

**Anti-Topoisomerase II alpha Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AH13546****Specification**

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**Anti-Topoisomerase II alpha Antibody - Product Information**

Application	WB, IHC-P, IF, FC
Primary Accession	<a href="#">P11388</a>
Other Accession	<a href="#">156346</a>
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  
IHC-P~~N/A  
IF~~1:50~200  
FC~~1:10~50

**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:<a href="http://www.uniprot.org/citations/17567603" target="\_blank">17567603</a>, PubMed:<a href="http://www.uniprot.org/citations/18790802" target="\_blank">18790802</a>, PubMed:<a href="http://www.uniprot.org/citations/22013166" target="\_blank">22013166</a>, PubMed:<a href="http://www.uniprot.org/citations/22323612" target="\_blank">22323612</a>). 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

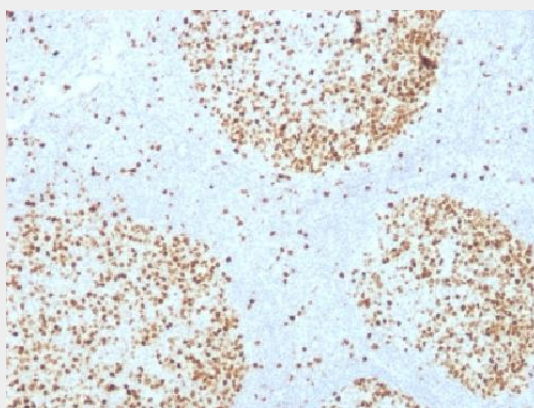
Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

### Anti-Topoisomerase II alpha Antibody - Protocols

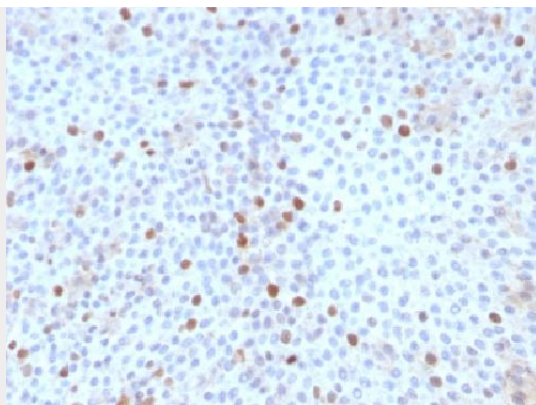
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

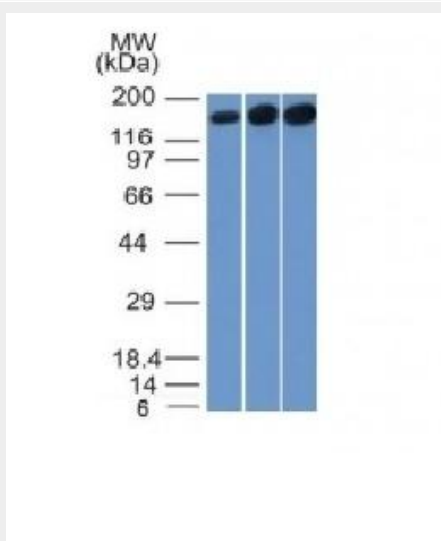
### Anti-Topoisomerase II alpha Antibody - Images



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 $\alpha$ . It shows no cross-reaction with Topoisomerase II $\beta$  or I. Topo II $\alpha$  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 $\alpha$  is also implicated in drug resistance of tumor cells.