



# TOP2A (TOP2A, TOP2, DNA topoisomerase 2-alpha, DNA topoisomerase II, alpha isozyme)

## Catalog number

031303

## Supplier

United States Biological

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, alpha, is localized to chromosome 17 and the beta gene is localized to chromosome 3. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia.

## Applications

Suitable for use in Western Blot, ELISA.

## Recommended Dilution

ELISA: 1:1,000

Western Blot: 1:500~8000

## Storage and Stability

May be stored at 4°C for short-term only. For long-term storage, store at -20°C. Aliquots are stable for at least 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

## Immunogen

Purified His-tagged TOP2A protein (fragment).

## Formulation

Supplied as a liquid, crude ascites with 0.09% sodium azide.

## Purity

Ascites

## Specificity

Human

## Product Type

Mab

## Source



human

**Isotype**

IgG1

**Grade**

Ascites

**Applications**

E WB

**Crossreactivity**

Hu

**Storage**

-20°C

**MW**

174385

**Reference**

Vranic, S., et al. Hum. Pathol. 41(11):1617-1623(2010)

Chen, H., et al. Am. J. Surg. Pathol. 34(9):1250-1257(2010)

Ye, J., et al. Cell 142(2):230-242(2010)

Rossi, E., et al. Histopathology 57(1):81-89(2010)

Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)