Catalog # GFA-H52H3



#### Synonym

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

#### Source

Human GFR alpha-like, His Tag(GFA-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ser 19 - Glu 351 (Accession # <u>Q6UXV0-1</u>). Predicted N-terminus: Ser 19

## **Molecular Characterization**

GFR alpha-like(Ser 19 - Glu 351) Q6UXV0-1

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

The protein has a calculated MW of 39.7 kDa. The protein migrates as 43-60 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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.

>90% as determined by SEC-MALS.

#### 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

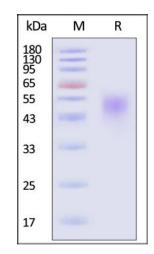
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

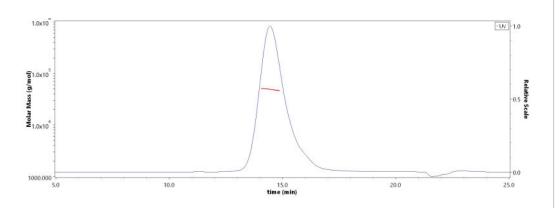
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human 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 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# SEC-MALS



The purity of Human GFR alpha-like, His Tag (Cat. No. GFA-H52H3) is more than 90% and the molecular weight of this protein is around 44-66 kDa verified by SEC-MALS.



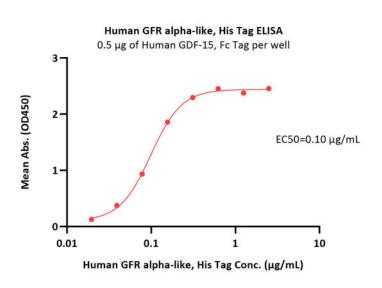
**Bioactivity-ELISA** 







Catalog # GFA-H52H3



Immobilized Human GDF-15, Fc Tag (Cat. No. GD5-H5269) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human GFR alpha-like, His Tag (Cat. No. GFA-H52H3) with a linear range of 0.02-0.313  $\mu$ g/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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.



>>> www.acrobiosystems.com

