

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

Catalog No. PKS033670

Description

Synonyms	GDNF Family Receptor Alpha-1; GDNF Receptor Alpha-1; GDNFR-Alpha-1; GFR-Alpha-1; RET Ligand 1; TGF-Beta-Related Neurotrophic Factor Receptor 1; GFRA1; GDNFRA; RETL1; TRNR1
Species	Human
Expression_host	Human Cells
Sequence	Asp25-Lys429
Accession	P56159-2
Mol_Mass	46.28 kDa
AP_Mol_Mass	60 kDa
Tag	C-His
Bio_activity	Immobilized Human GDNF(Cat: PKS032488) at 1.5µg/ml(100 µl/well) can bind Human GFRA1-His. The ED50 of Human GFRA1-His is 0.468 µg/ml .

Properties

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.

Background

Glial Cell Line-Derived Neurotrophic Factor Family Receptor α -1 (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.

SDS-PAGE

