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.

SOURCE
COL1A2 (G-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1050-1087 at the C-terminus of Collagen α2 Type I of human origin.

PRODUCT
Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Blocking peptide available for competition studies, sc-166865 P , (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS
COL1A2 (G-4) is recommended for detection of Collagen α2 Type I of human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of COL1A2 precursor: 130-140 kDa.
Molecular Weight of mature COL1A2: 70-90 kDa.
Positive Controls: CCD-1064Sk cell lysate: sc-2263, Hs68 cell lysate: sc-2230 or FHs 173We cell lysate: sc-2417.

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

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

DATA
See COL1A2 (E-6): sc-393573 for COL1A2 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.

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

SELECT PRODUCT CITATIONS