

Folding/unfolding kinetics of G-quadruplexes upstream of the P1 promoter of the human
BCL-2 oncogene

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Supporting Information

Table S1

Figure S1

Name	Sequence (5' to 3')
Pu39	A GGGG C GGG CGCG GGG AGGA AGGGGG C GGG AGC GGGG GCTG
Bcl2-2345	A GGGG CGCG GGG AGGA AGGGGG C GGG A
Bcl2-1234	A GGGG C GGG CGCG GGG AGGA AGGGGG C
Bcl2-3456	CGC GGG AGGA AGGGGG C GGG AGC GGGG GCTG
Bcl2-1245	A GGGG C GGG CGCTTTAGGAAA AGGG C GGG A

Bcl2-1345	A GGGG CTTTCGC GGG AGGA AGGGGG C GGG AGC
Bcl2-1235	A GGGG C GGG CGCG GGG AGGAATTTTTC GGG AGC
Bcl2-2346	C GGG CGCG GGG AGGA AGGGGG CTTTAGC GGGG GCTG
Bcl2-2356	C GGG CGCG GGG AGGAATTTTTC GGG AGC GGGG GCTG
Bcl2-2456	C GGG CGCTTTAGGA AGGGGG C GGG AGC GGGG GCTG
Bcl2-1236	A GGGG C GGG CGCG GGG AGGAATTTTCTTTAGC GGGG GCTG
Bcl2-1246	A GGGG C GGG CGCTTTAGGA AGGGGG CTTTAGC GGGG GCTG
Bcl2-1256	A GGGG C GGG CGCTTTAGGAATTTTTC GGG AGC GGGG GCTG
Bcl2-1346	A GGGG CTTTCGC GGG AGGA AGGGGG CTTTAGC GGGG GCTG
Bcl2-1356	A GGGG CTTTCGC GGG AGGAATTTTTC GGG AGC GGGG GCTG
Bcl2-1456	A GGGG CTTTCGCCTTTAGGA AGGGGG C GGG AGC GGGG GCTG

Table S1. 15 truncated mutants with all the possible combinations of four G-tracts in the Pu39 sequence. The G-tracts are shown in bold. The sequences are listed based on the length of oligonucleotides and the length smaller than 30-nt are listed above the dotted line.

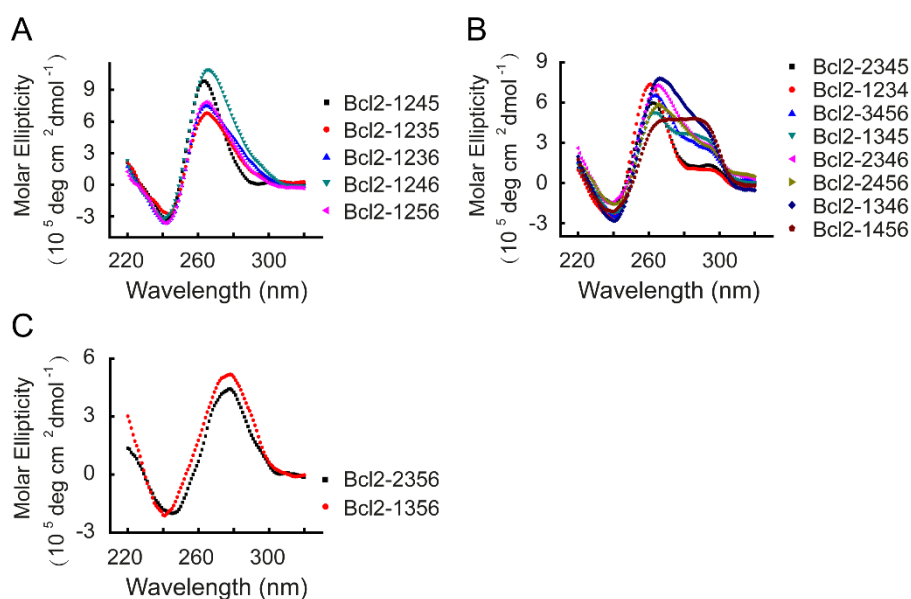


Figure S1. The CD spectra of the truncated mutants measured in 100 mM KCl at room temperature. (A) CD spectra of five sequences with a single positive peak at ~260 nm indicate the formation of parallel-stranded G4 structures. (B) CD spectra of eight sequences with a large positive peak at ~260 nm and a small positive peak at ~290 nm indicate the formation of a mixed parallel/antiparallel-stranded G4 structures. (C) CD spectra of the Bcl2-2356 and Bcl2-1356 sequences.