Recombinant Rat CD32b/FCGR2B Protein (His Tag)

Catalog Number: PKSR030402

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

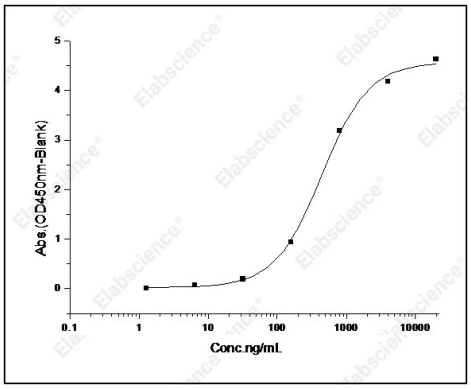
Description

Species	Rat
Source	HEK293 Cells-derived Rat CD32b/FCGR2B protein Met 1-Pro 212, with an C-terminal His
Calculated MW	21.9 kDa
Observed MW	35-40 kDa
Accession	Q63203-1
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 EC_{50} of biotinylated human IgG1 is 0.3-0.8 μg/ml.

Properties

Purity	> 97% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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 sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Immobilized human rat FCGR2B-His (Cat: PKSR030402) at 10 μg/ml (100 μl/well) can bind biotinylated human IgG1, The EC_{50} of biotinylated human IgG1 is 0.3-0.8 μg/ml.

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.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com