

Anti-Desmoglein-1 (DSG1) Antibody

Mouse Monoclonal Antibody Catalog # AH13166

Product Information

ApplicationWB, IF, FCPrimary AccessionQ02413Other Accession2633ReactivityHumanHostMouseClonalityMonoclonal

Isotype Mouse / IgG1, kappa

Clone Names 18D4 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);

,Western Blotting (0.5-1.0ug/ml) ,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 plague proteins and intermediate filaments

mediating cell-cell adhesion (PubMed: 19717567).

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.

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