



## CLEC-2D (N-12): sc-103435

### 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-2D (C-type lectin domain family 2, member D), also known as CLAX, LLT1 or OCIL, is an 191 amino acid single-pass type II membrane protein that contains one C-type lectin domain and localizes to the cell membrane. Expressed in spleen, thymus, lymph node and osteoblasts, CLEC-2D functions as a receptor for CD161, specifically protecting cells against natural killer (NK) cell-induced lysis and inhibiting osteoclast formation, as well as bone resorption. Additionally, CLEC-2D induces IFN- $\gamma$  release in NK cells, thereby regulating IFN- $\gamma$  activity. CLEC-2D is upregulated in osteogenic sarcoma cells, suggesting a role in tumorigenesis. Four isoforms of CLEC-2D exist due to alternative splicing events.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: CLEC2D (human) mapping to 12p13.31.

### RESEARCH USE

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

### SOURCE

CLEC-2D (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of CLEC-2D of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103435 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

CLEC-2D (N-12) is recommended for detection of CLEC-2D 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-2D siRNA (h): sc-95672, CLEC-2D shRNA Plasmid (h): sc-95672-SH and CLEC-2D shRNA (h) Lentiviral Particles: sc-95672-V.

Molecular Weight of CLEC-2D: 22 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.

### PROTOCOLS

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