# COL1A1 (m): 293T Lysate: sc-125157



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**

- Bellamy, G. and Bornstein, P. 1971. Evidence for procollagen, a biosynthetic precursors of collagen. Proc. Natl. Acad. Sci. USA 68: 1138-1142.
- Church, R.L., Pfeiffer, S.E. and Tanzer, M.L. 1971. Collagen biosynthesis: synthesis and secretion of a high molecular weight collagen precursor (procollagen). Proc. Natl. Acad. Sci. USA 68: 2638-2642.
- 3. Bornstein, P., Ehrlich, H.P. and Wyke, A.W. 1972. Procollagen: conversion of the precursor to collagen by a neutral protease. Science 175: 544-546.
- Bateman, J.F., Bateman, J.F., Lamande, S.R. and Ramshaw, J.A.M. 1996.
  Collagen superfamily. In Comper, W.D., ed. Extracellular Matrix, Vol 2: Molceular Components and Interactions. Amsterdam: Harwood Academic Publishers, 2: 22-67.
- McCarthy, J.B., Vachhani, B. and lida, J. 1996. Cell adhesion to collagenous matrices. Biopolymers 40: 371-381.
- 6. Engel, J. 1997. Versatile collagens in invertebrates. Science 277: 1785-1786.
- 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.
- 8. Boskey, A.L., Wright, T.M. and Blank, R.D. 1999. Collagen and bone strength. J. Bone Miner. Res. 14: 330-335.
- 9. 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: Col1a1 (mouse) mapping to 11 D.

### **PRODUCT**

COL1A1 (m): 293T Lysate represents a lysate of mouse COL1A1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

COL1A1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive COL1A1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

#### **RESEARCH USE**

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

#### **PROTOCOLS**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com