

Anti-MARCKS (pS158) Antibody

Rabbit polyclonal antibody to MARCKS (pS158) Catalog # AP61089

Product Information

ApplicationWBPrimary AccessionP29966Other AccessionP26645

Reactivity Human, Mouse, Rat, Zebrafish, Chicken, Bovine

HostRabbitClonalityPolyclonalCalculated MW31555

Additional Information

Gene ID 4082

Other Names MACS; PRKCSL; Myristoylated alanine-rich C-kinase substrate; MARCKS;

Protein kinase C substrate 80 kDa protein light chain; 80K-L protein; PKCSL

Target/Specificity Recognizes endogenous levels of MARCKS (pS158) protein.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name MARCKS

Synonyms MACS, PRKCSL

Function Membrane-associated protein that plays a role in the structural modulation

of the actin cytoskeleton, chemotaxis, motility, cell adhesion, phagocytosis, and exocytosis through lipid sequestering and/or protein docking to membranes (PubMed:23704996, PubMed:36009319). Thus, exerts an influence on a plethora of physiological processes, such as embryonic development, tissue regeneration, neuronal plasticity, and inflammation. Sequesters phosphatidylinositol 4,5- bisphosphate (PIP2) at lipid rafts in the plasma membrane of quiescent cells, an action reversed by protein kinase C, ultimately inhibiting exocytosis (PubMed:23704996). During inflammation, promotes the migration and adhesion of inflammatory cells and the secretion of cytokines such as tumor necrosis factor (TNF), particularly in macrophages (PubMed:37949888). Plays an essential role in bacteria- induced intracellular

reactive oxygen species (ROS) formation in the monocytic cell type. Participates in the regulation of neurite initiation and outgrowth by interacting with components of cellular machinery including CDC42 that regulates cell shape and process extension through modulation of the cytoskeleton (By similarity). Plays also a role in axon development by mediating docking and fusion of RAB10-positive vesicles with the plasma membrane (By similarity).

Cellular Location

Cell membrane; Lipid-anchor. Cytoplasm, cytoskeleton Cytoplasm. Note=PKC-dependent phosphorylation displaces MARCKS from the cell membrane and subsequent dephosphorylation is accompanied by its reassociation with the membrane.

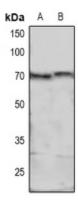
Tissue Location

Detected in spermatozoa.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MARCKS. The exact sequence is proprietary.

Images



Western blot analysis of MARCKS (pS158) expression in mouse kidney (A), rat brain (B) whole cell lysates.

Citations

• Small Extracellular Vesicles Containing miR-34c Derived from Bone Marrow Mesenchymal Stem Cells Regulates Epithelial Sodium Channel via Targeting MARCKS

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