

Topoisomerase 3 beta1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51579**Specification**

Topoisomerase 3 beta1 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IP, IHC-P, E |
| Primary Accession | O95985 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 100 KDa |

Topoisomerase 3 beta1 Antibody - Additional Information**Gene ID** 8940**Other Names**

DNA topoisomerase 3-beta-1, DNA topoisomerase III beta-1, TOP3B, TOP3B1

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Topoisomerase 3 beta1 Antibody - Protein Information**Name** TOP3B**Synonyms** TOP3B1**Function**

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-(5'-phosphotyrosyl)- enzyme intermediate and the expulsion of a 3'-OH DNA strand. The free DNA strand then undergoes passage around the unbroken strand thus removing DNA supercoils. Finally, in the religation step, the DNA 3'-OH attacks the covalent intermediate to expel the active-site tyrosine and restore the DNA phosphodiester backbone (By similarity). Possesses negatively supercoiled DNA relaxing activity.

Tissue Location

Isoform 1 is found in testis, heart and skeletal muscle. A 4 kb transcript which probably represents isoform 2 is found in thymus, kidney and pancreas.

Topoisomerase 3 beta1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Topoisomerase 3 beta1 Antibody - Images

Topoisomerase 3 beta1 Antibody - 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-(5'-phosphotyrosyl)-enzyme intermediate and the expulsion of a 3'-OH DNA strand. The free DNA strand then undergoes passage around the unbroken strand thus removing DNA supercoils. Finally, in the religation step, the DNA 3'-OH attacks the covalent intermediate to expel the active-site tyrosine and restore the DNA phosphodiester backbone (By similarity). Possesses negatively supercoiled DNA relaxing activity.

Topoisomerase 3 beta1 Antibody - References

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Kawasaki K.,et al.Genome Res. 7:250-261(1997).
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Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).