



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

Immunogen	COL9A1 (AAH15409, 1 a.a. ~ 329 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	4I2
Conjugate	Unconjugated
Applications	sELISA, ELISA
Sequence Similarities	MKTCWKIPVFFFVCSFLEPWASAAVKRRPRFPVNSNSNGNECPKIRIGQDDLPGFDLISQFQVDKAASRRAIQRVVGSATLQVAYKLGNNVDFRIPTRNLYPAGLPEEYSLTTFRMTGSTLKKNWNIWQIQDSSGKEQVGKINGQTQSVVFSYKGLDGLQTAFSNLSSLFDSQWHKIMIGVERSSATLFVDCNRIESLPIKPRGPIDIDGFAVLGKLADNPQVSVPFELQWMLIHCDPLRPRRETCHEL
Format	Liquid
Size	100 µg
Buffer	In 1x PBS, pH 7.2
Storage	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