Package ‘CascadeData’

Type Package

Title Experimental Data of Cascade Experiments in Genomics

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Imports

Suggests

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License GPL (>= 2)

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RoxygenNote 7.1.1


BugReports https://github.com/fbertran/CascadeData/issues/

NeedsCompilation no

Repository CRAN

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CascadeData-package

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CascadeData-package  Experimental Data of Cascade Experiments in Genomics

Description


Details

5 leukemic CLL B-lymphocyte of aggressive form were stimulated in vitro with an anti-IgM antibody, activating the B-cell receptor (BCR). We analyzed the gene expression at 4 time points (60, 90, 210 and 390 minutes). Each gene expression measurement is performed both in stimulated cells and in control unstimulated cells.

The data were normalized and are ready to use.

These Experimental Data are used as examples by packages such as the Cascade one doi: 10.1093/bioinformatics/btt705 in one of its vignettes. The Cascade package is a modeling tool allowing gene selection, reverse engineering, and prediction in Cascade networks.

Data were collected on HG-U133_Plus_2, Affymetrix Human Genome U133 Plus 2.0 Array.

Author(s)

This package has been written by Frederic Bertrand, Myriam Maumy-Bertrand and Nicolas Jung with biological insights from Laurent Vallat.

Maintainer: Frederic Bertrand <frederic.bertrand@math.unistra.fr>

References


micro_S  

**Stimulated dataset**

**Description**

This is the stimulated data part of the GSE39411 dataset, https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE39411. Data were normalized and are ready to use.

**Format**

A data frame with 54613 probesets measured 6 times through 4 time points.

**Details**

5 leukemic CLL B-lymphocyte of aggressive form were stimulated in vitro with an anti-IgM antibody, activating the B-cell receptor (BCR). We analyzed the gene expression at 4 time points (60, 90, 210 and 390 minutes). Each gene expression measurement is performed both in stimulated cells and in control unstimulated cells. This is the stimulated cells dataset.

Data were collected on HG-U133_Plus_2, Affymetrix Human Genome U133 Plus 2.0 Array.

**References**


**Examples**

```r
data(micro_S)
```

---

micro_US  

**Unstimulated control dataset**

**Description**

This is the unstimulated data part of the GSE39411 dataset, https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE39411. Data were normalized and are ready to use.

**Format**

A data frame with 54613 probesets measured 6 times through 4 time points.
Details

5 leukemic CLL B-lymphocyte of aggressive form were stimulated in vitro with an anti-IgM antibody, activating the B-cell receptor (BCR). We analyzed the gene expression at 4 time points (60, 90, 210 and 390 minutes). Each gene expression measurement is performed both in stimulated cells and in control unstimulated cells. This is the unstimulated cells dataset.

Data were collected on HG-U133_Plus_2, Affymetrix Human Genome U133 Plus 2.0 Array.

References


Examples

data(micro_US)
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