Supporting Information

Experimental

Instrumentation. Proton nuclear magnetic resonance spectra ($^1$H NMR) were recorded at 400 MHz or 500 MHz on Bruker spectrometers. Carbon nuclear magnetic resonance spectra ($^{13}$C NMR) were recorded on Bruker spectrometers at 125.8 MHz. Infrared spectra (IR) were measured on an Analect RFX-40 FTIR spectrometer. A Thomas Hoover Capillary Melting Point Apparatus was used to observe uncorrected melting points. High resolution mass spectra (FAB, NBA or CI, isobutane) were obtained on a VG 7070E high resolution mass spectrometer or Fisons Autospec mass spectrometer.

GPC analyses were performed on a 30 cm column (Polymer Laboratories PLgel Mixed C, 5 µm particle size) using an HP Agilent 1100 dual solvent delivery system and an Agilent 1100 differential refractometer, both of which were held at 35 °C. Tetrahydrofuran (THF) was used as the eluent (0.5 mL/min), and calibration was performed using polystyrene standards (Polysciences, Inc.). Each polymer was diluted to 2 mg/mL in THF and 60µL of the diluted solution was injected into the column. HPLC analyses were performed on a normal phase column (Varian Dynamax Microsorb 100 Å Si, 250 × 4.6 mm) using an HP 1100 dual solvent delivery system and a UV/Vis detector.

Fluorescence studies were performed on a Spex Fluorolog 0.22m double spectrometer. The slit sizes were adjusted to avoid saturation. (0.50 mm slits were used for dansyl and anthracenesulfonyl samples, and 0.25 mm slits were used for pyrenesulfonyl samples.) Routinely, excitation and emission spectra were obtained, and spectroscopic grade solvents were used for all measurements.

General Procedures. All air and moisture sensitive reactions were conducted under an atmosphere of dry nitrogen using oven dried glassware. Diethyl ether, dichloromethane, tetrahydrofuran and benzene were dried by filtration through alumina according to the procedure described by Grubbs. Anhydrous carbon tetrachloride (99.9%, ACS reagent grade), was used
without further purification. Acetonitrile and 1,2-dichlorethane were distilled over CaH₂ prior to use. N,N-dimethylacetamide was distilled over BaO.² 2-Anthracenesulfonyl chloride and 1-pyrene sulfonyl chloride were purchased from Molecular Probes, Inc. Styrene, methyl acrylate and methyl methacrylate were run through Aldrich inhibitor remover columns immediately prior to use. All other reagents were purchased from Aldrich and used without further purification. Volatile solvents were removed under reduced pressure using a Büchi rotary evaporator. Thin layer chromatography was run on precoated plates of silica gel with a 0.25 mm thickness containing 60F-254 indicator (Merck) and visualized using UV light. Column chromatography was run using 230-400 mesh silica gel (Merck).

**5-Dimethylamino-1-naphthalenesulfonyl iodide (Dansyl iodide, 4).** In a 500 mL round bottom flask equipped with a reflux condenser, an aqueous solution (15 mL) of Na₂SO₃ (2.1 g, 16 mmol) and NaHCO₃ (2.5 g, 30 mmol) was heated to 80 °C. Dansyl chloride (2, 4.0 g, 15 mmol) was added to the reaction mixture, and the resulting orange suspension was allowed to stir at 80 °C until no solid residue was visible (~1 h). Electrospray mass spectrometer analysis showed presence of the sodium sulfinate salt 3. The solution was allowed to cool to RT and DI water (150 mL) was added. To the diluted reaction mixture was added a solution of iodine (3.8 g, 15 mmol) in ethanol (60 mL) in the dark, forming a reddish-orange precipitate. After stirring in the dark for an additional 14 h, the precipitate was filtered and washed with DI water. The precipitate was dissolved with a small amount of toluene and reduced *in vacuo* (with minimal heating) to azeotrope any residual water. The title compound 4 was thus obtained as a red solid (3.7 g, 70%). (The compound was found to decompose upon prolonged exposure to light and was, therefore, stored in the dark at 0°C). m.p. 191° – 195 °C (dec.); ¹H NMR (500 MHz, CDCl₃) δ 8.68 (d, J = 8.5, 1H), 8.59 (d, J = 8.5, 1H), 8.20 (d, J = 7.5, 1H), 7.76 – 7.77 (dd, J = 8.5, 7.5, 1H), 7.47 – 7.50 (dd, J = 8.5, 7.5, 1H), 7.26 (d, J = 7.5, 1H), 2.92 (s, 6H); ¹³C NMR (125 MHz, CDCl₃) δ 152.2, 144.7, 132.9, 130.4, 129.2, 128.4, 126.9, 122.6, 117.9, 116.4, 45.6
General Procedure for the synthesis of 2-(dansyl)methacrylates 7a-e. To a solution of dansyl iodide (4, 1.5 equiv) in CCl₄ (0.1 M in methacrylate 6) was added alkyl methacrylate 5a-d or dimethacrylate 5e (1.0 equiv). The resulting solution was stirred at RT for 24 h. Triethylamine (5.0 equiv) was added to the mixture and the solution was heated to reflux for 24 h. The resulting black solution was cooled and quenched with 1 N HCl. The layers were separated, and the aqueous layer was washed with CH₂Cl₂ three times. The organic layers were combined, washed with brine and dried (Na₂SO₄). The solution was reduced in vacuo, and the crude product was purified by flash chromatography (10 to 15% ethyl acetate in hexanes) to afford the fluorescent monomer.

