Supporting Information

Amino-acid-modified graphene oxide magnetic nanocomposite for

the magnetic separation of proteins

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Supporting Figures



Fig. S1. FTIR spectra of GO (a), AMGO-Glu (b), GO@Fe₃O₄ (c) and AMGO-Glu@Fe₃O₄ (d).



Fig. S2. Extraction amount of BHb for different cycles.



Fig. S3. SDS-PAGE assay results: lane 1: molecular weight standards (Mw in kDa); lane 2: 0.50 mg mL ⁻¹ BHb and BSA binary solution; lane 3: supernatant after adsorption by $GO@Fe_3O_4$; lane 4: supernatant after adsorption by AMGO- $Glu@Fe_3O_4$; lane 5: eluent recovered from the $GO@Fe_3O_4$; lane 6: eluent recovered from the AMGO-Glu@Fe_3O_4.



Fig. S4. SDS-PAGE assay results: lane 1: molecular weight standards (Mw in kDa); lane 2: 10-fold diluted bovine plasma without pretreatment; lane 3: 10-fold diluted bovine plasma after adsorption by AMGO-Glu@Fe₃O₄; lane 4: eluent recovered from

the AMGO-Glu@Fe₃O₄; lane 5: BHb standard solution (0.50 mg mL $^{-1}$).

Supporting Tables

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Amino acid	Structure
Glutamic acid	но он NH2
Arginine	
Cysteine	HO O SH
Phenylalanine	HO O

Table S1 Structures of four kinds of amino acids