



12-622-C100

## Monoclonal Antibody to CD11a (mouse) Low Endotoxin (0.1 mg)

<b>Clone:</b>	M17/4
<b>Isotype:</b>	Rat IgG2a
<b>Specificity:</b>	The rat monoclonal antibody M17/4 reacts with CD11a (alpha-subunit of murine LFA-1), a 180 kDa type I transmembrane glycoprotein expressed on B and T lymphocytes, monocytes, macrophages, neutrophils, basophils and eosinophils.
<b>Immunogen:</b>	C57BL/6 mouse splenic secondary cytotoxic T lymphocytes
<b>Species Reactivity:</b>	Mouse
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified by protein G
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized. Endotoxin level is less than 10 EU/mg of the protein, as determined by the LAL test.
<b>Storage / Stability:</b>	Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.

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

**Antibodies****References:**

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- \*Bellingan GJ, Xu P, Cooksley H, Cauldwell H, Shock A, Bottoms S, Haslett C, Mutsaers SE, Laurent GJ: Adhesion molecule-dependent mechanisms regulate the rate of macrophage clearance during the resolution of peritoneal inflammation. *J Exp Med.* 2002 Dec 2;196(11):1515-21.
- \*Beyer M, Wang H, Peters N, Doths S, Koerner-Rettberg C, Openshaw PJ, Schwarze J: The beta2 integrin CD11c distinguishes a subset of cytotoxic pulmonary T cells with potent antiviral effects in vitro and in vivo. *Respir Res.* 2005 Jul 12;6:70.
- \*Koseki S, Miura S, Fujimori H, Hokari R, Komoto S, Hara Y, Ogino T, Nagata H, Goto M, Hachimura S, Kaminogawa S, Ishii H: In situ demonstration of intraepithelial lymphocyte adhesion to villus microvessels of the small intestine. *Int Immunol.* 2001 Sep;13(9):1165-74.
- \*Papayannopoulou T, Priestley GV, Nakamoto B, Zafiroopoulos V, Scott LM, Harlan JM: Synergistic mobilization of hemopoietic progenitor cells using concurrent beta1 and beta2 integrin blockade or beta2-deficient mice. *Blood.* 2001 Mar 1;97(5):1282-8.
- \*And many other.

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