

(Supplemental information)

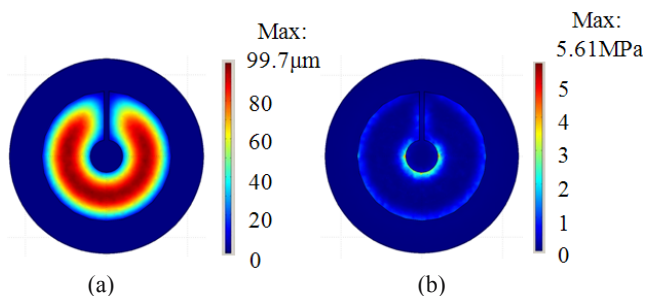


Fig. S1 Numerical simulation of the cell trapping barrier formed at the membrane pressure of 50kPa, resulting in (a) the membrane deflection (horseshoe height) of 99.7 μm; (b) the maximum stress of 5.61 MPa at the inner membrane edge.

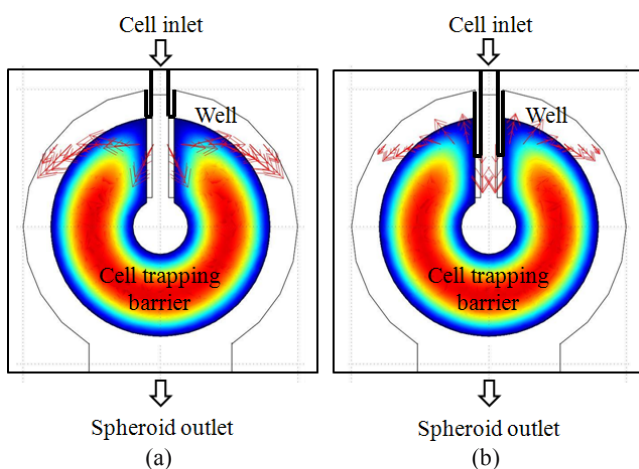


Fig. S2 Numerical simulation of the inlet flow velocity vector depending on the length of the 60 μm-wide, 100 μm-high inlet guides, when the cell inlet pressure of 100 Pa is applied in the presence of 100 μm-high cell trapping barrier: (a) 100 μm-long inlet guide; (b) 250 μm-long inlet guide.