

Anti-Laminin alpha-3 antibody, mouse monoclonal (BM515)

70-350 100 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C.

Immunogen: Native laminin α -3 chain from bovine cornea

Form: 1mg/ml in PBS- with 50% glycerol. Filter-sterilized.

Purity: Protein A purified IgG1, κ

Reactivity: Laminin α -3 (Human, Rabbit, Bovine)

No reactivity against other laminin chains

Applications:

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 a distinct genes, respectively. Laminin subunit α -3 in humans is encoded by the LAMA3 gene, known as 165 kDa subunit, and thought to be involved in cell adhesion, signal transduction and differentiation of keratinocytes.

Data Link: UniProtKB: [Q16787](https://www.uniprot.org/entry/Q16787) (LAMA3_HUMAN)

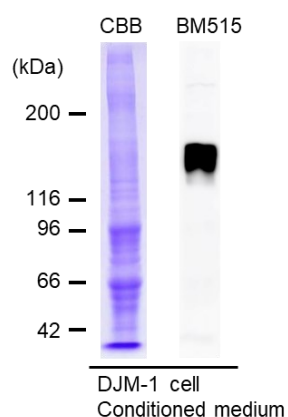


Fig. 1 Western blot analysis of BM515 antibody

Conditioned medium prepared from DJM-1 cells was concentrated by ammonia sulfate precipitation, and was stained with CBB and immunoblotted with BM515 antibody (1:2,500 dilution). The HRP-conjugated goat anti-mouse IgG was used as the second antibody. This antibody detected 165-kDa band, a processed form of laminin α -3 chain. Protein bands were visualized using a chemiluminescent detection with EzWestLumi plus kit (ATTO, Tokyo, Japan).

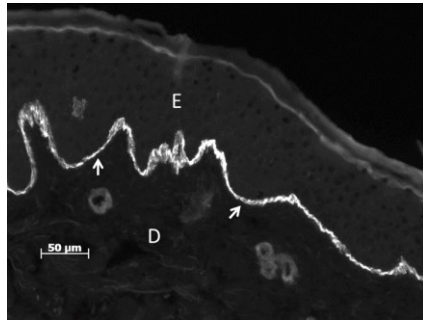


Fig.2 Immunofluorescence microscopy of human skin

A frozen acetone-fixed human skin section was stained with BM515 antibody (1:500 dilution). FITC-conjugated goat anti-mouse IgG as second antibody. The antibody revealed the location of laminin-3 chain at the dermal-epidermal junction (arrows). E: epidermis, D: dermis. Bar = 50 μm.

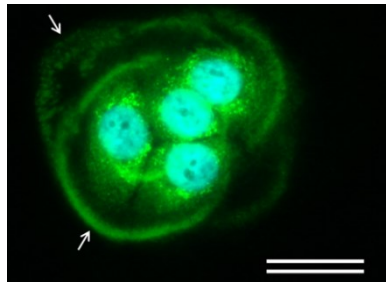


Fig. 3 Immunofluorescence microscopy of DJM-1 cells

Methanol-fixed human carcinoma derived DJM-1 cells were stained with BM515 antibody (1:500 dilution, green) and DAPI (blue). 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.

Related product: [70-352](#) Anti-Laminin gamma-2 antibody, mouse monoclonal

Reference:

1. Hirako Y, Yoshino K, Zillikens D, Owaribe K. Extracellular cleavage of bullous pemphigoid antigen 180/type XVII collagen and its involvement in hemidesmosomal disassembly. *J Biochem.* 133: 197-206, 2003
2. Uematsu J, Nishizawa Y, Hirako Y, Kitamura K, Usukura J, Miyata T, Owaribe K. Both type-I hemidesmosomes and adherens-type junctions contribute to the cell-substratum adhesion system in myoepithelial cells. *Eur J Cell Biol.* 84: 407-415, 2005.
3. Owaribe K, Nishizawa Y, Franke WW. Isolation and characterization of hemidesmosomes from bovine corneal epithelial cells. *Exp Cell Res.* 192:622-630, 1991.



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