SANTA CRUZ BIOTECHNOLOGY, INC.

DC-LAMP (T-20): sc-83135

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.
7. Mayer, W.J., et al. 2007. Characterization of antigen-presenting cells in fresh and cultured human corneas using novel dendritic cell markers. Invest. Ophthalmol. Vis. Sci. 48: 4459-4467.
8. Loverre, A., et al. 2007. Ischemia-reperfusion injury-induced abnormal dendritic cell traffic in the transplanted kidney with delayed graft function. Kidney Int. 72: 994-1003.
9. Lebre, M.C., et al. 2008. Rheumatoid arthritis synovium contains two subsets of CD83-DC-LAMP- dendritic cells with distinct cytokine profiles. Am. J. Pathol. 172: 940-950.

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.

CHROMOSOMAL LOCATION

Genetic locus: LAMP3 (human) mapping to 3q27.1.

SOURCE

DC-LAMP (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DC-LAMP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-83135 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DC-LAMP (T-20) is recommended for detection of DC-LAMP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family members LAMP-1 or LAMP-2. .

Suitable for use as control antibody for DC-LAMP siRNA (h): sc-77099, DC-LAMP shRNA Plasmid (h): sc-77099-SH and DC-LAMP shRNA (h) Lentiviral Particles: sc-77099-V.

Molecular Weight of DC-LAMP: 70-90 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.

RESEARCH USE

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