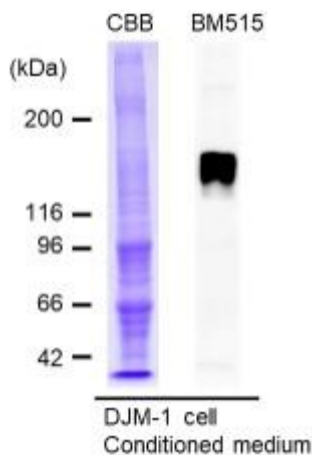


### Anti-Laminin alpha-3 antibody, mouse monoclonal (BM515)

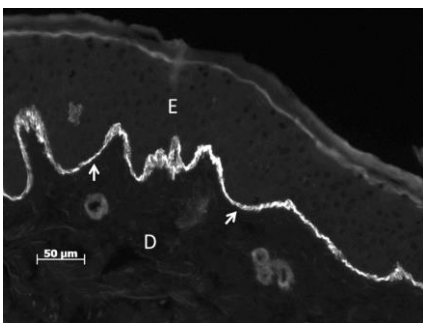
<b>Product code</b>	70-350
<b>Size</b>	100 µg
<b>Storage</b>	-20°C
<b>Concentration</b>	1.0 mg/ml
<b>Buffer</b>	PBS <sup>-</sup> with 50% glycerol
<b>Purity</b>	Purified IgG fraction with protein A from hybridoma cell culture medium.
<b>Immunogen</b>	Native laminin $\alpha$ -3 chain from bovine cornea
<b>Isotype</b>	Mouse IgG1 $\kappa$
<b>Reactivity</b>	Laminin $\alpha$ -3 (Human, Rabbit, Bovine) No reactivity against other laminin chains
<b>Special notes</b>	N/A
<b>Application</b>	1. Western blotting: x1/1,000-2,500 (Fig.1) 2. Immunofluorescence microscopy x1/250-500 (Fig.2,3)
<b>Background</b>	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 ( $\alpha$ , $\beta$ and $\gamma$ ) encoded by a distinct genes, respectively. Laminin subunit $\alpha$ -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.
<b>Data Link</b>	UniProtKB: <a href="https://www.uniprot.org/entry/Q16787">Q16787</a> (LAMA3_HUMAN)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

**Data Images:** 70-350 Anti-Laminin alpha-3 antibody, mouse monoclonal (BM515)



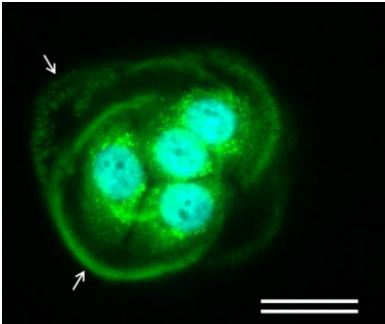
**Fig. 1 Western blot analysis of BM515 antibody**

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  $\alpha$ -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  $\mu$ m.



**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  $\mu$ m.

### 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.

### Related product

70-352 Anti-Laminin gamma-2 antibody, mouse monoclonal