

**MARCKS Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2521b****Specification**

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**MARCKS Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P29966</a>
Other Accession	<a href="#">NP_002347</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	31555
Antigen Region	241-271

**MARCKS Antibody (C-term) - 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

**Target/Specificity**

This MARCKS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241-271 amino acids from the C-terminal region of human MARCKS.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MARCKS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MARCKS Antibody (C-term) - 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**

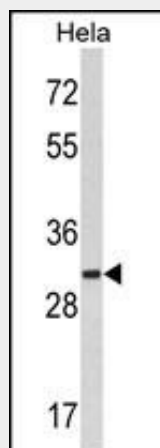
Detected in spermatozoa.

### **MARCKS Antibody (C-term) - 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 Antibody (C-term) - Images**



Western blot analysis of hMARCKS-K254 (Cat. #AP2521b) in HeLa cell line lysates (35ug/lane).

MARCKS (arrow) was detected using the purified Pab.

#### **MARCKS Antibody (C-term) - Background**

MARCKS is a substrate for protein kinase C. It is localized to the plasma membrane and is an actin filament crosslinking protein. Phosphorylation by protein kinase C or binding to calcium-calmodulin inhibits its association with actin and with the plasma membrane, leading to its presence in the cytoplasm. The protein is thought to be involved in cell motility, phagocytosis, membrane trafficking and mitogenesis.

#### **MARCKS Antibody (C-term) - References**

Rauch, M.E., et al., J. Biol. Chem. 277(16):14068-14076 (2002).  
Aderem, A., Biochem. Soc. Trans. 23(3):587-591 (1995).  
Rao, P.H., et al., Cytogenet. Cell Genet. 66(4):272-273 (1994).  
Taniguchi, H., et al., J. Biol. Chem. 268(14):9960-9963 (1993).  
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