10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

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 Ig**
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

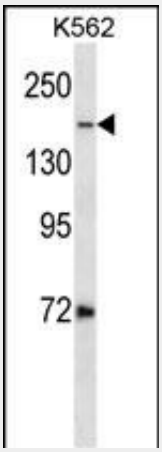
Target/Specificity
This TOP2A/Topo? antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1434-1461 amino acids from the C-terminal region of human TOP2A/Topo?.

Dilution
WB~~1:1000

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



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

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 ARNTL/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)

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)

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 Cytomety
- Cell Culture