

CLEC2A Antibody

Catalog # ASC11520

Product Information

Application	WB, IF, E
Primary Accession	Q6UWW9
Other Accession	NP_001124183 , 195222725
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	19972
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CLEC2A antibody can be used for detection of CLEC2A by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.

Additional Information

Gene ID	387836
Other Names	C-type lectin domain family 2 member A, Keratinocyte-associated C-type lectin, KACL, Proliferation-induced lymphocyte-associated receptor, PILAR, CLEC2A, KACL
Target/Specificity	CLEC2A; CLEC2A antibody is human specific. Two alternatively spliced transcript variants have been observed.
Reconstitution & Storage	CLEC2A antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CLEC2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CLEC2A
Synonyms	KACL
Function	Membrane-bound protein expressed mainly on keratinocytes which acts as a ligand to stimulate the activating receptor NKp65/KLRF2, expressed on the surface of natural killer (NK) cells (PubMed: 25510854). Facilitates thereby dedicated immune recognition of keratinocytes leading to natural killer cell mediated cytotoxicity (PubMed: 20194751). Also plays a role in modulating the extent of T-cell expansion (PubMed: 18550855).

Cellular Location	Cell membrane; Single-pass type II membrane protein
Tissue Location	Mainly expressed in skin. Also expressed in keratinocytes, spleen, thymus, small intestine, peripheral blood monocytes, bone marrow, ovary, testis and skin. High expression in CD8(+), B-lymphocytes and naive CD4(+) T-cells. Restricted mostly to proliferating lymphocytes. Not detected in myeloid leukocytes or natural killer (NK) cells.

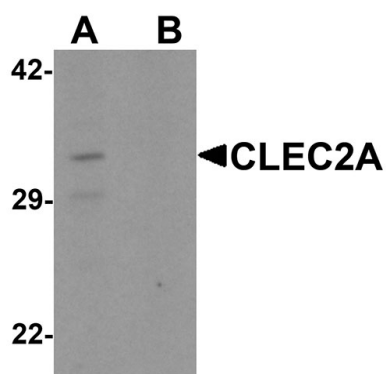
Background

CLEC2A Antibody: CLEC2A (C-type lectin domain family 2 member A), also known as PILAR (proliferation-induced lymphocyte-associated receptor) is involved in modulating T-cell expansion. It is a 32 kDa single-pass type II membrane protein that contains one C-type lectin domain in its extracellular region and belongs to the CTL/CTLD superfamily. CLEC2A is mainly expressed in skin and highly expressed in CD8(+), B lymphocytes and naive CD4(+) T cells. Manipulation of CLEC2A signaling may be important for treatment of autoimmune diseases and cancer.

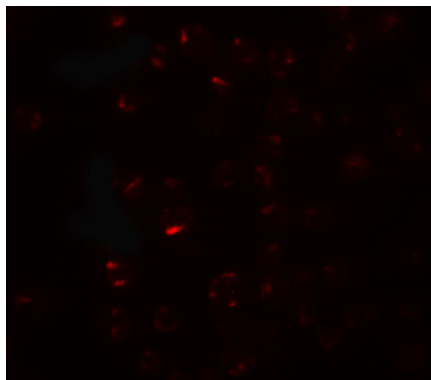
References

- Huarte E, Cubillos-Ruiz JR, Nesbeth YC, et al. PILAR is a novel modulator of human T-cell expansion. *Blood* 2008; 112:1259-68.
- Drickamer K. C-type lectin-like domains. *Curr. Opin. Struct. Biol.* 1999; 9:585-90
- Spreu J, Kienle EC, Schrage B, et al. CLEC2A: a novel, alternatively spliced and skin-associated member of the NKC-encoded AICL-CD69-LLT1 family. *Immunogenetics* 2007; 59:903-12.
- Spreu J, Kuttruff S, Stejfova V, et al. Interaction of C-type lectin-like receptors NKp65 and KACL facilitates dedicated immune recognition of human keratinocytes. *Proc. Natl. Acad. Sci. USA* 2010; 107:5100-5.

Images



Western blot analysis of CLEC2A in K562 cell lysate with CLEC2A antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of CLEC2A in K562 cells with CLEC2A antibody at 20 µg/mL.