Supporting Information Cover Sheet

ES&T MS:

Manuscript title: An Aptamer-Based Optical Biosensor For Rapid and High-Selective Detection of 17β-Estradiol In Water Samples.

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Number of Pages: 3

Number of Figures: 4

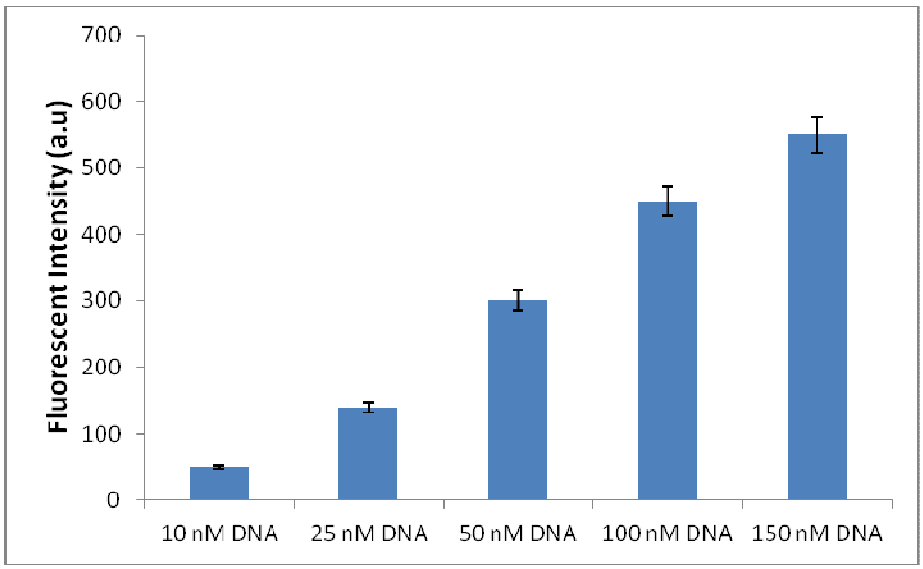

Figure S1. Sensor signals with different concentration of fluorescent-labeled aptamer DNA applied in the mixture with 17β-Estradiol during the sensing procedure.

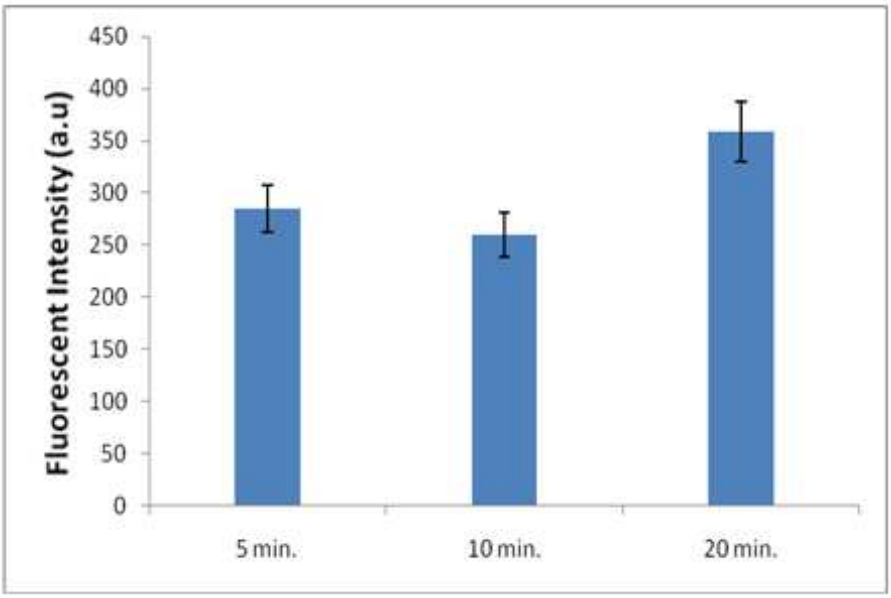

Figure S2. Optimization of Incubation time used for binding reaction between the 17β-Estradiol and the Cy5.5 dye labeled 17β-Estradiol-aptamer.

