**Table S1.** Properties of redox phospholipid polymers synthesized in this study.

| Monomer Unit Composition (mol%) | in Feed MPC/VFc/rho[a] | in Copolymer MPC/VFc/rho[b] | $M_n$ ($\times 10^3$)[c] | $M_w/M_n$[c] |
|-------------------------------|-------------------------|-----------------------------|-------------------------|--------------|
| pMFc                          | 60.0/40.0/0             | 49.8/50.2/0                 | 3.3                     | 1.7          |
| rho–pMFc                      | 59.4/39.6/1.0           | 46.1/53.5/0.4               | 2.3                     | 1.4          |

[a] MPC, 2-methacryloyloxyethyl phosphorylcholine; VFc, vinylferrocene; rho, methacryloxyethyl thiocarbamoyl rhodamine B.
[b] Determined by UV–Vis.
[c] Number-average ($M_n$) and weight-average ($M_w$) molecular weights measured by gel permeation chromatography (GPC) using poly(ethylene glycol) standards.