

TDG (K90) polyclonal antibody

Catalog: BS2053

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 SUMO-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:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

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 °C short term. Aliquot and store at -20 °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) polyclonal antibody at 1:500 dilution

Lane1:A549 whole cell lysate(40ug)

Lane2:H9C2 whole cell lysate(40ug)

Lane3:The lung tissue lysate of Mouse(30ug)

Lane4:The lung tissue lysate of Rat(30ug)

Lane5:Hela whole cell lysate(40ug)

Lane6:HEK293T whole cell lysate(40ug)

Note:

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

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