

# COL4A6 (H-299): sc-134614

## BACKGROUND

Collagens are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue, such as tendons and cartilage. Collagens contain triple helix domains and frequently show lateral self-association in order to form complex connective tissues. Several collagens play a role in cell adhesion, which is important for maintaining normal tissue architecture and function. COL4A6 (collagen, type IV,  $\alpha$  6) is a 1,691 amino acid secreted protein belonging to the type IV collagen family. Type IV collagen, a major component of the basement membrane (BM), is composed of six genetically distinct  $\alpha$ (IV) chains,  $\alpha$ 1(IV) to  $\alpha$ 6(IV). Defects in the gene encoding COL4A6 is believed to be the cause of X-linked Alport syndrome (AS), which is characterized by macroscopic hematuria, cataracts and leiomyomatosis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: COL4A6 (human) mapping to Xq22.3; Col4a6 (mouse) mapping to X F1.

## SOURCE

COL4A6 (H-299) is a rabbit polyclonal antibody raised against amino acids 761-1059 mapping within an internal region of COL4A6 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

COL4A6 (H-299) is recommended for detection of COL4A6 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for COL4A6 siRNA (h): sc-91179, COL4A6 siRNA (m): sc-142470, COL4A6 shRNA Plasmid (h): sc-91179-SH, COL4A6 shRNA Plasmid (m): sc-142470-SH, COL4A6 shRNA (h) Lentiviral Particles: sc-91179-V and COL4A6 shRNA (m) Lentiviral Particles: sc-142470-V.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **COL4A6 (G-2): sc-398655**, our highly recommended monoclonal alternative to COL4A6 (H-299).