

Anti-Human CD16 PE

Catalog Number :08221-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: 3G8

Format/Conjugate: PE

Concentration: 5 uL (0.5 ug)/test

Reactivity: Human

Laser: Blue (488nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

Brightness (1=dim,5=brightest): 5

Isotype: Mouse IgG1, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The 3G8 monoclonal antibody specifically reacts with human CD16, the low affinity IgG receptor III (FC gamma RIII). CD16 is expressed on granulocytes, monocytes, macrophages, and NK cells and plays a role in NK activation and signal transduction. CD16 is expressed as either CD16a or CD16b. CD16a is a polypeptide-anchored transmembrane protein and CD16b is a glycosylphosphatidylinositol (GPI)-anchored protein that is expressed exclusively on neutrophils.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

References

1. Choi, E. I., Wang, R., Peterson, L., Letvin, N. L., Reimann, K. A. (2008). Use of an anti-CD16 antibody for in vivo depletion of natural killer cells in rhesus macaques. *Immunology*, 124(2), 215-222.
2. Perussia, B. I. C. E., Trinchieri, G. I. O. R. G. I. O. (1984). Antibody 3G8, specific for the human neutrophil Fc receptor, reacts with natural killer cells. *The Journal of Immunology*, 132(3), 1410-1415.
3. Vossebeld, P. J., Homburg, C. H., Roos, D., Verhoeven, A. J. (1997). The anti-FcγRIII mAb 3G8 induces neutrophil activation via a cooperative action of FcγRIIIb and FcγRIIa. *The international journal of biochemistry cell biology*, 29(3), 465-473.