

## Basic Information

Product Name	Anti-Collagen Type III/COL3A1 Antibody (Clone#9H9)		
Gene Name	COL3A1		
Source	Mouse		
Isotype	IgG2b		
Species Reactivity	human, mouse, rat		
Tested Application	WB, IHC		
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>3</sub> N , 1 mg BSA and 50% glycerol.		
Immunogen	E. coli-derived human Collagen III/COL3A1 recombinant protein (Position: D1222- E1455).		
concentration	500 ug/ml		
Purification	protein G purified.		
Observed MW	150KD-200KD		
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (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 (Clone#9H9)被引用在2文献中。

## Selected Validation Data

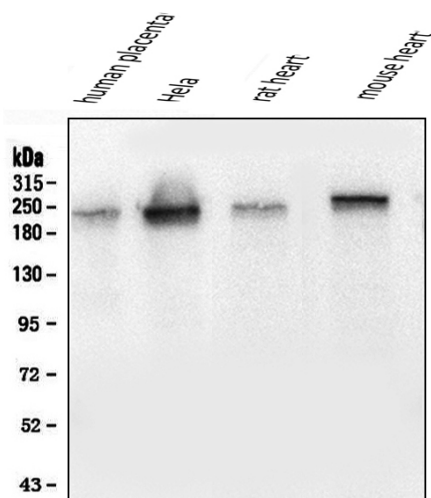


Figure 1. Western blot analysis of Anti-Collagen III/COL3A1 antibody (M00788). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: Hela whole cell lysates,

Lane 3: rat heart tissue lysates,

Lane 4: mouse heart tissue lysates, Use mouse Anti-Collagen

III/COL3A1 1:1000, probed with a goat anti-mouse IgG-HRP

secondary antibody. The signal is developed using an Enhanced

Chemiluminescent detection (ECL) kit (Catalog # EK1001). A

specific band was detected for Collagen III/COL3A1 at

approximately 180-190KD. The expected band size for Collagen

III/COL3A1 is at 139KD.

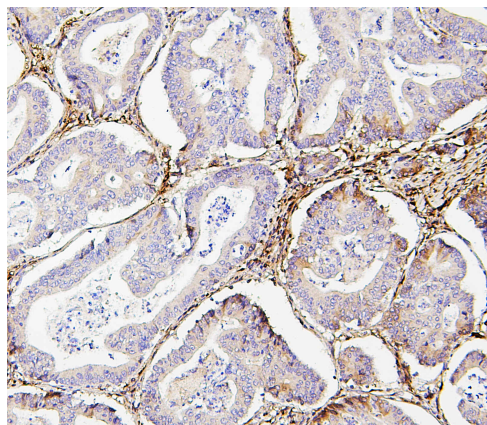


Figure 2. IHC analysis using Anti-Collagen III/COL3A1 antibody

(M00788) detected in paraffin-embedded section of human

intestinal cancer tissue. Biotinylated goat anti-mouse IgG was used

as secondary antibody. The tissue section was developed using

Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as

the chromogen.