

For Research Use Only

TDG Polyclonal antibody

Catalog Number: 13370-1-AP

Featured Product

5 Publications



Basic Information

Catalog Number:

13370-1-AP

Size:

150ul, Concentration: 200 µg/ml by Nanodrop and 160 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4190

GenBank Accession Number:

BC037557

GeneID (NCBI):

6996

Full Name:

thymine-DNA glycosylase

Calculated MW:

410 aa, 46 kDa

Observed MW:

55-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for IP and 1:200-1:1000 for WB

IF 1:50-1:500

Applications

Tested Applications:

IF, IP, WB, ELISA

Cited Applications:

ChIP, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human

Positive Controls:

WB: human brain tissue, HeLa cells, mouse colon tissue, mouse thymus tissue, Raji cells

IP: U-937 cells,

IF: HeLa cells,

Background Information

TDG belongs to the TDG/mug DNA glycosylase family. TDG corrects G/T mispairs to G/C pairs. It is capable of hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and a mispaired thymine. In addition to the G/T, it can remove thymine also from C/T and T/T mispairs in the order $G/T \gg C/T > T/T$. 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 mispairs 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
Umut Sahin	24637324	J Cell Biol	WB, IP
Etsuko Shibata	24962565	J Biol Chem	WB
Xuehe Xu	24532795	J Biol Chem	IHC, ChIP

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

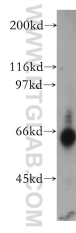
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

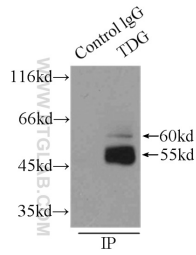
E: proteintech@ptglab.com
W: ptglab.com

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

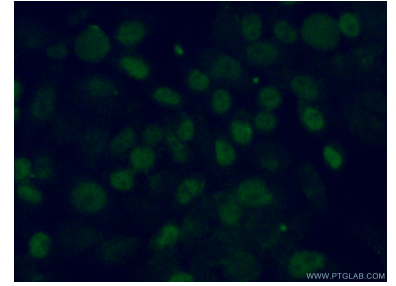
Selected Validation Data



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.



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).