Amamus M-MLV Reverse Transcriptase

Cat. No.	Size
PBIMV0030	10,000 units

Applications

01 Synthesis of first-strand cDNA for cloning

02 RT-PCR applications for amplification from RNA targets (e.g., RNA virus)

03 cDNA library construction for RNA-Seq transcriptome studies

Storage buffer

Description

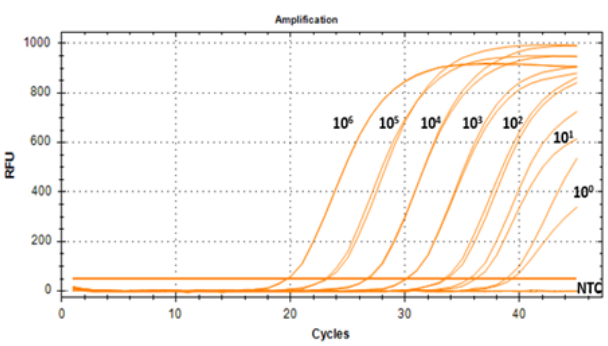
Amamus M-MLV (Moloney Murine Leukemia Virus) Reverse Transcriptase is a recombinant RNA-directed DNA polymerase that is capable for preparation of first-strand cDNA using an RNA template. The enzyme is modified to reduce RNase H activity and increase thermal stability enabling improved synthesis of full-length cDNA even for long mRNA.

Features

- Purity ≥ 90% , no nuclease residues, low bacterial gDNA contamination (10 units ≤ 1 copies level).
- Supports reverse transcription in a wide temperature range (37-50˚C).

Validation Data

A.



B.

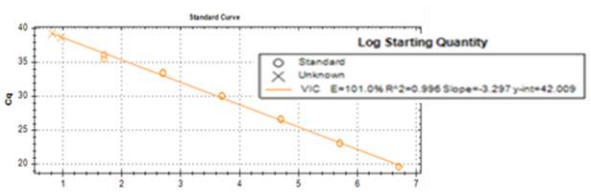


Figure. High sensitivity detection of low copy number RNA target. Amamus M-MLV was used in One-Step RT-PCR Reaction to amplify the portion of nucleoprotein gene (N gene of coronavirus). Quantified N gene RNA transcript was used as template and serial diluted to the following gradients: 5 copies to 5 x 10^6 copies (over 5 orders of magnitude).The amplification profiles illustrate (A) a very good linearity, down to 5 copies , (B) very good correlation coefficient (R2 = 0.996), and qPCR reaction efficiency (101%).

Amamus