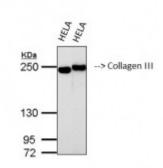


Anti-Collagen III antibody



Western Blot (WB) analysis of HELA cells using Collagen III Monoclonal Antibody from two batches. (STJ97025)



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

approximately 138,5 kDa. Collagen III is secreted into the extracellular matrix. It is involved in collagen chain trimerization, the integrin pathway, ERK signalling and the phospholipase-C pathway. It occurs in most soft connective tissues along with type I collagen. It is involved in regulation of cortical development and is the major ligand of ADGRG1 in the developing brain, binding to ADGRG1 inhibits neuronal migration and activates the RhoA pathway by coupling ADGRG1 to GNA13. Collagen III is expressed in the skin, pancreas, bone, liver and lung. Mutations in the COL3A1 gene may result in Ehlers-Danlos syndrome. STJ97025 was developed from clone Q76 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous Collagen III protein.

Model STJ97025

Host Mouse

Reactivity Human, Mouse, Rat

Applications WB

Immunogen Synthetic Peptide

Gene ID <u>1281</u>

Gene Symbol COL3A1

Dilution range WB 1:1000

Specificity The antibody detects endogenous Collagen III protein.

Purification The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID Q76

Note For Research Use Only (RUO).

Protein Name Collagen alpha-1 III chain

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

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

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

Database Links <u>HGNC:2201OMIM:120180</u>

Alternative Names Collagen alpha-1 III chain

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.

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com