

Product datasheet

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ARG62705 anti-CD11a / LFA1 alpha antibody [MEM-83] (low endotoxin)

Package: 100 μg Store at: -20°C

Summary

Product Description Azide free and low endotoxin Mouse Monoclonal antibody [MEM-83] recognizes CD11a / LFA1 alpha

Tested Reactivity Hu

Tested Application FACS, FuncSt, IP

Specificity The antibody MEM-83 reacts with an extracellular epitope of CD11a (alpha subunit of human LFA-1), a

170-180 kDa type I transmembrane glycoprotein expressed on B and T lymphocytes, monocytes,

macrophages, neutrophils, basophils and eosinophils.

Host Mouse

Clonality Monoclonal
Clone MEM-83

Isotype IgG1

Target Name CD11a / LFA1 alpha

Species Human

Immunogen Human peripheral blood lymphocytes.

Conjugation Un-conjugated

Alternate Names Leukocyte adhesion glycoprotein LFA-1 alpha chain; LFA-1A; Integrin alpha-L; CD11A; Leukocyte

function-associated molecule 1 alpha chain; LFA-1; CD11 antigen-like family member A; CD antigen

CD11a

Application Instructions

Application table	Application	Dilution
	FACS	1 μg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Purification with Protein A.

Purification Note 0.2 μ m filter sterilized. Endotoxin level is less than 0.01 EU/ μ g of the protein.

Buffer PBS

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

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

Bioinformation

Gene Symbol ITGAL

Gene Full Name integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide)

Background ITGAL encodes the integrin alpha L chain. Integrins are heterodimeric integral membrane proteins

composed of an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form the integrin lymphocyte function-associated antigen-1 (LFA-1), which is expressed on all leukocytes. LFA-1 plays a central role in leukocyte intercellular adhesion through interactions with its ligands, ICAMs 1-3 (intercellular adhesion molecules 1 through 3), and also functions in lymphocyte costimulatory signaling. Two transcript variants encoding different isoforms

have been found for this gene. [provided by RefSeq, Jul 2008]

Function Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is a

 $receptor\ for\ F11R\ (PubMed:11812992,\ PubMed:15528364).\ Integin\ ITGAL/ITGB2\ is\ a\ receptor\ for\ the$

secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL

(PubMed:29100055). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity (PubMed:15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:11812992). Required for generation of common lymphoid progenitor cells in bone marrow, indicating a role in lymphopoiesis (By similarity). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic

neutrophil phagocytosis by macrophages (PubMed:23775590). [UniProt]

Calculated Mw 129 kDa

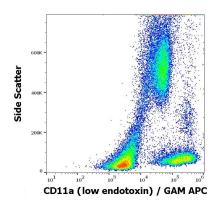
PTM In resting T-cells, up to 40% of surface ITGAL is constitutively phosphorylated. Phosphorylation causes

conformational changes needed for ligand binding and is necessary for activation by some physiological

agents. [UniProt]

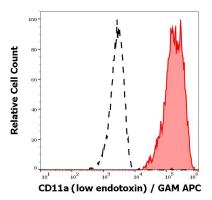
Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG62705 anti-CD11a / LFA1 alpha antibody [MEM-83] (low endotoxin) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG62705 anti-CD11a / LFA1 alpha antibody [MEM-83] (low endotoxin) at 1 μ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



${\sf ARG62705}$ anti-CD11a / LFA1 alpha antibody [MEM-83] (low endotoxin) FACS image

Flow Cytometry: Separation of Human CD11a positive lymphocytes (red-filled) from CD11a negative blood debris (black-dashed). Human peripheral whole blood stained with ARG62705 anti-CD11a / LFA1 alpha antibody [MEM-83] (low endotoxin) at 1 $\mu g/ml$ dilution, followed by APC-conjugated Goat anti-Mouse antibody.