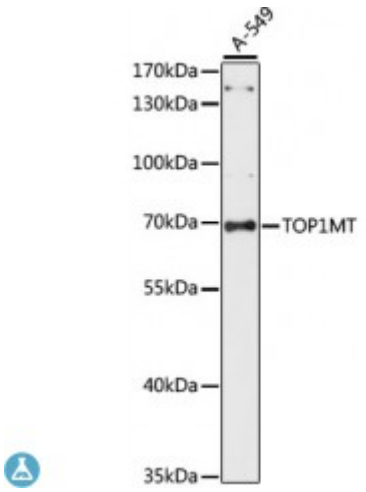
Anti-TOP1MT Antibody



Description	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.

Model	STJ117754
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 470-550 of human TOP1MT (NP_443195.1).
Gene ID	116447
Gene Symbol	TOP1MT
Dilution range	WB 1:200 - 1:2000
Tissue Specificity	Ubiquitous
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	DNA topoisomerase I mitochondrial TOP1mt
Molecular Weight	69.872 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:29787OMIM:606387
Alternative Names	DNA topoisomerase I mitochondrial TOP1mt
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 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 ,
Cellular Localization	Mitochondrion