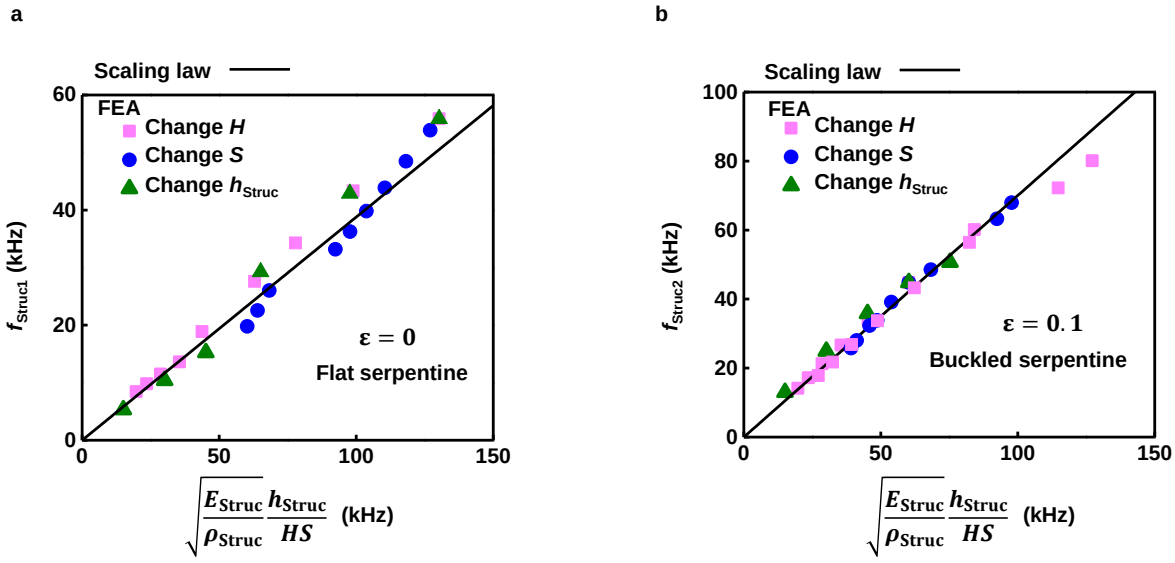

Figure S1. FEA validation of the scaling law for the resonant frequency of Structure 1 (a) and Structure 2 (b) without cells. The baseline values are E_{Struc}=4GPa, ρ_{Struc}=1000kg/m^3, H=100μm, S=1330μm, h_{Struc}=4μm and b_{Struc}=20μm.

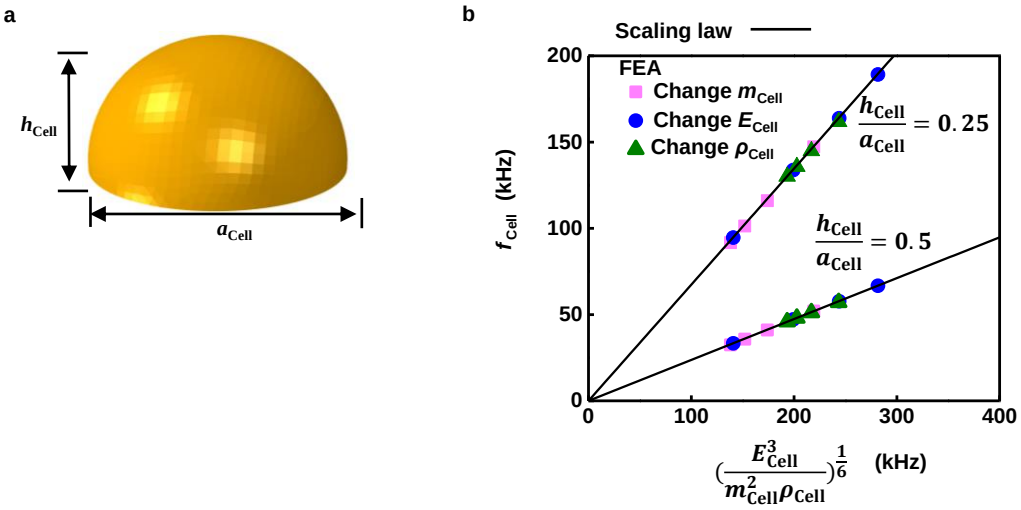

Figure S2. FEA validation of the scaling law for the resonant frequency of the cell on a rigid base. The baseline values are m_{Cell} =4ng, E_{Cell}=10kPa and ρ_{Cell}=1000kg/m^3.

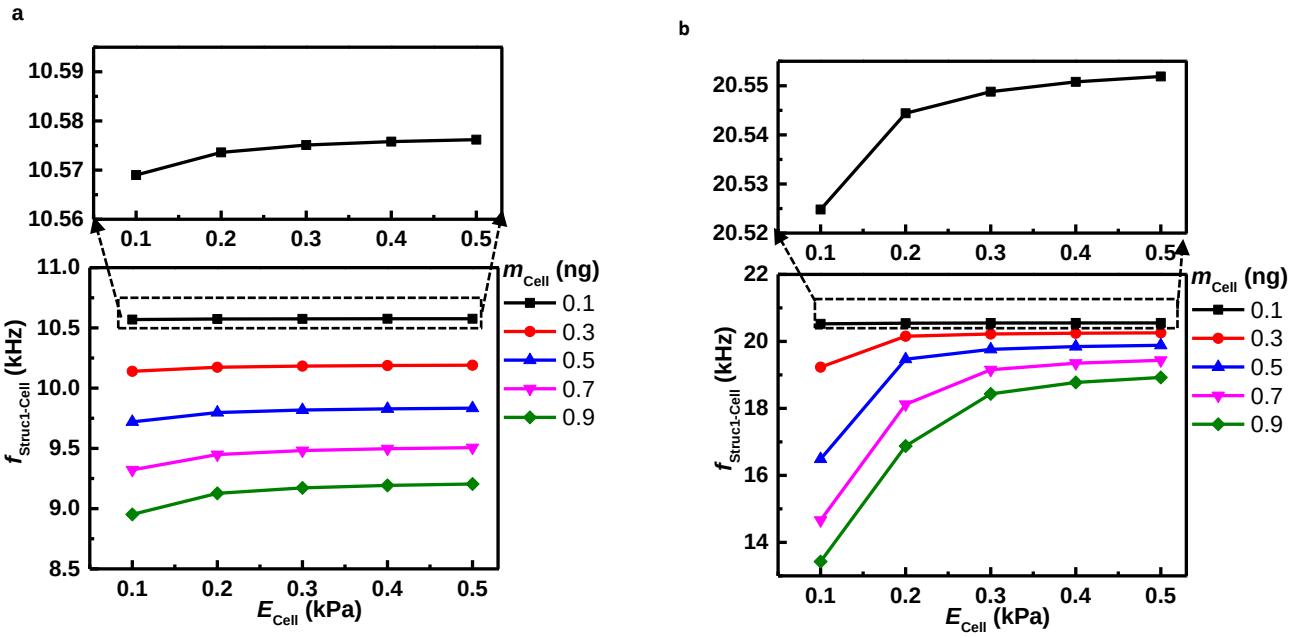

Figure S3. Vibration of the structure with cells of small mass and modulus (0.1ng<m_{Cell} <1ng and 0.1kPa<E_{Cell} <0.5kPa). Relationship of the resonant frequency vs. organoids mass and modulus, for Structure 1 (a) and Structure 2 (b). The cell shape is h_{Cell}/a_{Cell} =0.5.

Figure S3