

## **Anti-TdT Antibody**

Catalog # ABO10605

# **Specification**

# **Anti-TdT Antibody - Product Information**

Application WB
Primary Accession P04053
Host 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<br>

### **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 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 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.

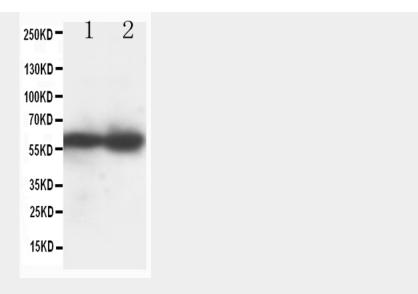
### **Anti-TdT Antibody - Protocols**

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

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

## **Anti-TdT Antibody - Images**





Anti-TdT antibody, ABO10605, Western blottingLane 1: JURKAT Cell LysateLane 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.