

# Package ‘golubEsets’

June 27, 2024

**Version** 1.46.0

**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\_19

**git\_last\_commit** 49cadcf

**git\_last\_commit\_date** 2024-04-30

**Repository** Bioconductor 3.19

**Date/Publication** 2024-06-27

## Contents

golubMerge . . . . .	2
golubTest . . . . .	3
golubTrain . . . . .	4

<b>Index</b>	<b>6</b>
--------------	----------

**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](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](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](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

## \* datasets

golubMerge, 2

golubTest, 3

golubTrain, 4

Golub\_Merge (golubMerge), 2

Golub\_Test (golubTest), 3

Golub\_Train (golubTrain), 4

golubMerge, 2

golubTest, 3

golubTrain, 4