

MARCKS Antibody (clone 2C2)
Mouse Monoclonal Antibody
Catalog # ALS14083**Specification**

MARCKS Antibody (clone 2C2) - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P29966
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	32kDa kDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

MARCKS Antibody (clone 2C2) - 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

Human MARCKS

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

MARCKS Antibody (clone 2C2) is for research use only and not for use in diagnostic or therapeutic procedures.

MARCKS Antibody (clone 2C2) - 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

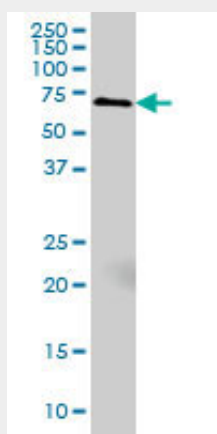
Detected in spermatozoa.

MARCKS Antibody (clone 2C2) - Protocols

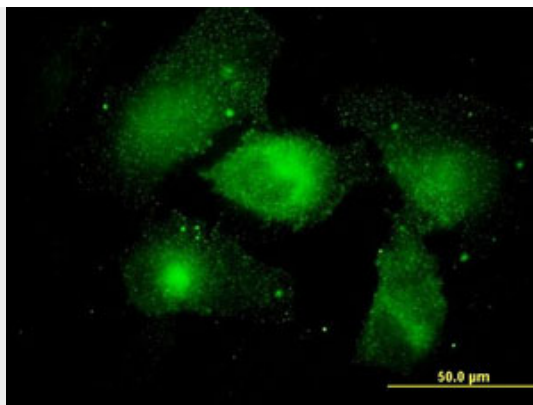
Provided below are standard protocols that you may find useful for product applications.

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

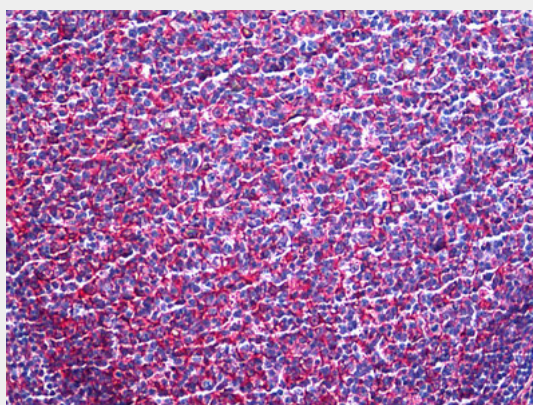
MARCKS Antibody (clone 2C2) - Images



MARCKS monoclonal antibody clone 2C2.



Immunofluorescence of monoclonal antibody to MARCKS on HeLa cell. [antibody concentration 10 ug/ml]



Anti-MARCKS antibody IHC of human tonsil.

MARCKS Antibody (clone 2C2) - 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 Antibody (clone 2C2) - 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).