

**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP2522a****Specification**

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**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Product Information**Primary Accession  
Other Accession[P49006](#)  
[NP\\_075385](#)**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 65108**Other Names**

MARCKS-related protein, MARCKS-like protein 1, Macrophage myristoylated alanine-rich C kinase substrate, Mac-MARCKS, MacMARCKS, MARCKSL1, MLP, MRP

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2522a](/product/products/AP2522a) was selected from the N-term region of human MLP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Protein Information****Name** MARCKSL1**Synonyms** MLP, MRP**Function**

Controls cell movement by regulating actin cytoskeleton homeostasis and filopodium and lamellipodium formation (PubMed: <http://www.uniprot.org/citations/22751924> target="\_blank">22751924</a>). When unphosphorylated, induces cell migration (By similarity). When phosphorylated by MAPK8, induces actin bundles formation and stabilization, thereby reducing actin plasticity, hence restricting cell movement, including neuronal migration (By similarity). May be involved in coupling the protein kinase C and calmodulin signal transduction systems (By similarity).

**Cellular Location**

Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P28667}. Cell membrane; Lipid- anchor.  
Note=Associates with the membrane via the insertion of the N-terminal N-myristoyl chain and the partial insertion of the effector domain. Association of the effector domain with membranes may be regulated by Ca(2+)/calmodulin. Colocalizes with F-actin at the leading edge of migrating cells (By similarity). In prostate cancers, shows strong expression at apical and/or basal regions of the cell and also has weak cytoplasmic expression (PubMed:22751924).  
{ECO:0000250|UniProtKB:P28667, ECO:0000269|PubMed:22751924}

**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Images****MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - Background**

Protein kinase C is a key enzyme of intracellular signal transduction. The myristoylated, alanine-rich protein MARCKS, is a widely expressed, prominent substrate for protein kinase C. The severe neural tube defects (NTD) including exencephaly, spina bifida, and tail flexion anomaly in approximately 60% of the homozygous mutants and in approximately 10% of heterozygous animals. The homozygous mutants without exencephaly survived despite brain abnormalities, which appear to occur secondarily to the NTD. It has been suggested that mutations in Mrp result in isolated NTD and therefore may provide an animal model for common human NTD.

**MARCKS-like 1 Protein (MLP) Antibody (N-term) Blocking peptide - References**

Hsia, T.C., et al., Lung 180(3):173-179 (2002). Stumpo, D.J., et al., Genomics 49(2):253-264 (1998). Umekage, T., et al., FEBS Lett. 286 (1-2), 147-151 (1991).