Package 'golubEsets'

October 12, 2023

Version 1.42.0

Title exprSets for golub leukemia data

Author Todd Golub <golub@wi.mit.edu>

Maintainer Vince Carey <stvjc@channing.harvard.edu>

Description representation of public golub data with some covariate
data of provenance unknown to the maintainer at present; now
employs ExpressionSet format

biocViews ExperimentData, Genome, CancerData, LeukemiaCancerData

LazyLoad true

Depends R (>= 2.14.0), Biobase (>= 2.5.5)

License LGPL

ZipData No

git_url https://git.bioconductor.org/packages/golubEsets

git_branch RELEASE_3_17

git_last_commit 589ef63

git_last_commit_date 2023-04-25

Date/Publication 2023-10-12

R topics documented:

---

golubMerge

Combined Test and Training Sets from the Golub Paper

Description

golubMerge is deprecated. use Golub_Merge instead.

The data are from Golub et al. These are the combined training samples and test samples. There are 47 patients with acute lymphoblastic leukemia (ALL) and 25 patients with acute myeloid leukemia (AML). The samples were assayed using Affymetrix Hgu6800 chips and data on the expression of 7129 genes (Affymetrix probes) are available. The data were obtained from the Web site listed below and transformed slightly. They were installed in an exprSet.

Usage

```
data(golubMerge)
data(Golub_Merge)
```

Format

There are 11 covariates listed.

- Samples: The original sample numbers.
- ALL.AML: Whether the patient had AML or ALL.
- BM.PB: Whether the sample was taken from bone marrow or from peripheral blood.
- T.B.cell: ALL arises from two different types of lymphocytes (T-cell and B-cell). This specifies which for the ALL patients; it is NA for the AML samples.
- FAB: FAB classification.
- Date: The date the sample was obtained.
- Gender: The gender of the patient the sample was obtained from.
- pctBlasts: An estimate of the percentage of blasts.
- Treatment: For the AML patient and indicator of whether the treatment was a success.
- PS: Prediction Strength.
- Source: The institution that provided the samples.

Source

http://www-genome.wi.mit.edu/mpr/data_set_ALL_AML.html, after some anonymous Bioconductor massaging

References

Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring, Science, 531-537, 1999, T. R. Golub and D. K. Slonim and P. Tamayo and C. Huard and M. Gaasenbeek and J. P. Mesirov and H. Coller and M.L. Loh and J. R. Downing and M. A. Caligiuri and C. D. Bloomfield and E. S. Lander

Examples

```
data(Golub_Merge)
Golub_Merge
```

---

golubTest   *Test Set Data from the Golub Paper*

Description

golubTest is deprecated. Use Golub_Test instead.

The data are from Golub et al. These are the training samples, 20 patients with acute lymphoblastic leukemia (ALL) and 14 patients with acute myeloid leukemia (AML). The samples were assayed using Affymetrix Hgu6800 chips and data on the expression of 7129 genes (Affymetrix probes) are available. The data were obtained from the Web site listed below and transformed slightly. They were installed in an exprSet.

Usage

```
data(golubTest)
data(Golub_Test)
```

Format

There are 11 covariates listed.

- Samples: The original sample numbers.
- ALL.AML: Whether the patient had AML or ALL.
- BM.PB: Whether the sample was taken from bone marrow or from peripheral blood.
- T.B.cell: ALL arises from two different types of lymphocytes (T-cell and B-cell). This specifies which for the ALL patients; it is NA for the AML samples.
- FAB: FAB classification.
- Date: The date the sample was obtained.
- Gender: The gender of the patient the sample was obtained from.
- pctBlasts: An estimate of the percentage of blasts.
- Treatment: For the AML patient and indicator of whether the treatment was a success.
- PS: Prediction Strength.
- Source: The institution that provided the samples.

Source

http://www-genome.wi.mit.edu/mpr/data_set_ALL_AML.html, after some anonymous Bioconductor massaging

References

Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring, Science, 531-537, 1999, T. R. Golub and D. K. Slonim and P. Tamayo and C. Huard and M. Gaasenbeek and J. P. Mesirov and H. Coller and M.L. Loh and J. R. Downing and M. A. Caligiuri and C. D. Bloomfield and E. S. Lander

Examples

```
data(Golub_Test)
Golub_Test
```

---

golubTrain   *Training Set from the Golub Paper*

Description

golubTrain is deprecated. use Golub_Train instead.

The data are from Golub et al. These are the training samples, 27 patients with acute lymphoblastic leukemia (ALL) and 11 patients with acute myeloid leukemia (AML). The samples were assayed using Affymetrix Hgu6800 chips and data on the expression of 7129 genes (Affymetrix probes) are available. The data were obtained from the Web site listed below and transformed slightly. They were installed in an exprSet.

Usage

```
data(golubTrain)
data(Golub_Train)
```

Format

There are 11 covariates listed.

- Samples: The original sample numbers.
- ALL.AML: Whether the patient had AML or ALL.
- BM.PB: Whether the sample was taken from bone marrow or from peripheral blood.
- T.B.cell: ALL arises from two different types of lymphocytes (T-cell and B-cell). This specifies which for the ALL patients; it is NA for the AML samples.
- FAB: FAB classification.
- Date: The date the sample was obtained.
- Gender: The gender of the patient the sample was obtained from.
- pctBlasts: An estimate of the percentage of blasts.
- Treatment: For the AML patient and indicator of whether the treatment was a success.
- PS: Prediction Strength.
- Source: The institution that provided the samples.

Source

http://www-genome.wi.mit.edu/mpr/data_set_ALL_AML.html, after some anonymous Bioconductor massaging

References

Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring, Science, 531-537, 1999, T. R. Golub and D. K. Slonim and P. Tamayo and C. Huard and M. Gaasenbeek and J. P. Mesirov and H. Coller and M.L. Loh and J. R. Downing and M. A. Caligiuri and C. D. Bloomfield and E. S. Lander

Examples

```
data(Golub_Train)
Golub_Train
```

Index