

CLEC-L1 (Y-14): sc-240242

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., et al. 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., et al. 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., et al. 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[™]. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607467. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- McMahon, S.A., et al. 2005. The C-type lectin fold as an evolutionary solution for massive sequence variation. *Nat. Struct. Mol. Biol.* 12: 886-892.
- Gijzen, K., et al. 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 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of CLEC-L1 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-240242 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLEC-L1 (Y-14) is recommended for detection of CLEC-L1 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).

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 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.

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 or our catalog for detailed protocols and support products.