

Package: plasmapR (via r-universe)

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Title Create Plasmid Maps in R

Type Package

Version 0.3.1

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Description Create circular plasmid maps as ggplot objects. Allows for parsing of .gb files and the creation of plasmid maps. Features allowing for customisation of aesthetics, like regular ggplot plots.

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Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

Imports ggplot2, stringr, ggrepel, cli, readr, rlang, methods, ggfittext (>= 0.10.0)

Suggests knitr, rmarkdown, covr, testthat (>= 3.0.0)

VignetteBuilder knitr

Depends R (>= 2.10)

URL <https://github.com/bradyajohnston/plasmapr>

BugReports <https://github.com/bradyajohnston/plasmapr/issues>

Config/testthat/edition 3

Repository <https://bradyajohnston.r-universe.dev>

RemoteUrl <https://github.com/bradyajohnston/plasmapR>

RemoteRef HEAD

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as.data.frame.plasmid *Extract Features of a Plasmid as a DataFrame*

Description

Extract Features of a Plasmid as a DataFrame

Usage

```
## S3 method for class 'plasmid'
as.data.frame(x, row.names, optional, ...)
```

Arguments

x	A list of class 'plasmid' from read_gb()
row.names	Ignored.
optional	Ignored.
...	Ignored.

Value

a DataFrame

plot_plasmid *Plot a Plasmid*

Description

Create a {ggplot2} plot of a plasmid in polar coordinates. Extracts the features as a data.frame from the plasmid and uses these to construct arrows that are added to the plot.

Usage

```
plot_plasmid(plasmid, name = "Plasmid Name", label_wrap = 20)
```

Arguments

plasmid	A list of class 'plasmid' created through read_gb().
name	Name of the plasmid, to be shown in the center.
label_wrap	Passed to stringr::str_wrap() to wrap the long labels.

Value

A ggplot object.

read_gb	<i>Read a .gb GenBank File</i>
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Description

Read a .gb GenBank File

Usage

```
read_gb(file)
```

Arguments

file	File path or connection, that can be handled by readr::read_lines().
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Value

a list of class 'plasmid' which can be further coerced for plotting.

Examples

```
f1 <- system.file("extdata", "petm20.gb", package = "plasmR")  
f1 |>  
  read_gb() |>  
  as.data.frame()
```

StatArrow	<i>Compute positions for an Arrow</i>
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Description

Compute positions for an Arrow

Usage

StatArrow

Format

An object of class StatArrow (inherits from Stat, ggproto, gg) of length 5.

StatArrowLabel	<i>Compute required values for labels</i>
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Description

Compute required values for labels

Usage

StatArrowLabel

Format

An object of class StatArrowLabel (inherits from StatArrow, Stat, ggproto, gg) of length 2.

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