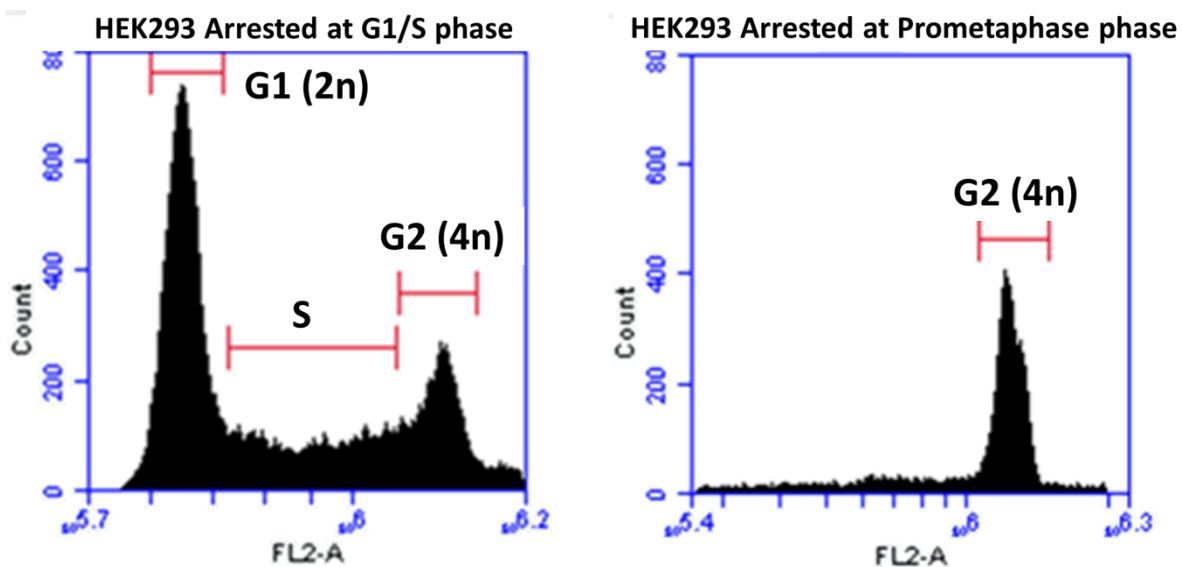


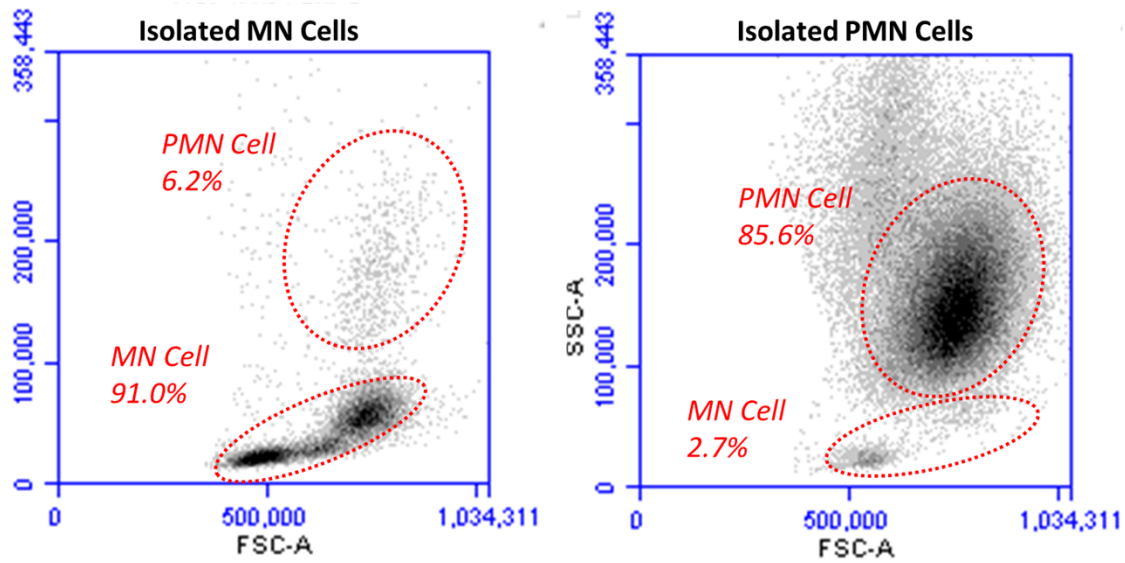
S\_Figure 1 Dektak measurement for the profile of microlens by photoresist reflow process.



