

GFRA1 / GFR alpha-1 Active Protein | GFRA1 active protein

Recombinant Mouse GFRA1 / GFR alpha-1 Protein (His tag)

CATALOG #
AAA173594

HOST
HEK293 Cells

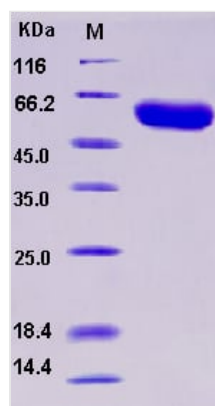
PRODUCT SYNONYMS

GFRA1 / GFR alpha-1; Recombinant Mouse GFRA1 / GFR alpha-1 Protein (His tag); AU042498; GFRA1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	> 98 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH 7.4, 5% Trehalose, 5% Mannitol, 0.01% Tween-80.
Sequence	Met1-Ser42 5
Sequence Length	463
Species	Mouse
Tag	C-His
Bioactivity	1. Measured in a cell proliferation assay using SH-SY5Y human neuroblastoma cells. The ED50 for this effect is typically 0.3-1.5 ug/mL in the presence of 40ng/mL Recombinant Human GDNF. 2. Measured by its ability to bind with human GDNF in a functional ELISA.
Endotoxin	< 1.0 EU per ug of the protein as determined by the LAL method.
Reconstitution	It is recommended that sterile water (330ul) be added to the vial to prepare a stock solution of 0.15mg/mL. Concentration is measured by UV-Vis.
Preparation and Storage	Shipping: Blue Ice 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.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for GFRA1 active protein	Glial cell line derived neurotrophic factor (GDNF) Family Receptor Alpha 1 (GFRA1) is a member of the GDNF receptor family. It is a glycosylphosphatidylinositol (GPI)-linked cell surface receptor for both GDNF and NTN, and mediates activation of the RET tyrosine kinase receptor. GFRA1 is a potent survival factor for central and peripheral neurons, and is essential for the development of kidneys and the enteric nervous system. Glial cell line-derived neurotrophic factor (GDNF) and neurturin (NTN) are its binding ligand which are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. GDNF promotes the formation of a physical complex between GFRA/GDNFRa and the orphan tyrosin kinase receptor Ret, thereby inducing its tyrosine phosphorylation. The RET is a receptor tyrosine kinase representing the signal-transducing molecule of a multisubunit surface receptor complex for the GDNF, in which GFRA / GDNFRa acts as the ligand-binding component. GDNF, a distantly related member of the transforming growth factor-beta (TGF-) superfamily, and its receptor components: GFRA1, Ret and neural cell adhesion molecule (NCAM) have been recently reported to be expressed in the testis and to be involved in the proliferation regulation of immature Sertoli cells.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	2624963
NCBI GeneID	14585
Molecular Weight	Molecular Mass: 46.3 kDa Actual Protein Molecular Mass: 55-60 kDa
NCBI Official Full Name	GDNF receptor beta
NCBI Official Synonym Full Names	glial cell line derived neurotrophic factor family receptor alpha 1
NCBI Official Symbol	Gfra1
NCBI Official Synonym Symbols	AU042498
NCBI Protein Information	GDNF family receptor alpha-1
UniProt Protein Name	GDNF family receptor alpha-1
UniProt Gene Name	Gfra1
UniProt Synonym Gene Names	Gdnfra; Trnr1; GDNF receptor alpha-1; GDNFR-alpha-1; GFR-alpha-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.