

# Package ‘diggitdata’

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**Type** Package

**Title** Example data for the diggit package

**Version** 1.8.0

**Date** 2014-08-29

**Author** Mariano Javier Alvarez

**Maintainer** Mariano Javier Alvarez <reef103@gmail.com>

**Description** This package provides expression profile and CNV data for glioblastoma from TCGA, and transcriptional and post-translational regulatory networks assembled with the ARACNe and MINDy algorithms, respectively.

**License** GPL (>=2)

**Depends** R(>= 2.14.0), Biobase, methods

**Imports** viper

**LazyLoad** yes

**biocViews** ExperimentData, Cancer

**NeedsCompilation** no

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diggitdata-package	<i>Datasets and network models required for the examples in the diggit package</i>
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### Description

This package contains a human glioblastoma mRNA expression dataset, a human glioblastoma copy number variation (CNV) dataset, a glioblastoma context-specific transcriptional network, and a glioblastoma context-specific post-translational network.

### Details

Package:	diggitdata
Type:	Package
Version:	0.99.0
Date:	2014-08-29
License:	GPL (>=2)
LazyLoad:	yes

### Author(s)

Mariano Javier Alvarez

Maintainer: Mariano Javier Alvarez <reef103@gmail.com>

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gbm.aracne	<i>Transcriptional regulatory network for human glioblastoma</i>
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### Description

Human glioblastoma transcriptional regulatory network assembled by the ARACNe algorithm from TCGA expression data. The data is stored in a S3 class 'regulon' object.

### Usage

```
data(gbm.aracne)
```

### References

Margolin, A.A. et al. (2006) ARACNE: an algorithm for the reconstruction of gene regulatory networks in a mammalian cellular context. *BMC Bioinformatics*, 7 Suppl 1, S7.

### Examples

```
data(gbm.aracne)
print(gbmTFregulon)
```

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`gbm.cnv`*Human glioblastoma TCGA copy number variation (CNV) dataset*

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**Description**

Normalized CNV data, summarized at the gene level, for 230 samples from TCGA profiled by Agilent HG-CGH-244A arrays. The CNV data is in a matrix format, with samples in columns and genes in rows.

**Usage**

```
data(gbm.cnv)
```

**Examples**

```
data(gbm.cnv)
print(gbmCNV[1:5, 1:5])
```

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`gbm.cnv.normal`*Human normal blood TCGA copy number variation (CNV) dataset*

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**Description**

Normalized CNV data, summarized at the gene level, for 33 blood samples from TCGA profiled by Agilent HG-CGH-244A arrays. The CNV data is in a matrix format, with samples in columns and genes in rows.

**Usage**

```
data(gbm.cnv.normal)
```

**Examples**

```
data(gbm.cnv.normal)
print(gbmCNVnormal[1:5, 1:5])
```

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`gbm.expression`*Human glioblastoma mRNA expression dataset from TCGA*

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**Description**

ExpressionSet object containing cleaner summarized and mas5 normalized mRNA expression data from 250 human glioblastoma samples profiled by TCGA on HT-HGU133A arrays.

**Usage**

```
data(gbm.expression)
```

**References**

Alvarez,M.J. et al. (2009) Correlating measurements across samples improves accuracy of large-scale expression profile experiments. *Genome Biol.*, 10, R143.

**Examples**

```
data(gbm.expression)
print(gbmExprs)
```

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gbm.mindy

*Post-translational regulatory network for human glioblastoma*

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**Description**

Human glioblastoma post-translational regulatory network assembled by the MINDy algorithm from TCGA expression data. The data is stored in a S3 class 'regulon' object.

**Usage**

```
data(gbm.mindy)
```

**References**

Wang,K. et al. (2009) Genome-wide identification of post-translational modulators of transcription factor activity in human B cells. *Nat. Biotechnol.*, 27, 829-39.

**Examples**

```
data(gbm.mindy)
print(gbmMindy)
```

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