

Table S1. Raw data for the calculation of  $I_c$  values

Type	Compound	MW (g/mol)	$T_{fus}$ (K)	$\Delta H_{fus}$ (J/g)	$\Delta H_{fus}$ (kJ/mol)
API	NPX	230.26	432.15	142.55	32.824
	IBU	206.29	348.57	130.35	26.889
Dicarboxylic acid	SUC	-	465.63	-	-
	GLU	-	371.73	-	-
	SUB	-	417.25	-	-
Fatty alcohol <sup>1</sup>	TD	-	313.15	-	-
	OD	-	333.65	-	-
	DC	-	346.98	-	-

<sup>1</sup> Tetradecanol (TD), octadecanol (OD), and docosanol (DC).

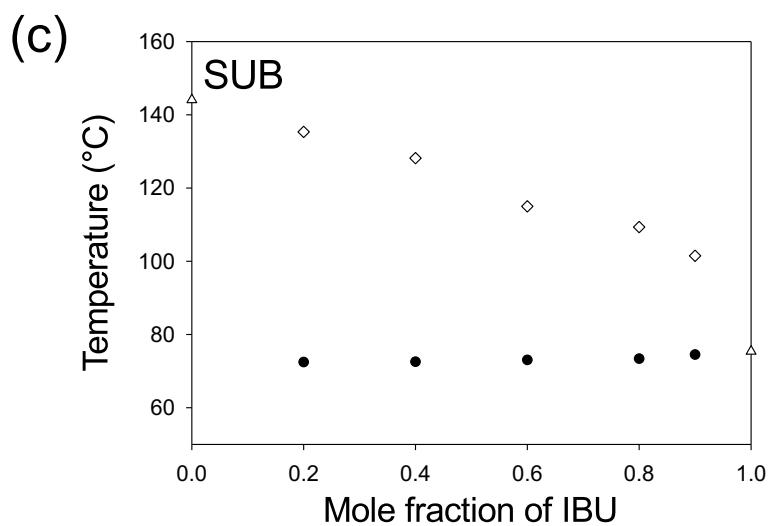
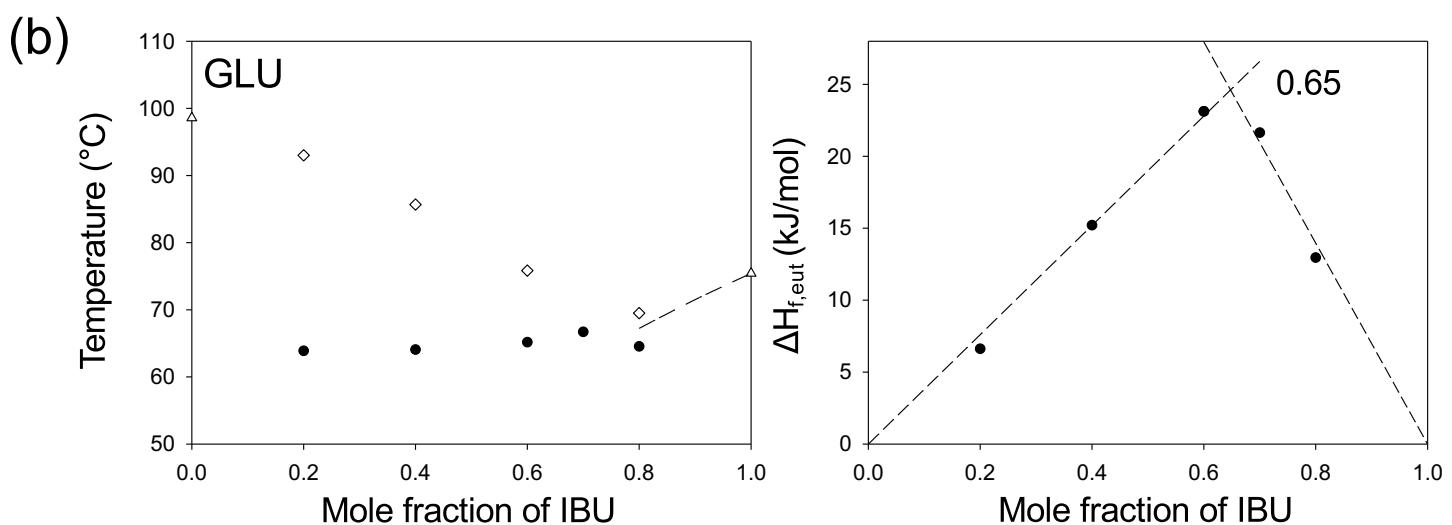
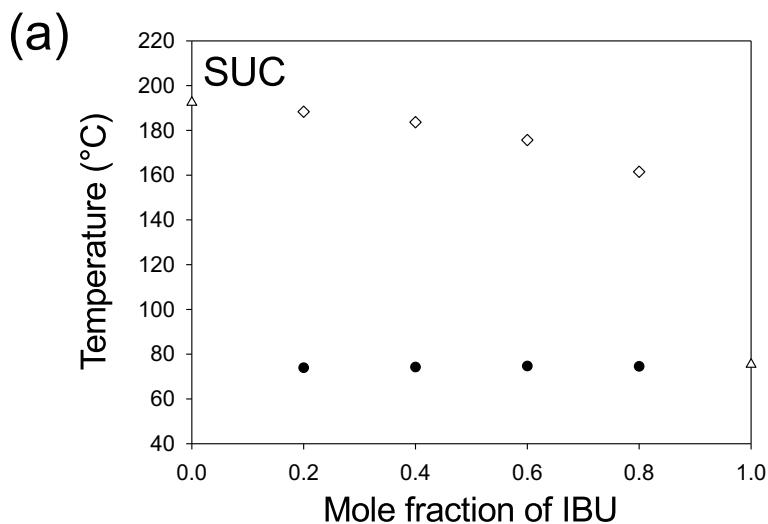