**Methyl-2-(dansyl)methacrylate (7a).** Starting with methyl methacrylate (400 mg, 4.00 mmol), the title compound was obtained as a yellow solid (893 mg, 67 %): m.p. = 108° – 109° C; ¹H NMR (400 MHz, CDCl₃) δ 8.62 (d, J = 8.3, 1H), 8.49 (d, J = 8.7, 1H), 8.21 (dd, J = 7.3, 1.2, 1H), 7.63 – 7.67 (dd, J = 8.6, 7.7, 1H), 7.54 – 7.58 (dd, J = 8.4, 7.4, 1H), 7.24 (d, J = 7.5, 1H), 6.48 (d, J = 0.4, 1H), 5.81 (s, 1H), 4.36 (d, J = 0.5, 2H), 3.49 (s, 3H), 2.91 (s, 6H); ¹³C NMR (125 MHz, CDCl₃) δ 165.2, 152.1, 133.7, 133.5, 131.7, 131.3, 130.6, 129.7, 128.9, 128.8, 123.2, 118.6, 115.4, 57.0, 52.2, 45.4 (2); IR (thin film) 2941, 2361, 1720, 1560, 1450, 1310, 1140 cm⁻¹; HRMS (EI) m/z calcd for C₁₇H₁₉NO₄S (M⁺) 333.1035, found 333.1032.

**tert-Butyl-2-(dansyl)methacrylate (7b).** Starting with tert-butyl methacrylate (400 mg, 2.81 mmol), the title compound was obtained as a yellow oil (316 mg, 30 %): ¹H NMR (500 MHz, CDCl₃) δ 8.59 (d, J = 8.5, 1H), 8.48 (d, J = 8.7, 1H), 8.19 (dd, J = 7.3, 1.1, 1H), 7.60 – 7.64 (dd, J = 8.5, 7.7, 1H), 7.52 – 7.56 (dd, J = 8.4, 7.5, 1H), 7.21 (d, J = 7.5, 1H), 6.41 (s, 1H), 5.78 (s, 1H), 4.32 (s, 2H), 2.89 (s, 3H), 2.88 (s, 3H), 1.24 (s, 9H); ¹³C NMR (125 MHz, CDCl₃) δ 163.7, 152.1, 133.9, 132.7, 131.6, 131.3, 130.6, 130.3, 129.8, 128.8, 123.2, 118.8, 115.4, 81.5, 57.0, 45.4 (2), 27.6 (3); IR (thin film) 2980, 2359, 1714, 1573, 1317, 1157, 1137 cm⁻¹; HRMS (EI) m/z calcd for C₂₁H₂₅NO₄S (M⁺) 375.1504, found 375.1504.
Lauryl-2-(dansyl)methacrylate (7c). Starting with lauryl methacrylate (500 mg, 1.97 mmol), the title compound was obtained as a yellow oil (572 mg, 60%): $^1$H NMR (500 MHz, CDCl$_3$) $\delta$ 8.60 (d, $J = 8.5$, 1H) 8.49 (d, $J = 8.5$, 1H), 8.21 (d, $J = 7.6$, 1H), 7.62 – 7.65 (dd, $J = 8.5$, 7.6, 1H), 7.53 – 7.56 (dd, $J = 8.5$, 7.6, 1H), 7.22 (d, $J = 7.6$, 1H), 6.48 (s, 1H), 5.82 (s, 1H), 4.35 (s, 2H), 3.88 (t, $J = 6.8$, 2H), 2.90 (s, 6H), 1.43 – 1.46 (m, 2H), 1.27 – 1.31 (m, 18H), 0.87 – 0.90 (t, $J = 6.7$, 3H); $^{13}$C NMR (125 MHz, CDCl$_3$) $\delta$ 165.0, 152.2, 134.0, 133.5, 131.8, 131.5, 130.8, 129.9, 129.2, 129.0, 123.5, 118.8, 115.5, 57.1, 45.6 (2), 32.1, 29.8 (2), 29.7 (2), 29.5, 29.4, 28.4, 26.0, 22.8, 14.3; IR (thin film) 2942, 2360, 1720, 1566, 1458, 1312, 1180 cm$^{-1}$; HRMS, (Cl) m/z calcd for C$_{28}$H$_{41}$NO$_4$S (M$^+$) 487.2756, found 487.2752.

