

Package ‘hoplon’

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Title tidy human phenotype ontology

Version 0.0.0.9000

Description Tidy and lightweight handling of human phenotype ontology (HPO) terms.

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Encoding UTF-8

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Depends R (>= 2.10)

Imports dplyr,
magrittr,
purrr,
stringr,
tibble,
tidyr

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

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ancestors	<i>Return the ancestors of an HPO term</i>
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Description

Return the ancestors of an HPO term

Usage

```
ancestors(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a ancestor term

Examples

```
ancestors("HP:0000001")
## Not run:
data %>% mutate(ancestors = ancestors(term))

## End(Not run)
```

children	<i>Return the children of an HPO term</i>
----------	---

Description

Return the children of an HPO term

Usage

```
children(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a child term

Examples

```
children("HP:0000001")
## Not run:
data %>% mutate(children = children(term))

## End(Not run)
```

descendants	<i>Return the descendants of an HPO term</i>
-------------	--

Description

Return the descendants of an HPO term

Usage

```
descendants(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a descendant term

Examples

```
descendants("HP:000001")
## Not run:
data %>% mutate(descendants = descendants(term))

## End(Not run)
```

describe	<i>Return the description of an HPO term</i>
----------	--

Description

Return the description of an HPO term

Usage

```
describe(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector of the description (name) of the HPO ID

Examples

```
describe("HP:000001")
```

parents	<i>Return the parents of an HPO term</i>
---------	--

Description

Return the parents of an HPO term

Usage

```
parents(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a parent term

Examples

```
parents("HP:000001")
## Not run:
data %>% mutate(parents = parents(term))

## End(Not run)
```

parse_hpo	<i>Parse an HPO OBO file</i>
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Description

Parse an HPO OBO file

Usage

```
parse_hpo(path)
```

Arguments

path	Character vector; filepath to your hp.obo file.
------	---

Value

Tibble of HPO terms, term descriptions, and relations

Examples

```
## Not run:
hpo <- parse_hpo("hp.obo")

## End(Not run)
```

prune	<i>Exclude descendants of a set of terms (roots) that are not ancestors of another set of terms. In other words, this takes a set of terms and returns the subtrees rooted at each node, pruned to nodes that are ancestors of the second set of terms.</i>
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Description

Exclude descendants of a set of terms (roots) that are not ancestors of another set of terms. In other words, this takes a set of terms and returns the subtrees rooted at each node, pruned to nodes that are ancestors of the second set of terms.

Usage

```
prune(roots, terms)
```

Arguments

roots	Character vector, a set of valid HPO IDs; defines descendants
terms	Character vector, a set of valid HPO IDs; defines ancestors

Value

a character vector where each element is a HPO term

Examples

```
prune(roots = c("HP:0001250", "HP:0001943"), terms = "HP:0002173")
## Not run:
data %>% mutate(test = prune(roots, terms = "HP:0002173"))

## End(Not run)
```

snomed	<i>Maps an HPO term to SNOMED terms</i>
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Description

Maps an HPO term to SNOMED terms

Usage

```
snomed(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a SNOMED term

Examples

```
snomed("HP:0000003")
## Not run:
data %>% mutate(snomed = snomed(term))

## End(Not run)
```

umls*Maps an HPO term to UMLS concepts*

Description

Maps an HPO term to UMLS concepts

Usage

```
umls(term)
```

Arguments

term	Character vector, a valid HPO ID
------	----------------------------------

Value

a character vector where each element is a UMLS concept

Examples

```
umls("HP:0000001")
## Not run:
data %>% mutate(umls = umls(term))

## End(Not run)
```

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