

# Product datasheet

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# ARG62709 anti-CD11a / LFA1 alpha antibody [MEM-25] (FITC)

Package: 100 tests Store at: 4°C

# Summary

Product Description FITC-conjugated Mouse Monoclonal antibody [MEM-25] recognizes CD11a / LFA1 alpha

Tested Reactivity Hu
Tested Application FACS

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. \_x000D\_ HLDA IV; WS Code NL 209

Host Mouse

**Clonality** Monoclonal

Clone MEM-25

Isotype IgG1

Target Name CD11a / LFA1 alpha

Immunogen Leukocytes from a pacient suffering from a LGL-type leukaemia.

Conjugation FITC

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	20 μl / 10^6 cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Note The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions.

The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.

Buffer PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA

Preservative 15 mM Sodium azide

Stabilizer 0.2% (w/v) high-grade protease free BSA

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

#### Bioinformation

Database links <u>GeneID: 3683 Human</u>

Swiss-port # P20701 Human

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

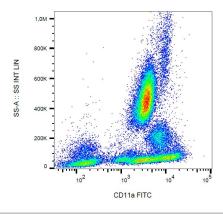
Calculated Mw 129 kDa

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**



ARG62709 anti-CD11a / LFA1 alpha antibody [MEM-25] (FITC) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG62709 anti-CD11a / LFA1 alpha antibody [MEM-25] (FITC).