# Fibromodulin (A-6): sc-166466



The Power to Question

## **BACKGROUND**

Small leucine-rich proteoglycans (SLRPs), such as Decorin, Biglycan, Fibromodulin and Lumican, mediate extracellular matrix organization and are binding partners of TGF $\beta$ . Fibromodulin is a collagen-binding Keratan sulphate proteoglycan that influences adhesion processes of connective tissue and plays a role in fibrillogenesis by regulating collagen fibril spacing and thickness. The core proteins of SLRPs consist of a central region of leucine-rich repeats flanked by disulfide-linkages of the terminal domains. Fibromodulin is a ubiquitous protein that is most prominent in articular cartilage, tendon and ligament. The human Fibromodulin gene maps to chromosome 1q32.1 and encodes a 376 amino acid protein.

## **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: FMOD (human) mapping to 1q32.1.

# SOURCE

Fibromodulin (A-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 38-71 near the N-terminus of Fibromodulin of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$   $lgG_3$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166466 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

# **APPLICATIONS**

Fibromodulin (A-6) is recommended for detection of Fibromodulin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Fibromodulin siRNA (h): sc-40995, Fibromodulin shRNA Plasmid (h): sc-40995-SH and Fibromodulin shRNA (h) Lentiviral Particles: sc-40995-V.

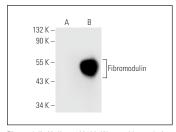
Molecular Weight of Fibromodulin: 67 kDa.

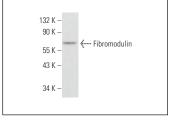
Positive Controls: Fibromodulin (h): 293T Lysate: sc-114267 or Hep G2 cell lysate: sc-2227.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

#### DATA





Fibromodulin (A-6): sc-166466. Western blot analysis of Fibromodulin expression in non-transfected: sc-117752 (A) and human Fibromodulin transfected: sc-114267 (B) 293T whole cell lysates.

Fibromodulin (A-6): sc-166466. Western blot analysis of Fibromodulin expression in Hep G2 whole cell lysate.

#### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.