Spatially controlled diffusion range of tumor-associated angiogenic factors to develop a tumor model using a microfluidic resistive circuit

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Supplementary information
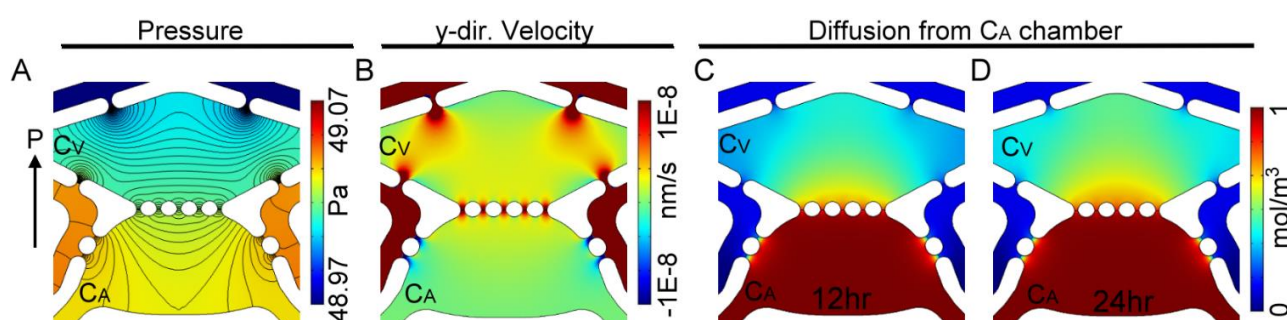
Figure S1. Simulation results of the DC-MPS device with a reversed pressure application: pressure distribution (A), diffusion patterns of dextran diffused from microchannels (B), diffusion patterns of dextran diffused from the C_A chamber at 12-hr (C) and 24-hr (D).
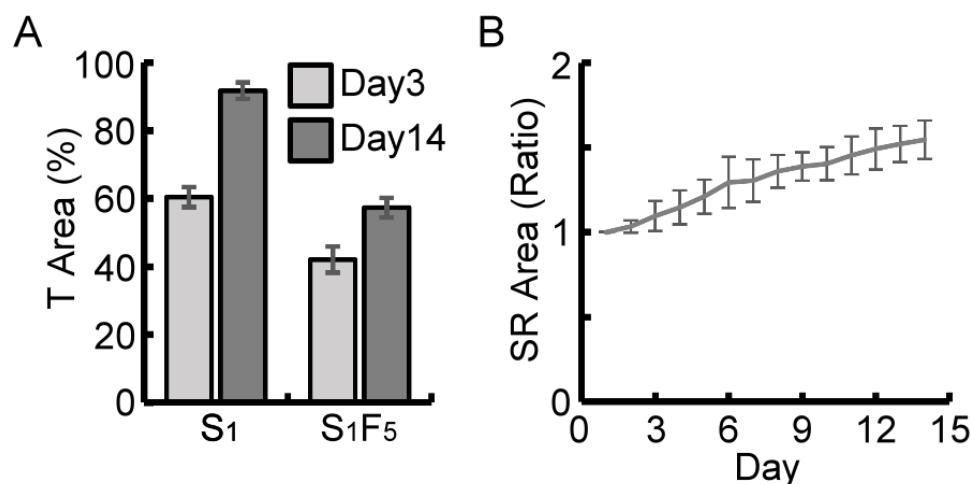
Figure S2. Statistical analysis on the growth of the SW480 tumor developed from cell suspensions of S_1 (h_7h_{14}) and S_1F_5 (h_7h_{14}) conditions (A) and from a tumor spheroid (SR) (B).
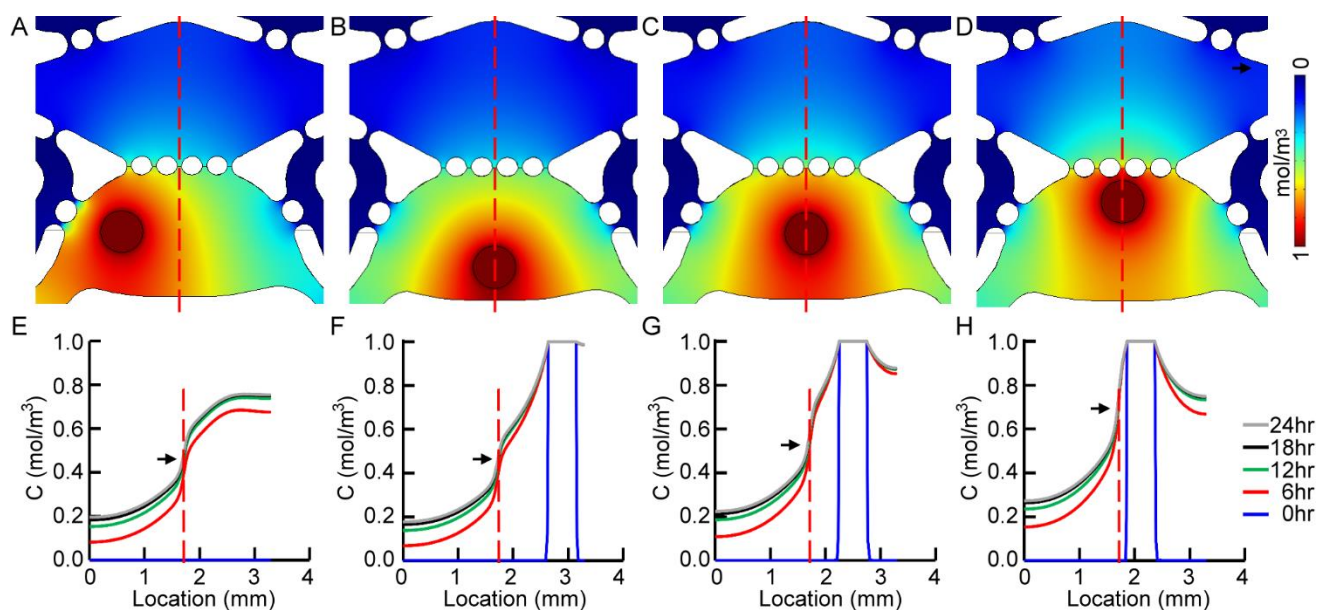
Figure S3. Simulated concentration profiles of molecules released from a tumor spheroid toward the C_V chamber 24 hours after loading, where the tumor spheroid is located in the left (A), bottom (B), middle (C), and top (D) regions of the C_A chamber. The corresponding concentration profiles at 0, 6, 12, 18, and 24 hours along with the red dashed lines are in (E-H). (scale bar = 500 μm).