

Recombinant Protein Technical Manual

Recombinant Human CD32b/FCGR2B Protein (His &AVI Tag), Biotinylated(Active) RPES4980

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Product SKU: RPES4980

Species: Human

Size: 20µg

Expression host: HEK293 Cells

Uniprot: NP_001002274.1

Protein	Inform	ation
Protein	iniorm	ation:

Molecular Mass:	24 kDa			
AP Molecular Mass:				
Tag:	C-His-AVI, Biotinylated			
Bio-activity:	Measured by its binding ability in a functional ELISA. Immobilized Human IgG1 at 10 μg/ml (100 μl/well) can bind Human CD32b. The EC50 of Human CD32b is 1.6 - 3.7 μg/ml.2. Labeling ratio of biotin to protein: 0.5			
Purity:	> 95 % as determined by reducing SDS-PAGE.			
Endotoxin:	< 1.0 EU per μg of the protein as determined by the LAL method.			
Storage:	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 7.4			
Reconstitution:	Please refer to the printed manual for detailed information.			
Application:	Functional ELISA			
Synonyms:	Low Affinity Immunoglobulin Gamma Fc Region Receptor II-b; IgG Fc Receptor II-b; CDw32; Fc-Gamma RII-b; Fc-Gamma-RIIb; FcRII-b; CD32; FCGR2B; FCG2; IGFR2			

Sequence: Ala 46-Ile 224

Background:

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