SANTA CRUZ BIOTECHNOLOGY, INC.

COL4A2 (H-57): sc-135231



The Power to Question

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

- Bateman, J.F., Lamande, S.R. and Ramshaw, J.A.M. 1996. Collagen superfamily. In Comper, W.D., ed., Extracellular Matrix, Vol 2: Molecular Components and Interactions. Amsterdam: Harwood Academic Publishers, 22-67.
- McCarthy, J.B., Vachhani, B. and lida, J. 1996. Cell adhesion to collagenous matrices. Biopolymers 40: 371-381.
- 3. Engel, J. 1997. Versatile collagens in invertebrates. Science 277: 1785-1786.
- Myers, L.K., Rosloniec, E.F., Cremer, M.A. and Kang, A.H. 1997. Collageninduced arthritis, an animal model of autoimmunity. Life Sci. 61: 1861-1878.
- Staines, N.A., Harper, N. and Ward, F.J. 1997. Nasal tolerance to dominant and subdominant epitopes of collagen type II and protection against collagen-induced arthritis. Biochem. Soc. Trans. 25: 661-664.
- Cremer, M.A., Rosloniec, E.F. and Kang, A.H. 1998. The cartilage collagens: a review of their structure, organization and role in the pathogenesis of experimental arthritis in animals and in human rheumatic disease. J. Mol. Med. 76: 275-288.

CHROMOSOMAL LOCATION

Genetic locus: COL4A2 (human) mapping to 13q34; Col4a2 (mouse) mapping to 8 A1.1.

SOURCE

COL4A2 (H-57) is a rabbit polyclonal antibody raised against amino acids 974-1030 mapping within an internal region of COL4A2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

COL4A2 (H-57) is recommended for detection of COL4A2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 COL4A2 siRNA (h): sc-72954, COL4A2 siRNA (m): sc-72955, COL4A2 shRNA Plasmid (h): sc-72954-SH, COL4A2 shRNA Plasmid (m): sc-72955-SH, COL4A2 shRNA (h) Lentiviral Particles: sc-72954-V and COL4A2 shRNA (m) Lentiviral Particles: sc-72955-V.

Molecular Weight of COL4A2: 168 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or MIA PaCa-2 cell lysate: sc-2285.

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.

RESEARCH USE

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