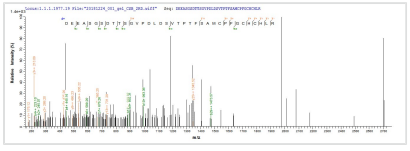
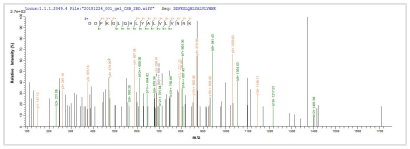
Recombinant Mouse Biglycan (Bgn)

Product Code	CSB-EP002683MO
Abbreviation	Recombinant Mouse Bgn protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P28653
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	DEEASGSDTTSGVPDLDSVTPTFSAMCPFGCHCHLRVVQCSDLGLKTVPKEISPDTTLLDLQNNDISELRKDDFKGLQHLYALVLVNNKISKIHEKAFSPLRKLQKLYISKNHLVEIPPNLPSSLVELRIHDNRIRKVPKGVFSGLRNMNCIEMGGNPLENSGFEPGAFDGLKLNYLRISEAKLTGIPKDLPETLNELHLDHNKIQAIELEDLLRYSKLYRLGLGHNQIRMIENGSLSFLPTLRELHLDNNKLSRVPAGLPDLKLLQVVYLHSNNITKVGINDFCPMGFGVKRAYYNGISLFNNPVPYWEVQPATFRCVTDRLAIQFGNYKK
Research Area	Signal Transduction
Source	E.coli
Target Names	Bgn
Protein Names	Recommended name: Biglycan Alternative name(s): Bone/cartilage proteoglycan I PG-S1
Expression Region	38-369aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	43.4 kDa
Protein Length	Full Length of Mature Protein
Image	 Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP002683MO could indicate that this peptide derived from E.coli-expressed Mus musculus (Mouse) Bgn.



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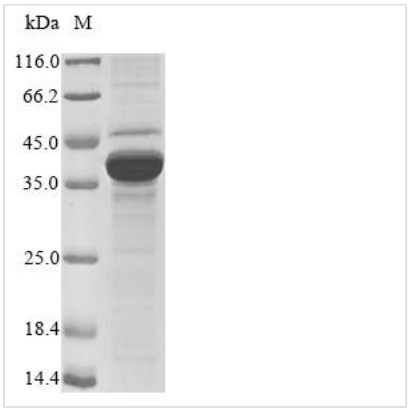

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Mouse Bgn contains amino acids 38-369. This Bgn protein is theoretically predicted to have a molecular weight of 43.4 kDa. This protein is generated in a e.coli-based system. The N-terminal 10xHis tag was fused into the coding gene segment of Bgn, making it easier to detect and purify the Bgn recombinant protein in the later stages of expression and purification.

Biglycan (Bgn) is an important protein with research covering biomedicine, biochemistry, and tissue engineering. In the field of skeletal biology, Biglycan plays a pivotal role in bone formation and maintenance, with particular attention to studies related to bone density and osteoporosis. Additionally, Biglycan is a significant extracellular matrix protein involved in the formation and regulation of connective tissues, playing a vital role in maintaining tissue structure and function. In cardiovascular disease research, Biglycan has been found to participate in pathological processes such as atherosclerosis, making it a potential therapeutic target for cardiovascular diseases. Moreover, Biglycan is implicated in physiological processes like inflammatory responses and immune regulation.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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