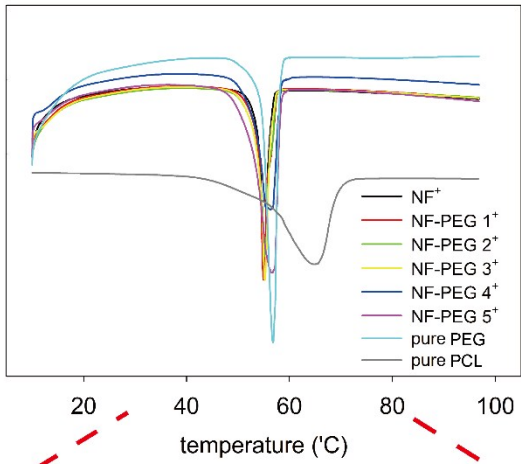
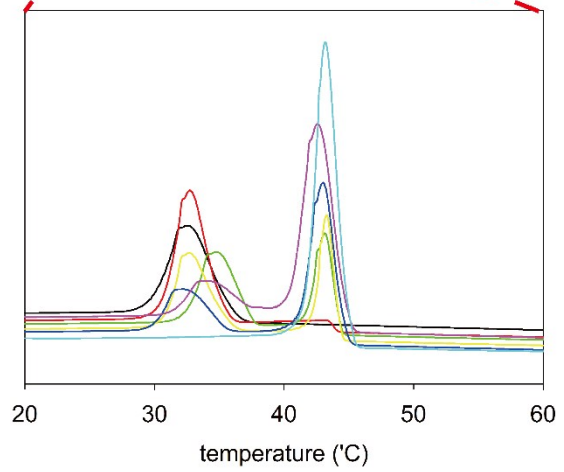
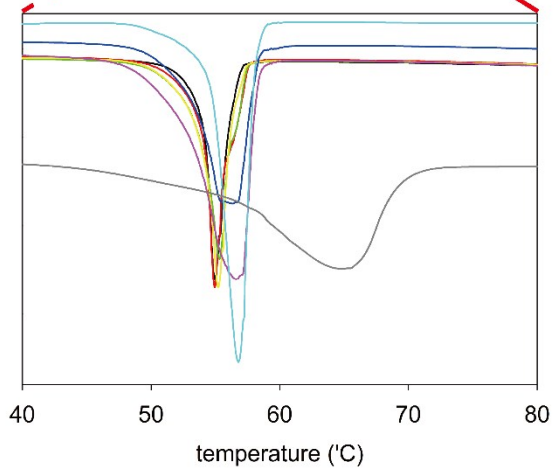
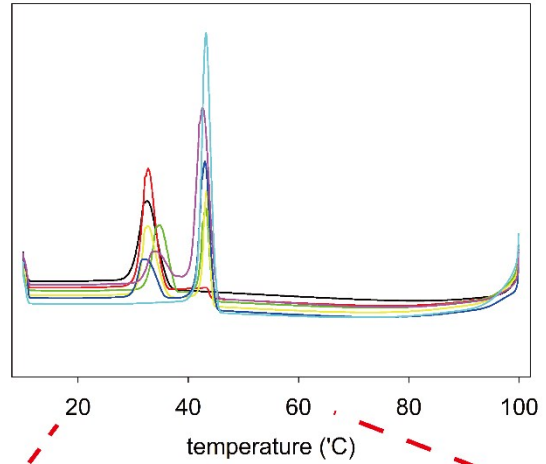


S1.  $^1\text{H}$  NMR of PCL-PEI block copolymer.

