

Taqman® Advanced miRNA cDNA Synthesis Kit (50 Reactions)

Product No. A28007
Lot No. 1855544
Date of Manufacture 02Mar2017
Expiration Date 31Oct2017

Kit Component Performance Testing

Poly A Enzyme

RNase Assay

Specification: Incubation of a 10 µl reaction containing 5 units of E. coli Poly(A) Polymerase with 40 ng of RNA transcript for 2 hours at 37°C results in no detectable degradation of the RNA as determined by gel electrophoresis.

Result: Meets specification

DNA Exonuclease Activity

Specification: Incubation of a 50 µl reaction containing 10 units of E. coli Poly(A) Polymerase with 1 µg of a mixture of single and double-stranded ³H E. coli DNA (200,000 cpm/µg) for 3 hours at 37°C releases 0.1% of the total radioactivity.

Result: Meets specification

DNA Endonuclease Activity:

Specification: Incubation of a 50 µl reaction containing 10 units of E. coli Poly(A) Polymerase with 1 µg of phiX174 RF I DNA for 3 hours at 37°C resulted in 10% conversion to RFII as determined by agarose gel electrophoresis.

Result: Meets specification

RNA Ligase, 10U/uL

RNase Assay

Specification: Incubation of a 10 µl reaction containing 20 units of T4 RNA Ligase 1 with 40 ng of RNA transcript for 2 hours at 37°C results in no detectable degradation of the RNA as determined by gel electrophoresis.

Result: Meets specification

DNA Exonuclease Activity

Specification: Incubation of 20 units of T4 RNA Ligase 1 with 1 µg of mixed single and double-stranded sonicated ³H DNA (10⁵ cpm/ µg) in 50 µl T4 RNA Ligase Reaction Buffer for 4 hours at 37°C releases 0.1% of the activity.

Result: Meets specification

DNA Endonuclease Activity

Specification: Incubation of 20 units of T4 RNA Ligase 1 with 1 µg phiX174RF I DNA in 50 µl T4 RNA Ligase Reaction Buffer for 4 hours at 37°C resulted in no detectable degradation of DNA as determined by agarose gel electrophoresis.

Result: Meets specification

10X RT Enzyme Mix

qRT-PCR Functional Assay

Specification: This product is tested functionally in qRT-PCR using total RNA. Kinetic analysis must demonstrate a linear dose response between -3.20 and -3.60 over six orders of magnitude from 2.5 µg – 2.5 pg with a correlation coefficient ≥ 0.990 .

Result: Meets specification

2X miR-Amp Master Mix

Bulk samples are subjected to a panel of quality control tests to guarantee the highest level of performance and lot-to-lot consistency.

Deoxynucleoside triphosphate (dNTP) Concentration

Specification: Deoxynucleoside triphosphate (dNTP) concentrations individually measured by HPLC.

Result: Meets specification

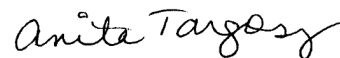
Magnesium ion (Mg2+) Concentration

Specification: Magnesium ion (Mg2+) concentration measured by ion chromatography.

Result: Meets specification

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