Package ‘Iyer517’

February 1, 2017

Version 1.16.0
Title exprSets for Iyer, Eisen et all 1999 Science paper
Author Vishy Iyer <vishy@cmgm.stanford.edu>
Maintainer Vince Carey <stvjc@channing.harvard.edu>
Description representation of public Iyer data
License Artistic-2.0
Depends Biobase (>= 2.5.5)
biocViews ExperimentData
NeedsCompilation no

R topics documented:

   get.dna2 ................................................................. 1
   Iyer517 ................................................................. 2
   IyerAnnotated ......................................................... 3

Index 4

---------------------------------------------
get.dna2 query genbank for an EST accession id
---------------------------------------------

Description
   extends the get.dna function of E Paradis CRAN package "ape"

Usage
   get.dna2(access.nb)

Arguments
   access.nb an EST accession id

Details
   queries ncbi
Value

a vector of nucleotide codes

Note

try ape::get.dna if this fails

Author(s)

VJ Carey <stvjc@channing.harvard.edu>

See Also

ape::get.dna

Examples

if (interactive())
{
  data(IyerAnnotated)
  get.dna2(IyerAnnotated$GB[1])
}

Iyer517

exprSet instance Iyer517, time series on transcriptional response of fibroblasts to serum

Description

an expression set for timed measurements of transcriptional response of fibroblasts to serum in presence or absence of cycloheximide

Slots

exprs: Object of class matrix, value: 517 x 19 expression levels (normed to 1 at time 0)
se.exprs: Object of class matrix, value: absent
description: Object of class MIAME, value: string
annotation: Object of class character, value: ""
notes: Object of class character, value: ""
phenoData: Object of class phenoData, value: data frame with info on timing
class: Object of class character, value: 'exprSet'

References

Iyer et al 1999 Science v283 83-87

Examples

data(Iyer517)
show(Iyer517)
plot(apply(exprs(Iyer517)[1:100,1:13],2,mean),main="Cluster A",
  xlab="index in time seq", ylab="ratio to time 0", log="y")
IyerAnnotated

Partly annotated version of Iyer517 data

Description
GenBank ids, LocusLink ids (where available) and GO tags (where available) for the 517 cDNAs in the dataset.

Usage
data(IyerAnnotated); data(Iyer517GO)

Format
Iyer517GO: An environment with keys given by the 'GB' identifiers of probes and values given by vectors of GO tags (named by evidence codes) obtained via locuslink mapping
IyerAnnotated: A data frame with 517 observations on the following 9 variables.
- **Iclust**: a factor with levels N A B ... – the cluster groups A-J of the Iyer paper, with N for those rows that were not clustered
- **GB**: a factor with levels AA001025 AA001722 ... accession numbers (often genbank) for probes
- **seqno**: a numeric vector indicating the order of the cDNA in the Iyer report on clustering. (Elements 2:101 formed cluster A, etc.)
- **locusid**: a numeric vector of locuslink ids, formed using AnnBuilder
- **GO1**: a character vector of GO tags (there were up to five based on the LL:GO mapping available March 2003 – these should be ignored in favor of the new Iyer517GO environment
- **GO2**, **GO3**, **GO4**, **GO5**: a character vector

Details
Annotating this dataset is a good exercise for AnnBuilder. Many of the probes seem to have no annotation.

Source

References

Examples
data(IyerAnnotated)
table(is.na(IyerAnnotated$GO1))
data(Iyer517GO)
get(ls(env=Iyer517GO)[1],env=Iyer517GO)
Index

*Topic datasets
  IyerAnnotated, 3

*Topic methods
  Iyer517, 2

*Topic models
  get.dna2, 1

get.dna2, 1

Iyer517, 2
Iyer517GO (IyerAnnotated), 3
IyerAnnotated, 3