

# **Anti-Collagen III Antibody**

**Catalog # ABO12718** 

#### **Specification**

### **Anti-Collagen III Antibody - Product Information**

Application WB
Primary Accession P02461
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Collagen alpha-1(III) chain(COL3A1) detection. Tested with WB in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-Collagen III Antibody - Additional Information**

**Gene ID 1281** 

**Other Names** 

Collagen alpha-1(III) chain, COL3A1

Calculated MW 138564 MW KDa

**Application Details** 

Western blot, 0.1-0.5 μg/ml, Human<br>

**Subcellular Localization** 

Secreted, extracellular space, extracellular matrix.

**Protein Name** 

Collagen alpha-1(III) chain

**Contents** 

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Collagen III(1200-1221aa VGAAAIAGIGGEKAGGFAPYYG), different from the related mouse sequence by four amino acids, and from the related rat sequence by five amino acids.

#### **Purification**

Immunogen affinity purified.

**Cross Reactivity** 



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the fibrillar collagen family.

### **Anti-Collagen III Antibody - Protein Information**

Name COL3A1

#### **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.

#### **Cellular Location**

Secreted, extracellular space, extracellular matrix {ECO:0000255|PROSITE-ProRule:PRU00793}

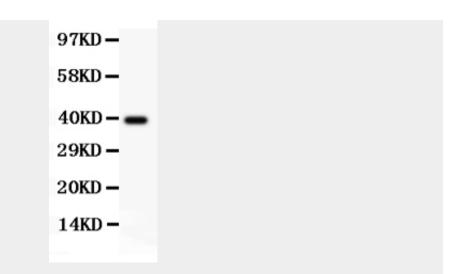
#### **Anti-Collagen III Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

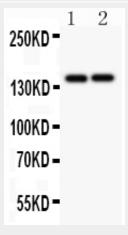
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-Collagen III Antibody - Images





Anti-Collagen III Picoband antibody, ABO12718-1.jpgAll lanes: Anti Collagen III (ABO12718) at 0.5ug/mlWB: Recombinant Human Collagen III Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD



Anti-Collagen III Picoband antibody, ABO12718-2.jpgAll lanes: Anti Collagen III(ABO12718) at 0.5ug/mlLane 1: MCF-4 Whole Cell Lysate at 40ugLane 2: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 139KDObserved bind size: 139KD

# **Anti-Collagen III Antibody - Background**

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