

Product Name: TOP2A Mouse Monoclonal Antibody**Catalog #: AMM82423**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,ICC,ELISA,FC
Reactivity	Human, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC 1:100-1:500,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	174.4kDa

Antigen Information

Gene Name	TOP2A
Alternative Names	TOP2; TP2A
Gene ID	7153.0
SwissProt ID	P11388
Immunogen	Purified recombinant fragment of human TOP2A (AA: 1100-1530) expressed in E. Coli.

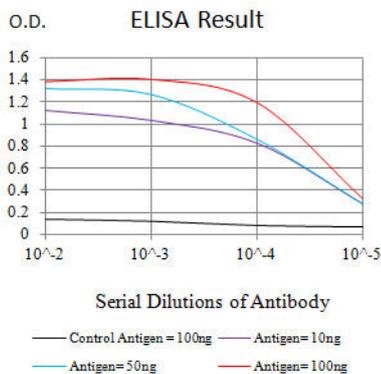
Background

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

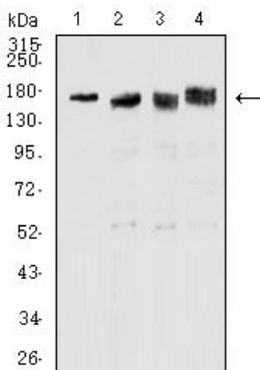
strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, alpha, is localized to chromosome 17 and the beta gene is localized to chromosome 3. The gene encoding this enzyme functions as the target for several 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.

Research Area

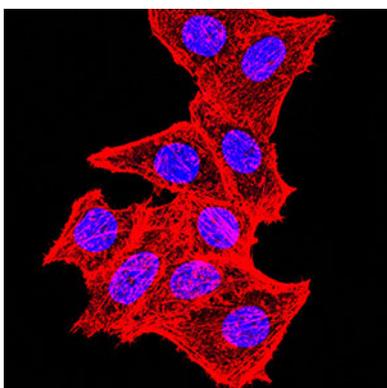
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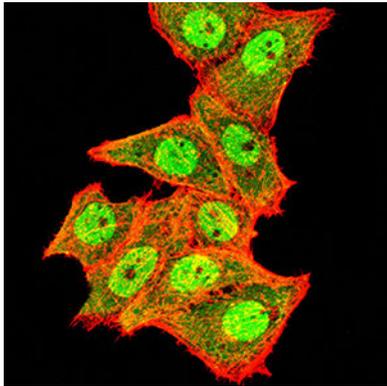
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



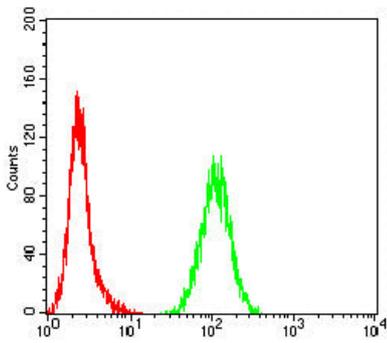
Western blot analysis using TOP2A mouse mAb against PC-12 (1), HeLa (2), Jurkat (3), and K562 (4) cell lysate.



Immunofluorescence analysis of HeLa cells using TOP2A mouse mAb. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Immunofluorescence analysis of HeLa cells using TOP2A mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using TOP2A mouse mAb (green) and negative control (red).