



20150116ML

Anti-Human Desmoglein-1 (#7P1)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M377
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant Desmoglein-1.

Target Background

Synonyms (Target):	DSG1; DG1; DSG; CDHF4; PPKS1; SPPK1
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Desmoglein1 is one of three members of the desmoglein subfamily of calcium-dependent cadherin cell adhesion molecules. Together with desmocollins, another subfamily within the cadherin superfamily, the desmoglein isoforms form the adhesive components of desmosomes, the cell-cell adhesive structures that are found in epithelial cells. Human Desmoglein1 is a type I transmembrane glycoprotein of 1049 amino acid (aa) residues with a 23 aa signal peptide and a 26 aa propeptide. It differs from other classic cadherins by having four instead of five cadherin repeat domains in its extracellular region, and a much larger cytoplasmic region containing five desmoglein repeat domains which share homology with the cadherin repeats. Instead of having the HAV adhesion motif found in type I cadherins, Desmoglein1 has R/YAL as the adhesion motif on its amino-terminal cadherin repeat. The cytoplasmic tail of Desmoglein 1 interacts with desmoplakins, plakoglobin and plakophilins. In turn, these proteins link the Desmoglein1 with the intermediate filaments. Desmoglein1 has been shown to be important in establishing cell-cell adhesion and function in the epidermis. In the autoimmune skin disease pemphigus foliaceus, autoantibodies to Desmoglein1 can cause the loss of keratinocyte adhesion resulting in blisters.

Database References Target

Protein RefSeq:	NP_001933.2
Uniprot ID:	Q02413
mRNA RefSeq:	NM_001942.2

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#7P1)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human Desmoglein-1
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human Desmoglein-1.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, IHC

Recommended usage:

WB: 1:500-1000

IHC

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Application/Handling

