

# Anti-Desmoglein-2 (DSG2) Antibody

Mouse Monoclonal Antibody Catalog # AH13174

## **Specification**

## Anti-Desmoglein-2 (DSG2) Antibody - Product Information

Application ,1,3,4,
Primary Accession Q14126
Other Accession 412597
Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Calculated MW 122294

## Anti-Desmoglein-2 (DSG2) Antibody - Additional Information

#### **Gene ID 1829**

#### **Other Names**

ARVC10; ARVD10; Cadherin family member 5; CDHF5; CMD1BB; Desmoglein-2; DSG2; HDGC; Human Desmoglein Colon

#### **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-2 (DSG2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Anti-Desmoglein-2 (DSG2) Antibody - Protein Information

## Name DSG2

## Synonyms CDHF5

#### **Function**

Component of intercellular desmosome junctions. Involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion.

## **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cell junction, desmosome

## **Tissue Location**



All of the tissues tested and carcinomas.

## Anti-Desmoglein-2 (DSG2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-Desmoglein-2 (DSG2) Antibody - Images

## Anti-Desmoglein-2 (DSG2) Antibody - Background

Recognizes a protein of 165kDa, identified as Desmoglein-2 (DSG2). This monoclonal antibody recognizes the extracellular domain of human desmoglein-2. Desmoglein-2 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. Human Desmoglein-2 is a type I transmembrane glycoprotein of 1117 amino acid (aa) residues with a 23 aa signal peptide and a 25 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, desmogleins have R/YAL as the adhesion motif on its amino-terminal cadherin repeat. The cytoplasmic tails of desmogleins interact with desmoplakins, plakoglobin and plakophilins. In turn, these proteins link the desmogleins with the intermediate filaments. Desmoglein-2 has been shown to be important in establishing cell-cell adhesion and function in epithelial cells. Desmoglein2 was originally identified in colon carcinoma and colon, and was named HDGC (human desmoglein colon).