

Data Sheet

HUMAN LAMININ 5

ANTIBODY, PURIFIED IgG, POLYCLONAL

Catalog no.: AP1002.3 / AP1002.4

Immunogen: Human Laminin 5; Laminin 5 consists of three chains: $\alpha 3$, $\beta 3$ and $\gamma 2$

Synonyms: Laminin 332, Epiligrin, Kalinin, Nicein

Swiss-Prot No: Q16787, Q13751 and Q13753

Gene Information: Gene names: LAMA3, LAMB3 and LAMC2

GeneID's: 3909, 3914 and 3918

Host: Rabbit

Matrix: IgG, Protein G purified from serum; PBS

Specificity: Human total Laminin 5, mouse, rat, and bovine Laminin 5

Contents: 10 µg / 100 µg (lyophilized)

Resuspend in 10 µl/100 µl aqua bidest.

Known applications: Western Blot^{1,2,5,7}, immunoprecipitation³, immunohistochemistry (cryosections, methanol-fixed, 1.5-3 µg/ml)^{3,4,6,7,8}, immunocytochemistry^{5,7}

This antibody has not been tested for use in all applications. This does not necessarily exclude its use in non-tested procedures. The stated dilutions are recommendations only. End users should determine optimal dilutions/concentrations in their system using appropriate negative/positive controls.

Store at: 2-8 °C (lyophilized); -20 °C (dissolved)

Repeated thawing and freezing must be avoided

References:

- Marinkovich MP, Lunstrum GP, Burgeson RE (1992). The anchoring filament protein kalinin is synthesized and secreted as a high molecular weight precursor. *J Biol Chem* **267**(25): 17900-17906.
- Zillikens D, Kawahara Y, Ishiko A, Shimizu H, Mayer J, Rank CV, Liu Z, Giudice GJ, Tran HH, Marinkovich MP, Brocker EB, Hashimoto T (1996). A novel subepidermal blistering disease with autoantibodies to a 200-kDa antigen of the basement membrane zone. *J Invest Dermatol* **106**(6): 1333-1338.
- Amano S, Scott IC, Takahara K, Koch M, Champliaud MF, Gerecke DR, Keene DR, Hudson DL, Nishiyama T, Lee S, Greenspan DS, Burgeson RE (2000). Bone morphogenetic protein 1 is an extracellular processing enzyme of the laminin 5 gamma 2 chain. *J Biol Chem* **275**(30): 22728-22735.



Figure 1: Western Blot analysis of Laminin 5. Cell culture supernatant (12 µl) of human juvenile foreskin keratinocytes was separated by SDS-PAGE. Laminin 5 was detected by incubation with AP1002 (5 µg/ml) for 2h and a secondary antibody coupled to peroxidase with Opti-4CN (Bio-Rad) as the substrate.

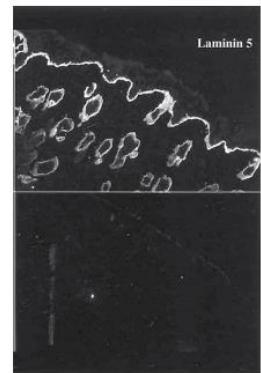
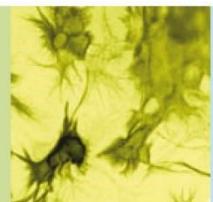


Figure 2: Immunohistochemistry image of Laminin 5 staining in cryosection of fetal calf skin. AP1002 stains the basal keratinocytes and the outer root sheath cells of hair follicles (upper panel); preimmune serum (lower panel).

Amano S et al. (2000) *J Biol Chem* Vol 275 No. 30: 22728-22735





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5. Waterman EA, Sakai N, Nguyen NT, Horst BA, Veitch DP, Dey CN, Ortiz-Urda S, Khavari PA, Marinkovich MP (2007). A Laminin-Collagen Complex Drives Human Epidermal Carcinogenesis through Phosphoinositol-3-Kinase Activation. *Cancer Research* **67**(9): 4264-4270.
6. Choi SK, Kim JH, Lee D, Lee JB, Kim HM, Tchah HW, Hahn TW, Joo M, Ha CI (2008). Different epithelial cleavage planes produced by various epikeratomes in epithelial laser in situ keratomileusis. *Journal of Cataract & Refractive Surgery* **34**(12): 2079-2084.
7. Tran M, Rousselle P, Nokelainen P, Tallapragada S, Nguyen NT, Fincher EF, Marinkovich MP (2008). Targeting a Tumor-Specific Laminin Domain Critical for Human Carcinogenesis. *Cancer Research* **68**(8): 2885-2894.
8. Song J, Lokmic Z, Lammermann T, Rolf J, Wu C, Zhang X, Hallmann R, Hannocks MJ, Horn N, Ruegg MA, Sonnenberg A, Georges-Labouesse E, Winkler TH, Kearney JF, Cardell S, Sorokin L (2013). Extracellular matrix of secondary lymphoid organs impacts on B-cell fate and survival. *Proc Natl Acad Sci USA* **110**(31): E2915-E2924.

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27 April 2022

For research use only

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