

## ARG53780 anti-CD18 / LFA1 beta antibody [MEM-48] (PE)

Package: 100 tests  
Store at: 4°C

### Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [MEM-48] recognizes CD18 / LFA1 beta
Tested Reactivity	Hu
Species Does Not React With	Dog
Tested Application	FACS
Specificity	The clone MEM-48 recognizes an epitope involving residues 534-546 in cysteine-rich repeat 3 of the CD18 antigen (integrin beta2 subunit; beta2 integrin). CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.
Host	Mouse
Clonality	Monoclonal
Clone	MEM-48
Isotype	IgG1
Target Name	CD18 / LFA1 beta
Immunogen	Leukocytes of a patient suffering from a LGL-type leukemia.
Conjugation	PE
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
	FACS	20 µl / 10 <sup>6</sup> cells

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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]

Research Area

Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody

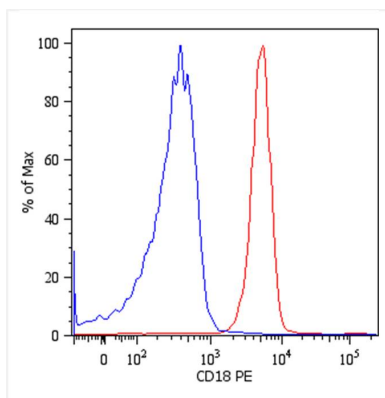
Calculated Mw

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).

## Images



ARG53780 anti-CD18 / LFA1 beta antibody [MEM-48] (PE) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG53780 anti-CD18 / LFA1 beta antibody [MEM-48] (PE). Cells in the granulocyte gate were used for analysis.