

Rabbit Biglycan/BGN Polyclonal Antibody | anti-BGN antibody

Anti-Biglycan/BGN Antibody Picoband

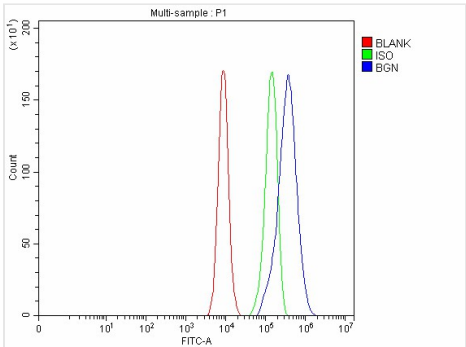
CATALOG # AAA127099	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

Biglycan/BGN; Polyclonal Antibody; Anti-Biglycan/BGN Antibody Picoband; Biglycan; biglycan; BGN; SLRR1A; Bone/cartilage proteoglycan I; PG-S1; anti-BGN antibody

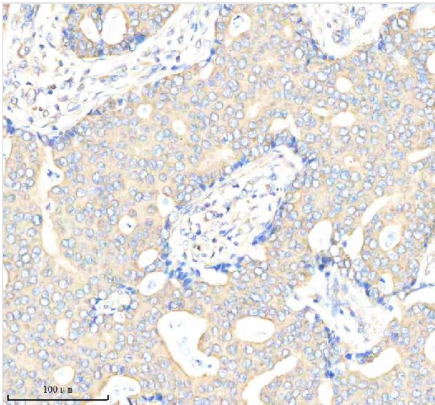
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-BGN antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Biglycan/BGN, identical to the related mouse and rat sequences.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



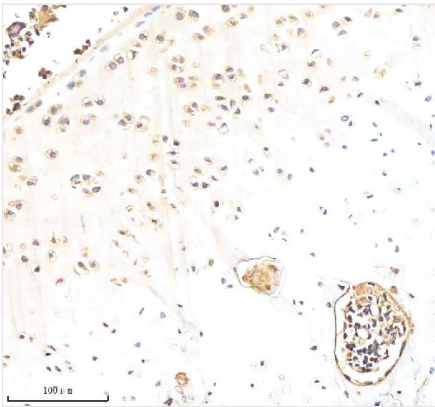
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of Caco-2 cells using anti-Biglycan/BGN antibody (AAA127099).Overlay histogram showing Caco-2 cells stained with AAA127099 (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 (AAA127099, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



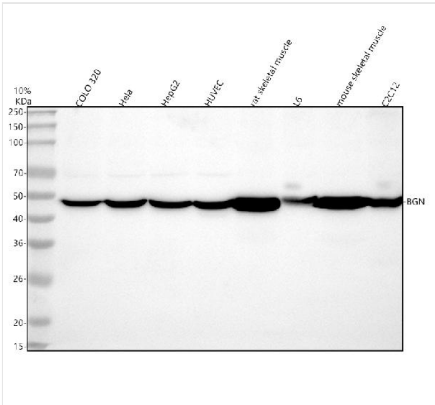
IHC (Immunohistochemistry)

Figure 2. IHC analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (AAA127099).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 2ug/ml rabbit anti-Biglycan/BGN Antibody (AAA127099) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (AAA127099).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 2ug/ml rabbit anti-Biglycan/BGN Antibody (AAA127099) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Biglycan/BGN using anti-Biglycan/BGN antibody (AAA127099).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 (#AAA127099) at 0.5ug/mL overnight at 4 degree 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 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.

ADDITIONAL INFORMATION

Related Product Information for anti-BGN antibody	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.
Product Categories/Family for anti-BGN antibody	Primary Antibodies

References	1. Camera, G., Stella, G., Camera, A. New X linked spondyloepimetaphyseal dysplasia: report on eight affected males in the same family. J. Med. Genet. 31: 371-376, 1994.2. Chatterjee, A., Faust, C. J., Herman, G. E. Genetic and physical mapping of the biglycan gene on the mouse X chromosome. Mammalian Genome 4: 33-36, 1993.3. Cho, S. Y., Bae, J.-S., Kim, N. K. D., Forzano, F., Girisha, K. M., Baldo, C., Faravelli, F., Cho, T.-J., Kim, D., Lee, K. Y., Ikegawa, S., Shim, J. S., Ko, A.-R., Miyake, N., Nishimura, G., Superti-Furga, A., Spranger, J., Kim, O.-H., Park, W.-Y., Jin, D.-K. BGN mutations in X-linked spondyloepimetaphyseal dysplasia. Am. J. Hum. Genet. 98: 1243-1248, 2016.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502403
NCBI GeneID	633
NCBI Accession #	NP_001702.1
NCBI GenBank Nucleotide #	NM_001711.4
UniProt Accession #	P21810; P13247; D3DWU3
Molecular Weight	42kDa
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
NCBI Protein Information	biglycan; biglycan proteoglycan; bone/cartilage proteoglycan I; bone/cartilage proteoglycan-I; small leucine-rich protein 1A; dermatan sulphate proteoglycan I
UniProt Protein Name	Biglycan
UniProt Gene Name	BGN
UniProt Synonym Gene Names	SLRR1A
UniProt Entry Name	PGS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.