

## TOP3B Antibody

Catalog No: #33641

Package Size: #33641-1 50ul #33641-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

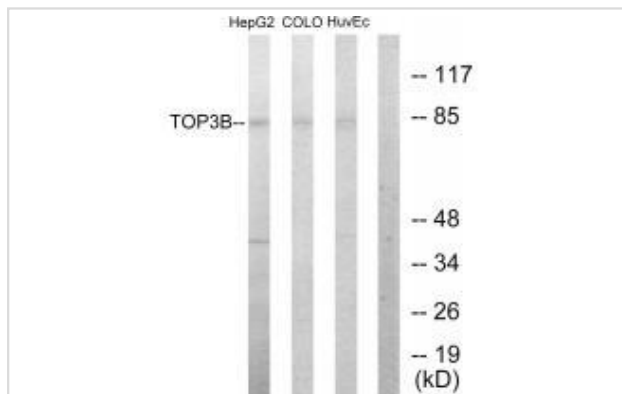
## Description

Product Name	TOP3B Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total TOP3B protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human TOP3B.
Target Name	TOP3B
Other Names	DNA topoisomerase 3-beta-1; EC 5.99.1.2; DNA topoisomerase III beta-1; TOP3B; TOP3B1
Accession No.	Swiss-Prot: O95985NCBI Gene ID: 8940
Uniprot	O95985
GeneID	8940;
SDS-PAGE MW	96kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

Western blotting: 1:500~1:3000

## Images



Western blot analysis of extracts from HepG2 cells, COLO205 cells and HUVEC cells, using TOP3B antibody #33641.

## Background

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Releases the supercoiling and torsional tension of DNA introduced during the DNA replication and transcription by transiently cleaving and rejoining one strand of the DNA duplex. Introduces a single-strand break via transesterification at a target site in duplex DNA. The scissile phosphodiester is attacked by the catalytic tyrosine of the enzyme, resulting in the formation of a DNA-(5'-phosphotyrosyl)-enzyme intermediate and the expulsion of a 3'-OH DNA strand. The free DNA strand then undergoes passage around the unbroken strand thus removing DNA supercoils. Finally, in the religation step, the DNA 3'-OH attacks the covalent intermediate to expel the active-site tyrosine and restore the DNA phosphodiester backbone. By similarity, Possesses negatively supercoiled DNA relaxing activity.

Ng S.-W., *Nucleic Acids Res.* 27:993-1000(1999).

Kawasaki K., *Genome Res.* 7:250-261(1997).

Collins J.E., *Genome Biol.* 5:RESEARCH84.1-RESEARCH84.11(2004).

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Note: This product is for in vitro research use only