SANTA CRUZ BIOTECHNOLOGY, INC.

COL4A (COL-94): sc-59814

SANTA CRUZ BIOTECHNOLOGY

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

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2. Bateman, J.F., et al. 1996. Collagen Superfamily. In Comper, W.D., ed. Extracellular Matrix. Amsterdam: Harwood Academic Publishers, 22-67.
3. Engel, J. 1997. Versatile collagens in invertebrates. Science 277: 1785-1786.
4. Cremer, M.A., et al. 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.

SOURCE

COL4A (COL-94) is a mouse monoclonal antibody raised against full length native Collagen Type IV of human origin.

PRODUCT

Each vial contains 500 µl ascites containing IgG_1 with PBS and < 0.1% sodium azide.

APPLICATIONS

COL4A (COL-94) is recommended for detection of native, non-denatured, Collagen Type IV of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:10-1:200); non cross-reactive with Collagen Type I, II, III, V, VI or VII, human Vitronectin, Fibronectin or chondroitin sulfate A B and C, or denatured or denatured-reduced collagen in immunoblots.

Molecular Weight of COL4A: 160-190 kDa.

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

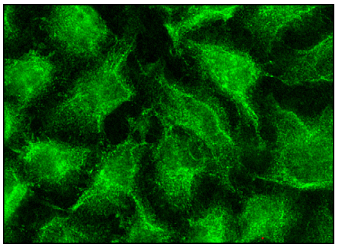
STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

DATA



COL4A (COL-94): sc-59814. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

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4. Spencer, M., et al. 2011. Adipose tissue extracellular matrix and vascular abnormalities in obesity and Insulin resistance. J. Clin. Endocrinol. Metab. 96: E1990-E1998.
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PROTOCOLS

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