

DATASHEET

Topoisomerase 1 Rabbit Polyclonal Antibody

CAT. NO. APA14704

KEY FEATURES

Target	Topoisomerase 1	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

Releases the supercoiling and torsional tension of DNA introduced during the DNA replication and transcription by transiently cleaving and rejoining one strand of the DNA duplex. Introduces a single-strand break via transesterification at a target site in duplex DNA. The scissile phosphodiester is attacked by the catalytic tyrosine of the enzyme, resulting in the formation of a DNA-(3'-phosphotyrosyl)-enzyme intermediate and the expulsion of a 5'-OH DNA strand. The free DNA strand then rotates around the intact phosphodiester bond on the opposing strand, thus removing DNA supercoils. Finally, in the religation step, the DNA 5'-OH attacks the covalent intermediate to expel the active-site tyrosine and restore the DNA phosphodiester backbone .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Topoisomerase 1
Specificity	Recognizes endogenous levels of Topoisomerase 1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide of human Topoisomerase 1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 90 kD; Observed: 120 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	DNA topoisomerase 1; DNA topoisomerase I
Gene Symbol	TOP1
Entrez Gene	7150(Human); 21969(Mouse)
SwissProt	P11387(Human); Q04750(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

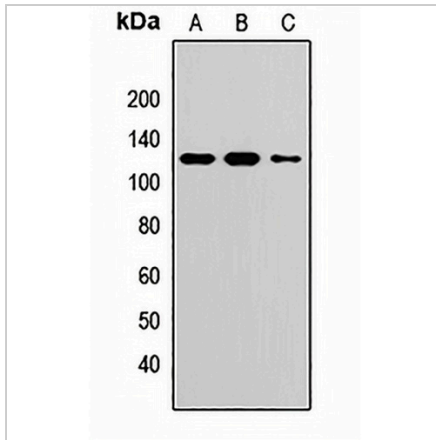
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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DATA



Western blot analysis of Topoisomerase 1 expression in Jurkat (A), HeLa (B), mouse spleen (C) whole cell lysates. (Predicted band size: 90 kD; Observed band size: 120 kD)

Data 2

Immunohistochemical analysis of Topoisomerase 1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.