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MATN3 Antibody

Catalog # ASC10893

Product Information

Application	WB, IF, ICC, E
Primary Accession	O15232
Other Accession	AAI39908, 146218451
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	52817
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	MATN3 antibody can be used for detection of MATN3 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	4148
Other Names	Matrilin-3, MATN3
Target/Specificity	MATN3;
Reconstitution & Storage	MATN3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	MATN3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MATN3
Function	Major component of the extracellular matrix of cartilage and may play a role in the formation of extracellular filamentous networks.
Cellular Location	Secreted {ECO:0000250|UniProtKB:O35701}.
Tissue Location	Expressed only in cartilaginous tissues, such as vertebrae, ribs and shoulders

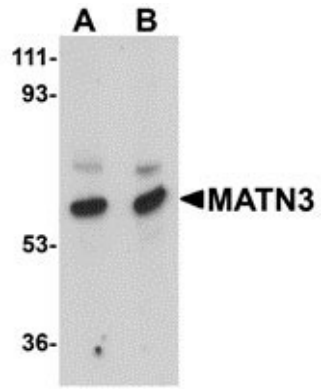
Background

MATN3 Antibody: Matrilins (MATNs) are a family of non-collagenous extra-cellular matrix (ECM) proteins consisting of four known members that have been proposed to play key roles in modulating cellular phenotypes during chondrogenesis of mesenchymal stem cells (MSCs). MATN1 and MATN3 are expressed specifically in cartilage and are among the most up-regulated ECM proteins during chondrogenesis. MATN3 is composed of a single N-terminal von Willebrand Factor A (vWFA) domain followed by four epidermal growth factor (EGF) repeats and a coiled-coil domain whereas MATN1 is composed of two vWFA domains separated by one EGF-like domain. MATN1 or MATN3 may play a role in modulating chondrogenesis during the chondrocyte differentiation process. Mutations of this gene have been associated with variety of inherited chondrodysplasias. Recent studies show that aberrant expression and processing of MATN3 are hallmarks of conventional cartilaginous neoplasms.

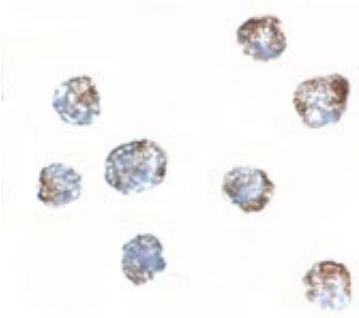
References

Pei M, Luo J, and Chen Q. Enhancing and maintaining matrilins. Osteoarthritis Cartilage2008; 16:1110-7.
Frank S, Schulthess T, Landwehr R, et al. Characterization of the matrilin coiled-coil domains reveals seven novel isoforms. J. Biol. Chem.2002; 277:19071-9.
Chen Q, Johnson DM, Haudenschild DR, et al. Progression and recapitulation of the chondrocyte differentiation program: cartilage matrix protein is a marker for cartilage maturation. Dev. Biol.1995; 172:293-306.
Stokes DG, Liu G, Coimbra IB, et al. Assessment of the gene expression profile of differentiated and dedifferentiated human fetal chondrocytes by microarray analysis. Arthritis Rheum2002; 46:404-19.

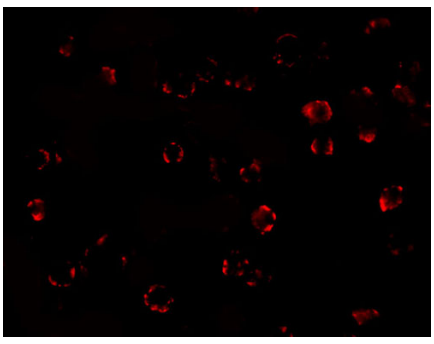
Images



Western blot analysis of MATN3 in rat thymus tissue lysate with MATN3 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of MATN3 in 3T3 cells tissue with MATN3 antibody at 2.5 µg/mL.



Immunofluorescence of MATN3 in 3T3 cells with MATN3 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.