

TOP2A Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9248B

Specification

TOP2A Antibody (C-term) - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	P11388
Other Accession	P41516 , O01320 , P41515
Reactivity	Human
Predicted	Hamster, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	174385
Antigen Region	1167-1196

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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1167-1196 amino acids from the C-terminal region of human TOP2A.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100

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

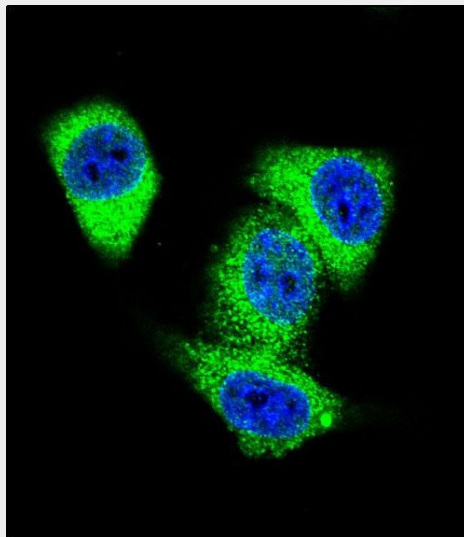
Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

TOP2A Antibody (C-term) - Protocols

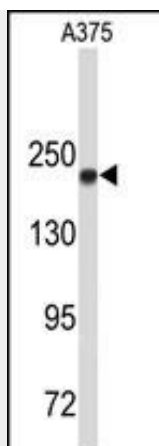
Provided below are standard protocols that you may find useful for product applications.

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

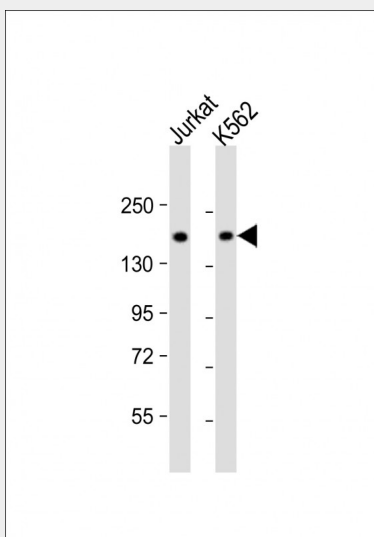
TOP2A Antibody (C-term) - Images



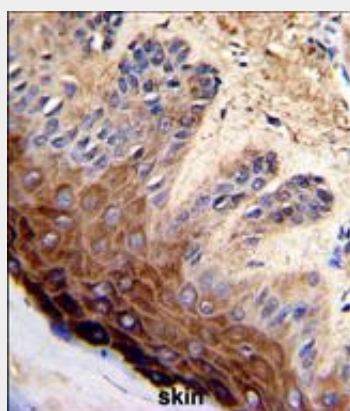
Confocal immunofluorescent analysis of TOP2A Antibody (C-term) (Cat#AP9248b) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of TOP2A Antibody (C-term) (Cat. #AP9248b) in A375 cell line lysates (35ug/lane). TOP2A (arrow) was detected using the purified Pab.



All lanes : Anti-TOP2A Antibody (C-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 174 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



Formalin-fixed and paraffin-embedded human skin with TOP2A Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

TOP2A Antibody (C-term) - Background

TOP2A 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.

TOP2A Antibody (C-term) - References

Kawamura,R., et.al, J. Cell Biol. 188 (5), 653-663 (2010)
Alchanati,I., et.al, PLoS ONE 4 (12), E8104 (2009)

TOP2A Antibody (C-term) - Citations

- [Ciprofloxacin impairs mitochondrial DNA replication initiation through inhibition of Topoisomerase 2.](#)