

# Datasheet: VMA00940 BATCH NUMBER 100005715

Description: MOUSE ANTI TOPBP		
Specificity:	TOPBP1	
Format:	Purified	
<b>Product Type:</b>	PrecisionAb Monoclonal	
Clone:	E03/6C8	
Isotype:	lgG2b	
Quantity:	100 μΙ	

## **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Immunoprecipitation	•			
Western Blotting	-			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click <a href="here">here</a> to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Rat  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG - Liquid
Preparation	Mouse monoclonal antibody affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	E. coli-derived recombinant protein of amino acids 1097-1522 of human TOPBP1
External Database Links	UniProt:  Q92547 Related reagents
	Entrez Gene:  11073 TOPBP1 Related reagents
Synonyms	KIAA0259
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line
Specificity	Mouse anti TOPBP1 antibody recognizes DNA topoisomerase 2-binding protein 1 (TOPBP1). TOPBP1 is a large, non-enzymatic scaffold protein that plays essential roles in many cellular processes including DNA repair, replication, and transcription. The nine BRCT domains of TOPBP1 allow TOPBP1 to bind to numerous interacting proteins (Moudry et al. 2016). TOPBP1 mediates the response to DNA damage through binding to MDC1. This binding allows TOPBP1 recruitment to double-strand breaks (DSBs) in mitosis (Leimbacher et al. 2019). The role of TOPBP1 in DNA processing during mitosis is important for genome integrity, preventing DNA damage from being passed to daughter cells (Gallina et al. 2016). Due to its role in genome integrity, it is unsurprising that dysregulation of TOPBP1 has been identified in cancer. For example, TOPBP1 has been found to be elevated in a range of sarcoma types. In osteosarcoma, TOPBP1 appears to contribute to cancer cell survival and chemoresistance to doxorubicin and cisplatin (Wu et al. 2017). In non-small cell lung cancer, TOPBP1 contributes to chemoresistance by upregulating the transcription factor p53 (Lv et al. 2016).
Western Blotting	Mouse anti TOPBP1 detects a band of approximately 198 kDa in HEK293 cell lysates
Storage	Store undiluted at -20°C, avoiding repeated freeze thaw cycles
Guarantee	12 months from date of despatch
Acknowledgements	PrecisionAb is a trademark of Bio-Rad Laboratories
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/VMA00940">https://www.bio-rad-antibodies.com/SDS/VMA00940</a> Antibody (10040)
Regulatory	For research purposes only

# **Related Products**

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (H/L) (STAR207...) HRP

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M390063:210823'

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