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Anti-Desmoglein 1 Antibody

Catalog # AP61028

Product Information

Application	WB, IHC
Primary Accession	Q02413
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	113748

Additional Information

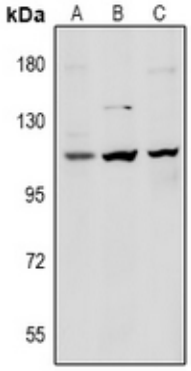
Gene ID	1828
Other Names	CDHF4; Desmoglein-1; Cadherin family member 4; Desmosomal glycoprotein 1; DG1; DGI; Pemphigus foliaceus antigen
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Desmoglein 1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

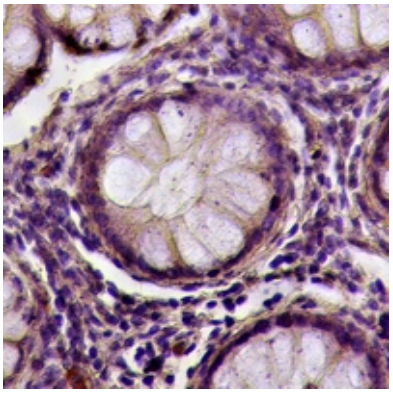
Name	DSG1
Synonyms	CDHF4
Function	A component of desmosome cell-cell junctions which are required for positive regulation of cellular adhesion (PubMed:19717567). Promotes differentiation of keratinocytes via interaction with ERBIN. Reduces activation of RAS/ERK signaling pathways in keratinocytes via promoting ERBIN localization to the cell membrane and its interaction with SHOC2, this competitively reduces the formation of RAS-SHOC2 ERK-activating complexes (PubMed:23524970). Mediates the interaction between the desmosome and COP9 signalosome complex (CSN) protein complex (PubMed:28891468). As a result of this interaction, promotes keratinocyte differentiation via deneddylation of EGFR resulting in a reduction in EGFR protein stabilization and translocation away from the cell membrane (PubMed:28891468). Critical for epidermal integrity and barrier function of the skin (By similarity). May mediate the inflammatory response in the epidermis (By similarity). Required

	for esophageal epithelial barrier integrity and correct intercellular spacing in differentiated esophageal epithelium (PubMed:24220297). Required for recovery of epidermal architecture and correct expression of differentiation markers following UVB exposure (PubMed:24594668). May also be required for OCLN involvement in tight junctions (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q7TSF1}. Cell junction, desmosome. Cytoplasm. Nucleus
Tissue Location	Expressed in all suprabasal layers of the epidermis, with the highest expression seen in the granular layer (at protein level) (PubMed:34905516). Expressed in the suprabasal esophageal epithelium (at protein level) (PubMed:24220297)

Images



Western blot analysis of Desmoglein 1 expression in Beas2B (A), H9C2 (B), MEF (C) whole cell lysates. (Predicted band size: 113 kD; Observed band size: 114 kD)



Immunohistochemical analysis of Desmoglein 1 staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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