Supporting Information

Efficient discovery of novel antimicrobials through integration of synthesis and testing in crude ribosome extract

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1. Chemistry section

1.1 General synthetic procedures

Unless otherwise noted, materials were obtained from commercial suppliers and used without further purification. All the solvents were dried according to the standard methods before use. NMR spectra were recorded on a Bruker Avance (Varian Unity Inova) 400 MHz spectrometer in $CDCl_3$, DMSO-d_6, D_2O or CD_3OD with TMS as internal standard. NMR data were analyzed by using MestReNova Software. High resolution mass spectrometry (HRMS) was performed on an Agilent LC/MSD TOF system G3250AA. Analytical thin layer chromatography (TLC) was performed on silica gel 60 F254 precoated plates (0.25 mm) from Qingdao Haiyang Inc., and components were visualized by ultraviolet light (254 nm). Silicycle silica gel 300-400 (particle size 40-63 μm) mesh was used for all flash column chromatography experiments.

*1.2 Synthetic procedures of N-((3-(4-azido-3-fluorophenyl)-2-oxooxazolidin-5-yl)methyl) acetamide **(azide 1)***

To a solution of N-((3-(4-amino-3-fluorophenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (100 mg) , which was obtained as previous described[1], in 10 ml 15% hydrochloric acid aqueous solution was added the sodium nitrite aqueous solution by injection syringe at -5 °C. The mixture was allowed to stir for 0.5 hours, followed by adding the sodium azide aqueous solution by injection syringe. After completion of the reaction, the mixture was extracted with EA for three times. The combined organic layer was dried over anhydrous Na_2SO_4. Removal of solvent gave white solid (72.2 mg, 66%) that could be used for the next transformation without purification. The NMR spectra data was consistent with the reported data and was not shown here.

*1.3 General synthesis procedure of **anti (1,4)-3a~3f***

To a solution of azide intermediate 1 (1.0 eq.), $CuSO_4$ (0.02 eq.) and (+)-sodium L-ascorbate (0.1 eq.) in 1:1 H_2O:t-BuOH was added the corresponding alkyne **2a**~**2f** (2.0 eq.), and the mixture was stirred at r.t. for 24 hours. Once the reaction complete, reaction mixture was poured into water, and extracted with EA for three times. The combined organic layer was washed with brine, dried over sodium sulfate, and the solvent was removed under reduced pressure. The residue was purified by flash chromatography to give *anti* (1,4)-**3a**~**3f**.

*1.4 Chemical and physical data of **anti (1,4)-3a~3f***

(S)-N-((3-(3-fluoro-4-(4-(pyridin-2-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3a).

Following general procedure, product was purified by flash chromatography to afford desired compound **3a** as a white solid (yield of 72.5%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.03 (s, 1H), 8.65 (s, 1H), 8.26 (t, J = 5.6 Hz, 1H), 8.13 (d, J = 7.8 Hz, 1H), 7.94 (dd, J = 17.6, 8.8 Hz, 2H), 7.83 (dd, J = 13.2, 2.0 Hz, 1H), 7.57 (dd, J = 8.8, 2.0 Hz, 1H), 7.41 (t, J = 5.6 Hz,1H), 4.85 – 4.72 (m, 1H), 4.22 (t, J = 9.2 Hz, 1H), 3.83 (m, 1H), 3.46 (t, J = 5.6 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.52, 155.76, 154.47, 153.29, 150.22, 149.85, 148.13, 141.27, 137.84, 126.93, 124.99, 123.86, 120.17, 114.52, 106.48, 72.41, 47.75, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$396.1346, found $[M+H]^+$ 397.1461.

(S)-N-((3-(3-fluoro-4-(4-(pyridin-4-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3b).

Following general procedure, product was purified by flash chromatography to afford desired compound **3b** as a white solid (yield of 65.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.31 (d, J = 1.6 Hz, 1H), 8.70 (brs, 2H), 8.26 (t, J = 5.6 Hz, 1H), 7.96-7.92 (m, 3H), 7.86 (dd, J = 13.2, 2.4 Hz, 1H), 7.59 (dd, J = 8.8, 1.6 Hz, 1H), 4.86 – 4.73 (m, 1H), 4.22 (t, J = 8.8 Hz, 1H), 3.84 (m, 1H), 3.46 (t, J = 5.6 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 170.52, 155.61, 154.47, 153.13, 150.95 (2C), 145.12, 141.42, 137.63 (2C), 126.89, 125.30, 119.87, 114.59, 106.47, 72.43, 47.76, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$396.1346, found $[M+H]^+$ 397.1460.

(S)-N-((3-(3-fluoro-4-(4-(pyridin-3-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3c).

Following general procedure, product was purified by flash chromatography to afford desired compound **3c** as a white solid (yield of 79.4%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.20 (d, J = 1.6 Hz, 1H), 9.17 (s, 1H), 8.60 (d, J = 4.0 Hz, 1H), 8.33 (dt, J = 8.0, 2.0 Hz, 1H), 8.26 (t, J = 6.0 Hz, 1H), 7.94 (t, J = 8.8 Hz, 1H), 7.86 (dd, J = 13.2, 2.0 Hz, 1H), 7.59 (dd, J = 11.2, 2.4 Hz, 1H), 7.54 (dd, J = 5.2, 8.0 Hz, 1H), 4.87 – 4.71 (m, 1H), 4.22 (t, J = 9.2 Hz, 1H), 3.84 (m, 1H), 3.46 (t, J = 5.6 Hz, 2H), 1.85 (s, 3H).^{13}C NMR (100 MHz, DMSO-d_6) δ 170.52, 155.58, 154.48, 153.10, 149.77, 147.10, 144.62, 141.27, 133.17, 126.83, 124.59, 123.99, 119.98, 114.60, 106.49, 72.43, 47.76, 41.85, 22.93. HRMS (Q-TOF): calculated for $[M]^+$ 396.1346, found$[M+H]^+$397.1461.

(S)-N-((3-(3-fluoro-4-(4-(thiophen-2-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3d).

Following general procedure, product was purified by flash chromatography to afford desired compound **3d** as a white solid (yield of 81.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.97 (d, J = 1.6 Hz, 1H), 8.26 (t, J = 6.0 Hz, 1H), 7.91 (t, J = 8.8 Hz, 1H), 7.84 (dd, J = 13.2, 2.4 Hz, 1H), 7.60 (d, J = 4.8 Hz, 1H), 7.59

– 7.53 (m, 2H), 7.22 – 7.16 (m, 1H), 4.86 – 4.72 (m, 1H), 4.21 (t, J = 9.2 Hz, 1H), 3.83 (m, 1H), 3.46 (t, J = 5.6 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.52, 155.57, 154.47, 153.10, 142.78, 141.15, 132.58, 128.51, 126.64, 125.32, 122.44, 119.89, 114.54, 106.58, 72.41, 47.75, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$401.0958, found $[M+H]^+$402.1117.

(S)-N-((3-(3-fluoro-4-(4-(pyrimidin-2-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3e).

Following general procedure, product was purified by flash chromatography to afford desired compound **3e** as a white solid (yield of 85.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.18 (s, 1H), 8.93 (d, J = 4.8 Hz, 1H), 8.27 (t, J = 5.6 Hz, 1H), 7.95 (t, J = 8.8 Hz, 1H), 7.84 (d, J = 13.6 Hz, 1H), 7.58 (d, J = 9.2 Hz, 1H), 7.51 (t, J = 4.8 Hz, 1H), 4.80 (m, 1H), 4.22 (t, J = 8.8 Hz, 1H), 3.90 – 3.76 (m, 1H), 3.46 (t, J = 5.2 , 2H), 1.85 (s, 1H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 170.54, 158.68, 158.36, 155.78, 154.47, 153.31, 147.27, 141.29, 128.03, 126.97, 120.92, 119.93, 114.48, 106.45, 72.41, 47.75, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$ 397.1299, found $[M+H]^+$398.1371.

(S)-N-((3-(3-fluoro-4-(4-(pyrimidin-5-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3f).

Following general procedure, product was purified by flash chromatography to afford desired compound **3f** as a white solid (yield of 72.3%). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.36 (s, 2H), 9.30 (d, J = 6.0 Hz, 1H), 9.22 (s, 1H), 8.27 (t, J = 5.6 Hz, 1H), 7.97 (t, J = 8.8 Hz, 1H), 7.89 (dd, J = 13.2, 5.2 Hz, 1H), 7.61 (dd, J = 9.6, 2.0 Hz, 1H), 4.80 (m, 1H), 4.24 (t, J = 9.2 Hz, 1H), 3.85 (m, 1H), 3.47 (t, J = 2.8 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 170.52, 158.38, 155.50, 154.47, 154.04, 153.03, 141.77, 141.37, 126.74, 124.96, 124.74, 119.79, 114.63, 106.49, 72.44, 47.75, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$397.1299, found $[M+H]^+$398.1364.

1.5 General procedure for the synthesis of compounds ***anti (1, 4)-3g, 3h, 3i, 3j, 3k, 3p***.

To a solution of azide intermediate (1) (1.0 eq.) in t-BuOH was added the copper (1.0 eq.), copper sulfate pentahydrate (0.5 eq.) and corresponding alkyne **2g**, **2h**, **2i**, **2j**, **2k**, **2p** (1.5 eq.). The reaction was stirred overnight at 65 °C. After completion of the reaction, the mixture was cooled to room temperature. Then, water was added into the mixture, and extracted with DCM for three times. The combined organic layer was washed with brine and dried over Na_2SO_4. After removing the solvents, the residue was stirred in the mixed solvents (PE: EA=4:1) for 10 min. Then, the mixture was filtered and the solid was collected to give the target compounds.

1.6 Chemical and physical data of ***anti (1,4)-3g, 3h, 3i, 3j, 3k, 3p***.

(S)-N-((3-(3-fluoro-4-(4-(thiophen-3-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3g).

Following general procedure, product was collected by filtration to afford desired compound **3g** as a white solid (yield of 88.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.92 (d, J = 1.6 Hz, 1H), 8.26 (t, J = 5.6 Hz, 1H), 7.98 (dd, J = 2.8, 1.2 Hz, 1H), 7.92 (t, J = 8.8 Hz, 1H), 7.84 (dd, J = 13.2, 2.0 Hz, 1H), 7.70 (m, 1H), 7.62 (dd, J = 5.2, 1.2 Hz, 1H), 7.57 (dd, J = 8.8, 1.6 Hz, 1H), 4.80 (m, 1H), 4.21 (t, J = 9.0 Hz, 1H), 3.84 (m, 1H), 3.45 (t, J = 5.6 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.52, 155.46, 154.47, 152.99, 143.91, 141.10, 131.78, 127.84, 126.51, 122.87, 122.07, 120.17, 114.59, 106.60, 72.41, 47.75, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$401.0958, found $[M+Na]^+$424.0881.

(S)-N-((3-(3-fluoro-4-(4-(4-nitrophenyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3h).

Following general procedure, product was collected by filtration to afford desired compound **3h** as a white solid (yield of 21.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.34 (s, 1H), 8.38 (d, J = 9.2 Hz, 2H), 8.25 (d, J = 8.8 Hz, 2H), 7.95 (t, J = 8.8 Hz, 1H), 7.86 (dd, J = 13.2, 2.0 Hz, 1H), 7.59 (dd, J = 8.4, 1.6 Hz, 1H), 6.50 (s, 1H), 4.81 (m, 1H), 4.22 (t, J=7.2 Hz, 1H), 3.91 – 3.78 (m, 1H), 3.46 (t, J = 5.2 Hz, 2H), 1.85 (s, 3H). HRMS (Q-TOF): calculated for $[M]^+$440.1244, found $[M+Na]^+$463.1147.

(S)-N-((3-(3-fluoro-4-(4-(3-nitrophenyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3i).

Following general procedure, product was collected by filtration to afford desired compound **3i** as a white solid (yield of 78.5%).^{1}H NMR (400 MHz, DMSO-d_6) δ = 9.37 (d, J = 1.6 Hz, 1H), 8.79 (t, J = 2.0 Hz, 1H), 8.43 (d, J = 8.0 Hz, 1H), 8.34 – 8.19 (m, 2H), 7.95 (t, J = 8.8 Hz, 1H), 7.84 (m, 2H), 7.60 (d, J = 9.6 Hz, 1H), 4.81 (m, 1H), 4.22 (t, J = 8.8 Hz, 1H), 3.85 (m, 1H), 3.46 (t, J = 5.2 Hz, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.54, 169.69, 155.58, 154.48, 153.24, 148.93, 144.82, 141.37, 132.13, 131.27, 126.82, 124.73, 123.36, 120.19, 114.68, 106.42, 72.33, 47.82, 41.81, 22.94. HRMS (Q-TOF): calculated for $[M]^+$440.1244, found $[M+Na]^+$463.1147.

(S)-N-((3-(3-fluoro-4-(4-((hydroxymethoxy)methyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3j).

Following general procedure, product was collected by filtration to afford desired compound **3j** as a white solid (yield of 47.3%). ^{1}H NMR (400 MHz, $CDCl_3$) δ = 8.06 (d, J = 2.8 Hz, 1H), 7.93 (t, J = 8.8 Hz, 1H), 7.80 (dd, J = 13.2, 2.4 Hz, 1H), 7.30 (d, J = 13.2 Hz, 1H), 6.26 (t, J = 6.0 Hz, 1H), 4.84 (m, 1H), 4.79 (s, 2H), 4.11 (t, J = 8.8 Hz, 1H), 3.83 (m, 8H), 2.04 (s, 3H). ^{13}C NMR (100 MHz, CDCl3) δ = 171.37, 154.59,

154.05, 152.11, 139.61, 125.02, 113.71, 106.56, 72.55, 72.16, 70.17, 64.33, 61.78, 47.35, 41.80, 23.06. HRMS (Q-TOF): calculated for $[M]^+$ 393.1448, found $[M+Na]^+$ 416.1393.

(S)-N-((3-(4-(4-(acetamidomethyl)-1H-1,2,3-triazol-1-yl)-3-fluorophenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3k).

Following general procedure, product was collected by filtration to afford desired compound **3k** as a white solid (yield of 91.0%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.40 (t, J = 6.0 Hz, 1H), 8.36 (d, J = 2.0 Hz, 1H), 8.25 (t, J = 6.4 Hz, 1H), 7.81 (m, 2H), 7.53 (dd, J = 9.6, 2.8 Hz, 1H), 4.79 (m, 1H), 4.38 (d, J = 5.6 Hz, 2H), 4.19 (t, J = 8.8 Hz, 1H), 3.81 (m, 1H), 3.44 (t, J = 5.6 Hz, 1H), 1.85 (s, 3H), 1.84 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 170.52, 169.68, 155.47, 154.46, 153.00, 146.06, 140.92, 126.64, 124.72, 120.21, 114.53, 106.45, 72.38, 47.72, 41.84, 34.48, 22.95. HRMS (Q-TOF): calculated for $[M]^+$ 390.1452, found $[M+Na]^+$ 413.1418.

(S)-N-((3-(3-fluoro-4-(4-(2-(trifluoromethyl)phenyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3p).

Following general procedure, product was collected by filtration to afford desired compound **3p** as a white solid (yield of 86.8%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.77 (s, 1H), 8.26 (t, J = 6.0 Hz, 1H), 7.93 (m, 2H), 7.84 (m, 2H), 7.70 (m, 1H), 7.58 (d, J = 10.4 Hz, 1H), 4.81 (m, 1H), 4.56 (m, 1H), 4.22 (t, J = 9.2 Hz, 1H), 3.83 (m, 1H), 3.45 (m, 2H), 1.85 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 170.52, 155.65, 154.48, 153.18, 144.45, 141.24, 133.21, 132.59, 129.75, 129.27, 127.31, 126.90 (2C), 125.78, 119.93, 114.56, 106.47, 72.42, 47.76, 41.85, 22.92. HRMS (Q-TOF): calculated for $[M]^+$ 390.1452, found $[M+Na]^+$ 413.1418.

1.7 General procedure for the synthesis of compounds ***anti (1, 4)-3l, 3m, 3n, 3o, 3q.***

To a solution of azide intermediate **1** (1.0 eq.) in mixed solvents of tertiary butanol: water (1:3) was added the cupric oxide (0.05 eq.), sodium ascorbate (0.1eq.) and corresponding alkyne **2l**, **2m**, **2n**, **2o**, **2q** (1.2 eq.). The reaction was allowed to stir at 65°C overnight. After the reaction completed, the mixture was cooled to room temperature. Then, water was added into the reaction mixture, and the mixture was extracted with DCM for three times. The combined organic layer was washed with brine and dried over Na_2SO_4. After removing the solvents, the residue was added into the mixture solvents (PE: EA=4:1), and the solid was collected by filtration to give target compounds.

1.8 Chemical and physical data of ***anti (1, 4)-3l, 3m, 3n, 3o, 3q.***

(S, E)-N-((3-(3-fluoro-4-(5-(4-hydroxybut-2-en-2-yl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3l).

Following general procedure, product was collected by filtration to afford desired compound **3l** as a white solid (yield of 68.9%).^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.52 (d, J = 2.0 Hz, 1H), 8.26 (t, J = 6.0 Hz, 1H), 7.86 (t, J = 8.4 Hz, 1H), 7.82 (dd, J = 13.2, 2.4 Hz, 1H), 7.54 (dd, J = 8.8, 1.6 Hz, 1H), 5.75 (t, J = 7.2 Hz, 1H), 4.78 (m, 2H), 4.33 (t, J = 5.6 Hz, 2H), 4.20 (t, J = 9.2 Hz, 1H), 3.82 (m, 1H), 3.45 (t, J = 5.6 Hz, 2H), 2.12 (s, 3H), 1.84 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.52, 155.66, 154.47, 153.19, 146.86, 141.11, 132.28, 126.91, 124.72, 123.74, 120.05, 114.51, 106.30, 72.40, 59.38, 47.75, 41.85, 22.91. HRMS (Q-TOF): calculated for $[M]^+$ 389.1499, found $[M+Na]^+$ 412.1415.

(S)-N-((3-(4-(4-((1,3-dioxoisoindolin-2-yl)methyl)-1H-1,2,3-triazol-1-yl)-3-fluorophenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3m).

Following general procedure, product was collected by filtration to afford desired compound **3m** as a white solid (yield of 70.5%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.55 (s, 1H), 8.24 (t, J = 4.0 Hz, 1H), 7.86 (m, 5H), 7.51 (dd, J = 7.6, 1.2 Hz, 1H), 6.51 (s, 1H), 4.95 (s, 2H), 4.77 (m, 1H), 4.18 (t, J = 9.2 Hz, 1H), 3.80 (m, 1H), 3.43 (t, J = 5.6 Hz, 2H), 1.83 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.50, 167.86, 155.49, 154.45, 153.02, 143.44, 141.07, 135.03 (2C), 132.14, 126.72, 125.10, 123.72 (2C), 120.00, 114.44, 106.25, 72.37, 47.71, 41.83, 33.31, 31.77, 22.90. HRMS (Q-TOF): calculated for $[M]^+$ 478.1401, found $[M+Na]^+$ 501.1303.

(S)-N-((3-(3-fluoro-4-(4-(1-hydroxycyclopentyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3n).

Following general procedure, product was collected by filtration to afford desired compound **3n** as a white solid (yield of 87.5%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.28 (d, J = 2.4 Hz, 1H), 8.26 (t, J = 6.0 Hz, 1H), 7.84 (t, J = 8.8 Hz, 1H), 7.80 (m, 1H), 7.53 (dd, J = 9.2, 2.0 Hz, 1H), 5.14 (s, 1H), 4.82 (m, 1H), 4.20 (t, J = 9.2 Hz, 1H), 3.82 (m, 1H), 3.45 (d, J = 5.6 Hz, 2H), 2.05 (m, 3H), 1.84 (s, 3H), 1.73 (m, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.51, 155.58, 154.47, 152.99, 140.81, 126.61, 123.01, 120.46, 114.50, 106.59, 77.87, 72.37, 47.72, 41.84, 41.20 (2C), 23.80 (2C), 22.91. HRMS (Q-TOF): calculated for $[M]^+$ 403.1656, found $[M+Na]^+$ 426.1541.

N-(((R)-3-(3-fluoro-4-(5-((S)-1-hydroxyethyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3o).

Following general procedure, product was collected by filtration to afford desired compound **3o** as a white solid (yield of 90.5%). ^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.34 (d, J = 1.6 Hz, 1H), 8.26 (t, J = 5.8 Hz, 1H), 7.84 (m, 2H), 7.53 (dd, J = 8.8, 1.6 Hz, 1H), 5.39 (d, J = 5.2 Hz, 1H), 4.92 (m, 1H), 4.82 (m, 1H),

4.27 - 4.14 (t, J = 5.2 Hz, 1H), 3.82 (m, 1H), 3.45 (t, J = 5.6 Hz, 2H), 1.84 (s, 3H), 1.48 (d, J = 6.8 Hz, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ = 170.52, 155.51, 154.05, 153.04, 140.77, 126.67, 123.28, 120.43, 114.50, 106.34, 72.37, 61.94, 47.72, 41.84, 24.10, 22.91. HRMS (Q-TOF): calculated for $[M]^+$ 403.1656, found $[M+Na]^+$ 426.1541.

N-(((R)-3-(3-fluoro-4-(4-((R)-1-hydroxyethyl)-1H-1,2,3-triazol-1-yl)phenyl)-2-oxooxazolidin-5-yl)methyl)acetamide (3q).

Following general procedure, product was collected by filtration to afford desired compound **3q** as a white solid (yield of 82.5%).^{1}H NMR (400 MHz, DMSO-d_6) δ = 8.34 (d, J = 1.6 Hz, 1H), 8.25 (t, J = 5.6 Hz, 1H), 7.81 (m, 2H), 7.53 (dd, J = 8.8, 2.0 Hz, 1H), 5.38 (d, J = 4.8 Hz, 1H), 4.92 (m, 1H), 4.78 (m, 1H), 4.20 (t, J = 8.8 Hz, 1H), 3.81 (m, 1H), 3.45 (t, J = 5.6 Hz, 2H), 1.84 (s, 3H), 1.48 (d, J = 6.4 Hz, 3H). HRMS (Q-TOF): calculated for $[M]^+$363.1343, found $[M+Na]^+$386.1215.

1.9 General procedure for the synthesis of compounds ***anti (1, 4)-5a~5i.***

To a solution of azides **4a**-**4i** (50 mg, 1 eq.) in tert-butyl alcohol (5 mL) was added copper powder (1 eq.) and copper sulfate pentahydrate (0.5 eq.), then 2-ethynylpyridine (2 eq.) was added into the mixture. The mixture was stirred at 65°C overnight, then cooled to room temperature. Then 20 mL water was added into the mixture to quench the reaction, the mixture was extracted with DCM (20mL) for three times. The combined organic layer was evaporated under vacuum to give crude product, which was purified through silica gel thin layer chromatography to give compounds **5a**-**5i** (yield 10.98 ~ 38.45 %).

1.10 Chemical and physical data of ***anti (1, 4)-5a~5i.***

2-(1-(2,4',6-trifluoro-[1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)pyridine (5a)

Following general procedure, starting from 4-azido-2,4',6-trifluoro-1,1'-biphenyl (**4a**) and 2-ethynylpyridine to afford compound **5a** as a white solid (yield 28.41 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.51 (s, 1H), 8.68 (d, J = 4.4 Hz, 1H), 8.14 (m, 1H), 8.05 (m, 2H), 7.97 (td, J = 7.6, 1.6 Hz, 1H), 7.60 (m, 4H), 7.44 (m, 1H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 161.30, 158.84, 150.25, 149.56, 149.00, 137.92, 137.51, 134.28, 132.44 (2C), 129.22 (2C), 126.94, 124.07, 122.07, 120.40, 104.90, 104.74, 104.58. HRMS (Q-TOF): calculated for $C_{19}H_{11}F_3N_4$ [M] :352.0936. Found $[M+H]^+$: 353.1010.

1-(3'-(4-(pyridin-2-yl)-1H-1,2,3-triazol-1-yl)-[1,1'-biphenyl]-4-yl)ethan-1-one (5b)

Following general procedure, starting from 1-(3'-azido-[1,1'-biphenyl]-4-yl)ethan-1-one (**4b**) and 2-ethynylpyridine to afford compound **5b** as a white solid (yield 32.66 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.55 (s, 1H), 8.68 (d, J = 4.4 Hz, 1H), 8.40 (m, 1H), 8.15 (m, 1H), 8.10 (m, 3H), 8.03 (m, 2H), 7.97 (td, J = 7.6, 2.0 Hz, 1H), 7.91 (m, 1H), 7.75 (t, J = 8.0 Hz, 1H), 7.42 (m, 1H), 2.65 (s, 3H). ^{13}C NMR (100

MHz, DMSO-d_6) δ 198.05, 150.16, 149.99, 148.75, 143.52, 141.07, 137.84, 137.74, 136.71, 131.16, 129.37 (2C), 127.76 (2C), 127.71, 123.85, 122.09, 120.44, 120.29, 119.00, 27.30. HRMS (Q-TOF): calculated for $C_{21}H_{16}N_4O$ [M] :340.1324. Found $[M+H]^+$: 341.1400.

2-(1-(4-(benzo[d][1,3]dioxol-5-yl)-2-fluorophenyl)-1H-1,2,3-triazol-4-yl)pyridine (5c)

Following general procedure, starting from 5-(4-azido-3-fluorophenyl)benzo[*d*][1,3]dioxole (**4c**) and 2-ethynylpyridine to afford compound **5c** as a white solid (yield 10.98 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.06 (d, J = 2.0 Hz, 1H), 8.67 (m, 1H), 8.14 (m, 1H), 7.94 (m, 3H), 7.74 (dd, J = 8.4, 1.6 Hz, 1H), 7.43 (m, 2H), 7.34 (dd, J = 8.4, 2.0 Hz, 1H), 7.07 (d, J = 8.0 Hz, 1H), 6.11 (s, 2H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 150.25, 149.82, 148.69, 148.37, 148.19, 143.47, 137.87, 132.15, 126.66, 124.93, 123.89, 123.56, 123.53, 121.45, 120.35, 115.16, 109.29, 107.79, 101.94, 100.00. HRMS (Q-TOF): calculated for $C_{20}H_{13}FN_4O_2$ [M] :360.1023. Found $[M+H]^+$: 361.1101.

3-(1-(2,3',6-trifluoro-[1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)pyridine (5d)

Following general procedure, starting from 4-azido-2,3',6-trifluoro-1,1'-biphenyl (**4d**) and 2-ethynylpyridine to afford compound **5d** as a white solid (yield 25.48 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.49 (m, 1H), 8.66 (m, 1H), 8.03 (m, 4H), 7.59 (s, 1H), 7.41 (m, 4H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 163.64, 161.27, 158.83, 150.22, 149.55, 149.00, 137.87, 137.53, 131.12, 130.18, 126.84, 124.04, 122.05, 120.38, 117.49, 116.29, 104.82, 104.67, 104.51. HRMS (Q-TOF): calculated for $C_{19}H_{11}F_3N_4$ [M] :352.0936. Found $[M+H]^+$: 353.1006.

1-(4'-(4-(pyridin-2-yl)-1H-1,2,3-triazol-1-yl)-[1,1'-biphenyl]-4-yl)ethan-1-one (5e)

Following general procedure, starting from 1-(4'-azido-[1,1'-biphenyl]-4-yl)ethan-1-one (**4e**) and 2-ethynylpyridine to afford compound **5e** as a yellow solid (yield 29.80 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.42 (s, 1H), 8.68 (d, J = 5.2 Hz, 1H), 8.16 (m, 3H), 8.08 (m, 2H), 8.02 (m, 2H), 7.96 (m, 3H), 7.42 (m, 1H), 2.64 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 197.98, 150.18, 149.94, 148.79, 143.51, 139.57, 137.84, 136.89, 136.52, 129.45 (2C), 128.91 (2C), 127.46 (2C), 123.87, 121.73, 121.12 (2C), 120.34, 27.29. HRMS (Q-TOF): calculated for $C_{21}H_{16}N_4O$ [M] :340.1324. Found $[M+H]^+$: 341.1400.

2-(1-(3,5-difluoro-3',4'-dimethoxy-[1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)Pyridine (5f)

Following general procedure, starting from 4-azido-3,5-difluoro-3',4'-dimethoxy-1,1'-biphenyl (**4f**) and 2-ethynylpyridine to afford compound **5f** as a white solid (yield 25.53 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.13 (s, 1H), 8.67 (d, J = 4.8 Hz, 1H), 8.15 (m, 1H), 7.97 (td, J = 7.6, 1.6 Hz, 1H), 7.89 (d, J = 10.0 Hz, 2H), 7.44 (m, 3H), 7.10 (m, 1H), 3.90 (s, 3H), 3.84 (s, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 158.34, 155.84, 150.52, 150.29, 149.69, 149.66, 147.98, 144.97, 137.92, 129.52, 126.78, 123.98, 120.35, 120.15, 112.57, 111.10, 110.71, 110.51, 110.48, 56.25, 56.14. HRMS (Q-TOF): calculated for $C_{21}H_{16}F_2N_4O_2$ [M] :394.1241. Found $[M+H]^+$: 395.1318.

3-(1-(2,2',6-trifluoro-[1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)pyridine (5g)

Following general procedure, starting from 4-azido-2,2',6-trifluoro-1,1'-biphenyl (**4g**) and 2-ethynylpyridine to afford compound **5g** as a white solid (yield 30.67 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.52 (s, 1H), 8.69 (d, J = 4.4 Hz, 1H), 8.12 (m, 3H), 7.97 (m, 1H), 7.60 (m, 2H), 7.43 (m, 3H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 161.37, 158.90, 150.24, 149.57, 149.00, 138.14, 137.90, 132.80, 132.23, 125.25, 124.06, 122.17, 120.40, 116.38, 115.66, 112.15, 104.81, 104.65, 104.50. HRMS (Q-TOF): calculated for $C_{19}H_{11}F_3N_4$ [M] :352.0936. Found $[M+H]^+$: 353.1017.

3-(1-(3'-(trifluoromethoxy)-[1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)pyridine (5h)

Following general procedure, starting from 4'-azido-3-(trifluoromethoxy)-1,1'-biphenyl (**4h**) and 2-ethynylpyridine to afford compound **5h** as a white solid (yield 12.95 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.42 (s, 1H), 8.68 (d, J = 4.0 Hz, 1H), 8.16 (m, 3H), 7.97 (m, 3H), 7.84 (m, 1H), 7.77 (s, 1H), 7.65 (t, J = 8.0 Hz, 1H), 7.42 (m, 2H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 150.18, 149.93, 149.54, 149.52, 148.78, 141.60, 139.07, 137.84, 136.80, 131.52, 128.84 (2C), 126.41, 123.87, 121.73, 121.10 (2C), 120.79, 120.34, 119.89. HRMS (Q-TOF): calculated for $C_{20}H_{13}F_3N_4O$ [M] :382.1041. Found $[M+H]^+$: 383.1122.

2-(1-([1,1'-biphenyl]-4-yl)-1H-1,2,3-triazol-4-yl)pyridine (5i)

Following general procedure, starting from 4-azido-1,1'-biphenyl (**4i**) and 2-ethynylpyridine to afford compound **5i** as a white solid (yield 38.45 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.39 (s, 1H), 8.68 (d, J = 4.8 Hz, 1H), 8.14 (m, 3H), 7.95 (m, 3H), 7.77 (m, 2H), 7.52 (m, 2H), 7.43 (m, 2H). ^{13}C NMR (100 MHz, DMSO-d_6) δ 150.16, 149.99, 148.73, 140.92, 139.25, 137.81, 136.24, 129.55 (2C), 128.48 (3C), 127.24 (2C), 123.82, 121.68, 121.07 (2C), 120.32. HRMS (Q-TOF): calculated for $C_{19}H_{14}N_4$ [M] :298.1218. Found $[M+H]^+$: 299.1300.

2. Biology section

2.1 Preparation for E. coli ribosome extracts (ERE)

This preparation for ERE was based on Kim et al. with some modifications.[2] For 3-liter culture, 20 to 25 ml of ribosome extracts was expected. The fermentation starter was incubated by growing *E. coli* BL21(DE3) strain (25% glycerol stock) to 100 ml in 2 xYT medium. For fermentation, 4 x 0.75 L of 2 x YT medium with vigorous agitation was performed (37 ºC, 200 rpm). Cells were grown for 5 to 6 hours until mid-log phase (OD_{600} of approximately 2) and centrifugation (6000 RCF, SLA-3000, 5950 rpm, 15 min, 4ºC) was set to harvest cells. Then two other centrifugations (6000 RCF, SLA-3000, 5950 rpm or SLC-6000, 5230 rpm, 15 min, 4ºC) were followed by the wash of homogenized cells. Wall-cracking was performed using two runs of french press (14,000 psi). In the end, ERE was obtained underdoing the last centrifugation (12,000 RCF, SS-34, 10,000 rpm, 10 min, 4 ºC) and divided into small aliquots and frozen

in liquid nitrogen, stored at -80 ºC. For each batch, A_{280} and A_{260} were measured using NanoDrop 2000C ultra- microspectrophotometry.

2.2 Preparation for R-free100 of E. coli

Centrifugation of ERE was employed at 100,000 RCF (48,000 RPM) for 2.5 h at 4 ºC. Supernatant was collected followed by a same re-centrifugation.[2] The pellet was discarded and supernatant (R-free 100) was carefully collected. R-free 100 was divided into small aliquots and frozen in liquid nitrogen, stored at -80 ºC.

2.3 In situ click experiment coupled with in vitro Transcription-Translation (T/T) system

ERE was incubated with azide **1** (5 μM) at 0ºC (on an ice bucket) for 30min in 96-well plate. 5 mM of each alkyne was added to trigger *in situ* click reaction followed by 24h of incubation at rt. Then in each case, 2.5x *in vitro* Transcription-Translation Premix [500 mM potassium acetate, 87.5 mM Tris-acetate [pH 8.0], 67.5 mM ammonium acetate, 50 g/ml of folinic acid, 5 mM DTT, 87.5 mg/ml of polyethylene glycol, 5.0 mM ATP, 1.25 mM [each] additional ribonucleotide triphosphate, 50 mM phosphoenolpyruvate [trisodium salt], 2.5 mM cyclic AMP, 250 g/ml of each *E. coli* tRNA], amino acid mix (1.25 mM concentrations of each amino acid), luc-plasmid] was added to the incubation mixture. 1h of incubation at 37°C was set to perform the expression of luciferase. The amount of luciferase was measured using Luciferase Assay System Kit (Promega).[3] In addition, stability test of ribosome at different temperature was performed and in vitro T/T assay results shown no much loss of ribosome activity after incubation at r.t for 24 h (Figure S1).

2.4 Ribosomes isolation and purification

E. coli strain BL21 (DE3) was used for purification of bacterial 70S ribosomes, 50S subunit and 30S subunit. Bacteria growth, cell wall disruption and ribosome purification were performed as Zohar described. [4]

2.5 Pure E. coli ribosomes-templated in situ click experiment

5 μM of ribosome template (*E. coli* 70S ribosome or 50S ribosome subunit), 5 μM azide **1**, and 5 mM alkyne were incubated at r.t for 24 h. The whole incubation system volume was 100 μL. Buffer-only control (without ribosomes in it) and bovine serum albumin (BSA) control (final concentration of 5 μM). 30S *E. coli* ribosomal subunit (5 μM) reaction was performed as another control group for investigating the nonspecific binding. Because 30S subunit does not possess an oxazolidone-binding site, it is supposed not capable to catalyze the cycloaddition reactions with azide **1** and alkyne **2a**~**2q**.

2.6 LC-MS analysis of in situ click reaction products

90 μL of the above solutions were injected on an AB/MDS Sciex 5500QTRAP LC-MS instrument utilizing an XBridge™ BEH, 75×2.1 mm, 2.5 μm C18 reverse phase column with a flow rate of 0.3 mL/min and a 5-minute gradient from 0 % Methanol (0.1 % HCO_2H)/100 % water (0.1 % HCO_2H)-100 % Methanol (0.1 % HCO_2H)/0 % water (0.1 % HCO_2H). Extracted ion chromatograms (EIC's) were used to locate and quantify amounts of triazole products.

2.7 Ribosome Activity Assay.

Purified 70S *E. coli* ribosomes was used in translation reactions. Luc plasmid was gifted by Dr. Ada Yonath group (Department of Structural Biology, Weizmann Institute of Science). Bacterial ribosome activity was determined in a bacterial-coupled transcription/translation assay system, which measures the expression of the luciferase gene[5]. The IC_{50} values represent the drug concentration that inhibits luciferase activity by 50 %.

2.8 Minimum inhibitory concentration (MIC) assay

S. aureus strains ATCC33591 and ATCC25923 were inoculated from freezer stock into Brain Heart Infusion (BHI) Broth 37 °C overnight. The culture was then diluted 1:100 and grown to an OD_{600} = 0.6 (2-4 h). 75μL of BHI Broth was added to wells in rows 1-11 of 96-well plates. 150 μL of a 256 μg/mL antibiotic solution in BHI Broth was then added to row. Serial dilutions were made from row 12 to 1 for a final volume of 75 μL in each well. The above-prepared *S. aureus* cultures were then diluted to OD_{600} = 0.004 with BHI Broth and 75 μL of the above-prepared *S. aureus* culture was then added to all wells. The last column of the 96-well plate was reserved for negative controls (BHI Broth only) and positive controls (OD_{600} = 0.004). 96-well plates were covered and incubated at 37 °C for 18 h. Plates were visually inspected to determine MIC. MIC testing of compounds against other isolates utilized in this work was performed following similar method.

