# 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)

**License**  MIT + file LICENSE

**LazyData**  false

**biocViews**  ExperimentData, MicroarrayData, ExpressionData

**RoxygenNote**  5.0.1

**NeedsCompilation**  no

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## Description

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

## Usage

```r
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.

---

**cmap_var**

Variance values for Connectivity Map build 02 drugs.

---

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.

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**genes**

HGNC symbols used for NNet predictions.

---

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

**Neural network model 1 for treatment combinations.**

**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

**Neural network model 2 for treatment combinations.**

**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.
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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