

ARG62718 anti-CD11b antibody [M1/70] (Functional Grade)

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Functional grade and low endotoxin Rat Monoclonal antibody [M1/70] recognizes CD11b
Tested Reactivity	Hu, Ms, NHuPrm, Rb
Tested Application	CyTOF®-candidate, FACS, FuncSt, IHC-Fr, IP
Specificity	The clone M1/70 detects CD11b (integrin alphaM subunit), a type I transmembrane protein mainly expressed on monocytes/macrophages, granulocytes and NK-cells, which associates with CD18 to form Mac-1 integrin that plays important role in cell-cell interactions.
Host	Rat
Clonality	Monoclonal
Clone	M1/70
Isotype	IgG2b
Target Name	CD11b
Species	Mouse
Immunogen	B10 mouse spleen cells enriched for T cells
Conjugation	Un-conjugated
Alternate Names	MAC1A; CR3A; CR-3 alpha chain; Cell surface glycoprotein MAC-1 subunit alpha; Integrin alpha-M; MAC-1; CD11 antigen-like family member B; Leukocyte adhesion receptor MO1; MO1A; SLEB6; Neutrophil adherence receptor; CD antigen CD11b; CD11B

Application Instructions

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	1 µg/ml
	FuncSt	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	Functional studies: In vitro blocking of CD11b. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

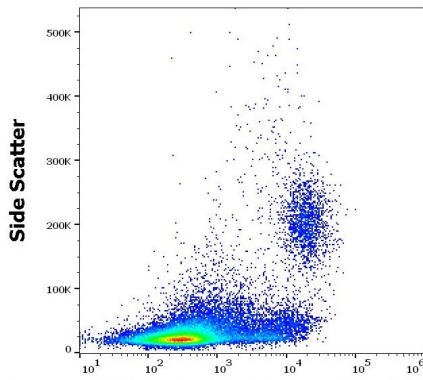
Properties

Form	Liquid
Purification	Purification with Protein G.
Purification Note	0.2 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)

Buffer	PBS (pH 7.4)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

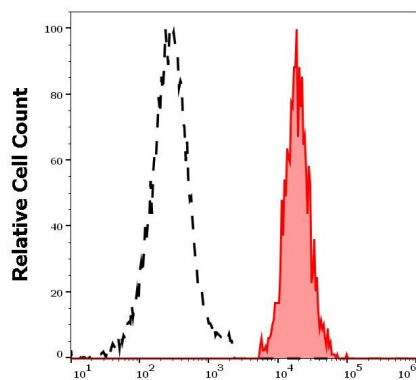
Bioinformation

Database links	GeneID: 16409 Mouse GeneID: 3684 Human Swiss-port # P11215 Human
Background	<p>CD11b (integrin alpha M chain): Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form a leukocyte-specific integrin referred to as macrophage receptor 1 ('Mac-1'), or inactivated-C3b (iC3b) receptor 3 ('CR3'). The alpha M beta 2 integrin is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]</p>
Function	<p>CD11b: Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens (PubMed:9558116, PubMed:20008295). It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). May regulate phagocytosis-induced apoptosis in extravasated neutrophils. May play a role in mast cell development. Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development. [UniProt]</p>
Highlight	<p>Related products: CD11b antibodies; CD11b Duos / Panels; Anti-Rat Rat secondary antibodies; Related news: CyTOF-candidate Antibodies New antibody panels and duos for Tumor immune microenvironment Anti-SerpinB9 therapy, a new strategy for cancer therapy</p>
Research Area	MDSC Marker antibody; Myeloid-derived suppressor cell antibody
Calculated Mw	127 kDa



ARG62718 anti-CD11b antibody [M1/70] (Functional Grade) FACS image

Flow Cytometry: Murine splenocyte suspension stained with ARG62718 anti-CD11b antibody [M1/70] (Functional Grade) at 0.6 µg/ml dilution, followed by APC-conjugated Donkey anti-Rat antibody.



ARG62718 anti-CD11b antibody [M1/70] (Functional Grade) FACS image

Flow Cytometry: Separation of murine CD11b positive myeloid cells (red-filled) from murine CD11b negative lymphocytes (black-dashed). Murine splenocyte suspension stained with ARG62718 anti-CD11b antibody [M1/70] (Functional Grade) at 0.6 µg/ml dilution, followed by APC-conjugated Donkey anti-Rat antibody.