

MRLC2 Polyclonal Antibody

YT2839 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IHC;IF;ELISA **Applications:**

Target: Myosin Light Chain 2

Fields: >>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Vascular

> smooth muscle contraction;>>Axon guidance;>>Focal adhesion;>>Tight junction;>>Leukocyte transendothelial migration;>>Regulation of actin

cytoskeleton;>>Oxytocin signaling pathway;>>Shigellosis;>>Salmonella infection

Gene Name: **MLRN**

Protein Name: Myosin regulatory light polypeptide 9

Human Gene Id: 10398/10627

Human Swiss Prot

P24844/P19105

No:

Mouse Gene Id: 98932

Rat Gene Id: 296313

Rat Swiss Prot No: Q64122

The antiserum was produced against synthesized peptide derived from human Immunogen:

MRLC2. AA range:3-52

MRLC2 Polyclonal Antibody detects endogenous levels of MRLC2 protein. **Specificity:**

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not **Dilution:**

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 18kD

Cell Pathway: Vascular smooth muscle contraction; Focal adhesion; Tight junction; Leukocyte

transendothelial migration; Regulates Actin and Cytoskeleton;

Background: Myosin, a structural component of muscle, consists of two heavy chains and four

light chains. The protein encoded by this gene is a myosin light chain that may regulate muscle contraction by modulating the ATPase activity of myosin heads. The encoded protein binds calcium and is activated by myosin light chain kinase. Two transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Jul 2008],

Function: function: Myosin regulatory subunit that plays an important role in regulation of

both smooth muscle and nonmuscle cell contractile activity via its phosphorylation. Implicated in cytokinesis, receptor capping, and cell locomotion.,miscellaneous:This chain binds calcium.,PTM:Phosphorylation increases the actin-activated myosin ATPase activity and thereby regulates the contractile activity. It is required to generate the driving force in the migration of

the cells but not necessary for localization of myosin-2 at the leading

edge.,similarity:Contains 3 EF-hand domains.,subunit:Myosin is an hexamer of 2 heavy chains and 4 light chains.,tissue specificity:Smooth muscle tissues and in

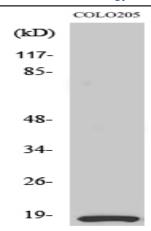
some, but not all, nonmuscle cells.,

Subcellular Cytoplasm, cytoskeleton . Cytoplasm, cell cortex . Colocalizes with F-actin,

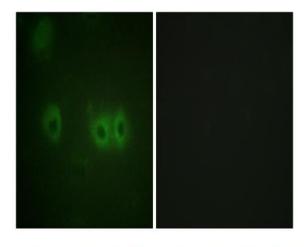
Location: MYH9 and PIEZO1 at the actomyosin cortex in myoblasts. .

Expression: Smooth muscle tissues and in some, but not all, nonmuscle cells.

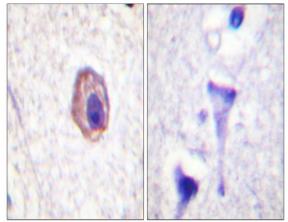
Products Images



Western Blot analysis of various cells using MRLC2 Polyclonal Antibody



Immunofluorescence analysis of HUVEC cells, using MRLC2 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using MRLC2 Antibody. The picture on the right is blocked with the synthesized peptide.

