

Anti-Desmocollin-2/3 Antibody Mouse Monoclonal Antibody

Catalog # AH13164

Specification

Anti-Desmocollin-2/3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P, IF, FC <u>Q02487</u> <u>95612</u> Human, Mouse, Rat Mouse Monoclonal Mouse / IgG1, kappa 99962

Anti-Desmocollin-2/3 Antibody - Additional Information

Gene ID 1824

Other Names

ARVD11; Cadherin family member 2; CDHF2; Desmocollin-2; Desmocollin-3; Desmosomal glycoprotein II and III; Desmosomal glycoprotein II; Desmosomal glycoprotein II; DG2; DGII/III; DSC2; DSC3

Format

200ug/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.

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions

Anti-Desmocollin-2/3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Desmocollin-2/3 Antibody - Protein Information

Name DSC2 (<u>HGNC:3036</u>)

Synonyms CDHF2, DSC3

Function

A component of desmosome cell-cell junctions which are required for positive regulation of cellular adhesion (PubMed:33596089). Promotes timely incorporation of DSG2 into desmosome intercellular junctions and promotes interaction of desmosome cell junctions with intermediate filament cytokeratin, via modulation of DSP phosphorylation (PubMed:33596089). Plays an



important role in desmosome-mediated maintenance of intestinal epithelial cell intercellular adhesion strength and barrier function (PubMed:33596089). Positively regulates wound healing of intestinal mucosa via promotion of epithelial cell migration, and also plays a role in mechanotransduction of force between intestinal epithelial cells and extracellular matrix (PubMed:<a href="http://www.uniprot.org/citations/31967937"

target="_blank">31967937). May contribute to epidermal cell positioning (stratification) by mediating differential adhesiveness between cells that express different isoforms. May promote p38MAPK signaling activation that facilitates keratinocyte migration (By similarity).

Cellular Location

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

Tissue Location

Expressed at intercalated disks in the heart, where it is colocalized with CDH2 (at protein level) (PubMed:23863954, PubMed:33784018). Expressed in intestinal mucosal cells (at protein level) (PubMed:31967937).

Anti-Desmocollin-2/3 Antibody - Protocols

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

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

Anti-Desmocollin-2/3 Antibody - Images



Formalin-fixed, paraffin-embedded human Skin stained with Desmocollin-2/3 Monoclonal Antibody (7G6).

Anti-Desmocollin-2/3 Antibody - Background

Desmosomes are intercellular adhering junctions that represent cell surface attachment sites for intermediate filament. The desmosome is subdivided into two regions. The plaque region lies adjacent to the plasma, and is believed to contain molecules that attach the intermediate filament cytoskeleton to the desmosome. The core region is composed of transmembrane glycoproteins that



are thought to mediate cell-cell adhesion. Desmogleins and desmocollins are the main desmosomal transmembrane proteins. These desmosomal glycoproteins belong to the members of the cadherin family of adhesion molecules. Three different isoforms of both desmogleins and desmocollins have been identified, named as desmoglein 1-3 and desmocollins. Desmosomal cadherins showed differentiation-specific expression in the human epidermis, although the functional significance of this differential expression is not fully understood. Desmocollin-1 can be found in the upper layers. The expression of desmocollin-2 varies in the basal and suprabasal layers. And desmocollin-3 is expressed more evenly throughout the suprabasal layers.