

Package ‘ggpval’

June 13, 2017

Type Package

Title Annotate Statistical Tests for 'ggplot2'

Version 0.1.0

Description Automatically perform desired statistical tests (e.g. `wilcox.test()`, `t.test()`) to compare between groups, and add test p-values to the plot with annotation bar.

Visualizing group differences are frequently performed by boxplots, violin plots etc..

Statistical test results are often needed to be annotated on the plots. This package provide a convenient function that work on 'ggplot2' objects,

perform desired statistical test between groups of interest and annotate the test results on the plot.

URL <https://github.com/s6juncheng/ggpval>

License GPL-3

Encoding UTF-8

Imports ggplot2, data.table

Suggests knitr, rmarkdown

LazyData true

VignetteBuilder knitr

RoxygenNote 6.0.1

NeedsCompilation no

Author Jun Cheng [aut, cre]

Maintainer Jun Cheng <s6juncheng@gmail.com>

Repository CRAN

Date/Publication 2017-06-12 23:03:42 UTC

R topics documented:

`add_pval` 2

Index 3

add_pval	<i>Add p-values to ggplot objects.</i>
----------	--

Description

Add p-values to ggplot objects.

Usage

```
add_pval(ggplot_obj, pairs = list(c(1, 2), c(1, 3)), test = "wilcox.test",
  heights = NULL, barheight = NULL, testsize = 5, pval_text_adj = NULL,
  annotation = NULL, log = FALSE, pval_star = FALSE,
  fold_change = FALSE)
```

Arguments

ggplot_obj	ggplot object
pairs	a list pairs of comparison. Groups indicated by integer numbers counted from left to right. e.g. list(c(1, 2), c(2, 3)) will compare first group with second, second group with third
test	character of statistical testing method. e.g. t.test, wilcox.test. Default wilcox.test
heights	integer or vector of integers. The heights of the p-value/annotation. Default maximum value from the data
barheight	tip bar height of the annotation. Default calculated by range_y / 20
testsize	p-value/annotation text size
pval_text_adj	distance of p-value/annotation from annotation bar. Default barheight/2
annotation	text to annotate. If specified, statistical test will not be done
log	whether y axis is log transformed. Default FALSE
pval_star	whether transform pval numbers to stars
fold_change	whether also compute and show fold changes. Default FALSE.

Examples

```
library(ggplot2)
library(ggpval)
data("PlantGrowth")
plt <- ggplot(PlantGrowth, aes(group, weight)) +
  geom_boxplot()
add_pval(plt, pairs = list(c(1, 3)), test='wilcox.test')
```

Index

add_pval, [2](#)