

## Technology Offer

### New highly specific and sensitive marker for adenocarcinomas of the lung: ZP-2 monoclonal antibody

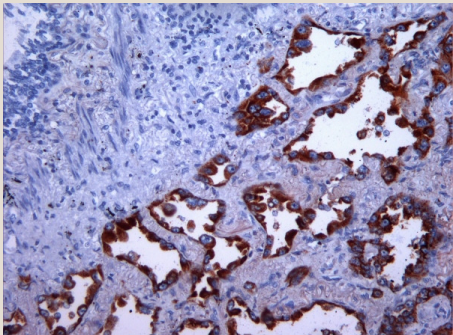
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### Challenge

Lung Cancer is one of the leading causes of death worldwide with a still rising incidence and differentiation between Small Cell Lung Cancer (SCLC) and Non Small Cell Lung Cancer (NSCLC) is of large therapeutic relevance. Novel chemo-therapeutic approaches have recently been developed for NSCLC, which is known as a largely chemo-resistant tumor group. Clinical studies revealed substantial differences as to the adequate therapeutic regimens of the three main types of NSCLC (adenocarcinomas versus squamous cell carcinomas and large cell carcinomas), but existing markers for required sub-differentiation (TTF-1, SP-A, proSP-B, Napsin) either lack sensitivity or specificity. Therefore, novel markers for a reliable sub-differentiation of NSCLC are needed.



Monoclonal antibody ZP-2 is a specific marker for adenocarcinomas of the lung.

### Technology

The new ZP-2 monoclonal antibody was raised against human alveolar epithelial cells type II, and is a highly specific marker for adenocarcinomas of the lung. In addition, it specifically detects alveolar epithelial cells type II and alveolar macrophages. The antibody can be used for the analyses of native, formalin fixed or HOPE™-fixed tissue.

### Commercial Opportunity

The technology is offered for in-licensing for the development of a diagnostic kit.

### Developmental Status

In a large scale study comprising 280 specimens, the sensitivity and specificity of the ZP-2 antibody was analysed and compared with established markers (TTF-1, SP-A, proSP-B). ZP-2 displays 100% specificity for adenocarcinomas of the lung (TTF-1: 88%). In addition, ZP-2 has a much higher sensitivity (74%) as compared to the established highly specific markers (SP-A: 55%, proSP-B: 52%). The comparative study for the marker Napsin is currently ongoing. The ZP-2 antibody has successfully been used as an additional marker for adenocarcinomas in routine analysis of clinical specimens for the last two years.

### Further Reading

H. Schultz et al. Generation and evaluation of a monoclonal antibody designated ZP-2 as a new specific marker for adenocarcinomas of the lung. In preparation.

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