Supporting Information

Label-free Emission Assay of Mercuric Ions Using DNA Duplexes of Poly(dT)

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Figure S1. Emission emission spectra ($\lambda_{ex} = 480$ nm) of 1 in the presence of 0.10 $\mu$M G$_{11}$•C$_{11}$ without and with 10 equiv Hg$^{2+}$ in phosphate buffer (pH = 7.0). These emission spectra were plotted with that of T$_{11}$•A$_{11}$ for comparison.
Figure S2. Circular dichroism spectra collected with 1.0 μM $T_{11} \cdot A_{11}$ treated with 5 equiv Hg$^{2+}$ (gray line) and the mixture of 0.5 μM $T_{11} \cdot A_{11} + 0.5$ nM $A_{11} + T_{11} - Hg^{2+} - T_{11}$ prepared with 0.5 μM $T_{11}$ and 5 equiv Hg$^{2+}$ (black) in 10 mM phosphate buffer (pH = 7.0).
**Figure S3.** Circular dichroism spectra collected with 1.0 μM $G_{11} \cdot C_{11}$ (gray line) and 1.0 μM $G_{11} \cdot C_{11}$ treated with 10 equiv Hg$^{2+}$ (black) in phosphate buffer (pH = 7.0).
Figure S4. Emission spectra of 1 with (a) T\textsubscript{11}·A\textsubscript{11}, (b) T\textsubscript{10G}·A\textsubscript{11}, (c) T\textsubscript{10C}·A\textsubscript{11}, and (d) T\textsubscript{10A}·A\textsubscript{11} (each 0.10 μM) in 10 mM phosphate buffer.