Supporting Information

알칸 용매내에서 용매 크기에 따른 블록공중합체 마이셀 구조 연구

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Solvent size-dependent structure of diblock copolymer micelles in *n*-alkanes

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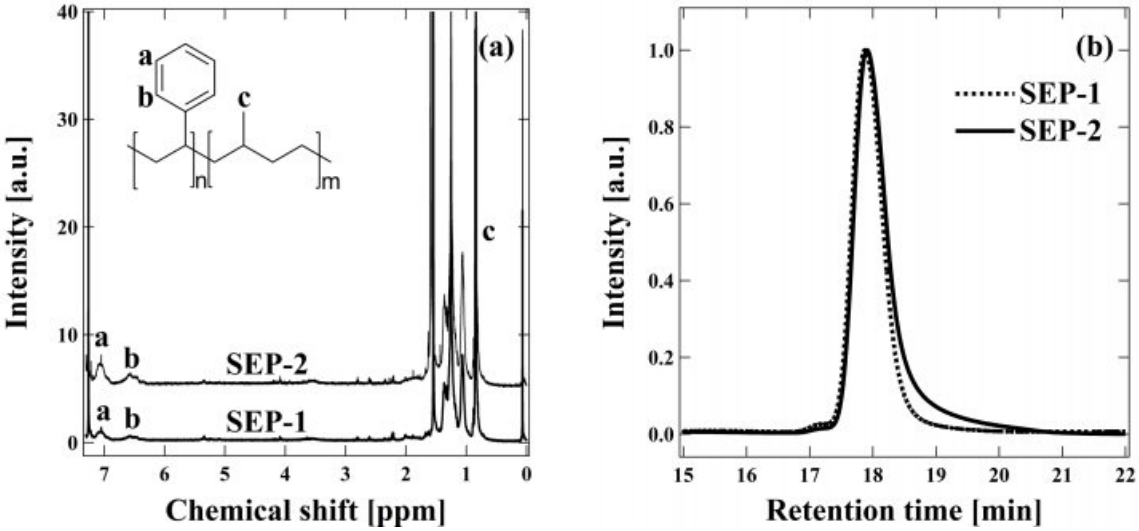

Figure S1. (a) ^{1}H-NMR spectra for SEP-1 and SEP-2. (b) GPC results of SEP-1 and SEP-2. This confirms that both SEP block copolymers are narrowly dispersed in molecular weight.

