

Datasheet: VMA00790

**BATCH NUMBER 100007439**

<b>Description:</b>	MOUSE ANTI MYOSIN REGULATORY LIGHT CHAIN
<b>Specificity:</b>	MYOSIN
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	AB03/2F2
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 µl

## 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	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 [here](#) 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

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant protein of amino acids 1-172 of human myosin
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P24844</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">10398</a>    MYL9    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MLC2, MRLC1, MYRL2
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti myosin antibody</b> recognizes myosin regulatory light polypeptide 9 (MYL9), also known as MLC-2C.</p> <p>The myosin superfamily contains actin-based molecular motors which facilitate muscle contraction among other motility processes, such as cytoplasmic contractility and mechanosensing. Myosin proteins use ATP hydrolysis to generate contractile force, powering movement (<a href="#">Heissler et al. 2016</a>). Specific myosins are involved with specific functions. MYL9 is a regulatory subunit of myosin, which can be phosphorylated at threonine 18 and serine 19 to regulate activity. MYL9 also plays a unique role in the nucleus, transcriptionally activating intercellular adhesion molecule 1 (ICAM1) (<a href="#">Nevitt et al. 2018</a>). Myosin functions as a tumor suppressor, with dysregulated activity in cancer. Loss of myosin has been shown to impact the metastatic potential of cells. However, targeting myosin may be difficult in cancer treatment due to its essential contractile functions (<a href="#">Surcel and Robinson 2019</a>).</p>
<b>Western Blotting</b>	Mouse anti myosin antibody detects a band of approximately 18 kDa in HEK293 cell lysates
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb is a trademark of Bio-Rad Laboratories
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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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](https://bio-rad-antibodies.com/datasheets)

'M394647:220215'

Printed on 07 Feb 2023

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