For Research Use Only

Phospho-MYL9 (Thr19/Ser20) Polyclonal antibody

Catalog Number:29504-1-AP 4 Publications



Basic Information

Catalog Number: 29504-1-AP

Size: 350 ug/ml 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:

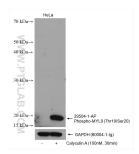
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

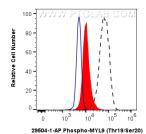
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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 $^\lambda$ 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.