COL7A1 (H-120): sc-20774

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

1. Bateman, J.F., et al. 1996. Collagen Superfamily. In Comper, W.D., ed. Extracellular Matrix, Volume 2: Molecular Components and Interactions. Amsterdam: Harwood Academic Publishers, 22-67.

2. McCarthy, J.B., et al. 1996. Cell adhesion to collagenous matrices. Biopolymers 40: 371-381.

3. Engel, J. 1997. Versatile collagens in invertebrates. Science 277: 1785-1786.

CHROMOSOMAL LOCATION

Genetic locus: COL7A1 (human) mapping to 3p21.31; Col7a1 (mouse) mapping to 9 F2.

SOURCE

COL7A1 (H-120) is a rabbit polyclonal antibody raised against amino acids 2641-2760 mapping near the C-terminus of Collagen Type VII of human origin.

PRODUCT

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

APPLICATIONS

COL7A1 (H-120) is recommended for detection of Collagen Type VII of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

COL7A1 (H-120) is also recommended for detection of Collagen Type VII in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for COL7A1 siRNA (h): sc-43066, COL7A1 siRNA (m): sc-43067, COL7A1 shRNA Plasmid (h): sc-43066-SH, COL7A1 shRNA Plasmid (m): sc-43067-SH, COL7A1 shRNA (h) Lentiviral Particles: sc-43066-V and COL7A1 shRNA (m) Lentiviral Particles: sc-43067-V.

Molecular Weight of COL7A1: 290 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA
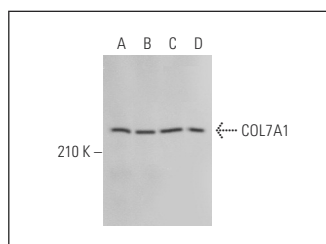
COL7A1 (H-120): sc-20774. Western blot analysis of COL7A1 expression in K-562 (**A**), HeLa (**B**) and Jurkat (**C**) whole cell lysates and mouse heart tissue extract (**D**).
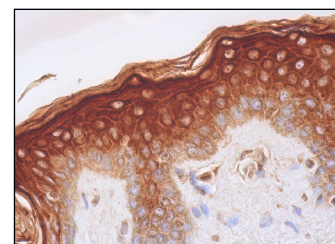
COL7A1 (H-120): sc-20774. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, melanocytes, Langerhans and Epidermal cells.

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.

PROTOCOLS

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

MONOS
Satisfaction Guaranteed

Try **COL7A1 (4D2): sc-33710** or **COL7A1 (LH7.2): sc-53226**, our highly recommended monoclonal alternatives to COL7A1 (H-120). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **COL7A1 (4D2): sc-33710**.