2.9 Reproducibility validation of ERE

Three parallel batches of ERE were prepared respectively as described previously on each day of DAY one, DAY three and DAY five. At last, 9-batch of ERE were obtained for robustness study of ERE as click reaction template catalyzing [2+3] Husigen cycloaddition. Both ERE-templated *in situ* click experiments and *E. coli* in vitro T/T assay were carried out using 9-batch of ERE. Batch-to-batch variations of amount of luciferase generated in *in vitro* T/T system were calculated to value the reproducibility and robustness of different batches of *E. coli* ribosomal extracts. *In situ* click experiments using 9-batch ERE as template were performed as previously described and *E. coli* in vitro T/T assays were preformed with some modifications as follow. 25 μL of ERE was added to 75 μL of buffer A followed by an incubation at r.t. for 24 hours. 15 μL of the premix for in vitro Transcription-Translation

system (Murray et al., 2001) was added into the mixture.[5] Another incubation of 1h at 37 °C was set to perform the expression of luciferase. The amount of luciferase was measured using Luciferase Assay system.[3]

2.10 In cellulo click chemistry using S. aureus ATCC33591

Alkyne control. 75 μL of alkyne solution (10 mM in BHI) was added to each well of the 96-well plate. Then 75 μL of 1:1000 v/v dilution of an overnight bacterial culture grown in BHI at 37 °C was added to each well.

Azide control. 205 μL (50 μM) of azide stock solution was diluted with 10 mL BHI into 5 μM solution. 75 μL of the mixture was added into each well of the 96-well plate. 75 μL of 1:1000 (v/v) overnight bacterial culture dilution was added to each well.

***In cellulo* click reaction.** 75 μL of azide solution (20 μM) was added to columns 1-11 of the 96-well plate. 150 μL of alkyne solution (10 mM) was added and serial diluted into the remaining columns. 75 μL of 1:1000 (v/v) overnight bacterial culture dilution was added to each well.

Resazurin-based alamarBlue assay. AlamarBlue reagents were added to each well and the plate was incubated at 37°C for another 8 hours.

2.11 RT-PCR and Western blot analysis

Bacteria growth and treatment with tested compounds. *S. aureus* strains ATCC33591 was inoculated from freezer stock into Brain Heart Infusion (BHI) Broth 37 °C overnight. The culture was then diluted 1:100 and grown to an OD_{600} = 0.6 (2-4 h). Cells were treated for 2 h with 1/2 and 1/4× MIC of **5c**, **5h**, **3a** and Chloramphenicol (CHL, positive control). MIC values of these compounds against ATCC33591 are 2.0, 4.0, 0.5 and 2.0 μg/mL respectively.

RT-PCR. Total RNA was extracted using Trizol method and cDNA was obtained using reverse transcription kit (TransGen Biotech). Then PCR was conducted with cDNA. *HcaT* was used as internal control.

Primer sequences:

hcaT-F：GCTGCTCGGCTTTCTCATCC，hcaT-R：CCAACCACGCTGACCAACC.

EFtu-F：CAATCACCACCGTACTGGCT，EFtu-R：AAGAATCCAGGAAGCCAGCC.

Western blot

Total cellular proteins were extracted in *RIPA Lysis Buffer* (Beyotime Biotechnology). Protein concentrations were determined with BCA protein assay kit (Thermo Fisher Scientific). Equal amounts of protein were run out on 10% SDS-PAGE gel and subsequently transferred onto PVDF membranes (Millipore). Membranes were blocked in 5% skimmed milk and incubated with *anti-EFtu antibody*

(Proteintech) at 4℃ overnight. *Anti-Rabbit antibody* (Proteintech) was used as second antibodies and incubated at 37 ℃ for 1 h.

2.12 Microscopic observations

S. aureus strains ATCC33591 was inoculated from freezer stock into Brain Heart Infusion (BHI) Broth 37 °C overnight. The culture was then diluted 1:100 and grown to an OD_{600} = 0.6 (2-4 h). Cells were treated for 6 h with 1/2 × MIC of 5c, 5h, 3a and Linezolid (LNZ, positive control). MIC values of these compounds against ATCC33591 are 2.0, 4.0, 0.5 and 2.0 μg/mL respectively. Then microscopic observation was conducted using Gram staining method."

2.13 Screening for species-specific ribosome inhibitors

Based on the preparation methods of *E. coli* ribosome extracts (ERE) and 70S ribosomes, *S. aureus* ribosome extracts (SRE) and 70S ribosomes were obtained using *S. aureus* strain MRSA ATCC33591. The procedures of coupled assay and *in situ* click chemistry experiment with *S. aureus* materials were performed based on the those in *E. coli* experiments. The screening of alkyne **2a**~**2q** was against azide **1** and screening for azides **4a**~**4i** was against alkyne **2a**.

3. Supplementary tables and figures

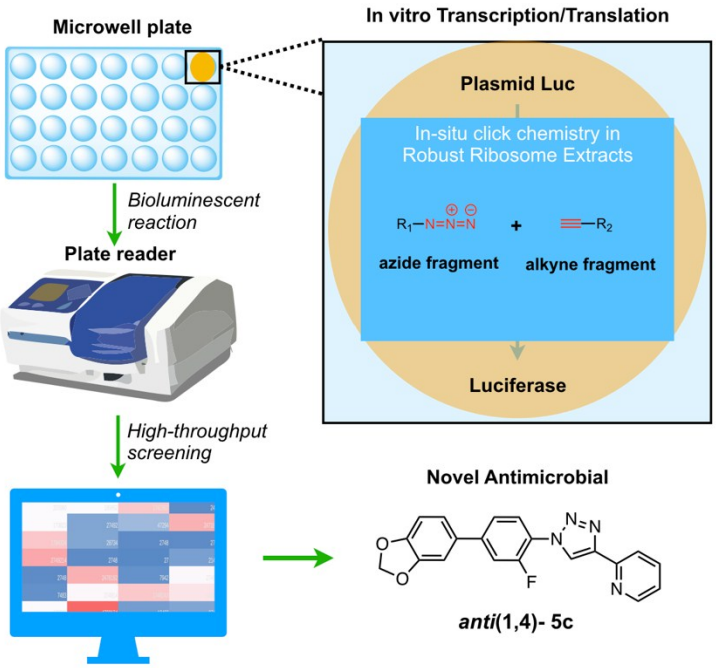


Figure S1. Illustration of the robust and accurate high-throughput platform developed in this work: the synthesis of the ribosomal inhibitors was driven by a very crude ribosome extract system (ERE) through *in situ* [2+3] Huisgen cycloaddition and integrated with an *in vitro* transcription/translation luminescence assay.

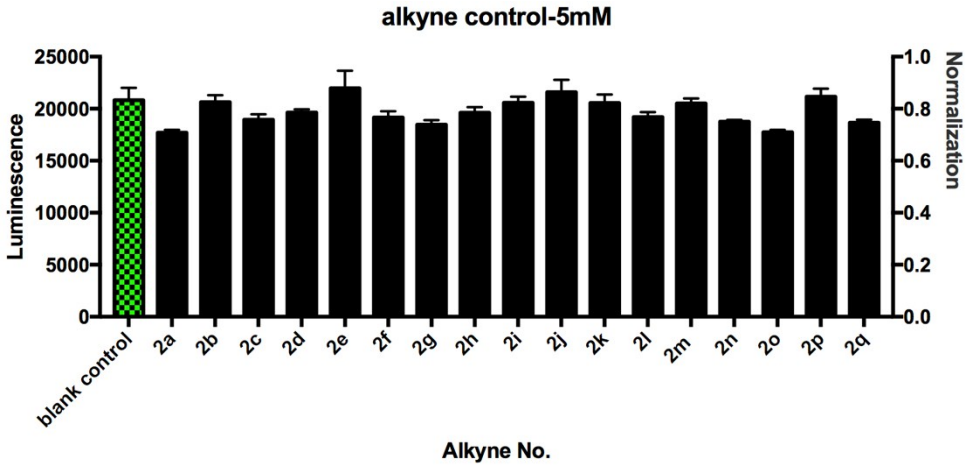


Figure S2. Alkyne control (5 mM) experiment of coupled assay established in this work (*in situ* click chemistry system coupled with *in situ* luciferase production and luminescence detection).

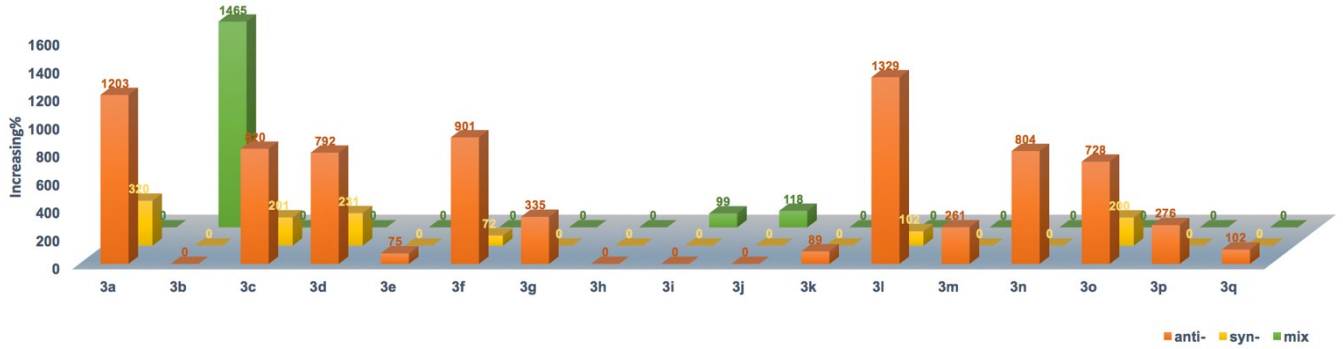


Figure S3. *In situ* click experiment (*E. coli* 70S subunits -templated) with **1** and 17 alkynes respectively. Mix represents unresolved *anti* (1, 4)- and *syn* (1, 5)- isomers. Increase % of mass counts are calculated from the ratio of the ribosome-templated reaction to the buffer control group. Results are an average of 3 independent experiments (see standard error in Table S1 below).

Table S1. LC-MS analysis of *E. coli* 70S subunits-templated *in situ* click experiments

Cmpd#	[mass counts of *anti* (1,4)-]	[mass counts of *syn* (1,5)-]	30S	BSA	Buffer	Increase%	S.D
3a	1147536	305247	227382	109291	90029	1524	123
3b	1452672[a]		447278	437282	92839	1583	103
3c	723709	454579	444922	399945	98398	1195	34
3d	768722	224210	334883	300392	88372	1065	43
3e	78493	0	75882	57893	44893	51	8
3f	934633	74688	600923	465783	94883	1156	29
3g	885636	0	55564	66487	203483	335	109
3h	43799	0	58378	40095	45694	6	10
3i	99053[a]		47937	57937	49683	75	88
3j	75847[a]		65843	57833	34783	89	12
3k	58589	0	44589	46578	30942	151	19
3l	1474126	113138	246842	223984	100932	1366	133
3m	144532	0	54567	44795	39984	284	34
3n	888894	0	229302	222937	98348	910	59
3o	531552	146031	227563	374865	67578	1048	88
3p	167732	0	54737	56773	44657	246	39
3q	95883	0	47583	59489	47583	62	9

[a] Unsolved mixture of *anti*- and *syn*- isomers. Results are an average of three independent experiments.

Table S2. MIC (μg/mL) values of *anti*-triazole products against *E.coli* and *P. aeruginosa*

Comp#	*Escherichia coli* ATCC25922	*Pseudomonas aeruginosa ATCC27853*	Comp#	*Escherichia coli* ATCC25922	*Pseudomonas aeruginosa ATCC27853*
3a	>64	>64	**3o**	>64	>64
3b	>64	>64	**3p**	>64	>64
3c	>64	>64	**3q**	>64	>64
3d	>64	>64	**5a**	>64	>64
3e	>64	>64	**5b**	>64	>64
3f	>64	>64	**5c**	>64	>64
3g	>64	>64	**5d**	>64	>64
3h	>64	>64	**5e**	>64	>64
3i	>64	>64	**5f**	>64	>64
3j	>64	>64	**5g**	>64	>64
3k	>64	>64	**5h**	>64	>64
3n	>64	>64	**5i**	>64	>64

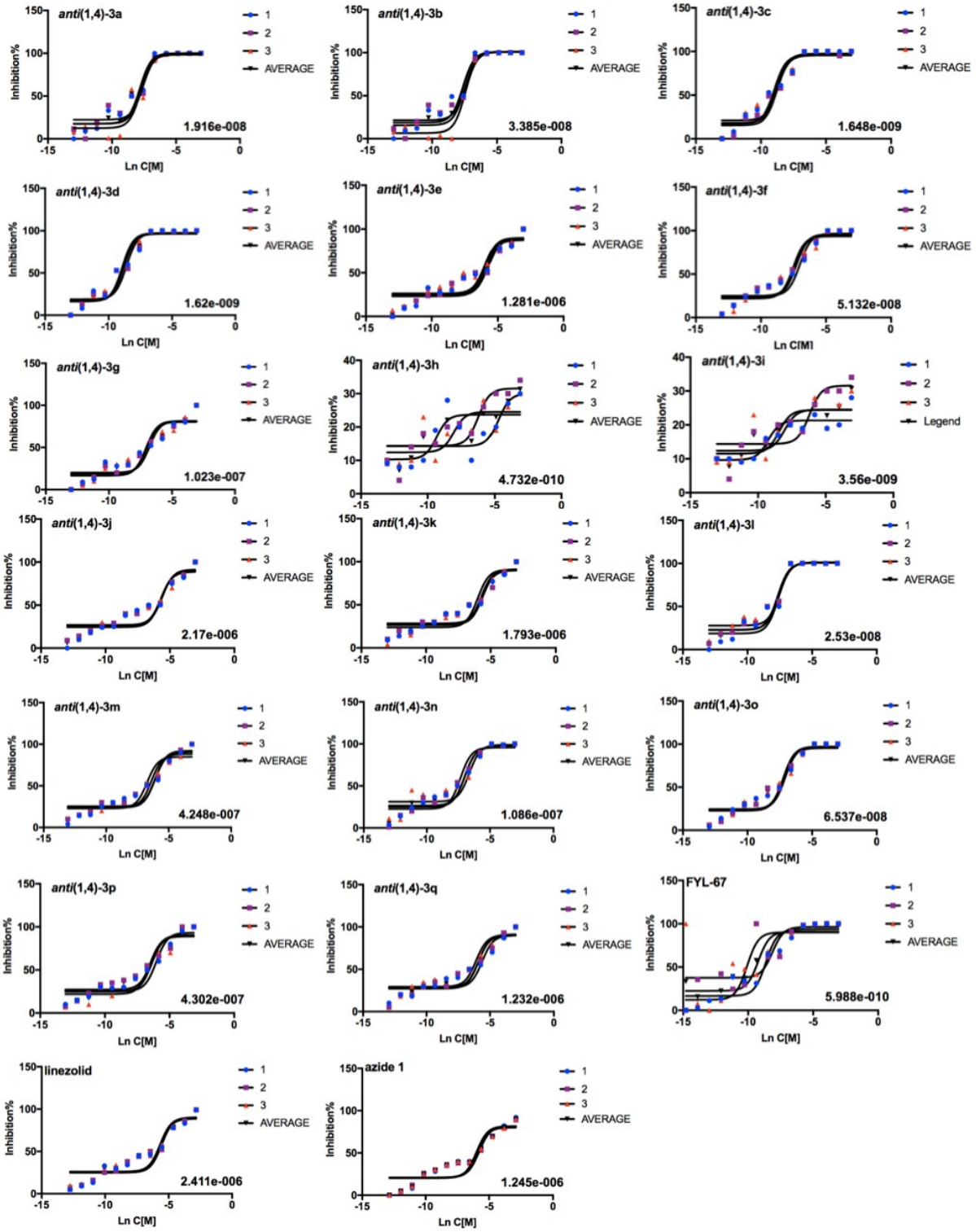


Figure S4. IC_{50} values of *anti* (1, 4)- triazole products **3a**~**3q**, azide **1**, Linezolid and FYL-67 on *E. coli* ribosome.

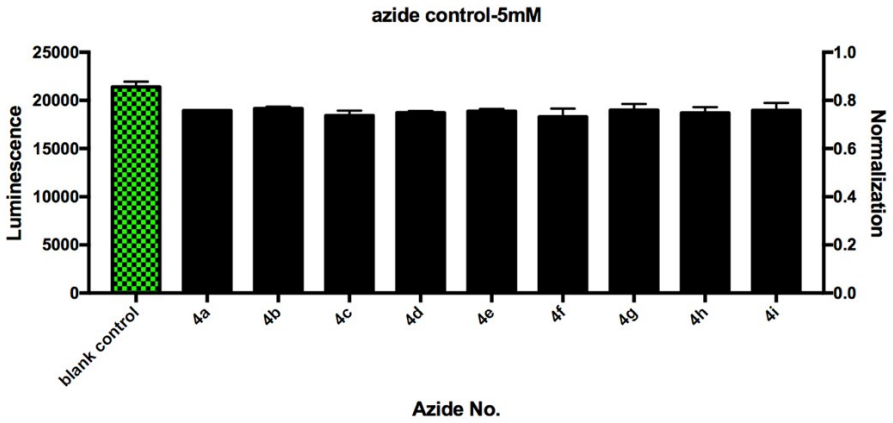


Figure S5. Azide control experiment (5mM) of coupled assay established in this work (*in situ* click chemistry coupled with *in situ* luciferase production and luminescence detection).

Table S3. Bacterial ribosomal inhibitory activity of *anti*-triazole products **5a~5i** at 100 μM

Comp#	Inhibition ratio%	Comp#	Inhibition ratio%
5a	10	**5f**	8
5b	12	**5g**	7
5c	100	**5h**	100
5d	6	**5i**	10
5e	8	**FYL-67**	100

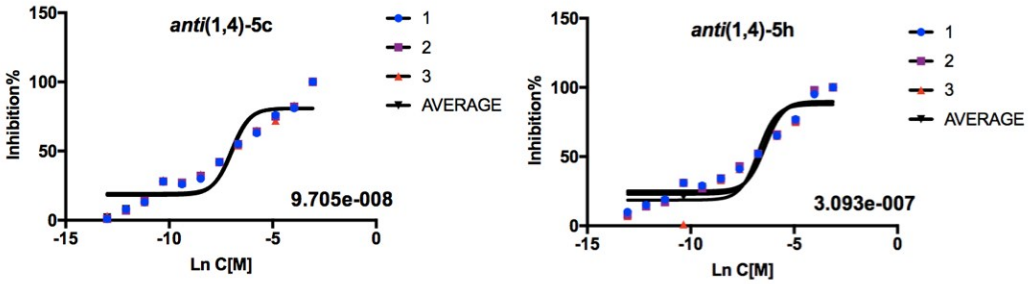


Figure S6. IC_{50} values of *anti* (1, 4)- triazole products **5c** and **5h** on *E. coli* ribosome.

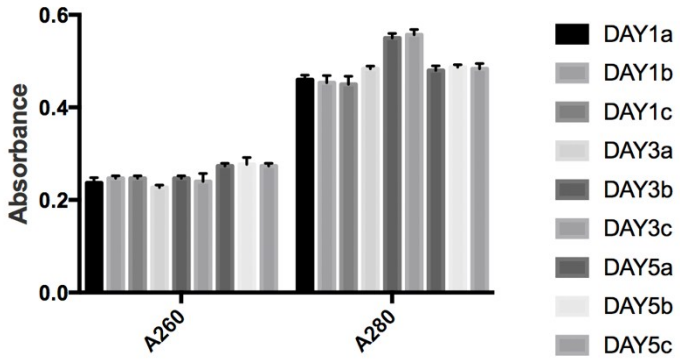


Figure S7. A_{260} and A_{280} measured using NanoDrop 2000C ultra-microspectrophotometer of 9-batch of ERE prepared on DAY one, DAY three and DAY five. Results are shown as mean ±SD, n=9.

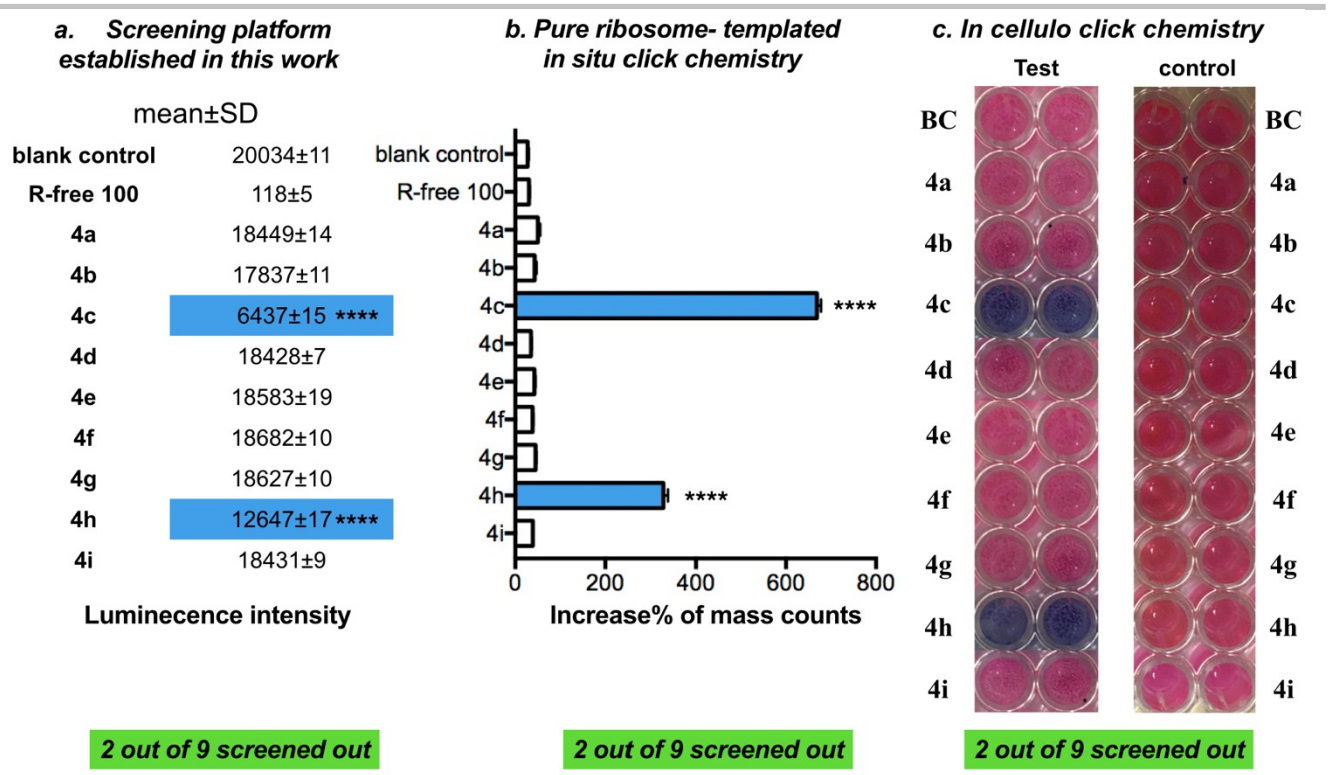


Figure S8. Screening results of 9-azide **4a**~**4i** against alkyne **2a** using three different screening strategies. **a)** The integration method established in this work. Results are shown as mean ±SD. 9 individual experiments using 9-batch of ERE prepared following the standard procedure on DAY 1, DAY 3 and DAY 5 (3 batches on each day) were respectively performed. Results are shown as mean ±SD (n=9; ****, $p < 0.0001$). **b)** Classical *in situ* click chemistry strategy using pure ribosomes to catalyze Huisgen cycloaddition reaction. Click products were analyzed using LC-MS and mass counts of each triaozles was recorded. Results are an average of three experiments. Increase% of mass counts are calculated from the ratio of the ribosome-templated reaction to the buffer control group. Results are shown as mean ±SD (n=3; ****, $p < 0.0001$). **c)** *In cellulo* click chemistry performed in *S. aureus* strain ATCC33591. Control groups were performed with only azide fragments. **BC**, blank control.

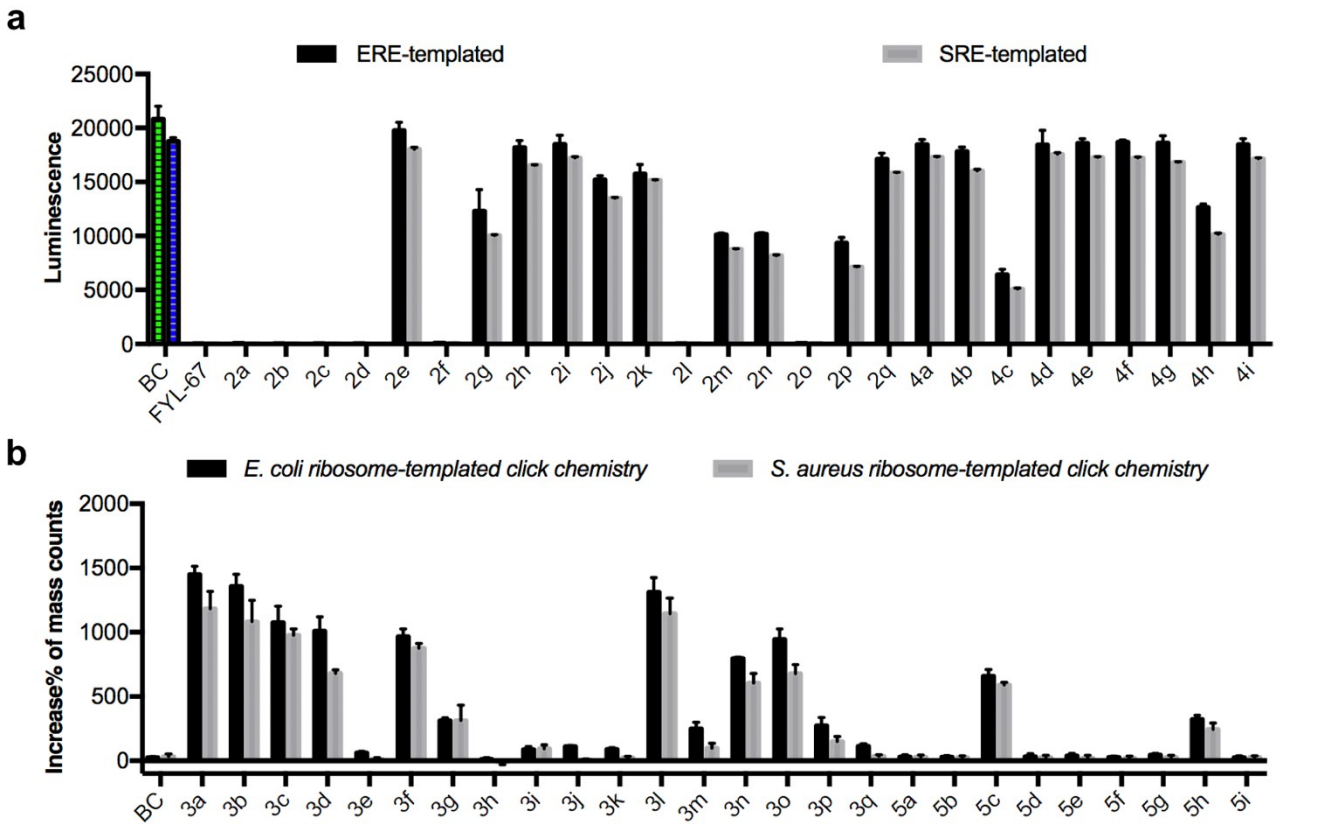


Figure S9. Screening results of species-specific inhibitor with (**a**) coupled assay in this work and (**b**) classical *in situ* click chemistry. (**a**) Preparation of *S. aureus* (MRSA, ATCC33591) ribosome extracts (SRE) is as same as it for ERE. Screeing of building blocks alkynes **2a**~**2q** and azides **4a**~**4i** were against azide **1** and alkyne **2a** respectively. (**b**) Increase % of mass counts from LC-MS analysis of click products (total of *anti*- and *syn*- isomers). *E. coli* (BL21) 70S ribosome and *S. aureus* (MRSA, ATCC33591) 70S ribosome were used as click templates respectively. Increase% of mass counts are calculated from the ratio of the ribosome-templated reaction to the buffer control group. Results are shown as mean ±SD (n=3, see standard error in Table S4).

Table S4. LC-MS analysis of *S. aureus* and *E. coli* 70S ribosomes-templated *in situ* click experiments

	E. coli 70S ribosomes				*S. aureus* 70S ribosomes			
Cmpd#	Increase%	Increase%	Increase%	S.D	Increase%	Increase%	Increase%	S.D
BSA	32	15	23	9	29	10	55	23
3a	1523	1399	1423	66	1300	1033	1211	136
3b	1465	1300	1309	93	1109	902	1233	167
3c	1021	988	1221	126	999	1011	920	49
3d	1023	888	1112	113	700	693	650	27
3e	75	50	59	13	-2	13	22	12
3f	973	902	1022	60	832	892	902	38
3g	335	290	310	23	293	440	203	120
3h	0	11	23	12	-31	11	0	22
3i	99	60	101	23	100	59	120	31
3j	118	110	101	9	-1	0	14	8
3k	89	80	102	11	21	34	10	12
3l	1431	1300	1203	114	1194	1002	1233	124
3m	261	192	290	50	102	56	133	39
3n	804	801	784	11	619	670	521	76
3o	928	877	1032	79	713	600	723	68
3p	276	202	334	66	168	103	177	40
3q	102	101	134	19	48	20	34	14
5a	50	20	22	17	45	29	10	18
5b	43	20	19	14	40	10	23	15
5c	669	703	603	51	609	593	566	22
5d	35	10	55	23	44	20	10	17
5e	43	20	55	18	47	10	2	24
5f	39	20	21	11	37	0	15	19
5g	45	30	57	14	44	23	10	17
5h	328	289	350	31	298	233	203	49
5i	39	10	23	15	40	20	19	12

[a] Increase % of mass counts represent the sum of *anti*- and *syn*- isomers. BSA, bull serum albumin, negative control. Results are an average of 3 independent experiments.

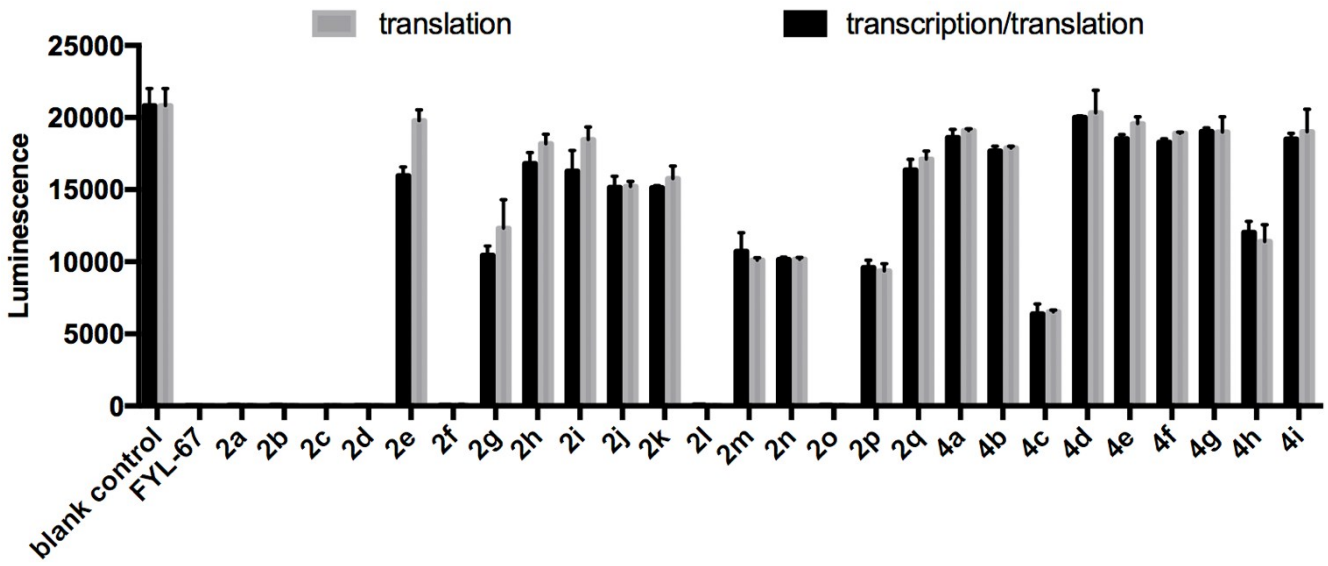


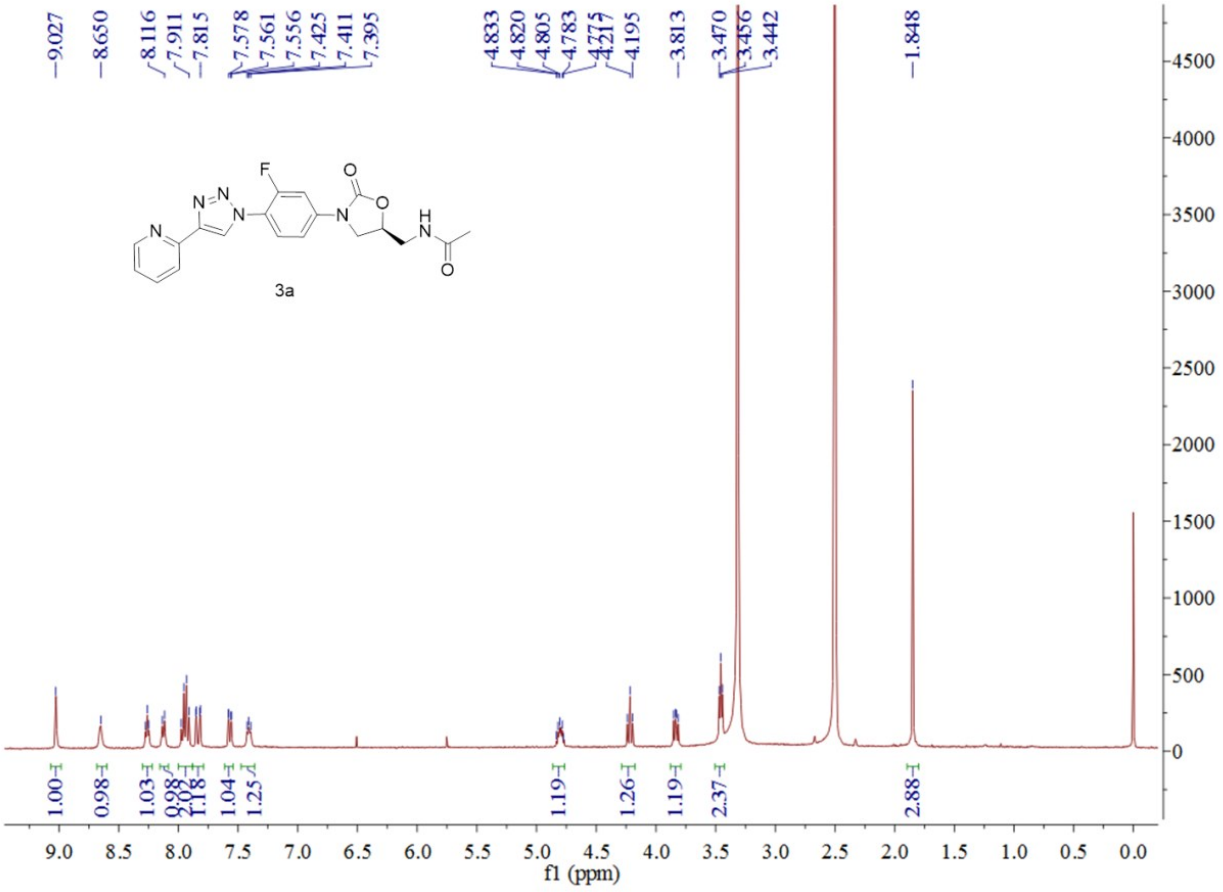
Figure S10. Screening results of alkynes **2a**~**2q** against azide **1** and azides **4a**~**4i** against alkyne **2a** using bacterial-coupled translation system[5] and *in situ* click chemistry coupled with bacterial *in vitro* transcription/translation assay in this work. Firefly luciferase mRNA (produced *in vitro* using T7 RNA polymerase) instead of T7 RNA Polymerase was added in bacterial-coupled translation system,. Results are shown as mean ±SD (n=3, see standard error in Table S5).

