10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Desmoglein 2 Monoclonal Antibody
Catalog # ABO14712

Specification

Anti-Desmoglein 2 Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	Q14126
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-Desmoglein 2 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Desmoglein 2 Monoclonal Antibody - Additional Information

Gene ID 1829

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

Application Details
WB 1:1000-1:5000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:100

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human Desmoglein 2 Component of intercellular desmosome junctions. Involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion.

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti-Desmoglein 2 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:17559062, 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). Promotes cardiomyocyte cell homeostasis and desmosome junction formation at intercalated disks, as a result plays a role in the maintenance of cardiac conduction and heart chamber integrity (By similarity). Positively regulates pancreatic islet development and maintenance of endothelial cell barrier integrity in the pancreas, therefore involved in the controlled release of insulin from islet cells into the circulation in response to glucose (By similarity). 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). Acts as a positive modulator of CSK and EGFR activation via sequestering them away from lipid rafts, this is independent of its role in desmosome cell junctions (PubMed:26918609). Also disrupts the localization of CAV1 to lipid rafts resulting in its distribution throughout the cytoplasm (PubMed:26918609).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell junction, desmosome. Cytoplasm. Note=Localized to intercalated disks in the heart (PubMed:31845994). Localizes to the cytoplasm following cleavage by CASP3 in response to apoptosis (PubMed:17559062) Glycosylation promotes localization to the plasma membrane (PubMed:30885746).

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 pancreatic alpha-cells, beta-cells and exocrine tissue (at protein level) (PubMed:36309486). Expressed in cardiomyocytes (at protein level) (PubMed:31845994, PubMed:38375917). Expressed in kidney tubular epithelial cells (PubMed:38395410).

Anti-Desmoglein 2 Monoclonal Antibody - Protocols

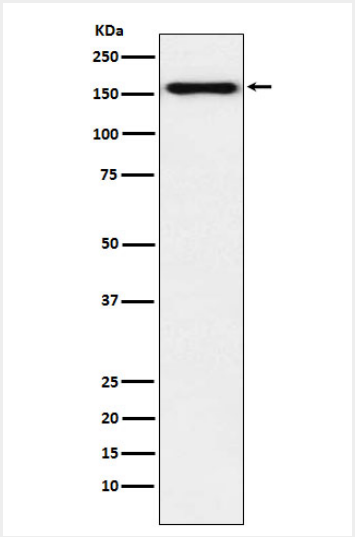
Provided below are standard protocols that you may find useful for product applications.

- Western Blot

10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Anti-Desmoglein 2 Monoclonal Antibody - Images



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