

# Recombinant Human Insulin-like Growth Factor-Binding Protein 7 (rHuIGF-BP7)

## ChemWhat Technical Data Sheet (TDS)

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<b>Catalog Number:</b>	105-01B7
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 26.4 kDa, a single non-glycosylated polypeptide chain containing 256 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	SSSDTCGPCE PASCPLPPL GCLLGETRDA CGCCPMCARG EGEPCCGGGA GRGYCAPGME CVKSRKRRKG KAGAAAGGPG VSGVCVCKSR YPVCGSDGTT YPSGCQLRAA SQRAESRGEK AITQVSKGTC EQGPSIVTPP KDIWNVTGAQ VYLSCEVIGI PTPVLIWNKV KRGHYGVQRT ELLPGDRDNL AIQTRGGPEK HEVTGWVLVS PLSKEDAGEY ECHASNSQGQ ASASAKITVV DALHEIPVKK GEGAEL
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Testing in Progress.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 8.6, 150 mM NaCl.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rHuIGF-BP7 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>	Use a <b>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>	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Human Insulin-like Growth Factor-Binding Protein 7***

IGF-BP7, also named IBP-7, Mac25 and IGFBPrP1, is belonging to the superfamily of insulin-like growth factor (IGF) binding proteins and is encoded by the *igfbp7* gene in human. It is expressed in a wide range of normal human tissues and it generally shows reduced expression in cancer cell lines of prostate, breast, colon, and lung origin. IGF-BP7 includes conserved cysteine residues. IGF-BP7 modulates the biological activities of IGF proteins. It also suppresses growth and colony formation of prostate and breast cancer cell lines. Above all, IGF-BP7 is a very important factor in skeletal myogenesis. Human IGF-BP7 cDNA encodes 282 amino acid (a.a.) residue precursor protein with a putative 26 a.a. signal peptide. Human and murine IGF-BP7 share 94% a.a. sequence identity.