

# Package ‘signFlip’

June 11, 2020

**Type** Package

**Title** Permutation based one sample t test

**Version** 1.0

**Date** 2019-12-10

**Author** Angela Andreella

**Maintainer** Angela Andreella <angela.andreella@phd.unipd.it>

**Description** To finish

**License** GPL (>= 2)

**Imports** Rcpp (>= 1.0.3), matrixStats, stats

**LinkingTo** Rcpp, RcppArmadillo

**RoxygenNote** 7.1.0

**NeedsCompilation** yes

**Archs** i386, x64

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signFlip-package	<i>Permutation based one sample t test</i>
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## Description

To finish

## Details

The DESCRIPTION file:

Package:	signFlip
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Date: 2019-12-10  
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#### Index of help topics:

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An overview of how to use the package, including the most important functions

#### Author(s)

Angela Andreella

Maintainer: Angela Andreella <angela.andreella@phd.unipd.it>

#### References

Literature or other references for background information

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oneSample	<i>Permutatation-based one sample t-test</i>
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#### Description

Performs sign-flipping, i.e. permutation, one-sample t-tests

#### Usage

```
oneSample(X, B = 1000, alternative = "two.sided", seed = NULL)
```

#### Arguments

X	data where rows represents the variables and columns the observations
B	number of permutations to perform, default is 1000.
alternative	character referring to the alternative hypothesis, "two.sided", "greater" or "less". Default is "two.sided"
rand	logical. Should p values computed by permutation distribution?
seed	specify seed, default is 1234.

#### Value

Returns a list with the following objects: Test observed one sample t-test, Test\_H0 Test statistics under H0, pv observed p-values, pv\_H0 p-values under H0

**Author(s)**

Angela Andreella

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rowVariance*Rows Variance*

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**Description**

Performs the variance for each row in a matrix

**Usage**

```
rowVariance(X, na.rm = TRUE)
```

**Arguments**

X	data where rows represents the variables and columns the observations
na.rm	remove na?

**Value**

rows variance

**Author(s)**

Angela Andreella