

# Human CellExp™ FCGR3A/CD16a, human recombinant

**CATALOG #:** 7431-10 10 µg  
7431-50 50 µg

**ALTERNATE NAMES:** FCGR3A, CD16A, FCG3, FCGR3, IGFR3

**SOURCE:** HEK 293 cells (Gly 17 – Gln 208)

**PURITY:** ≥ 98% by SDS-PAGE gel

**MOL. WEIGHT:** This protein is fused with 6xhis tag at the C-terminus, and has a calculated MW of 22.7 kDa. The predicted N-terminus is Gly 17. DTT-reduced Protein migrates as 36-45 kDa in SDS-PAGE due to glycosylation.

**ENDOTOXIN LEVEL:** <1 EU/µg by LAL method

**FORM:** Lyophilized

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

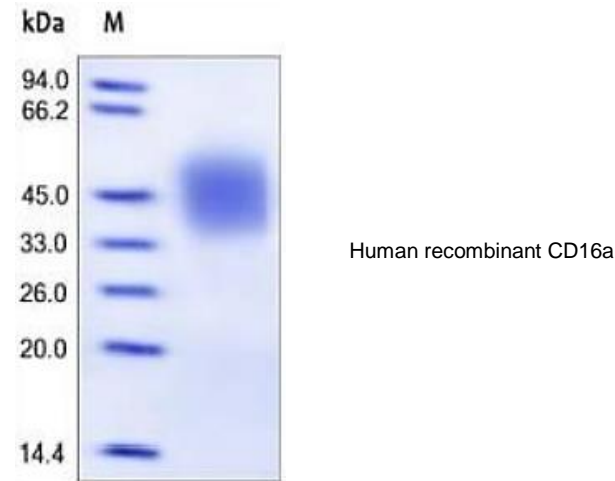
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** CD16 is a low affinity Fc receptor, and has been identified as Fc receptors FcγRIIIa (CD16a) and Fcγ IIIb (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. CD16a antigen is also known as Low affinity immunoglobulin gamma Fc region receptor III-A, Fc-gamma RIII-alpha. CD16b is a low-affinity, GPI-linked receptor expressed by neutrophils and eosinophils, whereas CD16a is an intermediate affinity polypeptide-anchored

of T-cells, immature thymocytes and placental trophoblasts. CD16a is involved in phagocytosis, secretion of enzymes and inflammatory mediators, antibody dependent cytotoxicity and clearance of immune complexes. Aberrant expression or mutations of CD16a is implicated in susceptibility to recurrent viral infections, systemic lupus erythematosus, and alloimmune neonatal neutropenia.

**BIOLOGICAL ACTIVITY:** Measured by its ability to bind human IgG with an estimated KD < 45 nM.



**RELATED PRODUCTS:**

- Human CellExp™ CD223, human recombinant (Cat. No. 7278-10, -50)
- Human CellExp™ CD71, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)
- Human CellExp™ CD360, human recombinant (Cat. No. 7373-20, -100)
- Human CellExp™ CD244, human recombinant (Cat. No. 7374-10, -50)
- Human CellExp™ CD304, human recombinant (Cat. No. 7375-10)
- Human CellExp™ CD319, human recombinant (Cat. No. 7376-10, -50)
- Human CellExp™ CD306, human recombinant (Cat. No. 7377-10, -50)
- Human CellExp™ CD84, human recombinant (Cat. No. 7378-10, -50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

