

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:<u>17567603</u>, PubMed:<u>18790802</u>, PubMed:<u>22013166</u>, PubMed:<u>22323612</u>). 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,

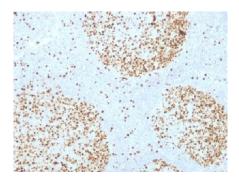
colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas

(PubMed:9155056)

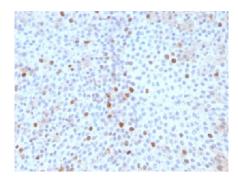
Background

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.

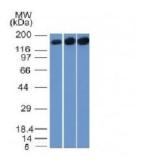
Images



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'.