
Product Data Sheet

Product Name: IGFBP4 Sf9, Human

Cat. No.: GP26037

Batch No.: 1

Product Data

Purity	>98%	Source	Sf9, Insect cells.
Physical Appearance	solid	Shipping Condition	atRoomtemp.
Synonyms	Insulin-like growth factor-binding protein 4, IBP-4, IGF-binding protein 4, IGFBP-4, IGFBP4, IBP4, BP-4, HT29-IGFBP.		
Amino Acid Sequence	DEAIHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL GLGMPCGVYT PRCGSGLRCY PPRGVEKPLH TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHRRRCLQK HFAKIRDRST SGGKMKVNGA PREDARVVPQ GSCQSELHRA LERLAASQSR THEDLYIPI PNCDRNGNFH PKQCHPALDG QRGKCWCVDR KTGVKLPDDL EPKGELDCHQ LADSFRE.		
Solubility	It is recommended to reconstitute the lyophilized Insulin Like Growth Factor Binding Protein-4 in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Lyophilized from a 0.2μm filtered concentrated solution in 20mM Tris-HCl, pH 8.0 and 150mM NaCl.		

Introduction

Insulin-like growth factor-binding protein 4 (IGFBP-4) is a part of the insulin-like growth factor binding protein (IGFBP) family. IGFBP4 includes an IGFBP domain and a thyroglobulin type-I domain. IGFBP4 binds both insulin-like growth factors (IGFs) I and II. IGFBP-4 circulates in the plasma in both glycosylated and non-glycosylated forms. IGFBPs can either inhibit or enhance the biological activities of IGF, or act in an IGF independent manner. IGFBP-4 is consistently inhibits several cancer cells in vivo and in vitro, suggesting that it may function as an apoptotic factor. IGFBP4 is produced by all colon cancer cells. Binding of IGFBP-4 prolongs the half-life of the IGFs and changes their interaction with cell surface receptors.

Biological Activity

Caution: Product has not been fully validated for medical applications. For research use only.

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The ED50 is determined by its ability to inhibit IGF-II induced proliferation of MCF-7 cells and is <than 0.1 µg/ml, corresponding to a specific activity of $> 1.0 \times 10^4$ IU/mg in the presence of 14 ng/ml of rHuIGF-II.

Stability

Lyophilized IGFBP4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Insulin Like Growth Factor Binding Protein-4 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Background

Insulin Like Growth Factor Binding Protein-4 Human Recombinant produced in Sf9 Insect cells is a single, glycosylated polypeptide chain containing 237 amino acids and having a molecular mass of 30kDa. The IGFBP4 is purified by proprietary chromatographic techniques.

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