

## Recombinant Protein Technical Manual

# Recombinant Rat PDGFRB/CD140b Protein (Fc Tag)(Active) RPES4105

#### Product Data:

**Product SKU:** RPES4105 **Size:** 50μg

Species: Rat Expression host: HEK293 Cells

Uniprot: Q05030

#### **Protein Information:**

Molecular Mass: 83.2 kDa

AP Molecular Mass: 117 kDa

Tag: C-Fc

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA.2. Immobilized mouse

PDGF-B at 10µg/mL (100µL/well) can bind rat PDGFRB-Fc, the EC50 of rat PDGFRB-

Fc is  $0.02-0.2 \,\mu g/mL$ .

**Purity:** > 90 % as determined by SDS-PAGE

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method}$ 

**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:** 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.