

Recombinant human IGFBP-1 protein

Catalog Number: ATGP4103

PRODUCT INFORMATION

Expression system

HEK293

Domain

26-259aa

UniProt No.

P08833

NCBI Accession No.

NP_000587.1

Alternative Names

insulin like growth factor binding protein 1, IGFBP1, AFBP, hIGFBP-1, IBP1, IGF-BP25, PP12, IGF-binding protein 1, Placental protein 12, amniotic fluid binding protein, alpha-pregnancy-associated endometrial globulin

PRODUCT SPECIFICATION

Molecular Weight

25.2kDa (234aa)

Concentration

0.5mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by its ability to inhibit proliferation using MCF-7 human breast cancer cells in the presence of Human IGF-1. The ED50 range ≤ 3 ug/ml.

Tag

Non-Tagged

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

Recombinant human IGFBP-1 protein

Catalog Number: ATGP4103

BACKGROUND

Description

IGFBP-1 (Insulin-like growth factor-binding protein 1), also known as PP12 (placental protein 12), is a member of the Insulin-like growth factor-binding protein family. This protein binds both insulin-like growth factors (IGFs) I and II and circulates in the plasma. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors. IGFBP-1 is expressed in liver, decidua, kidneys and is the most abundant IGFBP in amniotic fluid. Serum levels of IGFBP-1 are lowest after meals. Hepatocyte production of IGFBP-1 is regulated at the transcriptional level due to the effects of insulin and corticosteroids. Recombinant human IGFBP-1 was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

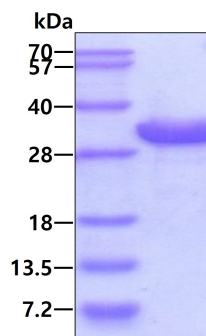
APWQCAPCSA EKLALCPPVS ASCSEVTRSA GCGCCPMCAL PLGAACGVAT ARCARGLSCR ALPGEQQLH ALTRGQGACV
QESDASAPHA AEAGSPESPE STEITEEELL DNFHLMAPSE EDHSILWDAI STYDGSKALH VTNIKKWKEP CRIELYRVVE
SLAKAQETSG EEISKFYLPN CNKNGFYHSR QCETSMDGEA GLCWCVYPWN GKRIPIGSPEI RGDPCNCQIYF NVQN

General References

Jones, J.I. and D.R. Clemmons (1995) *Endocrine Rev.* 16:3-34.
Kelley, K.M., et al, (1996) *Int. J. Biochem. Cell Biol.* 28:619-637.
J.Ekstrand., et al, (1990) *Genomics.* 6:413-418.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

Recombinant human IGFBP-1 protein

Catalog Number: ATGP4103

Human IGFBP-1 inhibit proliferation using MCF-7 human breast cancer cells in the presence of Human IGF-1. The ED50 range ≤ 3 ug/ml.

