

Rev03  
Update: Dec,14,2021

**DATASHEET**

# IGF-BP-3, Human

Cat. No.: Z02862

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>IGF-BP-3 (Gly28-Lys291) Accession # P17936</b>
<b>Purity</b>	> 98% as analyzed by SDS-PAGE > 98% as analyzed by HPLC
<b>Endotoxin Level</b>	< 1 EU/μg of protein by LAL method
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by inhibiting IGF-II induced proliferation of serum free human MCF-7 cells is less than 200.0 ng/ml, corresponding to a specific activity of $> 5.0 \times 10^3$ IU/mg in the presence of 15.0 ng/ml of rHuIGF-II.
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	28.8 kDa
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** 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 :** IGFBP3; BP-53; IBP3; insulin like growth factor binding protein 3

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.