Creative Enzymes®

Reverse Transcriptase from HIV, Recombinant

Cat. No. NATE-0987

Lot. No. (See product label)

Introduction

Description	Chromatographically purified heterodimer composed of 66kDa and 51kDa subunits. Supplied as a solution in 10mM potassium phosphate, pH 7.4, 1mM DTT and 20% glycerol. Primarily for AIDS research purposes; this enzyme has less fidelity than the AMV enzyme in other applications such as the preparation of cDNA from mRNA for cloning purposes.
Applications	HIV reverse transcriptase is used for research on the AIDS primer. However it can be substituted for AMV reverse transcriptase, which is mainly used to transcribe mRNA into double stranded cDNA, that can be inserted into prokaryotic vectors. The enzyme can also be used with either single stranded DNA or RNA templates to make probes for use in hybridization experiments. It can be used for labeling the termini of DNA fragments with protruding 5' termini. The enzyme can also be used to sequence DNAs by the dideoxy chain termination method of Sanger when the Klenow fragment of E. coli DNA polymerase I, or the T7 DNA polymerase yield unsatisfactory results.
Synonyms	Reverse transcriptase; RT

Product Information

Species	HIV
Source	E. coli
Form	A solution in 10mM potassium phosphate, pH 7.4, 1mM DTT and 20% glycerol.
EC Number	EC 2.7.7.49
CAS No.	9068-38-6
Molecular Weight	66 kDa and 51 kDa
Purity	Chromatographically purified
Activity	> 5,000 units per mg protein
Unit Definition	One Unit incorporates 1 nmole of tritiated d-TMP into acid precipitable products using poly(A)/oligo(dT)12-18 as the template/primer in 20 minutes at 37°C, pH 8.3.

Storage and Shipping Information

Storage	Store at -20°C