Human latent GDF-8 Protein, His Tag (pro & latent) (MALS verified)

Catalog # GD8-H5243

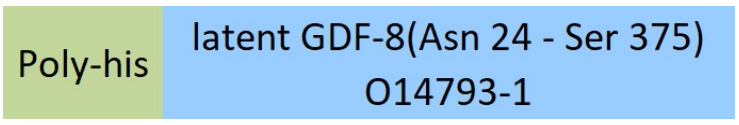
Synonym

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

Source

Human latent GDF-8, His Tag(GD8-H5243) is expressed from human 293 cells (HEK293). It contains AA Asn 24 - Ser 375 (Accession # O14793-1).
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus. Pro-GDF8 was predominantly migrated to 45-50 kDa precursor monomers, and latent GDF8 showed 35 kDa prodomain monomer bands together with a 14 kDa growth factor monomer when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

The protein is designed as a dimer.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.2 M Arginine, 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

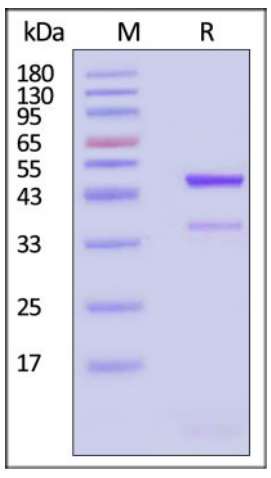
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

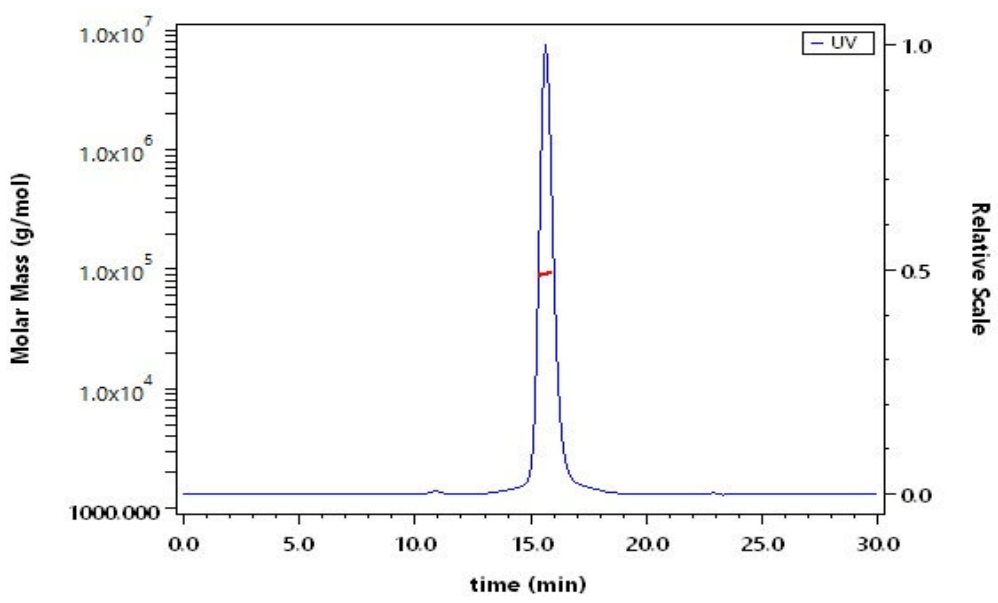
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



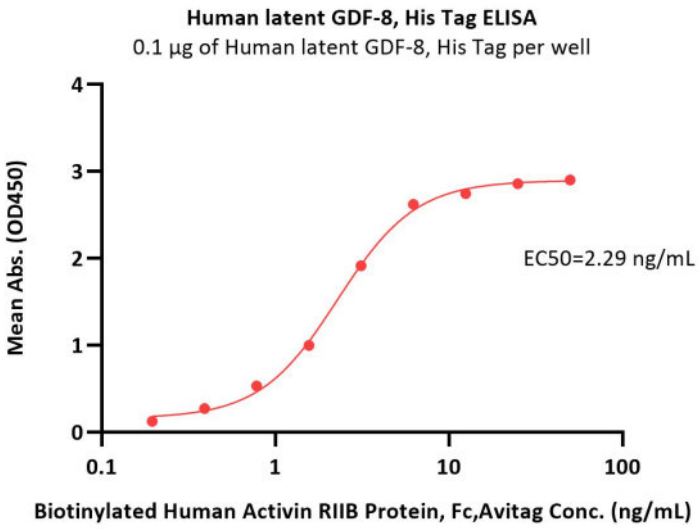
Human latent GDF-8, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

