

Synonym

IGFBP4,IBP-4

Source

Human IGFBP-4 Protein, Fc Tag(IG4-H5253) 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) Fc(Pro 100 - Lys 330) P22692-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 52.4 kDa. The protein migrates as 60-65 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

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

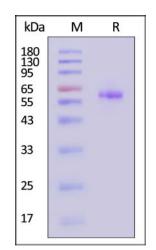
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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.

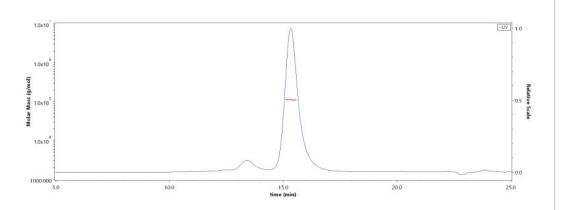
SDS-PAGE



Human IGFBP-4 Protein, Fc 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

SEC-MALS



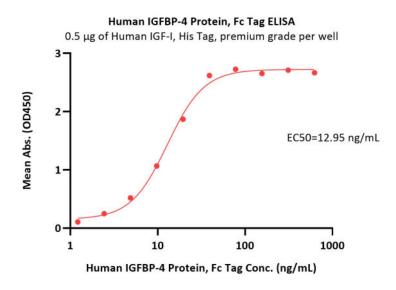
The purity of Human IGFBP-4 Protein, Fc Tag (Cat. No. IG4-H5253) is more than 85% and the molecular weight of this protein is around 100-125 kDa verified by SEC-MALS.

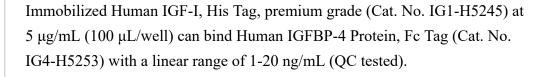
Report

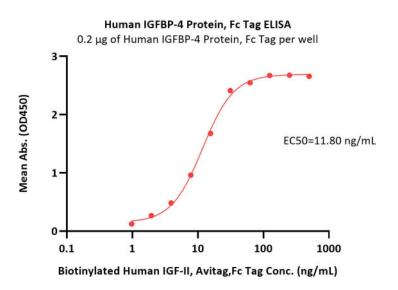
Human IGFBP-4 Protein, Fc Tag (MALS verified)

Catalog # IG4-H5253









Immobilized Human IGFBP-4 Protein, Fc Tag (Cat. No. IG4-H5253) at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human IGF-II, Avitag,Fc Tag (Cat. No. IG2-H82F9) with a linear range of 1-20 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.