Supporting Information

Self-Assembled Poly(L-lactide)-Based Platelets Prepared via Seeded Growth

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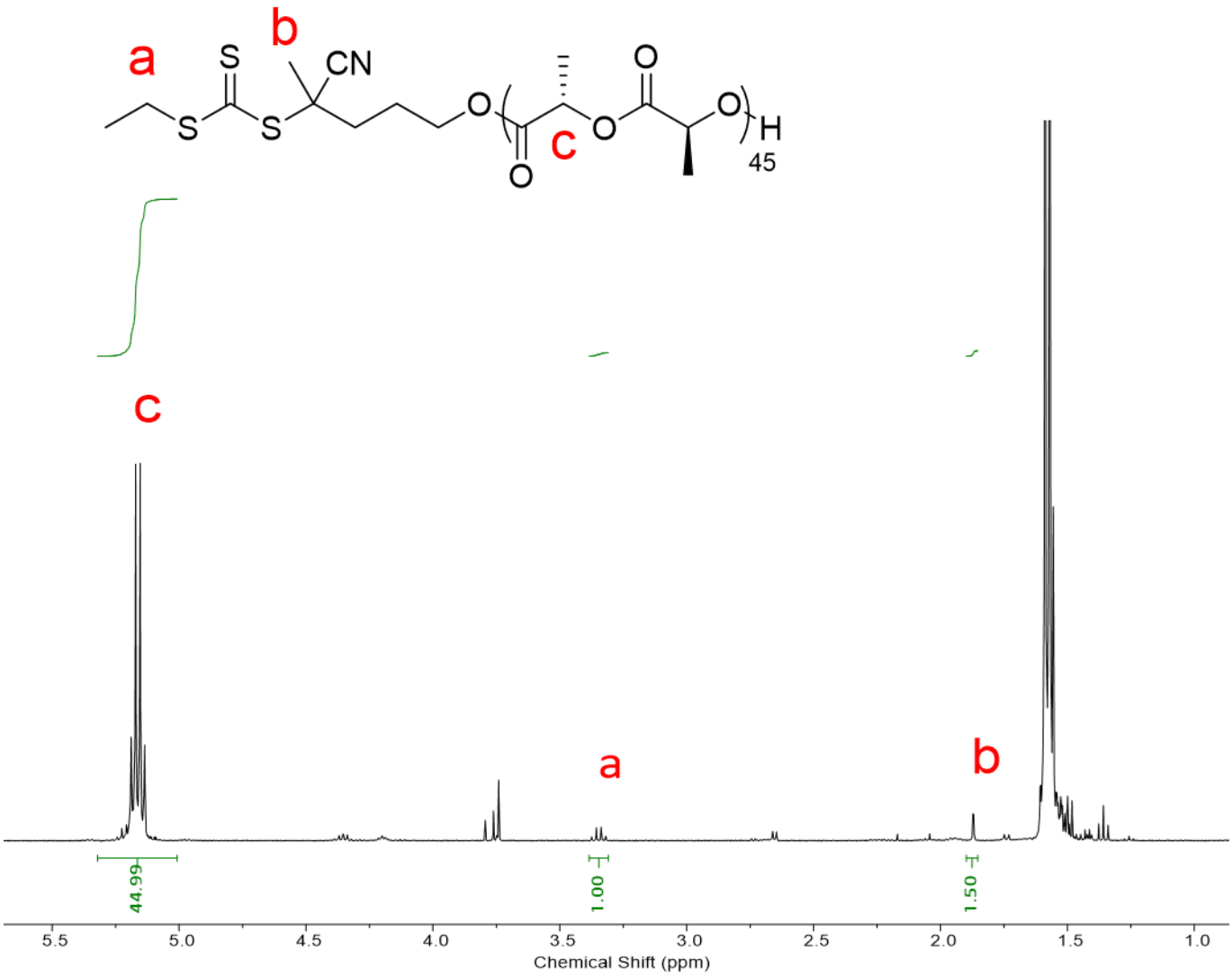


Figure S1. ^{1}H NMR spectrum of $PLLA_{45}$ homopolymer (400 MHz, in $CDCl_3$).

