

Supplementary Information

For

Selectfluor-Mediated Highly Selective Radical Dioxygenation of Alkenes

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I. General Considerations

All reagents were purchased from commercial sources and used without further treatment, unless otherwise indicated. All reactions were run under air with no precautions taken to exclude moisture. ^1H NMR and ^{13}C NMR spectra were recorded at 25 °C on a Varian (400 MHz and 100 MHz). Melting points were obtained with a micro melting point XT4A Beijing Keyi electrooptic apparatus and are uncorrected. High resolution mass spectra were recorded on Bruck microtof. All reactions were monitored by TLC with Taizhou GF254 silica gel coated plates. Flash column chromatography was carried out using 200-300 mesh silica gel at increased pressure.

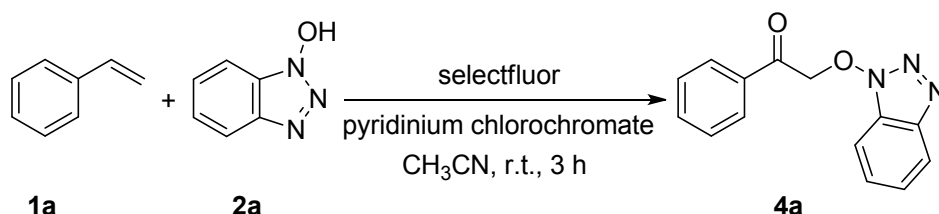
II. General procedure for the preparation of 3 and 4

3a as an example



To a solution of the 1H-benzo[d][1,2,3]triazol-1-ol **2a** (40.5 mg, 0.3 mmol) in 1, 2-dichloroethane (DCE, 3.0 ml) was added the styrene **1a** (41 μL , 0.36 mmol) and selectfluor (106.2 mg, 0.3 mmol). The mixture was then stirred for 12 h at room temperature in air. After the reaction was finished, the resulting mixture was quenched with water (5.0 mL) and extracted with EtOAc (3×5.0 mL). The combined organic phases were dried over anhydrous Na_2SO_4 and the solvent was evaporated under vacuum. The residue was purified by column chromatography to give the corresponding products **3a** (71.1 mg, 93%).

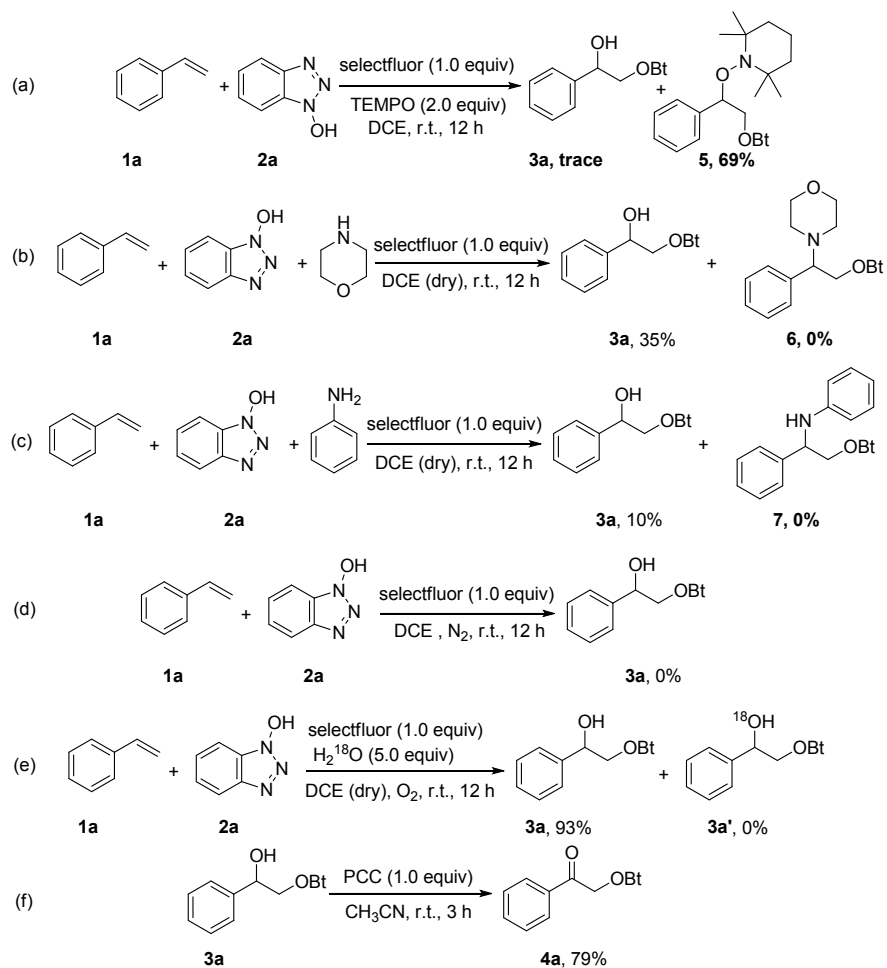
4a as an example



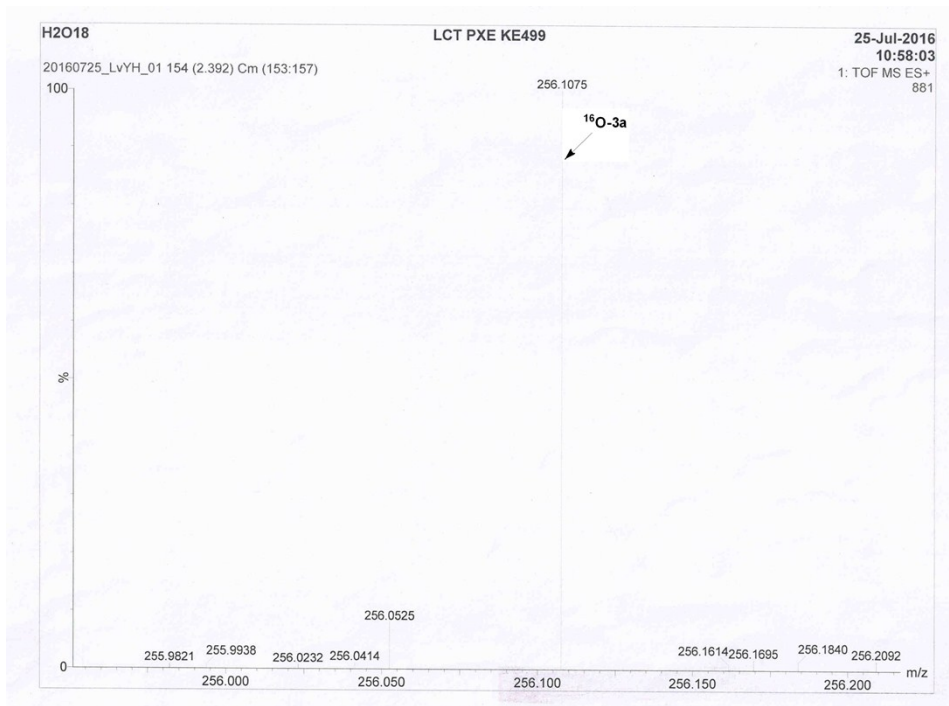
To a solution of the 1H-benzo[d][1,2,3]triazol-1-ol **2a** (40.5 mg, 0.3 mmol) in CH_3CN (3.0 ml) was added the styrene **1a** (41 μL , 0.36 mmol), selectfluor (106.2 mg, 0.3 mmol) and pyridinium chlorochromate (64.7 mg, 0.3 mmol). The mixture was then stirred for 3 h at room temperature in air. After the reaction was finished, the resulting mixture was quenched with water (5.0 mL) and extracted with EtOAc (3×5.0 mL). The combined organic phases were dried over anhydrous

Na₂SO₄ and the solvent was evaporated under vacuum. The residue was purified by column chromatography to give the corresponding products **4a** (54.6 mg, 72%).

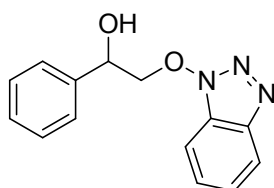
III. Control experiment on the reaction mechanism



HRMS Spectra of ¹⁶O-**3a**

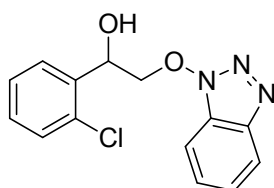


IV. Analytical data of Compounds 3, 4 and 5



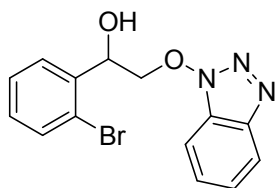
2-((1*H*-benzo[*d*][1,2,3]triazol-1-yl)oxy)-1-phenylethanol 3a

Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 4.78-4.85 (m, 2H), 5.42 (dd, J_1 = 4.8 Hz, J_2 = 6.8 Hz, 1H), 7.31-7.37 (m, 6H), 7.43-7.47 (m, 1H), 7.58 (dd, J_1 = 0.8 Hz, J_2 = 8.4 Hz, 1H), 7.92 (d, J = 8.4 Hz, 1H), 10.33 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 80.2, 84.2, 109.0, 119.8, 124.9, 127.2, 127.3, 128.2, 128.7, 128.9, 135.5, 143.0. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{14}\text{N}_3\text{O}_2$, $[\text{M}+\text{H}]^+$ m/z 256.1086; Found 256.1088.



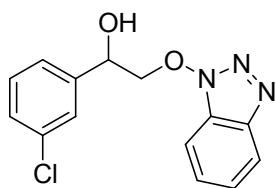
2-((1*H*-benzo[*d*][1,2,3]triazol-1-yl)oxy)-1-(2-chlorophenyl)ethanol 3b

Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 4.66 (dd, J_1 = 8.0 Hz, J_2 = 11.6 Hz, 1H), 4.84 (dd, J_1 = 2.0 Hz, J_2 = 11.6 Hz, 1H), 5.91 (dd, J_1 = 2.4 Hz, J_2 = 8.0 Hz, 1H), 7.28-7.34 (m, 2H), 7.36-7.41 (m, 2H), 7.50-7.53 (m, 1H), 7.58-7.64 (m, 2H), 8.00 (d, J = 8.4 Hz, 1H), 9.55 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 79.1, 81.8, 108.8, 120.2, 124.9, 127.3, 127.4, 128.0, 128.3, 129.9, 130.0, 132.8, 133.0, 143.3. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{O}_2$, $[\text{M}+\text{H}]^+$ m/z 290.0696; Found 290.0690.



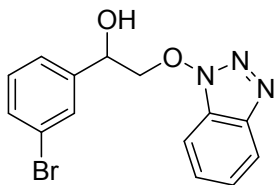
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(2-bromophenyl)ethanol 3c

Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 4.62 (dd, J_1 = 8.4 Hz, J_2 = 12.0 Hz, 1H), 4.82 (dd, J_1 = 2.4 Hz, J_2 = 12.0 Hz, 1H), 5.86 (dd, J_1 = 2.4 Hz, J_2 = 8.0 Hz, 1H), 7.20 (t, J = 7.6 Hz, 1H), 7.34-7.41 (m, 2H), 7.51 (d, J = 8.0 Hz, 1H), 7.54 (d, J = 8.0 Hz, 1H), 7.59 (d, J = 8.0 Hz, 1H), 7.65 (d, J = 8.4 Hz, 1H), 8.00 (d, J = 8.4 Hz, 1H), 9.65 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 79.2, 83.9, 108.9, 120.2, 122.7, 124.9, 127.5, 127.9, 128.1, 128.4, 130.3, 133.2, 134.6, 143.3. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{13}\text{BrN}_3\text{O}_2$, $[\text{M}+\text{H}]^+$ m/z 334.0191; Found 334.0189.



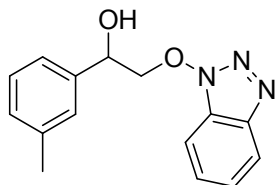
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(3-chlorophenyl)ethanol 3d

Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 4.79 (d, J = 5.6 Hz, 2H), 5.41 (d, J = 5.6 Hz, 1H), 7.27-7.29 (m, 3H), 7.36 (d, J = 7.6 Hz, 1H), 7.39 (d, J = 8.0 Hz, 1H), 7.49 (t, J = 7.6 Hz, 1H), 7.59 (d, J = 8.0 Hz, 1H), 7.94 (d, J = 8.4 Hz, 1H), 10.18 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 79.9, 83.7, 108.9, 119.9, 125.0, 125.3, 127.3, 128.4, 129.2, 130.1, 134.7, 137.6, 143.1. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{13}\text{ClN}_3\text{O}_2$, $[\text{M}+\text{H}]^+$ m/z 290.0696; Found 290.0689.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(3-bromophenyl)ethanol 3e

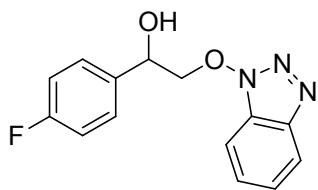
Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 4.78-4.80 (m, 2H), 5.40 (dd, J_1 = 4.8 Hz, J_2 = 6.8 Hz, 1H), 7.27 (t, J = 8.0 Hz, 1H), 7.34 (d, J = 7.6 Hz, 1H), 7.38-7.42 (m, 1H), 7.49-7.55 (m, 2H), 7.57 (s, 1H), 7.61 (d, J = 8.4 Hz, 1H), 8.01 (d, J = 8.4 Hz, 1H), 9.23 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 79.8, 83.8, 108.9, 120.2, 123.0, 125.0, 125.8, 127.4, 128.4, 130.2, 130.5, 132.3, 137.7, 143.3. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{13}\text{BrN}_3\text{O}_2$, $[\text{M}+\text{H}]^+$ m/z 334.0191; Found 334.0187.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(m-tolyl)ethanol 3f

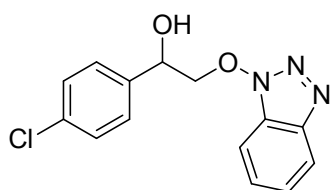
Colorless oil. $^1\text{H NMR}$ (400 MHz; CDCl_3): δ = 2.34 (s, 3H), 4.80 (d, J = 6.0 Hz, 2H), 5.39 (t, J = 6.0 Hz, 1H), 7.18 (d, J = 10.8 Hz, 3H), 7.27 (t, J = 7.6 Hz, 1H), 7.39 (t, J = 7.6 Hz, 1H), 7.51 (t, J = 7.6 Hz, 1H), 7.63 (d, J = 8.4 Hz, 1H), 7.99 (d, J = 8.4 Hz, 1H), 9.12 (s, 1H); $^{13}\text{C NMR}$ (100 MHz, CDCl_3): δ = 21.3, 80.2, 84.5, 109.0, 120.1, 124.2, 124.9, 127.5, 127.8, 128.3, 128.8, 130.0,

135.2, 138.7, 143.3. HRMS (ESI-TOF) Calcd for C₁₅H₁₆N₃O₂, [M+H]⁺ *m/z* 270.1243; Found 270.1249.



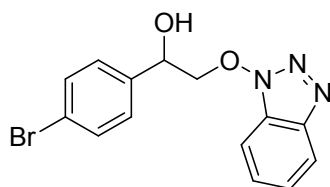
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-fluorophenyl)ethanol 3g

Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 4.80-4.82 (m, 2H), 5.40-5.43 (m, 1H), 7.06-7.10 (m, 2H), 7.37-7.41 (m, 3H), 7.50-7.54 (m, 1H), 7.61 (d, *J* = 8.4 Hz, 1H), 8.00 (d, *J* = 8.4 Hz, 1H), 9.17 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.9, 83.8, 108.9, 115.8, 116.0, 120.2, 125.0, 127.4, 128.4, 129.1, 129.2, 131.2, 131.2, 143.3, 161.9, 164.4. HRMS (ESI-TOF) Calcd for C₁₃H₁₄FN₃O₂, [M+H]⁺ *m/z* 274.0992; Found 274.0985.



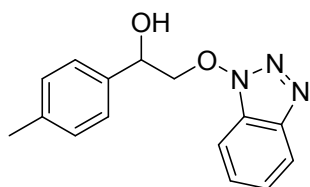
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-chlorophenyl)ethanol 3h

White solid. mp: 86-87 °C ¹H NMR (400 MHz; CDCl₃): δ = 4.80 (d, *J* = 5.6 Hz, 2H), 5.41 (t, *J* = 5.6 Hz, 1H), 7.34-7.42 (m, 5H), 7.51-7.56 (m, 1H), 7.60 (d, *J* = 8.4 Hz, 1H), 7.99 (d, *J* = 8.4 Hz, 1H), 9.20 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.8, 83.8, 108.9, 120.2, 125.0, 127.4, 128.4, 128.6, 129.1, 133.9, 135.2, 143.3. HRMS (ESI-TOF) Calcd for C₁₃H₁₄ClN₃O₂, [M+H]⁺ *m/z* 290.0696; Found 290.0688.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-bromophenyl)ethanol 3i

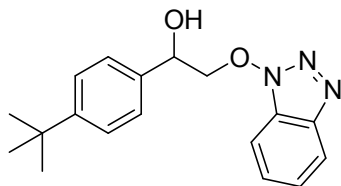
Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 4.79 (d, *J* = 6.0 Hz, 2H), 5.39 (t, *J* = 5.6 Hz, 1H), 7.29 (d, *J* = 8.4 Hz, 2H), 7.37-7.42 (m, 1H), 7.50-7.54 (m, 3H), 7.59 (d, *J* = 8.4 Hz, 1H), 7.99 (d, *J* = 8.4 Hz, 1H), 9.30 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 83.8, 108.9, 120.2, 123.3, 125.0, 127.4, 128.4, 128.9, 132.1, 134.4, 143.3. HRMS (ESI-TOF) Calcd for C₁₃H₁₄BrN₃O₂, [M+H]⁺ *m/z* 334.0191; Found 334.0189.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(p-tolyl)ethanol 3j

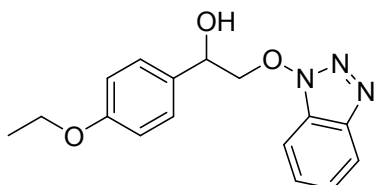
White solid. mp: 104-105 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.34 (s, 3H), 4.81 (d, *J* = 4.0 Hz, 2H), 5.38 (dd, *J*₁ = 4.8 Hz, *J*₂ = 6.8 Hz, 1H), 7.18 (d, *J* = 8.0 Hz, 2H), 7.27 (d, *J* = 8.0 Hz, 2H), 7.37 (dd, *J*₁ = 7.2 Hz, *J*₂ = 8.0 Hz, 1H), 7.50 (t, *J* = 7.6 Hz, 1H), 7.63 (d, *J* = 8.4 Hz, 1H), 7.97 (d,

$J = 8.4$ Hz, 1H), 9.35 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 21.1, 80.2, 84.1, 109.0, 119.9, 124.9, 127.2, 127.4, 128.2, 129.4, 132.3, 138.9, 143.1$. HRMS (ESI-TOF) Calcd for $\text{C}_{15}\text{H}_{16}\text{N}_3\text{O}_2$, $[\text{M}+\text{H}]^+ m/z$ 270.1243; Found 270.1240.



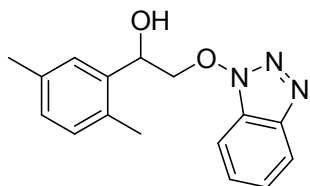
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-(tert-butyl)phenyl)ethanol 3k

Colorless oil. ^1H NMR (400 MHz; CDCl_3): $\delta = 1.30$ (s, 9H), 4.83 (t, $J = 7.6$ Hz, 2H), 5.41 (dd, $J_1 = 4.4$ Hz, $J_2 = 6.8$ Hz, 1H), 7.32 (d, $J = 8.4$ Hz, 2H), 7.35 (d, $J = 7.6$ Hz, 1H), 7.39 (d, $J = 8.4$ Hz, 2H), 7.48 (t, $J = 7.6$ Hz, 1H), 7.60 (d, $J = 8.4$ Hz, 1H), 7.96 (d, $J = 8.4$ Hz, 1H), 9.44 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 31.2, 34.6, 80.2, 84.2, 109.0, 120.0, 124.8, 125.8, 127.0, 127.4, 128.2, 132.3, 143.2, 152.3$. HRMS (ESI-TOF) Calcd for $\text{C}_{18}\text{H}_{22}\text{N}_3\text{O}_2$, $[\text{M}+\text{H}]^+ m/z$ 312.1712; Found 312.1719.



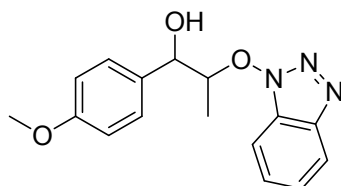
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-ethoxyphenyl)ethanol 3l

White solid. mp: 109-110 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 1.38$ (t, $J = 6.8$ Hz, 3H), 3.99 (q, $J = 6.8$ Hz, 2H), 4.76-4.86 (m, 2H), 5.34 (dd, $J_1 = 4.0$ Hz, $J_2 = 7.6$ Hz, 1H), 6.85 (d, $J = 8.4$ Hz, 2H), 7.28 (d, $J = 8.8$ Hz, 2H), 7.33-7.37 (m, 1H), 7.48 (t, $J = 7.6$ Hz, 1H), 7.61 (d, $J = 8.0$ Hz, 1H), 7.95 (d, $J = 8.4$ Hz, 1H), 9.66 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 14.7, 63.5, 80.1, 83.9, 109.0, 114.7, 119.9, 124.9, 127.1, 127.4, 128.2, 128.7, 143.2, 159.5$. HRMS (ESI-TOF) Calcd for $\text{C}_{16}\text{H}_{18}\text{N}_3\text{O}_3$, $[\text{M}+\text{H}]^+ m/z$ 300.1348; Found 300.1340.



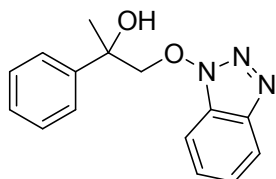
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(2,5-dimethylphenyl)ethanol 3m

White solid. mp: 131-132 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 2.24$ (s, 3H), 2.31 (s, 3H), 4.74 (d, $J = 5.6$ Hz, 2H), 5.67 (t, $J = 5.6$ Hz, 1H), 7.07 (s, 2H), 7.20 (s, 1H), 7.41 (t, $J = 7.6$ Hz, 1H), 7.54 (t, $J = 7.6$ Hz, 1H), 7.66 (d, $J = 8.4$ Hz, 1H), 8.02 (d, $J = 8.4$ Hz, 1H), 8.72 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 18.4, 21.0, 80.0, 81.5, 109.0, 120.2, 124.8, 126.7, 127.5, 128.3, 129.7, 131.0, 133.0, 133.0, 136.1, 143.4$. HRMS (ESI-TOF) Calcd for $\text{C}_{16}\text{H}_{18}\text{N}_3\text{O}_2$, $[\text{M}+\text{H}]^+ m/z$ 284.1399; Found 284.1391.

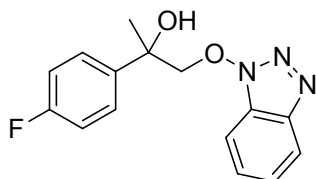


2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-methoxyphenyl)propan-1-ol 3n

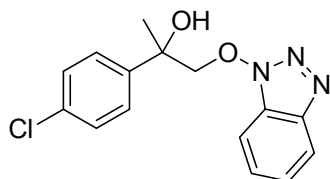
Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 1.25 (d, *J* = 6.4 Hz, 0.75H), 1.40 (d, *J* = 6.4 Hz, 3H), 3.78 (s, 0.75H), 3.79 (s, 3H), 4.87-4.94 (m, 0.25H), 5.08-5.12 (m, 1H), 5.14 (d, *J* = 3.6 Hz, 1H), 5.25 (d, *J* = 7.6 Hz, 0.25H), 6.89 (t, *J* = 4.0 Hz, 2.50H), 7.29-7.34 (m, 1.25H), 7.36-7.39 (m, 2.50H), 7.43-7.48 (m, 1.25H), 7.53 (d, *J* = 8.4 Hz, 1H), 7.68 (d, *J* = 8.4 Hz, 0.25H), 7.95 (d, *J* = 8.4 Hz, 1.25H), 9.65 (s, 0.25H), 9.90 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 14.8, 16.4, 55.2, 87.3, 87.4, 87.5, 88.7, 109.2, 109.4, 114.0, 114.1, 119.9, 124.7, 124.8, 127.1, 128.0, 128.1, 128.1, 128.2, 128.3, 129.0, 129.3, 143.1, 159.9, 160.0. HRMS (ESI-TOF) Calcd for C₁₆H₁₈N₃O₃, [M+H]⁺ *m/z* 300.1348; Found 300.1340.

**1-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-2-phenylpropan-2-ol 3o**

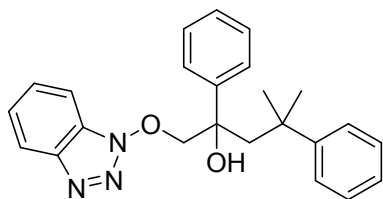
Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 1.85 (s, 3H), 4.95 (dd, *J*₁ = 10.4 Hz, *J*₂ = 14.0 Hz, 2H), 7.32-7.42 (m, 4H), 7.44-7.48 (m, 1H), 7.50-7.53 (m, 3H), 7.97 (d, *J* = 8.4 Hz, 1H), 9.10 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.9, 82.5, 84.5, 109.0, 120.1, 124.8, 125.6, 127.1, 128.1, 128.2, 128.7, 140.1, 143.3. HRMS (ESI-TOF) Calcd for C₁₅H₁₆N₃O₂, [M+H]⁺ *m/z* 270.1243; Found 270.1240.

**1-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-2-(4-fluorophenyl)propan-2-ol 3p**

Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 1.83 (s, 3H), 4.90 (dd, *J*₁ = 10.4 Hz, *J*₂ = 16.0 Hz, 2H), 7.05 (d, *J* = 8.8 Hz, 2H), 7.33-7.36 (m, 1H), 7.43-7.52 (m, 4H), 7.94 (d, *J* = 9.2 Hz, 1H), 9.79 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.8, 82.5, 83.9, 108.9, 115.3, 115.5, 119.9, 124.9, 127.0, 127.5, 127.6, 128.2, 136.0, 136.0, 143.1, 161.1, 163.6. HRMS (ESI-TOF) Calcd for C₁₅H₁₅FN₃O₂, [M+H]⁺ *m/z* 288.1148; Found 288.1141.

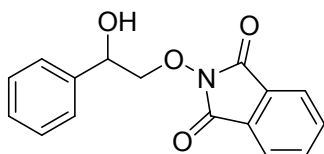
**1-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-2-(4-chlorophenyl)propan-2-ol 3q**

Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 1.81 (s, 3H), 4.91 (dd, *J*₁ = 10.4 Hz, *J*₂ = 18.0 Hz, 2H), 7.35-7.39 (m, 3H), 7.45-7.52 (m, 4H), 7.97 (d, *J* = 8.4 Hz, 1H), 9.29 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.9, 82.2, 84.1, 108.9, 120.1, 124.9, 127.0, 127.1, 128.3, 128.8, 134.2, 138.7, 143.3. HRMS (ESI-TOF) Calcd for C₁₅H₁₅ClN₃O₂, [M+H]⁺ *m/z* 304.0853; Found 304.0859.



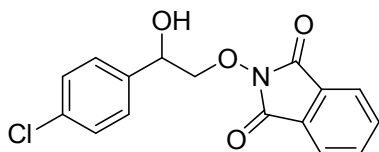
1-((1*H*-benzo[*d*][1,2,3]triazol-1-yl)oxy)-4-methyl-2,4-diphenylpentan-2-ol 3r

Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 1.13 (s, 3H), 1.25 (s, 3H), 2.51 (s, 2H), 4.71 (dd, *J*₁ = 10.4 Hz, *J*₂ = 34 Hz, 2H), 7.15-7.25 (m, 3H), 7.27-7.30 (m, 6H), 7.32-7.45 (m, 4H), 7.95 (d, *J* = 8.4 Hz, 1H), 8.08 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 30.1, 30.7, 37.4, 47.6, 81.5, 86.9, 109.1, 120.1, 124.7, 125.9, 126.0, 127.2, 127.7, 127.9, 128.2, 128.3, 138.8, 143.3, 148.5. HRMS (ESI-TOF) Calcd for C₂₄H₂₆N₃O₂, [M+H]⁺ *m/z* 388.2025; Found 388.2028.



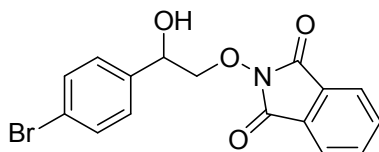
2-(2-hydroxy-2-phenylethoxy)isoindoline-1,3-dione 3s

Colorless oil. ¹H NMR (400 MHz; CDCl₃): δ = 4.46-4.53 (m, 2H), 5.40-5.45 (m, 1H), 7.32-7.41 (m, 5H), 7.76 (q, *J* = 2.8 Hz, 2H), 7.84-7.86 (m, 2H), 9.56 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.9, 85.4, 123.8, 127.1, 128.7, 128.7, 128.8, 134.7, 135.7, 163.8. HRMS (ESI-TOF) Calcd for C₁₆H₁₄NO₄, [M+H]⁺ *m/z* 284.0923; Found 284.0920.



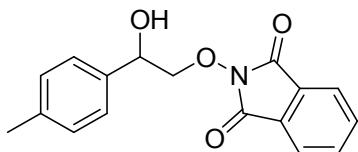
2-(2-(4-chlorophenyl)-2-hydroxyethoxy)isoindoline-1,3-dione 3t

White solid. mp: 83-84 °C ¹H NMR (400 MHz; CDCl₃): δ = 4.43-4.50 (m, 2H), 5.37 (q, *J* = 3.6 Hz, 1H), 7.34 (s, 4H), 7.77 (dd, *J*₁ = 3.2 Hz, *J*₂ = 5.2 Hz, 2H), 7.84-7.86 (m, 2H), 9.60 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.5, 84.6, 123.8, 128.5, 128.6, 128.9, 134.2, 134.8, 163.7. HRMS (ESI-TOF) Calcd for C₁₆H₁₃ClNO₄, [M+H]⁺ *m/z* 318.0533; Found 318.0537.



2-(2-(4-bromophenyl)-2-hydroxyethoxy)isoindoline-1,3-dione 3u

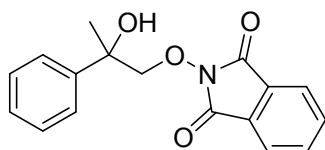
White solid. mp: 87-89 °C ¹H NMR (400 MHz; CDCl₃): δ = 4.43-4.53 (m, 2H), 5.35-5.38 (m, 1H), 7.30 (d, *J* = 8.4 Hz, 2H), 7.51 (d, *J* = 8.4 Hz, 2H), 7.78-7.80 (m, 2H), 7.86-7.88 (m, 2H), 9.51 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.5, 84.8, 123.0, 123.9, 128.7, 128.8, 131.9, 134.8, 134.8, 163.8. HRMS (ESI-TOF) Calcd for C₁₆H₁₃BrNO₄, [M+H]⁺ *m/z* 362.0068; Found 362.0074.



2-(2-hydroxy-2-(*p*-tolyl)ethoxy)isoindoline-1,3-dione 3v

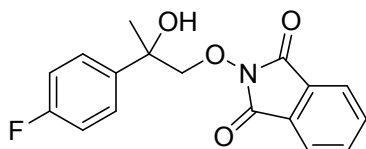
White solid. mp: 164-166 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.32 (s, 3H), 4.49 (d, *J* = 6.0 Hz,

2H), 5.37 (t, $J = 6.0$ Hz, 1H), 7.16 (d, $J = 8.0$ Hz, 2H), 7.28 (d, $J = 8.0$ Hz, 2H), 7.75-7.78 (m, 2H), 7.82-7.85 (m, 2H), 9.53 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 21.1, 78.9, 85.2, 123.7, 127.1, 128.6, 129.3, 132.7, 134.7, 138.7, 163.7$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{16}\text{NO}_4$, $[\text{M}+\text{H}]^+ m/z$ 298.1079; Found 298.1087.



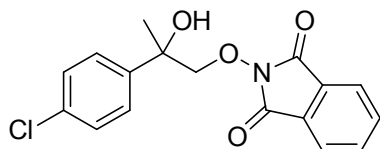
2-(2-hydroxy-2-phenylpropoxy)isoindoline-1,3-dione 3w

White solid. mp:108-109 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 1.65$ (s, 3H), 4.65 (dd, $J_1 = 9.6$ Hz, $J_2 = 22.0$ Hz, 2H), 7.28 (t, $J = 7.2$ Hz, 1H), 7.36 (t, $J = 7.6$ Hz, 2H), 7.50 (d, $J = 7.2$ Hz, 2H), 7.74-7.77 (m, 2H), 7.82-7.84 (m, 2H), 9.80 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 22.8, 79.7, 84.3, 123.7, 125.3, 127.8, 128.4, 128.5, 134.8, 140.7, 163.8$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{16}\text{NO}_4$, $[\text{M}+\text{H}]^+ m/z$ 298.1079; Found 298.1089.



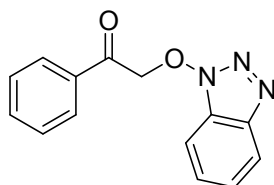
2-(2-(4-fluorophenyl)-2-hydroxypropoxy)isoindoline-1,3-dione 3x

Colorless oil. ^1H NMR (400 MHz; CDCl_3): $\delta = 1.63$ (s, 3H), 4.63 (dd, $J_1 = 9.6$ Hz, $J_2 = 20.0$ Hz, 2H), 7.05 (t, $J = 8.4$ Hz, 2H), 7.47-7.50 (m, 2H), 7.76-7.79 (m, 2H), 7.82-7.86 (m, 2H), 9.86 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 22.8, 79.7, 84.0, 115.2, 115.4, 123.8, 127.3, 127.4, 128.6, 134.8, 136.4, 136.5, 161.0, 163.5, 163.8$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{15}\text{FNO}_4$, $[\text{M}+\text{H}]^+ m/z$ 316.0985; Found 316.0992.



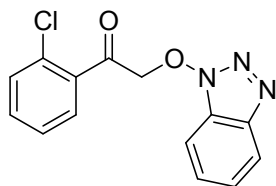
2-(2-(4-chlorophenyl)-2-hydroxypropoxy)isoindoline-1,3-dione 3y

White solid. mp:108-109 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 1.62$ (s, 3H), 4.61 (dd, $J_1 = 9.6$ Hz, $J_2 = 24.0$ Hz, 2H), 7.32 (dd, $J_1 = 2.0$ Hz, $J_2 = 6.8$ Hz, 2H), 7.44 (dd, $J_1 = 2.0$ Hz, $J_2 = 6.8$ Hz, 2H), 7.75-7.78 (m, 2H), 7.81-7.85 (m, 2H), 9.88 (s, 1H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 22.7, 79.5, 84.0, 123.8, 127.0, 128.5, 128.6, 133.7, 134.8, 139.2, 163.8$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{15}\text{ClNO}_4$, $[\text{M}+\text{H}]^+ m/z$ 332.0690; Found 332.0697.



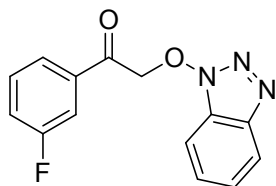
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-phenylethanone 4a

White solid. mp:98-99 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 5.94$ (s, 2H), 7.39 (t, $J = 6.8$ Hz, 1H), 7.50-7.63 (m, 4H), 7.90-7.99 (m, 4H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 79.9, 110.3, 119.9, 124.8, 127.9, 128.2, 129.1, 133.8, 134.4, 143.5, 191.7$. HRMS (ESI-TOF) Calcd for $\text{C}_{14}\text{H}_{12}\text{N}_3\text{O}_2$, $[\text{M}+\text{H}]^+ m/z$ 254.0930; Found 254.0923.



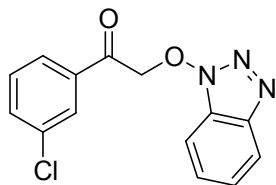
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(2-chlorophenyl)ethanone 4b

White solid. mp:80-82 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.84 (s, 2H), 7.34 (d, *J* = 8.8 Hz, 1H), 7.38 (d, *J* = 8.4 Hz, 1H), 7.43 (t, *J* = 7.2 Hz, 2H), 7.53 (t, *J* = 7.6 Hz, 1H), 7.60 (d, *J* = 7.6 Hz, 1H), 7.84 (d, *J* = 8.4 Hz, 1H), 7.96 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 81.8, 110.1, 119.9, 124.8, 127.3, 127.7, 128.2, 130.4, 130.8, 131.9, 133.5, 135.1, 143.4, 194.4. HRMS (ESI-TOF) Calcd for C₁₄H₁₁ClN₃O₂, [M+H]⁺ *m/z* 288.0540; Found 288.0547.



