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Anti-Desmoglein 3 Antibody
Catalog # ABO10883

Specification

Anti-Desmoglein 3 Antibody - 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.

Anti-Desmoglein 3 Antibody - Additional Information

Gene ID 1830

Other Names
Desmoglein-3, 130 kDa pemphigus vulgaris antigen, PVA, Cadherin family member 6, DSG3, CDHF6

Calculated MW
107533 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane ; Single-pass type I membrane protein . Cell junction, desmosome .

Tissue Specificity
Epidermis, tongue, tonsil, esophagus and carcinomas.

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.**

Anti-Desmoglein 3 Antibody - 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 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).

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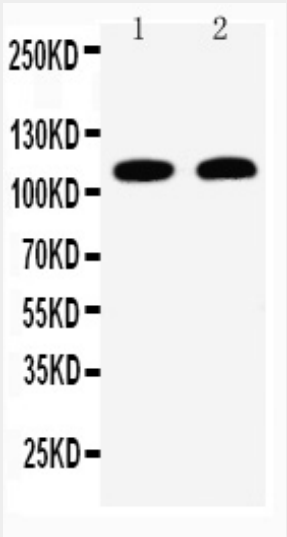
Anti-Desmoglein 3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Desmoglein 3 Antibody - Images



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

Anti-Desmoglein 3 Antibody - 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.