

Monoclonal Antibody to CD300A / CMRF35H - PE

Alternate names:	CD300 antigen-like family member A, CLM-8, CMRF-35-H9, CMRF35-H, CMRF35-H9, CMRF35-like molecule 8, IRC1/IRC2, IRp60, Inhibitory receptor protein 60, NK inhibitory receptor
Catalog No.:	AM03062RP-N
Quantity:	100 Tests
Background:	CD300a (CMRF-35H, IRp60) is a non-MHC-specific inhibitory receptor of immunoglobulin superfamily, which contains three immunoreceptor tyrosine-based inhibitory motifs (ITIMs) that associate with SH2-containing phosphatases SHP-1 and SHP-2. CD300a is expressed on many cell types including T cells, NK cells, neutrophils, eosinophils or mast cells. Its triggering inhibits activating signals such as those of IL5, GM-CSF or eotaxin, as well as suppresses mast cell degranulation or NK cell cytotoxic activity.
Uniprot ID:	Q9UGN4
NCBI:	NP_009192.2
GeneID:	11314
Host / Isotype:	Mouse / IgG1
Clone:	MEM-260
Immunogen:	HPB human acute lymphoid leukemia cell line
Format:	State: Liquid purified IgG fraction. Purification: Size-Exclusion Chromatography. Buffer System: PBS containing 15 mM Sodium Azide as preservative and 0.2% (w/v) high-grade BSA (Protease free) as stabilizer. Label: PE – Conjugated with R-Phycoerythrin under optimum conditions
Applications:	Suitable for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody reacts with CD300a, a 60 kDa leukocyte transmembrane glycoprotein expressed on human granulocytes, monocytes, neutrophils, NK cells, mast cells and dendritic cells, 25% of circulating T cells and 15% of circulating B cells. Species: Human. Other species not tested.
Storage:	Store the antibody in the dark at 2-8°C. DO NOT FREEZE! Avoid prolonged exposure to light. Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com



- General Readings:**
1. Cantoni C, Bottino C, Augugliaro R, Morelli L, Marcenaro E, Castriconi R, et al. Molecular and functional characterization of IRp60, a member of the immunoglobulin superfamily that functions as an inhibitory receptor in human NK cells. *Eur J Immunol.* 1999 Oct;29(10):3148-59. PubMed PMID: 10540326.
 2. Bachelet I, Munitz A, Moretta A, Moretta L, Levi-Schaffer F. The inhibitory receptor IRp60 (CD300a) is expressed and functional on human mast cells. *J Immunol.* 2005 Dec 15;175(12):7989-95. PubMed PMID: 16339535.
 3. Bachelet I, Munitz A, Levi-Schaffer F. Abrogation of allergic reactions by a bispecific antibody fragment linking IgE to CD300a. *J Allergy Clin Immunol.* 2006 Jun;117(6):1314-20. PubMed PMID: 16750992.
 4. Dimasi N, Roessle M, Moran O, Candiano G, Svergun DI, Biassoni R. Molecular analysis and solution structure from small-angle X-ray scattering of the human natural killer inhibitory receptor IRp60 (CD300a). *Int J Biol Macromol.* 2007 Feb 20;40(3):193-200. Epub 2006 Jul 26. PubMed PMID: 16949664.
 5. Alvarez Y, Tang X, Coligan JE, Borrego F. The CD300a (IRp60) inhibitory receptor is rapidly up-regulated on human neutrophils in response to inflammatory stimuli and modulates CD32a (FcγRIIa) mediated signaling. *Mol Immunol.* 2008 Jan;45(1):253-8. Epub 2007 Jun 22. PubMed PMID: 17588661.

Pictures: Surface staining of human peripheral blood cells with anti-CD300a antibody AM03062RP-N (MEM-260, PE conjugated).

