

## TECHNICAL DATA SHEET

### CyFlow™ CD18 Low Endotoxin Anti-Hu; Clone MEM-148

**REF** AH284465

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                                    |
|------------------------------------|------------------------------------|
| <b>Antigen</b>                     | CD18                               |
| <b>Alternative Names</b>           | b2 integrin                        |
| <b>Clone</b>                       | MEM-148                            |
| <b>Clonality</b>                   | monoclonal                         |
| <b>Format</b>                      | Low Endotoxin                      |
| <b>Host / Isotype</b>              | Mouse / IgG1                       |
| <b>Species Reactivity</b>          | Human                              |
| <b>Negative Species Reactivity</b> | Pig                                |
| <b>Quantity [Concentration]</b>    | 0.1 mg [ 1 mg/ml ]                 |
| <b>Immunogen</b>                   | Peripheral blood mononuclear cells |

### Specificity

The mouse monoclonal 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

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LFA-1 or on unassociated CD18. CD18 is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.

## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Functional assays

## Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH  $\approx$ 7.4; 0.2  $\mu$ m filter sterilized. Endotoxin level is less than 0.01 EU/ $\mu$ g of the protein, as determined by the LAL test.

## Storage and Stability

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

## Background Information

CD18 (integrin  $\beta$ 2 subunit) forms heterodimers with four types of CD11 molecule to constitute leukocyte ( $\beta$ 2) integrins:  $\alpha$ L $\beta$ 2 (CD11a/CD18, LFA-1),  $\alpha$ M $\beta$ 2 (CD11b/CD18, Mac-1, CR3),  $\alpha$ X $\beta$ 2 (CD11c/CD18) and  $\alpha$ D $\beta$ 2 (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.

## References

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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