

32-6401: IGFBP4 Sf9, Human

Application : Functional Assay

Alternative Name : Insulin-like growth factor-binding protein 4, IBP-4, IGF-binding protein 4, IGFBP-4, IGFBP4, IBP4, BP-4, HT29-IGFBP.

Description

Source: Sf9, Insect cells.

Sterile Filtered White lyophilized (freeze-dried) powder.

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.

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.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Lyophilized from a 0.2µm filtered concentrated solution in 20mM Tris-HCl, pH 8.0 and 150mM NaCl.

Content : It is recommended to reconstitute the lyophilized Insulin Like Growth Factor Binding Protein-4 in sterile 18M Omega -cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage condition : 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.

Amino Acid : DEAIHCPPCS EEKLARCRPP VGCEELVREP GCGCCATCAL GLGMPCGVYT PRCGSGRLRCY
PPRGVEKPLH TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHDDRCLQK
HFAKIRDRST SGGKMKVNGA PREDARPVPQ GSCQSELHRA LERLAASQSR THEDLYIPI
PNCDNRNGNFH PKQCHPALDG QRGKCWCVDR KTGVKLPGGL EPKGELDCHQ LADSFRE.

Application Note

The ED₅₀ is determined by its ability to inhibit IGF-II induced proliferation of MCF-7 cells and is 1.0 Å— 104 IU/mg in the presence of 14 ng/ml of rHuIGF-II.