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Product datasheet for TA319238

MRCL3 (MYL12A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1:5,000 - 1:20,000, WB: 1:1,000 - 1:5,000, IHC: 2.5 ug/ml, IP: 1:100
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Human Myosin Light Chain phospho peptide corresponding to a region near the amino terminus of the human smooth/non-muscle form of myosin regulatory light chain conjugated to Keyhole Limpet Hemocyanin (KLH).
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	myosin light chain 12A
Database Link:	NP_006462 Entrez Gene 10627 Human P19105
Synonyms:	HEL-S-24; MLC-2B; MLCB; MRCL3; MRLC3; MYL2B

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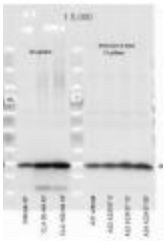
Note: Myosin is the major component of thick muscle filaments, and is a long asymmetric molecule containing a globular head and a long tail. The molecule consists of two heavy chains each ~200,000 daltons, and four light chains each ~16,000 - 21,000 daltons. Activation of smooth and cardiac muscle primarily involves pathways that increase calcium levels and myosin phosphorylation, resulting in contraction. Myosin light chain phosphatase acts to regulate muscle contraction by dephosphorylating activated myosin light chain. This antibody is specific for the phosphorylated form of myosin light chain. The selected peptide sequence used to generate the polyclonal antibody is located near the amino terminal end of the polypeptide corresponding to the smooth/non-muscle form of myosin regulatory light chain found in cardiac myocytes in addition to smooth and non-muscle cells. This sequence differs from that of the sarcomeric/cardiac form of myosin regulatory light chain that has a different sequence around the phosphorylation site. Human and mouse have almost identical sequences. In human the phosphorylation site is pS19, while in mouse the site maps to pS20.

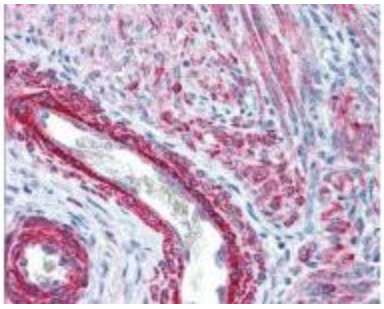
Protein Pathways: Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Tight junction

Product images:



Phospho specific antibody to Monophosphorylated Regulatory Light Chain of Smooth and Non-muscle Myosin at pS19/pS20 was used at a 1:5000 dilution to detect myosin light chain by WB. Either 13 or 20 µl of a mouse cardiac myocyte lysate was loaded on a 4-20% Criterion gel for SDS-PAGE. Samples were either mock-treated or CLA-treated, as indicated. After washing, a 1:5,000 dilution of HRP conjugated Gt-a-Rabbit IgG preceded color development using Amersham's substrate system.

Phosphospecific antibody to phosphorylated regulatory light chain of smooth and non-muscle Myosin at pS19/pS20 was used at a 1:1000 dilution to detect myosin light chain by WB on 3T3 cell lysates.



Anti-Monophosphorylated RLC Smooth and Non-Muscle Myosin pS19/20 antibody was used at 2.5 ug/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows strong staining of both vascular and myometrial smooth muscle cells of the uterus. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain.