

**FBN1 Polyclonal Antibody**  
**Catalog # AP69867****Specification**

---

**FBN1 Polyclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | IHC                    |
| Primary Accession | <a href="#">P35555</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |

**FBN1 Polyclonal Antibody - Additional Information****Gene ID** 2200**Other Names**

FBN1; FBN; Fibrillin-1

**Dilution**

IHC~~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**FBN1 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/1860873" target="\_blank">1860873</a>, PubMed:<a href="http://www.uniprot.org/citations/15062093" target="\_blank">15062093</a>). Fibrillin-1-containing microfibrils provide long-term force bearing structural support (PubMed:<a href="http://www.uniprot.org/citations/27026396" target="\_blank">27026396</a>). 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:<a href="http://www.uniprot.org/citations/27026396" target="\_blank">27026396</a>). 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:<a href="http://www.uniprot.org/citations/27026396" target="\_blank">27026396</a>). 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:<a href="http://www.uniprot.org/citations/27026396" target="\_blank">27026396</a>). 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:<a href="http://www.uniprot.org/citations/24039232" target="\_blank">24039232</a>). 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:<a href="http://www.uniprot.org/citations/24039232" target="\_blank">24039232</a>). Mediates cell adhesion via its binding to cell surface receptors integrins ITGAV:ITGB3 and ITGA5:ITGB1 (PubMed:<a href="http://www.uniprot.org/citations/12807887" target="\_blank">12807887</a>, PubMed:<a href="http://www.uniprot.org/citations/17158881" target="\_blank">17158881</a>). Binds heparin and this interaction has an important role in the assembly of microfibrils (PubMed:<a href="http://www.uniprot.org/citations/11461921" target="\_blank">11461921</a>).

### Cellular Location

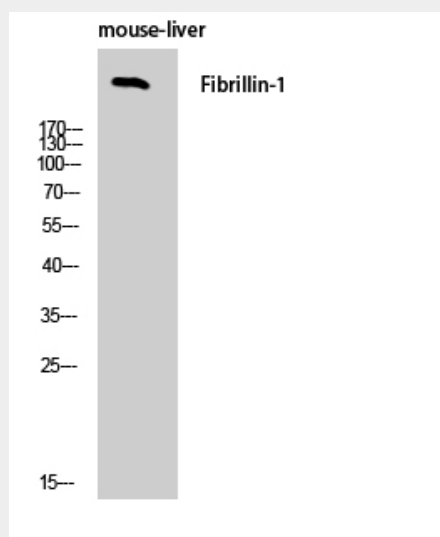
Secreted. Note=Fibrillin-1 and Asprosin chains are still linked together during the secretion from cells, but are subsequently separated by furin (PubMed:24982166) [Asprosin]: Secreted. Note=Secreted by white adipose tissue and circulates in the plasma.

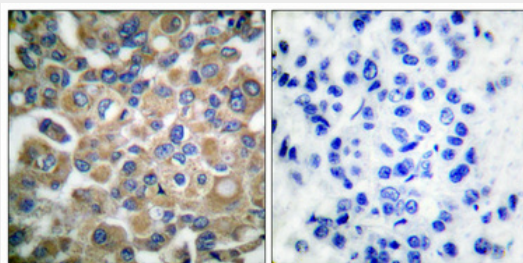
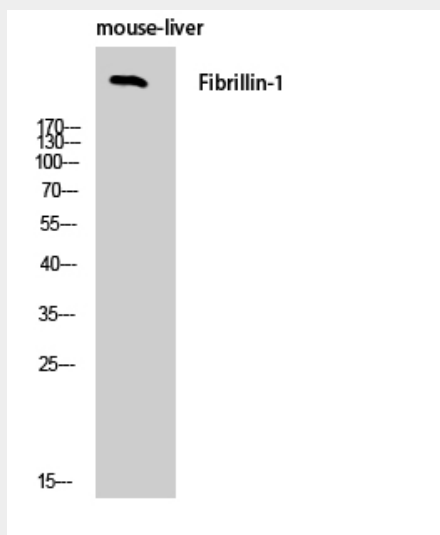
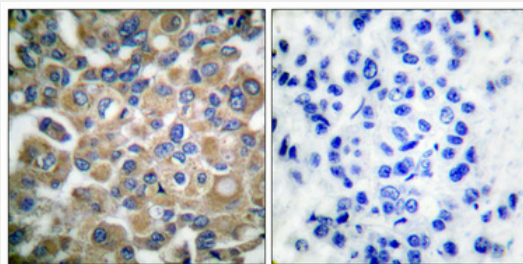
### FBN1 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### FBN1 Polyclonal Antibody - Images





### FBN1 Polyclonal Antibody - Background

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:1860873, PubMed:15062093). Fibrillin-1-containing microfibrils provide long-term force bearing structural support. 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. 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. 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 osteoclast differentiation and activation factor TNFSF11. This leads to disruption of

TNFSF11-induced  $\text{Ca}^{2+}$  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).