

Rabbit Anti-Topoisomerase I antibody

SL10542R

Product Name:	Topoisomerase I
Chinese Name:	拓普西异构酶 I 抗体
Alias:	DNA topoisomerase 1; DNA topoisomerase I; NUP98 fusion gene; TOP 1; TOP I; TOP1; TOP1_HUMAN; TOPI; Topoisomerase 1; Topoisomerase1; Topoisomerase1; Type I DNA topoisomerase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	91kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Topoisomerase I:581-765/765
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This enzyme catalyzes the transient breaking and rejoining of a single strand of DNA which allows the strands to pass through one another, thus altering the topology of DNA. This gene is localized to chromosome 20 and has pseudogenes which reside on chromosomes 1 and 22.

[provided by RefSeq, Jul 2008]

Function:

The reaction catalyzed by topoisomerases leads to the conversion of one topological isomer of DNA to another.

Subcellular Location:

Nucleus, nucleolus. Nucleus, nucleoplasm. Diffuse nuclear localization with some enrichment in nucleoli. On CPT treatment, cleared from nucleoli into nucleoplasm. Sumolyated forms found in both nucleoplasm and nucleoli.

Post-translational modifications:

Sumoylated. Lys-117 is the main site of sumoylation. Sumoylation plays a role in partitioning TOP1 between nucleoli and nucleoplasm. Levels are dramatically increased on camptothecin (CPT) treatment.

DISEASE:

Note=A chromosomal aberration involving TOP1 is found in a form of therapy-related myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.

Similarity:

Belongs to the eukaryotic type I topoisomerase family.

SWISS:

P11387

Gene ID:

7150

Database links:

Entrez Gene: 7150 Human

Entrez Gene: 21969 Mouse

Entrez Gene: 64550 Rat

Entrez Gene: 281539 Cow

Omim: 126420 Human

SwissProt: P11387 Human

SwissProt: Q04750 Mouse

SwissProt: Q9WUL0 Rat

Unigene: 472737 Human

Unigene: 712686 Human

Unigene: 217233 Mouse

Unigene: 91572 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.