

Datasheet for ABIN457429

**anti-ITGAL antibody****3** Images**5** 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), 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)

## Target Details

Target:	ITGAL
Alternative Name:	CD11a ( <a href="#">ITGAL Products</a> )
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:	<a href="#">E9Q5M7</a>
Pathways:	<a href="#">Activated T Cell Proliferation</a> , <a href="#">Integrin Complex</a>

## Application Details

Application Notes:	<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

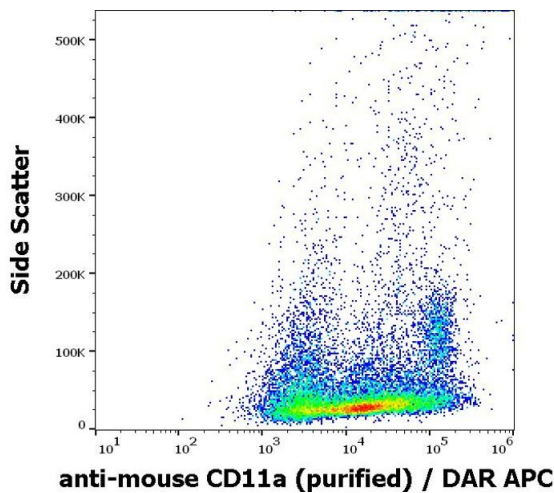
Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Handling

Handling Advice:	<b>Do not freeze.</b>
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

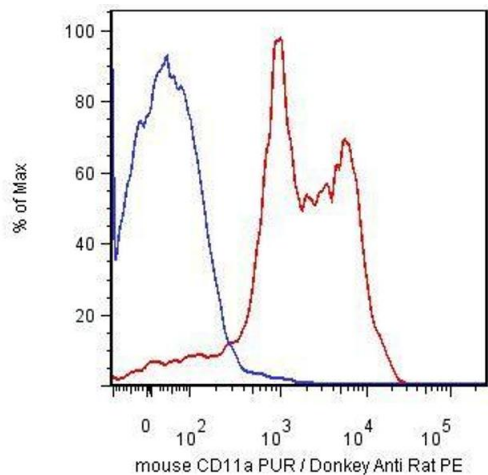
## Publications

Product cited in:	<p>Angelov, Guillaume, Cebecauer, Bosshard, Dojcinovic, Baumgaertner, Luescher: "Soluble MHC-peptide complexes containing long rigid linkers abolish CTL-mediated cytotoxicity." in: <b>Journal of immunology (Baltimore, Md. : 1950)</b>, Vol. 176, Issue 6, pp. 3356-65, (2006) (<a href="#">PubMed</a>).</p> <p>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: <b>Respiratory research</b>, Vol. 6, pp. 70, (2005) (<a href="#">PubMed</a>).</p> <p>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: <b>International immunology</b>, Vol. 13, Issue 9, pp. 1165-74, (2001) (<a href="#">PubMed</a>).</p> <p>Papayannopoulou, Priestley, Nakamoto, Zafiropoulos, Scott, Harlan: "Synergistic mobilization of hemopoietic progenitor cells using concurrent beta1 and beta2 integrin blockade or beta2-deficient mice." in: <b>Blood</b>, Vol. 97, Issue 5, pp. 1282-8, (2001) (<a href="#">PubMed</a>).</p> <p>Sanchez-Madrid, Davignon, Martz, Springer: "Antigens involved in mouse cytolytic T-lymphocyte (CTL)-mediated killing: functional screening and topographic relationship." in: <b>Cellular immunology</b>, Vol. 73, Issue 1, pp. 1-11, (1983) (<a href="#">PubMed</a>).</p>
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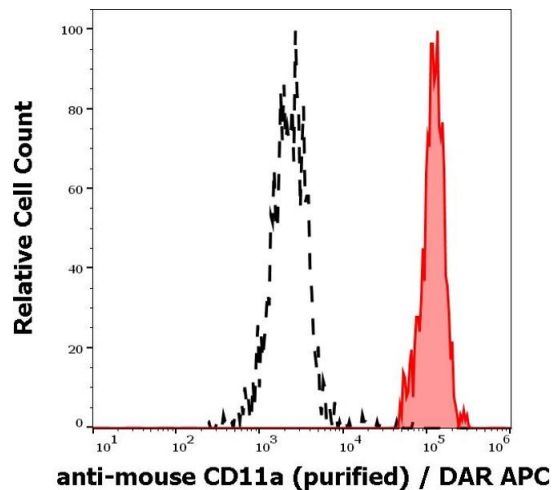
### Flow Cytometry

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