Oligo (dT)$_{12-18}$ Primers

Catalog Number: RDPC1
Pack Size: 50 tests

Specifications and Use

Description
- Oligo (dT)$_{12-18}$ primers are specific for polyadenylated regions of mRNA and can be used in reverse transcription reactions to generate first strand cDNA.

Components
- **Oligo (dT)$_{12-18}$ Primers** - Lyophilized. Each vial contains 25 µg. Adjust to a final concentration of 0.5 µg/µL by resuspending primers in 50 µL nuclease-free water.

Storage
- The Oligo (dT)$_{12-18}$ primers resuspended in nuclease-free water are stable for up to one year at ≤ -20° C in a non-frost free freezer. Aliquot in single use portions. **Do not use past the expiration date above.**
- **Avoid repeated freeze-thaw cycles.**

We recommend the following protocol for R&D Systems' Oligo (dT)$_{12-18}$ Primers.

Reverse Transcription Reaction:

1. Thaw all reagents completely on ice. All reactions should be assembled on ice.
2. Resuspend the RT primer according to the instructions in the "Specifications and Use" section.
3. Pipet the following into a nuclease-free tube:
   1 to 5 µg of total RNA (up to 11 µL)
   1 µL Oligo (dT)$_{12-18}$ primers (0.5 µg/µL)
   x µL Nuclease-free dH_2O for a final volume of 12 µL
4. Mix and incubate at 70° C for 10 minutes. Place tube on ice immediately.
5. Briefly centrifuge the tube, then add the following to each tube:
   4 µL 5X Reverse Transcription Buffer
   2 µL 0.1M DTT
   1 µL 10 mM dNTPs
6. Mix and incubate at room temperature (~25° C) for 10 minutes.
7. Incubate at 42° C for 2 minutes.
8. Add 1 µL RNase H$^-$ Reverse Transcriptase (200 units/µL). Mix by pipetting.
9. Incubate at 42° C for 50 minutes.
10. Incubate at 70° C for 15 minutes.
11. Dilute reactions 5-fold by adding 80 µL of nuclease-free dH_2O.
12. Store at ≤ -20° C in a manual defrost freezer.

R&D Systems, Inc.
1-800-343-7475