

Datasheet for ABIN7600107
anti-TDG antibody (AA 15-370)



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Overview

Quantity:	100 µg
Target:	TDG
Binding Specificity:	AA 15-370
Reactivity:	Human, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TDG antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS)

Product Details

Purpose:	Anti-TDG Antibody Picoband®
Immunogen:	E.coli-derived human TDG recombinant protein (Position: Q15-R370).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-TDG Antibody Picoband® (ABIN7600107). Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Monkey. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	TDG
Alternative Name:	TDG (TDG Products)
Background:	Synonyms: Kelch repeat and BTB domain-containing protein 2, BTB and kelch domain-containing protein 1, KBTBD2, BKLHD1, KIAA1489 Tissue Specificity: Detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon. Background: 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.
Molecular Weight:	46 kDa
Gene ID:	6996
UniProt:	Q13569
Pathways:	DNA Damage Repair , Chromatin Binding

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Monkey Flow Cytometry (Fixed), 1-3 µg/1×10⁶ cells, Human ELISA, 0.1-0.5 µg/mL, - 1. Baba, D., Maita, N., Jee, J.-G., Uchimura, Y., Saitoh, H., Sugawara, K., Hanaoka, F., Tochio, H., Hiroaki, H., Shirakawa, M. Crystal structure of thymine DNA glycosylase conjugated to SUMO-1. (Letter) Nature 435: 979-982, 2005. 2. Barrett, T. E., Savva, R., Panayotou, G., Barlow, T., Brown, T., Jiricny, J., Pearl, L. H. Crystal structure of a G:T/U mismatch-specific DNA glycosylase: mismatch recognition by complementary-strand interactions. Cell 92: 117-129, 1998. 3. Cortazar, D., Kunz, C., Selfridge, J., Lettieri, T., Saito, Y., MacDougall, E., Wirz, A., Schuermann, D., Jacobs, A. L., Siegrist, F., Steinacher, R., Jiricny, J., Bird, A., Schar, P. Embryonic lethal phenotype reveals a function of TDG in maintaining epigenetic stability. Nature 470: 419-423, 2011.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.