

Human GDF15 Protein, Ultra Low Endotoxin

Cat. No. GDF-HE115-UL

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 0.01 EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE |

Formulation and Storage

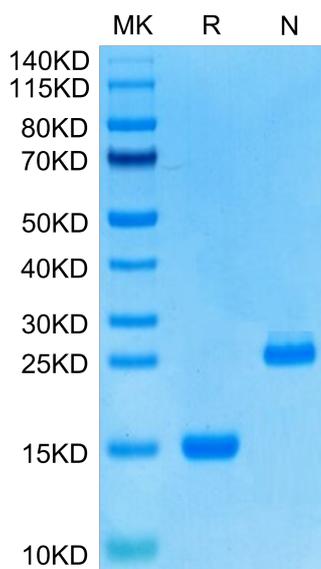
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22 µm filtered solution in 50mM HAc (pH 2.9). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Dissolve the lyophilized protein in 50 mM HAc (pH 2.9). Please refer to the Certificate of Analysis for detailed instructions. |
| 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



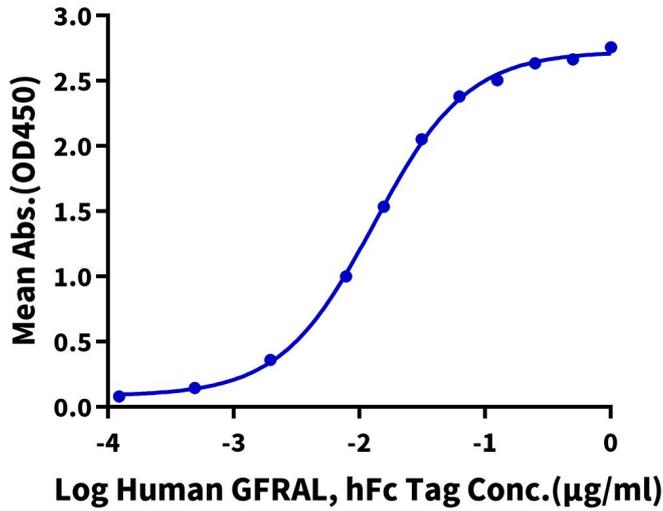
Human GDF15 on Bis-Tris PAGE under reduced (R) condition and Non reduced (N) condition. The purity is greater than 95%.

ELISA Data

Assay Data

Human GDF15, His Tag ELISA

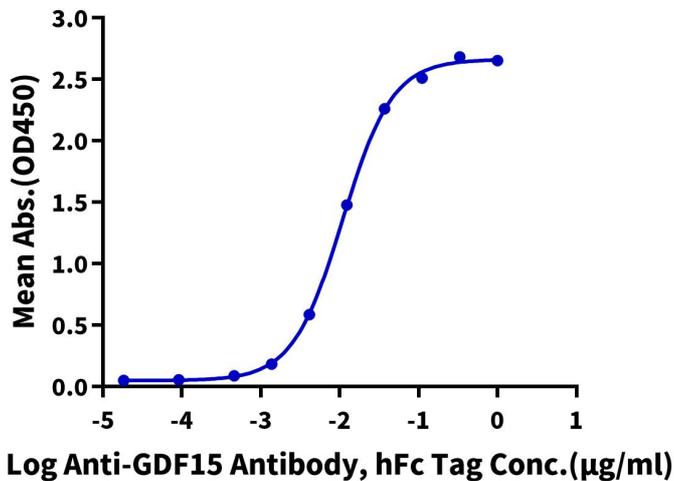
0.05µg Human GDF15, His Tag Per Well



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

Human GDF15, His Tag ELISA

0.05µg Human GDF15, His Tag Per Well

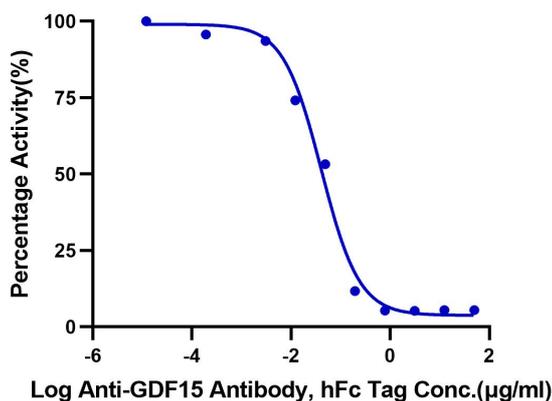


Immobilized Human GDF15, His Tag at 0.5µg/ml(100µl/well) on the plate. Dose response curve for Anti-GDF15 Antibody, hFc Tag with the EC50 of 10.9ng/ml determined by ELISA.

Blocking Data

Inhibition of Human GDF15 and GFRAL Binding

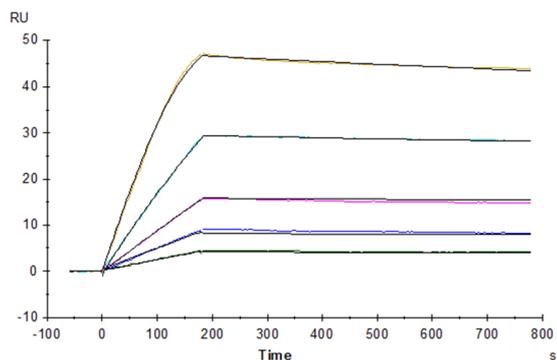
0.1µg Human GDF15, His Tag Per Well



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.

Assay Data

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).