

Package ‘alabaster.mae’

June 15, 2025

Title Load and Save MultiAssayExperiments
Version 1.8.0
Date 2024-10-28
License MIT + file LICENSE
Description Save MultiAssayExperiments into file artifacts, and load them back into memory.
This is a more portable alternative to serialization of such objects into RDS files.
Each artifact is associated with metadata for further interpretation;
downstream applications can enrich this metadata with context-specific properties.
Depends MultiAssayExperiment, alabaster.base
Imports methods, alabaster.se, S4Vectors, jsonlite, rhdf5
Suggests testthat, knitr, SummarizedExperiment, BiocParallel,
BiocStyle, rmarkdown
VignetteBuilder knitr
RoxygenNote 7.3.2
biocViews DataImport, DataRepresentation
git_url <https://git.bioconductor.org/packages/alabaster.mae>
git_branch RELEASE_3_21
git_last_commit 70ab20b
git_last_commit_date 2025-04-15
Repository Bioconductor 3.21
Date/Publication 2025-06-15
Author Aaron Lun [aut, cre]
Maintainer Aaron Lun <infinite.monkeys.with.keyboards@gmail.com>

Contents

readMultiAssayExperiment	2
saveObject,MultiAssayExperiment-method	3
Index	4

readMultiAssayExperiment

Read a MultiAssayExperiment from disk

Description

Read a [MultiAssayExperiment](#) from its on-disk representation. This is usually not directly called by users, but is instead called by dispatch in [readObject](#).

Usage

```
readMultiAssayExperiment(path, metadata, ...)
```

Arguments

path	String containing a path to a directory, itself created using the stageObject method for MultiAssayExperiment objects.
metadata	Named list of metadata for this object, see readObjectFile for details.
...	Further arguments passed to internal altReadObject calls.

Value

A [MultiAssayExperiment](#) object.

Author(s)

Aaron Lun

Examples

```
library(SummarizedExperiment)

# Mocking up an MAE
mat <- matrix(rnorm(1000), ncol=10)
colnames(mat) <- letters[1:10]
rownames(mat) <- sprintf("GENE_%i", seq_len(nrow(mat)))
se <- SummarizedExperiment(list(counts=mat))

library(MultiAssayExperiment)
mae <- MultiAssayExperiment(list(gene=se))

# Staging it:
tmp <- tempfile()
dir.create(tmp)
info <- stageObject(mae, tmp, "dataset")

# Loading it back in:
loadMultiAssayExperiment(info, tmp)
```

saveObject,MultiAssayExperiment-method
Save a MultiAssayExperiment

Description

Save a [MultiAssayExperiment](#) to its on-disk representation.

Usage

```
## S4 method for signature 'MultiAssayExperiment'
saveObject(x, path, ...)
```

Arguments

x	A MultiAssayExperiment object or one of its subclasses.
path	String containing the path to a directory in which to save x.
...	Additional named arguments to pass to specific methods.

Value

The contents of x are saved into a path, and NULL is invisibly returned.

Author(s)

Aaron Lun

Examples

```
# Mocking up an MAE
mat <- matrix(rnorm(1000), ncol=10)
colnames(mat) <- letters[1:10]
rownames(mat) <- sprintf("GENE_%i", seq_len(nrow(mat)))

library(SummarizedExperiment)
se <- SummarizedExperiment(list(counts=mat))

library(MultiAssayExperiment)
mae <- MultiAssayExperiment(list(gene=se))

# Saving it:
tmp <- tempfile()
saveObject(mae, tmp)
```

Index

altReadObject, [2](#)

loadMultiAssayExperiment
 (readMultiAssayExperiment), [2](#)

MultiAssayExperiment, [2](#), [3](#)

readMultiAssayExperiment, [2](#)

readObject, [2](#)

readObjectFile, [2](#)

saveObject, MultiAssayExperiment-method,
 [3](#)

stageObject, [2](#)

stageObject, MultiAssayExperiment-method
 (saveObject, MultiAssayExperiment-method),
 [3](#)