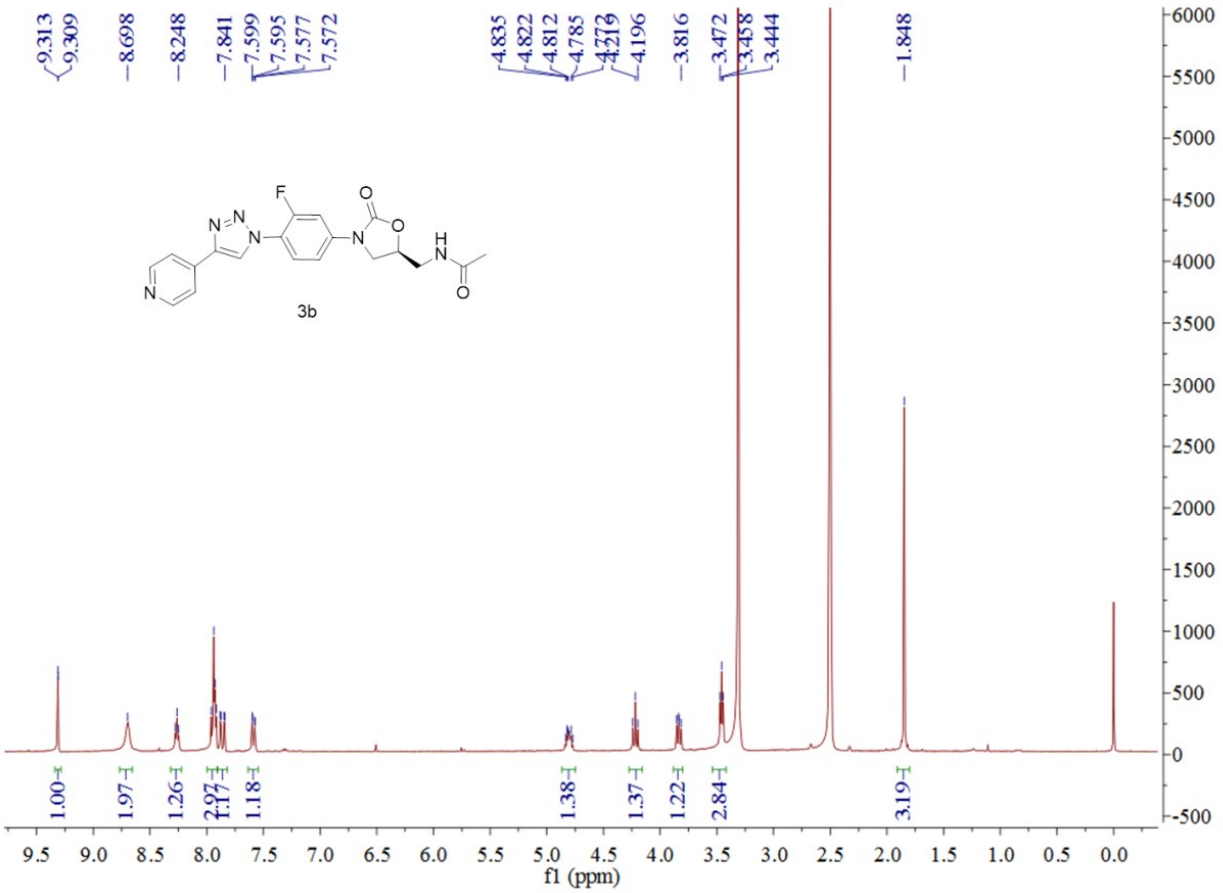
Table S5. Original data of luminescence intensity in bacterial-coupled translation assay and *in situ* click chemistry coupled with bacterial *in vitro* transcription/translation assay

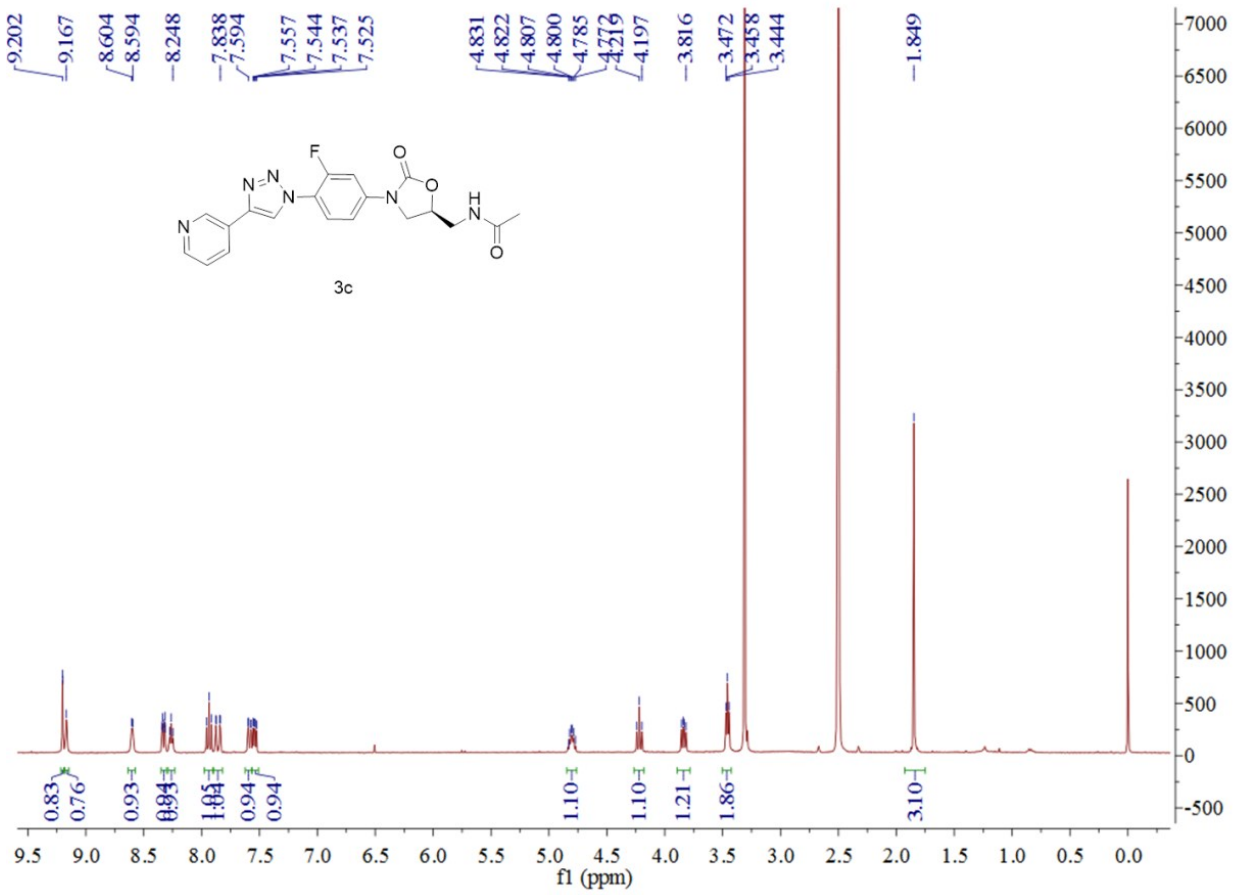
	Transcription/Translation				*Translation*			
Cmpd#	Increase%	Increase%	Increase%	S.D	Increase%	Increase%	Increase%	S.D
BC	22190	20190	20093	1184	22190	20190	20093	999
FYL-67	28	30	30	1	28	30	30	3
2a	49	55	38	9	67	48	39	14
2b	70	50	48	12	39	49	59	10
2c	20	15	10	5	48	40	40	5
2d	28	20	19	5	30	30	47	10
2e	15412	16620	15892	608	20399	18932	19983	756
2f	59	65	39	14	89	100	39	33
2g	11202	10092	10028	660	13647	13281	10039	1986
2h	16093	16690	17630	775	17839	18939	17782	652
2i	17820	15003	16049	1424	19389	18377	17663	867
2j	14456	15002	15992	779	15009	15002	15632	362
2k	15002	15102	15302	153	16732	15039	15493	876
2l	79	102	59	22	48	29	58	15
2m	9928	10020	12200	1286	10039	10020	10298	155
2n	10203	9950	10291	177	10201	10293	10039	129
2o	59	66	40	13	69	50	50	11
2p	9732	9002	10023	526	8932	9912	9230	502
2q	16620	16924	15539	728	17736	16998	16637	560
4a	18832	19032	18002	546	18993	19034	19234	129
4b	17322	17734	17983	334	17732	17893	18003	136
4c	5674	7032	6443	681	6394	6599	6601	119
4d	20133	19983	19890	123	19983	18932	22032	1577
4e	18732	18673	18211	285	19902	19802	19032	476
4f	18002	18343	18504	256	18834	18903	18993	80
4g	19324	18903	18873	252	17883	19093	19993	1059
4h	12098	11234	12763	767	12034	12112	10055	1166

[a] Results are an average of 3 independent experiments. Blank control, BC.

