For Research Use Only

CoraLite® Plus 488-conjugated Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant antibody



Catalog Number: CL488-82717

Basic Information

Catalog Number: CL488-82717 Concentration: 1000 ug/ml Source:

Rabbit P24844 Full Name: Isotype:

myosin, light chain 9, regulatory

20 kDa Observed MW: 19-20 kDa

Calculated MW:

BC002648

10398

GeneID (NCBI):

UNIPROT ID:

GenBank Accession Number:

Purification Method:

Protein A purification

CloneNo.: 1G10

Recommended Dilutions:

FC (Intra): 0.40 ug per 10^6 cells in a

100 ul suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications: FC (Intra)

Species Specificity: human, mouse

Positive Controls:

FC (Intra): Calyculin A treated HeLa cells,

Background Information

Myosin II is an actin-binding protein composed of MHC (myosin heavy chain), MLCs/MRLCs (myosin regulatory light chains) and ELCs (essential light chains). The Myosin Light Chains are divided into basic MLC (MLC I) and regulatory MLC (MLC II or Myosin Regulatory Light Chain, MRLC). MRLC can be classified into two major types:: class I MRLC found in muscles (MLC1, MLC2, MLC3, MYL4, MYL5, MYL6, MYL7, etc), and class II MRLCs present in non-muscle cells (such as MYL9, MYL12A, MYL12B). Phosphorylation of myosin II regulatory light chain (MRLC) is important for cell motility and cytokinesis in nonmuscle cells. Phosphorylation of MRLC at Ser19 (1P-MRLC) enhances myosin II activity, which is further enhanced by MRLC diphosphorylation at Thr18/Ser19 (2P-MRLC) in vitro .PMID: 23951055.PMID: 21126233

This antibody can recognize the phosphorylation of three highly homologous Myosin-regulated light chains: MYL12A, MYL12B and MYL9.

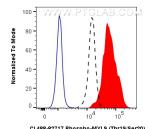
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1x10^6 Calyculin A treated HeLa cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant Antibody (CL488-82717, Clone:1G10) (red), or 0.4 ug CoraLite® Plus 488 Rabbit 1gG Isotype Control Recombinant Antibody (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.