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Interaction of long telomeric DNAs with macrocyclic hexaoxazole ligands

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DNA melting assay

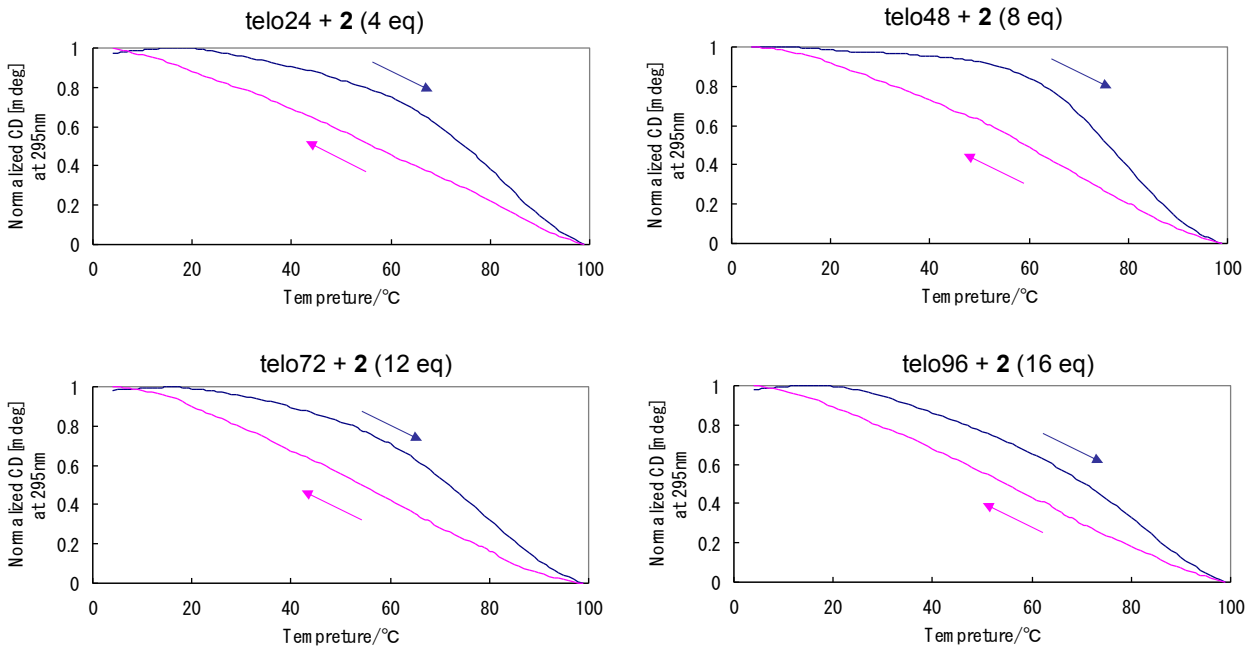
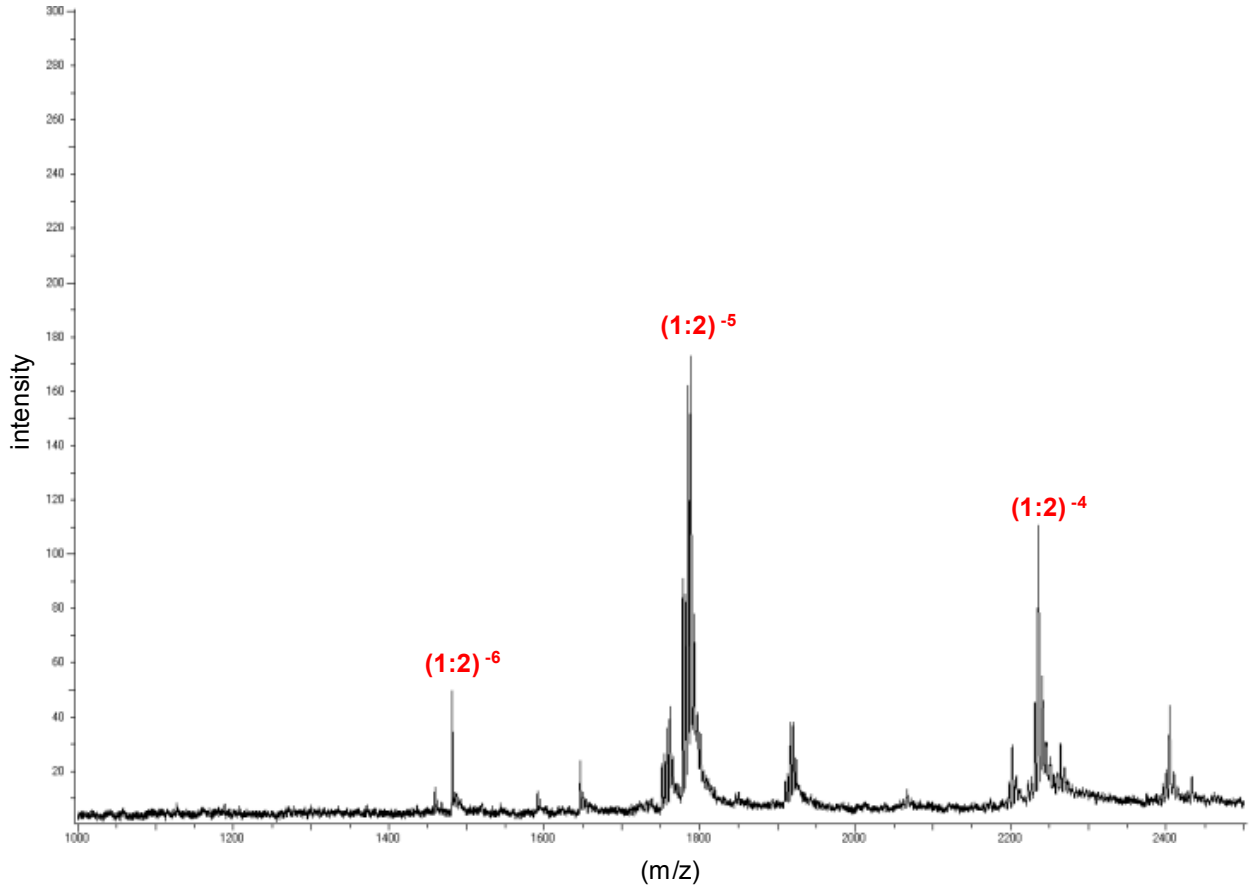


