

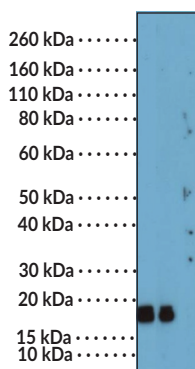
PRODUCT INFORMATION

MLC2 (Phospho-Ser¹⁹) Rabbit Monoclonal Antibody (Clone RM484) Item No. 42816

Overview and Properties

Contents:	This vial contains 100 µl of protein A affinity-purified recombinant monoclonal antibody
Synonyms:	MLC-2v, MYL2, Myosin Light Chain 2, Myosin Regulatory Light Chain 2, RLC2, Ventricular Myosin Light Chain 2
Immunogen:	A phospho-peptide corresponding to human Phospho-Myl2 (Ser ¹⁹)
Cross Reactivity:	(+) MCL2 (phospho-Ser ¹⁹); (-) Unmodified MCL2
Species Reactivity:	(+) Human, mouse, rat
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM484
Host:	Rabbit
Isotype:	IgG
Applications:	Western blot (WB); the recommended starting dilution is 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



WB of mouse heart tissue lysate using MLC2 (Phospho-Ser¹⁹) Rabbit Monoclonal Antibody (Clone RM484) at a dilution of 1:1,000. The phospho-specificity of RM484 was verified by peptide blocking using a control non-phosphopeptide or phosphopeptide targeting residue Ser¹⁹

Description

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Myosin light-chain 2 (MLC2), also known as myosin regulatory light chain 2, is a subtype of MLC expressed in cardiac ventricular and skeletal slow-twitch muscles.^{1,2} MLC2 is composed of three calcium-binding EF-hand domains and is found in the head-stem interface of myosin with other MLC isoforms.² It is phosphorylated at serine 19 (Ser¹⁹) by MLC kinase (MLCK), which stabilizes myosin filaments for cardiac- or skeletal muscle contractions.^{3,4} Mutations in MYL2, the gene encoding MLC2, have been found in patients with mild familial hypertrophic cardiomyopathy (FHC).⁵ Cayman's MLC2 (Phospho-Ser¹⁹) Rabbit Monoclonal Antibody (Clone RM484) can be used for Western blot (WB).

References

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3. Adhikari, B.B. and Wang, K. Interplay of troponin- and myosin-based pathways of calcium activation in skeletal and cardiac muscle: The use of W7 as an inhibitor of thin filament activation. *Biophys. J.* **86**(1), 359-370 (2004).
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5. Andersen, P.S., Havndrup, O., Bundgaard, H., et al. Myosin light chain mutations in familial hypertrophic cardiomyopathy: Phenotypic presentation and frequency in Danish and South African populations. *J. Med. Genet.* **38**(12), E43 (2001).

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