

Package ‘asciiruler’

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Type Package

Title Render an ASCII Ruler

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Description An ASCII ruler is for measuring text and is especially useful for sequence analysis. Included in this package are methods to create ASCII rulers and associated GenBank sequence blocks, multi-column text displays that make it easy for viewers to locate nucleotides by position.

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Depends R (>= 2.14)

Imports stringr

Collate 'asciiruler.R'

RoxygenNote 6.0.1

Suggests testthat

NeedsCompilation no

Repository CRAN

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asciiruler	<i>Generate an ascii ruler</i>
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Description

```
,
'
'  v borders
' +-----+<-borders
' |||||<-dense_ticks
' | | | | |<-sparse_ticks
' | -30      -20      -10      0      10      20      30 |
' +-----+<-borders
'
```

Usage

```
asciiruler(low = 0L, high = 50L, sparse_ticks = 5L, dense_ticks = TRUE,
  block_space = 0L, borders = FALSE, numbers_down = TRUE,
  line_break = "\n", strict_width = FALSE)

default.asciiruler(x)
```

Arguments

low	the range start, can be negative
high	the range end, can be negative
sparse_ticks	intermittent ticks appear every sparse_ticks, set to 0 to hide row
dense_ticks	display a row of ticks at every position
block_space	break up the ruler with a space every block_space blocks encountered, a multiple of sparse_ticks, set to 0 to disable
borders	display borders
numbers_down	display the ruler so the numbers are below the ticks
line_break	the line break character(s)
strict_width	hide numbers whose display would force the ruler to be wider than width(high-low)
x	the asciiruler

Value

- asciiruler object with the following slots:
- output** delimited ruler string ready to cat
 - content** vector of lines comprising the ruler
 - width** width of ruler
 - leftmargin** position of the first tick relative to the left edge of the ruler

References

Inspired by <http://codegolf.stackexchange.com/questions/4910/ascii-ruler-generation>

Examples

```
asciiruler(low=-30,high=30,borders=TRUE)
```

genbank_seqblock	<i>Generate a GenBank sequence block</i>
------------------	--

Description

```
,
'      1      6      11     16     21     26     31     36     41     46     51     56
'      |      |      |      |      |      |      |      |      |      |      |
'      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
'  1  GATCACAGGT CTATCACCT ATTAACCACT CACGGGAGCT CTCCATGCAT TTGGTATTTT
' 61  CGTCTGGGGG GTGTGCACGC GATAGCATTG CGAGACGCTG GAGCCGGAGC ACCCTATGTC
'121  GCAGTATCTG TCTTTGATTC CTGCCCCATC CTATTATTTA TCGCACCTAC GTTCAATATT
'181  ACAGGCGAAC ATACTTACTA AAGTGTGTTA ATTAATTAAT GCTTGTAGGA CATAATAATA
'241  ACAATTGAAT GTCTGCACAG CCGCTTTCCA CACAGACATC ATAACAAAAA ATTTCCACCA
'301  AACCCCCCTC CCCCCGCTTC TGGCCACAGC ACTTAAACAC ATCTCTGC
'
```

Usage

```
genbank_seqblock(string, start = 1L, end = 0L, blocksize = 10L,
  width = 60L, sep = " ", line_break = "\n", ruler = TRUE, ...)
```

Arguments

string	the sequence string to display
start	the substring start, should be 1 or greater
end	substring end, should be >start, negative to trim
blocksize	number of characters in each block
width	width of the sequence block
sep	space character between blocks
line_break	the line break character(s)
ruler	display an ascii ruler
...	additional arguments passed to asciiruler

Value

delimited GenBank block string ready to cat

Examples

```
my_sequence<- 'GATCACAGGTCTATCACCTATTAACCACTCACGGGAGCTCTCCATGCATTTGGTATTTTCGTCTGGGGG
GTATGCACGCGATAGCATTGCGAGACGCTGGAGCCGGAGCACCCATGTGCGAGTATCTGTCTTTGATTC
CTGCCTCATCCTATTATTTATCGCACCTACGTTCAATATTACAGGCGAACATACTTACTAAAGTGTGTTA
ATTAATTAATGCTTGTAGGACATAATAACAATTGAATGTCTGCACAGCCACTTCCACACAGACATC'
my_seqblock<-genbank_seqblock(my_sequence)
cat(my_seqblock)
```

print.asciiruler	<i>Print an asciiruler</i>
------------------	----------------------------

Description

Print an asciiruler

Usage

```
## S3 method for class 'asciiruler'
print(x, ...)
```

Arguments

x	the asciiruler
...	additional arguments

width	<i>Get the total width of an ascii ruler</i>
-------	--

Description

Get the total width of an ascii ruler

Usage

```
width(x, ...)
```

Arguments

x	the asciiruler
...	additional arguments

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