Datasheet for ABIN1302538

anti-CD11b antibody (APC)

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Overview

Quantity:	100 tests
Target:	CD11b (ITGAM)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD11b antibody is conjugated to APC
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Hu CD11b APC
Immunogen:	Human granulocytes
Clone:	MEM-174
Isotype:	IgG2a
Specificity:	The antibody MEM-174 recognizes an extracellular epitope of CD11b antigen (Mac-1 alpha), a 165-170 kDa type I transmembrane protein mainly expressed on monocytes, granulocytes and NK-cells. The CD11b mediates neutrophil and monocyte interactions with stimulated endothelium.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD11b (ITGAM)
Alternative Name:	CD11b (ITGAM Products)
Background:	Integrin subunit alpha M,CD11b (integrin alphaM subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with integrin beta2 subunit (CD18), expression of the CD11b chain on the cell surface requires the presence of the CD18 antigen. CD11b/CD18 integrin (Mac-1, CR3) is highly expressed on NK cells, neutrophils, monocytes and less on macrophages. CD11b/CD18 integrin is implicated in various adhesive interactions of monocytes, macrophages and granulocytes, facilitating their diapedesis, as well as it mediates the uptake of complement coated particles, serving as a receptor for the iC3b fragment of the third complement component.,Mac-1, Integrin alpha M, ITGAM, CR3A, MO1A, MAC1A
Gene ID:	3684
UniProt:	P11215
Pathways:	Apoptosis, Activation of Innate immune Response, Toll-Like Receptors Cascades, Activated T Cell Proliferation

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing 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 Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

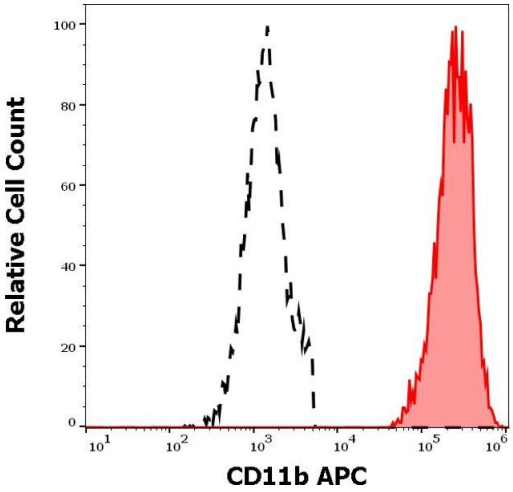
Publications

Product cited in:

Hasan, Osickova, Bumba, Novák, Sebo, Osicka: "Interaction of Bordetella adenylate cyclase toxin with complement receptor 3 involves multivalent glycan binding." in: **FEBS letters**, Vol. 589 , Issue 3, pp. 374-9, (2015) (PubMed).

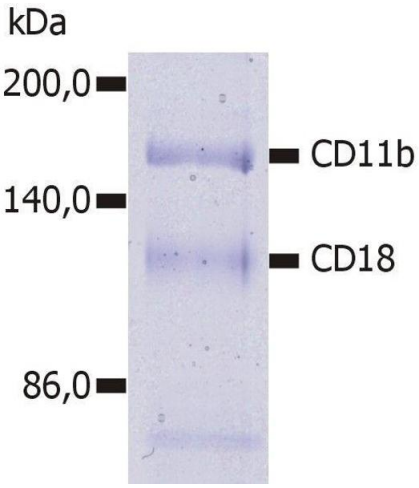
Drbal, Moertelmaier, Holzhauser, Muhammad, Fuertbauer, Howorka, Hinterberger, Stockinger, Schütz: "Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement." in: **International immunology**, Vol. 19, Issue 5, pp. 675-84, (2007) (PubMed).

Images



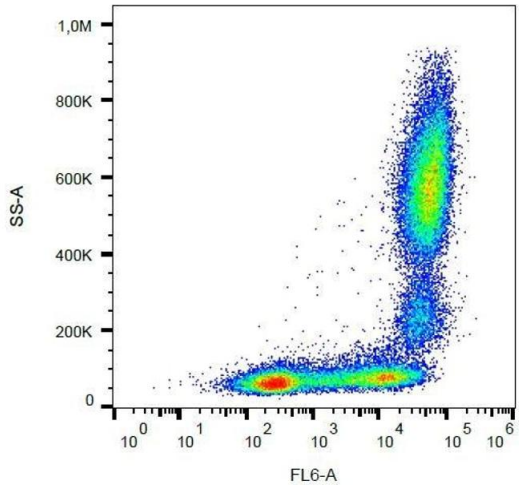
Flow Cytometry

Image 1. Separation of human monocytes (red-filled) from CD11b negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD11b (MEM-174) APC antibody (10 µL reagent / 100 µL of peripheral whole blood).



Immunoprecipitation

Image 2. Immunoprecipitation of human CD11b/CD18 heterodimer from the lysate of washed PBMC isolated from healthy donor. Lysate was subjected to affinity column chromatography using anti-human CD11b (MEM-174) immunosorbent. Eluted immunoprecipitate was resolved on 7.5% SDS-PAGE and stained with Coomasie Blue.



Flow Cytometry

Image 3. Surface staining of human peripheral blood with anti-human CD11b (MEM-174) APC.