



TDG Monoclonal Antibody

Catalog No	YP-mAb-02093
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TDG
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	EC:3.2.2.29;G/T mismatch-specific thymine DNA glycosylase;hTDG;thymine DNA glycosylase;Thymine-DNA glycosylase;TDG
Observed Band	46kD
Calculated Molecular Weight	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 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 2008],

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.

Products Images

