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

BGN Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant BGN.
Catalog # AT1296a

Product Information

Application	WB
Primary Accession	P21810
Other Accession	BC002416
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	2E6-D1
Calculated MW	41654

Additional Information

Gene ID	633
Other Names	Biglycan, Bone/cartilage proteoglycan I, PG-S1, BGN, SLRR1A
Target/Specificity	BGN (AAH02416.1, 1 a.a. ~ 368 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	BGN Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

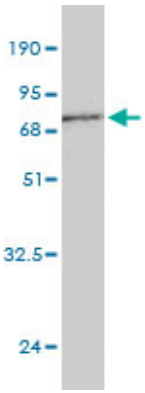
Background

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.

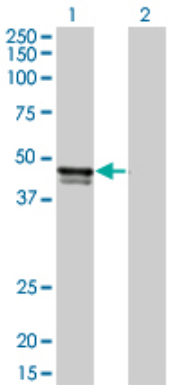
References

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.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (66.22 KDa) .



Western Blot analysis of BGN expression in transfected 293T cell line by BGN monoclonal antibody (M02), clone 2E6-D1.

Lane 1: BGN transfected lysate(41.7 KDa).
Lane 2: Non-transfected lysate.