

Supporting Information

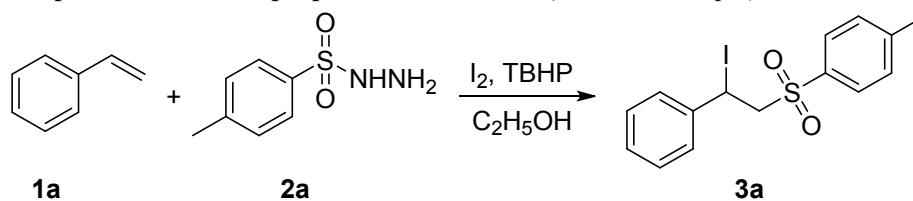
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I. General Remarks:

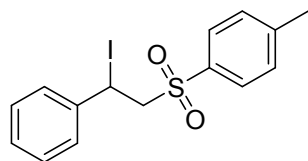
Unless otherwise stated, all commercial reagents and solvents were used without additional purification. All the reactions were carried out under air atmosphere. ^1H NMR spectra were recorded at 25 °C on a Bruker Ascend™ 400 spectrometer (Germany), ^{13}C NMR spectra were recorded at 25 °C on a Bruker 100 MHz, and TMS as internal standard. Melting points were obtained with a micro melting point XT4A Beijing Keyi electrooptic apparatus and are uncorrected. HRMS data were obtained on a Waters LCT Premierxe™ (USA). All reactions were monitored by TLC with Taizhou GF254 silica gel coated plates. Flash column chromatography was carried out using 300-400 mesh silica gel at increased pressure.

II. General procedure for the preparation of 3 and 6 (1a as an example).



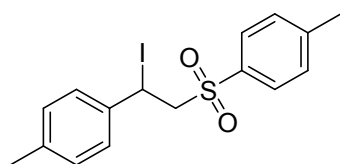
Styrene **1a** (52.0 mg, 0.5 mmol), 4-methylbenzenesulfonylhydrazide **2a** (102.3 mg, 0.55 mmol), I₂ (63.5 mg, 0.25 mmol) and TBHP (46.0 mg, 1.0 mmol) were added to EtOH (2 mL). The mixture was stirred at 0-20 °C for 8.0 h (monitored by TLC), quenched with water (10 mL), extracted with dichloromethane (5×3 mL), and dried over anhydrous Na₂SO₄. The solvent was removed under reduced pressure, and the residue was purified by a shot flash silica gel column chromatography (EtOAc/petro ether = 1 : 6) to give compound **3a** as a white solid (171.8 mg, 89%).

III. Analytical data of products obtained in this study



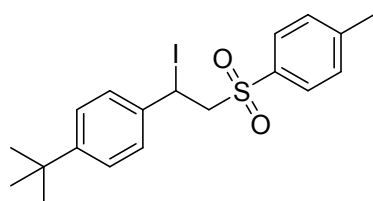
1-((2-iodo-2-phenylethyl)sulfonyl)-4-methylbenzene **3a**

White solid. Mp: 103-104 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.36 (s, 3H), 4.08 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 4.33 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 5.57 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 7.10-7.16 (m, 5H), 7.21-7.24 (m, 2H), 7.44 (d, *J* = 8.0, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 18.2, 21.6, 65.9, 127.2, 128.0, 128.5, 128.7, 129.7, 136.1, 140.6, 144.7. HRMS (ESI-TOF) Calcd for C₁₅H₁₆IO₂S, [M+H]⁺ 386.9916; Found 386.9912.



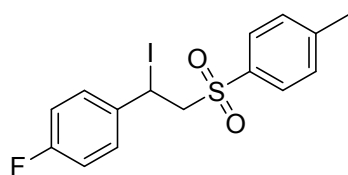
1-((2-iodo-2-(*p*-tolyl)ethyl)sulfonyl)-4-methylbenzene **3b**

White solid. Mp: 134-135 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.26 (s, 3H), 2.39 (s, 3H), 4.04 (dd, *J*₁ = 4.0, *J*₂ = 14.4, 1H), 4.30 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 5.56 (dd, *J*₁ = 4.4, *J*₂ = 14.6, 1H), 6.92 (d, *J* = 7.6, 2H), 7.13 (t, *J* = 7.6, 4H), 7.44 (d, *J* = 8.4, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 18.7, 21.2, 21.6, 66.0, 127.0, 128.0, 129.4, 129.6, 136.2, 137.6, 138.6, 144.6. HRMS (ESI-TOF) Calcd for C₁₆H₁₈IO₂S, [M+H]⁺ 401.0072; Found 401.0067.



1-(*tert*-butyl)-4-(1-iodo-2-tosylethyl)benzene **3c**

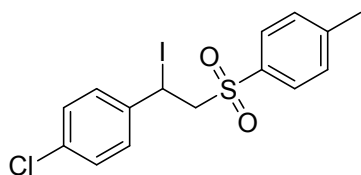
White solid. Mp: 125-126 °C; ¹H NMR (400 MHz; CDCl₃): δ = 1.27 (s, 9H), 2.35 (s, 3H), 4.08 (dd, *J*₁ = 4.0, *J*₂ = 14.8, 1H), 4.35 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 5.61 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 7.07-7.13 (m, 6H), 7.39 (d, *J* = 8.0, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 18.7, 21.6, 31.2, 34.6, 66.0, 125.6, 126.8, 127.9, 129.5, 136.3, 137.3, 144.2, 151.7. HRMS (ESI-TOF) Calcd for C₁₉H₂₄IO₂S, [M+H]⁺ 443.0538; Found 443.0542.



1-fluoro-4-(1-iodo-2-tosylethyl)benzene **3d**

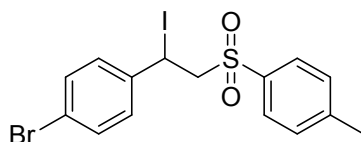
White solid. Mp: 131-132 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.45 (s, 3H), 3.30 (dd, *J*₁ = 2.0, *J*₂ = 14.4, 1H), 3.45 (dd, *J*₁ = 4.4, *J*₂ = 14.4, 1H), 5.24 (dd, *J*₁ = 1.6, *J*₂ = 14.0, 1H), 6.96-7.00 (m, 2H),

7.24-7.29 (m, 2H), 7.37 (d, $J = 8.0$, 2H), 7.81 (d, $J = 8.0$, 2H). ^{13}C NMR (100 MHz; CDCl_3): $\delta = 21.7, 63.9, 67.9, 115.5, 115.7, 127.5, 128.0, 130.1, 136.1, 136.7, 145.4, 161.2, 163.7$. HRMS (ESI-TOF) Calcd for $\text{C}_{15}\text{H}_{15}\text{FIO}_2\text{S}$, $[\text{M}+\text{H}]^+$ 404.9822; Found 404.9827.



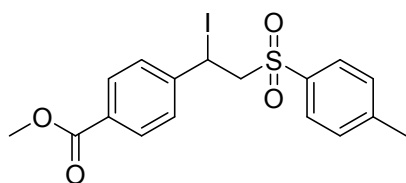
1-chloro-4-(1-iodo-2-tosylethyl)benzene 3e

White solid. Mp: 143-144 °C; ^1H NMR (400 MHz; CDCl_3): $\delta = 2.41$ (s, 3H), 4.02 (dd, $J_1 = 4.0$, $J_2 = 14.4$, 1H), 4.25 (dd, $J_1 = 4.4$, $J_2 = 14.4$, 1H), 5.52 (dd, $J_1 = 4.0$, $J_2 = 14.0$, 1H), 7.07 (d, $J = 8.4$, 2H), 7.14 (dd, $J_1 = 2.0$, $J_2 = 6.0$, 2H), 7.15 (t, $J = 7.6$, 4H), 7.41 (d, $J = 8.0$, 2H). ^{13}C NMR (100 MHz; CDCl_3): $\delta = 16.7, 21.6, 65.9, 127.9, 128.5, 128.8, 129.7, 134.3, 135.9, 138.9, 144.9$. HRMS (ESI-TOF) Calcd for $\text{C}_{15}\text{H}_{15}\text{ClIO}_2\text{S}$, $[\text{M}+\text{H}]^+$ 420.9522; Found 420.9517.



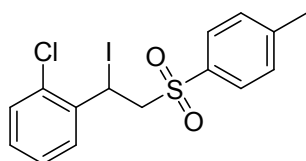
1-bromo-4-(1-iodo-2-tosylethyl)benzene 3f

White solid. Mp: 144-145 °C; ^1H NMR (400 MHz; CDCl_3): $\delta = 2.47$ (s, 3H), 3.26 (d, $J = 14.4$ Hz, 1H), 3.43 (t, $J = 14.0$ Hz, 1H), 5.51 (d, $J = 9.6$ Hz, 1H), 7.17 (d, $J = 7.6$ Hz, 2H), 7.33-7.43 (m, 4H), 7.81 (d, $J = 7.6$ Hz, 2H). ^{13}C NMR (100 MHz; CDCl_3): $\delta = 21.7, 63.7, 67.9, 122.1, 127.4, 128.0, 130.2, 131.8, 135.9, 139.8, 145.4$. HRMS (ESI-TOF) Calcd for $\text{C}_{15}\text{H}_{15}\text{BrIO}_2\text{S}$, $[\text{M}+\text{H}]^+$ 466.1519; Found 466.1517.



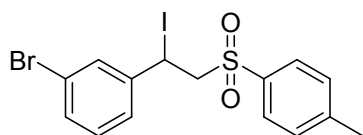
methyl 4-(1-iodo-2-tosylethyl)benzoate 3g

White solid. Mp: 138-139 °C; ^1H NMR (400 MHz; CDCl_3): $\delta = 2.28$ (s, 3H), 2.36 (s, 3H), 4.06 (dd, $J_1 = 4.0$ Hz, $J_2 = 14.4$ Hz, 1H), 4.26 (q, $J = 9.6$ Hz, 1H), 5.55 (q, $J = 9.6$ Hz, 1H), 6.84 (d, $J = 7.6$ Hz, 2H), 7.13-7.21 (m, 4H), 7.41 (d, $J = 7.6$ Hz, 2H). ^{13}C NMR (100 MHz; CDCl_3): $\delta = 17.2, 21.1, 21.5, 66.1, 121.8, 127.9, 128.2, 129.8, 135.9, 137.9, 144.9, 150.4, 168.7$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{18}\text{IO}_4\text{S}$, $[\text{M}+\text{H}]^+$ 444.9970; Found 444.9972.



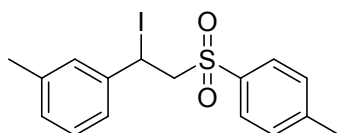
1-chloro-2-(1-iodo-2-tosylethyl)benzene 3h

White solid. Mp: 108-109 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.46 (s, 3H), 3.20 (d, *J* = 10.0 Hz, 1H), 4.26 (t, *J* = 10.0 Hz, 1H), 5.22 (d, *J* = 9.6 Hz, 1H), 6.84 (d, *J* = 8.4 Hz, 2H), 7.16-7.22 (m, 4H), 7.19 (d, *J* = 6.8 Hz, 2H), 7.41 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 21.7, 63.7, 67.9, 122.1, 127.4, 128.0, 130.2, 131.8, 135.9, 139.8, 145.4. HRMS (ESI-TOF) Calcd for C₁₅H₁₅ClIO₂S, [M+H]⁺ 420.9529; Found 20.9523.



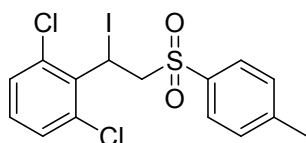
1-bromo-3-(1-iodo-2-tosylethyl)benzene 3i

White solid. Mp: 96-97 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.39 (s, 3H), 4.06 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 4.26 (q, *J* = 9.6 Hz, 1H), 5.48 (q, *J* = 9.6 Hz, 1H), 7.02 (t, *J* = 8.0 Hz, 1H), 7.13 (d, *J* = 8.4 Hz, 2H), 7.19 (d, *J* = 6.8 Hz, 2H), 7.26 (t, *J* = 7.6 Hz, 1H), 7.42 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 16.1, 21.6, 65.5, 122.6, 125.9, 127.8, 129.7, 130.1, 130.2, 131.5, 135.8, 142.4, 144.9. HRMS (ESI-TOF) Calcd for C₁₅H₁₅BrIO₂S, [M+H]⁺ 464.9021; Found 464.9025.



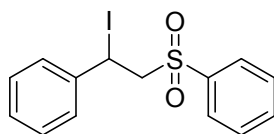
1-(1-iodo-2-tosylethyl)-3-methylbenzene 3j

White solid. Mp: 112-114 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.15 (s, 3H), 2.35 (s, 3H), 4.06 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 4.31 (q, *J* = 9.6 Hz, 1H), 5.54 (q, *J* = 9.6 Hz, 1H), 6.93 (d, *J* = 5.2 Hz, 2H), 6.99 (d, *J* = 7.6 Hz, 2H), 7.05 (t, *J* = 8.0 Hz, 2H), 7.10 (d, *J* = 7.6 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 18.6, 21.1, 21.5, 65.8, 124.4, 127.6, 127.9, 128.6, 129.3, 129.5, 136.1, 138.4, 140.2, 144.5. HRMS (ESI-TOF) Calcd for C₁₆H₁₈IO₂S, [M+H]⁺ 401.0071; Found 401.0076.



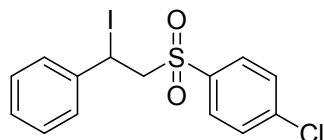
1,3-dichloro-2-(1-iodo-2-tosylethyl)benzene 3k

White solid. Mp: 109-110 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.36 (s, 3H), 3.95 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 4.89 (q, *J* = 9.6 Hz, 1H), 6.44 (q, *J* = 9.6 Hz, 1H), 7.00-7.05 (m, 2H), 7.16 (t, *J* = 8.0 Hz, 2H), 7.24 (t, *J* = 8.0 Hz, 1H), 7.56 (d, *J* = 8.0 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 9.2, 21.6, 62.0, 127.9, 128.8, 129.6, 129.7, 130.3, 134.0, 135.4, 135.9, 144.9. HRMS (ESI-TOF) Calcd for C₁₅H₁₄ICl₂O₂S, [M+H]⁺ 454.9136; Found 454.9131.

