

# Topoisomerase 2 alpha Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51577

# **Product Information**

Application	WB
Primary Accession	<u>P11388</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	174385

## **Additional Information**

Gene ID	7153
Other Names	DNA topoisomerase 2-alpha, DNA topoisomerase II, alpha isozyme, TOP2A, TOP2
Target/Specificity	KLH conjugated synthetic peptide derived from human Topoisomerase 2 alpha
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name	ΤΟΡ2Α
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

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.

## 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). Zody M.C.,et al.Nature 440:1045-1049(2006).

### Images



Anti-Topoisomerase 2 alpha Antibodyat 1:1000 dilution + Hela whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 174 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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