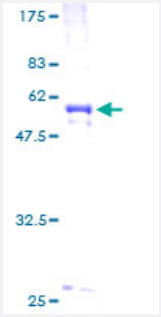
Full-Length

COL2A1 (Human) Recombinant Protein (P01)

Catalog # H00001280-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human COL2A1 full-length ORF (AAH07252, 1 a.a. - 268 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MSAFAGLGPREKGPDPLQYMRADQAAGGLRQHDAEVDATLKSLNNQIESIRSPEGSRKNPARTC RDLKLCHPEWKSGDYWIDPNQGCTLDAMKVFCNMETGETCVYPNPANVPKKNWWSSKSKEKK HIWFGETINGGFHFSYGDDNLAPNTANVQMTFLRLLSTEGSQNITYHCKNSIAYLDEAAGNLKKALLI QGSNDVEIRAEGNSRFTYTALKDGCTKHTGKWGKTVIEYRSQKTSRLPIIDIAPMDIGGPEQEFGVD IGPVCFL
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	55.22
Interspecies Antigen Sequence	Mouse (94); Rat (94)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	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 — COL2A1

Entrez GeneID	1280
GeneBank Accession#	BC007252
Protein Accession#	AAH07252
Gene Name	COL2A1
Gene Alias	ANFH, AOM, COL11A3, MGC131516, SEDC
Gene Description	collagen, type II, alpha 1
Omim ID	108300 120140 132450 151210 156550 165720 183900 184250 184252 200610 215150 271700 608805
Gene Ontology	Hyperlink
Gene Summary	This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutations in this gene are associated with achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SED congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in processing chondrocalcin, a calcium binding protein that is the C-propeptide of this collagen molecule, are also associated with chondrodysplasia. There are two transcripts identified for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000195063|cartilage collagen|chondrocalcin|collagen II, alpha-1 polypeptide

Pathway

- ECM-receptor interaction
- Focal adhesion

Disease

- Asthma
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Cumulative Trauma Disorders
- Diabetes Mellitus
- Edema
- Gaucher disease
- Genetic Predisposition to Disease
- Hip Dislocation
- Intervertebral Disk Displacement
- Legg-Perthes Disease
- Myopia
- Occupational Diseases
- Osteoarthritis
- Thrombophilia
- Toxoplasmosis