Cholesteryl-2-(dansyl)methacrylate (7d). Starting with cholesteryl methacrylate$^5$ (420 mg, 0.935 mmol), the title compound was obtained as a yellow solid (501 mg, 78%): m.p. = 150 – 152 $^\circ$C; $^1$H NMR (500 MHz, CDCl$_3$) $\delta$ 8.60 (d, $J = 8.6$, 1H), 8.49 (d, $J = 8.6$, 1H), 8.20 (d, $J = 7.5$, 1H), 7.62 – 7.65 (dd, $J = 8.6$, 7.5, 1H), 7.54 – 7.56 (dd, $J = 8.6$, 7.5, 1H), 7.21 (d, $J = 7.5$, 1H), 6.50 (s, 1H), 5.86 (s, 1H), 5.31 (d, $J = 5.1$, 1H), 4.40 – 4.48 (dddd, $J = 10.8$, 10.8, 5.4, 5.4, 1H), 4.36 (s, 2H), 2.90 (s, 6H), 1.94 – 2.09 (m, 4H), 1.77 – 1.86 (m, 2H), 1.00 – 1.67 (m, 22H), 0.98 (s, 3H), 0.82 – 0.93 (d, $J = 6.6$, 3H), 0.89 (d, $J = 6.6$, 3H), 0.88 (d, $J = 6.6$, 3H), 0.69 (s, 3H); $^{13}$C NMR (125 MHz, CDCl$_3$) $\delta$ 164.3, 152.2, 139.5, 134.0, 133.6, 131.8, 131.6, 130.8, 130.0, 129.4, 128.9, 123.4, 123.0, 118.9, 115.5, 57.4, 57.0, 56.9, 56.3, 50.2, 45.6 (2), 42.5, 39.9, 39.7, 37.8, 37.0, 36.7, 36.4, 36.0, 32.1, 32.0, 28.4, 28.2, 27.5, 24.4, 24.0, 23.0, 22.7, 21.2, 19.5, 18.9, 12.0; IR (thin film) 2940, 2359, 1721, 1572, 1462, 1319, 1190 cm$^{-1}$; HRMS (FAB) m/z calcd for C$_{43}$H$_{61}$NO$_4$S (M + H)$^+$ 688.4399, found 688.4385.

Ethylene glycol-2-(dansyl)dimethacrylate (7e). Starting with ethylene glycol dimethacrylate (365 mg, 1.84 mmol), the title compound was obtained as a yellow oil (267 mg, 32%): $^1$H NMR (500 MHz, CDCl$_3$) $\delta$ 8.59 (d, $J = 8.4$, 1H), 8.46 (d, $J = 8.6$, 1H), 8.19 (dd, $J = 7.2$, 0.8, 1H), 7.61 – 7.64 (dd, $J = 8.3$, 7.9, 1H), 7.52 – 7.55 (dd, $J = 8.1$, 7.7, 1H), 7.21 (d, $J = 7.5$, 1H), 6.49 (d, $J = 4.0$, 1H), 6.11 (s, 1H), 5.82 (s, 1H), 5.58 (d, $J = 1.4$, 1H), 4.34 (s, 2H), 4.16 – 4.34 (m, 4H), 2.89 (s, 3H), 2.88 (s, 3H), 1.93 (s, 3H); $^{13}$C NMR (125 MHz, CDCl$_3$) $\delta$ 166.9, 164.5, 152.0, 135.7,
133.9, 133.6, 131.6, 131.2, 129.6, 128.8, 128.5, 126.1, 123.1, 118.4, 115.3, 62.9, 61.9, 56.8, 45.3 (2), 18.2; IR (thin film) 2950, 2360, 1721, 1634, 1573, 1454, 1314, 1160, 1140 cm\(^{-1}\);

HRMS (FAB) \(m/z\) calcd for \(\text{C}_{22}\text{H}_{25}\text{NO}_{6}\text{S (M + Na)}^{+}\) 454.1300, found 454.1310.

