

TOP2A Monoclonal Antibody

Description

Product type	Antibody
Code	BT-MCA4204
Host	Mouse
Isotype	Mouse IgG2b
Size	100µL, 50µL
Immunogen	Purified recombinant fragment of human TOP2A (AA: 1100-1530) expressed in E. Coli.
Mol wt	174.4kDa
Species reactivity	Others
Clonality	Monoclonal
Recommended application	WB,ICC,FCM
Concentration	N/A
Full name	N/A
Synonyms	TOP2;TP2A

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

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.

Recommended Dilution

WB: 1:500 - 1:2000

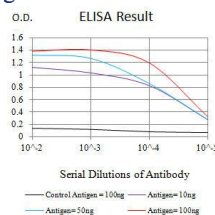
ICC: 1:100 - 1:500

FCM: 1:200-1:400

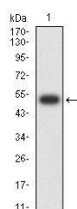
ELISA: 1:10000

Not yet tested in other applications.

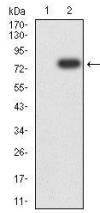
Images



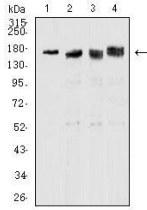
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



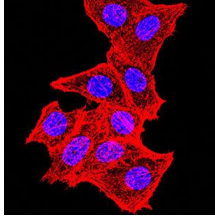
Western blot analysis using TOP2A mAb against human TOP2A (AA: 1100-1530) recombinant protein. (Expected MW is 51.2 kDa)



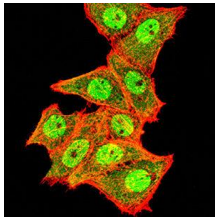
Western blot analysis using TOP2A mAb against HEK293 (1) and TOP2A (AA: 1100-1530)-hIgGFc transfected HEK293 (2) cell lysate.



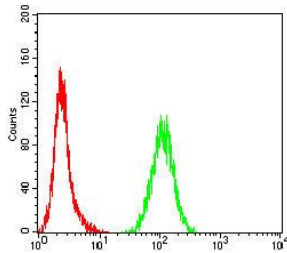
Western blot analysis using TOP2A mouse mAb against PC-12 (1), HeLa (2), Jurkat (3), and K562 (4) cell lysate.



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. Secondary antibody from Fisher (Cat#: 35503)



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

Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

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