

SUPPLEMENTARY INFORMATION

Optofluidic device for the quantification of circulating tumor cells in breast cancer

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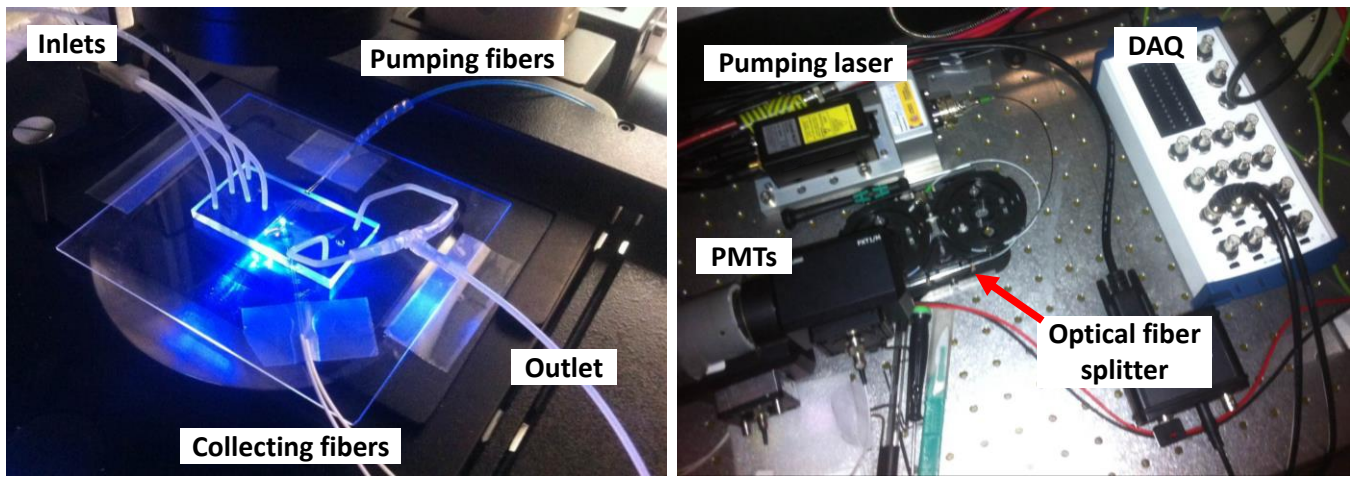


Figure S1. Optical images of the optofluidic device setup and its components.

