

# **KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI1508

### **Specification**

## **KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody - Product Information**

Application WB, FC
Primary Accession Q14126
Reactivity Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 122 kDa , observed, 160 kDa

KDa

Gene Name DSG2

Aliases DSG2; Desmoglein 2; CDHF5; Cadherin

Family Member 5; Desmoglein-2; HDGC A synthesized peptide derived from human

Desmoglein 2

## KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID **1829** 

**Other Names** 

**Immunogen** 

Desmoglein-2, Cadherin family member 5, HDGC, DSG2, CDHF5

## KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody - Protein Information

Name DSG2

**Synonyms** CDHF5

## **Function**

A component of desmosome cell-cell junctions which are required for positive regulation of cellular adhesion (PubMed:<a href="http://www.uniprot.org/citations/38395410" target="\_blank">38395410</a>). Involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion. Required for proliferation and viability of embryonic stem cells in the blastocyst, thereby crucial for progression of post-implantation embryonic development (By similarity). Maintains pluripotency by regulating epithelial to mesenchymal transition/mesenchymal to epithelial transition (EMT/MET) via interacting with and sequestering CTNNB1 to sites of cell-cell contact, thereby reducing translocation of CTNNB1 to the nucleus and subsequent transcription of CTNNB1/TCF-target genes (PubMed:<a href="http://www.uniprot.org/citations/29910125" target="\_blank">29910125</a>). Promotes pluripotency and the multi-lineage differentiation potential of hematopoietic stem cells

pluripotency and the multi-lineage differentiation potential of hematopoietic stem cells (PubMed:<a href="http://www.uniprot.org/citations/27338829" target="\_blank">27338829</a>). Plays a role in endothelial cell sprouting and elongation via mediating the junctional-association of cortical actin fibers and CDH5 (PubMed:<a href="http://www.uniprot.org/citations/27338829" target="\_blank">27338829</a>). Plays a role in limiting inflammatory infiltration and the apoptotic response to injury in kidney tubular epithelial cells, potentially via its role in maintaining



cell-cell adhesion and the epithelial barrier (PubMed:<a href="http://www.uniprot.org/citations/38395410" target=" blank">38395410</a>).

#### **Cellular Location**

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

#### **Tissue Location**

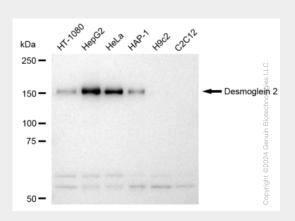
Expressed in undifferentiated pluripotent stem cells, expression decreases during differentiation (at protein level) (PubMed:29910125). Expressed in hematopoietic stem cells and circulating endothelial progenitor cells, expression decreases upon increasing cell lineage commitment (at protein level) (PubMed:27338829). Expressed on common myeloid progenitors, pro- myelocytes, pro-erythrocytes and B-cell linage progenitors (at protein level). Expression in mature cell types in the bone marrow and mature leukocyte populations is absent (PubMed:27338829). Expressed by foreskin fibroblasts, expression peaks during the early stage of differentiation reprogramming (at protein level) (PubMed:29910125) Expressed by endothelial cells in both arterioles and venules in the cervix (at protein level) (PubMed:27338829). Expressed in kidney tubular epithelial cells (PubMed:38395410)

## **KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody - Protocols**

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

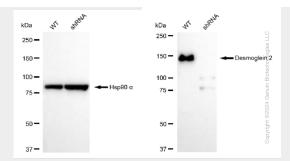
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-Desmoglein 2 Rabbit Monoclonal Antibody - Images

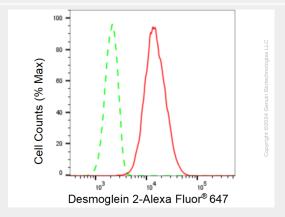


Western blotting analysis using anti-Desmoglein 2 antibody (Cat#AGI1508). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Desmoglein 2 antibody (Cat#AGI1508, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-Desmoglein 2 antibody (Cat#AGI1508). Desmoglein 2 expression in wild type (WT) and Desmoglein 2 shRNA knockdown (KD) HeLa cells with 30  $\mu g$  of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-Desmoglein 2 antibody (Cat#AGI1508, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Desmoglein 2 expression in HepG2 cells using Desmoglein 2 antibody (Cat#AGI1508, 1:2,000). Green, isotype control; red, Desmoglein 2.