Electronic Supplementary Material (ESI) for RSC Advances.

Micelle-provided microenvironment facilitating the formation of single-handed helical polymer-based nanoparticles

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Table S1. GPC data of polyM obtained by emulsion polymerizations in the presence of $(nbd)Rh^{+}B^{-}(C_6H_5)_4$ and chiral additive.

Run.	chiral additive	M_n[a]	M_w/M_n[a]
1	R-PEA	8100	1.72
2	S-PEA	9000	1.70
3	none	9200	1.77
4	R(S)-PEA	9400	1.59
5	D-menthol	9500	1.75
6	L-menthol	8300	1.73

[a] Determined by GPC (polystyrenes as standards, THF as eluent).

Table S2. GPC data of polyM obtained by emulsion polymerizations in the presence of $[(nbd)RhCl]_2$ and chiral additive.

Run.	chiral additive	M_n[a]	M_w/M_n[a]
1	R-PEA	7400	1.64
2	S-PEA	7600	1.41
3	D-menthol	10200	1.77
4	L-menthol	9400	1.59

[a] Determined by GPC (polystyrenes as standards, THF as eluent).

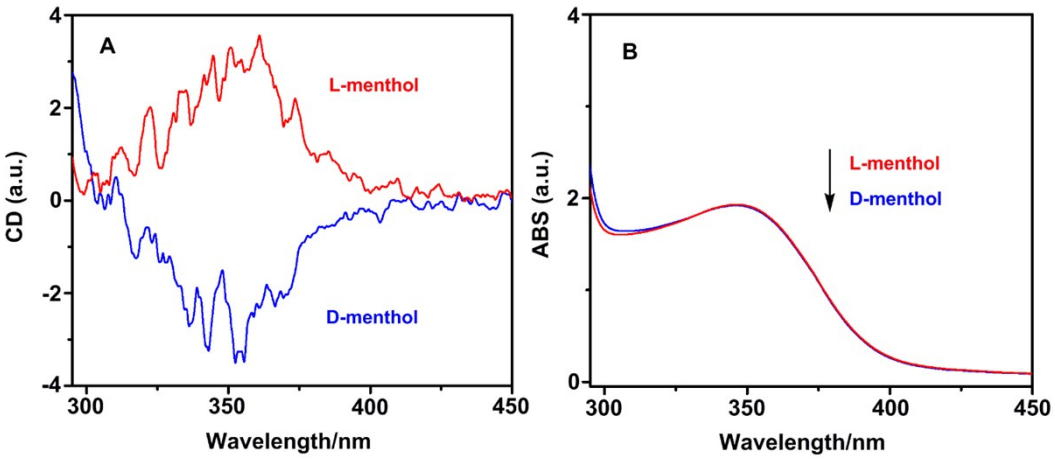

Figure. S1. (A) CD and (B) UV-vis spectra of polyM emulsions in the presence of $[(nbd)RhCl]_2$ and chiral menthol. The spectra were recorded at 25 °C.

