

## DSG1 Rabbit mAb

Catalog No: #49862

Package Size: #49862-1 50ul #49862-2 100ul

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## Description

Product Name	DSG1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JM54-19
Purification	ProA affinity purified
Applications	WB, ICC, IF, IHC-P
Species Reactivity	Human, Mouse, Rat, Zebrafish
Immunogen Description	Synthetic peptide within N-terminal human Aldolase
Other Names	Cadherin family member 4 antibody CDHF4 antibody Desmoglein-1 antibody Desmosomal glycoprotein 1 antibody DG1 antibody DGI antibody DSG antibody DSG1 antibody DSG1_HUMAN antibody EPKHE antibody EPKHIA antibody Pemphigus foliaceus antigen antibody PPKS1 antibody SPPK1 antibody
Accession No.	Swiss-Prot#:Q02413
Calculated MW	Predicted band size 114 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

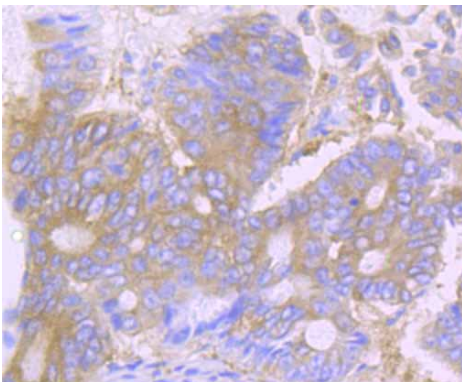
## Application Details

WB: 1:500-1:2,000

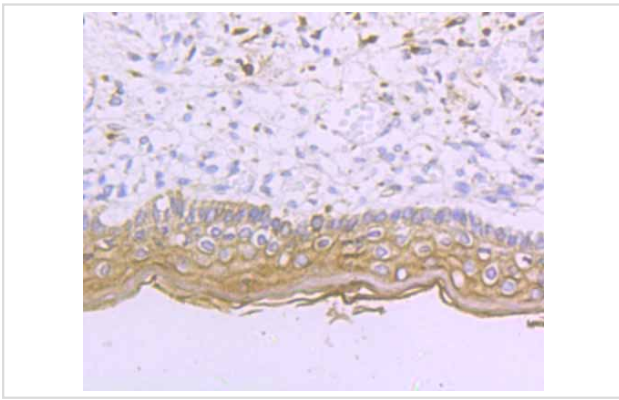
ICC/IF: 1:50-1:200

IHC-P:1:50-1:200

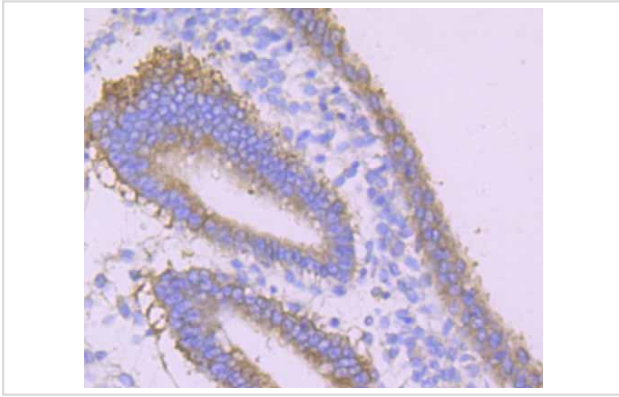
## Images



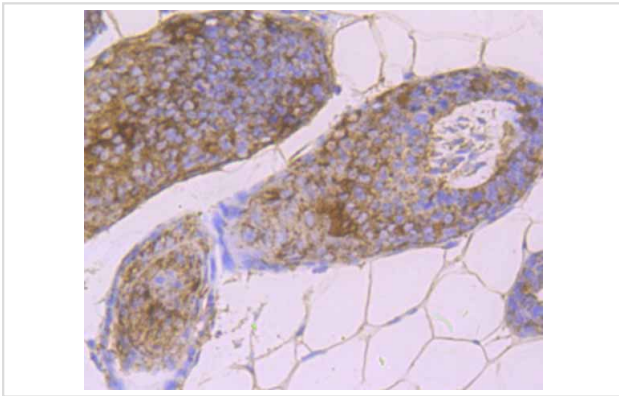
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-DSG1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-DSG1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human uterus tissue using anti-DSG1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse skin tissue using anti-DSG1 antibody. Counter stained with hematoxylin.

## Background

Desmogleins (dsgs) are type I membrane proteins that are important for cell adhesion and are expressed in great abundance at the desmosomes, which are adhesive cell junctions. The dsg proteins belong to the cadherin family and consist of dsg1, dsg2 and dsg3. Calcium binds to the putative calcium binding sites at the extracellular N-terminal domain of dsg1, which has cadherin-like repeats. Unlike normal human keratinocytes, the squamous cell carcinoma cells exhibit diminished or unusual expression of dsg3 and dsg1, which bear pemphigus vulgaris and pemphigus foliaceus antigens, respectively. Cultured normal human keratinocytes express dsg1 and dsg3 mRNA, with or without dsg 2 mRNA, which indicates that desmoglein isoforms exhibit abnormal expression and may be related to tumor cell kinetics, such as cell invasion and metastasis. Pemphigus is an autoimmune disease of skin adhesion associated with auto-antibodies against a number of keratinocyte antigens, such as the adhesion molecules dsg 1 and 3 and acetylcholine receptors.

## References

1. Rickman L et al. N-terminal deletion in a desmosomal cadherin causes the autosomal dominant skin disease striate palmoplantar keratoderma. *Hum Mol Genet* 8:971-976 (1999).
2. Samuelov L et al. Desmoglein 1 deficiency results in severe dermatitis, multiple allergies and metabolic wasting. *Nat Genet* 45:1244-1248 (2013).

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.