10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Desmoglein 3 Antibody

Catalog # ABO10883

Product Information

Application	WB
Primary Accession	P32926
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Desmoglein-3(DSG3) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1830
Other Names	Desmoglein-3, 130 kDa pemphigus vulgaris antigen, PVA, Cadherin family member 6, DSG3, CDHF6
Calculated MW	107533
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cell membrane ; Single-pass type I membrane protein . Cell junction, desmosome .
Tissue Specificity	Epidermis, tongue, tonsil, esophagus and carcinomas.
Source	Eukaryota
Protein Name	Desmoglein-3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Desmoglein 3(981-999aa QLRGSHTMLCTEDPCSRLI).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated

freezing and thawing.

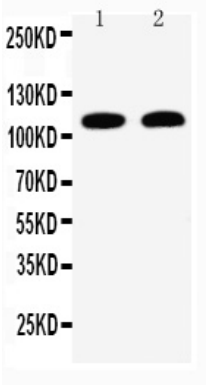
Protein Information

Name	DSG3 (HGNC:3050)
Synonyms	CDHF6
Function	A component of desmosome cell-cell junctions which are required for positive regulation of cellular adhesion (PubMed:31835537). Required for adherens and desmosome junction assembly in response to mechanical force in keratinocytes (PubMed:31835537). Required for desmosome-mediated cell-cell adhesion of cells surrounding the telogen hair club and the basal layer of the outer root sheath epithelium, consequently is essential for the anchoring of telogen hairs in the hair follicle (PubMed:9701552). Required for the maintenance of the epithelial barrier via promoting desmosome-mediated intercellular attachment of suprabasal epithelium to basal cells (By similarity). May play a role in the protein stability of the desmosome plaque components DSP, JUP, PKP1, PKP2 and PKP3 (PubMed:22294297). Required for YAP1 localization at the plasma membrane in keratinocytes in response to mechanical strain, via the formation of an interaction complex composed of DSG3, PKP1 and YWHAG (PubMed:31835537). May also be involved in the positive regulation of YAP1 target gene transcription and as a result cell proliferation (PubMed:31835537). Positively regulates cellular contractility and cell junction formation via organization of cortical F-actin bundles and anchoring of actin to tight junctions, in conjunction with RAC1 (PubMed:22796473). The cytoplasmic pool of DSG3 is required for the localization of CDH1 and CTNNB1 at developing adherens junctions, potentially via modulation of SRC activity (PubMed:22294297). Inhibits keratinocyte migration via suppression of p38MAPK signaling, may therefore play a role in moderating wound healing (PubMed:26763450).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell junction, desmosome {ECO:0000250|UniProtKB:O35902}. Cytoplasm. Cell junction, tight junction. Cell junction
Tissue Location	Expressed throughout the basal and spinous layer of the epidermis with weak expression in the granular layer (at protein level) (PubMed:19717567). Expressed in skin and mucosa (at protein level) (PubMed:22294297, PubMed:30528827). Expressed throughout the esophageal mucosa (at protein level) (PubMed:24220297). Expressed in the basal layer of the outer root sheath of the telogen hair club, specifically at the cell membrane between the apex of the cells and the surrounding hair club (at protein level) (PubMed:9701552). Expression is less abundant between the lateral margins of the outer root sheath basal cells (at protein level) (PubMed:9701552). Also expressed in the tongue, tonsil and esophagus (PubMed:16740002)

Background

Desmoglein3 is also known as PVA(Pemphigus Vulgaris Antigen). Pemphigus vulgaris(PV) and pemphigus foliaceus(PF) are autoimmune diseases of the skin which have as target antigens 2 different members of the desmoglein subfamily of the desmosomal cadherins: pemphigus vulgaris antigen(PVA, or desmoglein-3) in the case of PV and desmoglein I in the case of PF. The DSG3 gene, like the genes for DSG1 and DSG2, is located on chromosome 18. The human DSG3 gene consists of 15 exons and spans more than 23 kb. DSG3 and DSG1 are the autoantigens of pemphigus vulgaris and pemphigus foliaceus, respectively. DSG3 and DSG1 are the target antigens in PNP, and IgG autoantibodies against DSG3 in PNP sera play a pathogenic role in the loss of keratinocyte adhesion and blistering.

Images



Anti-Desmoglein 3 antibody, ABO10883, Western blottingLane 1: A431 Cell LysateLane 2: CEM Cell Lysate

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