

## TOP3B Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a full length recombinant TOP3B.

Catalog # AT4307a

### Product Information

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|                   |                          |
|-------------------|--------------------------|
| Application       | WB, IF                   |
| Primary Accession | <a href="#">O95985</a>   |
| Other Accession   | <a href="#">BC002432</a> |
| Reactivity        | Human                    |
| Host              | mouse                    |
| Clonality         | monoclonal               |
| Isotype           | IgG2a Kappa              |
| Clone Names       | 4H7                      |
| Calculated MW     | 96662                    |

### Additional Information

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|                    |                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 8940                                                                                                                |
| Other Names        | DNA topoisomerase 3-beta-1, DNA topoisomerase III beta-1, TOP3B, TOP3B1                                             |
| Target/Specificity | TOP3B (AAH02432, 1 a.a. ~ 862 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| Dilution           | WB~~1:500~1000 IF~~1:50~200                                                                                         |
| Format             | Clear, colorless solution in phosphate buffered saline, pH 7.2 .                                                    |
| Storage            | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.                                            |
| Precautions        | TOP3B Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures. |

### Background

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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 relaxing the supercoils and altering the topology of DNA. The enzyme interacts with DNA helicase SGS1 and plays a role in DNA recombination, cellular aging and maintenance of genome stability. Alternative splicing of the C-terminus of this gene results in three transcript variants which have distinct tissue specificity; however, not all variants have been fully described.

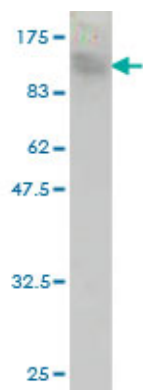
### References

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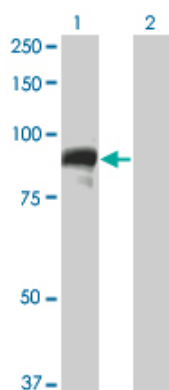
Molecular genetics of adult ADHD: converging evidence from genome-wide association and extended

pedigree linkage studies. Lesch KP, et al. J Neural Transm, 2008 Nov. PMID 18839057. Towards a proteome-scale map of the human protein-protein interaction network. Rual JF, et al. Nature, 2005 Oct 20. PMID 16189514. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334. A genome annotation-driven approach to cloning the human ORFeome. Collins JE, et al. Genome Biol, 2004. PMID 15461802. Identification of the functional elements in the promoter region of human DNA topoisomerase IIIbeta gene. Cho YH, et al. Biochim Biophys Acta, 2004 Sep 17. PMID 15358519.

## Images

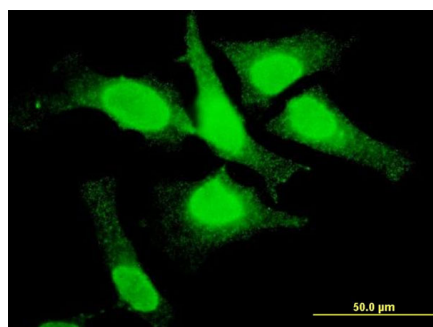


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (120.56 KDa) .



Western Blot analysis of TOP3B expression in transfected 293T cell line by TOP3B monoclonal antibody (M05), clone 4H7.

Lane 1: TOP3B transfected lysate (96.662 KDa).  
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to TOP3B on HeLa cell . [antibody concentration 10 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.