

Package ‘CyTOFpower’

April 12, 2022

Type Package

Title Power analysis for CyTOF experiments

Version 1.0.0

Description This package is a tool to predict the power of CyTOF experiments in the context of differential state analyses. The package provides a shiny app with two options to predict the power of an experiment:
i. generation of in-silico CyTOF data, using users input
ii. browsing in a grid of parameters for which the power was already precomputed.

biocViews FlowCytometry, SingleCell, CellBiology, StatisticalMethod, Software

License LGPL-3

Encoding UTF-8

Depends R (>= 4.1)

Imports CytoGLMM, diffcyt, DT, dplyr, ggplot2, magrittr, methods, rlang, stats, shiny, shinyFeedback, shinyjs, shinyMatrix, SummarizedExperiment, tibble, tidyr

RoxygenNote 7.1.2

VignetteBuilder knitr

Suggests testthat (>= 3.0.0), BiocStyle, knitr

Config/testthat/edition 3

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

git_branch RELEASE_3_14

git_last_commit 72c95c5

git_last_commit_date 2021-10-26

Date/Publication 2022-04-12

Author Anne-Maud Ferreira [cre, aut] (<<https://orcid.org/0000-0002-4749-746X>>),
Catherine Blish [aut],
Susan Holmes [aut]

Maintainer Anne-Maud Ferreira <anne-maud.ferreira@stanford.edu>

R topics documented:

CyTOFpower 2

Index 3

CyTOFpower *CyTOFpower: R-package to predict the power of a CyTOF experiment*

Description

This package provides functions and a shiny app to predict the power of a CyTOF experiment.
Interactive shiny app to predict the power of a CyTOF experiment.

Usage

```
CyTOFpower()
```

Value

Interactive shiny app.

Examples

```
# Launch the shiny app
if (interactive()) {
  CyTOFpower()
}
```

Index

CyTOFpower, [2](#)