



Recombinant Protein Technical Manual
Recombinant Human GFRA1/GDNFRA Protein (aa
25-429, His Tag)(Active)
RPES2548

Product Data:

Product SKU: RPES2548

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P56159-2

Protein Information:

Molecular Mass: 46.28 kDa

AP Molecular Mass: 60 kDa

Tag: C-His

Bio-activity: Immobilized Human GDNF(Cat: PKSH032488) at 1.5µg/ml(100 µl/well) can bind Human GFRA1-His. The ED50 of Human GFRA1-His is 0.468 µg/ml .

Purity: > 90% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: GDNF Family Receptor Alpha; GDNF Receptor Alpha; GDNFR-Alpha; GFR-Alpha; RET Ligand 1; TGF-Beta-Related Neurotrophic Factor Receptor 1; GFRA1; GDNFRA; RETL1; TRNR1

Immunogen Information:

Sequence: Asp25-Lys429

Background:

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