

## TECHNICAL DATA SHEET

### **CyFlow™ CD16 PerCP-Cy5.5** **Anti-Hu; Clone 3G8**

**REF** CC764035

**For Research Use Only.**

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

### Specifications

|                                    |                           |
|------------------------------------|---------------------------|
| <b>Antigen</b>                     | CD16                      |
| <b>Alternative Names</b>           | FcγRIIIA, CD16a           |
| <b>Clone</b>                       | 3G8                       |
| <b>Clonality</b>                   | monoclonal                |
| <b>Format</b>                      | PerCP-Cy5.5               |
| <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>                   | Human neutrophils         |

#### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

## Specificity

The mouse monoclonal antibody 3G8 recognizes CD16 antigen, a low affinity receptor for aggregated IgG (FcγRIII antigen). CD16 exists in two different isoforms: CD16a (FcγRIIIA; 50-65 kDa; expressed on NK-cells, monocytes and macrophages) and CD16b (FcγRIIIB; 48 kDa; mainly expressed on neutrophils).

## 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

CD16 (FcγRIII) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcγRIII is expressed in two forms - FcγRIIIA and FcγRIIIB. FcγRIIIA is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with FcεRI-γ subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcγRIIIA is associated, moreover, with FcεRI-β subunit. Besides IgG, FcγRIIIA can be triggered also by oligomeric IgE. FcγRIIIB is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.

## 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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