

Recombinant Human CD32b/FCGR2B protein (His Tag)

Catalog Number: PDMH100113

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

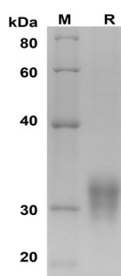
Description

Species	Human
Source	HEK293 Cells-derived Human CD32b/FCGR2B protein Thr43-Pro217, with an C-terminal His
Calculated MW	19.1 kDa
Observed MW	30-35 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°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 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



SDS-PAGE analysis of Human CD32b/FCGR2B proteins,
2µg/lane of Recombinant Human CD32b/FCGR2B proteins
was resolved with SDS-PAGE under reducing conditions,
showing bands at 30-35 KD.

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.