

ARG62648 anti-Topoisomerase II alpha antibody [3F6]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [3F6] recognizes Topoisomerase II alpha
Tested Reactivity	Hu
Tested Application	IHC, IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	3F6
Isotype	IgG1
Target Name	Topoisomerase II alpha
Immunogen	Recombinant protein corresponding to the C-terminus region of topoisomerase II alpha
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	1:20 - 1:40
	IP	10 µg/mg
	WB	1:250 - 1:500

Application Note IHC: Incubated for 1 hour, at 25°C.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Buffer	10mM PBS (pH 7.4), 0.2% BSA and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Stabilizer	0.2% 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 or below. 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

Database links	GeneID: 7153 Human Swiss-port # P11388 Human
Gene Symbol	TOP2A
Gene Full Name	topoisomerase (DNA) II alpha 170kDa
Background	<p>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 ataxia-telangiectasia. [provided by RefSeq, Jul 2010]</p>
Function	<p>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]</p>
Research Area	Cancer antibody; Gene Regulation antibody
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.
Cellular Localization	Nuclear