



PRODUCT DATA SHEET

**Product: Insulin-Like Growth Factor Binding Protein-3
(IGFBP-3) (recombinant human)**

Cat. No.: BC-269 (25 µg)

Synonyms:

Growth-hormone-dependant binding protein, IBP3, BP-53, IGFBP-3

Background:

IGFBP3 is a member of the insulin-like growth factor binding protein (IGFBP) family and encodes a protein with an IGFBP domain and a thyroglobulin type-I domain. The protein forms a ternary complex with insulin-like growth factor acid-labile subunit (IGFALS) and either insulin-like growth factor (IGF) I or II. In this form, it circulates in the plasma, prolonging the half-life of IGFs and altering their interaction with cell surface receptors. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Description:

Recombinant Human IGFBP3 produced in *E. Coli* is a homodimeric, non-glycosylated, polypeptide chain containing 2 x 264 amino acids and having a molecular mass of 28806 Dalton. The IGFBP-3 is purified by proprietary chromatographic techniques.

Origin:

Produced in *E. Coli*.

Format:

Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized from a 0.2 µm filtered concentrated (0.5 mg/mL) solution in 20 mM PB, pH 7.4, 150 mM NaCl.

Purity:

Greater than 97.0% as determined by RP-HPLC and SDS-PAGE.

Reconstitution:

Reconstitute in sterile 18MΩ-cm H₂O not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

Biological Activity:

The ED₅₀, calculated by its ability to inhibit IGF-II induced proliferation of MCF-7 is ≤ 0.2 µg/mL in the presence of 15 ng/mL of Human IGF-II, corresponding to a specific activity of 5,000,000 units/mg.

Storage:

Lyophilized IBP3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGF-BP 3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid freeze-thaw cycles.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. **KAMIYA BIOMEDICAL COMPANY** is not liable for any damage, personal injury, or economic loss caused by this product.