

ARG65497 anti-CD18 / LFA1 beta antibody [MEM-48] (low endotoxin)

Package: 100 µg
Store at: -20°C

Summary

Product Description	Azide free and low endotoxin 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

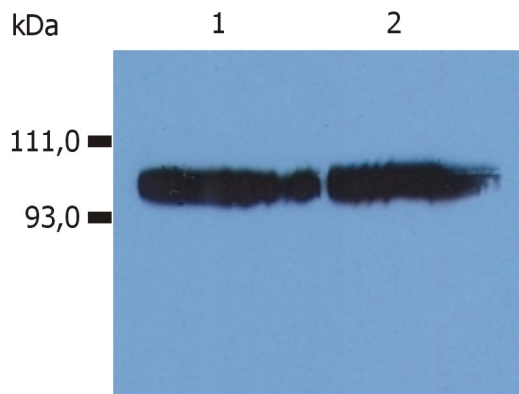
Application table	Application	Dilution
	FACS	2 µg/ml
	FuncSt	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	10 µg/ml
	IP	Assay-dependent
	WB	2 µg/ml
Application Note	WB: Sample preparation: Buffer with laurylmaltoside, 2x non-reducing SDS Application note: Non-reducing condition. SDS-PAGE (6% separating 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	Purification with Protein A.
Purification Note	0.2 µm filter sterilized. Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test.
Purity	> 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.

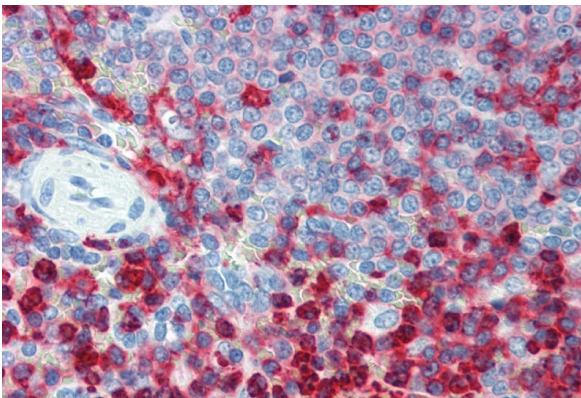
Bioinformation

Database links	GeneID: 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).



ARG65497 anti-CD18 / LFA1 beta antibody [MEM-48] (low endotoxin) WB image

Western blot: 1) KG-1a cell lysate, and 2) HPB-ALL Human peripheral blood T cell leukemia cell lysate stained with ARG65497 anti-CD18 / LFA1 beta antibody [MEM-48] (low endotoxin).



ARG65497 anti-CD18 / LFA1 beta antibody [MEM-48] (low endotoxin) IHC-P image

Immunohistochemistry: Human spleen (paraffin sections) stained with ARG65497 anti-CD18 / LFA1 beta antibody [MEM-48] (low endotoxin).