SANTA CRUZ BIOTECHNOLOGY, INC.

MARCKSL1 (H-163): sc-292783



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 membranecytoskeletal 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

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- 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.
- 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 β 3. Exp. Cell Res. 313: 1260-1269.

CHROMOSOMAL LOCATION

Genetic locus: MARCKSL1 (human) mapping to 1p35.1; Marcksl1 (mouse) mapping to 4 D2.2.

SOURCE

MARCKSL1 (H-163) is a rabbit polyclonal antibody raised against amino acids 33-195 mapping at the C-terminus of MARCKSL1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

MARCKSL1 (H-163) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

MARCKSL1 (H-163) is also recommended for detection of MARCKSL1 in additional species, including equine, canine, bovine and porcine.

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 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **MARCKSL1 (K53):** sc-130471, our highly recommended monoclonal alternative to MARCKSL1 (H-163).