Electronic Supplementary Material (ESI) for Lab on a Chip.


**Supporting Information**

# Sample Preconcentration through Airjet-Induced Liquid Phase Enrichment

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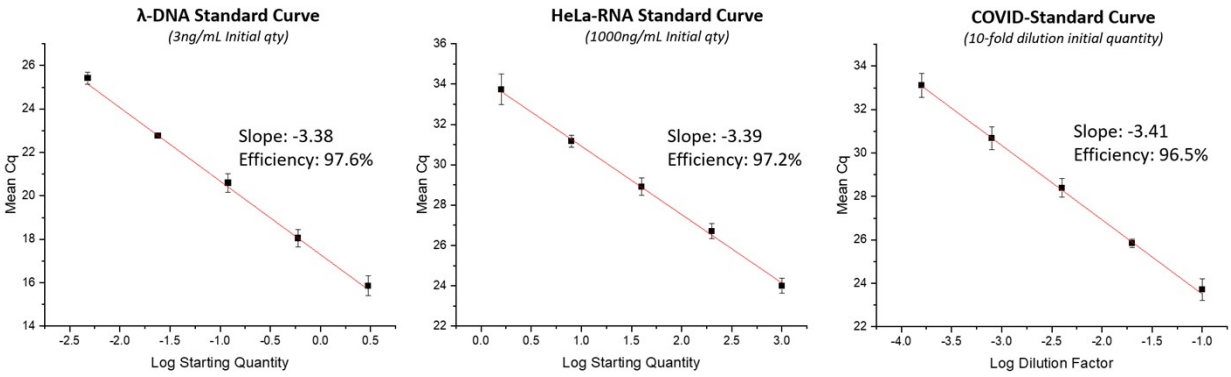


**Figure S1.** Amplification efficiencies of nucleic acids used in enrichment


**Figure S2.** Enrichment of rhodamine in ethanol after 2 minutes. 20 µL of rhodamine solution was deposited on a hydrophilic glass surface, and 1 µL of a 1% PDMS solution in hexane was added to the surface of the solution.

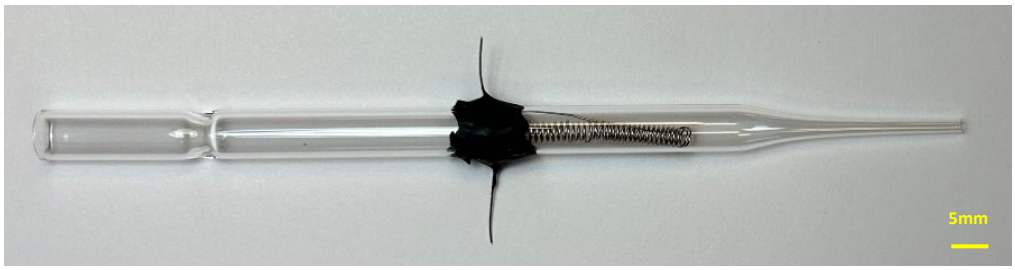


**Figure S3.** Image of the heated airjet nozzle used for enrichment. The nozzle consists of two halves of a borosilicate glass pipette with the heating element interested in the middle. The heating element consists of a 40 mm coil nichrome that is braided at the ends with wire. The glass halves are then sealed with ceramic adhesive.

