

An Electrochemical and Raman Scattering Dual Detection Biosensor for Rapid Screening and Biomolecular Profiling of Cancer Biomarkers

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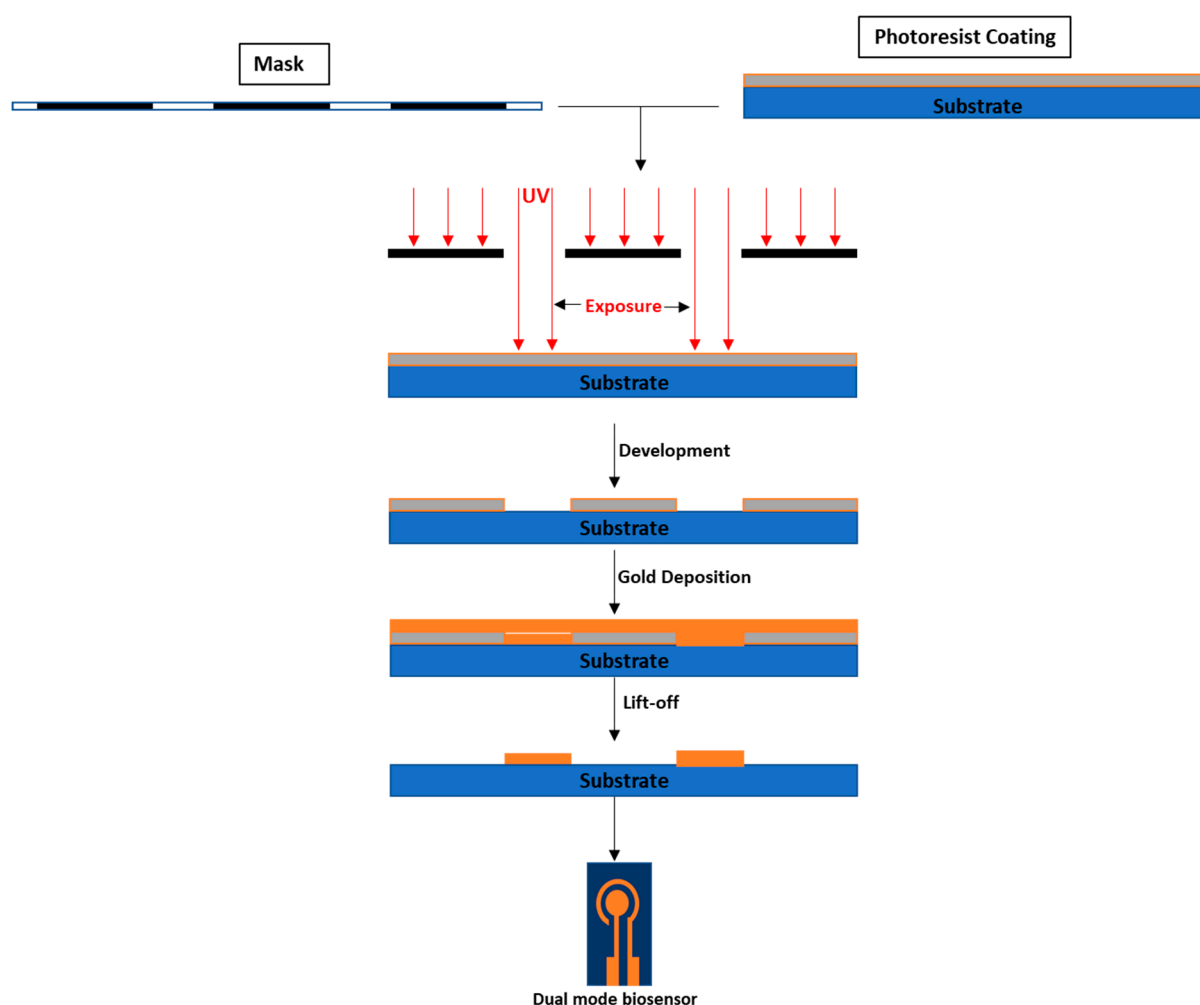


Figure S1. Schematic of biosensor fabrications.

