

**TOP2B Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12087b****Specification**

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**TOP2B Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q02880](#)**TOP2B Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 7155**Other Names**

DNA topoisomerase 2-beta, DNA topoisomerase II, beta isozyme, TOP2B

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**TOP2B Antibody (C-term) Blocking peptide - Protein Information****Name** TOP2B**Function**

Key decatenating enzyme that alters DNA topology by binding to two double-stranded DNA molecules, generating a double-stranded break in one of the strands, passing the intact strand through the broken strand, and religating the broken strand. Plays a role in B-cell differentiation.

**Cellular Location**

Nucleus, nucleolus. Nucleus, nucleoplasm. Nucleus

**Tissue Location**

Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in breast, colon and lung carcinomas, Hodgkin's disease, large-cell non-Hodgkin's lymphoma, lymphocytic lymphomas and seminomas (PubMed:9155056).

**TOP2B Antibody (C-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

#### **TOP2B Antibody (C-term) Blocking peptide - Images**

#### **TOP2B Antibody (C-term) Blocking peptide - Background**

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, beta, is localized to chromosome 3 and the alpha form is localized to chromosome 17. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia. Alternative splicing of this gene results in two transcript variants; however, the second variant has not yet been fully described.

#### **TOP2B Antibody (C-term) Blocking peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010) Ovsyannikova, I.G., et al. Hum. Genet. 127(2):207-221(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Deweese, J.E., et al. Biochemistry 48(9):1862-1869(2009)