4. *NMR and MS spectra*



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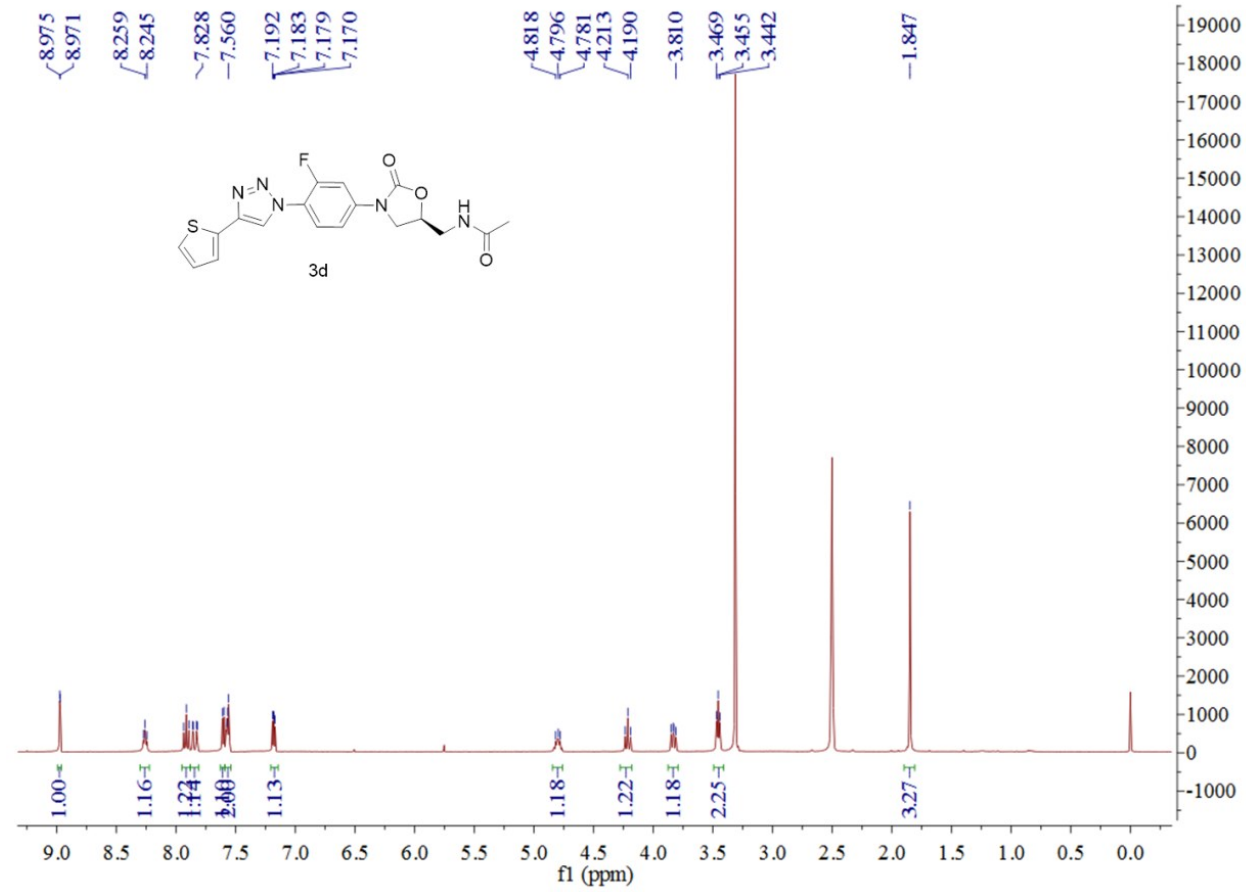
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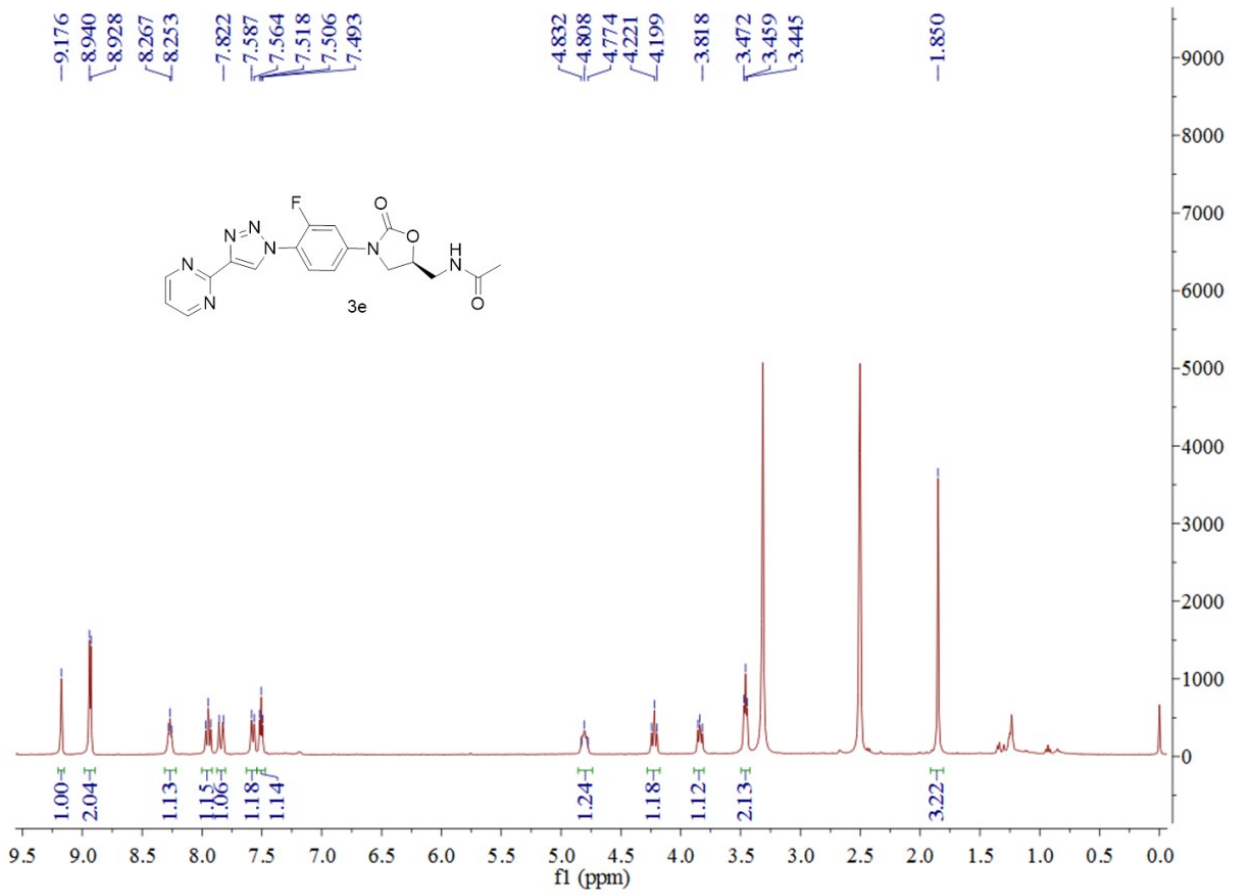
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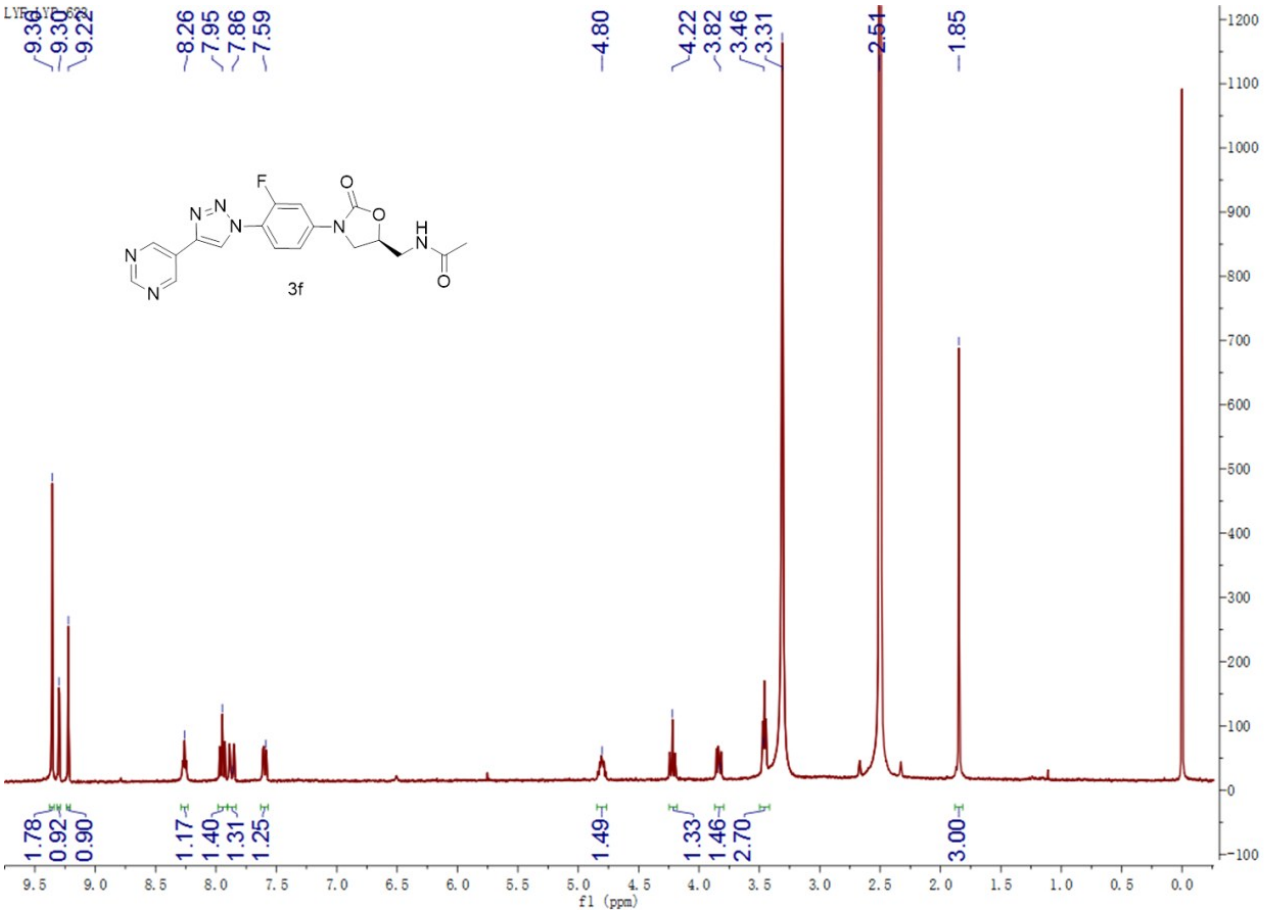
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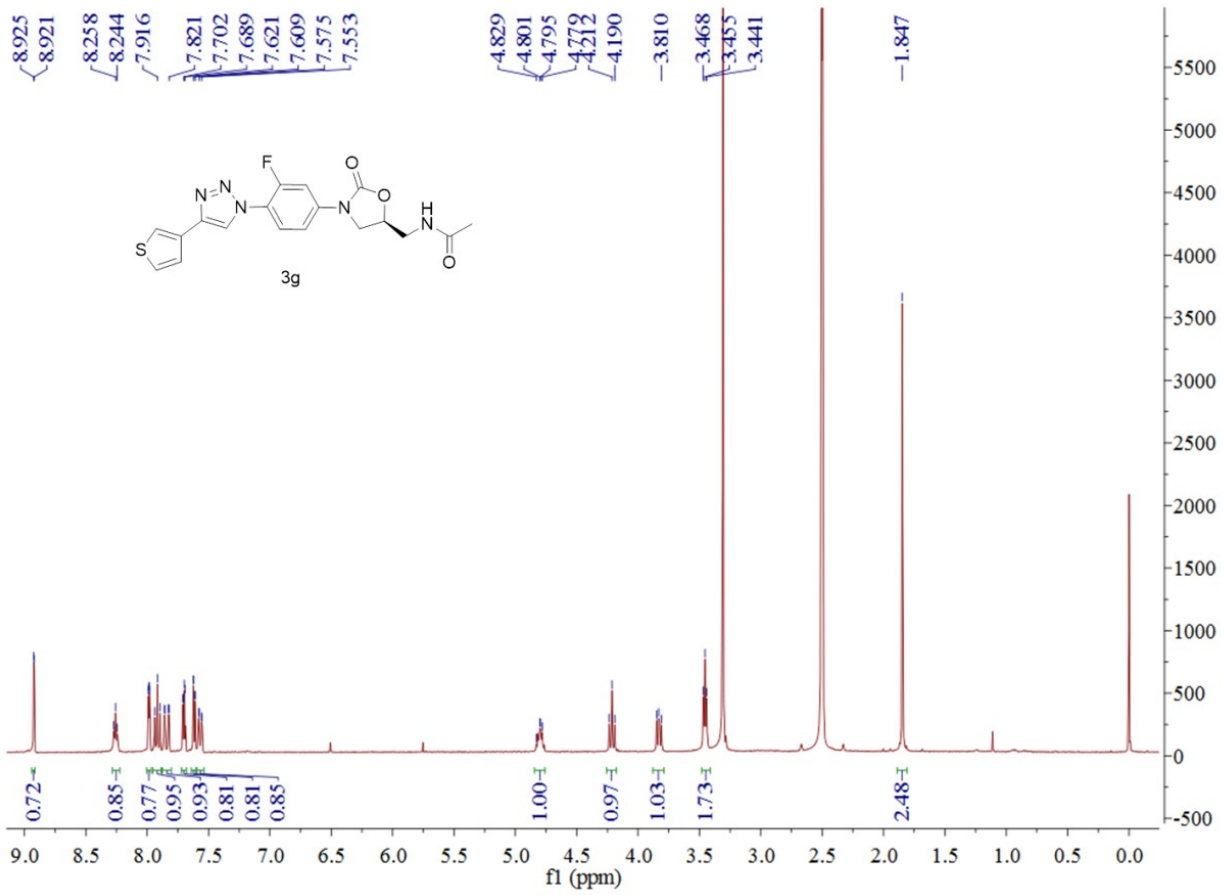
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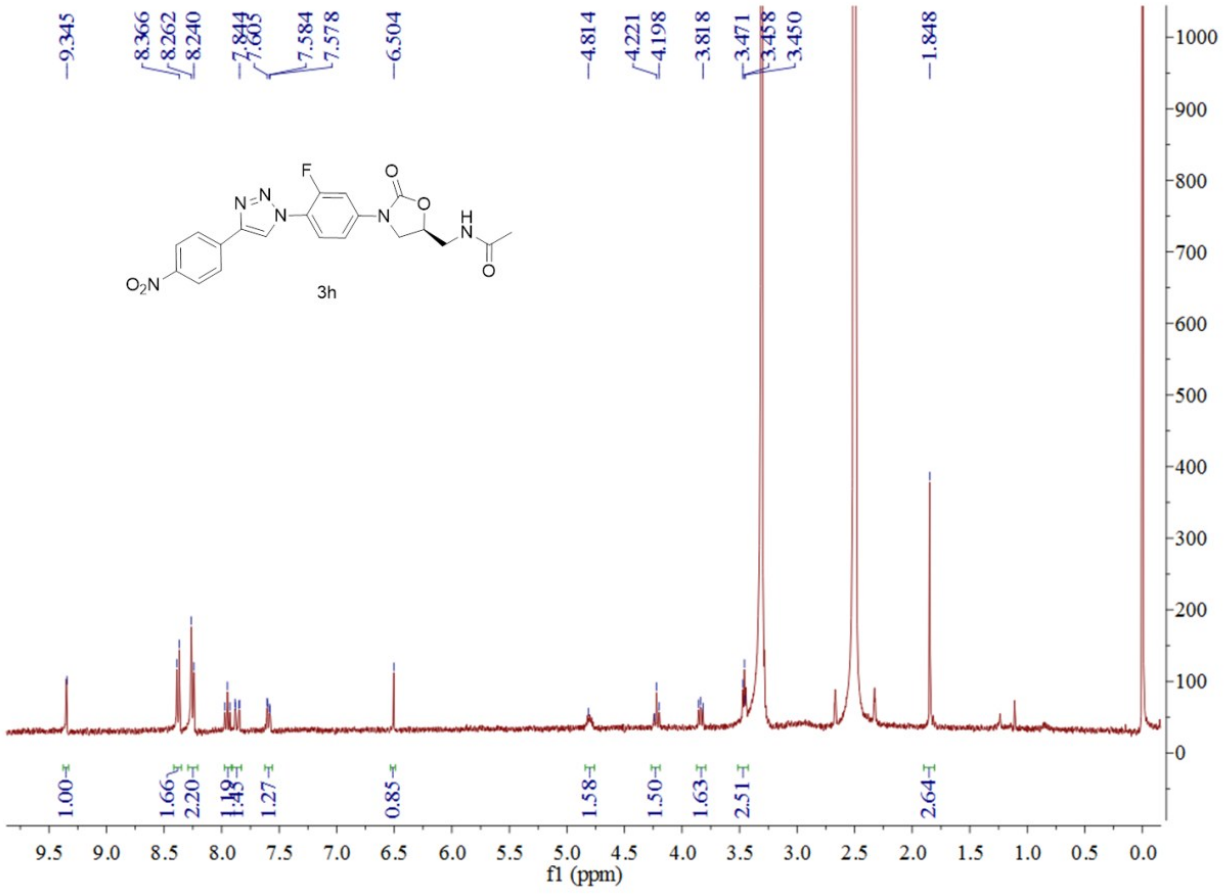
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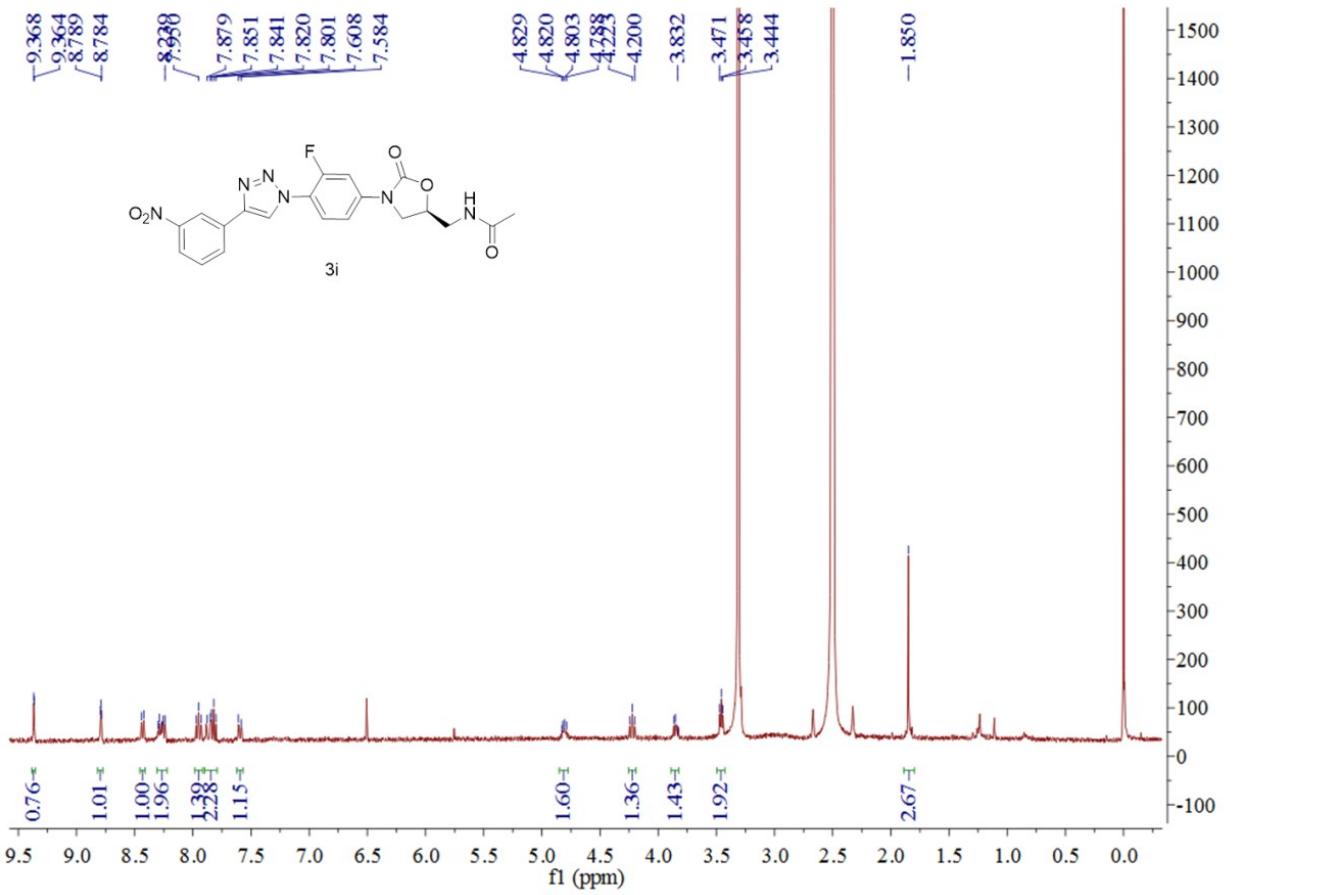
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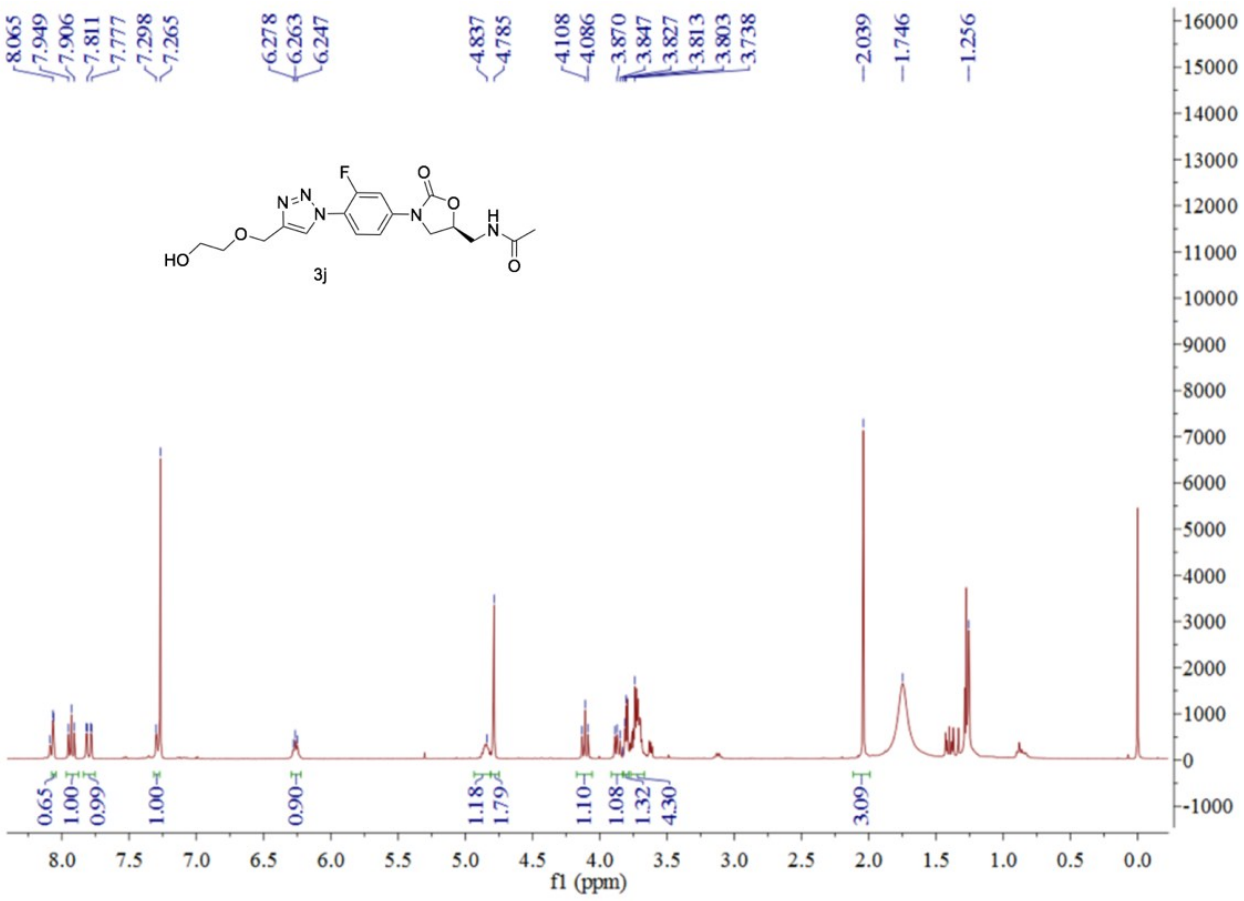
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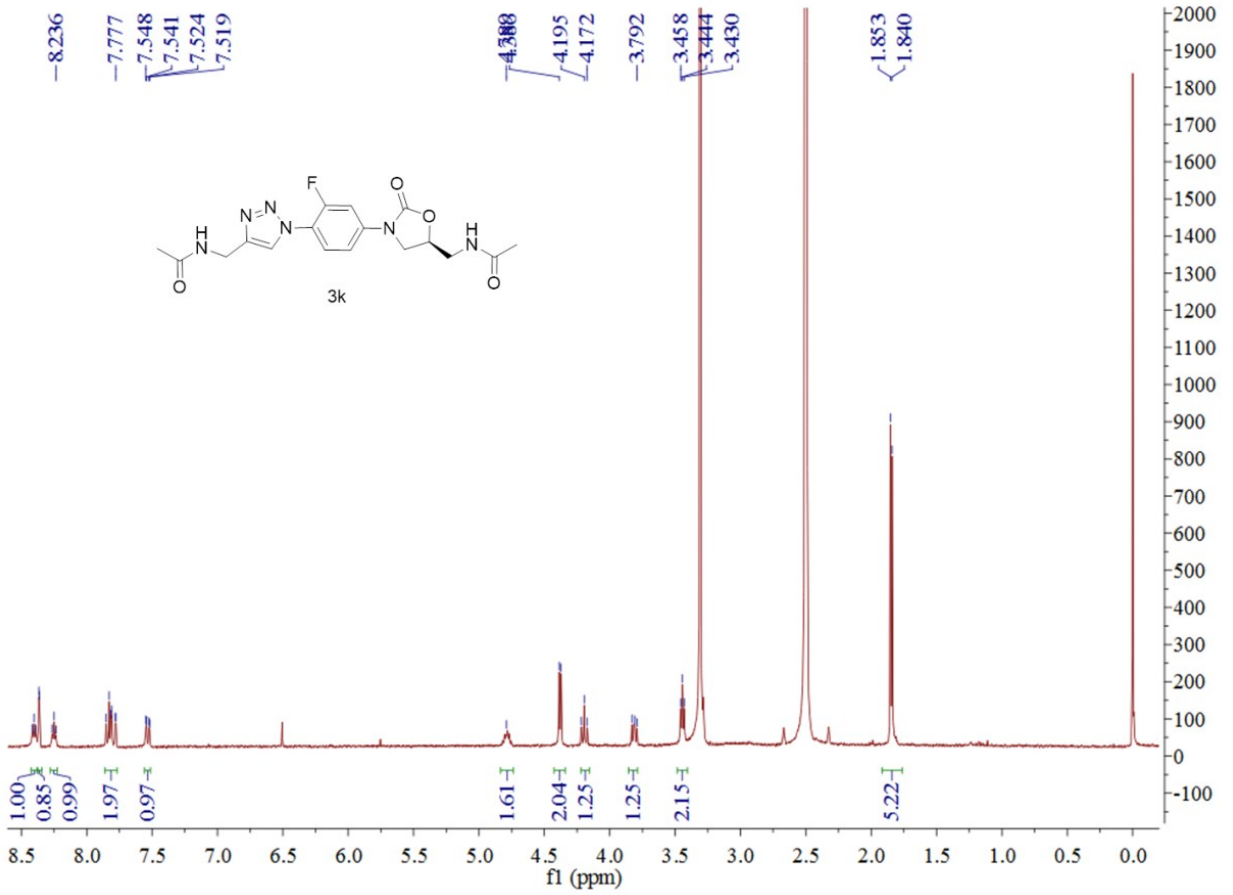
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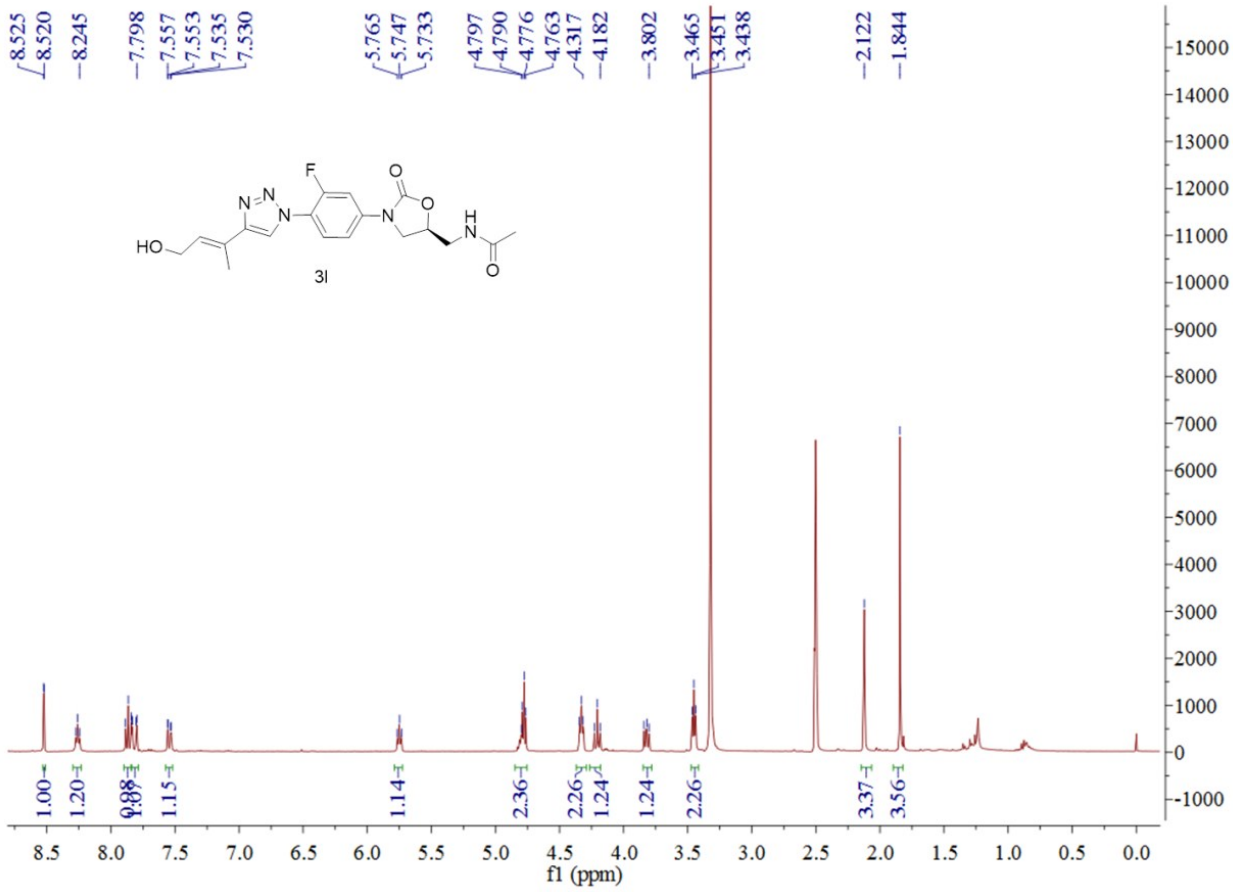
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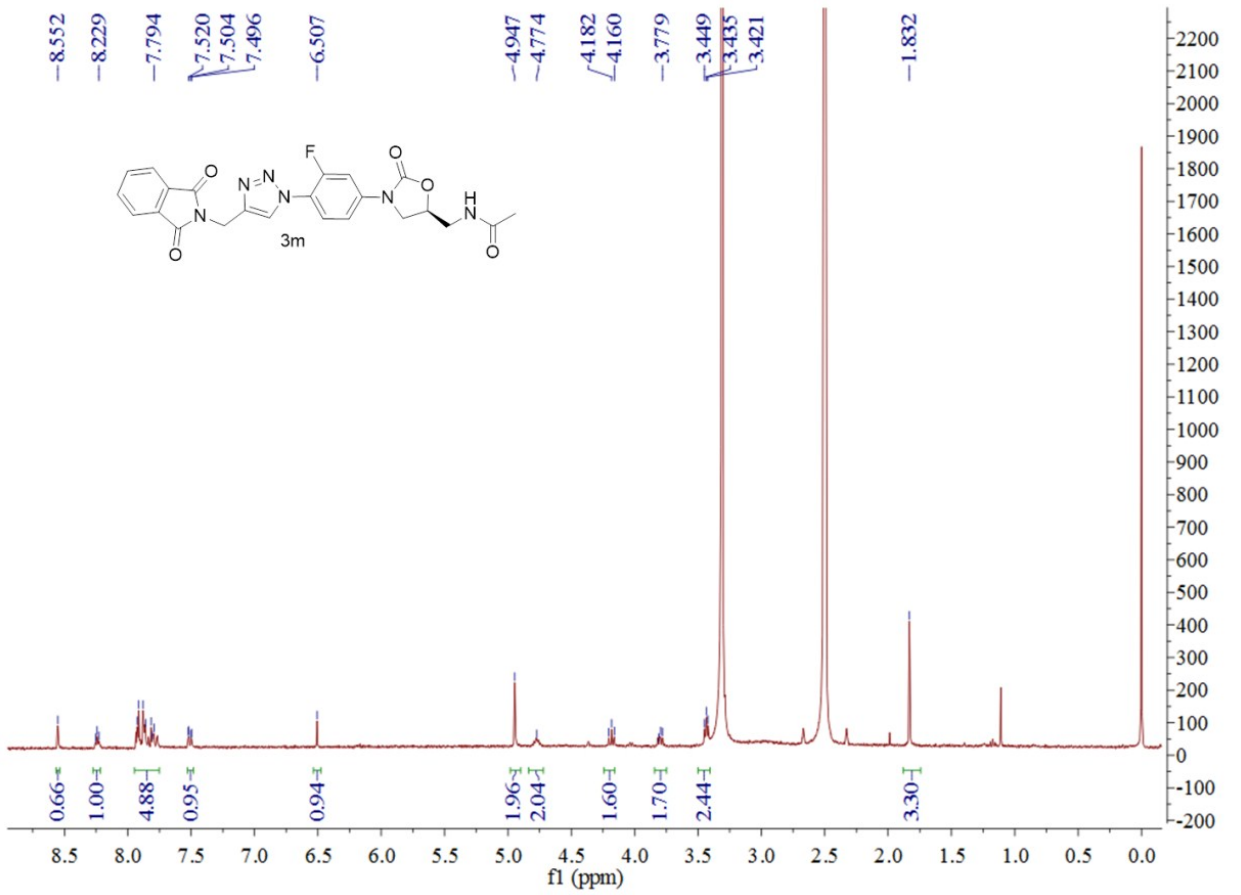
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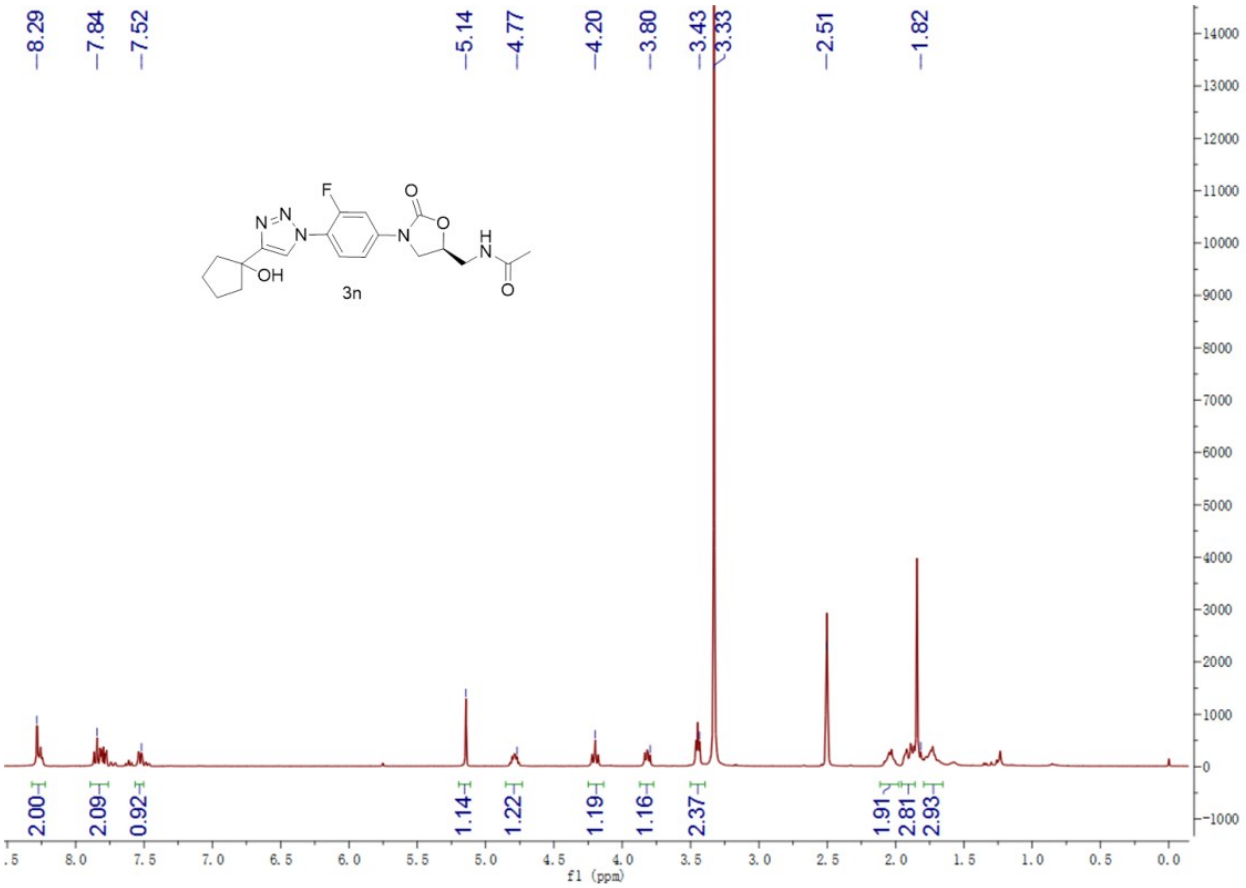
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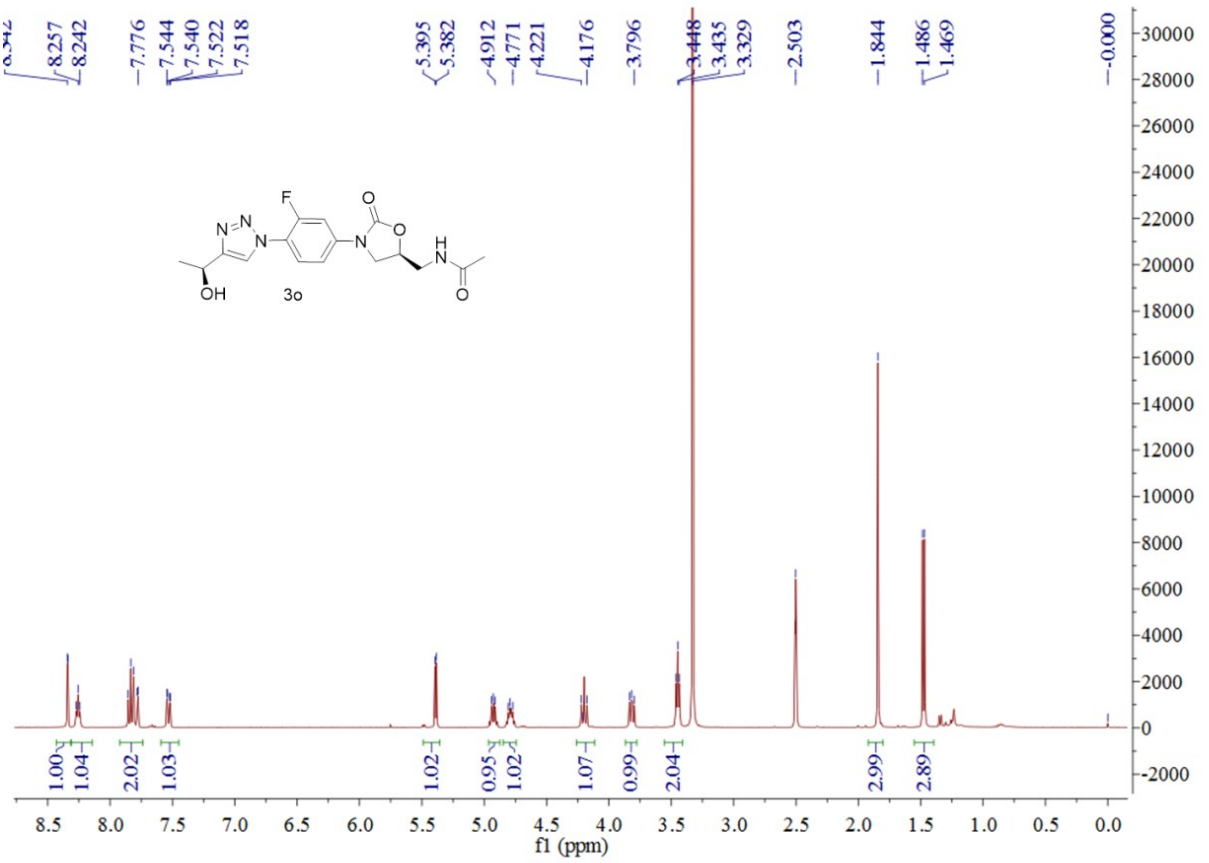
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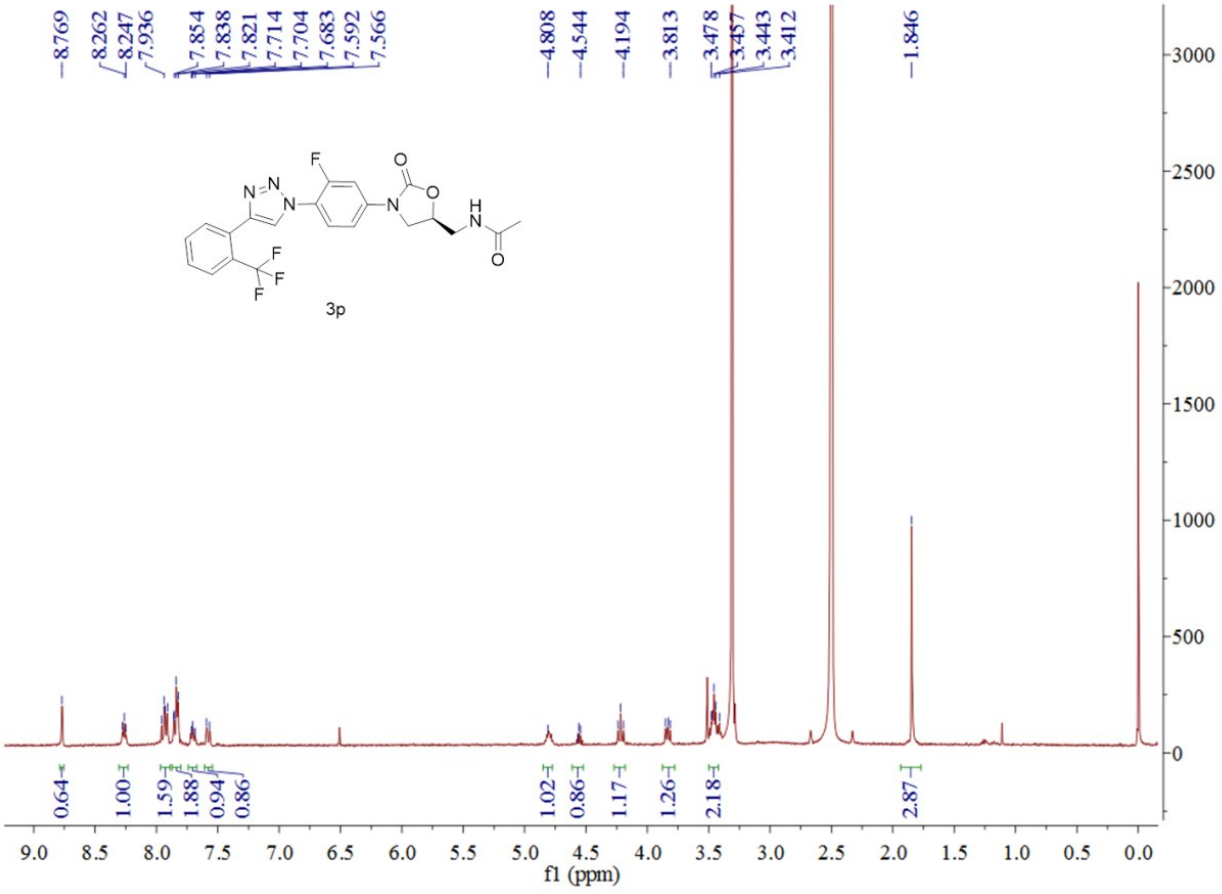
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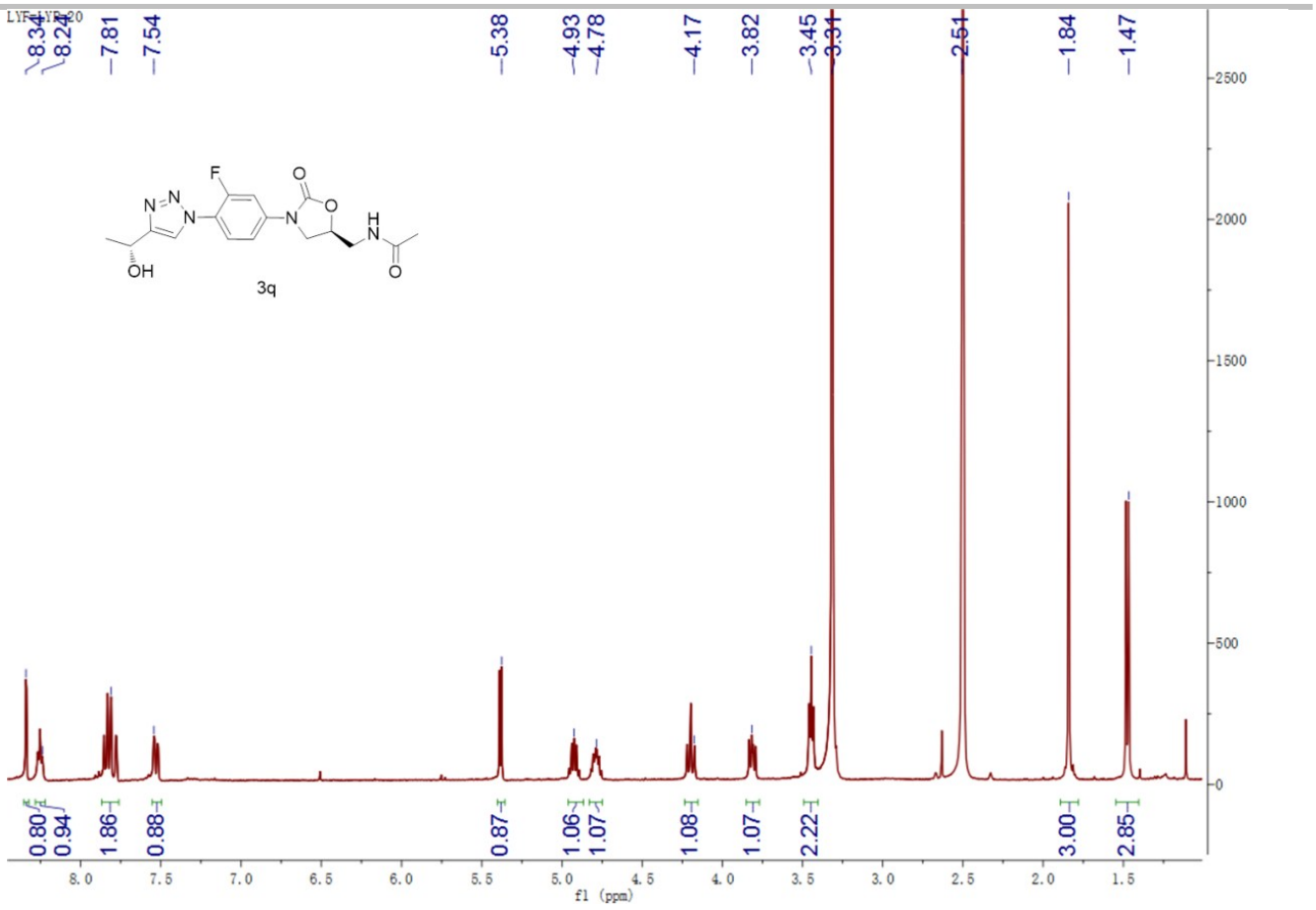
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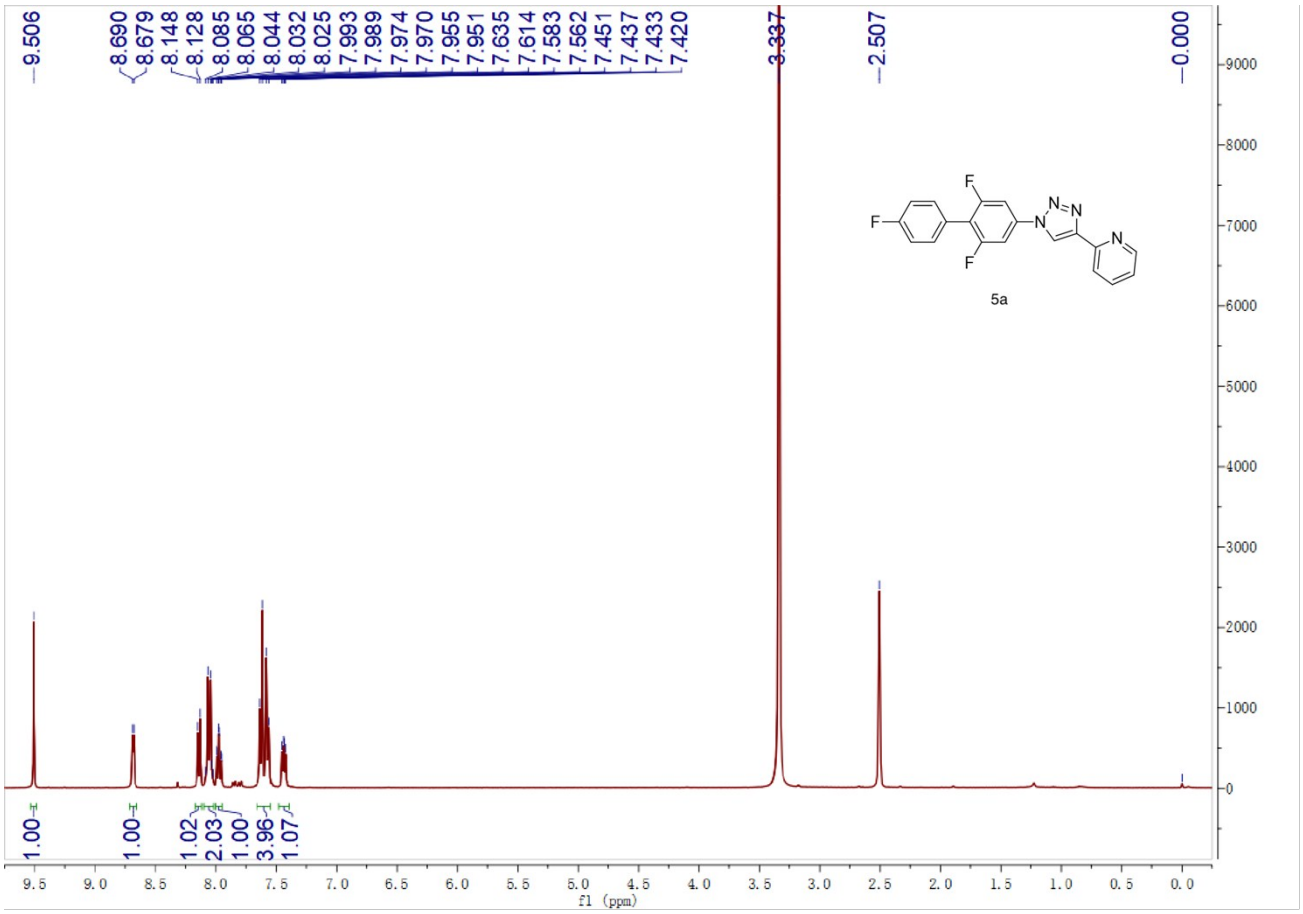
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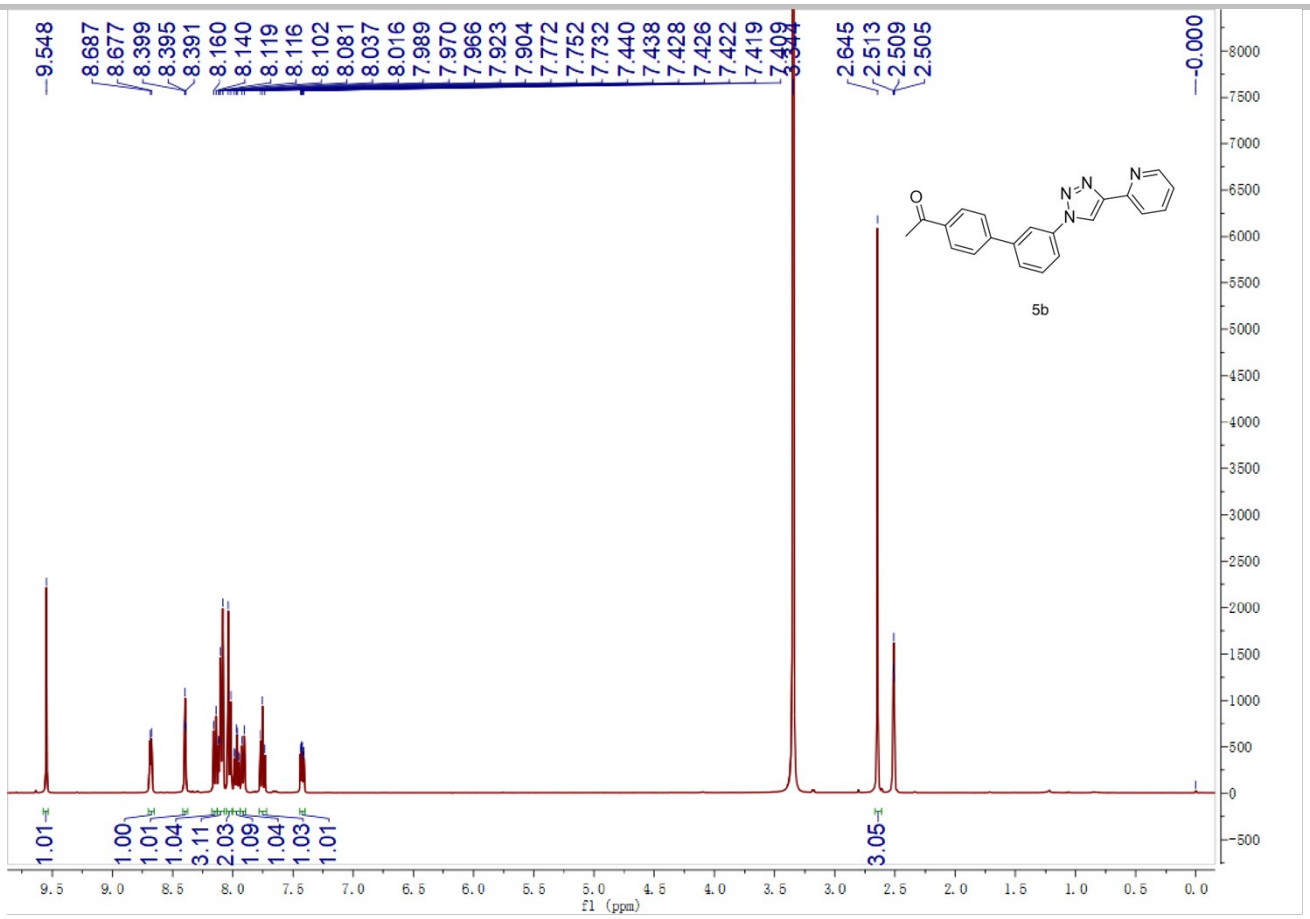
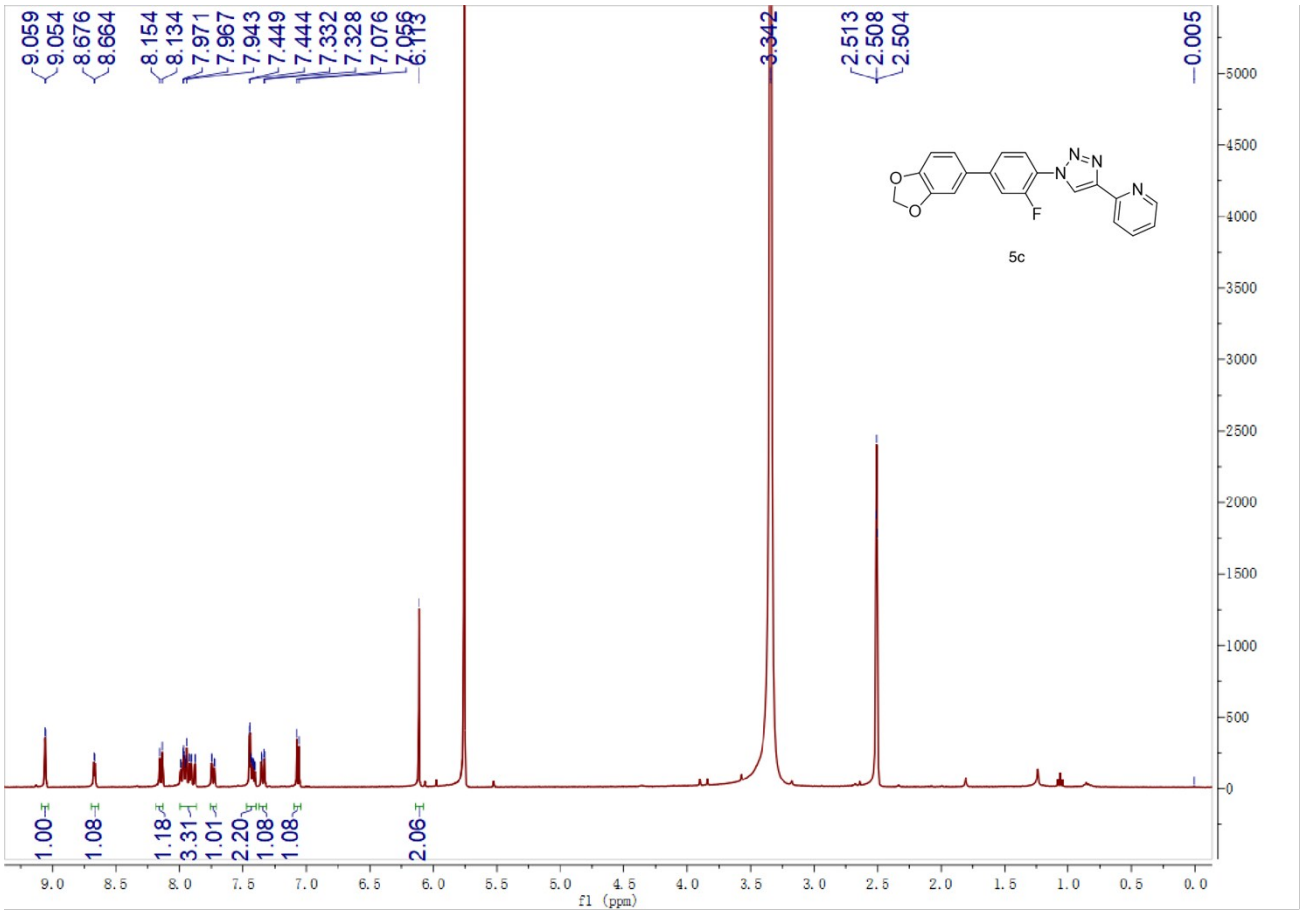
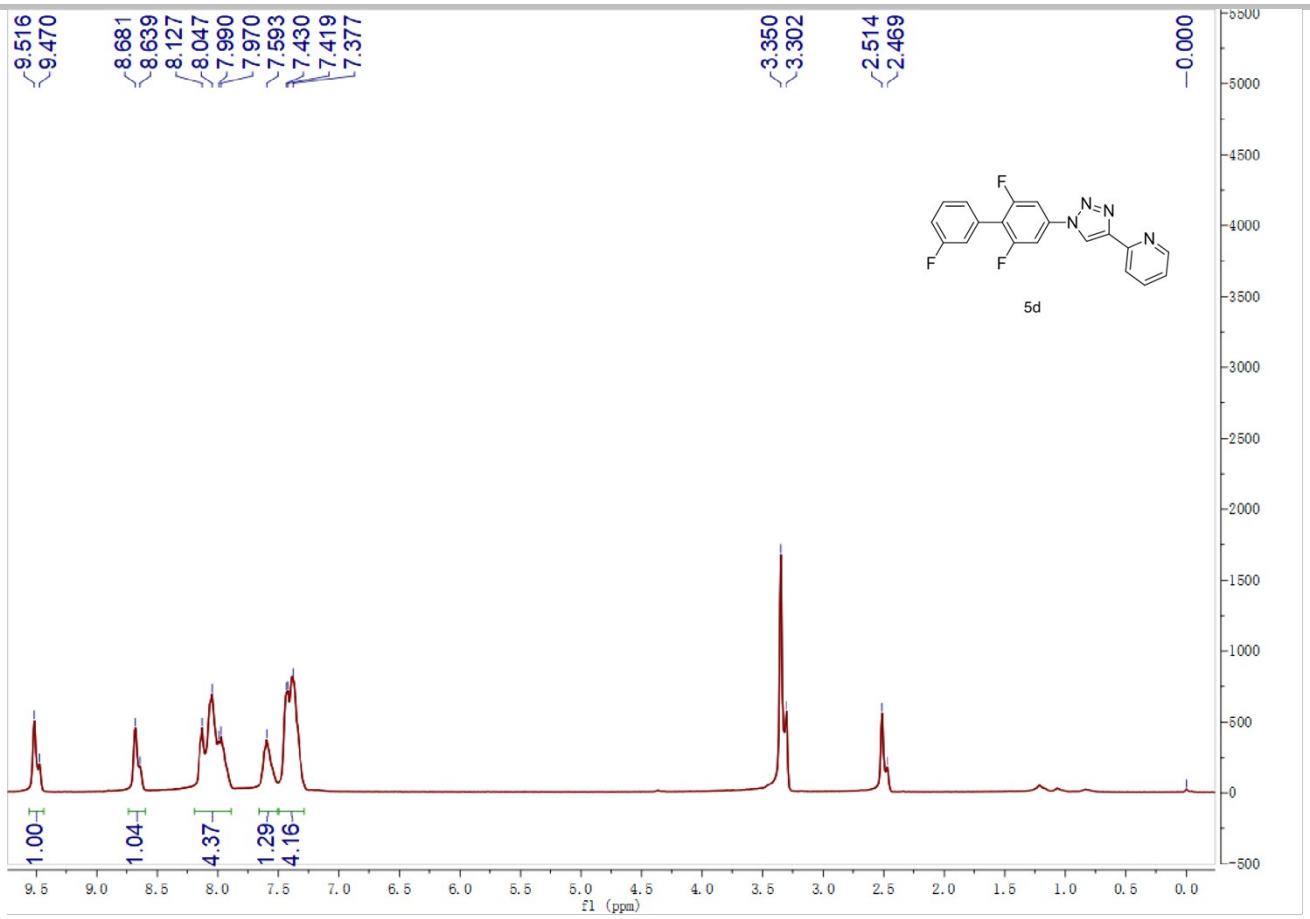
3.96
1.07
f1 (ppm)
5a

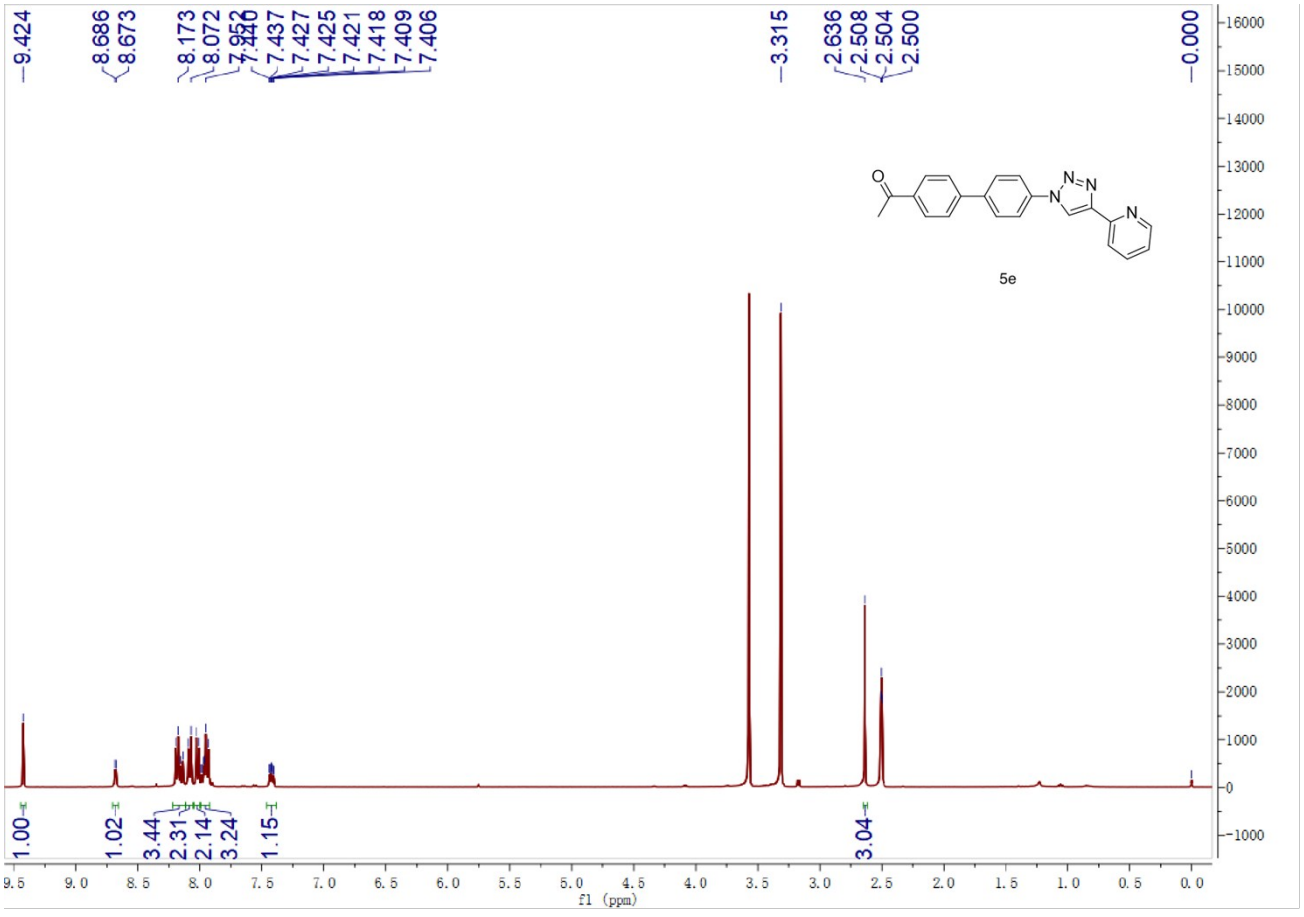

9.548
8.687
8.677
8.399
8.395
8.391
8.160
8.140
8.119
8.116
8.102
8.081
8.037
8.016
7.989
7.970
7.966
7.923
7.904
7.772
7.752
7.732
7.440
7.438
7.428
7.426
7.422
7.419
7.409
3.334
2.645
2.513
2.509
2.505
0.000
1.01
1.00
1.01
1.04
3.11
2.03
1.09
1.04
1.03
1.01
3.05
f1 (ppm)

