## **Elabscience Biotechnology Co., Ltd.**



A Reliable Research Partner in Life Science and Medicine

# **COL1A1 Monoclonal Antibody**

catalog number: E-AB-22152

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### Description

Reactivity Human; Mouse; Rat

Immunogen Synthetic Peptide of Collagen I

Host Mouse
Isotype IgG
Clone 3C3

**Purification** Protein A purification

Conjugation Unconjugated

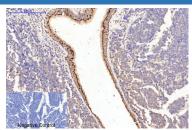
**Buffer** Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 0.5% protein

protectant and 50% glycerol.

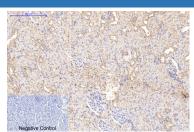
Applications Recommended Dilution

**IHC** 1:50-300

#### Data



Immunohistochemistry of paraffin-embedded Human lung cancer tissue using COL1A1 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded Rat kidney tissue using COL1A1 Monoclonal Antibody at dilution of 1:200.

## Preparation & Storage

Storage Storage Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

**Shipping** The product is shipped with ice pack, upon receipt, store it immediately at the

temperature recommended.

### Background

COL1A1 (Collagen Type I Alpha 1 Chain) is a Protein Coding gene. Diseases associated with COL1A1 include Caffey Disease and Osteogenesis Imperfecta, Type I. Among its related pathways are Collagen chain trimerization and Transcription\_Role of VDR in regulation of genes involved in osteoporosis. GO annotations related to this gene include identical protein binding and platelet-derived growth factor binding. An important paralog of this gene is COL2A1. 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 tissues 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.

#### For Research Use Only

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