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Desmoglein 2 Antibody

Rabbit mAb
Catalog # AP91954

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	Q14126
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	desmoglein-2; DSG2; HDGC; ARVD10; CDHF5; CMD1BB;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	122294

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

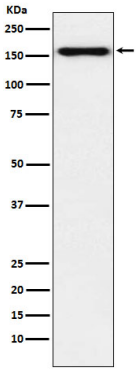
Cellular Location

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)

Images



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