

1P-340-T025

## **Monoclonal Antibody to CD18** Phycoerythrin (PE) conjugated (25 tests)

Clone: MEM-148 Isotype: Mouse IqG1

Specificity: The antibody MEM-148 recognizes an epitope on CD18 which is essentially

> inaccessible in intact integrin molecules on resting leukocytes, but is exposed on high-affinity state of LFA-1 or on unassociated CD18. CD18 (integrin beta2 subunit; beta2 integrin) is a 90-95 kDa type I transmembrane protein expressed on

all leukocytes.

HLDA VI; WS Code AS A052

**Regulatory Status: RUO** 

Peripheral blood mononuclear cells Immunogen:

Species Reactivity: Human **Negative Species:** Porcine

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) 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 20  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10 $^6$  cells in a suspension. Usage:

The content of a vial (0.5 ml) is sufficient for 25 tests.

**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.



## PRODUCT DATA SHEET

## References:

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