

Product datasheet for **SM3103B**

CD18 (ITGB2) Mouse Monoclonal Antibody [Clone ID: MEM-48]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-48
Applications:	FC, FN, IHC, IP, WB
Recommended Dilution:	Flow cytometry. Immunoprecipitation. Western blot: 2 µg/ml. Positive control: Kg-1a human leukemia cell lysate. Sample preparation: buffer with laurylmaltoside, 2 x non-reducing SDS. Application note: Non-reducing conditions. SDS-PAGE (6% separating gel). Immunohistochemistry on frozen sections. Functional application: The antibody MEM-48 induces high-affinity conformation of LFA-1 complex.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Leukocytes of a patient suffering from a LGL-type leukemia.
Specificity:	This antibody recognizes an epitope involving residues 534-546 in cysteine-rich repeat 3 of the CD18 antigen (integrin b2 subunit; b2 integrin). CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 Label: Biotin State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein-A affinity chromatography; purity > 95% (by SDS-PAGE)
Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2 - 8 °C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	integrin subunit beta 2



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Database Link: [Entrez Gene 3689 Human P05107](#)

Background: CD18, integrin b2 subunit, forms heterodimers with four types of CD11 molecule to constitute leukocyte (b2) integrins: aLb2 (CD11a/CD18, LFA-1), aMb2 (CD11b/CD18, Mac-1, CR3), aXb2 (CD11c/CD18) and aDb2 (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.

Synonyms: Integrin beta-2, MFI7

Product images:

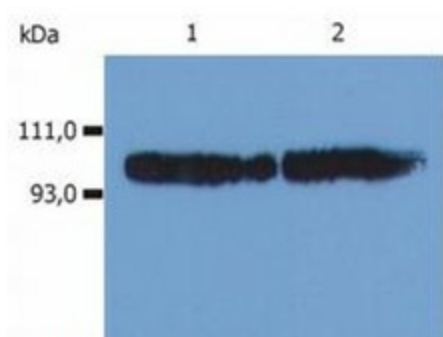
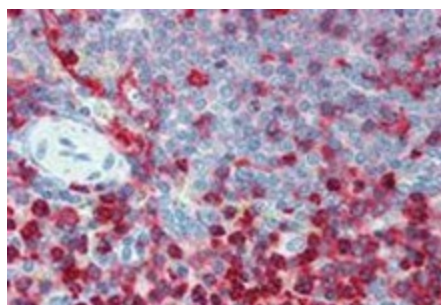
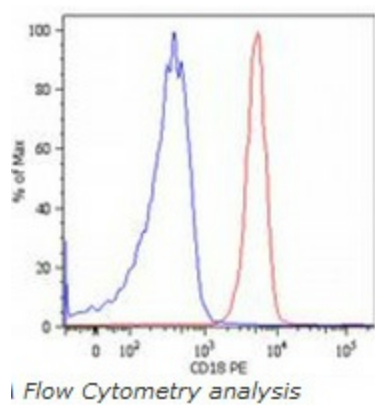


Fig. 1B Western Blotting

Western Blotting analysis (non-reducing conditions) of whole cell lysate using anti-human CD18 (MEM-48). Lane 1: KG-1a human acute myeloid leukemia cell line Lane 2: HPB-ALL human peripheral blood T cell leukemia cell line



Immunohistochemistry staining of human spleen (paraffin sections) using anti-CD18 (MEM-48).



Surface staining of human peripheral blood cells with anti-human CD18 (MEM-48) PE. Cells in the granulocyte gate were used for analysis.