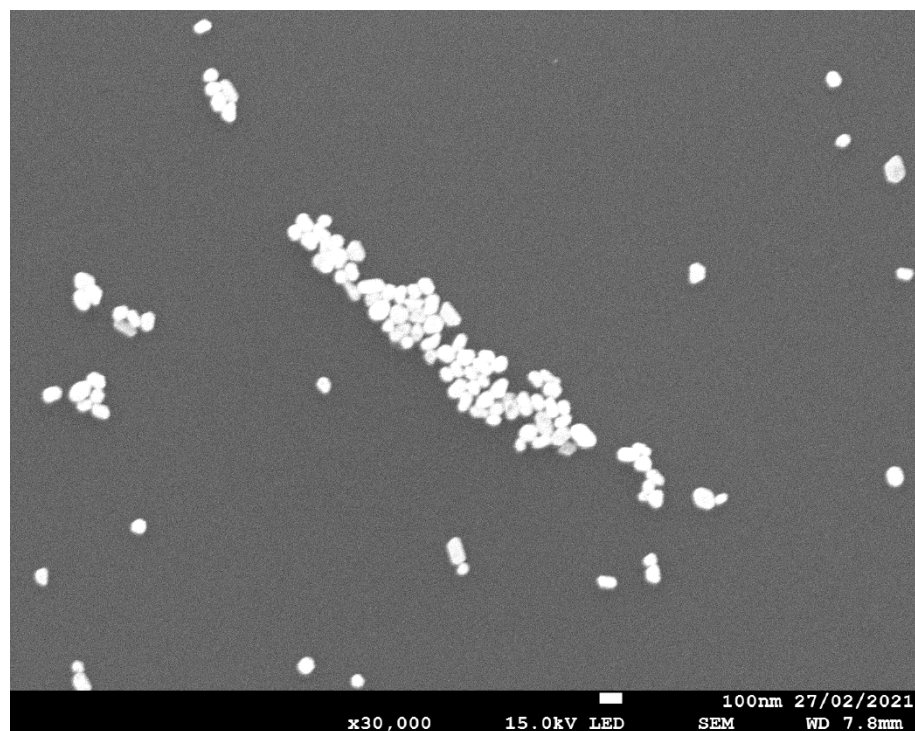


Figure S2. SEM image of synthesised gold nanoparticles.

