Anti-BPAG1 (BP230) antibody, mouse monoclonal (279)

Product code	70-365
Size	100 µg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Native BP230 from bovine cornea
Isotype	Mouse IgG1κ
Reactivity	Bullous pemphigoid (BP) antigen 1 (Human, Rat, Rabbit, Bovine, Porcine)
Special notes	N/A
Application	1. Western blotting: x1/1,000 (Fig.1) 2. Immunofluorescence microscopy x1/250-500 (Fig.2,3)
Background	BPAG1 (Bullous pemphigoid antigen I), also known as dystonin (DST) or BP230, is a member of the plakin protein family expressing in various tissues. BPAG1 plays crucial roles in numerous biological processes, such as cytoskeleton organization, cell polarization, cell adhesion and cell migration. It was first identified as an autoantigen in patients with bullous pemphigoid (BP), an autoimmune skin disease. BP typically occurs in older adults and may involve the formation of large, fluid-filled blisters (bullae) in the space between the epidermal and dermal skin layers.
Data Link	UniProtKB: Q03001 (DYST_HUMAN)

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Data Images: 70-365 Anti-BPAG1（BP230）antibody, mouse monoclonal (279)

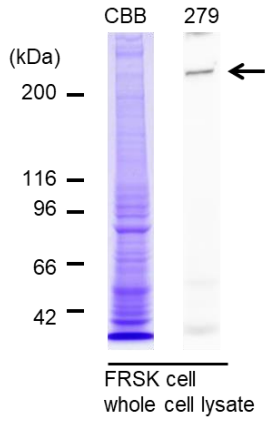

Fig.1 Western blot analysis of 279 antibody

Whole cell lysate prepared from FRSK (fetal rat skin keratinocyte) cells was stained with CBB and immunoblotted with 279 antibody at 1:1,000 dilution. The HRP-conjugated goat anti-mouse IgG was used as the second antibody. The 279 antibody recognized BPAG1 (Bullous Pemphigoid antigen 1) as a band at approximately 230 kDa (arrow), as visualized using a chemiluminescent detection with EzWestLumi plus kit (ATTO, Tokyo, Japan).

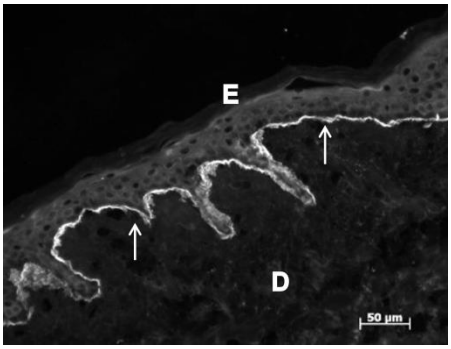

Fig.2　Immunofluorescence microscopy of human skin

A frozen acetone-fixed human skin section was stained with 279 antibody (1:500 dilution). The FITC-conjugated goat anti-mouse IgG was used as the second antibody.　The antibody revealed the location of BPAG1 at the dermal-epidermal junction (arrows).　E: epidermis, D: dermis. Bar = 50 µm.

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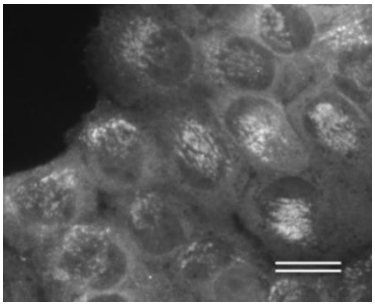

Fig.3　Immunofluorescence microscopy of cultured FRSK cells

Methanol-fixed FRSK (fetal rat skin keratinocyte) cells were stained with 279 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. Bar = 20 μm.

Reference:

1. Owaribe K, Nishizawa Y, Franke WW. Isolation and characterization of hemidesmosomes from bovine corneal epithelial cells. Exp Cell Res. 192:622-630, 1991.
2. Okumura M, Yamakawa H, Ohara O, Owaribe K. Novel alternative splicings of BPAG1 (bullous pemphigoid antigen 1) including the domain structure closely related to MACF (microtubule actin cross-linking factor). J Biol Chem. 277:6682-6687, 2002.
3. 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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