Datasheet for ABIN7127850

Recombinant anti-Topoisomerase I antibody

5 Images

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Overview

Quantity:	100 µL
Target:	Topoisomerase I (TOP1)
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This Topoisomerase I antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP), Flow Cytometry (FACS)

Product Details

Immunogen:	A synthesized peptide derived from human TOP1
Clone:	6D8
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	Topoisomerase I (TOP1)
Alternative Name:	TOP1 (TOP1 Products)

Target Details

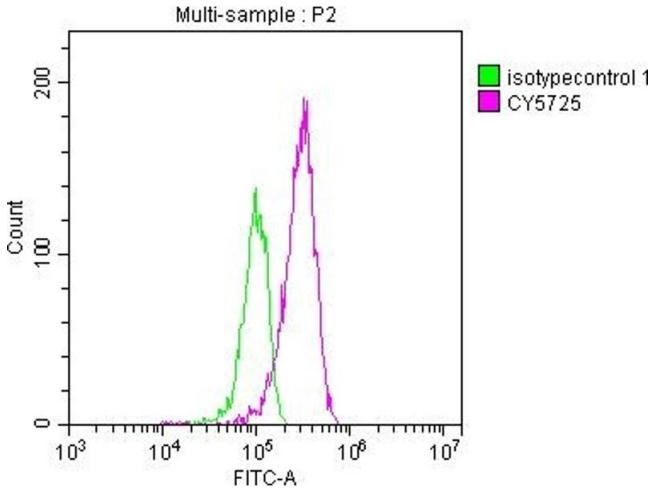
Target Type:	Viral Protein
Background:	Background: Releases the supercoiling and torsional tension of DNA introduced during the DNA replication and transcription by transiently cleaving and rejoining one strand of the DNA duplex. Introduces a single-strand break via transesterification at a target site 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 (By similarity). Regulates the alternative splicing of tissue factor (F3) pre-mRNA in endothelial cells. Involved in the circadian transcription of the core circadian clock component ARNTL/BMAL1 by altering the chromatin structure around the ROR response elements (ROREs) on the ARNTL/BMAL1 promoter. Aliases: DNA topoisomerase 1 (EC 5.99.1.2) (DNA topoisomerase I), TOP1
UniProt:	P11387
Pathways:	Caspase Cascade in Apoptosis, Stem Cell Maintenance

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, FC:1:20-1:200, IP:1:200-1:1000,
Restrictions:	For Research Use only

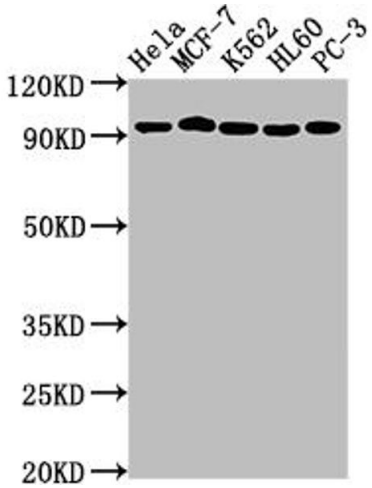
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



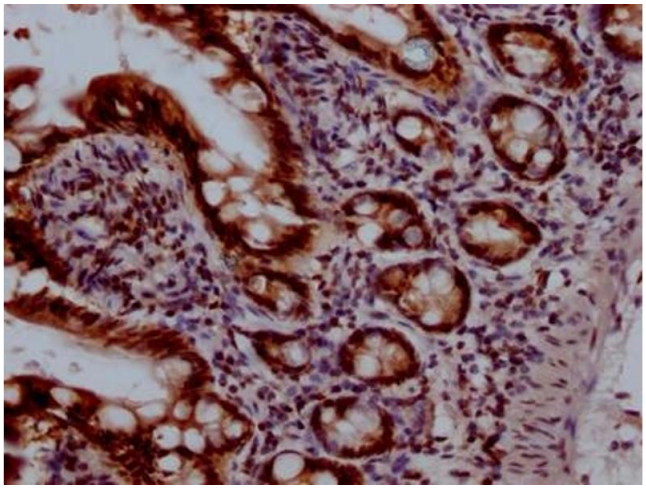
Flow Cytometry

Image 1. Overlay histogram showing HepG2 cells stained with ABIN7127850 (red line) at 1:50. The cells were fixed with 70 % Ethylalcohol (18h) and then incubated in 10 % normal goat serum to block non-specific protein-protein interactions followedby the antibody (1 µg/1*106cells) for 1 h at 4 °C.The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30 min at 4 °C. Control antibody (green line) was Rabbit IgG (1 µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.



Western Blotting

Image 2. Western Blot Positive WB detected in: Hela whole cell lysate, MCF-7 whole cell lysate, K562 whole cell lysate, HL60 whole cell lysate, PC-3 whole cell lysate All lanes: TOP1 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 91 kDa Observed band size: 91 kDa



Immunohistochemistry

Image 3. IHC image of ABIN7127850 diluted at 1:100 and staining in paraffin-embedded human small intestine tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.

Please check the product details page for more images. Overall 5 images are available for ABIN7127850.