

**Synonym**

IGFBP3,BP-53,IBP3

**Source**

Human IGFBP-3, His Tag (IG3-H5229) is expressed from human 293 cells (HEK293). It contains AA Gly 28 - Lys 291 (Accession # [AAH18962](#)).

Predicted N-terminus: Gly 28

**Molecular Characterization**

IGFBP-3(Gly 28 - Lys 291)  
AAH18962 Poly-his

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

The protein has a calculated MW of 29.6 kDa. The protein migrates as 40-50 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.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.*

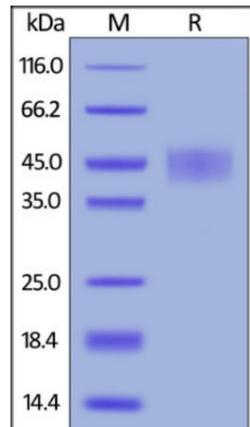
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

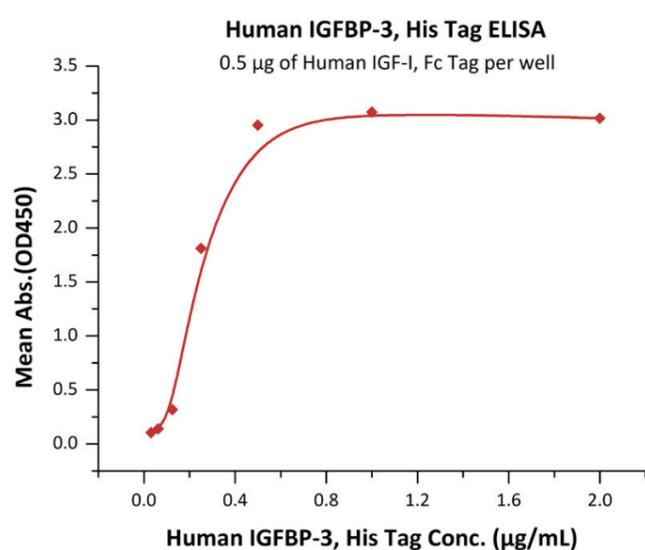
This product is stable after storage at:

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

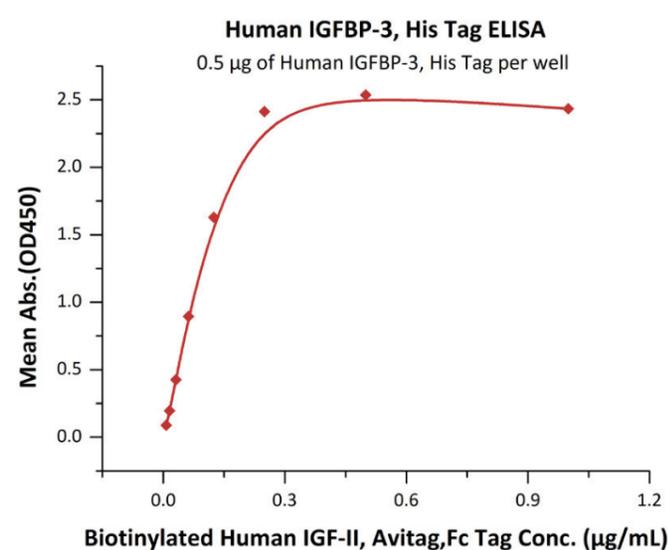
**SDS-PAGE**

Human IGFBP-3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Human IGF-I, Fc Tag (Cat. No. [IG1-H4269](#)) at 5 µg/mL (100 µL/well) can bind Human IGFBP-3, His Tag (Cat. No. [IG3-H5229](#)) with a linear range of 0.031-0.5 µg/mL (QC tested).



Immobilized Human IGFBP-3, His Tag (Cat. No. [IG3-H5229](#)) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IGF-II, Avitag,Fc Tag (Cat. No. [IG2-H82F9](#)) with a linear range of 0.008-0.1 µg/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 lead 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 nonparenchymal cells of the liver. Expression levels are also higher during extrauterine life and peak during puberty.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.