



Supplementary Figure S8 Cell growth is promoted in the extended region of tubular structures through nuclear localization of YAP/TAZ. (A) Schematic diagram of two-color cell cycle mapping using the Fucci constructs. Cells transfected with the Fucci construct showed *cdt1* expression (red), a ubiquitin E3 ligase, in G1 phase, and *geminin* expression (green), another ubiquitin E3 ligase, in S/G2/M phase. (B) IEC6 cells were cultured with or without Wnt3a, EGF, or Wnt3a/EGF for 60 h in 3D culture and incubated with EdU for 20 min before fixation. The cells were stained with *propidium* iodide. White dashed lines indicate the outline of basal membranes of IEC6 tubes and white arrowheads indicate EdU-incorporated cells. (C) IEC6 cells were grown for 4 h in 2D culture or for 4 h or 68 h in 3D Matrigel culture and stained with phalloidin. Cell adhesive areas were measured (n=30). Yellow dashed lines indicate the outline of basolateral and apical membranes of IEC6 cysts. (D) IEC6 cells were treated with Wnt3a or EGF for 60 h in 3D culture and stained with anti-YAP/TAZ antibody, DRAQ5, and phalloidin. (E) IEC6 cells stably expressing *Arl4c-GFP* were cultured with EGF for 60 h in 3D culture and stained with anti-YAP/TAZ, anti-GFP antibodies and DRAQ5. White boxes show enlarged images. (F, G) IEC6 cells were treated with Y27632 (2 μ M) (F) or blebbistatin (2 μ M)/EGF (G) for 60 h in 3D culture and stained with anti-YAP/TAZ antibody, DRAQ5, and phalloidin. (H) IEC6 cells were transfected with YAP and/or TAZ siRNAs and lysates were probed with anti-YAP/TAZ and anti-Clathrin antibodies. (I) IEC6 cells expressing FLAG-YAP^{5SA} (IEC6/FLAG-YAP^{5SA}) grown for 3 h in 3D culture were stained with anti-FLAG and anti-YAP/TAZ antibodies and DRAQ5. White arrowheads indicate FLAG-YAP^{5SA}-expressing cells. Scale bars in (B), 20 μ m (left three panels) and 50 μ m (right panel); in (C and D), 20 μ m; in (E and G), 50 μ m; in (F and I), 10 μ m.