Recombinant mouse Biglycan protein

Catalog Number: ATGP3775

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
38-369aa

UniProt No.
P28653

NCBI Accession No.
NP_031568

Alternative Names
Biglycan, Bgn, BG, DSPG1, PG-S1, PGI, SLRR1A

PRODUCT SPECIFICATION

Molecular Weight
64.6 kDa (574aa)

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)

Tag
hIgG-His-Tag

Application
SDS-PAGE

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
Bgn, also known as biglycan preproprotein, is a small leucine-rich repeat proteoglycan (SLRP). It binds to the growth factors BMP-4 and influences BMP-4 bioactivity. It plays an important role in stabilizing fibrotic scars after experimental myocardial infarction. It may function in connective tissue metabolism by binding to collagen fibrils and TGF-beta and may promote neuronal survival. Its ablation improves cardiac function and attenuates left

ventricular hypertrophy and fibrosis after long-term pressure overload. It is found in a variety of extracellular matrix tissues, including bone, cartilage and tendon. Recombinant mouse Bgn, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

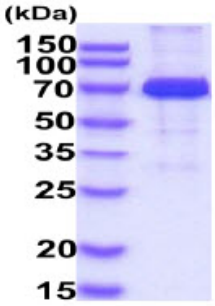
ADPDEEASGS DTTSGVPDLD SVTPTFSAMC PFGCHCHLRV VQCSDLGLKT VPKEISPDTT LLDLQNNDIS ELRKDDFKGL QHLYALVLVN NKISKIHEKA FSPLRKLQKL YISKNHLVEI PPNLPSSLVE LRIHDNRIRK VPKGVFSGLR NMNCIEMGGN PLENSGFEPG AFDGLKLNYL RISEAKLTGI PKDLPETLNE LHLDHNKIQA IELEDLLRYS KLYRLGLGHN QIRMIENGSL SFLPTLRELH LDNNKLSRVP AGLPDLKLLQ VVYLHSNNIT KVGINDFCPM GFGVKRAYYN GISLFNNPVP YWEVQPATFR CVTDRLAIQF GNYKKLEPKS CDKTHTCPPC PAPELLGGPS VFLFPPKPKD TLMISRTPEV TCVVVDVSHE DPEVKFNWYV DGVEVHNAKT KPREEQYNST YRVVSVLTVL HQDWLNGKEY KCKVSNKALP APIEKTISKA KGQPREPQVY TLPPSRDELT KNQVSLTCLV KGFYPSDIAV EWESNGQPEN NYKTTPPVLD SDGSFFLYSK LTVDKSRWQQ GNVFSCSVMH EALHNHYTQK SLSLSPGKHH HHHH

General References

Beetz N., et al. (2016) J Mol Cell Cardiol. 101:145-155.
Bianco P., et al. (1990) J Histochem Cytochem. 38:1549-1563.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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