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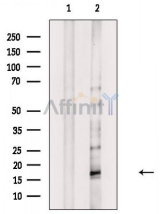
Phospho-MRLC1 (Thr19+Ser20) Ab

References(2) Images(4)

Cat.#: AF8010	Concn.: ~1mg/ml	Mol.Wt.: 18kDa
Size:	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:1000-3000 *The optimal dilutions should be determined by the end user.
Reactivity:	Human,Mouse,Rat
Storage:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Immunogen:	A synthesized peptide derived from human MRLC1 around the phosphorylation site of Thr19+Ser20.
Uniprot:	P24844
Description:	Myosin is composed of six polypeptide chains: two identical heavy chains and two pairs of light chains. Myosin light chain 2 (MLC2), also known as myosin regulatory light chain (MRLC), RLC, or LC20, has many isoforms depending on its distribution. In smooth muscle, MLC2 is phosphorylated at Thr18 and Ser19 by myosin light chain kinase (MLCK) in a Ca2+/calmodulin-dependent manner . This phosphorylation is correlated with myosin ATPase activity and smooth muscle contraction . ROCK also phosphorylates Ser19 of smooth muscle MLC2, which regulates the assembly of stress fibers . Phosphorylation of smooth muscle MLC2 at Ser1/Ser2 and Ser9 by PKC and cdc2 has been reported to inhibit myosin ATPase activity (4,5). Phosphorylation by cdc2 controls the timing of cytokinesis .



Western blot analysis of extracts from Mouse kidney, using Phospho-MRLC1 (Thr19+Ser20) Ab. The lane on the left was treated with blocking peptide.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.