

Package ‘ggseqlogo’

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Type Package
Title Beautiful and versatile sequence logos
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Description ggseqlogo is versatile ggplot2 extension that allows for plotting of publication-ready sequence logos in R.
License LGPL
Imports ggplot2
RoxygenNote 5.0.1

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geom_logo	<i>Plots sequence logo as a layer on ggplot</i>
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Description

Plots sequence logo as a layer on ggplot

Usage

```
geom_logo(data = NULL, method = "bits", seq_type = "auto",
  namespace = NULL, font = 1, stack_width = 0.95, rev_stack_order = F,
  col_scheme = "auto", low_col = "black", high_col = "yellow",
  na_col = "grey20", plot = T, ...)
```

Arguments

data	Character vector of sequences or named list of sequences. All sequences must have same width.
method	Height method, can be one of "bits" or "probability" (default: "bits")
seq_type	Sequence type, can be one of "auto", "aa", "dna", "rna" or "other" (default: "auto", sequence type is automatically guessed)
namespace	Character vector of single letters to be used for custom namespaces
font	Integer specifying font
stack_width	Width of letter stack between 0 and 1 (default: 0.95)
rev_stack_order	If TRUE, order of letter stack is reversed (default: FALSE)
col_scheme	Color scheme applied to the sequence logo, can be one of the following: "auto", "chemistry", "hydrophobicity", "nucleotide", "base_pairing", "clustalx", "taylor" (default: "auto", color scheme is automatically picked based on seq_type). One can also pass custom color scheme objects created with the make_col_scheme function
low_col, high_col	Colors for low and high ends of the gradient if a quantitative color scheme is used (default: "black" and "yellow").
na_col	Color for letters missing in color scheme (default: "grey20")
plot	If FALSE, plotting data is returned
...	Additional arguments passed to layer params

make_col_scheme	<i>Create new sequence logo color scheme</i>
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Description

Create new sequence logo color scheme

Usage

```
make_col_scheme(chars = NULL, groups = NULL, cols = NULL, values = NULL,
  name = "")
```

Arguments

chars	Vector of one letter characters
groups	Vector of groups for letters with same length as chars (optional if cols parameter is provided)
cols	Vector of colors with same length as chars (optional if values parameter is provided)
values	Vector of numerical values with same length as chars
name	Name of color scheme

Examples

```
# Discrete color scheme examples
cs1 = make_col_scheme(chars=c('A', 'T', 'G', 'C'), groups=c('g1', 'g1', 'g2', 'g2'),
                      cols=c('red', 'red', 'blue', 'blue'), name='custom1')

cs2 = make_col_scheme(chars=c('A', 'T', 'G', 'C'), cols=c('red', 'red', 'blue', 'blue'),
                      name='custom2')

# Quantitative color scheme
cs3 = make_col_scheme(chars=c('A', 'T', 'G', 'C'), values=1:4, name='custom3')
```

theme_logo	<i>ggseqlogo custom theme</i>
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Description

ggseqlogo custom theme

Usage

```
theme_logo(base_size = 14, base_family = "")
```

Arguments

base_size	font base size
base_family	font base family

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