For Research Use Only

# Phospho-MYL9 (Thr19/Ser20) Polyclonal antibody

Catalog Number:29504-1-AP

4 Publications

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## Basic Information

Catalog Number:
29504-1-AP

Size:
100ul , Concentration: 350 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:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000

## Applications

Tested Applications:
WB, FC (Intra), ELISA

Cited Applications:
WB, IF

Species Specificity:
human

Cited Species:
human, rat

Positive Controls:

WB : Calyculin A treated HeLa cells,

## Background Information

Myosin regulatory light polypeptide 9 (MYL9), also known as MLC2, belongs to the myosin regulatory subunits. It plays an important role in regulation of both smooth muscle and nonmuscle cell contractile activity via its phosphorylation at Thr19 and Ser20. Implicated in cytokinesis, receptor capping, and cell locomotion (PMID:11942626, PMID:2526655). Some studies have demonstrated that MYL9 may play important roles in various human cancers. The expression and phosphorylation of MYL9 (Thr19/Ser20) may be increased in human breast (PMID: 22144583) and liver cancers (PMID: 18648664), while decreased in human colon (PMID: 22752057) and bladder cancers (PMID: 21139803). MYL9 was the only gene differentially expressed in the aged versus young injured arteries in the rat smooth muscle cell layers (PMID:22003410).

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Junaid Afzal | 36147738 | Front Cell Dev Biol | IF |
| Mariam Anis | 36362426 | Int J Mol Sci | WB |
| Xiaozhou Zou | 39392679 | Am J Respir Cell Mol Biol | WB |

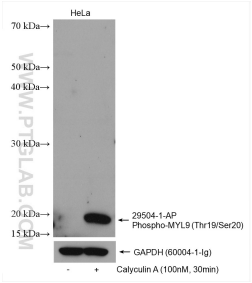
## Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

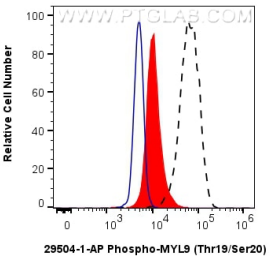
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

## Selected Validation Data




Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 29504-1-AP (Phospho-MYL9 (Thr19/Ser20) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.




1X10^6 HeLa cells untreated (dashed lines) or treated with λ phosphatase were intracellularly stained with 0.13 ug Phospho-MYL9 (Thr19/Ser20) Polyclonal antibody (29504-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13 ug Rabbit IgG control Polyclonal antibody (30000-0-AP). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.