Figure S1. Melting diagrams of (a) IBU/SUC, (b) IBU/GLU (with Tammann plot), and (c) IBU/SUB mixtures.

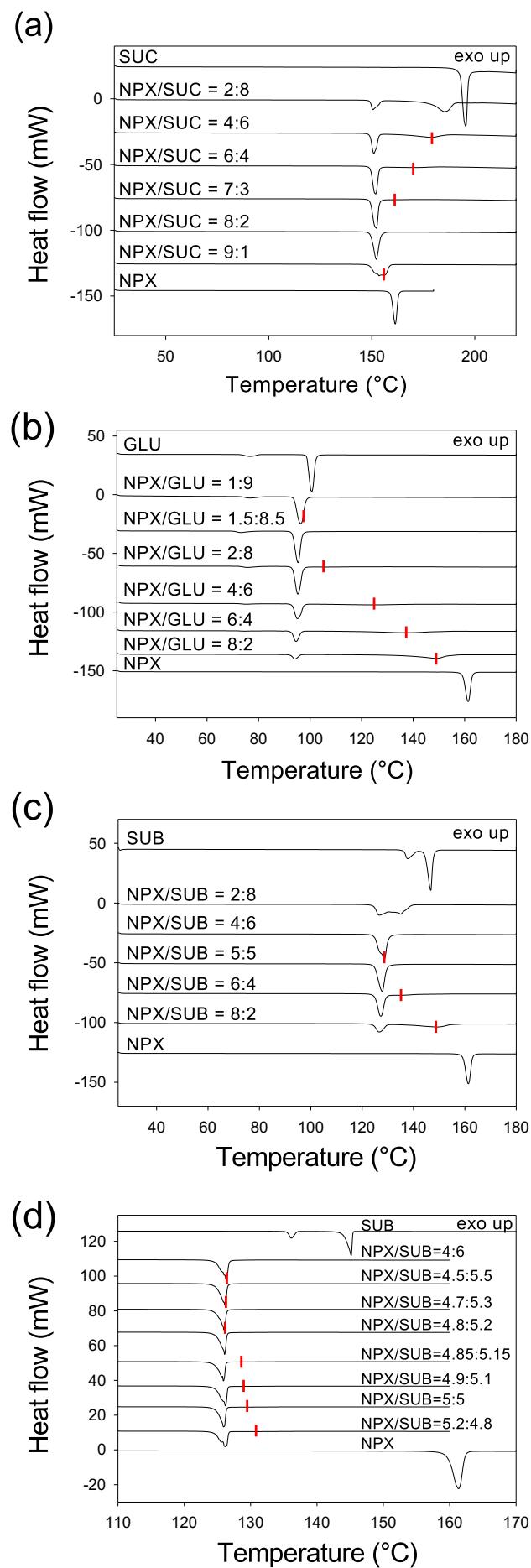


Figure S2. DSC thermograms of (a) NPX/SUC, (b) NPX/GLU, and (c, d) NPX/SUB mixtures. Heating rate 10 °C/min for (a, b, c) and 1 °C/min for (d).