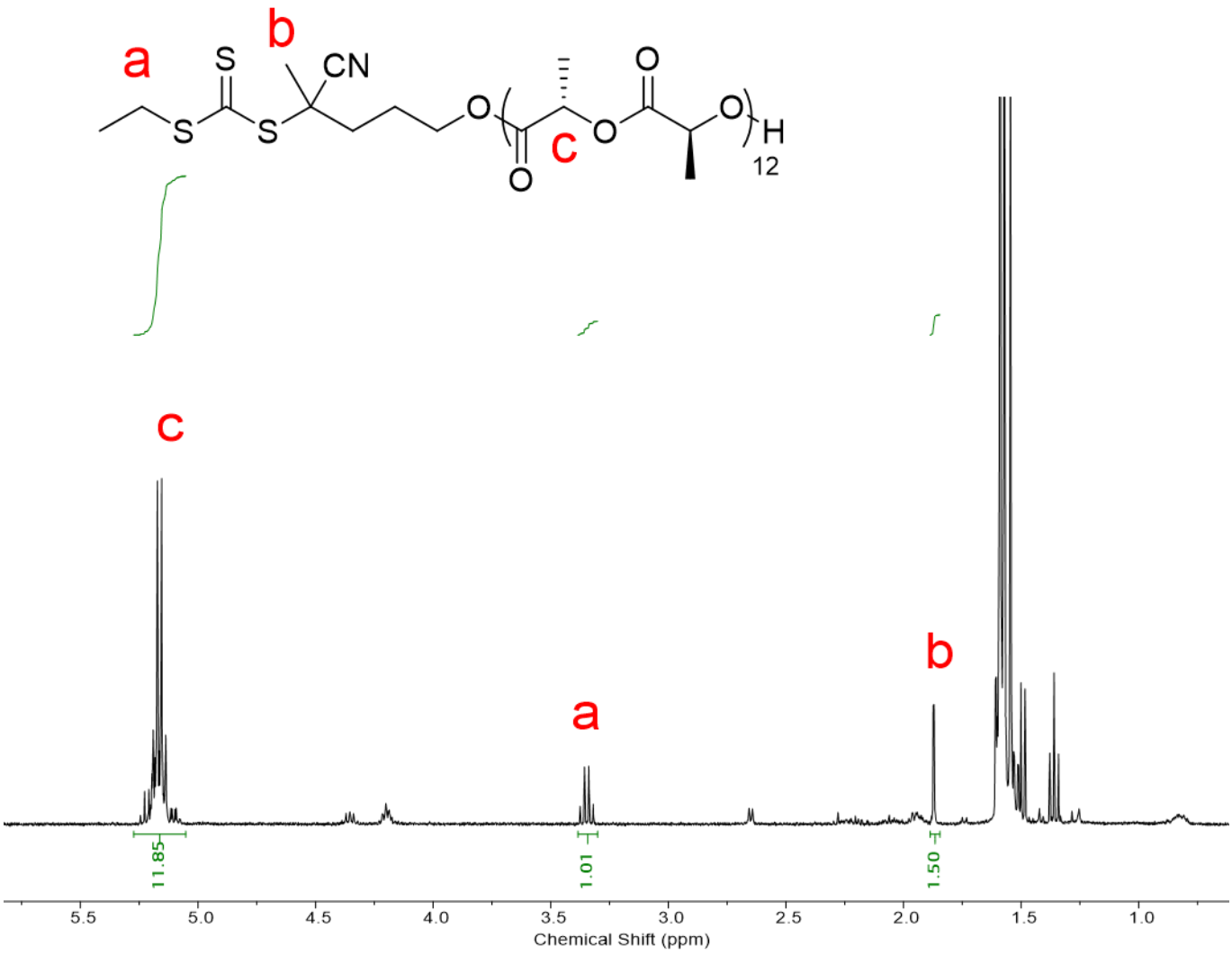


Figure S2. ^{1}H NMR spectrum of $PLLA_{12}$ homopolymer (400 MHz, in $CDCl_3$).

