



# Anti-DSG3 Reference Antibody (Forerunner patent anti-DSG3)

Recombinant Antibody Catalog # APR10885

### **Product Information**

**Application** FC, Kinetics, Animal Model

Primary Accession
Reactivity
Human
Clonality
Monoclonal
Isotype
IgG1
Calculated MW
107533

#### **Additional Information**

Target/Specificity DSG3

**Endotoxin** 

**Conjugation** Unconjugated

**Expression system** CHO Cell

Format Purified monoclonal antibody supplied in PBS, pH6.0, without

preservative. This antibody is purified through a protein A column.

#### **Protein Information**

Name DSG3 ( HGNC:3050)

Synonyms CDHF6

**Function** A component of desmosome cell-cell junctions which are required for

positive regulation of cellular adhesion (PubMed:31835537). Required for adherens and desmosome junction assembly in response to mechanical force in keratinocytes (PubMed:31835537). Required for desmosome-mediated cell-cell adhesion of cells surrounding the telogen hair club and the basal layer of the outer root sheath epithelium, consequently is essential for the anchoring of telogen hairs in the hair follicle (PubMed:9701552). Required for the maintenance of the epithelial barrier via promoting desmosome-mediated intercellular attachment of suprabasal epithelium to basal cells (By similarity). May play a role in the protein stability of the desmosome plaque components DSP, JUP, PKP1, PKP2 and PKP3 (PubMed:22294297). Required for YAP1 localization at the plasma membrane in keratinocytes in response to mechanical strain, via the formation of an interaction complex composed of DSG3, PKP1 and YWHAG (PubMed:31835537). May also be involved in the positive regulation of YAP1 target gene transcription and as a result cell

proliferation (PubMed:<u>31835537</u>). Positively regulates cellular contractility and cell junction formation via organization of cortical F-actin bundles and anchoring of actin to tight junctions, in conjunction with RAC1 (PubMed:<u>22796473</u>). The cytoplasmic pool of DSG3 is required for the localization of CDH1 and CTNNB1 at developing adherens junctions, potentially via modulation of SRC activity (PubMed:<u>22294297</u>). Inhibits keratinocyte migration via suppression of p38MAPK signaling, may therefore play a role in moderating wound healing (PubMed:<u>26763450</u>).

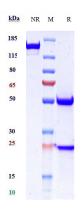
**Cellular Location** 

Cell membrane; Single-pass type I membrane protein. Cell junction, desmosome {ECO:0000250|UniProtKB:O35902}. Cytoplasm. Cell junction, tight junction. Cell junction

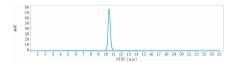
**Tissue Location** 

Expressed throughout the basal and spinous layer of the epidermis with weak expression in the granular layer (at protein level) (PubMed:19717567). Expressed in skin and mucosa (at protein level) (PubMed:22294297, PubMed:30528827). Expressed in the basal layer of the outer root sheath of the telogen hair club, specifically at the cell membrane between the apex of the cells and the surrounding hair club (at protein level) (PubMed:9701552). Expression is less abundant between the lateral margins of the outer root sheath basal cells (at protein level) (PubMed:9701552). Also expressed in the tongue, tonsil and esophagus (PubMed:16740002).

## **Images**



Anti-DSG3 Reference Antibody (Forerunner patent anti-DSG3) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-DSG3 Reference Antibody (Forerunner patent anti-DSG3) is more than 99.63%, determined by SEC-HPLC.

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