



Recombinant Protein Technical Manual

Recombinant Rat CD32b/FCGR2B Protein (His Tag)(Active)
RPES1480

Product Data:

Product SKU: RPES1480

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: Q63203

Protein Information:

Molecular Mass: 21.9 kDa

AP Molecular Mass: 35-40 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human rat FCGR2B-His at 10 µg/ml (100 µl/well) can bind biotinylated human IgG1, The EC50 of biotinylated human IgG1 is 0.3-0.8 µg/ml.

Purity: > 97 % as determined by 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: FCRII;Fcgr2

Immunogen Information:

Sequence: Met 1-Pro 212

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.