

AM09135SU-N**Monoclonal Antibody to Desmoglein-1 - Supernatant****Alternate names:**

CDHF4, Cadherin family member 4, DG1, DGI, DSG1, Desmosomal glycoprotein 1, Pemphigus foliaceus antigen

Quantity:

0.5 ml

Background:

Desmosomes are cell-cell junctions between epithelial, myocardial and certain other cell types. Desmoglein 1 is a calcium-binding transmembrane glycoprotein component of desmosomes in vertebrate epithelial cells. Currently, three desmoglein subfamily members have been identified and all are members of the cadherin cell adhesion molecule superfamily. These desmoglein gene family members are located in a cluster on chromosome 18.

Desmoglein 1 has been identified as the autoantigen of the autoimmune skin blistering disease pemphigus foliaceus.

Desmoglein 1 is a 165kD glycoprotein that is a core component of the desmosome cell-cell junction between epithelial cells. Desmoglein 1 is synthesized in the suprabasal layer of the skin, and is vital to epidermal integrity.

Uniprot ID:

[Q02413](#)

NCBI:

[NP_001933](#)

GeneID:

[1828](#)

Host / Isotype:

Mouse / IgG1

Clone:

Dsg1-P23

Immunogen:

Recombinant Human polypeptide Desmoglein 1 (extracellular part EII, EIII and EIV)

Format:

State: Liquid Hybridoma Culture Supernatant (Concentrate)

Preservatives: 0.09% Sodium Azide

Applications:

Immunoblotting (Western).

Immunohistochemistry on Frozen Sections: For better resolution on frozen sections preincubation (directly after fixation) with 0.05-0.2% Triton X-100 for 5-10 min, depending on tissue type, is recommended (See Ref.1)

Immunohistochemistry on Paraffin Embedded Sections (After Microwave treatment): For better staining on paraffin sections preincubation with 0.001% trypsin and addition of 2% milk powder to the incubation media is recommended.

Recommended Dilutions: 1/1000 for 1h at RT for Immunohistochemistry (Dilute immediately before use in PBS).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

In Immunoblots of cytoskeletal preparations from Human skin the antibody reacts specifically with a 160 kD polypeptide typical for Desmoglein 1.

In immunolocalisation studies the mab shows typical staining of suprabasal layers of the epidermis and special regions of fetal and anagen hair follicles. The staining pattern observed corresponds to those obtained with pemphigus foliaceus patient sera.

Cross reaction with Desmoglein 2 and 3 was not detected.

Species Reactivity:**Tested:** Human.**Storage:**Store undiluted at 2-8°C.
Shelf life: one year from despatch.**General Readings:**

1. Schäfer S, Stumpp S, Franke WW. Immunological identification and characterization of the desmosomal cadherin Dsg2 in coupled and uncoupled epithelial cells and in human tissues. *Differentiation*. 1996 May;60(2):99-108. PubMed PMID: 8641550.
2. Akat K, Mennel H-D, Kremer P, Gassler N, Bleck CKE, Kartenbeck J: Molecular characterization of desmosomes in meningiomas and arachnoidal tissue. *Acta Neuropathol* 106, 337-347 (2003).
3. Kurzen H, Moll I, Moll R, Schäfer S, Simics E, Masayuki A, Wheelock MJ, Franke WW: Compositionally different desmosomes in the various compartments of the human hair follicle. *Differentiation* 63, 295-304 (1998)