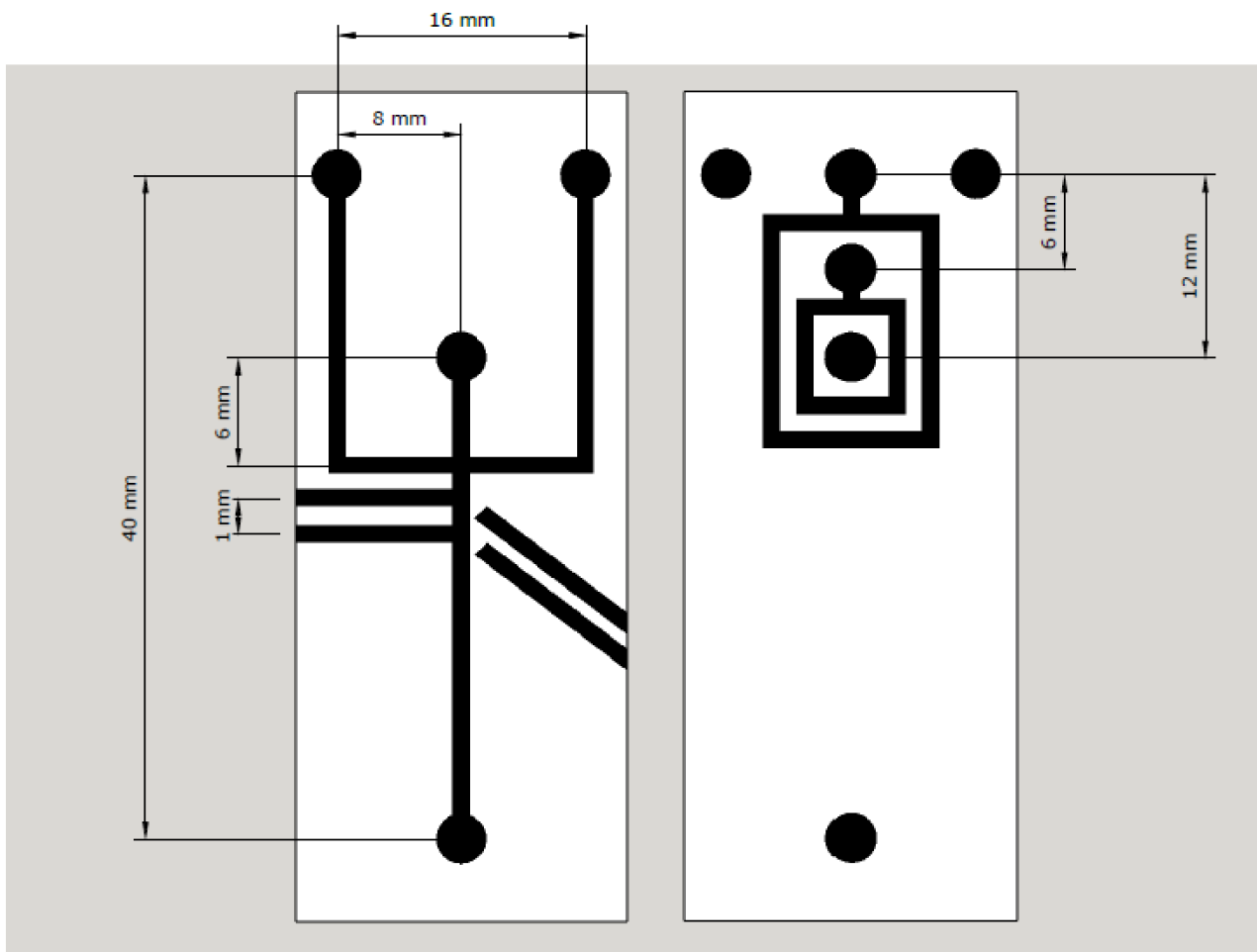


Figure S2. Schematic design of the microfluidic chip.

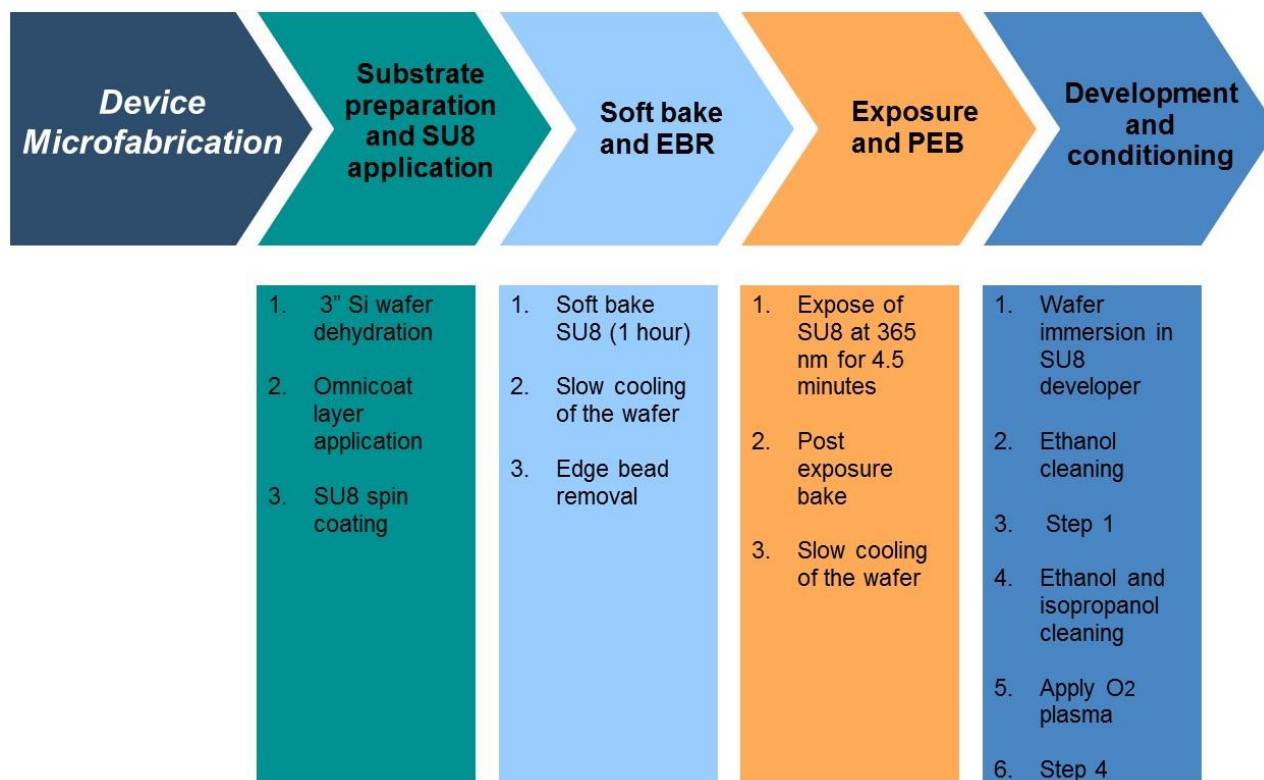


Figure S3. Schematic workflow of the microfluidic chip fabrication.