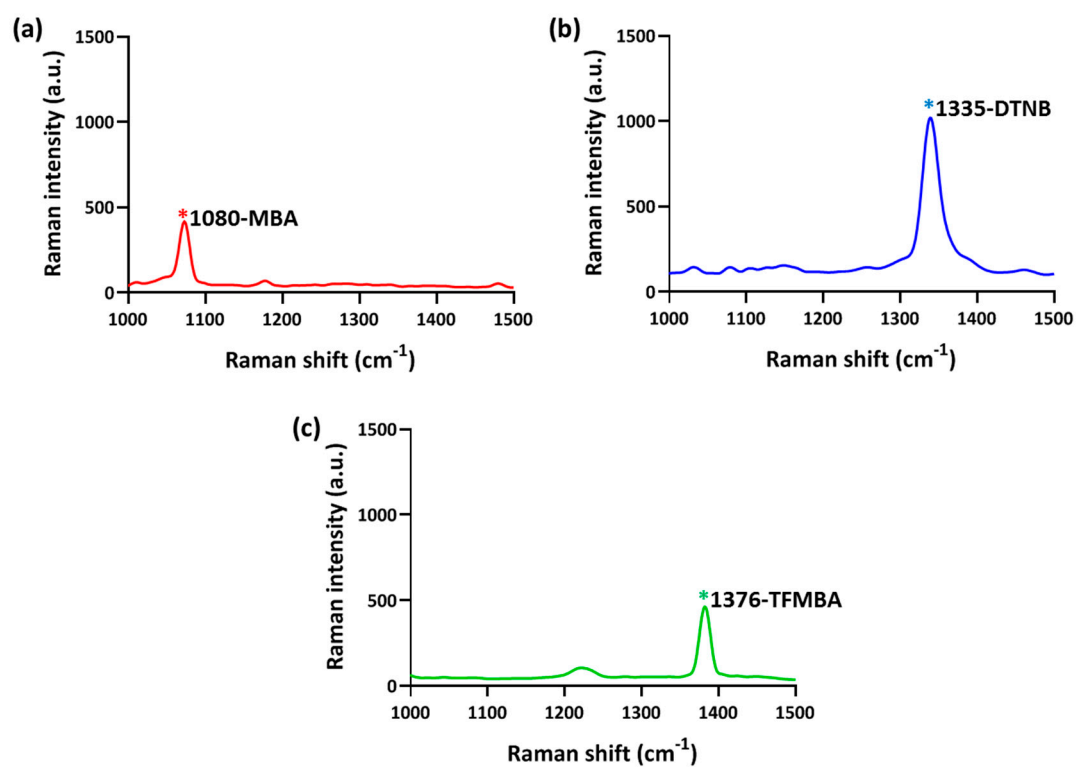


Figure S3. Raman signals of SERS nanotags. Characteristic Raman signal of: (a) MBA-BRAF SERS nanotags at 1080 cm^{-1} ; (b) EGFR-DTNB SERS nanotags at 1335 cm^{-1} and (c) PDL-1-TFMBA at 1376 cm^{-1} .

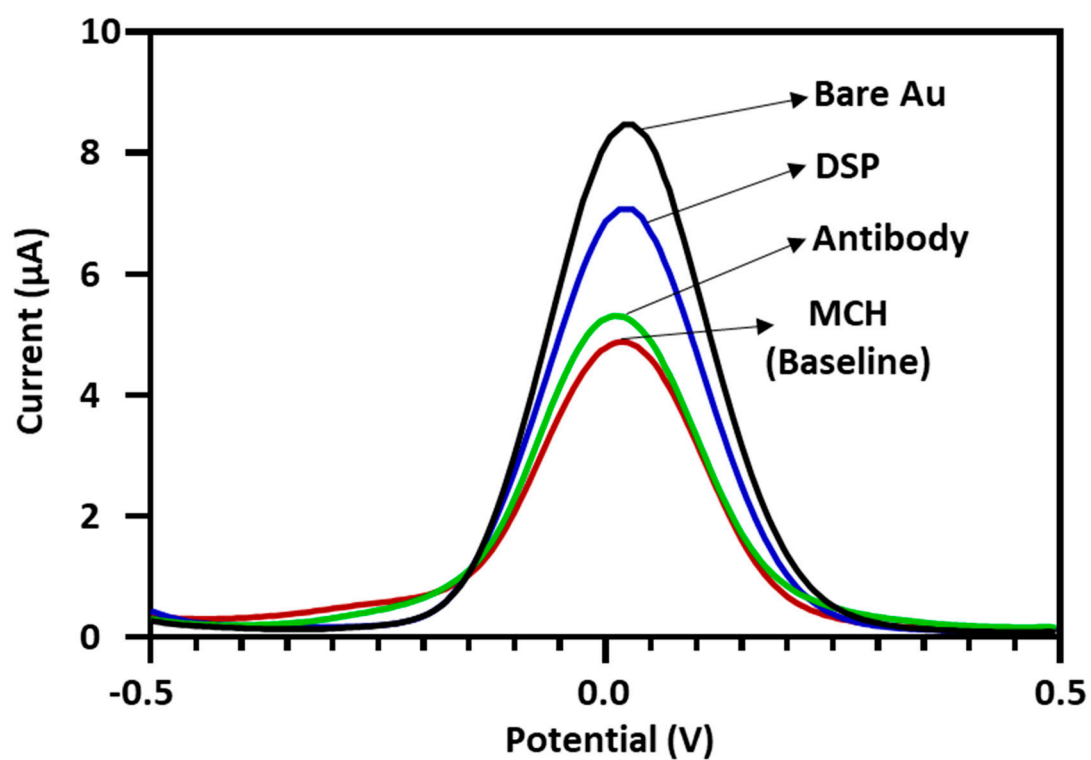


Figure S4. DPV signals during biosensor functionalization. Successful immobilization of molecules on the biosensor surface is confirmed by current reduction as bare Au (gold) > DSP functionalization > Antibody functionalization > MCH blocking (baseline for target biomolecule analysis).