**Ethyl 2-(2-anthracenethio) methacrylate (11).** A modified procedure for the non-aqueous reduction of aryl sulfonyl chlorides reported by Uchiro and Kobayashi\(^6\) was utilized. To a stirred suspension of activated zinc powder\(^2\) (41 mg, 0.63 mmol) and dichlorodimethylsilane (71 µL, 0.63 mmol) in 1,2-dichloroethane (0.9 mL) was added a solution of 2-anthracenesulfonyl chloride (50 mg, 0.18 mmol) and \(N,N\)-dimethylacetamide (77 µL, 0.63 mmol) in 1,2-dichloroethane (0.9 mL) dropwise. The mixture was stirred for 24 h at room temperature. Ethyl 2-bromomethacrylate (75 µL, 0.55 mmol) was then added to the reaction mixture. After 4 h, the thiol was consumed and quenched with water (2 mL). The aqueous layer was extracted with CH\(_2\text{Cl}_2\) (3 \(\times\) 5 mL) and the combined organic layers were dried (Na\(_2\)SO\(_4\)), and reduced in vacuo. The resulting oil was chromatographed (10\% CH\(_2\text{Cl}_2\) in hexanes) affording the title compound as a yellow solid (14 mg, 25\%): \(^1\)H NMR (500 MHz, CDCl\(_3\)) \(\delta\) 8.35 (s, 1H), 8.29 (s, 1H), 7.89 – 7.98 (m, 4H), 7.46 (m, 2H), 7.39 (d, \(J = 8.8\), 1H), 6.19, (s, 1H), 5.64 (s, 1H), 4.27 (q, \(J = 7.1\), 2H), 3.92 (s, 2H), 1.32 (t, \(J = 7.1\), 3H); \(^{13}\)C NMR (125 MHz, CDCl\(_3\)) \(\delta\) 166.3, 136.4, 132.7, 132.3, 131.9 (2), 130.4, 128.9, 128.4, 128.3, 128.3, 127.8, 127.1, 126.4, 125.9, 125.6 (2), 61.3, 35.2, 14.4; IR (thin film) 2924, 2360, 1717, 1541 cm\(^{-1}\) HRMS (CI) \(m/z\) calcd for \(\text{C}_{20}\text{H}_{18}\text{O}_2\text{S (M)}^{+}\) 322.1027, found 322.1027.