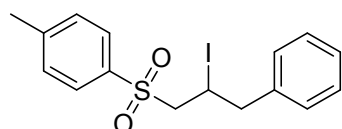


(1-iodo-2-(phenylsulfonyl)ethyl)benzene 3l

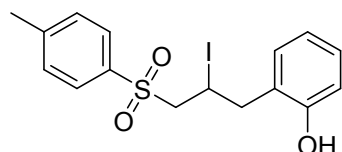
White solid. Mp: 84-85 °C; ¹H NMR (400 MHz; CDCl₃): δ = 4.08 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 4.34 (q, *J* = 9.6 Hz, 1H), 5.57 (q, *J* = 9.6 Hz, 1H), 7.09-7.15 (m, 3H), 7.23 (t, *J* = 7.2 Hz, 2H), 7.32 (d, *J* = 7.6 Hz, 2H), 7.36 (d, *J* = 7.2 Hz, 1H), 7.51 (d, *J* = 7.6 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 18.0, 65.9, 127.2, 127.9, 128.7, 128.8, 129.0, 133.6, 139.1, 140.4. HRMS (ESI-TOF) Calcd for C₁₄H₁₄IO₂S, [M+H]⁺ 372.9756; Found 372.9751.

**1-chloro-4-((2-iodo-2-phenylethyl)sulfonyl)benzene 3m**

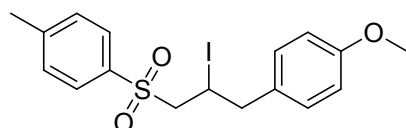
White solid. Mp: 104-105 °C; ¹H NMR (400 MHz; CDCl₃): δ = 4.07 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 4.34 (q, *J* = 9.6 Hz, 1H), 5.59 (q, *J* = 9.6 Hz, 1H), 7.01 (t, *J* = 8.0 Hz, 2H), 7.13 (d, *J* = 8.4 Hz, 2H), 7.19 (d, *J* = 9.2 Hz, 2H), 7.24 (d, *J* = 8.0 Hz, 1H), 7.42 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 21.6, 65.5, 122.6, 125.9, 127.8, 130.1, 130.2, 131.5, 135.8, 140.4, 144.9. HRMS (ESI-TOF) Calcd for C₁₄H₁₄IClO₂S, [M+H]⁺ 406.9366; Found 406.9361.

**1-((2-iodo-3-phenylpropyl)sulfonyl)-4-methylbenzene 3n**

White solid. Mp: 81-82 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.49 (s, 3H), 3.15 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 3.55 (q, *J* = 9.6 Hz, 1H), 3.80 (t, *J* = 8.8 Hz, 2H), 4.56 (d, *J* = 7.6 Hz, 1H), 7.23 (d, *J* = 8.0 Hz, 2H), 7.31-7.33 (m, 5H), 7.39 (d, *J* = 8.0 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 21.6, 21.7, 45.5, 64.9, 127.2, 128.1, 128.5, 129.2, 130.2, 136.3, 138.3, 145.3. HRMS (ESI-TOF) Calcd for C₁₆H₁₈IO₂S, [M+H]⁺ 401.0072; Found 401.0076.

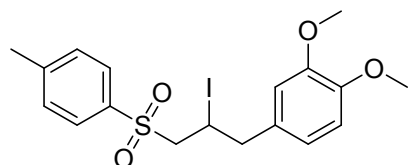
**2-((2-iodo-3-tosylpropyl)phenol) 3o**

White solid. Mp: 82-83 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.46 (s, 3H), 3.15 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 3.59 (q, *J* = 9.6 Hz, 1H), 3.86 (t, *J* = 8.0 Hz, 2H), 4.73 (q, *J* = 4.4 Hz, 1H), 6.00 (s, 1H), 6.81-6.88 (m, 2H), 7.09-7.14 (m, 2H), 7.17 (d, *J* = 7.6 Hz, 2H), 7.37 (d, *J* = 8.0 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 19.7, 21.7, 41.4, 65.3, 115.9, 120.4, 124.6, 128.2, 128.8, 130.2, 131.6, 135.9, 145.4, 154.1. HRMS (ESI-TOF) Calcd for C₁₆H₁₈IO₃S, [M+H]⁺ 417.0021; Found 417.0015.



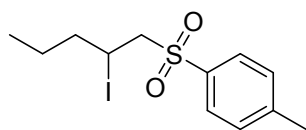
1-((2-iodo-3-(4-methoxyphenyl)propyl)sulfonyl)-4-methylbenzene 3p

White solid. Mp: 94-95 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.48 (s, 3H), 3.12 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 3.44 (q, *J* = 9.6 Hz, 1H), 3.78 (t, *J* = 9.6 Hz, 2H), 3.80 (s, 3H), 4.55 (q, *J* = 9.6 Hz, 1H), 6.85 (dd, *J*₁ = 2.0 Hz, *J*₂ = 6.8 Hz, 2H), 7.15 (d, *J* = 8.4 Hz, 2H), 7.39 (d, *J* = 8.0 Hz, 2H), 7.82 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 21.7, 22.5, 44.6, 55.2, 64.8, 113.9, 128.1, 130.2, 130.3, 136.3, 145.3, 158.8. HRMS (ESI-TOF) Calcd for C₁₇H₂₀IO₃S, [M+H]⁺ 431.0178; Found 431.0176.



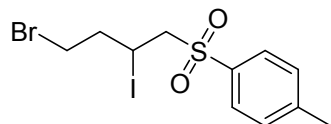
4-(2-iodo-3-tosylpropyl)-1,2-dimethoxybenzene 3q

White solid. Mp: 107-108 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.44 (s, 3H), 3.12 (dd, *J*₁ = 4.0 Hz, *J*₂ = 14.4 Hz, 1H), 3.43 (q, *J* = 9.6 Hz, 1H), 3.74 (t, *J* = 9.6 Hz, 2H), 3.85 (s, 3H), 3.86 (s, 3H), 4.52 (q, *J* = 9.6 Hz, 1H), 6.67-6.80 (m, 3H), 7.35 (d, *J* = 8.0 Hz, 2H), 7.77 (d, *J* = 8.0 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 21.7, 21.8, 45.1, 55.9, 64.5, 110.9, 112.3, 121.5, 128.0, 130.2, 130.7, 136.2, 145.3, 148.2, 148.8. HRMS (ESI-TOF) Calcd for C₁₈H₂₂IO₄S, [M+H]⁺ 461.0283; Found 461.0290.



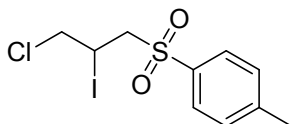
1-((2-iodopentyl)sulfonyl)-4-methylbenzene 6a

Colorless liquid; ¹H NMR (400 MHz; CDCl₃): δ = 1.24-1.41 (m, 3H), 1.53-1.56 (m, 2H), 1.83 (q, *J* = 4.8 Hz, 1H), 1.93 (t, *J* = 3.2 Hz, 1H), 2.45 (s, 3H), 3.67-3.80 (m, 2H), 4.43 (q, *J* = 4.0 Hz, 1H), 7.37 (d, *J* = 8.0 Hz, 2H), 7.77 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 12.9, 21.7, 22.2, 22.8, 41.1, 65.9, 128.0, 130.1, 136.4, 145.2. HRMS (ESI-TOF) Calcd for C₁₂H₁₈IO₂S, [M+H]⁺ 353.0071; Found 353.0075.



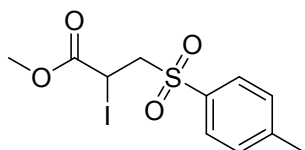
1-((4-bromo-2-iodobutyl)sulfonyl)-4-methylbenzene 6b

White solid. Mp: 73-74 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.28-2.33 (m, 1H), 2.46 (s, 3H), 2.62 (q, *J* = 6.4 Hz, 1H), 3.43 (t, *J* = 4.4 Hz, 1H), 3.59 (t, *J* = 4.0 Hz, 1H), 3.72-3.87 (m, 2H), 4.50 (q, *J* = 3.2 Hz, 1H), 7.38 (d, *J* = 8.0 Hz, 2H), 7.80 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 19.6, 21.8, 33.1, 40.9, 65.5, 128.2, 130.3, 135.7, 145.5. HRMS (ESI-TOF) Calcd for C₁₁H₁₅IBrO₂S, [M+H]⁺ 416.9021; Found 416.9026.



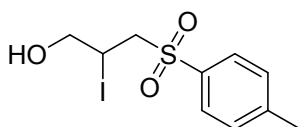
1-((3-chloro-2-iodopropyl)sulfonyl)-4-methylbenzene 6c

Colorless liquid; ¹H NMR (400 MHz; CDCl₃): δ = 2.46 (s, 3H), 3.62 (dd, *J*₁ = 4.4 Hz, *J*₂ = 14.4 Hz, 1H), 3.88-3.99 (m, 2H), 4.08 (q, *J* = 7.6 Hz, 1H), 4.64 (q, *J* = 8.0 Hz, 1H), 7.39 (d, *J* = 8.4 Hz, 2H), 7.80 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 16.4, 21.8, 50.1, 61.9, 128.1, 130.3, 135.9, 145.6. HRMS (ESI-TOF) Calcd for C₁₀H₁₃IClO₂S, [M+H]⁺ 358.9369; Found 358.9363.



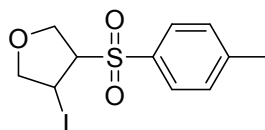
methyl 2-iodo-3-tosylpropanoate 6d

White solid. Mp: 70-71 °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.46 (s, 3H), 3.57 (dd, *J*₁ = 2.4 Hz, *J*₂ = 14.0 Hz, 1H), 3.67 (s, 3H), 4.17 (q, *J* = 7.6 Hz, 1H), 4.64 (q, *J* = 8.0 Hz, 1H), 7.38 (d, *J* = 8.0 Hz, 2H), 7.76 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 5.7, 21.7, 53.4, 61.9, 128.4, 130.1, 135.4, 145.6, 169.9. HRMS (ESI-TOF) Calcd for C₁₁H₁₄IO₄S, [M+H]⁺ 368.9654; Found 368.9651.



2-iodo-3-tosylpropan-1-ol 6e

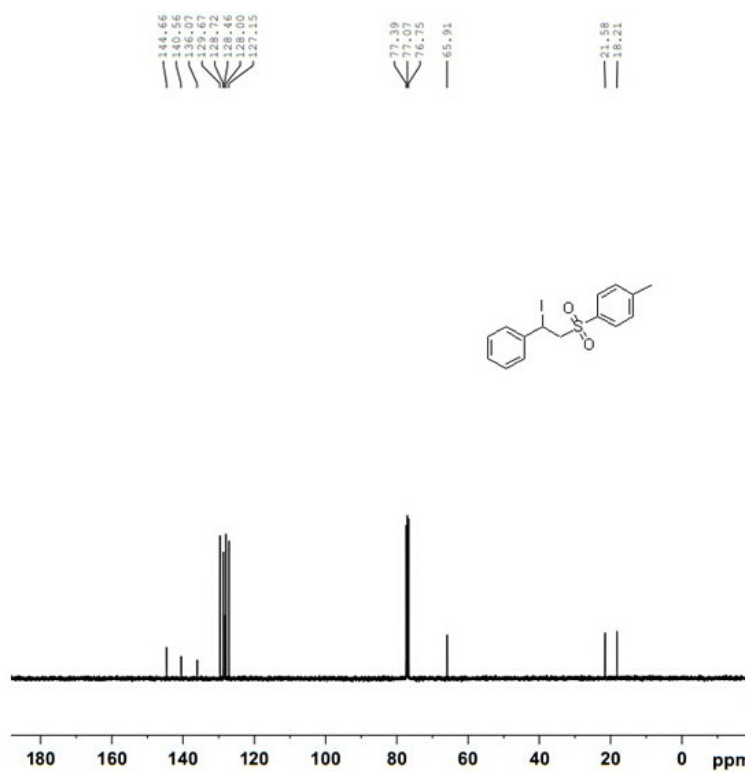
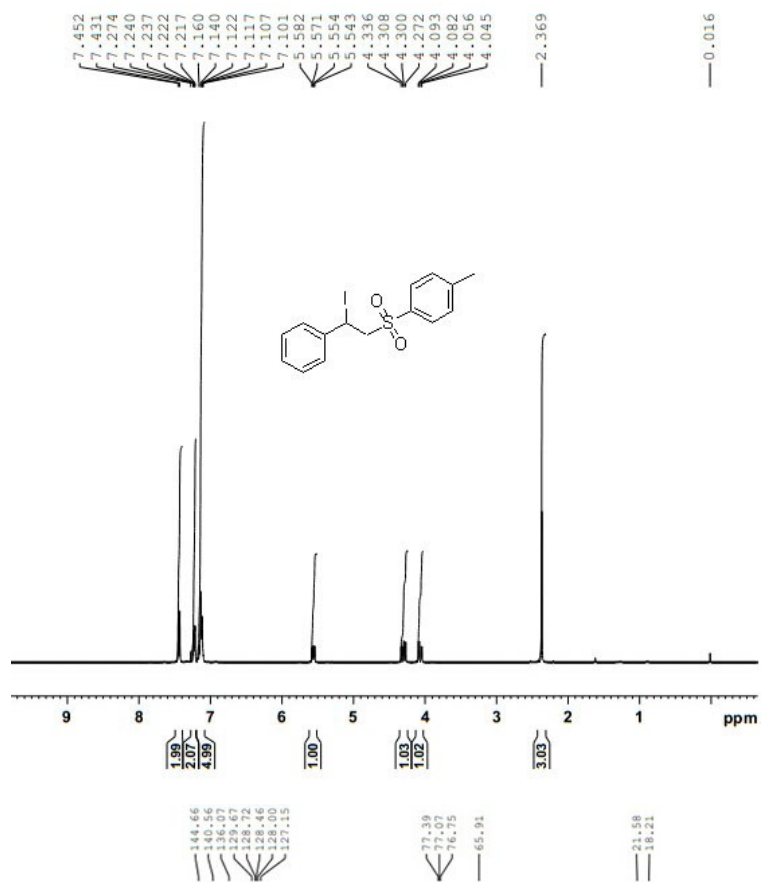
Colorless liquid °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.45 (s, 3H), 3.36 (dd, *J*₁ = 3.6 Hz, *J*₂ = 14.4 Hz, 1H), 3.58 (q, *J* = 6.4 Hz, 1H), 3.73-3.79 (m, 2H), 4.60 (q, *J* = 6.8 Hz, 1H), 7.41 (d, *J* = 8.0 Hz, 2H), 7.79 (d, *J* = 8.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 7.02, 21.8, 29.4, 63.9, 116.8, 128.0, 130.5, 135.5, 146.0. HRMS (ESI-TOF) Calcd for C₁₀H₁₄IO₃S, [M+H]⁺ 340.9708; Found 340.9703.



