

Synonym

IGFBP3,BP-53,IBP3

Source

Human IGFBP-3, His Tag(IG3-H52H9) is expressed from human 293 cells (HEK293). It contains AA Gly 28 - Lys 291 (Accession # P17936-1). Predicted N-terminus: Gly 28

Molecular Characterization

IGFBP-3(Gly 28 - Lys 291) P17936-1

Poly-his

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

The protein has a calculated MW of 30.6 kDa. The protein migrates as 40-50 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

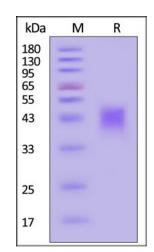
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

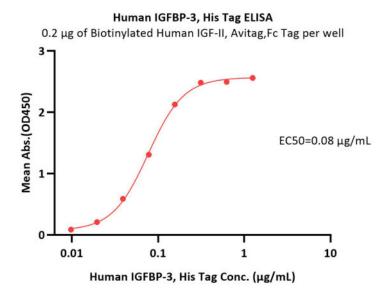
SDS-PAGE

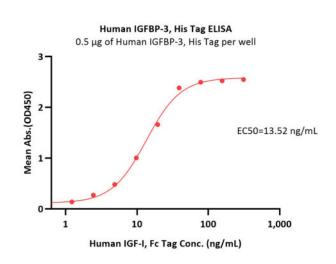


Human IGFBP-3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA







Immobilized Biotinylated Human IGF-II, Avitag,Fc Tag (Cat. No. IG2-H82F9) at 2 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (1 μ g/well) plate can bind Human IGFBP-3, His Tag (Cat. No. IG3-H52H9) with a linear range of 0.01-0.313 μ g/mL (QC tested).

Immobilized Human IGFBP-3, His Tag (Cat. No. IG3-H52H9) at 5 μ g/mL (100 μ L/well) can bind Human IGF-I, Fc Tag with a linear range of 0.6-39 ng/mL (Routinely tested).

Background

Insulin-like growth factor-binding protein 3 is also known as IGFBP3, is a protein that, in humans, is encoded by the IGFBP3 gene. IGFBP3 forms a ternary complex of about 140 ~150 kDa with IGF1 or IGF2 and a glycoprotein insulin-like growth factor acid-labile subunit (ALS), thus alter the interaction of IGFs with their cell surface receptors. IGFBP3 exerts either proapoptotic or growth stimulatory effects depending upon the cellular context. Studies have shown that IGFBP3 can leads to the induction of apoptosis dependent or independent of the IGF-IGF receptor axis, accordingly acts as a negative regulator of tumorigenesis and progressing in certain carcinomas. The highest expression level is found in the nonparanchymal cells of the liver. Expression levels are also higher during extrauterine life and peak during puberty.

Clinical and Translational Updates

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

