

# Recombinant Human Insulin-like Growth Factor Binding Protein 5

**Cat. No.** IGFBP5-81H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human IGFBP5 produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 253 amino acids and having a molecular mass of 28613 Dalton. IGFBP5 is purified by proprietary chromatographic techniques.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	IGFBP5 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.
<b>Amino Acid sequence</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Gly-Ser-Phe.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

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<b>Formulation</b>	IBP-5 was lyophilized from a concentrated (1mg/ml) solution containing 10 mM sodium Citrate PH 3.0.
<b>Solubility</b>	It is recommended to reconstitute the lyophilized Insulin-Like Growth Factor Binding Protein-5 in sterile 18 MΩ-cm H <sub>2</sub> O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
<b>Specific Activity</b>	The ED <sub>50</sub> , calculated by its ability to inhibit IGF-II induced proliferation of MCF-7 is < 0.3g/ml in the presence of 15 ng/ml of Human IGF-II.
<b>Stability</b>	Lyophilized IBP5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGFBP 5 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). Please prevent freeze-thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	IGFBP5 insulin-like growth factor binding protein 5 [ Homo sapiens ]
<b>Synonyms</b>	IBP-5; IBP5; IGFBP-5; IGFBP5; IGF-binding protein 5; insulin-like growth factor binding protein 5
<b>Gene ID</b>	3488
<b>mRNA Refseq</b>	NM_000599
<b>Protein Refseq</b>	NP_000590
<b>MIM</b>	146734
<b>UniProt ID</b>	P24593

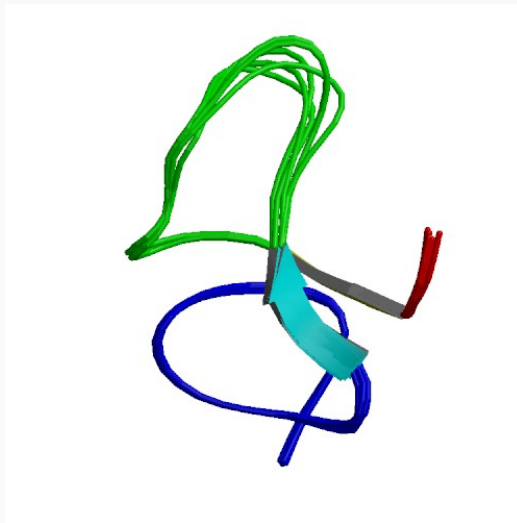
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<b>Chromosome Location</b>	2q33-q36
<b>Pathway</b>	Diabetes pathway
<b>Function</b>	insulin-like growth factor I binding

PDB rendering based  
on 1boe



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