

# Recombinant Human Insulin-like Growth Factor- Binding Protein 4, Insect Cells Derived (rHuIGF-BP4, Insect Cell) PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	105-01B4I
<b>Source:</b>	Insect Cell
<b>Molecular Weight:</b>	The apparent molecular weight is about 30 kDa in SDS-PAGE under reducing conditions, containing 237 amino acids.
<b>Quantity:</b>	5µg/20µg/1000µg
<b>AA Sequence:</b>	DEAIHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL GLGMPCGVYT PRCGSLRCY PPRGVEKPLH TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHDRRCLQK HFAKIRDRST SGGKMKVNGA PREDARVPVQ GSCQSELHRA LERLAASQSR THEDLYIPI PNCDRNGNFH PKQCHPALDG QRGKWCVDR KTGVKLPGGL EPKGELDCHQ LADSFRE
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED50 as determined by its ability to inhibit IGF-II induced proliferation of MCF-7 cells is less than 0.1 µg/ml, corresponding to a specific activity of > 1.0 × 10 <sup>4</sup> IU/mg in the presence of 14 ng/ml of rHuIGF-II.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20mM Tris-HCl, pH 8.0, 150mM NaCl.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rHuIGF-BP4, Insect Cell as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water 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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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## ***Human Insulin-like Growth Factor-Binding Protein 4***

IGFBP-4 (insulin-like growth factor binding protein 4) is member of the IGFBP family of structurally similar secreted glycoproteins that maintain IGF-I and IGF-II in the circulation and direct them to their target tissues. IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs with their cell surface receptors. IGFBP-4 consistently inhibits several cancer cells in vivo and in vitro.