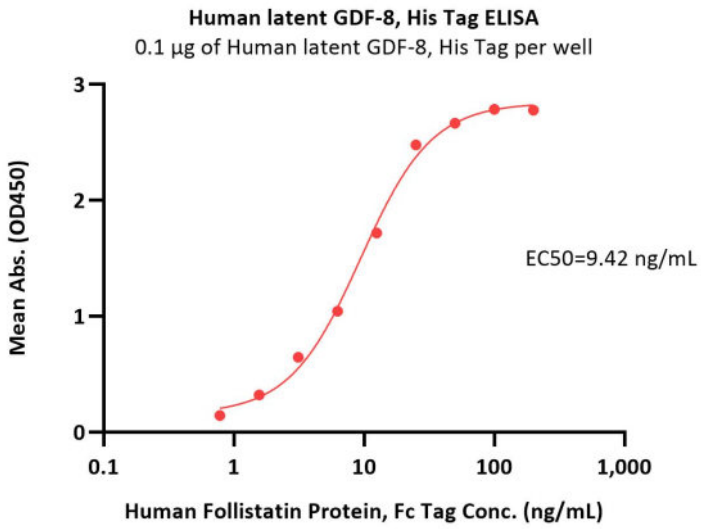


The purity of Human latent GDF-8, His Tag (Cat. No. GD8-H5243) is more than 95% and the molecular weight of this protein is around 80-95 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

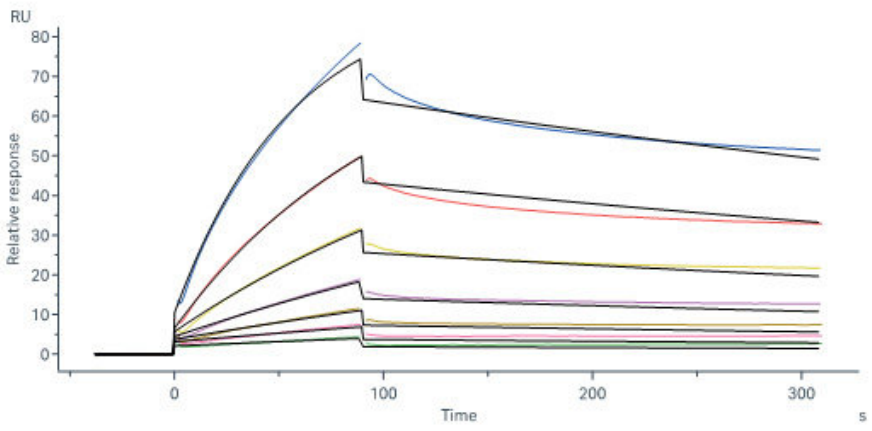


Immobilized Human latent GDF-8, His Tag (Cat. No. GD8-H5243) at 1 μg/mL (100 μL/well) can bind Biotinylated Human Activin RIIB Protein, Fc,Avitag (Cat. No. ACB-H82F3) with a linear range of 0.2-6 ng/mL (QC tested).

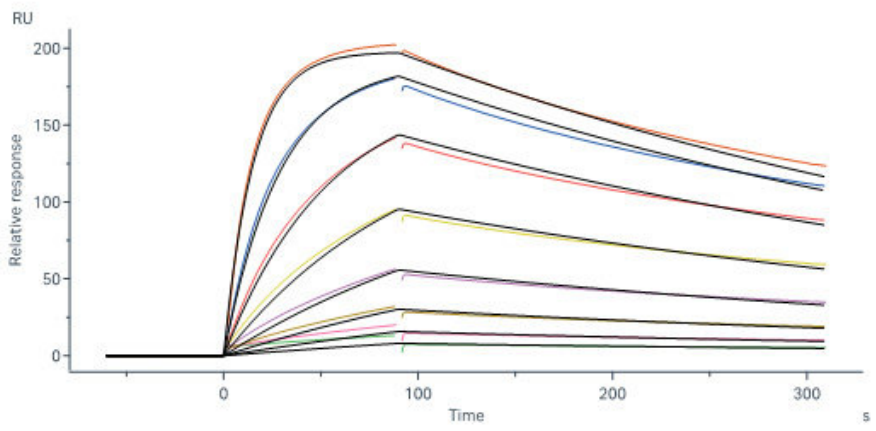


Immobilized Human latent GDF-8, His Tag (Cat. No. GD8-H5243) at 1 μg/mL (100 μL/well) can bind Human Follistatin Protein, Fc Tag (Cat. No. FON-H5256) with a linear range of 0.8-25 ng/mL (Routinely tested).

Bioactivity-SPR



Human Follistatin Protein, His Tag, premium grade (Cat. No. FON-H52H4) immobilized on CM5 Chip can bind Human latent GDF-8, His Tag (Cat. No. GD8-H5243) with an affinity constant of 364 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Apitegromab captured on Protein A Chip can bind Human latent GDF-8, His Tag (Cat. No. GD8-H5243) with an affinity constant of 9.44 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.