

For Research Use Only

TDG Polyclonal antibody

Catalog Number: 13370-1-AP

Featured Product

7 Publications



Basic Information

Catalog Number: 13370-1-AP	GenBank Accession Number: BC037557	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 200 µg/ml by Nanodrop and 160 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6996	Recommended Dilutions: WB 1:2000-1:10000 IP 0.5-4.0 ug for IP and 1:200-1:1000 for WB
Source: Rabbit	Full Name: thymine-DNA glycosylase	IF 1:50-1:500
Isotype: IgG	Calculated MW: 410 aa, 46 kDa	
Immunogen Catalog Number: AG4190	Observed MW: 55-60 kDa	

Applications

Tested Applications: IF, IP, WB, ELISA	Positive Controls:
Cited Applications: ChIP, IHC, IP, WB	WB : Caco-2 cells, mouse colon tissue, HeLa cells, human brain tissue, Raji cells, mouse thymus tissue, HCT-116 cells, Jurkat cells, K-562 cells, MCF-7 cells
Species Specificity: human, mouse, rat	IP : U-937 cells,
Cited Species: human, mouse	IF : HeLa cells,

Background Information

TDG belongs to the TDG/mug DNA glycosylase family. TDG corrects G/T mismatches to G/C pairs. It is capable of hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and a mismatched thymine. In addition to the G/T, it can remove thymine also from C/T and T/T mismatches in the order G/T >> C/T > T/T. It has no detectable activity on apyrimidinic sites and does not catalyze the removal of thymine from A/T pairs or from single-stranded DNA. It can also remove uracil and 5-bromouracil from mismatches with guanine. RNF4 interacts with and requires the base excision repair enzymes TDG and APE1 for active demethylation (PMID:20696907). TDG is modified by SUMO-1 and SUMO-2/3. The molecular weight of non-modified TDG is 46 kDa and modified TDG is 55-60 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Jiyu Miao	35414793	Int J Biol Sci	WB
Umut Sahin	24637324	J Cell Biol	WB,IP
Etsuko Shibata	24962565	J Biol Chem	WB

Storage

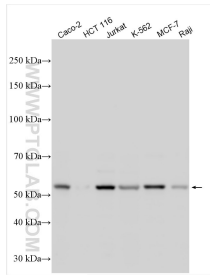
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

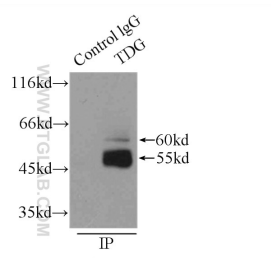
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

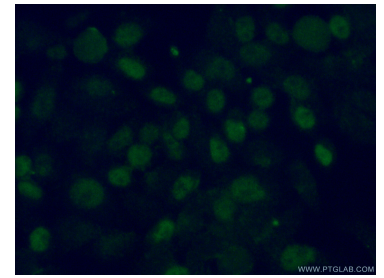
Selected Validation Data



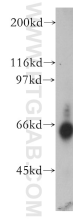
Various lysates were subjected to SDS PAGE followed by western blot with 13370-1-AP (TDG antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP Result of anti-TDG (IP:13370-1-AP, 3ug; Detection:13370-1-AP 1:400) with U-937 cells lysate 3000ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 13370-1-AP (TDG antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



human brain tissue were subjected to SDS PAGE followed by western blot with 13370-1-AP (TDG antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.