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## 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.

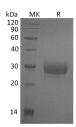
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

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

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# **Background**

Human Fc $\gamma$ Rs are divided into three classes designated Fc $\gamma$ RI (CD64); Fc $\gamma$ RII (CD32); and Fc $\gamma$ RIII (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. Fc $\gamma$ RI binds IgG with high affinity and functions during early immune responses; whereas Fc $\gamma$ RII 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  $\gamma$  Fc region receptor II-a (IgG Fc receptor II-a); Fc $\gamma$ RII 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; FcR $\gamma$ ; CD32a (Fc $\gamma$ RII 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 Fc $\gamma$  RII B; and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.

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