

Supplementary materials for

A scalable microfluidic chamber array for sample-loss-free and bubble-proof sample compartmentalization with a simple pipetting

This PDF file includes:

- Table S1. List of LAMP primer sequences.
- Figure S1. Effects of the chamber depth and the channel width to the success rate.
- Figure S2. Effect of the concentration of Triton X-100 to the success rate.

Other Supplementary Material for this manuscript includes the following:

- Video. S1. Working principle of each chamber.
- Video. S2. Sample partitioning process.
- Video. S3. Chamber filling process of the flat, the arc, and the triangle design.
- Video. S4. Bubble elimination process.

Table S1. List of LAMP primer sequences

Target	Primer	Sequences (5'-3')
Kpn	F3	ATACAAAAACACCAGTGTAGG
	B3	GCCGCCAGTTTGTTCAG
	FIP	CGTTGAGATTTGCGAAGTACCAAGAATCAAATATGCTGCAAATGT G
	BIP	CAAACGCATAATAAGCAGGTGATTTTCGGAGGTGATGTTTTTCGGTC
	Loop F	TGCCCCGCCATC
	Loop B	ATCATATCGTTCGGCT

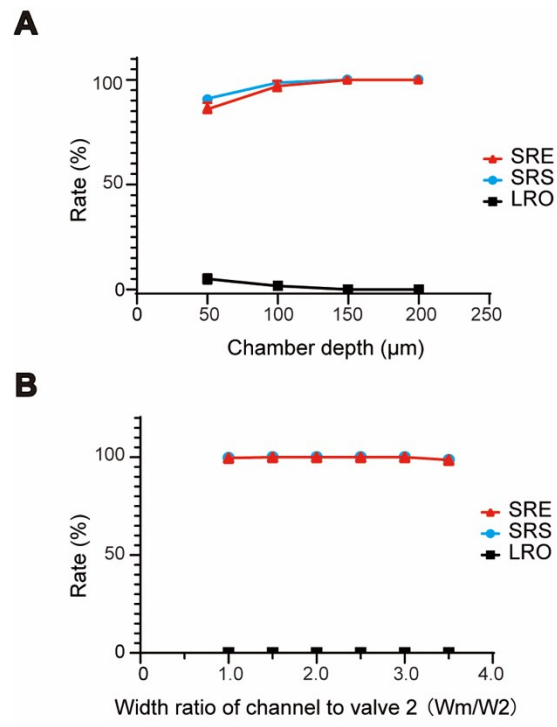


Figure S1. Effects of the chamber depth and the channel width to SRE, SRS and LRO. These two parameters have negligible effects to the success rate of sample partitioning.

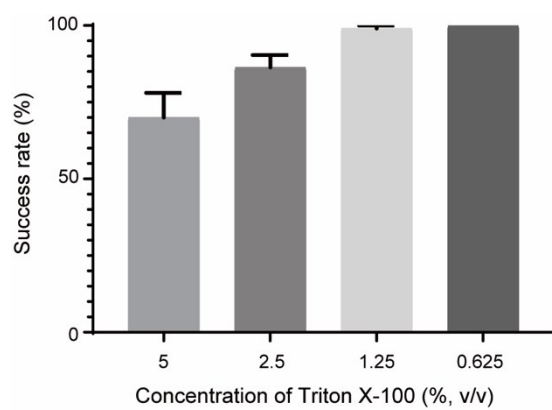


Figure S2. Effect of the concentration of Triton X-100 to the success rate of the chip loading. The success rate remains 100% when the concentration of Triton X-100 is less than 1.25%.