The ^{1}H NMR and MALDI-TOF data for the hemicyanine dyes:

2-(2-hydroxy1-4-N,N-diethylaminophenylethenyl)-benzothiazolium-1-acetate (HC-1)

^{1}H NMR (400 MHz, CD_3OD) δ 1.26 (t, 6H, -$CH_2\underline{CH_3}$, J = 7.10 Hz), 3.51 (q, 4H, -$\underline{CH_2}CH_3$, J = 7.10 Hz), 5.12 (s, 2H, -$\underline{CH_2}$COOH), 6.18 (s, 1H, Ar-H), 6.45 (d, 1H, Ar-H, J = 9.15 Hz), 7.38 (d, 1H, -CH=, J = 14.77 Hz), 7.60 (t, 1H, Ar-H, J = 8.16 Hz), 7.62 (d, 1H, Ar-H, J = 9.14 Hz), 7.70 (t, 1H, Ar-H, J = 8.45 Hz), 7.82 (d, 1H, Ar-H, J = 8.22 Hz), 8.03 (d, 1H, Ar-H, J = 7.3 Hz), 8.22 (d, 1H, -CH=, J = 14.81 Hz). MALDI-TOF: m/z 383.4 ($M+H^+$).

2-(4-N,N-diethylaminophenylethenyl)-benzothiazolium-1-acetate (HC-2)

^{1}H NMR (400 MHz, $CDCl_3$) δ 1.28 (t, 6H, -$CH_2\underline{CH_3}$, J = 8.64 Hz), 3.51 (m, 4H, -$\underline{CH_2}CH_3$), 5.21 (s, 2H, -$\underline{CH_2}$COOH), 6.70 (d, 2H, Ar-H, J = 9.04 Hz), 7.25 (d, 1H, -CH=, J = 15.20 HZ), 7.56 (t, 1H, Ar-H, J = 7.65 Hz), 7.62 (d, 2H, Ar-H, J = 8.94 Hz), 7.68 (t, 1H, Ar-H, J = 7.92 Hz), 7.70 (d, 1H, -CH=, J = 15.0 Hz), 7.86 (d, 2H, Ar-H, J = 8.15 Hz). MALDI-TOF: m/z 367.3 ($M+H^+$).

2-(2-hydroxy1-4-N,N-diethylaminophenylethenyl)-benzothiazolium-1-propionate (HC-3)

^{1}H NMR (400 MHz, $CD_3OD/CDCl_3$) δ 1.16 (t, 6H, -$CH_2\underline{CH_3}$, J = 7.11 Hz), 2.76 (t, 2H, -$CH_2\underline{CH_2}$COOH, J = 7.53 Hz), 3.40 (m, 4H, -$\underline{CH_2}CH_3$), 4.69 (t, 2H, -$\underline{CH_2}CH_2$COOH, J = 7.58 Hz), 6.11 (s, 1H, Ar-H), 6.24 (d, 1H, Ar-H, J = 9.12 Hz), 7.33 (d, 1H, -CH=, J = 15.23 Hz), 7.44 (t, 1H, Ar-H, J = 7.65 Hz), 7.58 (m, 2H, Ar-H), 7.70 (d, 1H, Ar-H, J = 7.93 Hz), 7.77 (d, 1H, -CH=, J = 15.25 Hz), 7.82 (d, 1H, Ar-H, J = 8.36 Hz). MALDI-TOF: m/z 397.4 ($M+H^+$).

2-(4-N,N-diethylaminophenylethenyl)-benzothiazolium-1-propionate (HC-4)

^{1}H NMR (400 MHz, $CD_3OD/CDCl_3$) δ 1.27 (t, 6H, -$CH_2\underline{CH_3}$, J = 7.04 Hz), 2.98 (t, 2H, -$CH_2\underline{CH_2}$COOH, J = 6.76 Hz), 3.49 (m, 4H, -$\underline{CH_2}CH_3$), 5.07 (t, 2H, -$\underline{CH_2}CH_2$COOH, J = 6.74Hz), 6.72 (d, 2H, Ar-H, J = 9.03 Hz), 7.51 (d, 1H, -CH=, J = 15.36 Hz), 7.56 (t, 1H, Ar-H, J = 7.69 Hz), 7.66 (t, 1H, Ar-H, J = 8.35 Hz), 7.72 (d, 2H, Ar-H, J = 8.83 Hz), 7.77 (d, 1H, -CH=, J = 15.20 Hz), 7.88 (d, 1H, Ar-H, J = 7.98 Hz), 7.93 (d, 1H, Ar-H, J = 8.44 Hz). MALDI-TOF: m/z 381.4 ($M+H^+$).

2-(2-hydroxy1-4-N,N-diethylaminophenylethenyl)-benzothiazolium-1-propylsulfonate (HC-5)

^{1}H NMR (400 MHz, $CD_3OD/CDCl_3$) δ 1.27 (t, 6H, -$CH_2\underline{CH_3}$, J = 6.95 Hz), 2.39 (m, 2H, -$CH_2\underline{CH_2}CH_2SO_3^-$), 3.06 (t, 2H, -$CH_2CH_2\underline{CH_2}SO_3^-$, J = 5.92 Hz), 3.50 (q, 4H, -$\underline{CH_2}CH_3$, J = 6.90 Hz), 4.82 (t, 2H, -$\underline{CH_2}CH_2CH_2SO_3^-$, J = 7.48 Hz), 6.15 (s, 1H, Ar-H), 6.45 (d, 1H, Ar-H, J = 9.11 Hz), 7.56 (m, 2H, Ar-H), 7.68 (t, 1H, Ar-H, J = 7.96 Hz), 7.74 (d, 1H, -CH=, J = 14.27 Hz), 7.92 (m, 2H, Ar-H), 8.20 (d, 1H, -CH=, J = 14.09 Hz). MALDI-TOF: m/z 447.5 ($M+H^+$).

2-(2-hydroxy1-4-N,N-diethylaminophenylethenyl)-β-naphthothiazolium-1-propylsulfonate (HC-6)

^{1}H NMR (400 MHz, $CD_3OD/CDCl_3$) δ 1.24 (t, 6H, -$CH_2\underline{CH_3}$, J = 7.06 Hz), 2.71 (m, 2H, -$CH_2\underline{CH_2}CH_2SO_3^-$), 3.24 (t, 2H, -$CH_2CH_2\underline{CH_2}SO_3^-$, J = 6.08 Hz), 3.45 (q, 4H, -$\underline{CH_2}CH_3$, J = 7.01 Hz), 5.25 (t, 2H, -$\underline{CH_2}CH_2CH_2SO_3^-$, J = 8.03 Hz), 6.08 (s, 1H, Ar-H), 6.40 (d, 1H, Ar-H, J = 9.27 Hz), 7.68 (d, 1H, -CH=, J = 14.82 Hz), 7.75 (m, 2H, Ar-H), 7.89 (t, 1H, Ar-H, J = 8.03 Hz), 7.93 (d, 1H, Ar-H, J = 8.70 Hz), 8.04 (d, 1H, Ar-H, J = 8.74 Hz), 8.12 (d, 1H, Ar-H, J = 8.20 Hz), 8.23 (d, 1H, -CH=, J = 14.79 Hz), 8.66 (d, 1H, Ar-H, J = 8.60 Hz). MALDI-TOF: m/z 497.5 ($M+H^+$).