**BACKGROUND**

COL8A2 (collagen α2(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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

COL8A2 (1F4) is a mouse monoclonal antibody raised against amino acids 626-696 of COL8A2 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG 2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

COL8A2 (1F4) is recommended for detection of Collagen α2 Type VIII 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]) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2833 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

**RESEARCH USE**

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

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