

TECHNICAL DATA SHEET

CyFlow™ CD18 Alexa Fluor™ 700 **Anti-Hu; Clone MEM-48**

REF CA220855

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD18
Alternative Names	b2 integrin
Clone	MEM-48
Clonality	monoclonal
Format	Alexa Fluor™ 700
Host / Isotype	Mouse / IgG1

Contact Information:

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Species Reactivity	Human
Negative Species Reactivity	Dog
Quantity	100 tests
Immunogen	Leukocytes of a patient suffering from LGL-type Leukemia

Specificity

The mouse monoclonal antibody MEM-48 recognizes an epitope involving residues 534-546 in cysteine-rich repeat 3 of the CD18 antigen. CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD18 (integrin β2 subunit) forms heterodimers with four types of CD11 molecule to constitute leukocyte (β2) integrins: αLβ2 (CD11a/CD18, LFA-1), αMβ2 (CD11b/CD18, Mac-1, CR3), αXβ2 (CD11c/CD18) and αDβ2 (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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