

Package ‘ccdata’

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Title Data for Combination Connectivity Mapping (ccmap) Package

Version 1.0.0

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Description This package contains microarray gene expression data generated from the Connectivity Map build 02. The data are used by the ccmap package to find drugs and drug combinations to mimic or reverse a gene expression signature.

Depends R (>= 3.3)

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LazyData false

biocViews ExperimentData, MicroarrayData, ExpressionData

RoxygenNote 5.0.1

NeedsCompilation no

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cmap_es	<i>Effect size values for Connectivity Map build 02 drugs.</i>
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Description

Unbiased effect sizes values for all 1309 drugs in the Connectivity Map build 02.

Usage

```
data(cmap_es)
```

Format

An object of class `matrix` with 13832 rows and 1309 columns.

Value

A matrix where columns correspond to drugs and rows to gene symbols.

<code>cmap_var</code>	<i>Variance values for Connectivity Map build 02 drugs.</i>
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Description

Variances of unbiased effect sizes values for all 1309 drugs in the Connectivity Map build 02.

Usage

```
data(cmap_var)
```

Format

An object of class `matrix` with 13832 rows and 1309 columns.

Value

A matrix where columns correspond to drugs and rows to gene symbols.

<code>genes</code>	<i>HGNC symbols used for NNet predictions.</i>
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Description

Order is as required for input and produced by output of net1/net2 predictions.

Usage

```
data(genes)
```

Format

An object of class `character` of length 11525.

Value

A character vector of 11525 HGNC symbols.

net1	<i>Neural network model 1 for treatment combinations.</i>
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Description

Contains weight matrices and bias vectors needed to make predictions.

Usage

#NA

Format

An object of class `list` of length 4.

Value

List with matrices `W1/W2` and vectors `b1/b2`.

net2	<i>Neural network model 2 for treatment combinations.</i>
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Description

Contains weight matrices and bias vectors needed to make predictions.

Usage

#NA

Format

An object of class `list` of length 4.

Value

List with matrices `W1/W2` and vectors `b1/b2`.

`xgb_mod`*XGBoost model for treatment combinations.*

Description

Model stacks predictions from `net1` and `net2` with effect size values from `cmap_es` and variance values from `cmap_var`.

Usage

```
#NA
```

Format

An object of class `xgb.Booster` of length 2.

Value

Object of class `xgb.Booster`

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