

Desmoglein 2 Antibody Rabbit mAb Catalog # AP91954

## **Specification**

# **Desmoglein 2 Antibody - Product Information**

Application	WB, IHC, FC, ICC	
Primary Accession	<u>014126</u>	
Reactivity	Rat	
Clonality	Monoclonal	
Other Names		
desmoglein-2; DSG2; HDGC; ARVD10; CDHF5; CMD1BB;		

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	122294 Da

## **Desmoglein 2 Antibody - Additional Information**

Dilution	WB~~1:1000
	IHC~~1:100~500
	FC~~1:10~50
	ICC~~N/A
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.

## **Desmoglein 2 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 (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)

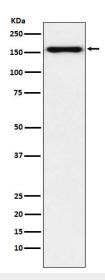
### **Desmoglein 2 Antibody - Protocols**

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

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

Desmoglein 2 Antibody - Images





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