Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2016

## **Electronic Supplementary Information**

Green and catalyst-free preparation of triazinyl polyimide for efficient adsorption of glycoproteins

Yue Zhang, Meng-Si Zhang, Yang Zhang, Xu-Wei Chen\* and Jian-Hua Wang\*

Research Center for Analytical Sciences, College of Sciences, Northeastern University, Box 332, Shenyang 110819, China

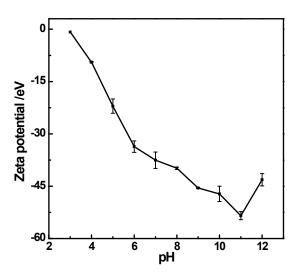


Fig. S1. Zeta potential of MA-PI within pH 3-12.

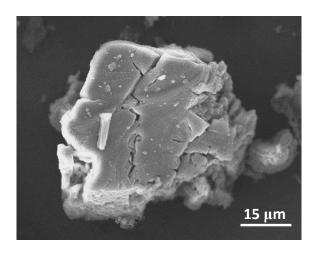


Fig. S2. SEM image of MA-PI.

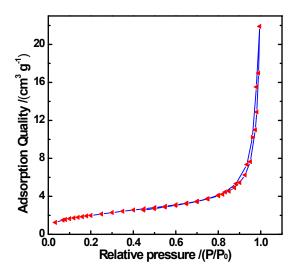


Fig. S3.  $N_2$  adsorption/desorption isotherms of MA-PI.

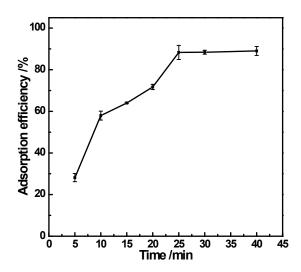


Fig. S4. The time-dependent adsorption behavior of Ova onto the surface of MA-PI. Concentration/volume of protein solution:  $70 \text{ mg L}^{-1}/1.0 \text{ mL}$ ; Amount of adsorbent: 1.0 mg.

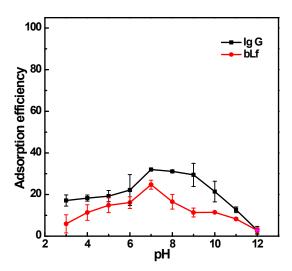


Fig. S5. The pH-dependent adsorption behaviors of IgG and bLf onto the surface of MA-PI. Concentration/volume of protein solution: 70 mg  $L^{-1}/1.0$  mL; Amount of adsorbent: 1.0 mg; Adsorption time: 30 min.

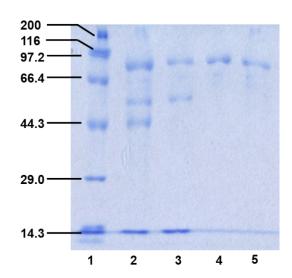


Fig. S6. SDS-PAGE assay results. Lane 1: Marker (KDa); Lane 2: Protein mixture before adsorption by the MA-PI; Lane 3: Protein mixture after adsorption by the MA-PI; Lane 4: bLf standard solution of 100  $\mu$ g mL<sup>-1</sup>; Lane 5: ConA standard solution of 100  $\mu$ g mL<sup>-1</sup>. The protein mixture consists of 200  $\mu$ g mL<sup>-1</sup> of Ova, 100  $\mu$ g mL<sup>-1</sup> of Ig G, ConA, bLf and Lys.