaTeX representation for the given annotationTable

x = "annotationTable", caption = "ANY", label = "ANY", align = "ANY", digits = "ANY", display = "ANY"
generates a LaTeX representation for the given annotationTable

x = "annotationTable", caption = "ANY", label = "ANY", align = "ANY", digits = "numeric", display = "ANY"
generates a LaTeX representation for the given annotationTable

Examples

```
## some dummy data
dData <- data.frame(someSymbol = LETTERS[1:5],
                   accessionNumber =
                     c("X83928", "V00540", "U21090", "L38487", "M34057"))

at <- annotationTable(displayData = dData,
                     displayCols = list(accessionNumber = "EntrezId"))

xat <- xtable(at)
print(xat, include.rownames = FALSE)
```

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