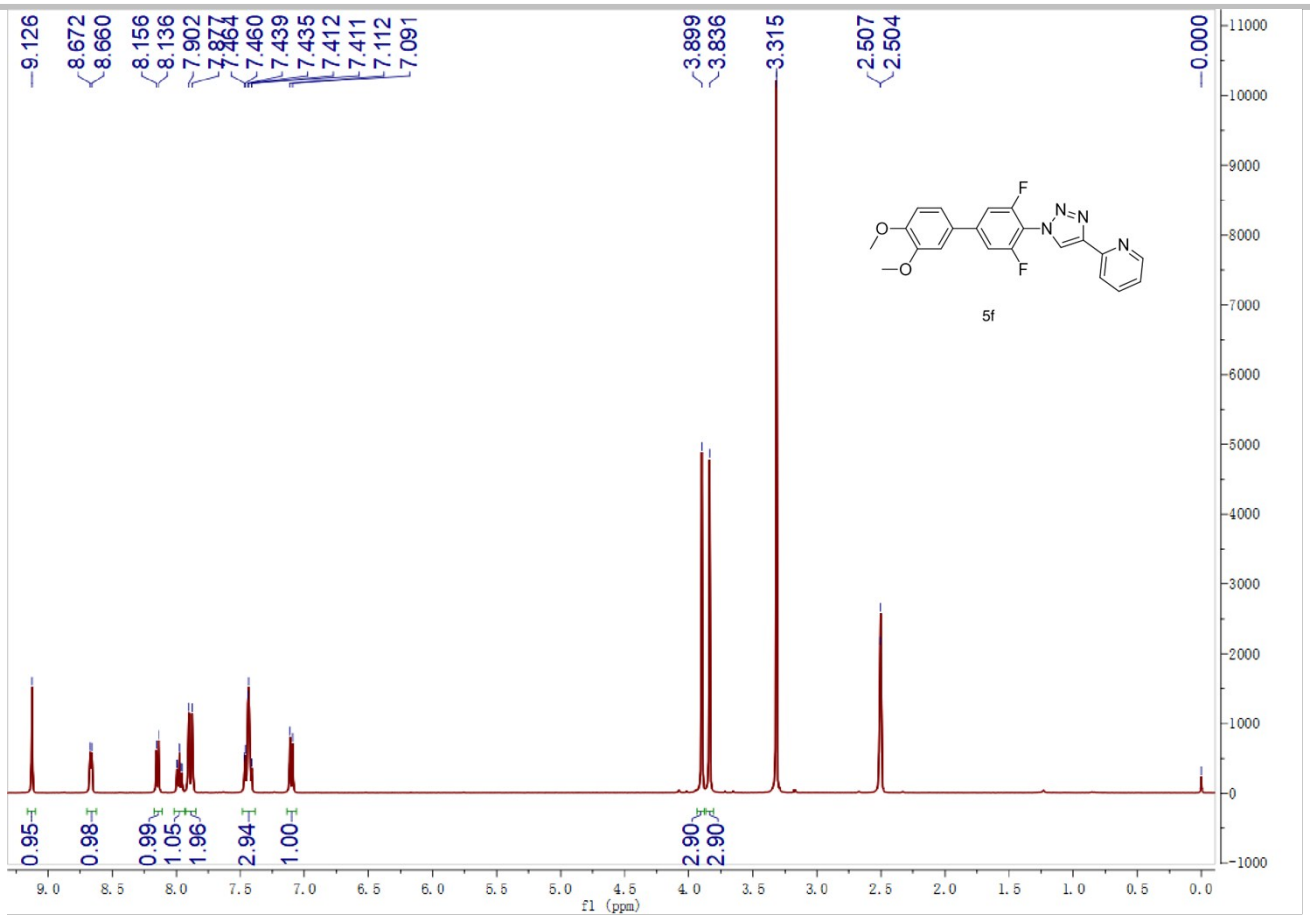
5b

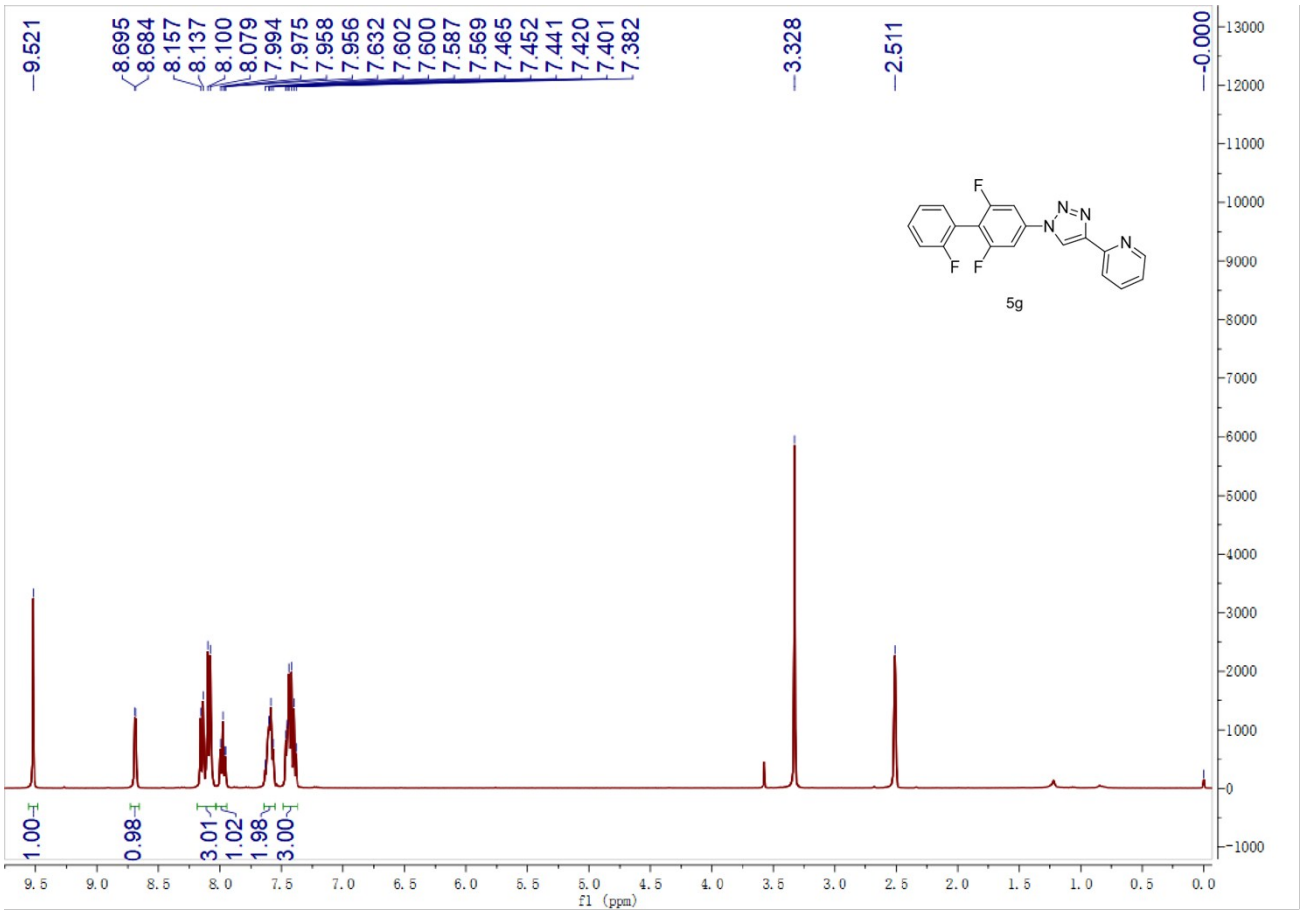

9.059
9.054
8.676
8.664
8.154
8.134
7.971
7.967
7.943
7.449
7.444
7.332
7.328
7.076
7.056
6.113
3.342
2.513
2.508
2.504
0.005
1.00
1.08
1.18
3.31
1.01
2.20
1.08
1.08
2.06
f1 (ppm)

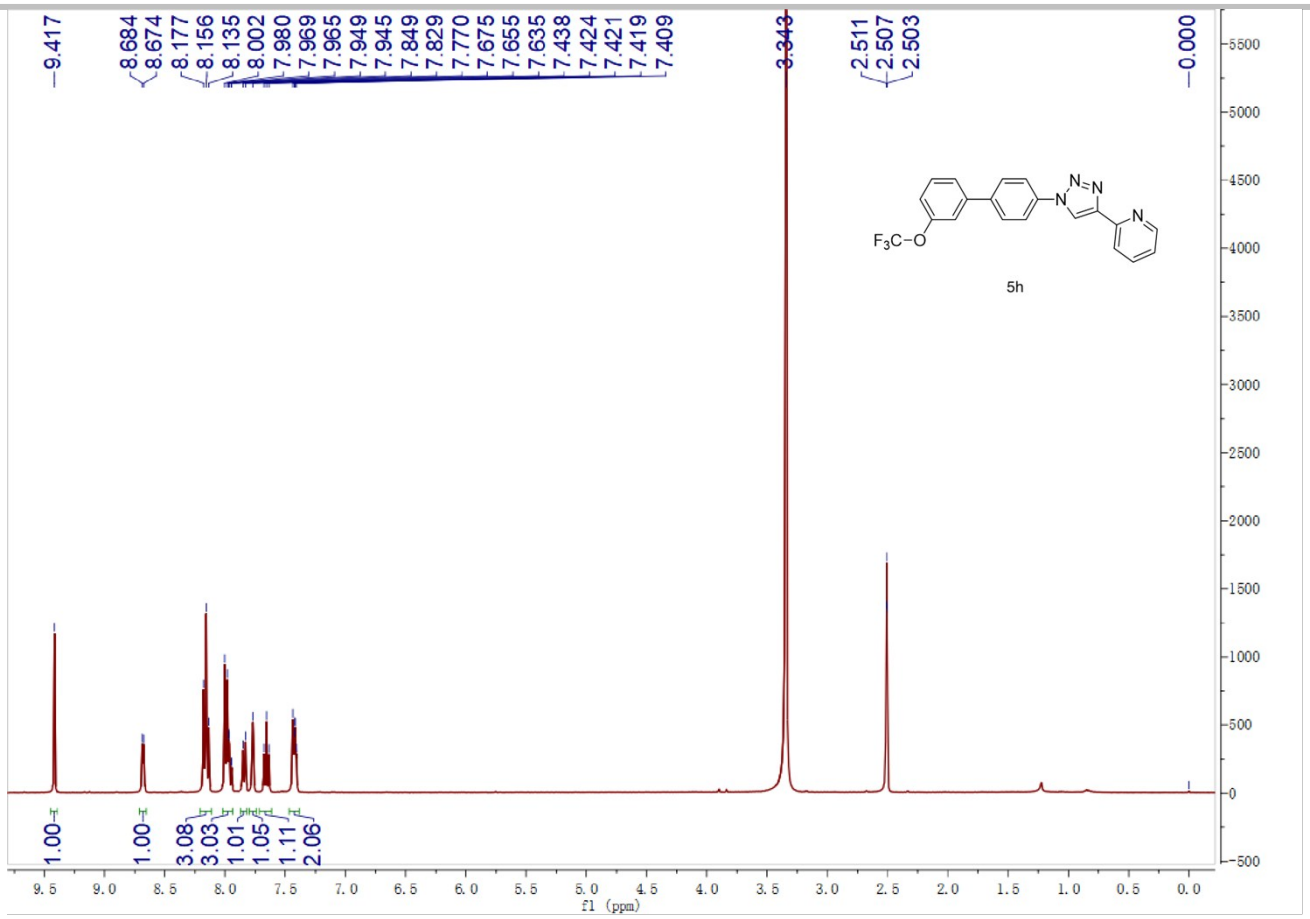
5c

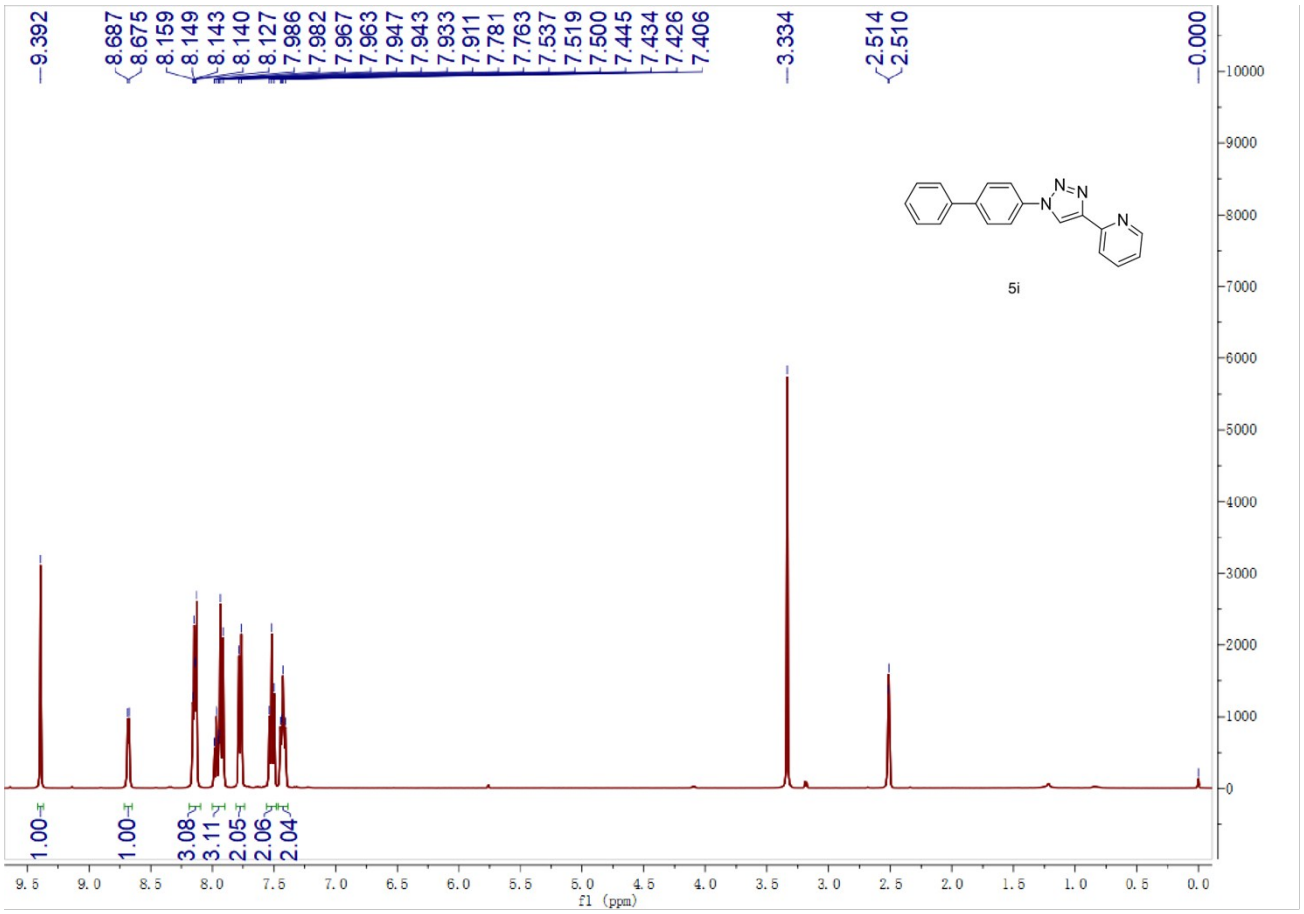

9.516
9.470
8.681
8.639
8.127
8.047
7.990
7.970
7.593
7.430
7.419
7.377
3.350
3.302
2.514
2.469
0.000
F
F
F
N
N
N
5d
1.00
1.04
4.37
1.29
4.16
f1 (ppm)

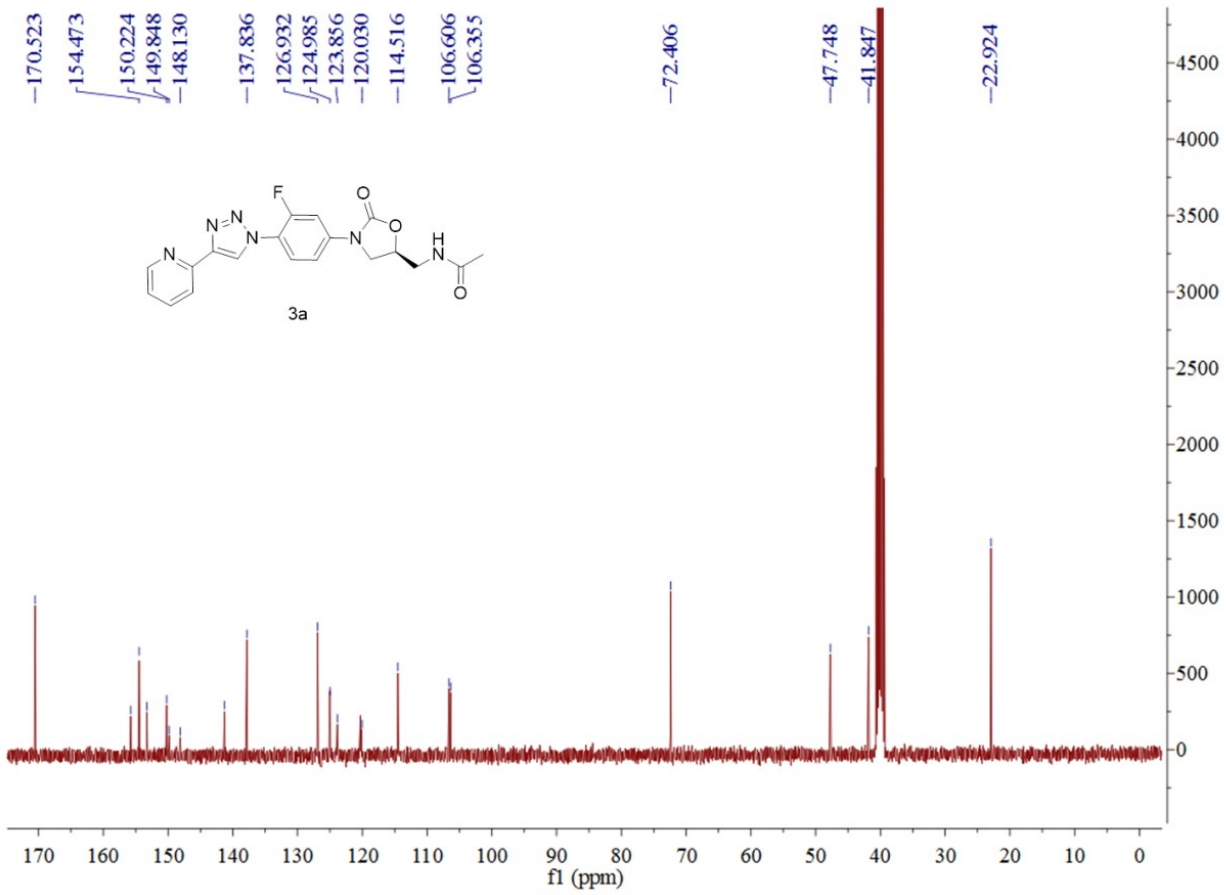

9.424
8.686
8.673
8.173
8.072
7.437
7.427
7.425
7.421
7.418
7.409
7.406
3.315
2.636
2.508
2.504
2.500
0.000
O
N
N
N
5e
1.00
1.02
3.44
2.31
2.14
3.24
1.15
3.04
f1 (ppm)

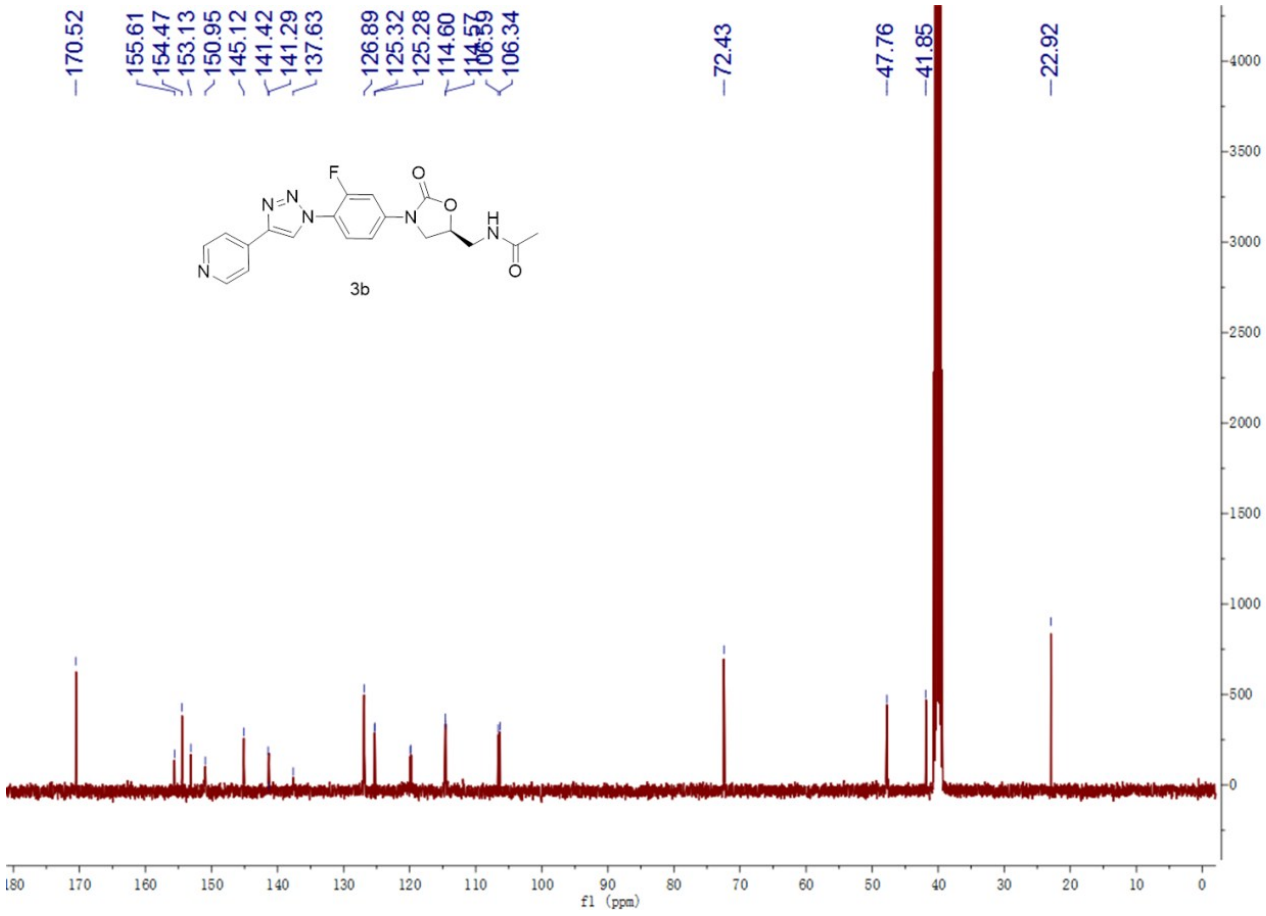

9.126
8.672
8.660
8.156
8.136
7.902
7.877
7.464
7.460
7.439
7.435
7.412
7.411
7.112
7.091
3.899
3.836
3.315
2.507
2.504
0.000
0.95
0.98
0.99
1.05
1.96
2.94
1.00
2.90
2.90
f1 (ppm)
5f

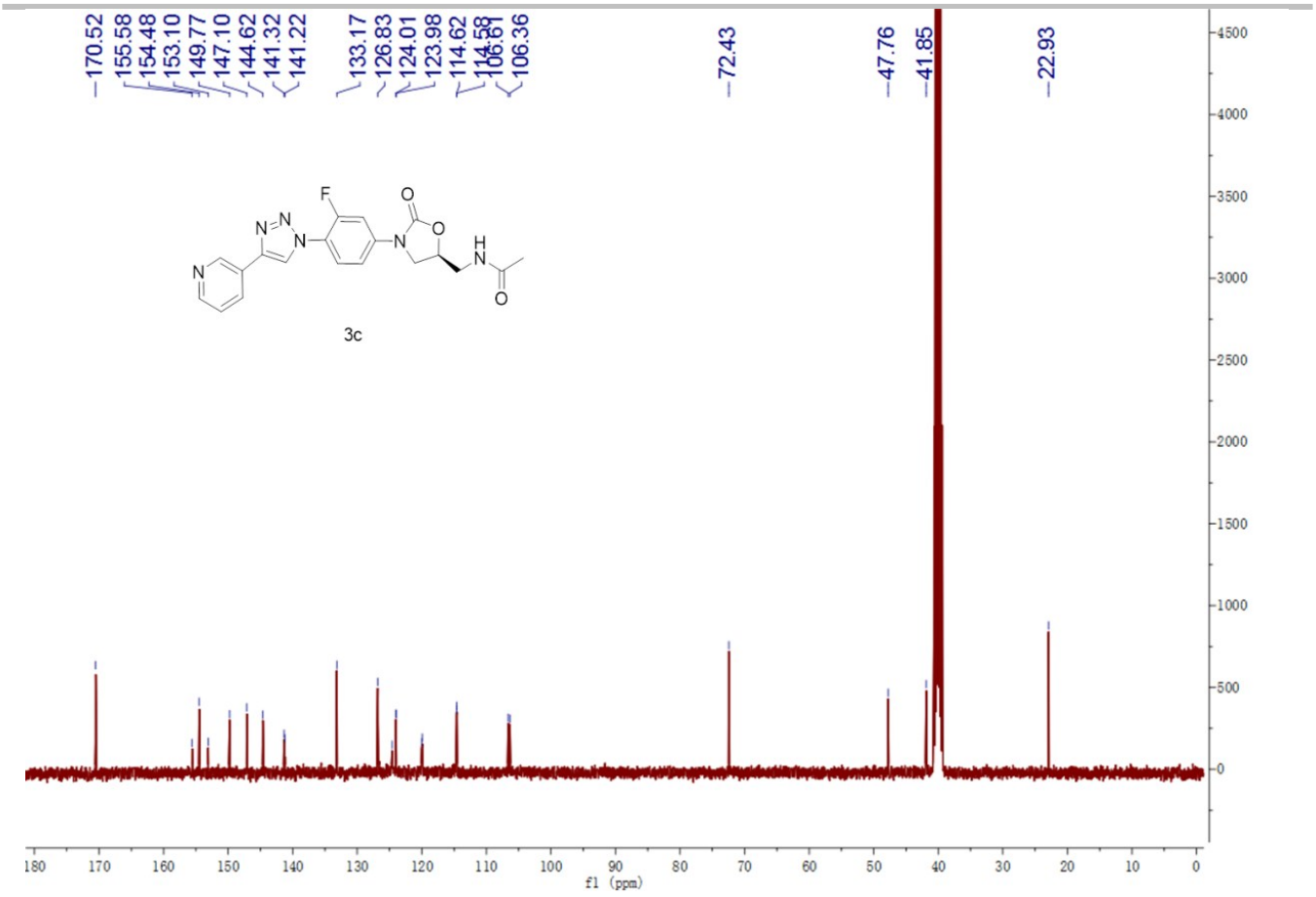

9.521
8.695
8.684
8.157
8.137
8.100
8.079
7.994
7.975
7.958
7.956
7.632
7.602
7.600
7.587
7.569
7.465
7.452
7.441
7.420
7.401
7.382
3.328
2.511
0.000
1.00
0.98
3.01
1.02
1.98
3.00
f1 (ppm)
5g

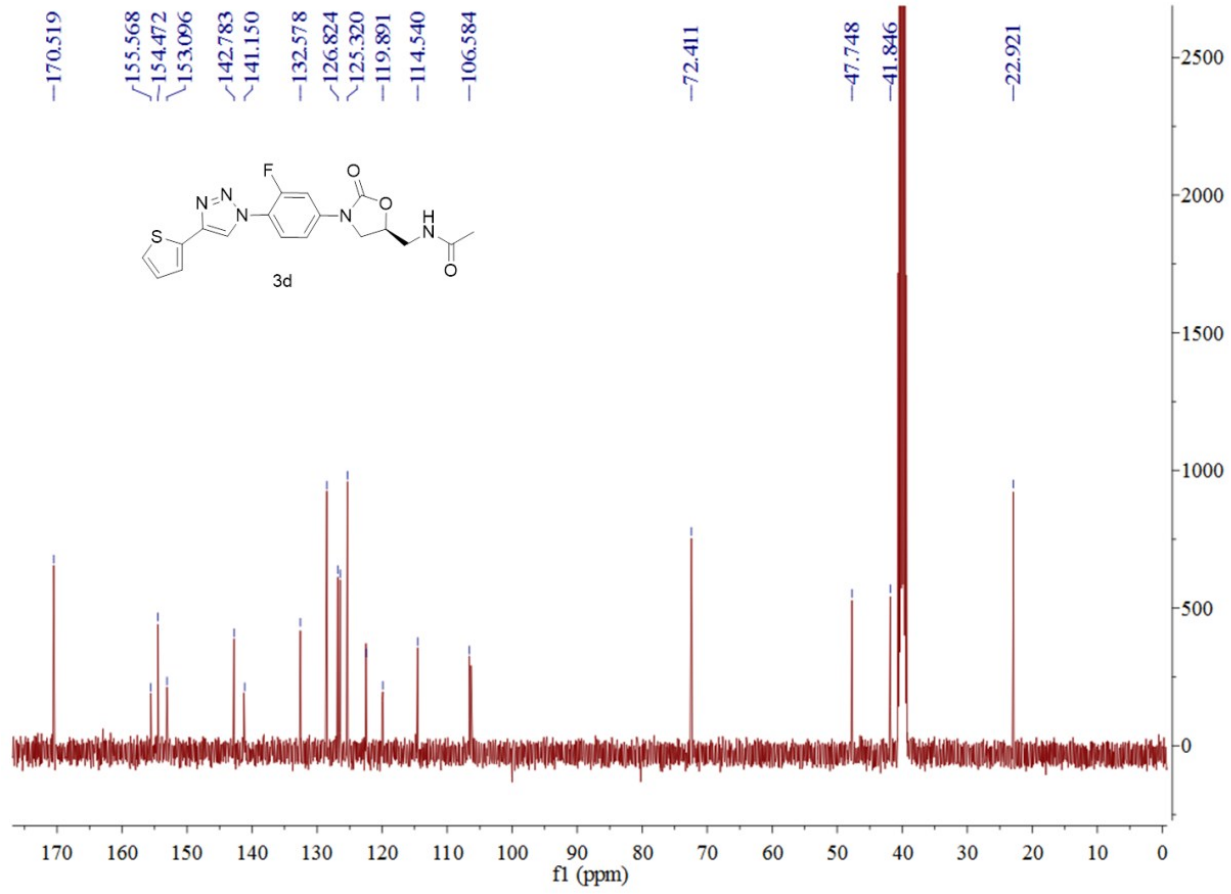

9.417
8.684
8.674
8.177
8.156
8.135
8.002
7.980
7.969
7.965
7.949
7.945
7.849
7.829
7.770
7.675
7.655
7.635
7.438
7.424
7.421
7.419
7.409
3.343
2.511
2.507
2.503
0.000
F3C–O
N
N
N
5h
1.00
1.00
3.08
3.03
1.01
1.05
1.11
2.06
f1 (ppm)

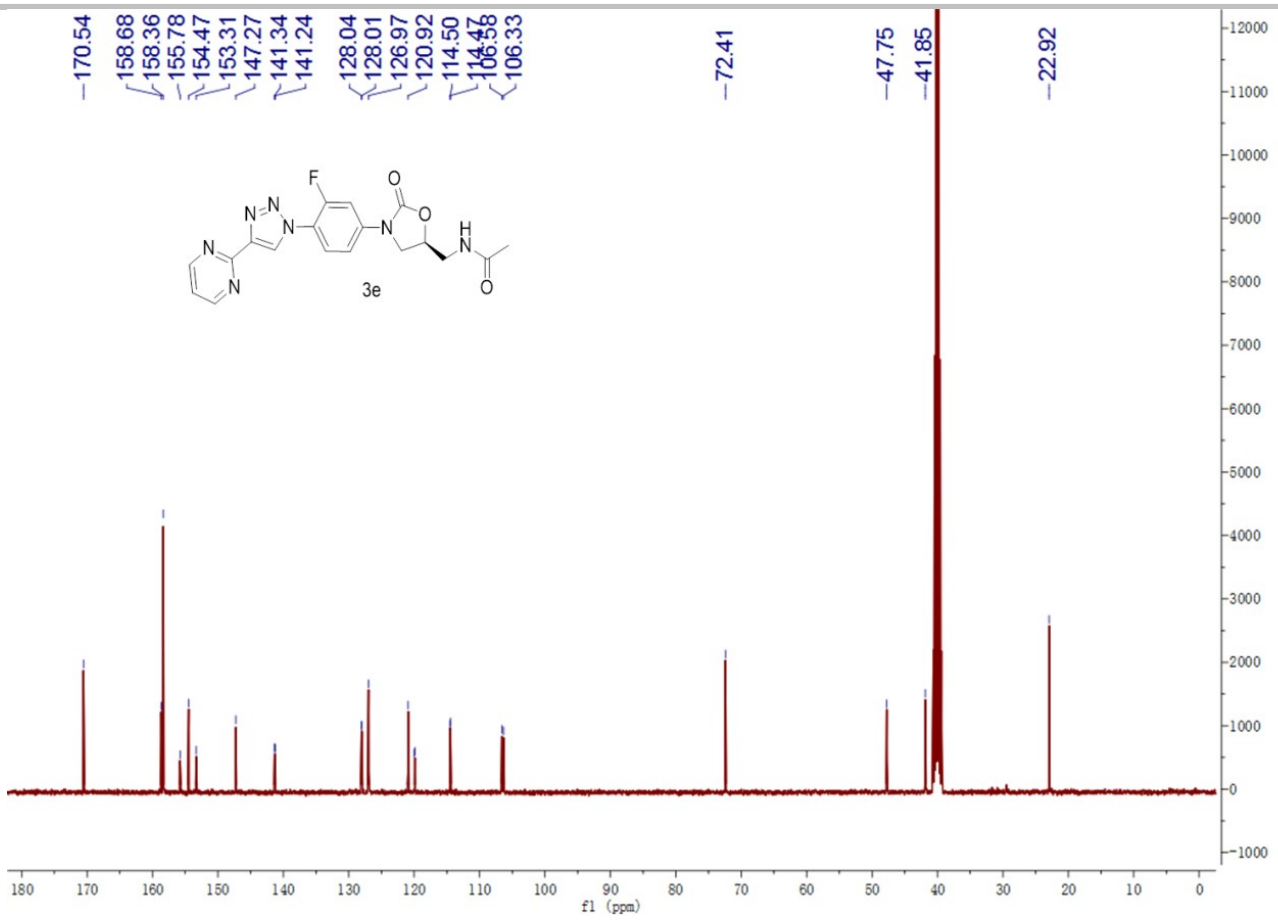

9.392
8.687
8.675
8.159
8.149
8.143
8.140
8.127
7.986
7.982
7.967
7.963
7.947
7.943
7.933
7.911
7.781
7.763
7.537
7.519
7.500
7.445
7.434
7.426
7.406
3.334
2.514
2.510
0.000
N
N
N
5i
1.00
1.00
3.08
3.11
2.05
2.06
2.04
f1 (ppm)


170.523
154.473
150.224
149.848
148.130
137.836
126.932
124.985
123.856
120.030
114.516
106.606
106.355
72.406
47.748
41.847
22.924
3a
f1 (ppm)


170.52
155.61
154.47
153.13
150.95
145.12
141.42
141.29
137.63
126.89
125.32
125.28
114.60
106.34
72.43
47.76
41.85
22.92
3b
f1 (ppm)


