

ARG42686 anti-Collagen IV alpha 2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Collagen IV alpha 2
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Hm
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Collagen IV alpha 2
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 1697-1712 of Human Collagen IV alpha 2. (LIRTHISRCQVCMKNL)
Conjugation	Un-conjugated
Alternate Names	ICH; POREN2; Collagen alpha-2(IV) chain

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200 - 1:1000
	IHC-Fr	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
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 or below. 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

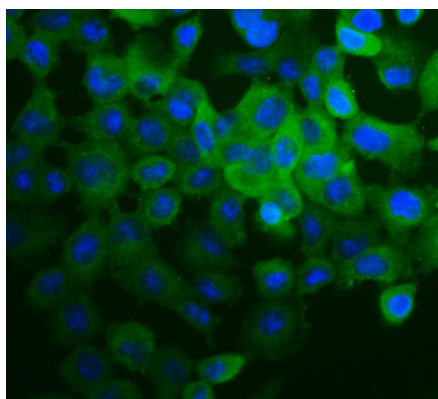
before use.

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

Bioinformation

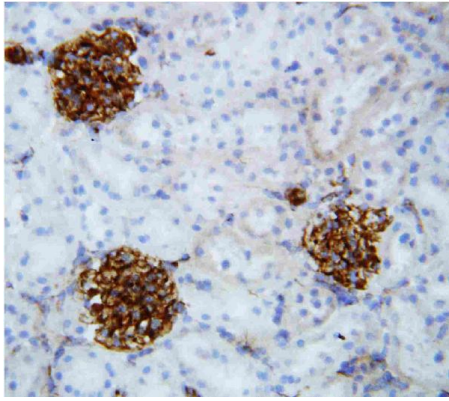
Gene Symbol	COL4A2
Gene Full Name	collagen, type IV, alpha 2
Background	This gene encodes one of the six subunits of type IV collagen, the major structural component of basement membranes. The C-terminal portion of the protein, known as canstatin, is an inhibitor of angiogenesis and tumor growth. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. [provided by RefSeq, Jul 2008]
Function	<p>Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 'chicken-wire' meshwork together with laminins, proteoglycans and entactin/nidogen.</p> <p>Canstatin, a cleavage product corresponding to the collagen alpha 2(IV) NC1 domain, possesses both anti-angiogenic and anti-tumor cell activity. It inhibits proliferation and migration of endothelial cells, reduces mitochondrial membrane potential, and induces apoptosis. Specifically induces Fas-dependent apoptosis and activates procaspase-8 and -9 activity. Ligand for alphavbeta3 and alphavbeta5 integrins. [UniProt]</p>
Calculated Mw	168 kDa
PTM	<p>Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.</p> <p>Type IV collagens contain numerous cysteine residues which are involved in inter- and intramolecular disulfide bonding. 12 of these, located in the NC1 domain, are conserved in all known type IV collagens.</p> <p>The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.</p> <p>Proteolytic processing produces the C-terminal NC1 peptide, canstatin. [UniProt]</p>
Cellular Localization	Secreted, extracellular space, extracellular matrix, basement membrane. [UniProt]

Images



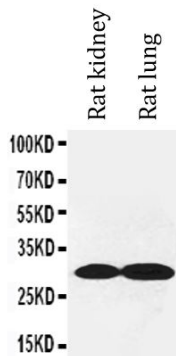
ARG42686 anti-Collagen IV alpha 2 antibody ICC/IF image

Immunofluorescence: A431 cells were blocked with 10% goat serum and then stained with ARG42686 anti-Collagen IV alpha 2 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



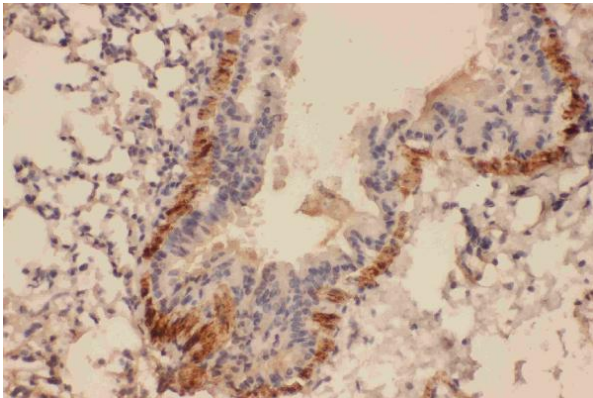
ARG42686 anti-Collagen IV alpha 2 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat kidney tissue stained with ARG42686 anti-Collagen IV alpha 2 antibody.



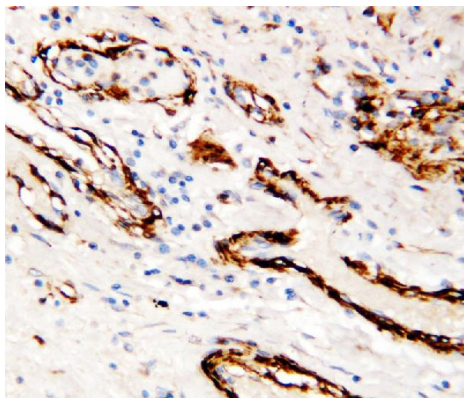
ARG42686 anti-Collagen IV alpha 2 antibody WB image

Western blot: Rat kidney and Rat lung lysates stained with ARG42686 anti-Collagen IV alpha 2 antibody.



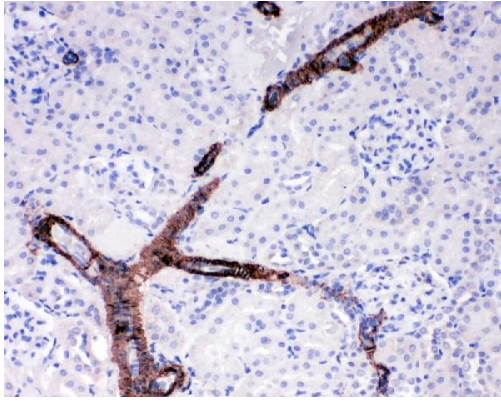
ARG42686 anti-Collagen IV alpha 2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse lung tissue stained with ARG42686 anti-Collagen IV alpha 2 antibody.



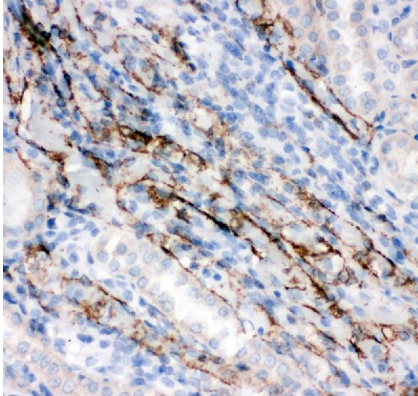
ARG42686 anti-Collagen IV alpha 2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42686 anti-Collagen IV alpha 2 antibody at 1 μ g/ml dilution, overnight at 4°C.



ARG42686 anti-Collagen IV alpha 2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue.
Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42686 anti-Collagen IV alpha 2 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42686 anti-Collagen IV alpha 2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue.
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