

## TECHNICAL DATA SHEET

### CyFlow™ CD14 Alexa Fluor™ 700 Anti-Hu; Clone MEM-15

**REF** BC549280

**For Research Use Only.**

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

### Specifications

|                                    |                                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Antigen</b>                     | CD14                                                                                                                               |
| <b>Alternative Names</b>           | LPS-R                                                                                                                              |
| <b>Clone</b>                       | MEM-15                                                                                                                             |
| <b>Clonality</b>                   | monoclonal                                                                                                                         |
| <b>Format</b>                      | Alexa Fluor™ 700                                                                                                                   |
| <b>Host / Isotype</b>              | Mouse / IgG1                                                                                                                       |
| <b>Species Reactivity</b>          | Human, Non-Human Primates                                                                                                          |
| <b>Negative Species Reactivity</b> | —                                                                                                                                  |
| <b>Quantity</b>                    | 100 tests                                                                                                                          |
| <b>Immunogen</b>                   | A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a patient suffering from proteinuria |

### Specificity

The mouse monoclonal antibody MEM-15 recognizes CD14 antigen, a 53-55 kDa GPI (glycosylphosphatidylinositol)-linked membrane glycoprotein expressed on monocytes, macrophages

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and weakly on granulocytes; also expressed by most tissue macrophages. The antibody MEM-15 also reacts with soluble forms of CD14 found in serum and in the urine of some nephrotic patients.

## 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 10<sup>6</sup> 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

|                  |                                                                               |
|------------------|-------------------------------------------------------------------------------|
| <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

CD14 is a 55 kDa GPI-anchored glycoprotein, constitutively expressed on the surface of mature monocytes, macrophages, and neutrophils, where serves as a multifunctional lipopolysaccharide receptor; it is also released to the serum both as a secreted and enzymatically cleaved GPI-anchored form. CD14 binds lipopolysaccharide molecule in a reaction catalyzed by lipopolysaccharide-binding protein (LBP), an acute phase serum protein. The soluble sCD14 is able to discriminate slight structural differences between lipopolysaccharides and is important for neutralization of serum allochthonous lipopolysaccharides by reconstituted lipoprotein particles. CD14 affects allergic, inflammatory and infectious processes.

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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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