Electronic Supplementary Information

Dynamic Halbach array magnet integrated microfluidic system for continuous-flow separation of rare tumor cells

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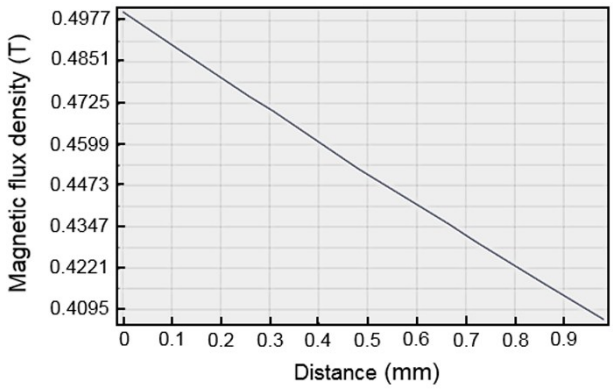

Fig.S1 Plots of magnetic flux densities at the medial and lateral of the microchannel. A large magnetic field gradient is induced by the Halbach array magnet.

Supplementary movie captions:

Movie S1. Particle trajectories of magnetic beads in the microchannel. When the continuously moving magnetic field is applied, the magnetic beads move toward the medial wall of

microchannel under the continuous action of the magnetic force.

Movie S2. Particle trajectories of fluorescent particles in the microchannel. Fluorescent particles maintain their positions near the centre of microchannel and continuously flow under the continuous action of the drag force.