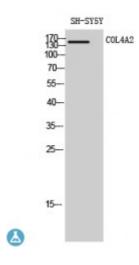


Anti-COL4A2 antibody



Description Rabbit polyclonal to COL4A2.

Model STJ92390

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human COL4A2

Immunogen Region 120-200 aa, N-terminal

Gene ID <u>1284</u>

Gene Symbol COL4A2

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity COL4A2 Polyclonal Antibody detects endogenous levels of COL4A2 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Collagen alpha-2 IV chain Canstatin

Molecular Weight 150 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:2203OMIM:120090</u>

Alternative Names Collagen alpha-2 IV chain Canstatin

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.; Canstatin, a cleavage product corresponding to the collagen alpha 2(IV) NC1 domain, possesses both antiangiogenic 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 alphaybeta3 and alphaybeta5

integrins.

Sequence and Domain Family Alpha chains of type IV collagen have a non-collagenous domain (NC1) at

their C-terminus, frequent interruptions of the G-X-Y repeats in the long central triple-helical domain (which may cause flexibility in the triple helix),

and a short N-terminal triple-helical 7S domain.

Cellular Localization Secreted, extracellular space, extracellular matrix, basement membrane.

Post-translational Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.; Type IV collagens contain

hydroxylated in some or all of the chains.; 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. Proteolytic

processing produces the C-terminal NC1 peptide, canstatin.

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