

Supplementary Materials: Integrated Microfluidic Preconcentration and Nucleic Amplification System for Detection of Influenza a Virus H1N1 in Saliva

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Table 1. Material properties used in numerical analysis.

Materials	Molar Mass (g/mol)	Density (kg/m ³)	Specific Heat Capacity (J/kg·K)	Thermal Conductivity (W/m·K)
Air	28.96	1.275	1.0044×10^3	2.61×10^{-2}
PCR fluid (Water)	10.82	997	4181.7	0.6069
PDMS (10:1)	1250	980	1100	0.18
Mineral oil	480	850	1670	0.14

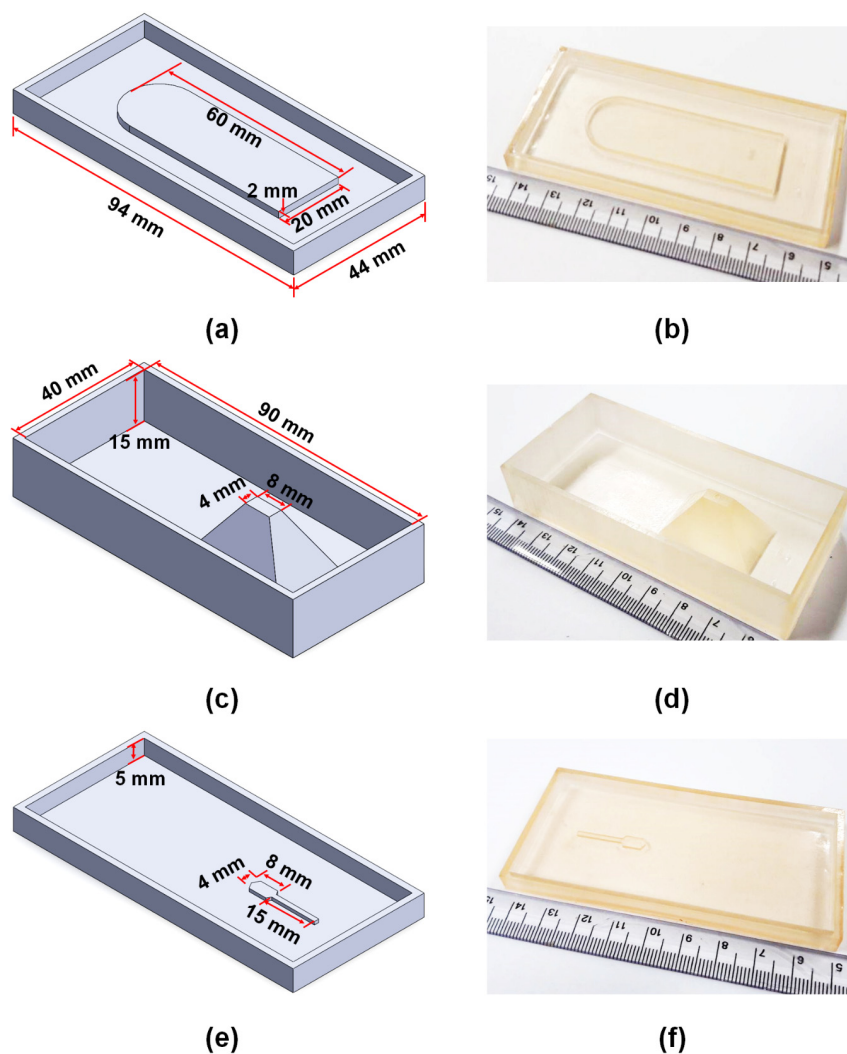


Figure S1. The 3D design (a, c, e) and their respective photographic images (b, d, f) of the master moulds for each layer: the lid (a, b), concentration (c, d), and PCR (e, f) layers.



Figure S2. A tailor-made flat heat block was used to conduct chip-based PCR, instead of using conventional heat block which contains either 48 or 96 wells to hold PCR tubes,