

For Research Use Only

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

Catalog Number: 85804-1-PBS



## Basic Information

<b>Catalog Number:</b> 85804-1-PBS	<b>GenBank Accession Number:</b> BC016372	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10627	<b>CloneNo.:</b> 250098F12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P19105	
<b>Isotype:</b> IgG	<b>Full Name:</b> myosin, light chain 12A, regulatory, non-sarcomeric	
	<b>Calculated MW:</b> 171 aa, 20 kDa	
	<b>Observed MW:</b> 19-20 kDa	

## 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

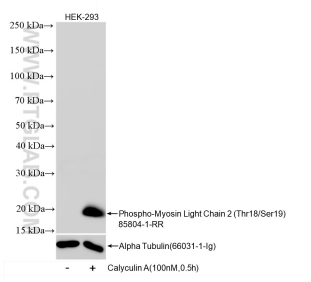
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

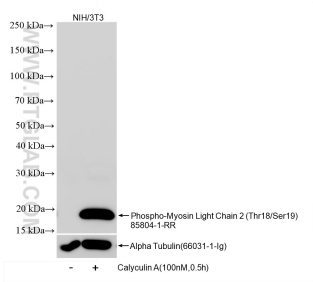
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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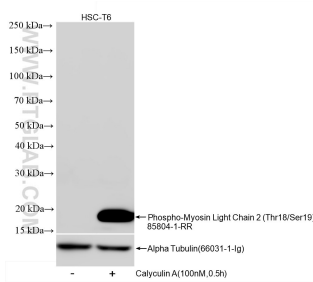
## Selected Validation Data



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.