

For Research Use Only

TDG Recombinant antibody, PBS Only (Detector)

Catalog Number: 83780-3-PBS



Basic Information

Catalog Number:	83780-3-PBS	GenBank Accession Number:	BC037557	Purification Method:	Protein A purification
Concentration:	1 mg/ml	GeneID (NCBI):	6996	CloneNo.:	240715E12
Source:	Rabbit	UNIPROT ID:	Q13569		
Isotype:	IgG	Full Name:	thymine-DNA glycosylase		
Immunogen Catalog Number:	AG4190	Calculated MW:	410 aa, 46 kDa		

Applications

Tested Applications:
IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human

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.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

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

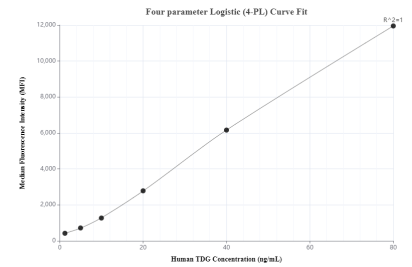
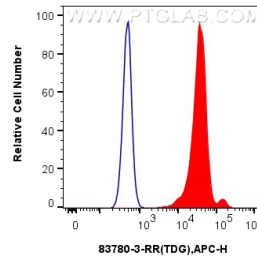
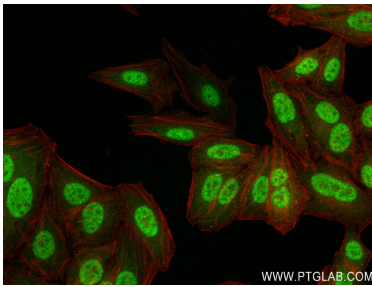
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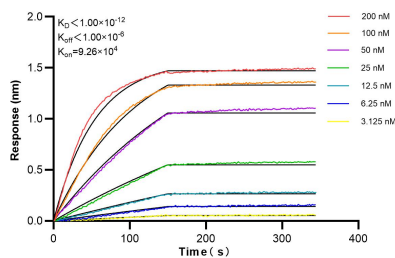
Selected Validation Data



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 AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83780-3-PBS in a different storage buffer formulation.

1×10^6 HeLa cells were intracellularly stained with 0.25 μ g TDG Recombinant Antibody (83780-3-RR, Clone: 240715E12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100. This data was developed using the same antibody clone with 83780-3-PBS in a different storage buffer formulation.

Cytometric bead array standard curve of MP00744-1, TDG Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83780-1-PBS. Detection antibody: 83780-3-PBS. Standard: Ag4190. Range: 1.25-80 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83780-3-RR against Human TDG were performed. The affinity constant is below 1 pM.