10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-Biglycan Preproprotein Antibody
Peptide-affinity purified goat antibody
Catalog # AF1153a

Specification

Goat Anti-Biglycan Preproprotein Antibody - Product Information

Application	**WB**
Primary Accession	P21810
Other Accession	NP_001702, 633, 12111 (mouse), 25181 (rat)
Reactivity	**Human, Rat**
Predicted	**Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**41654**

Goat Anti-Biglycan Preproprotein Antibody - Additional Information

Gene ID 633

Other Names
Biglycan, Bone/cartilage proteoglycan I, PG-S1, BGN, SLRR1A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Biglycan Preproprotein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Biglycan Preproprotein Antibody - Protein Information

Name BGN

Synonyms SLRR1A

Function
May be involved in collagen fiber assembly.

Cellular Location
Secreted, extracellular space, extracellular matrix

Tissue Location
Detected in placenta (at protein level) (PubMed:32337544). Found in several connective tissues, especially in articular cartilages.

Goat Anti-Biglycan Preproprotein Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Biglycan Preproprotein Antibody - Images



AF1153a (0.1 µg/ml) staining of Rat Skin lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Biglycan Preproprotein Antibody - Background

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.

Goat Anti-Biglycan Preproprotein Antibody - References

Growth factor-mediated hyper-elongation of glycosaminoglycan chains on biglycan requires transcription and translation. Yang SN, et al. Arch Physiol Biochem, 2009 Jul. PMID 19580379.

Biglycan expression in hypertensive subjects with normal or increased carotid intima-media wall thickness. Sardo MA, et al. Clin Chim Acta, 2009 Aug. PMID 19523462.
ApoCIII-enriched LDL in type 2 diabetes displays altered lipid composition, increased susceptibility for sphingomyelinase, and increased binding to biglycan. Hiukka A, et al. Diabetes, 2009 Sep. PMID 19502413.
High-density association study of 383 candidate genes for volumetric BMD at the femoral neck and lumbar spine among older men. Yerges LM, et al. J Bone Miner Res, 2009 Dec. PMID 19453261.
Potential roles for the small leucine-rich proteoglycans biglycan and fibromodulin in ectopic ossification of tendon induced by exercise and in modulating rotarod performance. Kilts T, et al. Scand J Med Sci Sports, 2009 Aug. PMID 19422643.