

TOP3B Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16775b

Specification

TOP3B Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O95985
Other Accession	O9Z321 , NP_003926.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	96662
Antigen Region	826-854

TOP3B Antibody (C-term) - Additional Information

Gene ID 8940

Other Names

DNA topoisomerase 3-beta-1, DNA topoisomerase III beta-1, TOP3B, TOP3B1

Target/Specificity

This TOP3B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 826-854 amino acids from the C-terminal region of human TOP3B.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TOP3B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TOP3B Antibody (C-term) - Protein Information

Name TOP3B

Synonyms TOP3B1

Function 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.

Tissue Location

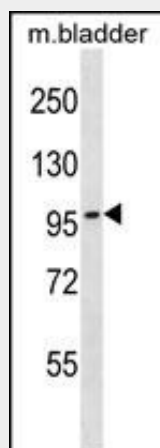
Isoform 1 is found in testis, heart and skeletal muscle. A 4 kb transcript which probably represents isoform 2 is found in thymus, kidney and pancreas.

TOP3B Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TOP3B Antibody (C-term) - Images



TOP3B Antibody (C-term) (Cat. #AP16775b) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the TOP3B antibody detected the TOP3B protein (arrow).

TOP3B Antibody (C-term) - Background

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This enzyme catalyzes the transient breaking and rejoining of a single strand of DNA which allows the strands to pass through one another, thus relaxing the supercoils and altering the topology of DNA. The enzyme interacts with DNA helicase SGS1

and plays a role in DNA recombination, cellular aging and maintenance of genome stability. Alternative splicing of the C-terminus of this gene results in three transcript variants which have distinct tissue specificity; however, not all variants have been fully described.

TOP3B Antibody (C-term) - References

Oliveira-Costa, J.P., et al. Hum. Pathol. 41(11):1624-1630(2010)
Lesch, K.P., et al. J Neural Transm 115(11):1573-1585(2008)
Cho, Y.H., et al. Biochim. Biophys. Acta 1679(3):272-278(2004)
Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)
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