

Product datasheet

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ARG62751 anti-CD18 / LFA1 beta antibody [MEM-48]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [MEM-48] recognizes CD18 / LFA1 beta

Tested Reactivity Hu
Species Does Not React With Dog

Tested Application FACS, FuncSt, IHC-Fr, IHC-P, IP, WB

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 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
	FACS	2 μg/ml
	FuncSt	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	10 μg/ml
	IP	Assay-dependent
	WB	2 μg/ml
Application Note	WB: Sample preparation: buffer with laurylmaltoside, 2x non-reducing SDS. Application note: Non-reducing condition. SDS-PAGE (6% separating gel). Functional studies: The clone MEM-48 induces high-affinity conformation of LFA-1 complex. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: Kg-1a human leukemia cells IHC-P: Spleen and microglia	

Properties

Form Liquid

Purification Purified from ascites 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]

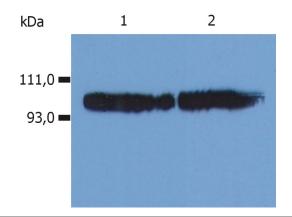
Research Area Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody

Calculated Mw 85 kDa

PTM Both Ser-745 and Ser-756 become phosphorylated when T-cells are exposed to phorbol esters

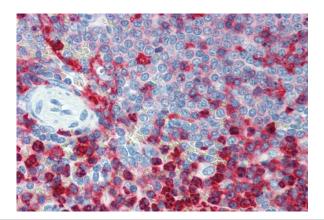
(PubMed:11700305). Phosphorylation on Thr-758 (but not on Ser-756) allows interaction with 14-3-3

proteins (PubMed:11700305, PubMed:16301335).



ARG62751 anti-CD18 / LFA1 beta antibody [MEM-48] WB image

Western blot: 1) KG-1a cell lysate, and 2) HPB-ALL Human peripheral blood T cell leukemia cell lysate stained with ARG62751 anti-CD18 / LFA1 beta antibody [MEM-48].



ARG62751 anti-CD18 / LFA1 beta antibody [MEM-48] IHC-P image

Immunohistochemistry: Human spleen (paraffin sections) stained with ARG62751 anti-CD18 / LFA1 beta antibody [MEM-48].