For Research Use Only

## Phospho-Myosin Light Chain 2 (Thr18/Ser19) Recombinant antibody, PBS Only



Catalog Number:85804-1-PBS

**Basic Information** 

Catalog Number: 85804-1-PBS Concentration:

1 mg/ml Source: Rabbit Isotype:

IgG

GenBank Accession Number:

BC016372 GeneID (NCBI): 10627 UNIPROT ID: P19105

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

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

Full Name:

Purification Method: Protein A purification

CloneNo.: 250098F12

**Applications** 

Tested Applications: WB, Indirect ELISA Species Specificity: human, mouse, rat

## **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

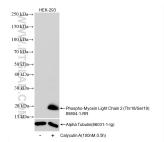
Storage:

Store at -80°C.

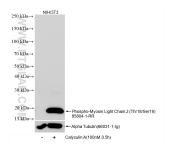
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer.

PBS only, pH7.3

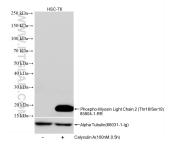
## **Selected Validation Data**



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. This data was developed using the same antibody clone with 85804-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 85804-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 85804-1-PBS in a different storage buffer formulation.