



[Go to Product page](#)

Datasheet for ABIN6258811  
**anti-TDG antibody (Internal Region)**

2 Images

Overview

Quantity:	100 µL
Target:	TDG
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TDG antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human TDG, corresponding to a region within the internal amino acids.
Isotype:	IgG
Specificity:	TDG Antibody detects endogenous levels of total TDG.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog,Xenopus
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	TDG
---------	-----

## Target Details

---

Alternative Name: TDG ([TDG Products](#))

---

Background: Description: 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.

Gene: TDG

---

Molecular Weight: 46 kDa

---

Gene ID: 6996

---

UniProt: [Q13569](#)

---

Pathways: [DNA Damage Repair](#), [Chromatin Binding](#)

---

## Application Details

---

Application Notes: WB 1:500-1:1000, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

---

Restrictions: For Research Use only

---

## Handling

---

Format: Liquid

---

Concentration: 1 mg/mL

---

Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

---

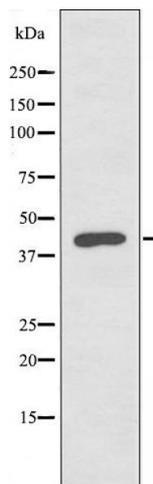
Preservative: Sodium azide

---

## Handling

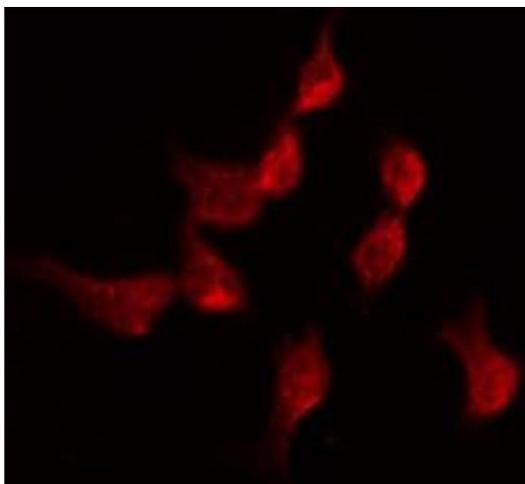
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

## Images



### Western Blotting

**Image 1.** Western blot analysis of extracts from Jurkat cells, using TDG antibody.



### Immunofluorescence (fixed cells)

**Image 2.** ABIN6274344 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.