For Research Use Only

Endostatin Polyclonal antibody

Catalog Number:18301-1-AP 5 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
18301-1-AP

Size:
150ul , Concentration: 240 μg/ml by Nanodrop and 133 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC063833

GeneID (NCBI):
80781

UNIPROT ID:
P39060

Full Name:
collagen, type XVIII, alpha 1

Calculated MW:
178 kDa

Observed MW:
20 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:200-1:1000
IHC 1:20-1:200
IF 1:50-1:500

Applications

Tested Applications:
WB, IF, IHC, ELISA

Cited Applications:
WB, IF

Species Specificity:
human, zebrafish

Cited Species:
human, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : human kidney tissue,

IHC : human liver tissue,

IF : zebrafish retina,

Background Information

Endostatin is a naturally-occurring 20-kDa C-terminal fragment derived from collagen alpha-1(XVIII) chain (COL18A1). It is reported to serve as an anti-angiogenic agent, similar to angiostatin and thrombospondin. It potently inhibits endothelial cell proliferation and inhibits endothelial cell angiogenesis by binding to the heparan sulfate proteoglycans involved in growth factor signaling. Endostatin is a broad spectrum angiogenesis inhibitor and may interfere with the pro-angiogenic action of growth factors such as basic fibroblast growth factor (bFGF/FGF-2) and vascular endothelial growth factor (VEGF). This antibody raised against 1693-1706 aa of human collagen alpha-1(XVIII) chain can recognize endostatin (20 kDa) and several endostatin-related fragments of higher molecular weight (PMID: 15545970; 19358707).

Notable Publications

Author	Pubmed ID	Journal	Application
Pei Zhang	31914639	FASEB J	WB
Emna Ouni	35341935	Matrix Biol	IF
Baolong Wang	26830094	Biotechnol Lett	WB

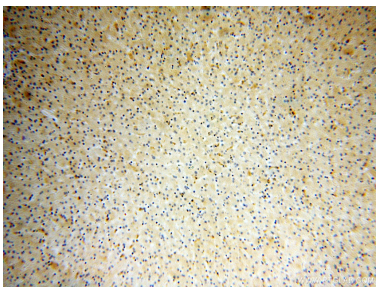
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

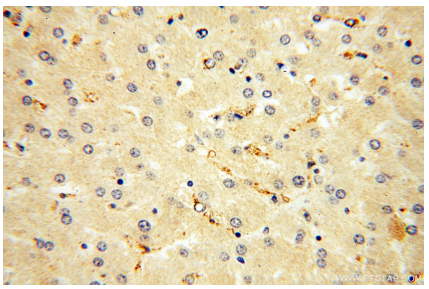
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

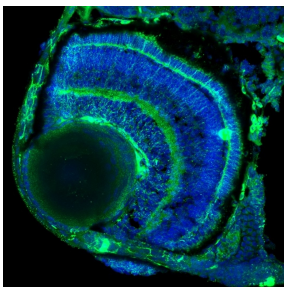
Selected Validation Data



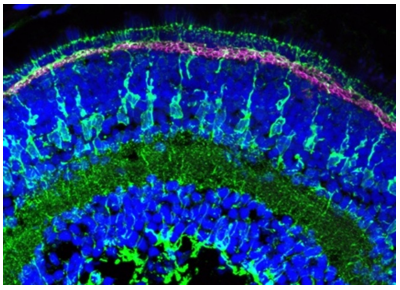
Immunohistochemical analysis of paraffin-embedded human liver using 18301-1-AP (Endostatin antibody) at dilution of 1:50 (under 10x lens).



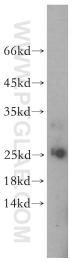
Immunohistochemical analysis of paraffin-embedded human liver using 18301-1-AP (Endostatin antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescence analysis of Collagen18a1 (aka Endostatin) polyclonal antibody (18301-1-AP, green) staining on tissue sections of the zebrafish retina at 3 days post fertilisation. Dilution 1:200. Tissue fixed overnight in 4% PFA. DAPI, blue. Data generated by Natalia Jaroszynska in Professor Ryan MacDonald's lab, University College London, UK.



Immunofluorescence analysis of the zebrafish retina at 5 days post fertilisation. Collagen18a1 (aka Endostatin) polyclonal antibody (18301-1-AP, magenta). Dilution 1:200. Glutamine synthetase (66323-1-Ig, green) dilution 1:500. Tissue fixed overnight in 4% PFA; DAPI, blue. Data generated by Natalia Jaroszynska in Professor Ryan MacDonald's lab, University College London, UK.



human kidney tissue were subjected to SDS PAGE followed by western blot with 18301-1-AP (Endostatin antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.