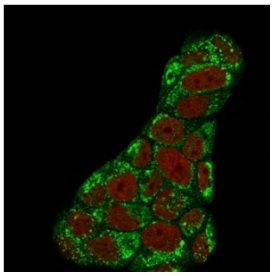
TOP1MT Antibody [clone TOP1MT/488] (V2461)

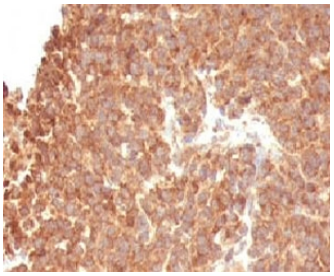
Catalog No.	Formulation	Size
V2461-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2461-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2461SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2461IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

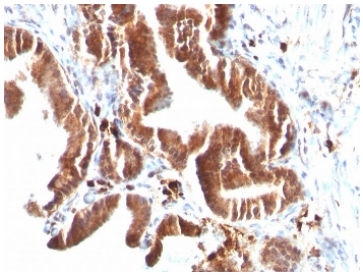
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	TOP1MT/488
Purity	Protein G affinity chromatography
UniProt	Q969P6
Localization	Cytoplasmic (mitochondria)
Applications	Flow Cytometry : 1-2ug/10^6 cells Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (1) (2)
Limitations	This TOP1MT antibody is available for research use only.



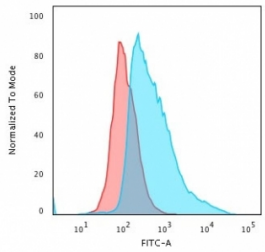
Immunofluorescent staining of PFA-fixed human MCF7 cells with TOP1MT antibody (clone TOP1MT/488, green) and Reddot nuclear stain (red).



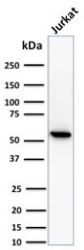
IHC: Formalin-fixed, paraffin-embedded human melanoma stained with TOP1MT antibody (clone TOP1MT/488).



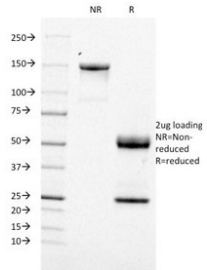
IHC: Formalin-fixed, paraffin-embedded human gallbladder stained with TOP1MT antibody (clone TOP1MT/488).



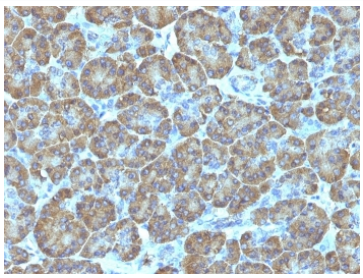
Flow cytometry testing of PFA-fixed human MCF7 cells with TOP1MT antibody (clone TOP1MT/488); Red=isotype control, Blue= TOP1MT antibody.



Western blot testing of human Jurkat cell lysate with TOP1MT antibody (clone TOP1MT/488). Predicted molecular weight ~66 kDa.



SDS-PAGE analysis of purified, BSA-free TOP1MT antibody (clone TOP1MT/488) as confirmation of integrity and purity.



IHC: Formalin-fixed, paraffin-embedded human pancreas stained with TOP1MT antibody (clone TOP1MT/488).

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.

Application Notes

Optimal dilution of the TOP1MT antibody should be determined by the researcher.

1. Staining of formalin/paraffin tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human protein was used as the immunogen for the TOP1MT antibody.

Storage

Store the TOP1MT antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com