

## Native Calf Terminal Transferase

Cat. No. NATE-0692

Lot. No. (See product label)

### Introduction

**Description** Bovine terminal transferase (TdT) is a primer-dependent polymerase that catalyzes the addition of deoxynucleotides to the 3'-OH terminus of DNA molecules with the release of inorganic phosphate. TdT reacts preferentially with either single-stranded DNA molecules or double-stranded-DNA with 3' overhangs, but procedures have been developed to label blunt ends or 3'-recessive ends. In a reaction mixture, the divalent ion (Co<sup>2+</sup>, Mn<sup>2+</sup>, Mg<sup>2+</sup>) will influence purine and pyrimidine polymerization rate. Activities of TdT are also affected by the bases (dATP, dCTP, dGTP and dTTP) present.

**Applications** Suitable for: • Addition of homopolymers to vectors, inserts and cDNA for cloning • Labeling the 3'-end of double- and single-stranded DNA with non-radioactive or radioactive labels • Carrying out in vitro mutagenesis by adding single nucleotides to DNA • Use in TUNEL assays

**Synonyms** DNA nucleotidylexotransferase; terminal deoxyribonucleotidyltransferase; terminal addition enzyme; addase; deoxynucleotidyl terminal transferase; deoxyribonucleic acid nucleotidyltransferase; deoxyribonucleic nucleotidyltransferase; terminal deoxynucleotide transferase; TdT; EC 2.7.7.31; 9027-67-2

### Product Information

<b>Species</b>	Calf
<b>Source</b>	Calf thymus
<b>Form</b>	buffered aqueous glycerol solution
<b>EC Number</b>	EC 2.7.7.31
<b>CAS No.</b>	9027-67-2
<b>Molecular Weight</b>	mol wt 60 kDa
<b>Concentration</b>	>5000 U/mL
<b>Function</b>	DNA binding; DNA nucleotidylexotransferase activity; DNA-directed DNA polymerase activity
<b>Unit Definition</b>	One unit will incorporate 1 nanomole of dATP into acid-precipitable material in one hour at 37°C using d (pT) <sub>6</sub> as primer.

### Storage and Shipping Information

**Storage** -20°C