

Bioactive

# Reverse Transcriptase (HIV) Recombinant Protein

Catalog # P5324

Size 200 Units

## Specification

<b>Product Description</b>	Chromatographically purified dimeric form with M.W. of 66 kDa and 51 kDa.
<b>Biological function</b>	Reverse transcriptases are enzymes encoded in retroviruses viral genome. The enzyme is responsible for transcription of the viral RNA to produce a dsDNA that can be inserted into the host genome.
<b>Host</b>	Escherichia coli
<b>Form</b>	Liquid
<b>Preparation Method</b>	<i>Escherichia coli</i> expression system
<b>Activity</b>	$\geq 5,000$ units per mg protein. 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.
<b>Recommend Usage</b>	Reverse Transcriptase Assay. 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 <i>E. coli</i> DNA polymerase I, or the T7 DNA polymerase yield unsatisfactory results.
<b>Storage Buffer</b>	In 10 mM potassium phosphate, pH 7.4 (1 mM DTT and 20% glycerol).
<b>Storage Instruction</b>	Store at -20°C.

## Applications

- Enzyme Activity