

# Anti-Desmoglein-1 (DSG1) Antibody

Mouse Monoclonal Antibody Catalog # AH13170

## **Product Information**

Application	IHC-P, IF, FC
Primary Accession	<u>Q02413</u>
Other Accession	<u>2633</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	DSG1/1733
Calculated MW	113748

#### **Additional Information**

Gene ID	1828
Other Names	Cadherin family member 4; CDHF4; Desmoglein-1; Desmosomal glycoprotein 1; DG1; DSG1; EPKHE; EPKHIA; Pemphigus foliaceus antigen; PPKS1; SPPK1
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris buffer with 1mM EDTA, pH 8.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Desmoglein-1 (DSG1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	DSG1
Synonyms	CDHF4
Function	Component of intercellular desmosome junctions (PubMed: <u>34368962</u> ). Involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion (PubMed: <u>19717567</u> ).

Cellular Location	Cell membrane; Single-pass type I membrane protein {ECO:0000250 UniProtKB:Q7TSF1} Cell junction, desmosome. Cytoplasm. Nucleus
Tissue Location	Expressed in all suprabasal layers of the epidermis, with the highest expression seen in the granular layer (at protein level).

### Background

Recognizes a protein of ~150kDa, identified as Desmoglein-1 (DSG1). Desmoglein-1 is a member of the desmosomal cadherin family. Desmosomes are intercellular adhering junctions that represent cell surface attachment sites for intermediate filament. Desmocollins and desmogleins are the main desmosomal transmembrane proteins. Desmogleins consist of Dsg1, Dsg2, Dsg3, and Dsg4 isoforms. Within the desmosome, the extracellular domain of desmoglein is essential for calcium dependent heterophilic binding to the desmocollins, whereas the intracellular domain is essential for binding to the desmosomal plaque protein, plakoglobin. Desmoglein 1 is synthesized exclusively in the suprabasal layers. Intact and functionally active desmoglein 1 is essential to epidermal integrity.

#### Images



Formalin-fixed, paraffin-embedded human Skin stained with Desmoglein-1 Monoclonal Antibody (DSG1/1733).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.