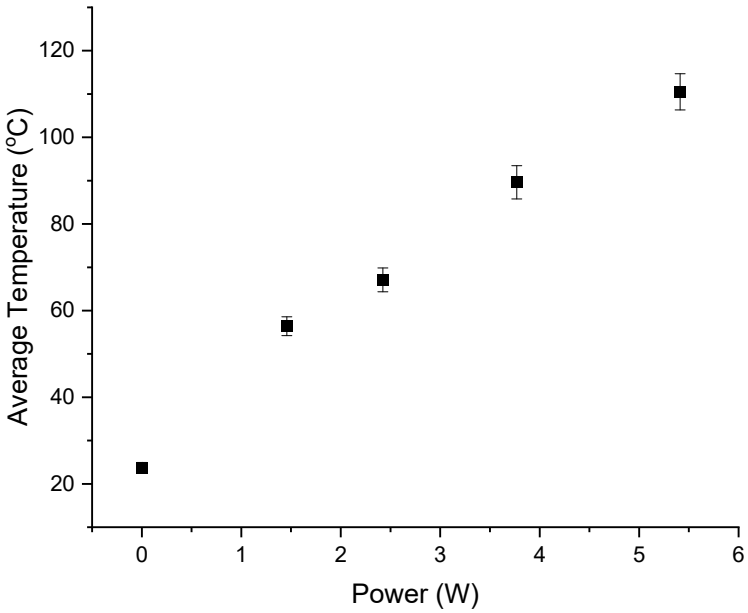


**Figure S4**. Average temperature vs. power for the pipette's exit nozzle

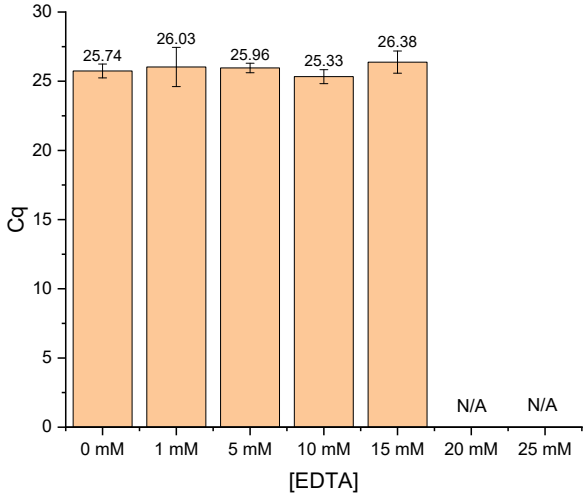


**Figure S5**. $C_q$ vs. EDTA concentration for a solution of λ-DNA. For each concentration, 1 µL from the EDTA solution was added to 9 µL of the qPCR reaction mix.

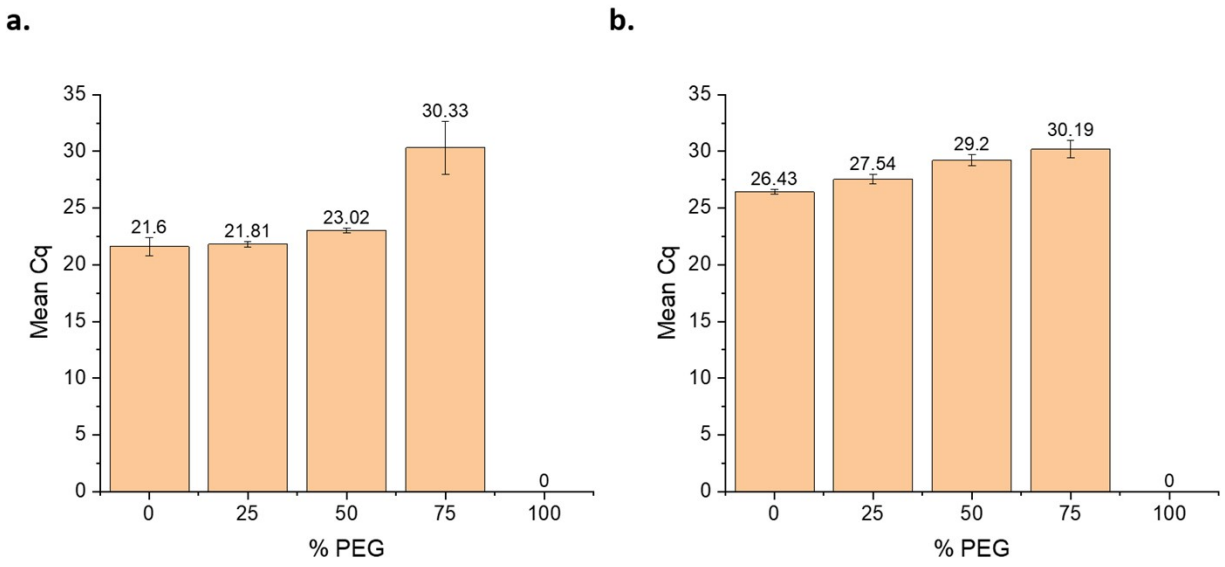


**Figure S6.** Effects of PEG concentration for **(a)** qPCR using λ-DNA and **(b)** RT-qPCR for HeLa-S3 RNA. Concentrations of nucleic acid were kept constant in varying concentrations of PEG.