

Anti-COL3A1 antibody



Description COL3A1 is a protein encoded by the COL3A1 gene which is

approximately 138,5 kDa. COL3A1 is secreted into the extracellular space and matrix. It is involved in collagen chain trimerization, integrin pathway, ERK signalling, phospholipase-C pathway and binding and uptake of ligands by scavenger receptors. It is involved in regulation of cortical development and is a major ligand of ADGRG1 in the developing brain. COL3A1 is expressed in skin, pancreas, bone, liver and lung. Mutations in the COL3A1 gene result in Ehlers-Danlos syndrome and thoracic aortic aneurysms. STJ92388 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of COL3A1 protein.

Model STJ92388

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, FC, IF, IHC

Immunogen Synthesized peptide derived from human COL3A1

Immunogen Region 50-130 aa, N-terminal

Gene ID 1281

Gene Symbol COL3A1

Dilution range IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000

Specificity COL3A1 Polyclonal Antibody detects endogenous levels of COL3A1 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Collagen alpha-1 III chain

95 kDa Molecular Weight

Polyclonal **Clonality**

Unconjugated Conjugation

IgG **Isotype**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. **Formulation**

1 mg/ml Concentration

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:22010MIM:120180

Collagen alpha-1 III chain **Alternative Names**

Function Collagen type III occurs in most soft connective tissues along with type I

> collagen. Involved in regulation of cortical development. Is the major ligand of ADGRG1 in the developing brain and binding to ADGRG1 inhibits neuronal migration and activates the RhoA pathway by coupling ADGRG1 to

GNA13 and possibly GNA12.

Sequence and Domain Family The C-terminal propeptide, also known as COLFI domain, have crucial roles

> in tissue growth and repair by controlling both the intracellular assembly of procollagen molecules and the extracellular assembly of collagen fibrils. It

binds a calcium ion which is essential for its function.

Cellular Localization Secreted, extracellular space, extracellular matrix

Post-translational Proline residues at the third position of the tripeptide repeating unit (G-X-Y) **Modifications**

are hydroxylated in some or all of the chains. O-linked glycan consists of a

Glc-Gal disaccharide bound to the oxygen atom of a post-translationally

added hydroxyl group.

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