

ARG65487
anti-CD18 / LFA1 beta antibody [MEM-148] (low endotoxin)Package: 100 µg
Store at: -20°C

Summary

| | |
|-----------------------------|--|
| Product Description | Azide free and low endotoxin Mouse Monoclonal antibody [MEM-148] recognizes CD18 / LFA1 beta |
| Tested Reactivity | Hu |
| Species Does Not React With | Pig |
| Tested Application | 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 |
|-------------------|-------------|-----------------|
| | FACS | 8 µg/ml |
| | FuncSt | Assay-dependent |
| | IP | Assay-dependent |
| | WB | Assay-dependent |

Application Note

FACS: The clone MEM-148 is 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.

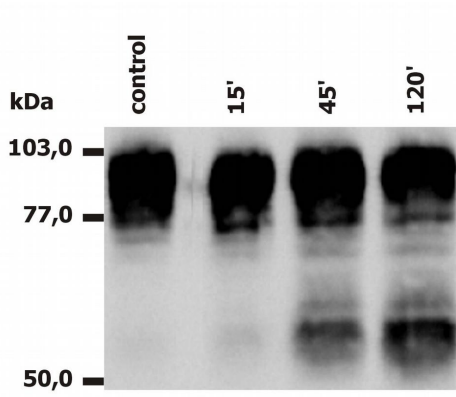
Properties

| | |
|------|--------|
| Form | Liquid |
|------|--------|

| | |
|---------------------|--|
| Purification | 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. |

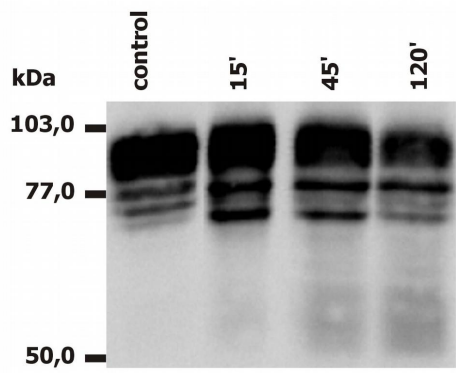
Bioinformation

| | |
|----------------|---|
| 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). |



ARG65487 anti-CD18 / LFA1 beta antibody [MEM-148] (low endotoxin) WB image

Western blot: PMA-activated neutrophils stained with ARG65487 anti-CD18 / LFA1 beta antibody [MEM-148] (low endotoxin).



ARG65487 anti-CD18 / LFA1 beta antibody [MEM-148] (low endotoxin) WB image

Western blot: PMA-activated monocytes stained with ARG65487 anti-CD18 / LFA1 beta antibody [MEM-148] (low endotoxin).
