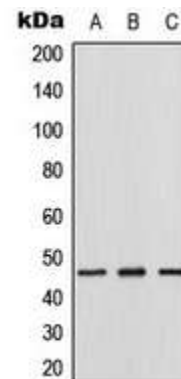


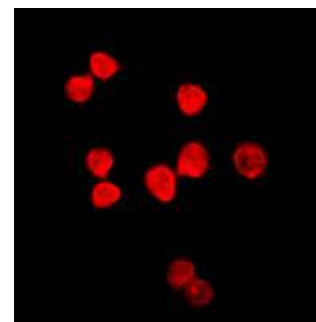
## Anti-TDG Antibody

<b>CATALOG NO:</b>	6157-100
<b>ALTERNATIVE NAMES:</b>	G/T mismatch-specific thymine DNA glycosylase, Thymine-DNA glycosylase, hTDG
<b>AMOUNT:</b>	100 µg
<b>IMMUNOGEN:</b>	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Thymine DNA Glycosylase
<b>HOST/ISOTYPE:</b>	Rabbit IgG
<b>CLONALITY:</b>	Polyclonal
<b>SPECIFICITY:</b>	Recognizes endogenous levels of Thymine DNA Glycosylase protein
<b>SPECIES REACTIVITY:</b>	Human, Mouse and Rat
<b>PURIFICATION:</b>	The antibody was purified by affinity chromatography
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	Supplied in 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide
<b>STORAGE CONDITIONS:</b>	Shipped at 4°C. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles
<b>DESCRIPTION:</b>	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.
<b>APPLICATION:</b>	WB; 1:500 – 1:1000, IF/IC; 1/100 - 1/500

**Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.**



Western blot analysis of Thymine DNA Glycosylase expression in HeLa (A); mouse lung (B); rat lung (C) whole cell lysates.



Immunofluorescent analysis of Thymine DNA Glycosylase staining in HeLa cells

### RELATED PRODUCTS:

- SUMO1, human recombinant (Cat. No. 4941-100, -1000)
- SUMO2, human recombinant (Cat. No. 4942-100, -1000)
- SUMO3, human recombinant (Cat. No. 4943-100, -1000)
- hSUMO1-AMC (Cat. No. 6412-50)
- hSUMO2-AMC (Cat. No. 6413-50)

**FOR RESEARCH USE ONLY! Not to be used on humans.**