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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-CR1

MATN1 Antibody

Overview

Description:	Anti-MATN1 (RABBIT) Antibody - 600-401-CR1
Item No.:	600-401-CR1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	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. MATN1 is composed of two Willebrand Factor A (vWFA) domains separated by one EGF-like domain, whereas MATN3 is composed of a single N-terminal vWFA domain followed by four epidermal growth factor (EGF) repeats and a coiled-coil 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 the MATN1 promoter region was associated with both susceptibility and disease progression in Adolescent idiopathic scoliosis.
Synonyms:	MATN1 Antibody, CMP, CRTM, CMP, Cartilage matrix protein, Matrilin-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MATN1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-MATN1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide from near the C-terminus of human MATN1.
Purity/Specificity:	Anti-MATN1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with MATN1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P21941 • GeneID - 4146 • NCBI - NP_002370

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-MATN1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 54 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

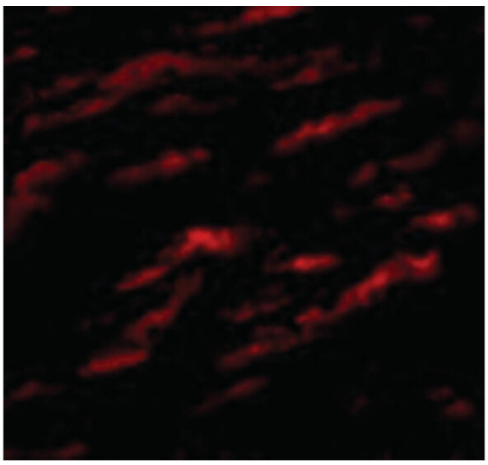
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

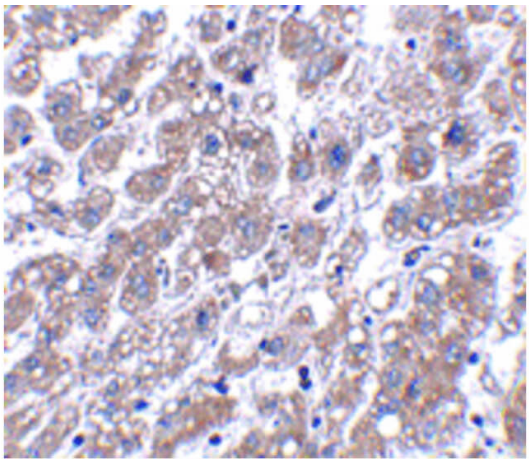
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

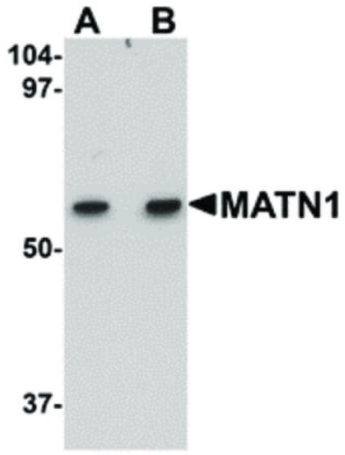
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of MATN1 antibody. Tissue: human liver cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: MATN1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: MATN1 is secreted into extracellular regions. Staining: MATN1 as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of MATN1 antibody. Tissue: Human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: MATN1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: MATN1 is secreted into extracellular regions. Staining: MATN1 as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of MATN1 antibody. Lane 1: rat liver tissue lysate with MATN1 antibody at 1 µg/mL. Lane 2: rat liver tissue lysate with MATN1 antibody at 1 µg/mL.. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 54 kDa, 54 kDa for MATN1. Other band(s): MATN1 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.