

## MMuLV Reverse Transcriptase

**Ordering Information:** AB-0322 MMuLV Reverse Transcriptase 10,000 units  
AB-0322/b MMuLV Reverse Transcriptase 50,000 units

**Enzyme Source:** Isolated from a clone over-expressing the enzyme.

**Concentration:** 250 units/μl

**Unit Definition:** One unit is the amount of enzyme that incorporates 1nmol of dTTP into acid-insoluble form in 10 minutes at 37°C using poly-A-oligo dT<sub>12-18</sub> as substrate.

**Analysis Conditions:** 50mM Tris-HCl, pH 8.3 (at 25°C)  
75mM KCl  
3mM MgCl<sub>2</sub>  
0.5mM dTTP  
0.4mM poly A:oligo dT<sub>12-18</sub>  
10mM DTT

Incubation at 37°C.

**Reaction Buffer (5x):** 250mM Tris-HCl, pH 8.3 (at 25°C)  
375mM KCl  
15mM MgCl<sub>2</sub>  
50mM DTT

**Storage and Dilution Buffer:** 50mM Tris-HCl, pH 8.3 (at 25°C)  
0.2mM NaCl  
5mM DTT  
0.1% Triton® X-100  
50% (v/v) Glycerol

**Storage Conditions:** Store at -20°C. Shipped on dry ice.

**For Research Purposes Only**

**Exonuclease Activity:** Incubation of 50 units of the enzyme with 1µg λ DNA for 16 hours at 37°C in the stated reaction buffer does not produce any detectable degradation of the DNA.

**RNase Assay:** No detectable RNase activity was observed when 50 units of the enzyme were incubated with 8ng RNA in a 20µl reaction volume for 24 hours at 37°C.

**Applications:**

1. Synthesis of cDNA
2. Filling in and labelling the 3'-termini of DNA with overhanging 5' ends
3. DNA sequencing
4. RNA amplification

**References:** Roth, MJ *et al* (1985) *J Biol Chem* **250**, 9326.

**Note:** We recommend using 100 units of enzyme/µg of RNA with our enzyme, compared with 200–300 units of enzyme/µg of RNA with the enzymes supplied from major competitors.

Triton® is a registered trademark of Rohm & Haas Inc.

**For Research Purposes Only**