

### 36-2179: Anti-Desmoglein-2 (DSG2) Monoclonal Antibody(Clone: 6D8)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | 6D8   |
| <b>Application :</b>           | FACS,IF,WB  |
| <b>Reactivity :</b>            | Human   |
| <b>Gene :</b>                  | DSG2  |
| <b>Gene ID :</b>               | 1829  |
| <b>Uniprot ID :</b>            | Q14126  |
| <b>Alternative Name :</b>      | ARVC10; ARVD10; Cadherin family member 5; CDHF5; CMD1BB; Desmoglein-2; DSG2; HDGC; Human Desmoglein Colon |
| <b>Isotype :</b>               | Mouse IgG1, kappa   |
| <b>Immunogen Information :</b> | Recombinant human DSG2 protein  |

#### Description

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).

#### Product Info

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|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/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. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

#### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml)

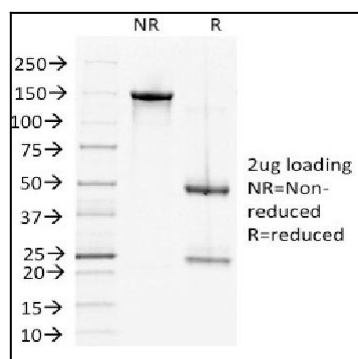


Fig. 1: SDS-PAGE Analysis Purified DSG2 Mouse Monoclonal Antibody (6D8).  
Confirmation of Integrity and Purity of Antibody.