

## Product datasheet for **SM3103P**

### 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: 2 µg/ml. Immunoprecipitation. Western blot (non-reducing conditions): 2 µg/ml. Positive Control: Kg-1a human leukemia cell lysate. Sample preparation: buffer with laurylmaltoside, 2 x non-reducing SDS. SDS-PAGE (6% separating gel, 4% stacking gel). Immunohistochemistry on paraffin sections: 10 µg/ml. Positive tissue: spleen, microglia. Immunohistochemistry on frozen sections. Functional Assays: The antibody induces high-affinity conformation of LFA-1 complex.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Leucocytes of a patient suffering from a LGL-type leukaemia
Specificity:	The antibody recognizes an epitope involving residues 534-546 in cysteine-rich repeat 3 of the CD18 antigen (Integrin beta2 chain). CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.
Formulation:	PBS, pH~7.4 with 15 mM Sodium Azide as preservative. State: Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)
Concentration:	lot specific
Purification:	Purified by sequential steps of physicochemical fractionation (differential precipitation and solid-phase chromatography methods).
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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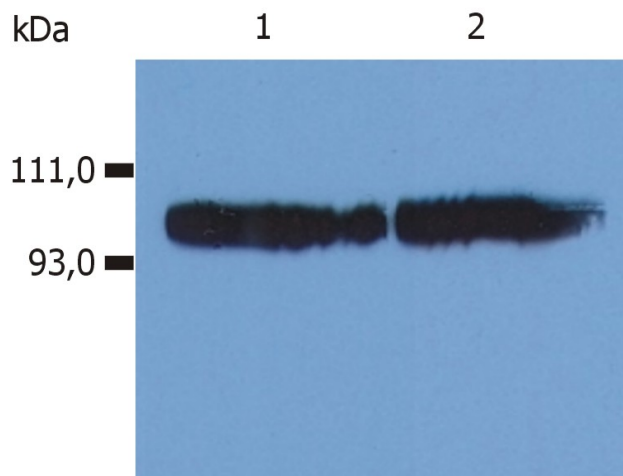
**Gene Name:** integrin subunit beta 2

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

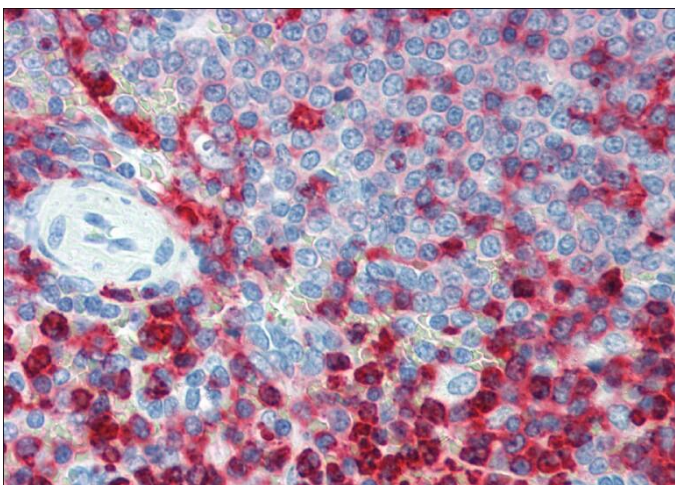
**Background:** CD18, integrin b2 subunit, forms heterodimers with four types of CD11 molecule to constitute leukocyte (b2) integrins: aLb2 (CD11a/CD18, LFA-1), aMb2 (CD11b/CD18, Mac-1, CR3), aXb2 (CD11c/CD18) and aDb2 (CD11d/CD18). In most cases, the response mediated by the integrin is a composite 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:



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).

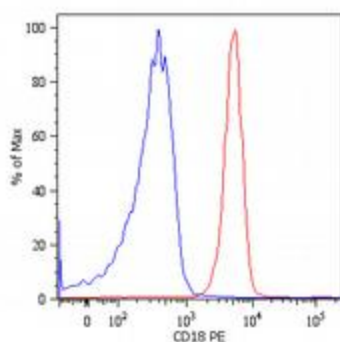


Figure 1A. Surface staining of human peripheral blood cells with anti-human CD18 (MEM-48) PE. Cells in the granulocyte gate were used for analysis.