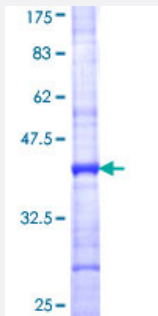


# COL9A1 (Human) Recombinant Protein (Q01)

Catalog # H00001297-Q01

Size 25 ug, 10 ug

## Applications



## Specification

|                                |                                                                                                                  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | Human COL9A1 partial ORF ( NP_001842, 24 a.a. - 132 a.a.) recombinant protein with GST-tag at N-terminal.        |
| <b>Sequence</b>                | AVKRRPRFPVNSNSNGGNELCPKIRIGQDDLPGFDLISQFQVDKAASRRAIQRVVGSATLQVAYKL<br>GNNVDFRIPTRNLYPSGLPEEYSFLTTFRMTGSTLKKNWNWQ |
| <b>Host</b>                    | Wheat Germ (in vitro)                                                                                            |
| <b>Theoretical MW (kDa)</b>    | 37.73                                                                                                            |
| <b>Preparation Method</b>      | <a href="#">in vitro wheat germ expression system</a>                                                            |
| <b>Purification</b>            | Glutathione Sepharose 4 Fast Flow                                                                                |
| <b>Quality Control Testing</b> | 12.5% SDS-PAGE Stained with Coomassie Blue.                                                                      |
| <b>Storage Buffer</b>          | 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.                                         |
| <b>Storage Instruction</b>     | Store at -80°C. Aliquot to avoid repeated freezing and thawing.                                                  |
| <b>Note</b>                    | Best use within three months from the date of receipt of this protein.                                           |

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — COL9A1

Entrez GeneID [1297](#)

GeneBank Accession# [NM\\_001851](#)

Protein Accession# [NP\\_001842](#)

Gene Name COL9A1

Gene Alias DJ149L1.1.2, EDM6, FLJ40263, MED

Gene Description collagen, type IX, alpha 1

Omim ID [120210](#)

Gene Ontology [Hyperlink](#)

**Gene Summary** 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]

**Other Designations** alpha 1 type IX collagen|alpha-1(IX) collagen chain|cartilage-specific short collagen|collagen IX, alpha-1 polypeptide

## Disease

- [Cardiovascular Diseases](#)

- [Clubfoot](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Intervertebral Disk Displacement](#)
- [Osteoarthritis](#)
- [Osteochondrodysplasias](#)
- [Tobacco Use Disorder](#)