



Recombinant Protein Technical Manual  
Recombinant Human CD16b/FCGR3B Protein (His  
Tag)  
RPES4150

Product Data:

**Product SKU:** RPES4150

**Size:** 20µg

**Species:** Human

**Expression host:** CHO Cells

**Uniprot:** NP\_000561.3

Protein Information:

**Molecular Mass:** 22.2 kDa

**AP Molecular Mass:** 38-43 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 99 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Low affinity immunoglobulin gamma Fc region receptor III-B; Fc-gamma RIII-beta; FcR0; IgG Fc receptor III; FCG3; FCGR3; CD16b and FCGR3B;FCRIII;FCRIIIb

## Immunogen Information:

**Sequence:** Met 1-Ser 200

## Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 24, also known as signal transducer CD24 or heat stable antigen CD24 (HSA), is a mucin-type glycosylphosphatidylinositol-linked glycoprotein expressed on the surface of B-cells, differentiating neuroblasts and many tumors. It is involved in molecular adhesion and metastatic tumor spread and serve as a normal receptor for P-selectin. The CD24 / P-selectin pathway could be important in dissiminating of tumor cells by facilitating the interaction with platelet and endothelial cells. It has also been considered as a tumor marker. High rate of CD24 expressions have been found in epithelial ovarian cancer, breast cancer, non-small cell lung cancer, prostate cancer and pancreatic cancer.