

Pro-COL1A2 (Y-18): sc-8787

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: COL1A2 (human) mapping to 7q21.3; Col1a2 (mouse) mapping to 6 A1.

SOURCE

Pro-COL1A2 (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Procollagen $\alpha 2$ Type I of mouse 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-8787 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pro-COL1A2 (Y-18) is recommended for detection of Pro-COL1A2 of mouse, rat and, to a lesser extent, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with mature form.

Suitable for use as control antibody for COL1A2 siRNA (h): sc-72156, COL1A2 siRNA (m): sc-43061, COL1A2 shRNA Plasmid (h): sc-72156-SH, COL1A2 shRNA Plasmid (m): sc-43061-SH, COL1A2 shRNA (h) Lentiviral Particles: sc-72156-V and COL1A2 shRNA (m) Lentiviral Particles: sc-43061-V.

Molecular Weight of Pro-COL1A2: 140-210 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215, 3T3-L1 cell lysate: sc-2243 or A-10 cell lysate: sc-3806.

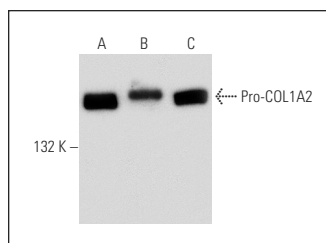
STORAGE

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

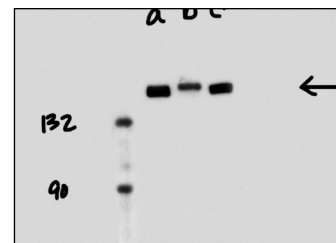
RESEARCH USE

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

DATA



Pro-COL1A2 (Y-18): sc-8787. Western blot analysis of Pro-COL1A2 expression in A-10 (A), 3611-RF (B) and 3T3-L1 (C) whole cell lysates.



Pro-COL1A2 (Y-18): sc-8787. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing extracellular localization.

SELECT PRODUCT CITATIONS

- Ohba S., et al. 2003. Antisense oligonucleotide against 47-kDa heat shock protein (Hsp47) inhibits wound-induced enhancement of collagen production. *Arch. Oral Biol.* 48: 627-633.
- Chen, S., et al. 2008. Expression of the vitamin d receptor is increased in the hypertrophic heart. *Hypertension* 52: 1106-1112.
- Fu, S.C., et al. 2008. Is cultured tendon fibroblast a good model to study tendon healing? *J. Orthop. Res.* 26: 374-383.
- Schauer, I.G., et al. 2009. Keratinocyte-derived chemokine induces prostate epithelial hyperplasia and reactive stroma in a novel transgenic mouse model. *Prostate* 69: 373-384.
- Carmona, R., et al. 2010. Peritoneal repairing cells: A type of bone marrow-derived progenitor cells involved in mesothelial regeneration. *J. Cell. Mol. Med.* 15: 1200-1209.
- Desroches, B.R., et al. 2012. Functional scaffold-free 3-D cardiac microtissues: a novel model for the investigation of heart cells. *Am. J. Physiol. Heart Circ. Physiol.* 302: H2031-H2042.
- Cho, E.B., et al. 2012. Effect of intense pulsed light on rat skin. *Dermatol. Surg.* 38: 430-436.
- Deyle, D.R., et al. 2012. Normal collagen and bone production by gene-targeted human osteogenesis imperfecta iPSCs. *Mol. Ther.* 20: 204-213.
- Renga, B., et al. 2014. The HIV matrix protein p17 promotes the activation of human hepatic stellate cells through interactions with CXCR2 and Syndecan-2. *PLoS ONE* 9: e94798.

MONOS
Satisfaction
Guaranteed

Try **Pro-COL1A2 (D-6): sc-166572**, our highly recommended monoclonal alternative to Pro-COL1A2 (Y-18).