Human IGFBP7 / IBP-7 Protein (Fc Tag)

Catalog Number: **13100-H02H**

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 the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA .
1. Immobilized IGFBP7-Fc at 20 μg/ml (100 μl/well) can bind biotinylated human IGF2-nusa. The EC50 of biotinylated human IGF2-nusa is 0.06 μg/ml .
2. Immobilized human CCL21 at 2 μg/ml (100 μl/well) can bind human IGFBP7-Fc with a linear ranger of 0.16-4 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 ℃

Predicted N terminal: Ser 27

Molecular Mass:

The secreted recombinant human IGFBP7/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 497 amino acids and has a predicted molecular mass of 53.5 kDa. The apparent molecular mass of rh IGFBP7/Fc monomer is approximately 65-70 kDa in SDS-PAGE under reducing conditions.

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.

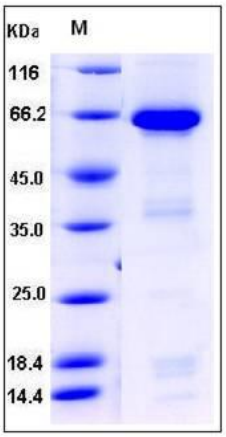
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ 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 oneIg-like C2-type (immunoglobulin-like) domain, oneIGFBP 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 ofInsulin 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

1. Akaogi K. et al.,1994, Biochem Biophys Res Commun. 198: 1046-53.
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5. Gommans WM., et al., 2008, RNA. 14: 2074-2085.
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