

Supplementary Material

A Green Purification Method of R-phycoerythrin from Marine Algae (*Porphyra. yezoensis*) based on Deep Eutectic Solvents Aqueous Two-Phase System

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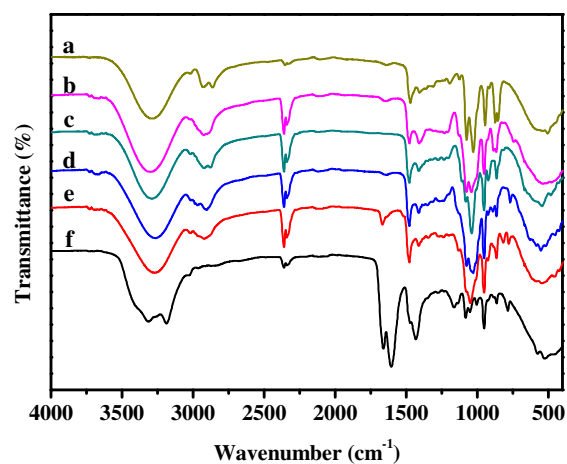


Figure S1. Infrared spectroscopy of six deep eutectic solvents: (a) choline chloride-ethylene glycol (ChCl-EG), (b) choline chloride-D-sorbitol (D-ChCl-S), (c) choline chloride-glycerol (ChCl-G), (d) choline chloride-D-glucose (D-ChCl-Gl), (e) choline chloride-D-fructose (D-ChCl-F), (f) choline chloride-urea (ChCl-U).

Table S1. The results of the precision, repeatability and stability experiments.

Precision experiment results (n = 5)					
Repeats	1	2	3	4	5
Absorbance (565 nm)	0.630	0.571	0.598	0.588	0.544
E (%)	93.92	92.10	94.07	93.17	94.13
RSD (%)			0.92		
Repeatability experiment results (n = 5)					
Sample number	1	2	3	4	5
Absorbance (565 nm)	0.551	0.540	0.537	0.532	0.538
E (%)	93.65	92.47	93.31	91.97	93.80
RSD (%)			0.85		
Stability experiment results (n = 5)					
Day number	1	2	3	4	5
Absorbance (565 nm)	0.612	0.647	0.631	0.652	0.650
E (%)	92.89	92.51	91.87	91.25	91.57
RSD (%)			0.73		

¹ $E = (C_t V_t) / (C_t V_t + C_b V_b)$, where C_t and C_b are the concentrations of the R-PE in the DES-rich top phase and salt-rich bottom phase. V_t and V_b represent the volume of the top phase and the bottom phase.

2. RSD represents relative standard deviation.