

# **TDG (K90) polyclonal antibody**

Catalog: BS2053

Host: Ra

Rabbit

Reactivity: Human, Mouse, Rat

### **BackGround:**

In the DNA of higher eukaryotes, hydrolytic deamination of 5-methylcytosine to thymine leads to the formation of G/T mismatches. G/T mismatch-specific Thymine DNA Glycosylase (TDG) is a nuclear protein which corrects G/T mismatches to G/C pairs by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and the mispaired thymine. TDG also corrects a subset of G/U mispairs inefficiently removed by the more abundant uracil glycosylases. Retinoic acid receptors interact physically and functionally with TDG, enhancing the ability of the retinoid X receptor and the retinoid X receptor/retinoid acid receptor complex to bind to their response elements. TDG interacts with, and is covalently modified by, the ubiquitin-like proteins SU-MO-1 and SUMO-2/3, resulting in a reduction of the DNA substrate and AP site binding affinity of TDG. This sumoylation is associated with a significant increase in enzymatic turnover in reactions with a G/U substrate and the loss of G/T processing activity.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:** 

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~ 46 kDa
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**Swiss-Prot:** 

#### Q13569

**Purification&Purity:** 

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

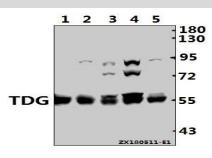
WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:50~1:200 Storage&Stability:

Store at  $4 \,^{\circ}{\rm C}$  short term. Aliquot and store at  $-20 \,^{\circ}{\rm C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

TDG (K90) polyclonal antibody detects endogenous levels of TDG protein.

#### **DATA:**



Western blot (WB) analysis of TDG (K90) pAb at 1:1000 dilution Lane1:CT-26 whole cell lysate(40ug) Lane2:PC12 whole cell lysate(40ug) Lane3:HCT116 whole cell lysate(40ug) Lane4:HEK293T whole cell lysate(40ug) Lane5:Hela whole cell lysate(40ug)

#### Note:

For research use only, not for use in diagnostic procedure.

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