

Package ‘TENxXeniumData’

July 25, 2024

Version 1.0.0

Title Collection of Xenium spatial data by 10X genomics

Description Collection of Xenium spatial transcriptomics datasets provided by 10x Genomics, formatted into the Bioconductor classes, the SpatialExperiment or SpatialFeatureExperiment (SFE), to facilitate seamless integration into various applications, including examples, demonstrations, and tutorials. The constructed data objects include gene expression profiles, per-transcript location data, centroid, segmentation boundaries (e.g., cell or nucleus boundaries), and image.

URL <https://github.com/mrbakhsh/TENxXeniumData>

BugReports <https://github.com/mrbakhsh/TENxXeniumData/issues>

License MIT + file LICENSE

Encoding UTF-8

biocViews ExperimentData, ExperimentHub, SpatialData

Depends ExperimentHub

Imports SpatialExperiment, SpatialFeatureExperiment, BumpyMatrix, SummarizedExperiment, utils

VignetteBuilder knitr

Suggests BiocStyle, knitr, rmarkdown

RoxygenNote 7.2.3

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

git_branch RELEASE_3_19

git_last_commit 6262463

git_last_commit_date 2024-04-30

Repository Bioconductor 3.19

Date/Publication 2024-07-25

Author Matineh Rahmatbakhsh [aut, cre],
Monica Ge [aut]

Maintainer Matineh Rahmatbakhsh <matinerb.94@gmail.com>

Contents

TENxXeniumData	2
Index	3

TENxXeniumData	<i>TENxXeniumData</i>
----------------	-----------------------

Description

Collection of Xenium spatial transcriptomics datasets from 10X Genomics, formatted into the Bioconductor classes, the `SpatialExperiment` or `SpatialFeatureExperiment` (SFE). Such Datasets can be used as examples in packages, tutorials, or for testing purposes.

Details

The following Xenium Spatial Transcriptomics datasets by 10X Genomics are currently available:

- `spe_mouse_brain`
- `sfe_mouse_brain`
- `spe_human_pancreas`
- `sfe_human_pancreas`

Value

a `SpatialExperiment` or a `SpatialFeatureExperiment` data objects.

Author(s)

Matineh Rahmatbakhsh

Examples

```
# initialize hub instance
eh <- ExperimentHub()

# query for TENxXenium datasets
(q <- query(eh, "TENxXenium"))
```

Index

sfe_human_pancreas (TENxXeniumData), [2](#)
sfe_mouse_brain (TENxXeniumData), [2](#)
SpatialExperiment, [2](#)
SpatialFeatureExperiment, [2](#)
spe_human_pancreas (TENxXeniumData), [2](#)
spe_mouse_brain (TENxXeniumData), [2](#)

TENxXeniumData, [2](#)