Package 'tableExtra'

November 23, 2020

Title Draws an awesome table

Version 0.99.2

Description Draws an awesome table.

License Apache License (>= 2.0)

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.1

Suggests testthat,
      dplyr,
      tibble

Depends R (>= 3.5.0)

Imports gtable,
      grid

R topics documented:

---

gtable_rbind   *rbind two or more gtables*

Description

rbind two or more gtables

cbind two or more gtables

1

Usage

```
gtable_rbind(..., size = "max", height = NULL, z = NULL)

gtable_cbind(..., size = "max", width = NULL, z = NULL)
```

Arguments

`...`	gtables
`size`	how should the widths be calculated?
	1. `max` maximum of all widths
	2. `min` minimum of all widths
	3. `first` widths/heights of first gtable
	4. `last` widths/heights of last gtable
`height`	padding height between grobs
`z`	optional z level
`width`	padding width between grobs

`pcawg_counts`	*Mutation counts attributed to each mutational signature in each tumour.*

Description

Data from the mutational signature analysis of Alexandrov et al. on the PCAWG data. The data is available as supplementary data to the paper "The repertoire of mutational signatures in human cancer" on the Synapse data repository syn11738669

Usage

```
data(pcawg_counts)
```

Format

A data frame with 2780 rows and 68 variables

Cancer.Types 37 different cancer types

Sample.Names Unique tumour identifiers

Accuracy Cosine similarity between the tumour's mutational profile and the reconstructed mutational profile

SBS1 Single-base-substitution signature 1. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS1.tt

SBS10a Single-base-substitution signature 10a. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS10a.tt

SBS10b Single-base-substitution signature 10b. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS10b.tt

SBS11 Single-base-substitution signature 11. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS11.tt

SBS12 Single-base-substitution signature 12. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS12.tt

SBS13 Single-base-substitution signature 13. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS13.tt

SBS14 Single-base-substitution signature 14. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS14.tt

SBS15 Single-base-substitution signature 15. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS15.tt

SBS16 Single-base-substitution signature 16. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS16.tt

SBS17a Single-base-substitution signature 17a. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS17a.tt

SBS17b Single-base-substitution signature 17b. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS17b.tt

SBS18 Single-base-substitution signature 18. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS18.tt

SBS19 Single-base-substitution signature 19. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS19.tt

SBS20 Single-base-substitution signature 20. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS20.tt

SBS2 Single-base-substitution signature 2. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS2.tt

SBS21 Single-base-substitution signature 21. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS21.tt

SBS22 Single-base-substitution signature 22. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS22.tt

SBS23 Single-base-substitution signature 23. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS23.tt

SBS24 Single-base-substitution signature 24. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS24.tt

SBS25 Single-base-substitution signature 25. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS25.tt

SBS26 Single-base-substitution signature 26. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS26.tt

SBS27 Single-base-substitution signature 27. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS27.tt

SBS28 Single-base-substitution signature 28. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS28.tt

SBS29 Single-base-substitution signature 29. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS29.tt

SBS30 Single-base-substitution signature 30. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS30.tt

SBS3 Single-base-substitution signature 3. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS3.tt

SBS31 Single-base-substitution signature 31. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS31.tt

SBS32 Single-base-substitution signature 32. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS32.tt

SBS33 Single-base-substitution signature 33. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS33.tt

SBS34 Single-base-substitution signature 34. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS34.tt

SBS35 Single-base-substitution signature 35. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS35.tt

SBS36 Single-base-substitution signature 36. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS36.tt

SBS37 Single-base-substitution signature 37. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS37.tt

SBS38 Single-base-substitution signature 38. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS38.tt

SBS39 Single-base-substitution signature 39. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS39.tt

SBS40 Single-base-substitution signature 40. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS40.tt

SBS4 Single-base-substitution signature 4. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS4.tt

SBS41 Single-base-substitution signature 41. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS41.tt

SBS42 Single-base-substitution signature 42. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS42.tt

SBS43 Single-base-substitution signature 43. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS43.tt

SBS44 Single-base-substitution signature 44. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS44.tt

SBS45 Single-base-substitution signature 45. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS45.tt

SBS46 Single-base-substitution signature 46. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS46.tt

SBS47 Single-base-substitution signature 47. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS47.tt

SBS48 Single-base-substitution signature 48. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS48.tt

SBS49 Single-base-substitution signature 49. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS49.tt

SBS5 Single-base-substitution signature 5. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS5.tt

SBS50 Single-base-substitution signature 50. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS50.tt

SBS51 Single-base-substitution signature 51. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS51.tt

SBS52 Single-base-substitution signature 52. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS52.tt

