

TDG (K90) polyclonal antibody

Catalog: BCP01622 Host: 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:

~ 46 kDa

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

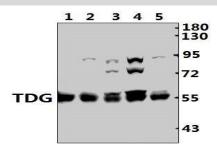
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ 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.