

Human GDF15 Protein

Cat. No. GDF-HE115

Description

Source	Recombinant Human GDF15 Protein is expressed from E.coli with His tag at the N-Terminus. It contains Ala197-Ile308.
Accession	Q99988-1
Molecular Weight	The protein has a predicted MW of 13.5 kDa. The protein migrates to 15-16 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

Formulation and Storage

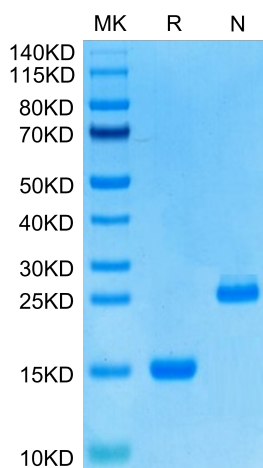
Formulation	Lyophilized from 0.22 µm filtered solution in 50mM HAc (pH 2.9). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 50 mM HAc (pH 2.9).
Storage	-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

Growth Differentiation Factor 15 (GDF15), also known as NSAID activated gene-1 (NAG-1), is associated with a large number of biological processes and diseases, including cancer and obesity. GDF15 is synthesized as pro-GDF15, is dimerized, and is cleaved and secreted into the circulation as a mature dimer GDF15.

Assay Data

Bis-Tris PAGE

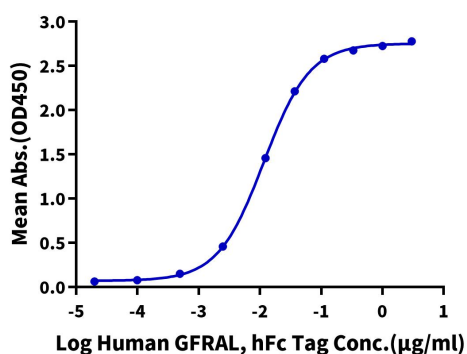


Human GDF15 on Bis-Tris PAGE under reduced (R) condition and Non reducing (N) condition. The purity is greater than 95%.

ELISA Data

Human GDF15, His Tag ELISA

0.05µg Human GDF15, His Tag Per Well

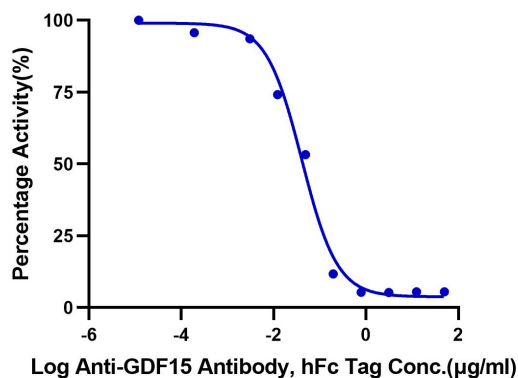


Immobilized Human GDF15, His Tag at 0.5 µg/ml (100 µl/well) on the plate. Dose response curve for Human GFRAL, hFc Tag with the EC50 of 11.5 ng/ml determined by ELISA (QC Test).

Assay Data

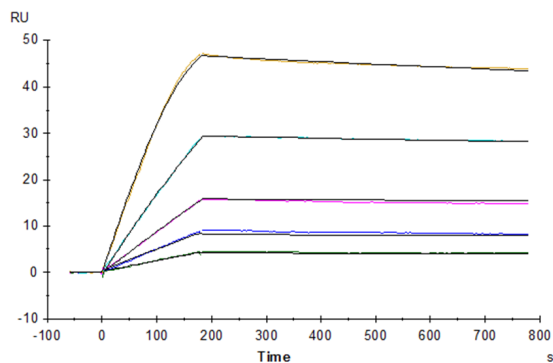
Blocking Data

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 40.8 ng/ml.

SPR Data



Human GFRAL, hFc Tag captured on CM5 Chip via Protein A can bind Human GDF15, His Tag with an affinity constant of 0.014 nM as determined in SPR assay (Biacore T200).