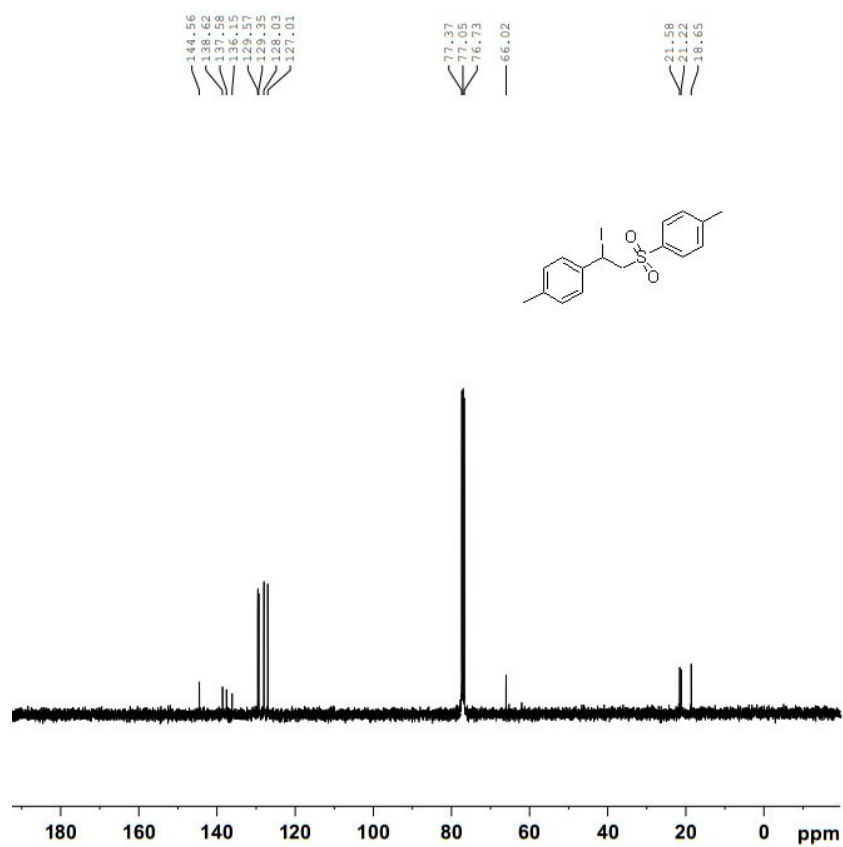
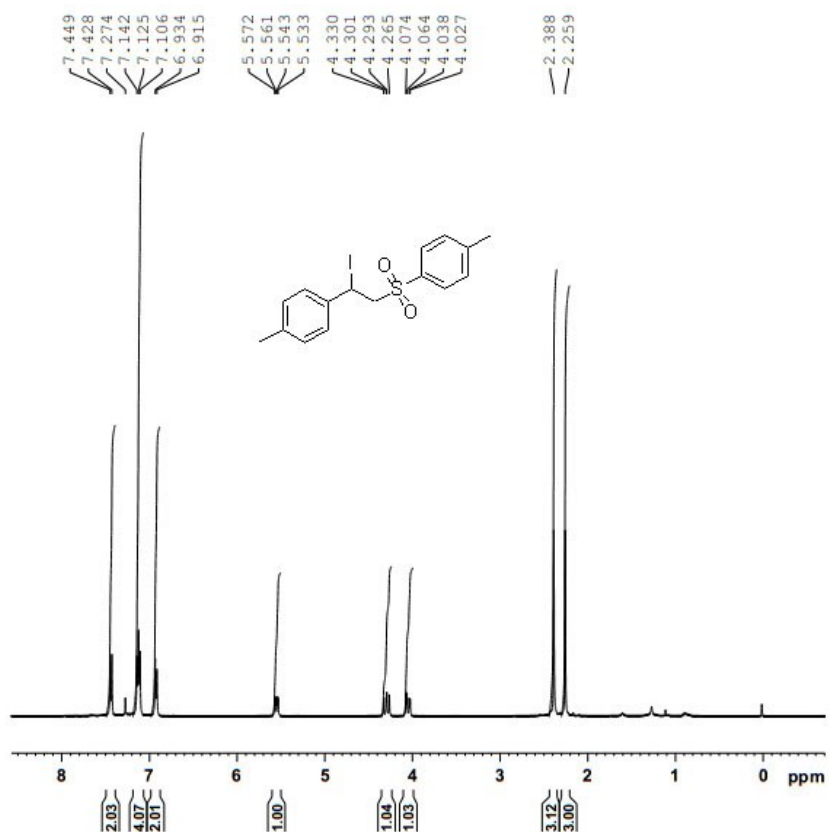
3-iodo-4-tosyltetrahydrofuran 6f

Colorless liquid °C; ¹H NMR (400 MHz; CDCl₃): δ = 2.49 (s, 3H), 3.95-4.02 (m, 3H), 4.19 (q, *J* = 8.0 Hz, 1H), 4.37 (dd, *J*₁ = 4.4 Hz, *J*₂ = 14.0 Hz, 1H), 4.48 (q, *J* = 5.6 Hz, 1H), 7.42 (d, *J* = 8.0 Hz, 2H), 7.80 (d, *J* = 6.4 Hz, 2H). ¹³C NMR (100 MHz; CDCl₃): δ = 13.6, 21.8, 66.8, 74.0, 78.7, 128.7, 130.3, 134.9, 145.7. HRMS (ESI-TOF) Calcd for C₁₁H₁₄IO₃S, [M+H]⁺ 352.9708; Found 352.9704.

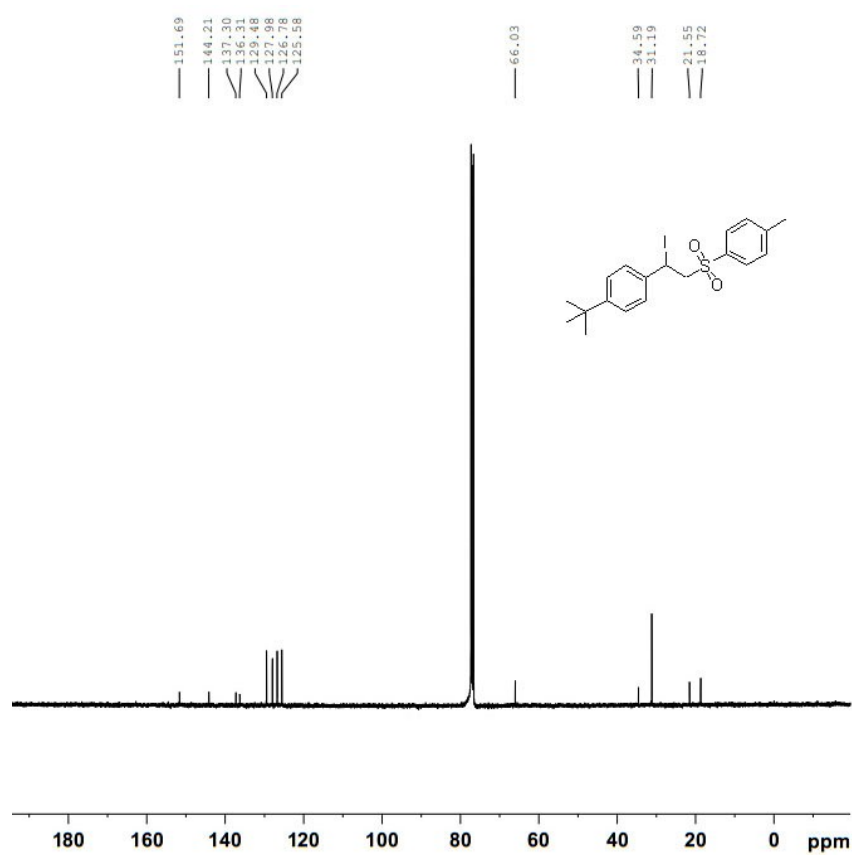
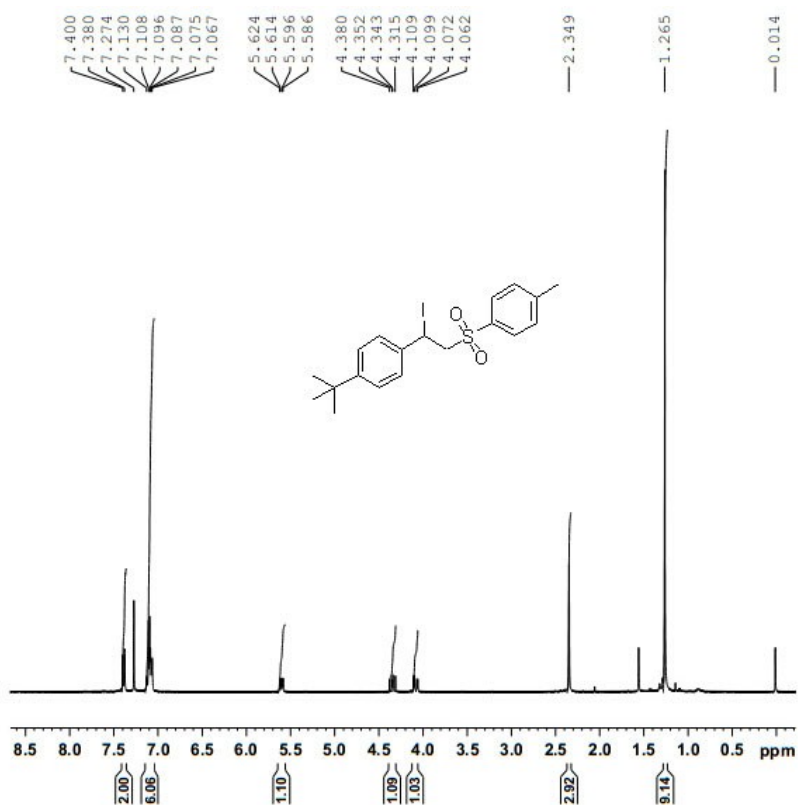
IV. ^1H NMR and ^{13}C NMR spectra copies of compounds 3 and 6
Compound 3a



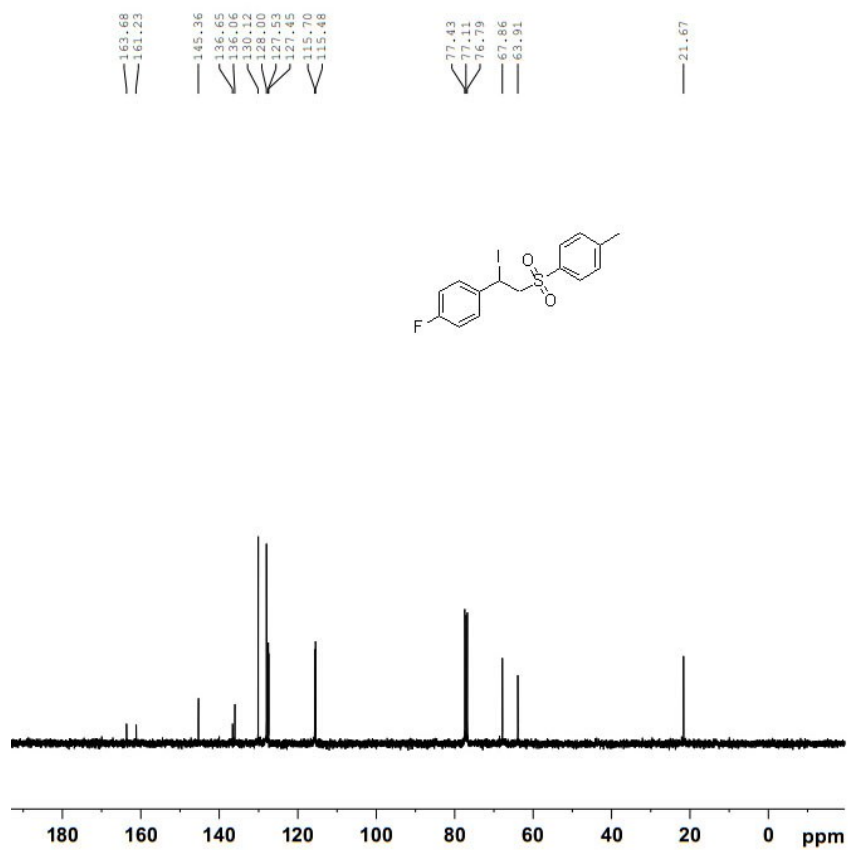
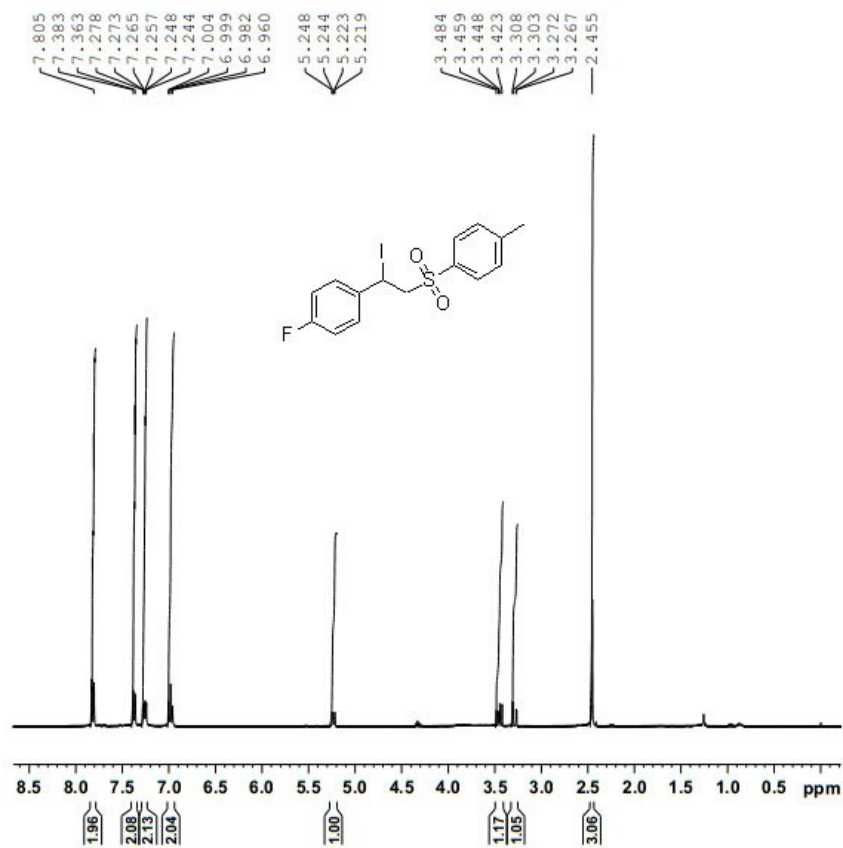
Compound 3b



