

## **Growth Factor Data Sheet**

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Insulin-like Growth Factor-Binding Protein 3 (IGFBP3) belongs to the IGFBP family, which are all proteins with conserved cysteine residues, an IGFBP domain, and a thyroglobulin type-I domain. IGFBP3 is expressed by most tissues and is the most abundant IGFBP protein. It has higher levels of expression during postnatal life, which peak during puberty. The expression of IGFBP3 in fibroblasts is stimulated by

a number of mitogenic growth factors. The protein forms a ternary complex with IGFI or IGFII, and an acid-labile subunit, causing it to circulate in the plasma. As this complex, it prolongs the half-life of IGFs and alters their interaction with cell surface receptors. Decreased plasma levels of IGFBP3 often happen during the progression of prostate cancer from benign to metastatic disease.

Catalog Number Product Name	1150-01B3 IGFBP3, Human Recombinant Human Insulin-like Growth Factor Binding Protein 3 IGF-BP3
Source	Escherichia coli
MW	~28.8 kDa (264 amino acids)
Sequence	GASSGGLGPV VRCEPCDARA LAQCAPPPAV CAELVREPGC GCCLTCALSE GQPCGIYTER CGSGLRCQPS PDEARPLQAL LDGRGLCVNA SAVSRLRAYL LPAPPAPGNA SESEEDRSAG EVESPSVSST HRVSDPKFHP LHSKIIIIKK GHAKDSQRYK VDYESQSTDT QNFSSESKRE TEYGPCRREM EDTLNHLKFL NVLSPRGVHI PNCDKKGFYK KKQCRPSKGR KRGFCWCVDK YGQPLPGYTT KGKEDVHCYS MQSK
Accession Number	<u>P17936</u>
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED $_{50}$ as determined by inhibiting IGF-II induced proliferation of serum free human MCF-7 cells is less than 200 ng/ml, corresponding to a specific activity of > $5.0 \times 10^3$ IU/mg in the presence of 15 ng/ml of rHuIGF-II.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.

GoldBio · FM-000019/ 1150-01B3 DES Version 1