

Supporting Information

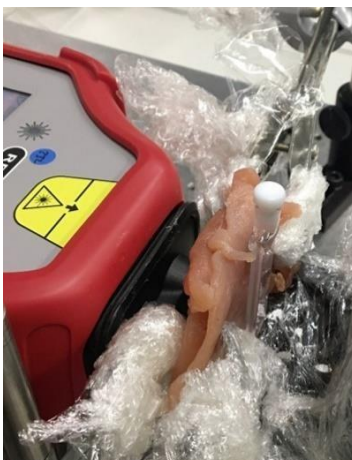


Figure S1. Experimental set-up using a handheld SORS spectrometer for the detection of nanotags through tissue. Nanotag solutions were held in a cuvette and the cuvette was placed behind tissue samples. The nose cone was brought into contact with the tissue ensuring there was no space between the tissue sample and the instrument.

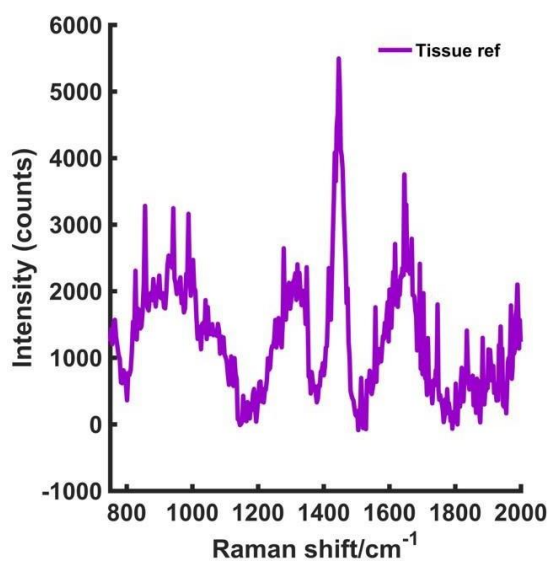


Figure S2 – Reference spectrum of the tissue, with no nanotags behind, collected at an 8 mm offset. All measurements were carried out using a 2 s integration time, 5 accumulations, 830 nm laser excitation wavelength.

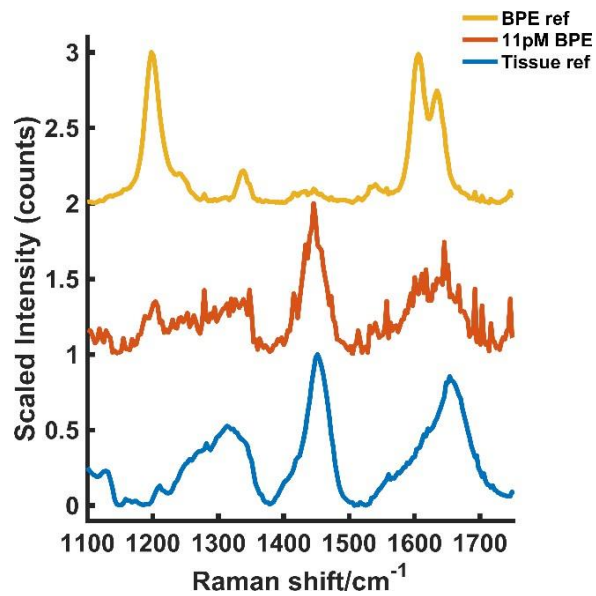


Figure S3 – BPE nanotags at a concentration of 11 pM obscured by 5 mm of tissue (middle). BPE and tissue reference spectra for the tracking of BPE nanotag solution through 5 mm of tissue. The tissue and BPE reference spectra are shown at the bottom and top respectively. The middle spectrum represents the Raman signal collected at an 8 mm offset through 5 mm of tissue. Nanotags were obscured by 5 mm of tissue and held in a quartz microcuvette.