

Goat Anti-COL4A4 Antibody (internal region (near C terminus)) Purified Goat Polyclonal Antibody Catalog # AF4159a

## Specification

# Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - Product Information

Application Primary Accession Other Accession Predicted Host Clonality Concentration Calculated MW E <u>P53420</u> <u>NP\_000083.3</u> Human Goat Polyclonal 0.5 164038

# Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - Additional Information

## Gene ID 1286

### **Other Names**

COL4A4; collagen, type IV, alpha 4; CA44; Collagen IV, alpha-4 polypeptide; collagen alpha-4(IV) chain; collagen of basement membrane, alpha-4 chain

### Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

### Immunogen

Peptide with sequence C-SEEAIRPYVSR, from the internal region (near C terminus) of the protein sequence according to NP\_000083.3.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-COL4A4 Antibody (internal region (near C terminus)) is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - Protein Information

Name COL4A4

### 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:0000255|PROSITE-ProRule:PRU00736} Note=Colocalizes with COL4A4 and COL4A5 in GBM, tubular basement membrane (TBM) and synaptic basal lamina (BL).

### **Tissue Location**

Expressed in Bruch's membrane, outer plexiform layer, inner nuclear layer, inner plexiform layer, ganglion cell layer, inner limiting membrane and around the blood vessels of the retina (at protein level) (PubMed:29777959). Alpha 3 and alpha 4 type IV collagens are colocalized and present in kidney, eye, basement membranes of lens capsule, cochlea, lung, skeletal muscle, aorta, synaptic fibers, fetal kidney and fetal lung. PubMed:8083201 reports similar levels of expression of alpha 3 and alpha 4 type IV collagens in kidney, but PubMed:7523402 reports that in kidney levels of alpha 3 type IV collagen are significantly lower than those of alpha 4 type IV collagen. Highest levels of expression of alpha 4 type IV collagen are detected in kidney, calvaria, neuroretina and cardiac muscle. Lower levels of expression are observed in brain, lung and thymus, and no expression is detected in choroid plexus, liver, adrenal, pancreas, ileum or skin.

# Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - Protocols

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

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

## Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - Images

## Goat Anti-COL4A4 Antibody (internal region (near C terminus)) - References

The collagen binding domain of gelatinase A modulates degradation of collagen IV by gelatinase B. Gioia M, Monaco S, Van Den Steen PE, Sbardella D, Grasso G, Marini S, Overall CM, Opdenakker G, Coletta M. J Mol Biol. 2009 Feb \20;386(2):419-34.