

Anti-Collagen type XVII antibody, mouse monoclonal (C34)

70-357 100 µg

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

Immunogen: GST tagged fusion protein containing the COOH-terminal portion of human BP180

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

Purity: Protein A purified IgG1 κ

Reactivity: Collagen type XVII/BP180/BPAG2 (Human)
C-terminal fragment (aa 1,188-1,497)

Applications:

1. Western blotting: x1/1,000-5,000 (Fig.1)
2. Immunofluorescence microscopy x1/250-500 (Fig2,3)

Background: Collagen is the main structural protein in the extracellular matrix found in various connective tissues in the body such as cartilage, bones, tendons, ligaments, and skin. It provides structural support to the extracellular space of connective tissues. Type XVII collagen promotes adhesion of basal keratinocytes to epidermal basement membrane, and is the target of disease in patients with certain inherited or acquired blistering diseases. Two forms of type XVII collagen are found in cultured human keratinocytes: a 180-kDa full-length, transmembrane protein (known as BP180 antigen) and a recently identified 120-kDa soluble fragment that corresponds to its collagenous ectodomain.

Data Link: UniProtKB: [Q9UMD9](https://www.uniprot.org/entry/Q9UMD9) (COHA1_HUMAN)

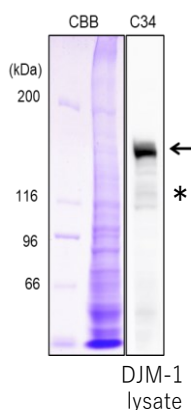


Fig. 1 Western blot analysis of C34 antibody

Whole cell extract prepared from human carcinoma derived DJM-1 cells was stained with CBB and immunoblotted with C34 antibody at 1:5000 dilution. The HRP-conjugated goat anti-mouse IgG was used as the second antibody. This antibody detected an approximate 180 kDa band of type XVII collagen (BP180, arrow) and 120 kDa bands of soluble fragments (asterisks). Protein bands were visualized using a chemiluminescent detection with EzWestLumi plus kits (ATTO, Tokyo, Japan).

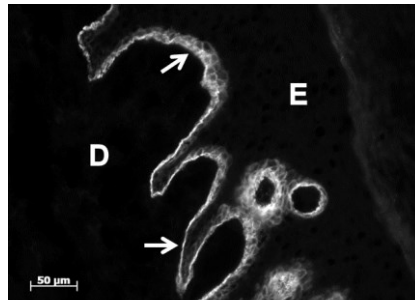


Fig.2 Immunofluorescence microscopy of human skin

A frozen acetone-fixed human skin section was stained with C34 antibody (1:500 dilution). The FITC-conjugated goat anti-mouse IgG was used as the second antibody. The antibody revealed the location of type XVII collagen at the dermal-epidermal junction (arrows). E: epidermis, D: dermis. Bar = 50 μm.

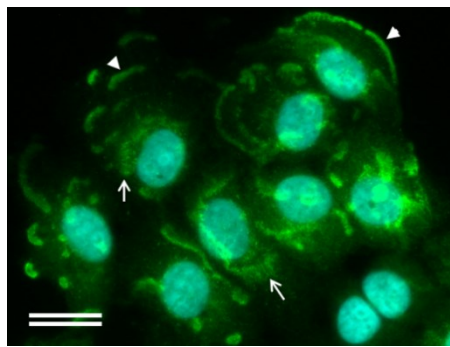


Fig. 3 Immunofluorescence microscopy of DJM-1 cells

Methanol-fixed human carcinoma derived DJM-1 cells were stained with C34 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- (arrowheads) or brush mark-like (arrows) patterns of hemidesmosomes. Bar = 20 μm.

Related product: [70-355](#) Anti-Collagen alpha (VII) antibody, mouse monoclonal

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



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