

## ARG62707 anti-CD11a / LFA1 alpha antibody [MEM-25]

Package: 100 µg

Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [MEM-25] recognizes CD11a / LFA1 alpha
Tested Reactivity	Hu
Tested Application	FACS, FuncSt, IP
Specificity	The clone MEM-25 reacts with 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. HLDA IV; WS Code NL 209
Host	Mouse
Clonality	Monoclonal
Clone	MEM-25
Isotype	IgG1
Target Name	CD11a / LFA1 alpha
Immunogen	Leukocytes from a patient suffering from a LGL-type leukaemia.
Conjugation	Un-conjugated
Alternate Names	Leukocyte adhesion glycoprotein LFA-1 alpha chain; LFA1A; 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	2 µg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
	Application Note	
		IP: Immunoaffinity purification of LFA-1 complex. Functional studies: The clone MEM-25 partially blocks binding of LFA-1 complex to ICAM-1. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

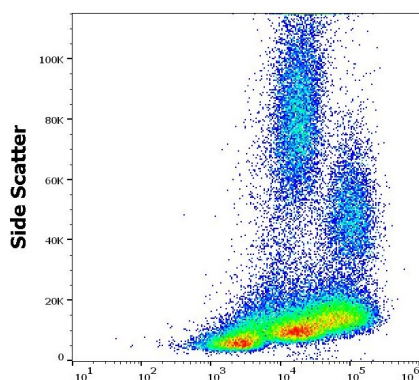
Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide

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

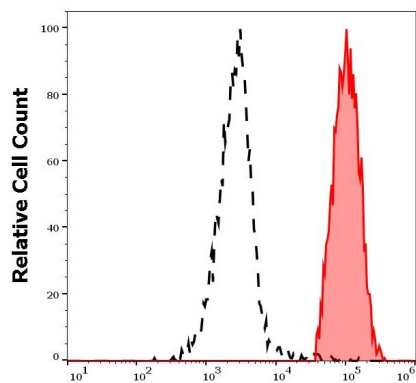
Database links	<a href="#">GeneID: 3683 Human</a> <a href="#">Swiss-port # P20701 Human</a>
Gene Symbol	ITGAL
Gene Full Name	integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide)
Background	CD11a (LFA-1 alpha) together with CD18 constitute leukocyte function-associated antigen 1 (LFA-1), the alphaLbeta2 integrin. CD11a is implicated in activation of LFA-1 complex. LFA-1 is expressed on the plasma membrane of leukocytes in a low-affinity conformation. Cell stimulation by chemokines or other signals leads to induction the high-affinity conformation, which supports tight binding of LFA-1 to its ligands, the intercellular adhesion molecules ICAM-1, -2, -3. LFA-1 is thus involved in interaction of various immune cells and in their tissue-specific settlement, but participates also in control of cell differentiation and proliferation and of T-cell effector functions. Blocking of LFA-1 function by specific antibodies or small molecules has become an important therapeutic approach in treatment of multiple inflammatory diseases. For example, humanized anti-LFA-1 antibody Efalizumab (Raptiva) is being used to interfere with T cell migration to sites of inflammation; binding of cholesterol-lowering drug simvastatin to CD11a allosteric site leads to immunomodulation and increase in lymphocytic cholinergic activity.
Function	Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. It is 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. [UniProt]
Research Area	Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody
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.

## Images



ARG62707 anti-CD11a / LFA1 alpha antibody [MEM-25] FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62707 anti-CD11a / LFA1 alpha antibody [MEM-25] at 1 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



#### ARG62707 anti-CD11a / LFA1 alpha antibody [MEM-25] FACS image

Flow Cytometry: Separation of human monocytes (red-filled) from blood debris (black-dashed). Human peripheral whole blood stained with ARG62707 anti-CD11a / LFA1 alpha antibody [MEM-25] at 1  $\mu\text{g/ml}$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.