

## Anti-COL4A3 antibody



**Description** Rabbit polyclonal to COL4A3.

Model STJ92391

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IF, IHC

 Immunogen
 Synthesized peptide derived from human COL4A3

Immunogen Region 770-850 aa, Internal

**Gene ID** <u>1285</u>

Gene Symbol COL4A3

**Dilution range** IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

**Specificity** COL4A3 Polyclonal Antibody detects endogenous levels of COL4A3 protein.

**Tissue Specificity** Alpha 3 and alpha 4 type IV collagens are colocalized and present in kidney,

eye, basement membranes of lens capsule, cochlea, lung, skeletal muscle, aorta, synaptic fibers, fetal kidney and fetal lung. PubMed:8083201 reports similar levels of expression of alpha 3 and alpha 4 type IV collagens in kidney, but PubMed:7523402 reports that in kidney levels of alpha 3 type IV collagen are significantly lower than those of alpha 4 type IV collagen. According to PubMed:8083201, alpha 3 type IV collagen is not de

**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-3 IV chain Goodpasture antigen Tumstatin

Molecular Weight 140 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 HGNC:2204OMIM:104200

Alternative Names Collagen alpha-3 IV chain Goodpasture antigen Tumstatin

**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.

**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.

Colocalizes with COL4A4 and COL4A5 in GBM, tubular basement

membrane (TBM) and synaptic basal lamina (BL).

**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. Phosphorylated by the Goodpasture

antigen-binding protein/COL4A3BP.

**Modifications**