Supporting Information

Finger-Actuated Microfluidic Display for Smart Blood Typing

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Supporting information includes:

Figure S1. Effect of the mixture concentration on the length of each inlet channel.

Figure S2. Typing of Rh+ AB blood sample with the 100 μm length and 3.5 μm height of the microslit filter.

Figure S3. Typing of Rh+ A blood sample according to the number of button pushes.

Figure S4. Typing of the 22-day-old Rh+ AB blood sample.

Movie S1. Operation of the device (MP4).
Figure S1. Effect of the mixture concentration on the length of each inlet channel. (A) A schematic of the device having two inlet channels with different length. (B) There is no significant difference at the mixture concentration according to the length ratio of the inlet channels.
Figure S2. Typing of Rh+ AB blood sample with 200 μm length and 3.5 μm height of the microslit filter.
Figure S3. Typing of Rh+ A blood samples according to the number of button pushes.
Figure S4. Typing of 22-day-old Rh+ AB blood sample. (A) The picture of blood type display. The images at the branches of (B) anti-A, (C) anti-B, (D) anti-D channel. The clogged microslit filter by RBC aggregates shows the well operation of the device. (E) Increased viscosity of the blood results in decreased portion in the actuation chamber.
Movie S1. Operation of the device. The video clip shows the display after seven times of button pushes (MP4).