

Basic Information

Product Name	Anti-Collagen Type III/COL3A1 Antibody	
Gene Name	COL3A1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human,mouse,rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived human Collagen III/COL3A1 recombinant protein (Position: D1222-E1455).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	150KD-200KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 ELISA: 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

COL3A1, also called EDS4A or Collagen alpha-1(III), is a protein that in humans is encoded by the COL3A1 gene. It is mapped to 2q32.2. COL3A1 chain is a fibrillar-forming collagen comprising 3 alpha-1(III) chains and is expressed in early embryos and throughout embryogenesis. In adult, COL3A1 is a major component of the extracellular matrix in a variety of internal organs and skin. COL3A1 is also a fibrous scleroprotein in bone, cartilage, dentin, tendon, bone marrow stroma and other connective tissue. It is involved in regulation of cortical development, and it is the major ligand of GPR56 in the developing brain. COL3A1 binding to GPR56 can inhibit neuronal migration and activate the RhoA pathway by coupling GPR56 to GNA13 and possibly GNA12.

Reference

Anti-Collagen Type III/COL3A1 Antibody 被引用在3文献中。

Selected Validation Data

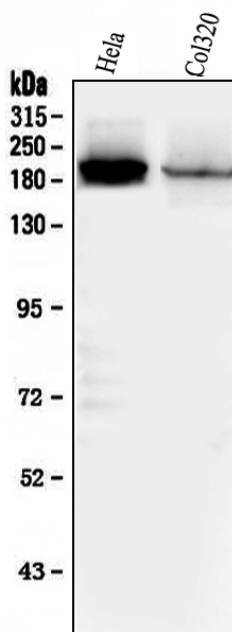


Figure 1. Western blot analysis of anti- COL3A1 antibody (A00788-3). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: Col320 whole cell lysates.

Use rabbit anti- COL3A1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for COL3A1 at approximately 150-200KD. The expected band size for COL3A1 is at 139KD.

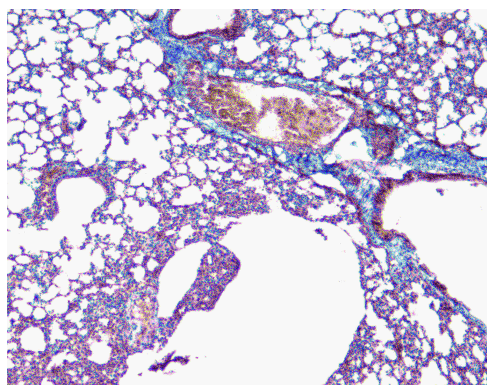


Figure 2.IHC analysis using anti-COL3A1 antibody (A00788-3). detected in paraffin-embedded section of mouse lung tissue.

Biotinylated goat anti-rabbit IgG was used as secondary antibody.

The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.