Recombinant Protein Technical Manual

Recombinant Rat PDGFRB/CD140b Protein (His Tag)(Active)

RPES4081

Product Data:

Product SKU: RPES4081

Size: 100µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: Q05030

Protein Information:

Molecular Mass:	57.6 kDa
AP Molecular Mass:	92 kDa
Tag:	C-His
Bio-activity:	Measured by its binding ability in a functional ELISA. Immobilized rat PDGFRB-His at 10 µg/ml (100 µl/well) can bind Cynomolgus PDGFB , The EC50 of Cynomolgus PDGFB is 3-7 ng/ml.
Purity:	> 95 % 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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:	PDGFRB;Pdgfr;Pdgfr1;PDGFR

Immunogen Information:

Sequence: Met1-Lys530

Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD140b, also known as PDGFRB, is a member of the CD system. CD140b is a cell surface tyrosine kinase receptor essencial for development interacting with the platelet-derived growth factors (PDGFs) which serves as mitogens for mesenchymal cells. CD140b can bind with platelet-derived growth factor (PDGF)-B, that are secreted by tumors and phosphorylation of PDGFR-β was correlated with depth of cancer invasion at statistically significant level.