

ARG56183 anti-TOP1MT antibody [TOP1MT/488]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [TOP1MT/488] recognizes TOP1MT
Tested Reactivity	Hu
Tested Application	FACS, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	TOP1MT/488
Isotype	IgG2b, kappa
Target Name	TOP1MT
Species	Human
Immunogen	Recombinant full-length human TOP1MT protein.
Conjugation	Un-conjugated
Alternate Names	TOP1mt; EC 5.99.1.2; DNA topoisomerase I, mitochondrial

Application Instructions

Application table	Application	Dilution
	FACS	1 - 2 µg/10 ⁶ cells
	IHC-P	2 - 5 µg/ml
	WB	1 - 2 µg/ml
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 10-20 min, followed by cooling at RT for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	~ 57 kDa	

Properties

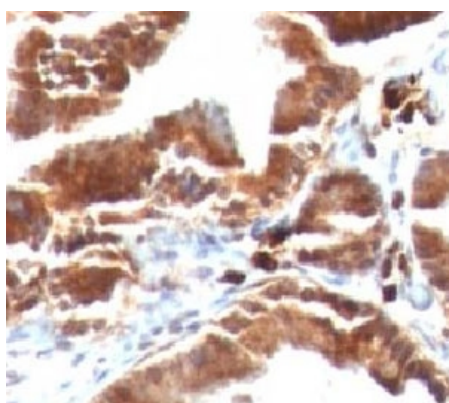
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA.
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA

Concentration	0.2 mg/ml
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

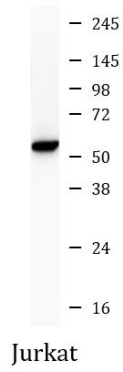
Database links	GeneID: 116447 Human Swiss-port # Q969P6 Human
Gene Symbol	TOP1MT
Gene Full Name	topoisomerase (DNA) I, mitochondrial
Background	This gene encodes a mitochondrial DNA topoisomerase that plays a role in the modification of DNA topology. The encoded protein is a type IB topoisomerase and catalyzes the transient breaking and rejoining of DNA to relieve tension and DNA supercoiling generated in the mitochondrial genome during replication and transcription. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]
Function	Releases the supercoiling and torsional tension of DNA introduced during duplication of mitochondrial DNA 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 undergoes passage around the unbroken 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 (By similarity). [UniProt]
Calculated Mw	70 kDa
Cellular Localization	Cytoplasmic (mitochondria)

Images



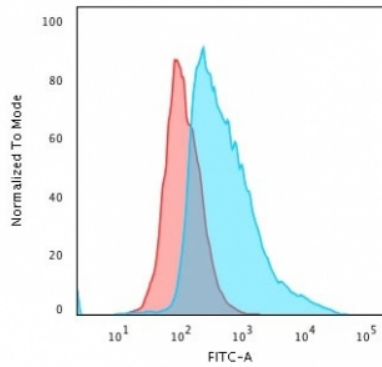
ARG56183 anti-TOP1MT antibody [TOP1MT/488] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human gallbladder stained with ARG56183 anti-TOP1MT antibody [TOP1MT/488].



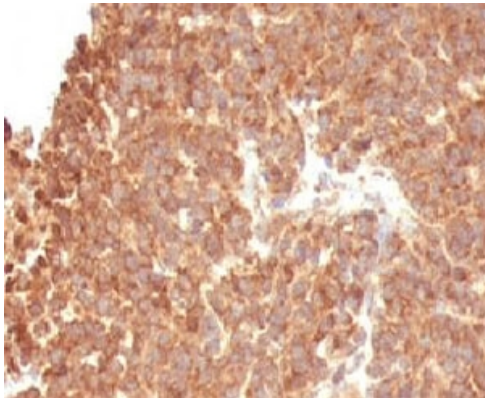
ARG56183 anti-TOP1MT antibody [TOP1MT/488] WB image

Western blot: Jurkat cell lysate stained with ARG56183 anti-TOP1MT antibody [TOP1MT/488].



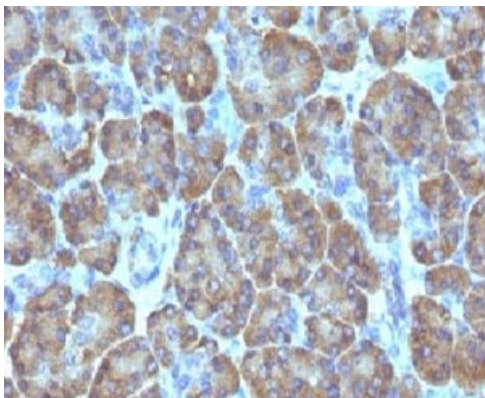
ARG56183 anti-TOP1MT antibody [TOP1MT/488] FACS image

Flow Cytometry: PFA-fixed MCF7 cells stained with ARG56183 anti-TOP1MT antibody [TOP1MT/488] (blue); Isotype control (red).



ARG56183 anti-TOP1MT antibody [TOP1MT/488] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human melanoma stained with ARG56183 anti-TOP1MT antibody [TOP1MT/488].



ARG56183 anti-TOP1MT antibody [TOP1MT/488] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human pancreas stained with ARG56183 anti-TOP1MT antibody [TOP1MT/488].