Package 'boggy'

April 25, 2024

Title Real-Time PCR Data Sets by Boggy et al. (2010)

Version 0.0.1

Description Real-time quantitative polymerase chain reaction (qPCR) data
sets by Boggy et al. (2008) <doi:10.1371/journal.pone.0012355>. This package
provides a dilution series for one PCR target: a random sequence that
minimizes secondary structure and off-target primer binding. The data set
is a six-point, ten-fold dilution series.
For each concentration there are two replicates. Each amplification curve
is 40 cycles long. Original raw data file:
<https://journals.plos.org/plosone/article/file?type=supplementary&id=10.
1371/journal.pone.0012355.s004>.

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Encoding UTF-8

RoxygenNote 7.3.1

Imports tibble

Depends R (>= 2.10)

LazyData true

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

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

NeedsCompilation no

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R topics documented:

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s1   *qPCR data set by Boggy et al. (2010)*

Description

The qPCR data set named *s1* comprises a six-point, ten-fold dilution series, replicated in duplicates targeting an amplicon designed with a random sequence that minimizes secondary structure and off-target primer binding. Please read the *Quantitative PCR data* section, *qPCR assays* subsection of Boggy et al. (2010) for more details.

Format

A tibble with 480 rows and 10 variables:

plate Plate identifier. For this data set it is always missing (NA).

well Well identifier.

dye The type of dye used. In this data set the values are always ″SYTO 13″, meaning 2 mM of the dsDNA dye SYTO-13 (Invitrogen, Carlsbad, CA).

target Target identifier: the amplicon used, a random sequence dubbed ″S1″ by the original authors.

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

replicate Replicate identifier: either 1 or 2.

copies Standard copy number.

dilution Dilution factor. Higher number means greater dilution.

cycle PCR cycle.

fluor Raw fluorescence values.

Source

doi:10.1371/journal.pone.0012355

Examples

s1

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