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# Anti-Topoisomerase 2 alpha Antibody [KO/KD Validated]

Catalog # AP51577

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF/IC |
| **Primary Accession** | P11388 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 174385 |

## Additional Information

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|---|---|
| **Gene ID** | 7153 |
| **Other Names** | TOP2; DNA topoisomerase 2-alpha; DNA topoisomerase II, alpha isozyme |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Topoisomerase 2 alpha. The exact sequence is proprietary. |
| **Dilution** | WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

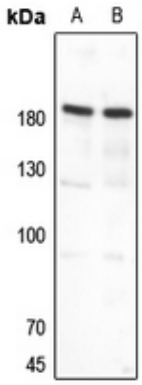
| | |
|---|---|
| **Name** | TOP2A |
| **Synonyms** | TOP2 |
| **Function** | Key decatenating enzyme that alters DNA topology by binding to two double-stranded DNA molecules, generating a double-stranded break in one of the strands, passing the intact strand through the broken strand, and religating the broken strand (PubMed:17567603, PubMed:18790802, PubMed:22013166, PubMed:22323612, PubMed:27754753). 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)

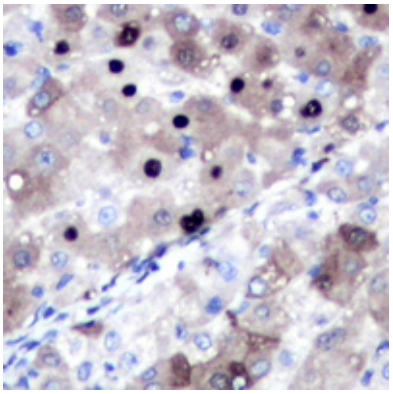
## References

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Wasserman R.A.,et al.Cancer Res. 53:3591-3596(1993).
Lang A.J.,et al.Gene 221:255-266(1998).
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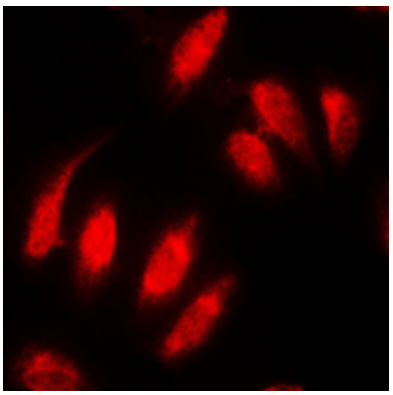
## Images




Western blot analysis of Topoisomerase 2 alpha expression in Hela (A), H446 (B) whole cell lysates. (Predicted band size: 174 kD; Observed band size: 190 kD)

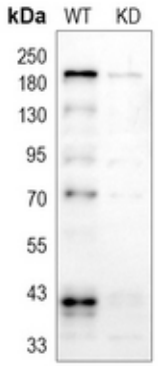


Immunohistochemical analysis of Topoisomerase 2 alpha staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Topoisomerase 2 alpha staining in MDAMB231 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Western blot analysis of Topoisomerase 2 alpha expression in wild type (WT) and knockdown (KD) HeLa cell lysates.




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