

Synonym

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

Source

Human GDF-15, His Tag(GD5-H5149) is expressed from E. coli cells. It contains AA Ala 197 - Ile 308 (Accession # Q99988-1).

Predicted N-terminus: Met

Molecular Characterization

Poly-his GDF-15(Ala 197 - Ile 308) Q99988-1

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

The protein has a calculated MW of 14.2 kDa. The protein migrates as 15-17 kDa under reducing (R) condition, and 26 kDa under non-reducing (NR) condition (SDS-PAGE).

Endotoxin

Less than 0.2 EU per µg by the LAL method.

Sterility

The sterility testing was performed by membrane filtration method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 30% ACN, 0.085% TFA 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

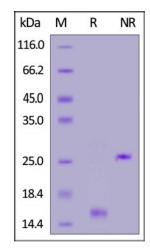
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Human GDF-15, His Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

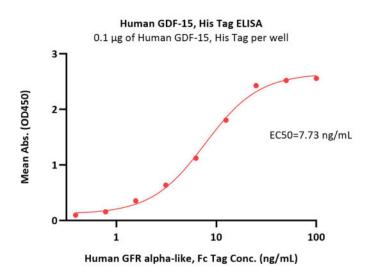
Bioactivity-ELISA



Human GDF-15 / MIC-1 Protein, His Tag

Catalog # GD5-H5149





Immobilized Human GDF-15, His Tag (Cat. No. GD5-H5149) at 1 μ g/mL (100 μ L/well) can bind Human GFR alpha-like, Fc Tag (Cat. No. GFE-H5259) with a linear range of 0.4-25 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 1β, 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

