

Human IGFBP7 / IBP-7 Protein (His Tag)

Catalog Number: 13100-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

AGM, FSTL2, IBP-7, IGFBP-7, IGFBP-7v, IGFBPRP1, MAC25, PSF, TAF

Protein Construction:

A DNA sequence encoding the human IGFBP7 (Q16270) (Met 1-Leu 282) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized IGFBP7 at 20 µg/ml (100 µl/well) can bind biotinylated human IGF2-nusa. The EC50 of biotinylated human IGF2-nusa is 0.57 µg/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ser 27

Molecular Mass:

The secreted recombinant human IGFBP7 comprises 267 amino acids and has a predicted molecular mass of 27.9 kDa. Since IGFBP7 can be proteolytically cleaved between lysine 97 and alanine 98, the apparent molecular mass of rh IGFBP7 is approximately 36 & 32 kDa in SDS-PAGE under reducing conditions, corresponding to the whole protein and the cleaved form respectively.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

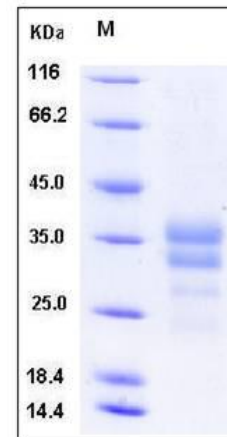
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Insulin-like growth factor-binding protein 7, also known as IGF-binding protein 7, IBP-7, IGFBP-7, IGFBP-rP1, MAC25 protein, PGI2-stimulating factor, Prostacyclin-stimulating factor, Tumor-derived adhesion factor TAF and IGFBP7, is a secreted protein involved in several cellular processes, including proliferation, senescence and apoptosis. Loss of IGFBP7 expression is a critical step in the development of human tumors, including melanoma and colon cancer. IGFBP7 contains one Ig-like C2-type (immunoglobulin-like) domain, one IGFBP N-terminal domain and one Kazal-like domain. IGFBP7 binds IGF-I and IGF-II with a relatively low affinity. IGFBP7 stimulates prostacyclin (PGI2) production. It also stimulates cell adhesion. The major function of the IGFBP7 protein is in the regulation of availability of insulin like growth factors (IGFs) in tissue as well as in modulating IGF binding to its receptors. IGFBP7 binds to IGF with high affinity. It also stimulates cell adhesion. IGFBP7 protein is implicated in some cancers.

References

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4. Sanjida Ahmed., et al., 2006, FEBS Journal. 273 (3): 615-27.
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6. Vizioli MG. et al., 2010, Oncogene. 29 (26): 3835-44.

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