

TOP2A Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16175B**Specification**

TOP2A Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P11388
Other Accession	NP_001058.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	174385
Antigen Region	1434-1461

TOP2A Antibody (C-term) - Additional Information**Gene ID** 7153**Other Names**

DNA topoisomerase 2-alpha, DNA topoisomerase II, alpha isozyme, TOP2A, TOP2

Target/Specificity

This TOP2A/Topo? antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1434-1461 amino acids from the C-terminal region of human TOP2A/Topo?.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

TOP2A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TOP2A Antibody (C-term) - Protein Information**Name** TOP2A**Synonyms** TOP2

Function Key decatenating enzyme that alters DNA topology by binding to two double-stranded DNA molecules, generating a double-stranded break in one of the strands, passing the intact strand through the broken strand, and religating the broken strand (PubMed:[17567603](#), PubMed:[18790802](#), PubMed:[22013166](#), PubMed:[22323612](#)). May play a role in regulating the period length of BMAL1 transcriptional oscillation (By similarity).

Cellular Location

Cytoplasm. Nucleus, nucleoplasm. Nucleus. Nucleus, nucleolus

Tissue Location

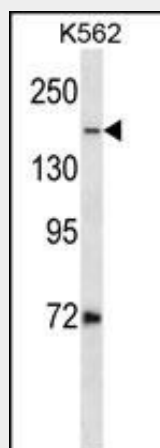
Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

TOP2A 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](#)

TOP2A Antibody (C-term) - Images



TOP2A/Topo? Antibody (C-term) (Cat. #AP16175b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the TOP2A/Topo? antibody detected the TOP2A/Topo? protein (arrow).

TOP2A Antibody (C-term) - Background

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and

replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, alpha, is localized to chromosome 17 and the beta gene is localized to chromosome 3. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia.

TOP2A Antibody (C-term) - References

Vranic, S., et al. Hum. Pathol. 41(11):1617-1623(2010)
Chen, H., et al. Am. J. Surg. Pathol. 34(9):1250-1257(2010)
Ye, J., et al. Cell 142(2):230-242(2010)
Rossi, E., et al. Histopathology 57(1):81-89(2010)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)