

CLEC-12B (D-13): sc-167477

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-12B (C-type lectin domain family 12 member B), also known as macrophage antigen H, is a 276 amino acid single-pass type II membrane protein that contains one C-type lectin domain and belongs to the CTL/CTLD superfamily. Existing as two alternatively spliced isoforms that are expressed in testis, ovary, colon, kidney, heart, lung and mammary gland, CLEC-12B functions as a cell surface receptor that prevents target cells from natural killer cell-mediated lysis. CLEC-12B contains an immunoreceptor tyrosine-based inhibitor motif (ITIM) through which it modulates several cellular responses, and is encoded by a gene that maps to human chromosome 12p13.2.

REFERENCES

1. Drickamer, K. 1999. C-type lectin-like domains. *Curr. Opin. Struct. Biol.* 9: 585-590.
2. 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.
3. East, L., et al. 2002. The mannose receptor family. *Biochim. Biophys. Acta* 1572: 364-386.
4. 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.

CHROMOSOMAL LOCATION

Genetic locus: CLEC12B (human) mapping to 12p13.2.

SOURCE

CLEC-12B (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CLEC-12B 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-167477 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

CLEC-12B (D-13) is recommended for detection of CLEC-12B 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 other CLEC family members.

Suitable for use as control antibody for CLEC-12B siRNA (h): sc-96052, CLEC-12B shRNA Plasmid (h): sc-96052-SH and CLEC-12B shRNA (h) Lentiviral Particles: sc-96052-V.

Molecular Weight of CLEC-12B: 32 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.