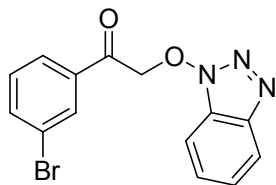
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(3-fluorophenyl)ethanone 4c

White solid. mp:121-122 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.91 (s, 2H), 7.34 (t, *J* = 8.0 Hz, 1H), 7.40 (t, *J* = 7.6 Hz, 1H), 7.50 (dd, *J*₁ = 7.6 Hz, *J*₂ = 13.2 Hz, 1H), 7.55-7.63 (m, 2H), 7.68 (d, *J* = 7.6 Hz, 1H), 7.92 (d, *J* = 8.0 Hz, 1H), 7.98 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.8, 110.2, 114.6, 114.9, 120.0, 121.5, 121.7, 123.6, 123.6, 124.8, 127.8, 128.3, 130.8, 130.9, 135.7, 135.8, 143.5, 161.7, 164.2, 190.6. HRMS (ESI-TOF) Calcd for C₁₄H₁₁FN₃O₂, [M+H]⁺ *m/z* 272.0835; Found 272.0841.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(3-chlorophenyl)ethanone 4d

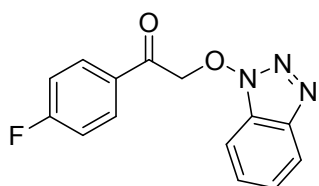
White solid. mp:118-119 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.90 (s, 2H), 7.38-7.47 (m, 2H), 7.56 (d, *J* = 8.0 Hz, 1H), 7.60 (d, *J* = 8.0 Hz, 1H), 7.78 (d, *J* = 7.2 Hz, 1H), 7.90-7.93 (m, 2H), 7.98 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 110.2, 120.0, 124.8, 125.9, 127.8, 128.0, 128.3, 130.4, 134.4, 135.3, 135.6, 143.5, 190.6. HRMS (ESI-TOF) Calcd for C₁₄H₁₁ClN₃O₂, [M+H]⁺ *m/z* 288.0540; Found 288.0547.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(3-bromophenyl)ethanone 4e

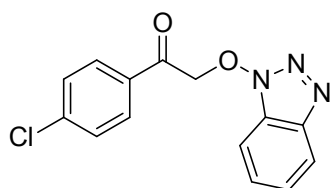
White solid. mp:122-123 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.90 (s, 2H), 7.36-7.42 (m, 2H), 7.57 (t, *J* = 7.6 Hz, 1H), 7.75 (d, *J* = 8.0 Hz, 1H), 7.82 (d, *J* = 7.6 Hz, 1H), 7.91 (d, *J* = 8.4 Hz, 1H), 7.98 (d, *J* = 8.4 Hz, 1H), 8.05 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 110.2, 120.0, 123.4, 124.8, 126.3, 127.8, 128.3, 130.6, 131.0, 135.4, 137.3, 143.5, 190.5. HRMS (ESI-TOF) Calcd for

C₁₄H₁₁BrN₃O₂, [M+H]⁺ *m/z* 332.0035; Found 332.0041.



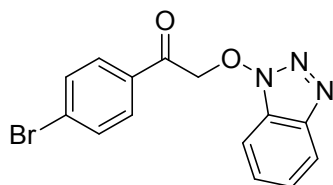
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-fluorophenyl)ethanone 4f

White solid. mp:143-144 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.89 (s, 2H), 7.18 (t, *J* = 8.4 Hz, 2H), 7.40 (t, *J* = 7.6 Hz, 1H), 7.57 (d, *J* = 7.6 Hz, 1H), 7.90-7.99 (m, 4H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 110.2, 116.3, 116.5, 119.9, 124.8, 127.8, 128.3, 130.3, 130.3, 130.6, 130.7, 143.5, 165.1, 167.7, 190.1. HRMS (ESI-TOF) Calcd for C₁₄H₁₁FN₃O₂, [M+H]⁺ *m/z* 272.0835; Found 272.0841.



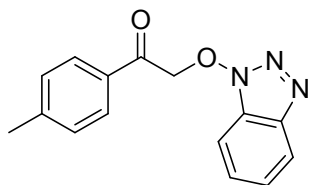
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-chlorophenyl)ethanone 4g

White solid. mp:146-147 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.88 (s, 2H), 7.38-7.42 (m, 1H), 7.48 (d, *J* = 8.4 Hz, 2H), 7.57 (t, *J* = 7.6 Hz, 1H), 7.85-7.87 (m, 2H), 7.90 (d, *J* = 8.4 Hz, 1H), 7.98 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 110.2, 120.0, 124.8, 127.8, 128.3, 129.3, 129.5, 132.4, 141.1, 143.5, 190.6. HRMS (ESI-TOF) Calcd for C₁₄H₁₁ClN₃O₂, [M+H]⁺ *m/z* 288.0540; Found 288.0547.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-bromophenyl)ethanone 4h

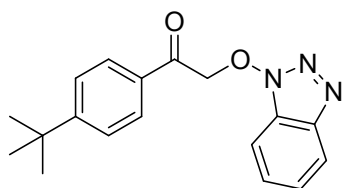
White solid. mp:153-154 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.88 (s, 2H), 7.40 (t, *J* = 7.6 Hz, 1H), 7.57 (t, *J* = 7.6 Hz, 1H), 7.65 (d, *J* = 8.4 Hz, 2H), 7.78 (d, *J* = 8.4 Hz, 2H), 7.90 (d, *J* = 8.4 Hz, 1H), 7.98 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 79.7, 110.2, 120.0, 124.8, 127.8, 128.3, 129.3, 129.9, 132.5, 132.5, 143.5, 190.8. HRMS (ESI-TOF) Calcd for C₁₄H₁₁BrN₃O₂, [M+H]⁺ *m/z* 332.0035; Found 332.0031.



2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(p-tolyl)ethanone 4i

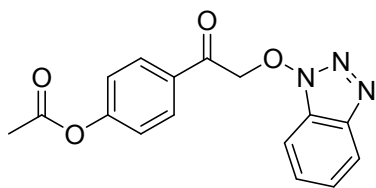
White solid. mp:122-123 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.40 (s, 3H), 5.89 (s, 2H), 7.27 (d, *J* = 7.6 Hz, 2H), 7.37 (t, *J* = 7.6 Hz, 1H), 7.54 (t, *J* = 7.6 Hz, 1H), 7.79 (d, *J* = 8.0 Hz, 2H), 7.92 (d, *J* = 8.4 Hz, 1H), 7.96 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.7, 79.8, 110.3, 119.8, 124.7, 127.8, 127.9, 128.1, 129.7, 131.3, 143.4, 145.5, 191.2. HRMS (ESI-TOF) Calcd for

C₁₅H₁₄N₃O₂, [M+H]⁺ *m/z* 268.1086; Found 268.1095.



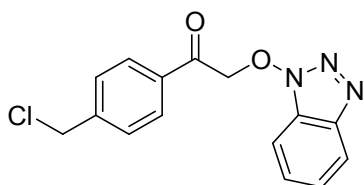
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-(tert-butyl)phenyl)ethanone 4j

White solid. mp:91-92 °C ¹H NMR (400 MHz; CDCl₃): δ = 1.33 (s, 9H), 5.91 (s, 2H), 7.39 (t, *J* = 7.6 Hz, 1H), 7.50 (d, *J* = 8.0 Hz, 2H), 7.56 (t, *J* = 7.6 Hz, 1H), 7.84 (d, *J* = 8.4 Hz, 2H), 7.92-7.99(m, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 31.0, 35.3, 79.9, 110.3, 119.9, 124.7, 126.0, 127.8, 127.9, 128.2, 131.3, 143.5, 158.5, 191.3. HRMS (ESI-TOF) Calcd for C₁₈H₂₀N₃O₂, [M+H]⁺ *m/z* 310.1556; Found 310.1551.



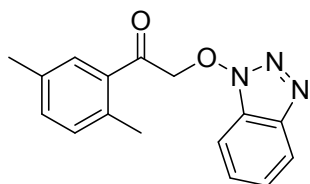
4-(2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)acetyl)phenyl acetate 4k

White solid. mp:100-102 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.31 (s, 3H), 5.89 (s, 2H), 7.23 (d, *J* = 8.8 Hz, 2H), 7.38 (t, *J* = 7.6 Hz, 1H), 7.55 (t, *J* = 7.6 Hz, 1H), 7.89-7.98 (m, 4H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.1, 79.8, 110.2, 119.9, 122.3, 124.8, 127.8, 128.2, 129.5, 131.3, 143.4, 155.3, 168.5, 190.5. HRMS (ESI-TOF) Calcd for C₁₆H₁₄N₃O₄, [M+H]⁺ *m/z* 312.0984; Found 312.0981.



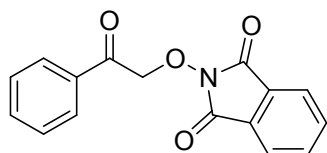
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(4-(chloromethyl)phenyl)ethanone 4l

White solid. mp:123-124 °C ¹H NMR (400 MHz; CDCl₃): δ = 4.59 (s, 2H), 5.91 (s, 2H), 7.38 (t, *J* = 7.6 Hz, 1H), 7.49 (d, *J* = 8.0 Hz, 2H), 7.55 (t, *J* = 7.6 Hz, 1H), 7.89 (t, *J* = 7.6 Hz, 3H), 7.96 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 45.0, 79.8, 110.2, 119.8, 124.8, 127.7, 128.2, 128.3, 129.0, 133.5, 143.4, 143.8, 191.1. HRMS (ESI-TOF) Calcd for C₁₅H₁₃ClN₃O₂, [M+H]⁺ *m/z* 302.0696; Found 302.0690.



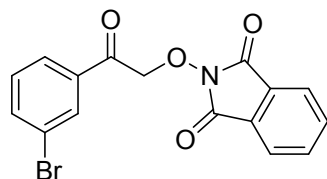
2-((1H-benzo[d][1,2,3]triazol-1-yl)oxy)-1-(2,5-dimethylphenyl)ethanone 4m

White solid. mp:106-107 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.35 (s, 3H), 2.43 (s, 3H), 5.77 (s, 2H), 7.16 (d, *J* = 7.6 Hz, 1H), 7.24 (s, 1H), 7.40 (d, *J* = 8.0 Hz, 2H), 7.54 (t, *J* = 7.6 Hz, 1H), 7.85 (d, *J* = 8.4 Hz, 1H), 7.98 (d, *J* = 8.4 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 20.7, 20.8, 80.9, 110.2, 119.9, 124.7, 127.7, 128.1, 129.0, 132.4, 133.5, 133.7, 135.6, 136.3, 143.5, 194.9. HRMS (ESI-TOF) Calcd for C₁₆H₁₆N₃O₂, [M+H]⁺ *m/z* 282.1243; Found 282.1251.



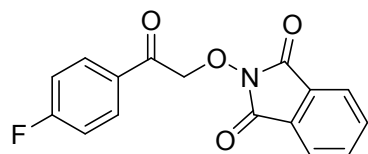
2-(2-oxo-2-phenylethoxy)isoindoline-1,3-dione 4n

White solid. mp:108-109 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.44 (s, 2H), 7.48-7.52 (m, 2H), 7.59-7.63 (m, 1H), 7.74-7.76 (m, 2H), 7.83-7.86 (m, 2H), 8.00-8.01 (m, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.5, 123.6, 123.7, 128.3, 128.8, 134.0, 134.3, 134.6, 163.0, 192.2. HRMS (ESI-TOF) Calcd for C₁₆H₁₂NO₄, [M+H]⁺ *m/z* 282.0766; Found 282.0761.



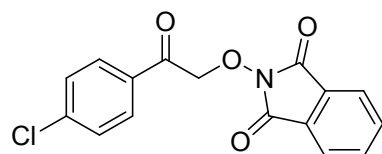
2-(2-(3-bromophenyl)-2-oxoethoxy)isoindoline-1,3-dione 4o

White solid. mp:152-153 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.37 (s, 2H), 7.39 (t, *J* = 8.0 Hz, 1H), 7.73-7.77 (m, 2H), 7.83-7.86 (m, 3H), 7.96 (d, *J* = 7.6 Hz, 1H), 8.16 (s, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.6, 123.1, 123.8, 127.0, 128.8, 130.4, 131.5, 134.7, 136.1, 136.9, 162.9, 191.1. HRMS (ESI-TOF) Calcd for C₁₆H₁₁BrNO₄, [M+H]⁺ *m/z* 359.9871; Found 359.9873.



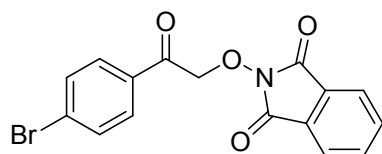
2-(2-(4-fluorophenyl)-2-oxoethoxy)isoindoline-1,3-dione 4p

White solid. mp:152-154 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.37 (s, 2H), 7.18 (d, *J* = 8.4 Hz, 2H), 7.76 (dd, *J*₁ = 3.2 Hz, *J*₂ = 5.6 Hz, 2H), 7.84 (dd, *J*₁ = 3.2 Hz, *J*₂ = 5.6 Hz, 2H), 8.07-8.10 (m, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.7, 116.0, 116.2, 123.7, 128.8, 131.0, 131.3, 131.4, 134.7, 162.9, 165.0, 167.5, 190.8. HRMS (ESI-TOF) Calcd for C₁₆H₁₁FNO₄, [M+H]⁺ *m/z* 300.0672; Found 300.0670.



2-(2-(4-chlorophenyl)-2-oxoethoxy)isoindoline-1,3-dione 4q

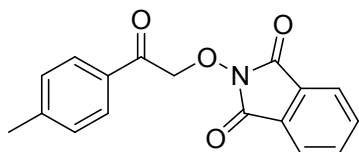
White solid. mp:160-161 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.37 (s, 2H), 7.49 (d, *J* = 8.4 Hz, 2H), 7.76-7.78 (m, 2H), 7.84-7.86 (m, 2H), 7.99 (d, *J* = 8.4 Hz, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 78.7, 123.8, 128.8, 129.2, 130.0, 132.8, 134.7, 140.6, 163.0, 191.3. HRMS (ESI-TOF) Calcd for C₁₆H₁₁ClNO₄, [M+H]⁺ *m/z* 316.0377; Found 316.0370.



2-(2-(4-bromophenyl)-2-oxoethoxy)isoindoline-1,3-dione 4r

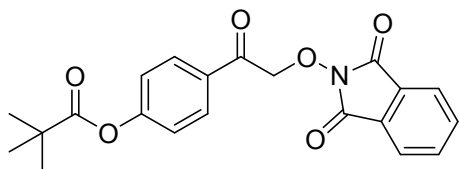
White solid. mp:164-166 °C ¹H NMR (400 MHz; CDCl₃): δ = 5.36 (s, 2H), 7.66(d, *J* = 8.8 Hz,

2H), 7.77 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 7.85 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 7.92 (d, $J = 8.4$ Hz, 2H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 78.7, 123.8, 128.8, 129.4, 130.0, 132.2, 133.2, 134.7, 162.9, 191.5$. HRMS (ESI-TOF) Calcd for $\text{C}_{16}\text{H}_{11}\text{BrNO}_4$, $[\text{M}+\text{H}]^+$ m/z 359.9871; Found 359.9875.



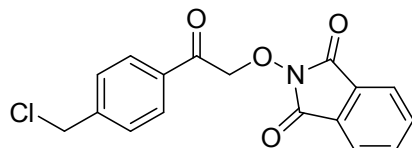
2-(2-oxo-2-(*p*-tolyl)ethoxy)isoindoline-1,3-dione 4s

White solid. mp:147-148 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 2.42$ (s, 3H), 5.42 (s, 2H), 7.29 (d, $J = 8.0$ Hz, 2H), 7.75 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.6$ Hz, 2H), 7.84 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.6$ Hz, 2H), 7.90 (d, $J = 8.0$ Hz, 2H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 21.8, 78.4, 123.7, 128.4, 128.9, 129.5, 132.0, 134.6, 145.1, 163.0, 191.8$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{14}\text{NO}_4$, $[\text{M}+\text{H}]^+$ m/z 296.0923; Found 296.0921.



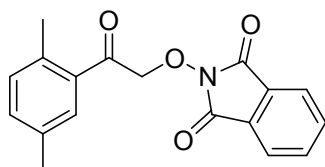
4-(2-((1,3-dioxoisindolin-2-yl)oxy)acetyl)phenyl pivalate 4t

White solid. mp:124-126 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 1.35$ (s, 9H), 5.41 (s, 2H), 7.20 (d, $J = 8.4$ Hz, 2H), 7.50 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 7.83 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 8.05 (d, $J = 8.8$ Hz, 2H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 27.0, 39.2, 78.5, 122.0, 123.7, 128.8, 130.0, 131.8, 134.6, 155.6, 162.9, 176.3, 191.1$. HRMS (ESI-TOF) Calcd for $\text{C}_{21}\text{H}_{20}\text{NO}_6$, $[\text{M}+\text{H}]^+$ m/z 382.1291; Found 382.1295.



2-(2-(4-(chloromethyl)phenyl)-2-oxoethoxy)isoindoline-1,3-dione 4u

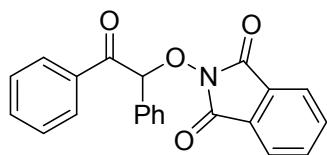
White solid. mp:178-180 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 4.62$ (s, 2H), 5.41 (s, 2H), 7.53 (d, $J = 8.4$ Hz, 2H), 7.77 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 7.86 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.2$ Hz, 2H), 8.03 (d, $J = 8.4$ Hz, 2H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 45.2, 78.7, 123.8, 128.8, 128.9, 128.9, 134.3, 134.7, 143.4, 163.0, 191.8$. HRMS (ESI-TOF) Calcd for $\text{C}_{17}\text{H}_{13}\text{ClNO}_4$, $[\text{M}+\text{H}]^+$ m/z 330.0533; Found 330.0524.



2-(2-(2,5-dimethylphenyl)-2-oxoethoxy)isoindoline-1,3-dione 4v

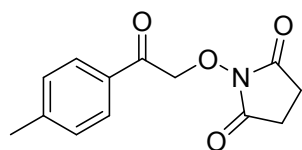
White solid. mp:153-155 °C ^1H NMR (400 MHz; CDCl_3): $\delta = 2.37$ (s, 3H), 2.51 (s, 3H), 5.33 (s, 2H), 7.17 (d, $J = 7.6$ Hz, 1H), 7.24 (d, $J = 7.6$ Hz, 1H), 7.56 (s, 1H), 7.76 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.6$ Hz, 2H), 7.84 (dd, $J_1 = 3.2$ Hz, $J_2 = 5.6$ Hz, 2H); ^{13}C NMR (100 MHz, CDCl_3): $\delta = 20.8, 20.8,$

79.4, 123.6, 128.8, 129.7, 132.1, 133.2, 134.0, 134.6, 135.3, 136.5, 163.0, 195.3. HRMS (ESI-TOF) Calcd for C₁₈H₁₆NO₄, [M+H]⁺ *m/z* 310.1079; Found 310.1075.



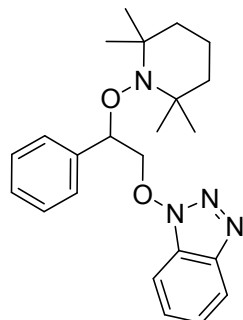
2-(2-oxo-1,2-diphenylethoxy)isoindoline-1,3-dione 4w

White solid. mp:165-166 °C ¹H NMR (400 MHz; CDCl₃): δ = 6.76 (s, 1H), 7.35-7.37 (m, 3H), 7.42 (t, *J* = 7.6 Hz, 2H), 7.53 (t, *J* = 7.6 Hz, 1H), 7.60-7.63 (m, 2H), 7.70 (dd, *J*₁ = 3.2 Hz, *J*₂ = 5.6 Hz, 2H), 7.77 (dd, *J*₁ = 3.2 Hz, *J*₂ = 5.6 Hz, 2H), 8.02 (d, *J* = 7.6 Hz, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 88.4, 123.6, 128.6, 128.8, 128.9, 129.1, 129.4, 130.0, 132.7, 133.7, 134.5, 134.8, 163.2, 192.8. HRMS (ESI-TOF) Calcd for C₂₂H₁₆NO₄, [M+H]⁺ *m/z* 358.1079; Found 358.1075.



1-(2-oxo-2-(*p*-tolylethoxy)pyrrolidine-2,5-dione 4x

White solid. mp:128-129 °C ¹H NMR (400 MHz; CDCl₃): δ = 2.41 (s, 3H), 2.74 (d, *J* = 7.6 Hz, 4H), 5.32 (s, 2H), 7.27 (d, *J* = 8.8 Hz, 2H), 7.84 (d, *J* = 8.0 Hz, 2H); ¹³C NMR (100 MHz, CDCl₃): δ = 21.7, 25.5, 76.9, 128.3, 129.5, 131.9, 145.1, 170.5, 191.7. HRMS (ESI-TOF) Calcd for C₁₃H₁₄NO₄, [M+H]⁺ *m/z* 248.0923; Found 248.0927.

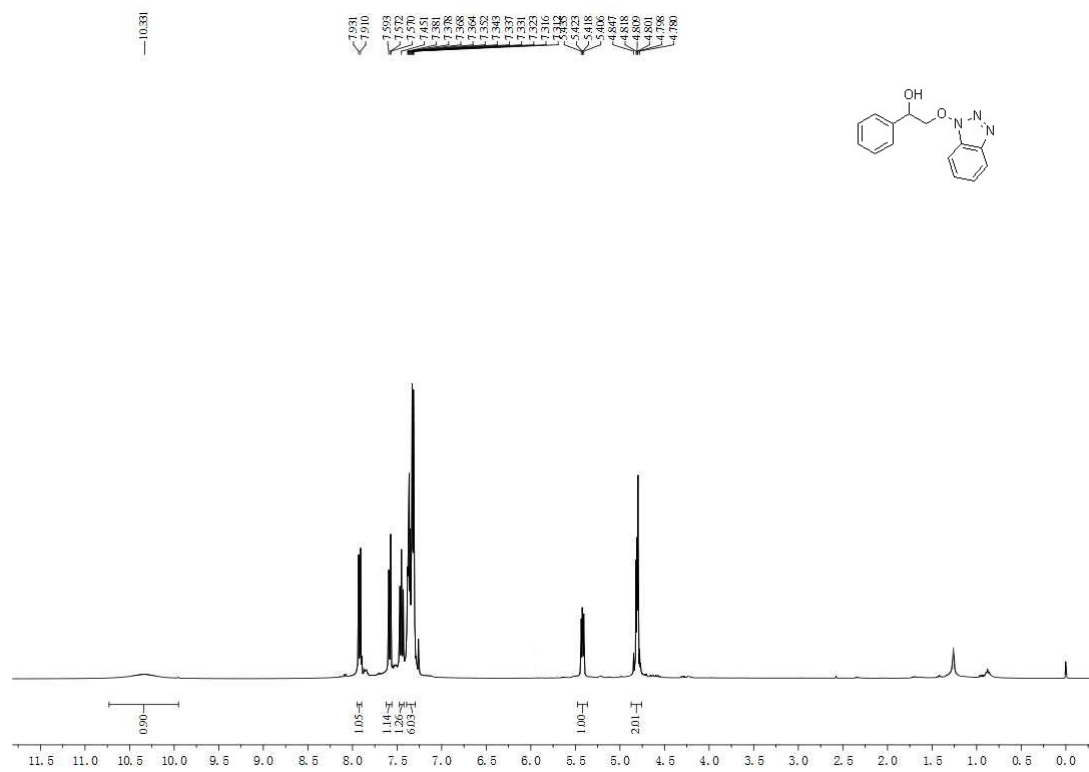


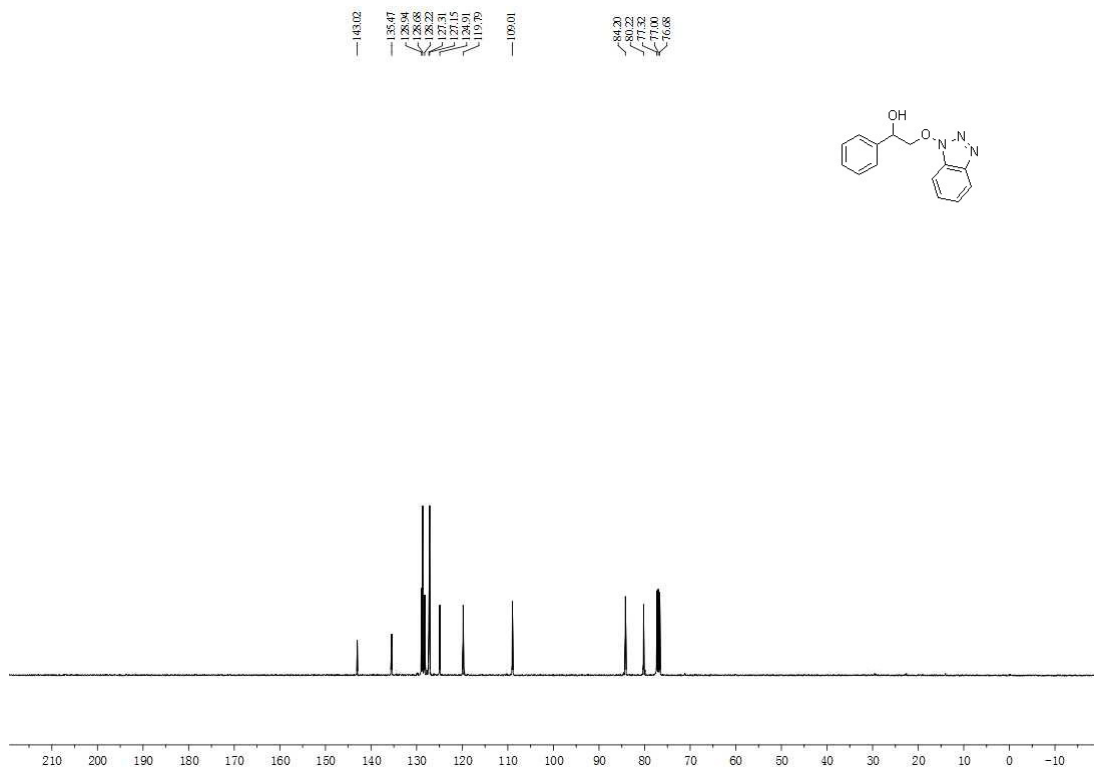
1-(2-phenyl-2-((2,2,6,6-tetramethylpiperidin-1-yl)oxy)ethoxy)-1H-benzo[*d*][1,2,3]triazole 5

White solid. mp:100-101 °C ¹H NMR (400 MHz; CDCl₃): δ = 0.81 (s, 2H), 1.13 (s, 3H), 1.27 (s, 3H), 1.42 (s, 6H), 1.56 (s, 4H), 4.84 (dd, *J*₁ = 6.8 Hz, *J*₂ = 9.2 Hz, 1H), 5.08 (dd, *J*₁ = 4.4 Hz, *J*₂ = 9.2 Hz, 1H), 5.24 (t, *J* = 5.6 Hz, 1H), 7.06 (d, *J* = 8.0 Hz, 1H), 7.35-7.47 (m, 5H), 7.51 (d, *J* = 6.8 Hz, 2H), 8.00 (d, *J* = 8.0 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃): δ = 16.3, 19.5, 33.2, 39.6, 59.4, 81.4, 82.4, 107.9, 119.2, 123.7, 126.1, 126.9, 127.0, 127.2, 127.5, 139.0, 142.5. HRMS (ESI-TOF) Calcd for C₂₃H₃₁N₄O₂, [M+H]⁺ *m/z* 395.2447; Found 395.2441.

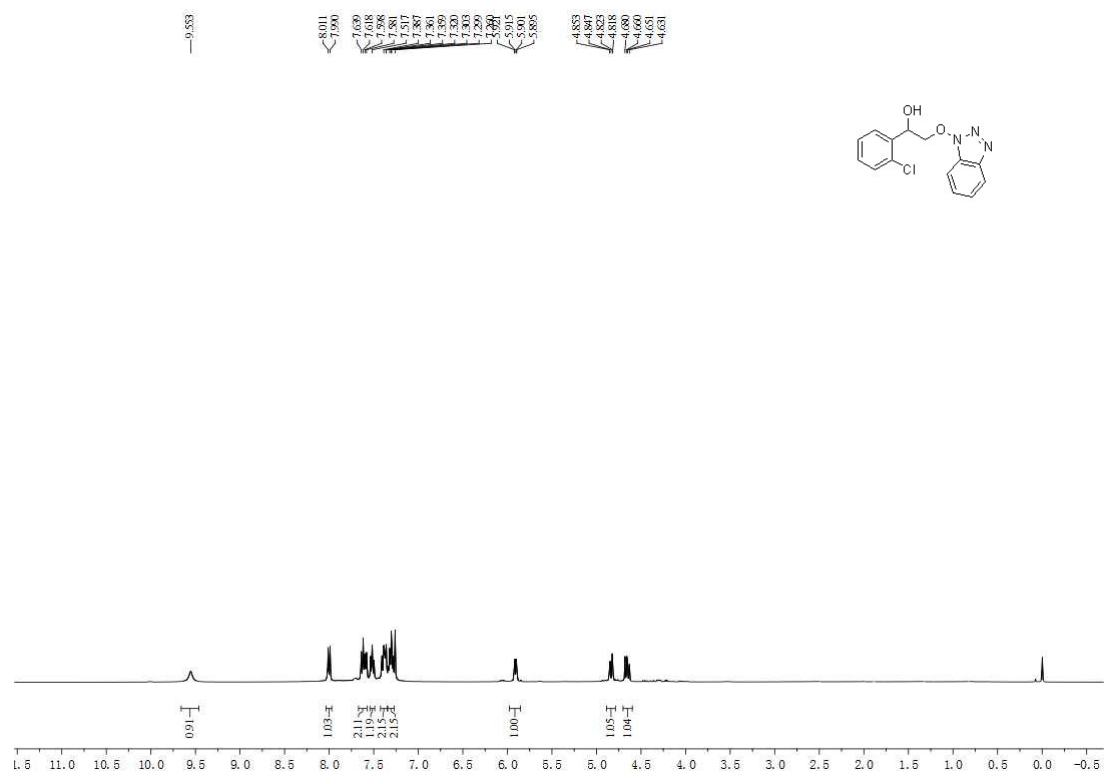
V. ^1H and ^{13}C Spectra of Compounds 3, 4 and 5

