Datasheet for ABIN7153379

anti-TDG antibody (AA 141-410)

3 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	TDG
Binding Specificity:	AA 141-410
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TDG antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human G/T mismatch-specific thymine DNA glycosylase protein (141-410AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Antigen Affinity Purified

Target Details

Target:	TDG
Alternative Name:	TDG (TDG Products)
Background:	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

Target Details

	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 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. Aliases: C JUN leucine zipper interactive protein antibody, C JUN leucine zipper interactive protein antibody, C-JUN leucine zipper interactive protein JZA-3 antibody, E130317C12Rik antibody, EC 3.2.2.29 antibody, G/T mismatch specific thymine DNA glycosylase antibody, G/T mismatch specific thymine DNA glycosylase antibody, G/T mismatch-specific thymine DNA glycosylase antibody, JZA 3 antibody, Jza1 antibody, T:G mismatch thymine glycosylase antibody, Tdg antibody, TDG_HUMAN antibody, Thymine DNA glycosylase antibody, Thymine-DNA glycosylase antibody
UniProt:	Q13569
Pathways:	DNA Damage Repair, Chromatin Binding

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:2000, IHC:1:20-1:200,
Restrictions:	For Research Use only

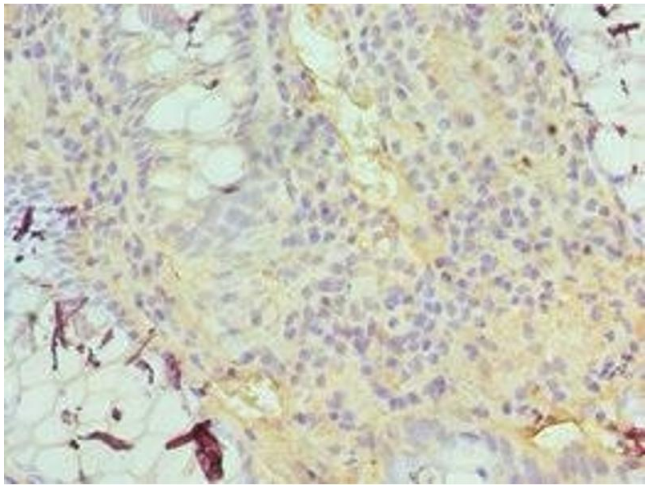
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide, 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.

Handling

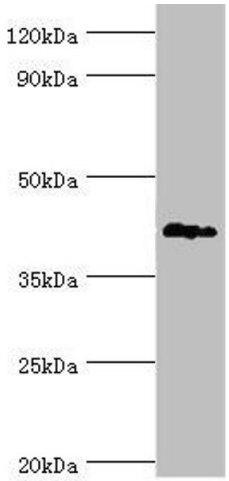
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



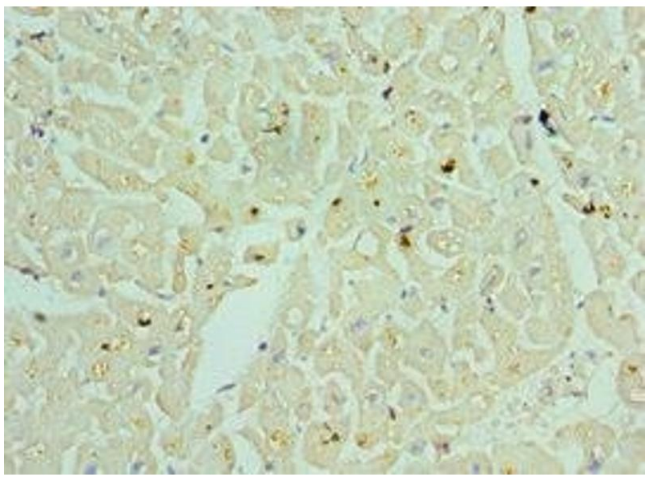
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human colon cancer using ABIN7153379 at dilution of 1:100



Western Blotting

Image 2. Western blot All lanes: G/T mismatch-specific thymine DNA glycosylase antibody at 6 µg/mL + Mouse brain tissue Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution Predicted band size: 46 kDa Observed band size: 46 kDa



Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human heart tissue using ABIN7153379 at dilution of 1:100