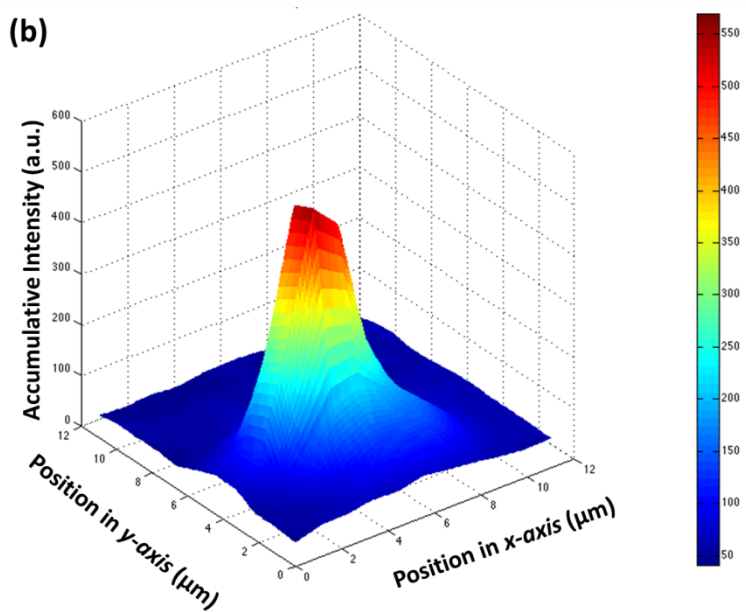
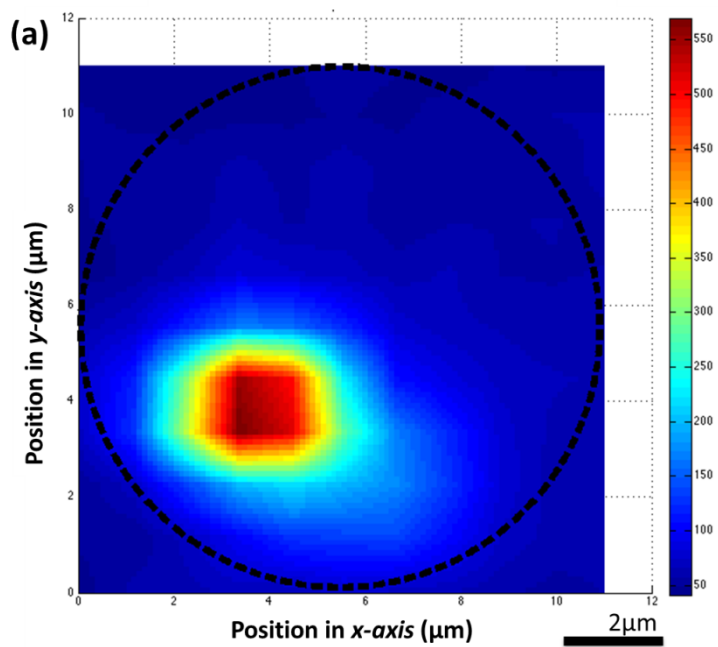
S\_Figure 2 Time-lapse montage of a 15  $\mu\text{m}$  polystyrene bead as the bead travels through the light sheet, producing dark-field scattering images on the CMOS imager over time.

