

## Rabbit Anti-Collagen VIII alpha 1/Biotin Conjugated antibody

SL7529R-Bio

<b>Product Name</b>	Anti-Collagen VIII alpha 1/Biotin
<b>Chinese Name</b>	生物素标记的 8 型胶原/内皮 Collagen protein 抗体
<b>Alias</b>	C3orf7; CO8A1_HUMAN; COL8A1; Collagen alpha 1(VIII) chain [Precursor]; Endothelial collagen; MGC9568; Vastatin.
<b>Research Area</b>	Cardiovascular Signal transduction Diabetes Cytoskeleton Extracellular matrix
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow) WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	19/79kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human Collagen VIII alpha 1 (672-718aa)
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail</b>	<b>background:</b> Macromolecular component of the subendothelium. Major component of the Descemet's membrane (basement membrane) of corneal endothelial cells. Also 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 arterogenesis. Vastatin, the C-terminal fragment comprising the NC1 domain, inhibits aortic endothelial cell proliferation and causes cell apoptosis.

**Function:**

Macromolecular component of the subendothelium. Major component of the Descemet's membrane (basement membrane) of corneal endothelial cells. Also 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.

Vastatin, the C-terminal fragment comprising the NC1 domain, inhibits aortic endothelial cell proliferation and causes cell apoptosis.

**Subunit:**

Homodimer; antiparallel disulfide-linked dimer. Heterodimer with PDGFB; antiparallel disulfide-linked dimer. The PDGFA homodimer interacts with PDGFRA homodimers, and with heterodimers formed by PDGFRA and PDGFRB. The heterodimer composed of PDGFA and PDGFB interacts with PDGFRA homodimers, and with heterodimers formed by PDGFRA and PDGFRB. Interacts with CSPG4.

**Subcellular Location:**

Secreted, extracellular space, extracellular matrix, basement membrane.

**Tissue Specificity:**

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. Specifically expressed in peritoneal fibroblasts and mesothelial cells.

**Post-translational modifications:**

Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.

Proteolytically cleaved by neutrophil elastase, in vitro. Proteolytic processing produces the C-terminal NC1 domain fragment, vastatin.



**Similarity:**

Belongs to the PDGF/VEGF growth factor family.

**Database links:**

UniProtKB/Swiss-Prot: P27658.2

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.