abcam

Product datasheet

Anti-Endostatin/COL18A1 antibody ab3453

4 References 6 Images

Overview

Product name	Anti-Endostatin/COL18A1 antibody
Description	Rabbit polyclonal to Endostatin/COL18A1
Host species	Rabbit
Specificity	Detects recombinant human Endostatin/COL18A1.
Tested applications	**Suitable for:** ICC/IF, IHC-P
Species reactivity	**Reacts with:** Mouse, Cat, Human, Non human primates
Immunogen	Synthetic peptide corresponding to Human Endostatin/COL18A1 aa 129-142. Sequence: RRLM/TESYCETWRTE (Peptide available as **ab4983**) Run BLAST with Run BLAST with
General notes	ab3453 has been recombinant only tested in Western blot. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3453 in the following tested applications.

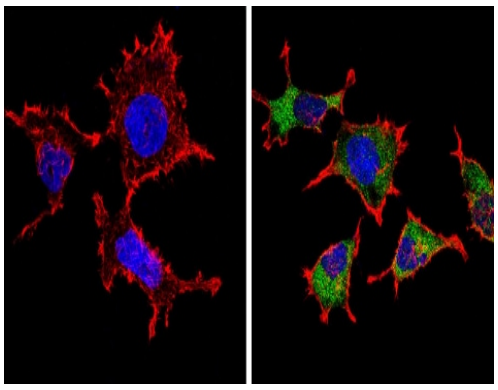
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/200 - 1/1000.
IHC-P		1/100 - 1/500.

Target

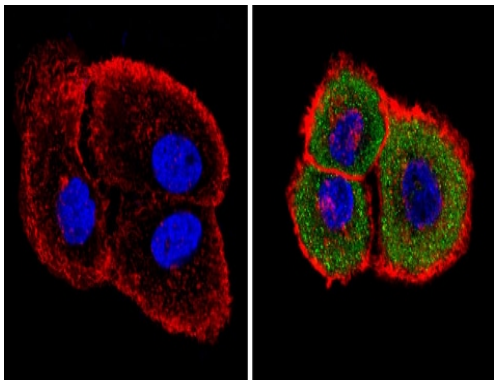
Function	COLA18A probably plays a major role in determining the retinal structure as well as in the closure of the neural tube. Endostatin potently inhibits endothelial cell proliferation and angiogenesis. May inhibit angiogenesis by binding to the heparan sulfate proteoglycans involved in growth factor signaling.
Tissue specificity	Present in multiple organs with highest levels in liver, lung and kidney.
Involvement in disease	Defects in COL18A1 are a cause of Knobloch syndrome (KNO) [MIM:267750]. KNO is an autosomal recessive disorder defined by the occurrence of high myopia, vitreoretinal degeneration with retinal detachment, macular abnormalities and occipital encephalocele.
Sequence similarities	Belongs to the multiplexin collagen family. Contains 1 FZ (frizzled) domain. Contains 1 TSP N-terminal (TSPN) domain.
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.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



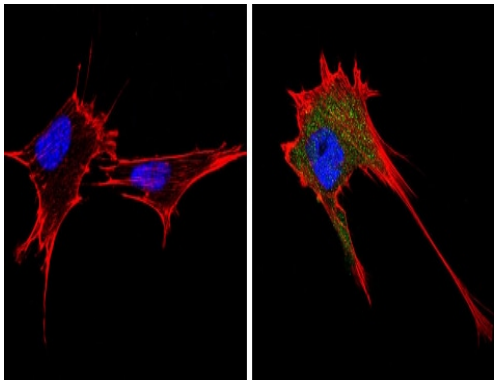
Immunocytochemistry/ Immunofluorescence - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 (green) in 293T cells (right) compared with a negative control (left) by Immunocytochemistry/Immunofluorscence. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4 ºC. A DyLight 488-conjugated Goat anti-rabbit IgG was used as the secondary antibody. Red (phalloidin) - F-actin, Blue (DAPI) - nuclei (blue). Images were taken at a magnification of 60x.



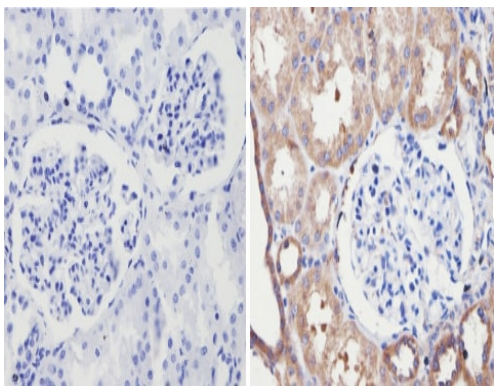
Immunocytochemistry/ Immunofluorescence - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 (green) in A431 cells (right) compared with a negative control (left) by Immunocytochemistry/Immunofluorscence. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4 ºC. A DyLight 488-conjugated Goat anti-rabbit IgG was used as the secondary antibody. Red (phalloidin) - F-actin, Blue (DAPI) - nuclei (blue). Images were taken at a magnification of 60x.



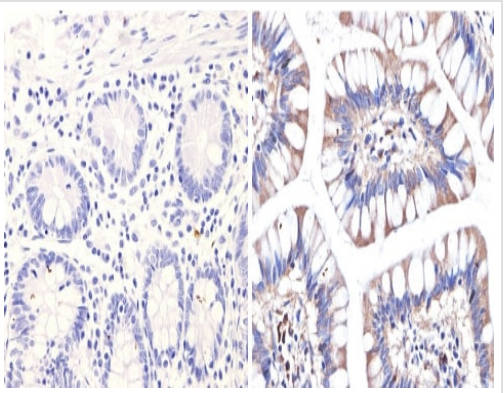
Immunocytochemistry/ Immunofluorescence - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 (green) in NIH-3T3 cells (right) compared with a negative control (left) by Immunocytochemistry/Immunofluorscence. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4 ºC. A DyLight 488-conjugated Goat anti-rabbit IgG was used as the secondary antibody. Red (phalloidin) - F-actin, Blue (DAPI) - nuclei (blue). Images were taken at a magnification of 60x.



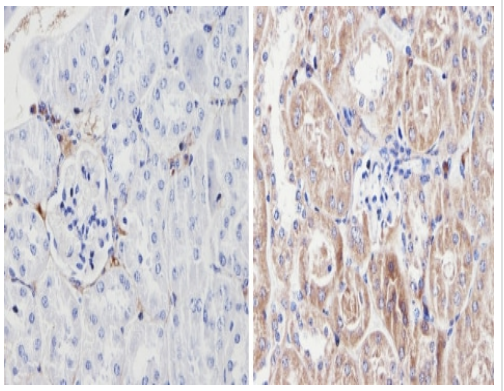
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 in the secretion of Human kidney tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Tissue sections were incuabted with the primary antibody (1:100 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit IgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 in the secretion of Human colon tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Tissue sections were incuabted with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit IgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Endostatin/COL18A1 antibody (ab3453)

ab3453 labelling Endostatin/COL18A1 in the secretion of Mouse kidney tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Tissue sections were incuabted with the primary antibody (1:100 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit IgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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