

Package ‘flowPloidyData’

September 3, 2024

Title Example Flow Cytometry Data

Version 1.31.0

Author Tyler Smith <tyler@plantarum.ca>

Maintainer Tyler Smith <tyler@plantarum.ca>

Description A collection of raw flow cytometry data for use in vignettes for the flowPloidy package.

License GPL-3

Encoding UTF-8

LazyData true

biocViews FlowCytometryData

Suggests knitr, rmarkdown, flowCore

VignetteBuilder knitr

git_url <https://git.bioconductor.org/packages/flowPloidyData>

git_branch devel

git_last_commit df538a1

git_last_commit_date 2024-04-30

Repository Bioconductor 3.20

Date/Publication 2024-09-03

Contents

flowPloidyData	2
Index	3

flowPloidyData

Example flow cytometry datasets from analysis of ploidy in plants.

Description

A list of LMD files from analyses of the plant leaf tissue samples, co-chopped with standards with known GC (e.g., tomato, soybean etc.).

Usage

```
flowPloidyFiles()
```

```
fpBad()
```

```
fpVac()
```

Format

The function `flowPloidyFiles` returns a vector of filenames corresponding to the LMD files provided by this package. Individual elements of this vector (e.g., `flowPloidyFiles()[1]`) can be passed to functions that load a single FCS file, such as `flowCore::read.FCS`. The entire vector can be passed to functions that load multiple files, such as `flowPloidy::histBatch`.

Each element is named with the filename (without the path), so that you can select an individual filename either by numeric index (i.e., `flowPloidyFiles()[7]`) or by name (`flowPloidyFiles()["248+S.LMD"]`). The names aren't meaningful to you, of course! I added them to provide a more robust way to select an individual file, as the order of files may change in package updates.

The individual files named in `flowPloidyFiles` are LMD files generated by a Beckman-Coulter Gallios flow cytometer. They represent a variety of samples, and some of them are low quality. They are not ideal data sets, but rather represent a range of data quality for assessing the performance of `flowPloidy`.

`fpBad()` and `fpVac()` each return the path to a single LMD file. These are particularly poor quality files that are used in some of the unit tests for `flowPloidy`. They're probably not useful to regular users.

Value

A named character vector of file names, including their full path in the local file system.

Examples

```
flowPloidyFiles() ## a character vector of file names

## Read in the first file:
library(flowCore)
fcs <- read.FCS(flowPloidyFiles()[1], dataset = 1,
               alter.names = TRUE)
```

Index

* datasets

flowPloidyData, [2](#)

flowPloidyData, [2](#)

flowPloidyFiles (flowPloidyData), [2](#)

fpBad (flowPloidyData), [2](#)

fpVac (flowPloidyData), [2](#)