

Topoisomerase IIa (Phospho Ser1469) rabbit pAb

Catalog No: YP1533

Reactivity: Human; Rat; Mouse;

Applications: WB

Target: Topo Ila

Fields: >>Platinum drug resistance

Gene Name: TOP2A TOP2

Protein Name: Topoisomerase IIa (Ser1469)

Q01320

Human Gene ld: 7153

Human Swiss Prot

ss Prot P11388

No:

Mouse Gene ld: 21973

Mouse Swiss Prot

No:

Rat Gene Id: 360243

Rat Swiss Prot No: P41516

Immunogen: Synthesized phosho peptide around human Topoisomerase IIa (Ser1469)

Specificity: This antibody detects endogenous levels of Human Topoisomerase IIa

(phospho-Ser1469)

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:1000-2000

1/3



Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) Storage Stability:

Observed Band: 174kD

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

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.,

Subcellular Location:

Cytoplasm . Nucleus, nucleoplasm . Nucleus . Nucleus, nucleolus .

Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, **Expression:**

> colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056).

Sort: 17290

Host: Rabbit

Modifications: Phospho

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Products Images