



Anti-COL9A1 monoclonal antibody (DCABH-11086)

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

PRODUCT INFORMATION

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

GENE INFORMATION

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| Gene Name | COL9A1 collagen, type IX, alpha 1 [Homo sapiens] |
| Official Symbol | COL9A1 |
| Synonyms | 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; |
| Entrez Gene ID | 1297 |
| Protein Refseq | NP_001842 |
| UniProt ID | P20849 |
| Chromosome Location | 6q12-q14 |
| Pathway | 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; |
| Function | extracellular matrix structural constituent conferring tensile strength; metal ion binding; structural molecule activity; |