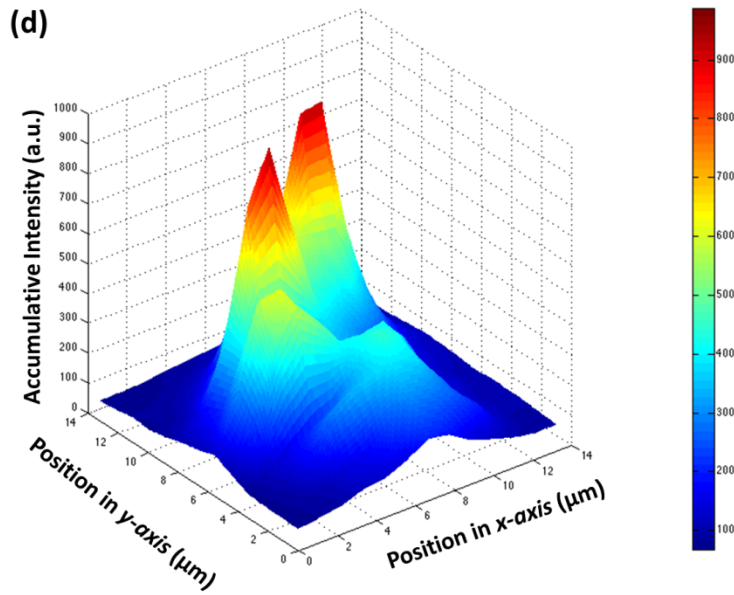
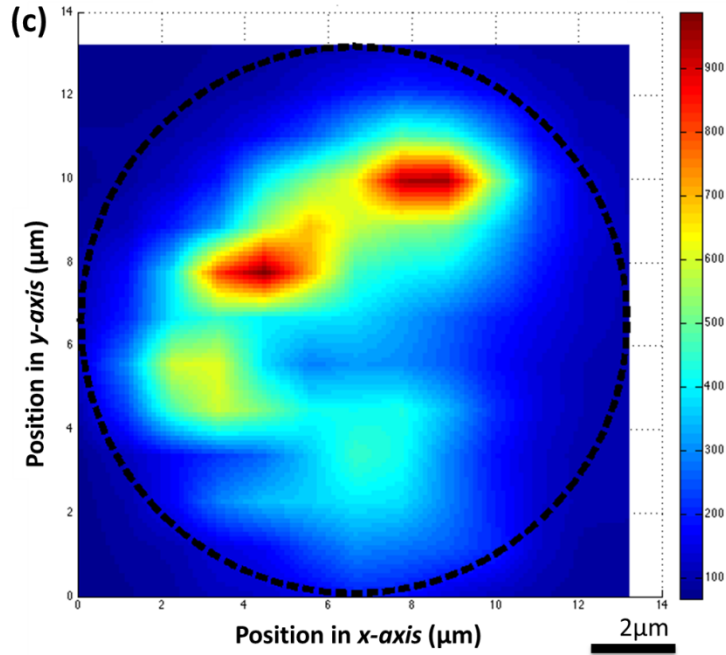


S\_Figure 3 Life cycle disrupted HEK293 cells characterized by a commercial flow cytometer (Accuri C6). The cells were fixed and stained with PI. The histograms are comprised of two main peaks at  $2n$  and  $4n$  levels of cellular DNA contents, which correspond to the cells in the G1/S and Prometaphase phase, respectively.



S\_Figure 4 Scatter plots of isolated mononuclear (MN) cells and polymophonuclear (PMN) cells from human whole blood.





S\_Figure 5 2- and 3-dimensional contour plots of MN ( (a) and (b) ) and PMN cells ((c) and (d)), respectively. The nuclear scattering profile in (c,d) appears to be different from Fig. 4 (e,f) in the text, suggesting that the scattering profile depends on the nuclear orientation relative to the light sheet beam but the total volume under the profile or the volume of the nucleus for neutrophils remains nearly constant.