For Research Use Only

Phospho-MARCKS (Ser167/170) Polyclonal antibody

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Catalog Number:29145-1-AP

Basic Information

Catalog Number:
29145-1-AP

Size:
900 μg/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 1:2000-1:10000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IF/ICC, ELISA

Species Specificity:
Human

Positive Controls:

WB : λ phosphatase treated HeLa cells,

IF/ICC : λ phosphatase treated HeLa cells,

Background Information

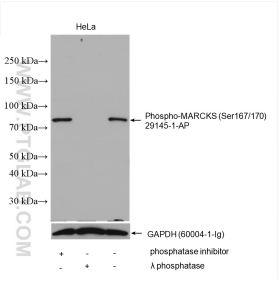
The Myristoylated Alanine Rich C-Kinase Substrate (MARCKS) is a ubiquitous, highly conserved protein among vertebrates, which is essential for postnatal survival, and has been widely studied for its functions in the brain and nervous system. Being highly expressed in nervous tissue, particularly during 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)

Storage

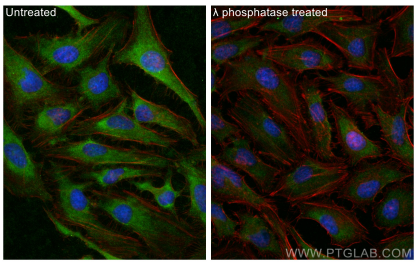
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

Selected Validation Data



Non-treated HeLa cells, phosphatase inhibitor treated and λ phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 29145-1-AP (Phospho-MARCKS (Ser167/170) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Immunofluorescent analysis of (-20°C Ethanol) fixed λ phosphatase treated HeLa cells using Phospho-MARCKS (Ser167/170) antibody (29145-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).