Creative Enzymes®

Native Avian myeloblastosis virus AMV-Reverse Transcriptase

Cat. No. NATE-0073

Lot. No. (See product label)

Introduction

Description	A Reverse transcriptase (RT) is an enzyme used to geneRate complementary DNA (cDNA) from an RNA template, a process termed reverse transcription. It is mainly associated with retroviruses. However, non-retroviruses also use RT (for example, the hepatitis B virus, a member of the Hepadnaviridae, which are dsDNA-RT viruses, while retroviruses are ssRNA viruses). RT inhibitors are widely used as antiretroviral drugs. RT activities are also associated with the replication of chromosome ends (telomerase) and some mobile genetic elements (retrotransposons).
Applications	AMV reverse transcriptase synthesizes DNA complementary (cDNA) to RNA templates. A DNA primer complementary to the RNA template and a divalent cation, either Mg or Mn, are required for initiation of transcription. This enzyme is commonly used to make cDNAs from mRNA for eventual cloning or for use as probes.
Synonyms	DNA nucleotidyltransferase (RNA-directed); reverse transcriptase; revertase; RNA-dependent deoxyribonucleate nucleotidyltransferase; RNA revertase; RNA-dependent DNA polymerase; RNA-instructed DNA polymerase; RT; EC 2.7.7.49; 9068-38-6

Product Information

Source	Avian myeloblastosis virus
EC Number	EC 2.7.7.49
CAS No.	9068-38-6
Unit Definition	One unit incorporates 1 nmol of dTTP into TCA precipitable material in 10 min at 37°C using polyadenylic acid as template and oligo (dT)12-18 as a primer.

Storage and Shipping Information

Storage	−70°C