

COL4A4 (G-12): sc-167524

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. COL4A4 (collagen α -4(IV) chain), also known as CA44, is a 1,690 amino acid extracellular matrix protein that functions in the structure of glomerular basement membranes. A member of the type IV collagen family, COL4A4 contains one collagen IV NC1 (C-terminal non-collagenous) domain and is encoded by a gene that maps to human chromosome 2q36.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COL4A4 (human) mapping to 2q36.3; Col4a4 (mouse) mapping to 1 C5.

SOURCE

COL4A4 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of COL4A4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-167524 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COL4A4 (G-12) is recommended for detection of COL4A4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other COL4A family members.

Suitable for use as control antibody for COL4A4 siRNA (h): sc-94626, COL4A4 siRNA (m): sc-142468, COL4A4 shRNA Plasmid (h): sc-94626-SH, COL4A4 shRNA Plasmid (m): sc-142468-SH, COL4A4 shRNA (h) Lentiviral Particles: sc-94626-V and COL4A4 shRNA (m) Lentiviral Particles: sc-142468-V.

Molecular Weight of COL4A4: 164 kDa.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ 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 or our catalog for detailed protocols and support products.