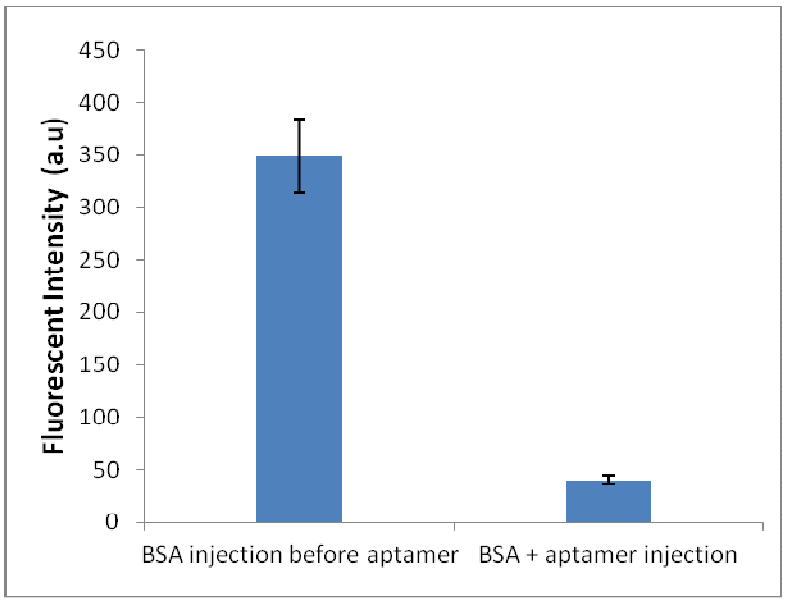

Figure S3. Blocking the non-specific binding sites in the probe surface with BSA. Left: BSA injection before sampling; Right: simultaneous injection of BSA mixed with 17β-Estradiol and the Cy5.5 dye labeled 17β-Estradiol-aptamer.

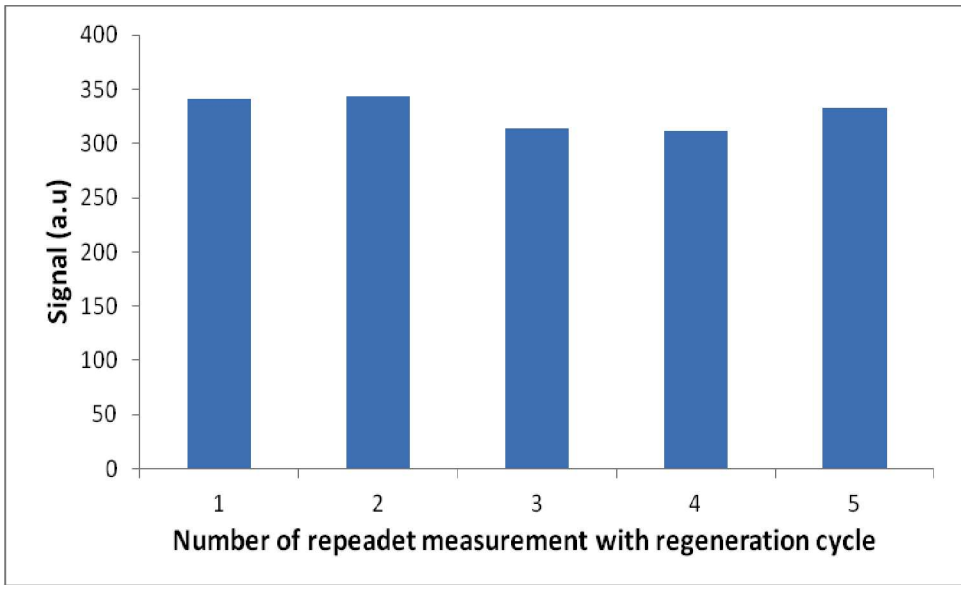

Figure S4. Exemplary aptamer based fiber optic biosensor response curves after a number of consecutive regeneration cycles.