Package ‘optimalFlowData’

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R topics documented:

  buildDatabase .............................................................. 3
cytometry.diagnosis ....................................................... 3
Cytometry1 ................................................................. 4
Cytometry10 ................................................................. 5
R topics documented:

Cytometry11 ................................................. 6
Cytometry12 ................................................. 7
Cytometry13 ................................................. 8
Cytometry14 ................................................. 9
Cytometry15 ................................................. 10
Cytometry16 ............................................... 11
Cytometry17 ............................................... 12
Cytometry18 ............................................... 13
Cytometry19 ............................................... 14
Cytometry2 .................................................. 15
Cytometry20 ............................................... 16
Cytometry21 ............................................... 17
Cytometry22 ............................................... 18
Cytometry23 ............................................... 19
Cytometry24 ............................................... 20
Cytometry25 ............................................... 21
Cytometry26 ............................................... 22
Cytometry27 ............................................... 23
Cytometry28 ............................................... 24
Cytometry29 ............................................... 25
Cytometry3 .................................................. 26
Cytometry30 ............................................... 27
Cytometry31 ............................................... 28
Cytometry32 ............................................... 29
Cytometry33 ............................................... 30
Cytometry34 ............................................... 31
Cytometry35 ............................................... 32
Cytometry36 ............................................... 33
Cytometry37 ............................................... 34
Cytometry38 ............................................... 35
Cytometry39 ............................................... 36
Cytometry4 .................................................. 37
Cytometry40 ............................................... 38
Cytometry5 .................................................. 39
Cytometry6 .................................................. 40
Cytometry7 .................................................. 41
Cytometry8 .................................................. 42
Cytometry9 .................................................. 43
noise.types .................................................. 44

Index 45
buildDatabase

Description

Constructs a subset of the cell types and cytometries in optimalFlowData in order to be used as a database.

Usage

buildDatabase(dataset_names, population_ids)

Arguments

dataset_names  A vector of strings with the names of the cytometries, ranging in c("Cytometry1", ..., "Cytometry40").

population_ids  A vector of strings with the names of the cell types to be selected in each cytometry.

Value

A list where each element is a cytometry containing only the cell types given by population_ids.

Examples

database <- buildDatabase(
  dataset_names = paste0('Cytometry', c(2:5, 7:9, 12:17, 19, 21)),
  population_ids = c('Monocytes', 'CD4+CD8-', 'Mature SIg Kappa', 'TCRgd-'))

cytometry.diagnosis

Description

A list of abreviations corresponding to the diagnosis for each cytometry in optimalFlowData. Diagnosis abbreviations correspond to: Healthy Diagnosis, Mantle Cell Lymphoma, Follicular Lymphoma, Lymphoplasmacytic Lymphoma, Chronic Lymphocytic Leukemia, Diffuse Large B-Cell Lymphoma and Hairy Cell Leukemia.

Usage

data("cytometry_diagnosis")

Format

A list of 40 diagnosis.
Examples

data(cytometry.diagnosis)
print(cytometry.diagnosis)

Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry1")

Format

A data frame with 82810 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) an vector of cell types (strings).

Source


Examples

data(Cytometry1)
head(Cytometry1)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry10")

Format

A data frame with 100000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry10)
head(Cytometry10)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry11")

Format

A data frame with 100000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry11)
head(Cytometry11)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry12")

Format

A data frame with 100000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry12)
head(Cytometry12)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry13")

Format

A data frame with 100000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry13)
head(Cytometry13)
Description
A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage
data("Cytometry14")

Format
A data frame with 154882 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
- CD38:APC H7-A LOGICAL  an integer vector.
- CD3:APC-A LOGICAL  an integer vector.
- CD4+CD20:PB-A LOGICAL  an integer vector.
- CD45:PO-A LOGICAL  an integer vector.
- CD56+IgK:PE-A LOGICAL  an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
- CD8+IgL:FITC-A LOGICAL  an integer vector.
- FSC-A LINEAR  an integer vector.
- SSC-A Exp-SSC Low  an integer vector.
- Population ID (name)  a vector of cell types (strings)

