

## Anti-Plectin (C-terminal domain) antibody, mouse monoclonal (PC742)

70-360 100 µg

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

**Immunogen:** Expressed recombinant His-tagged fusion protein of human plectin, C-terminal globular domain (aa 2,930-3,153)

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

**Purity:** Protein A purified IgG1 κ

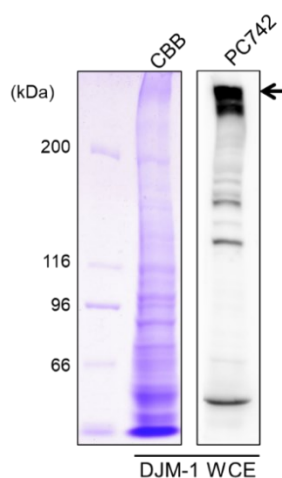
**Reactivity:** C-terminal domain of plectin (Human, mouse, rabbit, bovine, porcine),

### Applications:

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

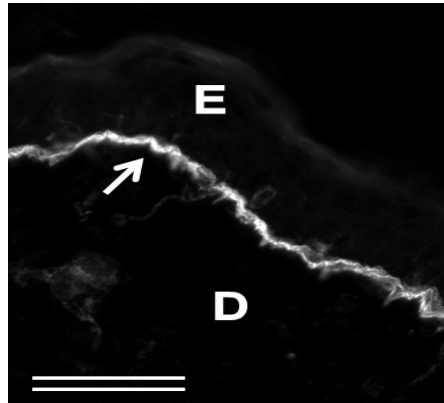
**Background:** Plectin is a giant protein found in nearly all mammalian cells and acts as a link among the three main components of the cytoskeleton: actin microfilaments, microtubules and intermediate filaments. For example, plectin interacts with intermediate filaments, which form networks that provide support and strength to cells. This protein is reported to relate to Epidermolysis Bullosa, Muscular Dystrophy and Pancreatic Ductal Adenocarcinoma. Plectin is encoded by the PLEC gene and known as a protein all around 500 kDa, consisting of >4000 amino acids. The carboxy-terminal domain consists of 6 highly homologous repeating regions, is known to connect to the intermediate filaments cyokeratin and vimentin.

**Data Link:** UniProtKB: [Q15149](https://www.uniprot.org/entry/Q15149) (PLEC\_HUMAN), Genbank: [U53204](https://www.ncbi.nlm.nih.gov/nuccore/U53204)



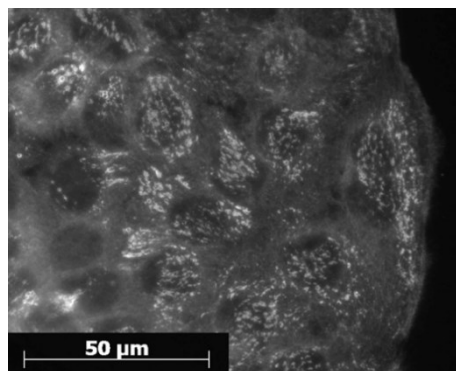
**Fig.1 Western blot analysis of PC742 antibody**

Whole cell extract (WCE) prepared from human carcinoma derived DJM-1 cells was stained with CBB and immunoblotted with PC742 antibody at 1:5,000 dilution. The HRP-conjugated goat anti-mouse IgG was used as the second antibody. PC742 antibody detected an approximate 500 kDa band of plectin (arrow). 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 PC742 antibody (1:500 dilution). The FITC-conjugated goat anti-mouse IgG was used as the second antibody. The antibody revealed the location of plectin at the dermal-epidermal junction (arrows). E: epidermis, D: dermis. Bar = 50  $\mu$ m.



**Fig.3 Immunofluorescence microscopy of cultured FRSK cells**

Methanol-fixed FRSK (fetal rat skin keratinocyte) cells were stained with PC742 antibody (1:500 dilution). The FITC-conjugated goat anti-mouse IgG was used as the second antibody. The antibody detected typical dotted patterns of hemidesmosomes.

**Related Product:** [70-361](#) Anti-Plectin (C-terminal domain) antibody mouse monoclonal

**Reference:**

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.



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