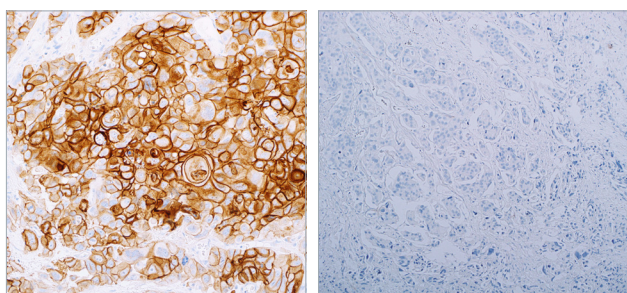
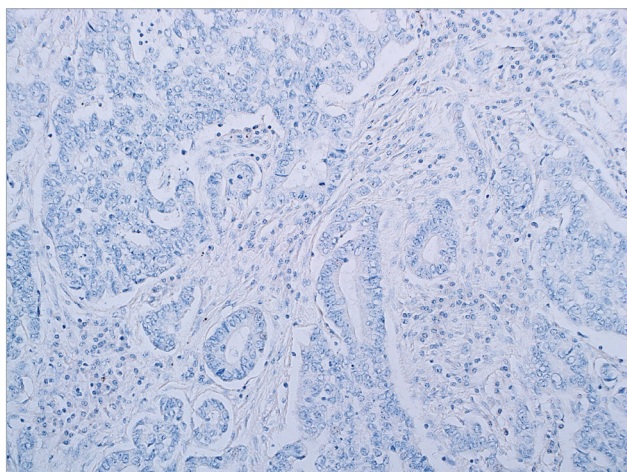
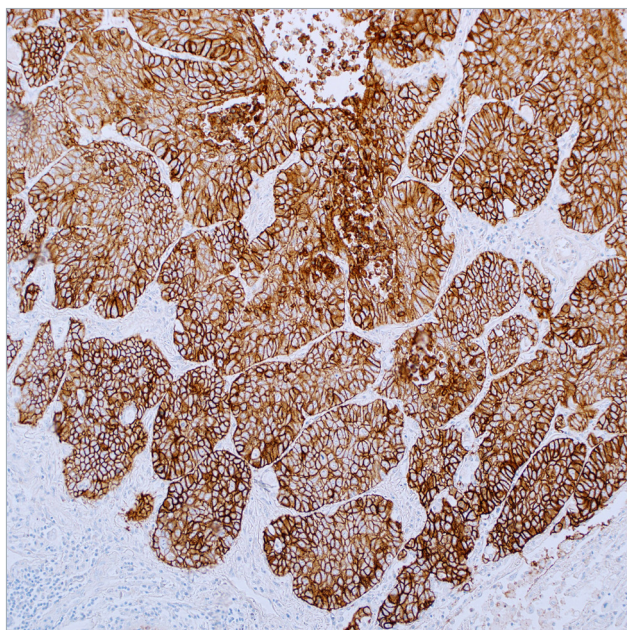


Spotlight on: Desmoglein 3 (EP306)



Top: Squamous cell carcinoma of the lung shows strong, diffuse staining with desmoglein 3.

Center: Lung adenocarcinoma is negative for desmoglein 3.

Bottom-left: Bladder squamous cell carcinoma is strongly positive for desmoglein 3.

Bottom-right: Transitional cell carcinoma is negative for desmoglein 3.

More than 200,000 cases of lung cancer are diagnosed each year in the United States; of those, the majority are non-small cell lung carcinomas.¹ Lung adenocarcinoma is the second most common subtype and squamous cell carcinoma is the least common subtype, accounting for 25-30% of all cases. Squamous cell carcinoma of the lung is most commonly associated with cigarette smoking, and most tumors are found in the central section of the lungs near the bronchus.²

Distinguishing subtypes of lung cancer (i.e. lung adenocarcinoma versus lung squamous carcinoma) is very important for patient care. Commonly, an immunohistochemical panel including TTF-1, napsin A, cytokeratin 5/6, and p63 or p40, may be involved to make this distinction. However, each antibody has its limitations of either specificity or sensitivity for its respective subtype of lung cancer.³ Desmoglein 3 is a novel marker for the identification of squamous cell carcinoma of the lung. Desmoglein 3 is expressed in pulmonary squamous cell carcinomas but has limited-to-no expression in both adenocarcinomas and non-neoplastic lungs.⁴ Because of desmoglein 3's high sensitivity and specificity for lung squamous cell carcinomas versus lung adenocarcinomas,⁵ it has been recommended as a valuable addition to any differential lung panel.

Benefits of Desmoglein 3 from Cell Marque™:

- *In vitro* diagnostic
- Compatible with automated platforms
- High sensitivity and specificity for pulmonary squamous cell carcinoma⁴
- Useful with napsin A, as a double stain for lung carcinoma subtyping⁵

Ordering Information:

Volume	Part No.	Volume	Part No.
0.1 ml, concentrate.....	436R-14	1 ml, prediluted	436R-17
0.5 ml, concentrate.....	436R-15	7 ml, prediluted	436R-18
1 ml, concentrate	436R-16	Positive control slides	436S

References:

1. <http://www.cancer.org/>
2. <https://www.lungevity.org/about-lung-cancer/lung-cancer-101/types-of-lung-cancer/squamous-cell-lung-cancer>
3. Rekhtman N, et al. Mod Pathol. 2011 Oct;24(10):1348-59
4. Savci-Heijink CD, et al. Am J Pathol. 2009 May;174(5):1629-37
5. Agackiran Y, et al. Appl Immunohistochem Mol Morphol. 2012 Jul;20(4):350-5.

Using RabMAb® technology from Abcam, Desmoglein 3 has the sensitivity of a rabbit antibody with the specificity and cleanliness of a monoclonal antibody for a strong signal to noise ratio.