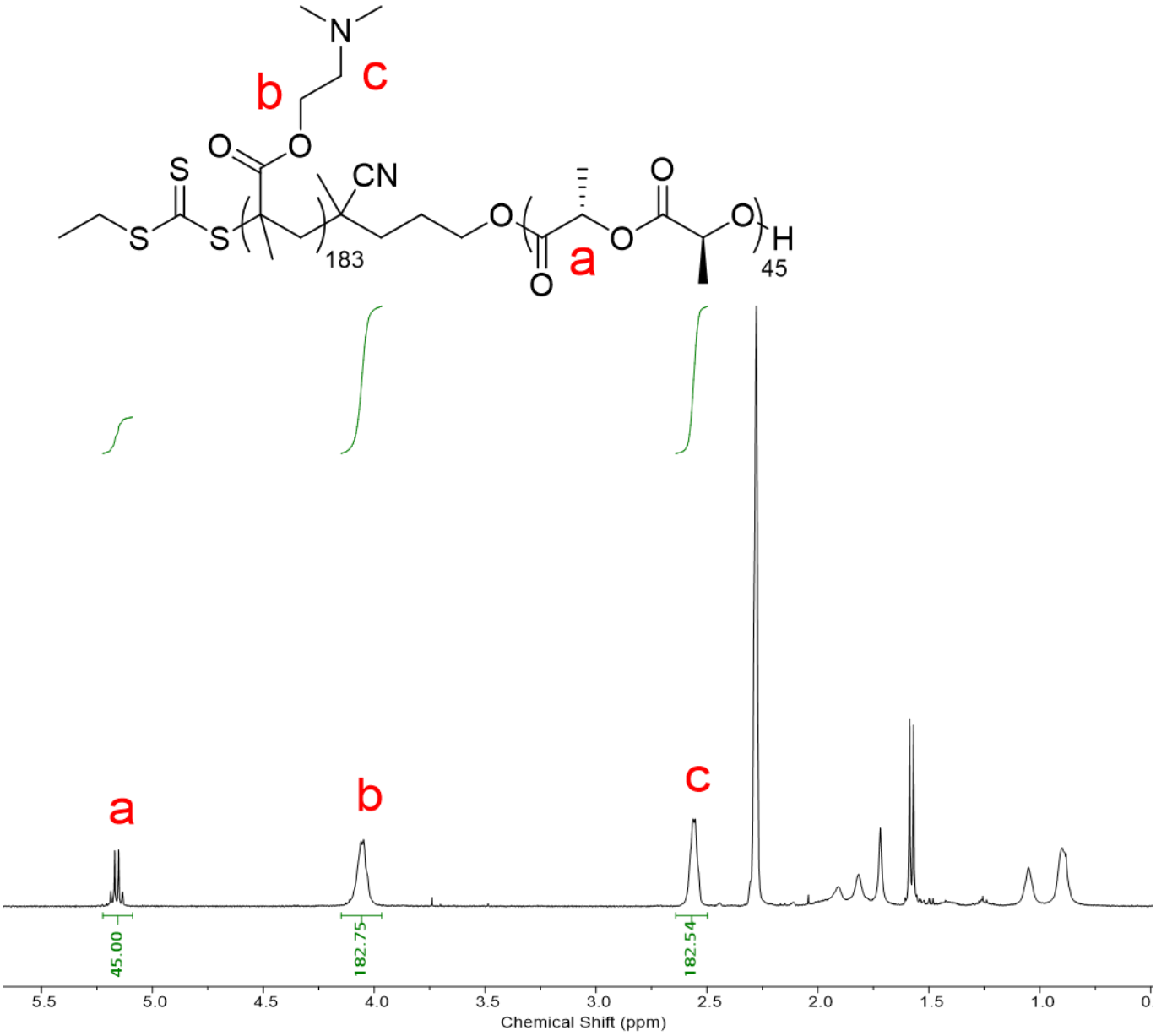


Figure S3. ^{1}H NMR spectrum of PLLA$_{45}$-*b*-PDMAEMA$_{183}$ diblock polymer (400 MHz, in $CDCl_3$).

