

Recombinant Human CD32a/FCGR2A Protein (H131, His Tag)

Catalog No. PKSH032418

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

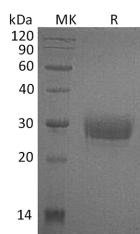
Description

Synonyms	Low affinity immunoglobulin gamma Fc region receptor II-a; IgG Fc receptor II-a; CDw32; Fc-gamma RII-a; Fc-gamma-RIIa; FcRII-a; CD32; FCGR2A; FCG2; FCGR2A1; IGFR2; CD32A; CDw32; Fc gamma RIIA; FCG2; FcGR; FCGR2
Species	Human
Expression Host	HEK293 Cells
Sequence	Ala36-Ile218
Accession	P12318
Calculated Molecular Weight	21.1 kDa
Observed molecular weight	25-32 kDa
Tag	C-His
Bioactivity	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°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 a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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.

For Research Use Only

Background

Human FcγRs are divided into three classes designated FcγRI (CD64); FcγRII (CD32); and FcγRIII (CD16); which generate multiple isoforms; are recognized. The activating- type receptor either has or associates non-covalently with an accessory subunit that has an immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain. FcγRI binds IgG with high affinity and functions during early immune responses; whereas FcγRII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. Human CD32; also known as Low affinity immunoglobulin γ Fc region receptor II-a (IgG Fc receptor II-a); FcγRII A or FCGR2A Protein; is expressed on cells of both myeloid and lymphoid lineages as well as on cells of non-hematopoietic origin. Associated with an ITAM-bearing adapter subunit; FcRγ; CD32a (FcγRII A) delivers an activating signal upon ligand binding; and results in the initiation of inflammatory responses including cytolysis; phagocytosis; degranulation; and cytokine production. The responses can be modulated by signals from the co-expressed inhibitory receptors such as Fcγ RII B; and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.