

# Anti-Collagen Type IV (RABBIT) Antibody

Collagen Type IV Antibody Catalog # ASR5147

### **Specification**

## Anti-Collagen Type IV (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate
Target Species
Reactivity
Clonality

Unconjugated
Mammalian
Human, Bovine
Polyclonal

Application WB, IHC, E, IP, I, LCI

Application Note

Anti-Collagen Type IV has been tested by

dot blot and IHC and is suitable for indirect trapping ELISA for quantitation of antigen

in serum using a standard curve, immunoprecipitation, native

(non-denaturing, non-dissociating) PAGE, immunohistochemistry, and western blotting for highly sensitive qualitative

analysis.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen Collagen Type IV from human and bovine

placenta

Preservative 0.01% (w/v) Sodium Azide

### Anti-Collagen Type IV (RABBIT) Antibody - Additional Information

**Gene ID 1282** 

Other Names 1282

#### **Purity**

Anti-Collagen Type IV has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens, human serum proteins and non-collagen extracellular matrix proteins to remove any unwanted specificities. Some class-specific anti-collagens may be specific for three-dimensional epitopes which may result in diminished reactivity with denatured collagen or formalin-fixed, paraffin embedded tissues. This antibody reacts with most mammalian Type IV collagens and has negligible cross-reactivity with Type I, II, III, V or VI collagens. Non-specific cross-reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.

# **Storage Condition**

Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage, mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.



#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-Collagen Type IV (RABBIT) Antibody - Protein Information

Name COL4A1 (HGNC:2202)

### **Function**

Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 'chicken-wire' meshwork together with laminins, proteoglycans and entactin/nidogen.

### **Cellular Location**

Secreted, extracellular space, extracellular matrix, basement membrane {ECO:0000250|UniProtKB:P02463}

### **Tissue Location**

Highly expressed in placenta.

## Anti-Collagen Type IV (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-Collagen Type IV (RABBIT) Antibody - Images

### Anti-Collagen Type IV (RABBIT) Antibody - Background

Rockland produces highly active antibodies and conjugates to collagens. Collagens are highly conserved throughout evolution and are characterized by an uninterrupted "Glycine-X-Y" triplet repeat that is a necessary part of the triple helical structure. For these reasons, it is often extremely difficult to generate antibodies with specificities to collagens. The development of 'type' specific antibodies is dependent on NON-DENATURED three-dimensional epitopes. Rockland extensively purifies collagens for immunization from human and bovine placenta and cartilage by limited pepsin digestion and selective salt precipitation. This preparation results in a native conformation of the protein. Antibodies are isolated from rabbit antiserum and are extensively cross-adsorbed by immunoaffinity purification to produce 'type' specific antibodies. Greatly diminished reactivity and selectivity of these antibodies will result if denaturing and reducing conditions are used for SDS-PAGE and immunoblotting.