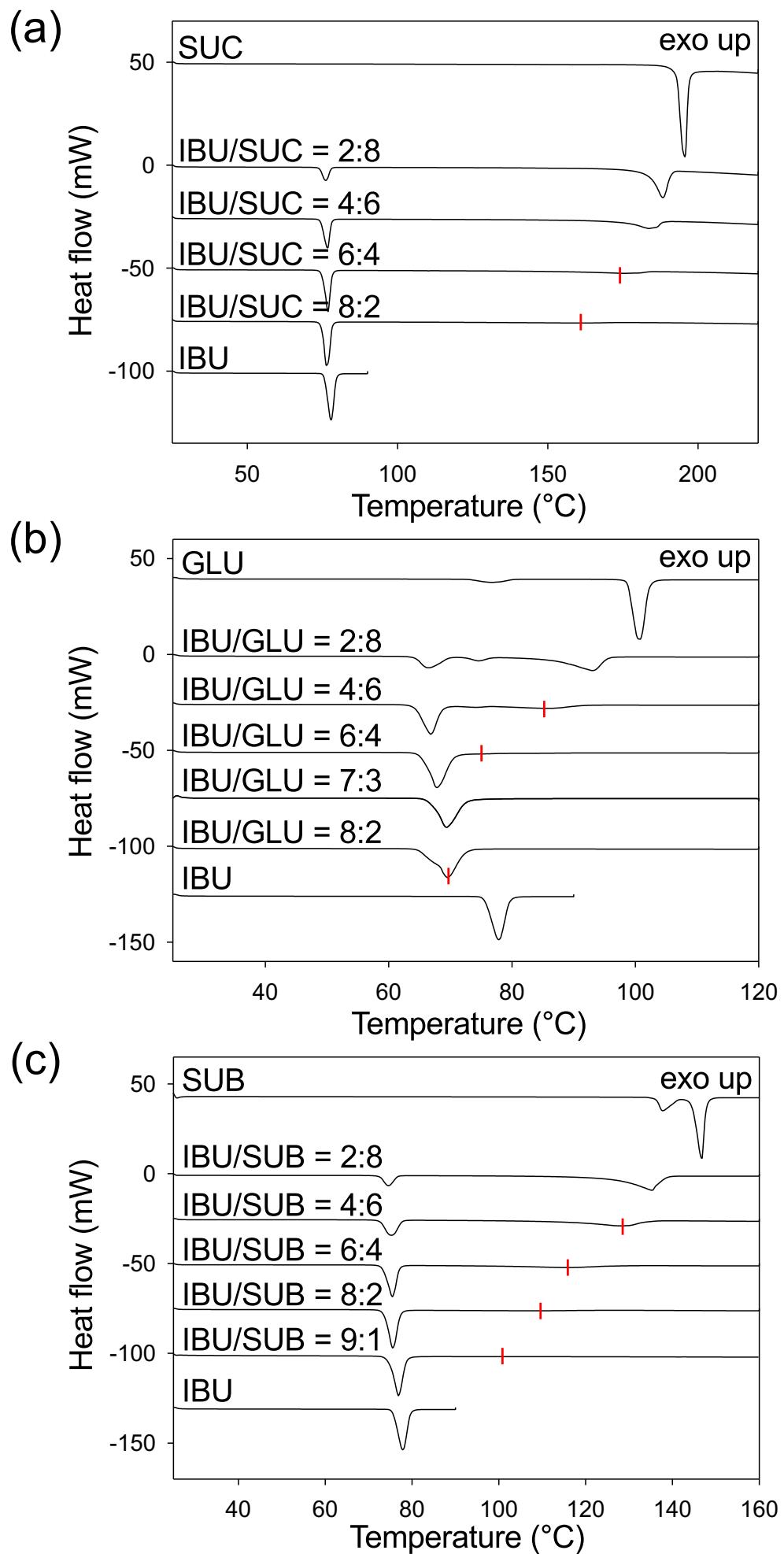


Figure S3. DSC thermograms of (a) IBU/SUC, (b) IBU/GLU, and (c) IBU/SUB mixtures. Heating rate 10 °C/min.

