

Package ‘BridgeDbR’

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Type Package

Title Code for using BridgeDb identifier mapping framework from within R

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Depends R (>= 2.0.0), rJava

Imports RCurl

Description Use BridgeDb functions and load identifier mapping
databases in R

biocViews Software, Annotation

License AGPL-3

LazyLoad yes

URL <https://github.com/bridgedb/BridgeDb>,
<https://github.com/BiGCAT-UM/bridgedb-r>

BugReports <https://github.com/BiGCAT-UM/bridgedb-r/issues>

NeedsCompilation no

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BridgeDbR-package *BridgeDBR Package.*

Description

R package for using BridgeDB directly from R.

Author(s)

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getBridgeNames *Method to list the BridgeDb identifier mapping file names as available from the download site.*

Description

This method returns a list of file names of BridgeDb identifier mapping files as they are available from the mapping file download site. The optional code parameter can be used to restrict the list to a specific organism.

Usage

```
getBridgeNames(code)
```

Arguments

code the organism code

Value

list the list of available BridgeDb mapping files

Author(s)

Egon Willighagen Christ Leemans

Examples

```
files <- getBridgeNames("Hs")
```

getDatabase	<i>Downloads a identifier mapping database for the given organism.</i>
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Description

Downloads a identifier mapping database for the given organism. The optional location parameter can be used to indicate where the file should be stored. If not give, it will save it in a temporary folder.

Usage

```
getDatabase(organism,location)
```

Arguments

organism	the organism name
location	optional parameter to indicate where the database should be saved

Value

location	the location where the database was saved
----------	---

Author(s)

Egon Willighagen Christ Leemans

Examples

```
## Not run: location <- getDatabase("Homo sapiens")
```

getDataSource	<i>Return a DataSource object based on either a name or system code.</i>
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Description

Return a DataSource object based on either a name or system code.

Usage

```
getDataSource(name,code)
```

Arguments

name	the name of the data source
code	the system code of the data source

Value

dataSource	a DataSource Java object
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Author(s)

Egon Willighagen

Examples

```
dataSource <- getDataSource(code="Ce")
```

getFullName	<i>Return the name of a particular data source.</i>
-------------	---

Description

Data sources are defined by a title and a short system code. This method converts a system code into a full name.

Usage

```
getFullName(syscode)
```

Arguments

syscode	the system code of the data source
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Value

systemCode	the full name of the data source
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Author(s)

Egon Willighagen Christ Leemans

Examples

```
name <- getFullName("Ce")
```

getMatchingSources	<i>Return a list of data sources of which the identifier pattern matches the identifier given.</i>
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Description

This method runs through all data sources it knows about, and looks for sources of which the identifier pattern matches the given identifier.

Usage

```
getMatchingSources(identifier)
```

Arguments

identifier	identifier to test
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Value

list list of matching data sources

Author(s)

Egon Willighagen Christ Leemans

Examples

```
list <- getMatchingSources("555")
```

getOrganismCode *Return the code of a particular organism.*

Description

This method converts a organism latin name into a code.

Usage

```
getOrganismCode(name)
```

Arguments

name latin name of an organism

Value

systemCode the code of the organism

Author(s)

Egon Willighagen Christ Leemans

Examples

```
systemCode <- getOrganismCode("Mus musculus")
```

getSystemCode	<i>Return the system code of a particular data source.</i>
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Description

Data sources are defined by a title and a short system code. This method converts a name into a system code.

Usage

```
getSystemCode(name)
```

Arguments

name	name of the data source
------	-------------------------

Value

systemCode	the system code of the data source
------------	------------------------------------

Author(s)

Egon Willighagen Christ Leemans

Examples

```
systemCode <- getSystemCode("ChEBI")
```

loadDatabase	<i>Loads a BridgeDb identifier mapping database (.bridge file) as an IDMapper object.</i>
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Description

Loads a BridgeDb identifier mapping database (.bridge file) as an IDMapper object.

Usage

```
loadDatabase(location)
```

Arguments

location	location on the hard disk of the BridgeDb file
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Value

mapper	the system code of the data source
--------	------------------------------------

Author(s)

Egon Willighagen

Examples

```
## Not run:  
location <- getDatabase("Homo sapiens")  
mapper <- loadDatabase(location)  
  
## End(Not run)
```

map	<i>Converts one identifier into other identifiers for the given target data source.</i>
-----	---

Description

Converts one identifier into other identifiers for the given target data source.

Usage

```
map(mapper, source, identifier, target)
```

Arguments

mapper	loaded BridgeDb identifier mapper
source	system code of the data source
identifier	identifier to be converted
target	system code of the target data source

Value

mappings	a vector of mapped identifiers for the target data source
----------	---

Author(s)

Egon Willighagen

Examples

```
## Not run:  
location <- getDatabase("Homo sapiens")  
mapper <- loadDatabase(location)  
map(mapper, "L", "196410", "X")  
  
## End(Not run)
```

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