

Electronic Supplementary Information

A novel organic-inorganic hybrid polyoxometalate for the selective adsorption/isolation of β -lactoglobulin

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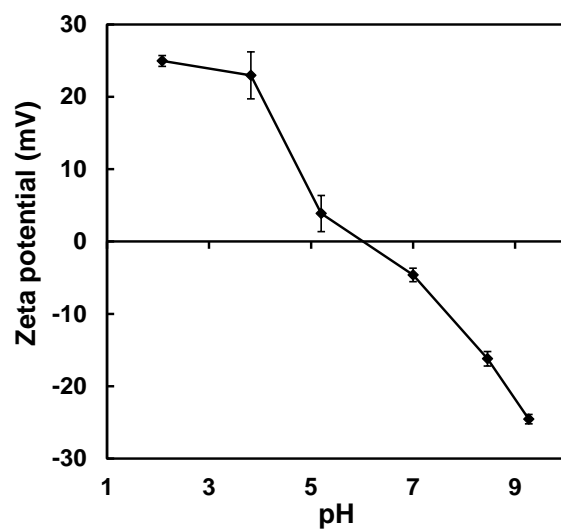


Figure S1. The zeta potential of TPPA-PMO₁₂ hybrid with different pH value.

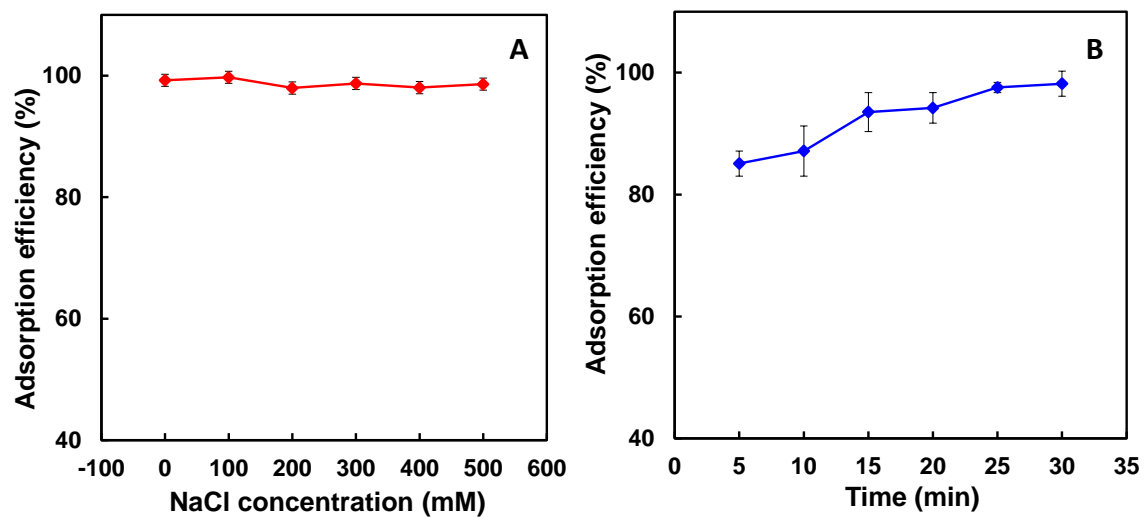


Figure S2. Effect of ionic strength (A) and adsorption time (B) on the adsorption efficiency of β -Lg. Protein solution: 100 mg L⁻¹, 1.0 mL, pH 5.0; TPPA-PMO₁₂ hybrid: 0.5 mg.

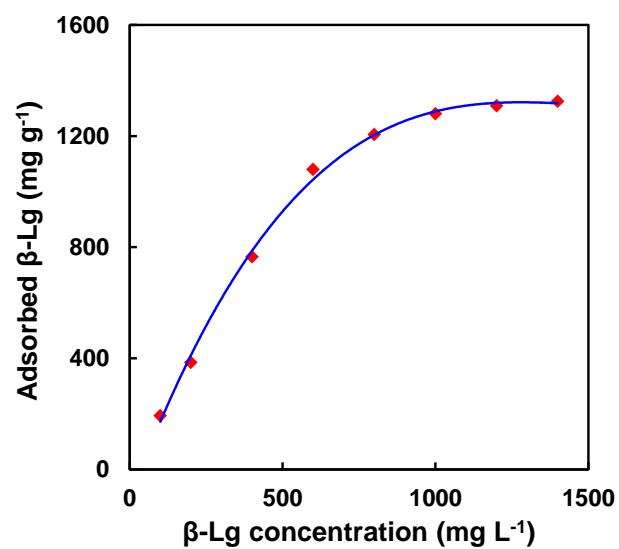


Figure S3. The adsorption isotherm of β -Lg by the TPPA-PMo₁₂ hybrid. Protein solution: 100-1400 mg L⁻¹, 1.0 mL; pH: 5.0; TPPA-PMo₁₂ hybrid: 0.5 mg; adsorption time: 30 min.

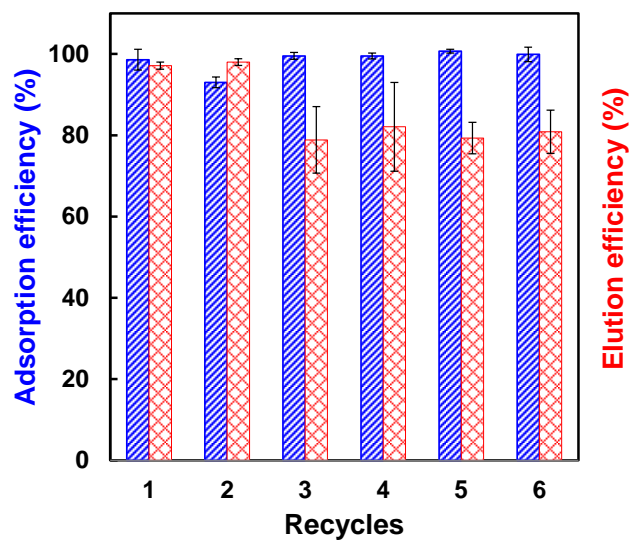


Figure S4. The reusability of the TPPA-PMO₁₂ hybrid for the adsorption/desorption performance for β -Lg by six continuous operation runs of adsorption/desorption. β -Lg solution: 100 mg L⁻¹, 1.0 mL, pH 5.0; TPPA-PMO₁₂: 0.5 mg; adsorption time: 30 min; stripping reagent: Tris-HCl (50 mmol L⁻¹, pH 8.0); stripping time: 10 min.