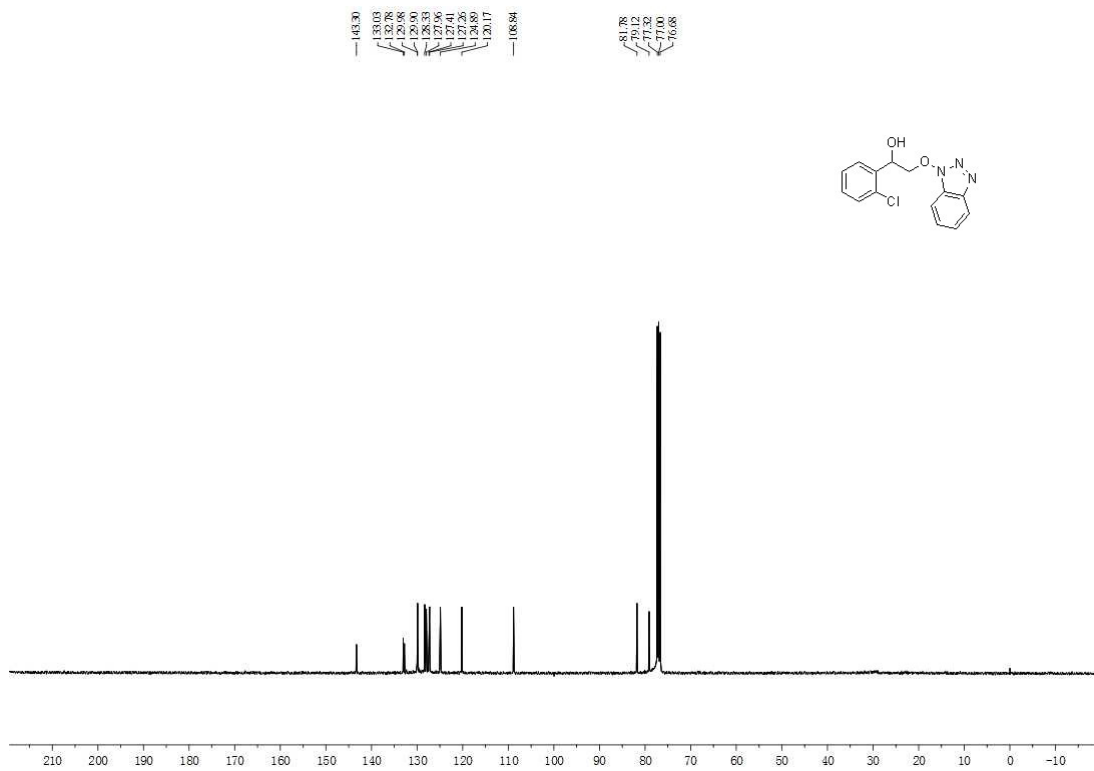
Product 3a



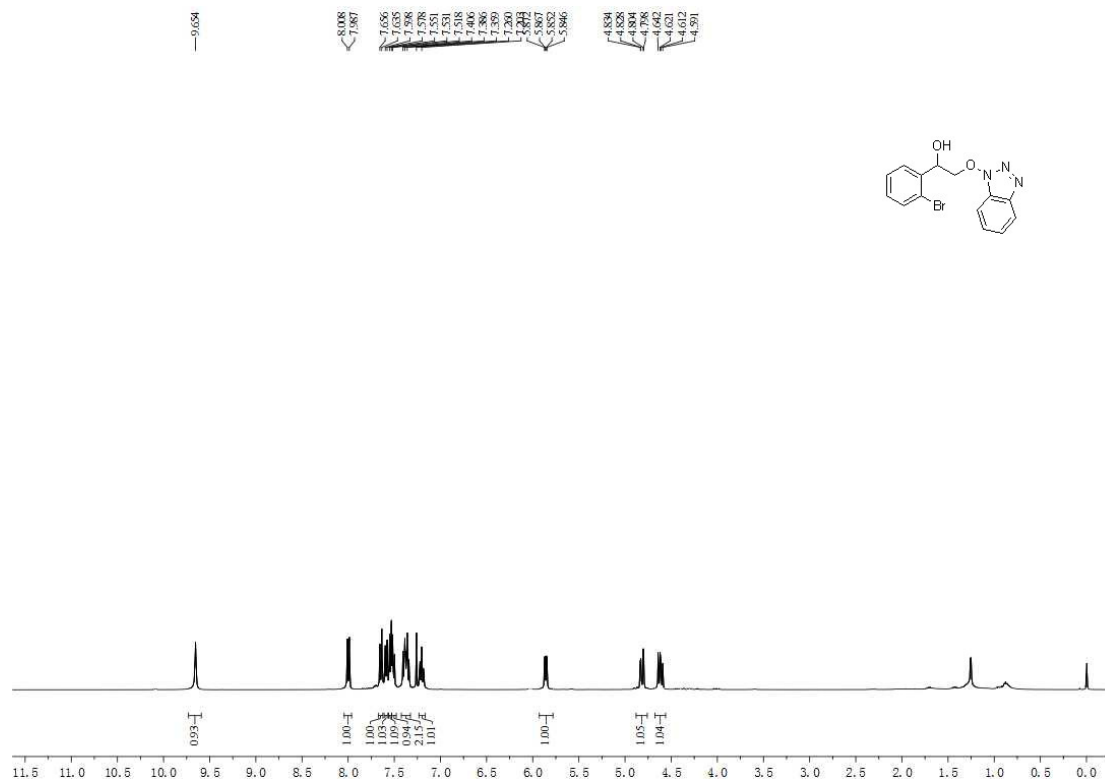


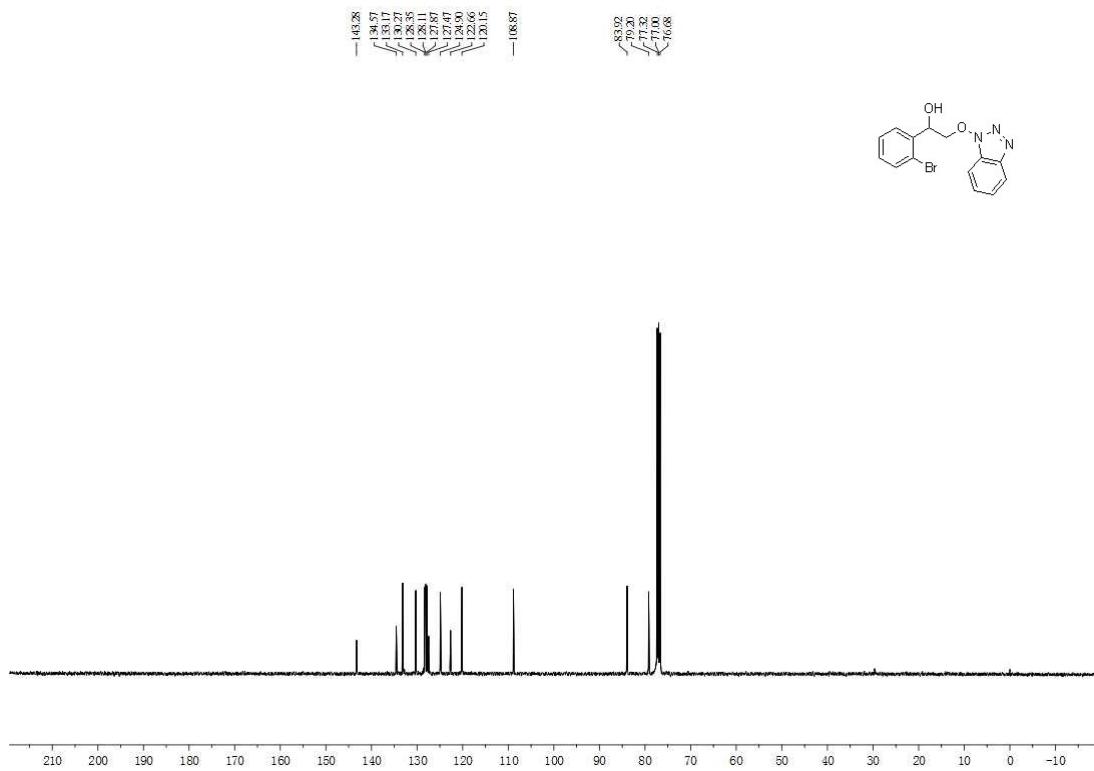
Product 3b



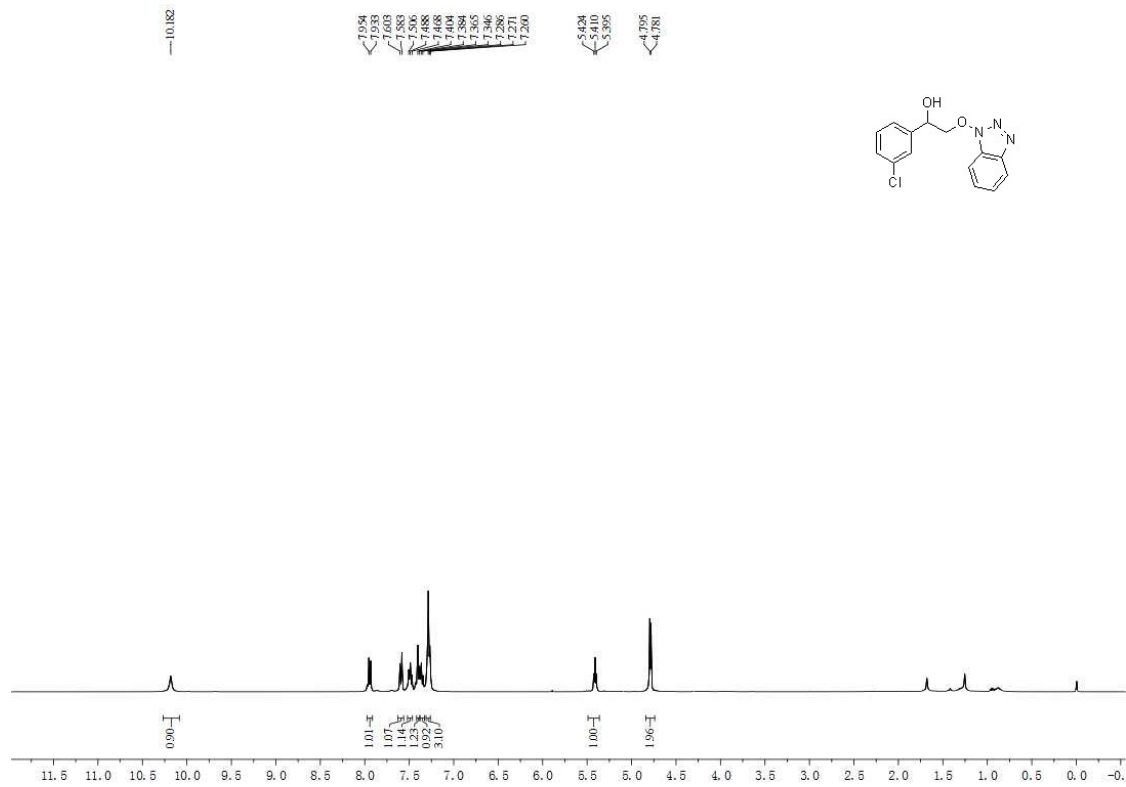


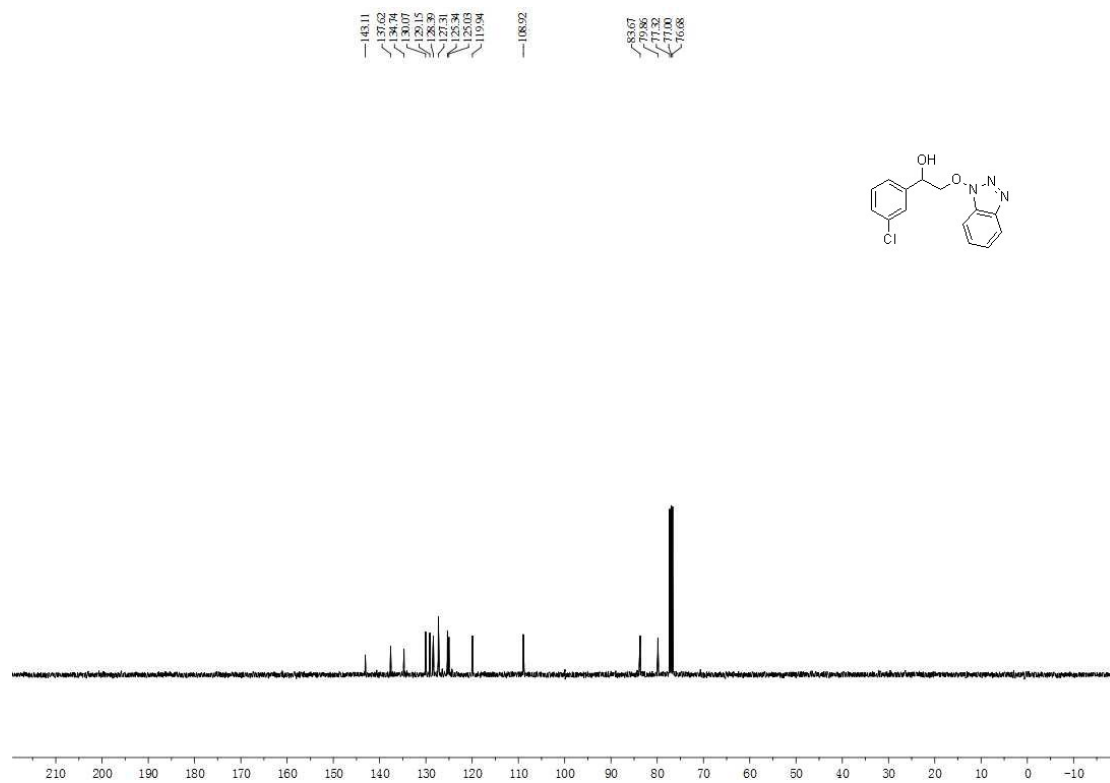
Product 3c



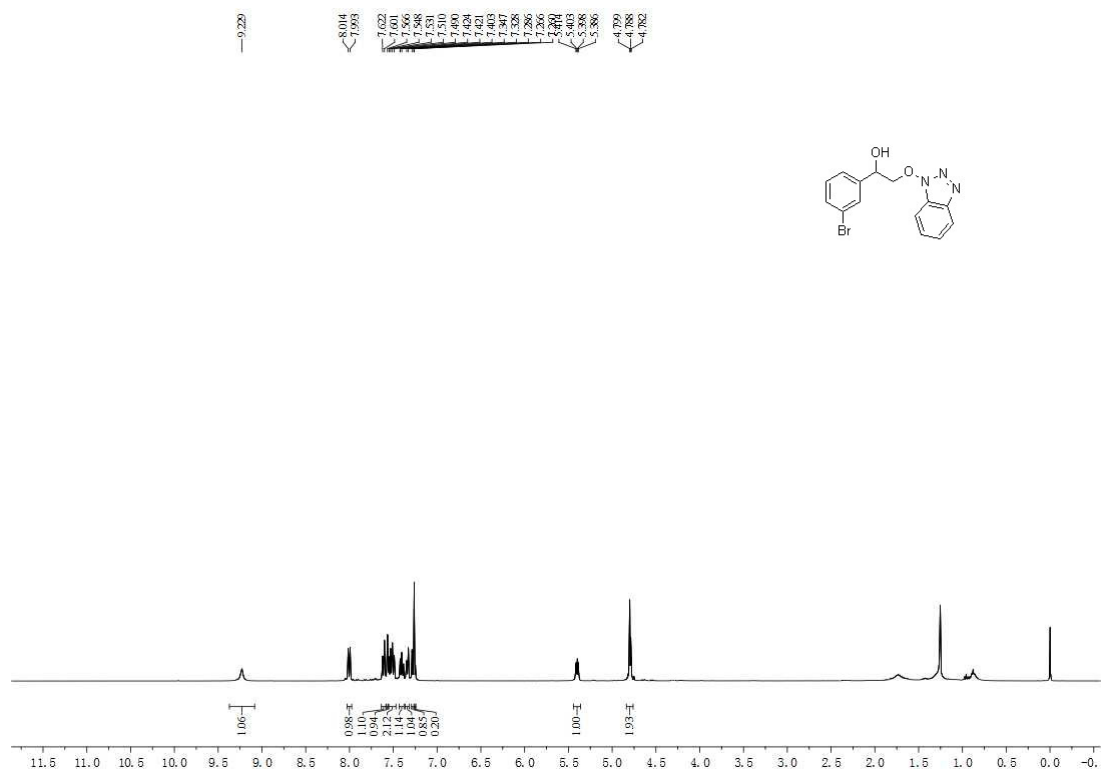


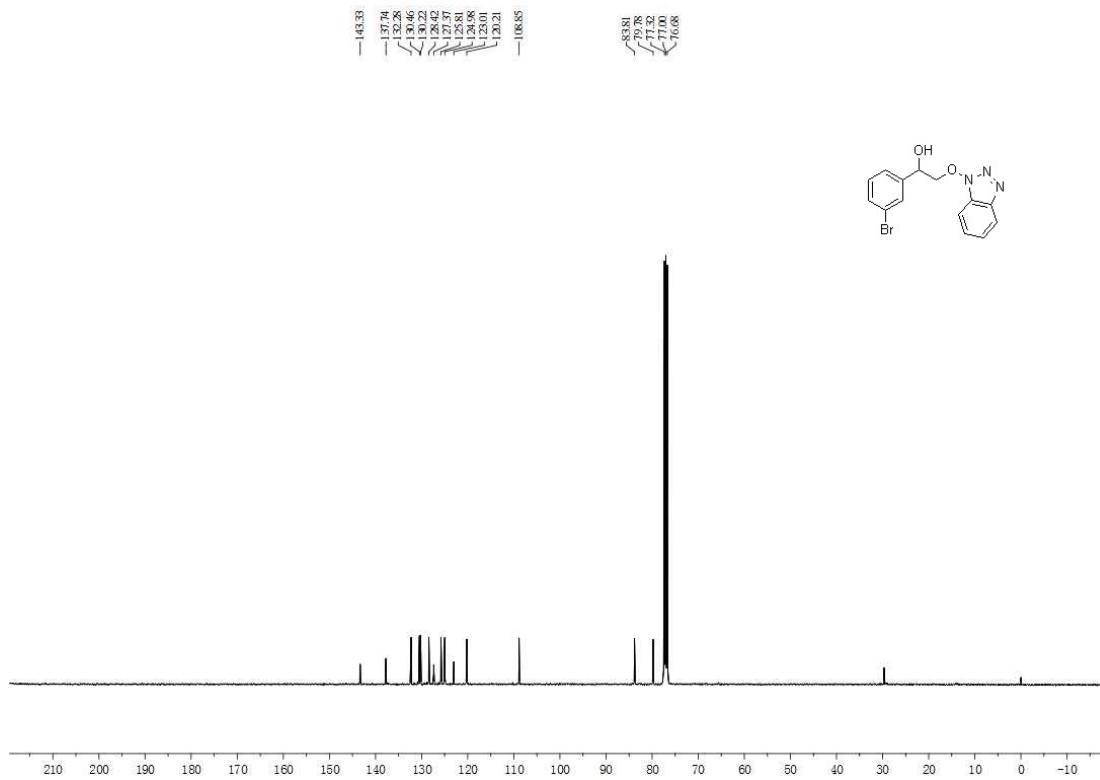
Product 3d



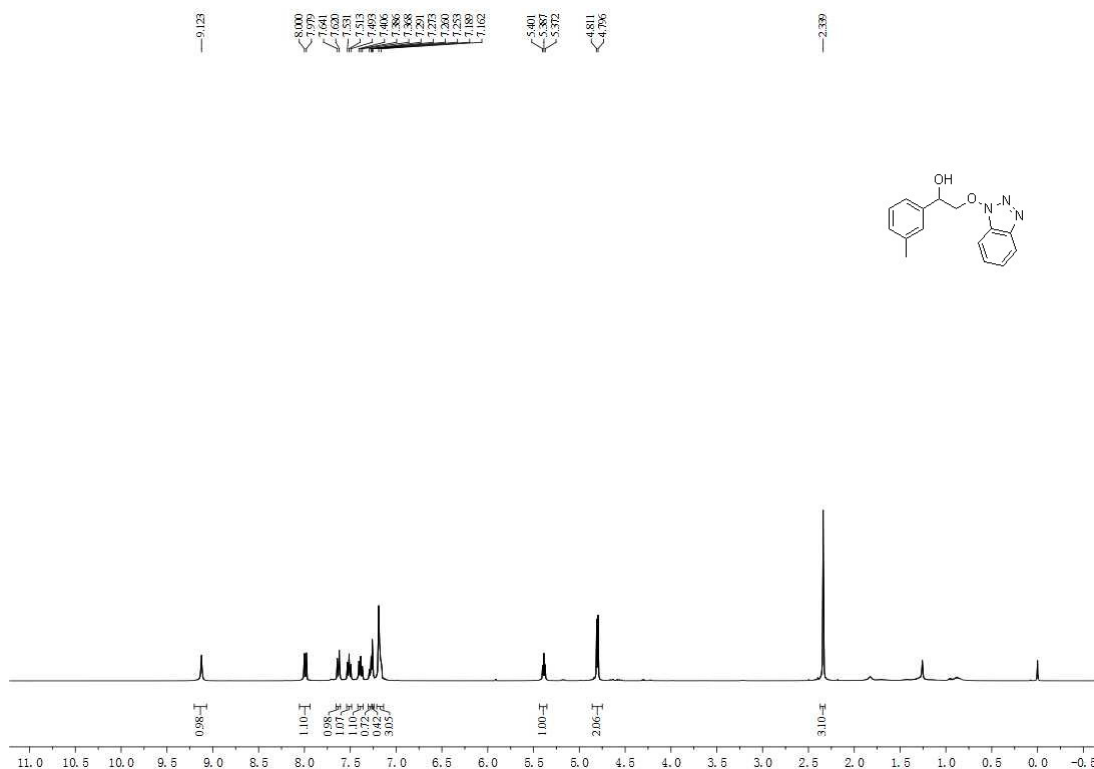


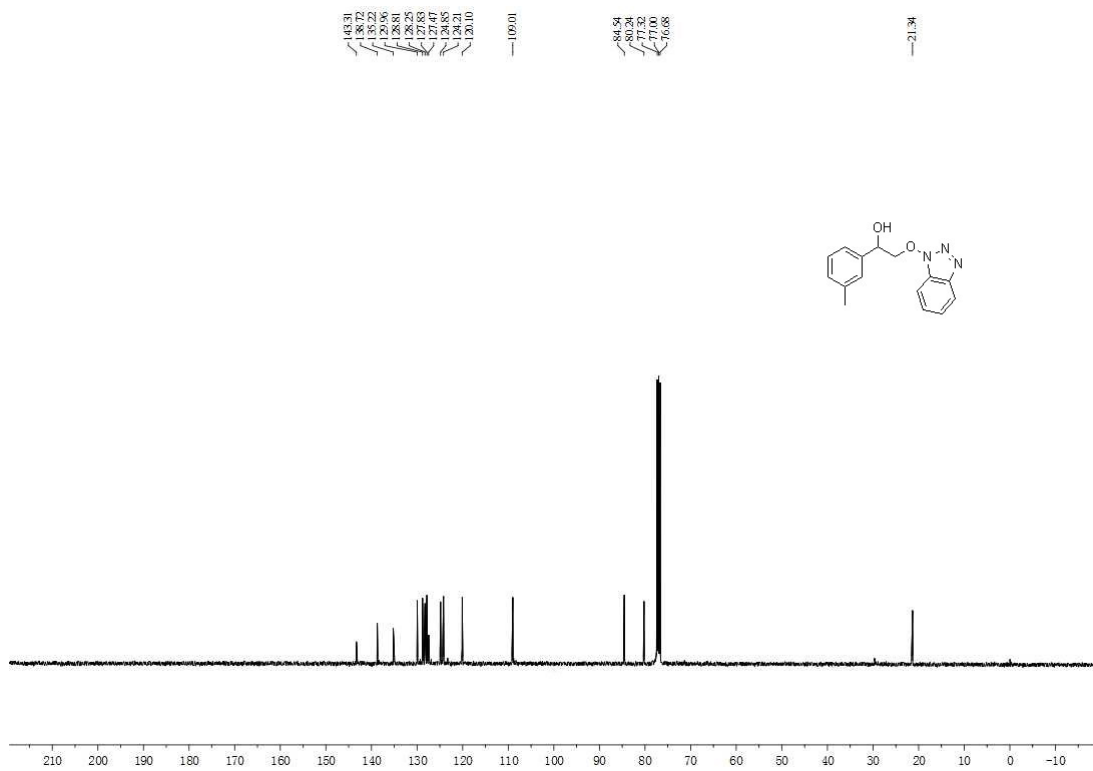
Product 3c



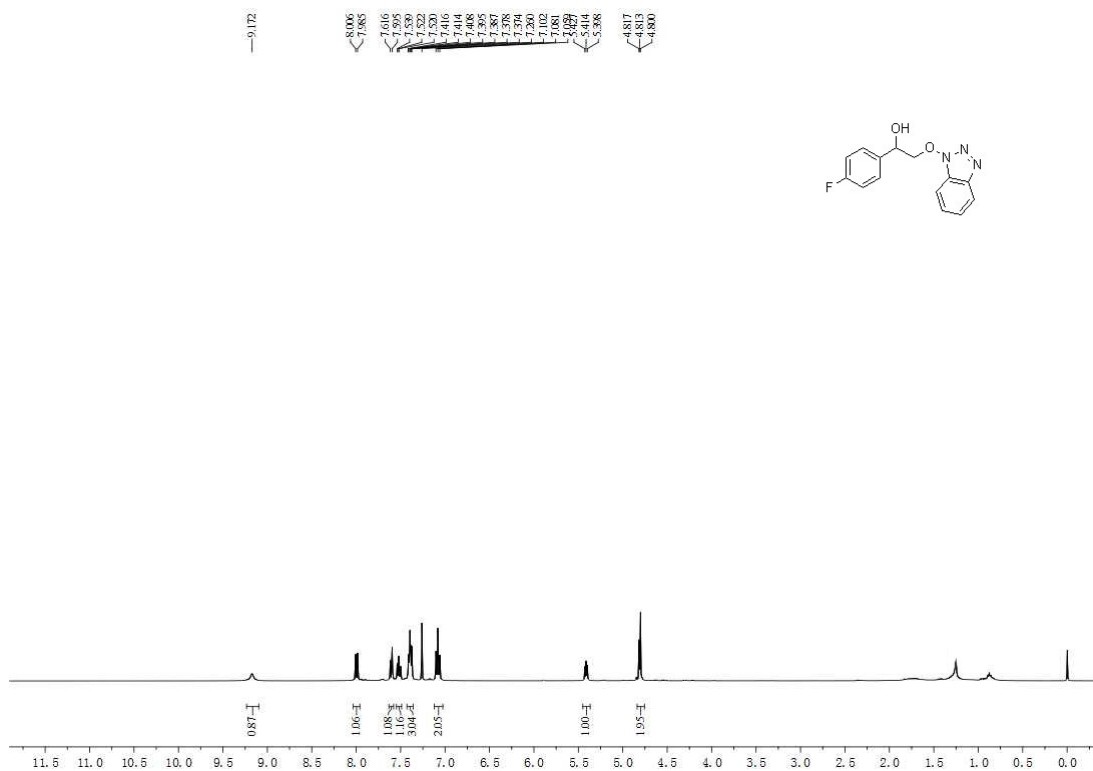


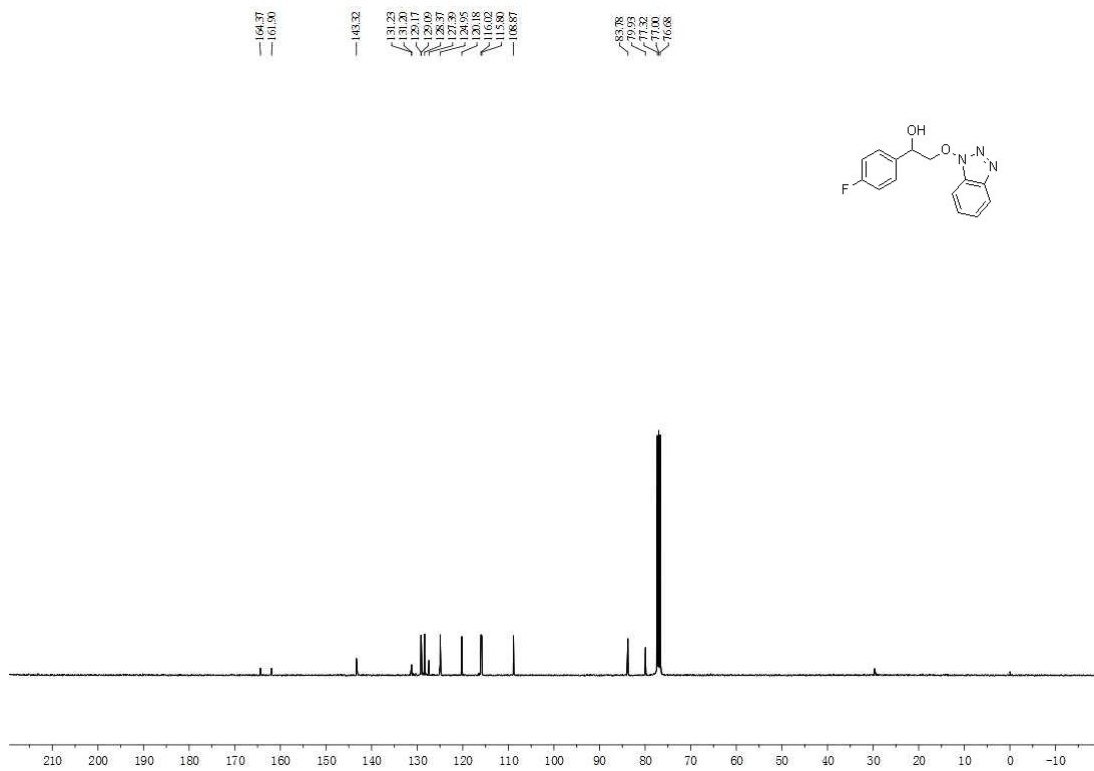
Product 3f



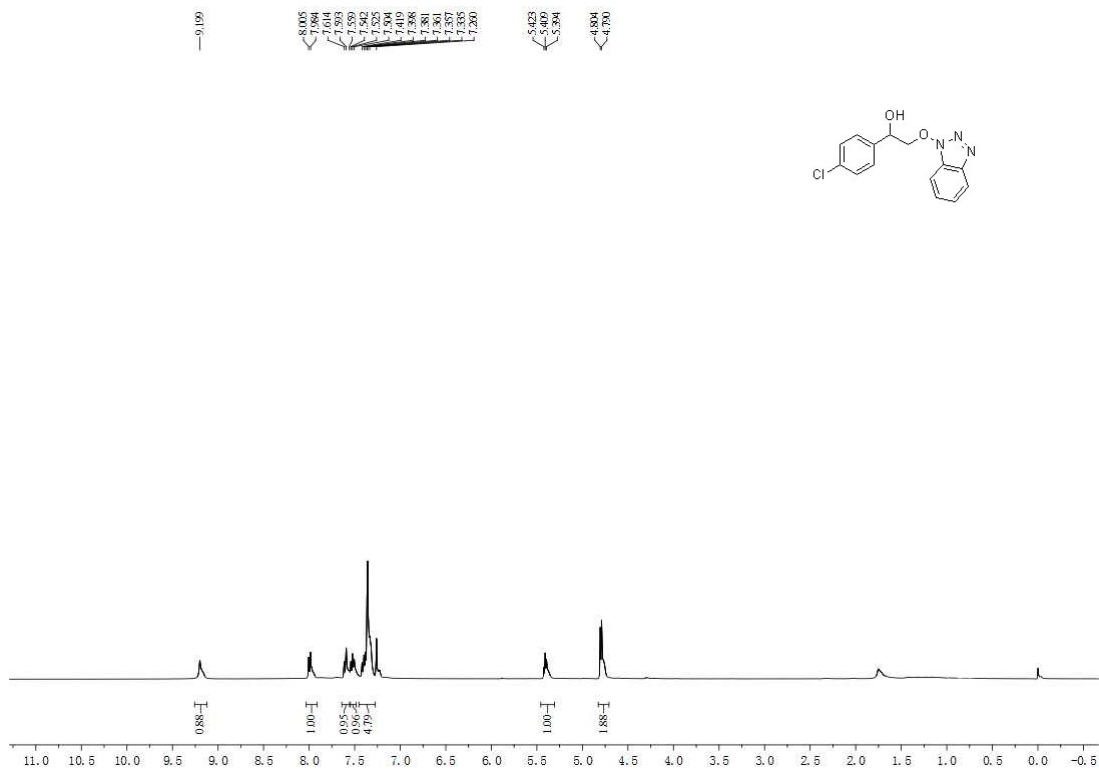


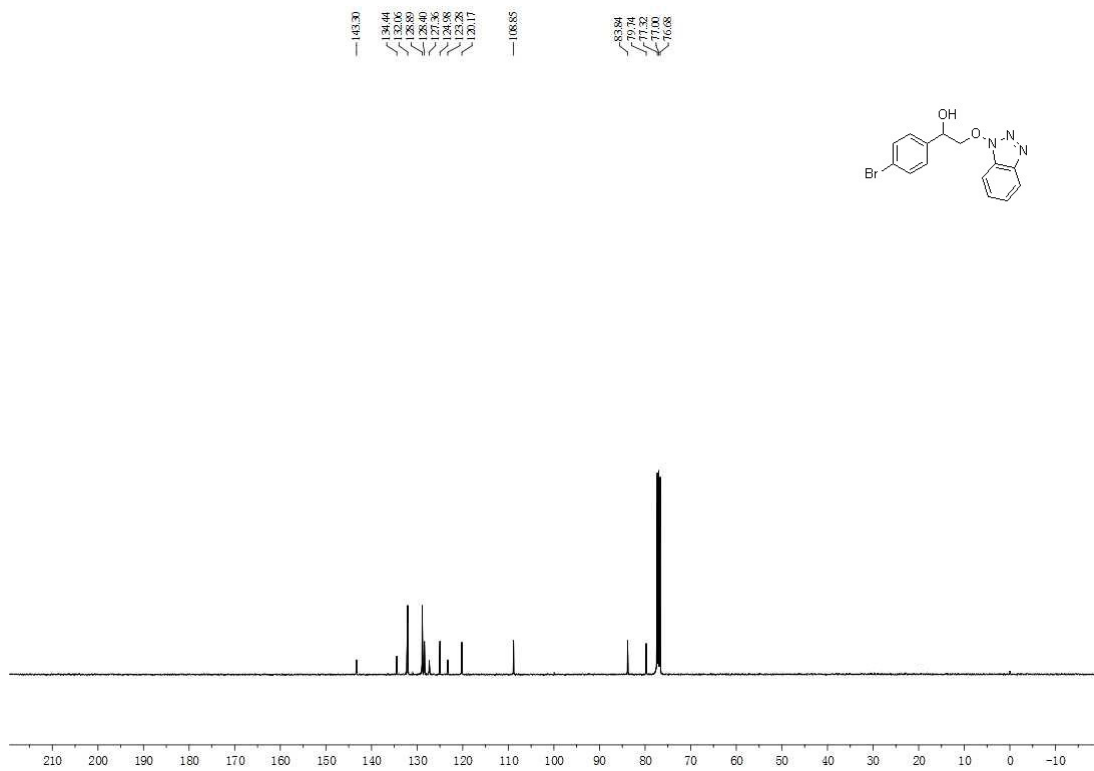
Product 3g



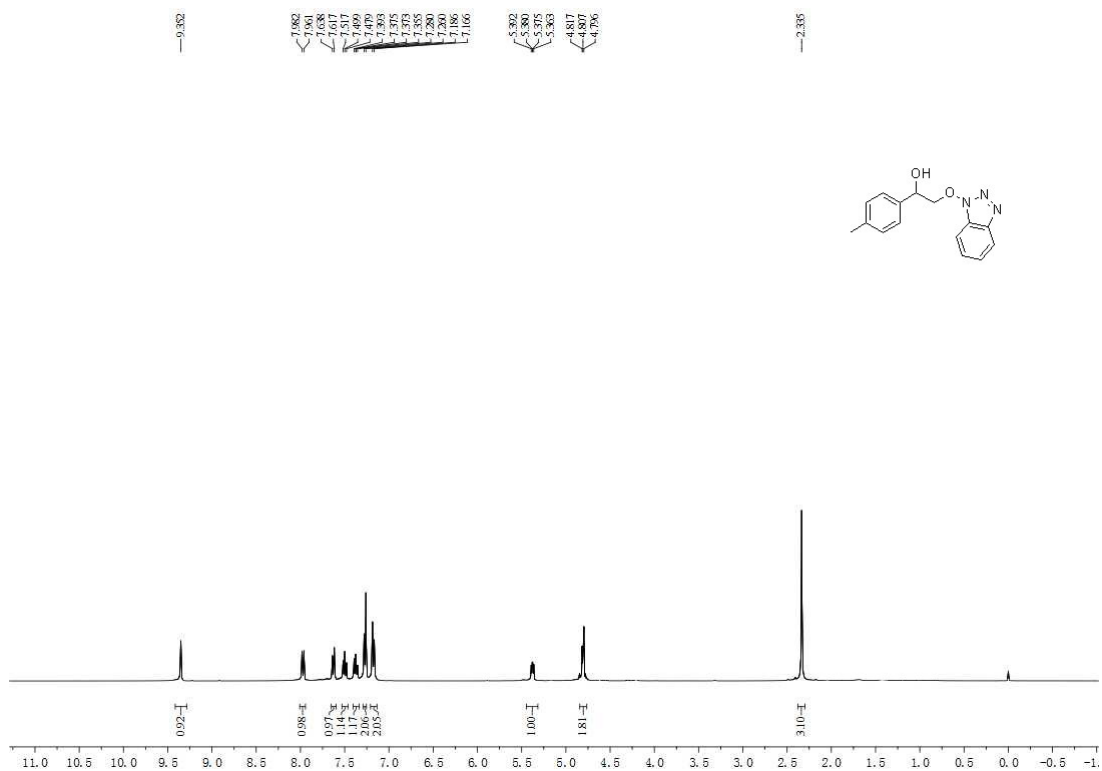


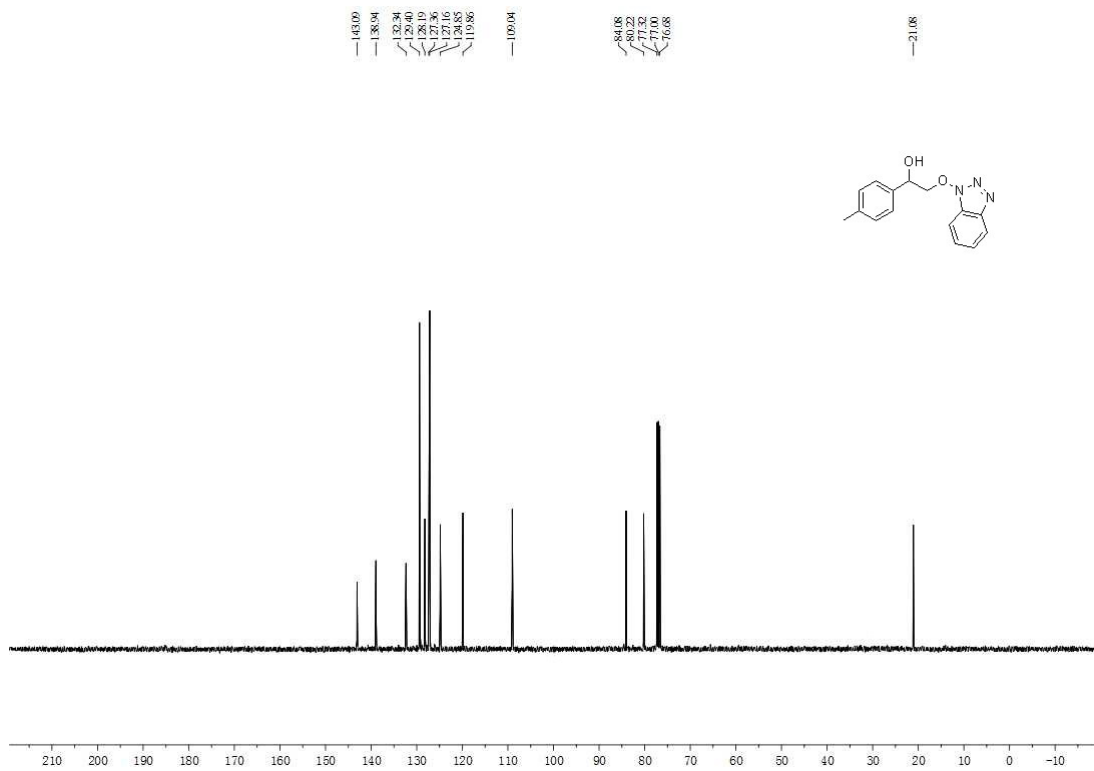
Product 3h



