



Anti-TOP2A (aa 1435-1531) polyclonal antibody (DPAB-DC3093)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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 ataxiatelangiectasia.
Immunogen	TOP2A (NP_001058, 1435 a.a. ~ 1531 a.a) partial recombinant protein with GST tag. The sequence is RAAPKGTKRDPALNSGVSQKPDPAKTKNRRKRKPSTSDDSDSNFEKIVSKAVTSKKSKGE SDDFHMDFDAVAPRAKSVRAKKPIKYLEESDEDDLF
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	TOP2A topoisomerase (DNA) II alpha 170kDa [Homo sapiens (human)]
Official Symbol	TOP2A
Synonyms	TOP2A; topoisomerase (DNA) II alpha 170kDa; TOP2; TP2A; DNA topoisomerase 2-alpha; DNA gyrase; DNA topoisomerase II, 170 kD; DNA topoisomerase (ATP-hydrolyzing); DNA topoisomerase II, alpha isozyme;
Entrez Gene ID	7153
Protein Refseq	NP_001058
UniProt ID	P11388
Chromosome Location	17q21-q22
Pathway	Cell Cycle; G0 and Early G1; Gastric cancer network 2; Mitotic G1-G1/S phases
Function	ATP binding; DNA binding; DNA binding, bending; DNA topoisomerase type II (ATP-hydrolyzing) activity
