

# Mouse GFRAL/GFR alpha-like Protein

Cat. No. GFL-MM401

## Description

<b>Source</b>	Recombinant Mouse GFRAL/GFR alpha-like Protein is expressed from Expi293 with His tag and Avi tag at the N-terminal. It contains Gln20-Glu350.
<b>Accession</b>	Q6SJE0-1
<b>Molecular Weight</b>	The protein has a predicted MW of 40.1 kDa. Due to glycosylation, the protein migrates to 48-60 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

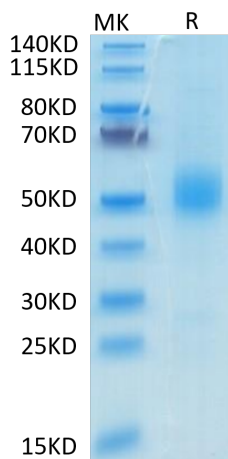
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended (usually we use 1mg/ml solution for lyophilization). 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. 4-8°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

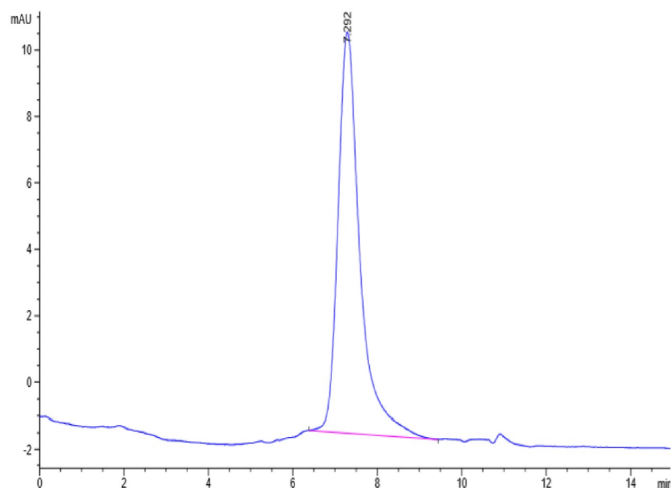
### Tris-Bis PAGE



Mouse GFRAL on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

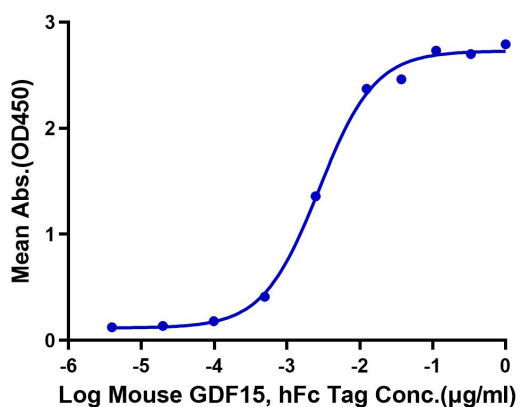


The purity of Mouse GFRAL is greater than 95% as determined by SEC-HPLC.

ELISA Data

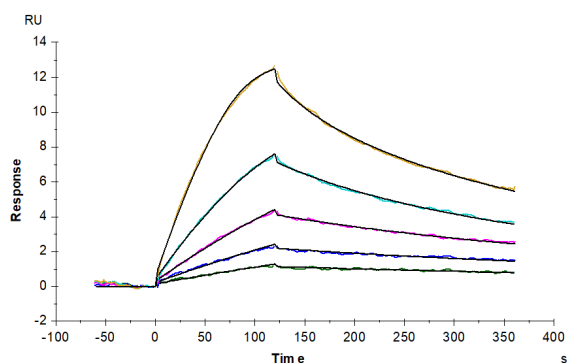
Mouse GFRAL, His Tag ELISA

0.2µg Mouse GFRAL, His Tag Per Well



Immobilized Mouse GFRAL, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Mouse GDF15, hFc Tag with the EC50 of 2.7ng/ml determined by ELISA.

SPR Data



Mouse GFRAL, His Tag immobilized on CM5 Chip can bind Mouse GDF15, His Tag with an affinity constant of 0.34 nM as determined in SPR assay (Biacore T200).