**Ethyl 2-(1-pyrenethio)methacrylate (12).** The same procedure as for the synthesis of thiomethacrylate 11 was used, starting with 1-pyrenesulfonyl chloride (50 mg, 0.17 mmol) to obtain the title compound as a yellow solid (16 mg, 36\%): \(^1\)H NMR (500 MHz, CDCl\(_3\)) \(\delta\) 8.72 (d, \(J = 9.2\), 1H), 8.00 – 8.20 (m, 8H), 5.96 (s, 1H), 5.19 (s, 1H) 4.24 (q, \(J = 7.1\), 2H), 3.90 (s, 2H), 1.28 (t, \(J = 7.1\), 3H); \(^{13}\)C NMR (125 MHz, CDCl\(_3\)) \(\delta\) 166.3, 136.7, 132.5, 131.9, 131.4, 131.3, 131.1, 129.7, 128.3, 128.0, 127.4, 126.8, 126.4, 125.6 (2), 125.4, 125.0, 124.9, 124.7, 61.3, 37.5, 14.4; IR (thin film) 2920, 2358, 1717, 1187 cm\(^{-1}\); HRMS (CI) \(m/z\) calcd for \(\text{C}_{22}\text{H}_{18}\text{O}_2\text{S (M)}^{+}\) 346.1027, found 346.1032.
Ethyl 2-(2-anthracenesulfonyl)methacrylate (13). To a solution of thiomethacrylate 11 (10 mg, 0.031 mmol) in DMF (1 mL) was added potassium peroxomonosulfate (76 mg, 0.12 mmol). The suspension was stirred for 18 h at room temperature and quenched with water (5 mL). The resulting precipitate was filtered using a 0.45 micron filter and dried \textit{in vacuo} to give the title compound as a yellow solid (7.4 mg, 67\%): $^1$H NMR (500 MHz, CDCl$_3$) $\delta$ 8.60 (s, 2H), 8.50 (s, 1H), 8.07 (m, 2H), 7.76 (dd, $J = 8.9, 1.5, 1$H), 7.55 – 7.60 (m, 2H) 6.52 (s, 1H), 5.96 (s, 1H), 4.27 (s, 2H), 3.84 (q, $J = 7.1, 2$H), 0.98 (t, $J = 7.1, 3$H); $^{13}$C NMR (125 MHz, CDCl$_3$) $\delta$ 165.0, 134.9, 133.8, 133.6, 132.6, 132.5, 132.4, 130.1, 129.6, 129.4 (2), 128.7, 128.5, 127.5, 126.9, 126.8, 121.9, 61.6, 57.7, 14.0; IR (thin film) 2984, 2359, 1721, 1677, 1312, 1199 cm$^{-1}$; HRMS (CI) $m$/z calcd for C$_{20}$H$_{18}$O$_4$S (M$^+$) 354.0926, found 354.0926.

Ethyl 2-(1-pyrenesulfonyl)methacrylate (14). To a solution of thiomethacrylate 12 (10 mg, 0.029 mmol) in DMF (1 mL) was added potassium peroxomonosulfate (76 mg, 0.12 mmol). The suspension was stirred for 18 h at room temperature and quenched with water (5 mL). The resulting precipitate was filtered using a 0.45 micron filter and dried \textit{in vacuo} to give the title compound as a yellow solid (9.5 mg, 85 \%): $^1$H NMR (500 MHz, CDCl$_3$) $\delta$ 9.16 (d, $J = 9.3, 1$H), 8.62 (d, $J = 8.2, 1$H), 8.37 (d, $J = 9.3, 1$H), 8.32 – 8.36 (m, 2H), 8.25 (d, $J = 8.9, 1$H), 8.22 (d, $J = 8.2, 1$H), 8.13 (d, $J = 7.6, 1$H), 8.10 (d, $J = 8.9, 1$H), 6.45, (s, 1H), 5.83 (s, 1H), 4.45 (s, 2H), 3.76 (q, $J = 7.1, 2$H), 0.91 (t, $J = 7.1, 3$H); $^{13}$C NMR (125 MHz, CDCl$_3$) $\delta$ 165.0, 135.8, 133.6, 131.1 (2), 130.9, 130.3, 130.0, 129.8, 129.2, 128.7, 127.5 (2), 127.4, 127.3, 127.2, 125.2, 124.2, 123.2, 61.5, 58.0, 13.9; IR (thin film) 2925, 2362, 1719, 1627, 1590, 1193 cm$^{-1}$; HRMS (CI) $m$/z calcd for C$_{22}$H$_{18}$O$_4$S (M$^+$) 378.0926, found 378.0922.

**Calibration curves for monomers 7d, 13, and 14.** Each monomer was dissolved in ethyl acetate (Fisher, HPLC grade) at a concentration of 40.0 $\mu$M using a volumetric flask and serially diluted. The fluorescence emission intensity at the appropriate fluorescence excitation ($\lambda_{\text{exc}}$) and emission ($\lambda_{\text{em}}$) maxima was measured for each dilution (in triplicate). The intensities were plotted against monomer concentration, and the linear portion of each calibration (Figures 1, 2 and 3) was used in subsequent experiments.
**Figure 1:** Fluorescence intensity calibration for monomer 7d.

