

Product datasheet

Anti-TdT antibody [EPR2976Y] ab76544

Recombinant RabMAb

1 References 8 Images

Overview

Product name	Anti-TdT antibody [EPR2976Y]
Description	Rabbit monoclonal [EPR2976Y] to TdT
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB, IP, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human TdT (C terminal).
Positive control	Human thymus and Jurkat lysates.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p>

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2976Y
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab76544** in the following tested applications.

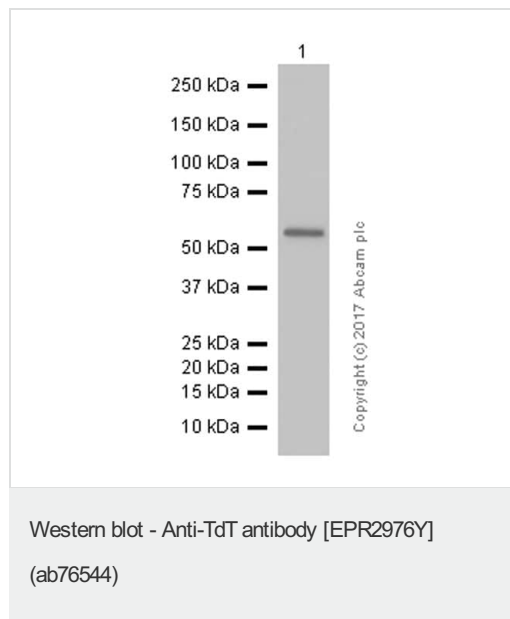
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/20.
WB		1/2000. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).
IP		1/20.
ICC/IF		1/100 - 1/250.

Target

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.
Sequence similarities	Belongs to the DNA polymerase type-X family. Contains 1 BRCT domain.

Images



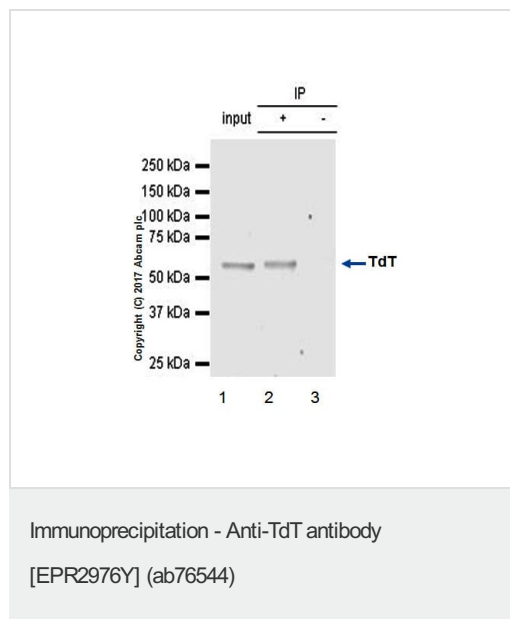
Anti-TdT antibody [EPR2976Y] (ab76544) at 1/10000 dilution (purified) + Human fetal thymus lysates at 15 µg

Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 58 kDa

Blocking and diluting buffer: 5% NFD/MTBST



ab76544 (purified) at 1:20 dilution (2µg) immunoprecipitating TdT in Jurkat (human acute T cell leukemia) whole cell lysate.

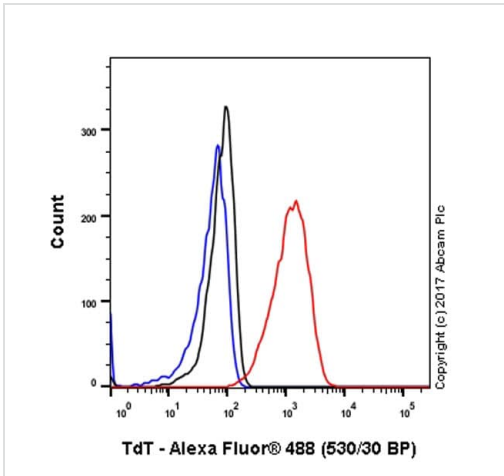
Lane 1 (input): Jurkat (human acute T cell leukemia) whole cell lysate 10µg

Lane 2 (+): ab76544 & Jurkat (human acute T cell leukemia) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76544 in Jurkat (human acute T cell leukemia) whole cell lysate

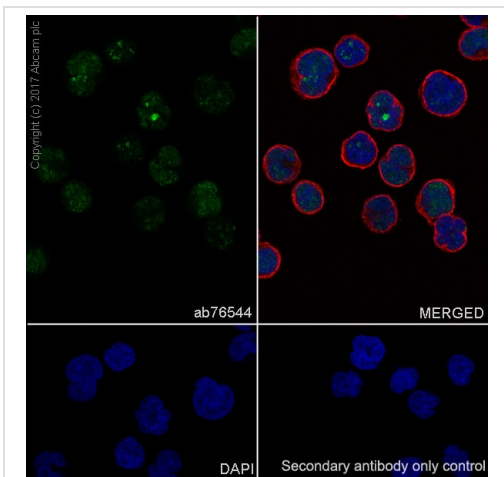
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFD/MTBST.



