

COL8A2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11859B

Product Information

Application	IHC-P-Leica, IF, WB, E
Primary Accession	<u>P25067</u>
Other Accession	<u>NP_005193.1</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31742
Calculated MW	67244
Antigen Region	571-599

Additional Information

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

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

Hemadevi, B., et al. BMC Ophthalmol 10, 3 (2010) : Afshari, N.A., et al. Invest. Ophthalmol. Vis. Sci. 50(3):1093-1097(2009) Liskova, P., et al. Br J Ophthalmol 91(12):1717-1718(2007) Aldave, A.J., et al. Cornea 26(8):963-965(2007) Zhang, C., et al. Trans Am Ophthalmol Soc 104, 85-97 (2006) :

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.

Citations

- <u>Transcription factor TFAP2B up-regulates human corneal endothelial cell-specific genes during corneal development</u> <u>and maintenance.</u>
- Involvement of ZEB1 and Snail1 in excessive production of extracellular matrix in Fuchs endothelial corneal dystrophy.

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