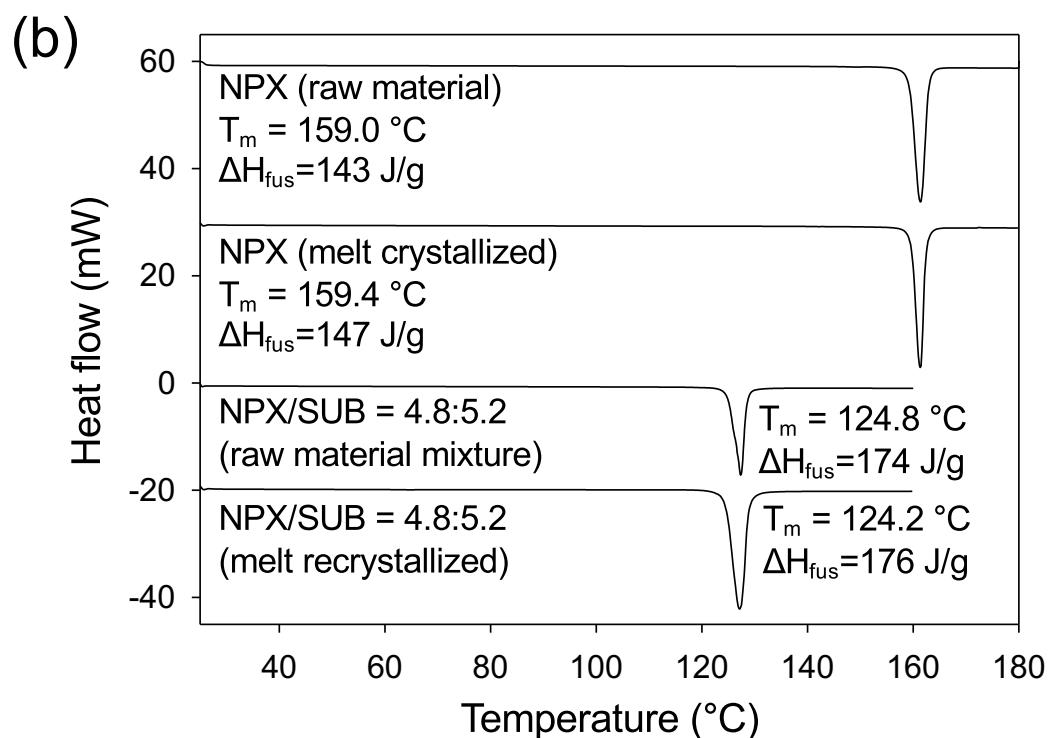
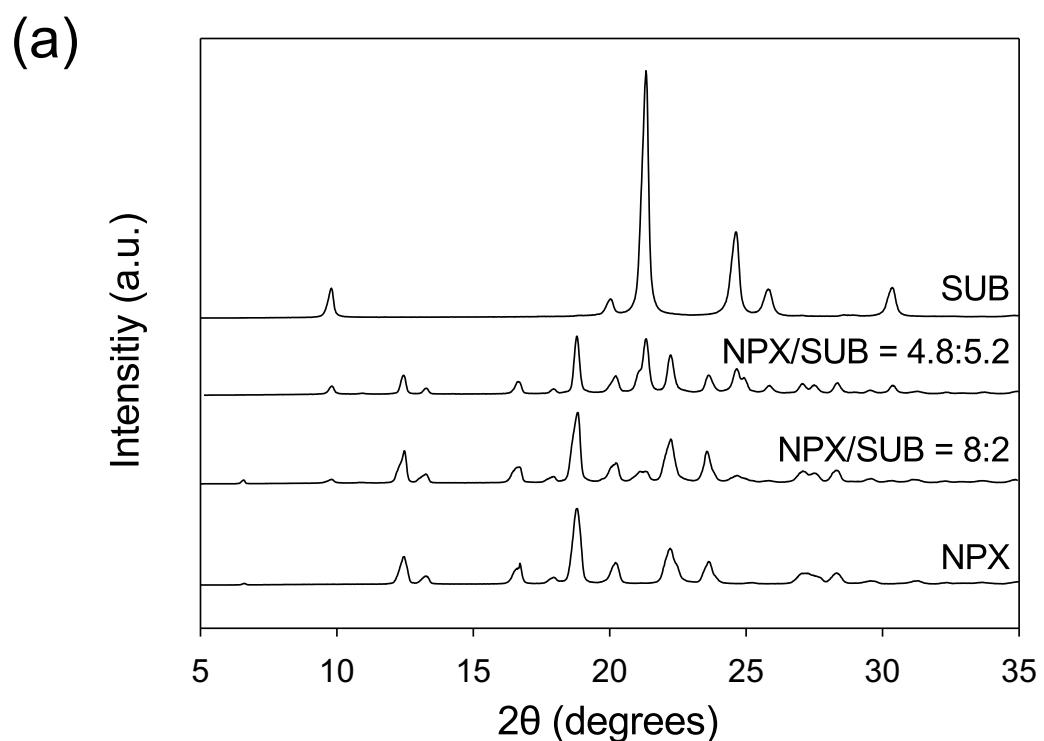


