For Research Use Only

Recombinant Human CD16(F176V) protein (Myc Tag, His Tag)

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Catalog Number: Eg31662

Basic Information

ED50:
0.5-2 μg/mL

Species:
Human

Purity:
>90 %, SDS-PAGE

GeneID:
2214

Accession:
P08637

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<1.0 EU/μg protein, LAL method

Source:
HEK293-derived Human CD16 protein Gly17-Gln208 (Accession# P08637, F176V) with a Myc tag and a His tag at the C-terminus.

Predicted Molecular Mass:
24.3 kDa

SDS-PAGE:
38-60 kDa, reducing (R) conditions

Formulation:
Lyophilized from sterile PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human CD16 (F176V) (Myc tag, His tag) at 2 μg/mL (100 μL/well) can bind Human IgG1 with a linear range of 0.5-2 μg/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD16, also known as the low affinity Fc gamma receptor III for IgG (Fc γ RIII), exists in two isoforms, Fc γ RIIIa (CD16a) and Fc γ RIIIb (CD16b), encoded by two nearly identical genes, FCGR3A and the FCGR3B. CD16a is expressed on NK cells, macrophages, and placental trophoblasts as a polypeptide-anchored transmembrane protein while CD16b is expressed on neutrophils in a glycosylphosphatidylinositol (GPI)-anchored form. CD16a forms a heteromeric structure with the Fc epsilon RI (gamma) and/or CD3 (zeta) subunits. CD16 mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis.

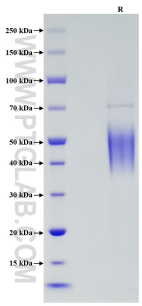
References

1. S Nagarajan, et al. (1995) J Biol Chem. 270(43):25762-70.
2. J E Gessner, et al. (1995) J Biol Chem. 270(3):1350-61.

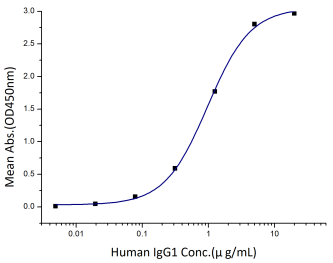
Synonyms

CD16, CD16A, Fc gamma RIII alpha, FCG3, FCGR3, FCGR3A, FCGRIII, FCRIII, FCRIIIA, IGFR3

Selected Validation Data



Purity of Recombinant Human CD16 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



Immobilized Human CD16 (F176V) (Myc tag, His tag) at 2 μg/mL (100 μL/well) can bind Human IgG1 with a linear range of 0.5-2 μg/mL.