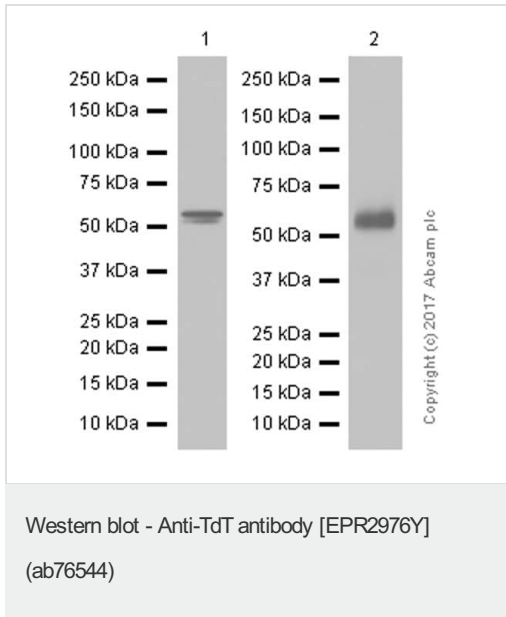
Flow Cytometry - Anti-TdT antibody [EPR2976Y] (ab76544)

Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling TdT with purified ab76544 at 1:20 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-TdT antibody [EPR2976Y] (ab76544)

Immunocytochemistry/ Immunofluorescence analysis of MOLT-4 (Human lymphoblastic leukemia T lymphoblast) cells labeling TdT with Purified ab76544 at 1:100 dilution (1.5µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200. ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



All lanes : Anti-TdT antibody [EPR2976Y] (ab76544) at 1/2000 dilution (purified)

Lane 1 : Jurkat (human acute T cell leukemia) whole cell lysates

Lane 2 : Mouse thymus lysates

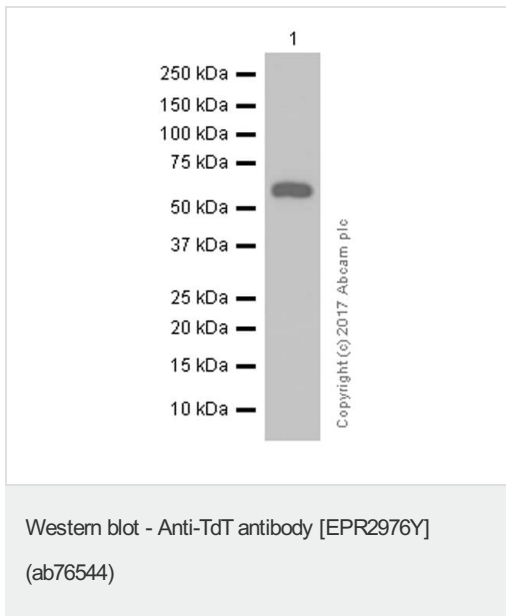
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 58 kDa

Blocking and diluting buffer: 5% NFDm/TBST



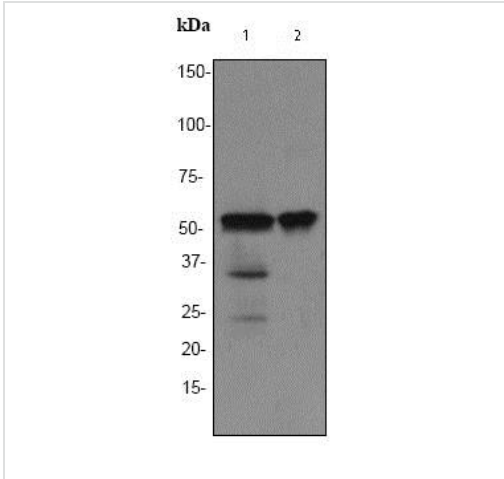
Anti-TdT antibody [EPR2976Y] (ab76544) at 1/10000 dilution (purified) + Rat thymus lysates at 20 µg

Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 58 kDa

Blocking and diluting buffer: 5% NFDm/TBST



Western blot - Anti-TdT antibody [EPR2976Y] (ab76544)

All lanes : Anti-TdT antibody [EPR2976Y] (ab76544) at 1/10000 dilution (unpurified)

Lane 1 : Human thymus lysate

Lane 2 : Jurkat lysate

Lysates/proteins at 10 µg per lane.

Secondary





All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 58 kDa

Observed band size: 58 kDa

Additional bands at: 24 kDa, 35 kDa. We are unsure as to the identity of these extra bands.

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-TdT antibody [EPR2976Y] (ab76544)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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