SANTA CRUZ BIOTECHNOLOGY, INC.

CLEC-2A (N-13): sc-167486



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-2A (C-type lectin domain family 2, member A), also known as PILAR (proliferation-induced lymphocyte-associated receptor), is a 174 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 thymus, spleen, testis, ovary, skin, bone marrow, peripheral blood monocytes and small intestine, CLEC-2A is involved in modulating T-cell expansion.

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.
- 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.
- Spreu, J., et al. 2007. CLEC2A: a novel, alternatively spliced and skin-associated member of the NKC-encoded AICL-CD69-LLT1 family. Immunogenetics 59: 903-912.
- Huarte, E., et al. 2008. PILAR is a novel modulator of human T-cell expansion. Blood 112: 1259-1268.

CHROMOSOMAL LOCATION

Genetic locus: CLEC2A (human) mapping to 12p13.31.

SOURCE

CLEC-2A (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of CLEC-2A of human origin.

STORAGE

Store at 4° C, **D0 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.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167486 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLEC-2A (N-13) is recommended for detection of CLEC-2A of 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-2 family members.

Suitable for use as control antibody for CLEC-2A siRNA (h): sc-96119, CLEC-2A shRNA Plasmid (h): sc-96119-SH and CLEC-2A shRNA (h) Lentiviral Particles: sc-96119-V.

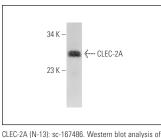
Molecular Weight of CLEC-2A: 20 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

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-2A (N-13): sc-16/486. Western blot analysis CLEC-2A expression in Ramos whole cell lysate.

RESEARCH USE

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