Supporting Information for

Facile Surface Functionalization of Cyclic Olefin Copolymer Film with Anhydride Groups for Protein Microarray Fabrication

Yuan Qi,^{†,‡} Yindian Wang,^{†,‡} Chuxuan Chen,^{†,‡} Changwen Zhao,^{*,†,‡} Yuhong Ma,¹ and Wantai Yang^{*,†,‡,§}

[†]State Key Laboratory of Chemical Resource Engineering, [‡]Beijing Laboratory of Biomedical Materials, Key Laboratory of Biomedical Materials of Natural Macromolecules, Ministry of Education, [§]Beijing Advanced Innovation Centre for Soft Matter Science and Engineering, ^IKey Laboratory of Carbon Fiber and Functional Polymers, Ministry of Education, University of Chemical Technology, Beijing 100029, China

*E-mail: zhaocw@mail.buct.edu.cn (C. Z.) yangwt@mail.buct.edu.cn (W. Y.)



Figure S1. Standard calibration curve for calculation of immobilization density of rabbit *anti*-mouse IgG.



Figure S2. The XPS C 1s core-level spectra of pristine COC (a) and poly(MAH-*co*-VAc) brushes modified COC (b), and the N 1s core-level spectra of poly(MAH-*co*-VAc) brushes modified COC (c) and IgG immobilized COC (d).



Figure S3. Water contact angle images of pristine COC (a) and poly(MAH-co-VAc) brushes modified COC (b) surface.



Figure S4. Fluorescence images of rabbit *anti*-mouse IgG microarray before (a) and after (a') blocking treatment (IgG concentration from top to bottom: 20, 17, 12.5, 7, 5, 2.5, 1.25 µg/mL.



Figure S5. Fluorescence images of rabbit *anti*-mouse IgG microarray immobilization on pristine COC surface before (a) and after (a') blocking treatment (IgG concentration was 7 µg/mL.).