Catalog # GD5-M5149



#### Synonym

## GDF15,GDF-15,MIC-1,MIC1,NAG-1,PDF,PLAB,PTGFB,NRG-1

### Source

Mouse GDF-15, His Tag(GD5-M5149) is expressed from E. coli cells. It contains AA Ser 189 - Ala 303 (Accession # <u>Q9Z0J7-1</u>). Predicted N-terminus: His

## **Molecular Characterization**

GDF-15(Ser 189 - Ala 303) **Poly-his** Q9Z0J7-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 14.6 kDa. The protein migrates as 16-17 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

#### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in 0.085%TFA 30%ACN with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

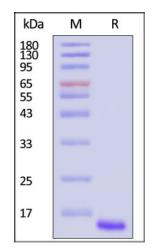
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Mouse GDF-15, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

#### **Bioactivity-ELISA**



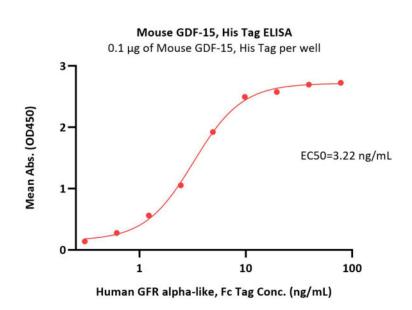
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# Mouse GDF-15 / MIC-1 Protein, His Tag

Catalog # GD5-M5149





Immobilized Mouse GDF-15, His Tag (Cat. No. GD5-M5149) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human GFR alpha-like, Fc Tag (Cat. No. GFE-H5259) with a linear range of 0.3-10 ng/mL (QC tested).

### Background

Growth Differentiation Factor 15 (GDF-15), also called Macrophage Inhibitory Cytokine 1 (MIC-1). Expression of MIC-1 mRNA in monocytoid cells is upregulated by a variety of stimuli associated with activation, including interleukin 1 $\beta$ , tumor necrosis factor  $\alpha$  (TNF- $\alpha$ ), interleukin 2, and macrophage colonystimulating factor but not interferon  $\gamma$ , or lipopolysaccharide (LPS). It is highly expressed in cardiomyocytes, adipocytes, macrophages, endothelial cells, and vascular smooth muscle cells in normal and pathological condition. GDF-15 increases during tissue injury and inflammatory states and is associated with cardiometabolic risk. Increased GDF-15 levels are associated with cardiovascular diseases such as hypertrophy, heart failure, atherosclerosis, endothelial dysfunction, obesity, insulin resistance, diabetes, and chronic kidney diseases in diabetes. Increased GDF-15 level is linked with the progression and prognosis of the disease condition.

## **Clinical and Translational Updates**



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