

Synonym

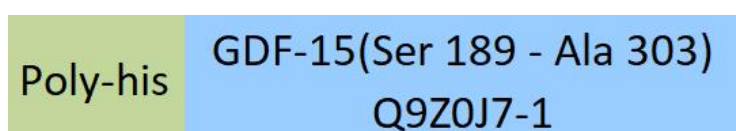
GDF15,GDF-15,MIC-1,MIC1,NAG-1,PDF,PLAB,PTGFB,NRG-1

Source

Mouse GDF-15, His Tag(GD5-M5149) is expressed from E. coli cells. It contains AA Ser 189 - Ala 303 (Accession # [Q9Z0J7-1](#)).

Predicted N-terminus: His

Molecular Characterization



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 under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm 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

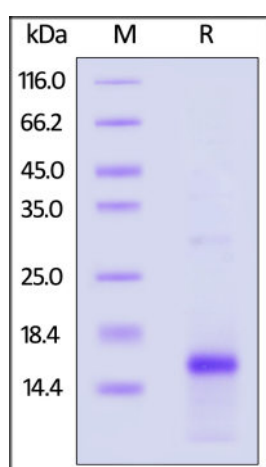
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

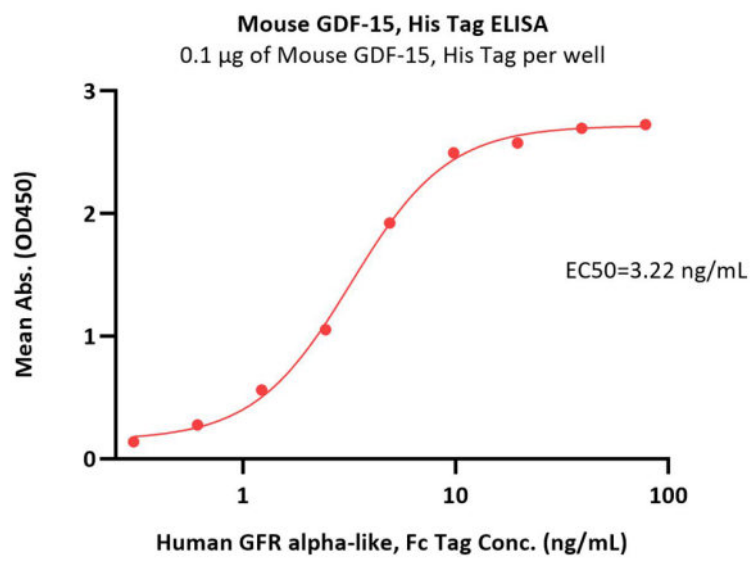
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

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%.

Bioactivity-ELISA



Immobilized Mouse GDF-15, His Tag (Cat. No. GD5-M5149) at 1 µg/mL (100 µL/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 monocytoic cells is up-regulated by a variety of stimuli associated with activation, including interleukin 1 β , tumor necrosis factor α (TNF- α), interleukin 2, and macrophage colony-stimulating factor but not interferon γ , 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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.