170.52
155.58
154.48
153.10
149.77
147.10
144.62
141.32
141.22
133.17
126.83
124.01
123.98
114.62
114.58
106.61
106.36
72.43
47.76
41.85
22.93
3c
f1 (ppm)


170.519
155.568
154.472
153.096
142.783
141.150
132.578
126.824
125.320
119.891
114.540
106.584
72.411
47.748
41.846
22.921
3d
f1 (ppm)


170.54
158.68
158.36
155.78
154.47
153.31
147.27
141.34
141.24
128.04
128.01
126.97
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114.50
106.58
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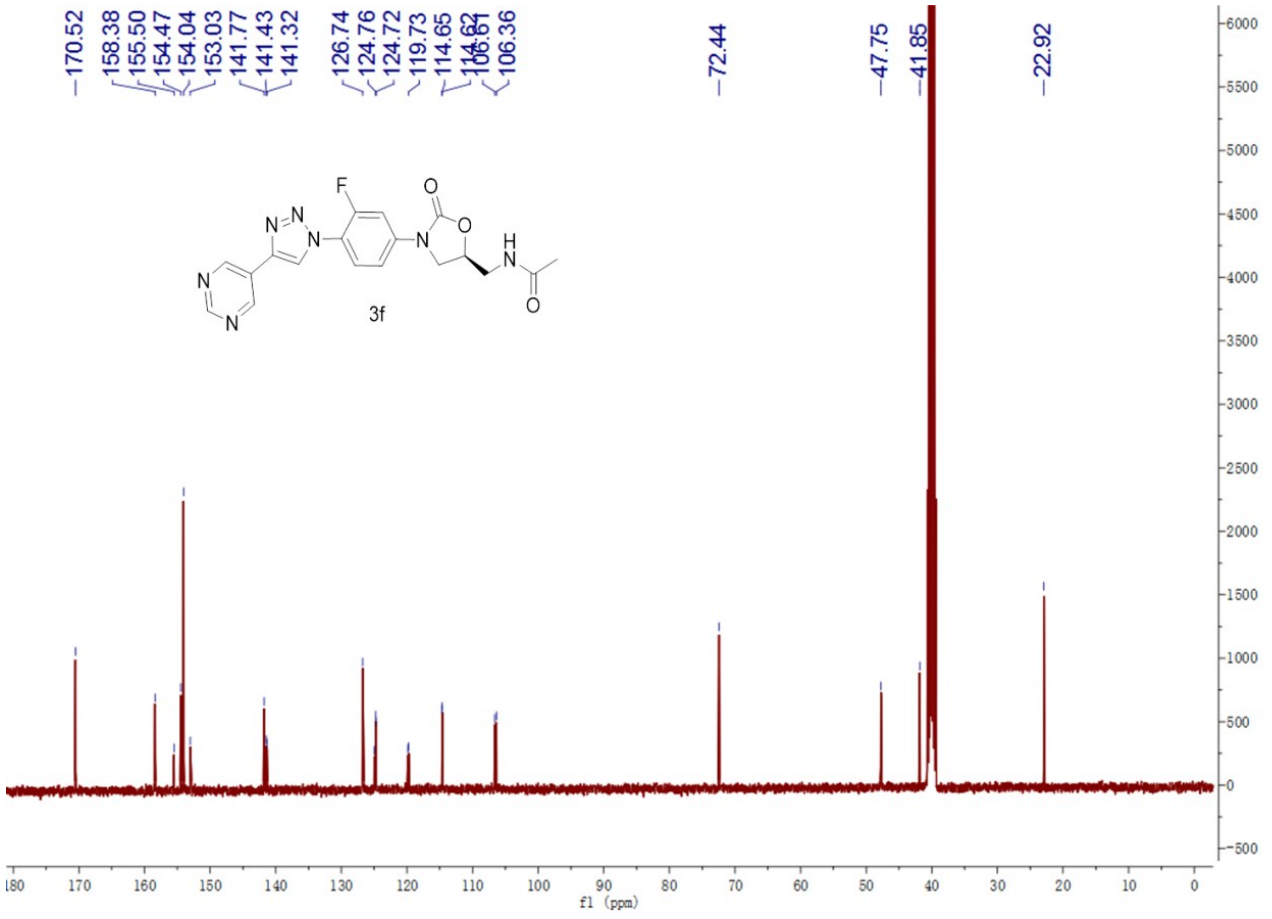
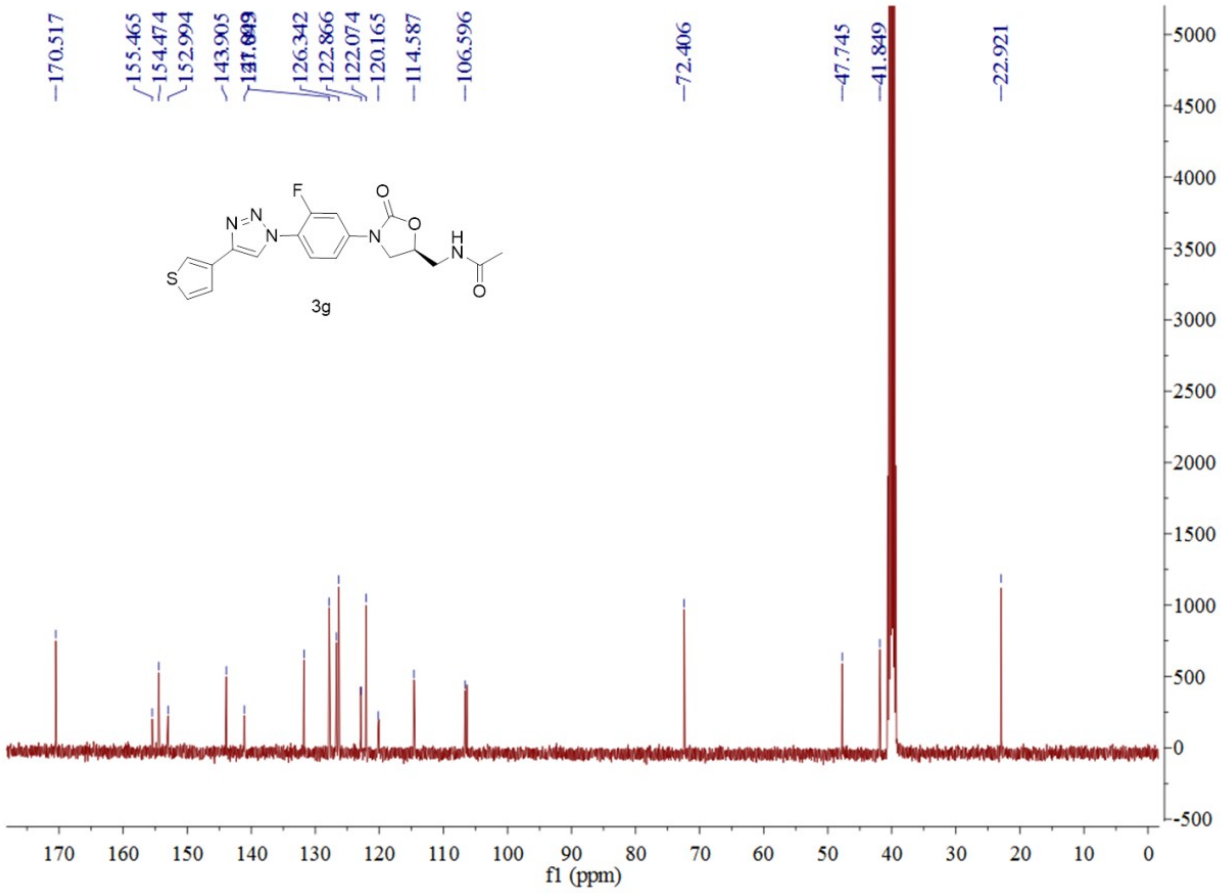
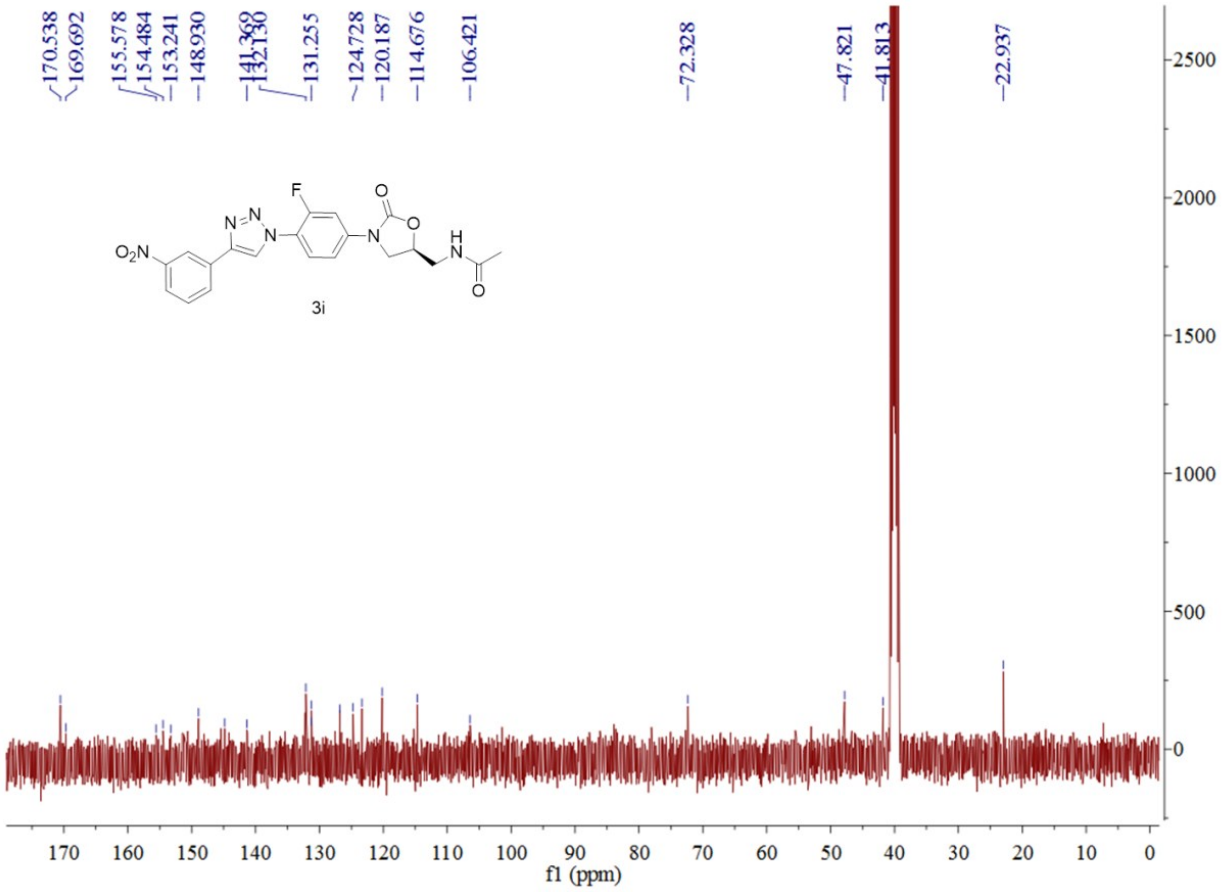
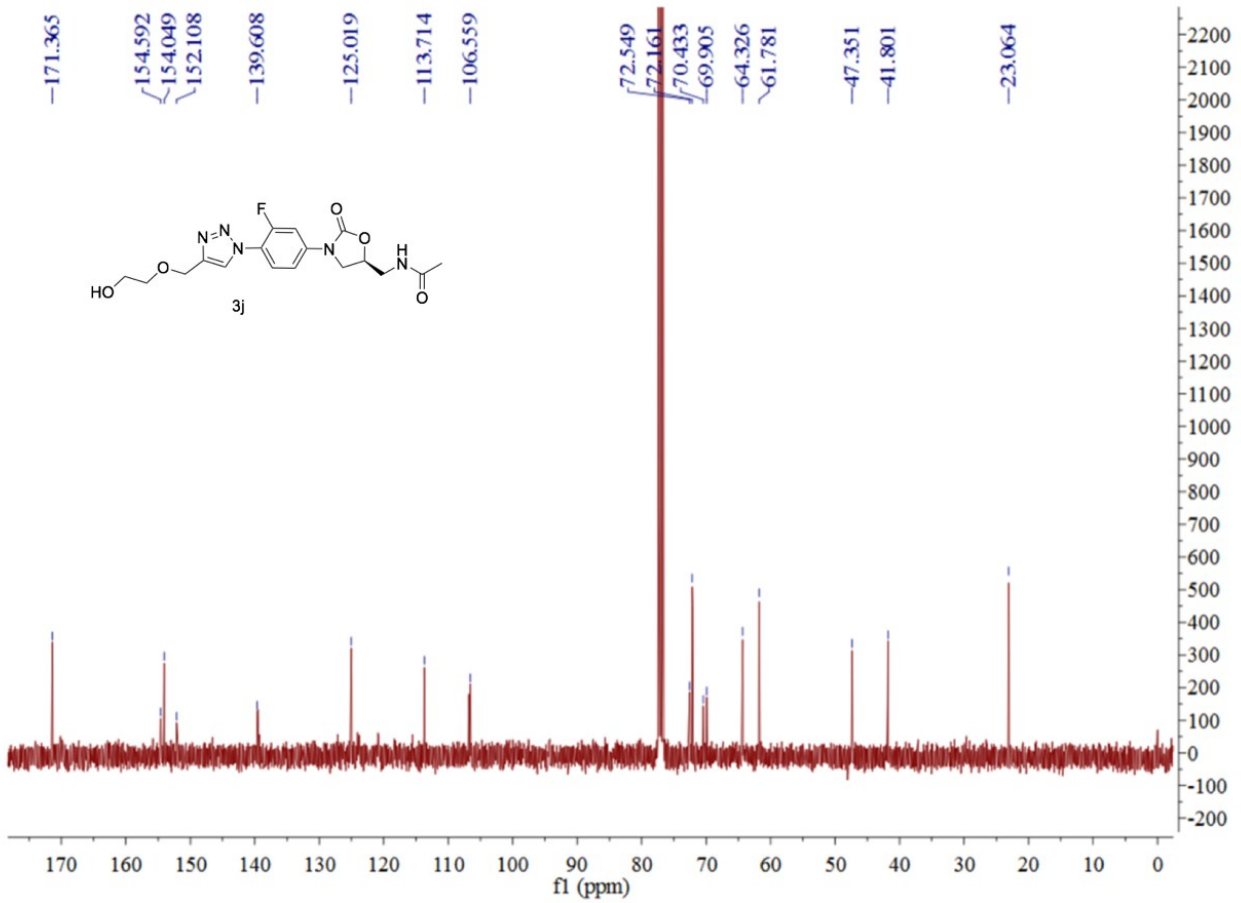
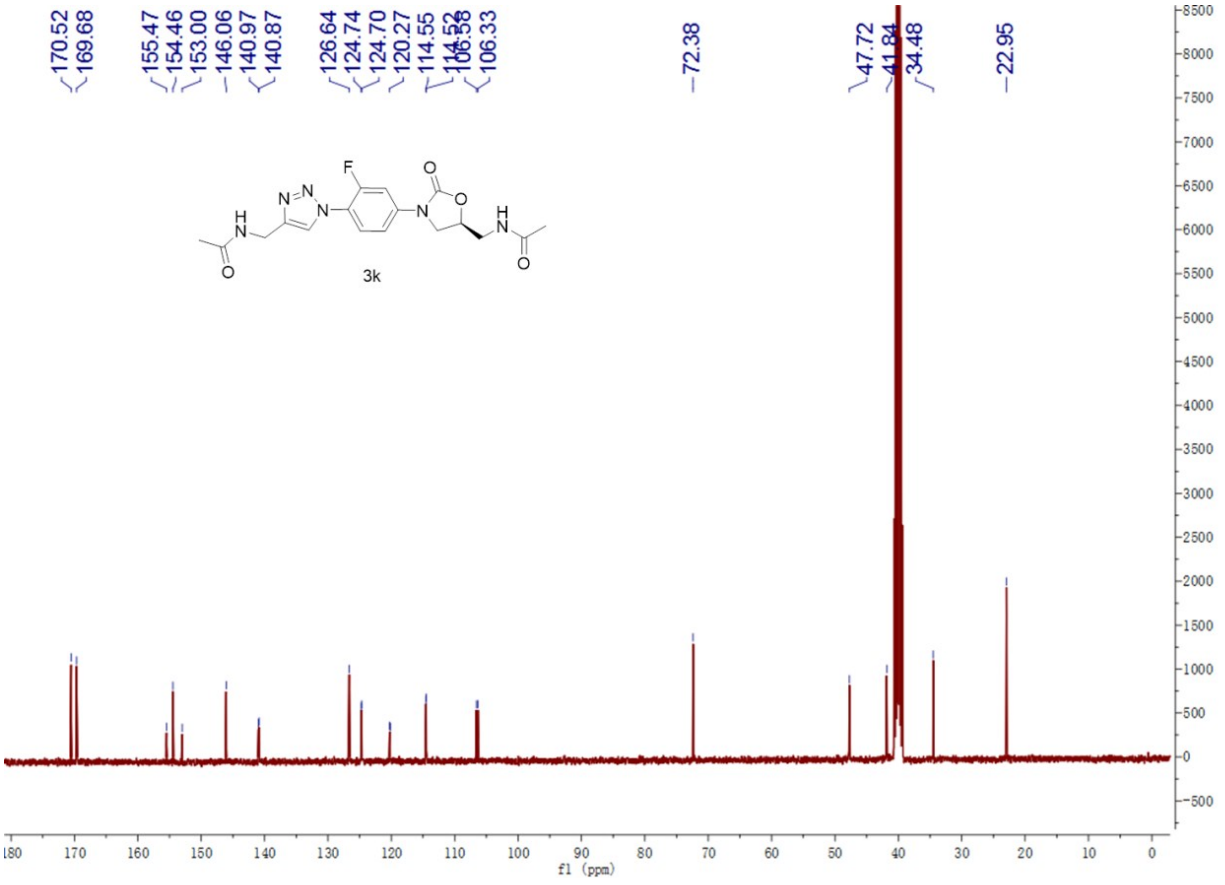
72.41
47.75
41.85
22.92
3e
f1 (ppm)

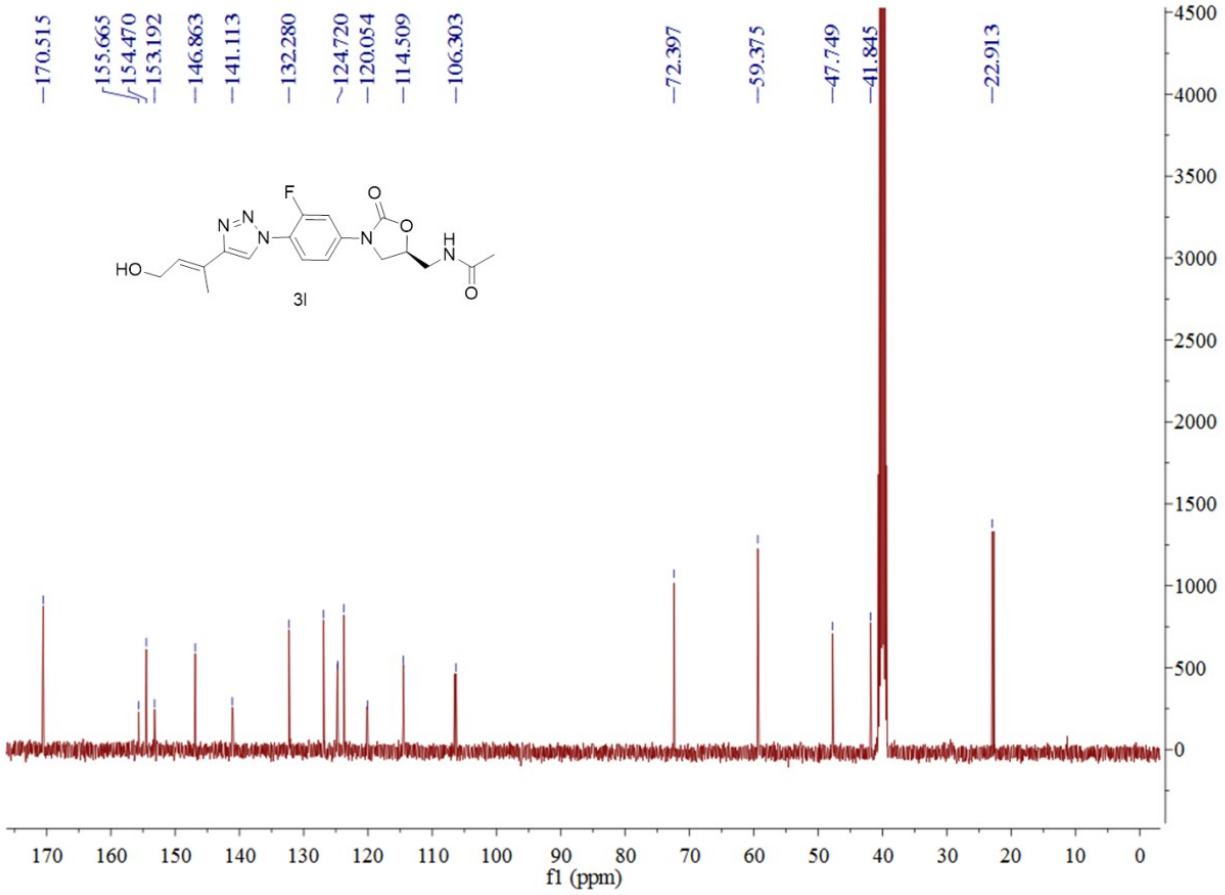

170.52
158.38
155.50
154.47
154.04
153.03
141.77
141.43
141.32
126.74
124.76
124.72
119.73
114.65
106.36
72.44
47.75
41.85
22.92
3f
f1 (ppm)

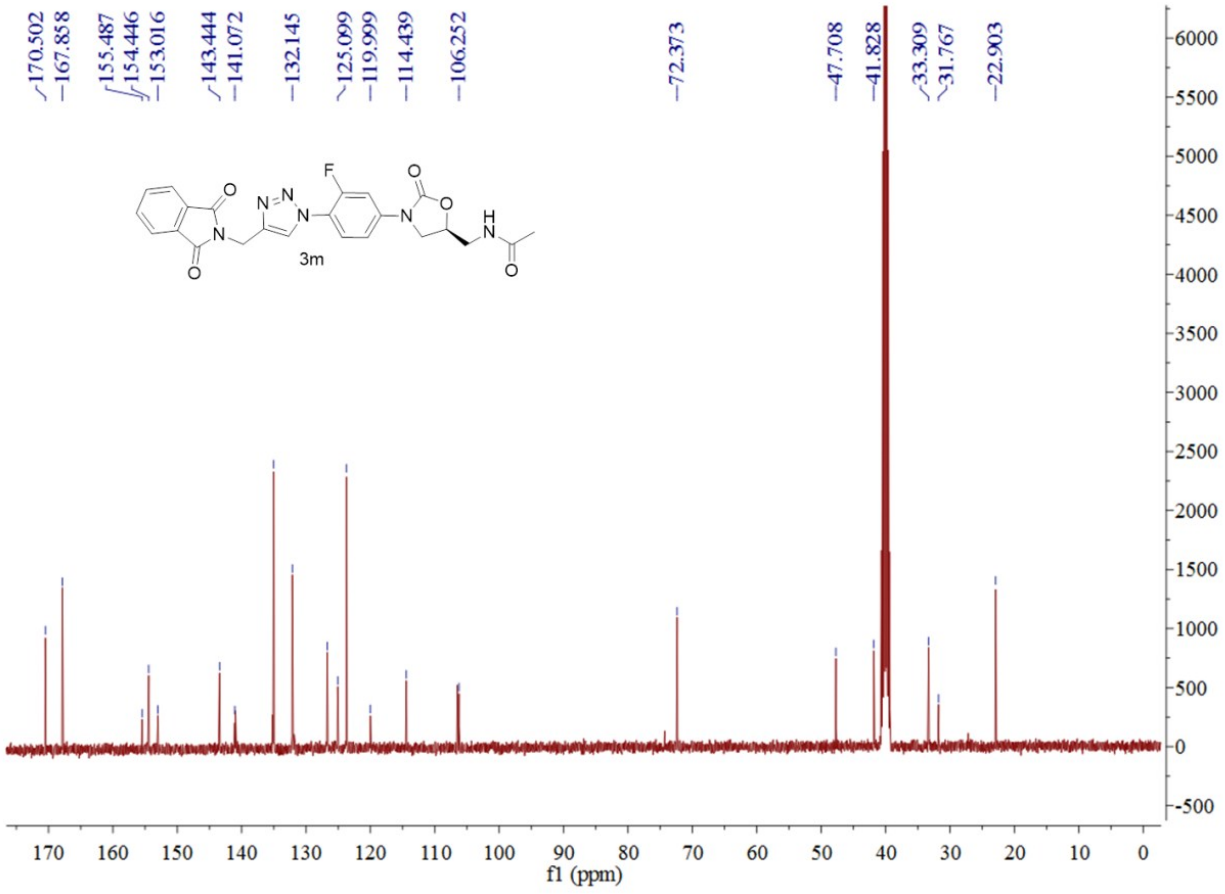

170.517
155.465
154.474
152.994
143.905
126.342
122.866
122.074
120.165
114.587
106.596
72.406
47.745
41.849
22.921
3g
f1 (ppm)

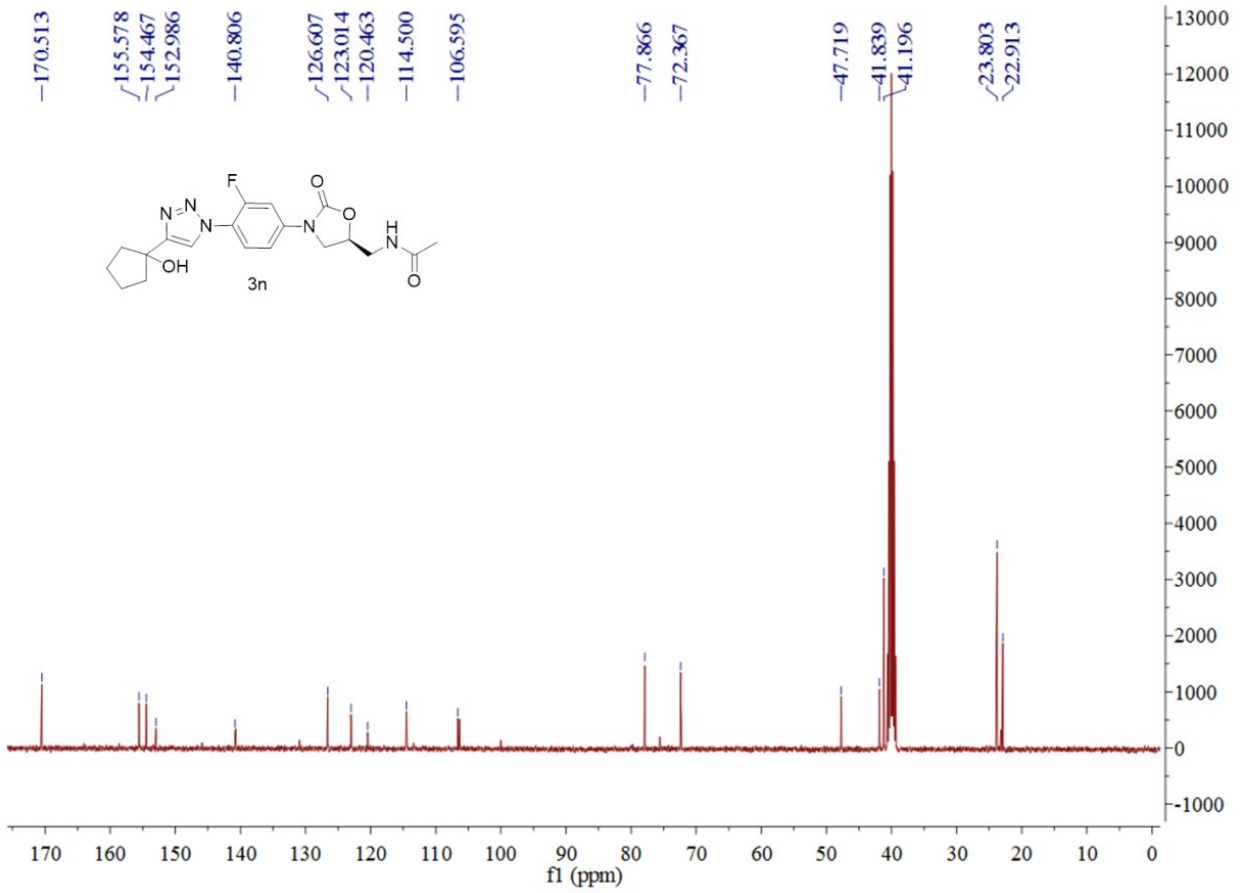

170.538
169.692
155.578
154.484
153.241
148.930
131.255
124.728
120.187
114.676
106.421
72.328
47.821
41.813
22.937
3i
f1 (ppm)

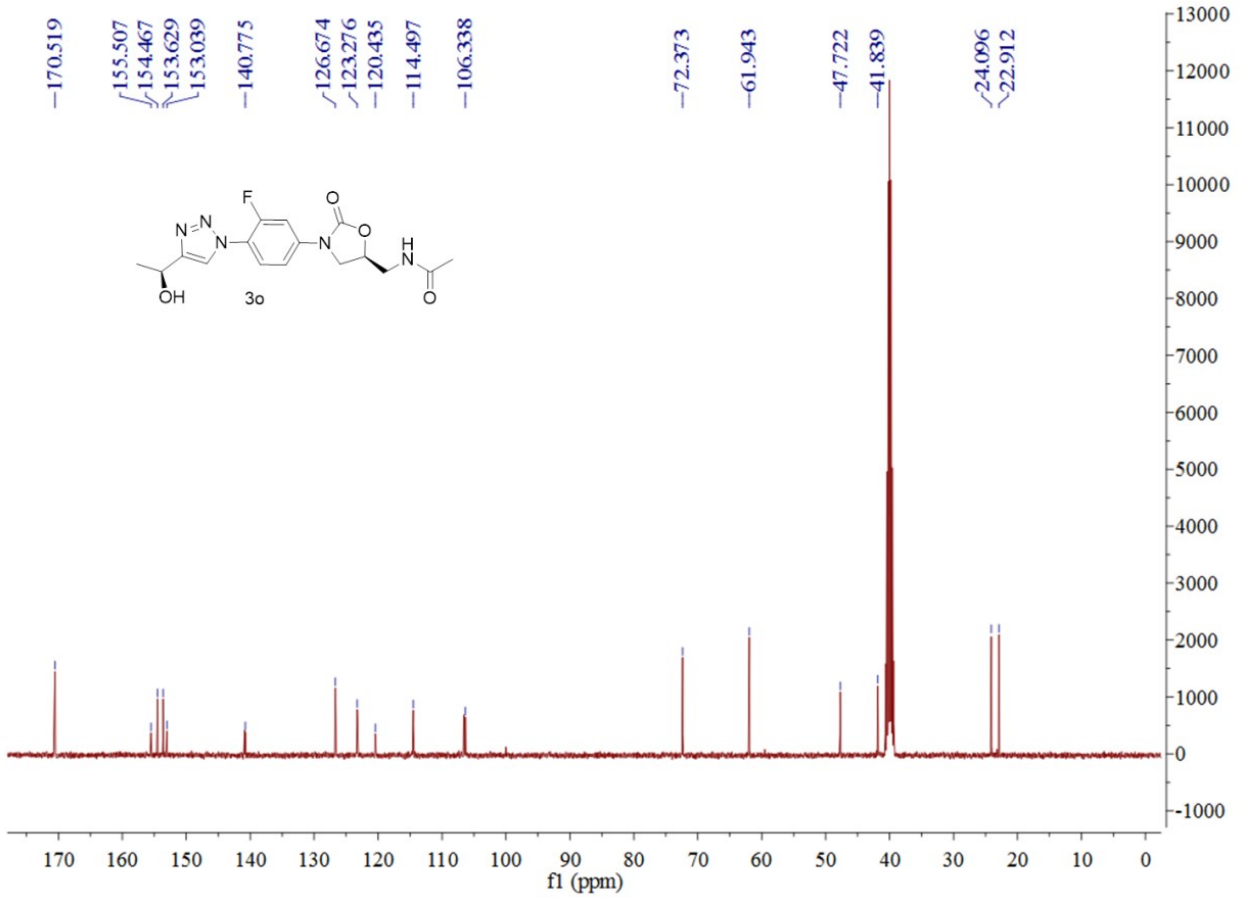

171.365
154.592
154.049
152.108
139.608
125.019
113.714
106.559
72.549
72.161
70.433
69.905
64.326
61.781
47.351
41.801
23.064
HO
3j
f1 (ppm)

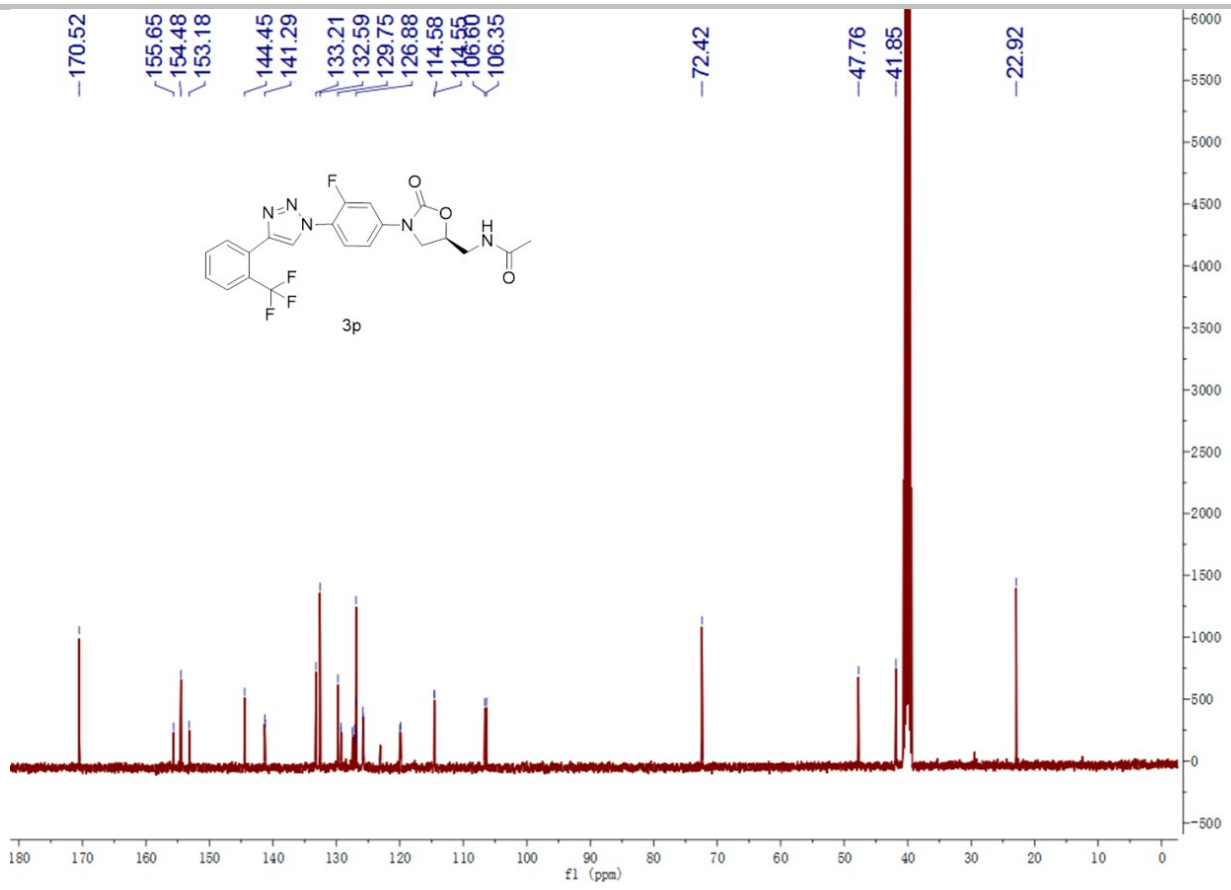

170.52
169.68
155.47
154.46
153.00
146.06
140.97
140.87
126.64
124.74
124.70
120.27
114.55
106.38
106.33
72.38
47.72
41.84
34.48
22.95
3k
f1 (ppm)