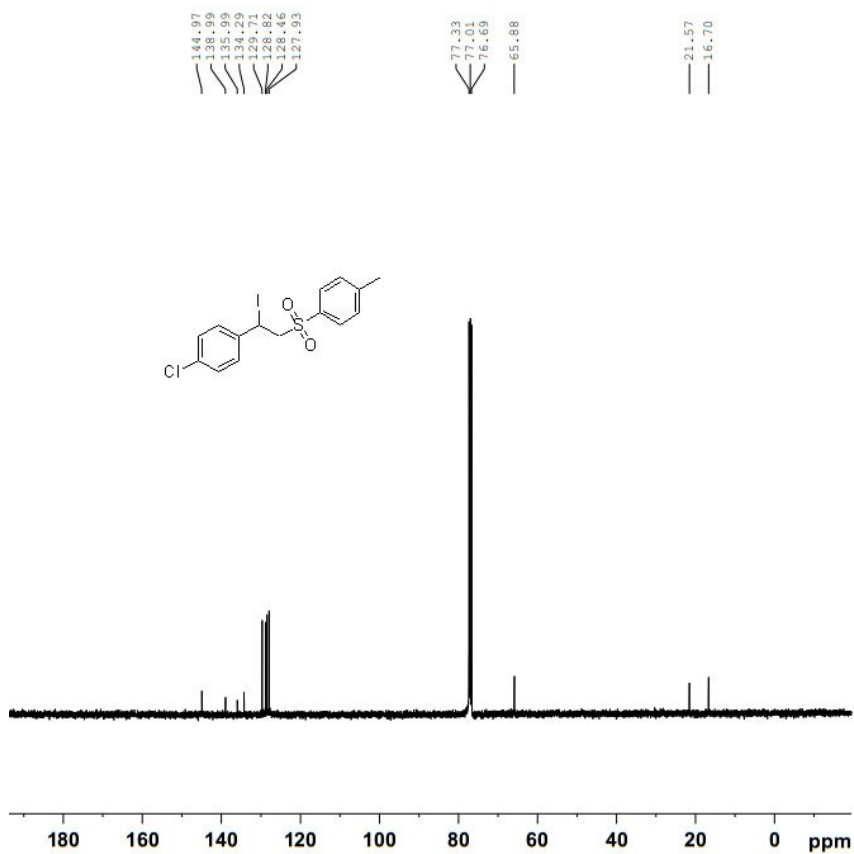
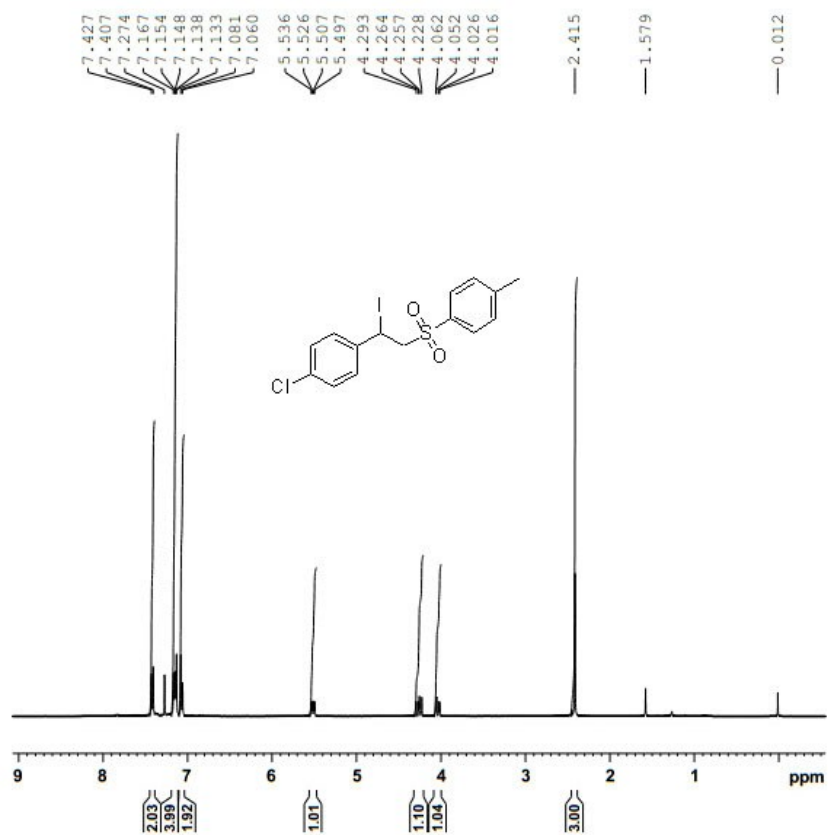
Compound 3c



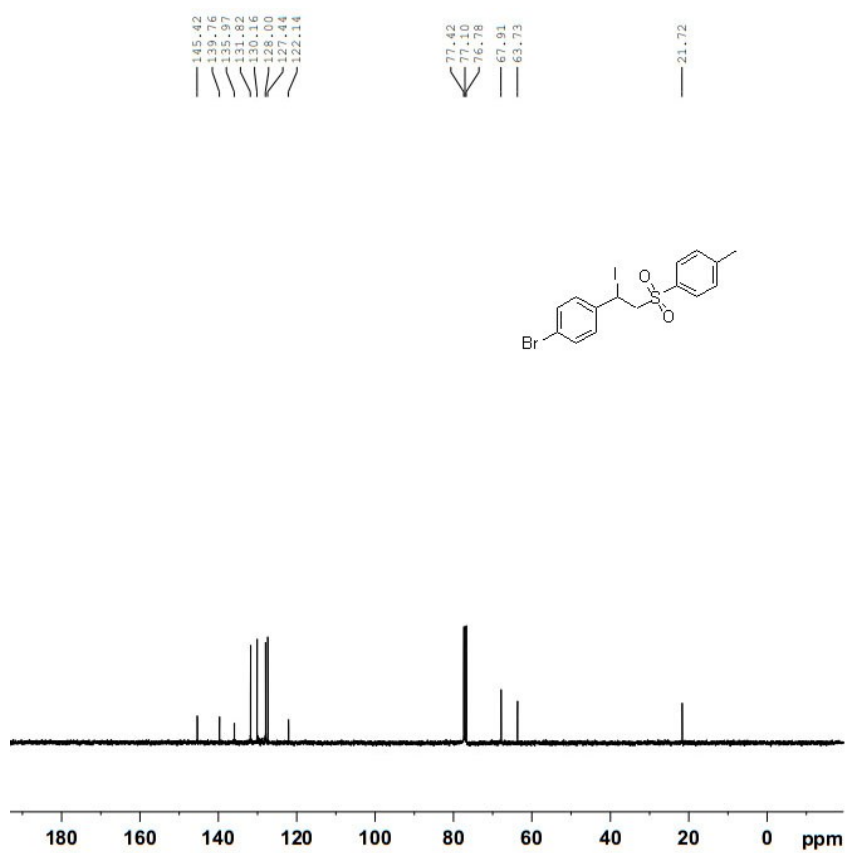
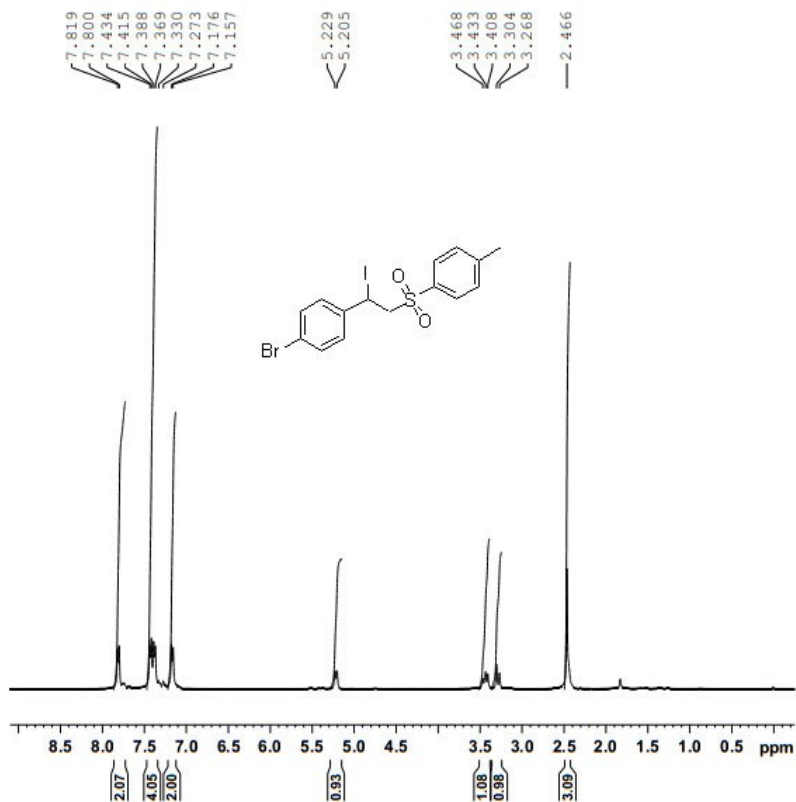
Compound 3d



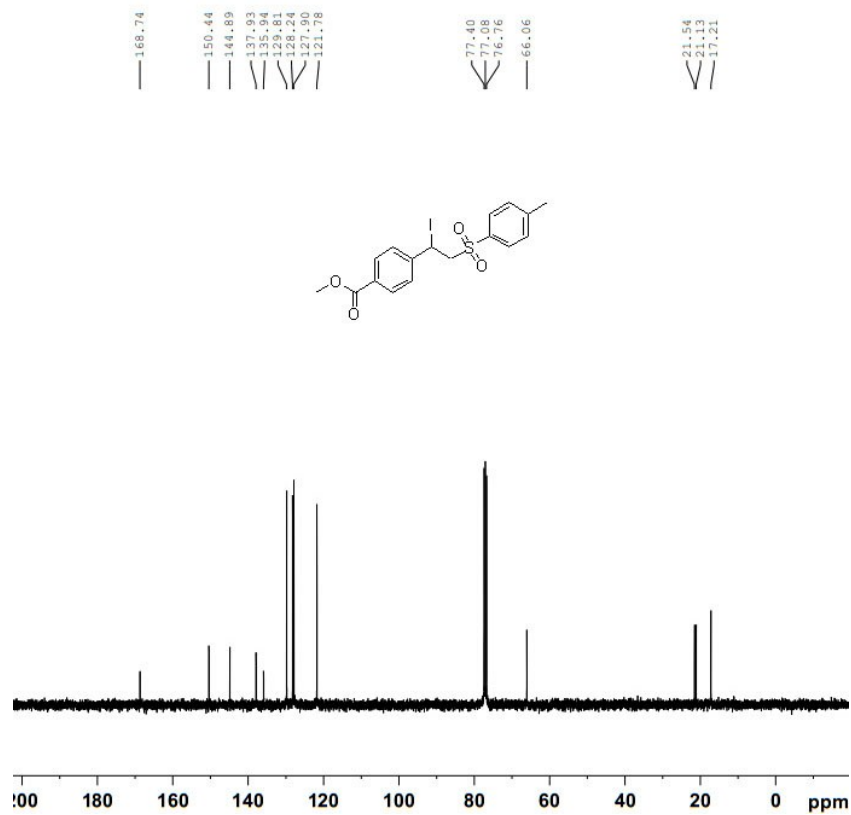
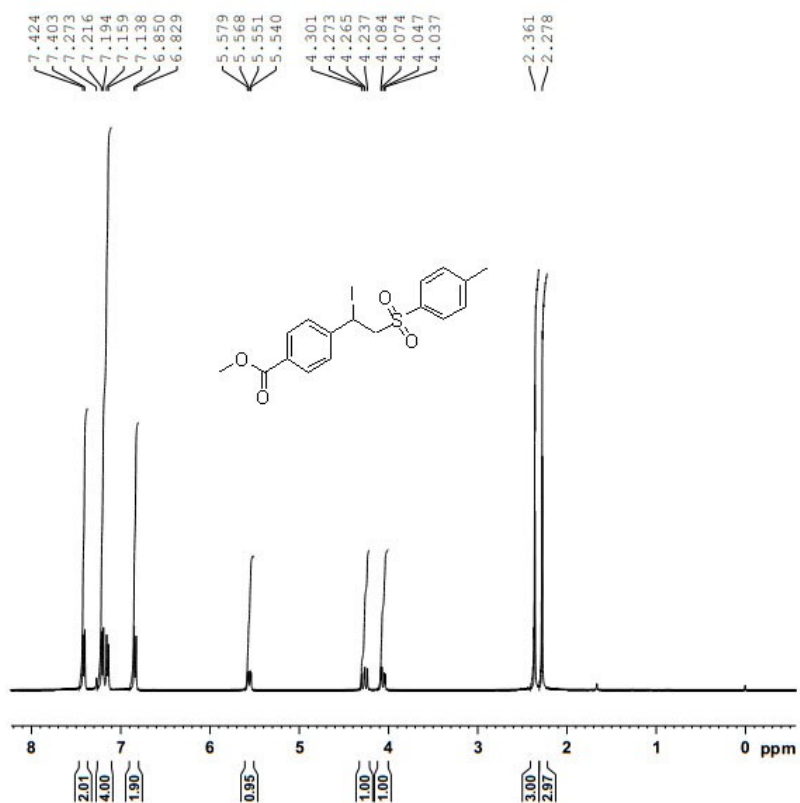
Compound 3e



