

Pro-COL3A1 (N-18): sc-8779

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.

CHROMOSOMAL LOCATION

Genetic locus: COL3A1 (human) mapping to 2q32.2; Col3a1 (mouse) mapping to 1 C1.1.

SOURCE

Pro-COL3A1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Procollagen α 1 Type III of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-8779 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pro-COL3A1 (N-18) is recommended for detection of Collagen α 1 Type III precursor 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).

Pro-COL3A1 (N-18) is also recommended for detection of Collagen α 1 Type III precursor in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for COL3A1 siRNA (h): sc-43062, COL3A1 siRNA (m): sc-43063, COL3A1 shRNA Plasmid (h): sc-43062-SH, COL3A1 shRNA Plasmid (m): sc-43063-SH, COL3A1 shRNA (h) Lentiviral Particles: sc-43062-V and COL3A1 shRNA (m) Lentiviral Particles: sc-43063-V.

Molecular Weight (predicted) of Pro-COL3A1: 140 kDa.

Molecular Weight (observed) of Pro-COL3A1: 215 kDa.

Positive Controls: COL3A1 (h): 293T Lysate: sc-114750 or CCD-1064Sk cell lysate: sc-2263.

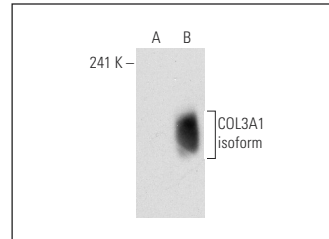
STORAGE

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

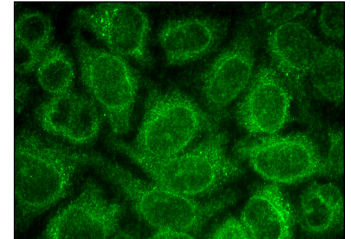
RESEARCH USE

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

DATA



Pro-COL3A1 (N-18): sc-8779. Western blot analysis of COL3A1 expression in non-transfected: sc-117752 (A) and human COL3A1 isoform 2 transfected: sc-114750 (B) 293T whole cell lysates.



Pro-COL3A1 (N-18): sc-8779. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Medhora, M., et al. 2002. Upregulation of collagens detected by gene array in a model of flow-induced pulmonary vascular remodeling. *Am. J. Physiol. Heart Circ. Physiol.* 282: H414-H422.
2. Ghose Roy, S., et al. 2007. Thyroid hormone induces myocardial matrix degradation by activating matrix met-alloproteinase-1. *Matrix Biol.* 26: 269-279.
3. Apone, F., et al. 2010. A mixture of peptides and sugars derived from plant cell walls increases plant defense responses to stress and attenuates ageing-associated molecular changes in cultured skin cells. *J. Biotechnol.* 145: 367-376.
4. Tito, A., et al. 2011. A tomato stem cell extract, containing antioxidant compounds and metal chelating factors, protects skin cells from heavy metal-induced damages. *Int. J. Cosmet. Sci.* 33: 543-552.
5. Buono, S., et al. 2012. Biological activities of dermatological interest by the water extract of the microalga *Botryococcus braunii*. *Arch. Dermatol. Res.* 304: 755-764.

PROTOCOLS

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



Try **Pro-COL3A1 (B-4): sc-166316** or **Pro-COL3A1 (A-1): sc-166333**, our highly recommended monoclonal alternatives to Pro-COL3A1 (N-18).