A smart pipette for equipment-free separation and delivery of plasma for on-site whole blood analysis

Sung B. Im, Sang C. Kim, Joon S. Shim

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For the fabrication of the micropump mold, the photosensitive polymer was patterned by UV lithography process. First, the backside of the plate coated with the photosensitive polymer was exposed under UV light for 45 sec. After covering the front side of the plate with the film mask, the UV light exposed on the plate for 5 min. During this process, the UV-exposed region of the photosensitive polymer was cross-linked. After developing the plate in the water with gentle brushing for 12 min, the plate was dried under hot air for 10 min. To increase the solidity, the plate was exposed under the UV light for 7 min. Fig. S1 shows the fabricated mold and the cut view of the PDMS micropump.
**Fig. S1** Picture of (a) the fabricated mold and (b) a cut-view of the PDMS micropump
**Fig. S2** Comparison with the capillary-driven separation device. (2cm scale bar)

**Fig. S3** Plasma separation efficiency according to the hematocrit level. The separation efficiency was approximately same and did not depend on the hematocrit, which was defined as a ratio between the volume of the separated plasma and the volume of the supplied plasma.