

Electronic Supplementary Information: Video Descriptions

ESI Video 1.avi

Title:

On-Chip Separation and Encapsulation of Magnetic Beads into Droplets

Legend:

Magnetic beads (7.9 μm diameter) are separated from non-magnetic beads (3.34 μm) by permalloy disk array under programmable magnetic field to the far right where they are encapsulated in mineral oil.

Keywords:

magnetic, bead, separation, encapsulation, droplet, microfluidic, programmable, tweezers, disk, array.

ESI Video 2.avi

Title:

On-Chip Separation and Encapsulation of Magnetically Labeled BT-474 Cells into Droplets

Legend:

Magnetically labeled BT-474 cells are separated from unlabeled red blood cells by permalloy disk array under programmable magnetic field to the far right where they are encapsulated in mineral oil.

Keywords:

magnetic, labeled, cancer, cell, separation, encapsulation, droplet, microfluidic, disk, array.