**BACKGROUND**

COL9A3 (also known as Collagen α3 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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

COL9A3 (H-83) is a rabbit polyclonal antibody raised against amino acids 602-684 mapping at the C-terminus of Collagen α3 Type IX of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

COL9A3 (H-83) is recommended for detection of Collagen α3 Type IX of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

COL9A3 (H-83) is also recommended for detection of Collagen α3 Type IX in additional species, including equine, bovine and canine. 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.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2048 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

![COL9A3 expression in THP-1 (A), U266 (B) and U-937 (C) whole cell lysates.](image)

**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.