

**Rabbit Anti-Desmoglein-3 [EP306]: RM0366RTU7**

**Intended Use:** For Research Use Only

**Description:** Desmoglein-3 (DSG3) is a calcium binding membrane protein that is localized desmosome cellular junctions and interacts with plaque proteins and intermediate filaments at cell-cell adhesion points. Desmosomes are cell-cell junctions between epithelial, myocardial and other cells types. In human keratinocytes, Desmoglein-3 (DSG3) is raft associated and disruption of rafts prevents desmosome assembly. DSG3 is one of four sister proteins in the desmoglein family. DSG3 is also the autoantigen for pemphigus vulgaris (PV) a lethal skin disease that is a result of autoantibodies against DSG3. DSG3 is over-expressed in lung squamous cell carcinomas (SQCC) but had very limited expression in both adenocarcinomas and non-neoplastic lungs. Using immunohistochemistry, the sensitivity and specificity of DSG3 for lung cancers were 98% and 99%, respectively, which is similar to that of p40. Therefore, DSG3 can be a useful ancillary marker to separate SQCC from other subtypes of lung cancer.

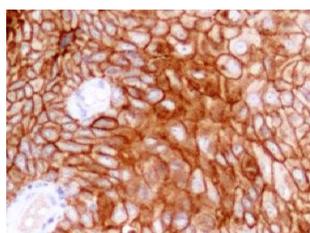
**Specifications**

Clone: EP306  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Localization: Membrane  
 Formulation: Antibody in PBS pH7.5, containing 0.2% BSA and <0.1% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
Desmoglein-3 Prediluted	RM0366RTU7	7 ml

**IHC Procedure**

Positive Control: Squamous cell carcinoma  
 Concentrated Dilution: Prediluted  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human SqCC stained with anti-Desmoglein-3 using DAB

**References:**

1. Simultaneous immunolocalization of desmoglein 3 and IgG4 in oral pemphigus vulgaris: IgG4 predominant autoantibodies in its pathogenesis. Abé T, et al. J Oral Pathol Med. Nov;44(10):850-6, 2015.
2. Desmoglein-3 and Napsin A double stain, a useful immunohistochemical marker for differentiation of lung squamous cell carcinoma and adenocarcinoma from other subtypes. Agackiran Y, et al. Appl Immunohistochem Mol Morphol. Jul;20(4):350-5, 2012.
3. IgG autoantibodies directed against desmoglein 3 cause dissociation of keratinocytes in canine pemphigus vulgaris and paraneoplastic pemphigus. Nishifuji K, et al. Vet Immunol Immunopathol. Jun 15;117(3-4):209-21, 2007.