

For Research Use Only

# TOP3A Recombinant monoclonal antibody

Catalog Number: 87558-1-RR



## Basic Information

<b>Catalog Number:</b> 87558-1-RR	<b>GenBank Accession Number:</b> BC051748	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 7156	<b>CloneNo.:</b> 252729C12
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> Q13472	<b>Recommended Dilutions:</b> WB: 1:2000-1:10000
<b>Immunogen Catalog Number:</b> AG6010	<b>Full Name:</b> topoisomerase (DNA) III alpha	
	<b>Calculated MW:</b> 1001 aa, 112 kDa	
	<b>Observed MW:</b> 100-110 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : HeLa cells, HEK-293 cells, MCF-7 cells, A549 cells, HCT 116 cells, mouse testis tissue, rat testis tissue
<b>Species Specificity:</b> human, mouse, rat	

## Background Information

DNA topoisomerase 3-alpha (TOP3A) is an essential component of the RMI complex, a complex involved in the processing of homologous recombination intermediates to limit DNA crossover formation in cells. It 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. This antibody is specific to react with the 110 kDa human TOP3A.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:

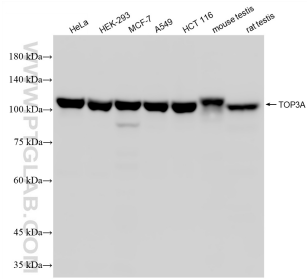
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87558-1-RR (TOP3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.