

Package ‘ARRmData’

July 1, 2025

Version 1.45.0

Title Example dataset for normalization of Illumina 450k Methylation data

Description Raw Beta values from 36 samples across 3 groups from Illumina 450k methylation arrays

Author Jean-Philippe Fortin, Celia M.T. Greenwood, Aurelie Labbe

Maintainer Jean-Philippe Fortin <jfortin@jhsph.edu>

License Artistic-2.0

Depends R (>= 3.0.0)

biocViews ExperimentData, MethylationArrayData

git_url <https://git.bioconductor.org/packages/ARRmData>

git_branch devel

git_last_commit a193838

git_last_commit_date 2025-04-15

Repository Bioconductor 3.22

Date/Publication 2025-07-01

Contents

betaMatrix	1
greenControlMatrix	2
redControlMatrix	3
sampleNames	3
Index	5

betaMatrix	<i>Example of a matrix of Beta values from the Illumina 450k array</i>
------------	--

Description

The matrix contains the Beta values of a set of 36 samples from the Illumina Infinium Human-Methylation 450k array

Usage

```
data(betaMatrix)
```

Format

A data frame with 485577 observations (rows) and 36 samples (columns)

Details

Column names correspond to the sample names (of the form 5621146025_R06C02)

See Also

[normalizeARRm](#) for normalization of the Beta values, [greenControlMatrix](#) and [redControlMatrix](#) for the associated negative control probe data.

Examples

```
data(betaMatrix)
```

greenControlMatrix	<i>Example of a matrix containing the green negative control probes from the Illumina 450k array</i>
--------------------	--

Description

The matrix contains the raw intensities of 600 negative control probes measured in the green channel for 36 samples from the Illumina Infinium HumanMethylation 450k array

Usage

```
data(greenControlMatrix)
```

Format

A data frame with 600 observations (rows) and 36 samples (columns)

Details

Column names correspond to the sample names (of the form 5621146023_R01C01). These samples correspond to those of [betaMatrix](#).

See Also

[getBackground](#) to obtain background information, [redControlMatrix](#) for the equivalent negative control probes in the red channel

Examples

```
data(greenControlMatrix)
```

redControlMatrix	<i>Example of a matrix containing the red negative control probes from the Illumina 450k array</i>
------------------	--

Description

The matrix contains the raw intensities of 600 negative control probes measured in the red channel for 36 samples from the Illumina Infinium HumanMethylation 450k array

Usage

```
data(redControlMatrix)
```

Format

A data frame with 600 observations (rows) and 36 samples (columns)

Details

Column names correspond to the sample names (of the form 5621146023_R01C01). These samples correspond to those of [betaMatrix](#)

See Also

[getBackground](#) to obtain background information, [greenControlMatrix](#) for the equivalent negative control probes in the green channel

Examples

```
data(redControlMatrix)
```

sampleNames	<i>An example of sample names for the Illumina 450k array</i>
-------------	---

Description

Sample names for a dataset containing 36 samples from the Illumina Infinium HumanMethylation 450k array.

Usage

```
data(sampleNames)
```

Format

A character vector

Details

Names are of the form 5621146023_R01C01. These sample names correspond to the names of the samples in [betaMatrix](#)

See Also

[getDesignInfo](#) to obtain design information,

Examples

```
data(sampleNames)
```

Index

* **datasets**

- betaMatrix, [1](#)
- greenControlMatrix, [2](#)
- redControlMatrix, [3](#)
- sampleNames, [3](#)

betaMatrix, [1](#), [2](#), [3](#)

getBackground, [2](#), [3](#)

getDesignInfo, [4](#)

greenControlMatrix, [2](#), [2](#), [3](#)

normalizeARRm, [2](#)

redControlMatrix, [2](#), [3](#)

sampleNames, [3](#)