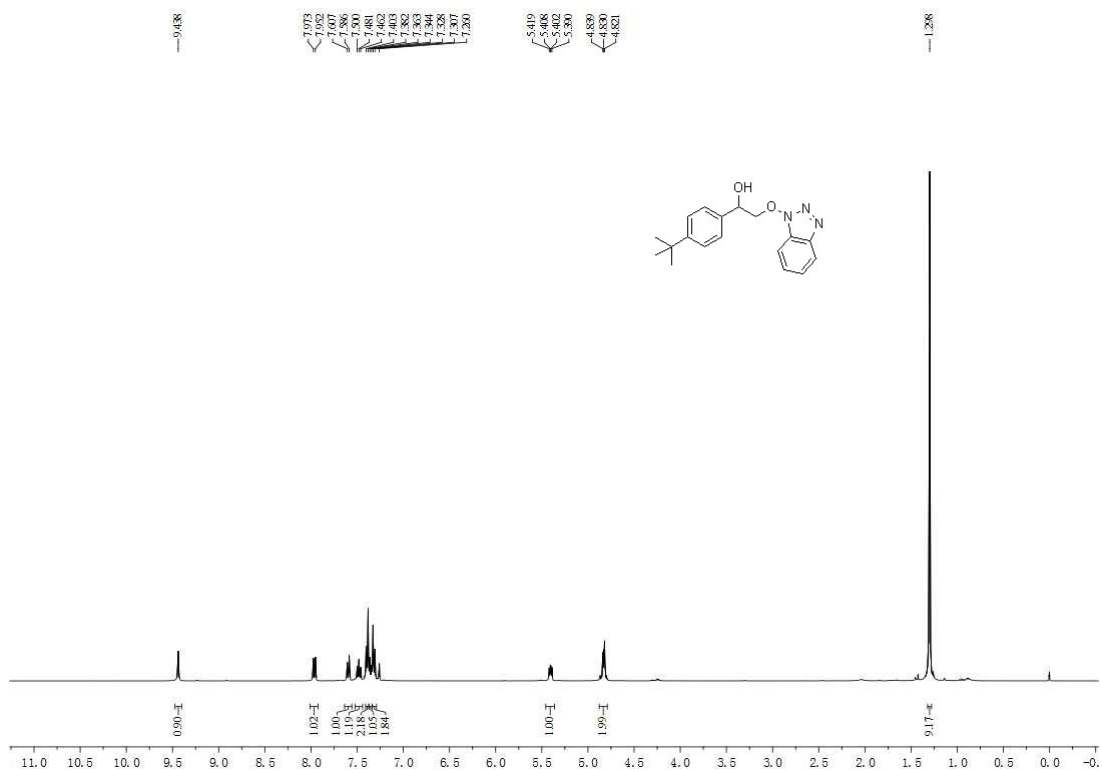


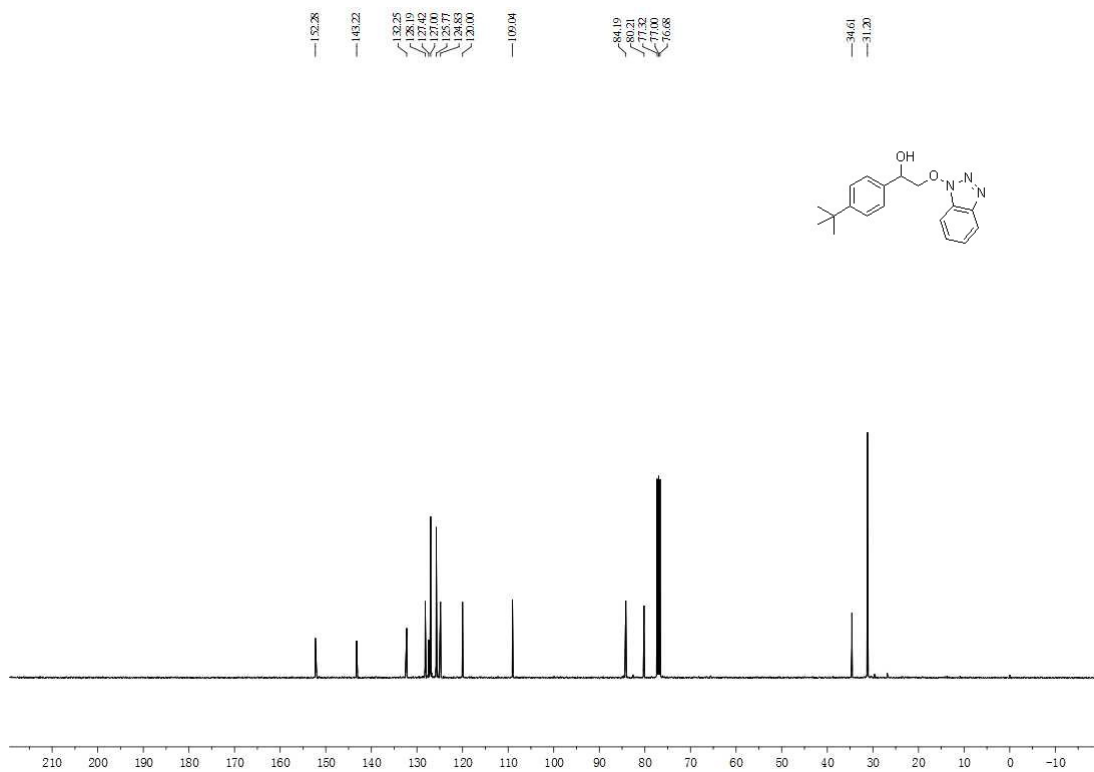
Product 3j



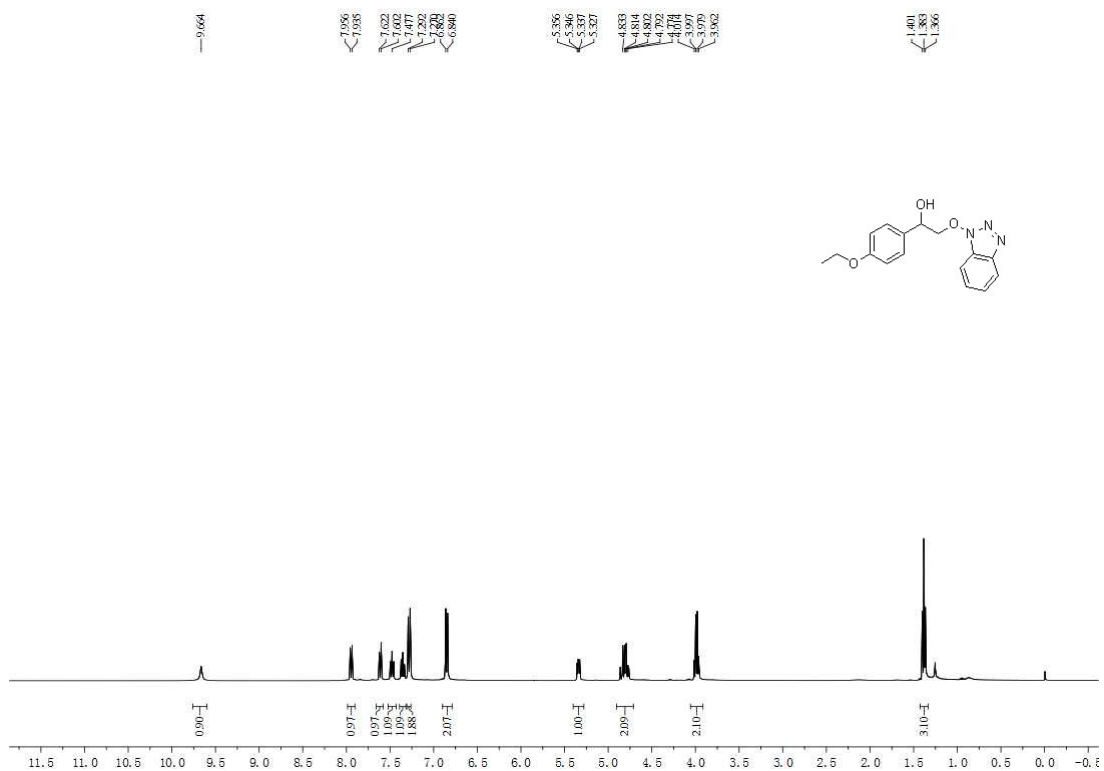


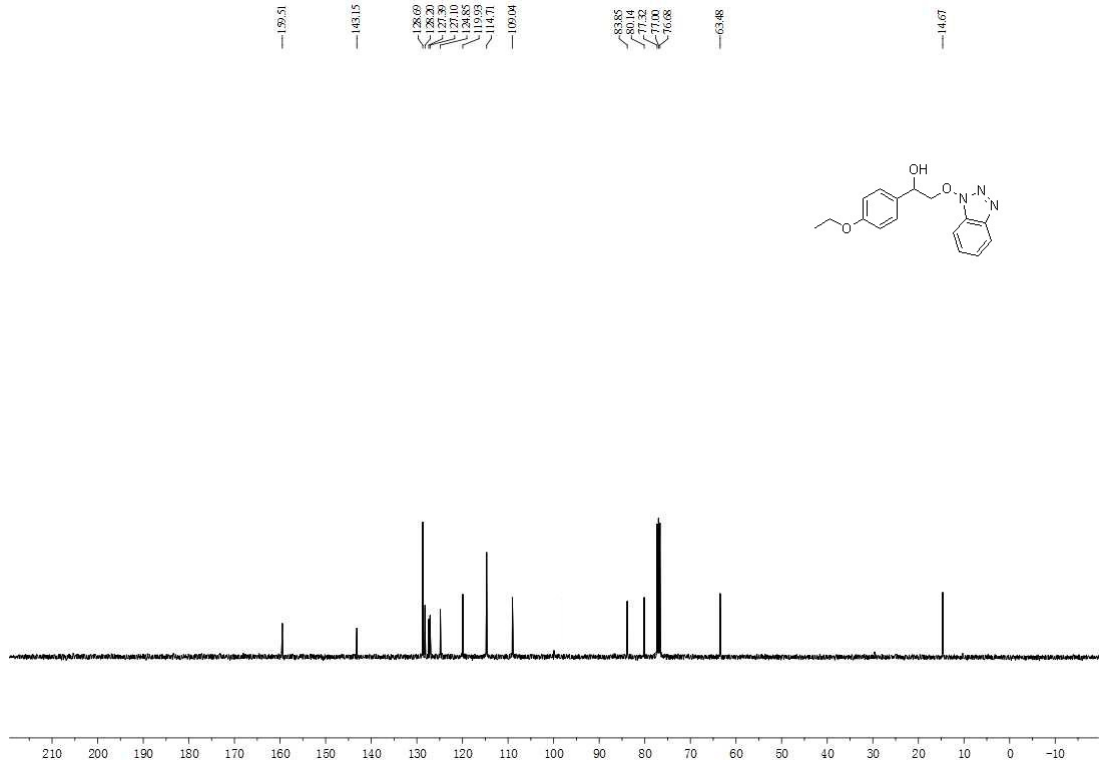
Product 3k



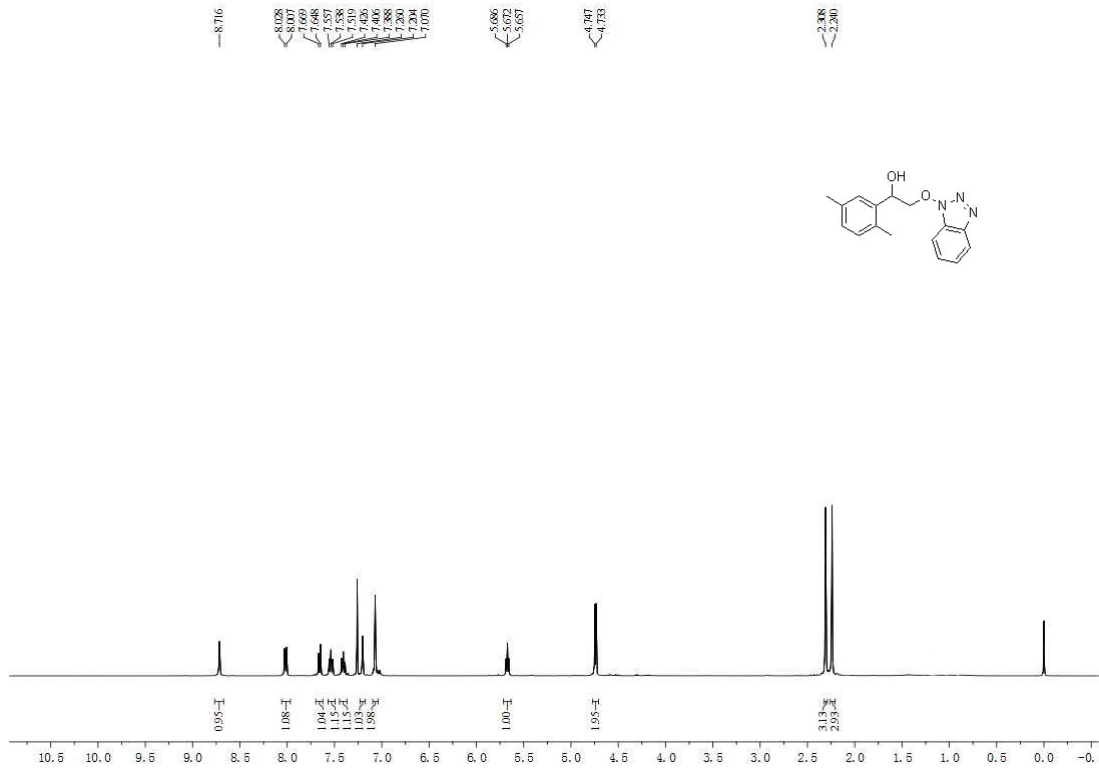


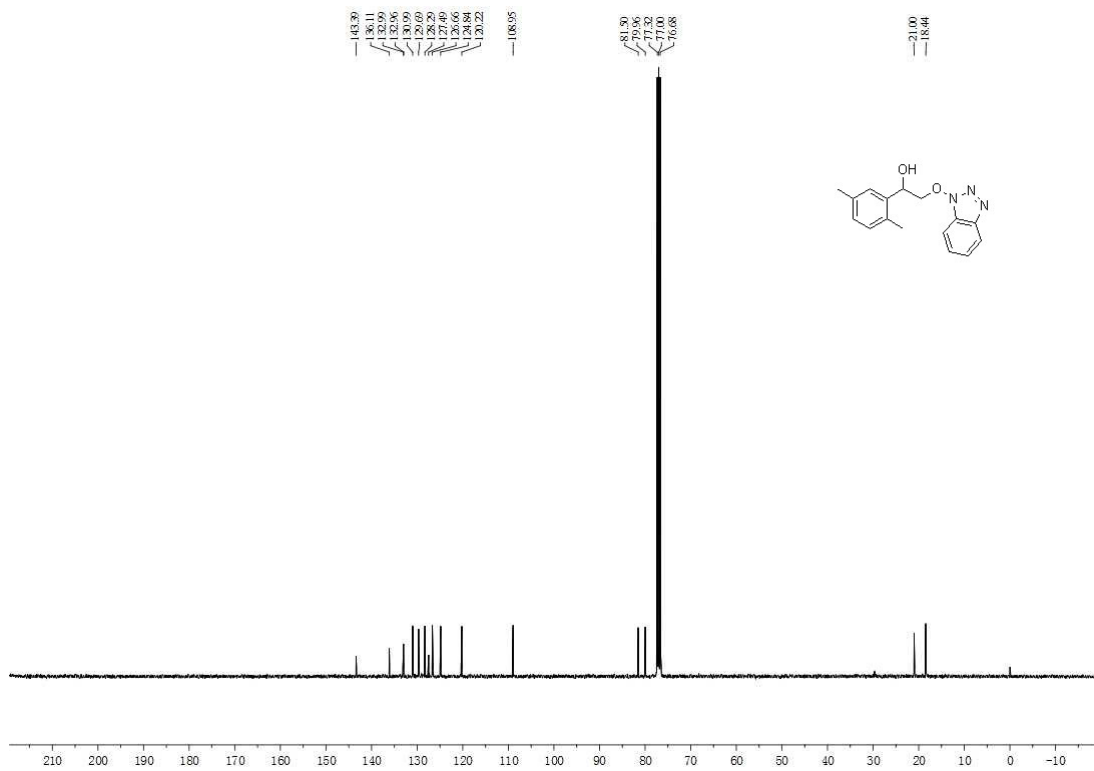
Product 31



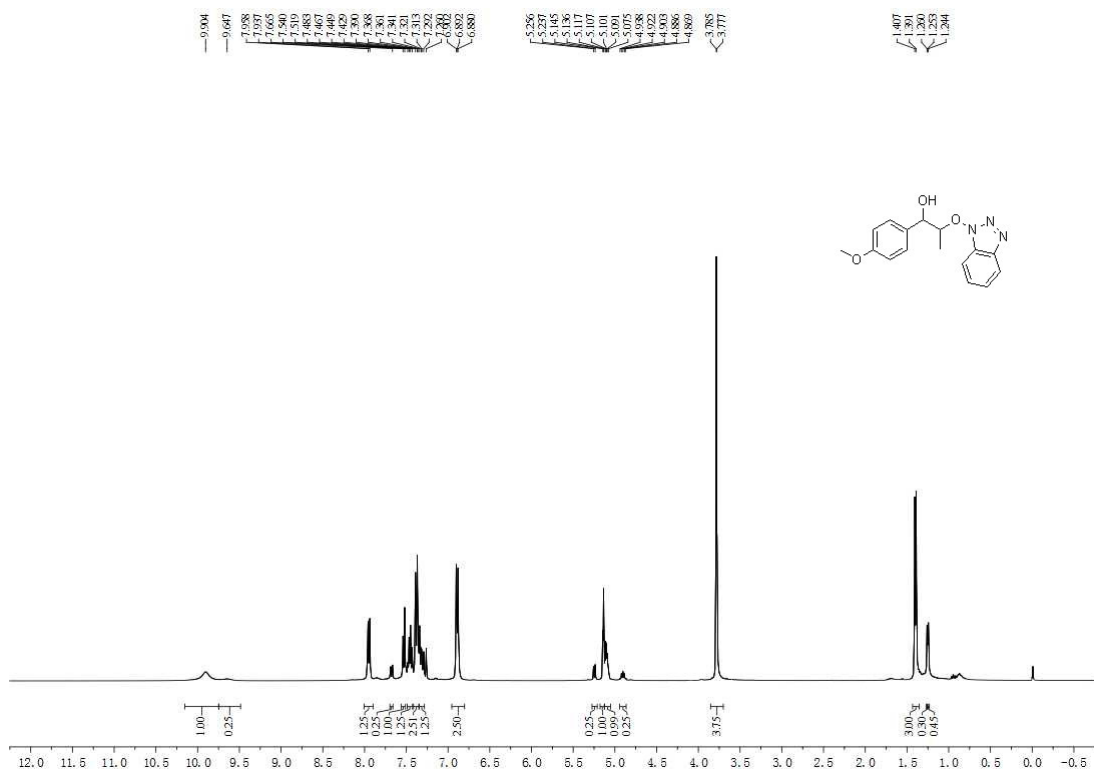


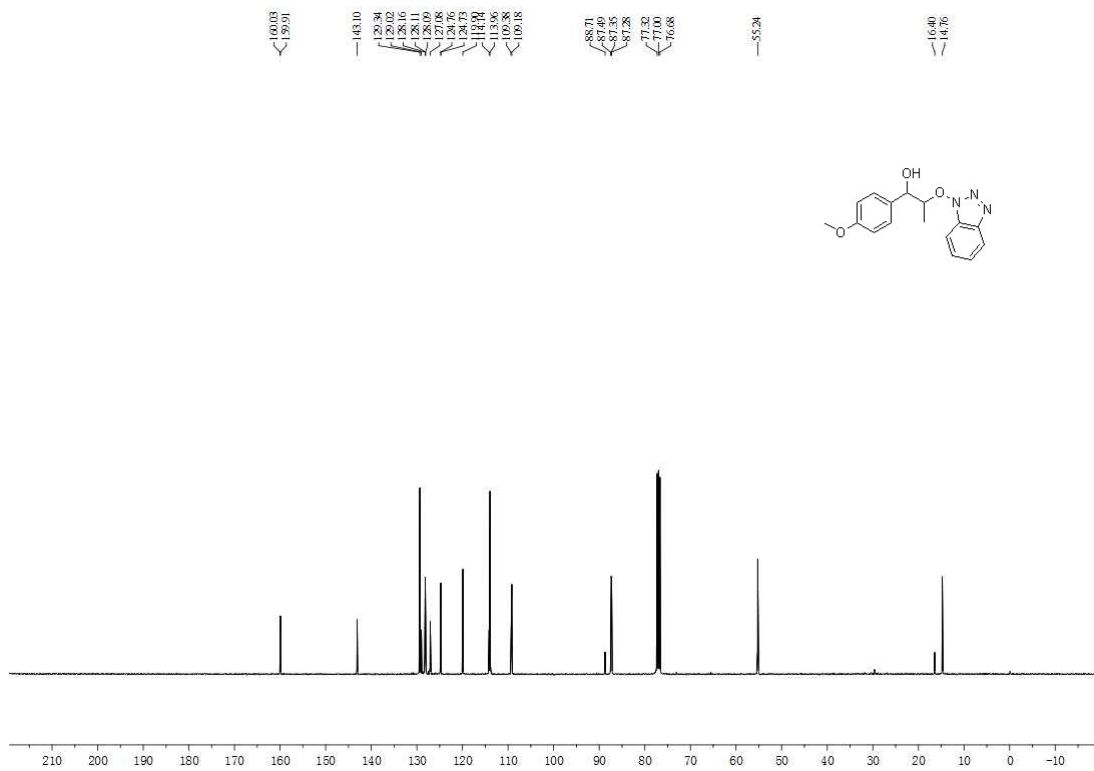
Product 3m



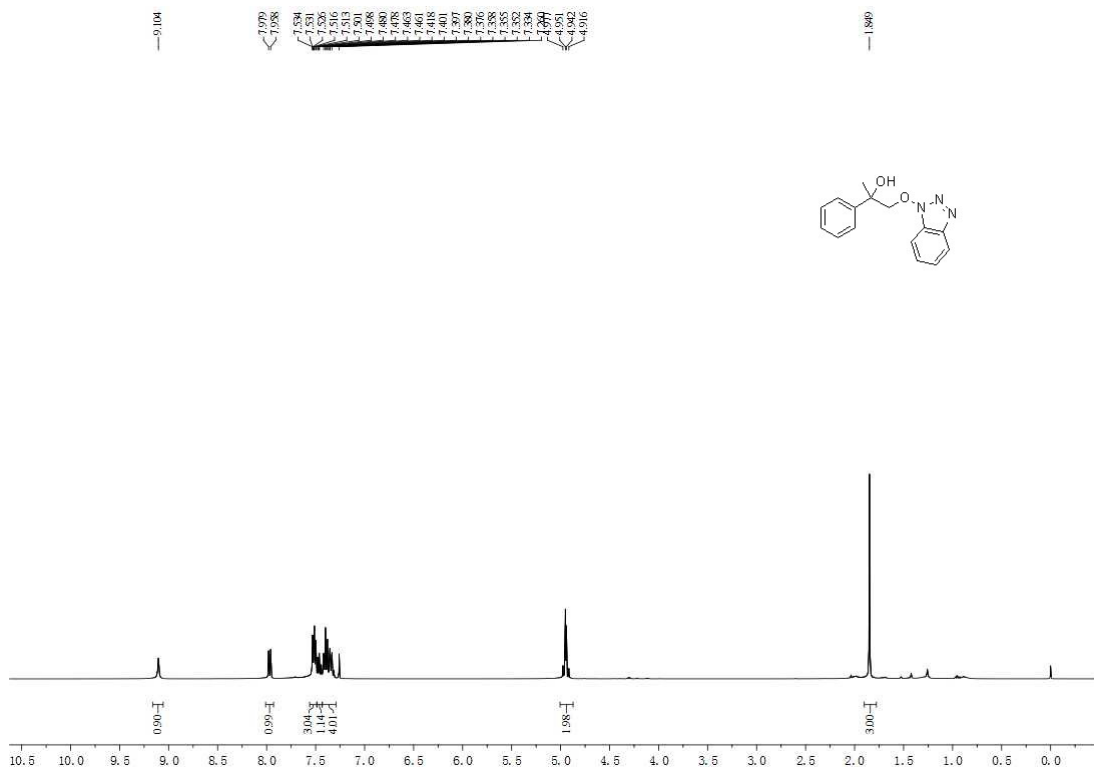


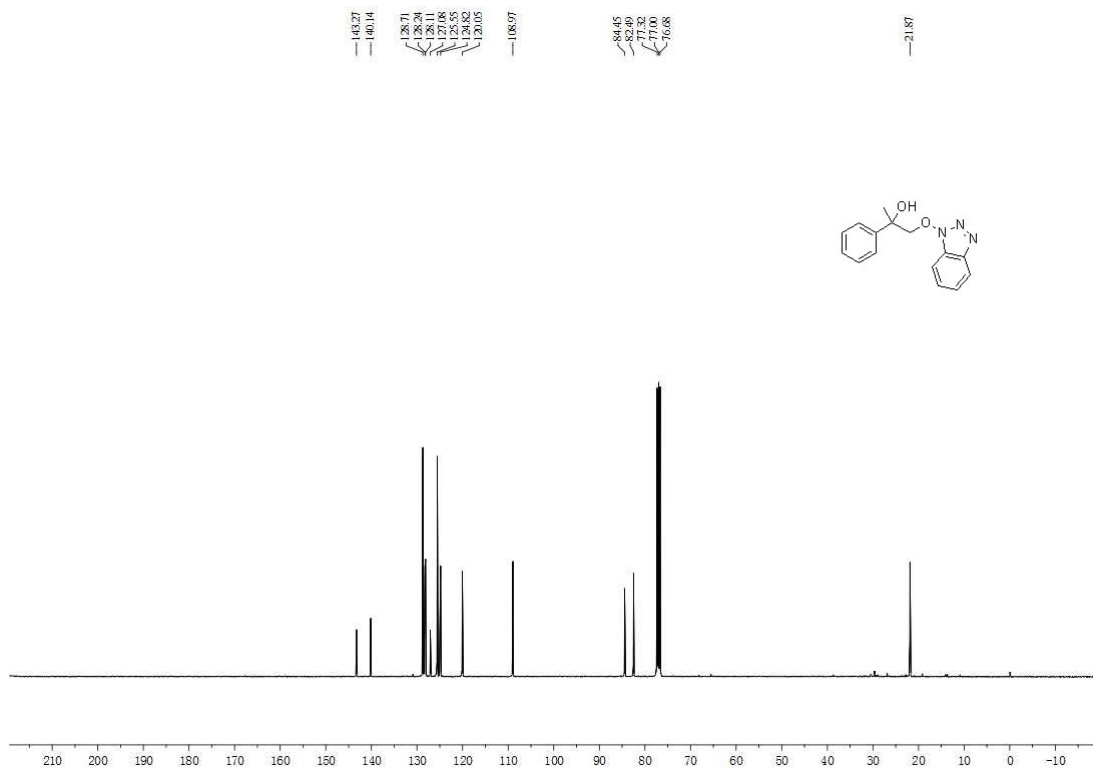
Product 3n



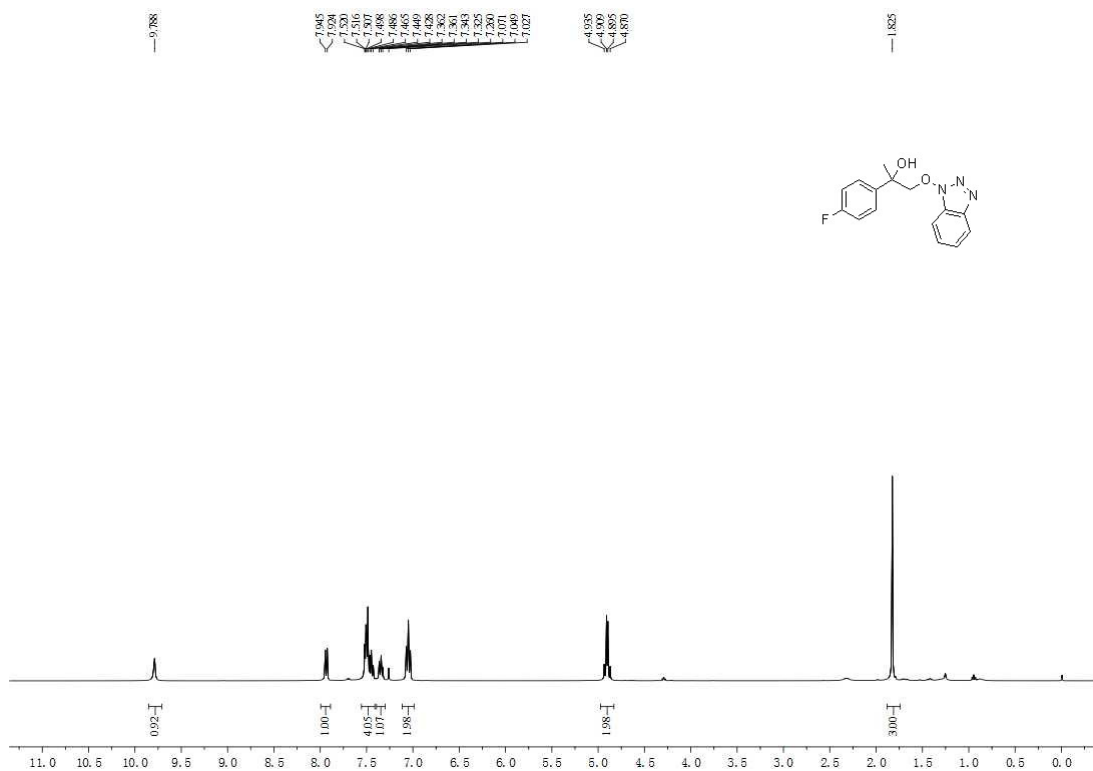


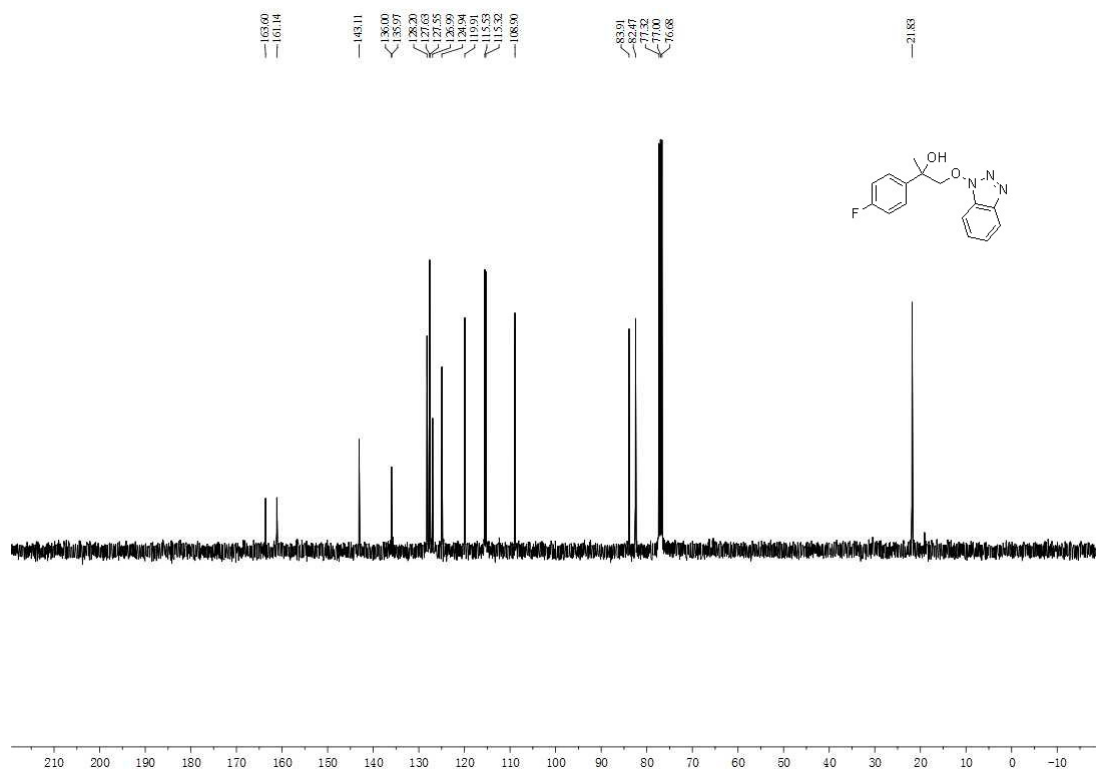
Product 3o



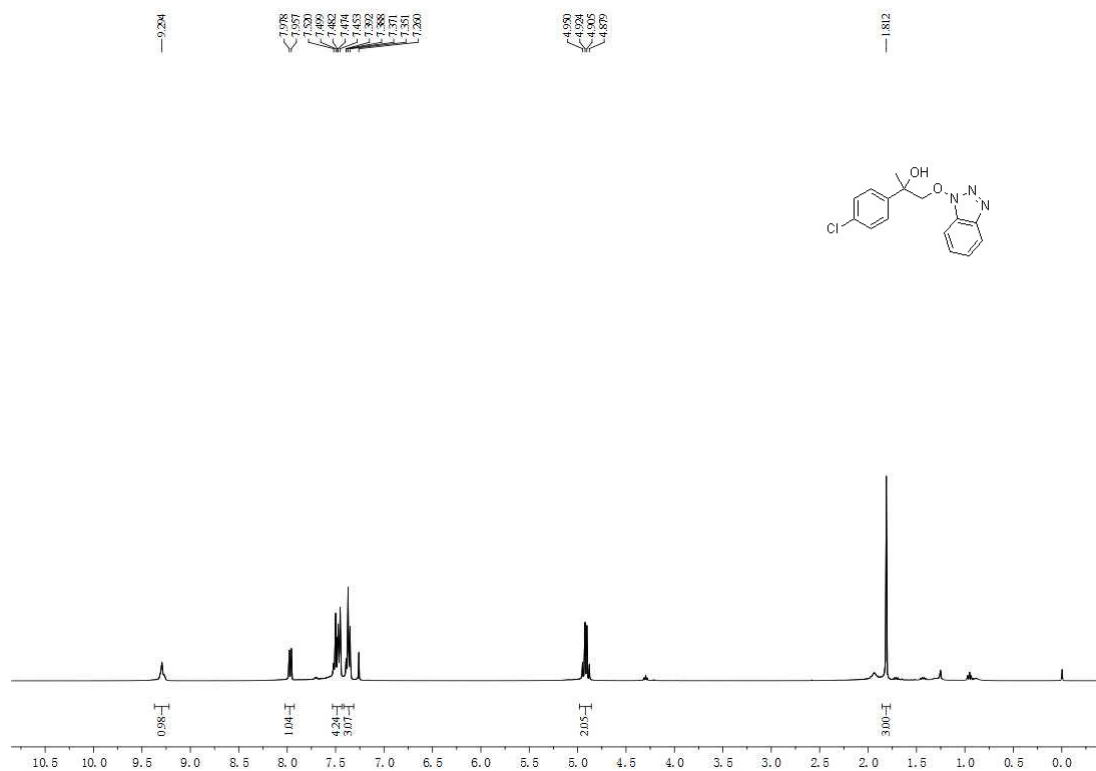


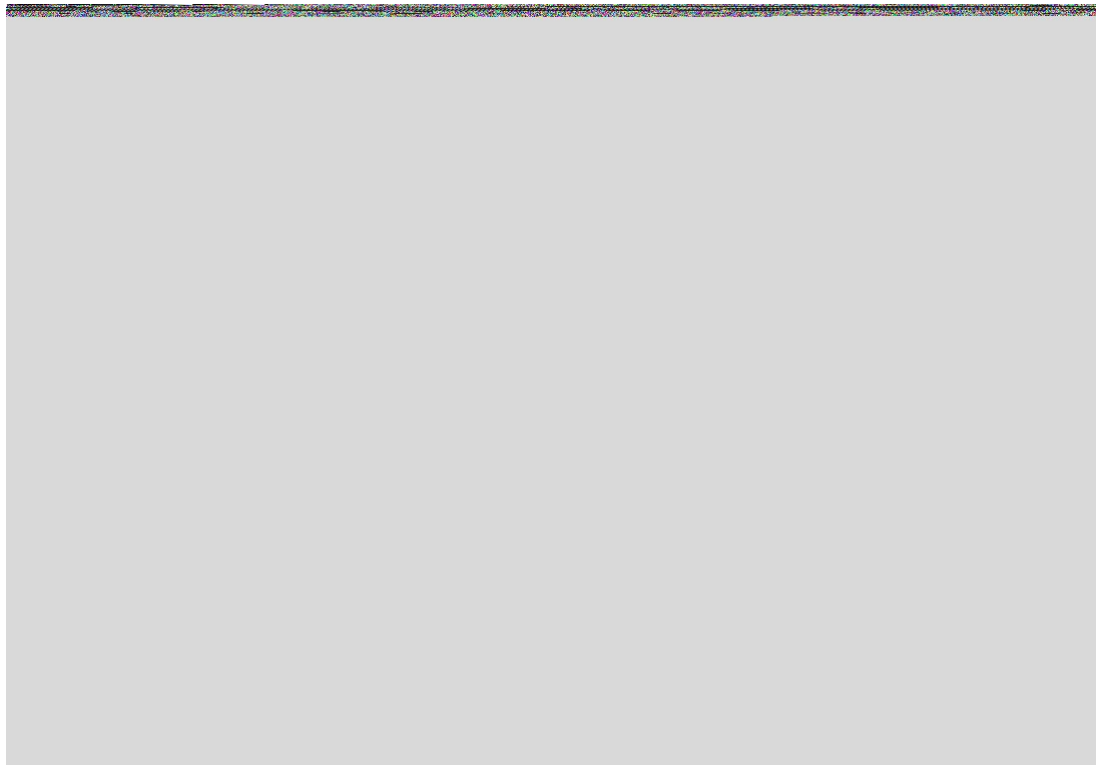
Product 3p



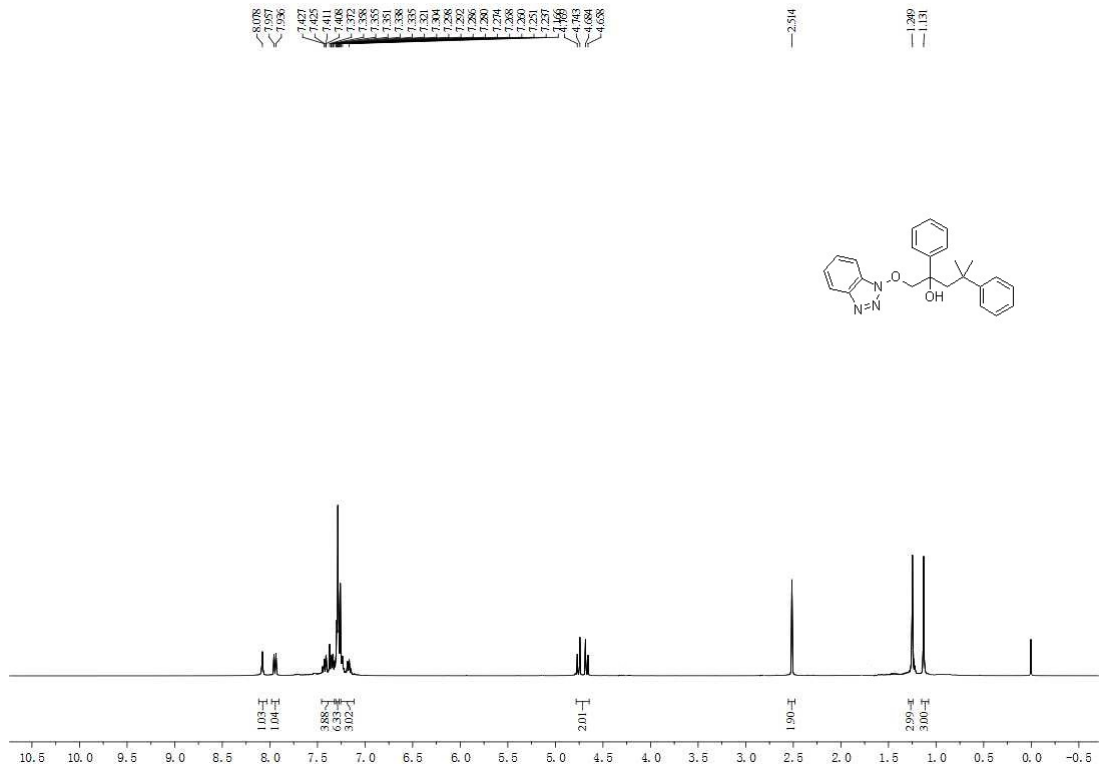


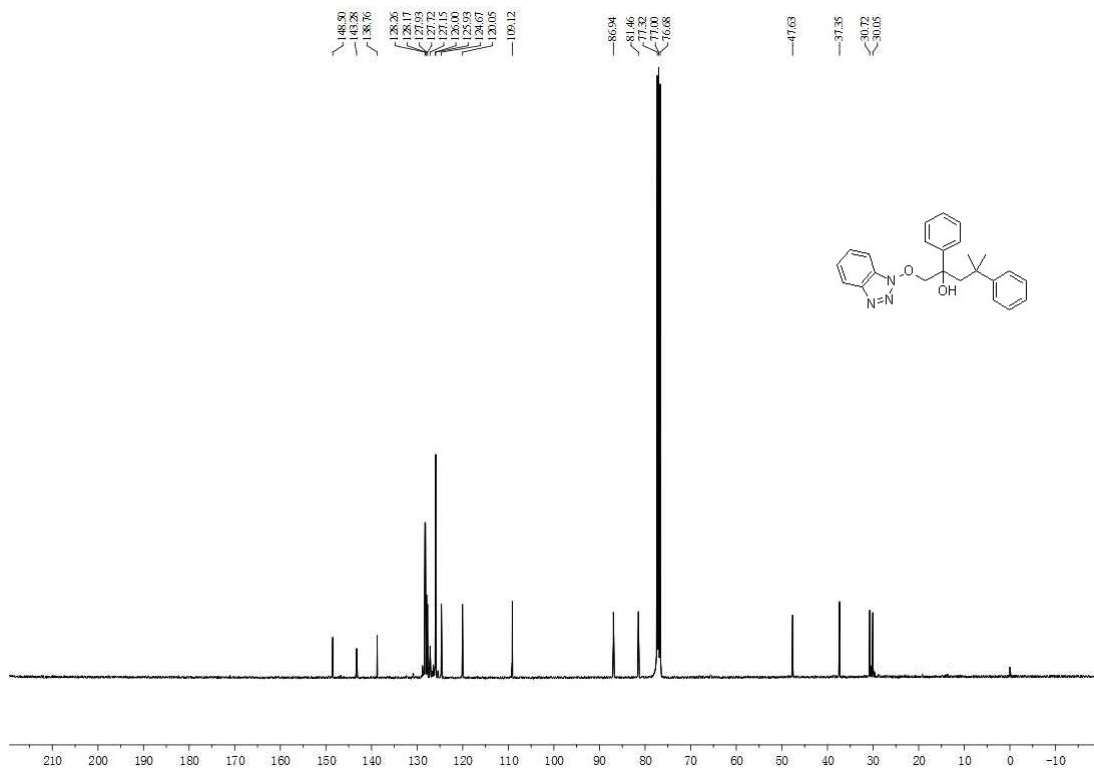
