Supporting information
for
Preparation and pH controlled release of Fe₃O₄/anthocyanin magnetic biocomposites

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Figure S1. The images of optimized synthesis conditions of Fe₃O₄/anthocyanin magnetic biocomposite. (a) Anthocyanin and Fe₃O₄ with different mass ratios of 5:1, 1:1, 1:5, 1:10, 1:20, 1:40, 1:80; (b) The optimum synthesis conditions of Fe₃O₄/anthocyanin magnetic biocomposite; (c) Anthocyanin and Fe₃O₄ with different mass ratios of 1:25, 1:30, 1:35, 1:40, 1:45, 1:50, 1:55, 1:60, 1:65, 1:70; (d) Different reaction times of 2, 4, 6, 8, 10, 12, 14, 16, 18, 22 h; (e) Different pH of 3, 5, 7, 9, 11, 13; (f) Different reaction temperatures of 20, 30, 40, 50, 60 °C.
Figure S2. The images of release conditions of anthocyanin. (a) Primary release in different methanol solutions (pH 1.0, 1.6, 2.0, 3.0 and original methanol solution); (b) Secondary release in different methanol solutions (pH 1.0, 1.6, 2.0, 3.0); (c) Primary release in different deionized water solutions (pH 1.0, 1.6, 2.0, 3.0 and deionized water solution); (d) Secondary release in different deionized water solutions (pH of 1.0, 1.6, 2.0, 3.0); (e) Primary release in different ethanol solutions (pH 1.0, 1.6, 2.0, 3.0 and original ethanol solution); (f) Anthocyanin solution, Fe$_3$O$_4$/anthocyanin magnetic biocomposites, separated Fe$_3$O$_4$/anthocyanin solid, supernatant, respectively.
**Figure S3.** Release percentages of anthocyanin from Fe₃O₄/anthocyanin magnetic biocomposites at different temperatures

**Figure S4.** The structure of cyanidin-3-O-glucoside standard