keggorth

April 19, 2009

---

getKOprobes   *obtain probe set IDs associated with a KO term*

Description

obtain probe set IDs associated with a KO term

Usage

```
getKOprobes(str, useAcc=TRUE, plat="hgu95av2", na.action=na.omit)
```

Arguments

str	string giving a KEGG orthology term
useAcc	logical – use all accessible terms?
plat	platform corresponding to a bioconductor annotation package, e.g., hgu95av2.db
na.action	function for dealing with NA

Details

looks up the requested term and gives back the unique probe set ids on the platform

Value

character vector, typically processed by `na.omit`

Author(s)

Vince Carey <stvjc@channing.harvard.edu>

Examples

```
getKOtags("insulin")
es =  acc(KOgraph, "Endocrine System")
nm = names(es[[1]])
nm
esp = lapply(nm, getKOprobes)
names(esp) = nm
sapply(esp, length)
```

1

| `indRender` | *indented textual rendering of nodes of a hierarchical graph* |

Description

indented textual rendering of nodes of a hierarchical graph

Usage

```
indRender(klike, from=nodes(klike)[1], indent="  ")
```

Arguments

`klike`	a graph, with tree structure similar to `KOgraph`
`from`	a node name from which the rendering should proceed to all leaves
`indent`	token to use for indentation – will be replicated to depth of node to be rendered to its left

Details

based on keggorth read of KEGG orthology, periodic, as of bioc 2.1 not folded into the annotation build system, but will be ASAP

Value

NULL

Author(s)

Vince Carey <stvjc@channing.harvard.edu>

Examples

```
data(KOgraph)
indRender(KOgraph, "Human Diseases")
```

| `keggDF2graph` | *create a graph from a specific data frame format for KEGG orthology* |

Description

create a graph from a specific data frame format for KEGG orthology

Usage

```
keggDF2graph(df, root="KO.June07root")
data(KOgraph)
```

Arguments

`df`	the data frame
`root`	a name for root node

Details

the obvious directed graph structure from root to leaf nodes (pathway names) is instantiated for the orthology, nodeData attribute tag is loaded with the numerical tag for the term in KEGG, and nodeData attribute depth is loaded with depth from root

Value

a `graphNEL-class` instance

Note

This is only a support function. The graph is serialized in the package data directory.

Author(s)

Vince Carey <stvjc@channing.harvard.edu>

Examples

```
data(keggOrthDF)
keggOrthDF[1:5,]
data(KOgraph)
nodes(KOgraph)[1:4]
nodeData(KOgraph,,"tag")[1:5]
nodeData(KOgraph,,"depth")[1:5]
```

Index