Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry

Supporting Information for

Simultaneous fluorescence light-up and selective multicolor nucleobase recognition based on sequence-dependent strong binding of berberine to DNA abasic site

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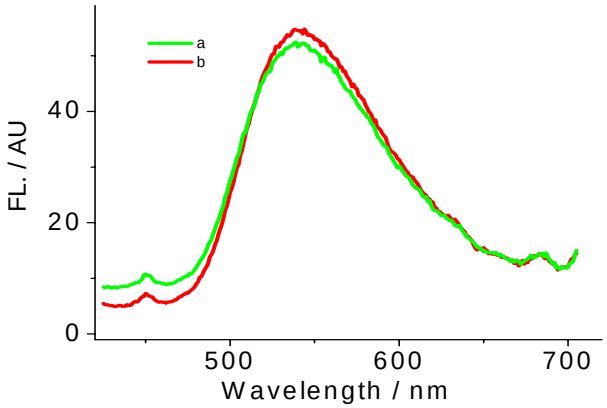

Figure S1 Independent Emissions of berberine on the sequences of FMs: a) 5'-ATGGTGT**A**TGCAGCG-3'/3'-TACCACA**T**ACGTCGC-5'; b) 5'-ATGGTGT**G**TGCAGCG-3'/3'-TACCACA**C**ACGTCGC-5'.

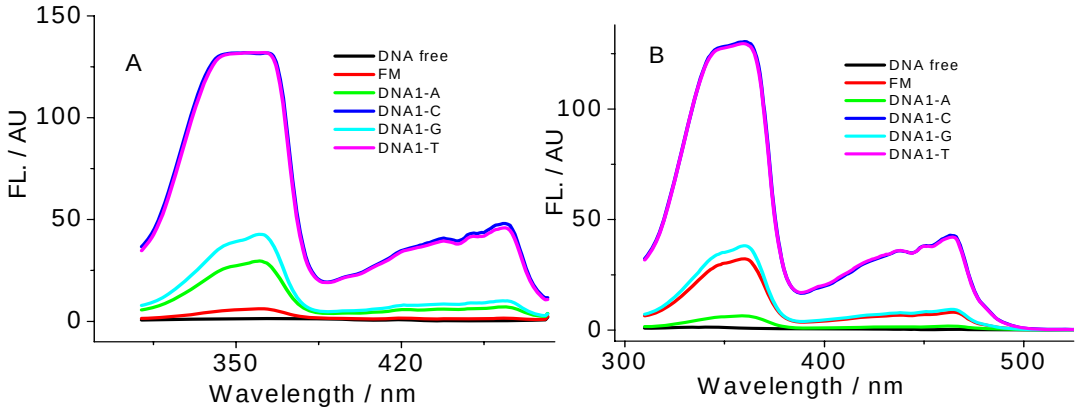

Figure S2 Excitation spectra (A and B were measured at 492 and 584 nm, respectively) of berberine (5 μM) in the absence and presence of DNA1-Ys (5 μM). The corresponding fully matched DNA (FM) was used as control.