Product 3q



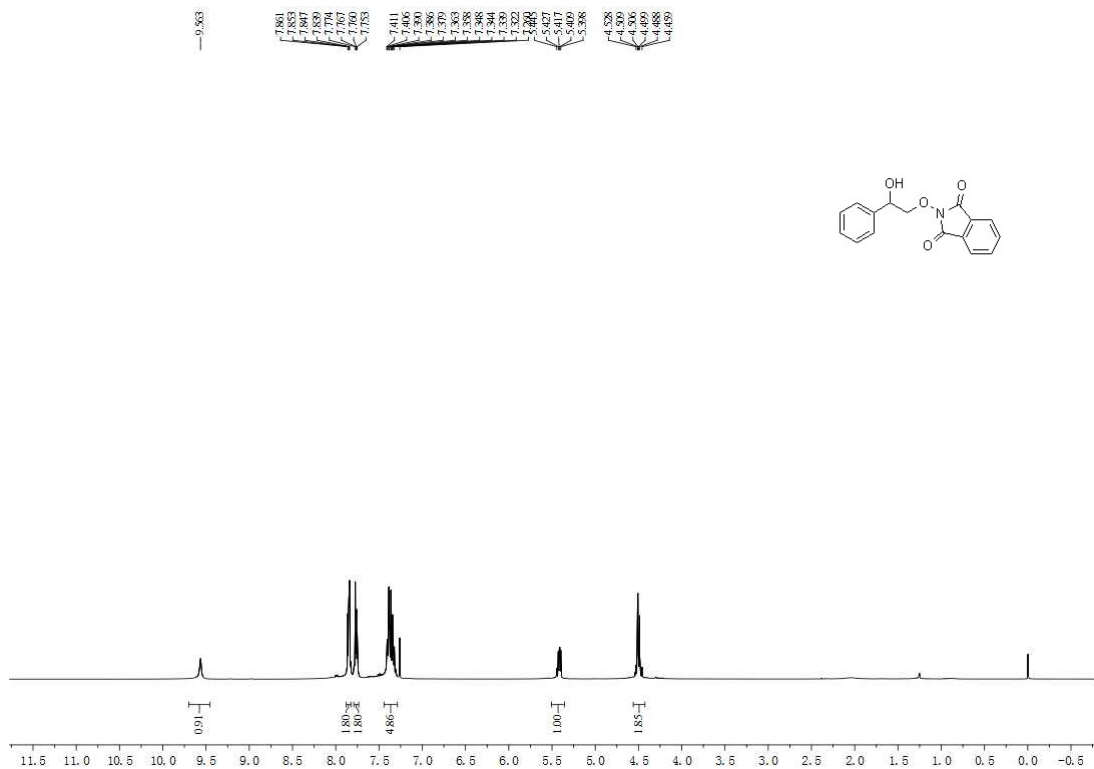


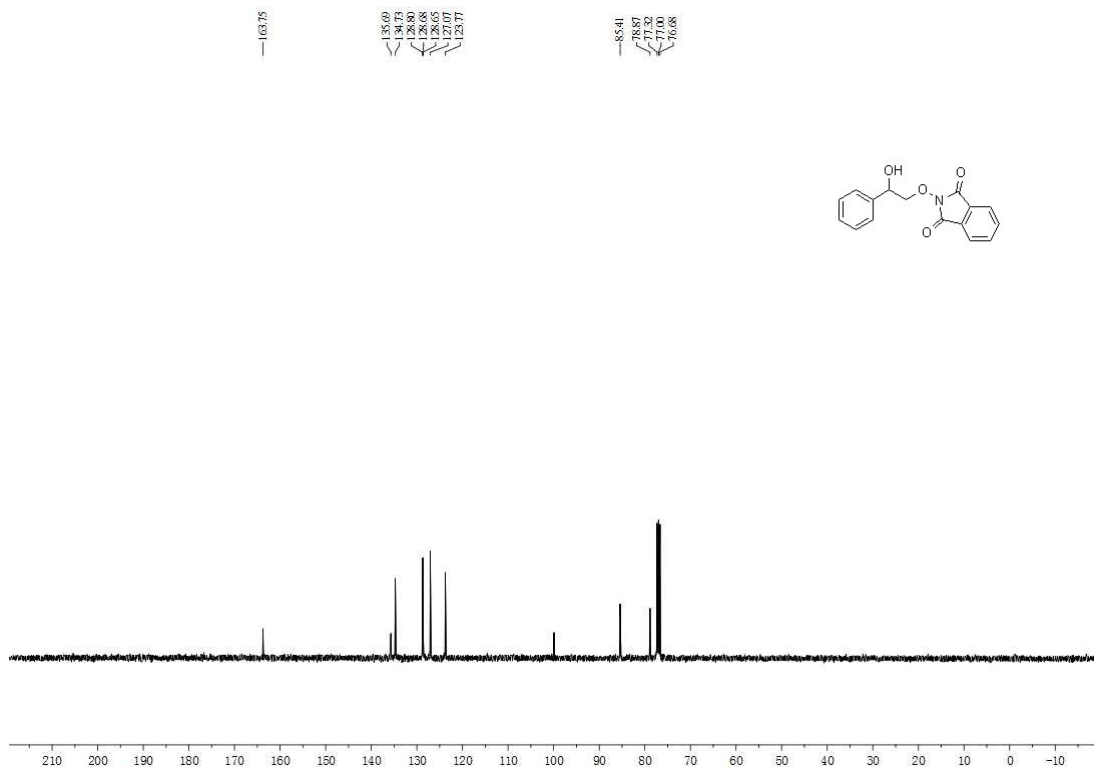
Product 3r



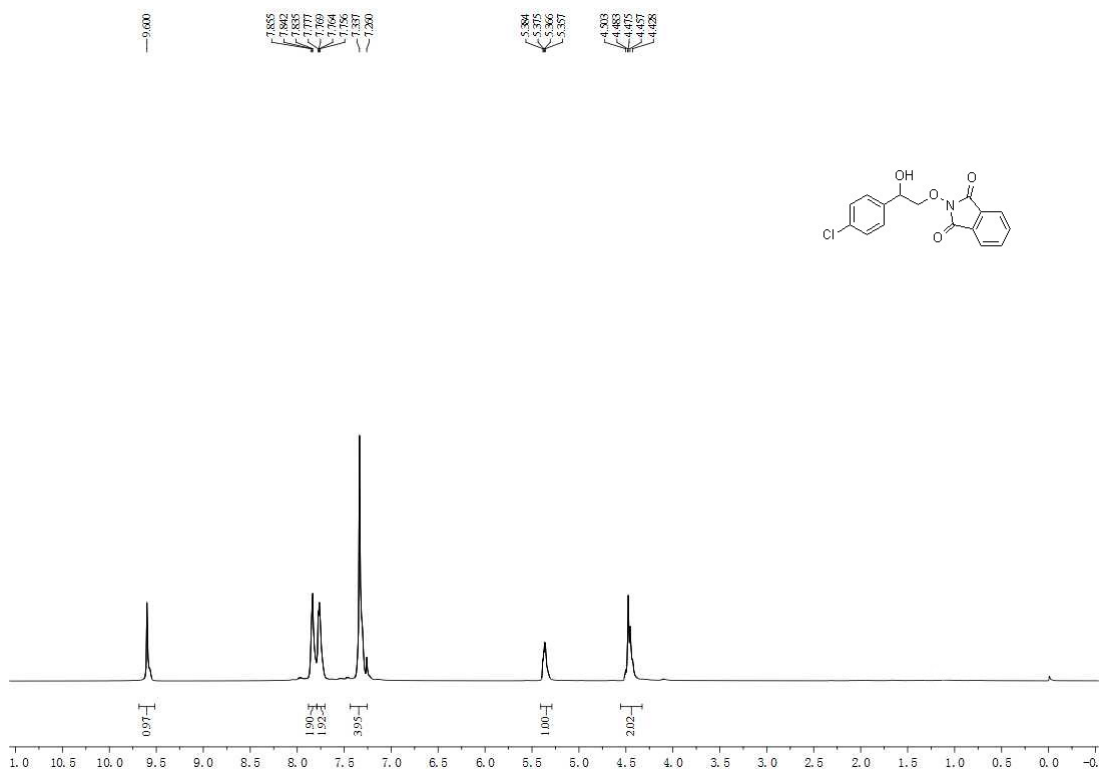


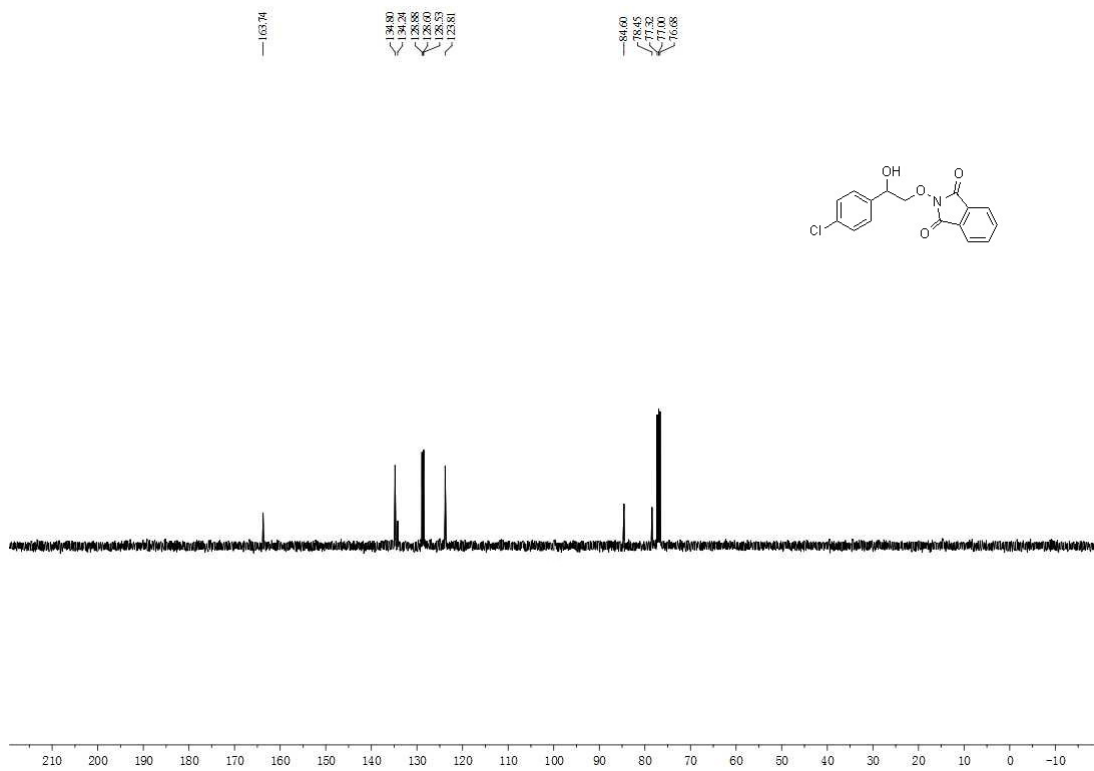
Product 3s



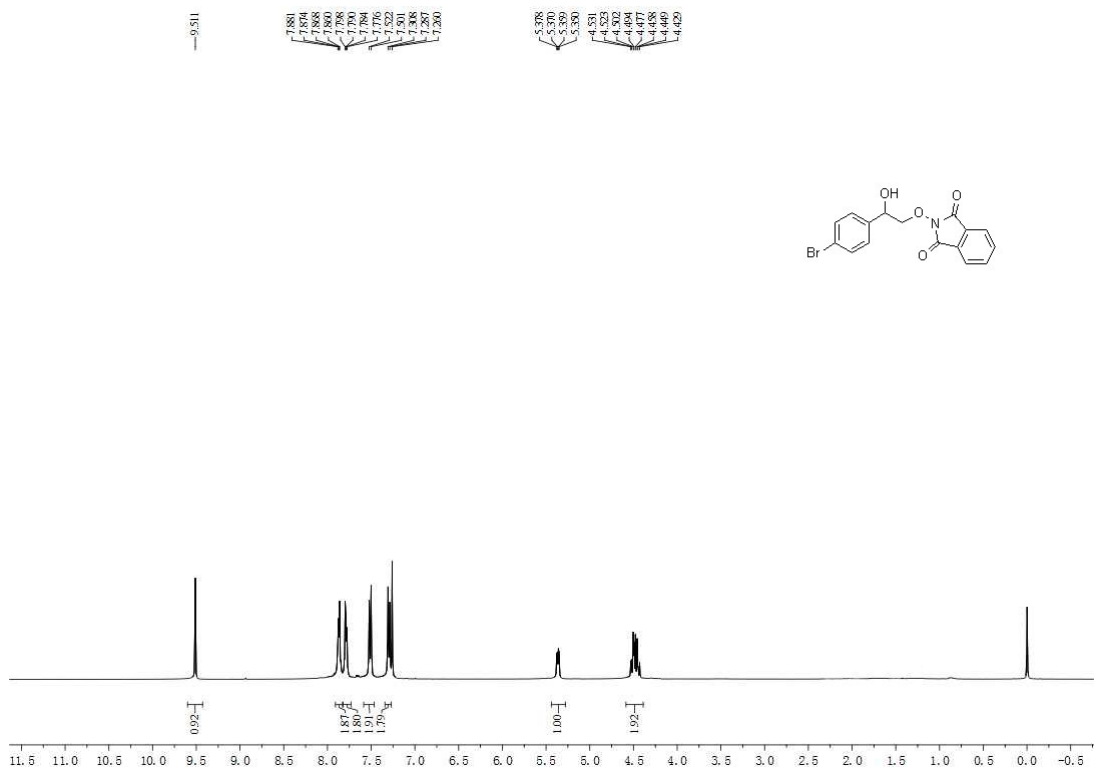


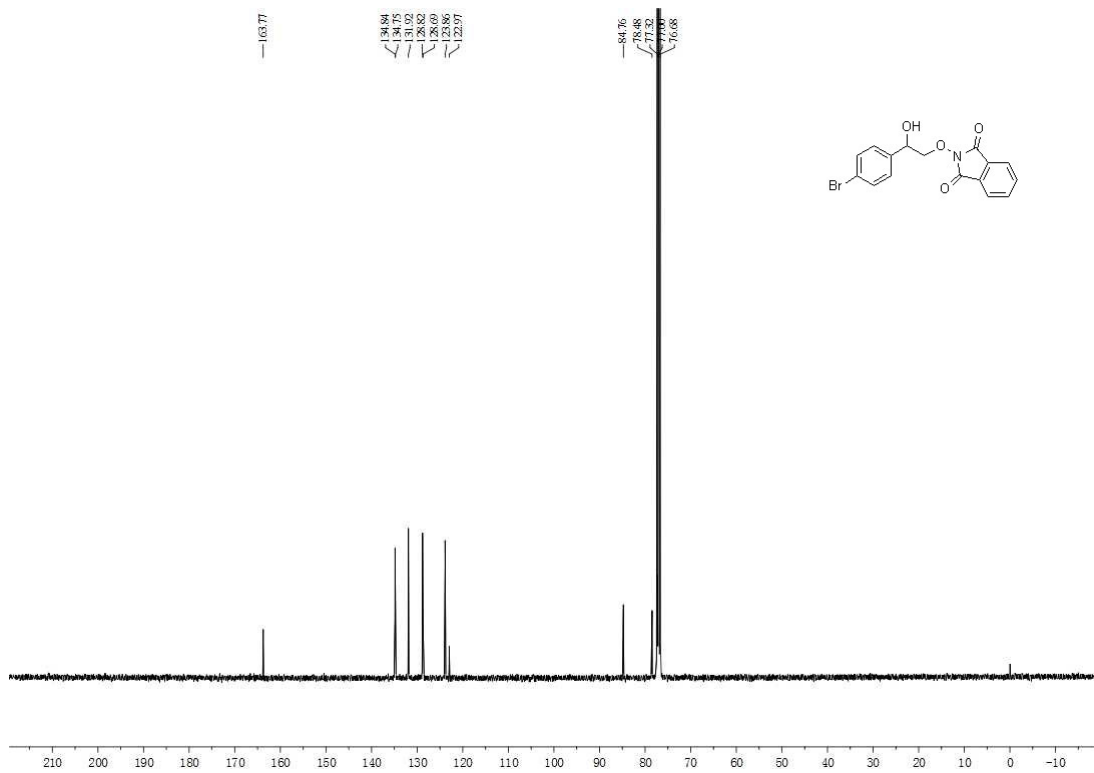
Product 3t



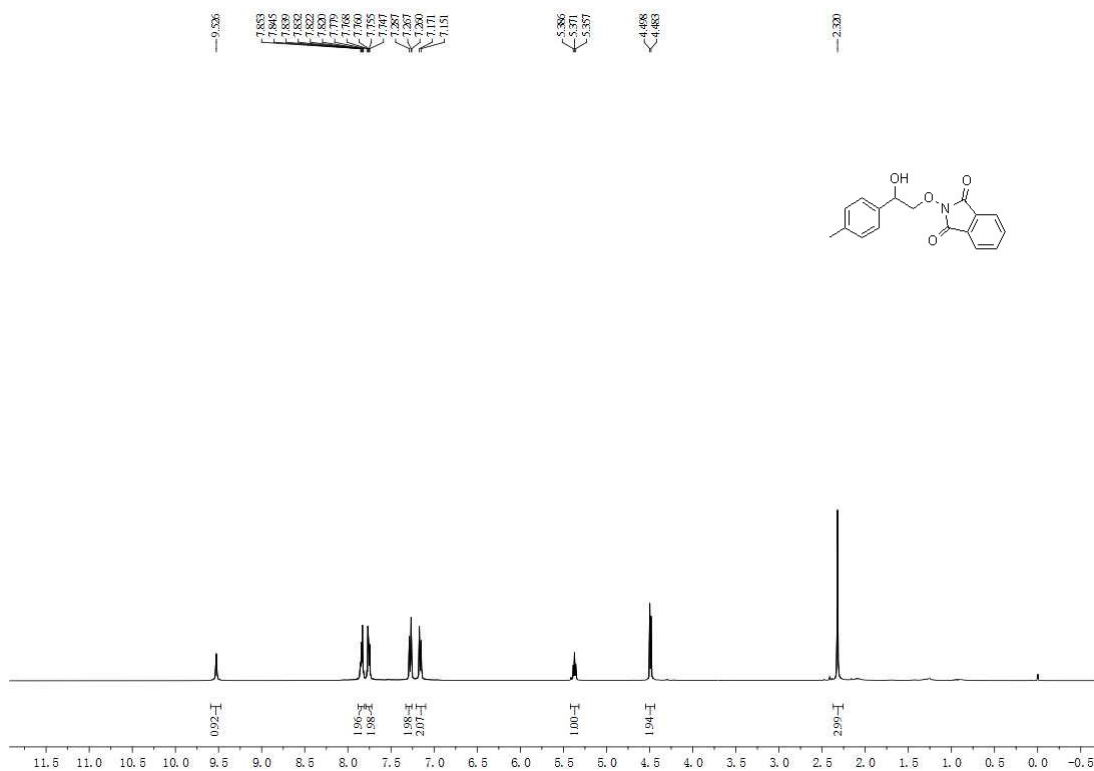


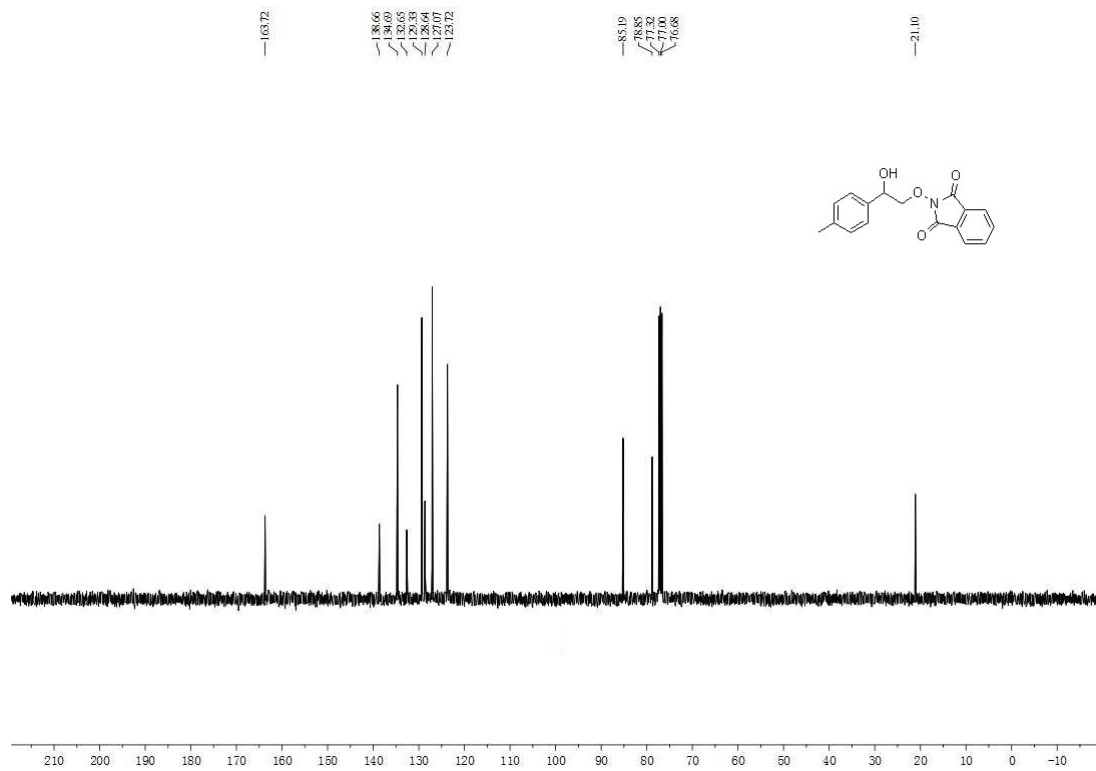
Product 3u



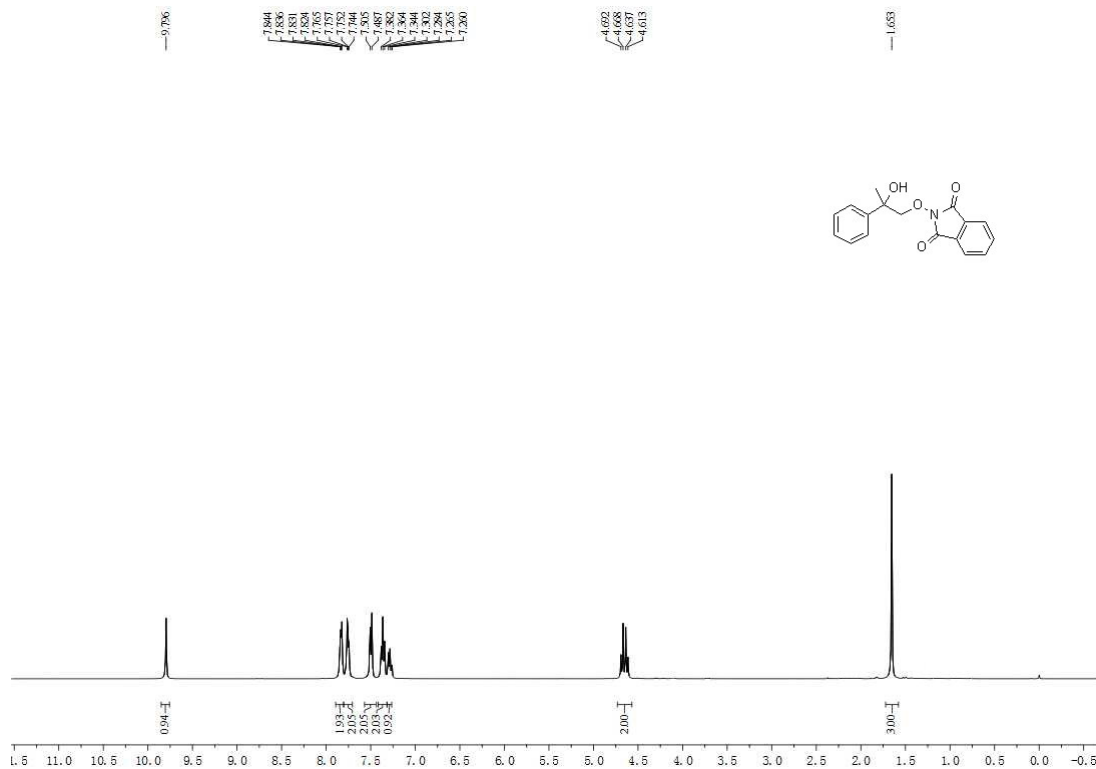


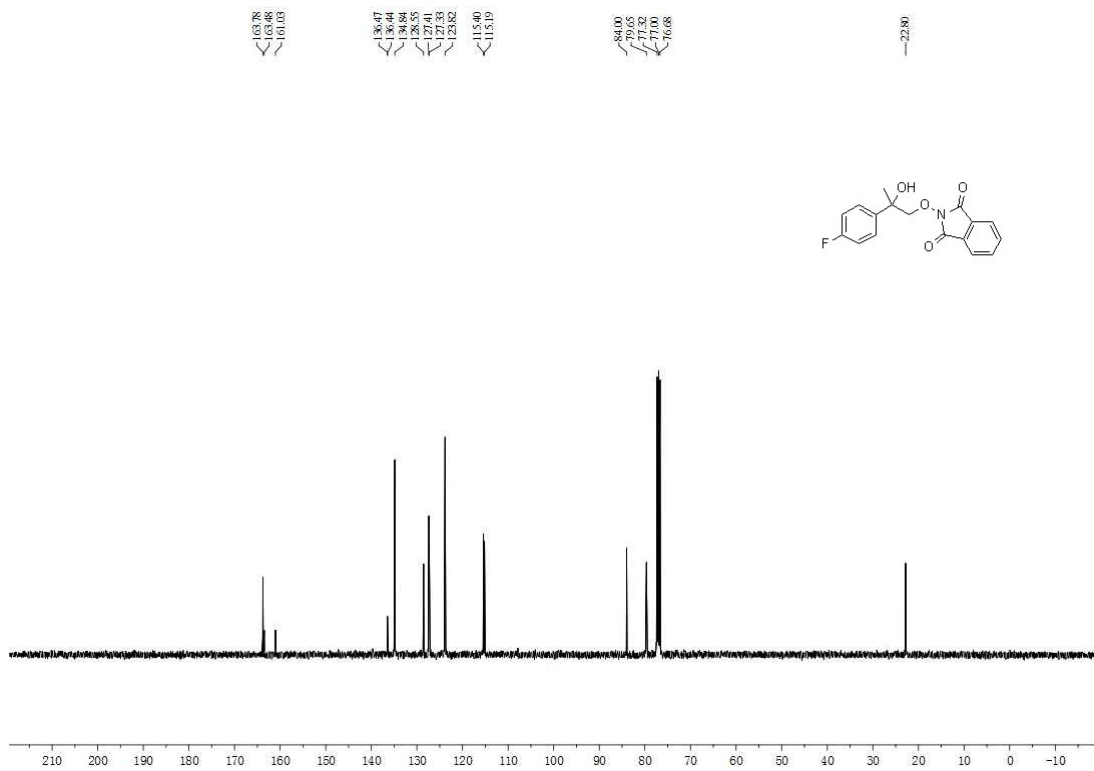
Product 3v



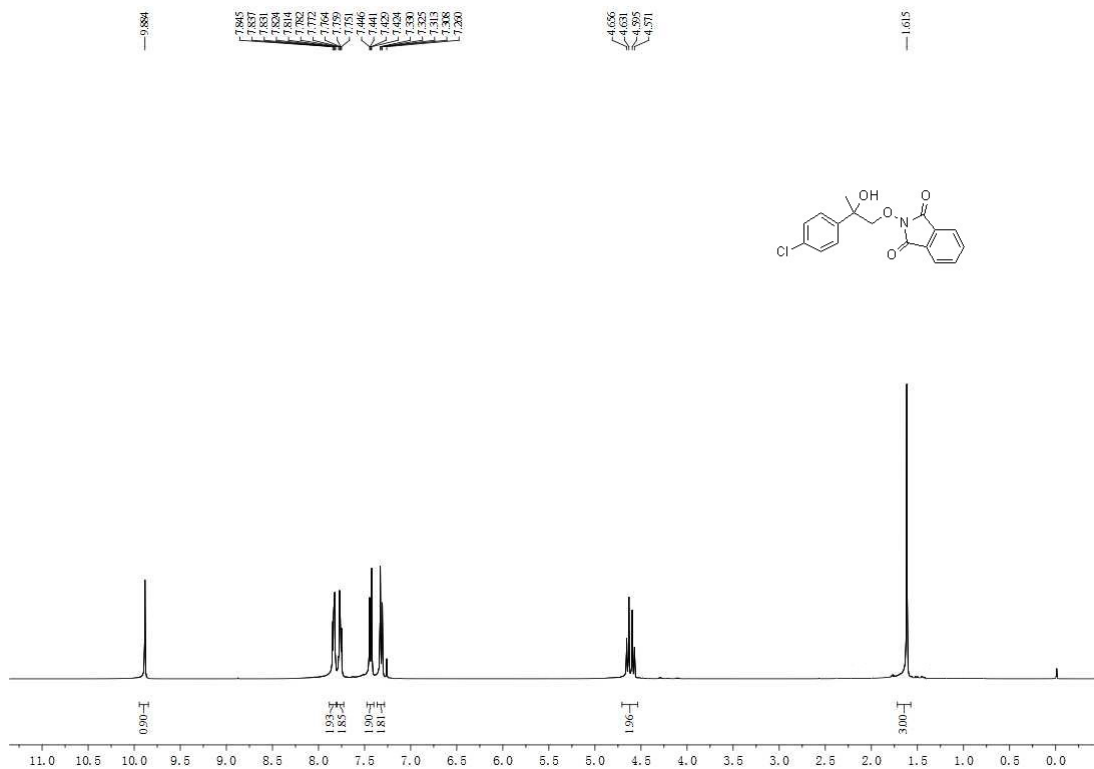


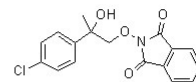
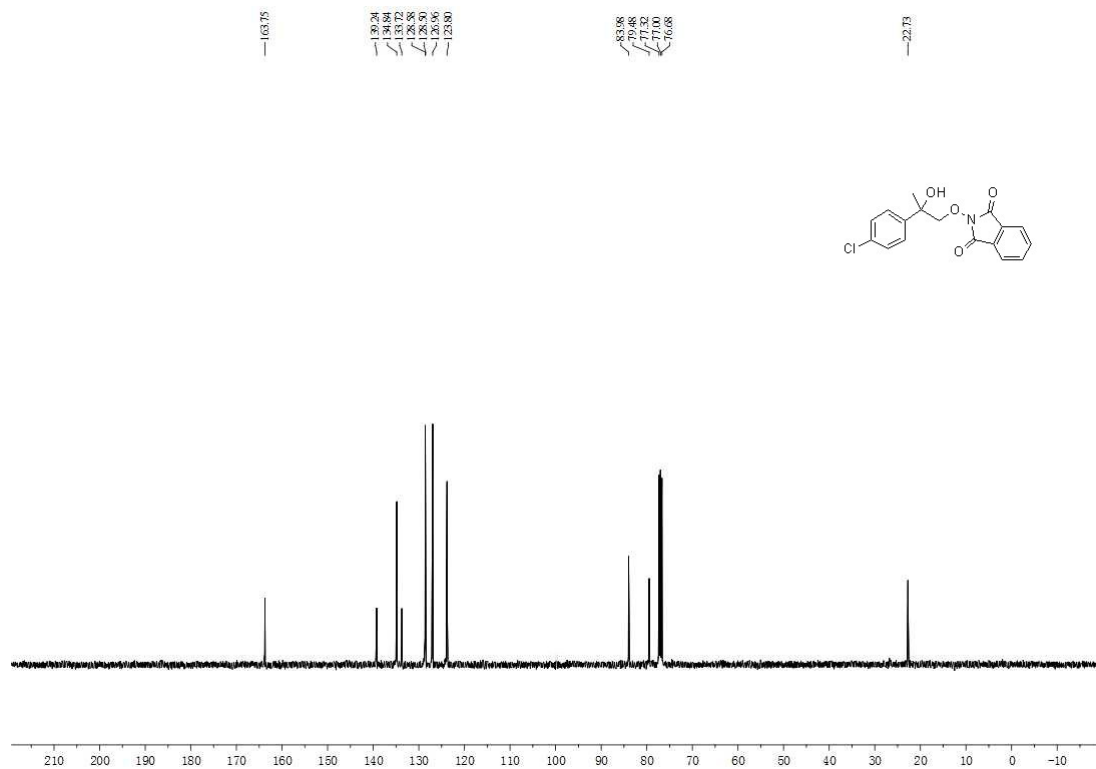
Product 3w



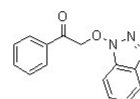
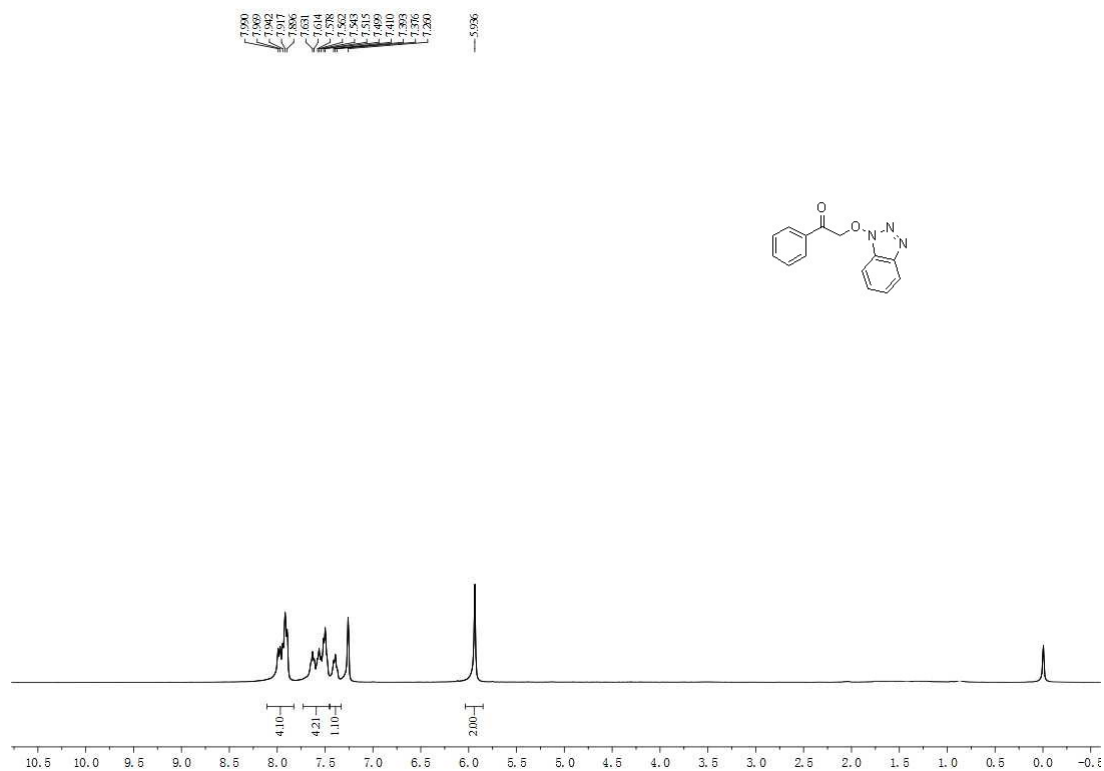


