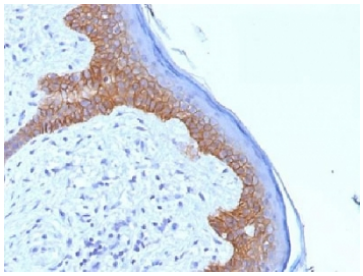
Desmoglein 3 Antibody / DSG3 [clone 5G11] (V3246)

Catalog No.	Formulation	Size
V3246-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3246-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3246SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

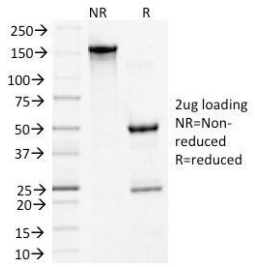
Citations (22)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	5G11
Purity	Protein G affinity chromatography
UniProt	P32926
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Desmoglein 3 antibody is available for research use only.



Desmoglein 3 Antibody 5G11 Skin IHC. Immunohistochemistry analysis of Desmoglein 3 Antibody clone 5G11 in human skin tissue. Formalin-fixed, paraffin-embedded human skin sections were stained with Desmoglein 3 Antibody, followed by HRP-conjugated secondary antibody and DAB chromogen development. Strong membranous staining is observed in epidermal keratinocytes, consistent with desmosomal localization of Desmoglein 3, with hematoxylin nuclear counterstain (blue). Required HIER: boil tissue sections in EDTA, pH9, for 10-20 min.



SDS-PAGE Analysis of Purified, BSA-Free Desmoglein 3 antibody clone 5G11. Confirmation of Integrity and Purity of the Antibody.

Description

Desmoglein 3 Antibody Clone 5G11 recognizes Desmoglein 3, a calcium-dependent desmosomal cadherin encoded by the DSG3 gene on chromosome 18q12.1. Desmoglein 3, commonly referred to as DSG3 in the literature, is a single-pass transmembrane glycoprotein localized to desmosomes at the plasma membrane of stratified epithelial cells, where it mediates strong intercellular adhesion. DSG3 antibody, also known as Desmoglein 3 antibody, plays a central role in studies of epithelial cohesion, mucocutaneous integrity, and squamous differentiation. Clone 5G11 has been widely referenced in peer-reviewed research, contributing to its recognition as a well-established tool for investigating DSG3 biology.

Desmoglein 3 is a member of the cadherin superfamily and functions as a structural component of desmosomal junctions. Its extracellular cadherin repeats mediate calcium-dependent homophilic binding between adjacent epithelial cells, while its intracellular domain associates with desmosomal plaque proteins including Plakoglobin and Desmoplakin. Through these interactions, Desmoglein 3 anchors keratin intermediate filaments to the plasma membrane, reinforcing tissue stability in stratified squamous epithelia exposed to mechanical stress such as skin, oral mucosa, and esophagus.

DSG3 expression is predominantly observed in the basal and suprabasal layers of stratified squamous epithelium. In contrast to Desmoglein 1, which is enriched in superficial epidermal layers, Desmoglein 3 is concentrated in deeper epithelial layers and plays a critical role in maintaining mucocutaneous adhesion. Autoantibodies targeting Desmoglein 3 are strongly associated with pemphigus vulgaris, where disruption of desmosomal adhesion leads to intraepidermal blister formation. Altered DSG3 expression has also been reported in squamous cell carcinomas and other epithelial malignancies, making DSG3 antibody an important marker in oncologic and dermatologic research.

Structurally, Desmoglein 3 contains multiple extracellular cadherin domains, a transmembrane region, and an intracellular tail that integrates into the desmosomal plaque complex. Beyond its adhesive function, DSG3 participates in signaling pathways influencing keratinocyte proliferation and epithelial differentiation. Due to its extensive citation in scientific literature and consistent performance across epithelial research applications, Desmoglein 3 Antibody Clone 5G11 remains a widely recognized reagent for studying desmosomal biology and mucocutaneous disease mechanisms.

Explore our Desmoglein 3 Antibody - Human Protein Microarray Validated Clone DSG3/2838 page for a broader view of DSG3 expression in stratified epithelia with supporting microarray specificity validation data.

Application Notes

Optimal dilution of the Desmoglein 3 antibody clone 5G11 should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to the extracellular portion of DSG3 was used as the immunogen for the Desmoglein 3 antibody clone 5G11.

Storage

Store the Desmoglein 3 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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