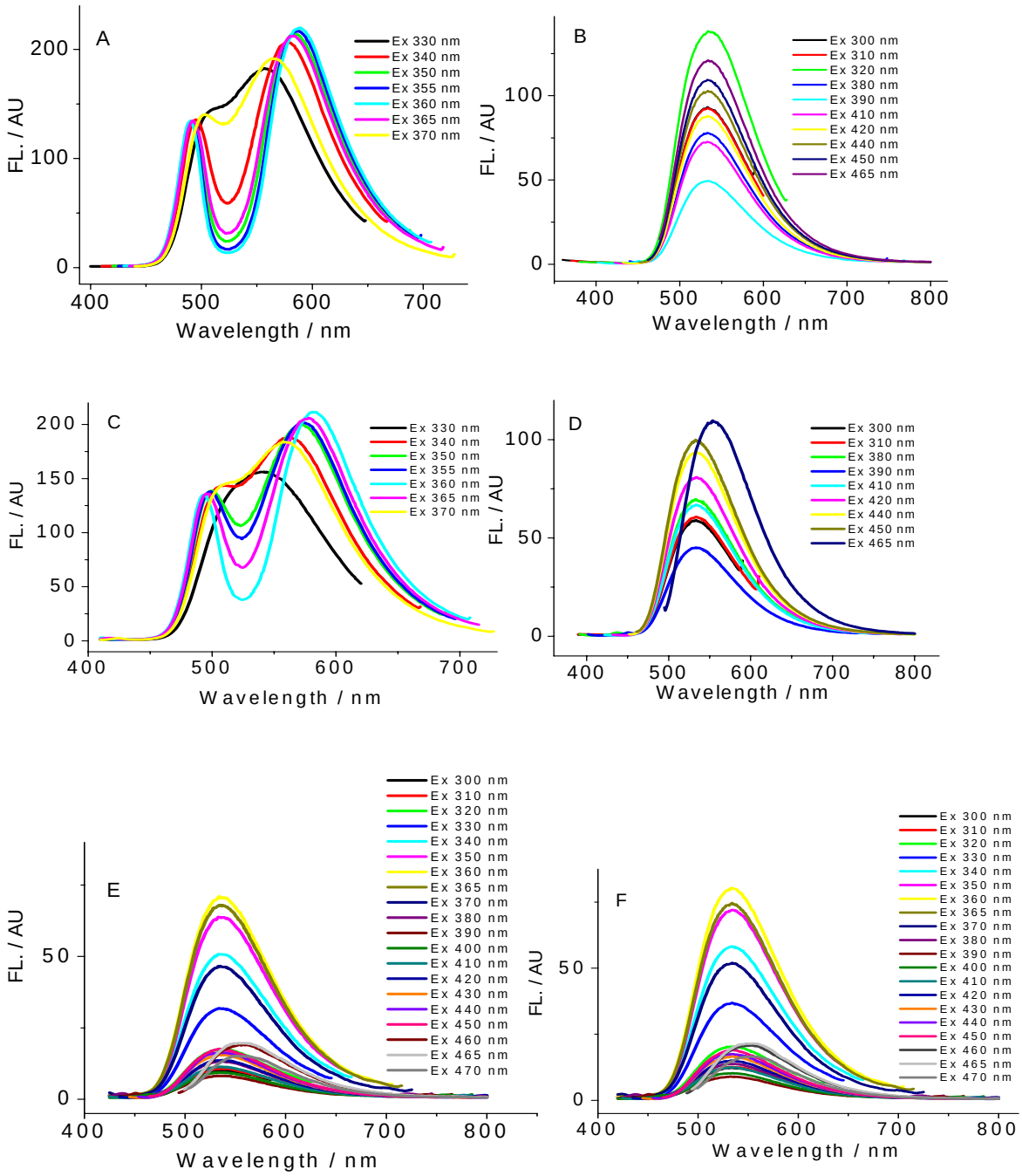

Figure S3 Emission profiles of berberine on excitation wavelengths in the presence of TXT-C (A and B), TXT-T (C and D), TXT-A (E) and TXT-G (F).

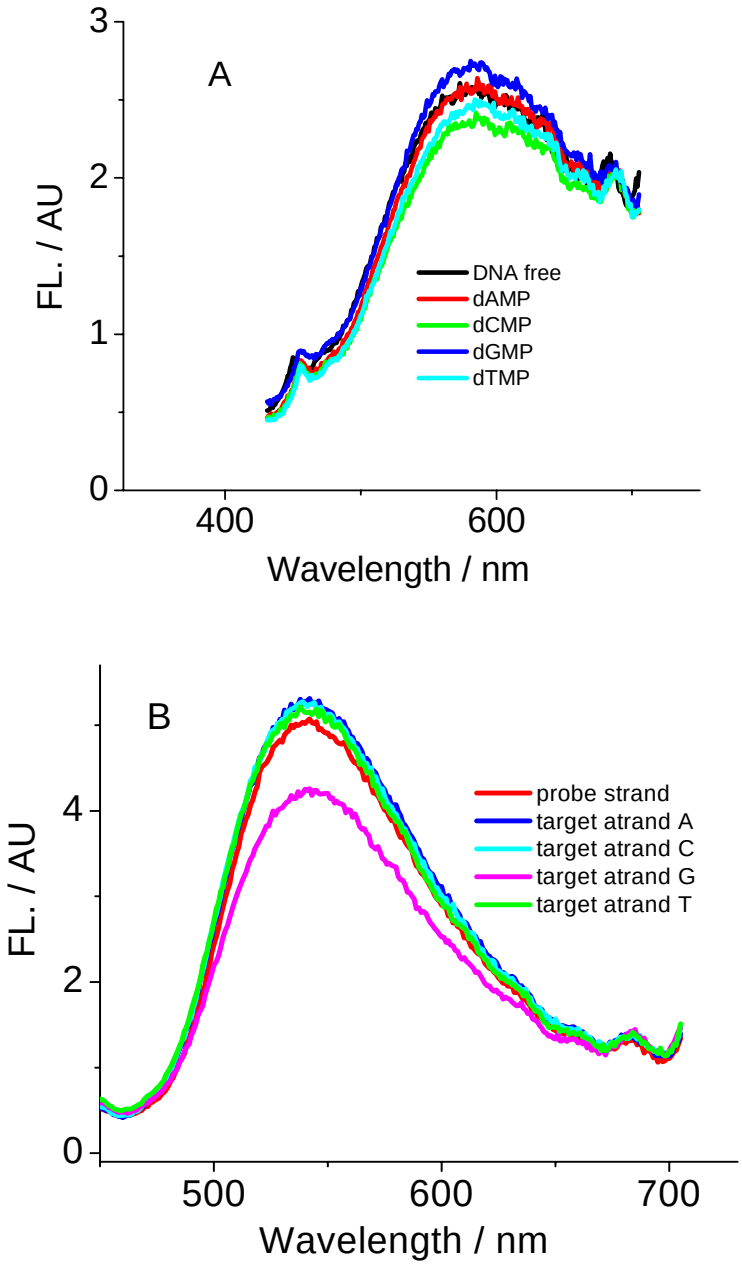

Figure S4 Berberine emissions in the presence of deoxynucleotides (A) and the single-stranded DNAs (B), respectively.