

## Recombinant Human CD32a/FCGR2A Protein (167 His, His&AVI Tag), Biotinylated

Catalog No. PKSH030290

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

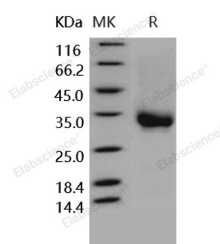
### Description

<b>Synonyms</b>	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
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Met 210
<b>Accession</b>	P12318-1
<b>Calculated Molecular Weight</b>	23.6 kDa
<b>Observed molecular weight</b>	33 kDa
<b>Tag</b>	C-His-Avi
<b>Bioactivity</b>	1. Immobilized human IgG2 at 10 µg/ml (100 µl/well) can bind biotinylated human CD32 with a linear range of 0.16-0.8 µg/ml. 2. Using the Octet RED System, the affinity constant (Kd) of CD32a-AVI-His + BirA bound to human IgG was 12nM. 3. Labeling ratio of biotin to protein: 0.1-0.6.

### 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 sterile 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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

Receptors for the Fc region of IgG (FcγR) are members of the Ig superfamily that function in the activation or inhibition of immune responses. 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. Three genes for human FcγRII (A, B, and C) and one for mouse (FcγRIIB), encoding type I transmembrane proteins with ITAM motifs (FcγRII A and C) or ITIM motifs (FcγRIIB) in their cytoplasmic domains, have been identified. Human CD32, also known as Low affinity immunoglobulin γ Fc region 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 delivers an activating signal upon ligand binding, and results in the initiation of inflammatory responses including cytolysis, phagocytosis, degranulation, and cytokine production.