Datasheet for ABIN7119947

anti-TDG antibody

Go to Product page

Overview

Quantity:	100 µg
Target:	TDG
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TDG antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	thymine-DNA glycosylase
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	TDG
Alternative Name:	TDG (TDG Products)
Background:	Synonyms: Background:DNA glycosylase that plays a key role in active DNA demethylation: specifically recognizes and binds 5-formylcytosine(5fC) and 5-carboxylcytosine(5caC) in the context of CpG sites and mediates their excision through base-excision repair(BER) to install an unmethylated cytosine. Cannot remove 5-hydroxymethylcytosine(5hmC). According to an

Target Details

	alternative model, involved in DNA demethylation by mediating DNA glycolase activity toward 5-hydroxymethyluracil(5hmU) produced by deamination of 5hmC. Also involved in DNA repair by acting as a thymine-DNA glycosylase that mediates correction of G/T mispairs to G/C pairs: in the DNA of higher eukaryotes, hydrolytic deamination of 5-methylcytosine to thymine leads to the formation of G/T mismatches. Its role in the repair of canonical base damage is however minor compared to its role in DNA demethylation. 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.
Molecular Weight:	55-60 kDa
Gene ID:	6996
UniProt:	Q13569
Pathways:	DNA Damage Repair, Chromatin Binding

Application Details

Application Notes:	WB: 1:500-1:2000, IP: 1:200-1:2000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C for 12 months (Avoid repeated freeze / thaw cycles.)
Expiry Date:	12 months