

Biotinylated Human GFRAL/GFR alpha-like Protein

Cat. No. GFL-HM401B

Description

Source	Recombinant Biotinylated Human GFRAL/GFR alpha-like Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ser19-Glu351.
Accession	Q6UXV0
Molecular Weight	The protein has a predicted MW of 40.7 kDa. Due to glycosylation, the protein migrates to 48-62 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

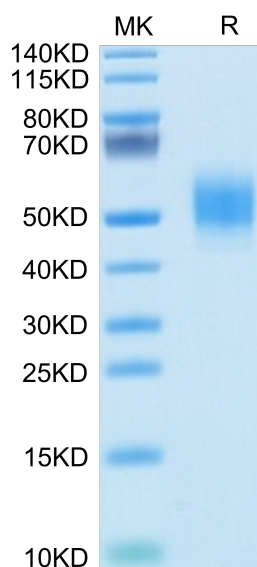
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. 2-8°C for 2-7 days 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

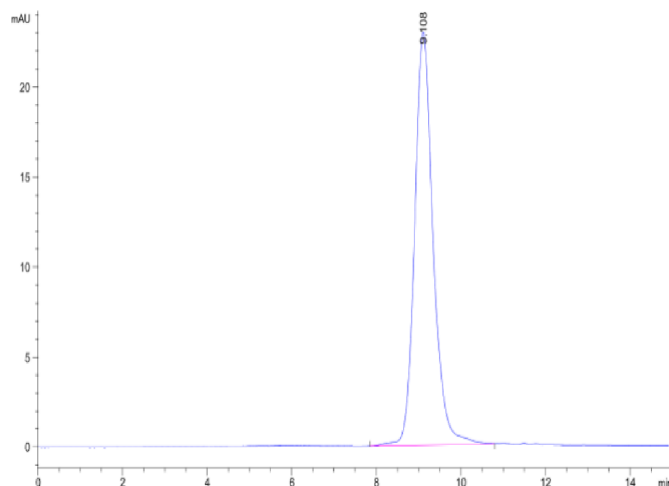
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

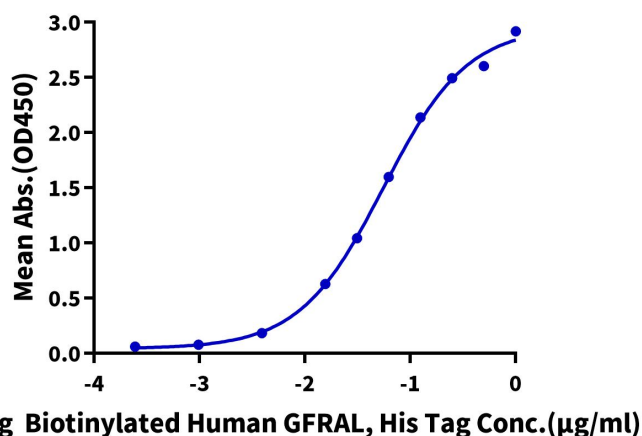


The purity of Biotinylated Human GFRAL is greater than 95% as determined by SEC-HPLC.

ELISA Data

Biotinylated Human GFRAL, His Tag ELISA

0.5µg Human GDF15, hFc Tag Per Well

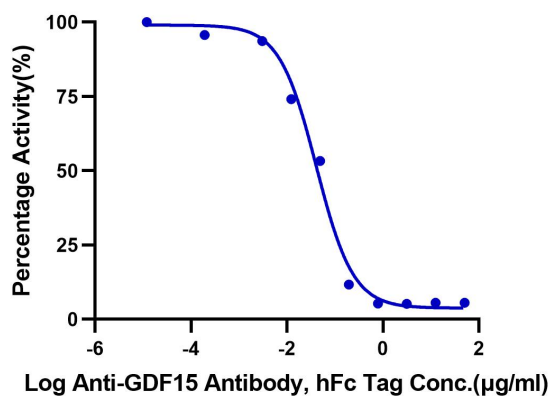


Immobilized Human GDF15, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human GFRAL, His Tag with the EC50 of 55.6ng/ml determined by ELISA (QC Test).

Blocking Data

Inhibition of Human GDF15 and GFRAL Binding

0.1µg 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.