

**Localization** – Nucleus  
**Host Species** – Rabbit  
**Ig Class** – IgG

### Intended Use

This antibody is designed for the specific localization of TdT in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

### Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

### Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

### Product Description

Terminal Deoxynucleotidyl Transferase (TdT), also known as terminal transferase, is a unique DNA polymerase expressed in immature lymphoid cells, specifically pre-B and pre-T cells, as well as in cells affected by acute lymphoblastic leukemia/lymphoma. Unlike most DNA polymerases, TdT does not require a template to function. It catalyzes the addition of nucleotides to the 3' end of a DNA strand, with a preference for a protruding 3' overhang. However, it is also capable of adding nucleotides to blunt or recessed 3' ends. TdT is typically found in cortical thymocytes and primitive lymphocytes. The TdT antibody detects the enzyme's antigen located in the nucleus of normal hematopoietic cells and cortical thymocytes, as well as in the cytoplasm of megakaryocytes in the bone marrow. TdT expression is observed in over 90% of acute lymphoblastic leukemia (ALL) cases, except for pre-B-cell ALL and in mature T- or B-lymphocytes. Additionally, TdT is positive in approximately one-third of all chronic myeloid leukemia (CML) cases, serving as a useful marker for predicting a better response to chemotherapy.

### Material Supplied

TdT antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

### Material required But Not Supplied

- Xylene
- Isopropyl alcohol
- Positive charged slides
- Wash Buffer
- DI Water
- Antigen retrieval buffers
- Blocking Reagents
- Detection System
- Control Tissues
- Hematoxylin
- Mounting media
- Cover glass

### Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

### Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Thymus, Lymphoblastic Lymphoma	<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)	<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

### Precautions

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contains sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

### Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

### Troubleshooting

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

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	Manufacturer Details		Use by Date	<b>LOT</b>	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	<b>REF</b>	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device