

Mouse Endostatin Monoclonal Antibody | anti-COL18A1 antibody

Mouse Monoclonal (IgG) to Mouse Endostatin

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA51802	Mouse	Human, Mouse, Rat	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

Endostatin; Monoclonal Antibody; Mouse Monoclonal (IgG) to Mouse Endostatin; Anti-Endostatin Antibody IHC-plus; COL18A1; Collagen; type XVIII; alpha 1; Collagen alpha-1(XVIII) chain; KNO; KNO1; KS; Multi-functional protein MFP; Antiangiogenic agent; Collagen alpha 1(xviii); Knobloch syndrome; type 1; Mouse Endostatin; anti-COL18A1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG
Specificity	Recognizes mouse endostatin, Mr 22kD, an unidentified protein is also weakly detected, Mr 54kD. Detects human protein in IHC-FFPE. It is predicted that the antibody will also detect the rat protein. Cross-reactivity is predicted based on sequence homology. The antibody has not been specifically tested with rat samples at this time.
Purity/Purification	Thiophilic adsorption
Form/Format	50 mM sodium phosphate, pH 8.0, 0.05% sodium azide, before the addition of glycerol to 30%. Sourced in Ascites.
Sequence Length	1516
Applicable Applications for anti-COL18A1 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Target Species	Mouse
Taget	Endostatin
Immunogen Description	Full-length recombinant murine endostatin.
Immunogen	Endostatin antibody was raised against full-length recombinant murine endostatin.
Usage Summary	Immunohistochemistry: was validated for use in immunohistochemistry on a panel of 21 formalin-fixed, paraffin-embedded (FFPE) human tissues after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with the primary antibody, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen. The stained slides were evaluated by a pathologist to confirm staining specificity. The optimal working concentration was determined to be 1:100. Western Blot: 1:500-1:2000. Detects endostatin in mouse liver cell lysates to which 50ng of recombinant human endostatin was added. Mouse liver cell lysate was resolved by electrophoresis, transferred to nitrocellulose and probed. Proteins were visualized using an IgG (HRP) goat anti-mouse and chemiluminescence detection system.
Preparation and Storage	Long term: -20 degree C; Short term: +4 degree C. Avoid repeat freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)
Anti-COL18A1 / Endostatin antibody IHC of human kidney. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody dilution 1:100.

ADDITIONAL INFORMATION

Related Product Information for anti-COL18A1 antibody	Endostatin, which corresponds to the C-terminal fragment of collagen XVIII, is a potent inhibitor of endothelial cell proliferation, migration and angiogenesis. Recent study shows that endostatin induces tyrosine kinase activity and enhanced apoptosis in FGF-treated endothelial cells. Endostatin is currently being used in Phase I trials as an antitumor agent. Endostatin is the alpha chain of type XVIII collagen. This collagen is one of the multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. A long isoform of the protein has an N-terminal domain that is homologous to the extracellular part of frizzled receptors. Proteolytic processing at several endogenous cleavage sites in the C-terminal domain results in production of endostatin, a potent antiangiogenic protein that is able to inhibit angiogenesis and tumor growth. Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities, so type XVIII collagen may play an important role in retinal structure and in neural tube closure. Alternative splicing results in multiple transcript variants.
Product Categories/Family for anti-COL18A1 antibody	Family: Collagen

NCBI AND UNIPROT INFORMATION

NCBI GI #	110611235
NCBI GeneID	80781
NCBI Accession #	NP_085059.2
NCBI GenBank Nucleotide #	NM_030582.3
UniProt Accession #	P39060 ; Q58EX6 ; Q6RZ39 ; Q6RZ40 ; Q6RZ41 ; Q8N4S4 ; Q8WXI5 ; Q96T70 ; Q9UK38 ; Q9Y6Q7 ; Q9Y6Q8 ; A8MVI4
NCBI Official Full Name	collagen alpha-1(XVIII) chain isoform 1 preproprotein
NCBI Official Synonym Full Names	collagen, type XVIII, alpha 1
NCBI Official Symbol	COL18A1
NCBI Official Synonym Symbols	KS; KNO; KNO1
NCBI Protein Information	collagen alpha-1(XVIII) chain; collagen alpha-1(XVIII) chain; endostatin; antiangiogenic agent; multi-functional protein MFP
UniProt Protein Name	Collagen alpha-1(XVIII) chain
UniProt Gene Name	COL18A1
UniProt Entry Name	COIA1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.