

# Human GDF15 Protein

Cat. No. GDF-HE115

## Description

<b>Source</b>	Recombinant Human GDF15 Protein is expressed from E.coli with His tag at the N-Terminus. It contains Ala197-Ile308.
<b>Accession</b>	Q99988-1
<b>Molecular Weight</b>	The protein has a predicted MW of 13.5 kDa. The protein migrates to 15-16 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

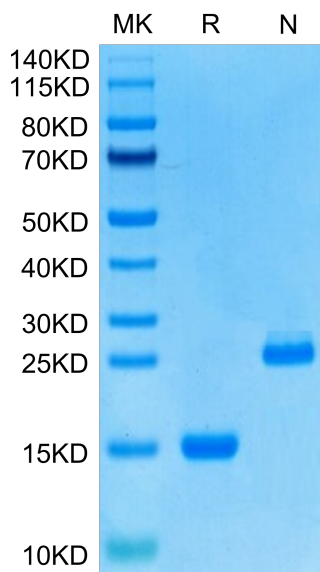
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 50mM HAc (pH 2.9). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized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

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



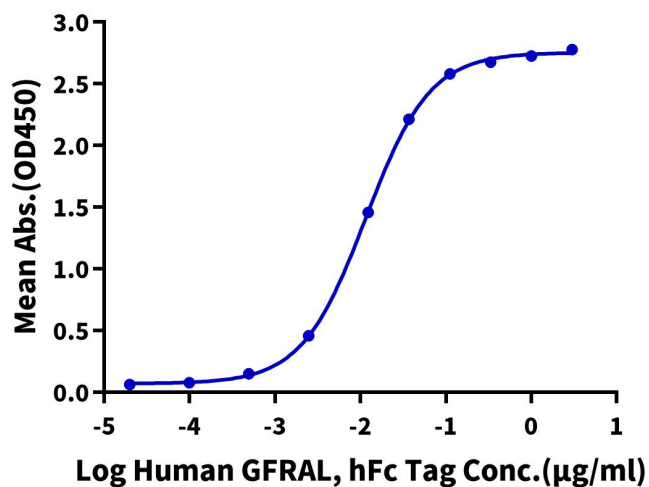
Human GDF15 on Bis-Tris PAGE under reduced (R) condition and Non reducing (N) condition. The purity is greater than 95%.

### ELISA Data

Assay Data

**Human GDF15, His Tag ELISA**

0.05µg Human GDF15, His Tag Per Well

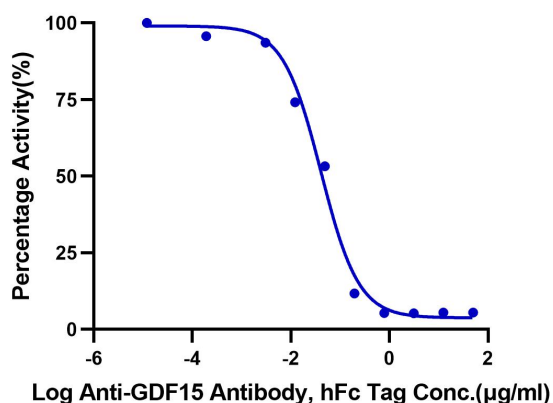


Immobilized Human GDF15, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human GFRAL, hFc Tag with the EC50 of 11.5ng/ml determined by ELISA (QC Test).

Blocking Data

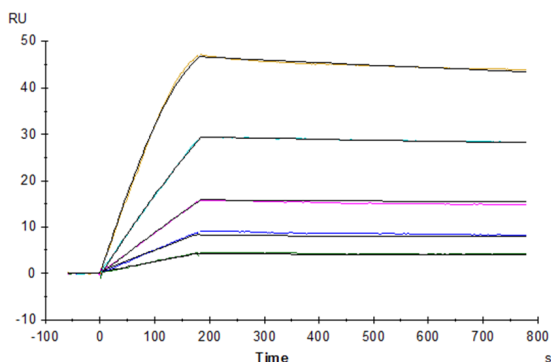
**Inhibition of Human GDF15 and GFRAL Binding**

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.

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).