

## TDG antibody

### Product Information

Catalog No.:	FNab08570
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

### 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 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 mismatches 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 mismatches 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 mismatches with guanine.

### Immunogen information

Immunogen:	thymine-DNA glycosylase
Synonyms:	G/T mismatch-specific thymine DNA glycosylase Thymine-DNA glycosylase (hTDG) TDG
Observed MW:	55-60 kDa

Uniprot ID : Q13569

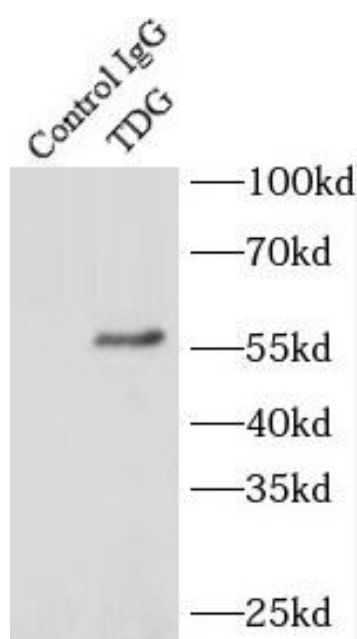
### Application

Reactivity: Human, Mouse, Rat

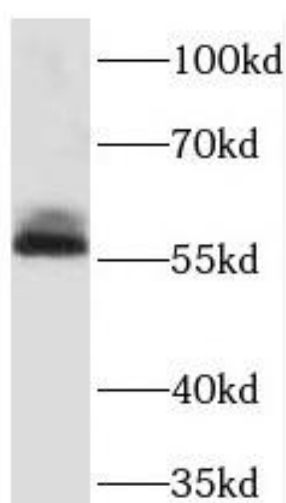
Tested Application: ELISA, WB, IP

Recommended dilution: WB: 1:500-1:2000; IP: 1:200-1:2000

Image:



IP Result of anti-TDG (IP:FNab08570, 3ug;  
Detection:FNab08570 1:400) with U-937 cells  
lysate 3000ug.



human brain tissue were subjected to SDS PAGE  
followed by western blot with FNab08570(TDG  
antibody) at dilution of 1:400