Recombinant Human CD16a/FCGR3A Protein (His Tag)

Catalog Number: PKSH032420

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

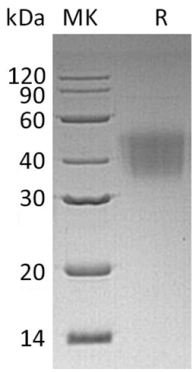
Description

Species	Human
Source	HEK293 Cells-derived Human CD16a;FCGR3A protein Gly17-Gln208, with an C-terminal His
Calculated MW	22.7 kDa
Observed MW	35-50 kDa
Accession	P08637
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Receptors for the Fc region of immunoglobin G (FcγR) are divided into three classes and FcγRIII is a multifunctional; low/intermediate affinity receptor. In humans; FcγRIII is expressed as two distinct forms (FcγRIIIA and FcγRIIIB) that are encoded by two different but highly homologous genes in a cell type-specific manner. FcγRIIIB 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. FcγRIIIA 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 - 70 kD type I transmembrane activating receptor.