

Anti-TdT Picoband Antibody

Catalog # ABO11859

Specification

Anti-TdT Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP04053HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit 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 Picoband 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 NaN3.

Immunogen

E.coli-derived human TdT recombinant protein (Position: K316-A509). Human TdT shares 81% amino acid (aa) sequence identity with mouse TdT.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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 Picoband 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 Picoband Antibody - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TdT Picoband Antibody - Images



97KD — 58KD — 40KD — — 29KD — 20KD — 14KD —

Anti-TdT Picoband antibody, ABO11859-1.jpgAll lanes: Anti TDT (ABO11859) at 0.5ug/mlWB: Recombinant Human TDT Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD



Anti-TdT Picoband antibody, ABO11859-2.jpgAll lanes: Anti TDT (ABO11859) at 0.5ug/mlWB: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 58KD Observed bind size: 58KD

Anti-TdT Picoband 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.