

Datasheet for ABIN457403

anti-ITGAL antibody

3 Images

6 Publications

[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	ITGAL
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This ITGAL antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP), Functional Studies (Func), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	C57BL/6 mouse splenic secondary cytotoxic T lymphocytes
Clone:	M17-4
Isotype:	IgG2a
Specificity:	The rat monoclonal antibody M17/4 reacts with an extracellular epitope of 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.
Cross-Reactivity (Details):	Mouse
Purification:	Purified by protein-G affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)
Endotoxin Level:	Endotoxin level is less than 0.01 EU/μg of the protein, as determined by the LAL test.

Target Details

Target:	ITGAL
Alternative Name:	CD11a (ITGAL Products)
Background:	<p>Integrin subunit alpha L,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.,LFA-1, LFA1A, ITGAL</p>
Gene ID:	16408
UniProt:	E9Q5M7
Pathways:	Activated T Cell Proliferation , Integrin Complex

Application Details

Application Notes:	<p>Functional application: Blocking.</p> <p>Flow cytometry: Recommended dilution: 1 µg/mL.</p> <p>Immunohistochemistry (frozen sections): Positive tissue: murine spleen or thymus, acetone fixation.</p>
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4
Preservative:	Azide free
Handling Advice:	Do not freeze.

Handling

Storage: 4 °C

Storage Comment: Store at 2-8°C. Do not freeze.

Publications

Product cited in: Smith, Barnum: "Differential expression of beta 2-integrins and cytokine production between gammadelta and alphabeta T cells in experimental autoimmune encephalomyelitis." in: **Journal of leukocyte biology**, Vol. 83, Issue 1, pp. 71-9, (2007) ([PubMed](#)).

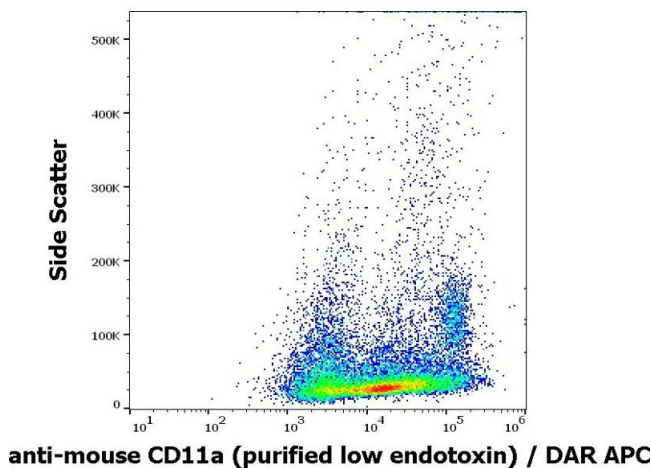
Angelov, Guillaume, Cebecauer, Bosshard, Dojcinovic, Baumgaertner, Luescher: "Soluble MHC-peptide complexes containing long rigid linkers abolish CTL-mediated cytotoxicity." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 176, Issue 6, pp. 3356-65, (2006) ([PubMed](#)).

Beyer, Wang, Peters, Doths, Koerner-Rettberg, Openshaw, Schwarze: "The beta2 integrin CD11c distinguishes a subset of cytotoxic pulmonary T cells with potent antiviral effects in vitro and in vivo." in: **Respiratory research**, Vol. 6, pp. 70, (2005) ([PubMed](#)).

Koseki, Miura, Fujimori, Hokari, Komoto, Hara, Ogino, Nagata, Goto, Hachimura, Kaminogawa, Ishii: "In situ demonstration of intraepithelial lymphocyte adhesion to villus microvessels of the small intestine." in: **International immunology**, Vol. 13, Issue 9, pp. 1165-74, (2001) ([PubMed](#)).

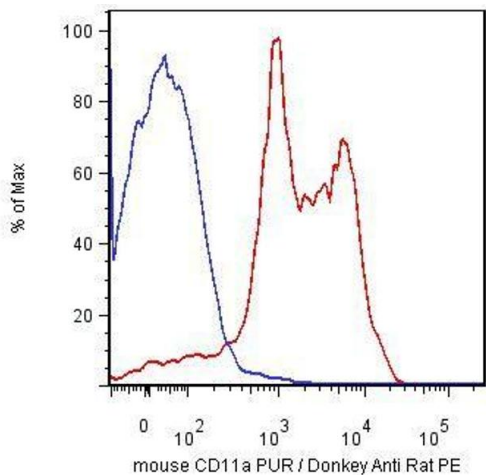
Papayannopoulou, Priestley, Nakamoto, Zafiropoulos, Scott, Harlan: "Synergistic mobilization of hemopoietic progenitor cells using concurrent beta1 and beta2 integrin blockade or beta2-deficient mice." in: **Blood**, Vol. 97, Issue 5, pp. 1282-8, (2001) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



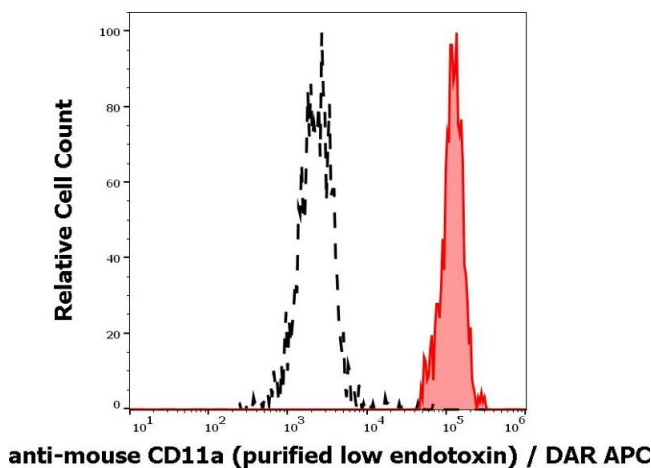
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine splenocytes stained using anti-mouse CD11a (M17/4) purified antibody (low endotoxin, concentration in sample 0,6 µg/mL) DAR APC.



Flow Cytometry

Image 2. Surface staining of mouse splenocytes using anti-CD11a monoclonal antibody (clone M17/4).



Flow Cytometry

Image 3. Separation of murine myeloid cells (red-filled) from cellular debris (black-dashed) in flow cytometry analysis (surface staining) of murine splenocytes stained using anti-mouse CD11a (M17/4) purified antibody (low endotoxin, concentration in sample 0,6 µg/mL) DAR APC.