Electronic Supplementary Material (ESI) for RSC Advances.

Supplemental Information

Development of a portable electrochemical loop mediated isothermal amplification (LAMP) device for detection of hepatitis B virus

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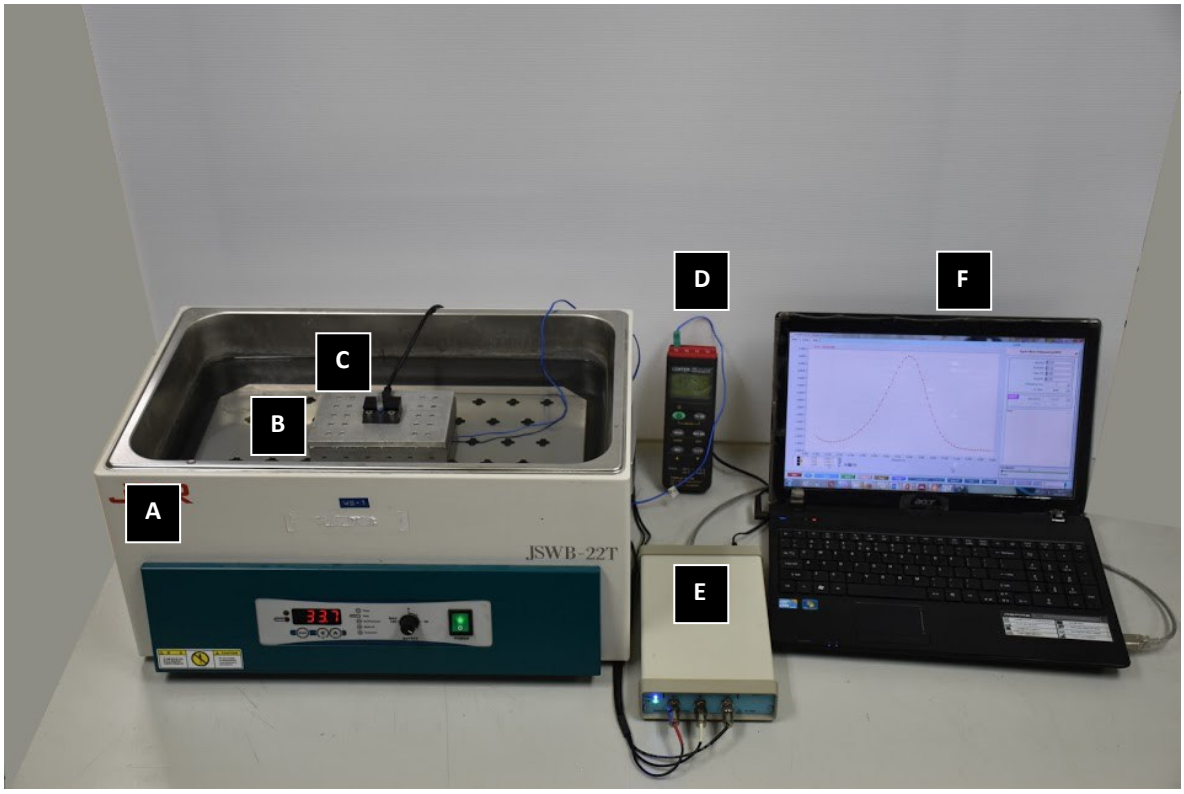

Figure S1. Experimental set-up used for the amplification of HBV DNA with real time electrochemical monitoring. A) Water bath; B) Heating block; C) Drop cell connector; D) Data logger; E) Potentiostat; F) Computer.

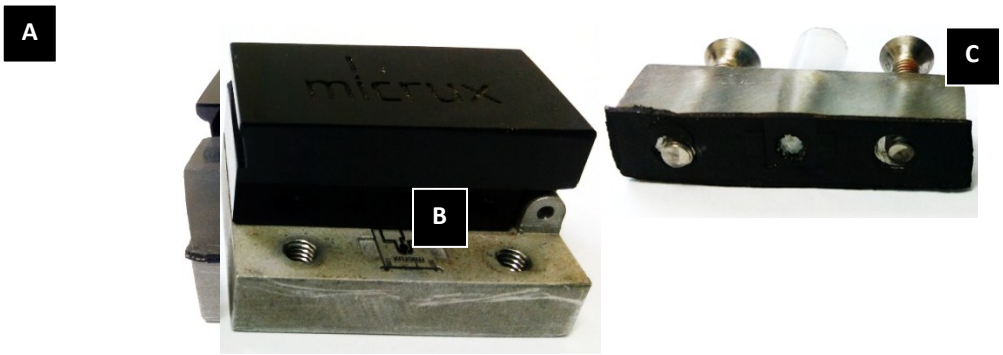

Figure S2. Modified electrochemical drop cell. A) Reaction chamber; B) Thin film electrode; C) Custom-made fixture

