For Research Use Only

CoraLite® Plus 647-conjugated Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant monoclonal antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:CL647-85804

Basic Information

Catalog Number:
CL647-85804

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC016372

GeneID (NCBI):
10627

UNIPROT ID:
P19105

Full Name:
myosin, light chain 12A, regulatory, non-sarcomeric

Calculated MW:
171 aa, 20 kDa

Observed MW:
19-20 kDa

Purification Method:
Protein A purification

CloneNo.:
250098F12

Recommended Dilutions:
FC (Intra): 0.2 ug per 10^6 cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:
654 nm / 674 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
human, mouse, rat

Positive Controls:

FC (Intra) : Calyculin A treated NIH/3T3 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.

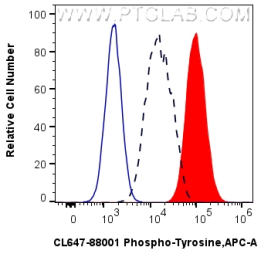
Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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Selected Validation Data



1X10^6 NIH/3T3 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.2 ug Coralite® Plus 647 Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant Antibody (CL647-85804, Clone:250098F12)(red), or 0.2 ug Isotype Control (blue). Cells were fixed and permeabilized with Flow Cytometry Phosphorylated Protein Fixation/Permeabilization Kit (PF00026).