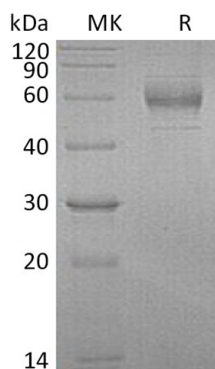


**Recombinant Human GFRA1/GDNFRA Protein (aa 25-429, His Tag)****Catalog Number: PKSH033670****Note:** Centrifuge before opening to ensure complete recovery of vial contents.**Description**

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human GFRA1;GDNFRA protein Asp25-Lys429, with an C-terminal His
<b>Calculated MW</b>	46.3 kDa
<b>Observed MW</b>	60 kDa
<b>Accession</b>	P56159-2
<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 µg 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 µm filtered solution of 20mM PB, 150mM NaCl, 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**

&gt; 95 % as determined by reducing SDS-PAGE.

**Background**

Glial Cell Line-Derived Neurotrophic Factor Family Receptor  $\alpha$ -1 (GDNFR $\alpha$ 1) is a glycosylphosphatidylinositol (GPI) linked cell surface protein belonging to GDNF-family receptor  $\alpha$  subtype which consists of at least four members. GFR $\alpha$ 1 and GFR $\alpha$ 2 are the cognate co-receptor for the neurotrophic factor neurturin mediating the NRTN-induced autophosphorylation and activation of the RET tyrosine kinase receptor. Soluble GFR $\alpha$ s released enzymatically from the cell surface by phosphatidylinositol phospholipase C, as well as recombinantly produced soluble GFR $\alpha$ 1, can also bind with high affinity to GDNF and trigger the activation of Ret tyrosine kinase. Human GFR $\alpha$ 1 shares 93% amino acid identity with mouse GFR $\alpha$ 1. The expression of the various GFR $\alpha$ s are differentially regulated in the central and peripheral nervous system, suggesting complementary roles for the GFR $\alpha$ s in mediating the activities of the GDNF family of neurotrophic factors.