

Anti-Topoisomerase II alpha Antibody

Mouse Monoclonal Antibody Catalog # AH13546

Specification

Anti-Topoisomerase II alpha Antibody - 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

Calculated MW 174385

Anti-Topoisomerase II alpha Antibody - 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

WB~~1:1000<br \><span class</pre>

="dilution IHC-P">IHC-P~~N/A<br \><span class

="dilution IF">IF \sim 1:50 \sim 200
FC \sim 1:10 \sim 50

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.

Anti-Topoisomerase II alpha Antibody - 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). 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

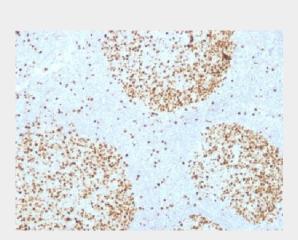
Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

Anti-Topoisomerase II alpha Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

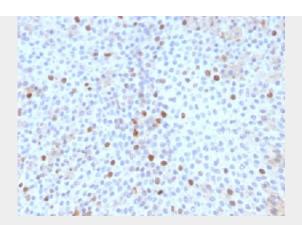
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Topoisomerase II alpha Antibody - Images

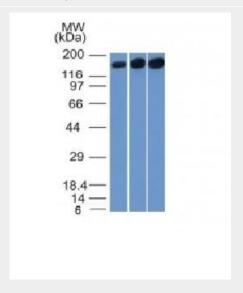


Formalin-fixed, paraffin-embedded Human Tonsil stained with Topoisomerase II alpha Monoclonal Antibody (TOP2A/1361).





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).

Anti-Topoisomerase II alpha Antibody - Background

It recognizes a 170kDa protein, which is identified as topoisomerase II \square . \square shows no cross-reaction with Topoisomerase II \square or I. Topo II \square 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 \square is also implicated in drug resistance of tumor cells.