



Recombinant Rat Biglycan (Bgn)

Product Code	CSB-YP002683RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P47853
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Sequence	DEE ASGSDTTSGV PDLDSLTPTF SAMCPFGCHC HLRVVQCSDL GLKTVPKAIS PDTLLDLQN NDISELRKDD FKGLQHLYAL VLVNNKISKI HEKAFSPLRK LQKLYISKNH LVEIPPNLPS SLVELRIHDN RIRKVPKGVF SGLRNMNCIE MGGNPLENSG FEPGAFDGLK LNYLRISEAK LTGIPKDLPE TLNELHLDHN KIQAIELEDL LRYSKLYRLG LGHNQIRMIE NGSLSFLPTL RELHLDNNKL SRVPAGLPDL KLLQVVYLHS NNITKVGIND FCPMGFGVKR AYYNGISLFN NPVPYWEVQP ATFRCVTDRL AIQFGNYKK
Source	Yeast
Target Names	Bgn
Protein Names	Recommended name: Biglycan Alternative name(s): Bone/cartilage proteoglycan I PG-S1
Expression Region	38-369
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This protein is a small cellular or pericellular matrix proteoglycan that is closely related in structure to two other small proteoglycans, decorin and fibromodulin. The encoded protein and decorin are thought to be the result of a gene duplication. Decorin contains one attached glycosaminoglycan chain, while this protein probably contains two chains. For this reason, this protein is called biglycan. This protein plays a role in assembly of collagen fibrils and muscle regeneration. It interacts with several proteins involved in muscular dystrophy, including alpha-dystroglycan, alpha- and gamma-sarcoglycan and collagen VI, and it is critical for the assembly of the dystrophin-associated protein complex.
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	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.