

Rabbit TDG Polyclonal Antibody | anti-TDG antibody

Anti-TDG Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126637	Rabbit	Human, Monkey	ELISA, Flow Cytometry, Functional Assay, Western Blot

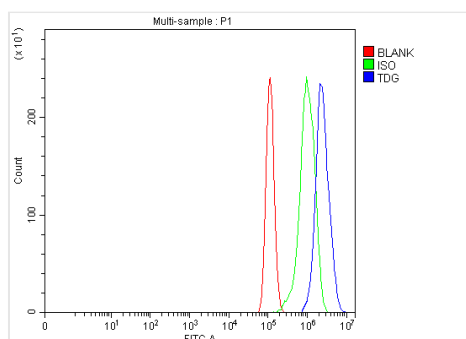
PRODUCT SYNONYMS

TDG; Polyclonal Antibody; Anti-TDG Antibody Picoband; anti-TDG antibody

PRODUCT SPECIFICATIONS

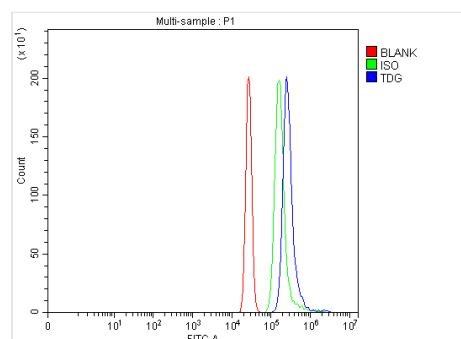
Host	Rabbit
Reactivity	Human, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-TDG antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human TDG recombinant protein (Position: Q15-R370).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



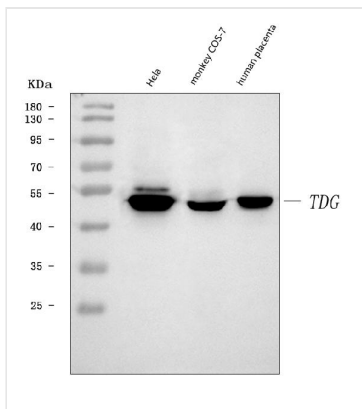
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of PC-3 cells using anti-TDG antibody (AAA126637). Overlay histogram showing PC-3 cells stained with AAA126637 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TDG Antibody (AAA126637, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HL-60 cells using anti-TDG antibody (AAA126637). Overlay histogram showing HL-60 cells stained with AAA126637 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TDG Antibody (AAA126637, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of TDG using anti-TDG antibody (AAA126637). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: monkey COS-7 whole cell lysates, Lane 3: human placenta tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TDG antigen affinity purified polyclonal antibody (#AAA126637) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for TDG at approximately 46 kDa. The expected band size for TDG is at 46 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-TDG antibody	G/T mismatch-specific thymine DNA glycosylase is an enzyme that in humans is encoded by the TDG gene. The protein encoded by this gene belongs to the TDG/mug DNA glycosylase family. Thymine-DNA glycosylase (TDG) removes thymine moieties from G/T mismatches by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of DNA and the mispaired thymine. With lower activity, this enzyme also removes thymine from C/T and T/T mispairings. TDG can also remove uracil and 5-bromouracil from mispairings with guanine. This enzyme plays a central role in cellular defense against genetic mutation caused by the spontaneous deamination of 5-methylcytosine and cytosine. This gene may have a pseudogene in the p arm of chromosome 12.
Product Categories/Family for anti-TDG antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	59853162
NCBI GeneID	6996
NCBI Accession #	NP_003202.3
NCBI GenBank Nucleotide #	NM_003211.4
UniProt Accession #	Q13569; Q8IUZ6; Q8IZM3
Molecular Weight	46,053 Da
NCBI Official Full Name	G/T mismatch-specific thymine DNA glycosylase
NCBI Official Synonym Full Names	thymine-DNA glycosylase
NCBI Official Symbol	TDG
NCBI Official Synonym Symbols	hTDG
NCBI Protein Information	G/T mismatch-specific thymine DNA glycosylase
UniProt Protein Name	G/T mismatch-specific thymine DNA glycosylase

UniProt Gene Name	TDG
UniProt Synonym Gene Names	hTDG
UniProt Entry Name	TDG_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/tdg-antibody-flow-cytometry-western-blot-elisa/126637>