Supporting Information

Reversible photo-cross-linking of GCN4 peptide containing 3-cyanovinylcarbazole amino acid to double-stranded DNA

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Compound 2

Figure S1. 1H-NMR spectra of compound 2

Figure S2. 13C-NMR spectra of compound 2
Figure S3. ESI spectra of compound 2. Found: 218.0575, Calcd. [M+Na]^+: 218.0581

Compound 3

Figure S4. 1H-NMR spectra of compound 3
Figure S5. 13C-NMR spectra of compound 3

Figure S6. ESI spectra of compound 3, Found:240.0898, Calcd.[M+H]^+:240.0898
Compound 4

Figure S7. 1H-NMR spectra of compound 4

Figure S8. 13C-NMR spectra of compound 4
Figure S9. ESI spectra of compound 4 Found 387.4351, Calcd.[M+Na]^+:388.9762

Compound 5

Figure S10. 1H-NMR spectra of compound 5
Figure S11. 13C-NMR spectra of compound 5

Figure S12. ESI spectra of compound 5 Found 314.0906, Calcd.[M+Na]^+:314.0827
Compound 6

**Figure S13.** 1H-NMR spectra of compound 6

**Figure S14.** 13C-NMR spectra of compound 6
Figure S15. ESI spectra of compound 6 Found 356.1819, Calcd.\([\text{M+H}]^+\): 356.1011

Compound 7

Figure S16. 1H-NMR spectra of compound 7
Figure S17 13C-NMR spectra of compound 7
Figure S18. MALDI-TOF-MS analysis of GCN4 peptide dimer

Figure S19. MALDI-TOF-MS analysis of peptide 1 dimer
Figure S20. MALDI-TOF-MS analysis of peptide 2 dimer

Figure S21. MALDI-TOF-MS analysis of peptide 3 dimer
**Figure S22.** MALDI-TOF-MS analysis of peptide 4 dimer

**Figure S23.** MALDI-TOF-MS analysis of peptide 5 dimer
Melting curve of CRE14 DNA

![Graph showing Melting curve of CRE14 DNA containing buffer]

**Figure S24.** Melting curve of CRE14 DNA containing buffer

Enantiomeric excess

![Graph showing Enantiomeric excess]

**Figure S25.** HPLC spectra of $^{CNV}A$ (a) Deacetylation of compound 6 by acylate (b) Deacetylation of compound 6 by Ammonium solution
Figure S26. CD spectra of GCN4 peptide containing L-^{CVN}A and CRE14 DNA.