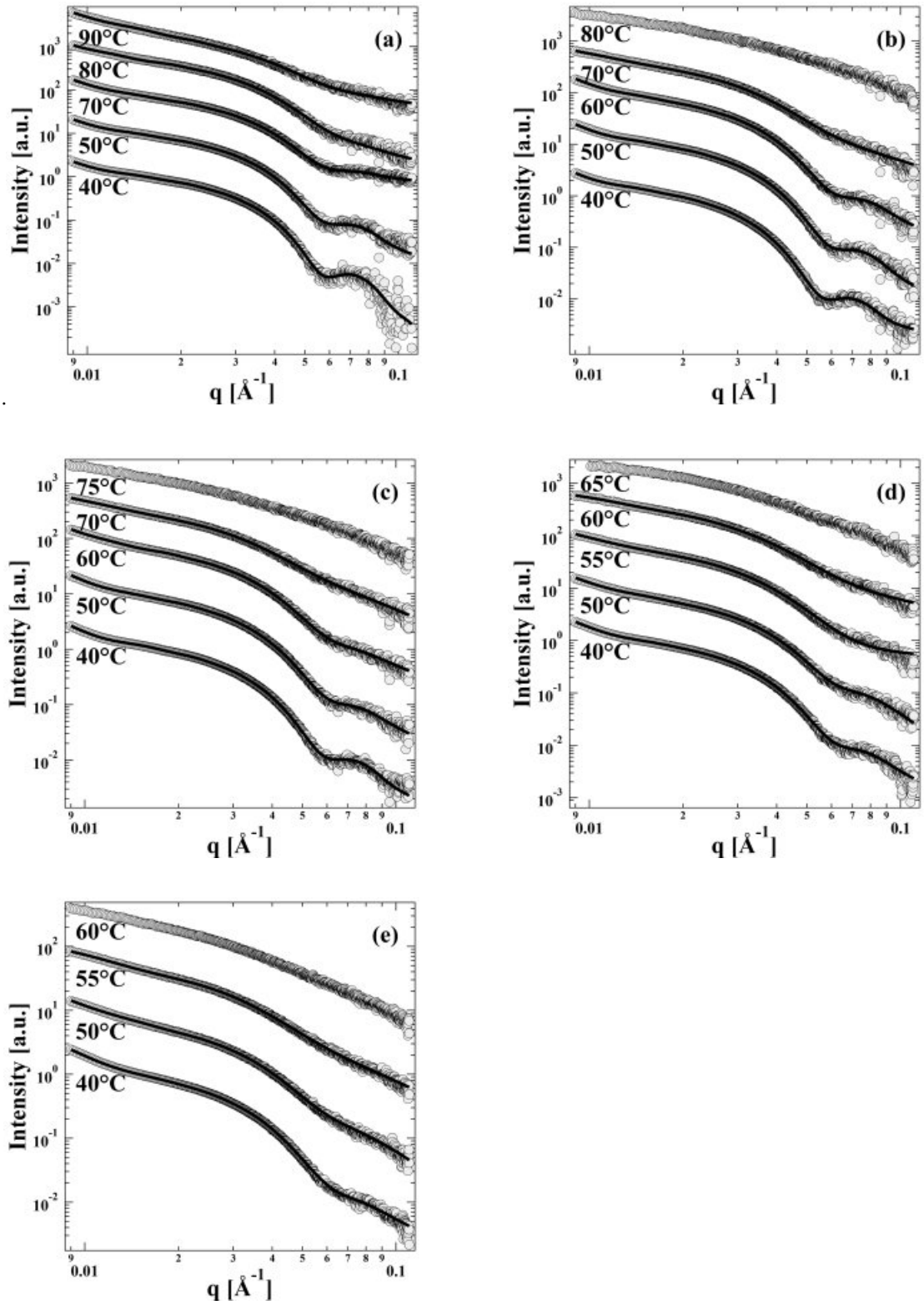

Figure S2. SAXS profiles for SEP -1 in *n*-alkanes; (a) *n*-hexadecane, (b) *n*-tetradecane, (c) *n*-dodecane, (d) *n*-decane, and (e) *n*-octane. Solid curves represent the best fit to the detailed BCP micelle model. Data are vertically shifted for clarity.

