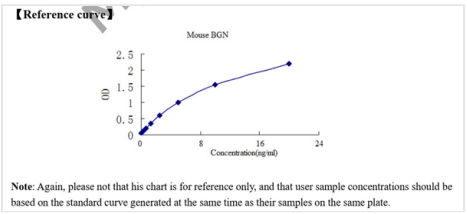
Biglycan (BGN) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Biglycan (BGN), ELISA Kit
Full Product Name	Mouse Biglycan (BGN) ELISA Kit
Product Gene Name	BGN elisa kit
Species Reactivity	Mouse
Assay Type	Sandwich
Detection Range	20 ng/mL-0.312 ng/mL
Sensitivity	Up to 0.06 ng/mL
Specificity	No cross-reaction with other factors.
Preparation and Storage	Store all reagents at 2-8 degree C.
Inter-assay Precision	<= 12%
Intra-assay Precision	<= 8%
Molecular Weight	41,654 Da
OMIM	301870
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for BGN elisa kit	Principle of the Assay: As mentioned above, this kit utilizes the Double Antibody Sandwich ELISA technique. The pre-coated antibody is an anti-Mouse BGN monoclonal antibody, while the detection antibody is a biotinylated polyclonal antibody. Samples and biotinylated antibodies are added into ELISA plate wells and washed out with PBS or TBS after their respective additions to the wells. Then Avidin-peroxidase conjugates are added to the wells in after. TMB substrate is used for coloration after the enzyme conjugate has already been thoroughly washed out of the wells by PBS or TBS. TMB reacts to form a blue product from the peroxidase activity, and finally turns to yellow after addition of the stop solution (Color Reagent C). The color intensity and quantity of target analyte in the sample are positively correlated.
Other Notes	Small volumes of BGN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for BGN purchase	MBS2602124 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Biglycan (BGN) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing BGN. The ELISA analytical biochemical technique of the MBS2602124 kit is based on BGN antibody-BGN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect BGN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, BGN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of BGN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for BGN. It may not necessarily be applicable to this product.

NCBI GI #	4502403
NCBI GeneID	633
NCBI Accession #	NP_001702.1
UniProt Secondary Accession #	P13247; D3DWU3
UniProt Related Accession #	P21810
GenBank Nucleotide #	NM_001711.4
NCBI Official Full Name	biglycan preproprotein
NCBI Official Synonym Full Names	biglycan
NCBI Official Symbol	BGN
NCBI Official Synonym Symbols	PGI; DSPG1; PG-S1; SLRR1A
UniProt Protein Name	Biglycan
UniProt Synonym Protein Names	Bone/cartilage proteoglycan I; PG-S1
Protein Family	Biglycan
UniProt Gene Name	BGN
UniProt Synonym Gene Names	SLRR1A
UniProt Entry Name	PGS1_HUMAN
NCBI Protein Information	biglycan; biglycan proteoglycan; bone/cartilage proteoglycan I; bone/cartilage proteoglycan-I; small leucine-rich protein 1A; dermatan sulphate proteoglycan I
NCBI Summary for BGN	The protein encoded by this gene 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. [provided by RefSeq, Nov 2009]
UniProt Comments for BGN	BGN: May be involved in collagen fiber assembly. Belongs to the small leucine-rich proteoglycan (SLRP) family. SLRP class I subfamily. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: Xq28 Cellular Component: extracellular matrix; proteinaceous extracellular matrix; lysosomal lumen; transport vesicle; cell surface; Golgi lumen; extracellular region; sarcolemma Molecular Function: glycosaminoglycan binding; extracellular matrix binding; extracellular matrix structural constituent Biological Process: chondroitin sulfate metabolic process; extracellular matrix organization and biogenesis; chondroitin sulfate biosynthetic process; glycosaminoglycan metabolic process; carbohydrate metabolic process; chondroitin sulfate catabolic process; blood vessel remodeling; pathogenesis; peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan; dermatan sulfate biosynthetic process
Research Articles on BGN	**1.** High expression of BGN in esophageal squamous cell carcinoma indicated aggressive tumor behaviors and predicted a worse clinical outcome.

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