

# COL4A3 (T-15): sc-18178

## BACKGROUND

The extensive family of COL gene products (collagens) is composed of several chain types, including fibril-forming interstitial Collagens (Types I, II, III and V) and basement membrane Collagens (Type IV), each type containing multiple isoforms. Collagens are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue, such as tendons and cartilage. All collagens contain a triple helix domain and frequently show lateral self-association in order to form complex connective tissues. Several collagens also play a role in cell adhesion, important for maintaining normal tissue architecture and function.

## REFERENCES

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5. Boskey, A.L., et al. 1999. Collagen and bone strength. J. Bone Miner. Res. 14: 330-335.
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## CHROMOSOMAL LOCATION

Genetic locus: COL4A3 (human) mapping to 2q36.3; Col4a3 (mouse) mapping to 1 C5.

## SOURCE

COL4A3 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Collagen  $\alpha 3$  Type IV 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.

Blocking peptide available for competition studies, sc-18178 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

COL4A3 (T-15) is recommended for detection of Collagen  $\alpha 3$  Type IV of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

COL4A3 (T-15) is also recommended for detection of Collagen  $\alpha 3$  Type IV in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for COL4A3 siRNA (h): sc-105228, COL4A3 siRNA (m): sc-142467, COL4A3 shRNA Plasmid (h): sc-105228-SH, COL4A3 shRNA Plasmid (m): sc-142467-SH, COL4A3 shRNA (h) Lentiviral Particles: sc-105228-V and COL4A3 shRNA (m) Lentiviral Particles: sc-142467-V.

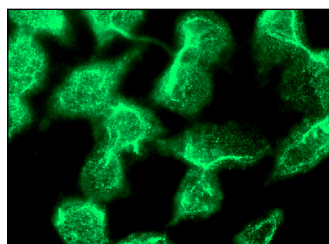
Molecular Weight of COL4A3: 160-190 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or Hs68 cell lysate: sc-2230.

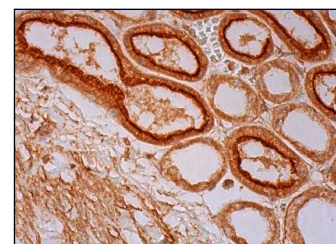
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



COL4A3 (T-15): sc-18178. Immunofluorescence staining of methanol-fixed HeLa cells showing cell-surface localization.



COL4A3 (T-15): sc-18178. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and apical membrane staining of cells in tubules and extracellular staining of connective tissue.

## 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.