SANTA CRUZ BIOTECHNOLOGY, INC.

Matrilin-2 (V-20): sc-27926



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. 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.

CHROMOSOMAL LOCATION

Genetic locus: MATN2 (human) mapping to 8q22.1; Matn2 (mouse) mapping to 15 B3.1.

SOURCE

Matrilin-2 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Matrilin-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-27926 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Matrilin-2 (V-20) is recommended for detection of Matrilin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-2 (V-20) is also recommended for detection of Matrilin-2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Matrilin-2 siRNA (h): sc-45447, Matrilin-2 siRNA (m): sc-45448, Matrilin-2 shRNA Plasmid (h): sc-45447-SH, Matrilin-2 shRNA Plasmid (m): sc-45448-SH, Matrilin-2 shRNA (h) Lentiviral Particles: sc-45447-V and Matrilin-2 shRNA (m) Lentiviral Particles: sc-45448-V.

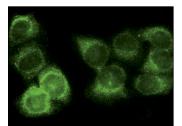
Molecular Weight of Matrilin-2: 107 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Matrilin-2 (V-20): sc-27926. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try Matrilin-2 (2B8): sc-293397, our highly recommended monoclonal alternative to Matrilin-2 (V-20).