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Anti-Topoisomerase II alpha Antibody

Mouse Monoclonal Antibody
Catalog # AH13546

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	P11388
Other Accession	156346
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	TOP2A/1361
Calculated MW	174385

Additional Information

Gene ID	7153
Other Names	ATP hydrolyzing DNA topoisomerase II alfa; DNA gyrase; DNA topoisomerase (ATP hydrolyzing); DNA topoisomerase 2 alpha; DNA topoisomerase II 170kD; DNA topoisomerase II alpha; DNA Topoisomerase2; TOP2A; Topoisomerase DNA II alpha 170kDa; TP2A
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Topoisomerase II alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

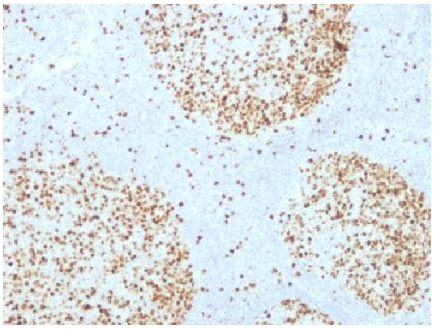
Name	TOP2A
Synonyms	TOP2

Function	Key decatenating enzyme that alters DNA topology by binding to two double-stranded DNA molecules, generating a double-stranded break in one of the strands, passing the intact strand through the broken strand, and religating the broken strand (PubMed:17567603, PubMed:18790802, PubMed:22013166, PubMed:22323612, PubMed:27754753). May play a role in regulating the period length of BMAL1 transcriptional oscillation (By similarity).
Cellular Location	Cytoplasm. Nucleus, nucleoplasm. Nucleus. Nucleus, nucleolus
Tissue Location	Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

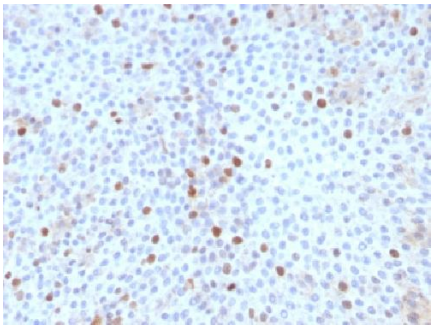
Background

It recognizes a 170kDa protein, which is identified as topoisomerase II □ □□shows no cross-reaction with Topoisomerase II □or I. Topo II □plays important roles in synthesis and transcription of DNA as well as chromosomal segregation during mitosis. It is reported to be a sensitive and specific marker of late S-, G2- & M-phases in transformed and developmentally regulated normal cells. Topo II □is also implicated in drug resistance of tumor cells.

Images

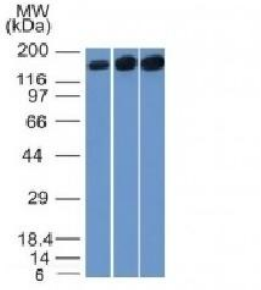


Formalin-fixed, paraffin-embedded Human Tonsil stained with Topoisomerase II alpha Monoclonal Antibody (TOP2A/1361).



Formalin-fixed, paraffin-embedded Human Bladder Carcinoma stained with Topoisomerase II alpha Monoclonal Antibody (TOP2A/1361).

Western Blot of HepG2, HeLa and 3T3 Cell Lysate using Topo II alpha, Monoclonal Antibody (TOP2A/1361).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.