

For Research Use Only

TDG Monoclonal antibody, PBS Only

Catalog Number: 66707-1-PBS



Basic Information

Catalog Number: 66707-1-PBS	GenBank Accession Number: BC037557	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 6996	CloneNo.: 1G2E2
Source: Mouse	UNIPROT ID: Q13569	
Isotype: IgG2b	Full Name: thymine-DNA glycosylase	
Immunogen Catalog Number: AG27408	Calculated MW: 410 aa, 46 kDa	
	Observed MW: 55-60 kDa	

Applications

Tested Applications:
WB, IF, IHC, Indirect ELISA

Species Specificity:
Human, rat, mouse

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 >> 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.

Storage

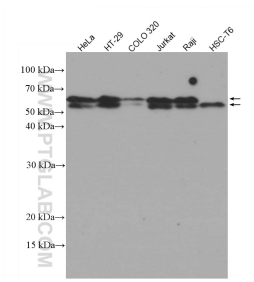
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

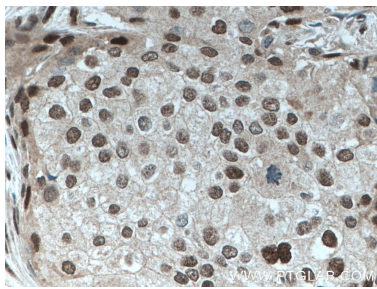
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

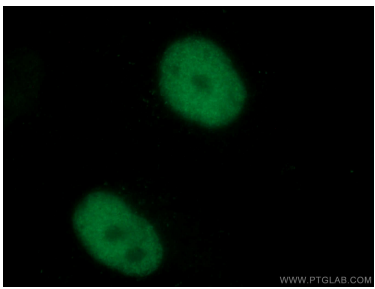
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66707-1-Ig (TDG antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66707-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66707-1-Ig (TDG antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66707-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66707-1-Ig (TDG antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66707-1-PBS in a different storage buffer formulation.