Package ‘optimalFlowData’

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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-'))

cyto.immune.cell

data("cyto.immune.cell")

Format

A list of 40 diagnosis.

cytometry.diagnosis

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD19/TCRgd:PE Cy7-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD38:APC H7-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD3:APC-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD4+CD20:PB-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD45:PO-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD56+IgK:PE-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD5:PerCP_Cy5-5-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>CD8+IgL:FITC-A LOGICAL</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>FSC-A LINEAR</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>SSC-A Exp-SSC Low</td>
<td>an integer vector.</td>
</tr>
<tr>
<td>Population ID (name)</td>
<td>a vector of cell types (strings)</td>
</tr>
</tbody>
</table>

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.
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(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

```r
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

```r
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.
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(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

```r
data("Cytometry18")
```

Format

A data frame with 200675 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(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

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.
- 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(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 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(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  
- 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**

```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.
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(Cytometry21)
head(Cytometry21)
Description

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

Usage

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.
- 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(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

```r
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.
- 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(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.
- 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(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

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

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 300,000 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/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(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.
- 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.
- 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

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

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)
```
Description

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

Usage

```r
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

```r
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
- 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(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

```r
data("Cytometry40")
```

Format

A data frame with 145075 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(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**

```r
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**

```r
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.
- 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.
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(Cytometry8)
head(Cytometry8)
Description

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

Usage

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.
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(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)
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