

Human CellExp™ Fc gamma RIIB /CD16b, Human Recombinant

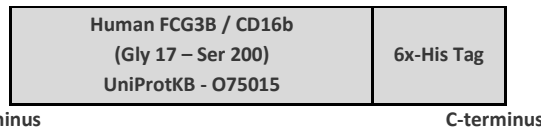
CATALOG NO: 7446-10 10 µg
7446-50 50 µg

ALTERNATE NAMES: Low affinity immunoglobulin gamma Fc region receptor III-B, Fc-gamma RIIB-beta, Fc-gamma RIIB, Fc-gamma RIIBb, FcRIIB, FcRIIBb, IgG Fc receptor III-1, CD antigen CD16b

SOURCE: HEK 293 cells (Gly 17 – Ser 200)

PURITY: ≥95% by SDS-PAGE

MOL. WEIGHT: This protein is fused with 6xHis tag at the C-terminus with a calculated MW of 22 kDa. The predicted N-terminus is Gly 17. The protein migrates as 38 - 50 kDa under reducing condition (SDS-PAGE) due to glycosylation.



FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered PBS (pH 7.4) with 5% trehalose

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS (pH 7.4). Do not vortex.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freeze-thaw cycles.

DESCRIPTION: CD16 is a low affinity Fc receptor, and has been identified as Fc receptors FcγRIIIa (CD16a) and FcγRIIIb (CD16b). These receptors bind to the Fc portion of IgG antibodies. CD16 encoded by two different highly homologous genes in a cell type-specific manner. CD16 is found on the surface of natural killer cells, neutrophil polymorphonuclear leukocytes, monocytes and macrophages. CD16b, also known as FCGR3B and FCG3B, is expressed specifically by neutrophils and stimulated eosinophils. CD16b is the low affinity receptor for the Fc region of immunoglobulins gamma. It binds complexed or aggregated IgG and also monomeric IgG. CD16b by itself is not capable of mediating antibody-dependent cytotoxicity and phagocytosis and cannot transduce signals from outside to inside the cell but may do so by associating with cell-specific components. Soluble CD16b has a regulatory role in inflammatory processes and induces the production of pro-inflammatory cytokines.

BIOLOGICAL ACTIVITY: Measured by its binding ability in a functional ELISA. Recombinant Human Fcγ RIIB / CD16b can bind immobilized Anti-CD20 (Rituximab Cat. No. A1049) coated at 2 µg/ml (100 µl/well)) with a linear range of 1 - 50 µg/ml

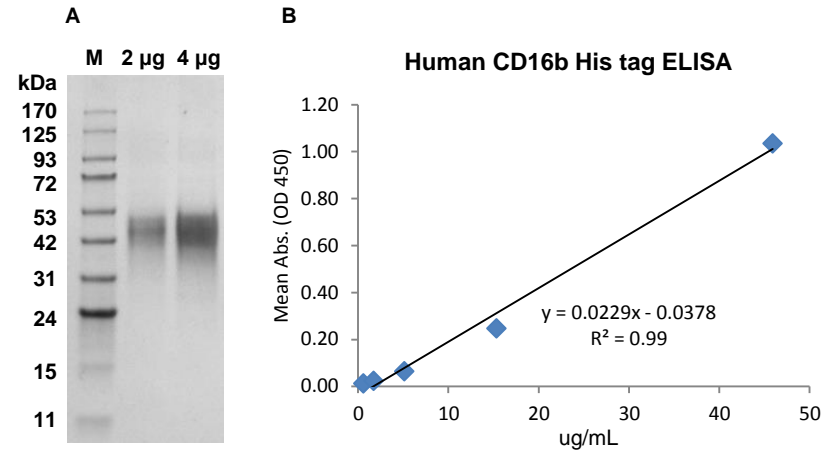


Fig. A. SDS-PAGE (4-20%) of Recombinant CD16b: Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. Lane M-MW marker, Lanes 2-3 human CD16b

Fig. B. Biological activity: Human CD16b can bind immobilized Rituximab (Cat. No. A1049) coated at 2 µg/mL (100 µL/well) with a linear range of 1-50 µg/mL

RELATED PRODUCTS:

- Human CellExp™ FCGR3A/CD16a, human recombinant (Cat. No. 7431)
- Human CellExp™ Fc gamma RIIB /CD32b, human recombinant (Cat. No. 7388)
- QuickDetect™ IgG (Human) ELISA Kit (Cat. No. E4475)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372)
- Human CellExp™ CD360, human recombinant (Cat. No. 7373)

FOR RESEARCH USE ONLY! Not to be used on humans.

