

Anti-Collagen 4 alpha 3 Antibody
Rabbit polyclonal antibody to Collagen 4 alpha 3
Catalog # AP61199**Specification**

Anti-Collagen 4 alpha 3 Antibody - Product Information

Application	WB, IF
Primary Accession	Q01955
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	161813

Anti-Collagen 4 alpha 3 Antibody - Additional Information**Gene ID** 1285**Other Names**

Collagen alpha-3(IV) chain; Goodpasture antigen

Target/Specificity

Recognizes endogenous levels of Collagen 4 alpha 3 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/100 - 1/500)

IF~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/100 - 1/500)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Collagen 4 alpha 3 Antibody - Protein Information**Name** COL4A3**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.

Cellular Location

Secreted, extracellular space, extracellular matrix, basement membrane. Note=Colocalizes with COL4A4 and COL4A5 in GBM, tubular basement membrane (TBM) and synaptic basal lamina (BL)

Tissue Location

Alpha 3 and alpha 4 type IV collagens are colocalized and present in kidney, eye, basement

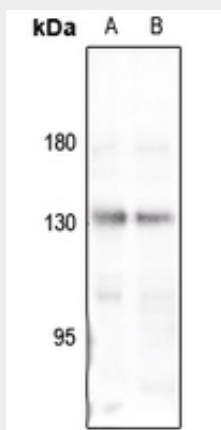
membranes of lens capsule, cochlea, lung, skeletal muscle, aorta, synaptic fibers, fetal kidney and fetal lung. PubMed:8083201 reports similar levels of expression of alpha 3 and alpha 4 type IV collagens in kidney, but PubMed:7523402 reports that in kidney levels of alpha 3 type IV collagen are significantly lower than those of alpha 4 type IV collagen. According to PubMed:8083201, alpha 3 type IV collagen is not detected in heart, brain, placenta, liver, pancreas, extrasynaptic muscle fibers, endoneurial and perineurial nerves, fetal brain, fetal heart and fetal liver. According to PubMed:7523402, alpha 3 type IV collagen is strongly expressed in pancreas, neuroretina and calvaria and not expressed in adrenal, ileum and skin. Isoform 1 and isoform 3 are strongly expressed in kidney, lung, suprarenal capsule, muscle and spleen, in each of these tissues isoform 1 is more abundant than isoform 3. Isoform 1 and isoform 3 are expressed at low levels in artery, fat, pericardium and peripheral nerve, but not in placenta, mesangium, skin, pleura and cultured umbilical endothelial cells

Anti-Collagen 4 alpha 3 Antibody - Protocols

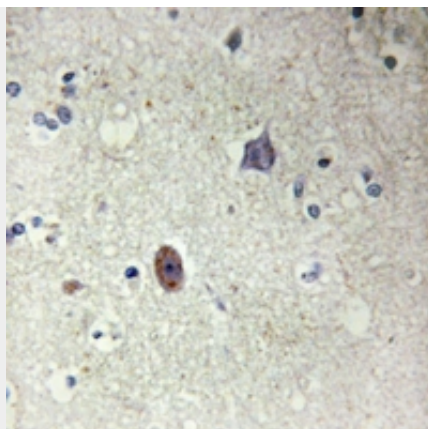
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

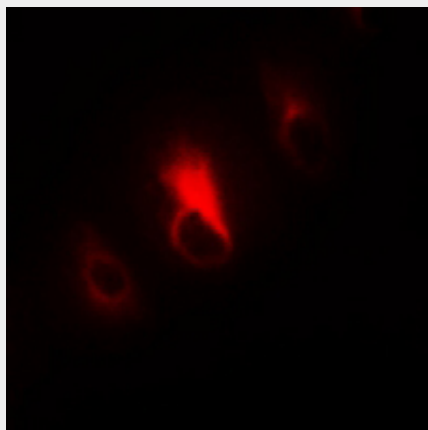
Anti-Collagen 4 alpha 3 Antibody - Images



Western blot analysis of Collagen 4 alpha 3 expression in HEK293T (A), SGC7901 (B) whole cell lysates.



Immunohistochemical analysis of Collagen 4 alpha 3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Collagen 4 alpha 3 staining in COS7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-Collagen 4 alpha 3 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Collagen 4 alpha 3. The exact sequence is proprietary.