

Product datasheet

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ARG62706 anti-CD11a / LFA1 alpha antibody [MEM-25] (Biotin)

Package: 100 μg Store at: 4°C

Summary

Product Description Biotin-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.

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 Biotin

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	2 - 3 μg/ml
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 Biotin-LC-NHS under optimum conditions. The reagent is free

of unconjugated biotin.

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

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.