



**S1 Fig.** Preparation of CRISPR/Cas9 knockout screening using A431. (A) Confirmation of Cas9 transduction using PCR (M, 100 bp DNA ladder; 1, Cas9-expressing A431; 2, distilled water). (B) Cas9 expression relative to actin in Cas9-expressing A431 (A431-Cas9) cell lines on the western blot (n=4). Data are presented as the mean±SEM from one-way ANOVA followed by Tukey's multiple comparisons tests, \*p < 0.05. (C) The graph showing multiplicity of infection calculated as the number of cells in the antibiotic-selection condition divided by that in the no-antibiotic-selection condition (n=3). Data are presented as the mean±SEM. (D) The cell surviving fraction of A431-Cas9 against varying concentrations of EGF treatment (0-1,000 nM) after 4 days (n=3). Data are presented as the mean±SEM from one-way ANOVA followed by Dunnett's multiple comparisons tests, \*\*\*\*p < 0.0001. ANOVA, analysis of variance; Cas9, CRISPR-associated protein 9; CRISPR, clustered regularly interspaced short palindromic repeats; EGF, epidermal growth factor; SEM, standard error of mean.