# Technical Data Sheet

## Recombinant Human IGF-BP3 (rHu IGF-BP3)

### *Human Insulin-like Growth Factor-Binding Protein 3(rHuIGF-BP3 )*

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.

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| **Catalog Number:** | RC216-12B3 |
| **Source:** | *Escherichia coli.* |
| **Molecular Weight:** | 28.8 kDa protein consisting of 264 amino acid residues.. |
| **Quantity:** | 5ug/25ug/1mg |
| **Purity:** | >98% by SDS-PAGE and HPLC analyses. |
| **Biological Activity:** | The $ED_{50}$ was determined by its ability to inhibit IGF-II induced proliferation of MCF-7. The expected $ED_{50}$ for this effect is ≤ 0.2 µg/ml in presence of 15 ng/ml of human IGF-II. |
| **Physical Appearance:** | Sterile Filtered White lyophilized (freeze-dried) powder. |
| **Formulation:** | Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. |
| **AA Sequence:** | GASSGGLGPVVRCEPCDARALAQCAPPPAVCAELVREPGCGCCLTCALSEG QPCGIYTERCGSGLRCQPSPDEARPLQALLDGRGLCVNASAVSRLRAYLLPA PPAPGNASESEEDRSAGEVESPSVSSTHRVSDPKFHPLHSKIIIIKKGHAKDSQ RYKVDYESQSTDTQNFSSESKRETEYGPCRREMEDTLNHLKFLNVLSPRGV HIPNCDKKGFYKKKQCRPSKGRKRGFCWCVDKYGQPLPGYTTKGKEDVH CYS MQSK |
| **Endotoxin:** | Less than 1EU/µg of rHuIGF-BP3 as determined by LAL method. |
| **Reconstitution:** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water containing 0.1% BSA or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions. |
| **Storage:** | This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. **Avoid repeated** |

**freeze/thaw cycles**.

**Usage:** This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.

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