

Anti-COL4A4 antibody



Description Rabbit polyclonal to COL4A4.

Model STJ92392

Host Rabbit

Reactivity Human

Applications ELISA, IF, IHC

Immunogen Synthesized peptide derived from human COL4A4

Immunogen Region 510-590 aa, Internal

Gene ID <u>1286</u>

Gene Symbol COL4A4

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

Specificity COL4A4 Polyclonal Antibody detects endogenous levels of COL4A4 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.

Highest levels of expression of alpha 4 type IV collagen are 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-4 IV chain

Molecular Weight 163.999 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:2206OMIM:120131

Alternative Names Collagen alpha-4 IV chain

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.

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

Modifications 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.

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