For Research Use Only

Phospho-MARCKS (Ser159/163) Polyclonal antibody

Catalog Number:29103-1-AP 1 Publications

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Basic Information

Catalog Number:
29103-1-AP

Size:
350 ug/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC089040

GeneID (NCBI):
4082

UNIPROT ID:
P29966

Full Name:
myristoylated alanine-rich protein kinase C substrate

Calculated MW:
32 kDa

Observed MW:
80 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse

Cited Species:
human

Positive Controls:

WB : Serum-free treated NIH/3T3 cells, Insulin treated NIH/3T3 cells

Background Information

The Myristoylated Alanine Rich C-Kinase Substrate (MARCKS) is a ubiquitous, highly conserved protein among vertebrates, which is essential for postnatal survival, and has been widely studied for its functions in the brain and nervous system. Being highly expressed in nervous tissue, particularly during early development but persisting in the adult, it plays numerous roles related to brain growth, neuronal migration, neurite outgrowth, neurotransmitter release, and synaptic plasticity. Protein kinase C (PKC) phosphorylates MARCKS, which converts MARCKS from a membrane-bound protein to a cytoplasmic protein. The phosphorylation site of MARCKS protein is called the effector domain (ED). Its structure is highly conserved. It can be combined with cell membrane, PKC, calcium/calmodulin-dependent kineses (CaMK) and F-actin. Studies have shown that increased membrane-bound, non-phosphorylated MARCKS might be conducive to the stabilization of synaptic morphology. Phosphorylated MARCKS protein (P-MARCKS) can regulate the stability of actin network and alter the synaptic structure. (PMID: 30655546, PMID: 30155805)

Notable Publications

Author	Pubmed ID	Journal	Application
Ling-Han Tang	37663944	World J Gastrointest Oncol	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

For technical support and original validation data for this product please contact:
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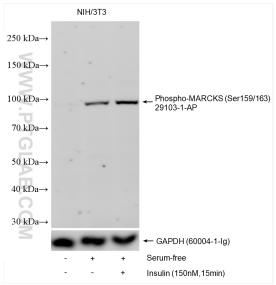
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Non-treated NIH/3T3 cells, Serum-free treated and Insulin treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 29103-1-AP (Phospho-MARCKS (Ser159/163) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.