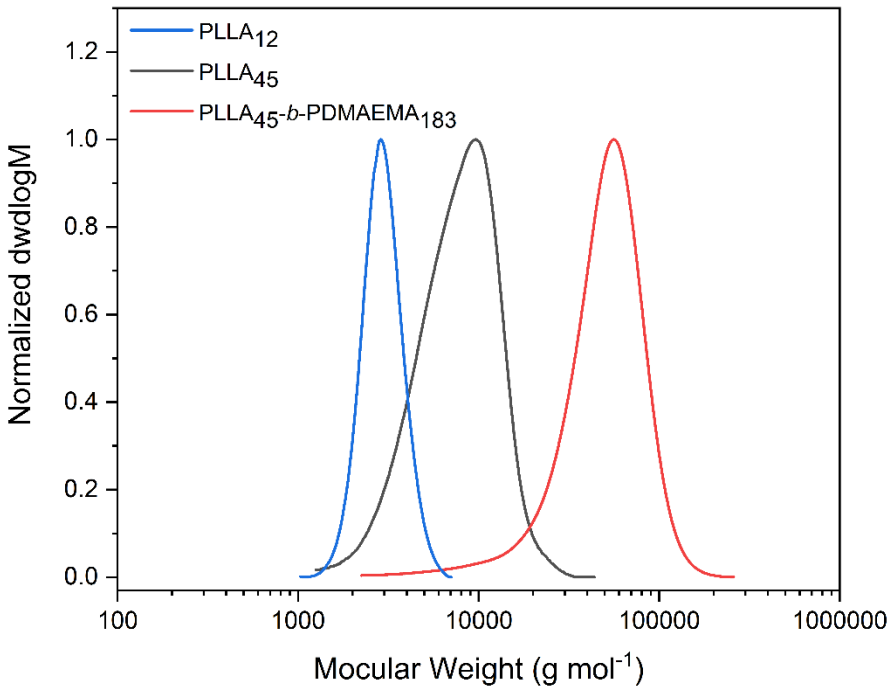


Figure S4. Normalized SEC curves (in $CHCl_3$ with 0.5% NEt_3, detected by refractive index).

Table S1. Summary of detailed polymer information.

Polymer	$M_{n\,(NMR)}$ ($kg \cdot mol^{-1}$)	$M_{n\,(SEC)}$ ($kg \cdot mol^{-1}$)	$M_{w\,(SEC)}$ ($kg \cdot mol^{-1}$)	$Đ_M$
$PLLA_{12}$	1.6	2.8	3.0	1.07
$PLLA_{45}$	5.4	6.2	8.1	1.30
$PLLA_{45}$-$PDMAEMA_{183}$	34.2	39.3	54.8	1.39

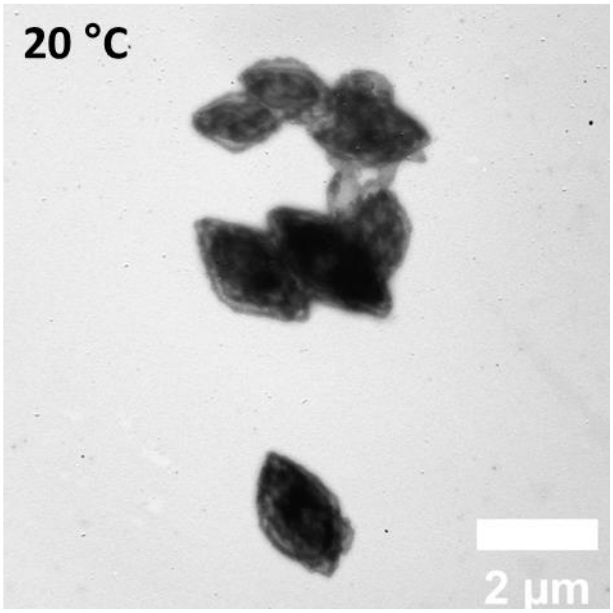
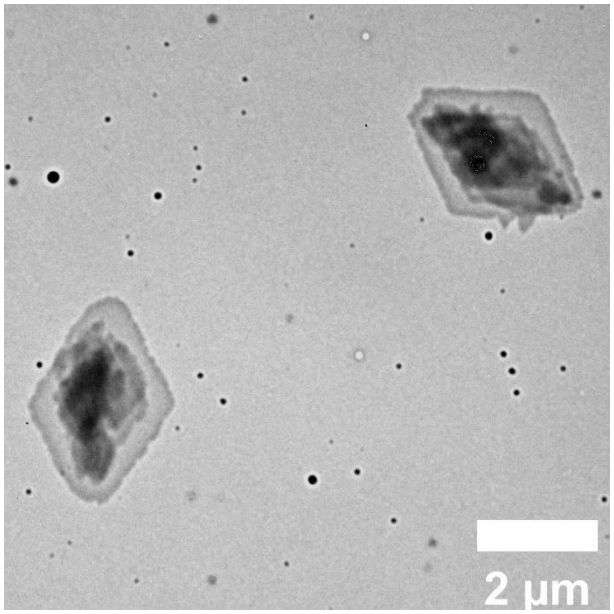
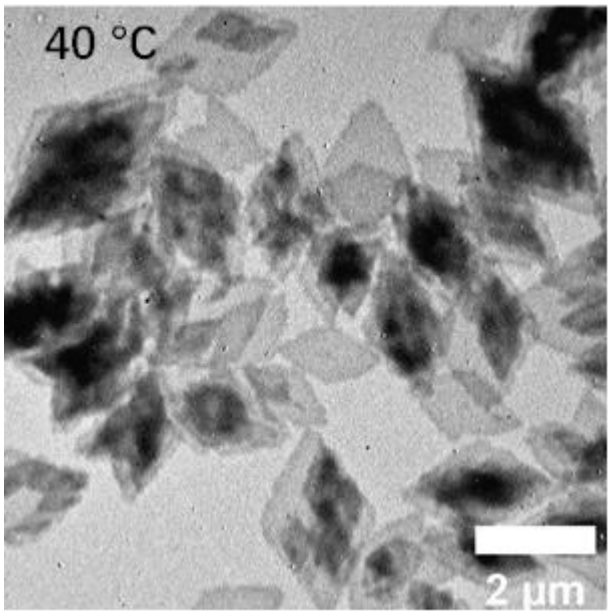