Source

Examples
data(Cytometry14)
head(Cytometry14)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry15")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry15)
head(Cytometry15)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry16")

Format

A data frame with 50000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry16)
head(Cytometry16)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry17")

Format

A data frame with 252425 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry17)
head(Cytometry17)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry18")

Format

A data frame with 200675 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL
- CD38:APC H7-A LOGICAL
- CD3:APC-A LOGICAL
- CD4+CD20:PB-A LOGICAL
- CD45:PO-A LOGICAL
- CD56+IgK:PE-A LOGICAL
- CD5:PerCP Cy5-5-A LOGICAL
- CD8+IgL:FITC-A LOGICAL
- FSC-A LINEAR
- SSC-A Exp-SSC Low
- Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry18)
head(Cytometry18)
### Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

### Usage

```r
data("Cytometry19")
```

### Format

A data frame with 100600 observations on the following 11 variables.

- `CD19/TCRgd:PE Cy7-A LOGICAL`: an integer vector.
- `CD38:APC H7-A LOGICAL`: an integer vector.
- `CD45:PO-A LOGICAL`: an integer vector.
- `CD56+IgK:PE-A LOGICAL`: an integer vector.
- `CD5:PerCP Cy5-5-A LOGICAL`: an integer vector.
- `CD8+IgL:FITC-A LOGICAL`: an integer vector.
- `FSC-A LINEAR`: an integer vector.
- `SSC-A Exp-SSC Low`: an integer vector.
- `Population ID (name)`: a vector of cell types (strings)

### Source


### Examples

```r
data(Cytometry19)
head(Cytometry19)
```
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry2")

Format

A data frame with 140753 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL
- CD38:APC H7-A LOGICAL
- CD3:APC-A LOGICAL
- CD4+CD20:PB-A LOGICAL
- CD45:PO-A LOGICAL
- CD56+IgK:PE-A LOGICAL
- CD5:PerCP Cy5-5-A LOGICAL
- CD8+IgL:FITC-A LOGICAL
- FSC-A LINEAR
- SSC-A Exp-SSC Low
- Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry2)
head(Cytometry2)
Description
A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage
```r
data("Cytometry20")
```

Format
A data frame with 200925 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
- CD38:APC H7-A LOGICAL an integer vector.
- CD3:APC-A LOGICAL an integer vector.
- CD4+CD20:PB-A LOGICAL an integer vector.
- CD45:PO-A LOGICAL an integer vector.
- CD56+IgK:PE-A LOGICAL an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL an integer vector.
- CD8+IgL:FITC-A LOGICAL an integer vector.
- FSC-A LINEAR an integer vector.
- SSC-A Exp-SSC Low an integer vector.
- Population ID (name) a vector of cell types (strings)

Source

Examples
```r
data(Cytometry20)
head(Cytometry20)
```
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry21")

Format

A data frame with 254450 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry21)
head(Cytometry21)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with a Mantle Cell Lymphoma based on data taken following Euroflow protocols.

Usage

```r
data("Cytometry22")
```

Format

A data frame with 100000 observations on the following 11 variables.

- `CD19/TCRgd:PE Cy7-A LOGICAL` an integer vector.
- `CD38:APC H7-A LOGICAL` an integer vector.
- `CD3:APC-A LOGICAL` an integer vector.
- `CD4+CD20:PB-A LOGICAL` an integer vector.
- `CD45:PO-A LOGICAL` an integer vector.
- `CD56+IgK:PE-A LOGICAL` an integer vector.
- `CD5:PerCP Cy5-5-A LOGICAL` an integer vector.
- `CD8+IgL:FITC-A LOGICAL` an integer vector.
- `FSC-A LINEAR` an integer vector.
- `SSC-A Exp-SSC Low` an integer vector.
- `Population ID (name)` a vector of cell types (strings)

Source


Examples

```r
data(Cytometry22)
head(Cytometry22)
```
Description

A flow cytometry dataset, as a data frame, of an individual with a Mantle Cell Lymphoma taken following Euroflow protocols.

Usage

data("Cytometry23")

Format

A data frame with 100000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry23)
head(Cytometry23)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with a Follicular Lymphoma based on data taken following Euroflow protocols.

