

COL4A1 (5E10): sc-517572

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

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CHROMOSOMAL LOCATION

Genetic locus: COL4A1 (human) mapping to 13q34; Col4a1 (mouse) mapping to 8 A1.1.

SOURCE

COL4A1 (5E10) is a mouse monoclonal antibody raised against Collagen α 1 Type IV of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 5% glycerol.

APPLICATIONS

COL4A1 (5E10) is recommended for detection of Collagen α 1 Type IV of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for COL4A1 siRNA (h): sc-43064, COL4A1 siRNA (m): sc-43065, COL4A1 shRNA Plasmid (h): sc-43064-SH, COL4A1 shRNA Plasmid (m): sc-43065-SH, COL4A1 shRNA (h) Lentiviral Particles: sc-43064-V and COL4A1 shRNA (m) Lentiviral Particles: sc-43065-V.

Molecular Weight of COL4A1: 160-190 kDa.

SELECT PRODUCT CITATIONS

- Pogoda, K., et al. 2021. Inhomogeneity of stiffness and density of the extracellular matrix within the leukoplakia of human oral mucosa as potential physicochemical factors leading to carcinogenesis. *Transl. Oncol.* 14: 101105.

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 for detailed protocols and support products.