

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

Product code	70-360
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Expressed recombinant His-tagged fusion protein of human plectin, C-terminal globular domain (aa 2,930-3,153)
Isotype	Mouse IgG1κ
Reactivity	C-terminal domain of plectin (Human, mouse, rabbit, bovine, porcine)
Special notes	N/A
Application	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 (PLEC_HUMAN), Genbank: U53204
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 70-360 Anti-Plectin (C-terminal domain) antibody, mouse monoclonal (PC742)

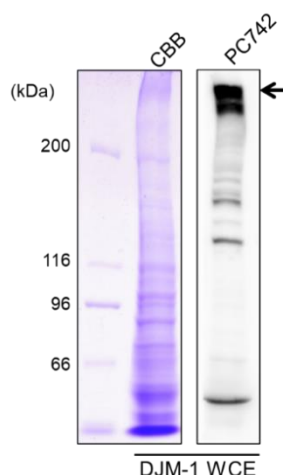


Fig.1 Western blot analysis of PC742 antibody

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).

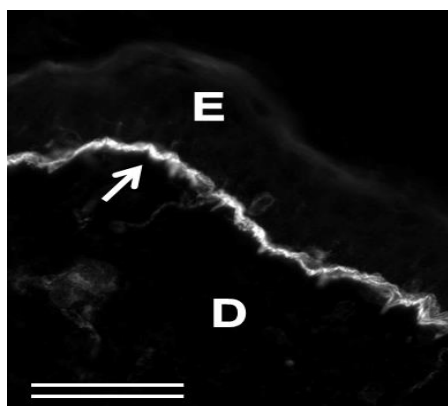


Fig.2 Immunofluorescence microscopy of human skin

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 μ m.

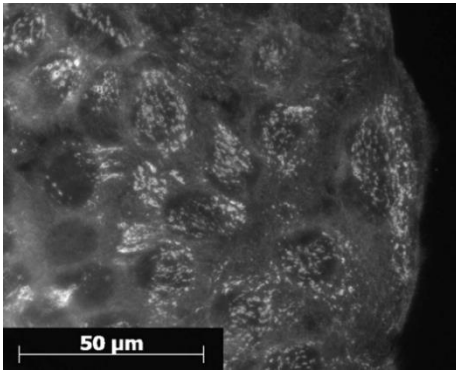


Fig.3 Immunofluorescence microscopy of cultured FRSK cells

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.

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.

Related Product

70-361 Anti-Plectin (C-terminal domain) antibody mouse monoclonal (PN643)