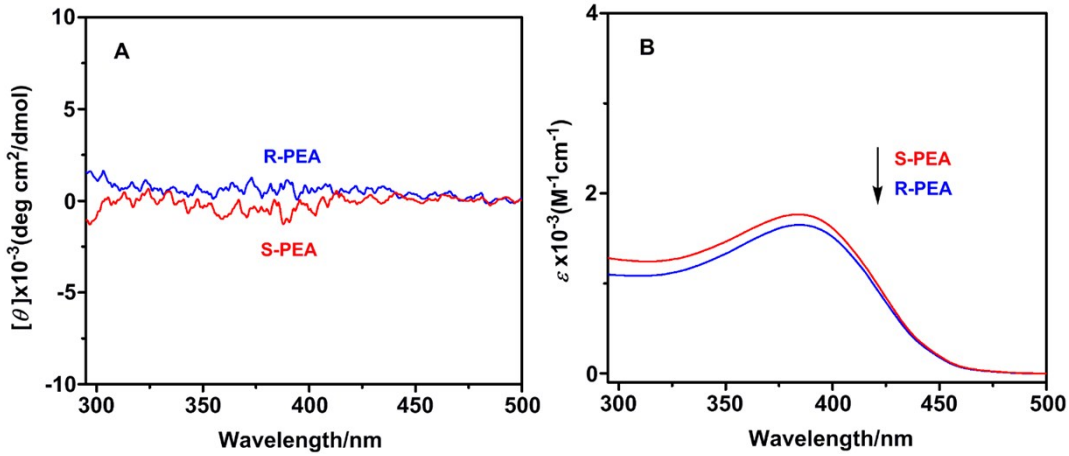

Figure. S2. (A) CD and (B) UV-vis spectra of polyM solutions after solution polymerization in the presence of $[(nbd)RhCl]_2$ and chiral PEA. The solution concentration was approximately 1 mmol/L by monomer units. The spectra were recorded at 25 °C.

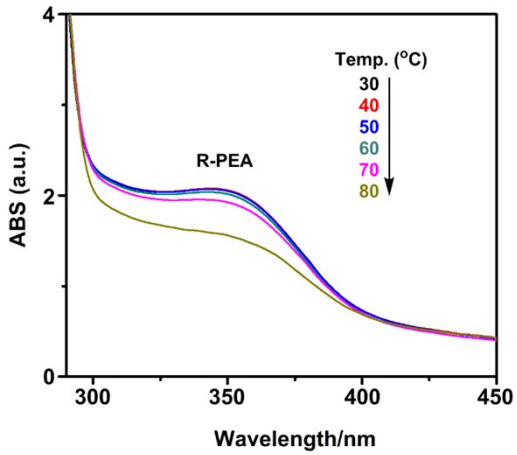

Figure S3. Effects of temperature on UV-vis spectra of polyM emulsion obtained by HSSEP in the presence of R-PEA.

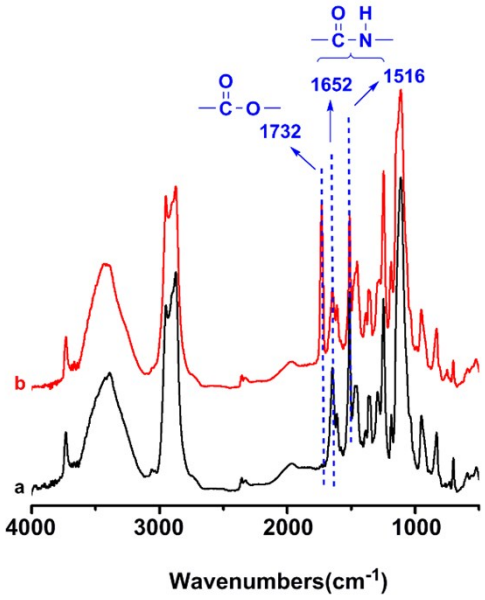

Figure S4. FI-IR spectra of (a) pure polyM nanoparticles and (b) optically active core/shell nanoparticles (KBr tablet).

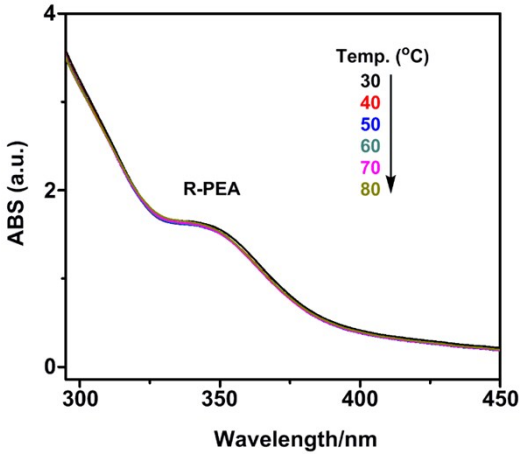

Figure S5. Effects of temperature on UV-vis spectra of core/shell nanoparticles in the presence of R-PEA.