

# Biotinylated Human GFRAL/GFR alpha-like Protein

Cat. No. GFL-HM401B

## Description

<b>Source</b>	Recombinant Biotinylated Human GFRAL/GFR alpha-like Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal. It contains Ser19-Glu351.
<b>Accession</b>	Q6UXV0
<b>Molecular Weight</b>	The protein has a predicted MW of 40.7 kDa. Due to glycosylation, the protein migrates to 48-62 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

## Background

GFR alpha-like (GDNF receptor-alpha-like) is a distant member of the GDNFR family of proteins. Mature human GFR alpha-like is a 376 amino acid (aa) type I transmembrane protein. It contains a 333 aa extracellular domain, a 20 aa transmembrane domain and a 23 aa cytoplasmic domain. GFRAL is a brainstem-restricted receptor for GDF15 which regulates food intake, energy expenditure and body weight in response to metabolic and toxin-induced stresses.

## Assay Data

### Tris-Bis PAGE



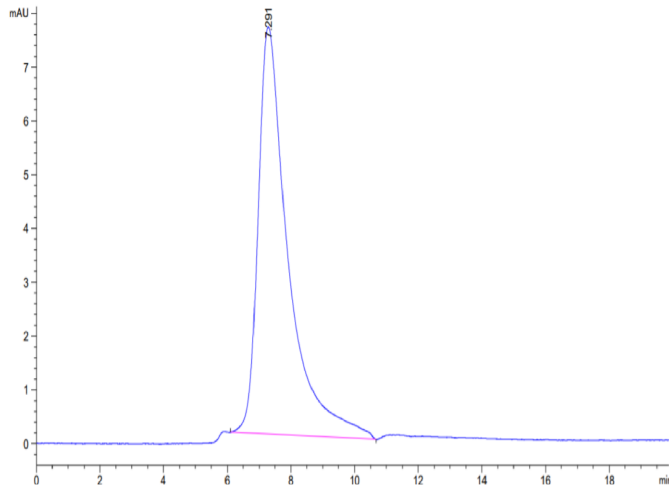
Biotinylated Human GFRAL on Tris-Bis PAGE under reduced conditions. The purity is greater than 95%.

### SEC-HPLC

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## Assay Data

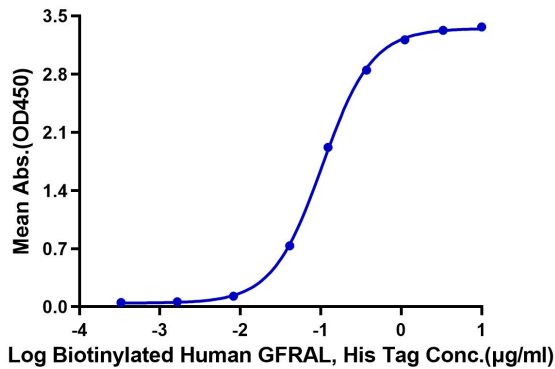


The purity of Biotinylated Human GFRAL is greater than 95% as determined by SEC-HPLC.

## ELISA Data

### Biotinylated Human GFRAL, His Tag ELISA

0.1  $\mu$ g Human GDF15, hFc Tag Per Well

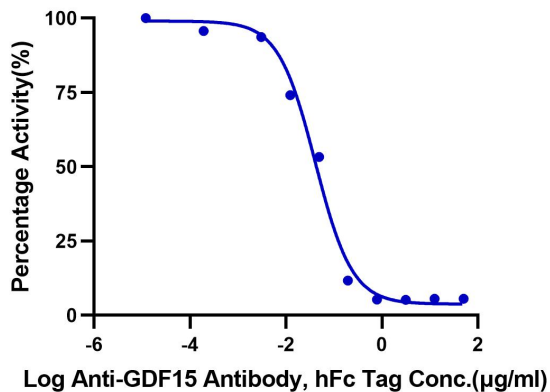


Immobilized Human GDF15, His Tag at 1  $\mu$ g/ml (100  $\mu$ l/well) on the plate. Dose response curve for Biotinylated Human GFRAL, His Tag with the EC50 of 0.1  $\mu$ g/ml determined by ELISA.

## Blocking Data

### Inhibition of Human GDF15 and GFRAL Binding

0.1  $\mu$ g Human GDF15, His Tag Per Well



Serial dilutions of Anti-GDF15 Antibody were added into Human GDF15, His Tag : Biotinylated Human GFRAL, His Tag binding reactions. The half maximal inhibitory concentration (IC50) is 40.8ng/ml.