

Recombinant Protein Technical Manual Recombinant Mouse CD16/FCGR3 Protein (His Tag)

RPES1751

Product Data:

Product SKU: RPES1751 **Size:** 10μg

Species: Mouse Expression host: Human Cells

Uniprot: Q5D5I8

Protein Information:

Molecular Mass: 21.9 kDa

AP Molecular Mass: 35-40 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 μm filtered solution of PBS, pH7.4.

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

Application:

Synonyms: Low affinity immunoglobulin gamma Fc region receptor III; Fcgr3; Fc gamma

Receptor III; CD-antigen 16; CD16; FcRIII; IgG Fc receptor III

Immunogen Information:

Sequence: Leu32-Thr215

Background:

Low affinity immunoglobulin gamma Fc region receptor III (Fc gamma RIII/CD16) is a member of the Ig superfamily. Based on close relationships in their extracellular domains, the Fc gamma Rs have been divided into three classes composing of Fc gamma RI (CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16). Each group may be encoded by multiple genes and exist in different isoforms depending on species and cell type. Mouse CD16 is a type I transmembrane protein having two extracellular Ig-like domains consisting of immunoglobulin domain, repeat, signa and transmembrane, transmembrane helix. It is expressed on a variety of myeloid and lymphoid cells and associates with Fc R gamma to deliver an activating signal upon ligand binding. Fcgr3 is IgG binding and activation or inhibition of immune responses such as antibody-dependent cellular cytotoxicity, phagocytosis, cell surface receptor signaling pathway and positive regulation of type I/IIa/III hypersensitivity.