

# Collagen IV (Clone PHM-12)

## Mouse Monoclonal Antibody

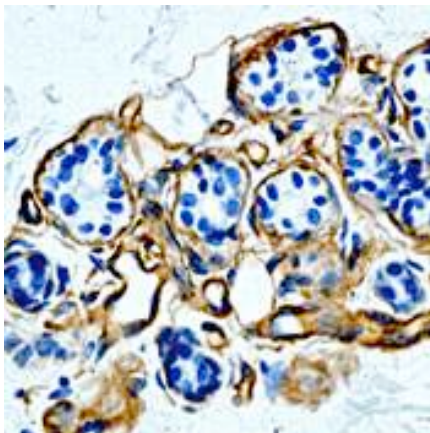
<b>Specificity:</b>	Human. Others unknown
<b>Immunogen:</b>	Human glomeruli
<b>Ig Class:</b>	Mouse IgG <sub>1</sub>
<b>Storage:</b>	Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of tissue with proteolytic enzymes should be performed prior to staining. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Skin. *Cellular Localization:* Cytoplasmic and membrane. *Intended Use:* In vitro diagnosis (IVD).

**Description:** Collagen IV is a major constituent of the basement membranes along with laminins and enactins. It is composed of  $\alpha 1(IV)$  chain and  $\alpha 2(IV)$  chain in 2:1 ratio . It can form insoluble fibers with high tensile strength. Antibody to collagen IV is useful in detecting the loss of parts of basement membrane in carcinomas.

**Comments:** PHM-12 + CIV 22 is highly specific to type IV collagen. In kidney, It reacts with glomerular and tubular basement membranes, parts of mesangial matrix and the Bowman's capsule. It also reacts with basal lamina of capillaries as well as basement membranes in a variety of tissues. PHM-12 + CIV 22 is excellent for the staining of routine formalin-fixed, paraffinembedded tissues.

**Supplied As:** Purified antibody with 0.2% BSA and 15mM sodium azide.



### References:

1. Odermatt BF, et al. *Proc Natl Acad Sci U S A.* 1984; 81:7343-7.
2. Laurie GW, et al. *J Cell Biol.* 1982; 95:340-4.
3. Abreu-Velez AM, et al. *Am J Med Sci.* 2012; 4:1-8.

*Formalin-fixed, paraffin-embedded human skin stained with anti- Collagen IV using peroxidase-conjugate and DAB chromogen. Note basement membrane staining of sweat glands, blood vessels and nerves.*

Cat. #Z2171 (1.0 ml)