



Insulin-Like Growth Factor Binding Protein-7, human recombinant (rhuTAF)

Catalog No: 99951
Lot No: XXXXX
Source: *E. coli*
Synonyms: Insulin-like growth factor-binding protein 7, IBP-7, IGF-binding protein 7, IGFBP-7, IGFBP-rP1, MAC25 protein, PGI2-stimulating factor, Prostacyclin-stimulating factor, Tumor-derived adhesion factor, TAF, IGFBP7, MAC25, PSF, AGM, FSTL2, RAMSVPS, IGFBP-7v, IGFBPRP1

Background

Insulin-like growth factor-binding protein 7 (IGFBP7) is a member of the IGFBP family. IGFBP family members are all cysteine rich proteins with conserved cysteine and an IGFBP domain, a Kazal-like domain and an Ig-like C2-type domain. IGFBP7 is expressed in a broad range of normal human tissues and frequently shows reduced expression in cancer cell lines of prostate, breast, colon, and lung origin. IGFBP7 has a role in skeletal myogenesis by binding to IGF in a manner, which inhibits IGF induced differentiation of skeletal myoblasts, without disturbing IGF induced proliferation. Moreover, IGFBP7 suppresses growth and colony formation of prostate and breast cancer cell lines via an IGF independent mechanism, which triggers a delay in the G1 phase of the cell cycle and increased apoptosis.

Description

Recombinant Human IGFBP7, produced in *E. coli* cells, is a non-glycosylated, homodimeric protein containing two 256 amino acid chains. It has a molecular mass of 26.4 kDa. The IGFBP-7 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered, white, lyophilized (freeze-dried) powder.

Formulation

The IGFBP7 was lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl (pH 8.5) and 150 mM NaCl.

Solubility

It is recommended to reconstitute the lyophilized IGFBP-7 in sterile 20 mM AcOH (acetic acid), not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized IGFBP7, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGFBP-7 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.

Amino Acid Sequence

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SSSDTCGPCE PASCPLPPL GCLLGETRDA CGCCPMCARG EGEPCGGGA GRGYCAPGME CVKSRKRRKG KAGAAAGGPG  
VSGVCVCKSR YPVCSDGTT YPSGCQLRAA SQRAESRGEK AITQVSKGTC EQGPSIVTTP KDIWNVTGAQ VYLSCEVIGI  
PTPVLIWNKV KRGHYGVQRT ELLPGDRDNL AIQTRGGPEK HEVTGWVLVS PLSKEDAGEY ECHASNSQGQ ASASAKITVV  
DALHEIPVKK GEGAEI
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Usage

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