Datasheet for ABIN457404

anti-Integrin beta 2 antibody

3 Images | 10 Publications

Go to Product page

Overview

Quantity:	0.1 mg
Target:	Integrin beta 2 (ITGB2)
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This Integrin beta 2 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunoprecipitation (IP), Functional Studies (Func), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Murine cytotoxic T cell glycoproteins
Clone:	M18-2
Isotype:	IgG2a
Specificity:	The rat monoclonal antibody M18/2 recognizes an extracellular epitope of CD18 antigen (integrin beta2 subunit, beta2 integrin), a 95 kDa type I transmembrane protein expressed on all leukocytes.
No Cross-Reactivity:	Dog
Cross-Reactivity (Details):	Mouse
Purification:	Purified by protein-G affinity chromatography.

Product Details

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:	Integrin beta 2 (ITGB2)
Alternative Name:	CD18 (ITGB2 Products)
Background:	Integrin subunit beta 2,CD18, integrin beta2 subunit, forms heterodimers with four types of CD11 Molecule to constitute leukocyte (beta2) integrins: alphaLbeta2 (CD11a/CD18, LFA-1), alphaMbeta2 (CD11b/CD18, Mac-1, CR3), alphaXbeta2 (CD11c/CD18) and alphaDbeta2 (CD11d/CD18). In most cases, the response mediated by the integrin is a composite of the functions of its individual subunits. These integrins are essential for proper leukocyte migration, mediating intercellular contacts. Absence of CD18 leads to leukocyte adhesion deficiency-1, severe reduction of CD18 expression leads to the development of a psoriasiform skin disease. CD18 is also a target of Mannheimia (Pasteurella) haemolytica leukotoxin and is sufficient to mediate leukotoxin-mediated cytolysis.,Integrin beta2, Complement receptor C3 subunit beta, ITGB2
Gene ID:	16414
UniProt:	P11835
Pathways:	NF-kappaB Signaling, Activation of Innate immune Response, Toll-Like Receptors Cascades, Activated T Cell Proliferation

Application Details

Application Notes:	Functional application: Blocking or stimulation. Flow cytometry: Recommended dilution: 1 μg/mL.
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:

Cullere, Lauterbach, Tsuboi, Mayadas: "Neutrophil-selective CD18 silencing using RNA interference in vivo." in: **Blood**, Vol. 111, Issue 7, pp. 3591-8, (2008) (PubMed).

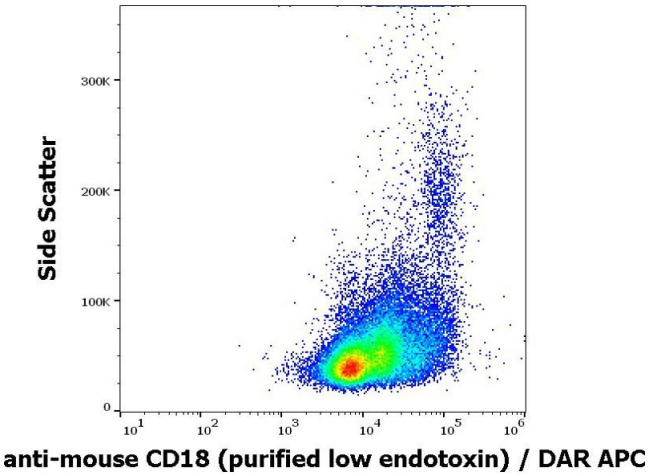
Varga, Balkow, Wild, Stadtbaeumer, Krummen, Rothoeft, Higuchi, Beissert, Wethmar, Scharffetter-Kochanek, Vestweber, Grabbe: "Active MAC-1 (CD11b/CD18) on DCs inhibits full T-cell activation." in: **Blood**, Vol. 109, Issue 2, pp. 661-9, (2007) (PubMed).

Watts, Beurskens, Martin-Padura, Ballantyne, Klickstein, Brenner, Lee: "Manifestations of inflammatory arthritis are critically dependent on LFA-1." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 174, Issue 6, pp. 3668-75, (2005) (PubMed).

Barlow, Langston, Matthews, Chidlow, Kevil: "CD18 deficiency protects against multiple low-dose streptozotocin-induced diabetes." in: **The American journal of pathology**, Vol. 165, Issue 6 , pp. 1849-52, (2004) (PubMed).

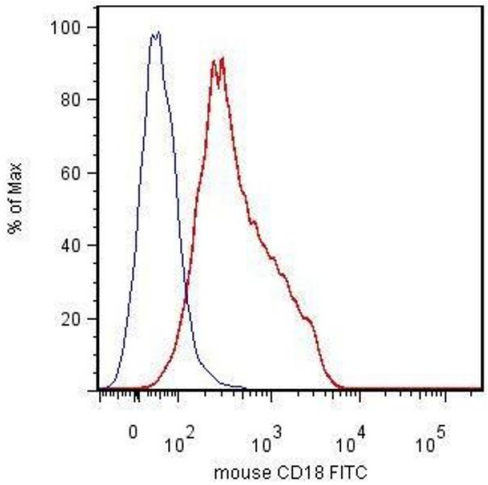
Sakurai, Taguchi, Anand, Ambati, Gragoudas, Miller, Adamis, Ambati: "Targeted disruption of the CD18 or ICAM-1 gene inhibits choroidal neovascularization." in: **Investigative ophthalmology & visual science**, Vol. 44, Issue 6, pp. 2743-9, (2003) (PubMed).

There are more publications referencing this product on: Product page



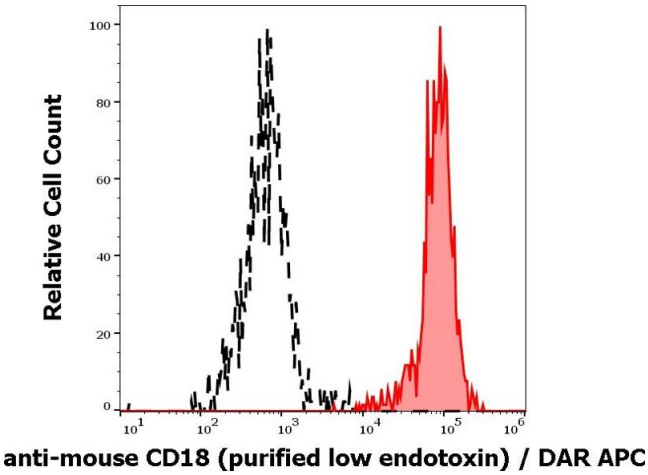
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine splenocytes stained using anti-mouse CD18 (M18/2) purified antibody (low endotoxin, concentration in sample 16 µg/mL) DAR APC.



Flow Cytometry

Image 2. Surface staining of mouse splenocytes using anti-CD18 antibody (clone M18/2).



Flow Cytometry

Image 3. Separation of murine myeloid cells stained using anti-mouse CD18 (M18/2) purified antibody (low endotoxin, concentration in sample 16 µg/mL, DAR APC, red-filled) from murine myeloid cells unstained by primary antibody (DAR APC, black-dashed) in flow cytometry analysis (surface staining) of murine splenocyte suspension.