Certificate of Analysis

M-MLV Reverse Transcriptase

Cat. No. 27032 50μl

SOURCE	*Moloney Murine Leukemia Virus*
CONCENTRACTION	200 U /μl
STORAGE	Store at -20°C
STORAGE BUFFER	20mM Tris-HCl (pH 7.5) 0.1mM DTT, 0.01% NP-40, 0.1mM EDTA 0.1M NaCl, 50% Glycerol
5x REACTION BUFFER	250mM Tris-HCl (pH 8.3) 15mM $MgCl_2$ 100mM DTT 375mM KCl
PHYSICAL PURITY	>90% as judged by SDS-PAGE gel with coomassie blue staining
QC DATA	Nuclease activity is not detected

APPLICATION

- cDNA synthesis
- Sequencing single and double-stranded DNA
- Sequencing single and double-stranded RNA
- Random priming reaction

UNIT DEFINITION

One unit of the enzyme incorpotates 1 nmol dTTP into acid-precipitable material in 10 min at 37°C, using poly(A):oligo dT as a template:primer.

QUALITY CONTROL

1) Endonuclease Activity

1μg of Type I supercoiled plasmid DNA is incubated with 500 units of enzyme in 1x reaction buffer for 1hr at 37°C. The supercoiled DNA is visualized on an ethidium bromide-stained agarose gel to verify the absence of nicking or cutting.

2) Nuclease Activity

50 ng of radiolabeled DNA or RNA is incubated with 200 units of enzyme in 1x reaction buffer for 1hr at 37°C, resulting in <1% release for both DNase and RNase.

GENERAL USE

Use 1μl of M-MLV RT in a 20μl of reaction.