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BM5106 Monoclonal Antibody to Desmoglein-2 - Supernatant

Alternate names: CDHF5, Cadherin family member 5, DSG2, HDGC

Quantity: 5 ml

Background: Desmosomes are cell-cell junctions between epithelial, myocardial, and certain other cell types. Desmoglein 2 is a calcium-binding transmembrane glycoprotein component of desmosomes in vertebrate epithelial cells. Currently, three desmoglein subfamily members have been identified and all are members of the cadherin cell adhesion molecule superfamily. These desmoglein gene family members are located in a cluster on chromosome 18. This second family member is expressed in colon, colon carcinoma, and other simple and stratified epithelial-derived cell lines.

Uniprot ID: Q14126

NCBI: NP_001934.2

GeneID: 1829

Host / Isotype: Mouse / IgG1

Clone: G129

Immunogen: Recombinant peptide (220 aa of 2nd and 3rd extracellular repeat domain).

Format:
State: Liquid Cell Culture Supernatant
Preservatives: 0.09% Sodium Azide

Applications:
ELISA.
Western Blot.
Immunohistochemistry on Frozen Sections: Ready-to-use (1 h at RT).
Preincubation with 0.05-0.2% Triton X-100, for 5-10 min, depending on tissue type, is recommended.
Immunohistochemistry on Paraffin Sections: Ready-to-use (overnight at 2-8°C).
Enhanced when using the microwave method.
Recommended as Positive Control: CaCo-2, HaCaT.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes Desmoglein 2 present in all epithelia and in tumors derived therefrom as well as in heart muscle and dendritic reticulum cells of lymphatic follicles. In basal epithelial cells Desmoglein 2 expression is generally very low.
Reactivities on Cultured Cell Lines: Many, including CaCo-2, HaCaT, MCF-7.
Negative Species: Mouse, Rat.

Species Reactivity: **Tested:** Human.

Add. Information: **Desmoglein 2** (1069 aa; calculated mol. wt. 116,760)

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Product Citations:

Purchased from Acris:

1. Lorén V, Cabré E, Ojanguren I, Domènech E, Pedrosa E, García-Jaraquemada A, et al. Interleukin-10 Enhances the Intestinal Epithelial Barrier in the Presence of Corticosteroids through p38 MAPK Activity in Caco-2 Monolayers: A Possible Mechanism for Steroid Responsiveness in Ulcerative Colitis. PLoS One. 2015 Jun 19;10(6):e0130921. doi: 10.1371/journal.pone.0130921. eCollection 2015. PubMed PMID: 26090671.

General Readings:

1. Schäfer S, Koch PJ, Franke WW. Identification of the ubiquitous human desmoglein, Dsg2, and the expression catalogue of the desmoglein subfamily of desmosomal cadherins. Exp Cell Res. 1994 Apr;211(2):391-9. PubMed PMID: 8143788.
2. Franke WW, Nuber UA, Schmidt A, Schäfer S. Desmosomes--dual junctional principles of intra- and supracellular order in epithelial differentiation and tissue formation. Verh Dtsch Ges Pathol. 1994;78:8-14. PubMed PMID: 7534023.
3. Schäfer S, Stumpp S, Franke WW. Immunological identification and characterization of the desmosomal cadherin Dsg2 in coupled and uncoupled epithelial cells and in human tissues. Differentiation. 1996 May;60(2):99-108. PubMed PMID: 8641550.
4. Demlehner MP, Schäfer S, Grund C, Franke WW. Continual assembly of half-desmosomal structures in the absence of cell contacts and their frustrated endocytosis: a coordinated Sisyphus cycle. J Cell Biol. 1995 Nov;131(3):745-60. PubMed PMID: 7593194.