Anti-Laminin gannma-2 antibody, mouse monoclonal (YN557)

Product code	70-352
Size	100 µg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Basement membrane isolated from bovine cornea
Isotype	Mouse IgG1κ
Reactivity	Human, Bovine
Special notes	N/A
Application	1. Western blotting: x1/1,000-2,500 (Fig.1) 2. Immunofluorescence microscopy x1/250-500 (Fig.2,3)
Background	Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. Laminins have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis, by interacting with other extracellular matrix components. Laminins are heterotrimeric proteins with a high molecular mass (~400 to ~900 kDa). They contain three different chains (α, β and γ) encoded by distinct genes, respectively. Laminin subunit γ-2 in human is encoded by the LAMC2 gene, and known as cell-scattering factor 140kDa subunit (aa 1,193). The epithelium-specific expression of the γ-2 implied its role as an epithelium attachment molecule, and mutations in this gene have been associated with junctional epidermolysis bullosa and an important role in cancer invasion.
Data Link	UniProtKB: Q13753 (LAMA3_HUMAN)

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/

Data Images: 70-352 Anti-Laminin gannma-2 antibody, mouse monoclonal (YN557)

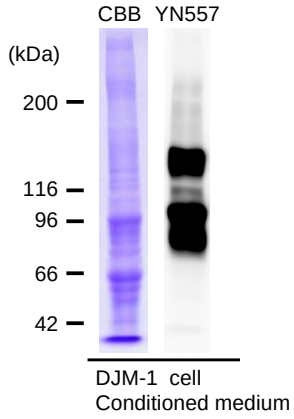

Fig. 1 Western blot analysis of YN557 antibody

Conditioned medium prepared from DJM-1 cells was concentrated by ammonia sulfate precipitation, and was stained with CBB and immunoblotted with YN557 antibody (1:2,500 dilution). The HRP-conjugated goat anti-mouse IgG was used as the second antibody. YN557 antibody detected 155 kDa and 105 kDa bands for non-processed and processed form of laminin γ-2 chains, respectively. Reacted protein bands were visualized using a chemiluminescent detection with EzWestLumi plus kit (ATTO, Tokyo, Japan).

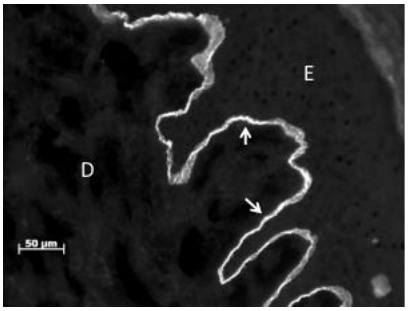

Fig.2 Immunofluorescence microscopy of human skin

A frozen acetone-fixed human skin section was stained with YN557 antibody (1:500 dilution). The FITC-conjugated goat anti-mouse IgG was used as the second antibody.The antibody revealed the location of laminin γ-2 chain at the dermal-epidermal junction (arrows). E: epidermis, D: dermis. Bar = 50 µm.

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/

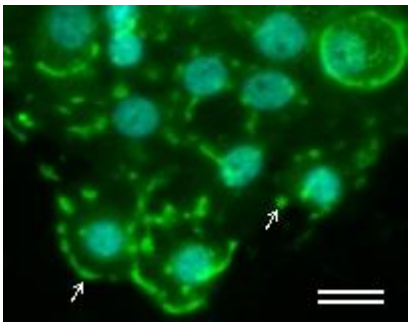

Fig. 3 Immunofluorescence microscopy of cultured DJM-1 cells

Methanol-fixed human carcinoma derived DJM-1 cells were stained with YN557 antibody (1:500 dilution, green) and DAPI (cyan). The FITC-conjugated goat anti-mouse IgG was used as the second antibody. The antibody detected arc- or spotted staining patterns (arrows), which are typical for deposited laminin-332 in DJM-1 cells. Bar = 20 μm.

Reference

1. Hirako Y, Yonemoto Y, Yamauchi T, Nishizawa Y, Kawamoto Y, Owaribe K. Isolation of a hemidesmosome-rich fraction from a human squamous cell carcinoma cell line. Exp Cell Res., 324: 172-182, 2014.
2. Hirako Y, Usukura J, Uematsu J, Hashimoto T, Kitajima Y, Owaribe K. Cleavage of BP180, a 180-kDa bullous pemphigoid antigen, yields a 120-kDa collagenous extracellular polypeptide. J Biol Chem. 273:9711-9717, 1998

Related product

70-350 Anti-Laminin arpha-3 antibody, mouse monoclonal

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/