Supporting information

Detection of mercury and phenylmercury ions using DNA-based fluorescent probe

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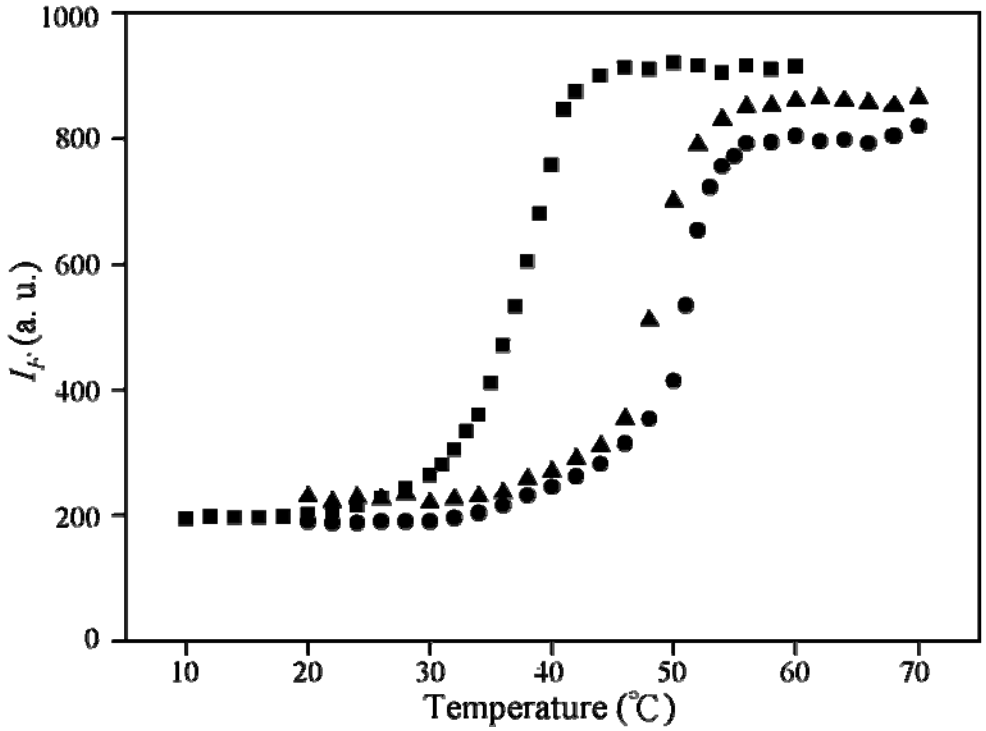

Figure S1. Temperatures dependence of the fluorescence intensities of the control DNA probe (10 nM) in the absence of (■) mercury and of the DNA probe (10 nM) in the presence of (●) Hg^{2+} (1.0 μM) and (▲) $PhHg^{+}$ (1.0 μM) ions.

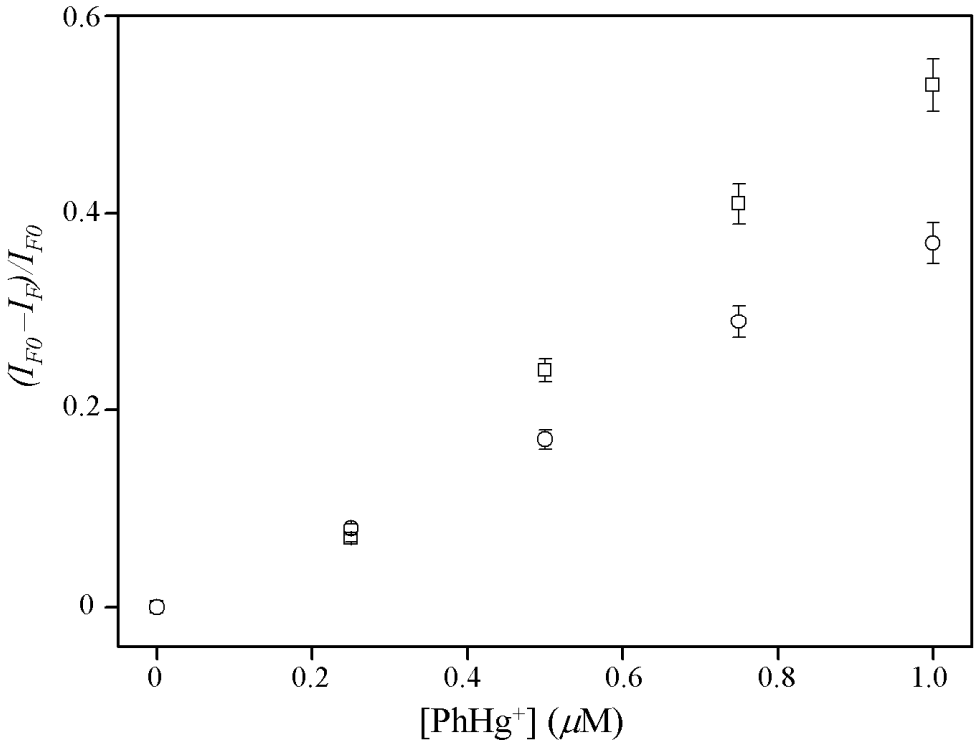

Figure S2. Relative fluorescence ratios $(I_{F0} - I_F)/I_{F0}$ of the DNA probe (10 nM) in solutions spiked with $PhHg^+$ ions (0, 0.25, 0.50, 0.75, and 1.0 μM) in the (○) presence and (□) absence of naphthalene (10 μM). The concentration of EDTA is 1.0 mM. I_F and I_{F0} represent the fluorescence intensities in the presence and absence of $PhHg^+$ ions. Other conditions are the same as those described in Figure 1.

