Data Sheet (Cat.No.TMPY-03590)

TargetMol

PDGFRB Protein, Rhesus, Recombinant (His)

General Information

Synonyms:	platelet-derived growth factor receptor, β polypeptide;platelet-derived growth factor receptor, beta polypeptide
Protein Construction:	A DNA sequence encoding the rhesus PDGFRB (XP_001107595.1) (Met1-Phe530) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Leu 33
Species:	Rhesus
Expression Host:	HEK293 Cells
Accession:	F7BTH1
Molecular Weight:	57.7 kDa (predicted)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized Rhesus PDGFRB-His at 10 μg/ml (100 μl/well) can bind Rhesus PDGFB , The EC50 of Rhesus PDGFB is 3-8 ng/ml.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The cluster of differentiation (CD) system is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules 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.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

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