

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

**Catalog Number:** PKSH032418

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

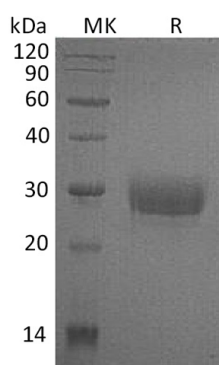
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human CD32a;FCGR2A protein Ala36-Ile218, with an C-terminal His
<b>Calculated MW</b>	21.1 kDa
<b>Observed MW</b>	25-32 kDa
<b>Accession</b>	P12318
<b>Bio-activity</b>	Loaded Human IgG1 Fc (PKSH032558) on Protein-A Biosensor, can bind Human CD32a-His (H167) (PKSH032418) with an affinity constant of 0.666 uM as determined in BLI assay.

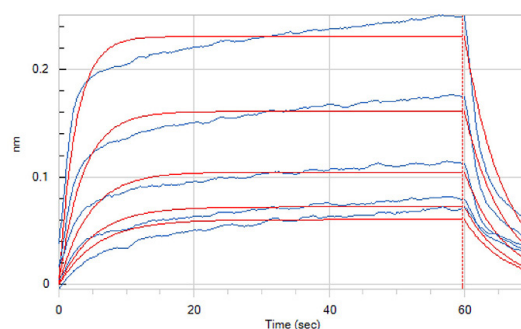
### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.



Loaded Human IgG1 Fc (PKSH032558) on Protein-A Biosensor, can bind Human CD32a-His (H167) (PKSH032418) with an affinity constant of 0.666 uM as determined in BLI assay.

### Background

### For Research Use Only

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 FcγRII B; and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.