

## Recombinant Human PDGFR $\alpha$ /CD140a Protein (His Tag)

**Catalog Number:** PKSH033564

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

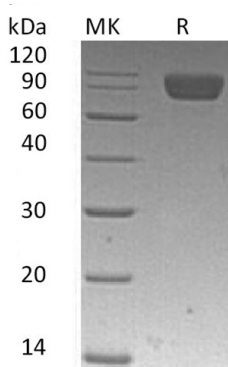
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human PDGFR $\alpha$ /CD140a protein Gln24-Glu524, with an C-terminal His
<b>Calculated MW</b>	57.0 kDa
<b>Observed MW</b>	93 kDa
<b>Accession</b>	P16234
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Platelet-derived Growth Factor Receptor Alpha (PDGF R $\alpha$ ) is an enzyme that belongs to the class III subfamily of receptor tyrosine kinases. It is a type I transmembrane glycoprotein, and can form homo- or hetero-dimeric receptors when engaged by dimers of the PDGF family of growth factors. PDGF R $\alpha$  is strongly expressed in oligodendrocyte, lung, skin and intestinal progenitor cells and induced by inflammation or growth in culture, but is lowly expressed in most mesenchymal cells. PDGF R $\alpha$  autophosphorylates upon dimerization, activating signaling cascades in PI-3kinase Ras-MAP kinase, and PLC- $\gamma$  pathways. PDGF R $\alpha$  has influence on local gradients of epithelially produced PDGF-AA or PDGF-CC during formation of the cranial, cardiac neural crest and interstitial kidney mesenchyme.

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