

GSE32323

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1 Data

The GSE32323 dataset was published by Khamas et al in 2012 (PMID: 22399497). The dataset include 17 colorectal cancer patients with samples from cancer and non-cancerous tissues and 10 samples from CRC cell lines. The cell lines samples were excluded in this analysis.

```
pacman::p_load(Biobase,GEOquery,affy,arrayQualityMetrics)
```

Download the data.

```
GSE32323_RAW = getGEOSuppFiles("GSE32323")
```

```
setwd("GSE32323/")
system("tar xvf GSE32323_RAW.tar")
system("rm GSE32323_RAW.tar")
GSE32323raw = ReadAffy()
GSE32323raw
dim(exprs(GSE32323raw))
setwd("../")
```

Quality controls.

```
table(probes(GSE32323raw,"pm") >= probes(GSE32323raw,"mm"))
affy::hist(GSE32323raw)
affy::boxplot(GSE32323raw)
arrayQualityMetrics(expressionset = GSE32323raw,
                     do.logtransform = FALSE) ## Transform to log2
```

2 Normalization with RMA

```
GSE32323 = affy::rma(GSE32323raw)
dim(GSE32323)
class(GSE32323)
```

The metadata or phenotypic variable is a text file included in the package.

```
file.path = system.file("extdata", "GSE32323_pData.csv", package="tamidata3")
pData(GSE32323) = read.csv(file.path)
save(GSE32323, file="GSE32323.rda")
```