

# Package ‘scanMiRData’

April 16, 2024

**Type** Package

**Title** miRNA Affinity models for the scanMiR package

**Version** 1.8.0

**Depends** R (>= 4.0)

**Date** 2023-07-03

**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

**git\_url** <https://git.bioconductor.org/packages/scanMiRData>

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**Author** Pierre-Luc Germain [cre, aut] (<<https://orcid.org/0000-0003-3418-4218>>),  
Michael Soutschek [aut],  
Fridolin Gross [aut]

**Maintainer** Pierre-Luc Germain <pierre-luc.germain@hest.ethz.ch>

## R topics documented:

getKdModels . . . . .	2
KdModels-hsa . . . . .	3
KdModels-mmu . . . . .	3
KdModels-rno . . . . .	3
<b>Index</b>	<b>4</b>

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getKdModels	<i>getKdModels</i>
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### 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)
```

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KdModels-hsa	<i>KdModelList for human miRNAs</i>
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**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.

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KdModels-mmu	<i>KdModelList for mouse miRNAs</i>
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**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.

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KdModels-rno	<i>KdModelList for rat miRNAs</i>
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**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.

# Index

[getKdModels](#), [2](#)

[hsa \(KdModels-hsa\)](#), [3](#)

[KdModel](#), [3](#)

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

[KdModels-hsa](#), [3](#)

[KdModels-hsa](#), ([KdModels-hsa](#)), [3](#)

[KdModels-mmu](#), [3](#)

[KdModels-mmu](#), ([KdModels-mmu](#)), [3](#)

[KdModels-rno](#), [3](#)

[KdModels-rno](#), ([KdModels-rno](#)), [3](#)

[mmu \(KdModels-mmu\)](#), [3](#)

[rno \(KdModels-rno\)](#), [3](#)