

ARG66732 anti-COL18A1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes COL18A1
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	COL18A1
Species	Human
Immunogen	KLH-conjugated synthetic peptide within the center region of Human COL18A1.
Conjugation	Un-conjugated
Alternate Names	KS; KNO; KNO1; Collagen alpha-1(XVIII) chain

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:500
	IHC-P	1:100 - 1:200
	WB	1:500 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Sodium citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	MCF7	
Observed Size	~ 170 kDa	

Properties

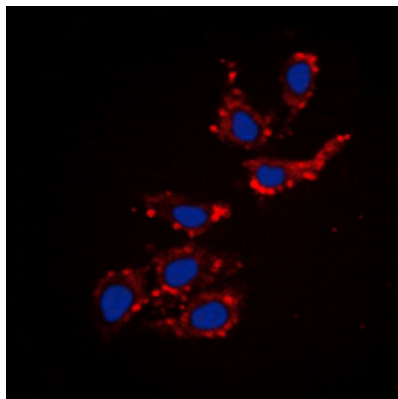
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.42% Potassium phosphate (pH 7.3), 0.87% NaCl, 0.01% Sodium azide and 30% Glycerol.
Preservative	0.01% Sodium azide
Stabilizer	30% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

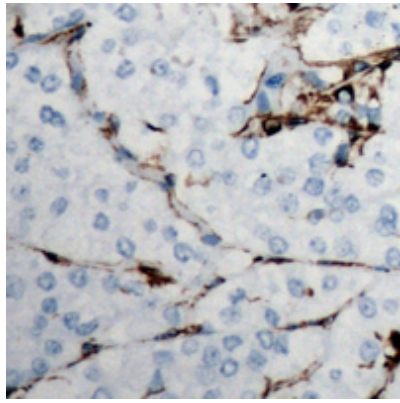
Gene Symbol	COL18A1
Gene Full Name	collagen, type XVIII, alpha 1
Background	<p>This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous 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. [provided by RefSeq, Dec 2014]</p>
Function	<p>Probably plays a major role in determining the retinal structure as well as in the closure of the neural tube.</p> <p>[Non-collagenous domain 1]: May regulate extracellular matrix-dependent motility and morphogenesis of endothelial and non-endothelial cells; the function requires homotrimerization and implicates MAPK signaling.</p> <p>Endostatin: Potently inhibits endothelial cell proliferation and angiogenesis (PubMed:9459295). May inhibit angiogenesis by binding to the heparan sulfate proteoglycans involved in growth factor signaling (By similarity). Inhibits VEGFA-induced endothelial cell proliferation and migration. Seems to inhibit VEGFA-mediated signaling by blocking the interaction of VEGFA to its receptor KDR/VEGFR2. Modulates endothelial cell migration in an integrin-dependent manner implicating integrin ITGA5:ITGB1 and to a lesser extent ITGAV:ITGB3 and ITGAV:ITGB5 (By similarity). May negatively regulate the activity of homotrimeric non-collagenous domain 1 (PubMed:11257123). [UniProt]</p>
Calculated Mw	178 kDa
PTM	Prolines at the third position of the tripeptide repeating unit (G-X-Y) of the triple-helical regions are hydroxylated. [UniProt]
Cellular Localization	Secreted, extracellular space, extracellular matrix. Secreted, extracellular space, extracellular matrix, basement membrane. Non-collagenous domain 1: Secreted, extracellular space, extracellular matrix, basement membrane. Secreted. Endostatin: Secreted. Secreted, extracellular space, extracellular matrix, basement membrane. [UniProt]

Images



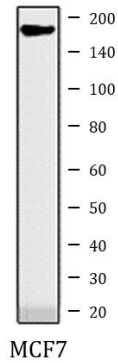
ARG66732 anti-COL18A1 antibody ICC/IF image

Immunofluorescence: Formalin-fixed MCF7 cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were stained with ARG66732 anti-COL18A1 antibody (red) in 3% BSA-PBS and incubated overnight at 4°C. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody in PBS at room temperature in the dark. DAPI (blue) for nuclear staining.



ARG66732 anti-COL18A1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human breast cancer tissue section. Antigen Retrieval: Heat mediation was performed in Sodium citrate buffer (pH 6.0). The section was stained with ARG66732 anti-COL18A1 antibody at room temperature. The section was counterstained with haematoxylin and mounted with DPX.



ARG66732 anti-COL18A1 antibody WB image

Western blot: MCF7 whole cell lysate stained with ARG66732 anti-COL18A1 antibody.