

# Recombinant mouse IGFBP-2 protein

Catalog Number: ATGP4144

## PRODUCT INFORMATION

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### 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

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### 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  $\leq$  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.

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## 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

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

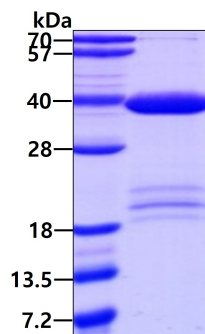
### General References

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

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