Supplementary Information

The Architecture of Responsive Polymeric Ligands on Protein Binding and Recovery

Zizhao Liu[1], S. Ranil Wickramasinghe[1], Xianghong Qian[2]*

[1]Department of Chemical Engineering, University of Arkansas, Fayetteville, AR 72701

[2]Department of Biomedical Engineering, University of Arkansas, Fayetteville, AR 72701

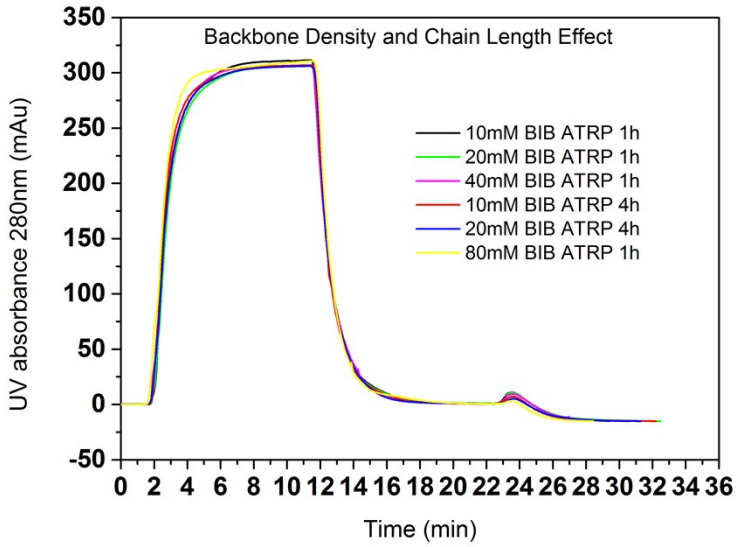

Figure S1. Chromatogram of membranes modified under different backbone density (indicated by concentration of BIB) and chain length conditions (indicated by poly (HEMA) ATRP time). System dead volume is 1.7 mL.

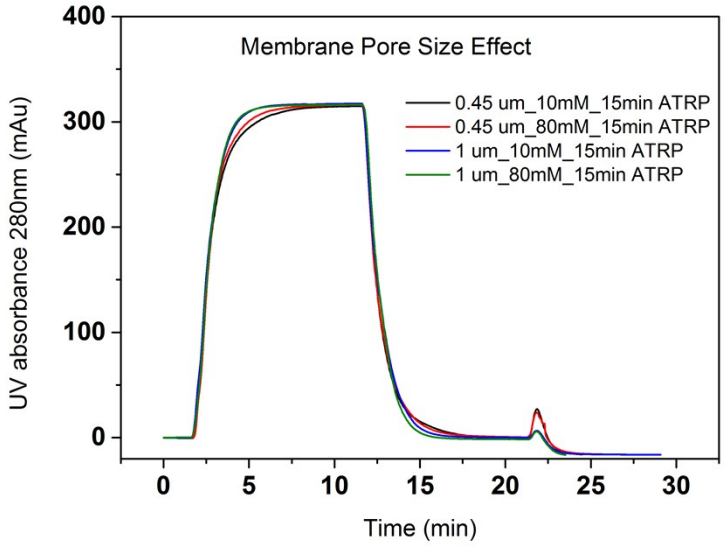

Figure S2. Chromatogram of membranes with different pore sizes and modified under two different initiator (1st) concentrations (10 mM and 80 mM). The ATRP time for poly (HEMA) and PVCL was kept the same as 15 min and 4 hr respectively. System dead volume is 1.7 mL.

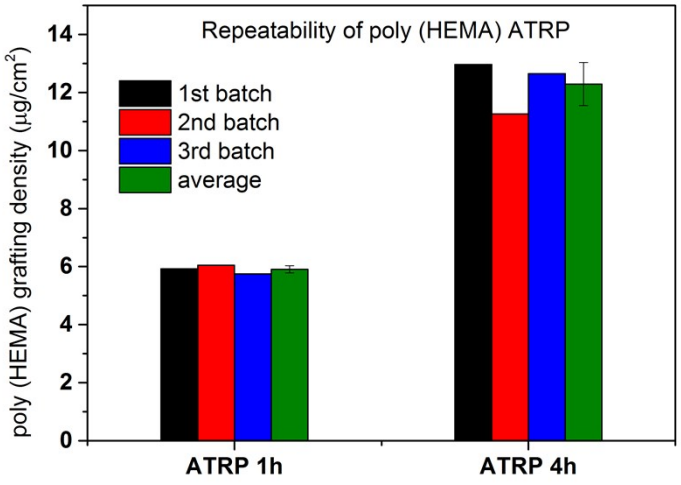

Figure S3. Repeatability of poly (HEMA) ATRP under condition of 40 mM BIB initiator and ATRP 1h and 4h.