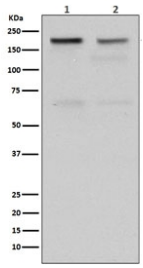
Topoisomerase II alpha Antibody for WB / TOP2A Western Blot Antibody [clone FB-20] (RQ5364)

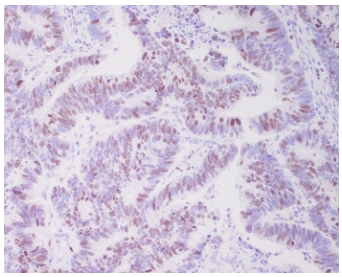
Catalog No.	Formulation	Size
RQ5364	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	FB-20
Purity	Affinity purified
UniProt	P11388
Localization	Nuclear
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:50-1:200
Limitations	This TOP2A antibody is available for research use only.



Topoisomerase II alpha Antibody for WB / TOP2A Western Blot Antibody (clone FB-20). Western blot analysis of human cell lysates using recombinant rabbit monoclonal clone FB-20 demonstrates detection of TOP2A 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 Topoisomerase II alpha / TOP2A (~174 kDa). The clear band observed in both lysates confirms recognition of denatured TOP2A protein in western blot assays and supports the use of this antibody for western blot detection of TOP2A expression in human cell lines.



IHC staining of FFPE human colon cancer with TOP2A antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.

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 breaks that relieve torsional stress generated during DNA replication and chromatin condensation. TOP2A expression increases during S phase and mitosis and is widely used as a molecular indicator of proliferating cells. The enzyme localizes primarily to the nucleus where it participates in chromosome condensation and segregation during cell division.

Topoisomerase II alpha Antibody for WB / TOP2A Western Blot Antibody (clone FB-20) is designed specifically for detection of TOP2A protein in western blot analysis of cell and tissue lysates. Western blot workflows separate proteins by SDS-PAGE prior to antibody detection, allowing researchers to identify the target protein based on both antibody binding and molecular size. In western blot experiments, this antibody recognizes denatured Topoisomerase II alpha protein following electrophoretic separation and membrane transfer, enabling visualization of the TOP2A protein band in complex lysates. Because researchers frequently search for either a TOP2A western blot antibody or TOP2A antibody WB, incorporating both terminology patterns reflects common laboratory usage and improves discoverability for western blot based applications.

Western blot detection of TOP2A provides an effective biochemical approach for evaluating protein expression in proliferating cells. Because TOP2A protein levels increase during cell cycle progression, western blot analysis often shows stronger TOP2A bands in rapidly dividing tumor cell lines compared with non-dividing cells. Detection of the protein by western blot therefore provides useful insight into proliferation related protein expression and DNA replication activity within experimental samples.

The Topoisomerase II alpha Antibody for WB enables researchers to verify the presence of TOP2A protein in lysates by observing a band at the expected molecular weight following SDS-PAGE separation. Western blotting provides an important advantage because proteins are resolved according to size before antibody detection, allowing confirmation that the detected signal corresponds to the correct TOP2A protein band. This capability helps distinguish the target protein from unrelated proteins that may be present in complex lysates.

Recombinant rabbit monoclonal clone FB-20 provides consistent recognition of the TOP2A protein in western blot assays. Recombinant monoclonal antibodies are particularly well suited for western blot applications because they provide reproducible detection of denatured epitopes generated during SDS-PAGE sample preparation. This supports reliable visualization of the TOP2A band across different lysate types and independent experiments.

Western blot analysis using the Topoisomerase II alpha Antibody for WB allows investigators to evaluate TOP2A protein levels in cultured cells, tumor cell lines, and tissue derived lysates. By enabling clear detection of the TOP2A protein band following electrophoretic separation, this antibody supports biochemical studies investigating DNA replication enzymes, cell cycle regulation, and proliferation associated nuclear proteins using western blot based experimental workflows.

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 Topoisomerase II alpha Antibody for WB / TOP2A Western Blot Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Topoisomerase II alpha / TOP2A was used as the immunogen for the Topoisomerase II alpha Antibody for WB / TOP2A Western Blot Antibody.

Storage

Store the TOP2A antibody at -20oC.

Alternate Names

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

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