

COL8A2 (H-45): sc-134947

BACKGROUND

COL8A2 (collagen alpha-2(VIII) chain), also known as endothelial collagen, is a 703 amino acid secreted protein. COL8A2 is a major component of the Descemet membrane (basement membrane) of corneal endothelial cells. COL8A2 can form homodimers as well as heterodimers with COL8A1. Defects in COL8A2 are a cause for posterior polymorphous corneal dystrophy (PPCD) and Fuchs endothelial corneal dystrophy (FECD), both being disorders with visual impairment occurring in adulthood. COL8A2 is also the cause of posterior polymorphous corneal dystrophy 2 (PPCD2), a rare familial disorder that occurs from birth onwards.

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CHROMOSOMAL LOCATION

Genetic locus: COL8A2 (human) mapping to 1p34.3; Col8a2 (mouse) mapping to 4 D2.2.

SOURCE

COL8A2 (H-45) is a rabbit polyclonal antibody raised against amino acids 531-575 mapping within an internal region of Collagen $\alpha 2$ type VIII 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.

APPLICATIONS

COL8A2 (H-45) is recommended for detection of Collagen $\alpha 2$ type VIII of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 COL8A2 siRNA (h): sc-72951, COL8A2 siRNA (m): sc-72952, COL8A2 shRNA Plasmid (h): sc-72951-SH, COL8A2 shRNA Plasmid (m): sc-72952-SH, COL8A2 shRNA (h) Lentiviral Particles: sc-72951-V and COL8A2 shRNA (m) Lentiviral Particles: sc-72952-V.

Molecular Weight of COL8A2: 67 kDa.

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-2012 (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.

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.


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Try **COL8A2 (1F4): sc-293350**, our highly recommended monoclonal alternative to COL8A2 (H-45).