For Research Use Only

TDG Recombinant antibody

Catalog Number:83780-3-RR



Purification Method:

CloneNo.:

240715E12

Protein A purification

Recommended Dilutions:

IF/ICC 1:125-1:500

Basic Information

Catalog Number: GenBank Accession Number: 83780-3-RR BC037557

83780-3-RR BC037557 Size: GeneID (NCBI): 1000 μ g/ml 6996

Source: UNIPROT ID:
Rabbit Q13569
Isotype: Full Name:

IgG thymine-DNA glycosylase

Immunogen Catalog Number: Calculated MW: AG4190 410 aa, 46 kDa

Applications

Tested Applications: IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

IF/ICC : 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-

Storage

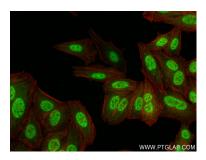
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

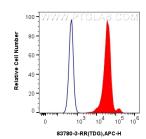
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using TDG antibody (83780-3-RR, Clone: 240715E12) at dilution of 1:250 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit 1gG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug TDG Recombinant Antibody (83780-3-RR, Clone:240715E12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100.