Figure S4. (a) XRD patterns for melt crystallized NPX, NPX/SUB, and SUB. (b) DSC thermograms to compare NPX and NPX/SUB before and after melt crystallization.

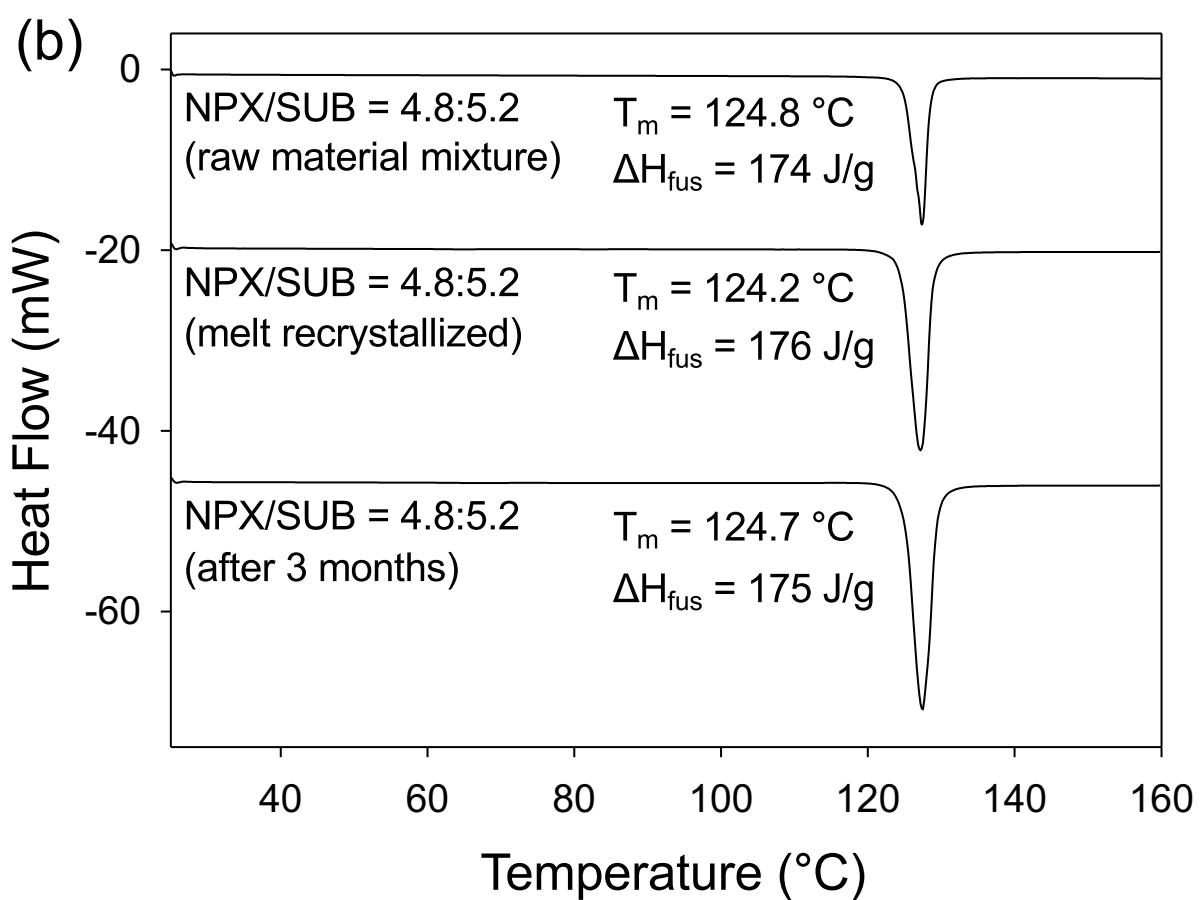