Usage

data("Cytometry24")

Format

A data frame with 100000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry24)
head(Cytometry24)
Description
A simulated flow cytometry dataset, as a data frame, of an individual with a Mantle Cell Lymphoma based on data taken following Euroflow protocols.

Usage
data("Cytometry25")

Format
A data frame with 100000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7−A LOGICAL an integer vector.
CD38:APC H7−A LOGICAL an integer vector.
CD3:APC−A LOGICAL an integer vector.
CD4+CD20:PB−A LOGICAL an integer vector.
CD45:PO−A LOGICAL an integer vector.
CD56+IgK:PE−A LOGICAL an integer vector.
CD5:PerCP Cy5−5−A LOGICAL an integer vector.
CD8+IgL:FITC−A LOGICAL an integer vector.
FSC−A LINEAR an integer vector.
SSC−A Exp−SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source

Examples
data(Cytometry25)
head(Cytometry25)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with a Lymphoplasmacytic Lymphoma based on data taken following Euroflow protocols.

Usage

data("Cytometry26")

Format

A data frame with 100000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+:IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry26)
head(Cytometry26)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with a Chronic Lymphocytic Leukemia based on data taken following Euroflow protocols.

Usage

```r
data("Cytometry27")
```

Format

A data frame with 300000 observations on the following 11 variables.

- **CD19/TCRgd:PE Cy7-A LOGICAL** an integer vector.
- **CD38:APC H7-A LOGICAL** an integer vector.
- **CD3:APC-A LOGICAL** an integer vector.
- **CD4+CD20:PB-A LOGICAL** an integer vector.
- **CD45:PO-A LOGICAL** an integer vector.
- **CD56+IgK:PE-A LOGICAL** an integer vector.
- **CD5:PerCP Cy5-5-A LOGICAL** an integer vector.
- **CD8+IgL:FITC-A LOGICAL** an integer vector.
- **FSC-A LINEAR** an integer vector.
- **SSC-A Exp-SSC Low** an integer vector.
- **Population ID (name)** a vector of cell types (strings)

Source


Examples

```r
data(Cytometry27)
head(Cytometry27)
```
Description

A simulated flow cytometry dataset, as a data frame, of an individual with Chronic Lymphocytic Leukemia based on data taken following Euroflow protocols.

Usage

data("Cytometry28")

Format

A data frame with 300000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry28)
head(Cytometry28)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry29")

Format

A data frame with 300000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
- CD38:APC H7-A LOGICAL  an integer vector.
- CD3:APC-A LOGICAL  an integer vector.
- CD4+CD20:PB-A LOGICAL  an integer vector.
- CD45:PO-A LOGICAL  an integer vector.
- CD56+IgK:PE-A LOGICAL  an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
- CD8+IgL:FITC-A LOGICAL  an integer vector.
- FSC-A LINEAR  an integer vector.
- SSC-A Exp-SSC Low  an integer vector.
- Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry29)
head(Cytometry29)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry3")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRγδ:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry3)
head(Cytometry3)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry30")

Format

A data frame with 236886 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry30)
head(Cytometry30)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry31")

Format

A data frame with 229216 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry31)
head(Cytometry31)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry32")

Format

A data frame with 260598 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
- CD38:APC H7-A LOGICAL  an integer vector.
- CD3:APC-A LOGICAL  an integer vector.
- CD4+CD20:PB-A LOGICAL  an integer vector.
- CD45:PO-A LOGICAL  an integer vector.
- CD56+IgK:PE-A LOGICAL  an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
- CD8+IgL:FITC-A LOGICAL  an integer vector.
- FSC-A LINEAR  an integer vector.
- SSC-A Exp-SSC Low  an integer vector.
- Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry32)
head(Cytometry32)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry33")

Format

A data frame with 135798 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry33)
head(Cytometry33)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with Diffuse Large B-Cell Lymphoma based on data taken following Euroflow protocols.

Usage

data("Cytometry34")

Format

A data frame with 300000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry34)
head(Cytometry34)
Description

A simulated flow cytometry dataset, as a data frame, of an individual with a Hairy Cell Leukemia based on data taken following Euroflow protocols.

