For Research Use Only

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

Catalog Number:85804-1-RR



Basic Information

Catalog Number: GenBank Accession Number: 85804-1-RR BC016372

Isotype: Full Name:

gG myosin, light chain 12A, regulatory, non-sarcomeric

> Calculated MW: 171 aa, 20 kDa Observed MW: 19-20 kDa

Applications

Tested Applications: WB, ELISA

Species Specificity: human, mouse, rat

Positive Controls:

WB: Calyculin A treated NIH/3T3 cells, Calyculin A treated HEK-293 cells, Calyculin A treated HSC-T6

Purification Method:

Protein A purification

Recommended Dilutions:

CloneNo.:

250098F12

WB 1:500-1:2000

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:

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

Storage

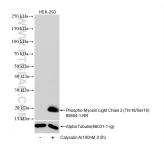
Storage:

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

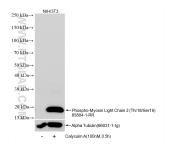
PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

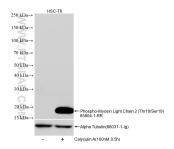
Selected Validation Data



Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 85804-1-RR (Phospho-Myosin Light Chain 2 (Thr18/Ser19) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 85804-1-RR (Phospho-Myosin Light Chain 2 (Thr18/Ser19) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Calyculin A treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 85804-1-RR (Phospho-Myosin Light Chain 2 (Thr18/Ser19) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.