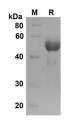
Recombinant Human Fcy RIIB/CD32b Protein(Fc Tag)

Catalog Number: PDMH100316

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

Description	
Species	Human
Source	Mammalian-derived Human Fcy RIIB/CD32b proteins Ala46-Pro217, with an C-terminal
	Fc
Calculated MW	43.9 kDa
Observed MW	50 kDa
Accession	P31994
Bio-activity	Not validated for activity
Properties	
Purity	>90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



 $\begin{array}{l} \text{SDS-PAGE analysis of Human Fc} \ \text{RIIB/CD32b proteins} \ , \\ 2\mu\text{g}/\text{lane of Recombinant HumanFc} \ \text{RIIB/CD32b proteins} \\ \text{was resolved with SDS-PAGE under reducing conditions} \ , \\ & \text{showing bands at 50 KD} \end{array}$

Background

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Fc γ RIIB is a low affinity receptor that recognizes the Fc portion of IgG. The human CD32 group consists of Fc γ RIIA, Fc γ RIIB, and Fc γ RIIC proteins that share 94-99% sequence identity in their extracellular domains but differ substantially in their transmembrane and cytoplasmic domains. Fc γ RII protein is expressed on cells of both myeloid and lymphoid lineages as well as on cells of non-hematopoietic origin. Fc γ RIIB has an intrinsic cytoplasmic immunoreceptor tyrosinebased inhibitory motif (ITIM) and delivers an inhibitory signal upon ligand binding. Ligation of Fc γ RIIB on B cells dow n-regulates antibody production and in some circumstances may promote apoptosis. Co-ligation of Fc γ RIIB on dendritic cells inhibits maturation and blocks cell activation. Fc γ RIIB may also be a target for monoclonal antibody therapy for malignancies. Fc γ RIIB plays an important negative-regulating role through modulating the signals from activation receptors.