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# COL8A2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11859B

## Product Information

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| **Application** | IHC-P-Leica, IF, WB, E |
| **Primary Accession** | P25067 |
| **Other Accession** | NP_005193.1 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB31742 |
| **Calculated MW** | 67244 |
| **Antigen Region** | 571-599 |

## Additional Information

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| **Gene ID** | 1296 |
| **Other Names** | Collagen alpha-2(VIII) chain, Endothelial collagen, COL8A2 |
| **Target/Specificity** | This COL8A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 571-599 amino acids from the C-terminal region of human COL8A2. |
| **Dilution** | IHC-P-Leica~~1:500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | COL8A2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | COL8A2 |
| **Function** | Macromolecular component of the subendothelium. Major component of the Descemet's membrane (basement membrane) of corneal endothelial |

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| | cells. Also a component of the endothelia of blood vessels. Necessary for migration and proliferation of vascular smooth muscle cells and thus, has a potential role in the maintenance of vessel wall integrity and structure, in particular in atherogenesis (By similarity). |
| **Cellular Location** | Secreted, extracellular space, extracellular matrix, basement membrane |
| **Tissue Location** | Expressed primarily in the subendothelium of large blood vessels. Also expressed in arterioles and venules in muscle, heart, kidney, spleen, umbilical cord, liver and lung and is also found in connective tissue layers around hair follicles, around nerve bundles in muscle, in the dura of the optic nerve, in cornea and sclera, and in the perichondrium of cartilaginous tissues. In the kidney, expressed in mesangial cells, glomerular endothelial cells, and tubular epithelial cells. Also expressed in mast cells, and in astrocytes during the repair process. Expressed in Descemet's membrane |

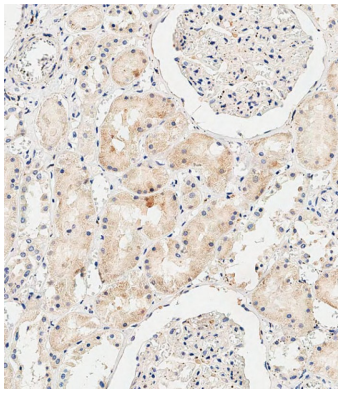
## Background

This gene encodes the alpha 2 chain of type VIII collagen. The protein is a major component of the basement membrane of the corneal endothelium and forms homo- or heterotrimers with alpha 1 (VIII) type collagens. Defects in this gene are associated with Fuchs endothelial corneal dystrophy and posterior polymorphous corneal dystrophy type 2.

## References

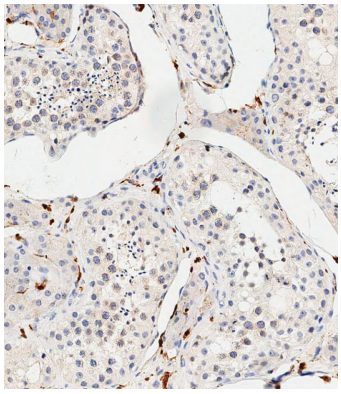
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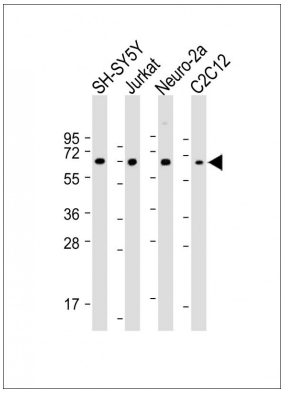
## Images



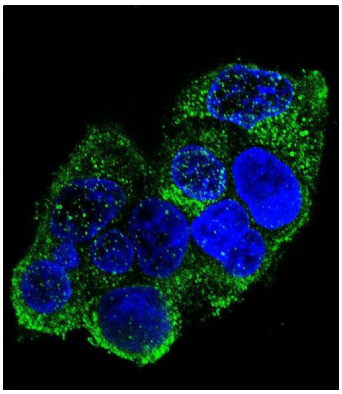
Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP11859B performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded Human testis tissue using AP11859B performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.






All lanes : Anti-COL8A2 Antibody (C-term) at 1:2000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Neuro-2a whole cell lysate Lane 4: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 67 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of COL8A2 Antibody (C-term)(Cat#AP11859b) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

## Citations

- Transcription factor TFAP2B up-regulates human corneal endothelial cell-specific genes during corneal development and maintenance.
- Involvement of ZEB1 and Snail1 in excessive production of extracellular matrix in Fuchs endothelial corneal dystrophy.
- Platelet-Derived Extracellular Vesicles Increase Col8a1 Secretion and Vascular Stiffness in Intimal Injury

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.