Electronic Supplementary Material (ESI) for Lab on a Chip. This journal is © The Royal Society of Chemistry 2019

Supplementary Figures:

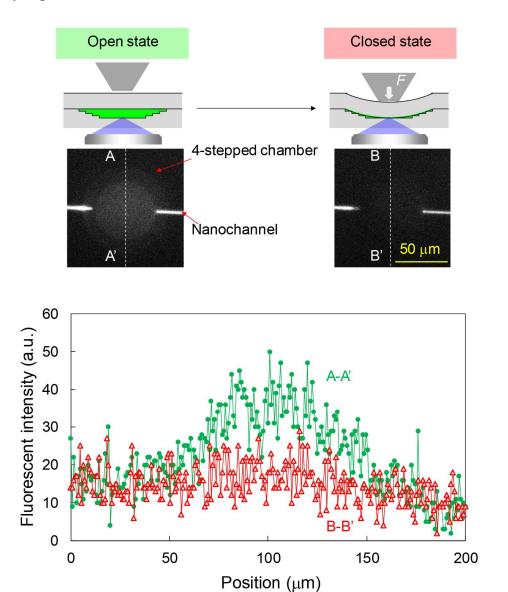


Figure S1. Profiles of the image intensity along the four-stepped valve chamber at open and closed states.

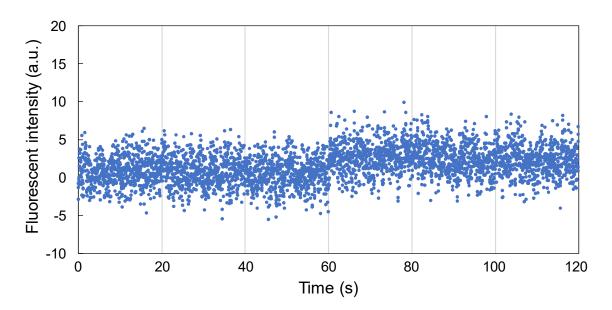


Figure S2. The fluorescent intensity-time profile at downstream nanochannel ($x = 0 \mu m$) during the closed state. It is a magnified graph of Figure 9. Noted that the fluorescent intensity was obtained by subtracting a background intensity from the image intensity.