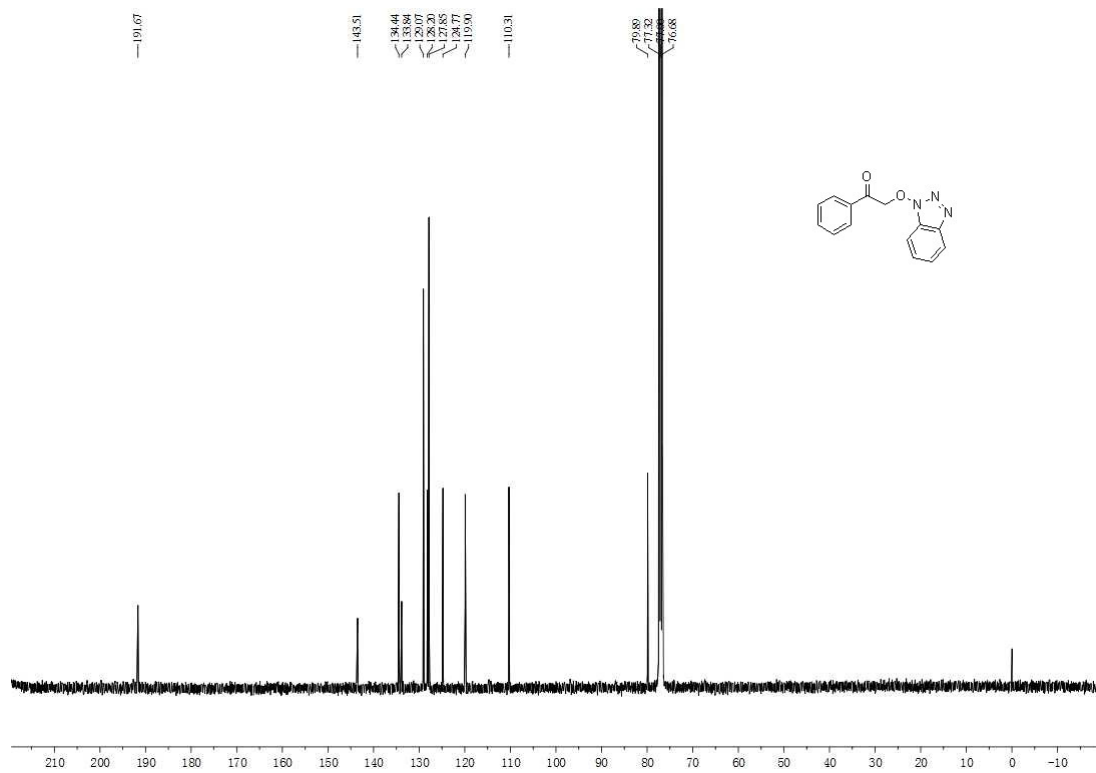
Product 3y



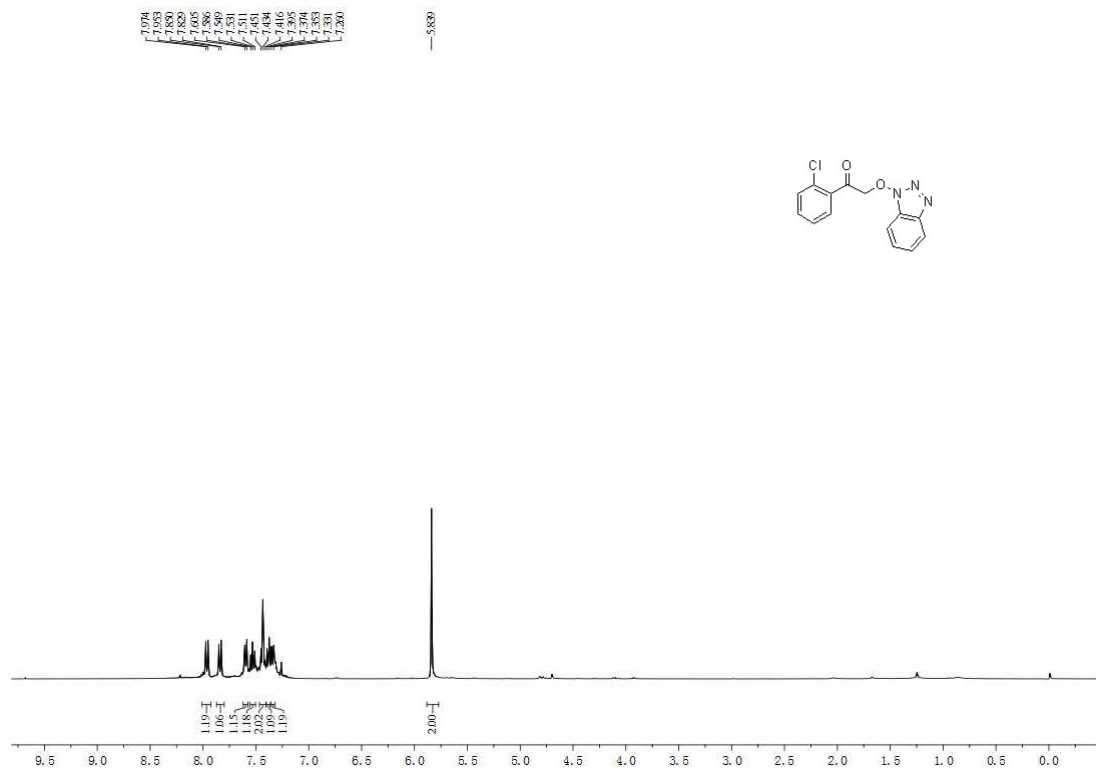


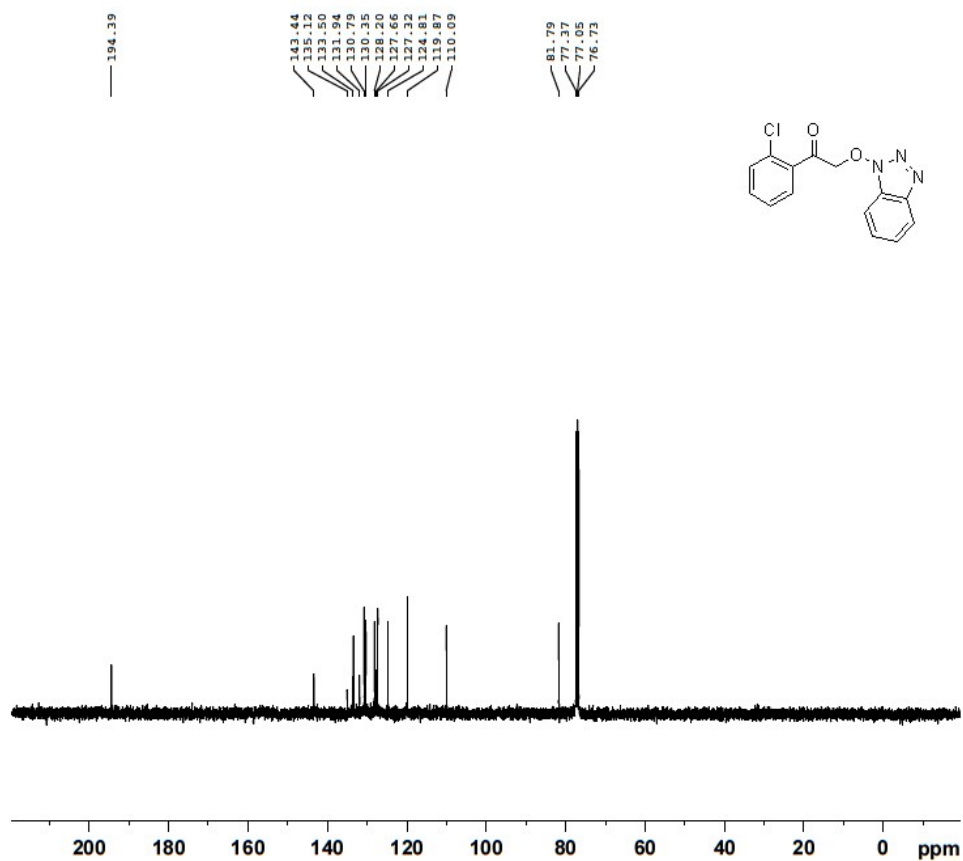
Product 4a



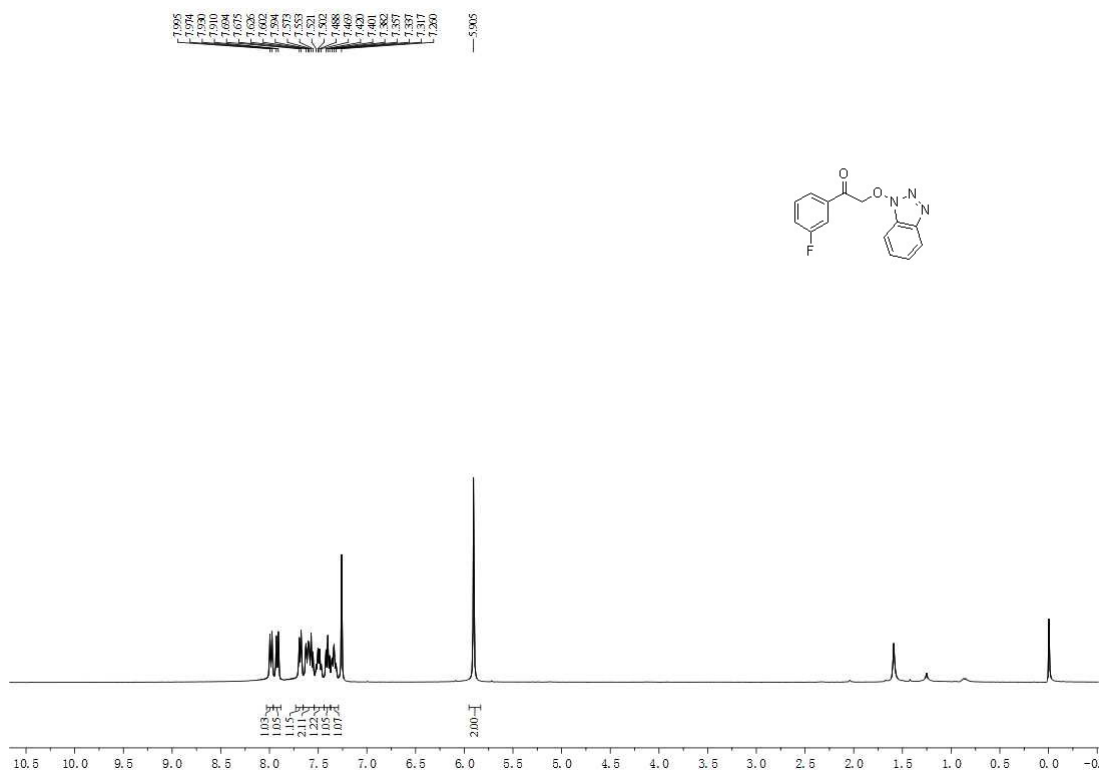


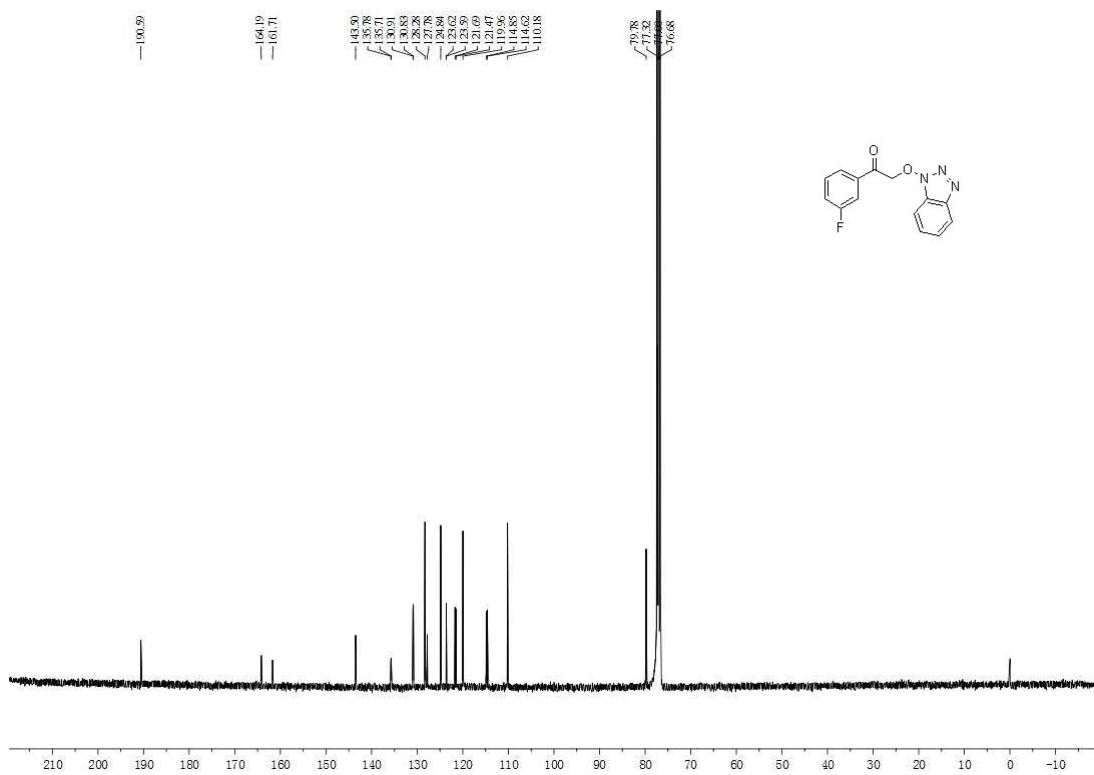
Product 4b





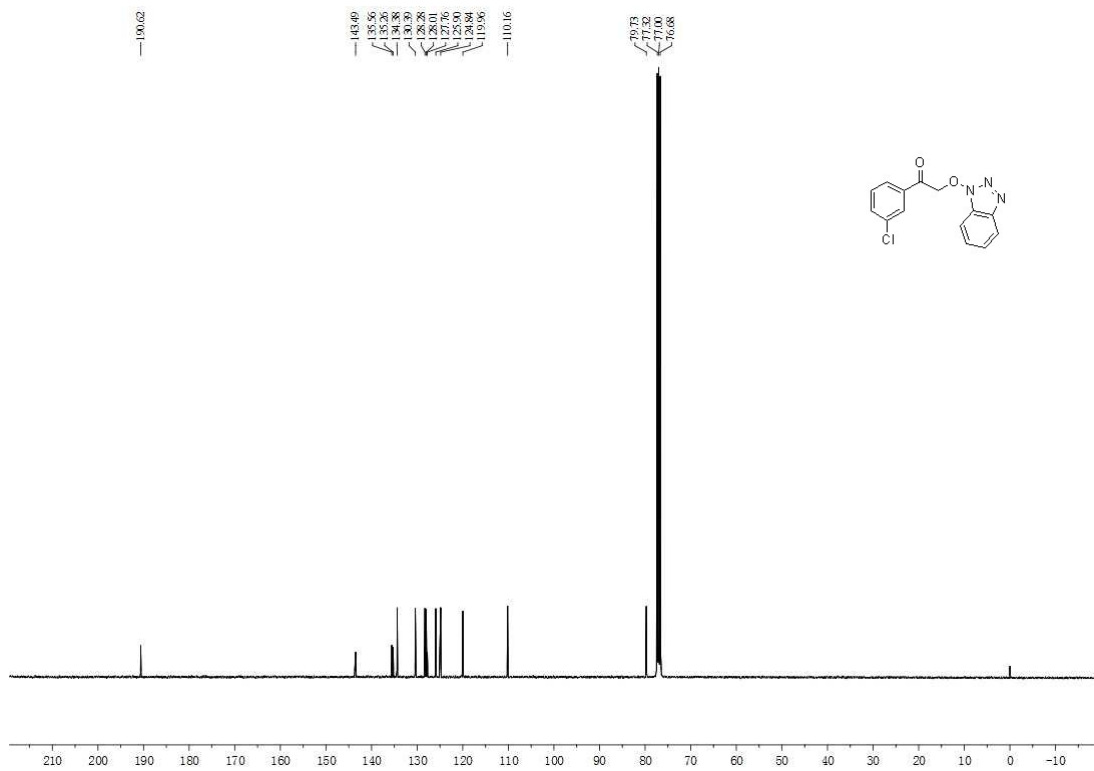
Product 4c



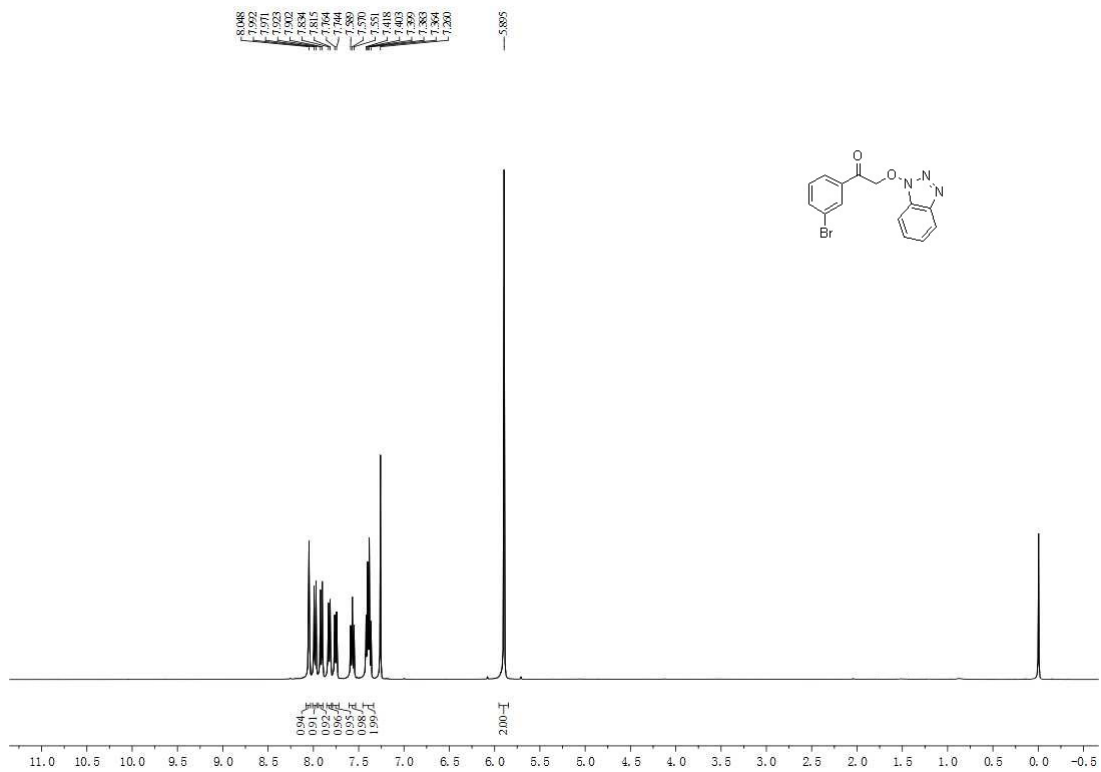


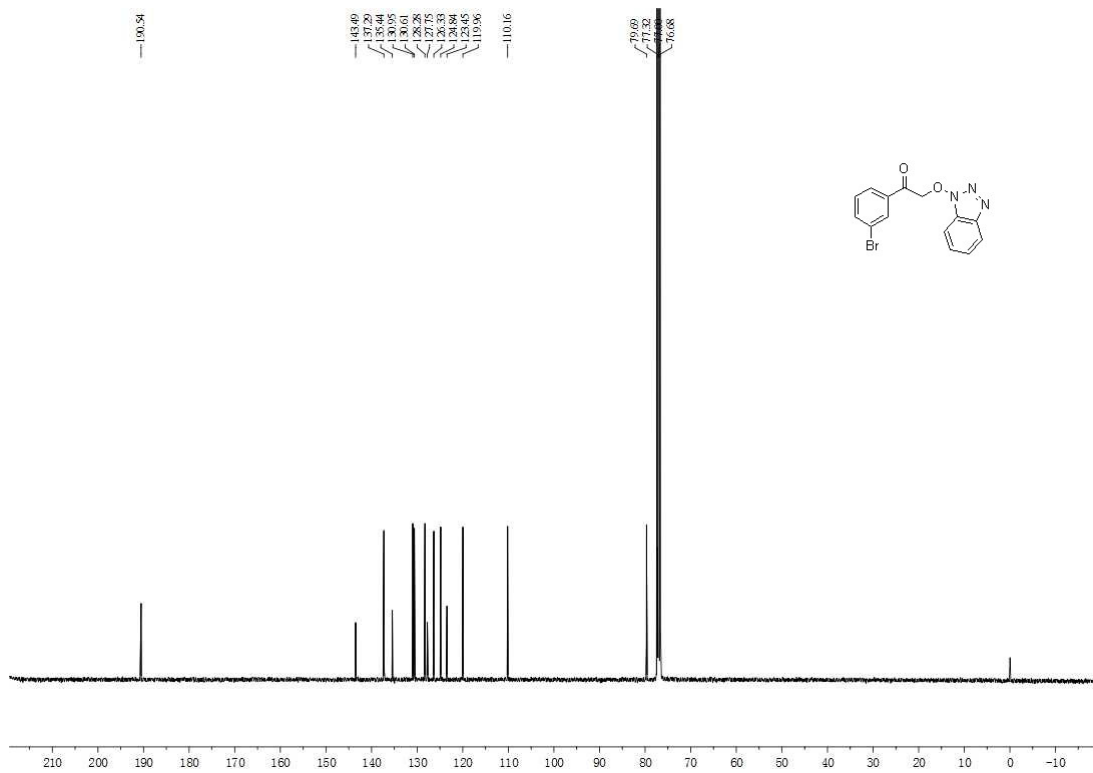
Product 4d



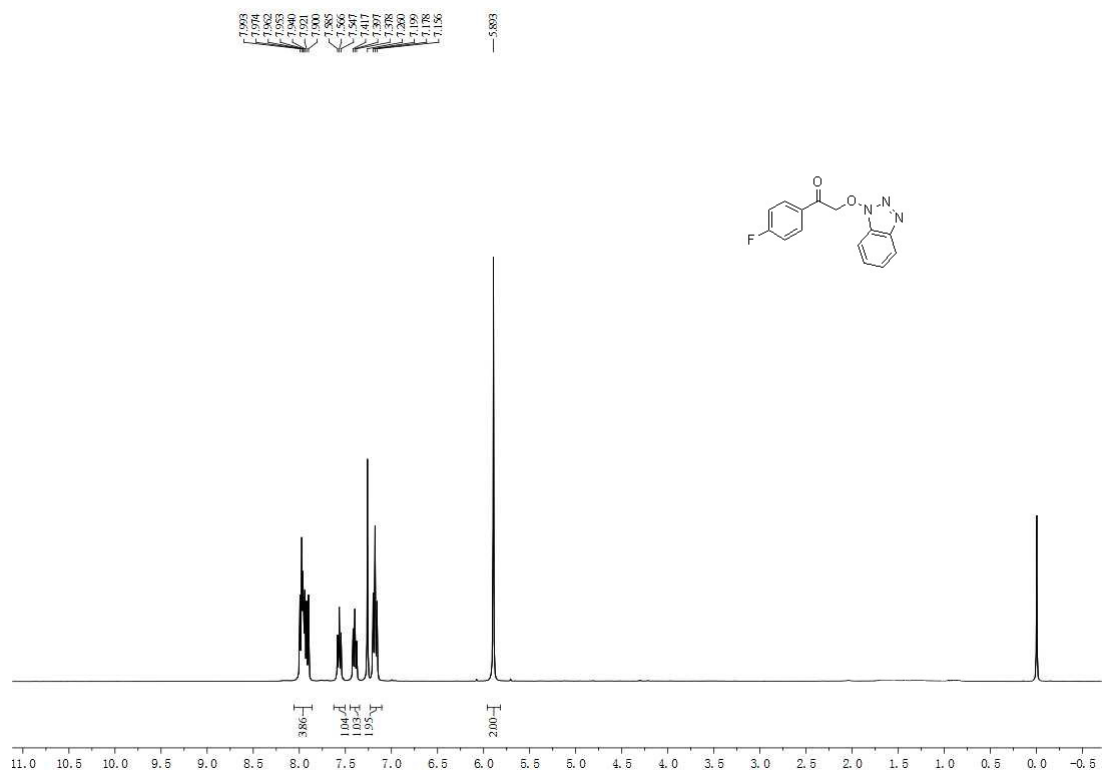


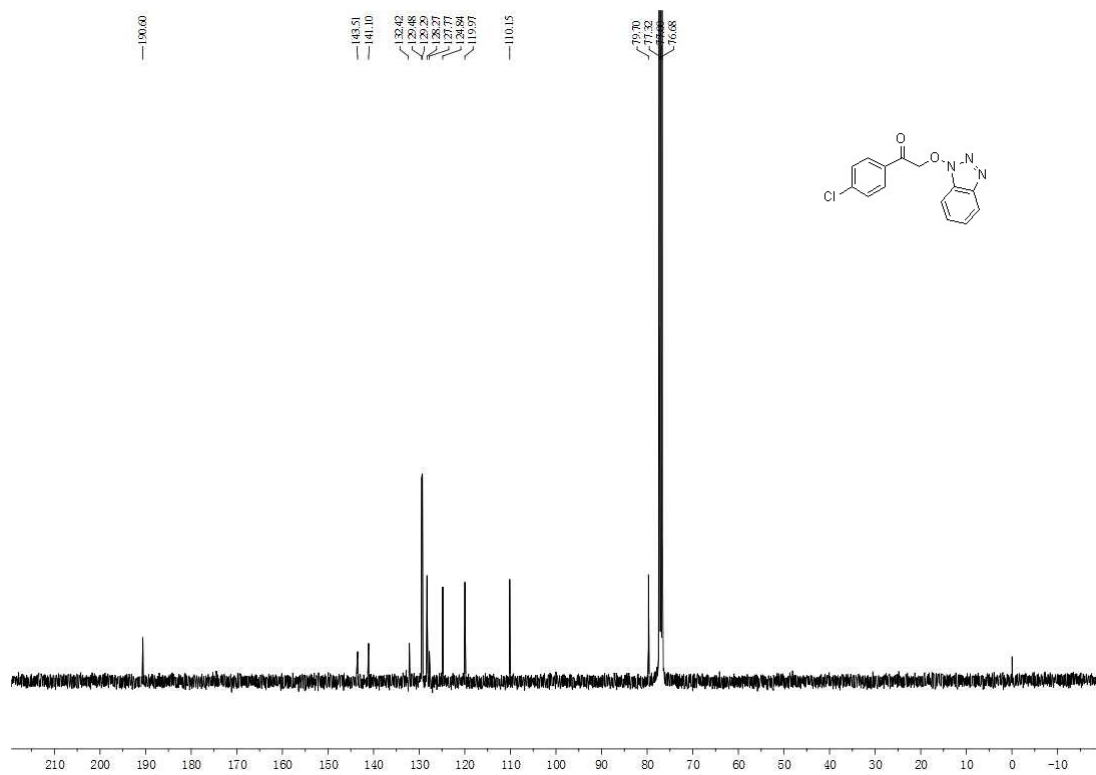
Product 4e



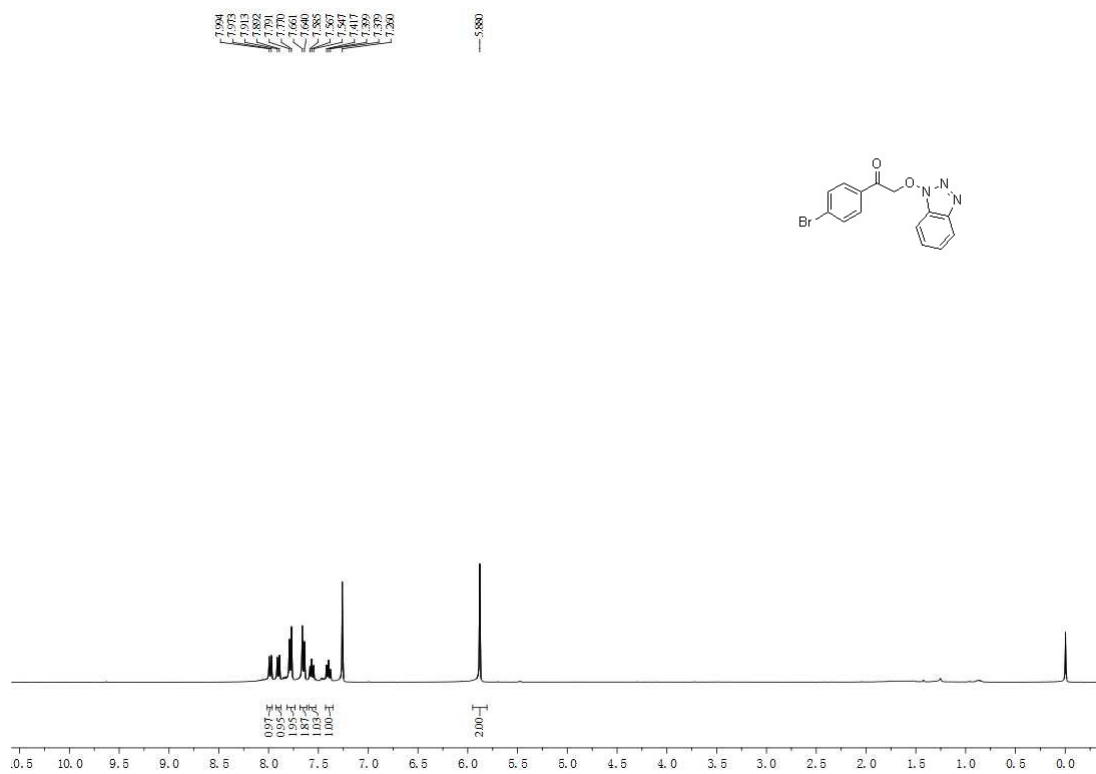


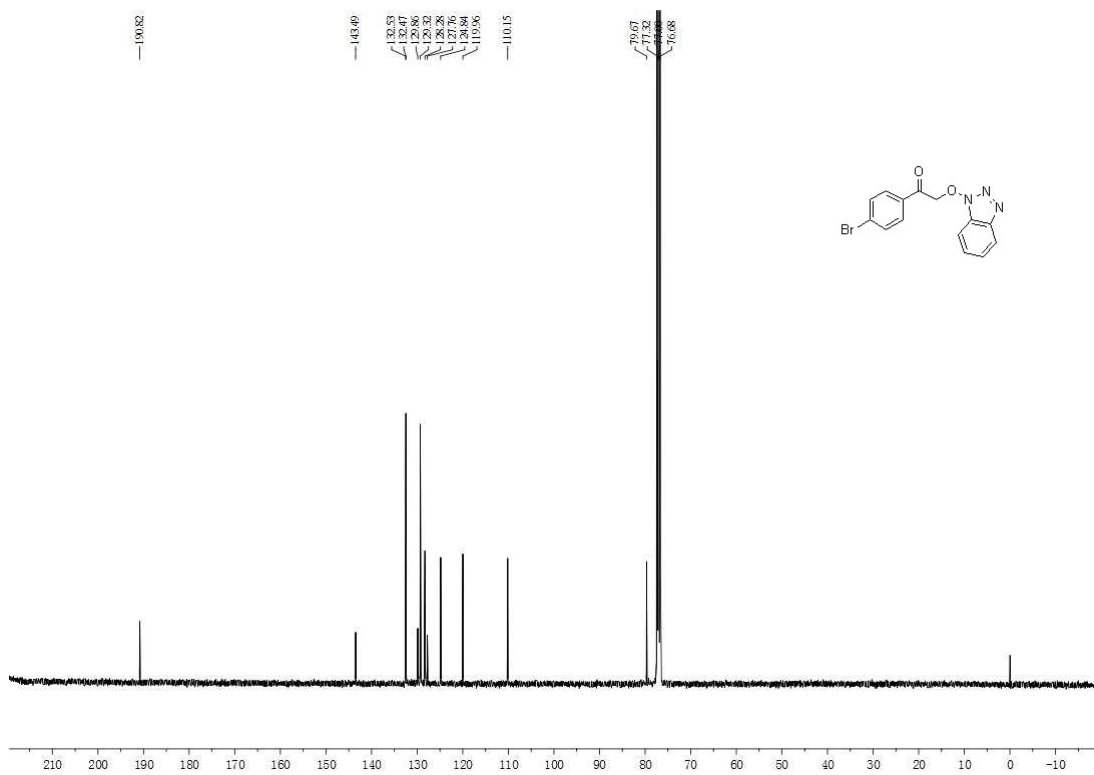
Product 4f



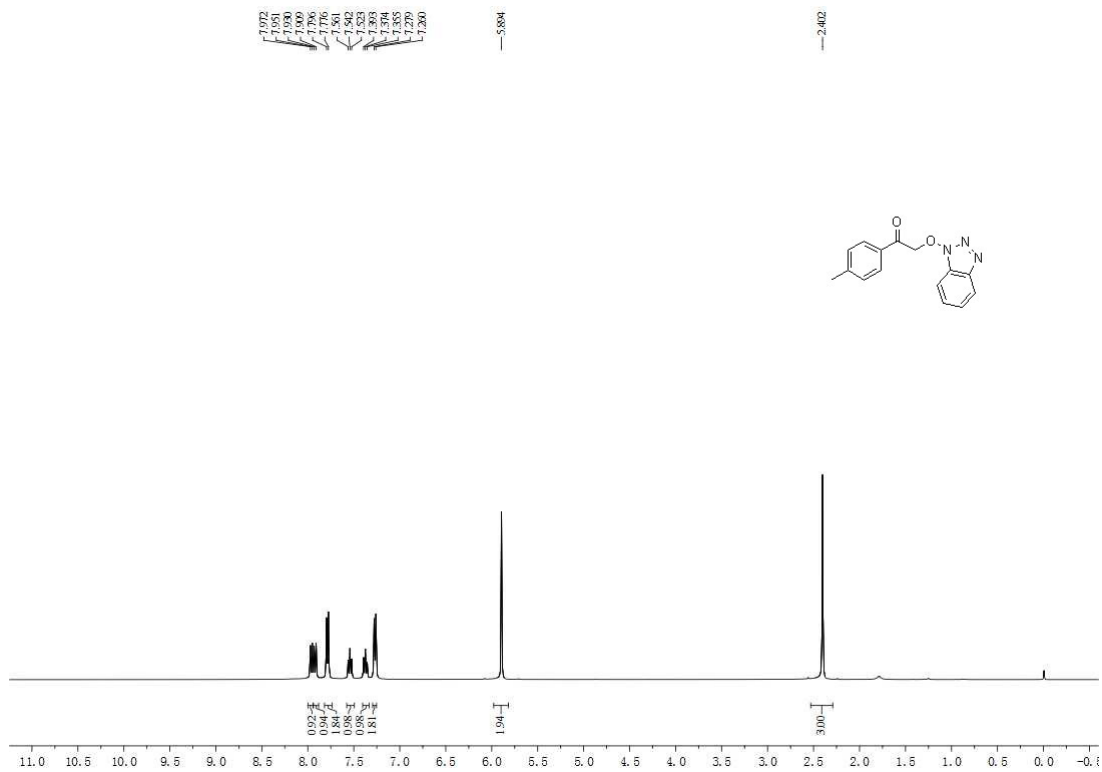


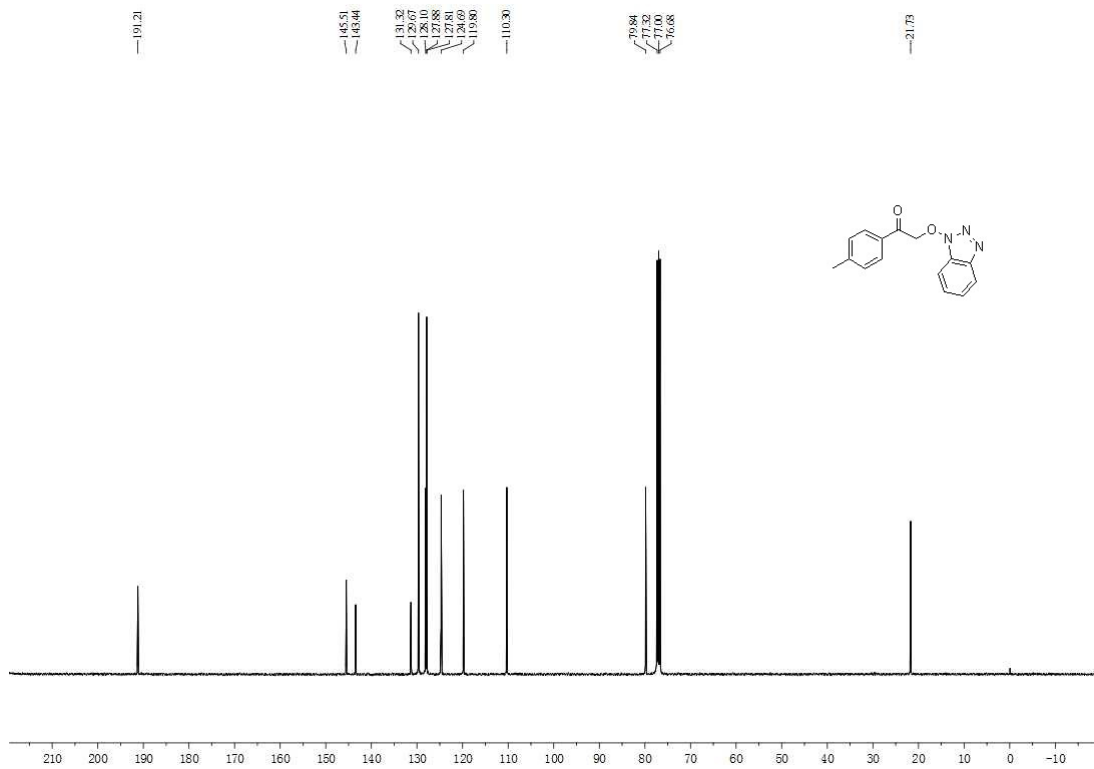
