

Matrilin-1 (H-70): sc-32880

BACKGROUND

The Matrilin family of secreted extracellular matrix proteins is comprised of Matrilin-1 through Matrilin-4. 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

1. Deak, F., et al. 1999. The matrilins: a novel family of oligomeric extracellular matrix proteins. *Matrix Biol.* 18: 55-64.
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. Wiberg, C., et al. 2003. Complexes of Matrilin-1 and Biglycan or Decorin connect Collagen VI microfibrils to both Collagen II and aggrecan. *J. Biol. Chem.* 278: 37698-37704.
5. 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.
6. 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.
7. 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.

CHROMOSOMAL LOCATION

Genetic locus: MATN1 (human) mapping to 1p35.2; Matn1 (mouse) mapping to 4 D2.3.

SOURCE

Matrilin-1 (H-70) is a rabbit polyclonal antibody raised against amino acids 427-496 mapping at the C-terminus of Matrilin-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Matrilin-1 (H-70) is recommended for detection of Matrilin-1 of mouse, rat and 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)], 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).

Matrilin-1 (H-70) is also recommended for detection of Matrilin-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Matrilin-1 siRNA (h): sc-60038, Matrilin-1 siRNA (m): sc-60039, Matrilin-1 shRNA Plasmid (h): sc-60038-SH, Matrilin-1 shRNA Plasmid (m): sc-60039-SH, Matrilin-1 shRNA (h) Lentiviral Particles: sc-60038-V and Matrilin-1 shRNA (m) Lentiviral Particles: sc-60039-V.

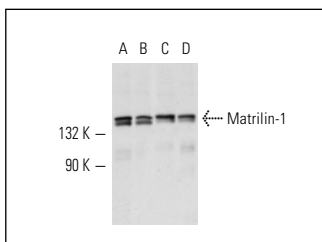
Molecular Weight of Matrilin-1: 148 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SK-N-SH cell lysate: sc-2410 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Matrilin-1 (H-70): sc-32880. Western blot analysis of Matrilin-1 expression in K-562 (A), SK-N-SH (B) and Jurkat (C) whole cell lysates and HeLa nuclear extract (D).

RESEARCH USE

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

PROTOCOLS

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