

Package ‘stjudem’

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Title Microarray Data from Yeoh et al. in MACAT format

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Description This is a microarray data set on acute lymphoblastic leukemia, published in 2002 (Yeoh et al. *Cancer Cell* 2002). The experiments were conducted in the St. Jude Children's Research Hospital, Memphis, Tennessee, USA. The raw data was preprocessed by variance stabilizing normalization (Huber et al.) on probe and subsequent summarization of probe expression values into probe set expression values using median polish.

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stjude	<i>Microarray Data from St. Jude Children Research Hospital (USA)</i>
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Description

Example for list-structure used by many functions in MACAT. It's based on the gene expression data published by Yeoh et al. in 2002. [Yeoh et al. Classification, subtype discovery, and prediction of outcome in pediatric acute lymphoblastic leukemia by gene expression profiling. *Cancer Cell*. March 2002. 1: 133-143. The data has been preprocessed using 'vsn' on probe level and the probes have been summed up using 'median polish'.

Usage

```
data(stjude)
```

Format

List of class 'MACATData' with 6 components:

geneName: Identifiers of genes/probe sets in expression data

geneLocation: Location of genes on their chromosome as distance from 5'end in base pairs Negative numbers denote genes on the antisense strand.

chromosome: Chromosome of the respective gene. Components 'geneName', 'geneLocation', and 'chromosome' are in the same order.

expr: expression matrix with rows = genes and columns = samples/patients

labels: (disease) subtype of each sample, has length = number of columns of expression matrix

chip: Identifier for Microarray used for the experiments (here for the Affymetrix HG-U95av2 Oligonucleotide GeneChip)

Source

Yeoh et al. Classification, subtype discovery, and prediction of outcome in pediatric acute lymphoblastic leukemia by gene expression profiling. *Cancer Cell*. March 2002. 1: 133-143.

Examples

```
data(stjude)
summary(stjude)
```

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