# **Elabscience**®

### DNA topoisomerase II alpha Polyclonal Antibody

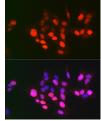
### catalog number: E-AB-90025

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human
Immunogen	Recombinant fusion protein of human II alpha
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.
Applications	Recommended Dilution

## IF 1:20-1:50

### Data



Immunofluorescence analysis of U-2 OS cells using DNA topoisomerase II alpha Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.

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Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

#### Background

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.

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