

RACO0254

Product Information

Size:

50ul

Reactivity:

Human

Source:

Homo sapiens (Human)

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, FC, IP

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, FC:1:20-1:200, IP:1:200-1:1000

Protein 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.

Gene ID:

TOP1

Uniprot

P11387

Synonyms:

DNA topoisomerase 1 (EC 5.99.1.2) (DNA topoisomerase I), TOP1

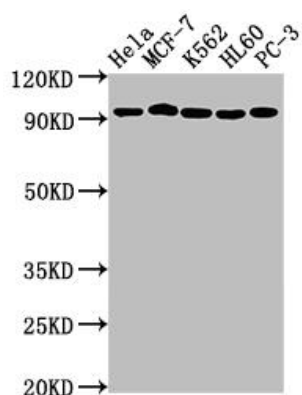
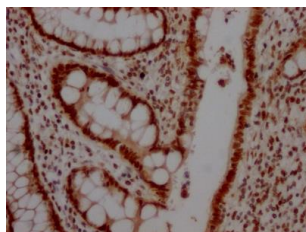
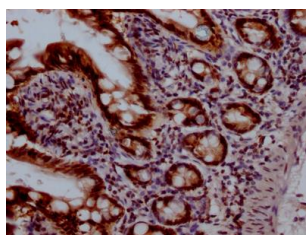
Immunogen:

A synthesized peptide derived from human TOP1.

Storage:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Product Images



IHC image of RACO0254 diluted at 1:100 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ 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 30min 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.

IHC image of RACO0254 diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond™ 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 30min 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.

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