

For Research Use Only

TDG Monoclonal antibody

Catalog Number: 66707-1-Ig



Basic Information

Catalog Number: 66707-1-Ig	GenBank Accession Number: BC037557	Purification Method: Protein A purification
Size: 150ul, Concentration: 1000 µg/ml by Nanodrop and 933 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6996	CloneNo.: 1G2E2
Source: Mouse	Full Name: thymine-DNA glycosylase	Recommended Dilutions: WB 1:1000-1:8000 IHC 1:200-1:800 IF 1:50-1:500
Isotype: IgG2b	Calculated MW: 410 aa, 46 kDa	
Immunogen Catalog Number: AG27408	Observed MW: 55-60 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Species Specificity:

Human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, HT-29 cells, COLO 320 cells, Jurkat cells, Raji cells, HSC-T6 cells

IHC: human breast cancer tissue,

IF: HepG2 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 >> 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 -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**

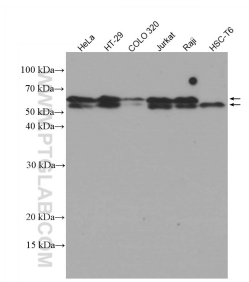
For technical support and original validation data for this product please contact:

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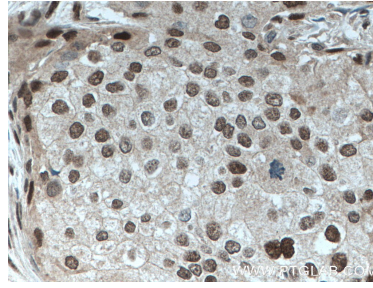
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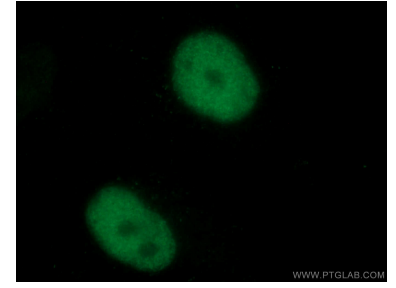
Selected Validation Data



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.



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).



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).