Product 4h



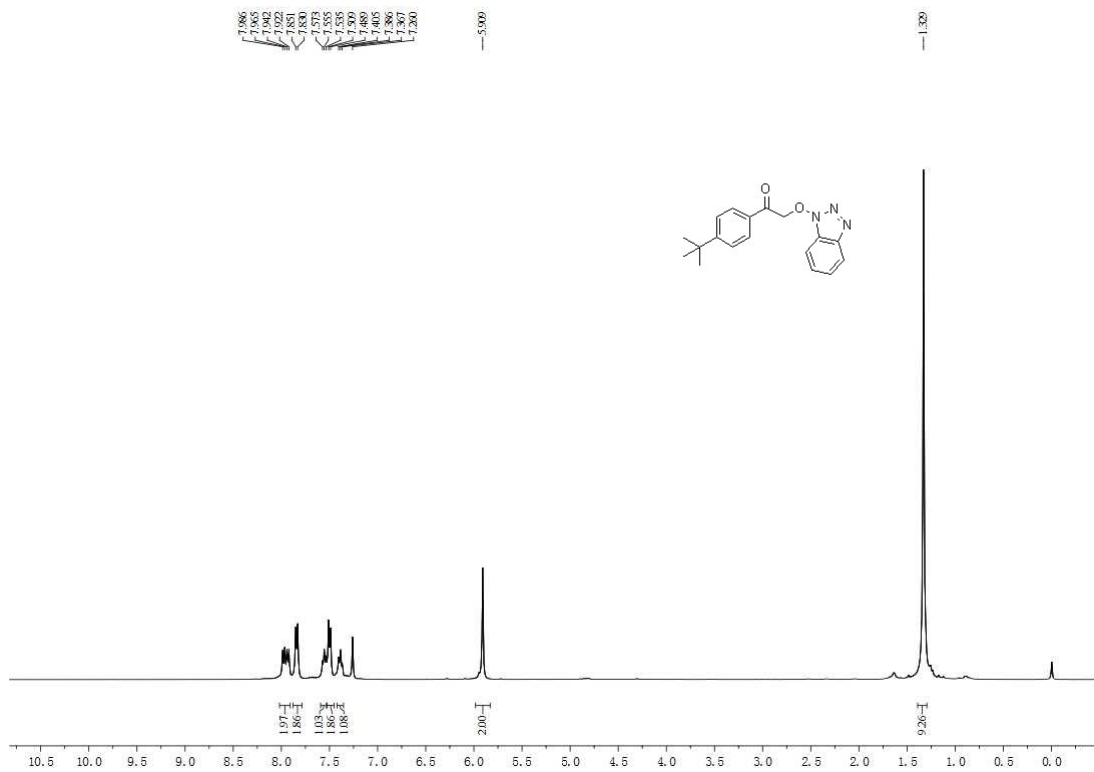


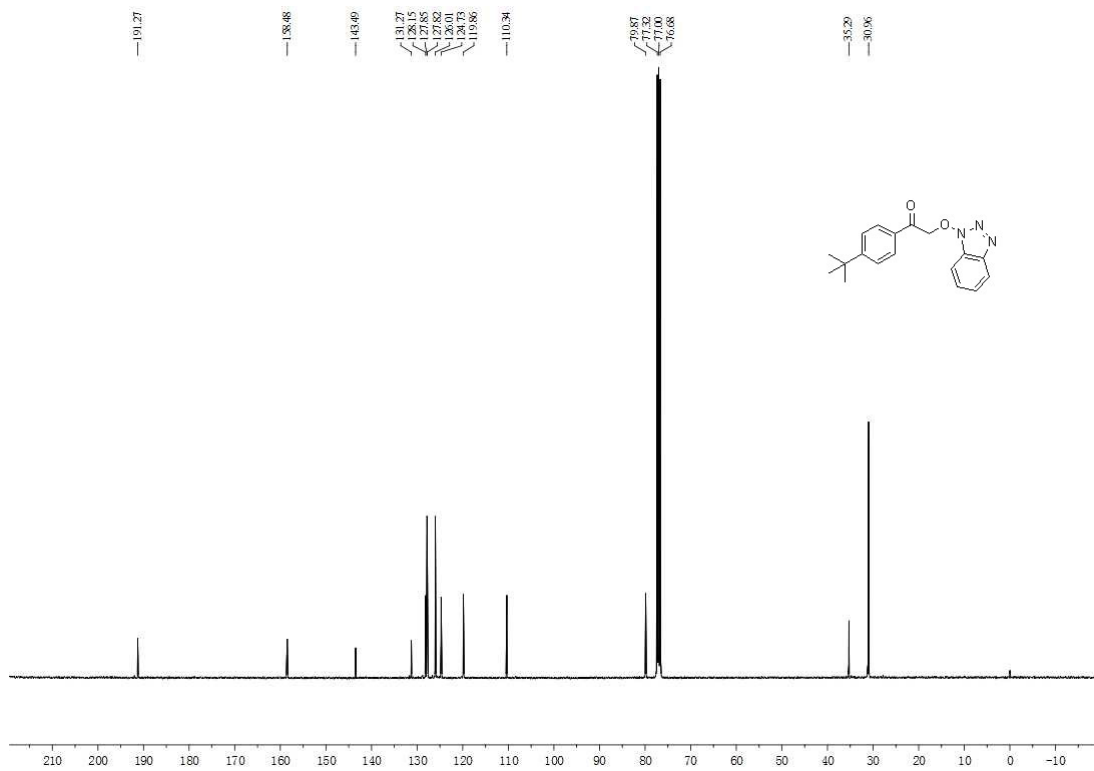
Product 4i



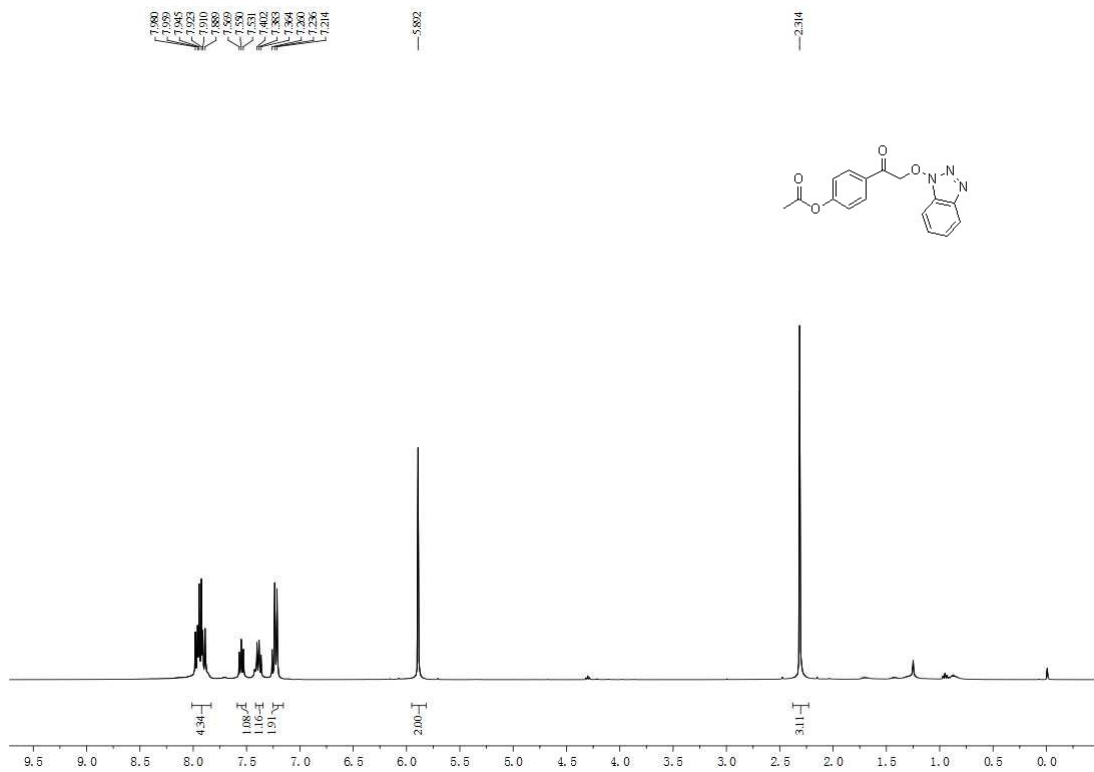


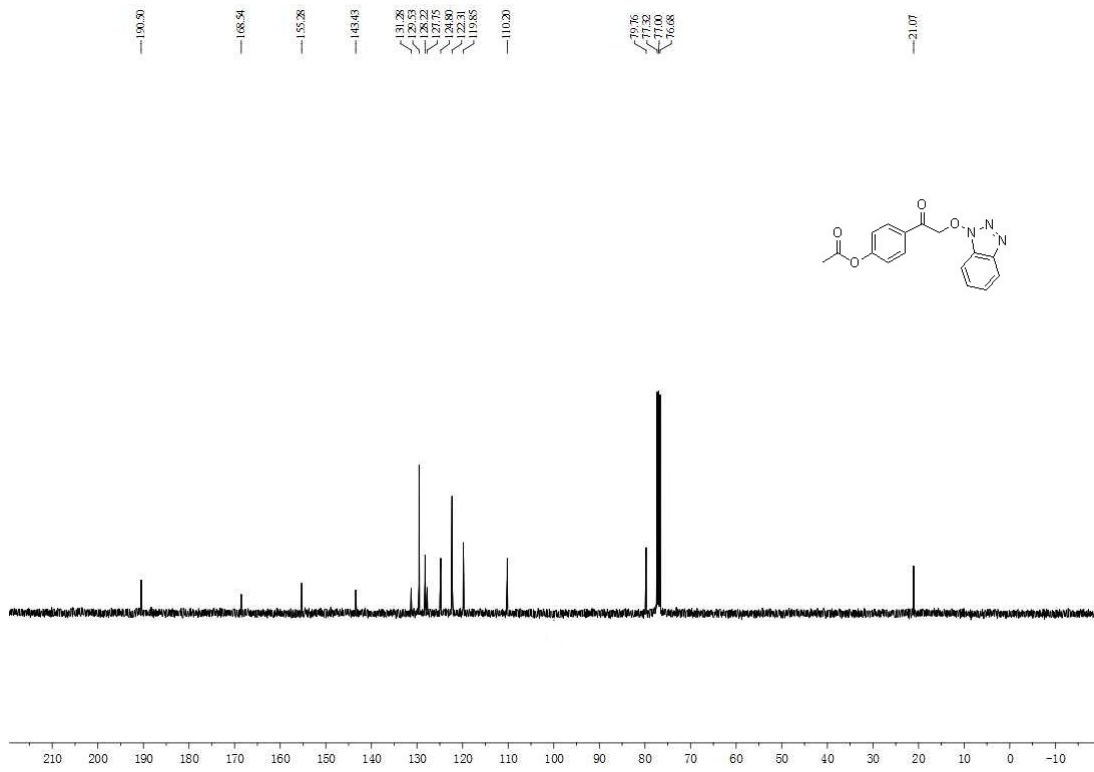
Product 4j



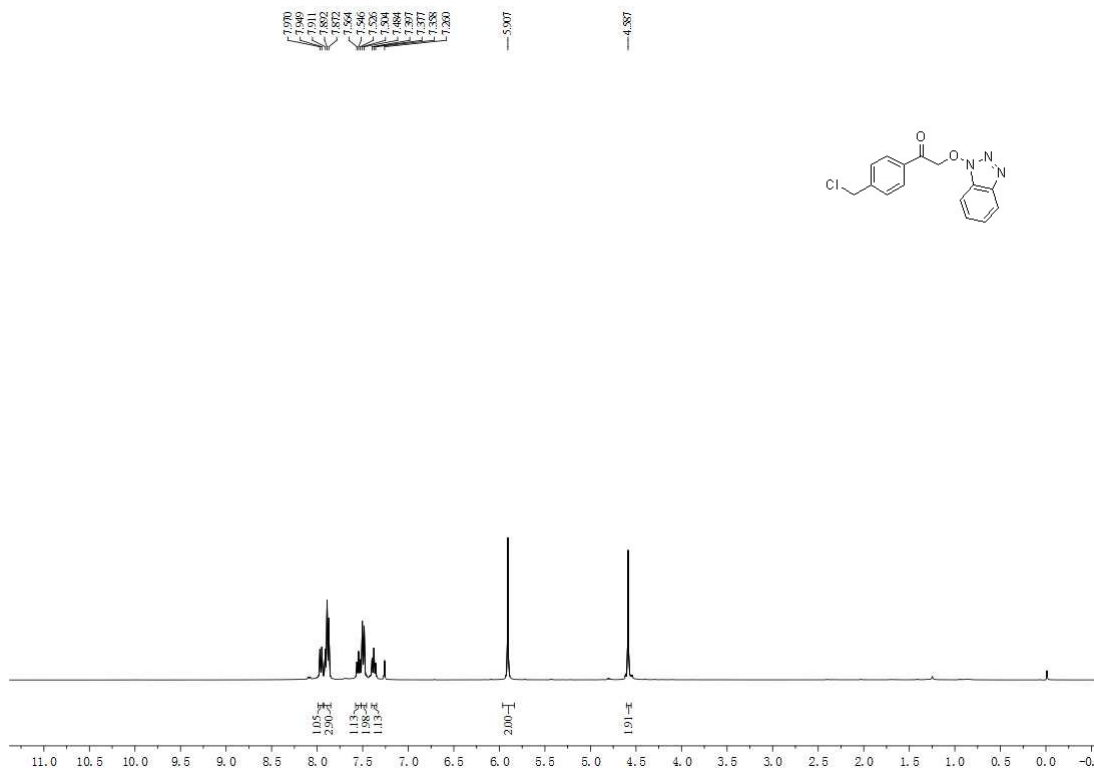


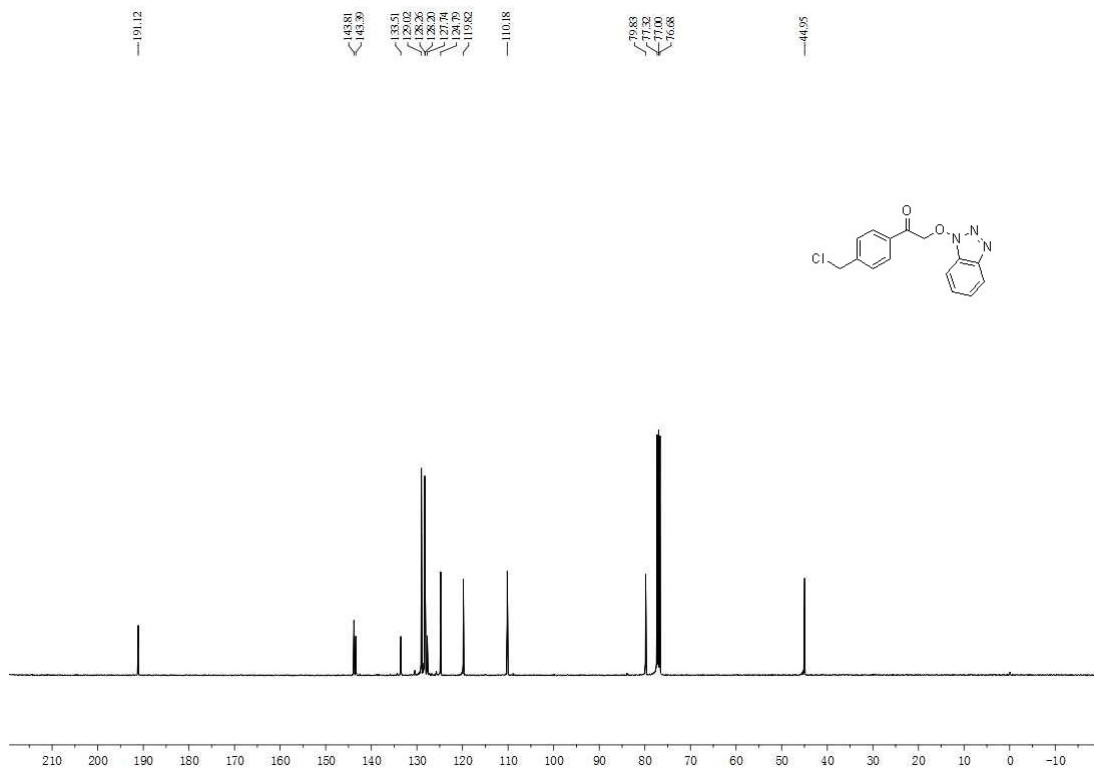
Product 4k



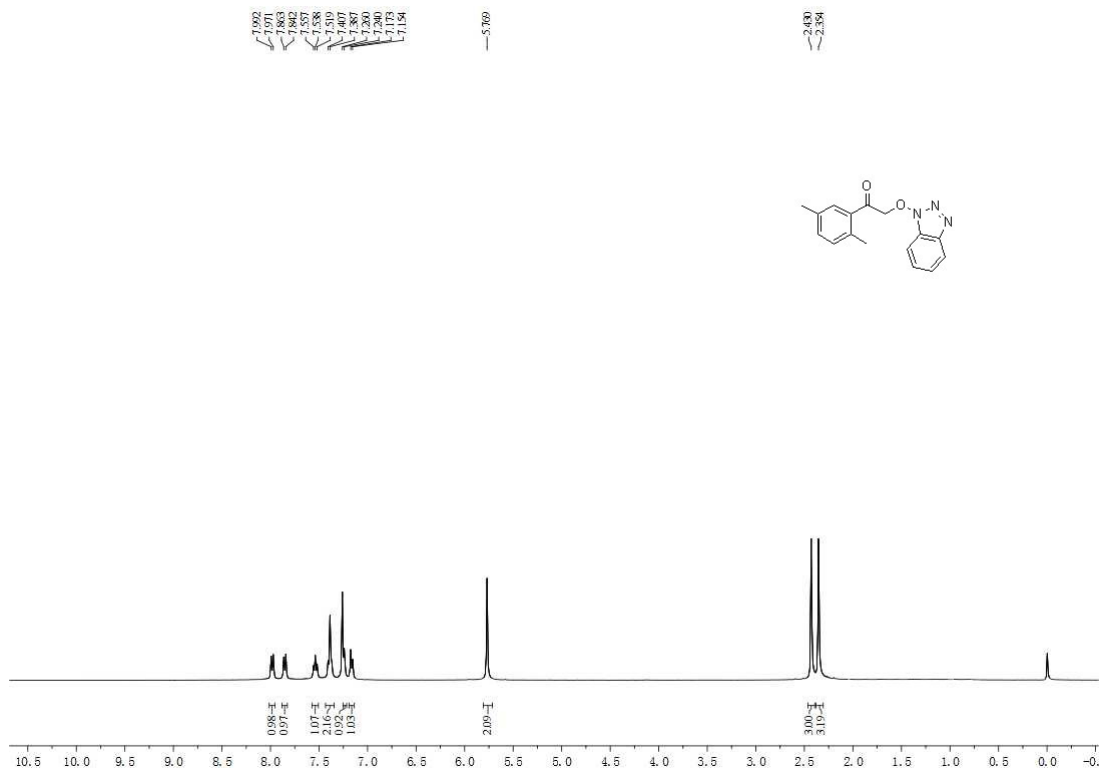


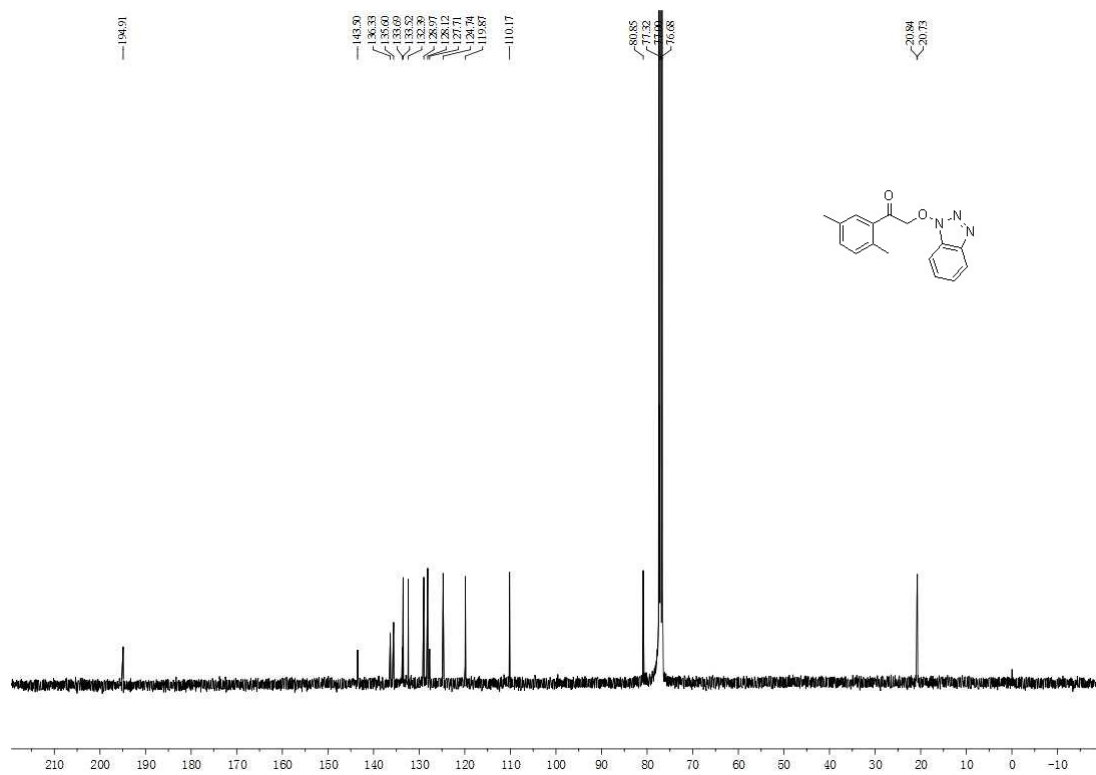
Product 41



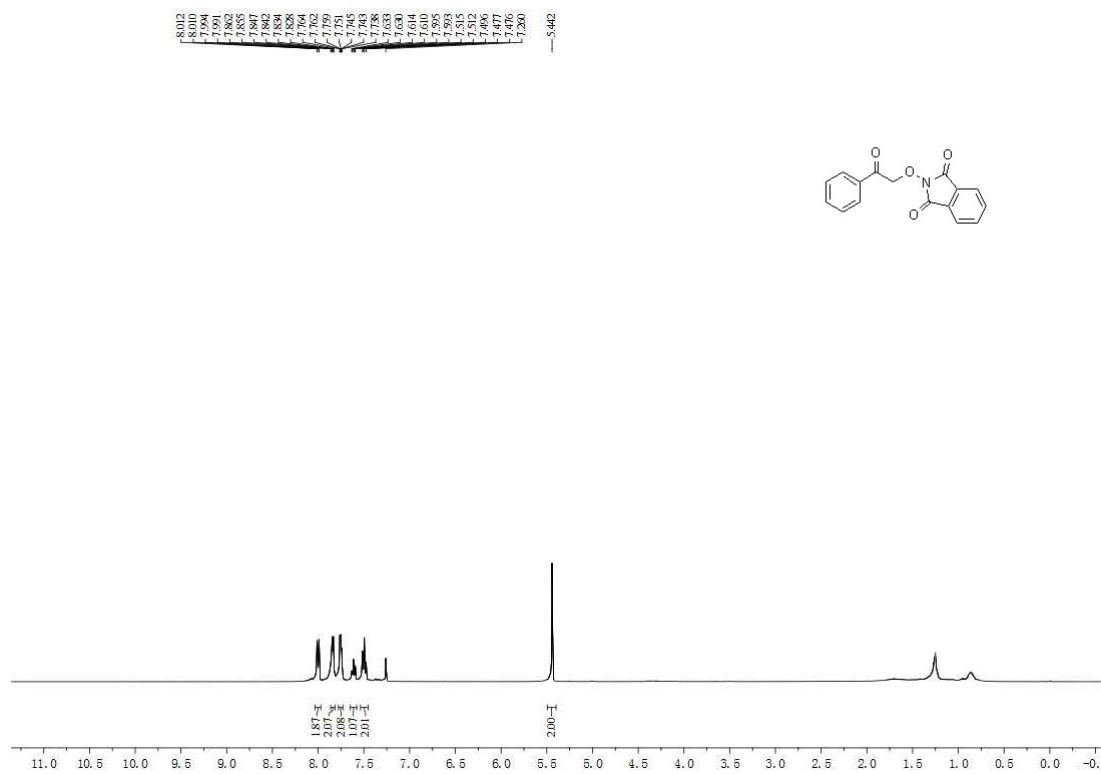


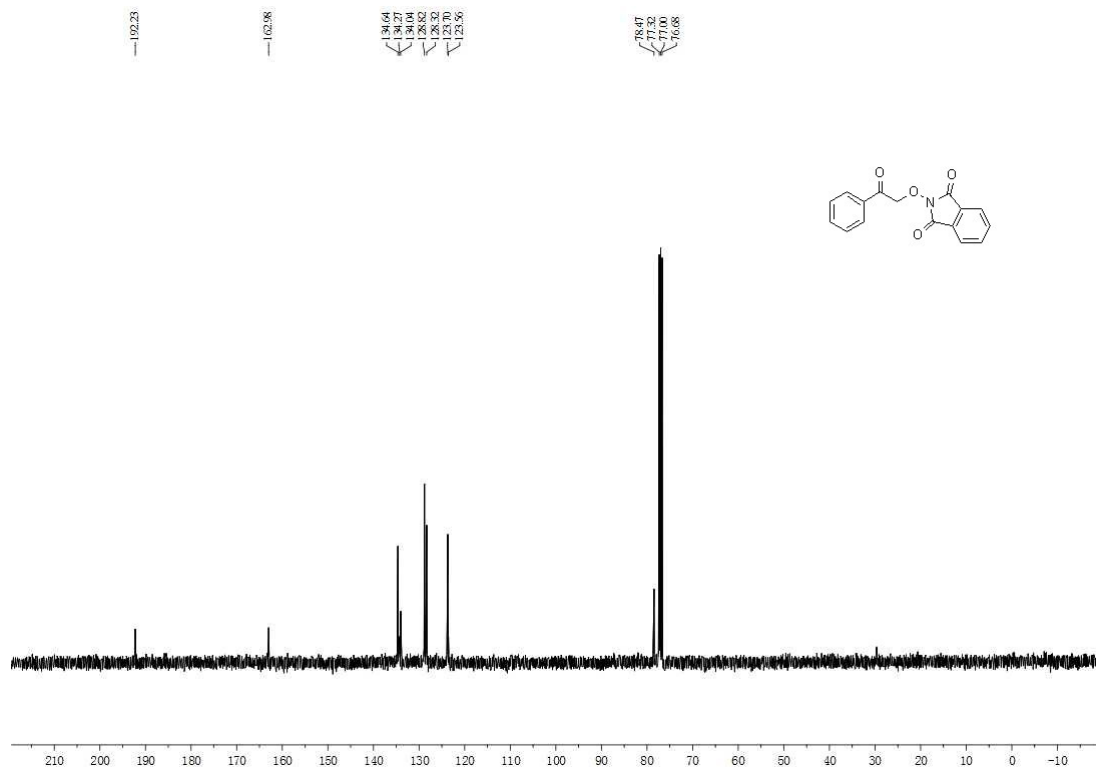
Product 4m



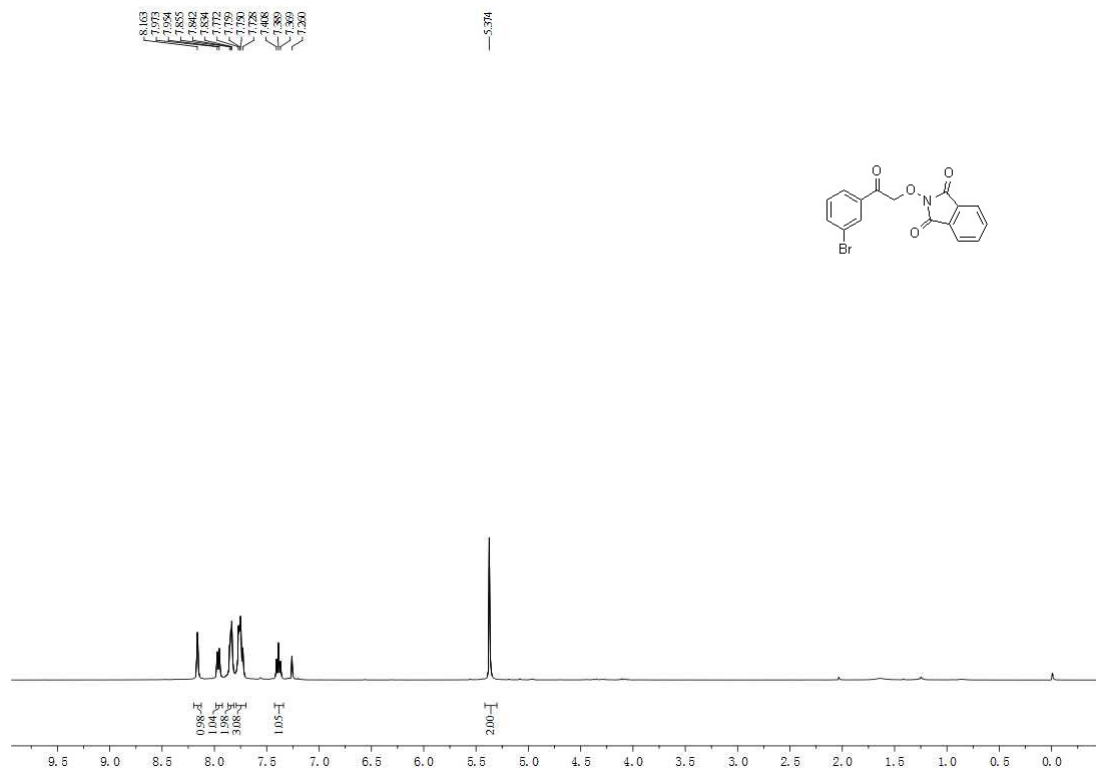


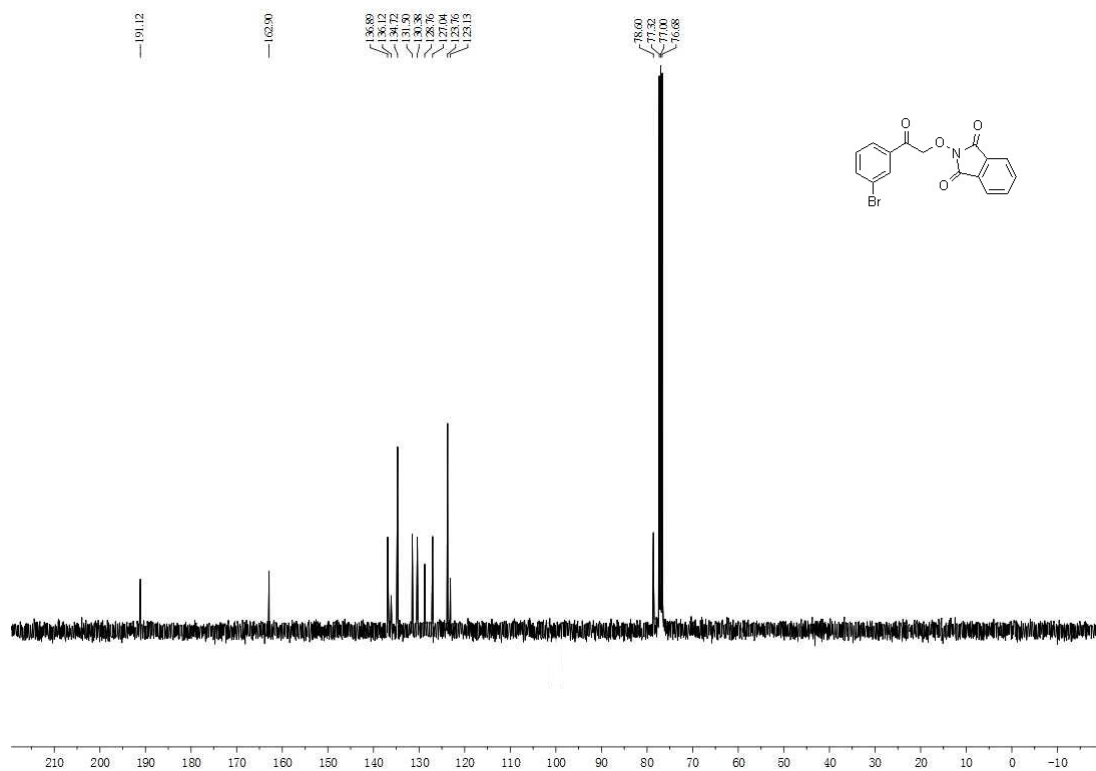
Product 4n



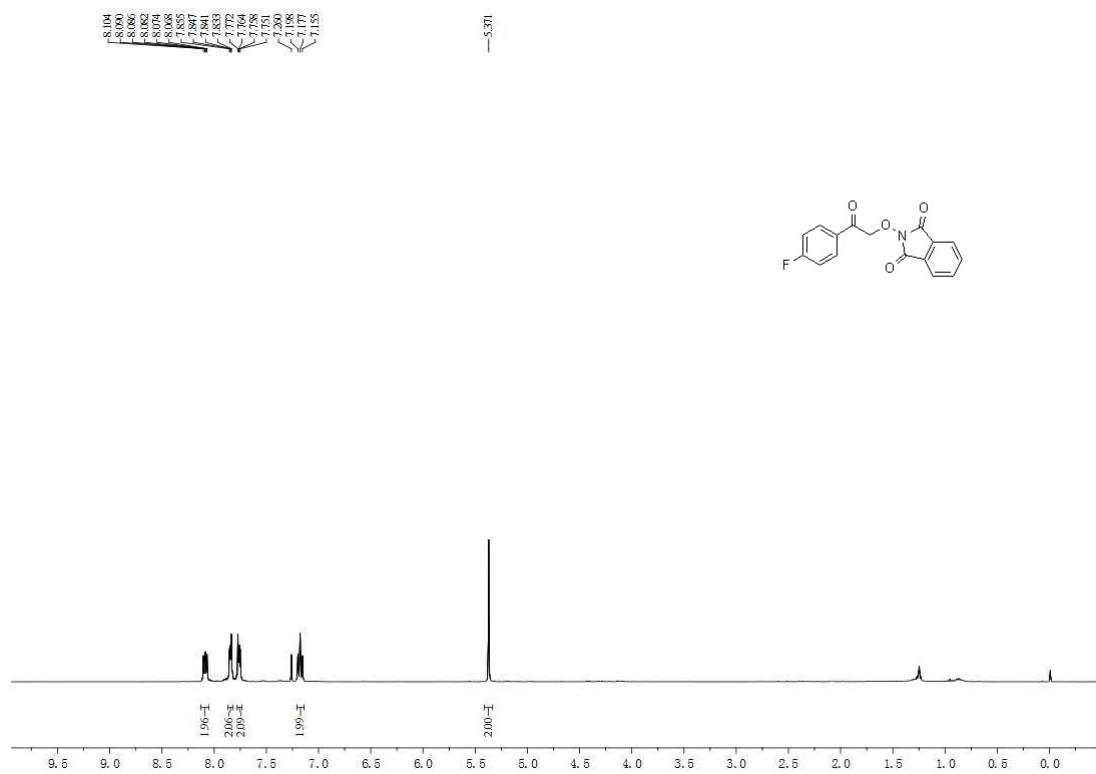


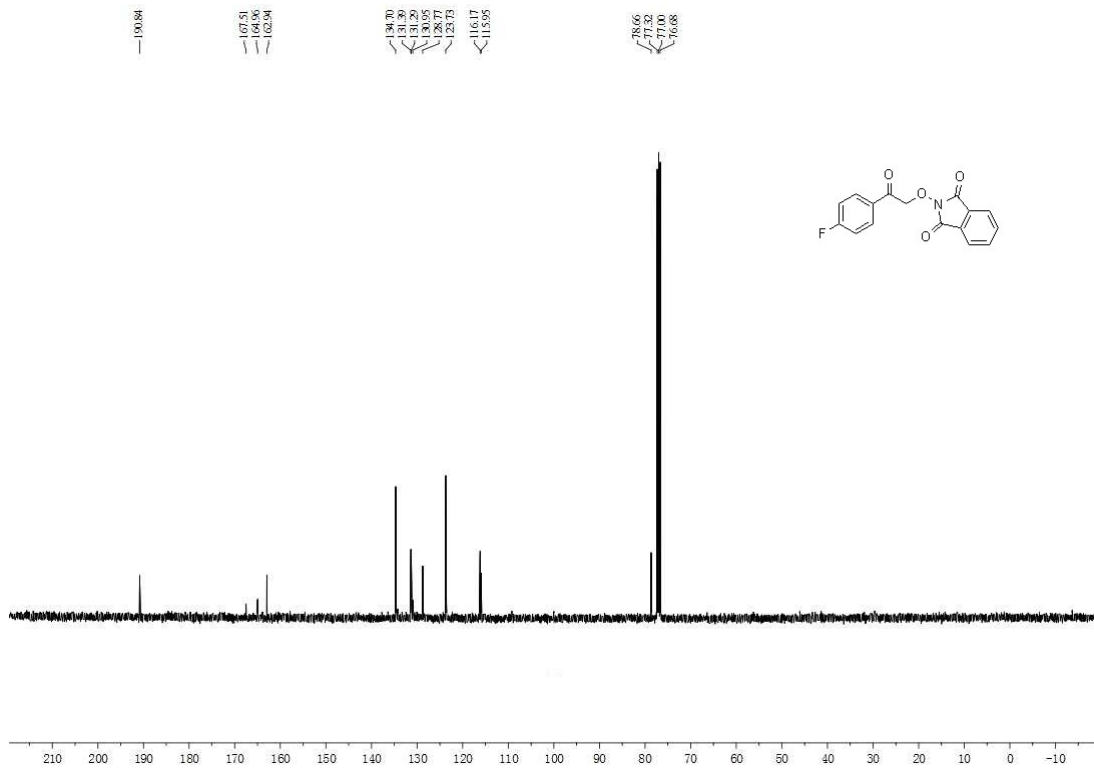
