ARG67029
anti-COL4A3 antibody [SQab30316]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Recombinant rabbit Monoclonal antibody [SQab30316] recognizes COL4A3
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Rabbit
Clonality	Monoclonal
Clone	SQab30316
Isotype	IgG
Target Name	COL4A3
Species	Human
Immunogen	Recombinant protein of Human COL4A3.
Conjugation	Un-conjugated
Alternate Names	COL4A3, Collagen Type IV Alpha 3 Chain, Collagen, Type IV, Alpha 3 (Goodpasture Antigen), Collagen Alpha-3(IV) Chain, Tumstatin, Collagen IV, Alpha-3 Polypeptide, Goodpasture Antigen, ATS2, ATS3

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:100

Application Note	The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Human kidney

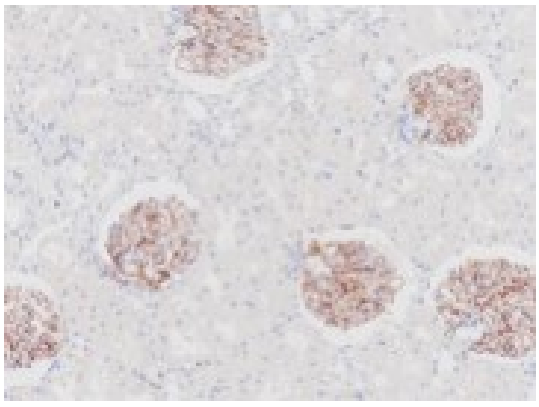
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05%BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05%BSA
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	COL4A3
Gene Full Name	Collagen Type IV Alpha 3 Chain
Background	Type IV collagen, the major structural component of basement membranes, is a multimeric protein composed of 3 alpha subunits. These subunits are encoded by 6 different genes, alpha 1 through alpha 6, each of which can form a triple helix structure with 2 other subunits to form type IV collagen. This gene encodes alpha 3. In the Goodpasture syndrome, autoantibodies bind to the collagen molecules in the basement membranes of alveoli and glomeruli. The epitopes that elicit these autoantibodies are localized largely to the non-collagenous C-terminal domain of the protein. A specific kinase phosphorylates amino acids in this same C-terminal region and the expression of this kinase is upregulated during pathogenesis. This gene is also linked to an autosomal recessive form of Alport syndrome. The mutations contributing to this syndrome are also located within the exons that encode this C-terminal region. 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, Jun 2010]
Function	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. Tumstatin, a cleavage fragment corresponding to the collagen alpha 3(IV) NC1 domain, possesses both anti-angiogenic and anti-tumor cell activity; these two anti-tumor properties may be regulated via RGD-independent ITGB3-mediated mechanisms. [Uniprot]
Calculated Mw	162 kDa
PTM	Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.Isoform 2 contains an additional N-linked glycosylation site.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.The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues. [Uniprot]
Cellular Localization	Basement membrane, Extracellular matrix, Secreted

Images



ARG67029 anti-COL4A3 antibody [SQab30316] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human kidney stained with ARG67029 anti-COL4A3 antibody [SQab30316].