

BPAG1 (N-16): sc-13774

BACKGROUND

As basal cells of stratified squamous epithelia begin to migrate in response to wound healing, they lose their cell-substrate adhesion junctions, the hemidesmosomes. The hemidesmosome is an adhesion structure of the epidermal-dermal junction in keratinocytes. When keratinocytes migrate laterally or upward to differentiate they must control the formation and disintegration of the hemidesmosomes. The bullous pemphigoid antigen BPAG1 is a hemidesmosomal protein of the cutaneous basement membrane zone. The primary sequence deduced from full-length human cDNAs predicts that this molecule consists of a central rod region and flanking globular domains. A neuronal isoform, BPAG1n3 is the result of differential splicing of BPAG1. BPAG1n3 is distinguished by its initial 32 amino acid residues and by the absence of the amino-terminal half of the actin-binding domain.

REFERENCES

1. Kitajima, Y., Owaribe, K., Nishizawa, Y., Jokura, Y. and Yaoita, H. 1992. Phorbol ester- and calcium-induced reorganization of 180 kDa bullous pemphigoid antigen on the ventral surface of cultured human keratinocytes as studied by immunofluorescence and immunoelectron microscopy. *Exp. Cell Res.* 203: 17-24.
2. Gipson, I.K., Spurr-Michaud, S., Tisdale, A., Elwell, J. and Stepp, M.A. 1993. Redistribution of the hemidesmosome components $\alpha 6 \beta 4$ integrin and bullous pemphigoid antigens during epithelial wound healing. *Exp. Cell Res.* 207: 86-98.
3. Sawamura, D., Sato, T., Kon, A., Harada, K., Nomura, K., Hashimoto, I., Tamai, K. and Uitto, J. 1994. Mouse 230 kDa bullous pemphigoid antigen gene: structural and functional characterization of the 5'-flanking region and interspecies conservation of the deduced amino-terminal peptide sequence of the protein. *J. Invest. Dermatol.* 103: 651-655.
4. Kitajima, Y., Nojiri, M., Yamada, T., Hirako, Y. and Owaribe, K. 1998. Internalization of the 180 kDa bullous pemphigoid antigen as immune complexes in basal keratinocytes: an important early event in blister formation in bullous pemphigoid. *Br. J. Dermatol.* 138: 71-76.
5. Yang, Y., Bauer, C., Strasser, G., Wollman, R., Julien, J.P. and Fuchs, E. 1999. Integrators of the cytoskeleton that stabilize microtubules. *Cell* 98: 229-238.

CHROMOSOMAL LOCATION

Genetic locus: DST (human) mapping to 6p12.1.

SOURCE

BPAG1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of BPAG1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-13774 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BPAG1 (N-16) is recommended for detection of BPAG1 isoform 7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BPAG1 (N-16) is also recommended for detection of BPAG1 isoform 7 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for BPAG1 siRNA (h): sc-43269, BPAG1 shRNA Plasmid (h): sc-43269-SH and BPAG1 shRNA (h) Lentiviral Particles: sc-43269-V.

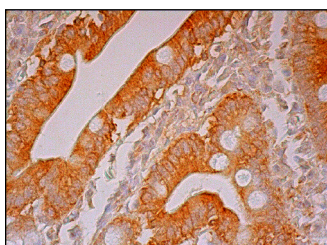
Molecular Weight of BPAG1: 230 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



BPAG1 (N-16): sc-13774. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing membrane and cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.