

# Mouse GDF15 Protein

Cat. No. GDF-ME115

## Description

<b>Source</b>	Recombinant Mouse GDF15 Protein is expressed from E.coli with His tag at the N-Terminus. It contains Ser189-Ala303.
<b>Accession</b>	Q9Z0J7
<b>Molecular Weight</b>	The protein has a predicted MW of 13.78 kDa. The protein migrates to 15-16 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE

## Formulation and Storage

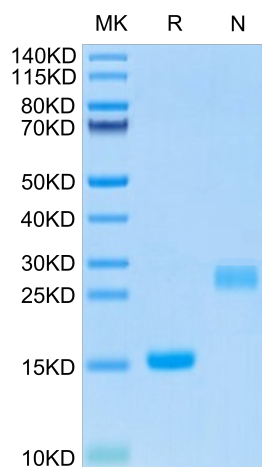
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 50mM HAc (pH 2.9). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 50mM HAc (pH 2.9).
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state 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 and differentiation factor 15 (GDF15) is an inflammation-associated hormone with poorly defined biology. Here, we investigated the role of GDF15 in bacterial and viral infections. Inflammation induced GDF15, and that GDF15 was necessary for surviving both bacterial and viral infections, as well as sepsis. The protective effects of GDF15 were largely independent of pathogen control or the magnitude of inflammatory response, suggesting a role in disease tolerance.

## Assay Data

### Tris-Bis PAGE



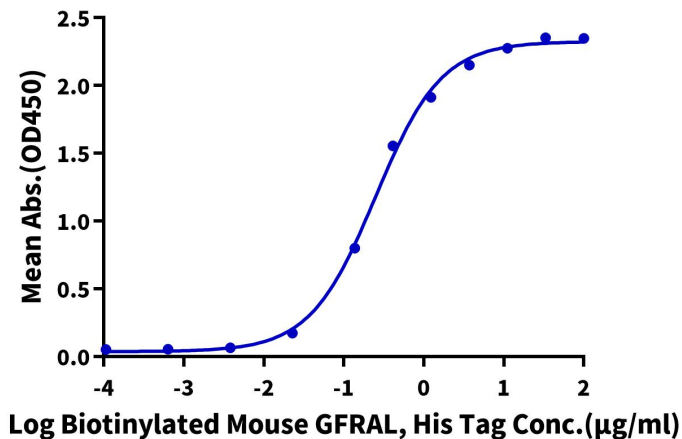
Mouse GDF15 on Tris-Bis PAGE under reduced (R) condition and Non reducing (N) condition. The purity is greater than 95%.

### ELISA Data

Assay Data

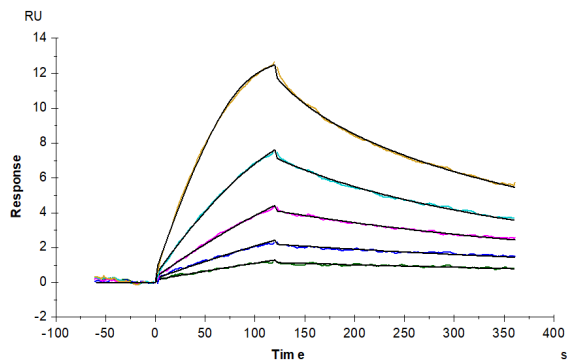
**Mouse GDF15, His Tag ELISA**

0.5µg Mouse GDF15, His Tag Per Well



Immobilized Mouse GDF15, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Mouse GFRAL, His Tag with the EC50 of 0.25µg/ml determined by ELISA (QC Test).

SPR Data



Mouse GFRAL, His Tag immobilized on CM5 Chip can bind Mouse GDF15, His Tag with an affinity constant of 0.34 nM as determined in SPR assay (Biacore T200).