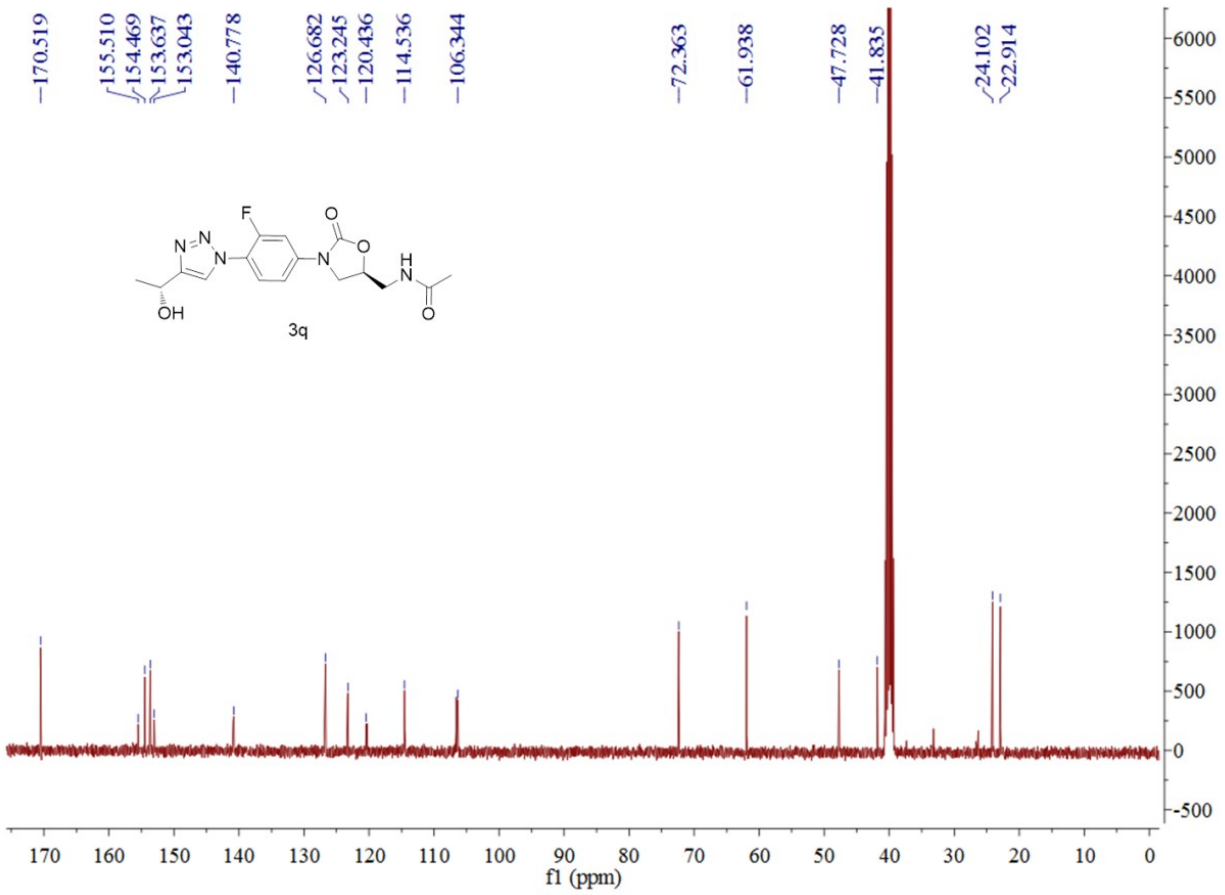

170.515
155.665
154.470
153.192
146.863
141.113
132.280
124.720
120.054
114.509
106.303
72.397
59.375
47.749
41.845
22.913
3l
f1 (ppm)

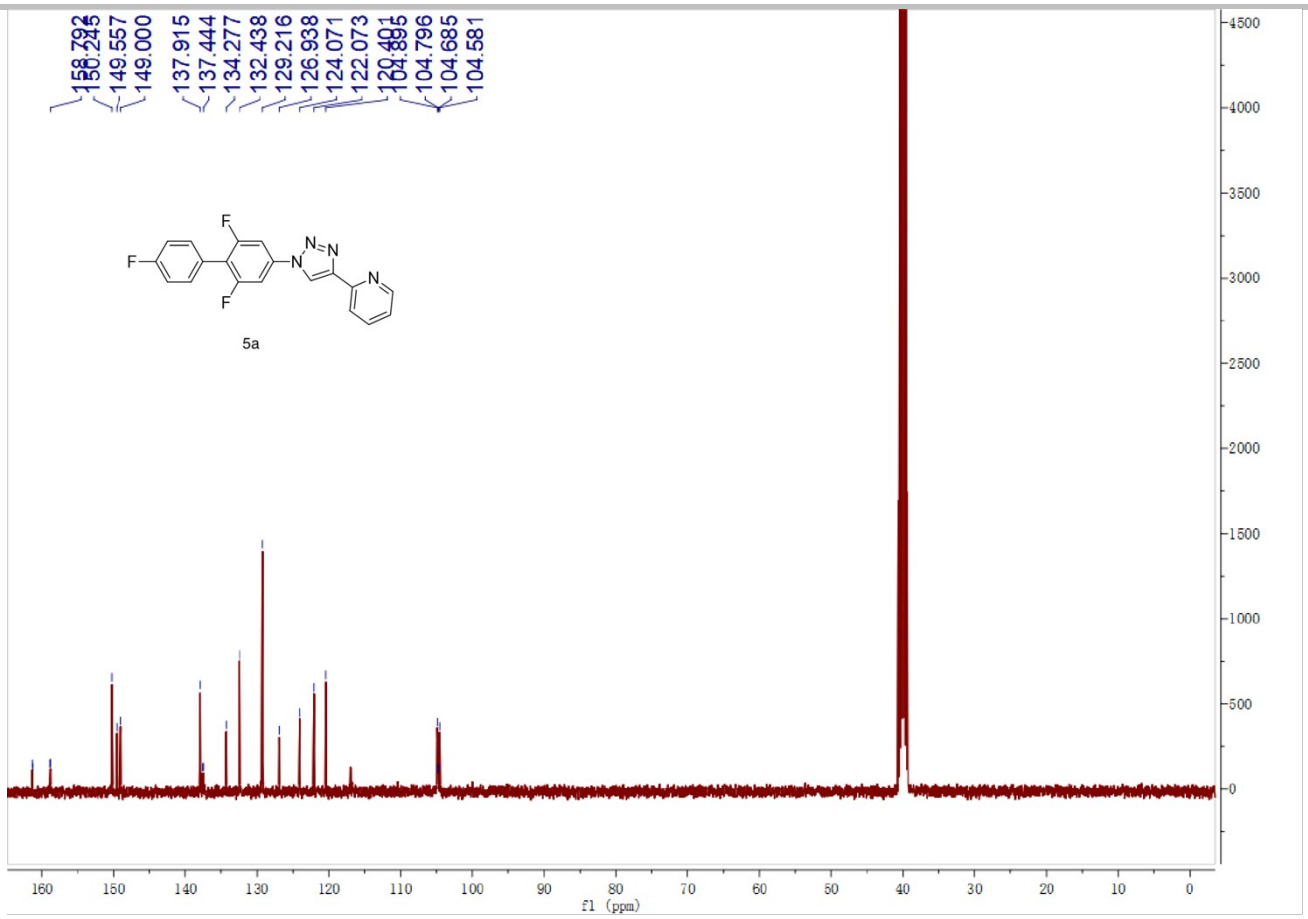

170.502
167.858
155.487
154.446
153.016
143.444
141.072
132.145
125.099
119.999
114.439
106.252
72.373
47.708
41.828
33.309
31.767
22.903
3m
f1 (ppm)

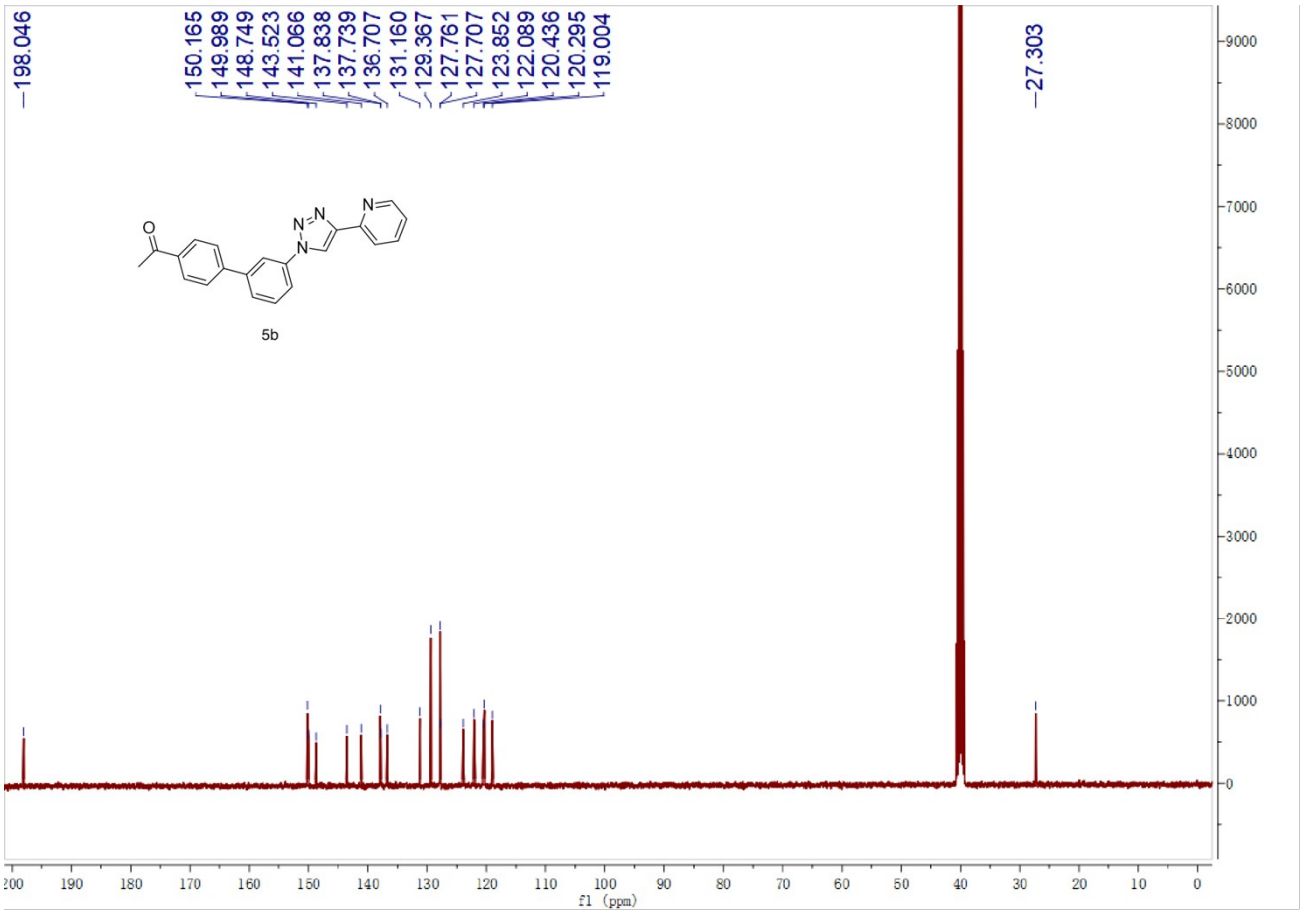

170.513
155.578
154.467
152.986
140.806
126.607
123.014
120.463
114.500
106.595
77.866
72.367
47.719
41.839
41.196
23.803
22.913
F
O
N
N
N
O
H
N
OH
O
3n
f1 (ppm)


170.519
155.507
154.467
153.629
153.039
140.775
126.674
123.276
120.435
114.497
106.338
72.373
61.943
47.722
41.839
24.096
22.912
F
O
N
N
N
O
H
N
OH
O
3o
f1 (ppm)


170.52
155.65
154.48
153.18
144.45
141.29
133.21
132.59
129.75
126.88
114.58
114.55
106.60
106.35
72.42
47.76
41.85
22.92
3p
f1 (ppm)


170.519
155.510
154.469
153.637
153.043
140.778
126.682
123.245
120.436
114.536
106.344
72.363
61.938
47.728
41.835
24.102
22.914
OH
3q
f1 (ppm)


149.557
149.000
137.915
137.444
134.277
132.438
129.216
126.938
124.071
122.073
104.796
104.685
104.581
F
F
F
N
N
N
5a
f1 (ppm)


198.046
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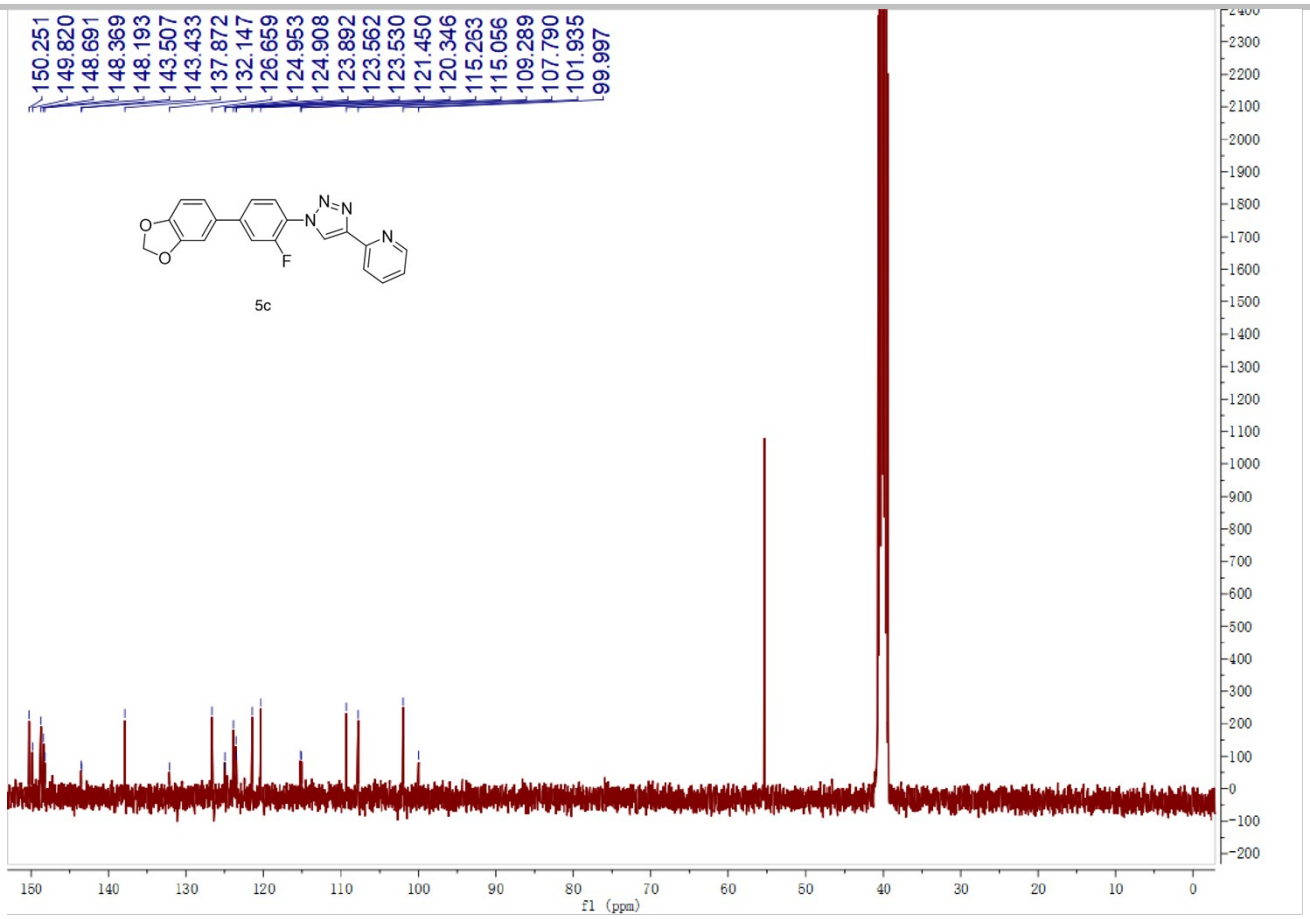
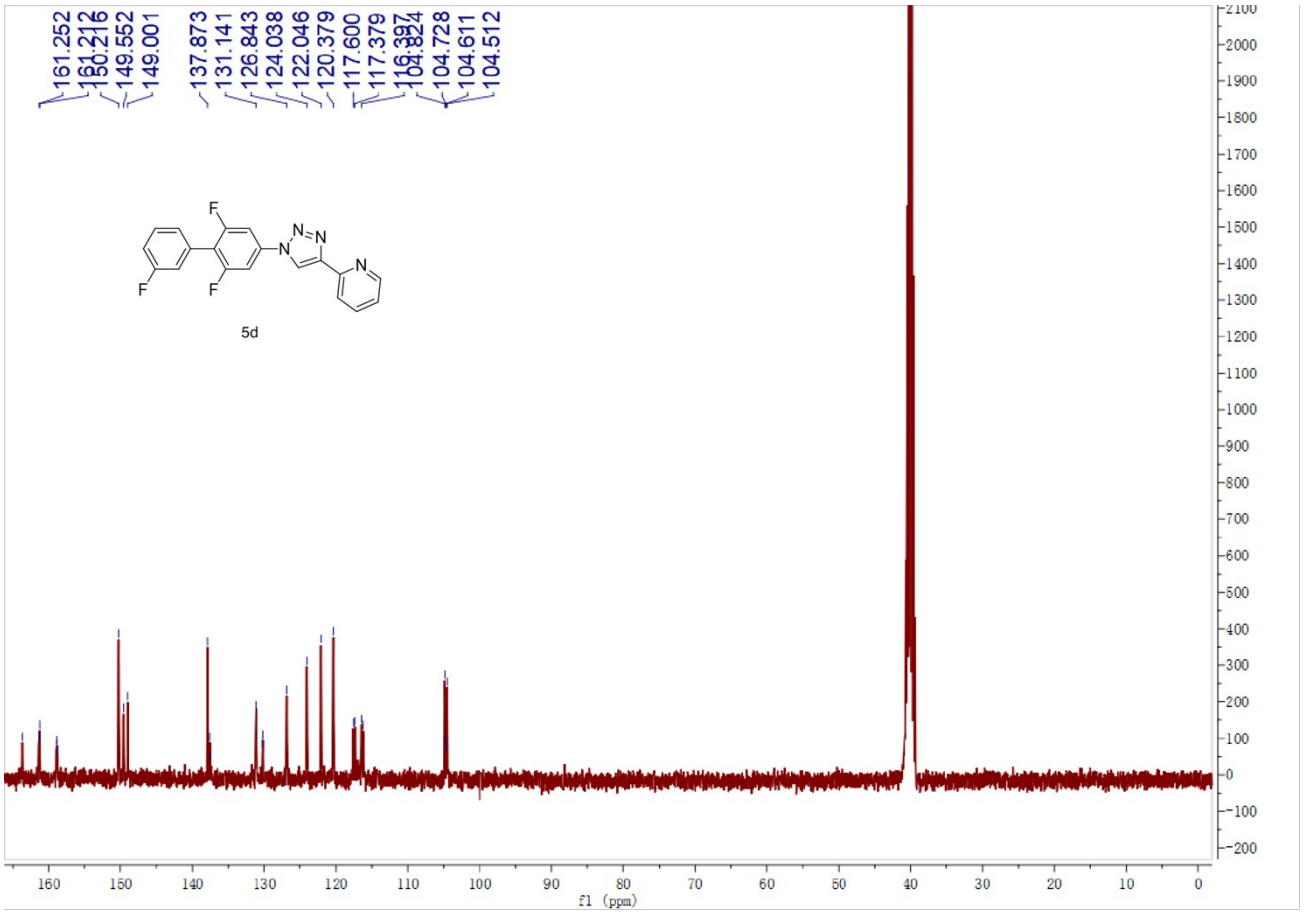
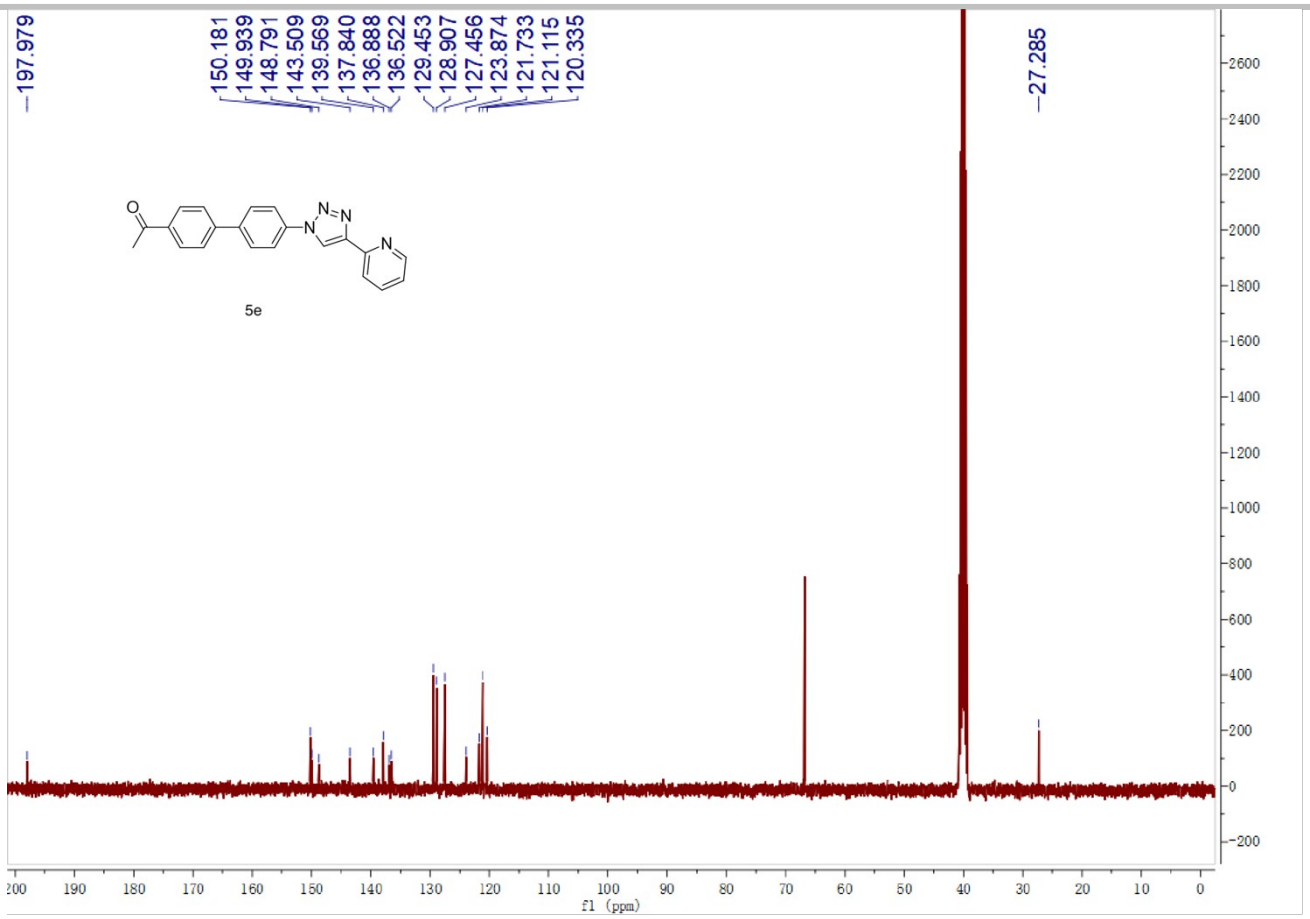
149.989
148.749
143.523
141.066
137.838
137.739
136.707
131.160
129.367
127.761
127.707
123.852
122.089
120.436
120.295
119.004
27.303
O
N
N
N
5b
f1 (ppm)


150.251
149.820
148.691
148.369
148.193
143.507
143.433
137.872
132.147
126.659
124.953
124.908
123.892
123.562
123.530
121.450
120.346
115.263
115.056
109.289
107.790
101.935
99.997
5c
f1 (ppm)


161.252
161.216
150.216
149.552
149.001
137.873
131.141
126.843
124.038
122.046
120.379
117.600
117.379
104.728
104.611
104.512
5d
f1 (ppm)


197.979
150.181
149.939
148.791
143.509
139.569
137.840
136.888
136.522
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128.907
127.456
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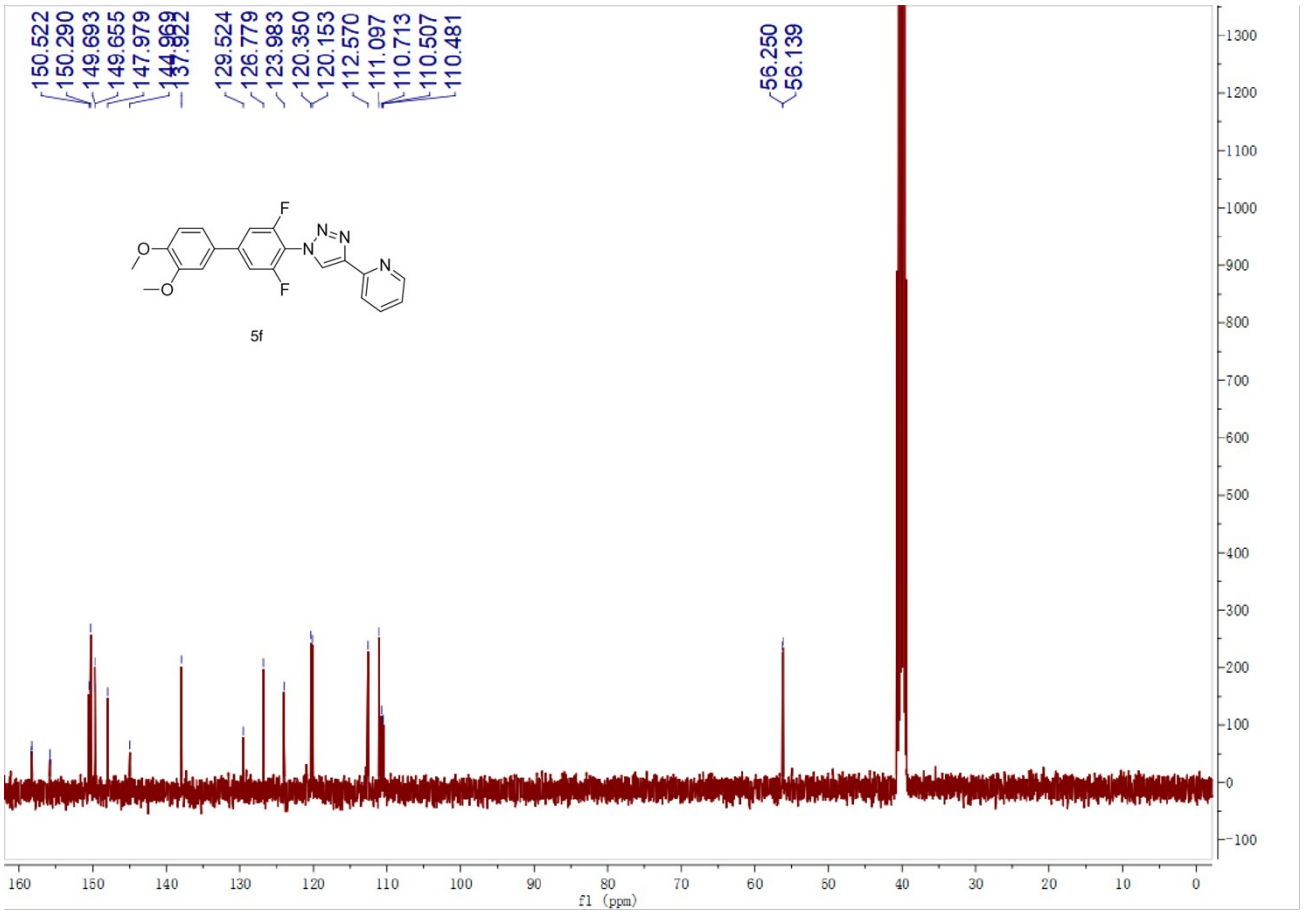
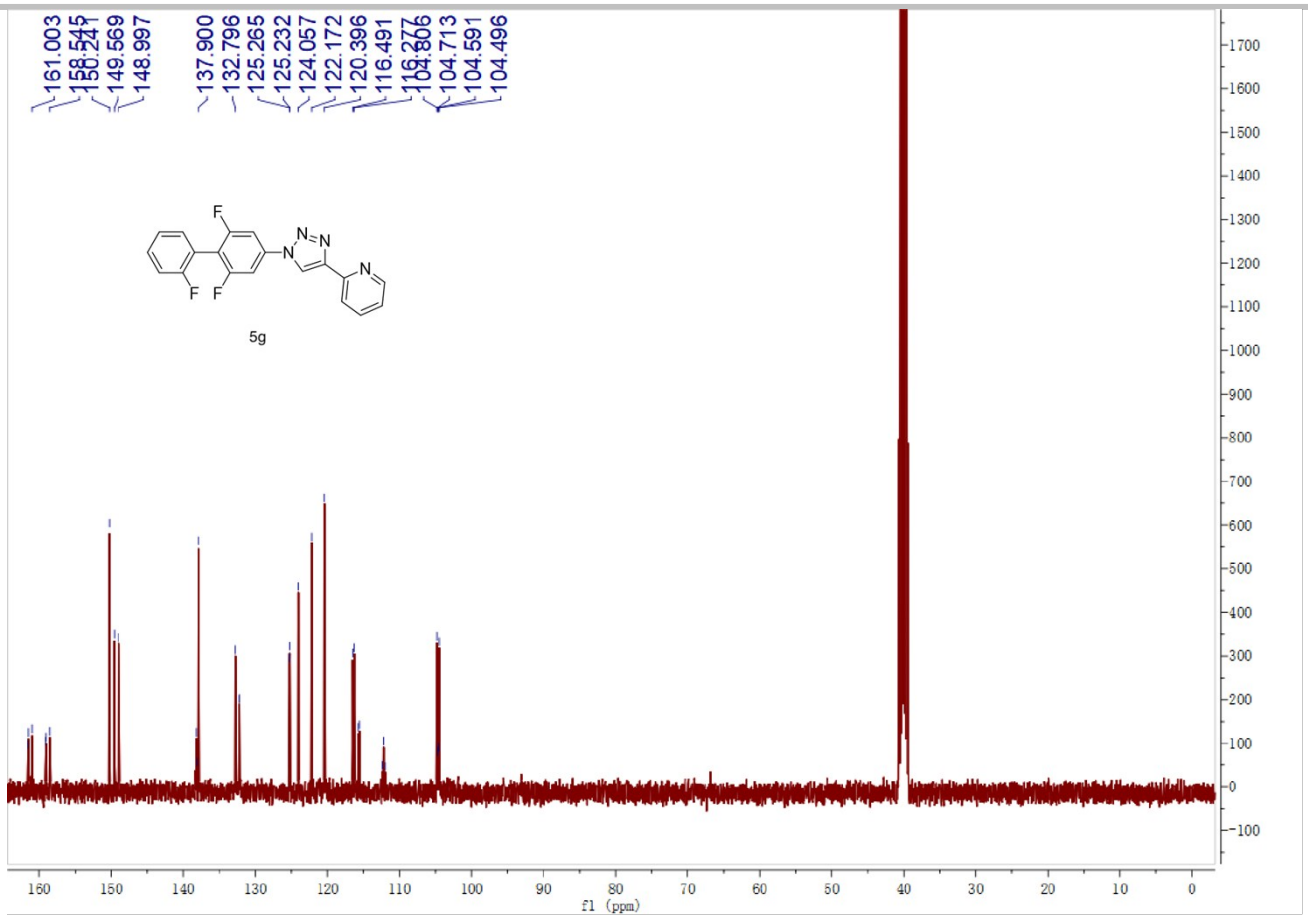
121.115
120.335
27.285
5e
f1 (ppm)


150.522
150.290
149.693
149.655
147.979
129.524
126.779
123.983
120.350
120.153
112.570
111.097
110.713
110.507
110.481
56.250
56.139
5f
f1 (ppm)


