# CLEC-2A (K-14): sc-167485



The Power to Question

#### **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**

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- 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.
- 4. 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 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CLEC-2A 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-167485 P, (100  $\mu$ g 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-2A (K-14) is recommended for detection of CLEC-2A 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-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.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat lgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-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 lgG-FITC: sc-2024 (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 or our catalog for detailed protocols and support products.

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