



# Mouse anti-Human COL9A1 monoclonal antibody, clone 4I2 (CABT-B10015)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	COL9A1 (AAH15409, 1 a.a. ~ 329 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	4I2
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	sELISA, ELISA
<b>Sequence Similarities</b>	MKTCWKIPVFFFVCSFLEPWASAAVKRRPRFPVNSNSNGGNELCPKIRIGQDDLPGFDLI SQFQVDKAASRRAIQRVVGSA TLQVAYKLGNNVDFRIPTRNLYPSGLPEEYSFLTFRMT GSTLKKNNWNIWQIQDSSGKEQVGIKINGQTQSVVFSYKGLDGSLQTAAFSNLSSLFDSQW HKIMIGVERSSATLFVDCNRIESLPIKPRGPIDIDGFAVLGKLADNPQVSVPFELQWMLI HCDPLRPRRETCHL
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	In 1x PBS, pH 7.2
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## BACKGROUND

## Introduction

This gene encodes one of the three alpha chains of type IX collagen, which is a minor (5-20%) collagen component of hyaline cartilage. Type IX collagen is usually found in tissues containing type II collagen, a fibrillar collagen. Studies in knockout mice have shown that synthesis of the alpha 1 chain is essential for assembly of type IX collagen molecules, a heterotrimeric molecule, and that lack of type IX collagen is associated with early onset osteoarthritis. Mutations in this gene are associated with osteoarthritis in humans, with multiple epiphyseal dysplasia, 6, a form of chondrodysplasia, and with Stickler syndrome, a disease characterized by ophthalmic, orofacial, articular, and auditory defects. Two transcript variants that encode different isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

## Keywords

COL9A1; collagen, type IX, alpha 1; MED; EDM6; STL4; DJ149L1.1.2; collagen alpha-1(IX) chain; alpha-1(IX) collagen chain; collagen IX, alpha-1 polypeptide; cartilage-specific short collagen;

# GENE INFORMATION

## Entrez Gene ID

[1297](#)

## UniProt ID

[P20849](#)

## Pathway

Axon guidance, organism-specific biosystem; NCAM signaling for neurite out-growth, organism-specific biosystem; NCAM1 interactions, organism-specific biosystem; Protein digestion and absorption, organism-specific biosystem; Protein digestion and absorption, conserved biosystem; Signaling by PDGF, organism-specific biosystem

## Function

extracellular matrix structural constituent conferring tensile strength; metal ion binding; structural molecule activity