

**MARCKS (pS163) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51329****Specification**

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**MARCKS (pS163) Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P29966</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80 KDa

**MARCKS (pS163) Antibody - Additional Information****Gene ID** 4082**Other Names**

Myristoylated alanine-rich C-kinase substrate, MARCKS, Protein kinase C substrate, 80 kDa protein, light chain, 80K-L protein, PKCSL, MARCKS, MACS, PRKCSL

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

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

**MARCKS (pS163) Antibody - 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:<a href="http://www.uniprot.org/citations/23704996" target="\_blank">23704996</a>, PubMed:<a href="http://www.uniprot.org/citations/36009319" target="\_blank">36009319</a>). 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:<a href="http://www.uniprot.org/citations/23704996" target="\_blank">23704996</a>). 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:<a href="http://www.uniprot.org/citations/37949888" target="\_blank">37949888</a>). 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.

**MARCKS (pS163) 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](#)

**MARCKS (pS163) Antibody - Images****MARCKS (pS163) Antibody - Background**

MARCKS is the most prominent cellular substrate for protein kinase C. This protein binds calmodulin, actin, and synapsin. MARCKS is a filamentous (F) actin cross-linking protein.

**MARCKS (pS163) Antibody - References**

Harlan D.M.,et al.J. Biol. Chem. 266:14399-14405(1991).  
Sakai K.,et al.Genomics 14:175-178(1992).  
Mungall A.J.,et al.Nature 425:805-811(2003).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Herget T.,et al.Eur. J. Biochem. 209:7-14(1992).