

11-216-C100

## Monoclonal Antibody to CD18 Purified Antibody (0.1 mg)

Clone: MEM-48

**Isotype:** Mouse IgG1

**Specificity:** The antibody 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.

Regulatory Status: RUO

**Immunogen:** Leukocytes of a patient suffering from a LGL-type leukemia.

Species Reactivity: Human

Negative Species: Canine (Dog)

**Application:** Flow Cytometry

Recommended dilution: 2 µg/ml

Immunoprecipitation Western Blotting

Recommended dilution: 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 (paraffin sections)

Recommended dilution: 10 μg/ml Positive tissue: spleen, microglia Immunohistochemistry (frozen sections)

**Functional Application** 

The antibody MEM-48 induces high-affinity conformation of LFA-1 complex.

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

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.

For laboratory research only, not for drug, diagnostic or other use.



## PRODUCT DATA SHEET

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