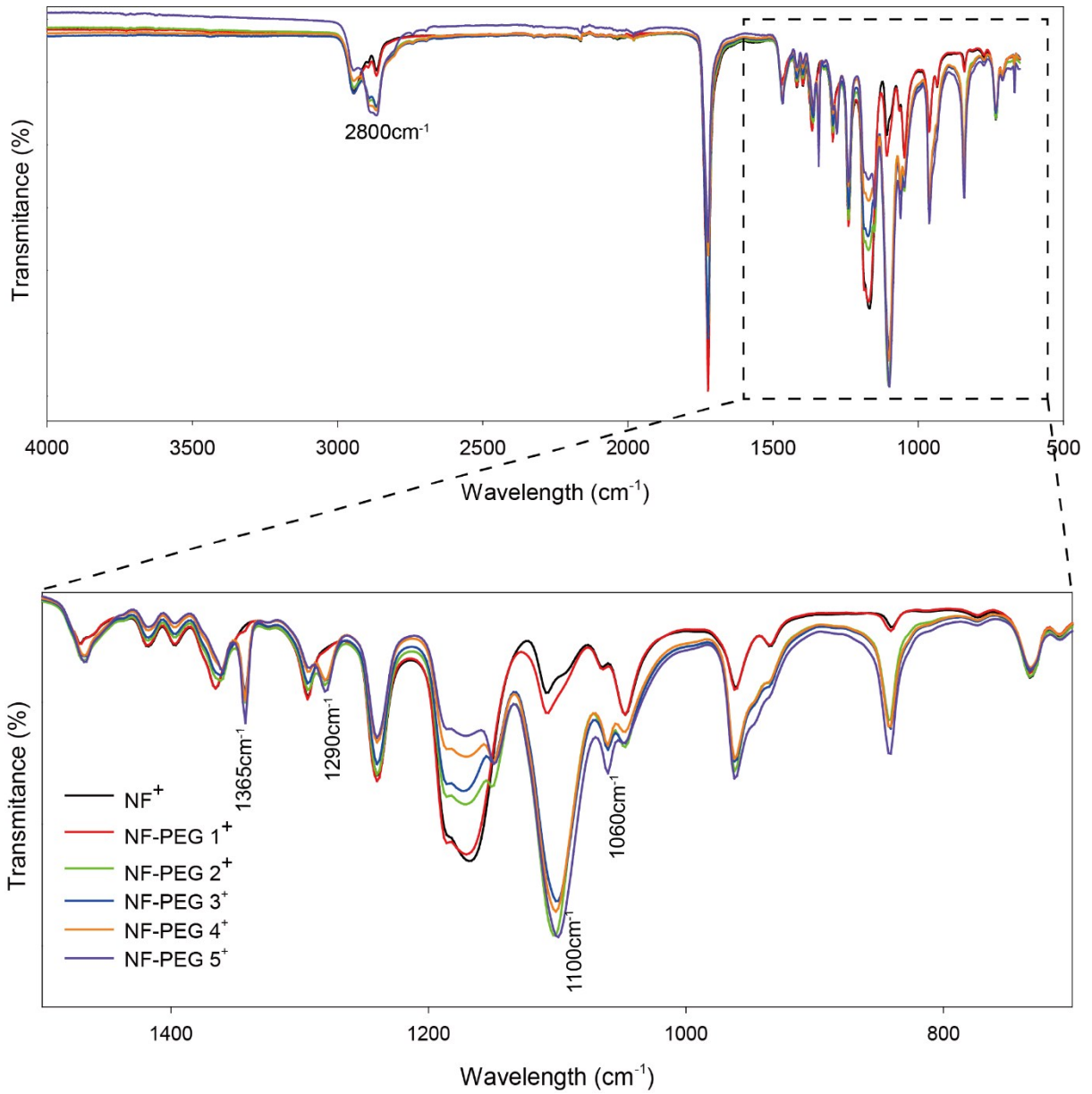
Endothermic curve



Exothermic curve



S2. Exothermic property of PEG layered nanofiber by DSC.



S3. FT-IR of PEG layered nanofiber.

Table S1. Primers for real time PCR.

Primer	Sequence	T <sub>m</sub> , °C	product size, bp
GAPDH-F <sup>a</sup>	ACCCAGAAGACTGTGGATGG	59.962	125
GAPDH-R <sup>b</sup>	TTCAGCTCAGGGATGACCTT	59.803	
Keratin 14-F	CATCCTTGCGGTTCTTCTCT	59.430	114
Keratin 14-R	TGGGTGGAGATGTCAATGTG	60.378	
Loricrin-F	CATGATGCTACCCGAGGTTT	59.955	132
Loricrin-R	ACTGGGGTTGGGAGGTAGTT	59.717	
Filaggrin-F	GTCGATTTGTCCCAGCCTTA	60.042	107
Filaggrin-R	TCAGACGACTCCGAGAGGTT	59.986	
Involucrin-F	AAACCCAGAGCAGCAGCTTA	60.154	196
Invorucrin-R	CTCTAGGTGCTTCAGGTGCC	60.012	

<sup>a</sup> F: forward primer sequence

<sup>b</sup> R: reverse primer sequence