

FBN1 Antibody (Internal region)

Peptide-affinity purified goat antibody Catalog # AF3039a

Specification

FBN1 Antibody (Internal region) - Product Information

Application

Primary Accession <u>P35555</u>

Other Accession NP 000129.2, 2200, 14118 (mouse), 83727

<u>(rat)</u>

Predicted Human, Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 312298

FBN1 Antibody (Internal region) - Additional Information

Gene ID 2200

Other Names

Fibrillin-1, FBN1, FBN

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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

FBN1 Antibody (Internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

FBN1 Antibody (Internal region) - Protein Information

Name FBN1 (HGNC:3603)

Synonyms FBN

Function

[Fibrillin-1]: Structural component of the 10-12 nm diameter microfibrils of the extracellular matrix, which conveys both structural and regulatory properties to load-bearing connective tissues



(PubMed:15062093, PubMed:1860873). Fibrillin-1-containing microfibrils provide long-term force bearing structural support (PubMed:27026396). In tissues such as the lung, blood vessels and skin, microfibrils form the periphery of the elastic fiber, acting as a scaffold for the deposition of elastin (PubMed:27026396). In addition, microfibrils can occur as elastin-independent networks in tissues such as the ciliary zonule, tendon, cornea and glomerulus where they provide tensile strength and have anchoring roles (PubMed:27026396). Fibrillin-1 also plays a key role in tissue homeostasis through specific interactions with growth factors, such as the bone morphogenetic proteins (BMPs), growth and differentiation factors (GDFs) and latent transforming growth factor-beta-binding proteins (LTBPs), cell-surface integrins and other extracellular matrix protein and proteoglycan components (PubMed:27026396). Regulates osteoblast maturation by controlling TGF- beta bioavailability and calibrating TGF-beta and BMP levels, respectively (By similarity). Negatively regulates osteoclastogenesis by binding and sequestering an osteoclast differentiation and activation factor TNFSF11 (PubMed: 24039232). This leads to disruption of TNFSF11-induced Ca(2+) signaling and impairment of TNFSF11-mediated nuclear translocation and activation of transcription factor NFATC1 which regulates genes important for osteoclast differentiation and function (PubMed:24039232). Mediates cell adhesion via its binding to cell surface receptors integrins ITGAV:ITGB3 and ITGA5:ITGB1 (PubMed:12807887, PubMed:17158881). Binds heparin and this interaction has an important role in the assembly of microfibrils (PubMed:11461921).

Cellular Location

Secreted. Note=Fibrillin-1 and Asprosin chains are still linked together during the secretion from cells, but are subsequently separated by furin (PubMed:24982166) [Asprosin]: Secreted. Note=Secreted by white adipose tissue and circulates in the plasma.

FBN1 Antibody (Internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FBN1 Antibody (Internal region) - Images

FBN1 Antibody (Internal region) - References

Mutation of ACTA2 gene as an important cause of familial and nonfamilial nonsyndromatic thoracic aortic aneurysm and/or dissection (TAAD). Morisaki H, Akutsu K, Ogino H, Kondo N, Yamanaka I, Tsutsumi Y, Yoshimuta T, Okajima T, Matsuda H, Minatoya K, Sasaki H, Tanaka H, Ishibashi-Ueda H, Morisaki T, Human mutation 2009 Jul: . PMID: 19639654