

**Synonym**

GFR alpha like,GFR alpha-like,GFRAL,GRAL

**Source**

Rat GFR alpha-like, His Tag(GFA-R52H5) is expressed from human 293 cells (HEK293). It contains AA Gln 20 - Gly 350 (Accession # [D3ZB94-1](#) ).

Predicted N-terminus: Gln 20

**Molecular Characterization**

GFR alpha-like(Gln 20 - Gly 350)  
D3ZB94-1 Poly-his

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

The protein has a calculated MW of 39.0 kDa. The protein migrates as 45-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm 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.*

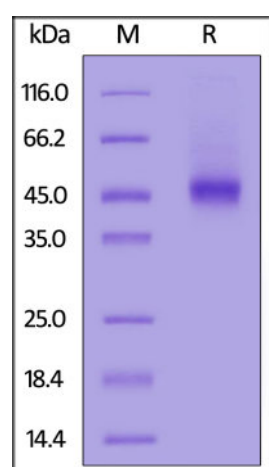
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

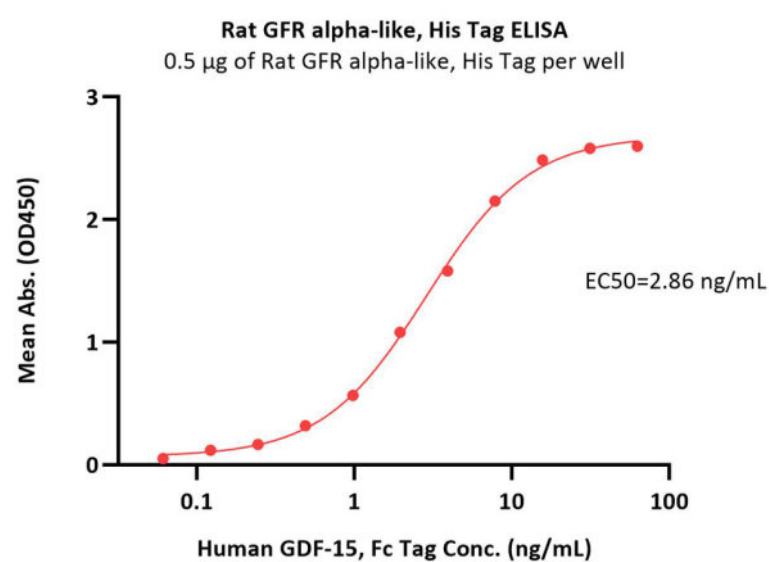
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Rat GFR alpha-like, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Rat GFR alpha-like, His Tag (Cat. No. GFA-R52H5) at 5 µg/mL (100 µL/well) can bind Human GDF-15, Fc Tag (Cat. No. GD5-H5269) with a linear range of 0.1-8 ng/mL (QC tested).

## Background

GFR alpha-like is also known as GDNF family receptor alpha-like, GFRAL, C6orf144, UNQ9356, PRO34128. Growth differentiation factor-15 (GDF15) is a circulating protein that has been implicated in multiple biological processes, including energy homeostasis, body weight regulation, and cachexia driven by cancer and chronic disease. GDNF family receptor  $\alpha$ -like (GFRAL) was recently identified as the neuronal brainstem receptor responsible for mediating the anorectic actions of GDF15. Brainstem-restricted receptor for GDF15 which regulates food intake, energy expenditure and body weight in response to metabolic and toxin-induced stresses. Upon interaction with its ligand, GDF15, interacts with RET and induces cellular signaling through activation of MAPK- and AKT- signaling pathways.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.