# Package 'RFlocalfdr.data'

October 27, 2023
Title Data for the Vignette and Examples in 'RFlocalfdr'
Version 0.0.3
Description Data for the vignette and examples in 'RFlocalfdr'. Contains a dataset of 1103547 importance values, and the table of variables used in the random forest splits. The data is Chromosome 22 taken from Auton et al.  (2015) <doi:10.1038 nature15393="">. It also contains a 51 samples by 22283 genes data set taken from Spira et al. (2004) <doi:10.1165 rcmb.2004-0273oc="">.</doi:10.1165></doi:10.1038>
License GPL (>= 3)
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<b>Depends</b> R (>= $2.10$ )
LazyDataCompression xz
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R topics documented:
ch22
Index

2 ch22

ch22

ch22 importance values

#### **Description**

A dataset containing 1103547 importance values, and a table of variables used in splits. Note that the importances have not been logged.

#### Usage

ch22

#### **Format**

A list

imp importaces

C table of counts

#### Source

A Global Reference for Human Genetic Variation, Auton et al., Nature, 2015, 526:7571 pp 68-74

### **Examples**

```
## Not run:
library(ranger)
system.time(fit.ranger.7 <- ranger(dependent.variable.name= "V1", data = aa2,</pre>
                                  importance = "impurity",
                                   num.threads=20, num.trees = 100000,
                                   seed=123))
#Ranger result
#Call:
#ranger(dependent.variable.name = "V1", data = aa2, importance = "impurity",
                                 num.threads = 20, num.trees = 1e+05, seed = 123)
                                     Classification
#Type:
#Number of trees:
                                     1e+05
#Sample size:
                                     2504
#Number of independent variables: 1103547
#Mtry:
                                     1050
#Target node size:
#Variable importance mode:
                                     impurity
#Splitrule:
                                     gini
#00B prediction error:
                                     4.27 %
C <-count_variables(fit.ranger.7)</pre>
imp<-rf1$variable.importance</pre>
ch22<-list(imp,C)</pre>
names(ch22)<-c("imp","C")</pre>
```

smoking 3

```
## End(Not run)
data(ch22)
```

smoking

Effects of cigarette smoke on the human airway epithelial cell transcriptome

#### Description

A dataset containing normalized transcript measurements for 51 subjects and 22283 transcripts. See Spira et al (2004). "Gene Expression Profiling of Human Lung Tissue from Smokers with Severe Emphysema", Am J Respir Cell Mol Biol.

#### Usage

smoking

#### **Format**

A list with rma (the transcript data) and y (the class labels):

```
rma 51 by 22283, log2 real values
y a character vector, "smoking" and "never-smoked" ...
```

## Source

https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE994

## **Index**

```
* datasets
ch22, 2
smoking, 3
ch22, 2
smoking, 3
```