**Figure 2:** Fluorescence intensity calibration for monomer 13.

**Figure 3:** Fluorescence intensity calibration for monomer 14.
General synthesis for polystyrenes P1, P2, P3 and P7. In a 1 dram vial, styrene (98 equiv) was added to the appropriate monomer 7d, 13 or 14 (1 equiv), followed by AIBN (1 equiv). (For P7, no fluorescent monomer was used.) The solution was deoxygenated by bubbling nitrogen through the solution for 2 min. The reaction mixture was capped and polymerized at 65 °C for 24 h. The resultant polymer was cooled to RT, precipitated in MeOH and sonicated (35 °C, 5 min). The supernatant liquid was removed by a pipette, and the precipitation, sonication and supernatant removal steps were repeated two more times. The methanol portions were combined and analyzed for residual fluorescence (see 'Fluorescence analysis of MeOH extracts.') The precipitated polymer was reduced in vacuo, weighed and analyzed by GPC (Table 2). Polymer yields: 7d (28 mg, 41 µmol) was used to obtain P1 (375 mg, 83%); 13 (5.0 mg, 14 µmol) was used to obtain P2 (149 mg, 99%); 14 (5.0 mg, 13 µmol) was used to obtain P3 (153 mg, 99%); styrene (158 µL, 1.38 mmol) was used to obtain P7 (146 mg, quant.).

General synthesis for polyacrylates P4, P5, P6 and P8. In a 1 dram vial, methyl acrylate (98 equiv) was added to the appropriate monomer 7d, 13 or 14 (1 equiv), followed by AIBN (1 equiv). (For P8, no fluorescent monomer was used.) A solution of acetonitrile/chloroform (1:1, ~5M in total monomer concentration) was added to the reaction mixture to dissolve the fluorescent monomers. The solution was deoxygenated by bubbling nitrogen through the solution for 2 min. The reaction mixture was capped and polymerized at 65 °C for 24 h. The resultant polymer was cooled to RT, precipitated in MeOH and sonicated (35 °C, 5 min). (The 'precipitate,' in this case, was usually a viscous yellow oil which was immiscible with MeOH). The supernatant liquid was separated by a pipette, and the precipitation, sonication and supernatant removal steps were repeated two more times. The methanol portions were combined and analyzed for residual fluorescence (see 'Fluorescence analysis of MeOH extracts.') The precipitated polymer was reduced in vacuo, weighed and analyzed by GPC (Table 2). Polymer yields: 7d (28 mg, 41 µmol) was used to obtain P4 (343 mg, 87%); 13 (5.0 mg, 14 µmol) was used to obtain P5 (115 mg 91%); 14 (5.0 mg, 13 µmol) was used to obtain P6 (99 mg, 84%); methyl acrylate (124 µL, 1.38 mmol) was used to obtain P8 (120 mg, quant.).
Fluorescence analysis of MeOH extracts. The combined MeOH extracts from each polymer were first reduced in vacuo, and dried under high vacuum overnight. The resulting residue was dissolved in ethyl acetate and quantitatively transferred to a 25 mL volumetric flask and filled to the mark with ethyl acetate. An aliquot of the solution (0.5 mL) was transferred to a quartz cuvette and its fluorescence was measured at the appropriate excitation and emission wavelengths. If the measured fluorescence emission intensity of the solution was above the intensity range of the corresponding calibration curve, the solution was sequentially diluted until the intensity was within the calibration range. The residual fluorescence (and thus the amount of unreacted monomer remaining) in the original solution was thus calculated from the appropriate calibration curve (Figure 2, 3 or 4). Following are the amounts extracted from each polymer: P1: (0.5 µmol), P2: (<0.05 µmol), P3: <0.05 µmol), P4: (8.2 µmol), P5: (<0.05 µmol) and P6: (3.0 µmol).

Extraction of Cholesterol from polystyrene P1. To a suspension of P1 (200 mg) in diethyl ether (4 mL) was added LiAlH₄ (7 mg, 0.18 mmol). The suspension was stirred at room temperature for 18 h and quenched with 1N HCl (10 mL). The polymer aggregated in the aqueous layer as a clumpy precipitate. This aqueous layer was separated and washed with diethyl ether (3 x 5 mL). The organic layers were combined, dried (Na₂SO₄) and reduced in vacuo. The residue was taken up in hexanes (~2 mL) and transferred to a 5 mL volumetric flask. The flask was filled to the mark with additional hexanes. The resulting suspension was filtered via a 0.44 µm syringe filter to remove insoluble compounds. This filtered solution was injected onto an HPLC, and the amount of cholesterol in the sample was determined according to a previously established calibration curve of pure cholesterol. The residue was found to contain 4.8 mg (± 0.1) of cholesterol, equating to 69% of the amount (7.0 mg) calculated to be in the original polymer P1. Methanol (10 mL) was added to the aqueous layer, and the precipitate was filtered and reduced in vacuo to give polymer P9 (185 mg).
References


