

Anti-TdT Antibody
Catalog # ABO10605**Specification**

Anti-TdT Antibody - Product Information

Application	WB
Primary Accession	P04053
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for DNA nucleotidylexotransferase(DNTT) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TdT Antibody - Additional Information

Gene ID 1791

Other Names

DNA nucleotidylexotransferase, 2.7.7.31, Terminal addition enzyme, Terminal deoxynucleotidyltransferase, Terminal transferase, DNTT, TdT {ECO:0000303|PubMed:11473582}

Calculated MW

58536 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Nucleus .

Protein Name

DNA nucleotidylexotransferase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TdT(471-485aa DNHALYDKTKRIFLK).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the DNA polymerase type-X family.

Anti-TdT Antibody - Protein Information

Name DNTT

Synonyms TDT {ECO:0000303|PubMed:11473582}

Function

Template-independent DNA polymerase which catalyzes the random addition of deoxynucleoside 5'-triphosphate to the 3'-end of a DNA initiator. One of the in vivo functions of this enzyme is the addition of nucleotides at the junction (N region) of rearranged Ig heavy chain and T-cell receptor gene segments during the maturation of B- and T-cells.

Cellular Location

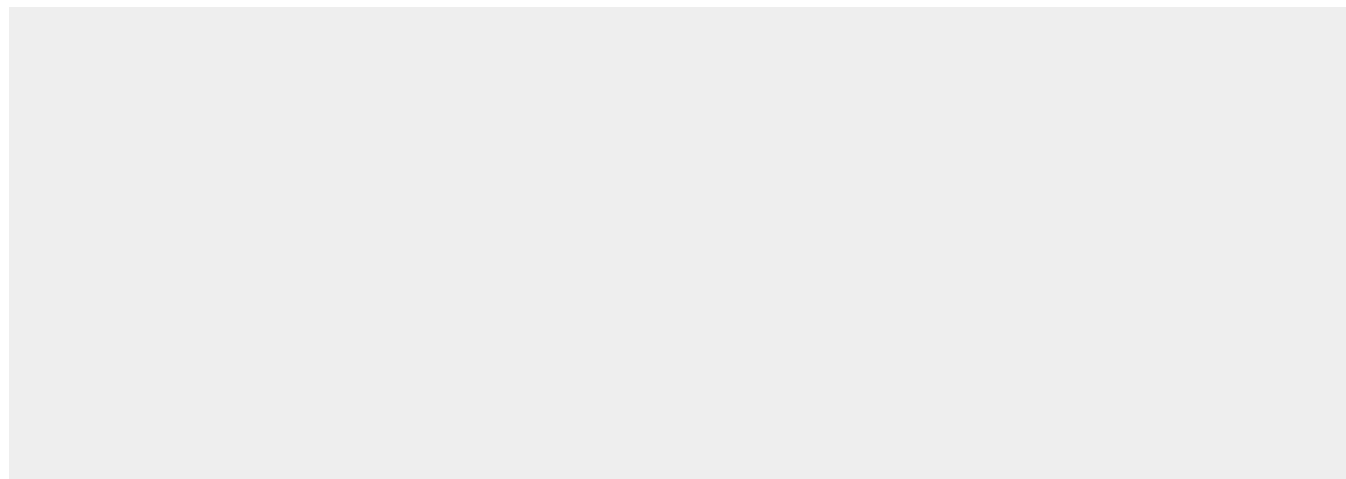
Nucleus.

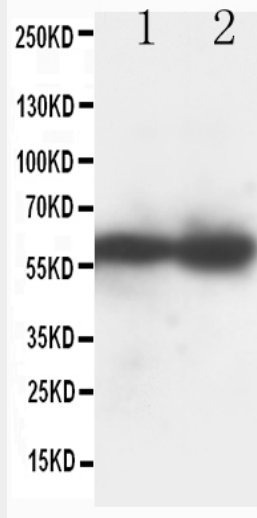
Anti-TdT Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TdT Antibody - Images





Anti-TdT antibody, ABO10605, Western blotting Lane 1: JURKAT Cell Lysate Lane 2: HT1080 Cell Lysate

Anti-TdT Antibody - Background

Terminal Deoxynucleotidyl Transferase, also known as TdT and terminal transferase, is a unique DNA polymerase without template direction catalyzes the addition of deoxyribonucleotides onto the 3-prime-hydroxyl end of DNA primers. Its gene is mapped to the region 10q23-q24. And TdT cDNA contains an open reading frame of 1,530 basepairs corresponding to a protein containing 510 amino acids. TdT may be responsible for inserting nucleotides(N regions) at the V(H)-D and D-J(H) junctions of immunoglobulin genes. The enzyme is present in immature thymocytes, some bone marrow cells, transformed pre-B and pre-T cell lines, and leukemia cells. Additionally, 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. Cobalt is a necessary cofactor.