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TOP2A / Topoisomerase II Alpha Antibody (clone 1E2)

Mouse Monoclonal Antibody
Catalog # ALS13409

Specification

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - Product Information

Application	**WB, IF, IHC**
Primary Accession	P11388
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**174kDa KDa**

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - Additional Information

Gene ID 7153

Other Names
DNA topoisomerase 2-alpha, 5.99.1.3, DNA topoisomerase II, alpha isozyme, TOP2A, TOP2

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) is for research use only and not for use in diagnostic or therapeutic procedures.

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - 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,

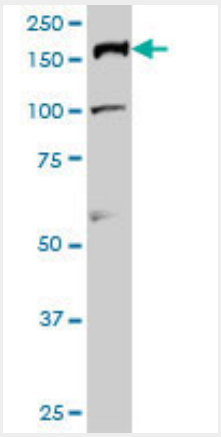
brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056)

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - Protocols

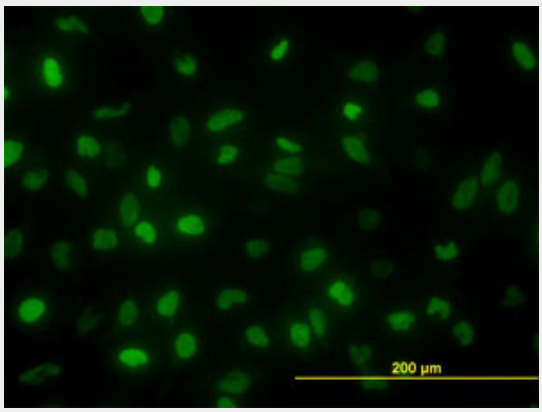
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - Images

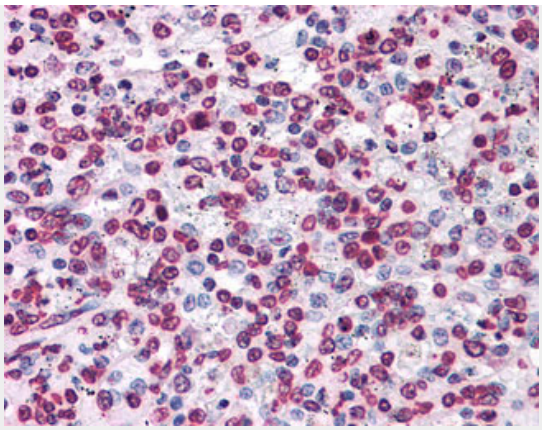


TOP2A monoclonal antibody clone 1E2 Western blot of TOP2A expression in HeLa NE.



Immunofluorescence of monoclonal antibody to TOP2A on HeLa cell (antibody concentration 10 ug/ml).

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Anti-TOP2A antibody IHC of human spleen.

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - Background

Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks. Essential during mitosis and meiosis for proper segregation of daughter chromosomes. May play a role in regulating the period length of ARNTL/BMAL1 transcriptional oscillation (By similarity).

TOP2A / Topoisomerase II Alpha Antibody (clone 1E2) - References

Tsai-Pflugfelder M.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:7177-7181(1988).
Wasserman R.A.,et al.Cancer Res. 53:3591-3596(1993).
Lang A.J.,et al.Gene 221:255-266(1998).
Sng J.H.,et al.Biochim. Biophys. Acta 1444:395-406(1999).
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