Package 'waveTilingData'

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Title waveTiling Example Data

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Description
Experiment and Annotation Data files used by the examples / vignette in the waveTiling package

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Depends R (>= 2.14.0)

License GPL (>= 2)

biocViews Microarray, AnnotationData, ExperimentData

R topics documented:

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waveTilingData-package

Example datasets for the waveTiling package

Description

This package contains the datasets used in the waveTiling package vignette and examples.

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See Also

leafdev,leafdevBQ,leafdevFit,leafdevInfCompare,leafdevMapAndFilterTAIR9

Examples

```
dataDir <- system.file("data", package="waveTilingData")
setwd(dataDir)
dir()
```

---

leafdev   *Example data*

Description

Example data set (TilingFeatureSet) on leaf development in the plant Arabidopsis thaliana [1] for use of the waveTiling package. The data set contains 6553600 features and 18 samples. Transcriptome analysis was conducted for 6 developmental time points (day 8 to day 13), with 3 biological replicates per time point. The focus of the initial study was to unravel the underlying mechanisms of on one hand the transition from cell division to cell expansion and on the other hand the transition from non-photosynthetic to photosynthetic leaves.

Usage

```
data(leafdev)
```

References

[1] Andriankaja M, Dhondt S, De Bodt S, Vanhaeren H, Coppens F, et al. (2012) Exit from proliferation during leaf development in Arabidopsis thaliana: A not-so-gradual process. Developmental Cell 22: 64-78.

Examples

```
data(leafdev)
```

---

leafdevBQ   *Example data*

Description

Example data set (TilingFeatureSet) on leaf development in the plant Arabidopsis thaliana for use of the waveTiling package. The data are taken from [1]. The dataset contains the background-corrected and quantile-normalized expression data

Usage

```
data(leafdevBQ)
```

References

[1] Andriankaja M, Dhondt S, De Bodt S, Vanhaeren H, Coppens F, et al. (2012) Exit from proliferation during leaf development in Arabidopsis thaliana: A not-so-gradual process. Developmental Cell 22: 64-78.

Examples

```
data(leafdevBQ)
```

---

  leafdevFit   *Example waveTiling fit object*

Description

Example WfmFit-class object as output after fitting the wavelet-based functional model to the `leafdev` data for the forward strand of chromosome 1.

Usage

```
data(leafdevFit)
```

Examples

```
data(leafdevFit)
```

---

  leafdevInfCompare   *Example waveTiling inference object*

Description

Example WfmInf-class object as output after transcriptome analysis of the `leafdev` data for the forward strand of chromosome 1, using pairwise comparisons between the different time points.

Usage

```
data(leafdevInfCompare)
```

Examples

```
data(leafdevInfCompare)
```

---

leafdevMapAndFilterTAIR9

Example waveTiling mapFilterProbe *object*

Description

Example `mapFilterProbe`-class object as output after filtering redundant probes (PM/MM and/or forward/reverse strand) and remapping the probes to the Arabidopsis thaliana TAIR9 genome sequence.

Usage

```
data(leafdevMapAndFilterTAIR9)
```

Examples

```
data(leafdevMapAndFilterTAIR9)
```

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