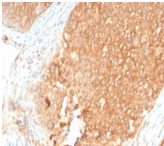


Topoisomerase I, Mitochondrial Recombinant Monoclonal Rabbit Antibody (TOP1MT/2883R)



Product Description

DNA topoisomerases are nuclear enzymes that regulate the topological structure of DNA in eukaryotic cells by transiently breaking and rejoining DNA strands. Due to their roles in DNA replication, recombination, and transcription, DNA topoisomerases have been identified as targets of numerous anticancer drugs. Mitochondrial Topo I (DNA topoisomerase I, mitochondrial) is a 601 amino acid protein that primarily acts to relieve DNA strain that may occur during duplication of mitochondrial DNA. As a type IB topoisomerase, mitochondrial Topo I requires a divalent metal, either, calcium or magnesium, as well as an alkaline pH for optimal activity. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 2883, Anti-Topoisomerase I, Mitochondrial (TOP1MT/2883R)**

Product attributes	
Antibody number	#2883
Antibody reactivity (target)	Topoisomerase I, Mitochondrial
Antibody type	Primary
Host species	Rabbit
Clonality	Recombinant Monoclonal
Clone	TOP1MT/2883R
Isotype	IgG
Molecular weight	70 kDa
Synonyms	DNA topoisomerase I; TOP1MT; Topoisomerase I mitochondrial; Type IB Topoisomerase
Human gene symbol	TOP1MT
Entrez gene ID	116447
SwissProt	Q969P6
Unigene	528574
Immunogen	Recombinant full-length human TOP1MT protein
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Mitochondria
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistochemistry (formalin): 0.5-1 ug/mL for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user.
Positive control	A431 cells. Heart, Skeletal muscle, brain or fetal liver.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA. Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cell cycle

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

Dye Features
[CF®405S Features](#)
[CF®488A Features](#)
[CF®568 Features](#)
[CF®594 Features](#)
[CF®640R Features](#)
[CF®647 Features](#)

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