

## Central Lancashire Online Knowledge (CLOK)

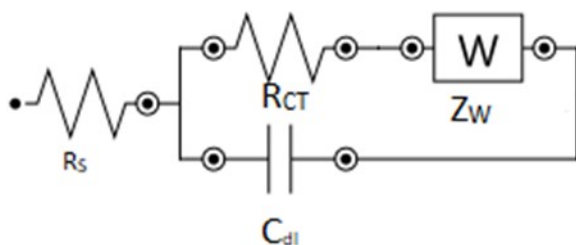
Title	Development of a Re-usable and Disposable Sensor for the Rapid Determination of Human Chorionic Gonadotrophin (hCG) Biomarker
Type	Article
URL	<a href="https://clock.uclan.ac.uk/id/eprint/56686/">https://clock.uclan.ac.uk/id/eprint/56686/</a>
DOI	<a href="https://doi.org/10.1039/d5an00663e">https://doi.org/10.1039/d5an00663e</a>
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Creators	Stephen, Andrei N and Reddy, Subrayal M

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<https://doi.org/10.1039/d5an00663e>

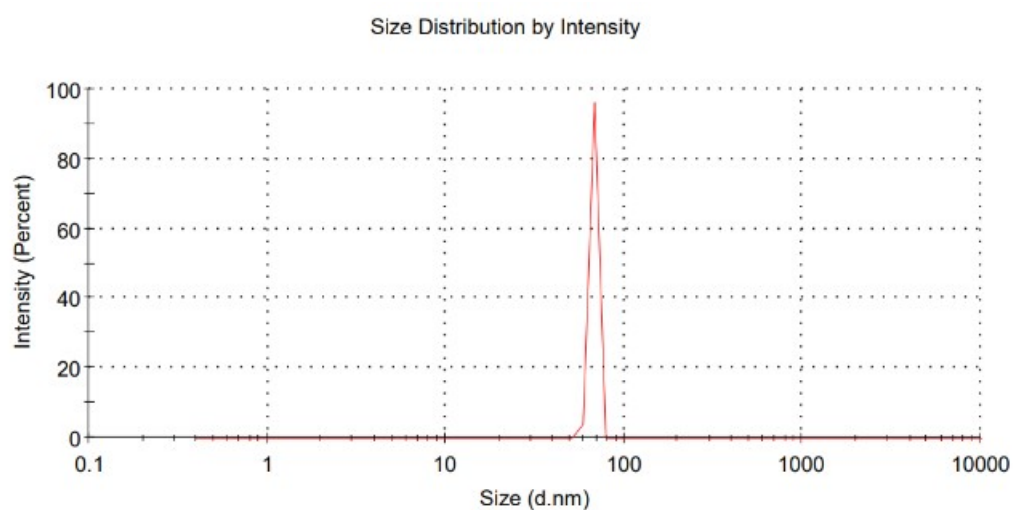
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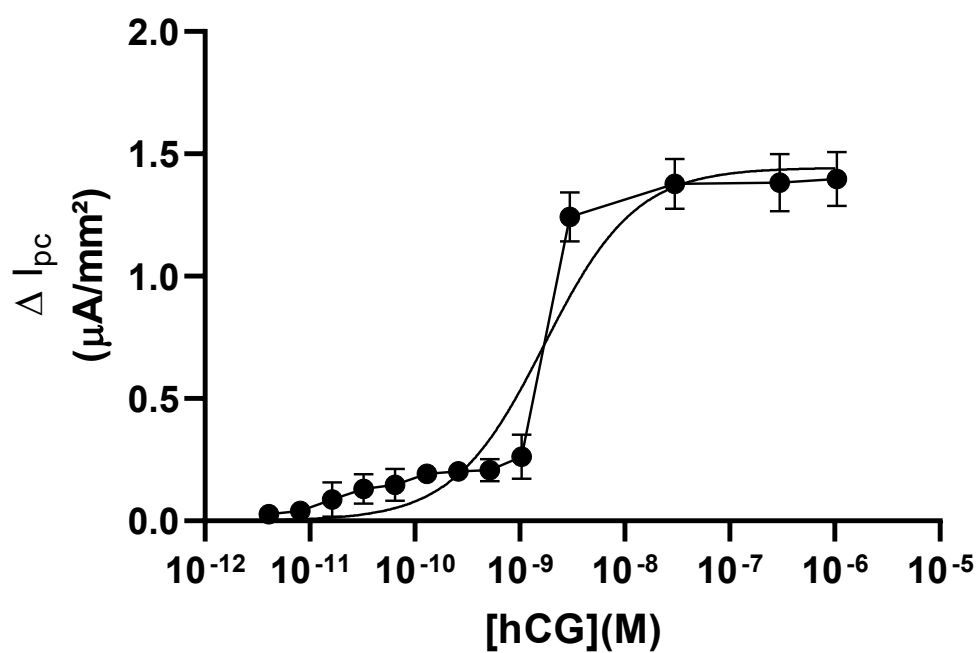
## Supplementary



