

Basic Information

Product Name	Anti-Collagen Type III/COL3A1 Antibody	
Gene Name	COL3A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human ,mouse ,rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml 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	150 kDa-200 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (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44文献中。

Selected Validation Data

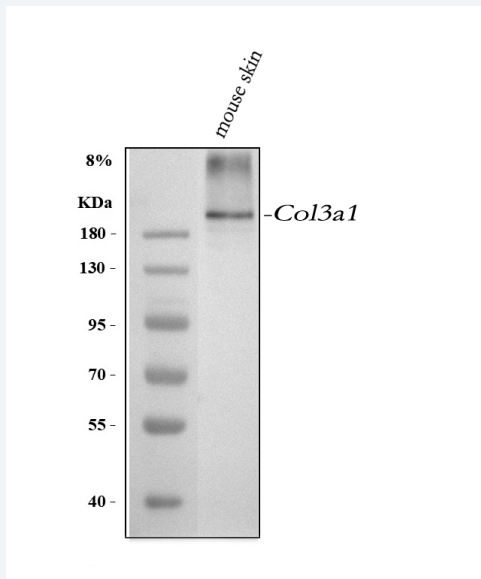


Figure 1. Western blot analysis of Collagen Type III/COL3A1 using anti-Collagen Type III/COL3A1 antibody (A00788-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: mouse skin tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Collagen Type III/COL3A1 antigen affinity purified polyclonal antibody (A00788-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Collagen Type III/COL3A1 at approximately 200 kDa. The expected band size for Collagen Type III/COL3A1 is at 139 kDa.

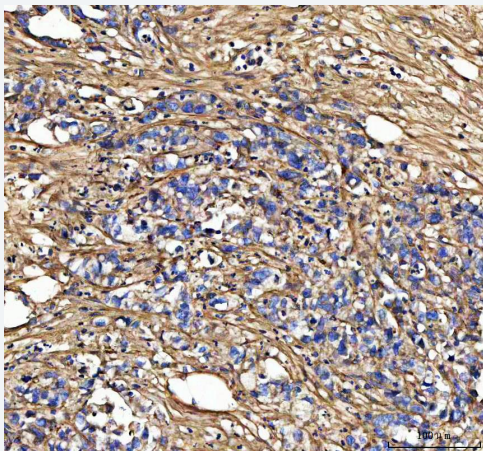


Figure 2. IHC analysis of Collagen Type III/COL3A1 using anti-Collagen Type III/COL3A1 antibody (A00788-3) .

Collagen Type III/COL3A1 was detected in a paraffin-embedded section of human gastric poorly differentiated adenocarcinoma tissue. The tissue section was incubated with rabbit anti-Collagen Type III/COL3A1 Antibody (A00788-3) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

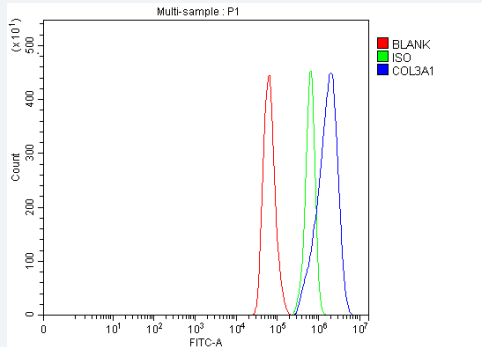


Figure 8. Flow Cytometry analysis of SiHa cells using anti-Collagen Type III/COL3A1 antibody (A00788-3).

Overlay histogram showing Hela cells stained with A00788-3 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Collagen Type III/COL3A1 Antibody (A00788-3, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.