



Topoisomerase II α (phospho-Ser1469) rabbit pAb

Catalog No	YP-Ab-01479
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	TOP2A TOP2
Immunogen	Synthesized phosho peptide around human Topoisomerase II α (Ser1469)
Specificity	This antibody detects endogenous levels of Human Topoisomerase II α (phospho-Ser1469)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	alpha isozyme;ATP hydrolyzing DNA topoisomerase II alfa;DNA gyrase;DNA topoisomerase (ATP hydrolyzing);DNA topoisomerase 2 alpha;DNA topoisomerase 2-alpha;DNA topoisomerase II 170 kD;DNA topoisomerase II alpha isozyme;DNA topoisomerase II;DNA Topoisomerase2;TOP 2A;TOP2; TOP2A;TOP2A_HUMAN;Topoisomerase DNA II alpha 170kDa;TP2A;Topo II α ; TOP2A TOP2;Topoisomerase II α (Ser1469);DNA topoisomerase 2-alpha (EC 5.99.1.3) (DNA topoisomerase II;alpha isozyme)
Observed Band	174kD
Calculated Molecular Weight	190kDa
Cell Pathway	Cytoplasm . Nucleus, nucleoplasm . Nucleus . Nucleus, nucleolus .
Tissue Specificity	Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056).
Function	catalytic activity:ATP-dependent breakage, passage and rejoining of double-stranded DNA.;enzyme regulation:Specifically inhibited by the intercalating agent amsacrine.;function:Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes



double-strand breaks.,miscellaneous:Eukaryotic topoisomerase I and II can relax both negative and positive supercoils, whereas prokaryotic enzymes relax only negative supercoils.,PTM:Phosphorylation has no effect on catalytic activity.,similarity:Belongs to the type II topoisomerase family.,subcellular location:Generally located in the nucleoplasm.,subunit:Homodimer. Interacts with COPS5.,

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 pla

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images