

Electronic Supporting Information

Silane-dextran chemistry on lateral flow polymer chips for immunoassays

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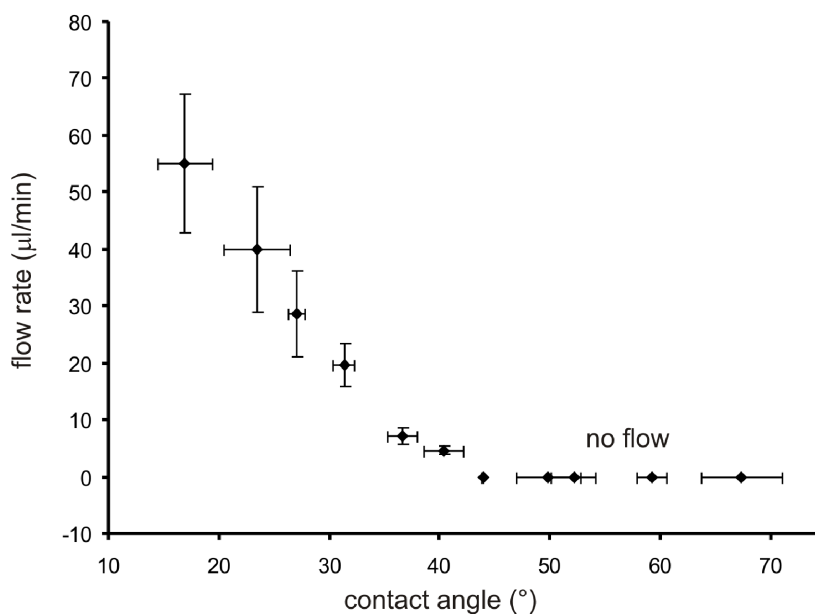


Figure S-1

The flow rate measured for different contact angles.

The contact angles for a series of ethanol-water solutions were measured on bare COP. The time to draw 2 μl of the different solutions from a pipette tip into the pillar array was subsequently measured, and the flow rates were calculated. The measured flow rates decreases as the contact angles increases. For contact angles around 45° and higher no flow from the pipette tip into the pillar array was observed. Error bars indicate ± 1 standard deviation, calculated from triplicate measurements for contact angles and hexaplicate measurements for flow rates.

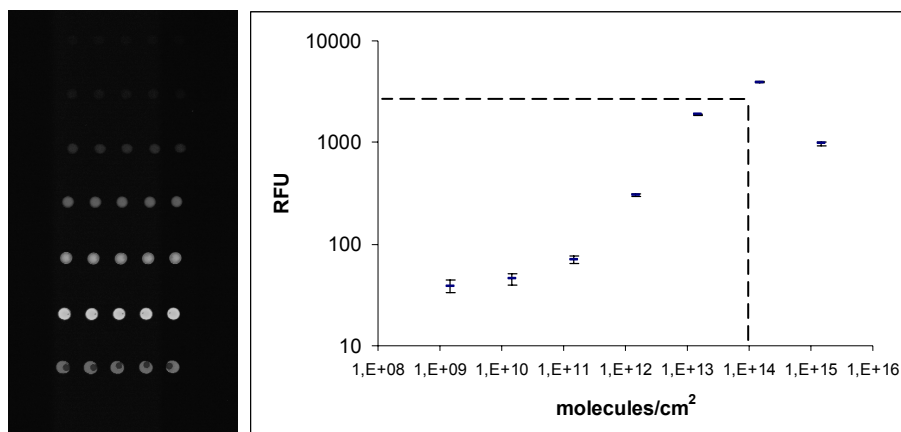


Figure S-2

A standard curve was generated to relate fluorescence signal intensity to the number of fluorophores on the surface. Known concentrations and volumes of Alexa Fluor® 647 dye were spotted and left to dry on a planar silanized chip surface (left). The signal intensities for different surface concentrations of fluorophores were recorded and used to calculate the surface concentration of unknown samples (right).

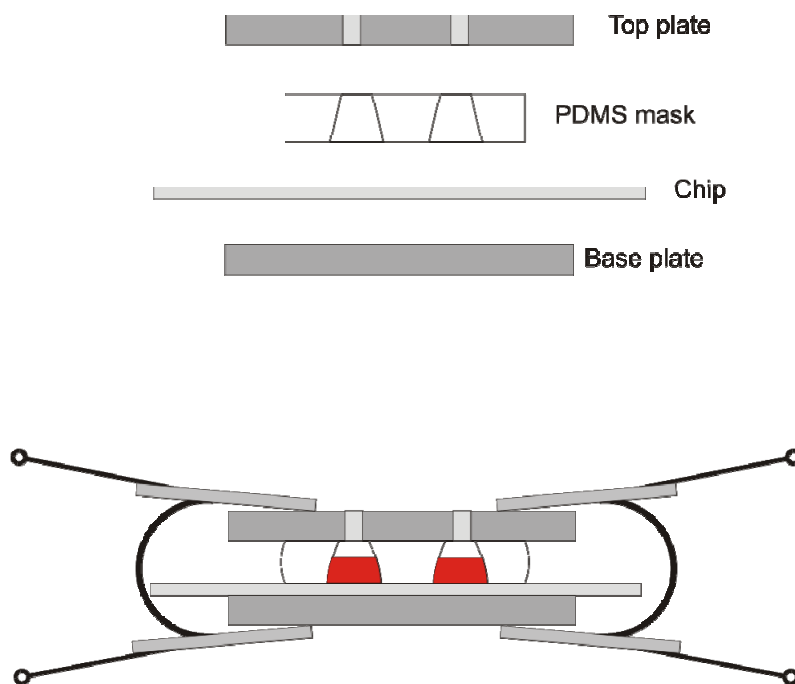


Figure S-3

Experimental setup for applying the reactive dye to a confined area on the chip.