

COL23A1 (N-14): sc-164086

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. COL23A1 (collagen α -1 (XXIII) chain) is a 540 amino acid single-pass type II membrane protein that exists as a homotrimer and contains 5 collagen-like domains. COL23A1 undergoes alternative splicing to produce two isoforms and is encoded by a gene that maps to human chromosome 5.

CHROMOSOMAL LOCATION

Genetic locus: COL23A1 (human) mapping to 5q35.3; Col23a1 (mouse) mapping to 11 B1.3.

SOURCE

COL23A1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Collagen α 1 Type XXIII 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-164086 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COL23A1 (N-14) is recommended for detection of Collagen α 1 Type XXIII isoform 1 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); may cross-react with 1500012F01Rik of mouse origin; non cross-reactive with isoform COL23A-2; non cross-reactive with other COL23A family members.

Suitable for use as control antibody for COL23A1 siRNA (h): sc-91609, COL23A1 siRNA (m): sc-142464, COL23A1 shRNA Plasmid (h): sc-91609-SH, COL23A1 shRNA Plasmid (m): sc-142464-SH, COL23A1 shRNA (h) Lentiviral Particles: sc-91609-V and COL23A1 shRNA (m) Lentiviral Particles: sc-142464-V.

Molecular Weight (predicted) of COL23A1: 52 kDa.

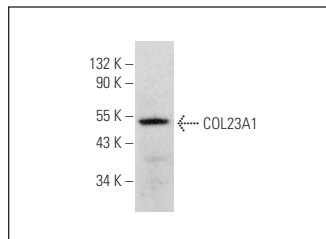
Molecular Weight (observed) of COL23A1: 75 kDa.

Positive Controls: NCI-H460 whole cell lysate: sc-364235 or human placenta extract: sc-363772.

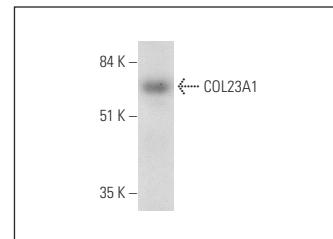
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



COL23A1 (N-14): sc-164086. Western blot analysis of COL23A1 expression in NCI-H460 whole cell lysate.



COL23A1 (N-14): sc-164086. Western blot analysis of COL23A1 expression in human placenta tissue extract.

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.



Try **COL23A1 (C-10): sc-514835**, our highly recommended monoclonal alternative to COL23A1 (N-14).