Catalog # GF1-H5224



#### Synonym

## GFRA1,GDNFRA,RETL1,TRNR1,GDNFR,GFR-ALPHA-1,RET1L

### Source

Human GFR alpha-1, His Tag(GF1-H5224) is expressed from human 293 cells (HEK293). It contains AA Asp 25 - Ser 424 (Accession # <u>NP\_665736.1</u>). Predicted N-terminus: Asp 25

## **Molecular Characterization**

GFR alpha-1(Asp 25 - Ser 424) NP\_665736.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 46.6 kDa. The protein migrates as 55-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

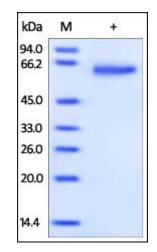
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- $70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human GFR alpha-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

#### **Bioactivity-ELISA**



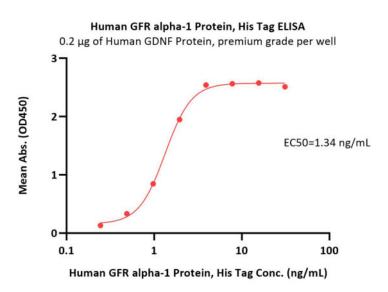
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11/7/2023

# Human GFR alpha-1 Protein, His Tag

Catalog # GF1-H5224





Immobilized Human GDNF Protein, premium grade (Cat. No. GDF-H5219) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human GFR alpha-1 Protein, His Tag (Cat. No. GF1-H5224) with a linear range of 0.5-2 ng/mL (Routinely tested).

#### Background

GDNF family receptor alpha-1 (GFRA1) is 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 carciniomas.

#### **Clinical and Translational Updates**

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.



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