Biotinylated Human GDF-8 Protein, Avitag™

Catalog # GD8-H8313

Synonym

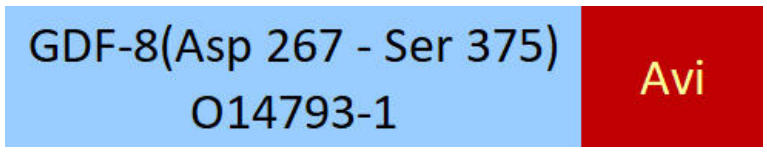
GDF-8, Myostatin, GDF8, MSTN, Growth, differentiation factor 8

Source

Biotinylated Human GDF-8 Protein, Avitag (GD8-H8313) is expressed from CHO cells. It contains AA Asp 267 - Ser 375 (Accession # O14793-1).

Predicted N-terminus: Asp 267

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus.

The protein has a calculated MW of 14.4 kDa. The protein migrates as 13-15 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM HAC, pH3.0 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.

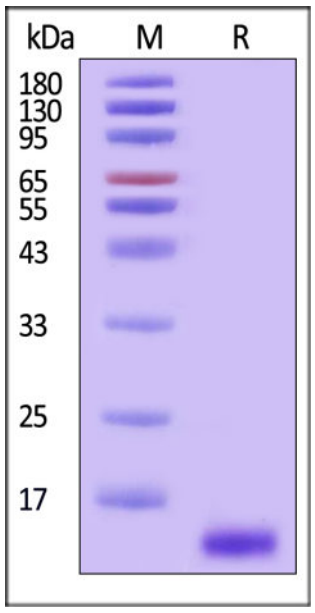
This product is stable after storage at:

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

ACRO Quality Management System

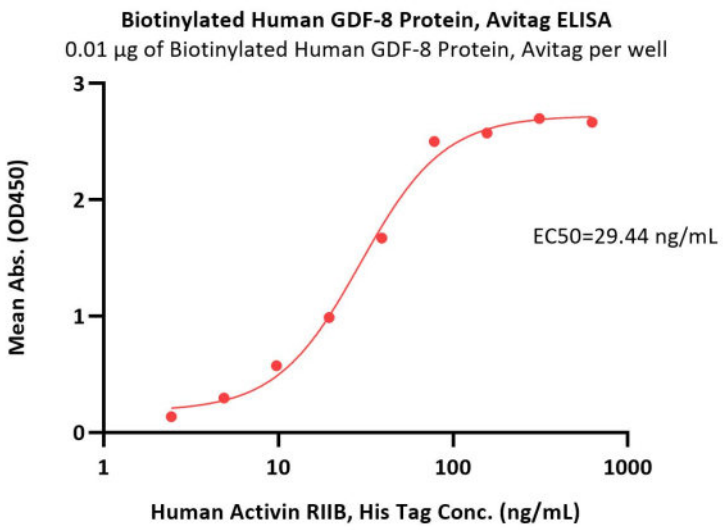
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE

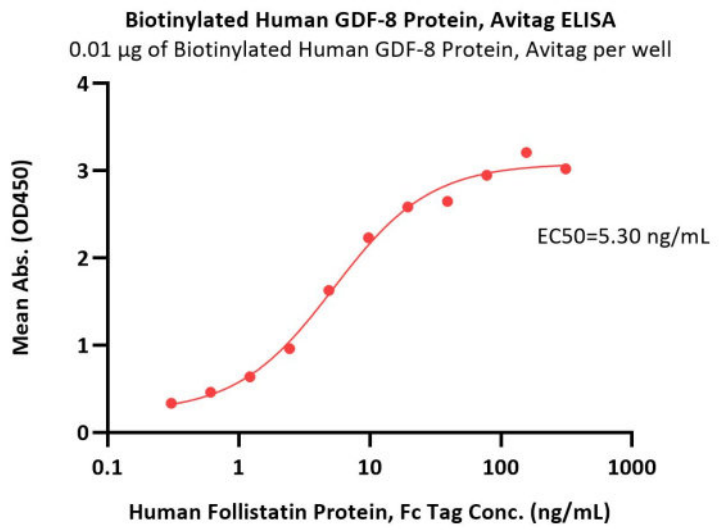


Biotinylated Human GDF-8 Protein, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

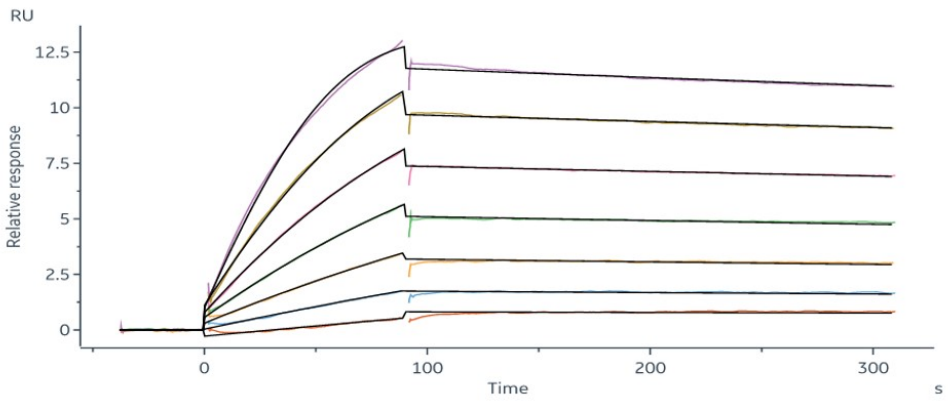


Immobilized Biotinylated Human GDF-8 Protein, Avitag (Cat. No. GD8-H8313) at 0.1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human Activin RIIB, His Tag (Cat. No. ACB-H5226) with a linear range of 2-78 ng/mL (QC tested).



Immobilized Biotinylated Human GDF-8 Protein, Avitag (Cat. No. GD8-H8313) at 0.1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human Follistatin Protein, Fc Tag (Cat. No. FON-H5256) with a linear range of 0.3-10 ng/mL (Routinely tested).

Bioactivity-SPR



Human Follistatin Protein, His Tag, premium grade (Cat. No. FON-H52H4) immobilized on CM5 Chip can bind Biotinylated Human GDF-8 Protein, Avitag (Cat. No. GD8-H8313) with an affinity constant of 1.71 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically

processed to generate each subunit of the disulfide-linked homodimer. This protein negatively regulates skeletal muscle cell proliferation and differentiation. Mutations in this gene are associated with increased skeletal muscle mass in humans and other mammals. [provided by RefSeq, Jul 2016]