Package: rutledge (via r-universe)

September 19, 2024

Type Package

Title Real-Time PCR Data Sets by Rutledge et al. (2004)

Version 0.1.1

Description Real-time quantitative polymerase chain reaction (qPCR)
data by Rutledge et al. (2004) <doi:10.1093/nar/gnh177> in tidy
format. The data comprises a six-point, ten-fold dilution
series, repeated in five independent runs, for two different
amplicons. In each run, each standard concentration is
replicated four times. For the original raw data file see the
Supplementary Data section:
<https://academic.oup.com/nar/article/32/22/e178/2375678#supplementary-data>.

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Encoding UTF-8

LazyData true

Depends R (>= 2.10)

RoxygenNote 7.3.1

Roxygen list(markdown = TRUE)

Imports tibble

URL https://github.com/ramiromagno/rutledge,
https://rmagno.eu/rutledge/

BugReports https://github.com/ramiromagno/rutledge/issues

Repository https://patterninstitute.r-universe.dev

RemoteUrl https://github.com/ramiromagno/rutledge

RemoteRef HEAD

RemoteSha c997f9d8eb20d24bb5a0b563734a603b1bc0df38

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| rutledge | *qPCR data set by Rutledge et al. (2004)* |

Description

Each data set comprises a six-point, ten-fold dilution series, repeated in five independent runs, for two different amplicons: K1/K2, 102 bp, and K3/K2, 218 bp. Fluorescence readings were exported after background subtraction via baseline averaging of the 5 cycles immediately preceding the cycles in which fluorescence was first detected. Please read the Materials and Methods section of Rutledge et al. (2004) for more details.

Format

A tibble with 10,800 rows and 10 variables:

plate Plate identifier. Because one plate (run) was used per dilution series, plate values are simply numbered 1 thru 5.

well Well identifier. Values are always NA (not available). This variable is kept nevertheless to be coherent with other data sets from other similar R data packages.

dye The type of dye used. In this data set the values are always "SYBR", meaning SYBR Green I master mix (Roche).

target Target identifier: the amplicon used, K1/K2 or K3/K2.

sample_type Sample type (all curves are standards, i.e. "std").

replicate Replicate identifier: 1 thru 4.

copies Standard copy number.

dilution Dilution factor. Higher number means greater dilution.

cycle PCR cycle.

fluor Raw fluorescence values.

Source

doi:10.1093/nar/gnh177

Examples

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