PRODUCT INFORMATION

Expression system E.coli

Domain 28-291aa

UniProt No. P17936

NCBI Accession No. NP_000589

Alternative Names Insulin-like growth factor binding protein 3 isoform b precursor, IBP3, BP-53

PRODUCT SPECIFICATION

Molecular Weight 31 kDa (285aa)

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE,Denatured

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.

BACKGROUND

Description

IGFBP3 also known as Insulin-like growth factor binding protein 3 isoform b precursor. They are structurally and functionally related to insulin but have a much higher growth-promoting activity. It may be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. It stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake. It may play a role in synapse maturation. Recombinant human IGFBP3, fused to His-tag at N-terminus, was



expressed in E. coli.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGASSAGLGP VVRCEPCDAR ALAQCAPPPA VCAELVREPG CGCCLTCALS EGQPCGIYTE RCGSGLRCQP SPDEARPLQA LLDGRGLCVN ASAVSRLRAY LLPAPPAPGN ASESEEDRSA GSVESPSVSS THRVSDPKFH PLHSKIIIIK KGHAKDSQRY KVDYESQSTD TQNFSSESKR ETEYGPCRRE MEDTLNHLKF LNVLSPRGVH IPNCDKKGFY KKKQCRPSKG RKRGFCWCVD KYGQPLPGYT TKGKEDVHCY SMQSK

General References

Zoidis E., et al. (2011) Mol. Cell. Biochem. 348:33-42

DATA



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