SANTA CRUZ BIOTECHNOLOGY, INC.

COL5A2 (G-15): sc-9856



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. 1996. In Comper, W.D., ed. Extracellular Matrix. Amsterdam: Harwood. 2: 22-67.
- McCarthy, J.B., Vachhani, B. and Iida, J. 1996. Cell adhesion to collagenous matrices. Biopolymers 40: 371-381.
- 3. Engel, J. 1997. Versatile collagens in invertebrates. Science 277: 1785-1786.
- 4. Cremer, M.A., Rosloniec, E.F., Kang and 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.
- 5. Boskey, A.L., Wright, T.M. and Blank, R.D. 1999. Collagen and bone strength. J. Bone Miner. Res. 14: 330-335.
- Alberio, L. and Dale, G.L. 1999. Platelet-collagen interactions: membrane receptors and intracellular signaling pathways. Eur. J. Clin. Invest. 29: 1066-1076.

CHROMOSOMAL LOCATION

Genetic locus: COL5A2 (human) mapping to 2q32.2; Col5a2 (mouse) mapping to 1 C1.1.

SOURCE

COL5A2 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Collagen $\alpha 2$ Type V of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9856 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

COL5A2 (G-15) is recommended for detection of Collagen α 2 Type V 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).

COL5A2 (G-15) is also recommended for detection of Collagen $\alpha 2$ Type V in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for COL5A2 siRNA (h): sc-105227, COL5A2 siRNA (m): sc-142471, COL5A2 shRNA Plasmid (h): sc-105227-SH, COL5A2 shRNA Plasmid (m): sc-142471-SH, COL5A2 shRNA (h) Lentiviral Particles: sc-105227-V and COL5A2 shRNA (m) Lentiviral Particles: sc-142471-V.

Molecular Weight of COL5A2 isoforms: 127/149/161/198 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263 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™ 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **COL5A1/2** (6F206): sc-70867, our highly recommended monoclonal alternative to COL5A2 (G-15).