**Fig. S1** Disc assembly: (a) DVD, (b) 100 µm adhesive, (c) CD with capillary valves, (d) 100 µm adhesive, and (e) DVD. Two 100 µm adhesive layers were applied to the CD before capillary valves were glued into the CD. Once epoxy was applied, the release layers of the adhesives are removed and the DVD layers were added.
Fig. S2 Construction of Configuration B with 9 mm long capillaries as valves in the CD layer (epoxy is not shown as it is clear).