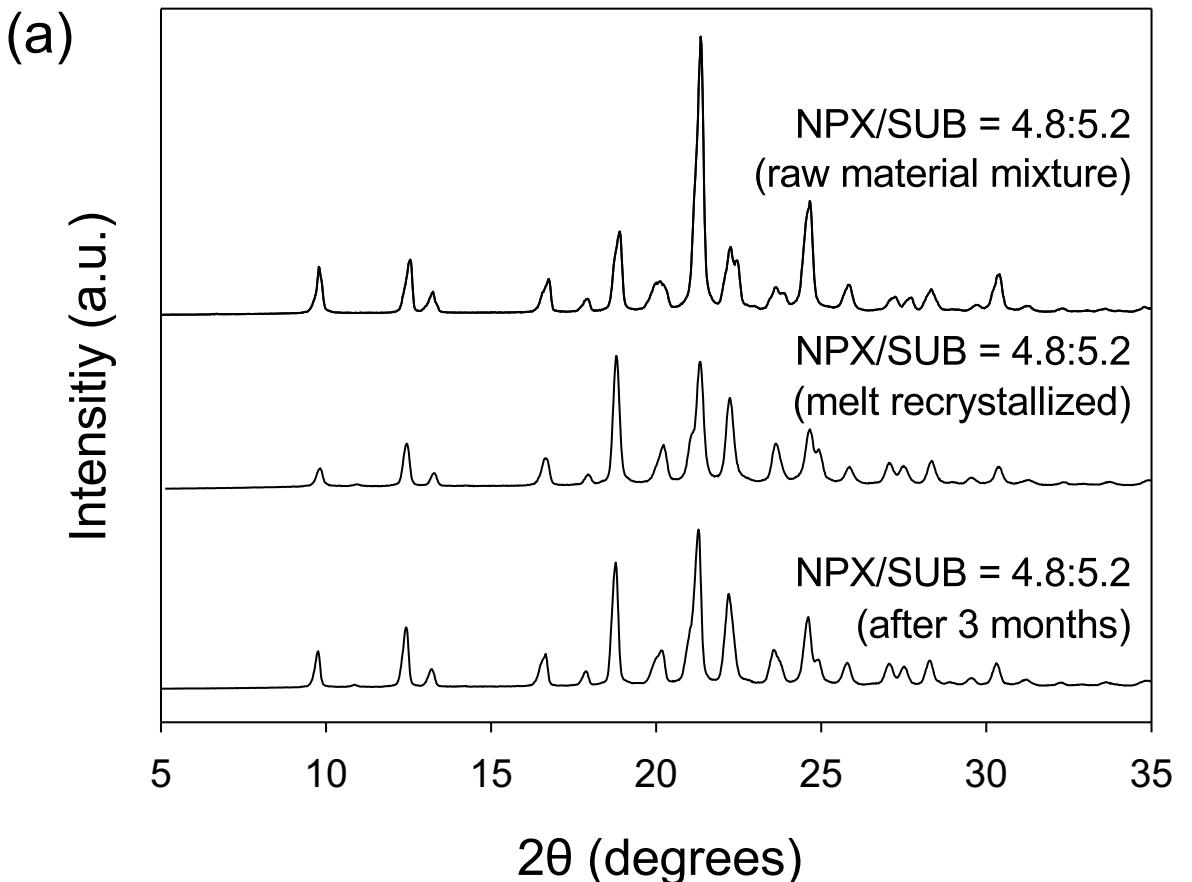


Figure S5. (a) XRD patterns and (b) DSC thermograms to show that virtually no change occurred for the 3-month storage (room temperature) after melt recrystallization.

