SANTA CRUZ BIOTECHNOLOGY, INC.

COL4A3 (1042): sc-52317



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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- McCarthy, J.B., et al. 1996. Cell adhesion to collagenous matrices. Biopolymers 40: 371-381.
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- Kim, S.J., et al. 2004. Effects of type IV Collagen and laminin on the cryopreservation of human embryonic stem cells. Stem Cells 22: 950-961.

CHROMOSOMAL LOCATION

Genetic locus: COL4A3 (human) mapping to 2q36.3.

SOURCE

COL4A3 (1042) is a mouse monoclonal antibody raised against Collagen $\alpha 3$ Type IV from isolated placenta of human origin.

PRODUCT

Each vial contains 500 μl ascites containing lgG_{2b} with < 0.1% sodium azide.

PROTOCOLS

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

APPLICATIONS

COL4A3 (1042) is recommended for detection of Collagen α 3 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

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.

SELECT PRODUCT CITATIONS

- Fu, J., et al. 2009. Paeoniflorin prevents diabetic nephropathy in rats. Comp. Med. 59: 557-566.
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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.