

Matrilin-2 (2B8): sc-293397

BACKGROUND

The matrilin family proteins are secreted extracellular matrix proteins. Matrilin-1 is a homotrimer that binds to collagen and is a component of the extracellular matrix of nonarticular cartilage. It is secreted primarily by chondrocytes in a characteristic spatial, temporal and developmental stage-specific pattern during skeletogenesis. Matrilin-2 is a secreted protein involved in matrix assembly. Matrilin-3 is a secreted protein expressed solely in cartilaginous tissues. It is important in the extracellular matrix of cartilage and in the formation of extracellular filamentous networks. Matrilin-4, expressed in embryonic kidney, lung and placenta, is a secreted protein important to the extracellular matrix of cartilage.

REFERENCES

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2. Segat, D., et al. 2000. Expression of Matrilin-1, -2 and -3 in developing mouse limbs and heart. *Matrix Biol.* 19: 649-655.
3. Strusberg, I., et al. 2002. Association analysis of genotypic frequencies of Matrilin-1 gene in patients with osteoarthritis. *Clin. Exp. Rheumatol.* 20: 543-545.
4. Ohno, S., et al. 2003. Immunohistochemical study of Matrilin-1 in arthritic articular cartilage of the mandibular condyle. *J. Oral Pathol. Med.* 32: 237-242.
5. Wiberg, C., et al. 2003. Complexes of Matrilin-1 and biglycan or decorin connect collagen Vmicrofibrils to both collagen II and aggrecan. *J. Biol. Chem.* 278: 37698-37704.
6. Mann H.H., et al. 2004. Interactions between the cartilage oligomeric matrix protein and matrilins. Implications for matrix assembly and the pathogenesis of chondrodysplasias. *J. Biol. Chem.* 279: 25294-25298.
7. Karcagi I., et al. 2004. Functional analysis of the regulatory regions of the Matrilin-1 gene in transgenic mice reveals modular arrangement of tissue-specific control elements. *Matrix Biol.* 22: 605-618.
8. Hansson, A.S., et al. 2004. Critical role of the major histocompatibility complex and IL-10 in Matrilin-1-induced relapsing polychondritis in mice. *Arthritis Res. Ther.* 6: 484-491.
9. Hansson, A.S., et al. 2004. Relapsing polychondritis, induced in mice with Matrilin-1, is an antibody- and complement-dependent disease. *Am. J. Pathol.* 164: 959-966.

CHROMOSOMAL LOCATION

Genetic locus: MATN2 (human) mapping to 8q22.1.

SOURCE

Matrilin-2 (2B8) is a mouse monoclonal antibody raised against amino acids 539-648 of Matrilin-2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Matrilin-2 (2B8) is recommended for detection of Matrilin-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

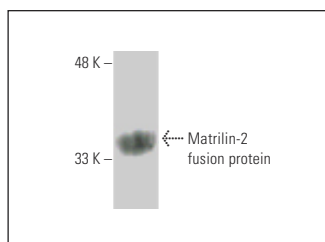
Suitable for use as control antibody for Matrilin-2 siRNA (h): sc-45447, Matrilin-2 shRNA Plasmid (h): sc-45447-SH and Matrilin-2 shRNA (h) Lentiviral Particles: sc-45447-V.

Molecular Weight of Matrilin-2: 107 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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).

DATA



Matrilin-2 (2B8): sc-293397. Western blot analysis of human recombinant Matrilin-2 fusion protein.

STORAGE

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

PROTOCOLS

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