

Package ‘tenXplore’

April 7, 2025

Title ontological exploration of scRNA-seq of 1.3 million mouse neurons from 10x genomics

Description

Perform ontological exploration of scRNA-seq of 1.3 million mouse neurons from 10x genomics.

Version 1.29.0

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Suggests org.Hs.eg.db, testthat, knitr, rmarkdown, BiocStyle

Depends R (>= 4.0), shiny

Imports methods, ontoProc (>= 0.99.7), SummarizedExperiment, AnnotationDbi, matrixStats, org.Mm.eg.db, stats, utils, BiocFileCache

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LazyLoad yes

biocViews ImmunoOncology, DimensionReduction, PrincipalComponent, Transcriptomics, SingleCell

VignetteBuilder knitr

RoxygenNote 7.3.2

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CellTypes *cellTypes: data.frame with ids and terms*

Description

cellTypes: data.frame with ids and terms

Usage

```
CellTypes
```

Format

TermSet instance

Source

efo.owl, August 2017, subclasses of http://www.ebi.ac.uk/efo/EFO_0000324

Examples

```
data(CellTypes)
head(slot(CellTypes, "cleanFrame"))
```

se1.3M *add/retrieve HSDS-based SE to/from cache*

Description

add/retrieve HSDS-based SE to/from cache

Usage

```
se1.3M(cache = BiocFileCache::BiocFileCache())
```

Arguments

cache *BiocFileCache-like cache*

| | |
|---------|--|
| tenx500 | <i>tenx500: serialized full SummarizedExperiment for demonstration</i> |
|---------|--|

Description

tenx500: serialized full SummarizedExperiment for demonstration

Usage

```
tenx500
```

Format

SummarizedExperiment instance

Source

restfulSE se1.3M pared down to 500 samples, assay materialized and assigned

Examples

```
data(tenx500)
tenx500
```

| | |
|-----------|--|
| tenXplore | <i>basic shiny interface to 10x data with ontological setup for cell selection</i> |
|-----------|--|

Description

basic shiny interface to 10x data with ontological setup for cell selection

Usage

```
tenXplore()
```

Value

shiny app invocation

Note

Starts slowly as it sets up connection to HDF Server.

Examples

```
tenXplore
```

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