

Oligo(dT)₁₈ primer mix

Catalogue number:

MB12801, 100 µL (27 µg)

Primer sequence:

5'- d (TTT TTT TTT TTT TTT TTT)-3'

Description

Oligo (dT)₁₈ primer is a synthetic single-stranded 18-mer oligonucleotide with 5'- and 3'- ends. Oligo (dT)₁₈ is suitable for use as a primer for first-strand cDNA synthesis with a reverse transcriptase. The primer hybridizes to the poly(A) tail found at the 3'-end of most eukaryotic mRNAs, making them more specific than random hexamers, as they will not transcribe rRNA.

Oligo (dT)₁₈ primer is frequently employed when cDNA is used for cloning, cDNA library construction and qPCR.

Concentration

100 µL at 270 ng/µL (50 µM)

Features

- Ultra-pure grade
- DNase/ RNase free

Storage conditions

Oligo (dT)₁₈ primer mix should be stored at -20 °C, in a constant temperature freezer. Avoid multiple freeze/thaw cycles.

Protocol

Use 1 µL in a 20 µL reverse transcription (RT) reaction.

Note: The sensitivity of cDNA synthesis may be improved when using a mixture of oligo(dT)₁₈ and random hexamer primers.

Quality control assays

Nucleases assays

To test for DNase contamination, 0.2-0.3 µg of pNZY28 plasmid DNA are incubated with 1 µL of Oligo (dT)₁₈ primer for 14-16 hours at 37 °C. To test for RNase contamination, 1 µg of RNA is incubated with 1 µL of Oligo (dT)₁₈ primer for 1 hour at 37 °C. Following incubation, the nucleic acids are visualized on a GreenSafe-stained agarose gel. There must be no visible nicking or cutting of the nucleic acids. Similar tests are performed with the reaction buffer.

Functional assay

Oligo (dT)₁₈ primer mix is tested for performance in a RT-qPCR experiment using a 10-fold serial dilution of total RNA from mouse liver (1 µg to 0.1 ng). After the first-strand cDNA synthesis with NZY Reverse Transcriptase, the resultant cDNA is then used as template in a quantitative real-time PCR assay using specific primers to amplify the mouse GAPDH gene.

Related products

| Product Name | Cat. No. |
|-----------------------------|----------|
| NZY Reverse Transcriptase | MB124 |
| Random hexamer mix | MB12901 |
| Water for Molecular Biology | MB11101 |
| dNTPs NZYSet | MB08701 |

V1902

Certificate of Analysis

| Assay | Result |
|------------------|--------|
| Nucleases Assay | Pass |
| Functional Assay | Pass |

Approved by:



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For research use only.



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