Product 40



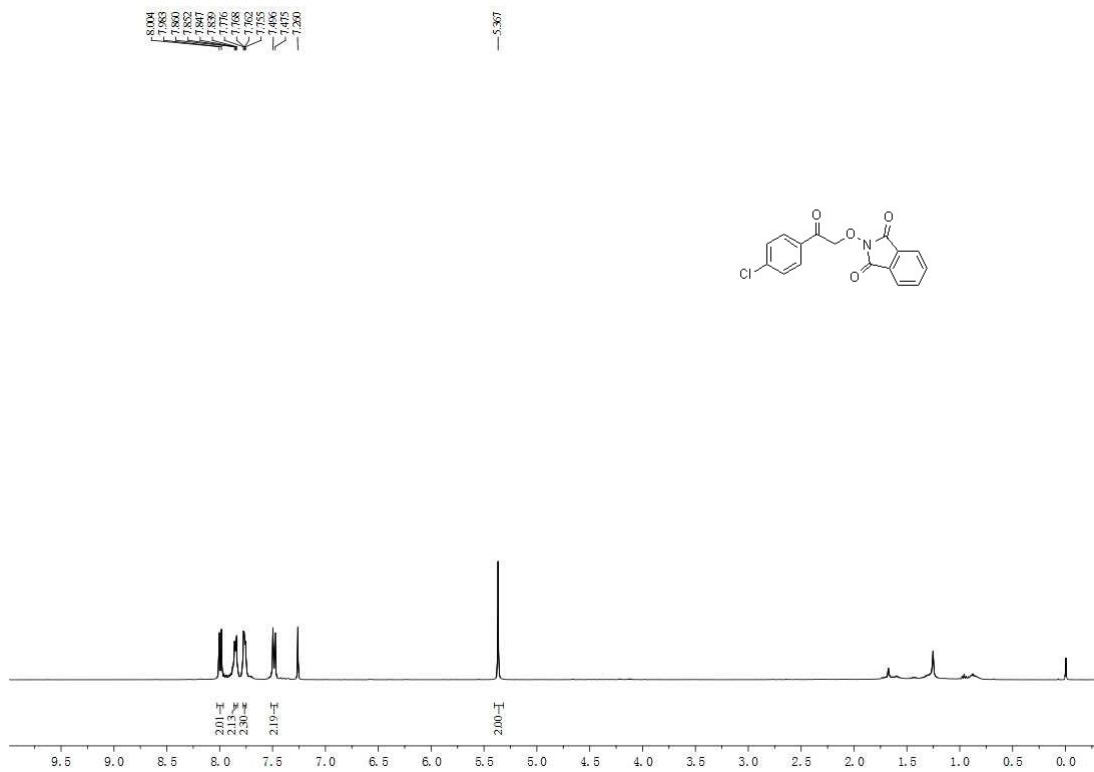


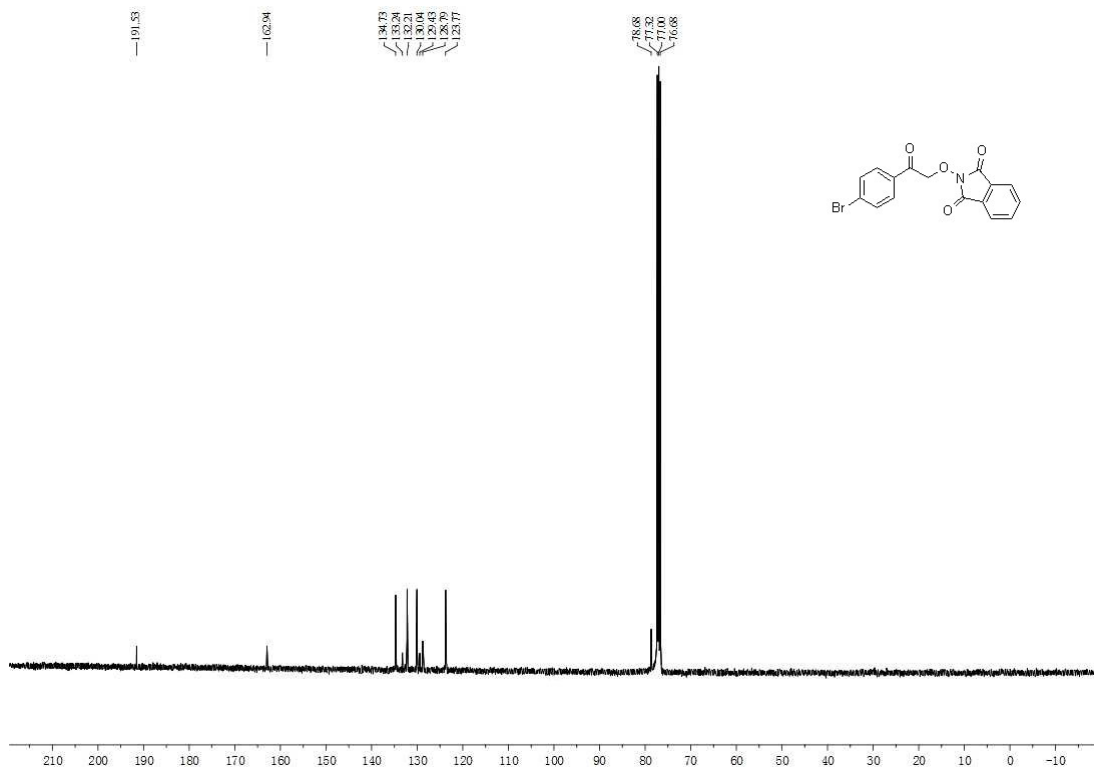
Product 4p



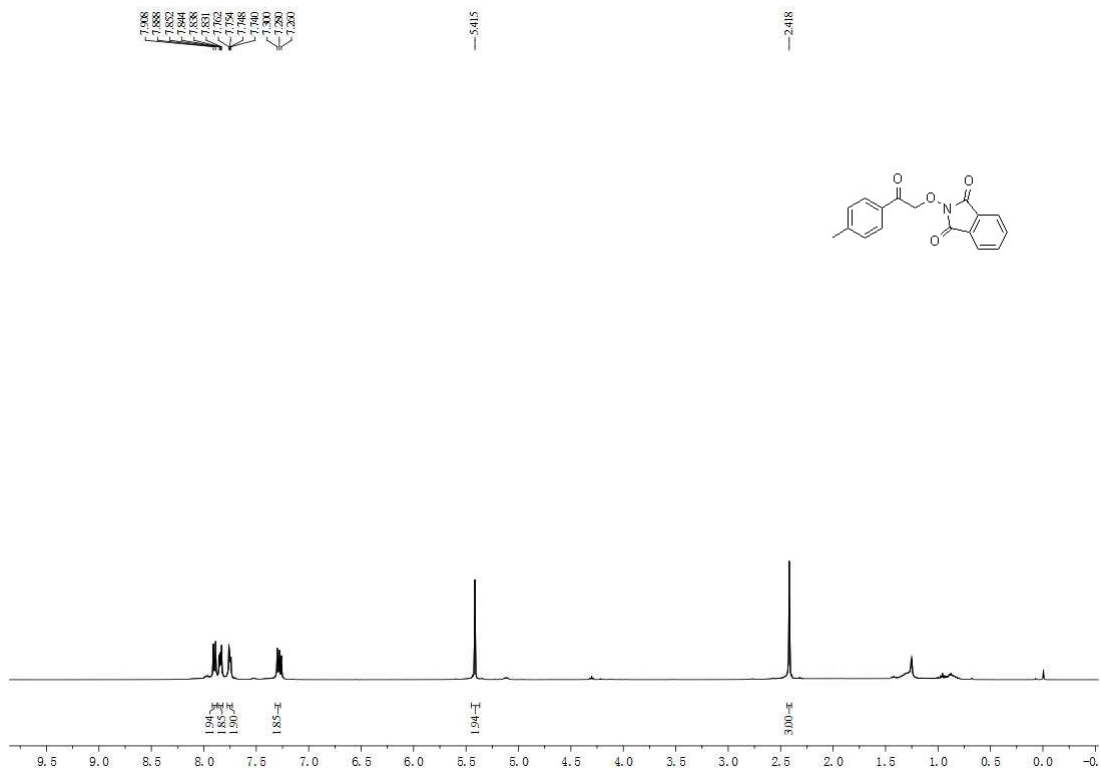


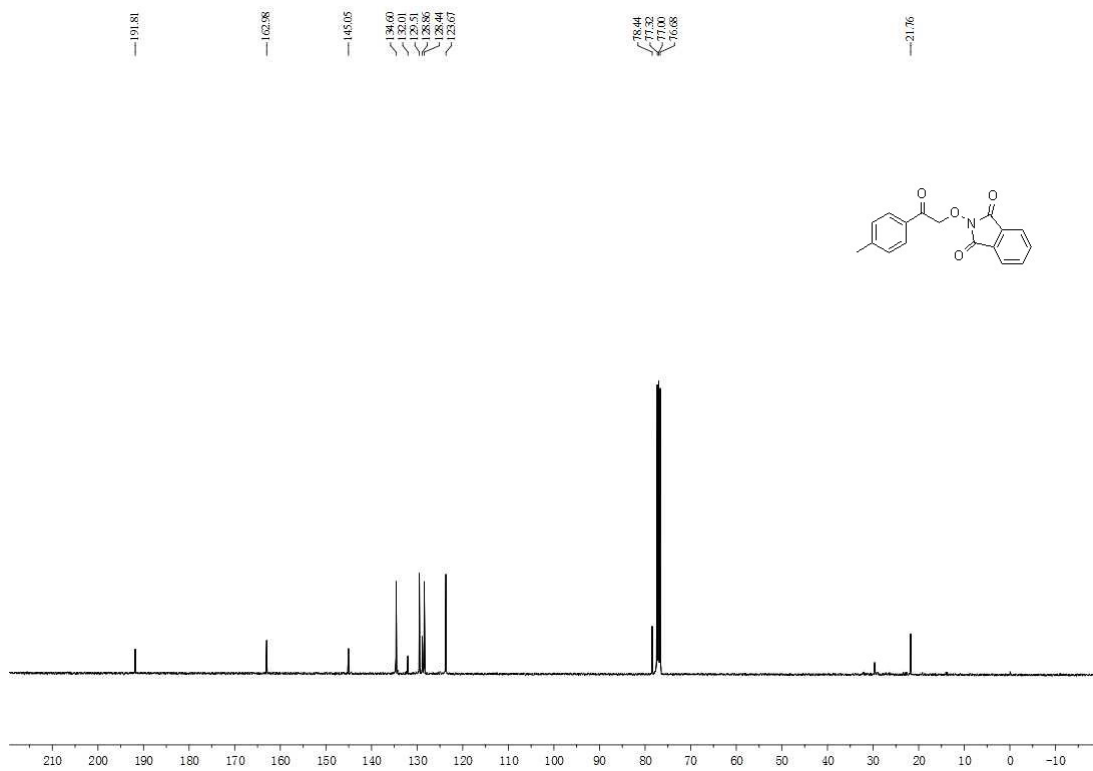
Product 4q



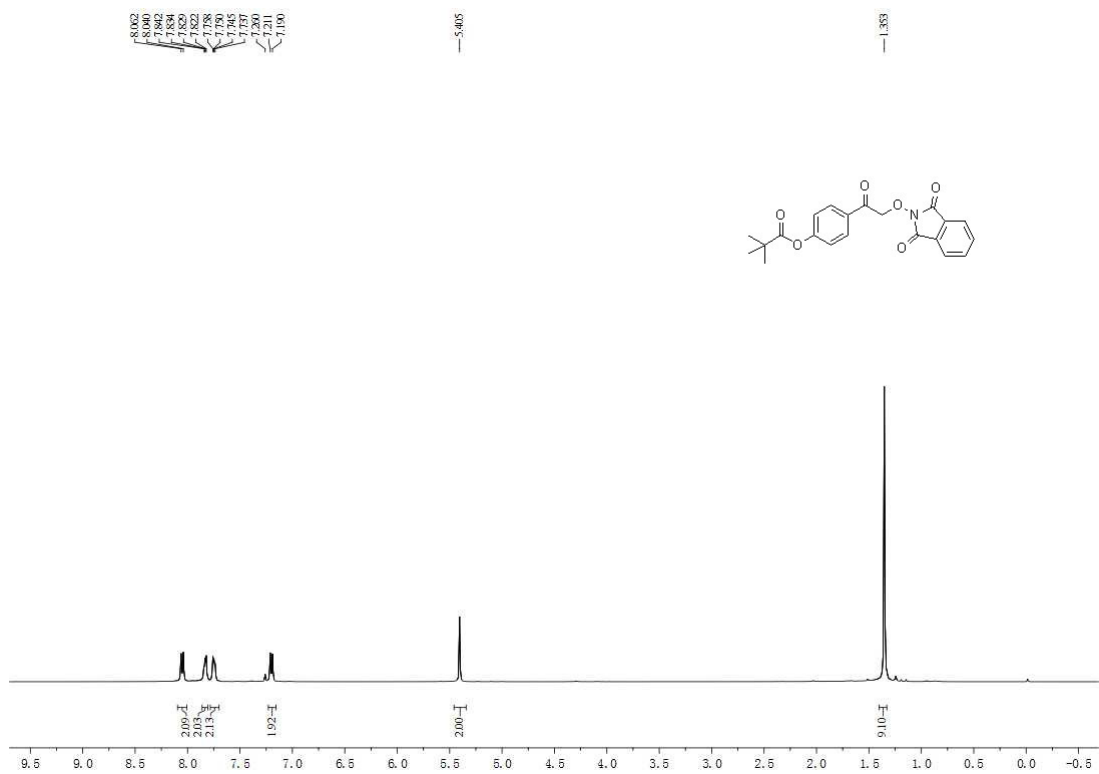


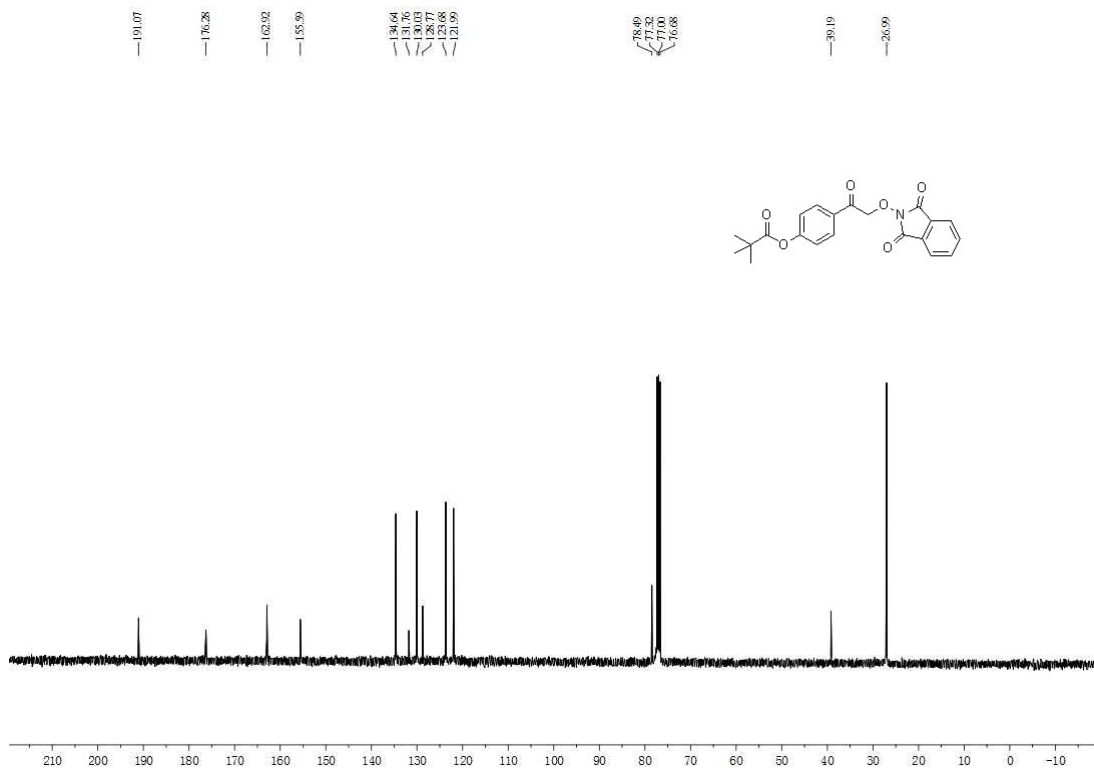
Product 4s



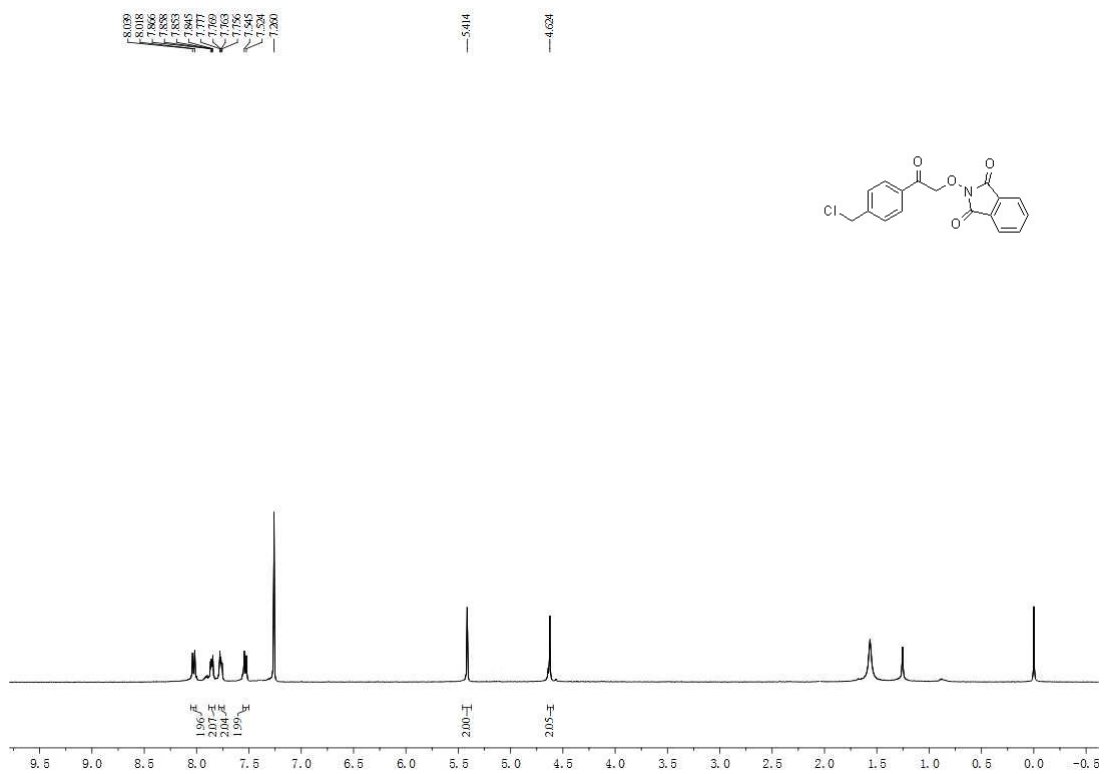


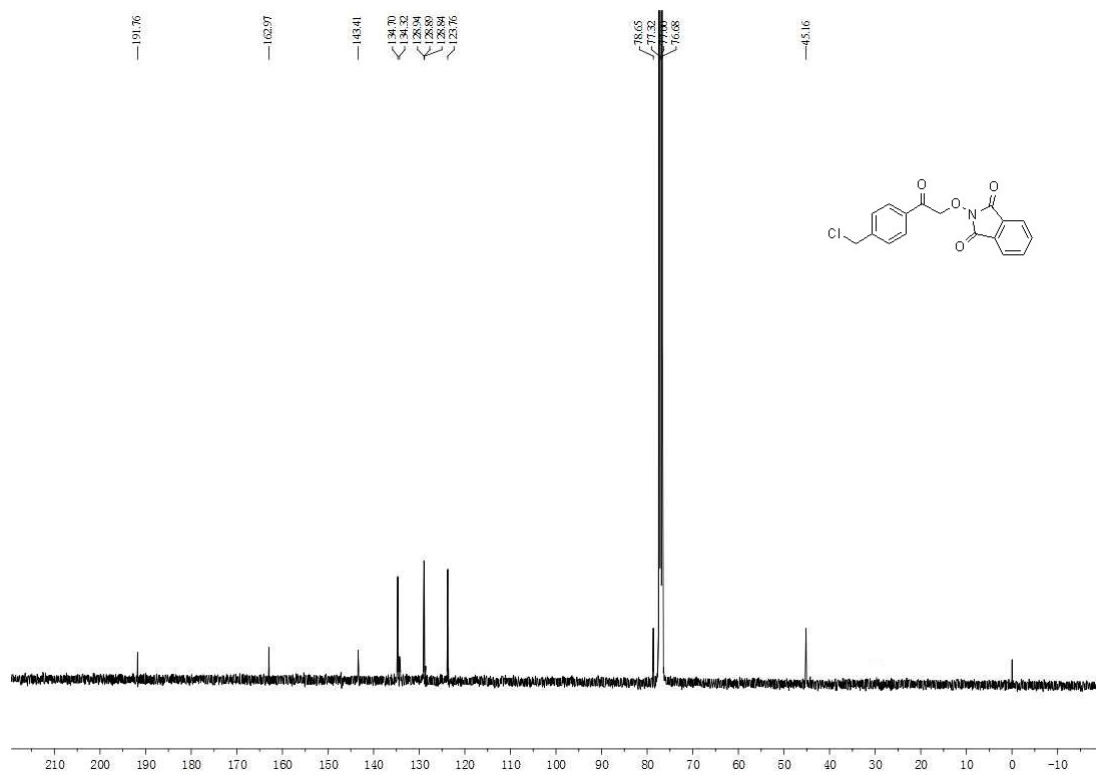
Product 4t





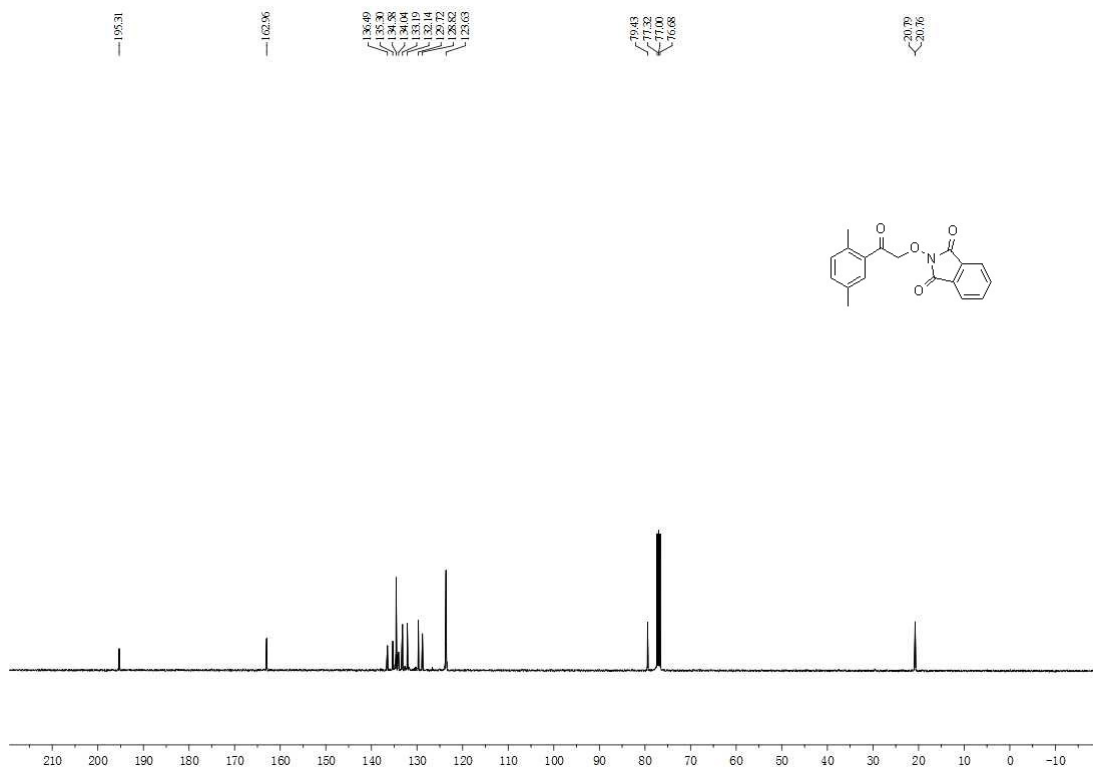
Product 4u



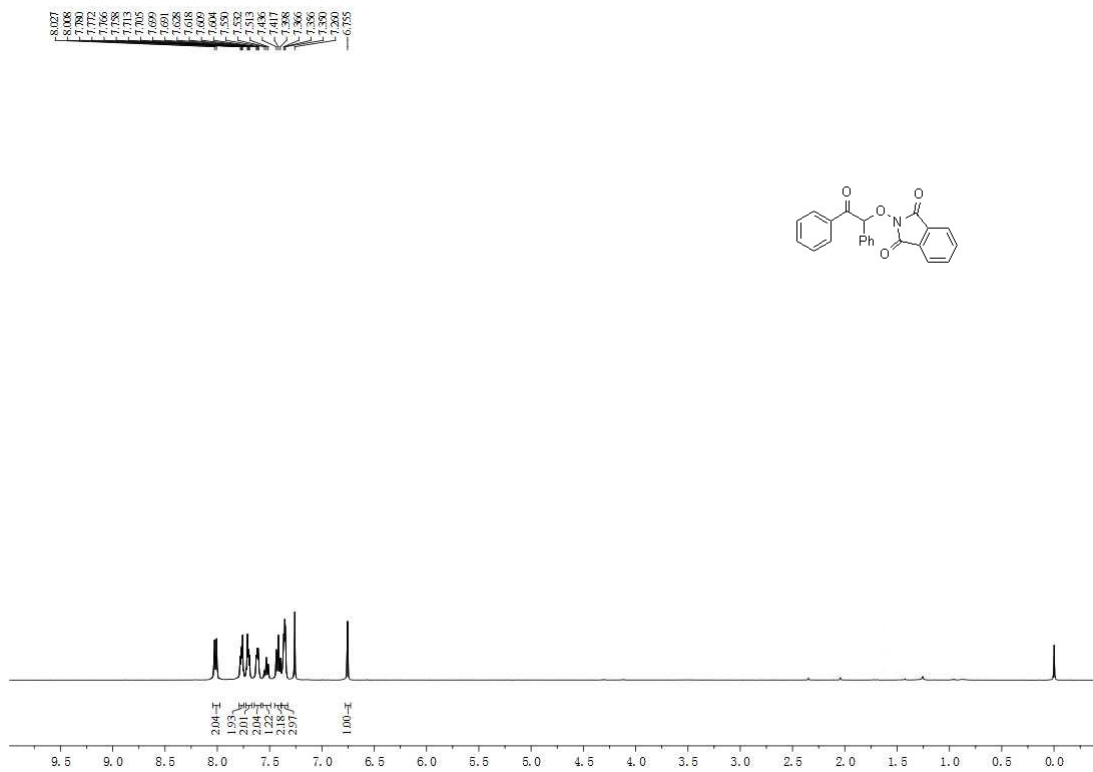


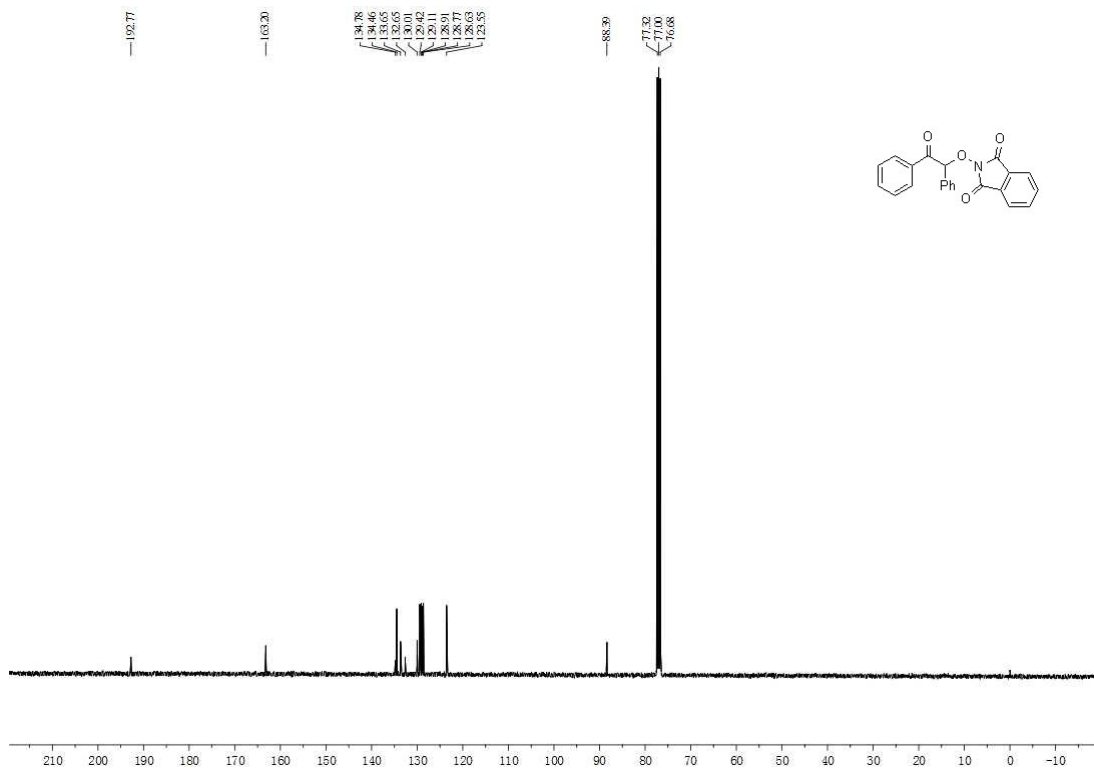
Product 4v



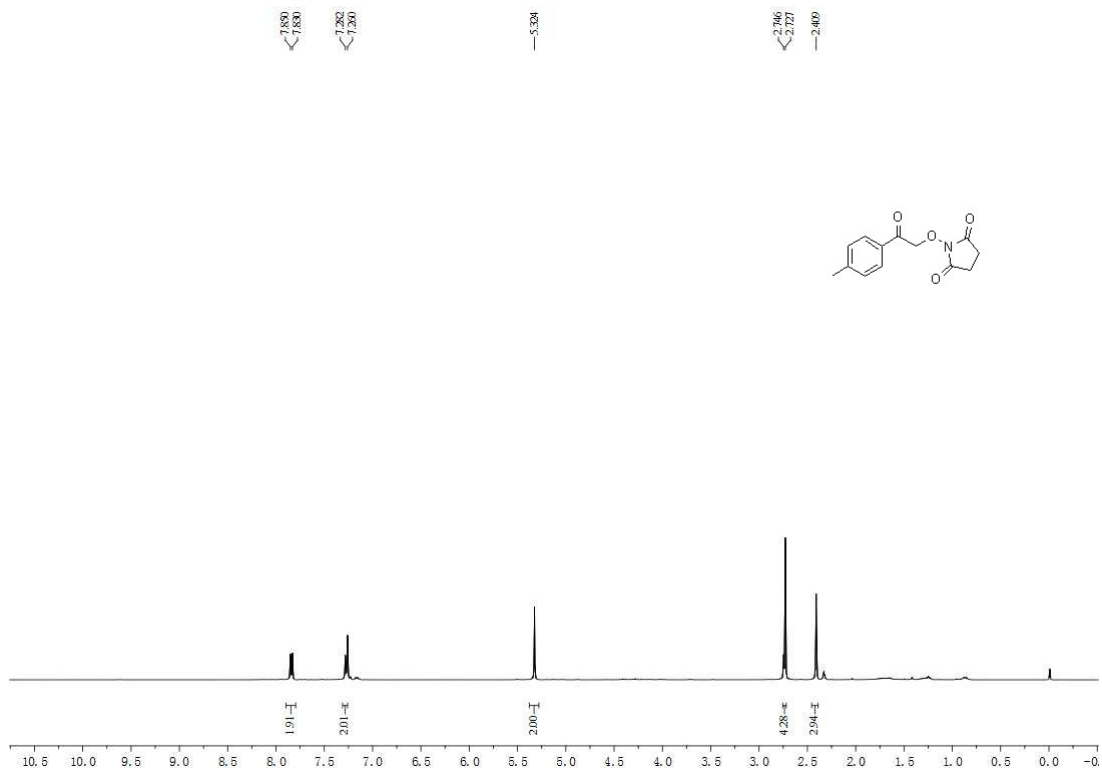


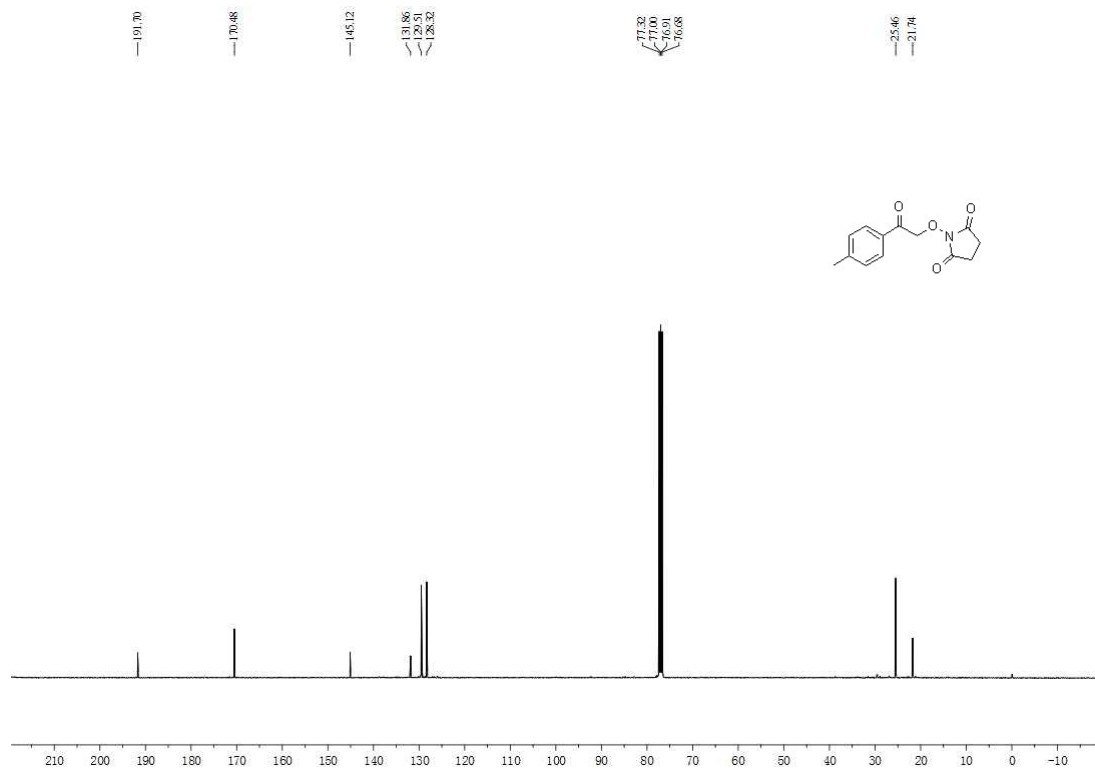
Product 4w





Product 4x





Product 5

