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Title: MAdL: A new diagnostic marker for adenocarcinomas

Dr. Holger 28831 Schultz hschultz@fz-borstel.de MD ¹, Mr. Sebastian 28832 Marwitz smarwitz@fz-borstel.de ¹, Ms. Bettina 28833 Baron-Luehr bbaron@fz-borstel.de ², Prof. Gernot 28834 Zissel gernot.zissel@uniklinik-freiburg.de ³, Dr. Christian 28835 Kugler c.kugler@kh-grosshansdorf.de MD ⁴, Prof. Dr Klaus 28842 Rabe k.f.rabe@kh-grosshansdorf.de MD ⁴, Prof. Dr Peter 28844 Zabel pzabel@fz-borstel.de MD ⁵, Prof. Dr Ekkehard 28846 Vollmer evollmer@fz-borstel.de MD ¹, Prof. Dr Johannes 28847 Gerdes jgerdes@fz-borstel.de ² and Dr. Torsten 28855 Goldmann tgoldmann@fz-borstel.de ¹. ¹ Clin.& Exp. Pathology, Research Center, Borstel, Germany, Borstel ; ² Tumorbiology, Research Center, Borstel, Germany and ³ Pneumology, University of Freiburg, Germany .

Body: With regard to the growing number of targeted therapies in lung cancer, a specific and reliable sub-differentiation is of crucial importance. Without discriminating adenocarcinomas from squamous cell carcinomas, molecular based diagnostics that e.g. target certain mutations in the EGFR gene are not applicable and hence, the patients cannot profit from the new therapies. To generate an antibody that, reliably detects adenocarcinomas of the lung in addition to the established markers, we immunized mice with primary human alveolar cells type II. Hybridomas were produced to obtain cell culture supernatants that were screened on tissue micro arrays. Among others, we identified one clone that strongly binds human adenocarcinomas of the lung. Since most of patient material are Formalin-fixed and paraffin-embedded, we established an antigen retrieval protocol that works on FFPE tissues. Here we present a monoclonal antibody, designated MAdL as a new specific marker for adenocarcinomas of the lung.