**Collagen IV Ab-3 (Clone PHM-12+CiV 22)**

**Mouse Monoclonal Antibody**

Cat. #MS-747-S0, -S1, or -S (0.1ml, 0.5ml, or 1.0ml Supernatant)

Cat. #MS-747-R7 (7.0ml) (Ready-to-Use for Immunohistochemistry)

Cat. #MS-747-PCS (5 Slides) (Positive Control for Histology)

**Please note this data sheet has been changed effective April 17, 2012**

**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 a 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:** Ab-3 is highly specific to type IV collagen. In kidney, Ab-3 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. Ab-3 is excellent for the staining of routine formalin-fixed, paraffin-embedded tissues.

**Epitope:** Not determined

**Species Reactivity:** Human. Others-not known.

**Clone Designation:** PHM-12+CiV 22

**Ig Isotype:** IgG1+ IgG1

**Immunogen:** Human glomeruli

**Applications and Suggested Dilutions:**

- Immunohistology (Formalin/paraffin)
  (Use Ab at 1:50-1:100 for 30 min at RT)
  (Staining of formalin/paraffin tissues is enhanced by digestion of tissue sections with Protease XXV at 1mg/ml PBS for 5 minutes at 37°C (Lab Vision Cat. #AP-9006).

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** Skin, Placenta and Kidney.

**Cellular Localization:** Basement membrane

**Supplied As:**

- Tissue culture supernatant with 0.09% sodium azide,
- or
- Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

**Storage and Stability:** Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.

**Key / Suggested References:**


**Limitations and Warranty:**

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Lab Vision is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

**Material Safety Data:**

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

**For Research Use Only**
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Additional Suggested References:
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23. Nanaev AK; Rukosuev VS; Shirinsky VP; Milovanov AP; Domogatsky SP; Duance VC; Bradbury FM; Yarrow P; Gardiner L; d'Lacey C; et al. Confocal and conventional immunofluorescent and immunogold electron microscopic localization of collagen types III and IV in human placenta. Placenta, 1991 Nov-Dec, 12(6):573-95.