

Fig. S1. Syndecan-1 does not affect FA assembly in migrating lung epithelial cells. Migrating B2b^{shRNA.scr} and B2b^{shRNA.hSdc1} cells stably expressing paxillin-eGFP were observed by time-lapse TIRF microscopy, and the rate of the FA assembly was determined. The FA assembly rate was similar between B2b^{shRNA.scr} cells (9.04±0.45 %max intensity/min) and B2b^{shRNA.hSdc1} cells (9.55±0.39 %max intensity/min).

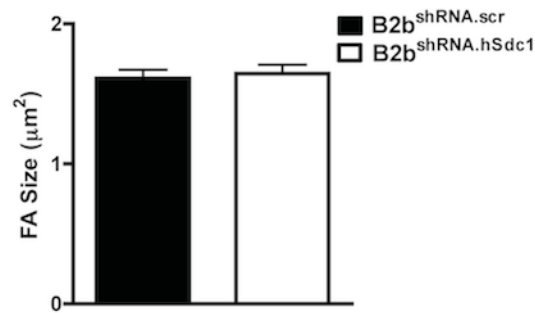


Fig. S2. Syndecan-1 does not affect FA size in migrating lung epithelial cells. Migrating B2b^{shRNA.scr} and B2b^{shRNA.hSdc1} cells stably expressing paxillin-eGFP were observed by time-lapse TIRF microscopy. Leading edge FAs were identified and the size measured at the peak FA intensity (and size). The FA size was similar between B2b^{shRNA.scr} cells (1.61±0.06 μm²) and B2b^{shRNA.hSdc1} cells (1.64±0.07 μm²).

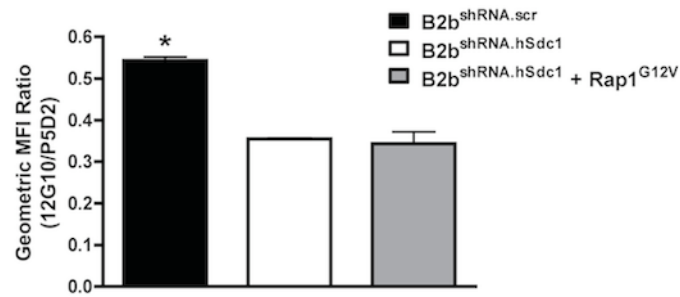


Fig. S3. Rap1 expression does not augment activation of the β_1 integrin subunit in B2b^{shRNA.hSdc1} cells. B2b^{shRNA.scr} and B2b^{shRNA.hSdc1} cells were infected with AAV-eGFP (control) or AAV-Rap1^{G12V}-IRES-eGFP to transduce activated Rap1. Cells were immunostained for the high affinity β_1 integrin subunit (clone 12G10) and all β_1 integrin subunit (clone P5D2). The β_1 subunit antibodies (clones 12G10 and P5D2) were conjugated with Pacific Blue and Alexa-647, respectively (Zenon labeling kit; Invitrogen) prior to immunostaining cells. Flow cytometry was performed on a BD FACS Canto II. After gating for eGFP-positive cells, the geometric mean fluorescent intensity (MFI) was determined for the high affinity and total β_1 integrin subunit (FlowJo), and the ratio of high affinity (12G10) to total (P5D2) β_1 integrin subunit is presented in the bar graph. * $P < 0.0005$ by one-way ANOVA; $n = 3$.

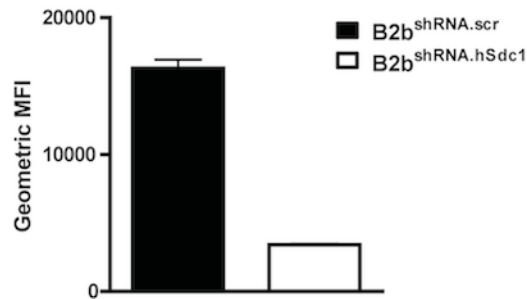


Fig. S4. Syndecan-1 expression levels on control (B2b^{shRNA.scr}) and knockdown (B2b^{shRNA.hSdc1}) cells. Syndecan-1 levels were quantified on B2b^{shRNA.scr} and B2b^{shRNA.hSdc1} cells by flow cytometry using anti-syndecan-1 antibody (clone BA38). The geometric mean fluorescent intensity (MFI) was determined for B2b^{shRNA.scr} cells (16,310±637 MFI) and B2b^{shRNA.hSdc1} cells (3,407±61 MFI).