Biotinylated Human GFRAL/GFR alpha-like Protein

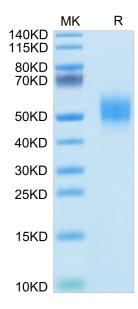
Cat. No. GFL-HM401B



Description	
Source	Recombinant Biotinylated Human GFRAL/GFR alpha-like Protein is expressed from HEK293 with His tag and Avitag 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 1 EU 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	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°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

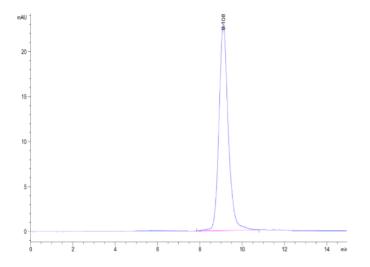


Biotinylated Human GFRAL on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

SEC-HPLC

KAGTUS

Assay Data

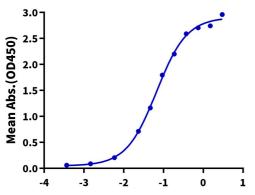


The purity of Biotinylated Human GFRAL is greater than 95% as determined by SEC-HPLC.

ELISA Data

Biotinylated Human GFRAL, His-Avi Tag ELISA

0.5μg Human GDF15, hFc Tag Per Well



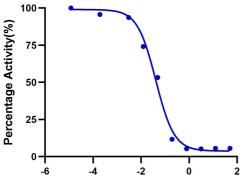
Log Biotinylated Human GFRAL, His-Avi Tag Conc.(μg/ml)

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 67.1ng/ml determined by ELISA (QC Test).

Blocking Data

Inhibition of Human GDF15 and GFRAL Binding

0.1µg Human GDF15, His Tag Per Well



Log Anti-GDF15 Antibody, hFc Tag Conc.(µg/ml)

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