

Supporting Information

Polymeric ionic liquid modified reduced graphene oxide as adsorbent for highly selective isolation of acidic protein

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Table S1. Zeta potentials of the PIL-rGO@SiO₂ nano-hybrid at various pH values.

Table S2. Adsorption efficiencies of Ova and Lys onto pure SiO₂ nanoparticles, rGO nanosheets and PIL-rGO@SiO₂ nano-hybrid. The concentration and volume of proteins: 150 mg L⁻¹ and 1.0 mL; amount of adsorbent: 3 mg; adsorption time: 30 min; pH 5.

Fig. S1. The variation of zeta potentials of PIL-rGO with the PIL/GO mass ratio.

Fig. S2. The adsorption isotherm for Ova on the PIL-rGO@SiO₂ nano-hybrid. The volume of Ova solution: 1.0 mL; the amount of PIL-rGO@SiO₂ nano-hybrid: 3 mg; the adsorption time: 30 min; pH 5.

Table S1

pH	Zeta potential/eV
3	49.3
5	47.6
7	48.1
9	38.1
11	24.3
12	25.6

Table S2

Adsorbent	Adsorption efficiency (%)	
	Ova	Lys
SiO ₂	62.8	22.5
rGO	86.7	67.5
PIL-rGO@SiO ₂	95.2	5.2

Fig. S1

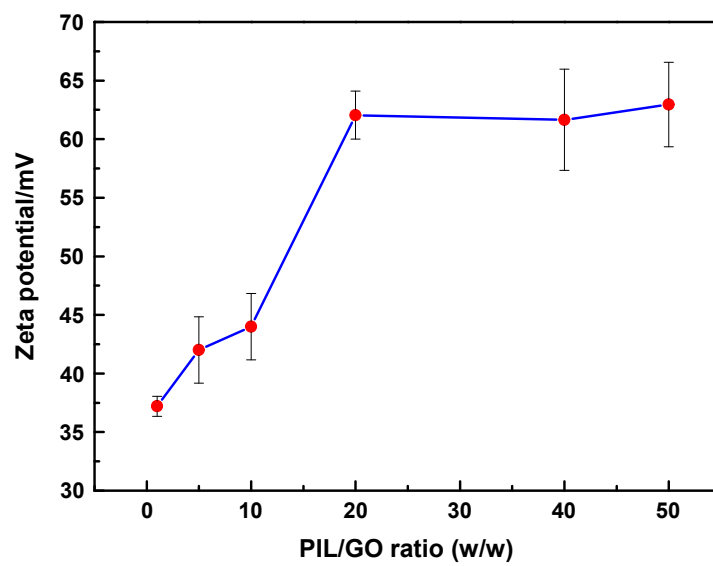


Fig. S2

