

PRODUCT DATA SHEET

Bioworld Technology,Inc.

TOP1 polyclonal antibody

Catalog: BS91366 Host: Rabbit Reactivity: Human, Mouse

BackGround:

DNA topoisomerases play essential roles in many DNA metabolic processes including DNA repair. Topoisomerases can introduce DNA damage upon exposure to drugs that stabilize the covalent protein-DNA intermediate of the topoisomerase reaction. Lesions in DNA are also able to trap topoisomerase-DNA intermediates. DNA topoisomerase I (Top1) catalyzes the relaxation of supercoiled DNA by a mechanism of transient DNA strand cleavage characterized by the formation of a phosphotyrosyl bond between the DNA end and active site tyrosine. The antitumor agent camptothecin (CPT) reversibly stabilizes the covalent enzyme-DNA intermediate by inhibiting DNA religation. When a replication fork collides with a DNA Top1 cleavage complex, the covalently bound enzyme must be removed from the DNA 3' end before recombination-dependent replication restart. The tyrosyl-DNA phosphodiesterase Tdp1 and the structure-specific endonuclease Rad1-Rad10 function as primary alternative pathways of Top1 repair in Saccharomyces cerevisiae. In the budding yeast S. cerevisiae, DNA topoisomerases I and II can functionally substitute for each other in removing positive and negative DNA supercoils.

Product:

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

Molecular Weight:

91 kDa

Swiss-Prot:

P11387(Human) Q04750(Mouse)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:1,000-1:5,000 ICC:1:50-1:500 IHC:1:50-1:200

FC:1:50-1:100

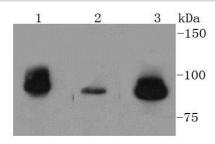
Storage&Stability:

Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C or -80 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

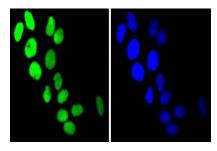
Specificity:

TOP1 polyclonal antibody detects endogenous levels of TOP1 protein.

DATA:



Western blot analysis of TOP1 on different lysates using anti-TOP1 antibody at 1/1,000 dilution. Positive control: Lane 1: HepG2 Lane 2: Jurkat Lane 3: MCF-7



ICC staining TOP1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Note:

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

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