

Supplementary Information (ESI) for Lab on a Chip

Automated Microchannel Alignment Using Innate Opto-Signature for Microchip Electrophoresis

Anchi Scott, Daniel Mills, Christopher Birch, Satvinder Panesar, Jingyi Li, Daniel Nelson, Margarita Starteva, Albert Khim, Brian Root, and James Landers

Department of Chemistry, University of Virginia, Charlottesville, VA 22904, USA.

Email: landers@virginia.edu

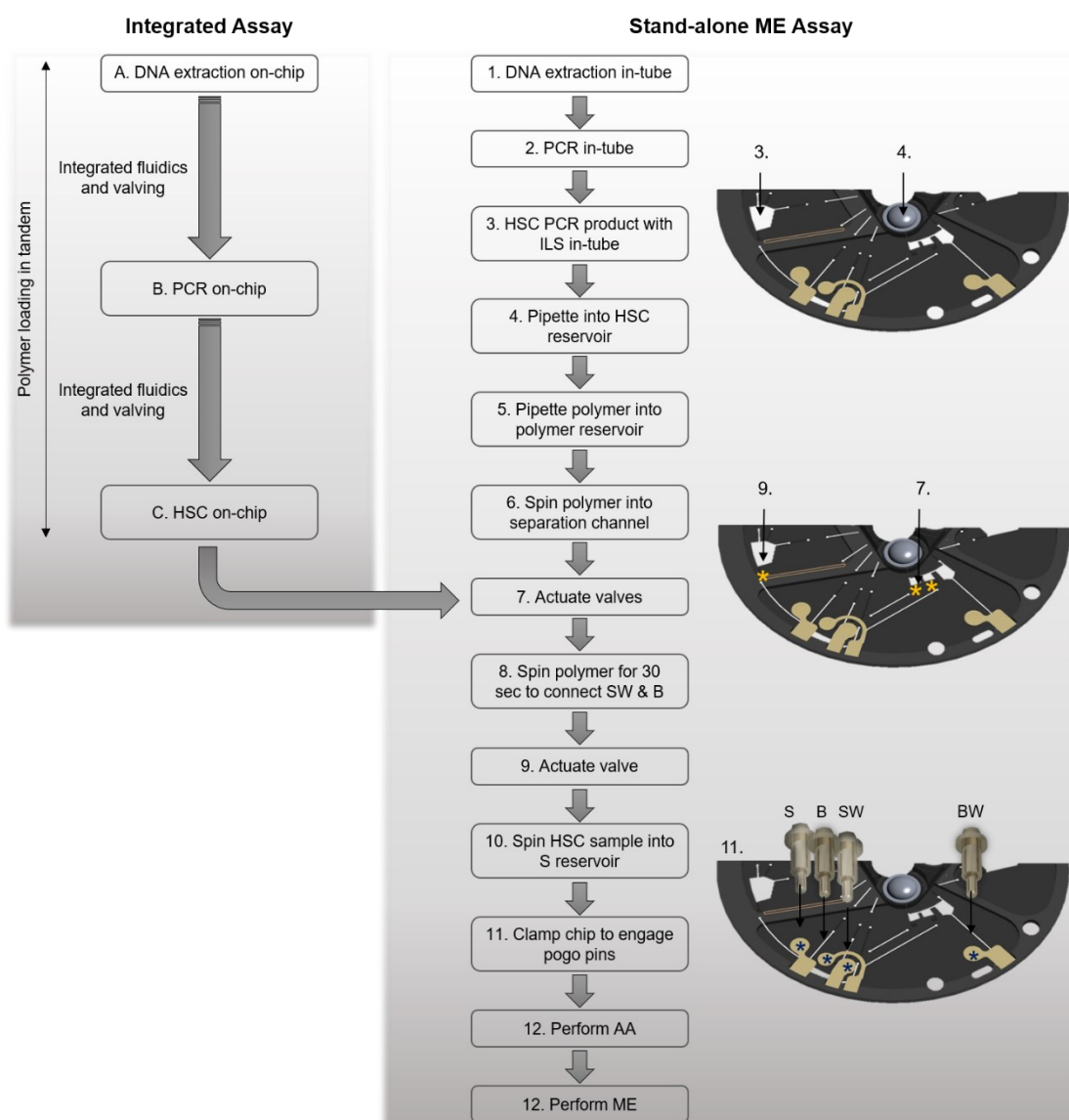


Figure S1 – Sample preparation and operation flowchart for integrated and stand-alone assays. During an integrated run, polymer loading is achieved in tandem with spin steps during DNA extraction, PCR, and heat-snap-cool (HSC) processes. In a stand-alone microchip electrophoresis (ME) assay, steps upstream were prepared in-tube before pipetting a pre-mixed PCR/internal lane standard (ILS) sample into the HSC reservoir. The remainder processes were performed on-chip automatically.

