Supplementary information for

Vacuum-ultraviolet circular dichroism reveals DNA duplex formation between short strands of adenine and thymine

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**Fig. S1** Absorption melting curve (260 nm) of 7.7 µM (AT)$_7$ in a 0.1 M NaF(aq) solution. The open circles are data measured using a heat bath and the filled circles are data measured using a peltier heating element.

**Fig. S2** (a) SRCD spectra of (AT)$_5$ in a 0.1 M NaF(aq) solution at different temperatures. (b) SRCD spectra of (AT)$_5$ in water at different temperatures. The temperature scale runs from 6°C (darkest blue) to 63°C (darkest red).
**Fig. S3** (a) SRCD spectra of (AT)$_7$ in a 0.1 M NaF(aq) solution at different temperatures. (b) SRCD spectra of (AT)$_7$ in water at different temperatures. The temperature scale runs from 6°C (darkest blue) to 77°C (darkest red).

**Fig. S4** (a) SRCD spectra of (AATT)$_4$ in a 0.1 M NaF(aq) solution at different temperatures. (b) SRCD spectra of (AATT)$_4$ in water at different temperatures. The temperature scale runs from 6°C (darkest blue) to 77°C (darkest red).
**Fig. S5** Basis spectra $\varphi_1$ (a) and $\varphi_2$ (b) from the analysis on the SRCD spectra of the strands indicated.

**Fig. S6** Corresponding coefficients to the basis spectra in Fig.S5.