

# Package ‘flowPloidyData’

July 25, 2024

**Title** Example Flow Cytometry Data

**Version** 1.30.0

**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** RELEASE\_3\_19

**git\_last\_commit** 296daf3

**git\_last\_commit\_date** 2024-04-30

**Repository** Bioconductor 3.19

**Date/Publication** 2024-07-25

## Contents

flowPloidyData . . . . .	2
<b>Index</b>	<b>3</b>

---

`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](#)