

## Product datasheet for **SM3103R**

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

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-48
Applications:	FC, IHC, WB
Recommended Dilution:	Flow Cytometry analysis of human blood cells using 20 $\mu$ l reagent / 100 $\mu$ l of whole blood or 10e6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
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 $\beta$ 2 subunit; $\beta$ 2 integrin). CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.
Formulation:	Phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent Label: PE State: Liquid Ig fraction Label: Conjugated with R-Phycoerythrin under optimum conditions
Purification:	Size-exclusion chromatography
Conjugation:	PE
Storage:	Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Gene Name:	integrin subunit beta 2
Database Link:	<a href="#">Entrez Gene 3689 Human P05107</a>



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**Background:**

CD18, integrin b2 subunit, forms heterodimers with four types of CD11 molecule to constitute leukocyte (b2) integrins:  $\alpha$ Lb2 (CD11a/CD18, LFA-1),  $\alpha$ Mb2 (CD11b/CD18, Mac-1, CR3),  $\alpha$ Xb2 (CD11c/CD18) and  $\alpha$ Db2 (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

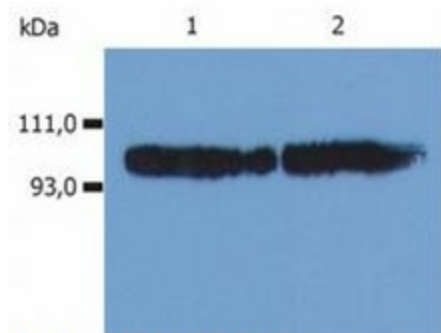
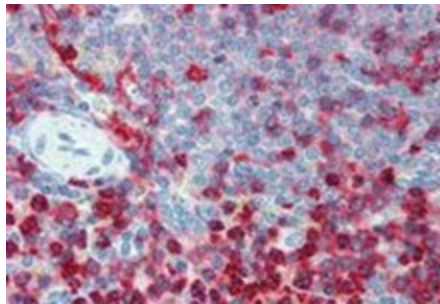
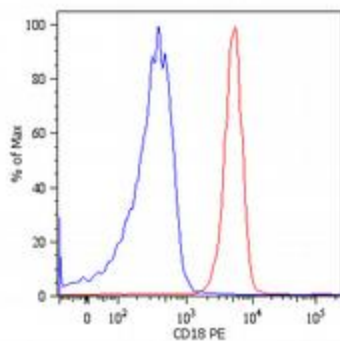
**Product images:**

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.