





Terminal Deoxynucleotidyl Transferase (TdT)

Cat #: PRP3002

Size: 40 µg/ 100 µg

Product Information

	Product Name: Terminal Deoxynucleotidyl Transferase (TdT)		
	Catalog Number: PRP3002		Lot Number: Refer to product label
	Purity: > 90% as determined by SDS-PAGE		
	Storage: Store at -20°C		Expressed Host: E. coli
	Shipping: Gel pack with blue ice		

Background: Terminal deoxynucleotidyl transferase (TdT), also known as terminal transferase, is a specialized DNA polymerase expressed in immature, pre-B, pre-T lymphoid cells, and acute lymphoblastic leukemia/lymphoma cells. Generally, TdT catalyses the addition of nucleotides to the 3' terminus of a DNA molecule. Unlike most DNA polymerases, it does not require a template. The preferred substrate of this enzyme is a 3'-overhang, but it can also add nucleotides to blunt or recessed 3' ends.

Sequence: Amino acid sequence derived from Bovine TdT (P06526) (Mer1-Ala509) was expressed.

Protein length: The recombinant Bovine TdT consists of 509 amino acids and migrates with an apparent molecular mass of 58.3 kDa as estimated in SDS-PAGE under reducing conditions.

Unit Definition: One unit of the enzyme catalyzes the incorporation of 1 nmol of deoxythymidylate into a polynucleotide fraction in 60 min at 37°C.

Storage buffer: Liquid in sterile 50 mM K₂HPO₄, 100 mM NaCl, 1 mM DTT, 0.1% Tween20, 1% BSA, 50% Glycerol, pH 6.5.

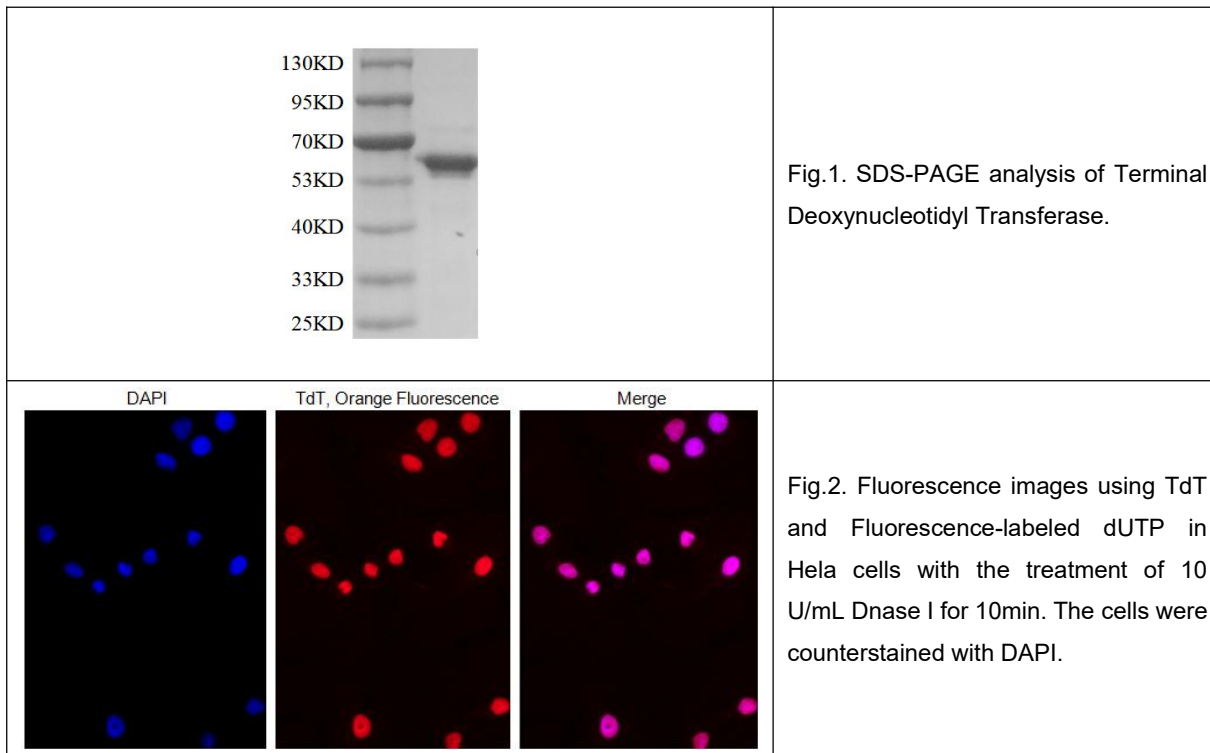
Formulation:

Components	Size 1	Size 2
Terminal Deoxynucleotidyl Transferase (TdT), 2 mg/mL	40 µg	100 µg
Equilibration Buffer (5×)	0.5 mL	1 mL

Equilibration Buffer (5×): 1 M potassium cacodylate, 125 mM Tris, 1 mM DTT, 5 mM CoCl₂.

Usage notes: The Equilibration Buffer (5×) stock solution is stored at low temperature, resulting in a small amount of component precipitation. Please invert and mix before use. And Equilibration Buffer (5×) contains cacodylate and cobalt chloride, highly toxic chemicals. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately.

Reference system of TUNEL: Equilibration Buffer (5×) 10 μL
 Fluorescence-labeled dUTP 5 μL
 ddH₂O 34 μL
 Terminal Deoxynucleotidyl Transferase (TdT) 1 μL



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