

# Human CellExp™ GFRA1 /GDNFRA, human recombinant

<b>CATALOG #:</b>	7469-10	10 µg
	7469-50	50 µg
<b>ALTERNATE NAMES:</b>	GFRA1, GDNFRA, RETL1, TRNR1, GDNFR, GFR-ALPHA-1, RET1L.	
<b>SOURCE:</b>	HEK 293 cells (Asp 25 – Ser 429)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	
<b>MOL. WEIGHT:</b>	This protein is fused with 6xHis tag at the C-terminus, has a calculated MW of 45.5 kDa. The predicted N-terminus is Asp 25. DTT-reduced Protein migrates as 55-60 kDa due to glycosylation.	
<b>ENDOTOXIN LEVEL:</b>	<1 EU/µg by LAL method	
<b>FORM:</b>	Lyophilized	

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

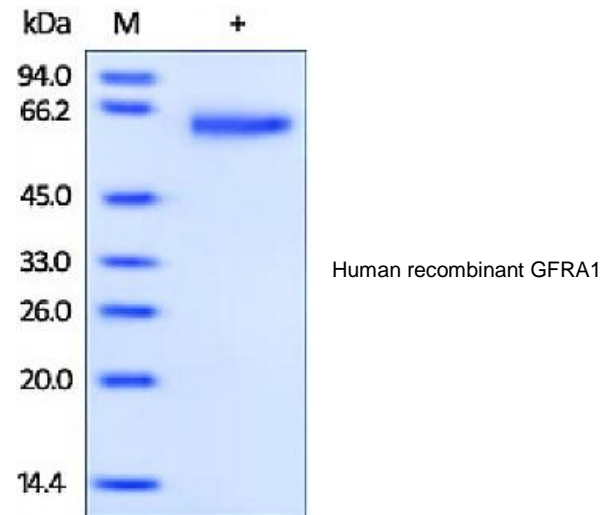
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** GDNF family receptor alpha-1 (GFRA1) also known as RET ligand 1 (RETL1), TGF-beta-related neurotrophic factor receptor 1 (TRNR1), is a novel glycosylphosphatidylinositol (GPI)-linked cell surface receptor, and belongs to the glial cell line-derived neurotrophic factor (GDNF) receptor subfamily. The GDNF family ligands comprises GDNF, Neurturin (NTN), Artemin, and Persephin. GDNF and NTN are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. GFRA1 mediates the association with and activation of the RET tyrosine kinase receptor (RTK), and subsequently initiates the RET signaling pathway. GFR alpha-mediated signaling plays an important role in the survival,

differentiation, and migration of central and peripheral neurons, and is essential for the development of kidneys and the enteric nervous system, as well as the inflammatory response in some carcinomas.

**BIOLOGICAL ACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human GDNF at 1 µg/mL binds rhGFRA1 with an apparent  $K_D$  <10 nM.



#### RELATED PRODUCTS:

- TNFRSF6B, human recombinant (**Cat # 7329-100**)
- Human CellExp™ CD30 /TNFRSF8, human recombinant (**Cat # 7389-10**)
- Human CellExp™ TNFR1 / TNFRSF1A, human recombinant (**Cat # 7382-10, -50**)
- Human CellExp™ TNFRSF10B /TRAILR2, human recombinant (**Cat # 7448-10**)
- Human CellExp™ TNFRSF4/OX40 /CD134, human recombinant (**Cat # 7438-10**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**