Supporting Information Table 1. ^{1}H Δδ and ^{13}C Δδ′ values (ppb) at 800 MHz at 25 ˚C and 5 ˚C.[a]

	Nt	measurement at 25 ˚C		measurement at 5 ˚C	
		^{1}H Δδ[b]	^{13}C Δδ′	^{1}H Δδ[c]	^{13}C Δδ′
C_2	A6	1	-47	1	-54
	A7	1	-52	2	-60
	A20	1	-52	1	-60
C_5	C4	-3	-59	-3	-69
	U5	0	-53	0	-59
	U19	-2	-51	3	-55
	C22	0	-10	1	-15
	C23	-2	-4	-2	-9
C_6	C4	n.d.[d]	-21	n.d.[d]	-36
	U5	7	-47	8	-62
	U19	6	-58	9	-68
	C22	5	-103	6	-111
	C23	3	-94	3	-118
C_8	G2	3	-52	-4	-78
	G3	4	-35	4	-40
	A6	-4	-23	n.d.[e]	n.d.[e]
	A7	2	-48	5	-52
	A20	-4	-10	n.d.[e]	n.d.[e]
	G21	6	-18	8	-20

[a] The alignment tensors at 5 and 25 °C differ in orientation by 9 ±2°, presumably as a result of a stiffening of the loop region at lower temperature. The magnitudes and rhombicities of the two alignment tensors are also different: -35 Hz/0.19 for 5°C data and -30 Hz/0.26 for 25°C data.
[b] Averaged ^{1}H shift obtained from HSQC and TROSY (carbon decoupled during the ^{1}H acquisition) spectra; pairwise rms shift = 3.4 ppb.
[c] Averaged ^{1}H shift obtained from two TROSY spectra; pairwise rms shift = 1.5 ppb.
[d] Overlap in ^{1}H dimension.
[e] Not determined due to resonance overlap.