

# Mouse GFRAL/GFR alpha-like Protein

Cat. No. GFL-MM401

## Description

<b>Source</b>	Recombinant Mouse GFRAL/GFR alpha-like Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. 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 Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

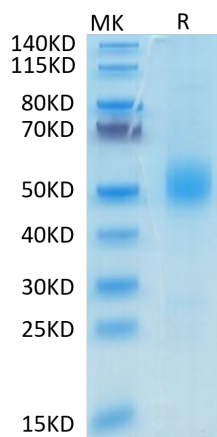
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

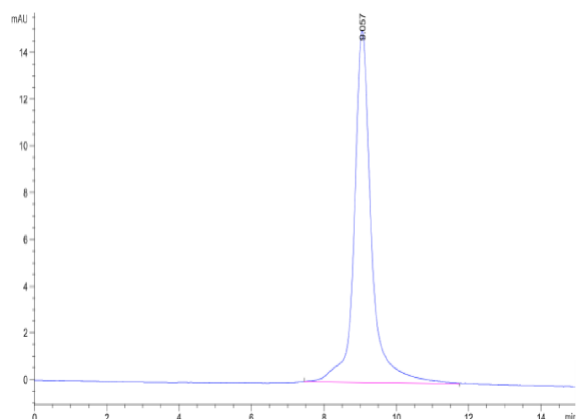
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



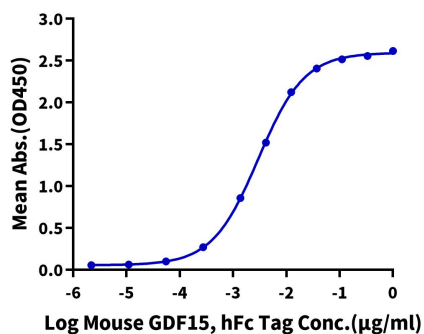
The purity of Mouse GFRAL is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

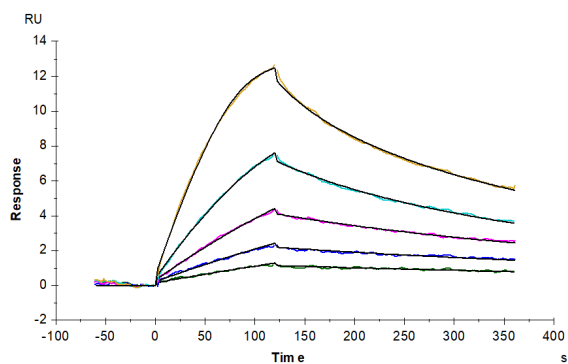
**Mouse GFRAL, His Tag ELISA**

0.2µg Mouse GFRAL, His Tag Per Well



Immobilized Mouse GFRAL, His Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Mouse GDF15, hFc Tag with the EC50 of 3.0 ng/ml determined by ELISA (QC Test).

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).