9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

IGFBP 4 Human

Insulin-Like Growth Factor Binding Protein-4 Human
GRF0176

Product Overview

Name	IGFBP 4 Human
Description	
Insulin-Like Growth Factor Binding Protein-4 Human	
Accession (Primary)	P22692
Synonyms	
Insulin-like growth factor-binding protein 4, IBP-4, IGF-binding protein 4, IGFBP-4, IGFBP4, IBP4, BP-4, HT29-IGFBP.	
Introduction	
Insulin-like growth factor-binding protein 4 (IGFBP-4) belongs to 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 exceptional since it 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.	
Source	
HEK293 cells.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
IGFBP 4 was lyophilized after extensive dialysis against PBS.	
Stability	
Lyophilized IGFBP4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGFBP-4 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.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	
DEAIHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL GLGMPCGVYT PRCGSGLRCY PPRGVEKPLH	

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHDRRCLQK HFAKIRDRST SGGKMKVNGA PREDARPVPQ GSCQSELHRA LERLAASQSR THEDLYIIPI PNCDRNGNFH PKQCHPALDG QRGKCWCVDR KTGVKLPGGL EPKGELDCHQ LADSFRE + His Tag.

Biological Activity

The ED50 range is 0.01-0.09 µg/ml as measured by its ability to inhibit the biological activity of IGFII (20ng/ml) on MCF7 human breast adenocarcinoma cells.

Solubility

It is recommended to reconstitute the lyophilized IGFBP4 in sterile 18M-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

IGFBP 4 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P22692)