Electronic Supplementary Information

Anion Exchange-Based Amperometric Assay for Heparin Using Polyimidazolium as Synthetic Receptor

Hetong Qi, Li Zhang, Lifen Yang, Ping Yu, * Lanqun Mao

Beijing National Laboratory for Molecular Sciences, Key Laboratory of Analytical Chemistry for Living Biosystems, Institute of Chemistry, the Chinese Academy of Sciences (CAS), Beijing 100190, China

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Figure S2. NMR of Synthetic Pim.
**Figure S3.** (A) CVs obtained at the Pim/MWCNT-modified GC electrodes in 0.10 M PBS (pH=7). (B) Consecutive CVs obtained at the Pim/MWCNT-modified GC electrodes in 1 mM K$_3$Fe(CN)$_6$ for 60 cycles.

**Figure S4.** (A) CVs obtained at the Fe(CN)$_6^{3-}$/Pim/MWCNTs-modified GC electrodes in 0.10 M PBS (pH=7) for 20 cycles, (B) Typical CVs obtained at Fe(CN)$_6^{3-}$/Pim/MWCNTs-modified GC electrodes in 0.10 M PBS (red curve) and Pim/MWCNT-modified GC electrodes in 0.1 M PBS (black curve).
Figure S5. CVs obtained at the Fe(CN)$_6^{3-}$/Pim/MWCNT-modified GC electrodes in 0.10 M PBS after the electrodes were immersed into 1 µM heparin different times of 0 min (magenta), 5 min (black), 10 min (red), 15 min (blue), and 20 min (dark cyan).

Figure S6. FT-IR spectra for the aggregates formed by heparin and Pim, which was exchanged by K$_3$Fe(CN)$_6$. 