

Product datasheet for CF802573

OriGene Technologies, Inc.

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Topoisomerase II alpha (TOP2A) Mouse Monoclonal Antibody [Clone ID: OTI2H9]

Product data:

Applications:

Product Type: Primary Antibodies

Clone Name: OTI2H9

Recommended Dilution: WB 1:2000

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 1100-1531 of human

TOP2A(NP_001058) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 174.2 kDa

Gene Name: DNA topoisomerase II alpha

Database Link: NP 001058

Entrez Gene 21973 MouseEntrez Gene 360243 RatEntrez Gene 7153 Human

<u>P11388</u>





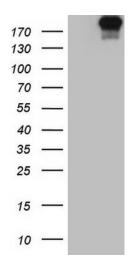
Background:

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. [provided by RefSeq, Jul

Synonyms: TOP2; TOP2alpha; TOPIIA; TP2A

Protein Families: Druggable Genome

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TOP2A ([RC221568], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TOP2A. Positive lysates [LY420704] (100ug) and [LC420704] (20ug) can be purchased separately from OriGene.