



# Anti-COL9A1 monoclonal antibody (DCABH-11086)

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

## PRODUCT INFORMATION

**Antigen Description** 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.

<b>Immunogen</b>	A synthetic peptide of human COL9A1 is used for rabbit immunization.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Protein A
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Western Blot (Transfected lysate); ELISA
<b>Size</b>	1 ea
<b>Buffer</b>	In 1x PBS, pH 7.4
<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">COL9A1 collagen, type IX, alpha 1 [ Homo sapiens ]</a>
<b>Official Symbol</b>	COL9A1
<b>Synonyms</b>	COL9A1; collagen, type IX, alpha 1; collagen alpha-1(IX) chain; alpha-1(IX) collagen chain;

collagen IX, alpha-1 polypeptide; cartilage-specific short collagen; MED; EDM6; STL4;  
DJ149L1.1.2; FLJ40263;

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<b>Entrez Gene ID</b>	<a href="#">1297</a>
<b>Protein Refseq</b>	<a href="#">NP_001842</a>
<b>UniProt ID</b>	<a href="#">P20849</a>
<b>Chromosome Location</b>	6q12-q14
<b>Pathway</b>	Axon guidance, organism-specific biosystem; Developmental Biology, 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; Signal Transduction, organism-specific biosystem;
<b>Function</b>	extracellular matrix structural constituent conferring tensile strength; metal ion binding; structural molecule activity;

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