

LAMP-5 (K-18): sc-85316

BACKGROUND

Lysosome-associated membrane proteins (LAMP) are glycosylated type I membrane proteins that play a role in the biogenesis of the pigment melanin. LAMP-5, also known as C20orf103, is a 280 amino acid protein that belongs to the LAMP family and is mainly found in cytoplasmic vesicles of the neuronal cell body. LAMP-5 is up-regulated upon CpG activation and down-regulated upon Toll-like receptor (TLR) ligands.

REFERENCES

1. Febbraio, M., et al. 1990. Identification and characterization of LAMP-1 as an activation-dependent platelet surface glycoprotein. *J. Biol. Chem.* 265: 18531-18537.
2. Salopek, T.G., et al. 1996. Induction of melanogenesis during the various melanoma growth phases and the role of tyrosinase, lysosome-associated membrane proteins, and p90 calnexin in the melanogenesis cascade. *J. Investig. Dermatol. Symp. Proc.* 1: 195-202.
3. Yang, K., et al. 2009. Immune responses to T-cell epitopes of SARS CoV-N protein are enhanced by N immunization with a chimera of lysosome-associated membrane protein. *Gene Ther.* 16: 1353-1362.
4. Defays, A., et al. 2011. BAD-LAMP is a novel biomarker of nonactivated human plasmacytoid dendritic cells. *Blood* 118: 609-617.
5. Wilke, S., et al. 2012. Crystal structure of the conserved domain of the DC lysosomal associated membrane protein: implications for the lysosomal glycolyx. *BMC Biol.* 10: 62.

CHROMOSOMAL LOCATION

Genetic locus: LAMP5 (human) mapping to 20p12.2; Lamp5 (mouse) mapping to 2 F3.

SOURCE

LAMP-5 (K-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of LAMP-5 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85316 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

LAMP-5 (K-18) is recommended for detection of LAMP-5 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).

LAMP-5 (K-18) is also recommended for detection of LAMP-5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for LAMP-5 siRNA (h): sc-72692, LAMP-5 siRNA (m): sc-141851, LAMP-5 shRNA Plasmid (h): sc-72692-SH, LAMP-5 shRNA Plasmid (m): sc-141851-SH, LAMP-5 shRNA (h) Lentiviral Particles: sc-72692-V and LAMP-5 shRNA (m) Lentiviral Particles: sc-141851-V.

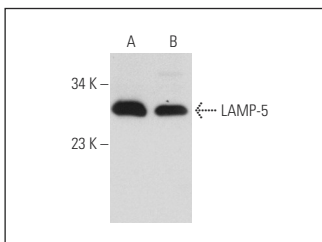
Molecular Weight of LAMP-5 isoforms: 27/32 kDa.

Positive Controls: mouse brain extract: sc-2253 or IMR-32 cell lysate: sc-2409.

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.

DATA



LAMP-5 (K-18): sc-85316. Western blot analysis of LAMP-5 expression in mouse brain tissue extract (A) and IMR-32 whole cell lysate (B).

RESEARCH USE

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

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Try **LAMP-5 (E-8): sc-398190**, our highly recommended monoclonal alternative to LAMP-5 (K-18).