Usage

```r
data("Cytometry35")
```

Format

A data frame with 213720 observations on the following 11 variables.

- `CD19/TCRgd:PE Cy7-A LOGICAL` an integer vector.
- `CD38:APC H7-A LOGICAL` an integer vector.
- `CD3:APC-A LOGICAL` an integer vector.
- `CD4+CD20:PB-A LOGICAL` an integer vector.
- `CD45:PO-A LOGICAL` an integer vector.
- `CD56+IgK:PE-A LOGICAL` an integer vector.
- `CD5:PerCP Cy5-5-A LOGICAL` an integer vector.
- `CD8+IgL:FITC-A LOGICAL` an integer vector.
- `FSC-A LINEAR` an integer vector.
- `SSC-A Exp-SSC Low` an integer vector.
- `Population ID (name)` a vector of cell types (strings)

Source


Examples

```r
data(Cytometry35)
head(Cytometry35)
```
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

```r
data("Cytometry36")
```

Format

A data frame with 50000 observations on the following 11 variables.

- **CD19/TCRgd:PE Cy7-A LOGICAL** an integer vector.
- **CD38:APC H7-A LOGICAL** an integer vector.
- **CD3:APC-A LOGICAL** an integer vector.
- **CD4+CD20:PB-A LOGICAL** an integer vector.
- **CD45:PO-A LOGICAL** an integer vector.
- **CD56+IgK:PE-A LOGICAL** an integer vector.
- **CD5:PerCP Cy5-5-A LOGICAL** an integer vector.
- **CD8+IgL:FITC-A LOGICAL** an integer vector.
- **FSC-A LINEAR** an integer vector.
- **SSC-A Exp-SSC Low** an integer vector.
- **Population ID (name)** a vector of cell types (strings)

Source


Examples

```r
data(Cytometry36)
head(Cytometry36)
```
Cytometry37

Description
A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage
data("Cytometry37")

Format
A data frame with 50000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source

Examples
data(Cytometry37)
head(Cytometry37)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry38")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
CD38:APC H7-A LOGICAL an integer vector.
CD3:APC-A LOGICAL an integer vector.
CD4+CD20:PB-A LOGICAL an integer vector.
CD45:PO-A LOGICAL an integer vector.
CD56+IgK:PE-A LOGICAL an integer vector.
CD5:PerCP Cy5-5-A LOGICAL an integer vector.
CD8+IgL:FITC-A LOGICAL an integer vector.
FSC-A LINEAR an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry38)
head(Cytometry38)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry39")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry39)
head(Cytometry39)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry4")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry4)
head(Cytometry4)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry40")

Format

A data frame with 145075 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL
- CD38:APC H7-A LOGICAL
- CD3:APC-A LOGICAL
- CD4+CD20:PB-A LOGICAL
- CD45:PO-A LOGICAL
- CD56+IgK:PE-A LOGICAL
- CD5:PerCP Cy5-5-A LOGICAL
- CD8+IgL:FITC-A LOGICAL
- FSC-A LINEAR
- SSC-A Exp-SSC Low
- Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry40)
head(Cytometry40)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry5")

Format

A data frame with 50000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
- CD38:APC H7-A LOGICAL  an integer vector.
- CD3:APC-A LOGICAL  an integer vector.
- CD4+CD20:PB-A LOGICAL  an integer vector.
- CD45:PO-A LOGICAL  an integer vector.
- CD56+IgK:PE-A LOGICAL  an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
- CD8+IgL:FITC-A LOGICAL  an integer vector.
- FSC-A LINEAR  an integer vector.
- SSC-A Exp-SSC Low  an integer vector.
- Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry5)
head(Cytometry5)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry6")

Format

A data frame with 50000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL an integer vector.
- CD38:APC H7-A LOGICAL an integer vector.
- CD3:APC-A LOGICAL an integer vector.
- CD4+CD20:PB-A LOGICAL an integer vector.
- CD45:PO-A LOGICAL an integer vector.
- CD56+IgK:PE-A LOGICAL an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL an integer vector.
- CD8+IgL:FITC-A LOGICAL an integer vector.
- FSC-A LINEAR an integer vector.
- SSC-A Exp-SSC Low an integer vector.
- Population ID (name) a vector of cell types (strings)

Source


Examples

data(Cytometry6)
head(Cytometry6)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry7")

Format

A data frame with 50000 observations on the following 11 variables.

