

CD300A (MEM-260): sc-101318

BACKGROUND

CD300A, also known as CMRF35H, IRC1, IRC2, IRp60 or IGSF12, is a 299 amino acid single-pass type I membrane protein that localizes to the cell membrane and contains one Ig-like V-type domain. Expressed by mast cells, B-cells, dendritic cells, monocytes, granulocytes and natural killer (NK) cells, CD300A functions as an inhibitory receptor that is thought to help down-regulate the cytolytic activity in NK cells and may also down-regulate the degranulation of mast cells. CD300A exists as multiple alternatively spliced isoforms and is subject to post-translational phosphorylation and glycosylation. The gene encoding CD300A maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

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3. Clark, G.J., et al. 2000. The CMRF-35H gene structure predicts for an independently expressed member of an ITIM/ITAM pair of molecules localized to human chromosome 17. *Tissue Antigens* 55: 101-109.
4. Clark, G.J., et al. 2002. CMRF-35A, CMRF-35H: potential new CD. *J. Biol. Regul. Homeost. Agents* 16: 233-235.
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6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 606790. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Ju, X., et al. 2008. CD300a/c regulate type I interferon and TNF- α secretion by human plasmacytoid dendritic cells stimulated with TLR7 and TLR9 ligands. *Blood* 112: 1184-1194.
8. Bachelet, I., et al. 2008. Suppression of normal and malignant kit signaling by a bispecific antibody linking kit with CD300a. *J. Immunol.* 180: 6064-6069.
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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 for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: CD300A (human) mapping to 17q25.1.

SOURCE

CD300A (MEM-260) is a mouse monoclonal antibody raised against acute lymphoid leukemia cell line of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD300A (MEM-260) is available conjugated phycoerythrin (sc-101318 PE, 100 tests in 2 ml), for IF, IHC(P) and FCM.

APPLICATIONS

CD300A (MEM-260) is recommended for detection of CD300A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

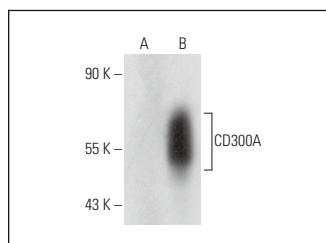
Suitable for use as control antibody for CD300A siRNA (h): sc-93624, CD300A shRNA Plasmid (h): sc-93624-SH and CD300A shRNA (h) Lentiviral Particles: sc-93624-V.

Molecular Weight of CD300A: 33 kDa.

Molecular Weight of glycosylated CD300A: 60 kDa.

Positive Controls: CD300A (h): 293T Lysate: sc-114941.

DATA



CD300A (MEM-260): sc-101318. Western blot analysis of CD300A expression in non-transfected: sc-117752 (A) and human CD300A transfected: sc-114941 (B) 293T whole cell lysates.

RESEARCH USE

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