

COL6A1 (S-16): sc-9855

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. In Comper, W.D., ed. Extracellular Matrix. Amsterdam: Harwood 2: 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.
4. Cremer, M.A., et al. 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.
5. Boskey, A.L., et al. 1999. Collagen and bone strength. J. Bone Miner. Res. 14: 330-335.

CHROMOSOMAL LOCATION

Genetic locus: COL6A1 (human) mapping to 21q22.3; Col6a1 (mouse) mapping to 10 C1.

SOURCE

COL6A1 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Collagen $\alpha 1$ Type VI 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-9855 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

COL6A1 (S-16) is recommended for detection of Collagen $\alpha 1$ Type VI 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).

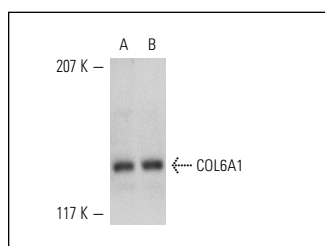
COL6A1 (S-16) is also recommended for detection of Collagen $\alpha 1$ Type VI in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for COL6A1 siRNA (h): sc-35085, COL6A1 siRNA (m): sc-35086, COL6A1 shRNA Plasmid (h): sc-35085-SH, COL6A1 shRNA Plasmid (m): sc-35086-SH, COL6A1 shRNA (h) Lentiviral Particles: sc-35085-V and COL6A1 shRNA (m) Lentiviral Particles: sc-35086-V.

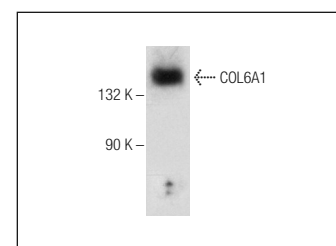
Molecular Weight of COL6A1: 140 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, Hs 732.Sk/Mu whole cell lysate: sc-364362 or Hs68 cell lysate: sc-2230.

DATA



COL6A1 (S-16): sc-9855. Western blot analysis of COL6A1 expression in CCD-1064Sk (A) and Hs68 (B) whole cell lysates.



COL6A1 (S-16): sc-9855. Western blot analysis of COL6A1 expression in Hs 732.Sk/Mu whole cell lysate.

SELECT PRODUCT CITATIONS

1. Polur, I., et al. 2010. Role of HTRA1, a serine protease, in the progression of articular cartilage degeneration. Histol. Histopathol. 25: 599-608.
2. Karousou, E., et al. 2013. New insights into the pathobiology of Down syndrome—hyaluronan synthase-2 overexpression is regulated by collagen VI $\alpha 2$ chain. FEBS J. 280: 2418-2430.

MONOS
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Try **COL6A1 (B-4): sc-377143** or **COL6A1 (F-8): sc-398976**, our highly recommended monoclonal alternatives to COL6A1 (S-16).