

A7-216-T025

## **Monoclonal Antibody to CD18** Alexa Fluor® 700 conjugated (25 tests)

Clone: MEM-48

Isotype: Mouse IqG1

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)

Preparation: The purified antibody is conjugated with Alexa Fluor® 700 under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

The reagent is designed for Flow Cytometry analysis of human blood cells using 4  $\mu l$  reagent / 100  $\mu l$  of whole blood or 10  $^6$  cells in a suspension. Usage:

The content of a vial (0.1 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number: See vial label

CD18, integrin beta2 subunit, forms heterodimers with four types of CD11 **Background:** 

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.





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