Supplementary Material (ESI) for Chemical Communications

Electronic Supplementary Information

Probing the microenvironments in the grooves of Z-DNA using dan-modified oligonucleotides

Takumi Kimura, Kiyohiko Kawai and Tetsuro Majima*

The Institute of Scientific and Industrial Research (SANKEN), Osaka University

Mihogaoka 8-1, Ibaraki, Osaka 567-0047, Japan

General methods

High performance liquid chromatography (HPLC) was performed on a JASCO Gulliver MD at 254 nm using a reversed phase Cosmosil MSΠ column (4.6 × 150 mm). Ultraviolet (UV) spectra were recorded with a JASCO V-530 spectrophotometer. Circular dichroism (CD) spectra were obtained on a JASCO CD-J720 spectrometer. Fluorescence spectra were measured on a Hitachi 850 spectrofluorometer.

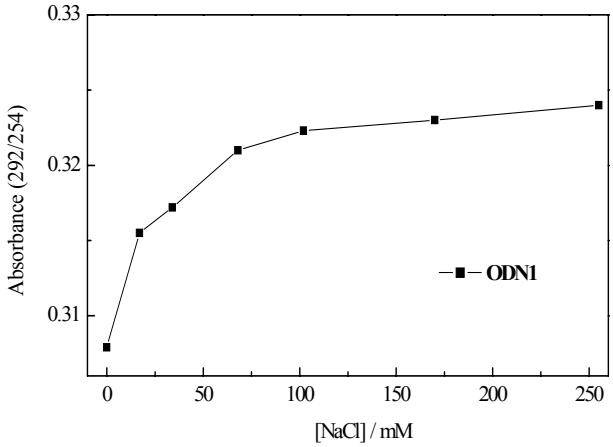

Figure S1. The B- to Z-DNA transition of **ODN1** was monitored by UV titration. Absorbance 292/254 was plotted versus the concentration of sodium chloride.

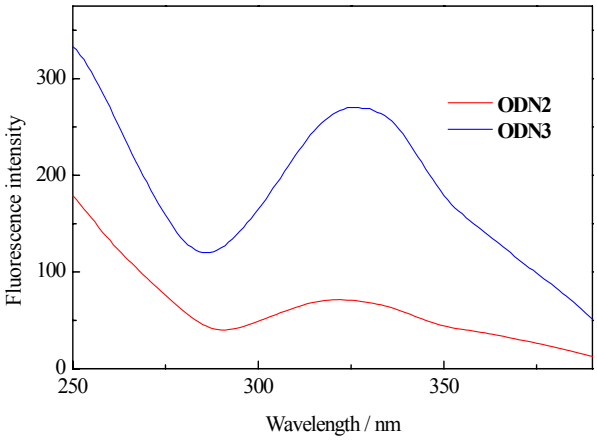

Figure S2. The excitation spectra of dan-modified ODNs (**ODN2** and **3**) were monitored at 460 nm.

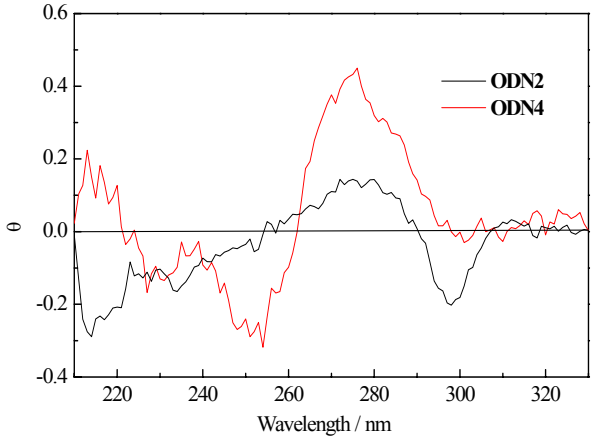

Figure S3 A. The CD spectra of ^{dan}C containing Z-DNA forming sequence (CACG^{dan}CGCG) is hybridized with unmodified (**ODN4**) and ^{Br}G modified (**ODN2**) complementary strand.

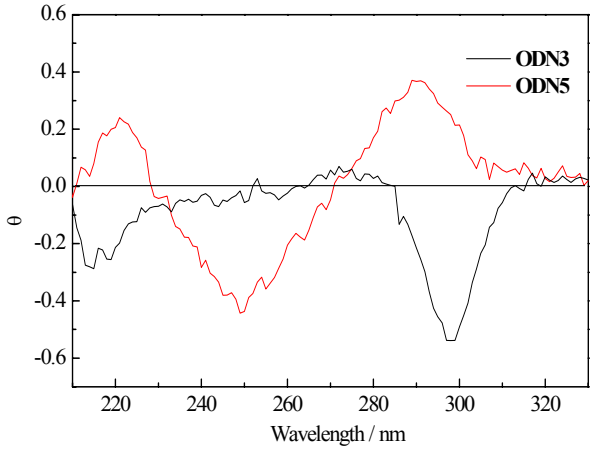

Figure S3 B. The CD spectra of ^{dan}G containing Z-DNA forming sequence (CAC^{dan}GCGCG) is hybridized with unmodified (**ODN5**) and ^{Br}G modified (**ODN3**) complementary strand.