

Datasheet for ABIN7602988

anti-Topoisomerase II alpha antibody (Middle Region)



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Overview

Quantity:	100 µg
Target:	Topoisomerase II alpha (TOP2A)
Binding Specificity:	Middle Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Topoisomerase II alpha antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-Topoisomerase II alpha/TOP2A Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human Topoisomerase II alpha/TOP2A, identical to the related mouse and rat sequences.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Topoisomerase II alpha/TOP2A Antibody Picoband® (ABIN7602988). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: Topoisomerase II alpha (TOP2A)

Alternative Name: TOP2A ([TOP2A Products](#))

Background: Synonyms: DNA topoisomerase 2-alpha, DNA topoisomerase II, alpha isozyme, TOP2A, TOP2
Tissue Specificity: Liver.

Background: The human topoisomerase II enzyme is encoded by a single-copy gene which is mapped to 17q21-q22. The TOP2A gene spans approximately 30 kb and contains 35 exons. Furthermore, DNA topoisomerases are enzymes that control and alter the topologic states of DNA in both prokaryotes and eukaryotes. Topoisomerase II from eukaryotic cells catalyzes the relaxation of supercoiled DNA molecules, catenation, decatenation, knotting, and unknotting of circular DNA. It appears likely that the reaction catalyzed by topoisomerase II involves the crossing-over of 2 DNA segments. There are about 100,000 Molecules of topoisomerase II per HeLa cell nucleus, constituting about 0.1 % of the nuclear extract¹. DNA topoisomerase II-alpha is associated with the pol II holoenzyme and is a required component of chromatin-dependent coactivation. Specific inhibitors of topoisomerase II blocked transcription on chromatin templates, but did not affect transcription on naked templates. Addition of purified topoisomerase II-alpha reconstituted chromatin-dependent activation activity in reactions with core pol II².

Molecular Weight: 174 kDa

Gene ID: 7153

UniProt: [P11388](#)

Pathways: [Cell Division Cycle, Mitotic G1-G1/S Phases](#)

Application Details

Application Notes: Western blot, 0.25-0.5 µg/mL, Human
Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human
Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human
Flow Cytometry (Fixed), 1-3 µg/1×10⁶ cells, Human

1. Miller, K. G., Liu, L. F., Englund, P. T. : A homogeneous type II DNA topoisomerase from HeLa cell nuclei. J. Biol. Chem. 256: 9334-9339, 1981. 2. Mondal, N., Parvin, J. D. : DNA topoisomerase II-alpha is required for RNA polymerase II transcription on chromatin templates.

Application Details

	Nature 413: 435-438, 2001.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.