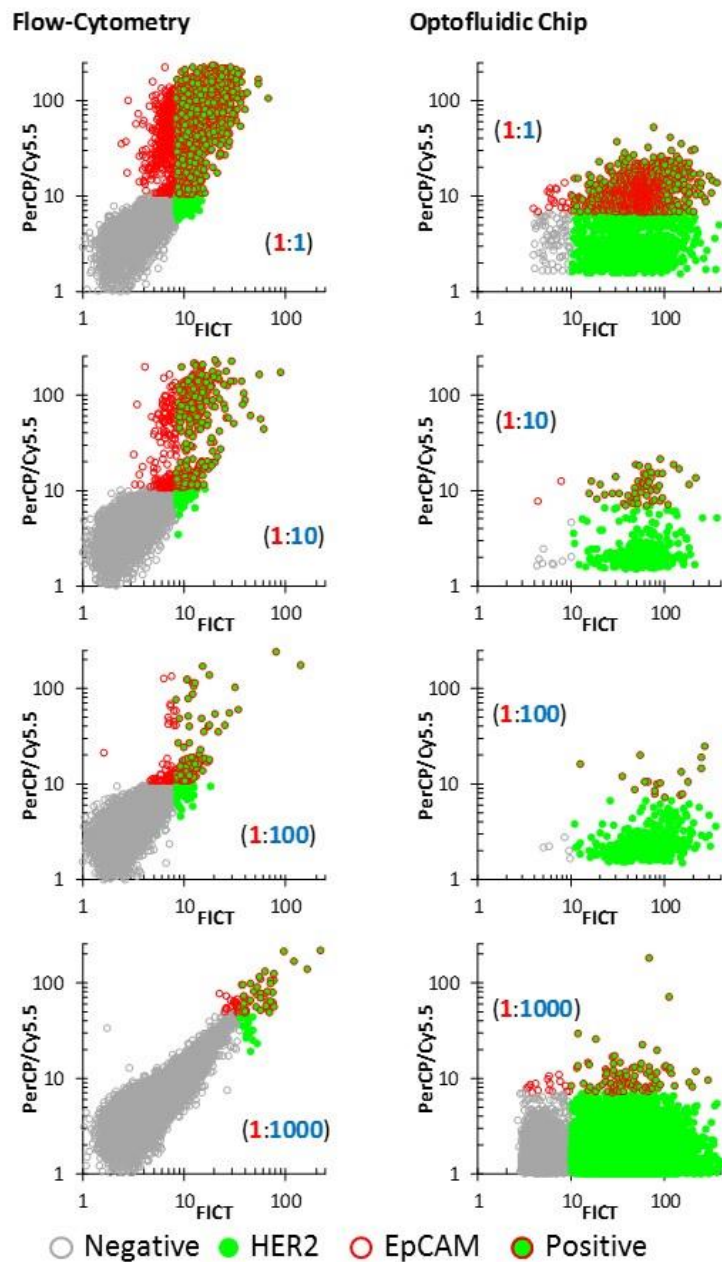


Figure S4. Results obtained with the flow cytometer and the optofluidic chip for cell ratios of 1:1, 1:10, 1:100 and 1:1000 Au-565:RAMOS. Substantial differences between the green and red signals from the flow-cytometry and our optofluidic device are mainly due to the different excitation wavelengths (488 nm in the flow cytometer, and 473 nm in the optofluidic device). In fact, sample cells present more autofluorescence at 473 nm than 488 nm which overlaps with the green fluorescence. In the case of the red signal (EpCAM), ratios are similar; however, the number of cells monitored in each experiment was different.

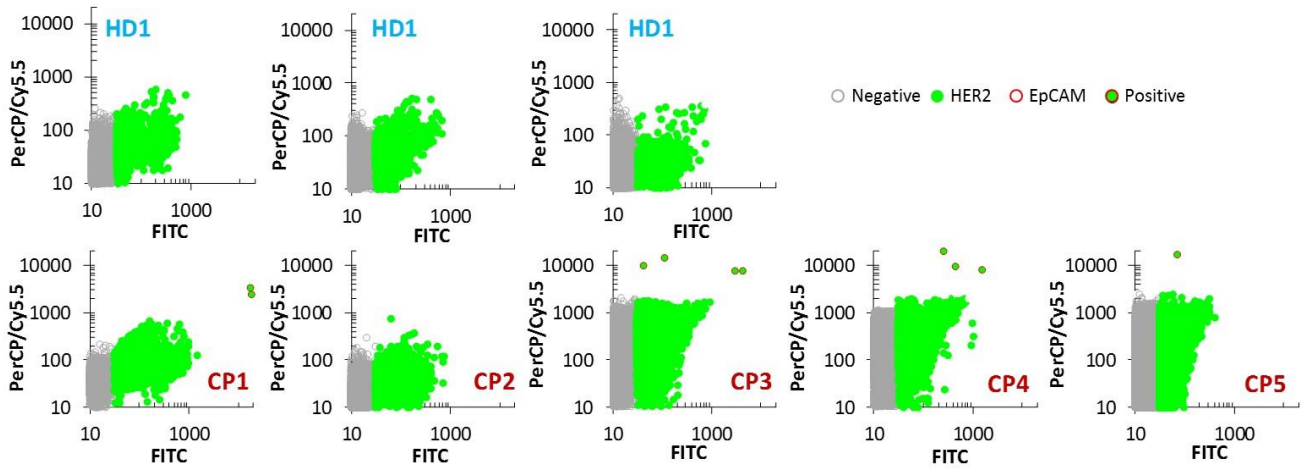


Figure S5. Results obtained with the flow cytometer for the blood samples from healthy donors and cancer patients.