

CLEC-18 (K-16): sc-240239

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-18 (c-type lectin domain family 18) exists as three nearly identical forms, designated CLEC-18A, CLEC-18B and CLEC-18C, or mannose receptor-like protein 1, 2 and 3, respectively. Both CLEC-18A and CLEC-18C contain 446 amino acids, whereas CLEC-18B contains 455 amino acids; all 3 forms are secreted proteins that contain one C-type lectin domain, a SCP domain and a single EGF-like domain. All three CLEC-18 proteins exist as two alternatively spliced isoforms that are encoded by genes that map to human chromosome 16q22.1 and 16q23.1

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.
- East, L. and Isacke, C.M. 2002. The mannose receptor family. *Biochim. Biophys. Acta* 1572: 364-386.
- 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.
- 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: CLEC18A/CLEC18C (human) mapping to 16q22.1, CLEC18B (human) mapping to 16q23.1; Clec18a (mouse) mapping to 8 E1.

SOURCE

CLEC-18 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CLEC-18 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-240239 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CLEC-18 (K-16) is recommended for detection of CLEC-18 of mouse, rat and human 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); non cross-reactive with other CLEC family members.

CLEC-18 (K-16) is also recommended for detection of CLEC-18 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CLEC-18 siRNA (h): sc-93037, CLEC-18 siRNA (m): sc-149549, CLEC-18 shRNA Plasmid (h): sc-93037-SH, CLEC-18 shRNA Plasmid (m): sc-149549-SH, CLEC-18 shRNA (h) Lentiviral Particles: sc-93037-V and CLEC-18 shRNA (m) Lentiviral Particles: sc-149549-V.

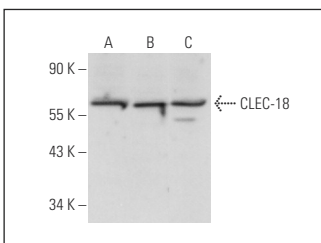
Molecular Weight of CLEC-18: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 and K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CLEC-18 (K-16): sc-240239. Western blot analysis of CLEC-18 expression in HeLa (A), Jurkat (B) and K-562 (C) whole cell lysates.

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.