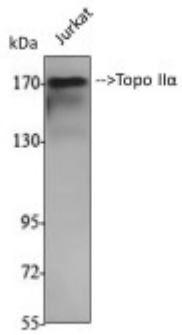
Anti-Topo I alpha antibody



Description	Rabbit polyclonal to Topo IIalpha.

Model	STJ96066
Host	Rabbit
Reactivity	Human, Simian
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Topo IIalpha
Immunogen Region	1-80 aa, N-terminal
Gene ID	7153
Gene Symbol	TOP2A
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	Topo IIalpha Polyclonal Antibody detects endogenous levels of Topo IIalpha protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	DNA topoisomerase 2-alpha DNA topoisomerase II, alpha isozyme
Molecular Weight	174 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11989OMIM:126430
Alternative Names	DNA topoisomerase 2-alpha DNA topoisomerase II, alpha isozyme
Function	Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks. Essential during mitosis and meiosis for proper segregation of daughter chromosomes. May play a role in regulating the period length of ARNTL/BMAL1 transcriptional oscillation .
Sequence and Domain Family	The N-terminus has several structural domains; the ATPase domain (about residues 1-265), the transducer domain (about 266-428) and the toprim domain (455-572) . Comparing different structures shows ATP hydrolysis induces domain shifts in the N-terminus that are probably part of the mechanism of DNA cleavage and rejoining .
Cellular Localization	Cytoplasm Nucleus, nucleoplasm. Generally located in the nucleoplasm.
Post-translational Modifications	Phosphorylation has no effect on catalytic activity. However, phosphorylation at Ser-1106 by CSNK1D/CK1 promotes DNA cleavable complex formation.