

Recombinant Human IGF-BP3 (rhIGF-BP3) Catalog Number: 105-01B

- **Description** IGF-BP3 is a 30 kDa cysteine-rich secreted protein. It is the major IGF binding protein present in the plasma of human and animals and it is also found in α -granules of platelets. In addition to its ability to modulate the activity of IGF-I and IGF-II, IGF-BP3 exerts inhibitory effects on follicle stimulating hormone (FSH) activity. Decreased plasma levels of IGF-BP3 often results in dwarfism, whereas elevated levels of IGF-BP3 may lead to acromegaly. The expression of IGF-BP3 in fibroblasts is stimulated by mitogenic growth factors such as Bombesin, Vasopressin, PDGF, and EGF.
- Synonyms Growth hormone dependent binding protein, IBP3, BP-53
- GCCLTCALSE **AA Sequence** GASSGGLGPV VRCEPCDARA LAQCAPPPAV CAELVREPGC **GOPCGIYTERC** GSGLRCQPSP DEARPLQALL DGRGLCVNASA **VSRLRAYLLP** APPAPGNASES EEDRSAGEVE SPSVSSTHRVS DPKFHPLHSK **IIIIKKGHAKD** SQRYKVDYESQ STDTQNFSSE SKRETEYGPC RREMEDTLNH **LKFLNVLSPR** GVHIPNCDKK GFYKKKQCRP SKGRKRGFCW CVDKYGQPLP GYTTKGKEDV **HCYSMQSK** Source Escherichia coli
- Molecular Weight Approximately 28.8 kDa protein consisting of 264 amino acid residues.
- **Purity** >98% by SDS-PAGE and HPLC analyses.
- **Biological Activity**Fully biologically active. The ED_{50} is $\leq 0.2 \ \mu$ g/ml in presence of 15 ng/ml of human IGF-II, as
determined by its ability to inhibit IGF-II induced MCF-7 proliferation.
- **Physical Appearance** White lyophilized powder.
- **Formulation** Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
- **Endotoxin** $< 1EU/\mu g$ of growth factor as determined by LAL method.
- **Reconstitution** Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
- StorageStore at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For
maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
- Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro* diagnostic procedures.