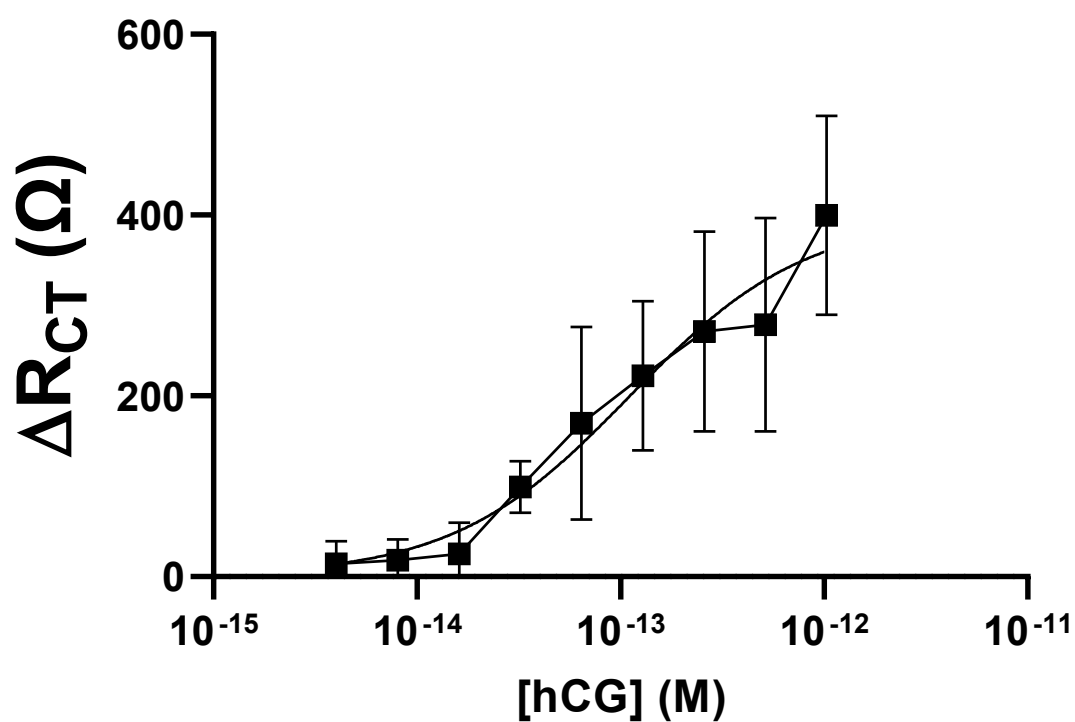
**Figure S1** Randles Circuit for determination of  $R_{CT}$ .



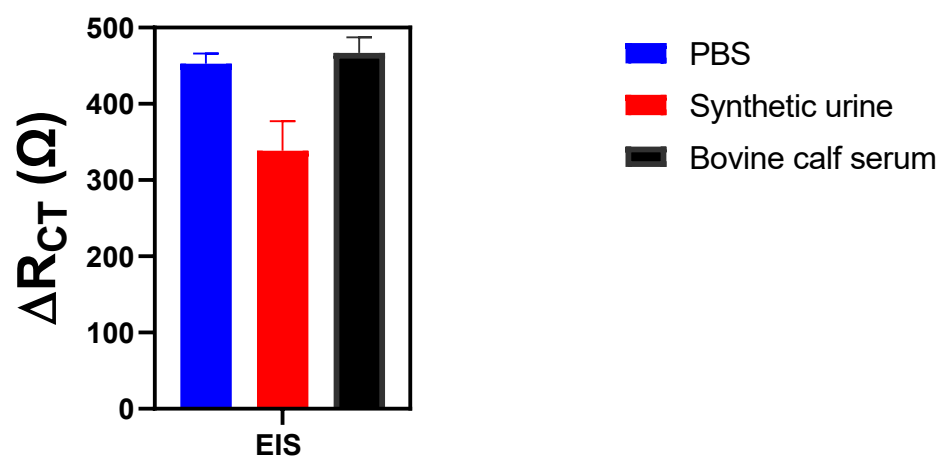
**Figure S2** DLS spectrum showing N-protein nanoMIPs have an average hydrodynamic size of 68 nm



**Figure S3** Calibration curve of hCG levels in (converted from mIU to M) vs  $\Delta I_{pc}$ .



**Figure S4** Calibration curve of hCG levels (converted from mIU to M) vs  $\Delta R_{CT}$ .



**Figure S5** Comparison of signal recovery for 1000 mIU hCG loading in different media (PBS vs synthetic urine vs bovine calf serum)