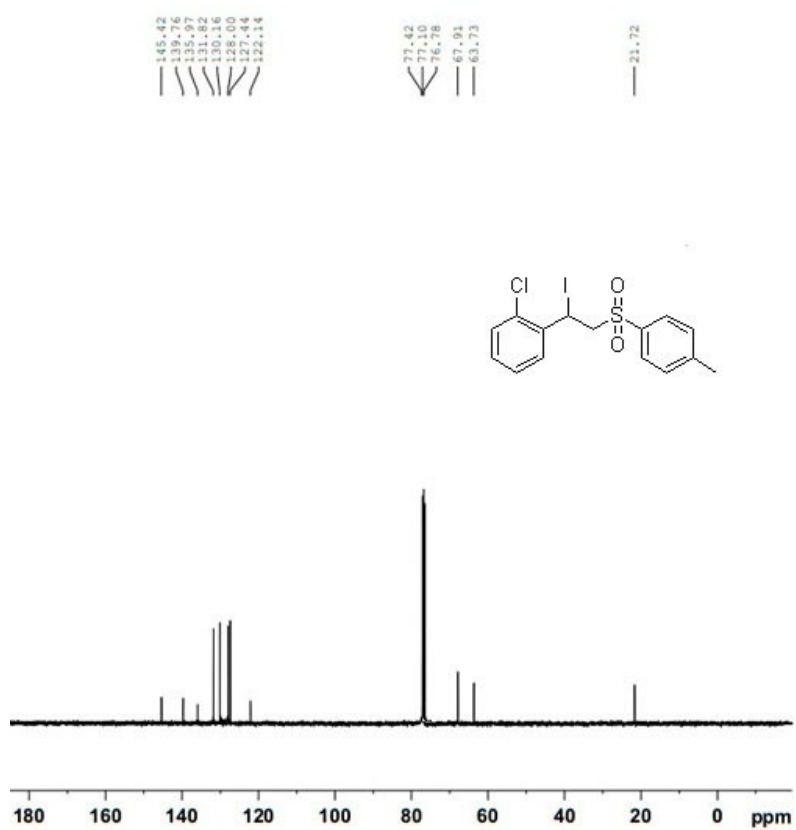
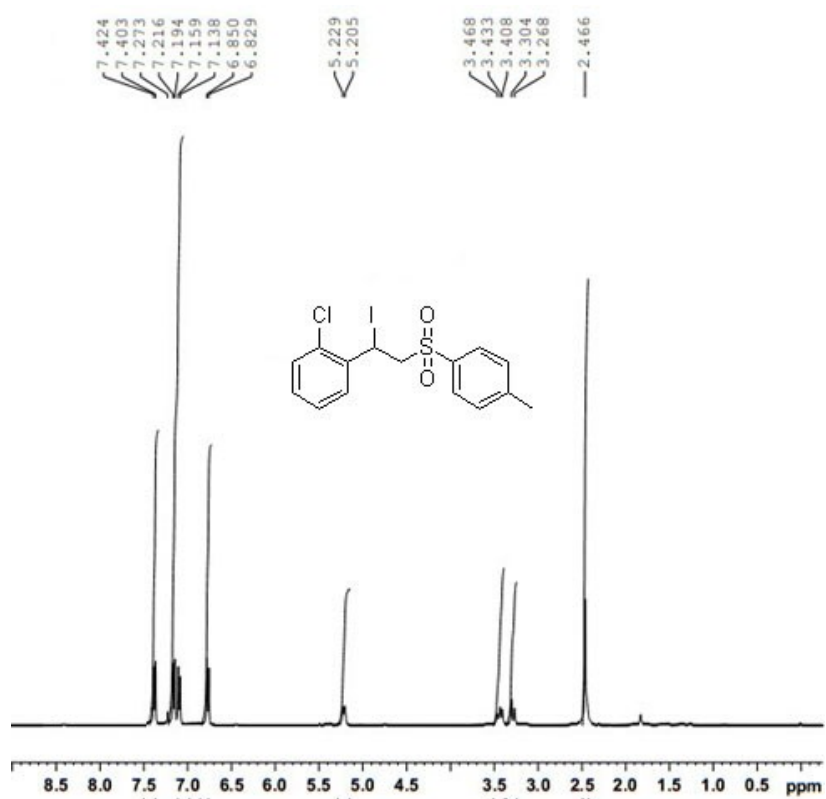
Compound 3f



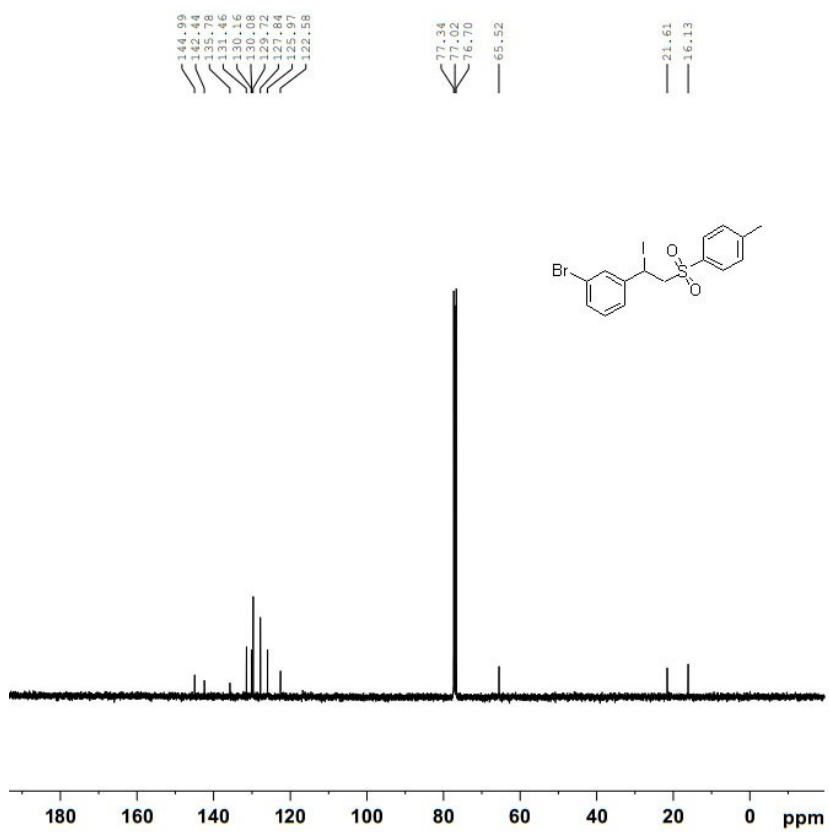
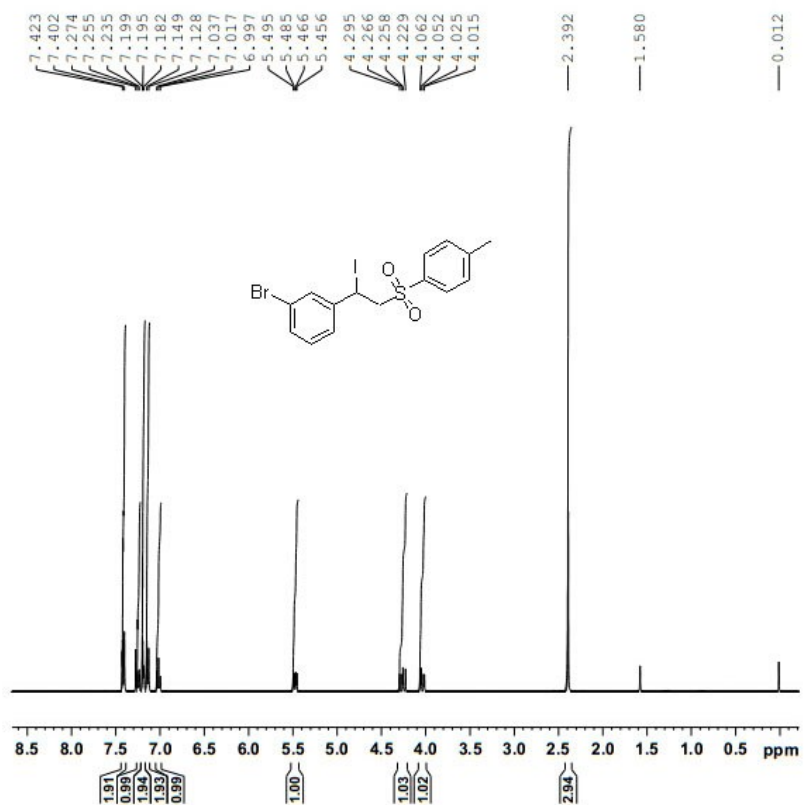
Compound 3g



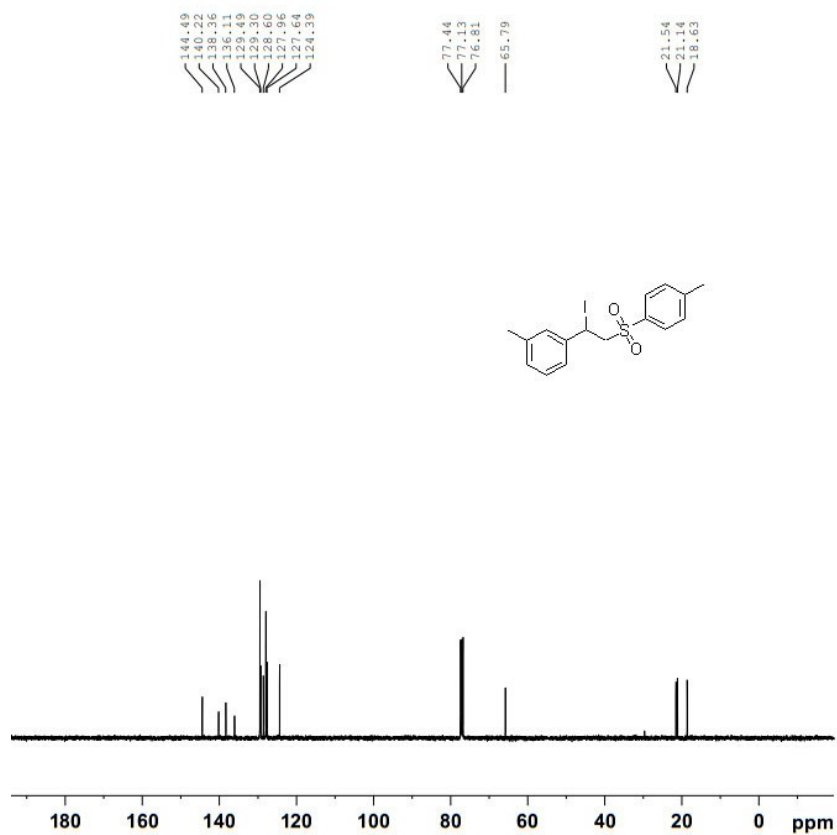
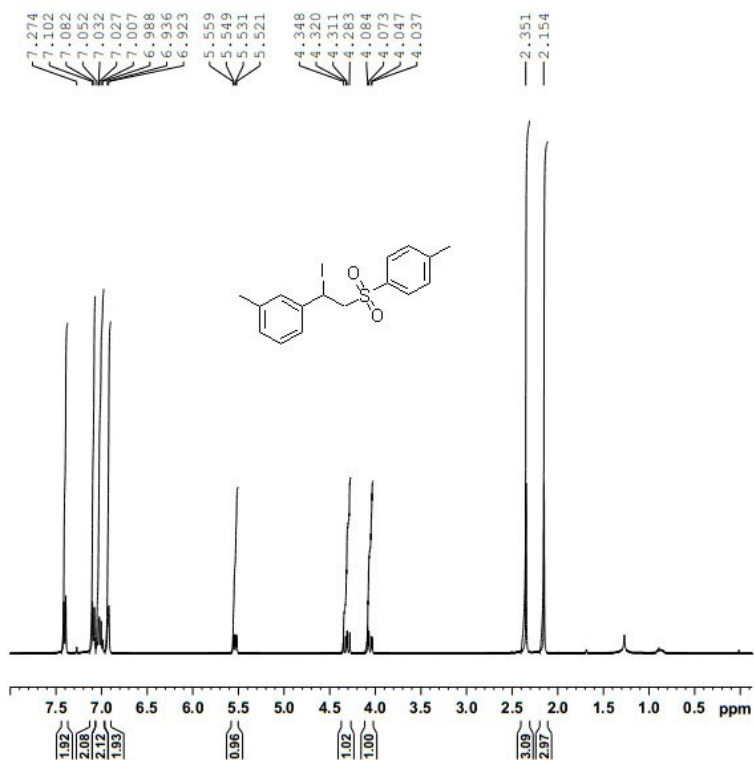
Compound 3h



Compound 3i



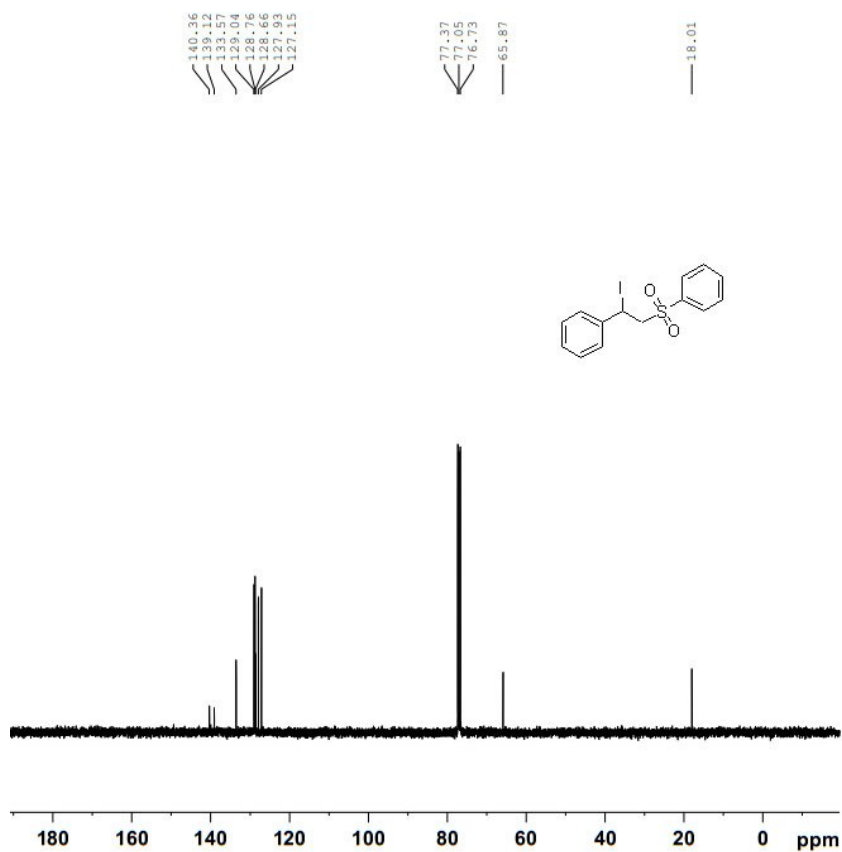
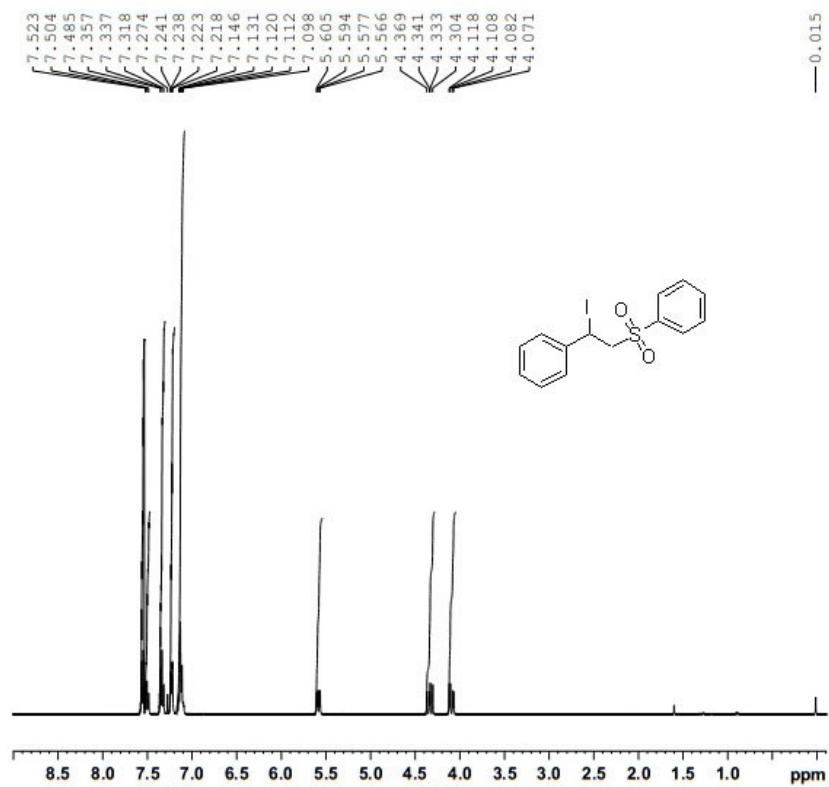
Compound 3j



