

Supplementary Material

Movie 1(ESM_1.mp4): There is no notable tissue deformation even after equilibration for 0.5 cell cycle from the initial condition.

Movie 2(ESM_2.mp4): Epithelial folding simulated under the condition of restraint of out-of-plane deformation ($k^r = 1 \times 10^{-3}$). Division axis is the longest axis of each cell.

Movie 3(ESM_3.mp4): Epithelial folding simulated under the condition of no restraint of out-of-plane deformation ($k^r = 0$). Division axis is the longest axis of each cell.

Movie 4(ESM_4.mp4): Epithelial folding simulated under the condition of restraint of out-of-plane deformation ($k^r = 1 \times 10^{-3}$). Division axis is the x-axis.

Movie 5(ESM_5.mp4): Epithelial folding simulated under the condition of restraint of out-of-plane deformation ($k^r = 1 \times 10^{-3}$). Division axis is the radial axis.