Fig. S1 Normalized thermal melting and annealing profiles recorded at 295 nm of $(TTAGGG)_n$ (n = 4–16) in the presence of 100 mM KCl with sufficient equivalent of **2**.

ESI-MS spectrometry

All measurements were carried out on a JMS-T100LC AccuTOF (JEOL), using the electrospray ionization (ESI) source in negative mode, as described previously.[S1] The measurement conditions and the sample preparation procedures were as follows: capillary needle voltage, -2.0 kV; ring lens voltage, -15 V; orifice 1 voltage, -75 V; orifice 2 voltage, 0 V; orifice 1 temperature, 80 °C; desolvation temperature, 80 °C; sample flow rate, 5 mL min^{-1}; All experiments were performed in 20 mM NH_4OAc containing 10 mMof GFOs and 40 mMof **2**. Methanol (10%) was added just before injection. The role of methanol is to increase ion signals.



Telomeric DNA $(TTAGGG)_4$	10 μM
Monomer **2**	40 μM
NH_4OAc	20 mM

(one DNA + two monomer-$4H^+$)$^{-4}$ = calct. 2221.70, found 2222.77
(one DNA + two monomer-$5H^+$)$^{-5}$ = calct. 1777.14, found 1778.08
(one DNA + two monomer-$6H^+$)$^{-6}$ = calct. 1481.12, found 1481.50

Fig. S2 ESI mass spectra of 10 μM telo24 with 40 μM monomer **2**.