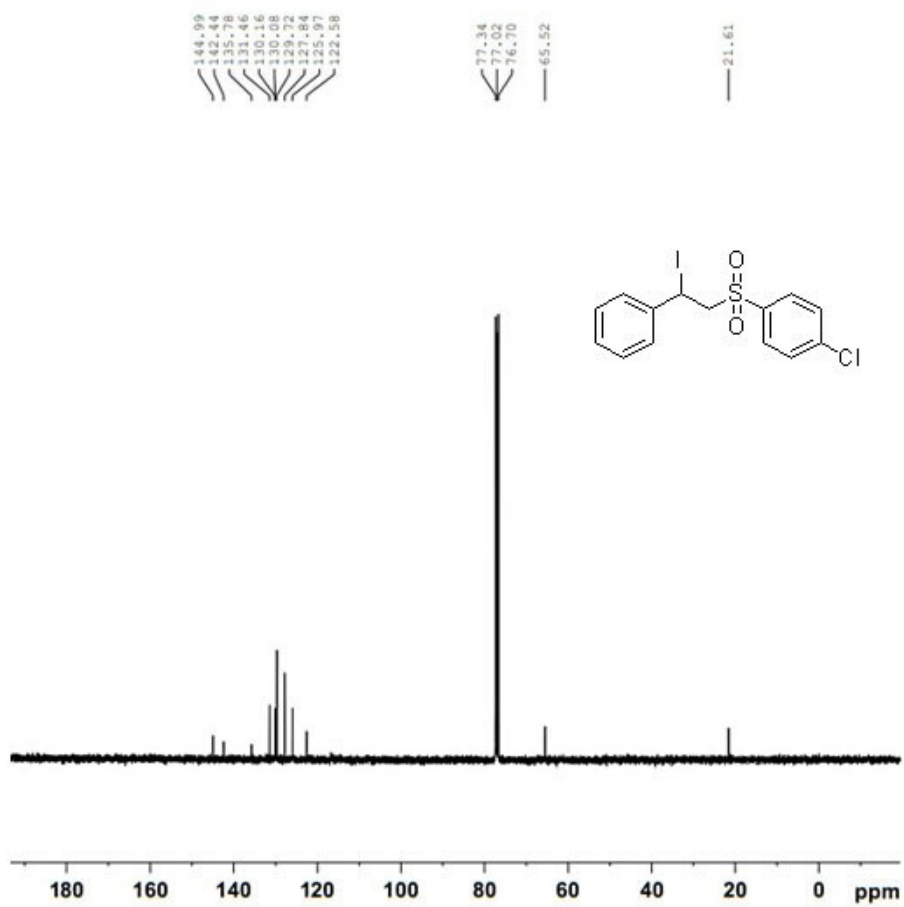
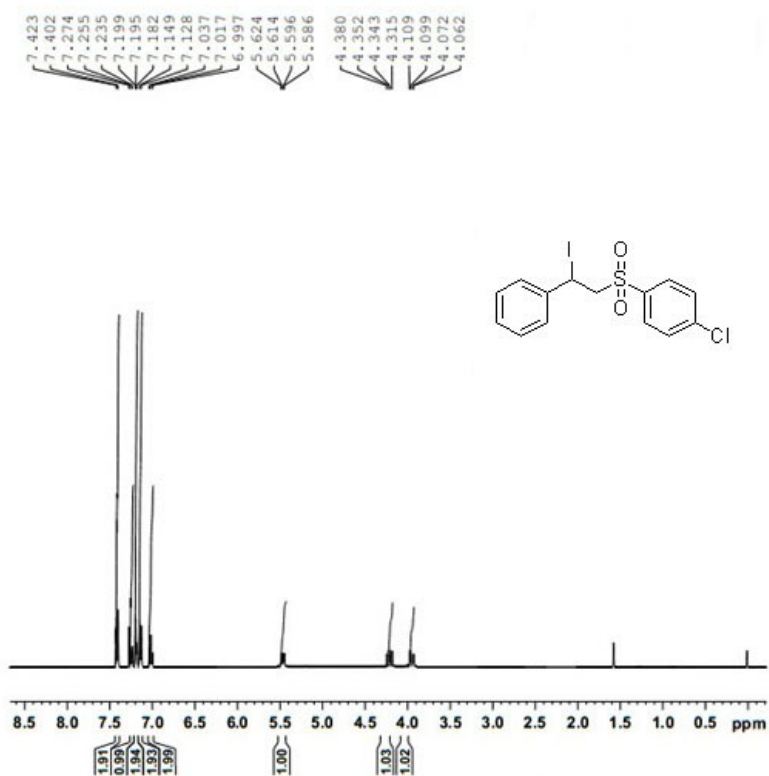
Compound 3k



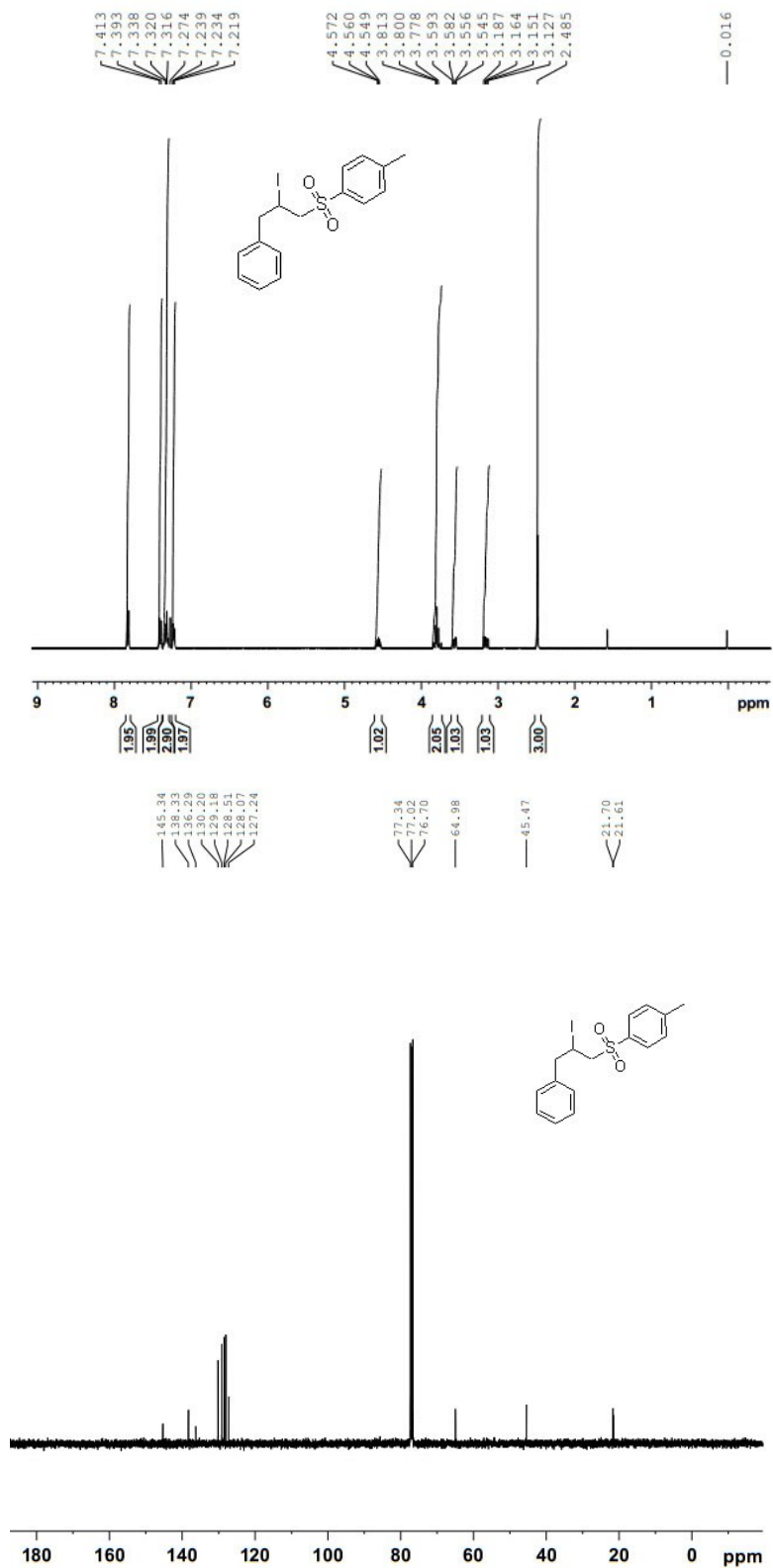
Compound 3l



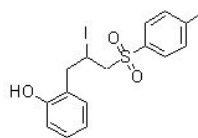
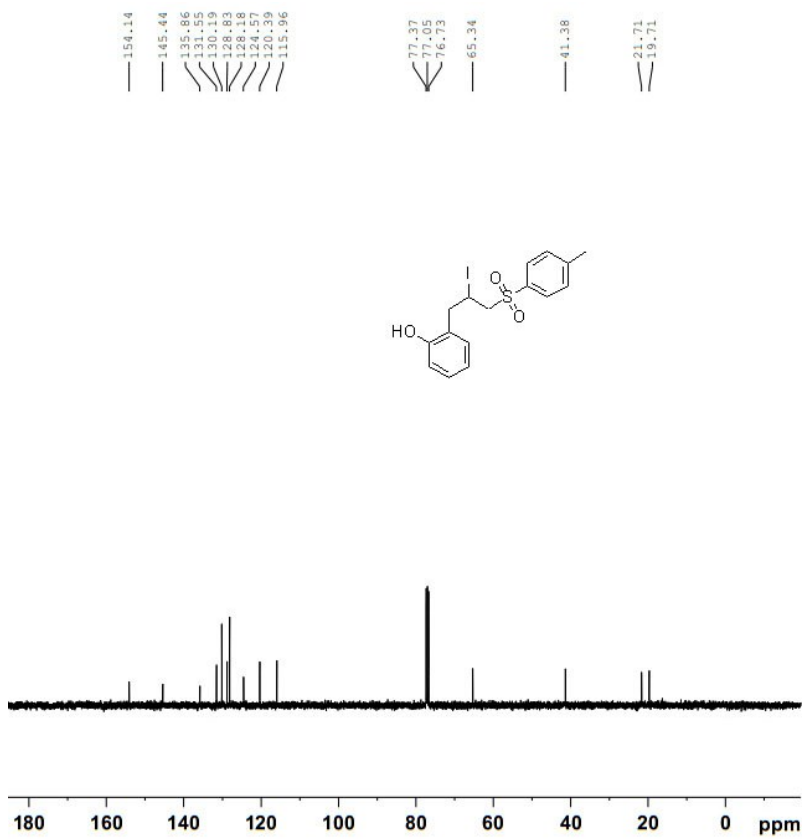
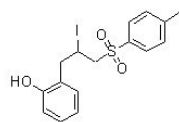
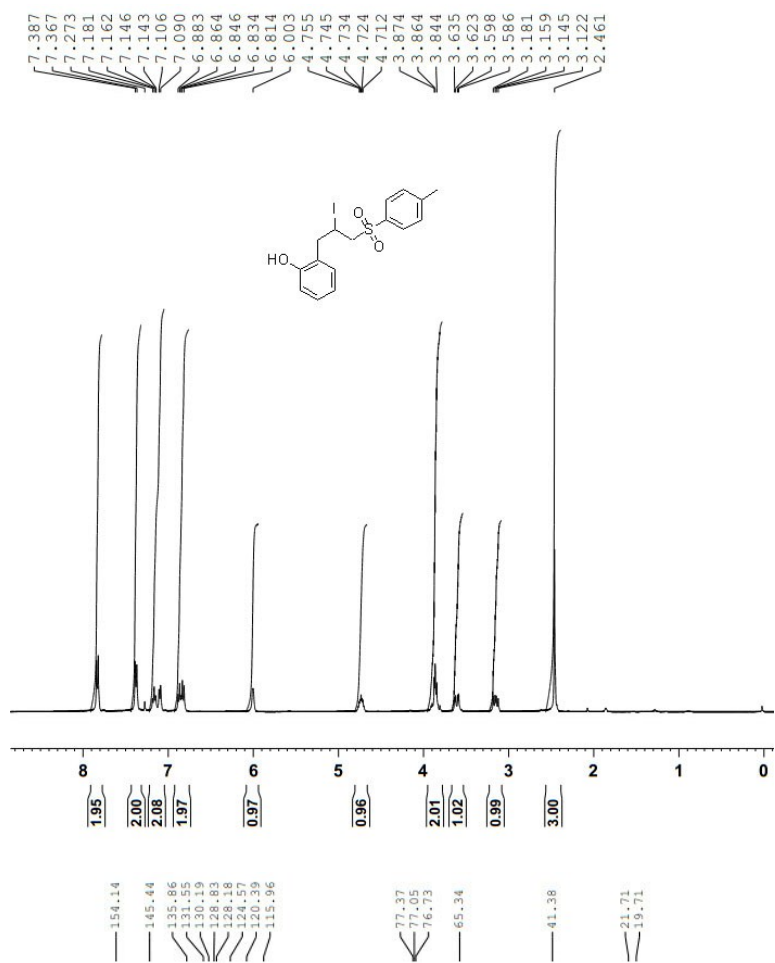
Compound 3m



