

Datasheet: VMA00790

BATCH NUMBER 100007056

Description:	MOUSE ANTI MYOSIN REGULATORY LIGHT CHAIN
Specificity:	MYOSIN
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AB03/2F2
Isotype:	IgG2a
Quantity:	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.

	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

Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> -derived recombinant protein of amino acids 1-172 of human myosin
External Database Links	<p>UniProt: P24844 Related reagents</p> <p>Entrez Gene: 10398 MYL9 Related reagents</p>
Synonyms	MLC2, MRLC1, MYRL2
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line
Specificity	<p>Mouse anti myosin antibody 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 (Heissler et al. 2016). 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) (Nevitt et al. 2018). 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 (Surcel and Robinson 2019).</p>
Western Blotting	Mouse anti myosin antibody detects a band of approximately 18 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: Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	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

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