

# CLEC-L1 (UW50): sc-293090

## BACKGROUND

The C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily consists of a variety of proteins that share a common protein fold and have diverse functions, including cell-cell signaling, cell adhesion, glycoprotein turnover and immune responses. CLEC-L1 (C-type lectin-like domain family 1), also known as DCAL-1 (dendritic cell-associated lectin 1), is a 167 amino acid single-pass type II membrane protein that contains one C-type lectin domain and plays a role in cell-to-cell immune interactions. Highly expressed in dendritic cells and B-cells, CLEC-L1 is also found in tonsil, lymph node and spleen, with low levels found in peripheral blood, colon and spleen. CLEC-L1 acts as a costimulatory molecule that increases IL-4 production and is encoded by a gene that maps to human chromosome 12p13.31.

## REFERENCES

- Drickamer, K. 1999. C-type lectin-like domains. *Curr. Opin. Struct. Biol.* 9: 585-590.
- Arce, I., Roda-Navarro, P., Montoya, M.C., Hernanz-Falcón, P., Puig-Kröger, A. and Fernández-Ruiz, E. 2001. Molecular and genomic characterization of human DLEC, a novel member of the C-type lectin receptor gene family preferentially expressed on monocyte-derived dendritic cells. *Eur. J. Immunol.* 31: 2733-2740.
- Ryan, E.J., Marshall, A.J., Magaletti, D., Floyd, H., Draves, K.E., Olson, N.E. and Clark, E.A. 2002. Dendritic cell-associated lectin-1: a novel dendritic cell-associated, C-type lectin-like molecule enhances T cell secretion of IL-4. *J. Immunol.* 169: 5638-5648.
- Ebner, S., Sharon, N. and Ben-Tal, N. 2003. Evolutionary analysis reveals collective properties and specificity in the C-type lectin and lectin-like domain superfamily. *Proteins* 53: 44-55.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607467. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- McMahon, S.A., Miller, J.L., Lawton, J.A., Kerkow, D.E., Hodes, A., Marti-Renom, M.A., Doulatov, S., Narayanan, E., Sali, A., Miller, J.F. and Ghosh, P. 2005. The C-type lectin fold as an evolutionary solution for massive sequence variation. *Nat. Struct. Mol. Biol.* 12: 886-892.
- Gijzen, K., Cambi, A., Torensma, R. and Figdor, C.G. 2006. C-type lectins on dendritic cells and their interaction with pathogen-derived and endogenous glycoconjugates. *Curr. Protein Pept. Sci.* 7: 283-294.

## CHROMOSOMAL LOCATION

Genetic locus: CLECL1 (human) mapping to 12p13.31.

## SOURCE

CLEC-L1 (UW50) is a mouse monoclonal antibody raised against CLEC-L1 of human origin.

## PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CLEC-L1 (UW50) is recommended for detection of CLEC-L1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and indirect flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for CLEC-L1 siRNA (h): sc-96106, CLEC-L1 shRNA Plasmid (h): sc-96106-SH and CLEC-L1 shRNA (h) Lentiviral Particles: sc-96106-V.

Molecular Weight of CLEC-L1: 19 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.