

## Anti-Biglycan/BGN Antibody Picoband®

Catalog Number: A02090-2

### About BGN

This gene encodes a member of the small leucine-rich proteoglycan (SLRP) family of proteins. The encoded preproprotein is proteolytically processed to generate the mature protein, which plays a role in bone growth, muscle development and regeneration, and collagen fibril assembly in multiple tissues. This protein may also regulate inflammation and innate immunity. Additionally, the encoded protein may contribute to atherosclerosis and aortic valve stenosis in human patients. This gene and the related gene decorin are thought to be the result of a gene duplication.

### Overview

Product Name	Anti-Biglycan/BGN Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Biglycan/BGN Antibody Picoband® catalog # A02090-2. Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P21810

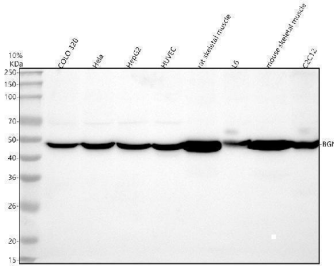
### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Biglycan/BGN, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

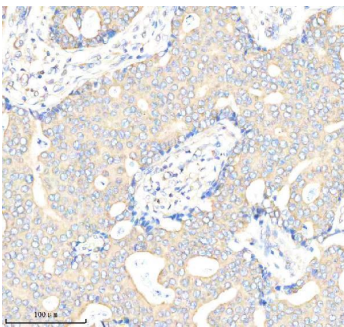
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat  
Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Rat  
Flow Cytometry (Fixed), 1-3 ug/1x10<sup>6</sup> cells, Human

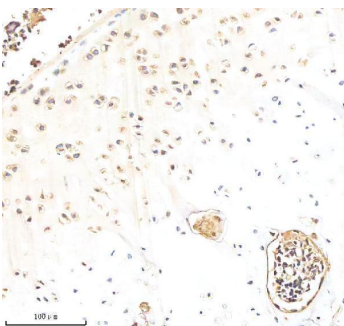
## Anti-Biglycan/BGN Antibody Picoband® (A02090-2) Images



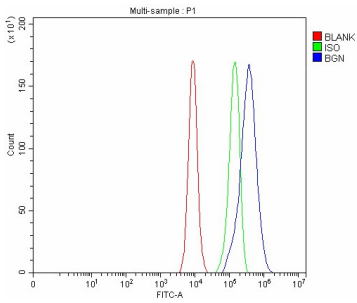
Western blot analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (A02090-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human COLO320 whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human HUVEC whole cell lysates, Lane 5: rat skeletal muscle tissue lysates, Lane 6: rat L6 whole cell lysates, Lane 7: mouse skeletal muscle tissue lysates, Lane 8: mouse C2C12 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Biglycan/BGN antigen affinity purified polyclonal antibody (Catalog # A02090-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Biglycan/BGN at approximately 48 kDa. The expected band size for Biglycan/BGN is at 42 kDa.



IHC analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (A02090-2). Biglycan/BGN was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Biglycan/BGN Antibody (A02090-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (A02090-2). Biglycan/BGN was detected in a paraffin-embedded section of rat knee tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Biglycan/BGN Antibody (A02090-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Flow Cytometry analysis of Caco-2 cells using anti-Biglycan/BGN antibody (A02090-2). Overlay histogram showing Caco-2 cells stained with A02090-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Biglycan/BGN Antibody (A02090-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



### Anti-Biglycan/BGN Antibody

For Research Use Only. Not for use in diagnostic procedures.