Electronic Supplementary Information

Construction of Logic Gates with the Fluorene-Based Small Molecule/DNA Probes

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**Fig. S1** UV-vis absorption spectra (a) and fluorescent spectra (b) of FSM

The UV-vis spectra and fluorescent spectra of the fluorene-based small molecule (FSM) were solely measured. The maximum absorption wavelength of FSM was 332 nm and the maximum emission wavelength was 420 nm.
**Fig. S2** UV-vis absorption spectra and fluorescence spectra of FSM/DNA probe (a and b), 5’-FITC-ssDNA (c and d), and EB/dsDNA (e and f).
Fig. S3 $^1$H-NMR spectra of the FSM