

Reverse Transcriptase from Moloney Murine Leukemia Virus, Recombinant

Cat. No. NATE-0660

Lot. No. (See product label)

Introduction

Description This Reverse Transcriptase has exceptionally strong strand displacement activity and enables efficient preparation of cDNA up to 12 kb in length. It is robust, versatile and well-suited for applications requiring full-length cDNA such as preparation of cDNA libraries and other techniques involving first strand cDNA synthesis (RT-PCR, preparation of cDNA probes, real-time quantitative RT-PCR). It can be used for performing a reverse transcription reaction with any RNA template including GC-rich templates and RNAs with high levels of secondary structure. This enzyme is a modified, recombinant MMLV (Moloney Murine Leukemia Virus) reverse transcriptase and is verified to be RNase H Minus. Because of the excellent extension capability of PrimeScript Reverse Transcriptase, preparation of cDNA can be performed at a lower temperature (42°C), decreasing the risk of RNA degradation that can occur during conventional reactions performed at higher temperatures.

Applications RT-PCR; First strand cDNA synthesis; cDNA probe preparation; Synthesis of cDNA libraries with a high proportion of full-length cDNAs.

Synonyms Reverse transcriptase; RT

Product Information

Species Moloney Murine Leukemia Virus

Source E. coli

Buffer 5X Buffer (for cDNA synthesis) 250 mM Tris-HCl, pH 8.3 375 mM KCl 15 mM MgCl₂ Reaction mixture for unit definition: 50 mM: Tris-HCl, pH 8.3 75 mM: KCl 8mM: MgCl₂ 10 mM: DTT 20 ug/mL: (ra)n (dT)12-18 0.5 mM: [3H]dTTP 0.1%: NP-40 Storage Buffer Composition 200 mM Tris-HCl, pH 7.8 100 mM NaCl 1 mM EDTA 1 mM DTT 50% Glycerol (v/v)

Unit Definition One unit is the amount of the enzyme that incorporates 1 nmol of [3H]dTTP in 10 minutes at 37°C, with poly (rA), oligo (dT) 12-18 as the primer-template.

Storage and Shipping Information

Storage Storage at -20°C