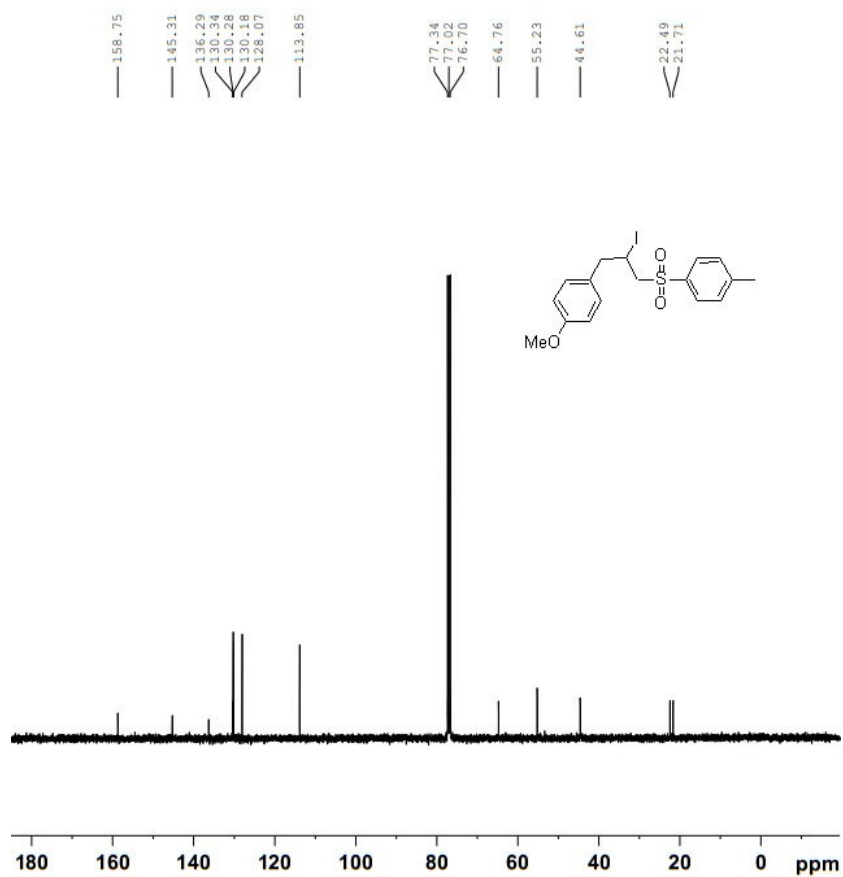
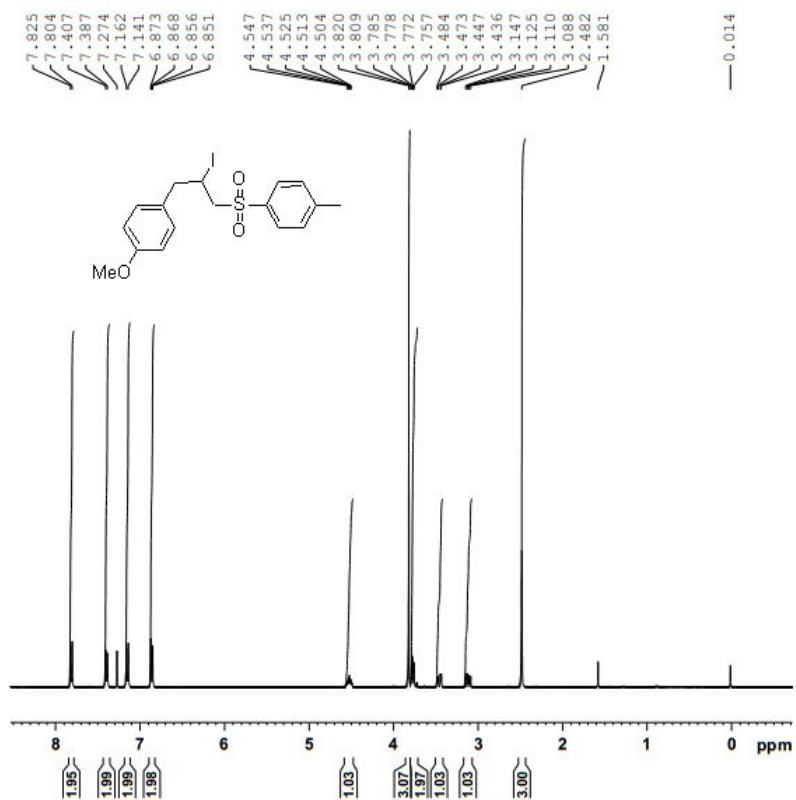
Compound 3n



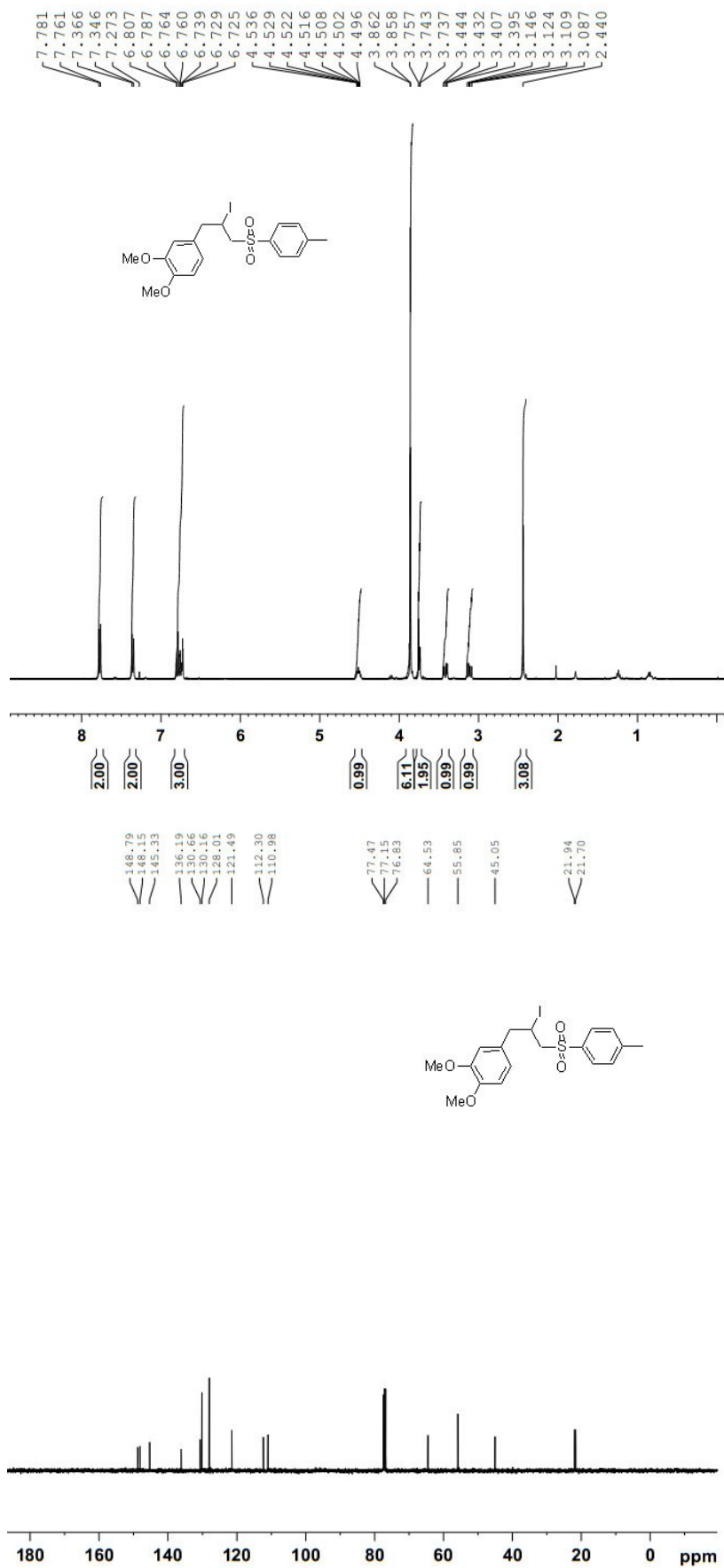
Compound 3o



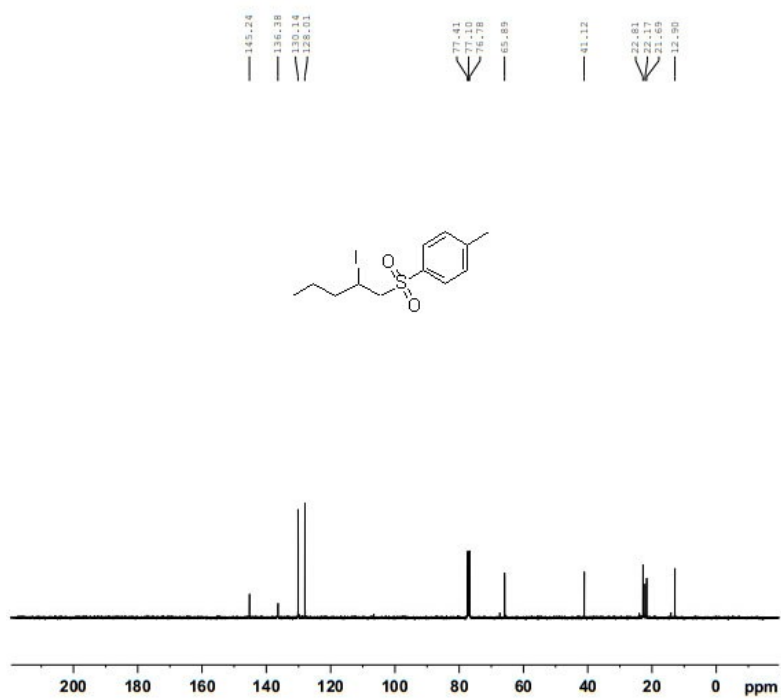
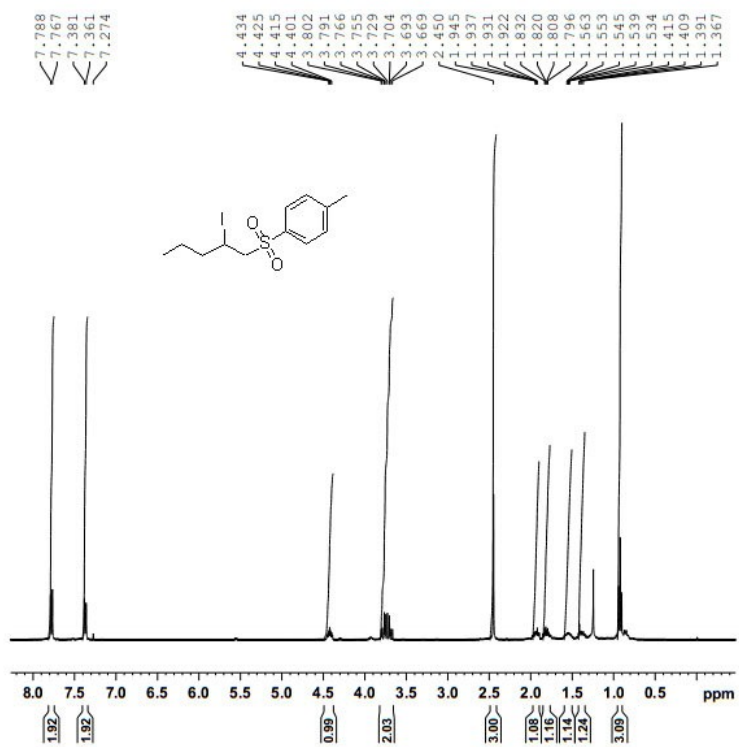
Compound 3p



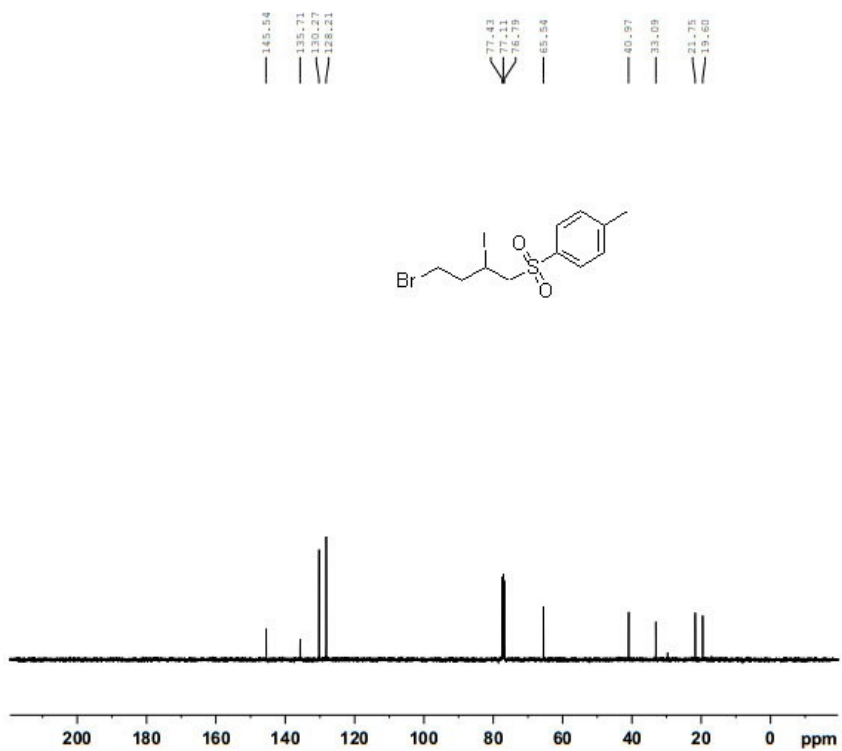
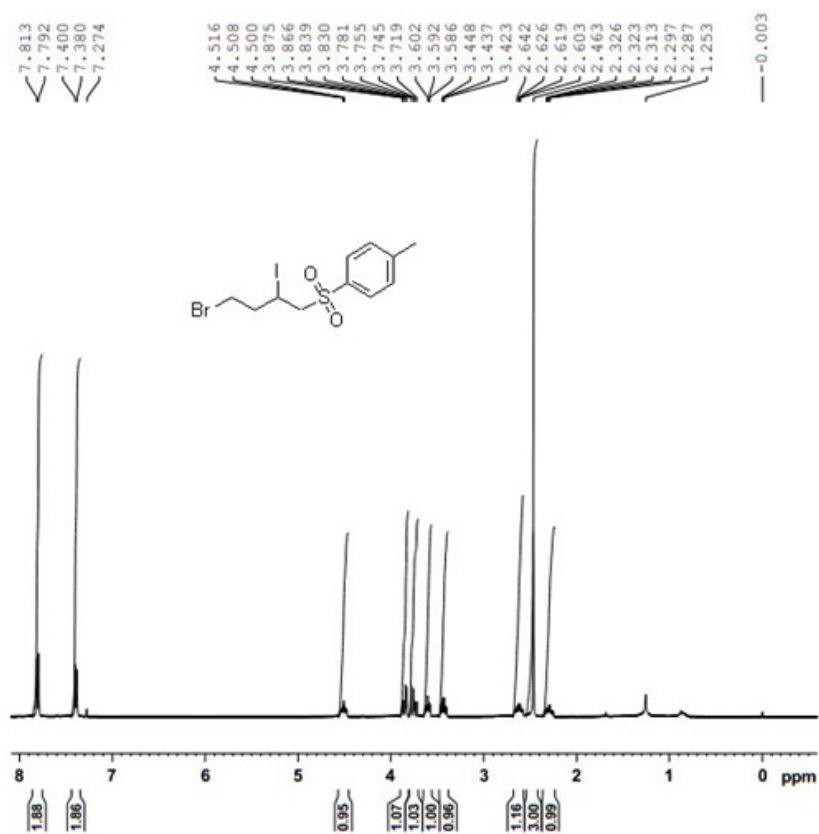
Compound 3q



