



TDG Monoclonal Antibody

Catalog No	YP-mAb-02093
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TDG
Protein Name	G/T mismatch-specific thymine DNA glycosylase
Immunogen	The antiserum was produced against synthesized peptide derived from human TDG. AA range:31-80
Specificity	TDG Monoclonal Antibody detects endogenous levels of TDG protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TDG; G/T mismatch-specific thymine DNA glycosylase; Thymine-DNA glycosylase
Observed Band	46kD
Cell Pathway	Nucleus .
Tissue Specificity	Colon,Lung,Pooled,Thymus,
Function	function:In the DNA of higher eukaryotes, hydrolytic deamination of 5-methylcytosine to thymine leads to the formation of G/T mismatches. This enzyme corrects G/T mispairs to G/C pairs. It is caMABle 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.,PTM:Sumoylation on Lys-330 by either SUMO1 or SUMO2 induces dissociation of the product DNA.,similarity:Belongs to the TDG/mug DNA glycosylase family.,
Background	The protein encoded by this gene belongs to the TDG/mug DNA glycosylase family. Thymine-DNA glycosylase (TDG) removes thymine moieties from G/T mismatches by hydrolyzing the carbon-nitrogen bond between the



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sugar-phosphate backbone of DNA and the mispaired thymine. With lower activity, this enzyme also removes thymine from C/T and T/T mispairings. TDG can also remove uracil and 5-bromouracil from mispairings with guanine. This enzyme plays a central role in cellular defense against genetic mutation caused by the spontaneous deamination of 5-methylcytosine and cytosine. This gene may have a pseudogene in the p arm of chromosome 12. [provided by RefSeq, Jul

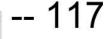
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.





Western Blot analysis of various cells using TDG Monoclonal Antibody

85

48