Recombinant mouse IGFBP-2 protein

Catalog Number: ATGP4144

PRODUCT INFORMATION

Expression system
HEK293

Domain
35-305aa

UniProt No.
P47877

NCBI Accession No.
NP_032368.2

Alternative Names
insulin-like growth factor binding protein 2 isoform 1,insulin-like growth factor binding protein 2, IBP-2, Igfbp-2, mIGFBP-2, IGF-binding protein 2, Igfbp2

PRODUCT SPECIFICATION

Molecular Weight
30.3kDa (277aa)

Concentration
1mg/ml (determined by Absorbance at 280nm)

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

Purity
> 85% 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 Mouse IGF-2. The ED50 range ≤ 0.7 ug/ml.

Tag
His-Tag

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 mouse IGFBP-2 protein

Catalog Number: ATGP4144

BACKGROUND

Description

IGFBP-2, also known as insulin-like growth factor binding protein 2, is a member of IGFBP superfamily. IGFBPs modulate the biological activities of IGF proteins and have a high affinity for IGFs. IGFBPs are not merely carrier proteins for IGFs, but hold a central position in IGF ligand-receptor interactions through influences on both the bioavailability and distribution of IGFs in the extracellular environment. During development, IGFBP-2 is expressed in a number of tissues. The highest expression level is found in the central nervous system. In adults, high expression levels are also detected in the central nervous system and in a number of reproductive tissues.This protein binds preferentially to IGF-2, exhibiting a 2 - 10 fold higher affinity for IGF-2 than for IGF-1. Also, it is overexpressed in many malignancies and is often correlated with an increasingly malignant status of the tumor, pointing to the potential involvement of IGFBP-2 in tumorigenesis. Recombinant mouse IGFBP-2, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

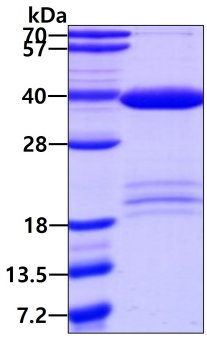
EVLFRCPPCT PERLAACGPP PDAPCAELVR EPGCGCCSVC ARQEGEACGV YIPRCAQTLR CYPNPGSELP LKALVTGAGT CEKRRVGTTP QQVADSDDDH SEGGLVENHV DGTMNMLGGG SSAGRKPLKS GMKELAVFRE KVNEQHRQMG KGAKHLSLEE PKKLRPPPAR TPCQQELDQV LERISTMRLP DDRGPLEHLY SLHIPNCDKH GRYNLKQCKM SLNGQRGECW CVNPNTGKPI QGAPTIRGDP ECHLFYNEQQ ETGGAHAQSV Q<HHHHHH>

General References

Yoshiyuki H., et al, (1994) Cellular Physiology. 158:444-450.
Agarwal N., et al, (1991) Exp Eye Res. 52:549-561.

DATA

SDS-PAGE

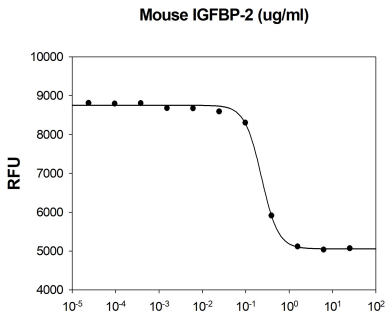


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

Recombinant mouse IGFBP-2 protein

Catalog Number: ATGP4144



Mouse IGFBP-2 inhibit proliferation using MCF-7 human breast cancer cells in the presence of Mouse IGF-2. The ED50 range ≤ 0.7 ug/ml.