SBS53 Single-base-substitution signature 53. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS53.tt

SBS54 Single-base-substitution signature 54. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS54.tt

SBS55 Single-base-substitution signature 55. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS55.tt

SBS56 Single-base-substitution signature 56. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS56.tt

SBS57 Single-base-substitution signature 57. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS57.tt

SBS58 Single-base-substitution signature 58. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS58.tt

SBS59 Single-base-substitution signature 59. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS59.tt

SBS6 Single-base-substitution signature 6. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS6.tt

SBS60 Single-base-substitution signature 60. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS60.tt

SBS7a Single-base-substitution signature 7a. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS7a.tt

SBS7b Single-base-substitution signature 7b. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS7b.tt

SBS7c Single-base-substitution signature 7c. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS7c.tt

SBS7d Single-base-substitution signature 7d. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS7d.tt

SBS8 Single-base-substitution signature 8. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS8.tt

SBS9 Single-base-substitution signature 9. See https://cancer.sanger.ac.uk/cosmic/signatures/SBS/SBS9.tt

Details

`pcawg_counts` contains the mutation counts as attributed by the SigProfiler algorithm on the Single-Base-Substitution (SBSs) mutation catalogs of 2780 WGS tumours from the PCAWG.

Source

Synapse collaborative compute space, https://www.synapse.org/#!Synapse:syn11804065

References

Alexandrov, L.B., Kim, J., Haradhvala, N.J. et al. The repertoire of mutational signatures in human cancer. Nature 578, 94–101 (2020). https://doi.org/10.1038/s41586-020-1943-3

Examples

```
data(pcawg_counts)
```

---

table_extra_grob	*Graphical display of a table with circles of varying scales and colours.*
	The code is inspired by the `tableGrob` *function* `gridExtra`

Description

Create a gtable containing circle grobs representing a numeric matrix.

Usage

```
table_extra_grob(
  dscale,
  dcolor = NULL,
  dscale_min = NULL,
  dscale_max = NULL,
  rows = rownames(dscale),
  cols = colnames(dscale),
  rows_more = NULL,
  cols_more = NULL,
  theme = ttheme_awesome(),
  vp = NULL
)
```

Arguments

`dscale`	a matrix
`dcolor`	(optional) a matrix
`dscale_min`	value for setting the minimum scale size of foreground grobs. Entries in the `dscale` matrix below `dscale_min` will have a scale of 0 (no grob).
`dscale_max`	value for setting the maximum scale size of foreground grobs. Entries in the `dscale` matrix above `dscale_max` will have a scale of 0 (no grob).
`rows`	(optional) a character vector
`cols`	(optional) a character vector
`rows_more`	(optional) a named list of additional columns (right-part) of the plot for describing the rows. The list names will be used as column headers.
`cols_more`	(optional) a named list of additional rows (top-part) of the plot for describing the columns The list names will be used as row headers.
`theme`	list of theme parameters
`vp`	optional viewport

Value

An R object of class `grob`

Author(s)

Yoann Pradat

See Also

ttheme_awesome()

Examples

```
library(tableExtra)
```

---

tableExtra	*tableExtra: A package for awesome tables*

Description

'tableExtra' provides a function to draw a table with grobs of varying size and colors to represent two different types of information about multiple variables in multiple samples. The package was originally developed to reproduce Figure 3 of Alexandrov, L.B., Kim, J., Haradhvala, N.J. et al. The repertoire of mutational signatures in human cancer. Nature 578, 94–101 (2020). https://doi.org/10.1038/s41586-020-1943-3

Author(s)

Yoann Pradat

---

ttheme_awesome	*Define theme for awesome table plot.*

Description

Define theme for awesome table plot.

Usage

```
ttheme_awesome(
  base_size = 8,
  base_colour = "black",
  base_family = "",
  core_size = unit(10, "mm"),
  scale_breaks = 10,
  scale_ratio = 0.25,
  color_palette = "black",
  color_breaks = NULL,
  parse = FALSE,
  padding = unit(c(0.3, 0.3), "mm"),
  ...
)
```

Arguments

`base_size`	default font size
`base_colour`	default font colour
`base_family`	default font family
`core_size`	cell size for core background grobs
`scale_breaks`	number of size categories for core foreground grobs or numeric vector of bin breaks
`scale_ratio`	ratio of minimum to maximum core foreground grobs sizes
`color_palette`	color palette for core foreground grobs
`color_breaks`	bin breaks for color palette for core foreground grobs
`parse`	logical, default behaviour for parsing text as plotmath
`padding`	length-2 unit vector specifying the horizontal and vertical padding of text within each cell
`...`	extra parameters added to the theme list

Author(s)

Yoann Pradat

Index