Tribioscience

HyperScript™ Reverse Transcriptase (TBS4601)

Formerly Catalog No. 601-100

Description

HyperScript™ M-MLV Reverse Transcriptase is an engineered M-MLV Reverse Transcriptase with reduced RNase H activity and increased thermal stability. The enzyme can be used to synthesize first-strand cDNA at temperatures up to 55°C. RNA targets up to 12 kb can be detected with this enzyme. The amount of starting material can vary from 1 pg to 5 ug of total RNA. It is suitable for synthesis of first strand cDNA, RT-PCR, RT-qPCR and construction of full-length cDNA library.

Kit Content

HyperScript™ M-MLV Reverse Transcriptase (10,000U)

Components	Size
HyperScript™ M-MLV Reverse Transcriptase (200U/µL)	50 µL
5x RT Buffer with DTT	0.5 mL
10 mM dNTP Mix(2.5mM/each)	0.25 mL

Storage Conditions:

Stable for 1 year at -20 ℃

Unit Definition:

One unit is defined as the amount of enzyme required for catalytic incorporation of 1nmole dTTP in 10 minutes using Poly (A) as template and Oligo (dT) as primer at 37℃.

Procedures

1. Set up cDNA reaction mixture in total volume of 20 µL as below

Component	**Volume**
5x RT Buffer	4 µL
10 mM dNTP Mix	4 µL
Oligo-dT primer 100mM, or Random Primers, 50mM, or specific primer 10 µM	1 µL
RNA Template	x
M-MLV (H-), 200 U/ µL	1 µL
RNase-Free Water	Up to 10 µL
Final volume	20 µL
If the amount of RNA is less than 50ng, RNase inhibitor (RNAsin) is essential. It is not included in the kit.	

2. Mix thoroughly and quickly spin the tube in centrifugation to make all of solution on the wall of the tube to the bottom of the tube.
3. Incubate at 55 ℃ for 5 ~ 15 minutes, then stop the reaction at 85℃ for 5minutes. After the reaction, briefly spin the tube and cool down on ice.

Related Products

2x Fast Taqman Probe qPCR Master Mix-ROX (TBS4002R)
2x Fast Taqman Probe qPCR Master Mix-Low ROX (TBS4002LR)
2x Fast Taqman Probe qPCR Master Mix-No ROX (TBS4002NR)
All-in-One Reverse Transcription Reaction Kit (TBS4006)