

Phospho-MARCKS Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10493**Specification**

Phospho-MARCKS Antibody - Product Information

Application	WB
Primary Accession	P30009
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29795

Phospho-MARCKS Antibody - Additional Information

Application & Usage	Western blotting (1:200-1000). However, the optimal conditions should be determined individually. Other applications have not been determined. The antibody detects 80 kDa MARCKS only when phosphorylated at Ser152/156.
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Other Names

MACS , PRKCSL , MRACKS , PKCSL , FLJ14368 , FLJ90045 , phosphomyristin

Target/Specificity

Phospho-MARCKS

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl affinity purified rabbit anti-phospho-MARCKS polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Phospho-MARCKS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-MARCKS Antibody - Protein Information

Name Marcks

Synonyms Macs

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:24662485). 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. During inflammation, promotes the migration and adhesion of inflammatory cells and the secretion of cytokines such as tumor necrosis factor (TNF), particularly in macrophages. 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 (PubMed:24662485).

Cellular Location

Cell membrane; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P29966}. Cytoplasm {ECO:0000250|UniProtKB:P29966}. Note=PKC-dependent phosphorylation displaces MARCKS from the cell membrane and subsequent dephosphorylation is accompanied by its reassociation with the membrane. {ECO:0000250|UniProtKB:P29966}

Tissue Location

Highest levels found in spleen and brain. Intermediate levels seen in thymus, ovary, lung and heart. Very low levels seen in kidney, skeletal muscle and liver

Phospho-MARCKS Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-MARCKS Antibody - Images

Phospho-MARCKS Antibody - Background

MARCKS (Myristoylated alanine-rich protein kinase C substrate) is a major PKC substrate that is distributed in various cell types. MARCKS has been implicated in cell motility, cell adhesion, phagocytosis, membrane traffic and mitogenesis. PKC phosphorylates Ser152, 156 and 163 of

MARCKS, which regulates MARCKS's calcium/calmodulin binding activity and filamentous (F)-actin cross-linking activity. In addition, phosphorylation by PKC results in translocation of MARCKS from membrane to cytoplasm.