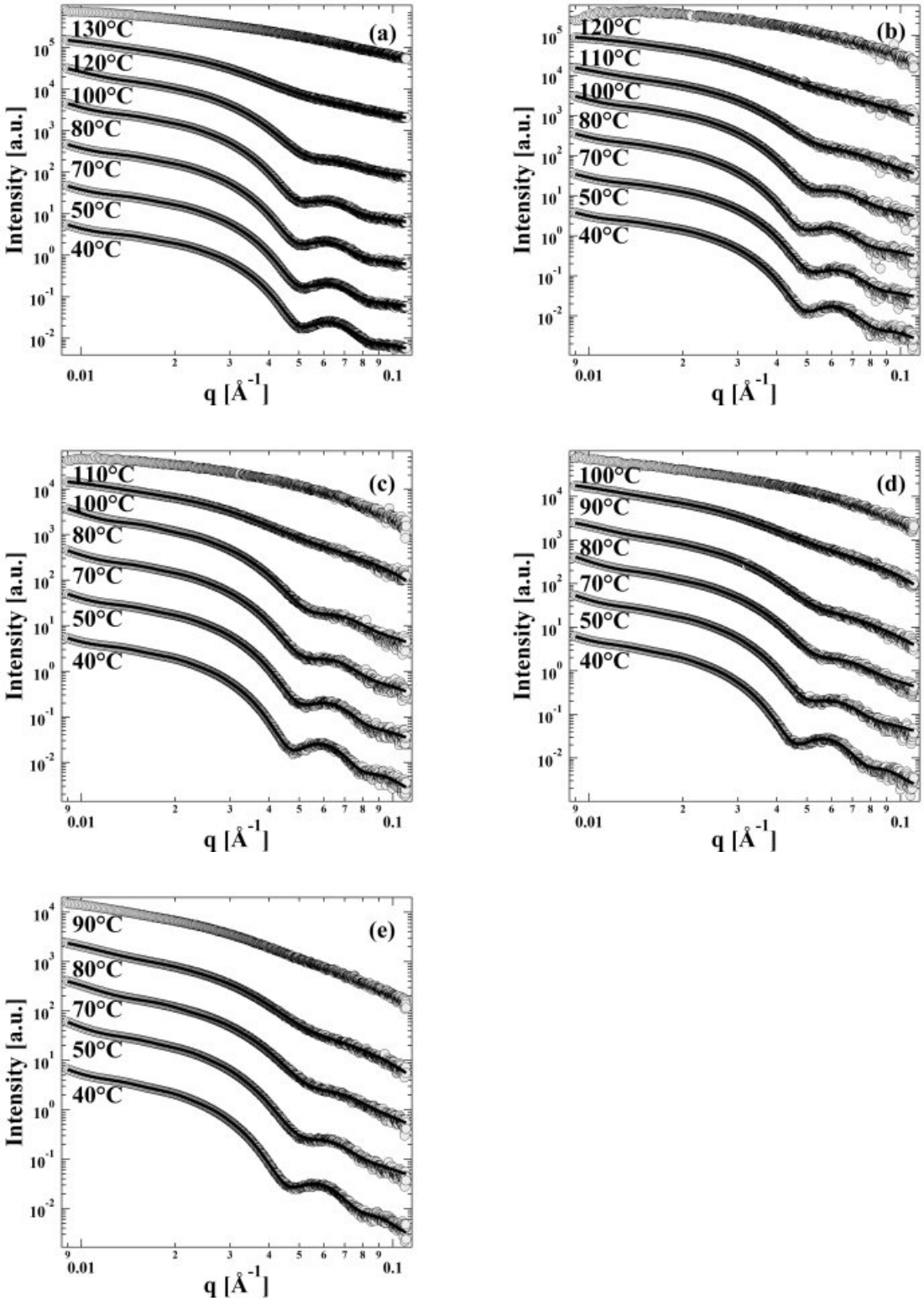

Figure S3. SAXS profiles for SEP-2 in *n*-alkanes; (a) *n*-hexadecane, (b) *n*-tetradecane, (c) *n*-dodecane, (d) *n*-decane, and (e) *n*-octane. Solid curves represent the best fit to the detailed BCP micelle model. Data are vertically shifted for clarity.

Table S1. **SAXS fitting results of SEP-1 in *n*-alkanes.**

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
HD						
40	79	72	436	5	13	0.10
50	77	67	431	4	14	0.10
70	73	52	392	4	14	0.08
80	72	48	309	12	17	0.03
90	63	21	233	7	27	0.03

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
TD						
40	79	74	443	4	14	0.09
50	75	59	424	4	14	0.09
60	72	51	348	4	14	0.05
70	58	15	273	13	26	0.06

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
DD						
40	75	61	425	4	15	0.07
50	72	51	394	4	15	0.06
60	72	51	348	4	14	0.05
70	52	11	208	19	30	0.03

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
DE						
40	71	50	400	4	16	0.03
50	69	42	358	4	15	0.02
55	62	28	325	18	23	0.03
60	70	46	322	7	16	0.03

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
OC						
40	68	43	334	5	17	0.06
50	64	32	255	5	22	0.03
55	58	13	224	22	28	0.07

Table S2. SAXS fitting results of SEP-2 in *n*-alkanes.

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
HD						
40	90	73	428	5	13	0.13
50	90	72	425	6	14	0.11
70	91	69	427	7	15	0.12
80	91	66	420	7	15	0.12
100	86	45	375	10	14	0.10
120	61	14	226	18	33	0.06

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
TD						
40	91	75	443	3	15	0.11
50	90	70	425	8	13	0.09
70	94	73	438	8	13	0.09
80	89	61	414	8	15	0.10
100	81	32	299	9	17	0.05
110	57	9	245	39	36	0.15

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
DD						
40	95	88	456	3	14	0.11
50	91	71	431	7	14	0.12
70	89	62	416	8	14	0.12
80	82	42	394	5	16	0.15
100	68	16	240	26	28	0.06

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
DE						
40	98	93	470	4	14	0.11
50	92	72	429	8	15	0.13
70	86	49	395	9	13	0.13
80	79	35	334	8	19	0.10
90	69	18	259	37	30	0.08

Temp. (°C)	R_c (Å)	N_{agg}	R_{hs} (Å)	σ_R (Å)	σ_{int} (Å)	η_{hs}
OC						
40	99	97	462	8	11	0.08
50	91	70	419	9	15	0.13
70	83	39	333	9	13	0.11
80	72	17	193	35	34	0.11

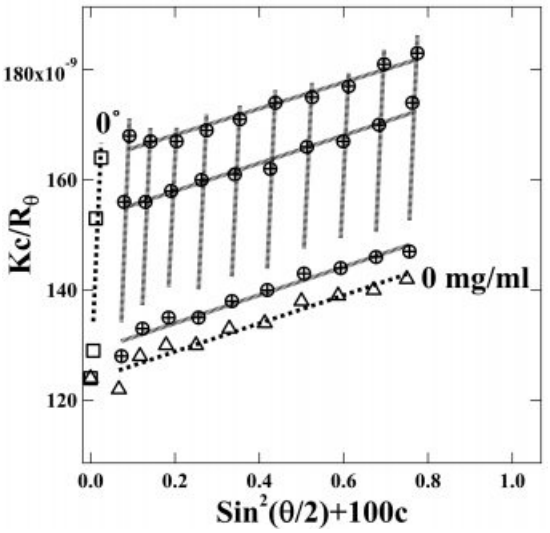

Figure S4. Zimm-plot obtained from SEP-2 in *n*-hexadecane at room temperature.