

COL9A2 (Q-15): sc-242493

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. COL9A2 (collagen $\alpha 2$ (IX) chain), also known as MED or EDM2, is a 689 amino acid extracellular matrix protein and component of hyaline cartilage and vitreous of the eye. A member of the fibril-associated collagens with interrupted helices (FACIT) family, COL9A2 is encoded by a gene that maps to human chromosome 1p34.2. Mutations in the COL9A2 gene are linked to multiple epiphyseal dysplasia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COL9A2 (human) mapping to 1p34.2.

SOURCE

COL9A2 (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Collagen $\alpha 2$ Type IX 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-242493 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COL9A2 (Q-15) is recommended for detection of Collagen $\alpha 2$ Type IX of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with COL9A1 or COL9A3.

Suitable for use as control antibody for COL9A2 siRNA (h): sc-78705, COL9A2 shRNA Plasmid (h): sc-78705-SH and COL9A2 shRNA (h) Lentiviral Particles: sc-78705-V.

Molecular Weight of COL9A2: 65 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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) 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.

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.