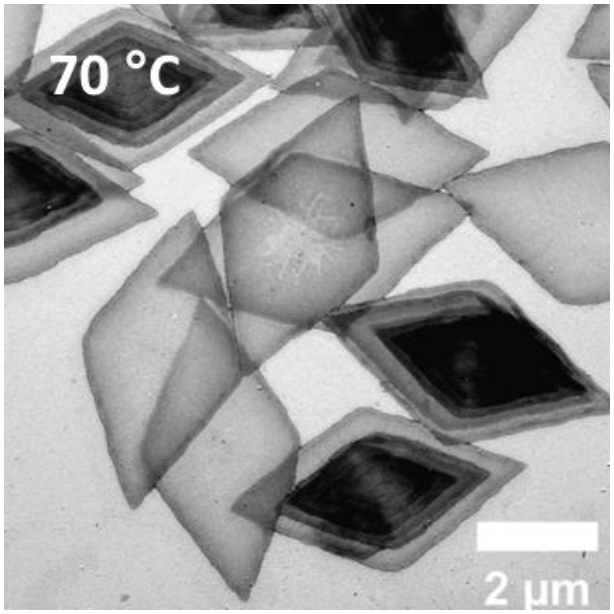
Figure S5. Platelets prepared by living CDSA at 20 °C.



Firure S6. Platelets prepared by adding unimer into ethanol without seed particles.



Firure S7. Platelets prepared by living CDSA at 40 °C.



Firure S8. Platelets prepared by living CDSA at 70 °C.

Table S2. Size of platelets prepared by various methods.

Sample	Unimer/Seed (w/w)	Homo/Diblock (w/w)	Temperature (°C)	A_n (um^2)	A_w (um^2)	A_w/A_n
1	10	1/1	50	4.47	4.68	1.05
2	10	1/1	60	0.97	0.99	1.02
3	10	1/1	65	2.24	2.30	1.02
4	10	1/1	70	8.31	8.41	1.01
5	10	1/2	50	0.27	0.30	1.10
6	10	1/4	50	0.18	0.19	1.07
7	10	1/8	50	0.16	0.17	1.08
8	10	1/1	50	0.44	0.47	1.05
9	20	1/1	50	0.66	0.68	1.03
10	30	1/1	50	0.93	1.00	1.08
11	10	1/1	50 and 20	0.39	0.42	1.08
12	20	1/1	50 and 20	0.66	0.68	1.03
13	30	1/1	50 and 20	0.95	1.00	1.05

Shading colors represent the parameters studied: orange—temperature; gold—homopolymer-to-diblock polymer ratio in the unimer solution; blue—short homopolymer used as unimer with varying unimer-to-seed ratios; green—flow-seeded growth with varying unimer-to-seed ratios.