Supplementary Table 1. Solid-state nuclear magnetic resonance experiments

Sample	Experiment	Magnet	MAS Rate (kHz)	Mixing (ms)	Exp Time (hr)
A	2D ^{13}C-^{13}C with DARR mixing	17.6 T (WB)	12.500	25	4
A	2D ^{15}N-{^{13}CO}-^{13}CX with DARR mixing	17.6 T (WB)	12.500	25	7
A	2D ^{15}N-{^{13}CA}-^{13}CX with DARR mixing	17.6 T (WB)	12.500	25	7
A	2D ^{13}CA-{^{15}N}-{^{13}CO}-^{13}CX with DARR mixing	17.6 T (WB)	12.500	50	30
A	3D ^{13}CA-{^{15}N}-^{13}CO	17.6 T (WB)	12.500	N/A	4
A	3D ^{15}N-^{13}CA-^{13}CX with DARR mixing	17.6 T (WB)	12.500	50	58
A	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (WB)	12.500	50	29
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	11.7 T (WB)	11.111	500	181
B	2D ^{13}C-^{13}C with DARR mixing	11.7 T (WB)	11.111	500	65
B	2D ^{13}C-^{13}C with DARR mixing	11.7 T (WB)	11.111	150	50
B	2D ^{15}N-^{13}C with TEDOR mixing	14.1 T (WB)	10.000	1.6, 3.2, 4.8, 6.4, 9.6, 12.8, 16.0	9, 13, 13, 9, 13, 13, 13
B	2D ^{15}N-^{13}C with TEDOR mixing	14.1 T (WB)	10.000	1.6, 3.2, 4.8, 6.4, 8.0, 9.6, 12.8, 16.0	7, 14, 21, 35, 21, 21, 28, 28
B	2D ^{13}C-^{13}C with DARR mixing	14.1 T (WB)	10.000	500	18
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	14.1 T (WB)	13.333	500	159
B	2D ^{13}C-^{13}C with DARR mixing	14.1 T (WB)	13.333	750	61
B	2D ^{13}C-^{13}C with DARR mixing	14.1 T (WB)	10.000	50, 100, 200, 300, 400, 500	22, 11, 12, 19, 33, 42
B	2D ^{13}C-^{13}C with DARR mixing	17.6 T (NB)	12.500	50, 100, 200, 300, 400, 500	11, 6, 12, 13, 13, 14
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (NB)	12.500	50	11
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (NB)	12.500	100	24
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (NB)	12.500	200	25
B	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (NB)	12.500	300	26
C	3D ^{15}N-^{13}CA-^{13}CX with DARR mixing	11.7 T (WB)	11.111	500	152
C	2D ^{13}C-^{13}C with DARR mixing	14.1 T (WB)	10.000	100, 200, 300, 400, 500	17, 18, 18, 30, 48
C	2D ^{15}N-^{13}C with TEDOR mixing	14.1 T (WB)	10.000	1.6, 3.2, 4.8, 6.4, 9.6, 12.8, 16.0	17, 22, 30, 22, 30, 113
C	3D ^{15}N-^{13}CA-^{13}CX with DARR mixing	17.6 T (WB)	12.500	500	88
C	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (WB)	12.500	500	35
C	3D ^{13}CA-^{15}N-^{13}CO	17.6 T (WB)	12.500	N/A	19
C	2D ^{13}C-^{13}C with DARR mixing	17.6 T (WB)	12.500	250	2
C	2D ^{13}C-^{13}C with DARR mixing	17.6 T (WB)	12.500	500	22
C	3D ^{13}C-^{13}C-^{13}C with DARR mixing	17.6 T (WB)	12.500	250, 500	306
C	3D ^{15}N-^{13}CA-^{13}CX with DARR mixing	17.6 T (WB)	12.500	750	230
C	3D ^{15}N-^{13}CO-^{13}CX with DARR mixing	17.6 T (WB)	12.500	750	100
D	2D ^{13}C-^{13}C with 1H-1H mixing	17.6 T (WB)	12.500	0.4	283
D	2D ^{13}C-^{13}C with DARR mixing	17.6 T (WB)	12.500	50	20
E	2D ^{15}N-^{13}C with TEDOR mixing	11.7 T (WB)	11.111	14.4	81
F	2D ^{15}N-^{13}C with TEDOR mixing	11.7 T (WB)	11.111	14.4	124
				Total Time	3049