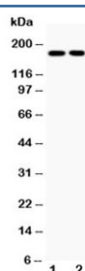


## Topoisomerase II alpha Antibody / TOP2A (R30295)

Catalog No.	Formulation	Size
R30295	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
<b>UniProt</b>	P11388
<b>Applications</b>	Western Blot : 0.5-1ug/ml
<b>Limitations</b>	This Topoisomerase II alpha antibody is available for research use only.



Western blot testing of Topoisomerase II alpha antibody and human 1: HeLa; 2: Jurkat cell lysate; Predicted molecular weight ~174 kDa.

## Description

The human topoisomerase II enzyme is encoded by a single-copy gene which is mapped to 17q21-q22. The TOP2A gene spans approximately 30 kb and contains 35 exons. Furthermore, DNA topoisomerases are enzymes that control and alter the topologic states of DNA in both prokaryotes and eukaryotes. Topoisomerase II from eukaryotic cells catalyzes the relaxation of supercoiled DNA molecules, catenation, decatenation, knotting, and unknotting of circular DNA. It appears likely that the reaction catalyzed by topoisomerase II involves the crossing-over of 2 DNA segments. There are about 100,000 molecules of topoisomerase II per HeLa cell nucleus, constituting about 0.1% of the nuclear extract. DNA topoisomerase II-alpha is associated with the pol II holoenzyme and is a required component of chromatin-dependent coactivation. Specific inhibitors of topoisomerase II blocked transcription on chromatin templates, but did not

affect transcription on naked templates. Addition of purified topoisomerase II-alpha reconstituted chromatin-dependent activation activity in reactions with core pol II.

## Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Topoisomerase II alpha antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

An amino acid sequence from the C-terminus of human Topoisomerase II alpha (RKPSTSDSDSNFEK) was used as the immunogen for this Topoisomerase II alpha antibody.

## Storage

After reconstitution, the Topoisomerase II alpha antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.