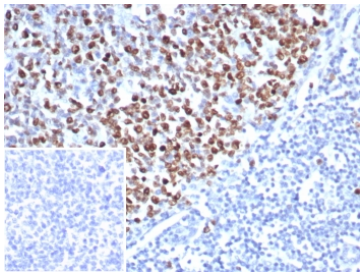
TOP2A Antibody / Cell Proliferation Marker Antibody [clone rTOP2A/8339] (V4483)

Catalog No.	Formulation	Size
V4483-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4483-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4483SAF-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
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rTOP2A/8339
Purity	Protein A/G affinity
UniProt	P11388
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 minutes at RT
Limitations	This recombinant TOP2A antibody is available for research use only.



TOP2A Antibody / Cell Proliferation Marker Antibody Tonsil IHC. Immunohistochemistry analysis of FFPE human tonsil tissue demonstrates strong nuclear staining consistent with expression of the TOP2A proliferation marker in actively dividing lymphoid cells. Nuclear immunoreactivity is concentrated within germinal center lymphocytes, reflecting the high proliferative activity of these cells during immune responses. The Cell Proliferation Marker Antibody highlights proliferating lymphoid populations within germinal centers while surrounding mantle zone lymphocytes show minimal staining. Inset: PBS used in place of primary antibody (secondary antibody negative control). Antigen retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer prior to immunohistochemistry staining.

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 TOP2A expression rises sharply during the S phase and G2/M phases of the cell cycle, the enzyme is strongly associated with actively dividing cells and proliferating cell populations.

TOP2A antibody, also known as Topoisomerase II alpha antibody or DNA Topoisomerase II alpha antibody, recognizes a nuclear enzyme that functions as a well established cell proliferation marker. During cell cycle progression, TOP2A accumulates in nuclei of cells undergoing DNA replication and mitosis. For this reason the protein is widely used as a marker of proliferating cells in biological research, particularly in tissues or experimental systems where rapid cell division occurs.

TOP2A Antibody / Cell Proliferation Marker Antibody (clone rTOP2A/8339) is a recombinant mouse monoclonal antibody designed to detect this proliferation associated nuclear protein. As a Cell Proliferation Marker Antibody, clone rTOP2A/8339 enables identification of cells actively progressing through the cell cycle. Recombinant monoclonal antibodies provide consistent binding performance and reproducible recognition of the target protein across experiments, supporting reliable detection of proliferating cell populations.

The designation Cell Proliferation Marker Antibody differentiates this antibody page from other TOP2A antibody pages that focus on enzymatic terminology such as Topoisomerase II alpha antibody or DNA Topoisomerase II alpha antibody. While those pages emphasize the biochemical role of the enzyme in DNA topology regulation, this page highlights the biological significance of TOP2A as a marker of proliferating cells during cell cycle progression. This differentiation allows researchers searching specifically for a cell proliferation marker antibody to identify antibodies targeting TOP2A based on its biological function rather than only its enzyme name.

TOP2A expression is especially prominent in tissues containing rapidly dividing cells. Lymphoid germinal centers, developing epithelial compartments, and many tumor tissues display strong expression of this DNA replication enzyme because these environments contain actively proliferating cells. In lymphoid tissues such as tonsil or lymph node, proliferating B lymphocytes within germinal centers often show strong nuclear expression of TOP2A, reflecting intense DNA replication activity during immune responses.

The Cell Proliferation Marker Antibody clone rTOP2A/8339 therefore provides a valuable reagent for identifying proliferating cells in experimental systems where cell cycle activity is being studied. By detecting the TOP2A protein associated with DNA replication and mitotic chromosome segregation, this antibody supports research investigating cell proliferation, tumor growth, and cell cycle regulation in biological samples.

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 / Cell Proliferation Marker Antibody should be determined by the researcher.

Immunogen

A recombinant human Topoisomerase II alpha protein fragment (aa1300-1500) was used as the immunogen for the TOP2A Antibody / Cell Proliferation Marker Antibody.

Storage

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

Alternate Names

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

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