



Recombinant Protein Technical Manual

Recombinant Human CD32b/FCGR2B Protein (His Tag)

RPES4216

Product Data:

Product SKU: RPES4216

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: NP_001002274.1

Protein Information:

Molecular Mass: 20.6 kDa

AP Molecular Mass: 27 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: Thr43-Pro217

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.