

# Desmoglein 2 Antibody

Rabbit mAb Catalog # AP91954

### **Product Information**

**Application** WB, IHC, IF, FC, ICC, IHF

Primary Accession <u>Q14126</u>

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names desmoglein-2; DSG2; HDGC; ARVD10; CDHF5; CMD1BB;

IsotypeRabbit IgGHostRabbitCalculated MW122294

## **Additional Information**

**Dilution** WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:100

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human Desmoglein 2

**Description** Component of intercellular desmosome junctions. Involved in the interaction

of plaque proteins and intermediate filaments mediating cell-cell adhesion.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Name DSG2

Synonyms CDHF5

**Function** A component of desmosome cell-cell junctions which are required for

positive regulation of cellular adhesion (PubMed:38395410). 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:<u>29910125</u>). Promotes pluripotency and the multi-lineage differentiation potential of hematopoietic stem cells (PubMed:<u>27338829</u>). Plays a role in endothelial cell sprouting and elongation via mediating the junctional-association of cortical actin fibers and CDH5 (PubMed:<u>27338829</u>). 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: <u>38395410</u>).

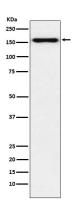
#### **Cellular Location**

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, promyelocytes, 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)

## **Images**



Western blot analysis of Desmoglein 2 expression in HeLa cell lysate.

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