

For Research Use Only

Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant antibody

Catalog Number: 82717-1-RR



Basic Information

Catalog Number:

82717-1-RR

Size:

100ul, Concentration: 1000 ug/ml by
Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC002648

GeneID (NCBI):

10398

UNIPROT ID:

P24844

Full Name:

myosin, light chain 9, regulatory

Calculated MW:

20 kDa

Observed MW:

19-20 kDa

Purification Method:

Protein A purification

CloneNo.:

1G10

Recommended Dilutions:

WB: 1:5000-1:50000

FC (Intra): 0.25 ug per 10⁶ cells in a
100 µl suspension

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human, mouse

Positive Controls:

WB : Calyculin A treated NIH/3T3 cells, Calyculin A
treated HeLa cells

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

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

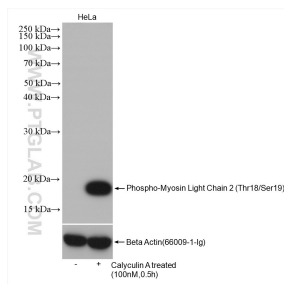
For technical support and original validation data for this product please contact:

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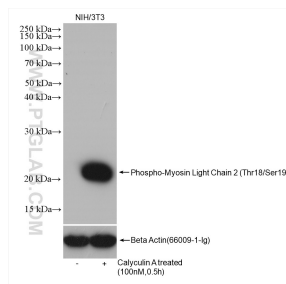
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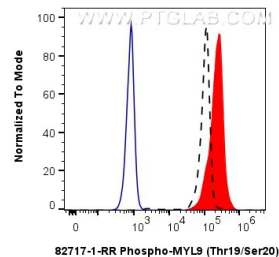
Selected Validation Data



Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 82717-1-RR (Phospho-Myosin Light Chain 2 (Thr18/Ser19) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody as loading control.



Non-treated and Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 82717-1-RR (Phospho-Myosin Light Chain 2 (Thr18/Ser19) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody as loading control.



1×10^6 Calyculin A treated HeLa cells were intracellularly stained with 0.25 ug Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant antibody (82717-1-RR, Clone:1G10) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.