

PE Conjugated Anti-Human CD16 Antibody [PSH04-95] HA600129F



Product Type:	Recombinant Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	FC
Molecular Wt:	Predicted band size: 29 kDa
Clone number:	PSH04-95

Description:	CD16, also known as FcγRIII, is a cluster of differentiation molecule found on the surface of natural killer cells, neutrophils, monocytes, macrophages, and certain T cells. CD16 has been identified as Fc receptors FcγRIIIa (CD16a) and FcγRIIIb (CD16b), which participate in signal transduction. The most well-researched membrane receptor implicated in triggering lysis by NK cells, CD16 is a molecule of the immunoglobulin superfamily (IgSF) involved in antibody-dependent cellular cytotoxicity (ADCC). It can be used to isolate populations of specific immune cells through fluorescent-activated cell sorting (FACS) or magnetic-activated cell sorting, using antibodies directed towards CD16. CD16 is the type III Fcγ receptor. In humans, it exists in two different forms: FcγRIIIa (CD16a) and FcγRIIIb (CD16b), which have 96% sequence similarity in the extracellular immunoglobulin binding regions. While FcγRIIIa is expressed on mast cells, macrophages, and natural killer cells as a transmembrane receptor, FcγRIIIb is only expressed on neutrophils. In addition, FcγRIIIb is the only Fc receptor anchored to the cell membrane by a glycosyl-phosphatidylinositol (GPI) linker, and also plays a significant role in triggering calcium mobilization and neutrophil degranulation. FcγRIIIa and FcγRIIIb together are able to activate degranulation, phagocytosis, and oxidative burst, which allows neutrophils to clear opsonized pathogens.
---------------------	---

Conjugate:	PE
Immunogen:	Recombinant protein within
Positive control:	Human peripheral blood granulocytes.
Subcellular location:	Cell membrane, Secreted.
Database links:	SwissProt: P08637 Human
Recommended Dilutions:	
FC	5 μl per million cells in 100 μl staining volume or 5 μl per 100 μl of whole blood.
Storage Buffer:	Supplied in phosphate-buffered solution, pH 7.2, containing 0.2% ProClean 950 and BSA.
Storage Instruction:	Store at 2°C to 8°C. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

Service mail: support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

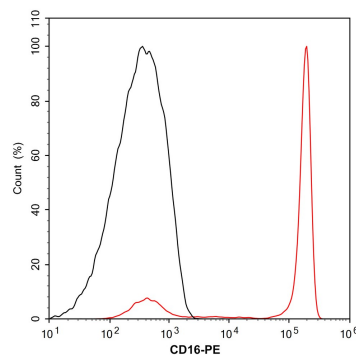


Fig1: Flow cytometric analysis of human peripheral blood granulocytes labelling Human CD16 (HA600129F, PE).

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Liu X et al. CD16(+) fibroblasts foster a trastuzumab-refractory microenvironment that is reversed by VAV2 inhibition. *Cancer Cell*. 2022 Nov
2. Cocker ATH et al. The CD56-CD16+ NK cell subset in chronic infections. *Biochem Soc Trans*. 2023 Jun

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation