# MARCKSL1 (I-23): sc-130167



The Power to Question

### **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 dynamitin and MacMARCKS detected by the fluorescent resonance energy transfer method. J. Biol. Chem. 276: 12879-12884.
- 4. 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.
- 5. 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 β-protein in mouse BV-2 microglial cells. Neurosci. Lett. 347: 9-12.
- 6. 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.
- 7. van den Bout, I., et al. 2007. The regulation of MacMARCKS expression by Integrin β3. Exp. Cell Res. 313: 1260-1269.
- Guo, Y., et al. 2007. Quantitative proteomics analysis of human endothelial cell membrane rafts: evidence of MARCKS and MRP regulation in the sphingosine 1-phosphate-induced barrier enhancement. Mol. Cell. Proteomics 6: 689-696.

# CHROMOSOMAL LOCATION

Genetic locus: MARCKSL1 (human) mapping to 1p35.1.

# SOURCE

MARCKSL1 (I-23) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MARCKSL1 of human origin.

#### **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with <0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

MARCKSL1 (I-23) is recommended for detection of MARCKSL1 of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

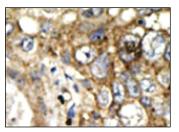
Suitable for use as control antibody for MARCKSL1 siRNA (h): sc-88464, MARCKSL1 shRNA Plasmid (h): sc-88464-SH and MARCKSL1 shRNA (h) Lentiviral Particles: sc-88464-V.

Molecular Weight of MARCKSL1: 20 kDa.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



MARCKSL1 (I-23): sc-130167. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

# **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.



Try **MARCKSL1 (K53): sc-130471**, our highly recommended monoclonal alternative to MARCKSL1 (I-23).