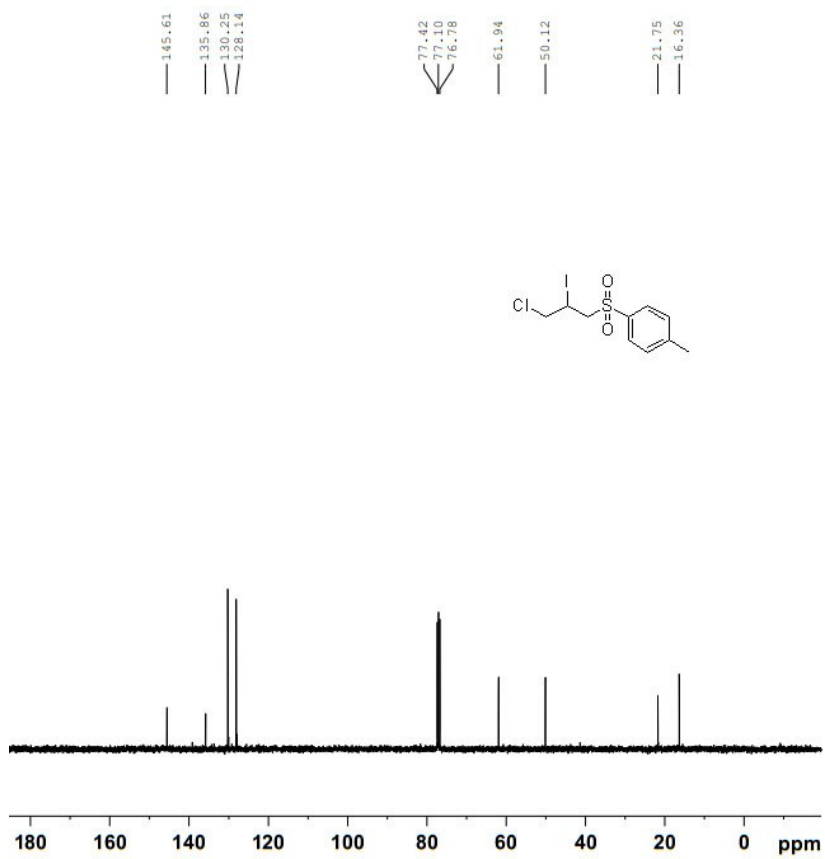
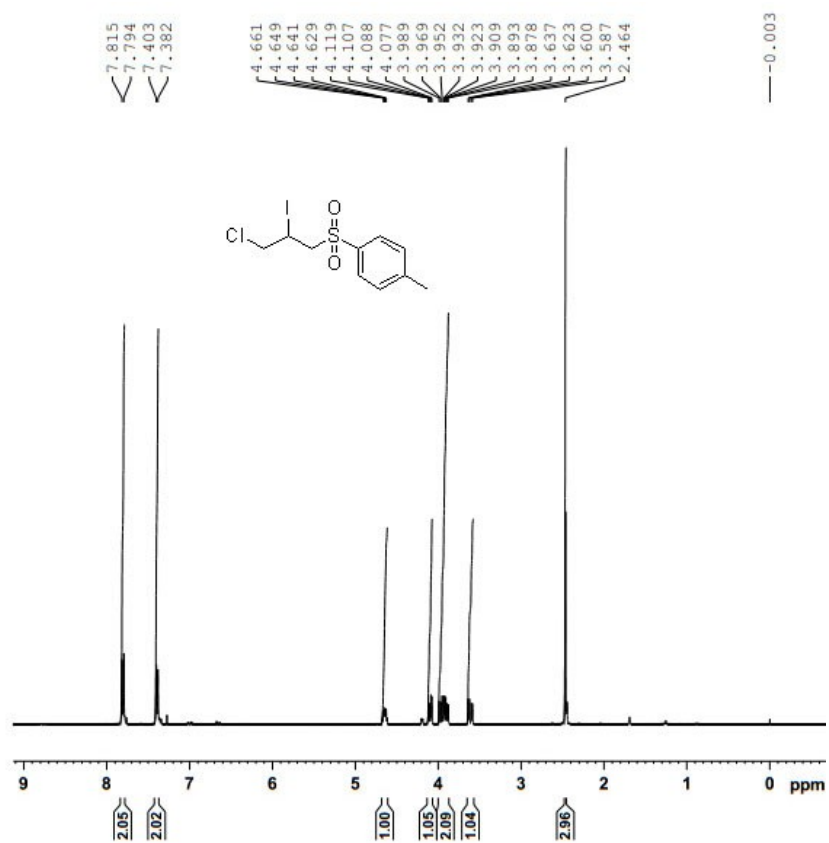
Compound 6a



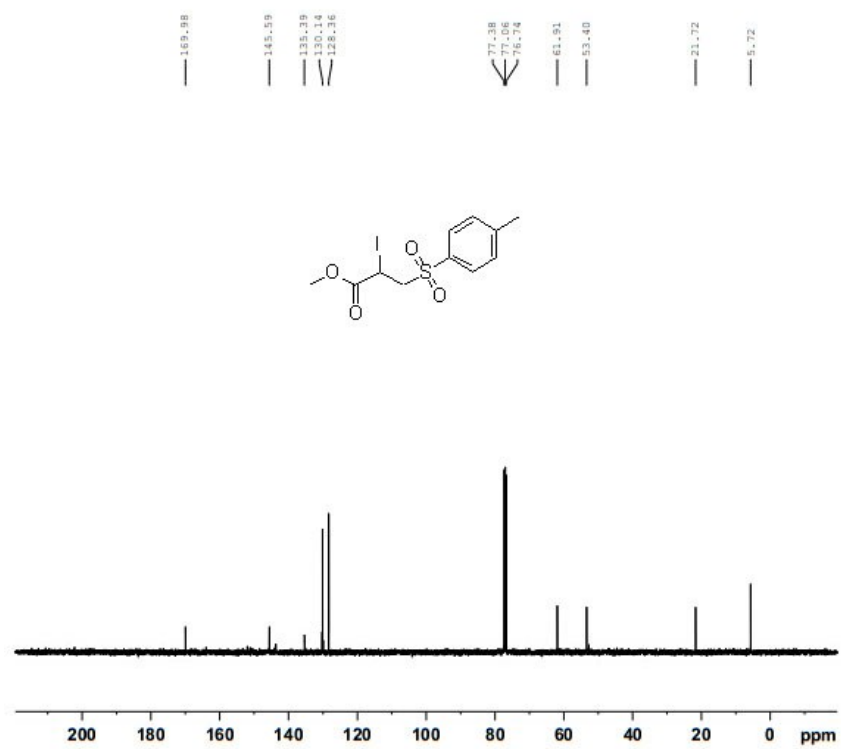
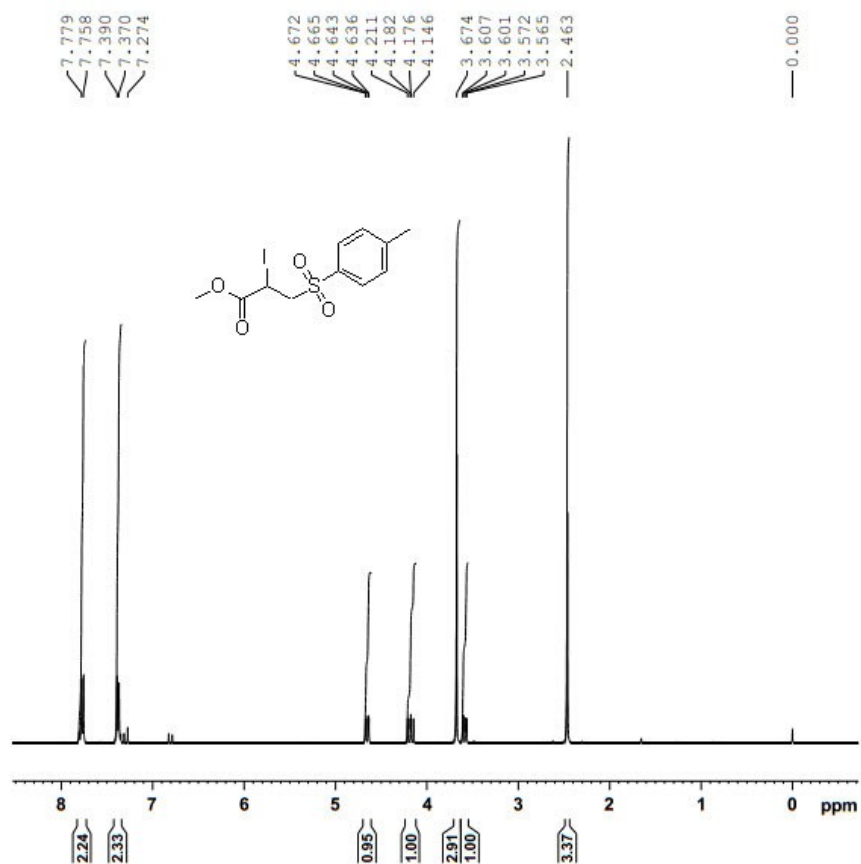
Compound 6b



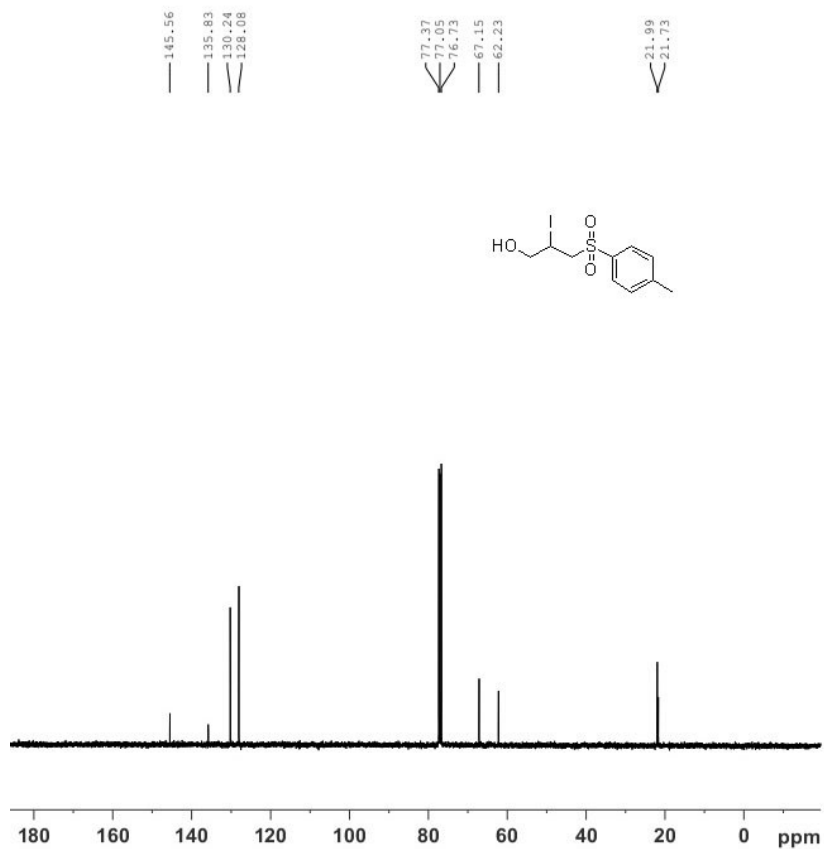
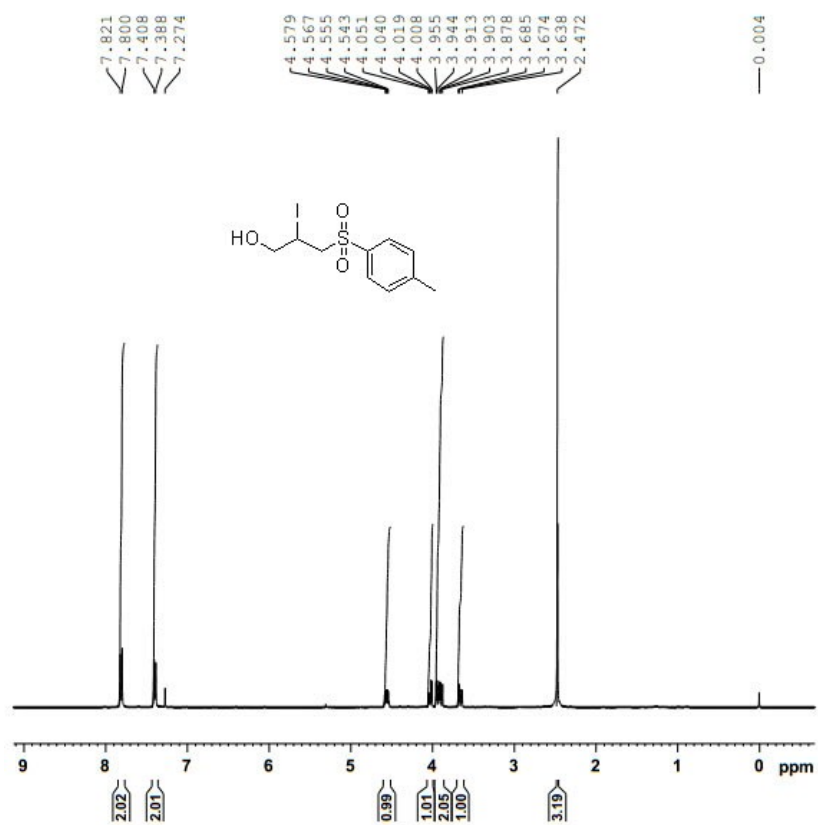
Compound 6c



Compound 6d



Compound 6e



Compound 6f

