

MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog No. NU-01-BP2

Anti BP180/type XVII collagen

Product type Primary Antibodies

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

(AB900157, Ile1188-Pro1497)

Clone number C34

Isotype Mouse IgG1, kappa

Host Mouse

Formulation Hybridoma supernatant with 0.02% NaN₃ as a preservative.

Specificity BP180/type XVII collagen/BPAG2

Cross reactivity Human

Storage Store at -20°C or -70°C in small aliquots for prolonged storage.

Repeated freeze-thaw cycles can damage immunoreactivity of the antibody.

Application notes

Recommended use

WB, IF, IP

Not tested yet in other applications.

Recommended dilutions

- Western Blot: 1:50-1:250 for detection of a 180-kDa full-length polypeptide in keratinocyte cell lysate.
- Immunofluorescence: 1:50-1:250 for staining of acetone-fixed cryostat frozen tissue sections. Optimal dilutions must be determined by end user.

References

- 1) Yamauchi T., *et al.* (2014) Major cleavage-dependent epitopes for linear IgA bullous dermatosis are formed at the boundary between the non-collagenous 16A and collagenous 15 domains of BP180. *J Dermatol Sci.*, **76**: 25-33. PMID: 25176590
- 2) Hirako Y., *et al.* (2014) Isolation of a hemidesmosome-rich fraction from a human squamous cell carcinoma cell line. *Exp Cell Res.*, **324**: 172-82. PMID: 24726610
- 3) Hirako Y., *et al.* (1998) Cleavage of BP180, a 180-kDa bullous pemphigoid antigen, yields a 120-kDa collagenous extracellular polypeptide. *J Biol Chem.*, **273**: 9711-7. PMID: 9545306

Example Assay Data

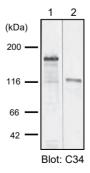


Fig. 1 Western blot analysis

TritonX-100 insoluble cytoskeletal fraction (lane 1) and concentrated conditioned medium (lane 2) prepared from DJM-1 cells were immunoblotted with the C34 antibody (1:200 dilution).

The C34 antibody detected a band at approximately 180 kDa in lane 1. This antibody also reacted with a 120-kDa shed ectodomain of BP180 in lane 2. Polypeptiedes were separated by SDS-PAGE (7.5% separating gel).

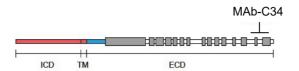


Fig. 2 Location of the epitope for the C34 antibody

The C34 antibody does not react with the 100-kDa extracellular fragment of BP180, which lacks the COOH-terminal portion (ref. 1). The result indicates that the C34 antibody recognizes an epitope locates at the COOH-terminal portion of about 20 kDa. ICD, TM and ECD represent for intracellular, transmembrane and extracellular domains. Collagenous domains are shown by gray boxes.

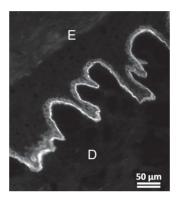


Fig. 3 Immunofluorescence microscopy of human skin

A human skin section was stained with C34 antibody at 1:200 dilution. The antibody revealed the location of BP180 molecules at the dermal-epidermal junction (arrow). E: epidermis, D: dermis. Bar = 50 um. Frozen sections were prepared as described previously (ref. 3).

RELATED PRODUCTS:

Product Name	Clone	Maker	Cat#
Anti Plectin Monocolonal antibody	PN753	CAC	NU-01-PLN
Anti Laminin γ2 chain Monocolonal antibody	YN557	CAC	NU-01-LA2
Anti BP180/type XVII collagen Monocolonal antibody	C34	CAC	NU-01-BP2
Anti Keratin 8 chain Monocolonal antibody	RL273	CAC	NU-01-KE8

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