

ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MEM-148] recognizes CD18 / LFA1 beta
Tested Reactivity	Hu
Species Does Not React With	Pig
Tested Application	CyTOF®-candidate, FACS, FuncSt, IP, WB
Specificity	The clone MEM-148 recognizes an epitope on CD18 which is essentially inaccessible in intact integrin molecules on resting leukocytes, but is exposed on high-affinity state of LFA-1 or on unassociated CD18. CD18 (integrin beta2 subunit; beta2 integrin) is a 90-95 kDa type I transmembrane protein expressed on all leukocytes. HLDA VI; WS Code AS A052
Host	Mouse
Clonality	Monoclonal
Clone	MEM-148
Isotype	IgG1
Target Name	CD18 / LFA1 beta
Immunogen	Peripheral blood mononuclear cells
Conjugation	Un-conjugated
Alternate Names	MF17; LAD; CD antigen CD18; MFI7; MAC-1; Cell surface adhesion glycoproteins LFA-1/CR3/p150,95 subunit beta; LCAMB; Integrin beta-2; Complement receptor C3 subunit beta; LFA-1; CD18

Application Instructions

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	8 µg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent

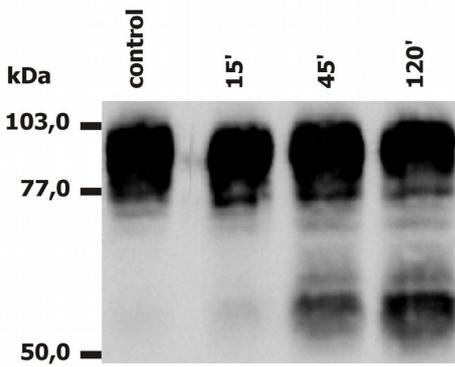
Application Note	FACS: The clone MEM-148 is an excellent marker of activated myeloid cells. WB: Under non-reducing condition. Functional studies: The clone MEM-148 induces homotypic cell aggregation and high-affinity LFA-1 conformation in resting leukocytes. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
------------------	---

Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
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.

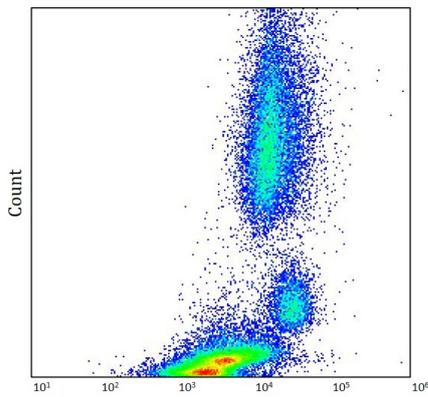
Bioinformation

Database links	GeneID: 3689 Human Swiss-port # P05107 Human
Gene Symbol	ITGB2
Gene Full Name	integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)
Background	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.
Function	Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins alpha-M/beta-2 and alpha-X/beta-2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin alpha-X/beta-2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin alpha-M/beta-2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin alpha-M/beta-2 is also a receptor for factor X. Integrin alpha-D/beta-2 is a receptor for ICAM3 and VCAM1. Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation. [UniProt]
Highlight	Related products: CD18 antibodies; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Research Area	Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody
Calculated Mw	85 kDa
PTM	Both Ser-745 and Ser-756 become phosphorylated when T-cells are exposed to phorbol esters (PubMed:11700305). Phosphorylation on Thr-758 (but not on Ser-756) allows interaction with 14-3-3 proteins (PubMed:11700305, PubMed:16301335).



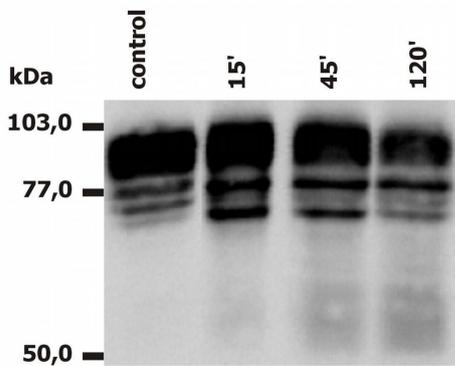
ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148] WB image

Western blot: PMA-activated neutrophils stained with ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148].



ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148] FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148] at 1.67 µg/ml dilution.



ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148] WB image

Western blot: PMA-activated monocytes stained with ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148].