

Recombinant Human CD16a (F176)

Catalog#:P01105 Derived from Human Cells

DESCRIPTION	<p>Recombinant Human Fc Gamma RIIIA (F176) is produced by our Mammalian expression system and the target gene encoding Gly17-Gln208 is expressed with a 6His tag at the C-terminus. It is identical to FCGR3A158F/V in the reference. Accession#: P08637 Known as: Low Affinity Immunoglobulin Gamma Fc Region Receptor III-A; CD16a Antigen; Fc-Gamma RIII-Alpha; Fc-Gamma RIII; Fc-gamma RIIIA; FcRIII;FcRIIIa; FcR- 10; IgG Fc Receptor III-2; CD16a; FCGR3A; CD16A; FCG3; FCGR3; IGFR3</p>
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
SHIPPING	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
STORAGE	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i> <i>It is not recommended to reconstitute to a concentration less than 100$\mu\text{g/ml}$.</i> Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass:22.7kDa AP Mol Mass:35-50kDa, reducing conditions. Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1ng/μg (1 EU/μg) as determined by LAL test.</p>
BACKGROUND	<p>Receptors for the Fc region of immunoglobulin G (Fc γ R) are divided into three classes and Fc γ RIII is a multifunctional, low/intermediate affinity receptor. In humans, FcγRIII is expressed as two distinct forms (Fc γ RIIIA and Fc γ RIIIB) that are encoded by two different but highly homologous genes in a cell type- specific manner. Fc γ RIIIB is a low-affinity, GPI-linked receptor expressed by neutrophils and eosinophils, whereas FcγRIIIA is an intermediate affinity polypeptide-anchored transmembrane glycoprotein expressed by a subset of T lymphocytes, natural killer (NK) cells, monocytes, and macrophages. The FcγRIIIA receptor is involved in phagocytosis, secretion of enzymes, inflammatory mediators, antibody-dependent cellular cytotoxicity (ADCC), mast cell degranulation, and clearance of immune complexes. Fc γ RIIIA has an immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain and delivers an activation signal in the immune responses. Aberrant expression or mutations in this gene is implicated in susceptibility to recurrent viral infections, systemic lupus erythematosus, and alloimmune neonatal neutropenia. In humans, it is a 50-70kD type I transmembrane activating receptor.</p>
<p>SDS-PAGE</p> 	