Human Latent GDF-2 / BMP-9 Protein, His Tag (MALS verified)

Catalog # GD2-H52H3



Synonym

Latent GDF-2,Latent GDF2,Latent BMP-9,Latent BMP9

Source

Human Latent GDF-2, His Tag(GD2-H52H3) is expressed from human 293 cells (HEK293). It contains AA Lys 23 - Arg 429 (Accession # Q9UK05-1).

Predicted N-terminus: His

Molecular Characterization

Poly-his

Latent GDF-2(Lys 23 - Arg 429) Q9UK05-1

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

The protein has a calculated MW of 47.0 kDa. The protein migrates as 13 kDa and 40-45 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

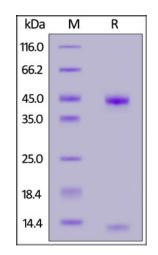
After reconstitution, this product is stable after storage at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

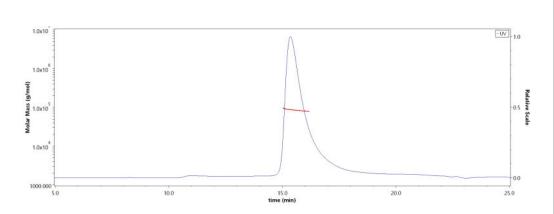
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Latent GDF-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human Latent GDF-2, His Tag (Cat. No. GD2-H52H3) is more than 90% and the molecular weight of this protein is around 80-95 kDa verified by SEC-MALS.

Report

Background

Human Growth and differentiation factor 2 (GDF-2), also known as Bone morphogenetic protein 9 (BMP-9), is a member of the BMP subgroup of the TGF-beta superfamily proteins that signal through heterodimeric complexes composed of type I and type II BMP receptors. GDF-2 Potent circulating inhibitor of angiogenesis. Signals through the type I activin receptor ACVRL1 but not other Alks. Signaling through SMAD1 in endothelial cells requires TGF-beta coreceptor endoglin/ENG.



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ALK1 is a signalling receptor for bone morphogenetic protein-9 (BMP-9) in endothelial cells (ECs). BMP-9 bound with high affinity to ALK1 and endoglin, and weakly to the type-I receptor ALK2 and to the BMP type-II receptor (BMPR-II) and activin type-II receptor (ActR-II) in transfected COS cells. Binding of BMP-9 to ALK2 was greatly facilitated when BMPR-II or ActR-II were co-expressed.

Clinical and Translational Updates

