Biotinylated Human latent GDF-8 Protein, His,Avitag™

Catalog # GD8-H82Q3

Synonym

latent GDF-8

Source

Biotinylated Human latent GDF-8 Protein, His,Avitag(GD8-H82Q3) is expressed from human 293 cells (HEK293). It contains AA Asn 24 - Ser 375 (Accession # O14793-1).
Predicted N-terminus: Gly

Molecular Characterization

This protein carries an Avi tag (Avitag™) at the N-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 43.7 kDa. The protein migrates as 40 kDa and 53-55 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 PBS, pH7.4 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

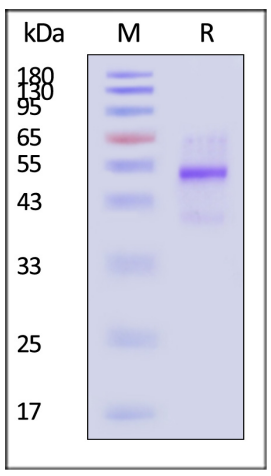
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

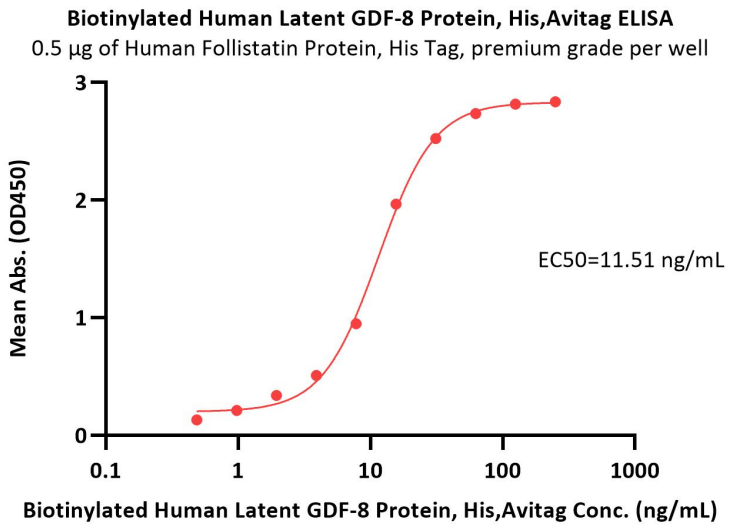
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



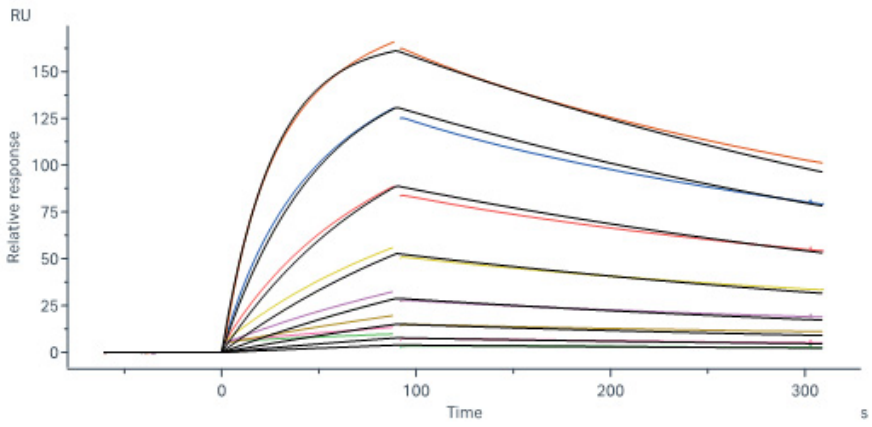
Biotinylated Human latent GDF-8 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Human Follistatin Protein, His Tag, premium grade (Cat. No. FON-H52H4) at 5 μg/mL (100 μL/well) can bind Biotinylated Human latent GDF-8 Protein, His,Avitag (Cat. No. GD8-H82Q3) with a linear range of 0.5-31 ng/mL (QC tested).

Bioactivity-SPR



Apitegromab captured on Protein A Chip can bind Biotinylated Human latent GDF-8 Protein, His,Avitag (Cat. No. GD8-H82Q3) with an affinity constant of 16.7 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Growth differentiation factor 8 (GDF8), also known as myostatin, is a unique member of the transforming growth factor-β superfamily that is expressed in human granulosa cells and has important roles in regulating a variety of ovarian functions. GDF8 acts as a negative regulator of skeletal muscle growth and differentiation. In addition to the expression in the musculoskeletal system, GDF8 is also expressed in various tissues, including the reproductive system.