CD19/TCRgd:PE Cy7-A LOGICAL  an integer vector.
CD38:APC H7-A LOGICAL  an integer vector.
CD3:APC-A LOGICAL  an integer vector.
CD4+CD20:PB-A LOGICAL  an integer vector.
CD45:PO-A LOGICAL  an integer vector.
CD56+IgK:PE-A LOGICAL  an integer vector.
CD5:PerCP Cy5-5-A LOGICAL  an integer vector.
CD8+IgL:FITC-A LOGICAL  an integer vector.
FSC-A LINEAR  an integer vector.
SSC-A Exp-SSC Low  an integer vector.
Population ID (name)  a vector of cell types (strings)

Source


Examples

data(Cytometry7)
head(Cytometry7)
Description

A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

data("Cytometry8")

Format

A data frame with 50000 observations on the following 11 variables.

- CD19/TCRgd:PE Cy7-A LOGICAL: an integer vector.
- CD38:APC H7-A LOGICAL: an integer vector.
- CD45:PO-A LOGICAL: an integer vector.
- CD56+IgK:PE-A LOGICAL: an integer vector.
- CD5:PerCP Cy5-5-A LOGICAL: an integer vector.
- CD8+IgL:FITC-A LOGICAL: an integer vector.
- FSC-A LINEAR: an integer vector.
- SSC-A Exp-SSC Low: an integer vector.
- Population ID (name): a vector of cell types (strings)

Source


Examples

data(Cytometry8)
head(Cytometry8)
A simulated flow cytometry dataset, as a data frame, of a healthy individual based on data taken following Euroflow protocols.

Usage

```r
data("Cytometry9")
```

Format

A data frame with 100000 observations on the following 11 variables.

- `CD19/TCRgd:PE Cy7-A LOGICAL`: an integer vector.
- `CD38:APC H7-A LOGICAL`: an integer vector.
- `CD45:PO-A LOGICAL`: an integer vector.
- `CD56+IgK:PE-A LOGICAL`: an integer vector.
- `CD5:PerCP Cy5-5-A LOGICAL`: an integer vector.
- `CD8+IgL:FITC-A LOGICAL`: an integer vector.
- `FSC-A LINEAR`: an integer vector.
- `SSC-A Exp-SSC Low`: an integer vector.
- `Population ID (name)`: a vector of cell types (strings)

Source


Examples

```r
data(Cytometry9)
head(Cytometry9)
```
Description

A list of cells that can be considered as noise (Debris and Doublets).

Usage

data("noise_types")

Format

A list 38 cell types that can be viewed as noise.

Examples

data(noise.types)
print(noise.types)
Index

buildDatabase, 3

Cytometry0, 1
Cytometry3, 2
Cytometry4, 3
Cytometry5, 4
Cytometry1, 5
Cytometry6, 6
Cytometry2, 7
Cytometry7, 8
Cytometry3, 9
Cytometry8, 10
Cytometry4, 11
Cytometry9, 12

Cytometry10, 13
Cytometry11, 14
Cytometry12, 15
Cytometry13, 16
Cytometry14, 17
Cytometry15, 18
Cytometry16, 19
Cytometry17, 20
Cytometry18, 21
Cytometry19, 22
Cytometry2, 23
Cytometry20, 24
Cytometry21, 25
Cytometry22, 26
Cytometry23, 27
Cytometry24, 28
Cytometry25, 29
Cytometry26, 30
Cytometry27, 31
Cytometry28, 32
Cytometry29, 33
Cytometry30, 34
Cytometry31, 35
Cytometry32, 36
Cytometry33, 37
Cytometry34, 38
Cytometry35, 39
Cytometry36, 40
Cytometry37, 41
Cytometry38, 42
Cytometry39, 43
Cytometry40, 44
Cytometry41, 45
Cytometry42, 46
Cytometry43, 47
Cytometry44, 48