Fibromodulin (h): 293T Lysate: sc-114267



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 β . 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

- Antonsson, P., Heinegard, D. and Oldberg, A. 1993. Structure and deduced amino acid sequence of the human fibromodulin gene. Biochim. Biophys. Acta 1174: 204-206.
- Sztrolovics, R., Chen, X.N., Grover, J., Roughley, P.J. and Korenberg, J.R. 1994. Localization of the human Fibromodulin gene (FMOD) to chromosome 1q32 and completion of the cDNA sequence. Genomics 23: 715-717.
- 3. Online Mendelian Inheritance in Man, OMIM™. 1995. Johns Hopkins University, Baltimore, MD. MIM Number: 600245. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Roughley, P.J., White, R.J., Cs-Szabo, G. and Mort, J.S. 1996. Changes with age in the structure of Fibromodulin in human articular cartilage. Osteoarthritis Cartilage 4: 153-161.
- Petri, J.B., Rott, O., Wetzig, T., Herrmann, K. and Haustein, U.F. 1999.
 The small proteoglycan Fibromodulin is expressed in mitotic, but not in postmitotic fibroblasts. Mol. Cell Biol. Res. Commun. 1: 59-65.
- Schaefer, L., Grone, H.J., Raslik, I., Robenek, H., Ugorcakova, J., Budny, S., Schaefer, R.M. and Kresse, H. 2000. Small proteoglycans of normal adult human kidney: distinct expression patterns of Decorin, Biglycan, Fibromodulin, and Lumican. Kidney Int. 58: 1557-1568.
- Schaefer, L., Raslik, I., Grone, H.J., Schonherr, E., Macakova, K., Ugorcakova, J., Budny, S., Schaefer, R.M. and Kresse, H. 2001. Small proteoglycans in human diabetic nephropathy: discrepancy between glomerular expression and protein accumulation of Decorin, Biglycan, Lumican, and Fibromodulin. FASEB J. 15: 559-561.
- 8. LocusLink Report (LocusID: 2331). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

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

PRODUCT

Fibromodulin (h): 293T Lysate represents a lysate of human Fibromodulin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

Fibromodulin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fibromodulin antibodies. Recommended use: 10-20 μ l per lane.

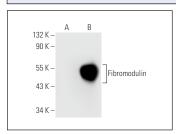
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

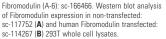
Fibromodulin (A-6): sc-166466 is recommended as a positive control antibody for Western Blot analysis of enhanced human Fibromodulin expression in Fibromodulin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

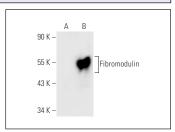
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







Fibromodulin (E-12): sc-166498. Western blot analysis of Fibromodulin expression in non-transfected: sc-117752 (A) and human Fibromodulin transfected: sc-114267 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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