

## 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

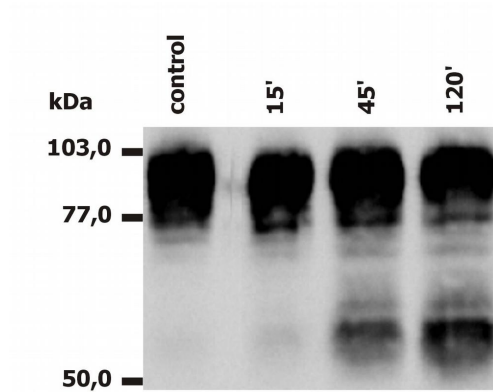
Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	8 µg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent
Application Note	<p>FACS: The clone MEM-148 is an excellent marker of activated myeloid cells.</p> <p>WB: Under non-reducing condition.</p> <p>Functional studies: The clone MEM-148 induces homotypic cell aggregation and high-affinity LFA-1 conformation in resting leukocytes.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

### 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.

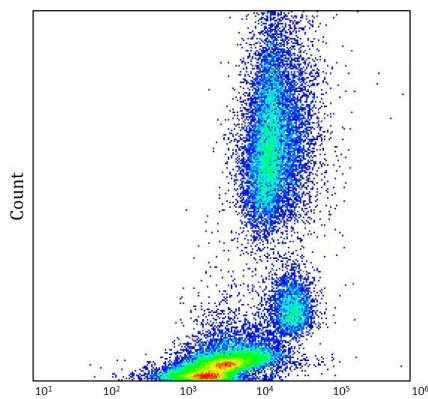
## Bioinformation

Database links	<a href="#">GeneID: 3689 Human</a> <a href="#">Swiss-port # P05107 Human</a>
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 cytotoxicity.
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: <a href="#">CD18 antibodies: Anti-Mouse IgG secondary antibodies:</a> Related news: <a href="#">CyTOF-candidate Antibodies</a>
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).



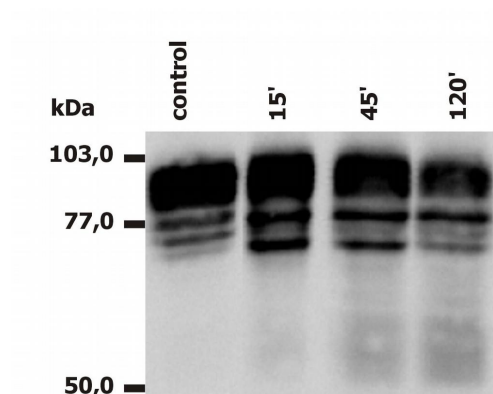
ARG62752 anti-CD18 / LFA1 beta antibody [MEM-148] WB image

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  $\mu\text{g}/\text{ml}$  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].