

# ARG66205 anti-Topoisomerase II antibody [SQab1727]

Package: 100 μl, 50 μl Store at: -20°C

# Summary

Product Description	Recombinant Rabbit Monoclonal antibody [SQab1727] recognizes Topoisomerase II
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Monoclonal
Clone	SQab1727
Isotype	IgG
Target Name	Topoisomerase II
Species	Human
Immunogen	Synthetic peptide around the C-terminus of Topoisomerase II.
Conjugation	Un-conjugated
Alternate Names	DNA topoisomerase II, alpha isozyme; DNA topoisomerase 2-alpha; TOP2; EC 5.99.1.3; TP2A

## **Application Instructions**

Application table	Application	Dilution	
	IHC-P	1:100 - 1:200	
	WB	1:2000 - 1:5000	
Application Note	* The dilutions indicate r	IHC: Antigen retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0 * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

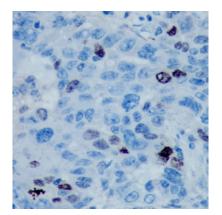
Gene Symbol	ТОР2А
Gene Full Name	topoisomerase (DNA) II alpha
Background	Topoisomerase II, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional 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. [provided by RefSeq, Jul 2010]
Function	Topoisomerase II controls 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. [UniProt]
Highlight	Related products: <u>Topoisomerase II antibodies;</u> Related news: <u>Cancer Pathology Markers (SQ clones)</u>
Calculated Mw	174 kDa
PTM	Phosphorylation has no effect on catalytic activity. However, phosphorylation at Ser-1106 by CSNK1D/CK1 promotes DNA cleavable complex formation.

## Images



### ARG66205 anti-Topoisomerase II antibody [SQab1727] WB image

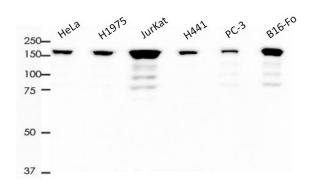
Western blot: 30  $\mu g$  of 293T cell lysate stained with ARG66205 anti-Topoisomerase II antibody [SQab1727] at 1:2000 dilution.



### ARG66205 anti-Topoisomerase II antibody [SQab1727] IHC-P image

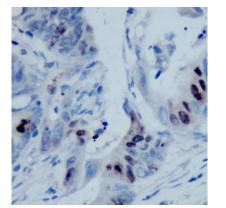
Immunohistochemistry: Formalin-fixed and paraffin-embedded Human ovarian cancer tissue stained with ARG66205 anti-Topoisomerase II antibody [SQab1727] at 1:200 dilution.

Antigen retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0



### ARG66205 anti-Topoisomerase II antibody [SQab1727] WB image

Western blot: 10  $\mu g$  of HeLa, H1975, Jurkat, H441, PC-3 and B16-Fo cell lysates stained with ARG66205 anti-Topoisomerase II antibody [SQab1727] at 1:5000 dilution.



#### ARG66205 anti-Topoisomerase II antibody [SQab1727] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human endometrium cancer tissue stained with ARG66205 anti-Topoisomerase II antibody [SQab1727] at 1:200 dilution.

Antigen retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0  $\,$