## anti-human CD16 PE-conjugated

PE- conjugated monoclonal antibody HI16a to human CD16

Cat-No: **21810164** 500 μl

Clone: HI16a

**Specificity:** The antibody HI16a recognizes a 50-60 kDA transmembrane molecule, low affinity FC receptor for IgG (FcrRIII), which is a NK cell-associated antigen. CD16 antigen is expressed on the large majority of NK cells, granulocytes (but on eosinophils), monocytes/macrophages and a subset of T cells. It may involve in signal transduction, NK cell activation and antibody-dependent cellular cytotoxicity (ADCC).

Isotype subclass: Mouse IgG1 I

**Form:** The purified antibody is conjugated with R-Phycoerythrin (R-PE) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

**Expiration date:** The reagent is stable until the expiry date stated on the vial label

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light

**Application:** Flow Cytometry

## References:

- \*) Knapp, W., B. Dorken, E. P. Rieber, et al., eds. 1989 Leucocyte Typing IV: White Cell Differentiation Antigens. P: 582 Oxford University Press, New York
- \*) Barclay, N.A., M.L. Birkeland, M.H. Brown, et al., eds. 1993 The Leucocyte Antigen FactsBook, CD16 Section, Academic Press Inc., San Diego, California, p. 136

**Background:** CD16 (FcγRIII) is a 50-80 kDa glycoprotein serving as a low affinity IgG receptor. Human FcγRIII is expressed in two forms FcγRIII-A and -B. FcγRIII-A 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 FcγRIII-A is associated, moreover, with FcεRI-β subunit. Besides IgG, FcεRI-A can be triggered also by oligomeric IgE. FcγRIII-B is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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