

# MARCKSL1 (P-12): sc-161829

## BACKGROUND

MARCKS (myristoylated alanine-rich protein kinase C substrate), also designated 80K or 80K-L, is a 332 amino acid protein that localizes to the plasma membrane and functions as a major cellular substrate for protein kinase C (PKC). MARCKSL1 (MARCKS-like protein 1), also known as MacMARCKS, MLP, MRP or F52, is a 195 amino acid protein that, like MARCKS, is a major substrate for PKC. Expressed in a variety of tissues with highest levels found in testis and uterus, MARCKSL1 participates in the coordination of membrane-cytoskeletal signaling events, including secretion, migration, phagocytosis and cell adhesion. Additionally, MARCKSL1 functions as a regulator of Integrin activation and is thought to regulate Integrin-dependent signal transduction pathways, especially those involved in macrophage spreading.

## REFERENCES

- Underhill, D.M., et al. 1998. MacMARCKS is not essential for phagocytosis in macrophages. *J. Biol. Chem.* 273: 33619-33623.
- Wohnsland, F., et al. 2000. MARCKS-related protein binds to actin without significantly affecting Actin polymerization or network structure. Myristoylated alanine-rich C kinase substrate. *J. Struct. Biol.* 131: 217-224.
- Jin, T., et al. 2001. *In vivo* interaction between dynamin and MacMARCKS detected by the fluorescent resonance energy transfer method. *J. Biol. Chem.* 276: 12879-12884.
- Jess, U., et al. 2002. Interaction of the C-terminal region of the rat serotonin transporter with MacMARCKS modulates 5-HT uptake regulation by protein kinase C. *Biochem. Biophys. Res. Commun.* 294: 272-279.
- Murphy, A., et al. 2003. Induction of protein kinase C substrates, Myristoylated alanine-rich C kinase substrate (MARCKS) and MARCKS-related protein (MRP), by Amyloid  $\beta$ -protein in mouse BV-2 microglial cells. *Neurosci. Lett.* 347: 9-12.
- Sundaram, M., et al. 2004. The MARCKS family of phospholipid binding proteins: regulation of phospholipase D and other cellular components. *Biochem. Cell Biol.* 82: 191-200.
- van den Bout, I., et al. 2007. The regulation of MacMARCKS expression by Integrin  $\beta$ 3. *Exp. Cell Res.* 313: 1260-1269.

## CHROMOSOMAL LOCATION

Genetic locus: MARCKSL1 (human) mapping to 1p35.1; Marcks1 (mouse) mapping to 4 D2.2.

## SOURCE

MARCKSL1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MARCKSL1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161829 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MARCKSL1 (P-12) is recommended for detection of MARCKSL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MARCKSL1 siRNA (h): sc-88464, MARCKSL1 siRNA (m): sc-149273, MARCKSL1 shRNA Plasmid (h): sc-88464-SH, MARCKSL1 shRNA Plasmid (m): sc-149273-SH, MARCKSL1 shRNA (h) Lentiviral Particles: sc-88464-V and MARCKSL1 shRNA (m) Lentiviral Particles: sc-149273-V.

Molecular Weight of MARCKSL1: 20 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **MARCKSL1 (K53): sc-130471**, our highly recommended monoclonal alternative to MARCKSL1 (P-12).