

COL9A3 (P-16): sc-87650

BACKGROUND

COL9A3 (also known as collagen $\alpha 3$ Type IX) belongs to the fibril-associated collagens with interrupted helices (FACIT) family. COL9 is expressed in cartilage, cornea and in the vitreous portion of the eye and is a heterotrimer composed of COL9A1 and COL9A2. When expressed in hyaline cartilage, COL9 possesses a large N-terminal globular domain (NC4). Mutations in the COL9A3 gene are associated with multiple epiphyseal dysplasia (MED), a chondrodysplasia, in humans. COL9 is often co-localized with COL2A1, and may play a role in the interaction of fibrils between COL2A1 and COL9.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COL9A3 (human) mapping to 20q13.33; Col9a3 (mouse) mapping to 2 H4.

RESEARCH USE

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

SOURCE

COL9A3 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Collagen $\alpha 3$ 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-87650 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COL9A3 (P-16) is recommended for detection of Collagen $\alpha 3$ Type IX of mouse, rat and 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 other Collagen family members.

COL9A3 (P-16) is also recommended for detection of Collagen $\alpha 3$ Type IX in additional species, including equine.

Suitable for use as control antibody for COL9A3 siRNA (h): sc-72953, COL9A3 siRNA (m): sc-142477, COL9A3 shRNA Plasmid (h): sc-72953-SH, COL9A3 shRNA Plasmid (m): sc-142477-SH, COL9A3 shRNA (h) Lentiviral Particles: sc-72953-V and COL9A3 shRNA (m) Lentiviral Particles: sc-142477-V.

Molecular Weight of COL9A3: 64 kDa.

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.

PROTOCOLS

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