

Package ‘scanMiRData’

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Type Package

Title miRNA Affinity models for the scanMiR package

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Depends R (>= 4.0)

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Imports scanMiR, utils

Suggests knitr, rmarkdown, BiocStyle

Description This package contains companion data to the scanMiR package. It contains
`KdModel` (miRNA 12-mer binding affinity models) collections corresponding
to all human, mouse and rat mirbase miRNAs. See the scanMiR package for
details.

BiocType ExperimentData

License GPL-3

VignetteBuilder knitr

RoxygenNote 7.1.1

biocViews miRNAData, ExperimentData, Homo_sapiens_Data,
Mus_musculus_Data, Rattus_norvegicus_Data

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| getKdModels | <i>getKdModels</i> |
|-------------|--------------------|

Description

Returns a collection of miRNA KdModels for the requested species. *Note that by default, low-confidence miRNAs are not returned* (see ‘categories’).

Usage

```
getKdModels(species = c("hsa", "mmu", "rno"), categories = NULL)
```

Arguments

| | |
|------------|---|
| species | Either "hsa" (human), "mmu" (mouse) or "rno" (rat) |
| categories | The categories of miRNAs to return. Any combination of "Low-confidence", "Poorly conserved", "Conserved across mammals", "Conserved across vertebrates". If NULL (default), all categories are returned. miRNAs with NA as conservation are not returned unless ‘categories==NULL’. |

Value

An object of class `KdModellist`

Examples

```
mods <- getKdModels("rno")
summary(mods)
```

| | |
|--------------|-------------------------------------|
| KdModels-hsa | <i>KdModelList for human miRNAs</i> |
|--------------|-------------------------------------|

Description

A list of binding affinity models ([KdModel](#)) for human ('hsa'), mouse ('mmu'), or rat ('rno') miRbase 21.1 miRNAs. These represent the miRNA 12-mer binding affinities predicted using the CNN from McGeary, Lin et al. (2019).

Value

a [KdModelList](#) list.

| | |
|--------------|-------------------------------------|
| KdModels-mmu | <i>KdModelList for mouse miRNAs</i> |
|--------------|-------------------------------------|

Description

A list of binding affinity models ([KdModel](#)) for mouse miRbase 21.1 miRNAs. These represent the miRNA 12-mer binding affinities predicted using the CNN from McGeary, Lin et al. (2019).

Value

a [KdModelList](#) list.

| | |
|--------------|-----------------------------------|
| KdModels-rno | <i>KdModelList for rat miRNAs</i> |
|--------------|-----------------------------------|

Description

A list of binding affinity models ([KdModel](#)) for rat miRbase 21.1 miRNAs. These represent the miRNA 12-mer binding affinities predicted using the CNN from McGeary, Lin et al. (2019).

Value

a [KdModelList](#) list.

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