



11-501-C025

## Monoclonal Antibody to CD300a Purified Antibody (0.025 mg)

<b>Clone:</b>	MEM-260
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-260 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.
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	HPB human acute lymphoid leukemia cell line
<b>Species Reactivity:</b>	Human
<b>Application:</b>	Flow Cytometry Recommended dilution: 2 µg/ml Western Blotting Positive material: HPB cell line Negative material: JURKAT human cell line, RAJI human cell line Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Application note: Non-reducing conditions.
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified by protein-A affinity chromatography
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Cantoni C, Bottino C, Augugliaro R, Morelli L, Marcenaro E, Castriconi R, Vitale M, Pende D, Sivori S, Millo R, Biassoni R, Moretta L, Moretta A: 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.
- \*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.
- \*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.
- \*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.
- \*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.
- \*Sabato V, Verweij MM, Bridts CH, Levi-Schaffer F, Gibbs BF, De Clerck LS, Schiavino D, Ebo DG: CD300a is expressed on human basophils and seems to inhibit IgE/FcγRI-dependent anaphylactic degranulation. *Cytometry B Clin Cytom.* 2012 May;82(3):132-8.
- \*Carnece X, Meertens L, Dejarnac O, Perera-Lecoin M, Hafirassou ML, Kitaura J, Ramdasi R, Schwartz O, Amara A: The Phosphatidylserine and Phosphatidylethanolamine Receptor CD300a Binds Dengue Virus and Enhances Infection. *J Virol.* 2015 Oct 14;90(1):92-102.

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