



Synonym

IGFBP4,IBP-4

Source

Biotinylated Human IGFBP-4 Protein, His,Avitag(IG4-H82E3) is expressed from human 293 cells (HEK293). It contains AA Asp 22 - Glu 258 (Accession # [P22692-1](#)).

Predicted N-terminus: Asp 22

Molecular Characterization

IGFBP-4(Asp 22 - Glu 258)
P22692-1 Poly-his Avi

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

The protein has a calculated MW of 29.6 kDa. The protein migrates as 35-40 kDa and 41-42 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.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% 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

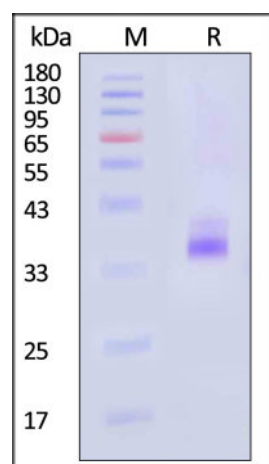
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

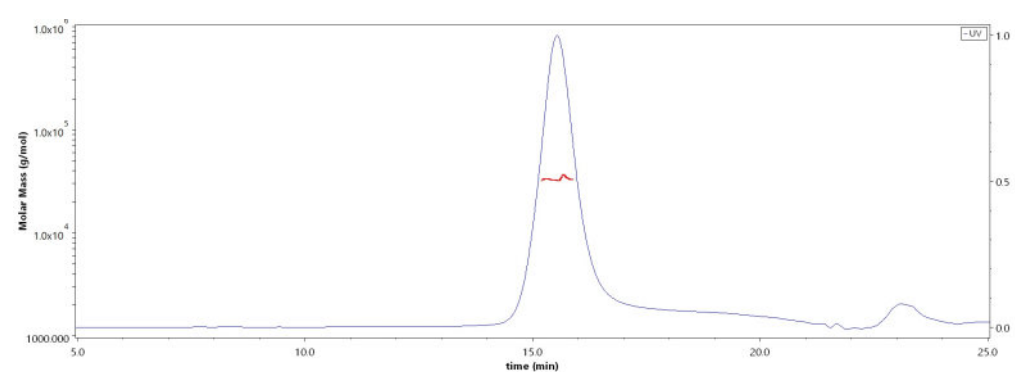
SDS-PAGE



Biotinylated Human IGFBP-4 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

SEC-MALS

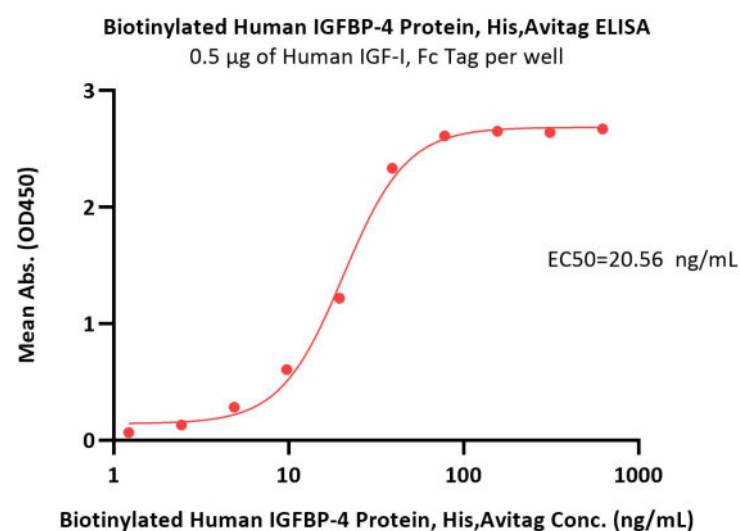
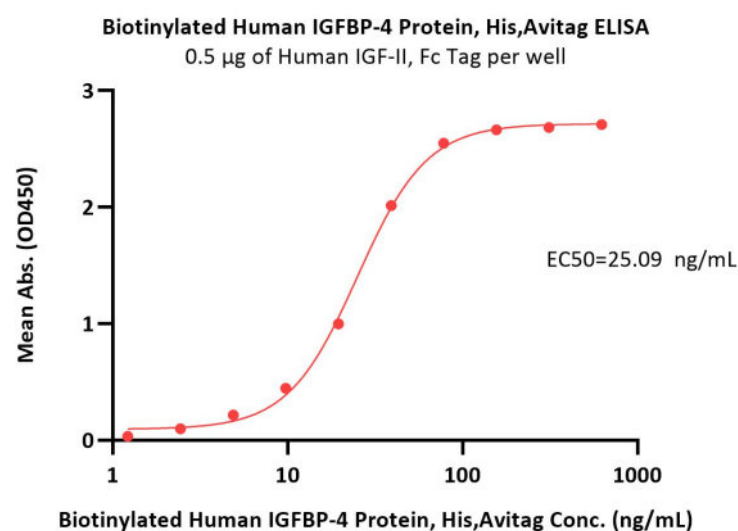


The purity of Biotinylated Human IGFBP-4 Protein, His,Avitag (Cat. No. IG4-H82E3) is more than 90% and the molecular weight of this protein is around 28-40 kDa verified by SEC-MALS.

Report

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and more!





Immobilized Human IGF-II, Fc Tag (Cat. No. IG2-H4260) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IGFBP-4 Protein, His,Avitag (Cat. No. IG4-H82E3) with a linear range of 2-40 ng/mL (QC tested).

Immobilized Human IGF-I, Fc Tag at 5 µg/mL (100 µL/well) can bind Biotinylated Human IGFBP-4 Protein, His,Avitag (Cat. No. IG4-H82E3) with a linear range of 2-40 ng/mL (Routinely tested).

Background

Insulin-like growth factor-binding protein 4 (IGFBP-4) is also known as IGF-binding protein 4, which contains an IGFBP domain and a thyroglobulin type-I domain. IGFBP-4 binds both insulin-like growth factors (IGFs) I and II and circulates in the plasma in both glycosylated and non-glycosylated forms. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors. IGFBP-4 is a unique protein and it consistently inhibits several cancer cells in vivo and in vitro. Its inhibitory action has been shown in vivo in prostate and colon. IGFBP-4 is secreted by all colon cancer cells.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

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and more!

