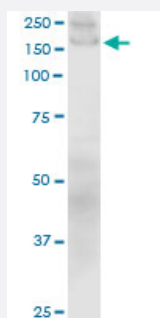


COL1A1 monoclonal antibody (M01), clone 3G3

Catalog # H00001277-M01

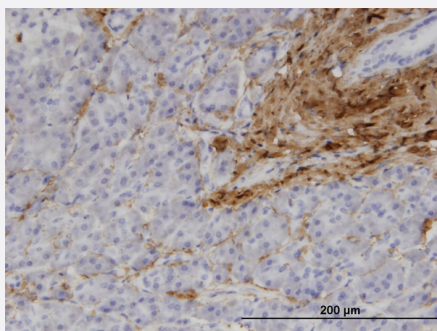
Size 100 ug

Applications



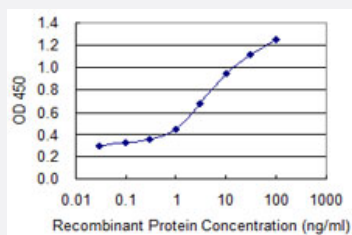
Western Blot (Cell lysate)

COL1A1 monoclonal antibody (M01), clone 3G3. Western Blot analysis of COL1A1 expression in NIH/3T3 (Cat # L018V1).



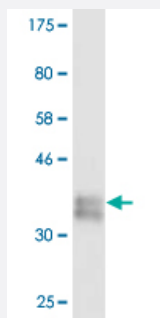
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to COL1A1 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged COL1A1 is 0.03 ng/ml as a capture antibody.



Western Blot detection against Immunogen (35.42 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant COL1A1.
Immunogen	COL1A1 (NP_000079.1, 1021 a.a. ~ 1108 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	EGSPGRDGSPPGAKGDRGETGPAGPPGAPGAPGPGVGPAGKSGDRGETGPAGPAGPVGPV GARGPAGPQGPRGDKGETGEQGDRGIK
Host	Mouse
Reactivity	Human, Mouse
Interspecies Antigen Sequence	Mouse (95); Rat (95)
Isotype	IgG3 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.42 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

COL1A1 monoclonal antibody (M01), clone 3G3. Western Blot analysis of COL1A1 expression in NIH/3T3(Cat # L018V1).

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to COL1A1 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged COL1A1 is 0.03 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — COL1A1

Entrez GeneID [1277](#)

GeneBank Accession# [NM_000088](#)

Protein Accession# [NP_000079.1](#)

Gene Name COL1A1

Gene Alias OI4

Gene Description collagen, type I, alpha 1

Omim ID [114000](#) [120150](#) [130000](#) [130060](#) [166200](#) [166210](#) [166220](#) [166710](#) [259420](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene encodes the pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissue and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene. [provided by R. Dalgleish]

Other Designations

alpha 1 type I collagen|collagen alpha 1 chain type I|collagen of skin, tendon and bone, alpha-1 chain|pro-alpha-1 collagen type 1|type I collagen alpha 1 chain

Publication Reference

- [Valproic acid modulates collagen architecture in the postoperative conjunctival scar.](#)

Li-Fong Seet, Stephanie WI Chu, Li Zhen Toh, Xiao Teng, Gary Hf Yam, Tina T Wong.

Journal of Molecular Medicine (Berlin, Germany) 2022 Jun; 100(6):947.

Application: IF, WB-Ce, Mouse, Mouse conjunctiva

- [A novel biphenyl compound IMB-S7 ameliorates hepatic fibrosis in BDL rats by suppressing Sp1-mediated integrin \$\alpha\$ v expression.](#)

Zhang N, Zhao SS, Zhang YX, Wang YC, Shao RG, Wang JX, He HW.

Acta Pharmacologica Sinica 2020 May; 41(5):661.

Application: WB-Ce, WB-Ti, WB-Tr, Human, Mouse, Rat, LX2 cells, Mouse hepatic stellate cells, Rat livers

- [Targeted therapy for the post-operative conjunctiva: SPARC silencing reduces collagen deposition.](#)

Seet LF, Tan YF, Toh LZ, Chu SW, Lee YS, Venkatraman SS, Wong TT.

The British Journal of Ophthalmology 2018 Jul; [Epub].

Application: WB-Ti, Mouse, Mouse conjunctival tissues

- [Bevacizumab Promotes T-Cell-Mediated Collagen Deposition in the Mouse Model of Conjunctival Scarring.](#)

Seet LF, Toh LZ, Chu S, Finger SN, Ginhoux F, Hong W, Wong TT.

Investigative Ophthalmology & Visual science 2018 Mar; 59(3):1682.

Application: WB, Mouse, Eye

Pathway

- [ECM-receptor interaction](#)
- [Focal adhesion](#)

Disease

- [Alzheimer disease](#)
- [Aortic Aneurysm](#)

- [beta-Thalassemia](#)
- [Body Weight](#)
- [Bone Diseases](#)
- [Bone Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Clubfoot](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Cystic fibrosis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Susceptibility](#)
- [Diseases in Twins](#)
- [Dwarfism](#)
- [Edema](#)
- [Femoral Neck Fractures](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Hearing Loss](#)
- [Hepatitis B](#)

- [Hip Dislocation](#)
- [Hip Fractures](#)
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- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Puberty](#)

- [Pulmonary Disease](#)
- [Rupture](#)
- [Shoulder Dislocation](#)
- [Skin Diseases](#)
- [Soft Tissue Injuries](#)
- [Spinal Diseases](#)
- [Spinal Fractures](#)
- [Spinal Injuries](#)
- [Tendinopathy](#)
- [Thalassemia](#)
- [Tobacco Use Disorder](#)
- [Urinary Incontinence](#)
- [Uterine Cervical Incompetence](#)
- [Wrist Injuries](#)