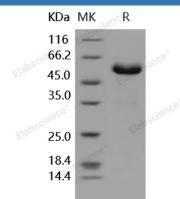
## Recombinant Human CD32a/FCGR2A Protein (167 Arg, Fc Tag)

## Catalog Number: PKSH030298

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

Description	
Species	Human
Source	HEK293 Cells-derived Human CD32a/FCGR2A protein Met 1-Ile 218, with an C-
	terminal hFc
Calculated MW	47.3 kDa
Observed MW	55 kDa
Accession	AAA35827.1
Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized human CD32a-Fc
	at 10 $\mu$ g/ml (100 $\mu$ l/well) can bind biotinylated human IgG1 with a linear range of
	0.625-10 μg/ml.
Properties	
Purity	>90 % 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 sterile PBS, pH 7.5
	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



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

## **Elabscience**®

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