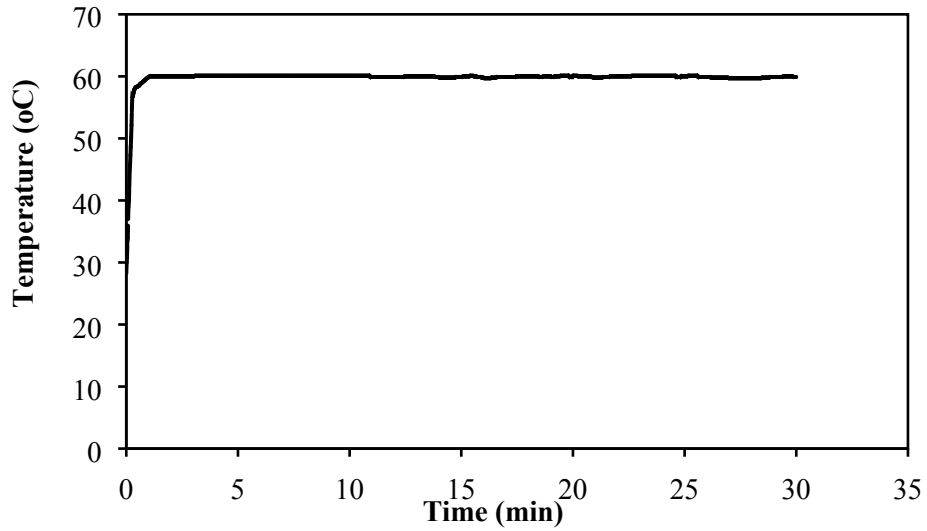

Figure S3**.** Temperature of the liquid inside the reaction chamber.

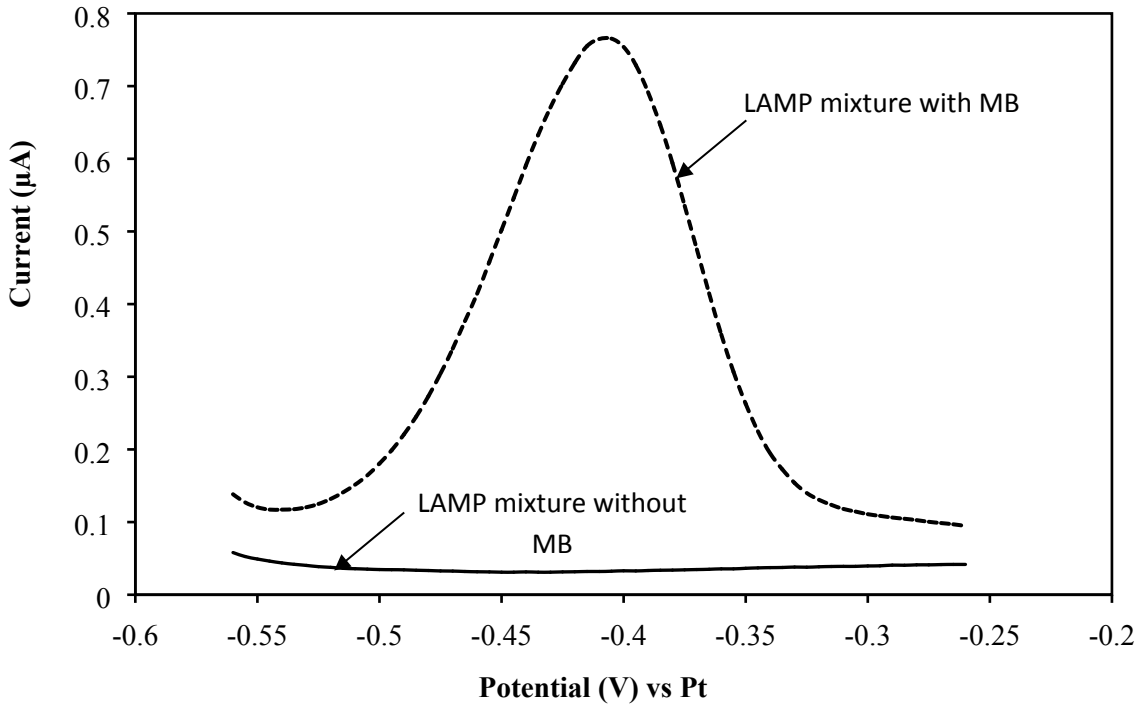

Figure S4. SWV response of MB (25 µM) in LAMP reaction mixture. SWV was measured at 63^{o}C with frequency of 5 Hz, amplitude of 5 mV, step potential of 5 mV, and potential range from -0.56 to -0.26.