

# Recombinant human Biglycan protein

Catalog Number: ATGP3776

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

38-368aa

### UniProt No.

P21810

### NCBI Accession No.

NP\_001702.1

### Alternative Names

Biglycan preproprotein, BGN, DSPG1, MRLS, PG-S1, PGI, SEMDX, SLRR1A

## PRODUCT SPECIFICATION

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### Molecular Weight

38.3 kDa (340aa)

### Concentration

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

### Formulation

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

### Purity

> 90% by SDS-PAGE

### Endotoxin level

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

### Biological Activity

Measured in inhibit the cell growth using 3T3-L1 mouse embryonic fibroblast adipose-like cells. The ED50 range  $\leq$  20ug/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.

## BACKGROUND

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# Recombinant human Biglycan protein

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## Description

BGN, also known as biglycan preproprotein, is a small leucine-rich repeat proteoglycan (SLRP). It plays an important role in the development and maintenance of many tissues. Core protein of this protein binds to the growth factors BMP-4 and influences its bioactivity. This protein is also involved in collagen fiber assembly. Recombinant human BGN protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

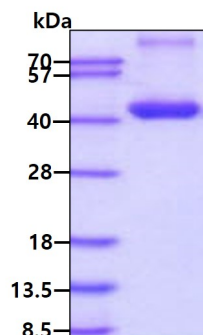
<ADP>DEEASGA DTSGVLDPDS VTPTYSAMCP FGCHCHLRV V QCS DLGLKSV PKEISPD TTL LDLQNNDISE LRKDDFKGLQ HLYALVLVNN KISKIHEKAF SPLRKLQKLY ISKNHLVEIP PNLPSSSLVEL RIHDNRIRKV PKGVFSGLRN MNCIEMGGNP LENS GFEPGA FDGLKLN YLR ISEAKLTGIP KDLPETL NEL HLDHNKIQAI ELEDLLRYSK LYRLGLGHNQ IRMIENGSL S FLPTLRELHL DNNKLARVPS GLPDLKLLQV VYLHSNNITK VGVNDFCPMG FGVKRAYYNG ISLFNNPVPY WEVQPATFRC VTDR LAIQFG NYKK<HHHHHH>

## General References

Sun H., et al, (2016) Arch Gynecol Obstet. 293:429-438.  
 Gaspar R., et al, (2016) J Mol Cell Cardiol. 99:138-150.

## DATA

### SDS-PAGE



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

### Biological Activity

Human Biglycan in inhibit the cell growth using 3T3-L1 mouse embryonic fibroblast adipose-like cells. The ED50 range  $\leq 20$  ug/ml.

