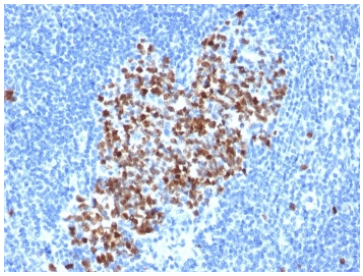
TOP2A Antibody / DNA Topoisomerase II Alpha Antibody [clone rTOP2A/6569] (V9302)

Catalog No.	Formulation	Size
V9302-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9302-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9302SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

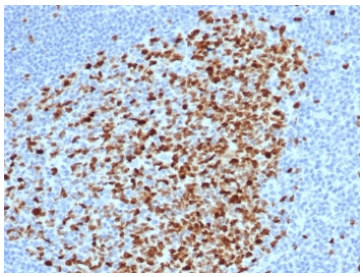
Recombinant | MOUSE MONOCLONAL

Bulk quote request

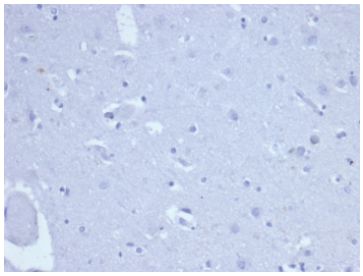
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rTOP2A/6569
Purity	Protein A/G affinity
UniProt	P11388
Localization	Nuclear
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml
Limitations	This recombinant TOP2A antibody is available for research use only.



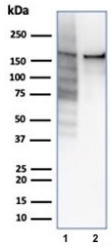
TOP2A Antibody Lymph Node IHC. Immunohistochemistry analysis of FFPE human lymph node tissue demonstrates nuclear staining corresponding to expression of DNA Topoisomerase II alpha in proliferating lymphoid cells. Nuclear immunoreactivity is concentrated within germinal center lymphocytes, consistent with the known role of DNA Topoisomerase II alpha as a chromosome replication enzyme expressed during active cell division. The DNA Topoisomerase II Alpha Antibody highlights proliferating lymphoid populations within germinal centers, while surrounding resting lymphocytes show minimal staining. Antigen retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer prior to immunohistochemistry staining.



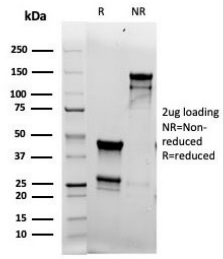
TOP2A Antibody Tonsil Tissue IHC. Immunohistochemistry analysis of FFPE human tonsil tissue demonstrates strong nuclear staining consistent with expression of DNA Topoisomerase II alpha in proliferating lymphoid cells. Nuclear immunoreactivity is prominent within germinal center lymphocytes, reflecting the role of DNA Topoisomerase II alpha as a chromosome replication enzyme expressed during active cell division. The DNA Topoisomerase II Alpha Antibody highlights proliferating lymphoid populations within tonsillar germinal centers while surrounding resting lymphocytes show minimal staining. Antigen retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer prior to immunohistochemistry staining.



Negative control: IHC staining of FFPE human brain tissue with recombinant TOP2A antibody (clone rTOP2A/6569) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



TOP2A Antibody / DNA Topoisomerase II Alpha Antibody (clone rTOP2A/6569). Western blot analysis of human cell lysates demonstrates detection of DNA Topoisomerase II alpha protein following SDS-PAGE separation and membrane transfer. Lane 1: HeLa cell lysate. Lane 2: Jurkat cell lysate. A band is detected at approximately 170-180 kDa, consistent with the predicted molecular weight of DNA Topoisomerase II alpha / TOP2A (~174 kDa). The clear band observed in both lysates confirms recognition of denatured DNA Topoisomerase II alpha protein in western blot assays and supports the use of this antibody for western blot detection of the DNA Topoisomerase II alpha enzyme in human cell lysates.



SDS-PAGE analysis of purified, BSA-free recombinant TTOP2A antibody (clone rTOP2A/6569) as confirmation of integrity and purity.

Description

DNA topoisomerase II alpha (TOP2A) is a nuclear enzyme that regulates DNA topology during replication, transcription, and chromosome segregation. The protein belongs to the type II DNA topoisomerase family and introduces transient double strand DNA breaks that relieve torsional stress generated during DNA replication and chromatin condensation. Because this enzyme is essential for chromosome decatenation and mitotic chromosome segregation, DNA Topoisomerase II alpha is highly expressed in actively dividing cells and proliferating tumor populations.

TOP2A antibody, also known as DNA Topoisomerase II alpha antibody or Topoisomerase II alpha antibody, recognizes the nuclear enzyme responsible for controlling DNA supercoiling during chromosome replication. The phrase DNA Topoisomerase II Alpha Antibody is widely used in molecular biology and biochemical research when referring to antibodies directed against the full enzyme name rather than the abbreviated gene symbol. Using the complete enzyme designation reflects how the protein is commonly described in enzymology, DNA replication research, and chromosome biology literature.

TOP2A Antibody / DNA Topoisomerase II Alpha Antibody (clone rTOP2A/6569) is a recombinant mouse monoclonal

antibody designed to detect the DNA Topoisomerase II alpha protein in biological samples. As a DNA Topoisomerase II Alpha antibody, clone rTOP2A/6569 enables researchers to examine expression of this critical DNA replication enzyme while studying chromosome topology and mitotic chromosome segregation. Recombinant monoclonal antibodies provide consistent binding performance and reproducible detection of the target enzyme across experiments.

A useful differentiation strategy for antibody catalog pages is to emphasize the DNA Topoisomerase II Alpha Antibody terminology alongside the gene symbol TOP2A. Some researchers search using the gene symbol, while others search using the full enzymatic protein name. Including both naming conventions naturally within the background allows the page to capture search traffic for TOP2A antibody, DNA Topoisomerase II alpha antibody, and Topoisomerase II alpha antibody without creating duplicate page structures.

DNA Topoisomerase II alpha plays a central role in resolving DNA tangles that arise during chromosome duplication. The enzyme participates in chromatin condensation and chromosome decatenation during mitosis, ensuring proper chromosome segregation during cell division. Because of this function, DNA Topoisomerase II alpha antibodies are frequently used in studies examining DNA replication machinery, chromosomal architecture, and cell cycle progression.

Elevated expression of DNA Topoisomerase II alpha has been reported in many rapidly dividing tissues and tumor types where active DNA replication occurs. Antibodies recognizing DNA Topoisomerase II alpha therefore provide valuable tools for studying nuclear enzymes associated with chromosome replication and mitotic progression. The DNA Topoisomerase II Alpha Antibody clone rTOP2A/6569 supports research investigating cell proliferation, chromosome segregation, and DNA topology regulation.

Learn more about TOP2A biology, its role as a chromosome segregation enzyme, and our microarray-validated TOP2A Antibody by visiting our TOP2A Antibody / Chromosome Segregation Enzyme Antibody page.

Application Notes

Optimal dilution of the TOP2A Antibody / DNA Topoisomerase II Alpha Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1352-1493 was used as the immunogen for the TOP2A Antibody / DNA Topoisomerase II Alpha Antibody.

Storage

Aliquot the recombinant TOP2A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

DNA Topoisomerase II alpha antibody, Topoisomerase II alpha antibody, Topoisomerase IIa antibody, DNA topoisomerase II antibody, TOP2A nuclear enzyme antibody

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