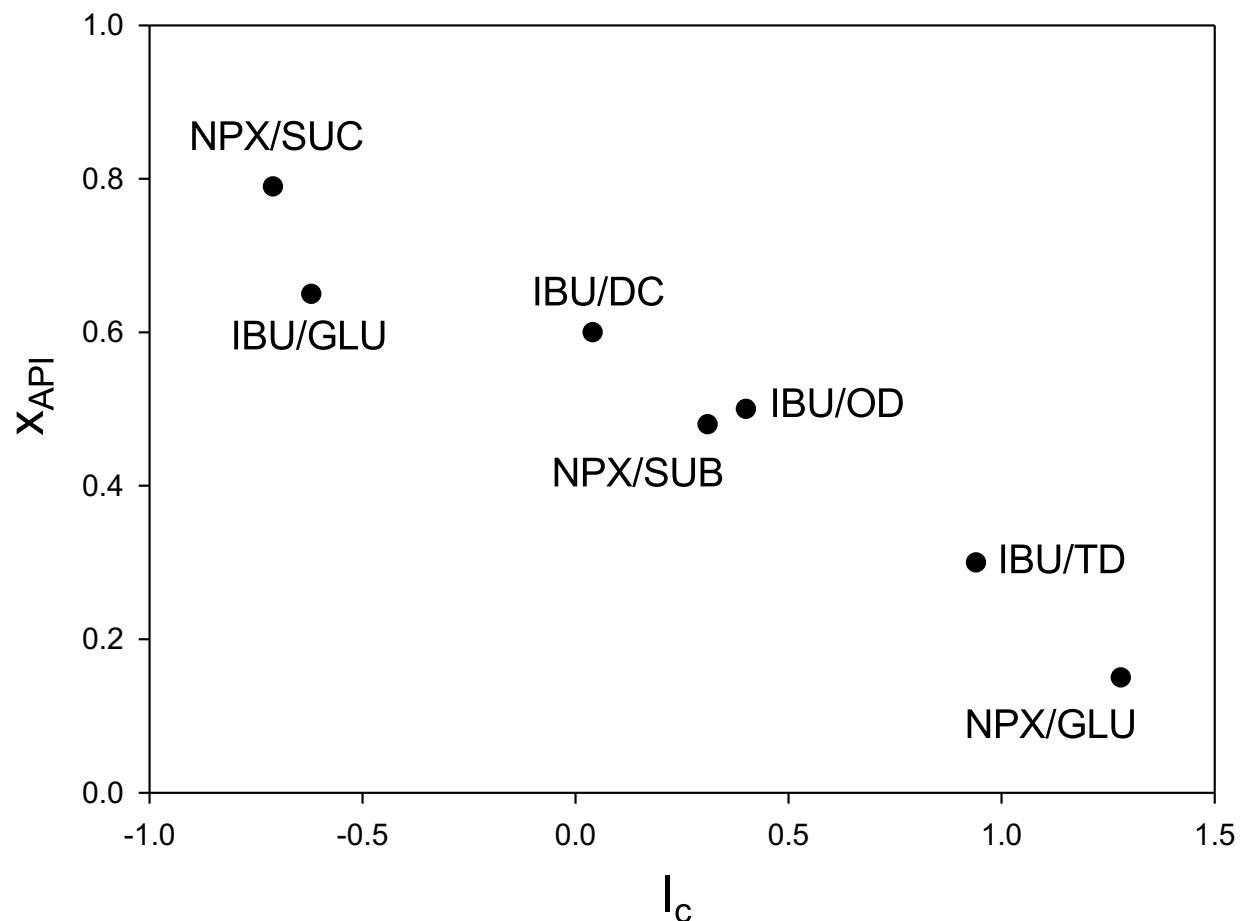


Figure S6. Correlation between  $I_c$  and the mole fraction of APIs ( $x_{\text{API}}$ ) at eutectic points. The linear regression generated  $x_{\text{API}} = -0.2832 I_c + 0.5621$  ( $R^2 = 0.9429$ ).