

Package ‘WeberDivechaLCdata’

May 15, 2025

Version 1.10.0

Title Spatially-resolved transcriptomics and single-nucleus
RNA-sequencing data from the locus coeruleus (LC) in postmortem
human brain samples

Description Spatially-resolved transcriptomics (SRT) and single-nucleus
RNA-sequencing (snRNA-seq) data from the locus coeruleus (LC) in postmortem
human brain samples. Data were generated with the 10x Genomics Visium SRT
and 10x Genomics Chromium snRNA-seq platforms. Datasets are stored in
SpatialExperiment and SingleCellExperiment formats.

URL <https://github.com/lmweber/WeberDivechaLCdata>

BugReports <https://github.com/lmweber/WeberDivechaLCdata/issues>

License MIT + file LICENSE

biocViews ExperimentData, ExperimentHub, ReproducibleResearch,
ExpressionData, SequencingData, RNASeqData, SingleCellData,
SpatialData, Homo_sapiens_Data

Depends ExperimentHub, SpatialExperiment, SingleCellExperiment

Imports utils

VignetteBuilder knitr

Suggests BiocStyle, knitr, rmarkdown

RoxygenNote 7.1.2

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

git_branch RELEASE_3_21

git_last_commit 8133353

git_last_commit_date 2025-04-15

Repository Bioconductor 3.21

Date/Publication 2025-05-15

Author Lukas M. Weber [aut, cre] (ORCID:
<<https://orcid.org/0000-0002-3282-1730>>),
Heena R. Divecha [aut] (ORCID: <<https://orcid.org/0000-0002-1959-0675>>)

Maintainer Lukas M. Weber <lmweberedu@gmail.com>

Contents

WeberDivechaLCdata	2
------------------------------	---

Index	3
--------------	----------

WeberDivechaLCdata	<i>Spatially-resolved transcriptomics and single-nucleus RNA-sequencing data from the locus coeruleus (LC) in postmortem human brain samples</i>
--------------------	--

Description

Spatially-resolved transcriptomics (SRT) and single-nucleus RNA-sequencing (snRNA-seq) data from the locus coeruleus (LC) in postmortem human brain samples. Data were generated with the 10x Genomics Visium SRT and 10x Genomics Chromium snRNA-seq platforms. Datasets are stored in SpatialExperiment and SingleCellExperiment formats.

Details

This dataset is described in our paper on the gene expression landscape of the human locus coeruleus (LC). The data are provided as R/Bioconductor objects in this package, and in online web apps (Shiny and iSEE) for interactive exploration. The R/Bioconductor objects in this package are stored in SpatialExperiment (Visium data) and SingleCellExperiment (snRNA-seq data) formats.

Datasets

The package contains the following objects:

- WeberDivechaLCdata_Visium: SRT (Visium) dataset
- WeberDivechaLCdata_singleNucleus: snRNA-seq dataset

The objects can be loaded using the dataset names, i.e. `WeberDivechaLCdata_Visium()` and `WeberDivechaLCdata_singleNucleus()`, or by accessing the ExperimentHub IDs (see vignette).

Examples

```
# Load objects using dataset names
spe <- WeberDivechaLCdata_Visium()
sce <- WeberDivechaLCdata_singleNucleus()

# Show objects
spe
sce
```

Index

WeberDivechaLCdata, [2](#)
WeberDivechaLCdata-package
 (WeberDivechaLCdata), [2](#)
WeberDivechaLCdata_singleNucleus
 (WeberDivechaLCdata), [2](#)
WeberDivechaLCdata_Visium
 (WeberDivechaLCdata), [2](#)