

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 PRCGSLRCY PPRGVEKPLH TLMHGQGVCM ELAEIEAIQE SLQPSDKDEG DHPNNSFSPC SAHDRRCLQK HFAKIRDRST SGGKMKVNGA PREDARVPVQ GSCQSELHRA LERLAASQSR THEDLYIPI PNCDRNGNFH PKQCHPALDG QRKGCWCVDR 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 Åµg/ml in the presence of 14 ng/ml of rHuIGF-II.