

## Datasheet: MCA4760

Description:	MOUSE ANTI TROPOMODULIN 1 (N-TERMINAL)		
Specificity:	TROPOMODULIN 1 (N-TERMINAL)		
Other names:	ERYTHROCYTE TROPOMODULIN		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	TRM-17 (Mab17)		
Isotype:	lgG1		
Quantity:	0.25 mg		

## **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 f		
	information. For general protocol recommendations, please visit <u>www.bio-</u>	
	rad-antibodies.com/protocols.	

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				
Immunohistology - Frozen			•	
Immunohistology - Paraffin				
ELISA	-			
Immunoprecipitation			•	
Western Blotting				
Immunofluorescence				
Functional Assays (1)	-			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) Removal of sodium azide is recommended prior to use in functional assays.

Target Species	Chicken
Species Cross Reactivity	Based on sequence similarity, is expected to react with:Birds, Mammals, Fish, Insect, Reptile <b>N.B.</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	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				
Buffer Solution	Phosphate buffered saline				
Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )				
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml				
Immunogen	Recombinant chicken tropomodulin 1				
RRID	AB_1898203				
Specificity	<b>Mouse anti Tropomodulin 1 (N-Terminal) antibody, clone TRM-17</b> recognizes chicke tropomodulin 1, otherwise known as erythrocyte tropomodulin or E-Tmod, an evolutiona very highly conserved cytoskeletal protein .				
	Tropomodulin 1 is a sarcomeric protein highly expressed by erythrocytes, heart and skeletal muscle, which binds to and caps pointed ends of actin filaments to prevent thin filament elongation. The binding of the N-terminal region of Tmod1 with the actin-binding protein tropomyosin blocks the elongation and depolymerization of actin filaments, contributing to the geometry of the membrane skeleton.				
	Mouse anti Tropomodulin 1 (N-Terminal) antibody, clone TRM-17 recognizes an epitope between amino acid residues 6-57 within the N-terminal (NT) region of tropomodulin 1 and inhibits the binding of Tmod1 to tropomyosin.				
Western Blotting	MCA4760 detects a band of approximately 40kDa in chick heart lysates.				
References	<ol> <li>Mudry, R.E. <i>et al.</i> (2003) The interaction of tropomodulin with tropomyosin stabilizes thin filaments in cardiac myocytes. <u>J Cell Biol. 162 (6): 1057-68.</u></li> <li>Almenar-Queralt, A. <i>et al.</i> (1999) Identification of a novel tropomodulin isoform, skeletal tropomodulin, that caps actin filament pointed ends in fast skeletal muscle <u>J Biol Chem</u> <u>274: 28466-75</u></li> </ol>				
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.				
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.				
Guarantee	12 months from date of despatch				
Health And Safety	Material Safety Datasheet documentation #10040 available at:				

Information	https://www.bio-rad-antibodies.com/SDS/MCA4760 10040				
Regulatory	For research purposes only				

# **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77)	HRP
Rabbit Anti Mouse IgG (STAR12)	RPE
Rabbit Anti Mouse IgG (STAR8)	DyLight®800
Goat Anti Mouse IgG (STAR76)	RPE
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP
Goat Anti Mouse IgG IgA IgM (STAR87	) <u>Alk. Phos.</u> , <u>HRP</u>
Rabbit Anti Mouse IgG (STAR13)	HRP
Goat Anti Mouse IgG (STAR70)	FITC
Rabbit Anti Mouse IgG (STAR9)	FITC
Goat Anti Mouse IgG (H/L) (STAR117)	<u>Alk. Phos., DyLight®488, DyLight®550,</u>
	DyLight®650, DyLight®680, DyLight®800,
	<u>FITC, HRP</u>

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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 'M389563:210806'

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