SANTA CRUZ BIOTECHNOLOGY, INC.

DC-LAMP (M-204): sc-98658

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DC-LAMP (DC-lysosome-associated membrane glycoprotein), also known as LAMP-3 (lysosomal-associated membrane protein 3), TSC403 or CD208, is a 416 amino acid lysosome membrane protein that belongs to the LAMP family. DC-LAMP is expressed in lung, lymphoid organs and dendritic cells, and is upregulated in carcinomas of the esophagus, colon, rectum, ureter, stomach, breast, fallopian tube, thyroid and parotid tissues. It is suggested that DC-LAMP may be responsible for changing lysosomal function after the transfer of peptide-MHC class II molecules to the surface of dendritic cells. DC-LAMP is thought to play an important part in enhancing metastasic potential and may be a prognostic factor for cervical cancer.

REFERENCES

1. Kanao, H., et al. 2005. Overexpression of LAMP3/TSC403/DC-LAMP promotes metastasis in uterine cervical cancer. Cancer Res. 65: 8640-8645.
2. Arruda, L.B., et al. 2006. Dendritic cell-lysosomal-associated membrane protein (LAMP) and LAMP-1-HIV-1 gag chimeras have distinct cellular trafficking pathways and prime T and B cell responses to a diverse repertoire of epitopes. J. Immunol. 177: 2265-2275.
3. Kolla, V., et al. 2007. Thyroid transcription factor in differentiating type II cells: regulation, isoforms, and target genes. Am. J. Respir. Cell Mol. Biol. 36: 213-225.
4. Bodineau, A., et al. 2007. Do Langerhans cells behave similarly in elderly and younger patients with chronic periodontitis? Arch. Oral Biol. 52: 189-194.
5. Ladányi, A., et al. 2007. Density of DC-LAMP+ mature dendritic cells in combination with activated T lymphocytes infiltrating primary cutaneous melanoma is a strong independent prognostic factor. Cancer Immunol. Immunother. 56: 1459-1469.
6. Zhu, L.C., et al. 2007. DC-LAMP stains pulmonary adenocarcinoma with bronchiolar Clara cell differentiation. Hum. Pathol. 38: 260-268.

CHROMOSOMAL LOCATION

Genetic locus: Lamp3 (mouse) mapping to 16 A3.

SOURCE

DC-LAMP (M-204) is a rabbit polyclonal antibody raised against amino acids 112-315 mapping near the C-terminus of DC-LAMP of mouse origin.

PRODUCT

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

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.

APPLICATIONS

DC-LAMP (M-204) is recommended for detection of DC-LAMP of mouse and rat 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).

Suitable for use as control antibody for DC-LAMP siRNA (m): sc-77100, DC-LAMP shRNA Plasmid (m): sc-77100-SH and DC-LAMP shRNA (m) Lentiviral Particles: sc-77100-V.

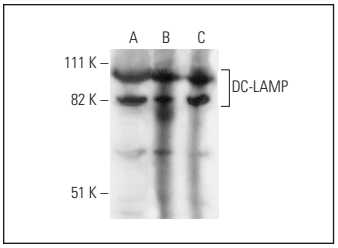
Molecular Weight of DC-LAMP: 70-90 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, mouse lung extract: sc-2390 or mouse lymph node extract: sc-364243.

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



DC-LAMP (M-204): sc-98658. Western blot analysis of DC-LAMP expression in RAW 264.7 whole cell lysate (**A**) and mouse lung (**B**) and mouse lymph node (**C**) tissue extracts.

SELECT PRODUCT CITATIONS

1. Woischnik, M., et al. 2010. A non-BRICHOS surfactant protein c mutation disrupts epithelial cell function and intercellular signaling. BMC Cell Biol. 11: 88.
2. Zemskov, E.A., et al. 2011. Unconventional secretion of tissue transglutaminase involves phospholipid-dependent delivery into recycling endosomes. PLoS ONE 6: e19414.
3. Zarbock, R., et al. 2012. The surfactant protein C mutation A116D alters cellular processing, stress tolerance, surfactant lipid composition, and immune cell activation. BMC Pulm. Med. 12: 15.