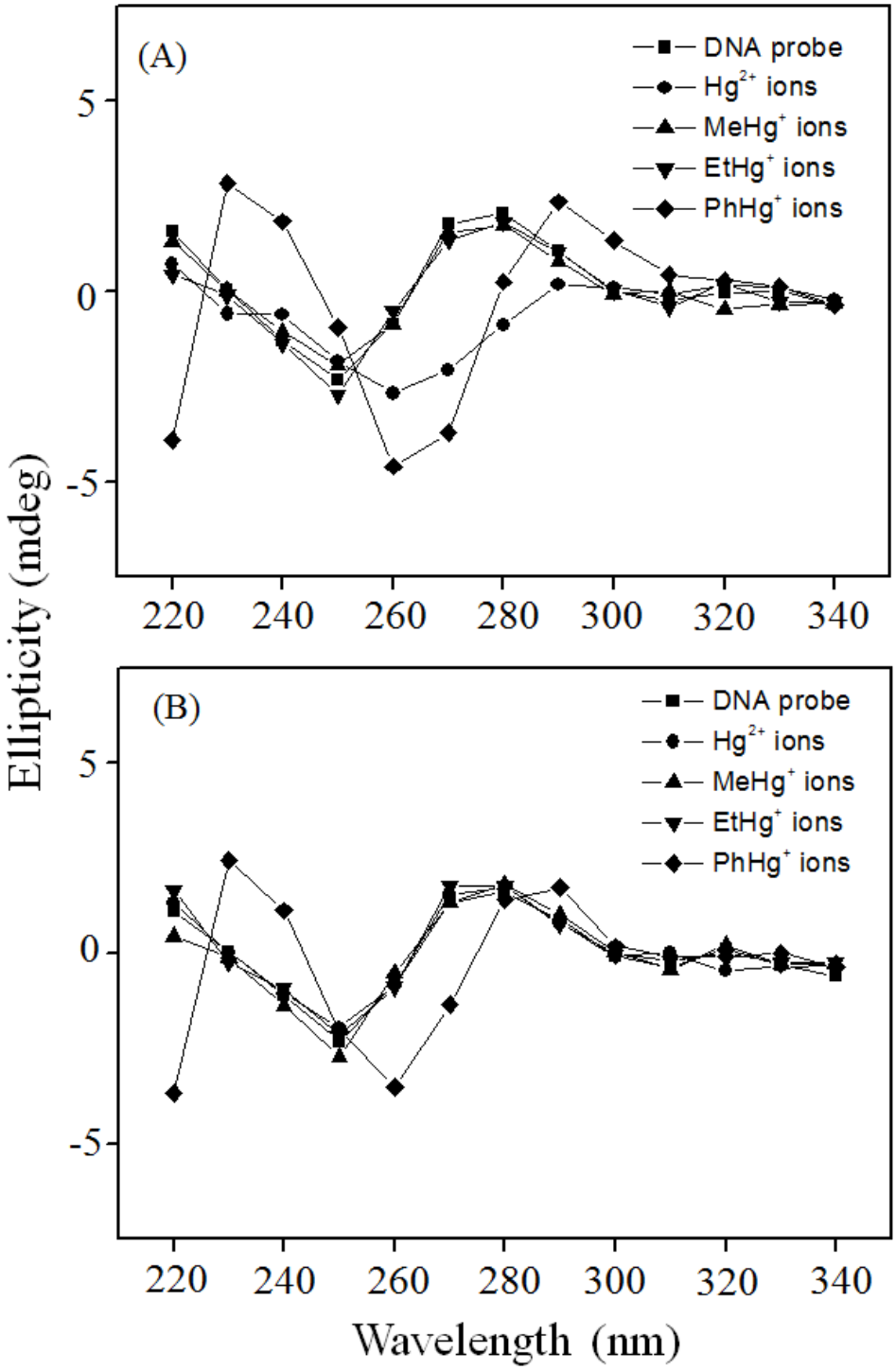

Figure S3. CD spectra of the DNA probe (500 nM) solutions, each containing Hg^{2+} (50.0 μM), $PhHg^{+}$ (50.0 μM), $MeHg^{+}$ (50.0 μM), or $EtHg^{+}$ ions, in the (A) absence and (B) presence of EDTA (5.00 mM). Other conditions are the same as those described in Figure 1.