161.003
158.545
150.241
149.569
148.997
137.900
132.796
125.265
125.232
124.057
122.172
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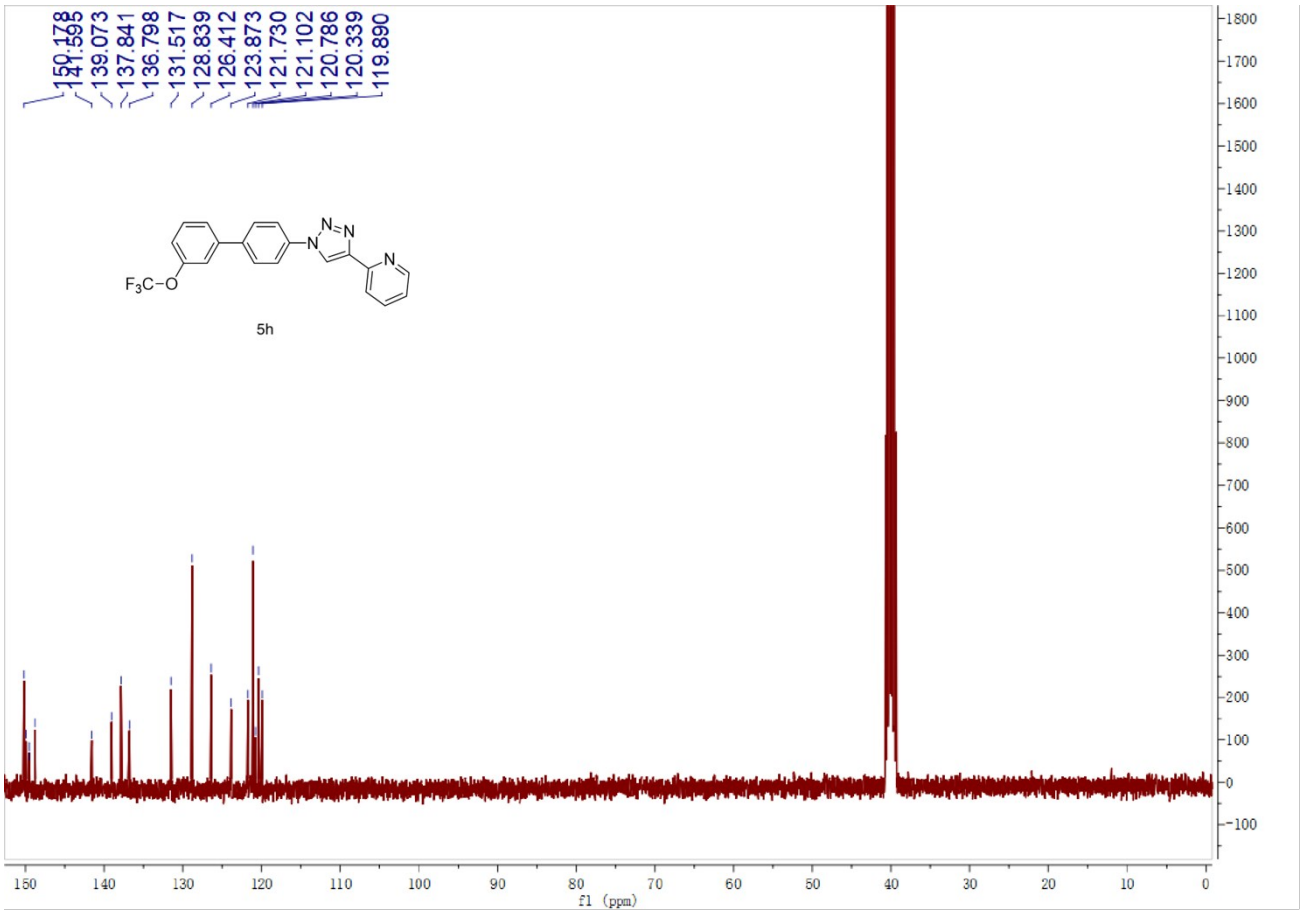
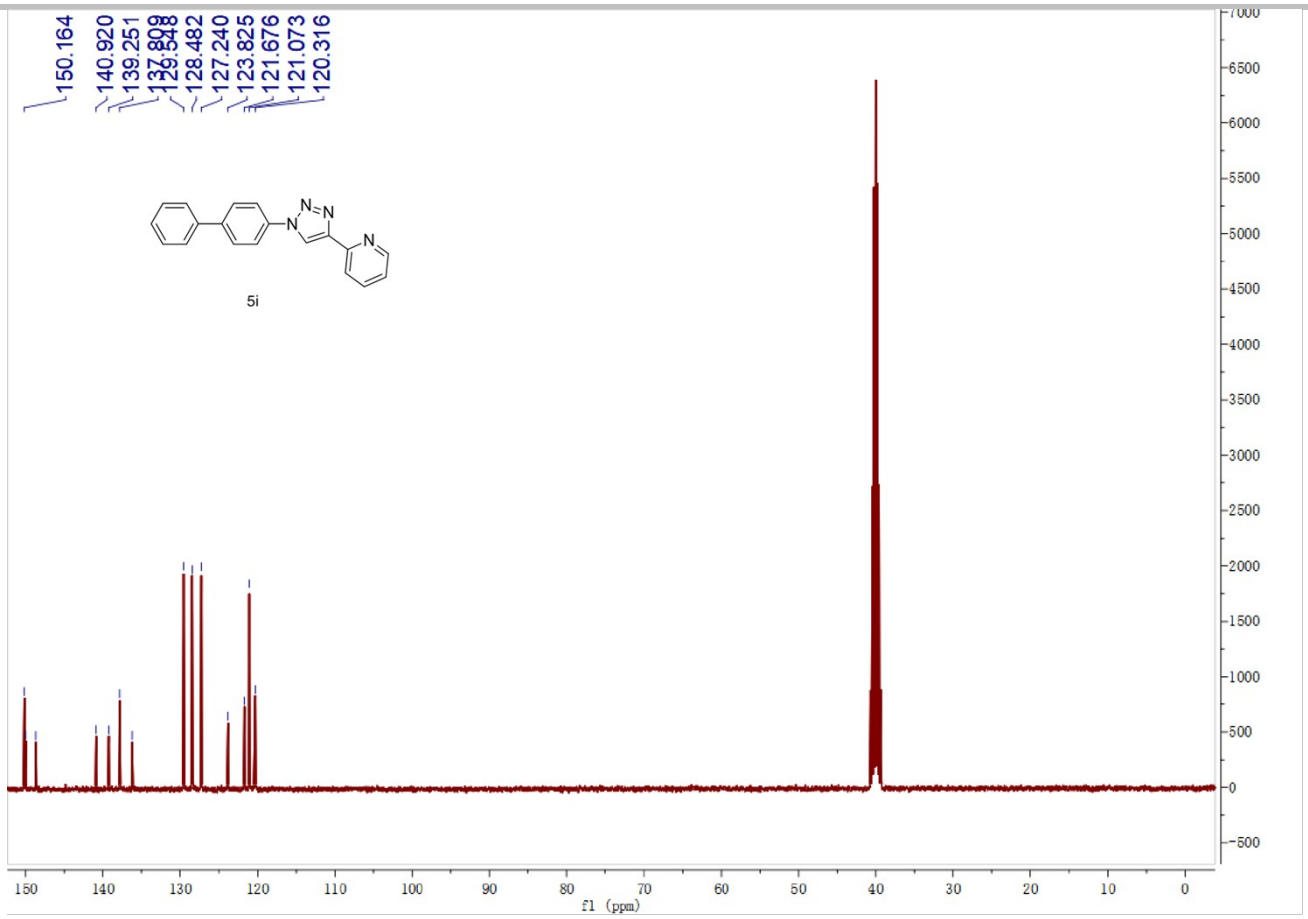
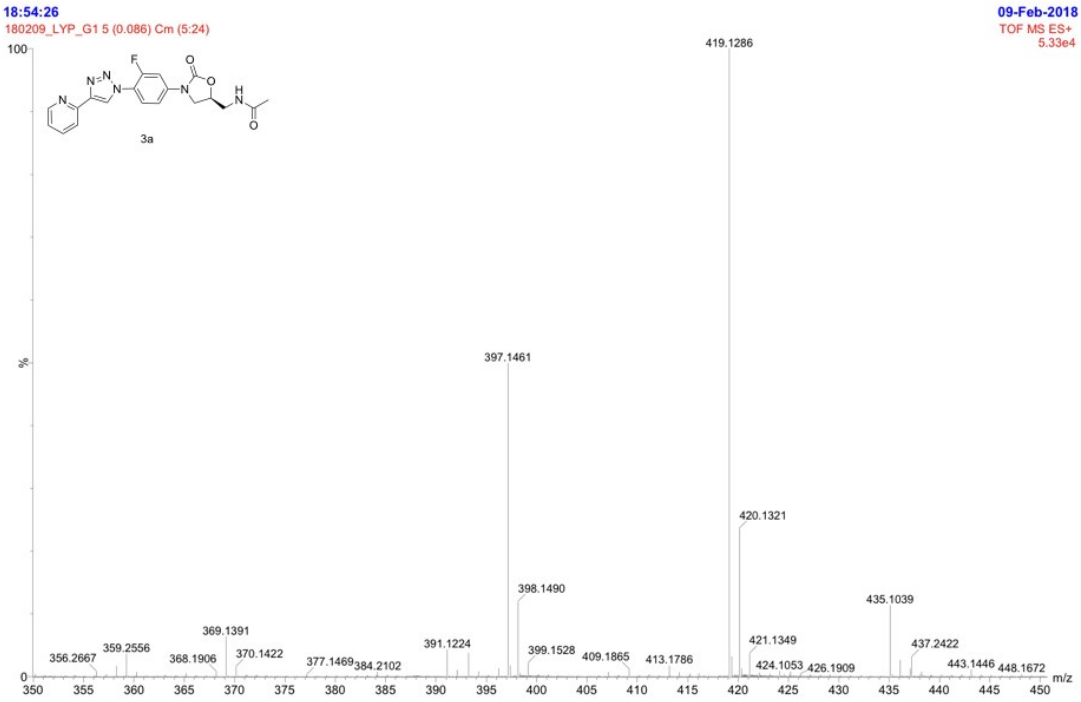
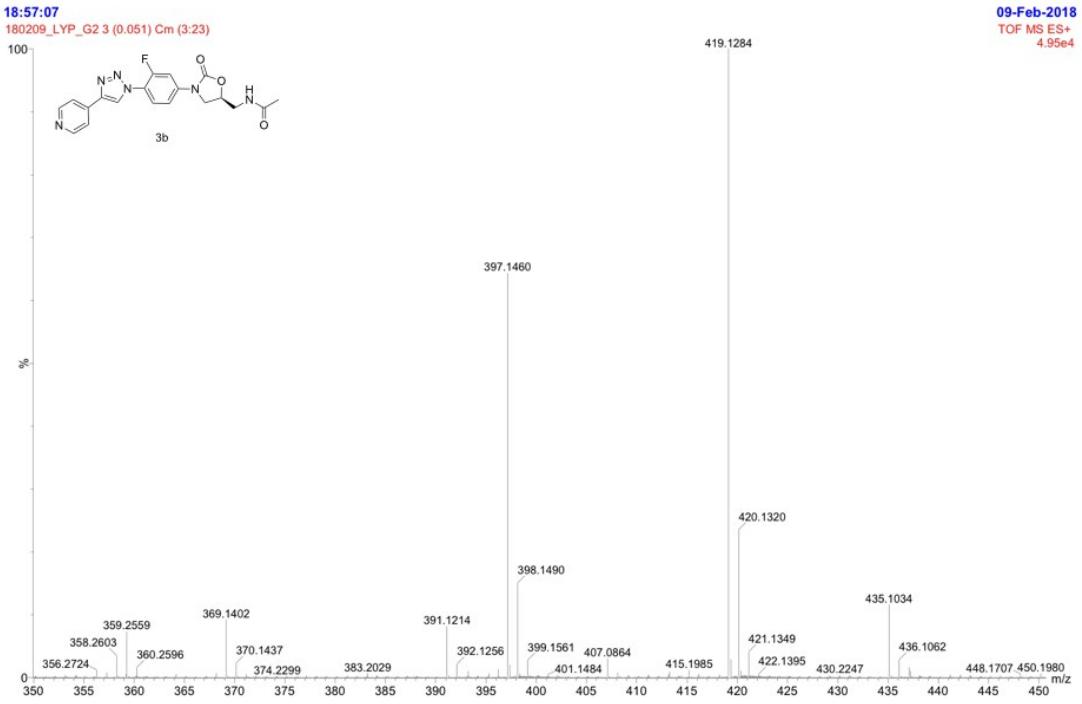
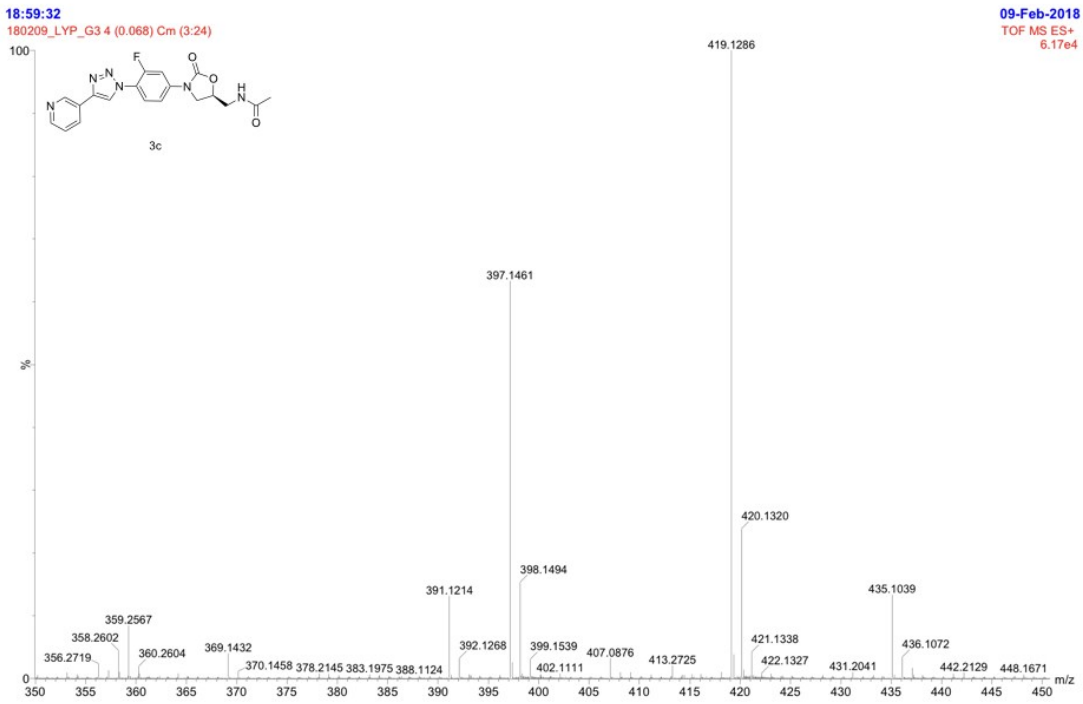
116.491
104.713
104.591
104.496
5g
f1 (ppm)

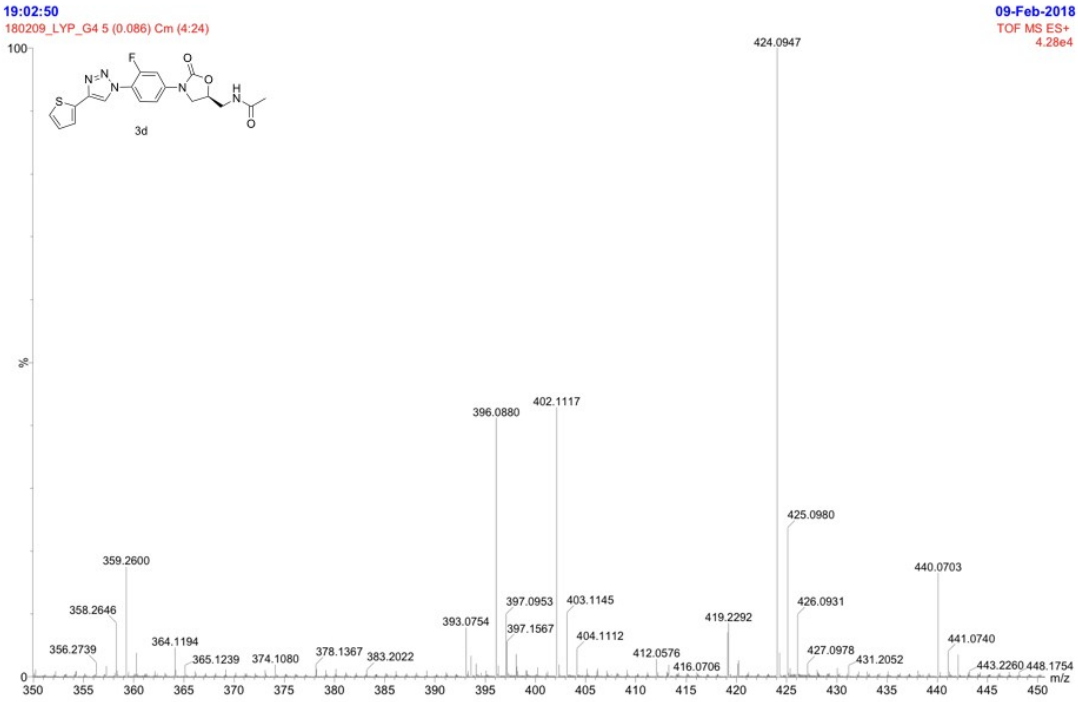

139.073
137.841
136.798
131.517
128.839
126.412
123.873
121.730
121.102
120.786
120.339
119.890
5h
f1 (ppm)

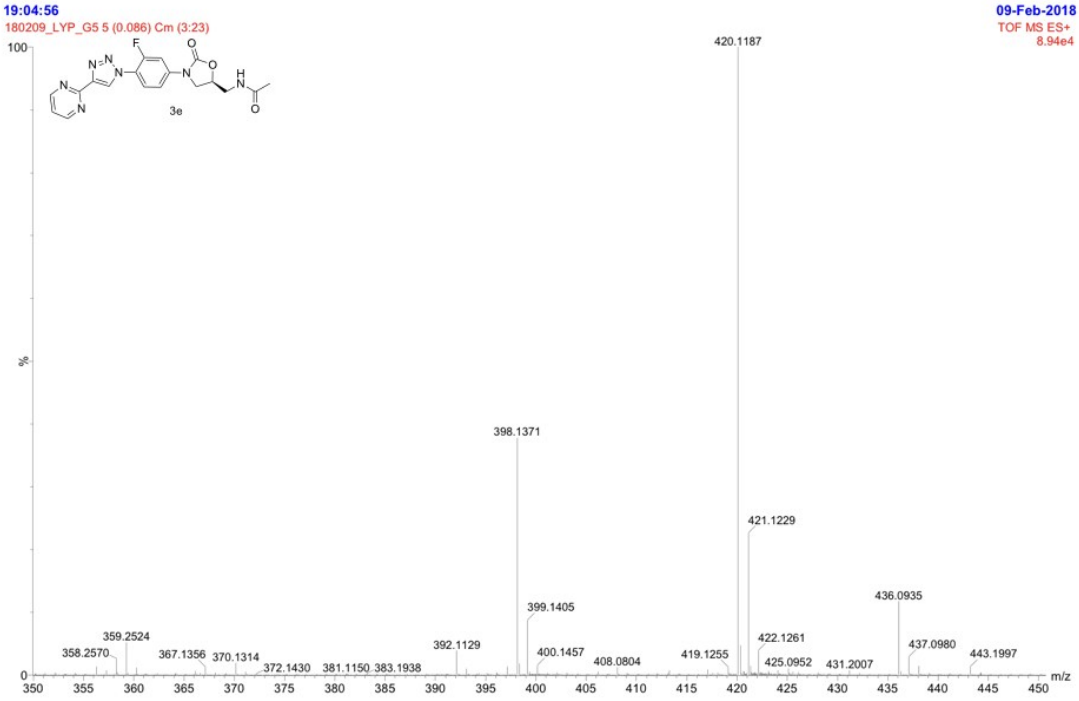

150.164
140.920
139.251
128.482
127.240
123.825
121.676
121.073
120.316
5i
f1 (ppm)

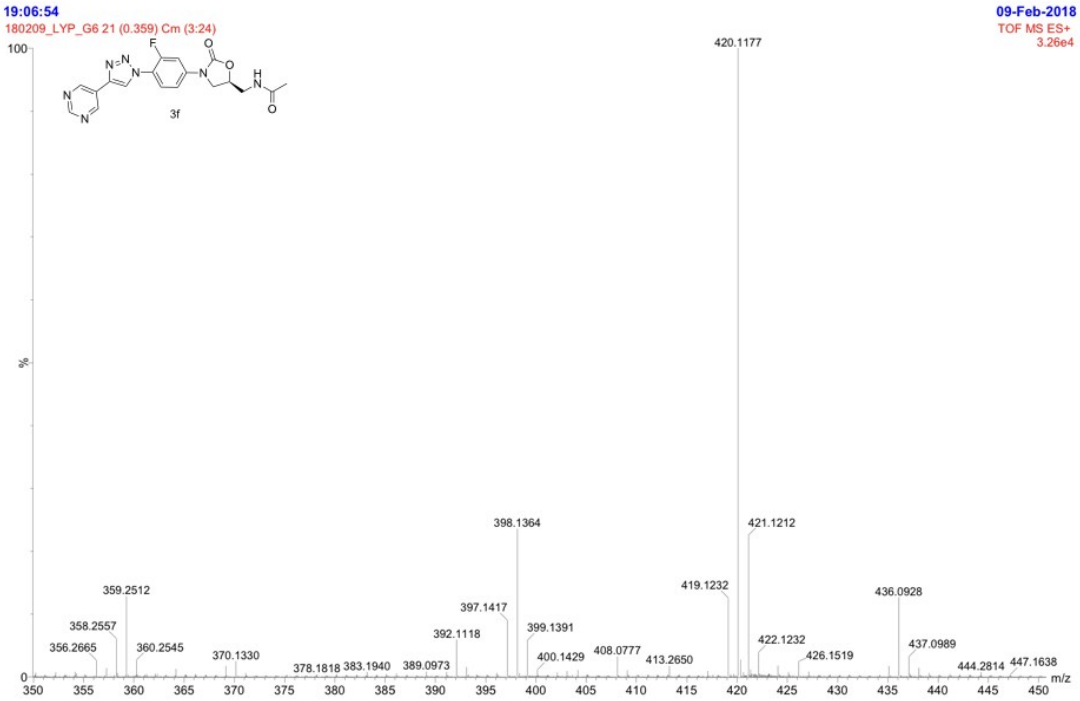

18:54:26
180209_LYP_G1 5 (0.086) Cm (5:24)
09-Feb-2018
TOF MS ES+
5.33e4
3a
419.1286
397.1461
420.1321
398.1490
435.1039
369.1391
356.2667
359.2556
368.1906
370.1422
377.1469
384.2102
391.1224
399.1528
409.1865
413.1786
421.1349
424.1053
426.1909
437.2422
443.1446
448.1672
m/z


18:57:07
180209_LYP_G2 3 (0.051) Cm (3:23)
09-Feb-2018
TOF MS ES+
4.95e4
3b
419.1284
397.1460
420.1320
398.1490
435.1034
369.1402
359.2559
391.1214
421.1349
358.2603
370.1437
392.1256
399.1561
407.0864
436.1062
360.2596
422.1395
356.2724
374.2299
383.2029
401.1484
415.1985
430.2247
448.1707
450.1980
%
m/z


18:59:32
180209_LYP_G3 4 (0.068) Cm (3:24)
09-Feb-2018
TOF MS ES+
6.17e4
3c
419.1286
397.1461
420.1320
398.1494
391.1214
435.1039
359.2567
358.2602
369.1432
392.1268
399.1539
407.0876
421.1338
436.1072
360.2604
422.1327
356.2719
370.1458
378.2145
383.1975
388.1124
402.1111
413.2725
431.2041
442.2129
448.1671
%
m/z


19:02:50
180209_LYP_G4 5 (0.086) Cm (4:24)
09-Feb-2018
TOF MS ES+
4.28e4
3d
424.0947
396.0880
402.1117
425.0980
359.2600
440.0703
358.2646
397.0953
403.1145
426.0931
393.0754
397.1567
419.2292
404.1112
441.0740
356.2739
364.1194
412.0576
427.0978
365.1239
374.1080
378.1367
383.2022
416.0706
431.2052
443.2260
448.1754
m/z


19:04:56
180209_LYP_G5 5 (0.086) Cm (3:23)
09-Feb-2018
TOF MS ES+
8.94e4
3e
420.1187
398.1371
421.1229
436.0935
399.1405
359.2524
422.1261
392.1129
437.0980
358.2570
367.1356
370.1314
400.1457
443.1997
408.0804
419.1255
425.0952
431.2007
372.1430
381.1150
383.1938
m/z


19:06:54
180209_LYP_G6 21 (0.359) Cm (3:24)
09-Feb-2018
TOF MS ES+
3.26e4
3f
100
%
0
420.1177
421.1212
398.1364
419.1232
359.2512
436.0928
397.1417
358.2557
399.1391
392.1118
422.1232
437.0989
356.2665
360.2545
370.1330
400.1429
408.0777
426.1519
444.2814
447.1638
378.1818
383.1940
389.0973
413.2650
350
355
360
365
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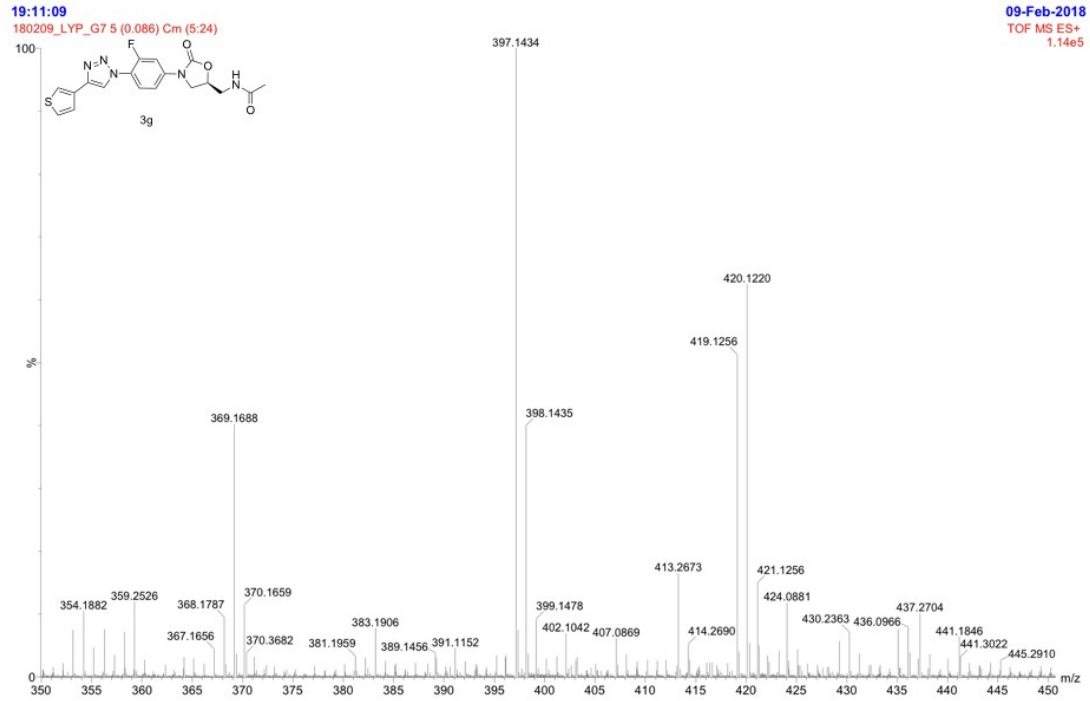
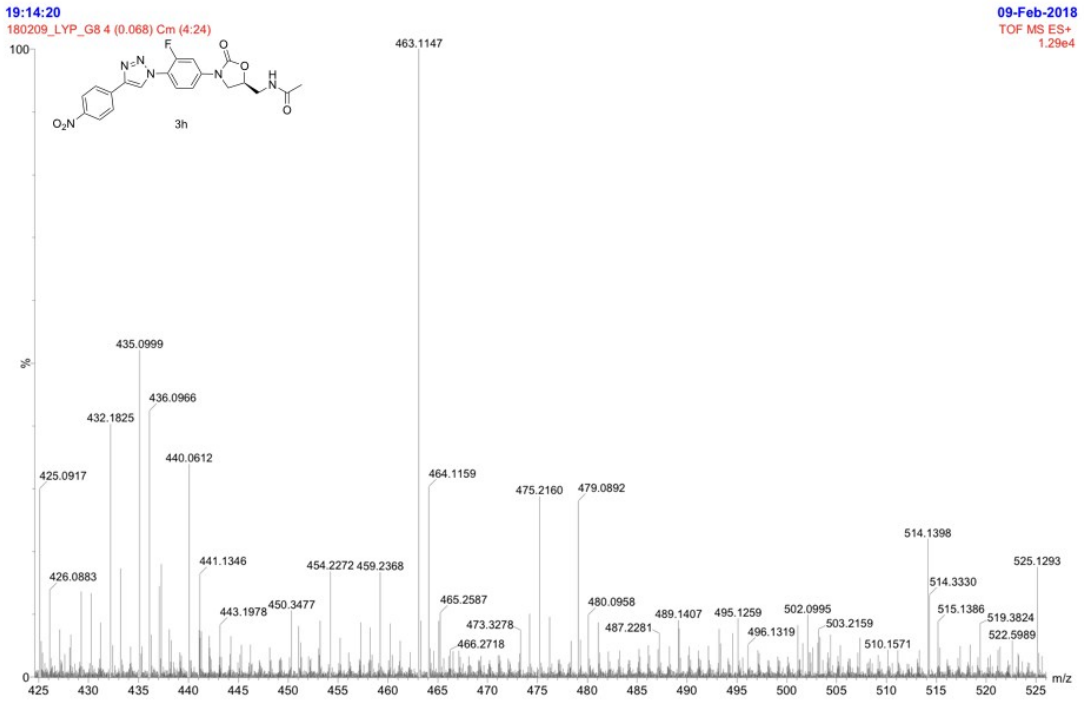
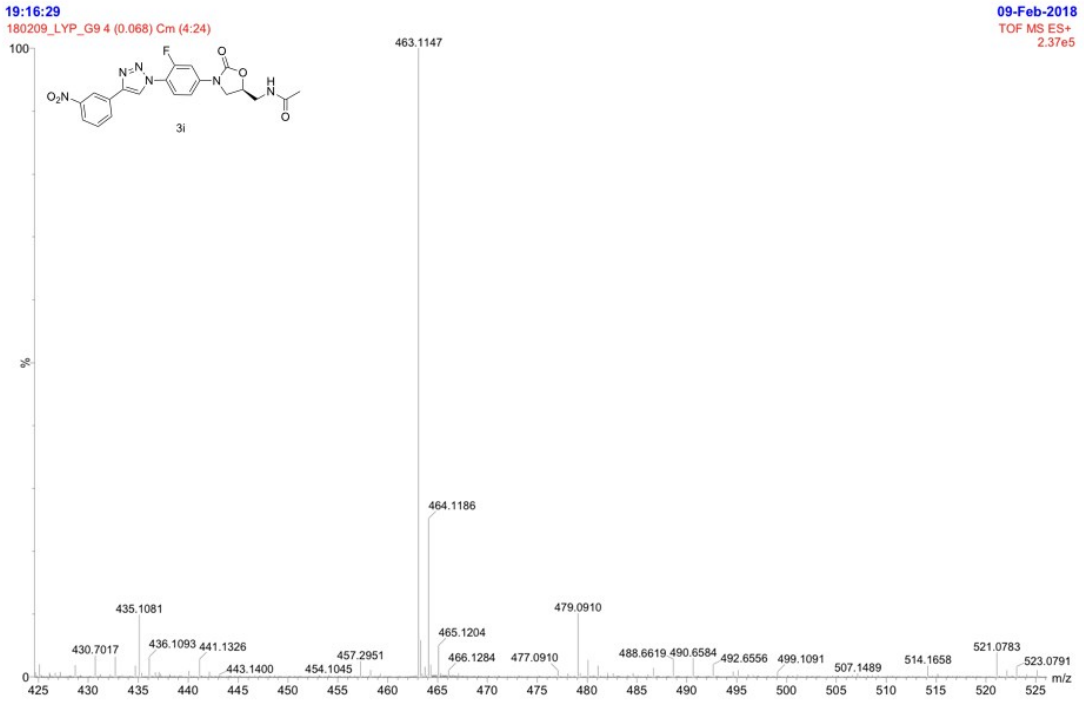
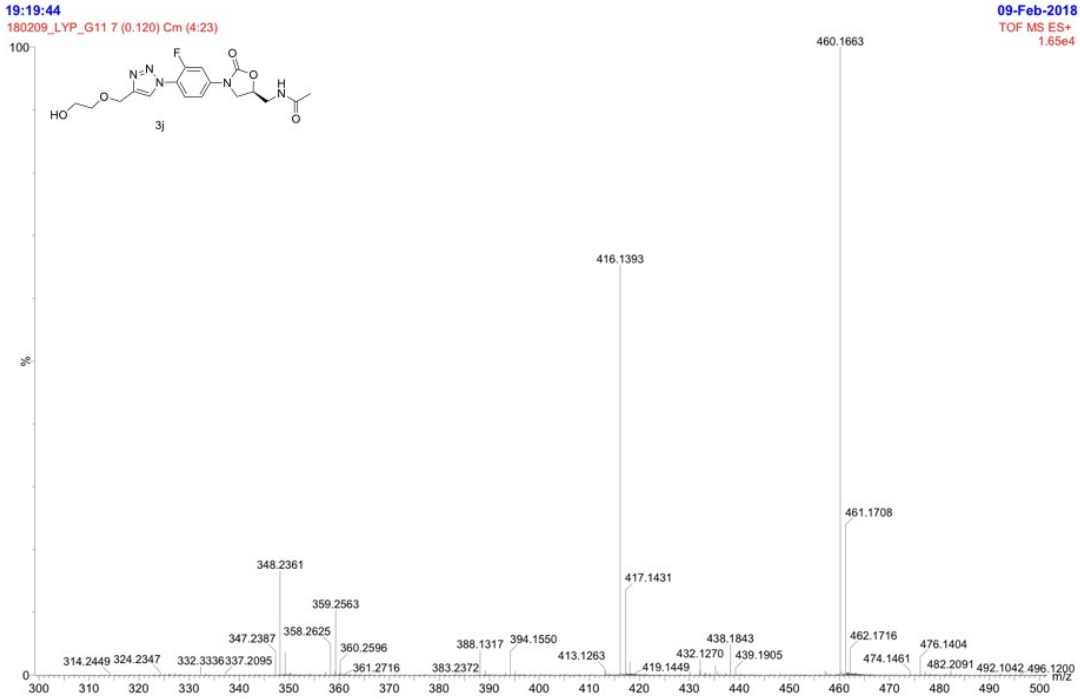
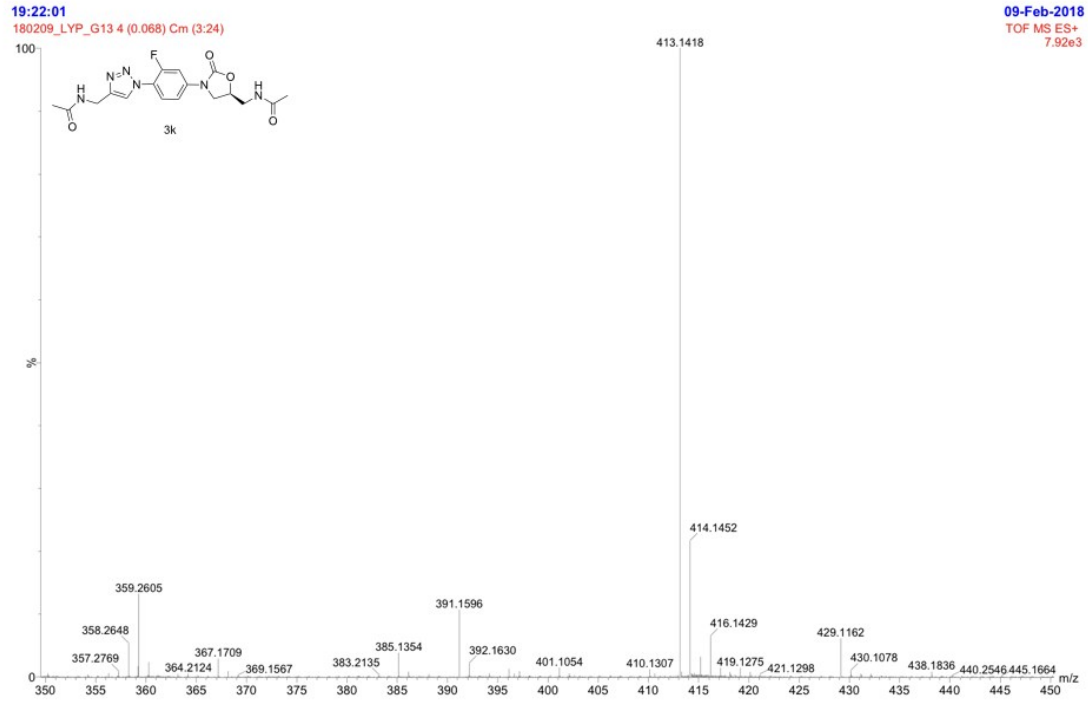
380
385
390
395
400
405
410
415
420
425
430
435
440
445
450
m/z

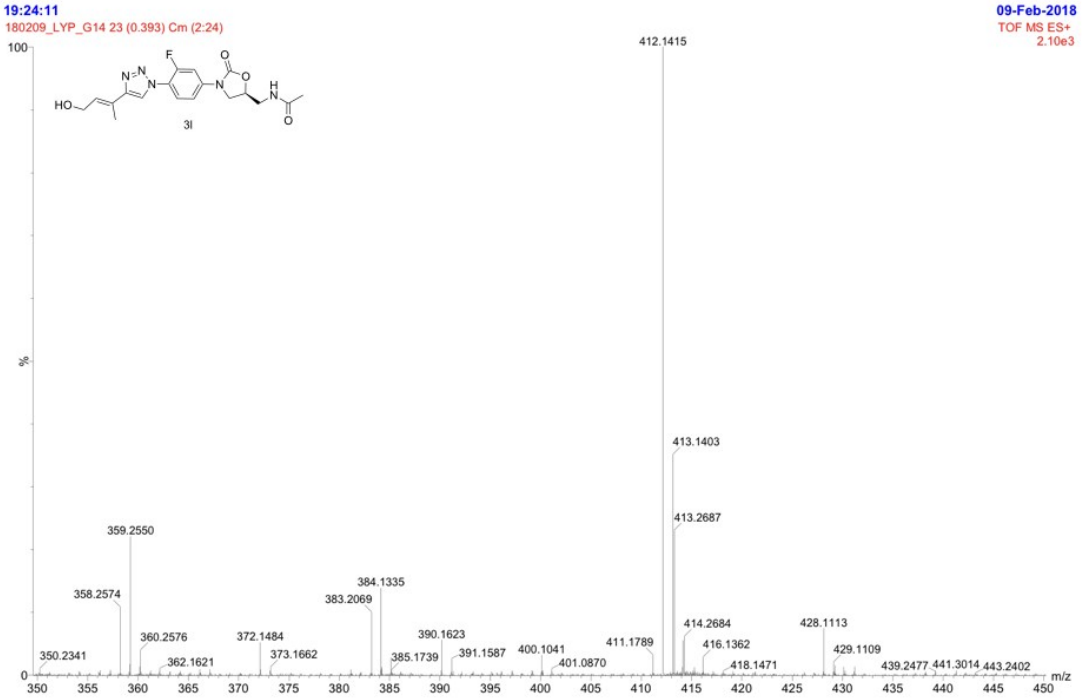

19:11:09
180209_LYP_G7 5 (0.086) Cm (5:24)
09-Feb-2018
TOF MS ES+
1.14e5
3g
397.1434
420.1220
419.1256
369.1688
398.1435
413.2673
421.1256
424.0881
354.1882
359.2526
368.1787
370.1659
399.1478
437.2704
383.1906
402.1042
407.0869
430.2363
436.0966
441.1846
367.1656
370.3682
381.1959
389.1456
391.1152
414.2690
441.3022
445.2910
%
m/z

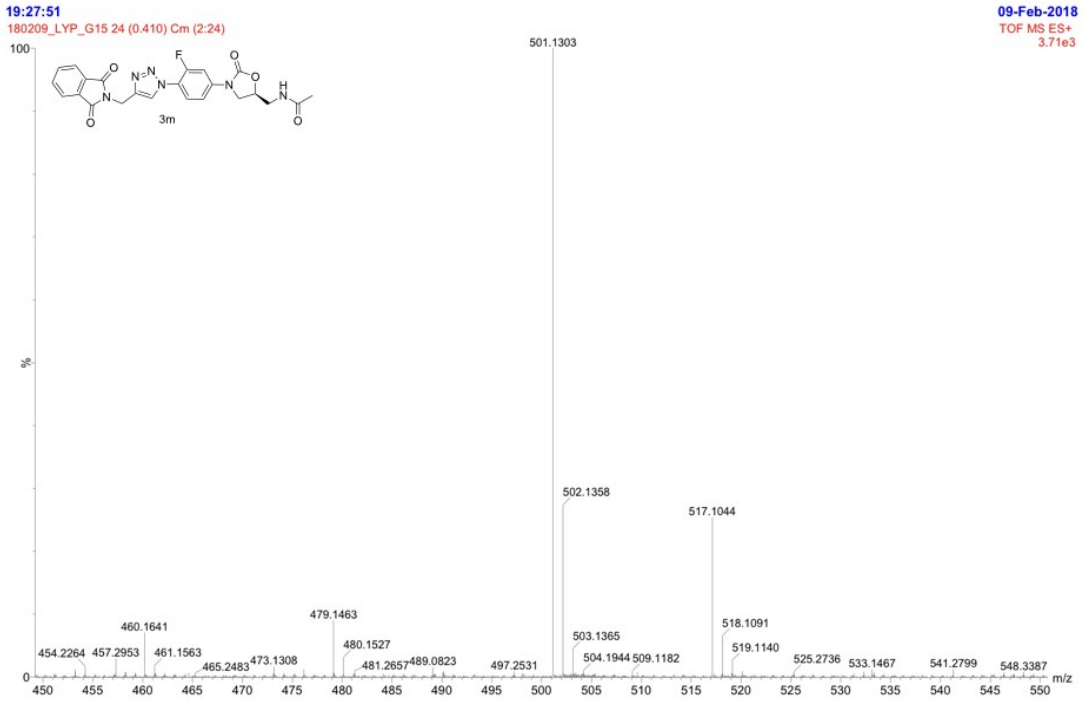

19:14:20
180209_LYP_G8 4 (0.068) Cm (4:24)
09-Feb-2018
TOF MS ES+
1.29e4
3h
463.1147
435.0999
436.0966
432.1825
440.0612
425.0917
464.1159
475.2160
479.0892
514.1398
441.1346
454.2272
459.2368
525.1293
426.0883
514.3330
465.2587
480.0958
515.1386
443.1978
450.3477
489.1407
495.1259
502.0995
519.3824
473.3278
487.2281
503.2159
522.5989
466.2718
496.1319
510.1571
%
m/z

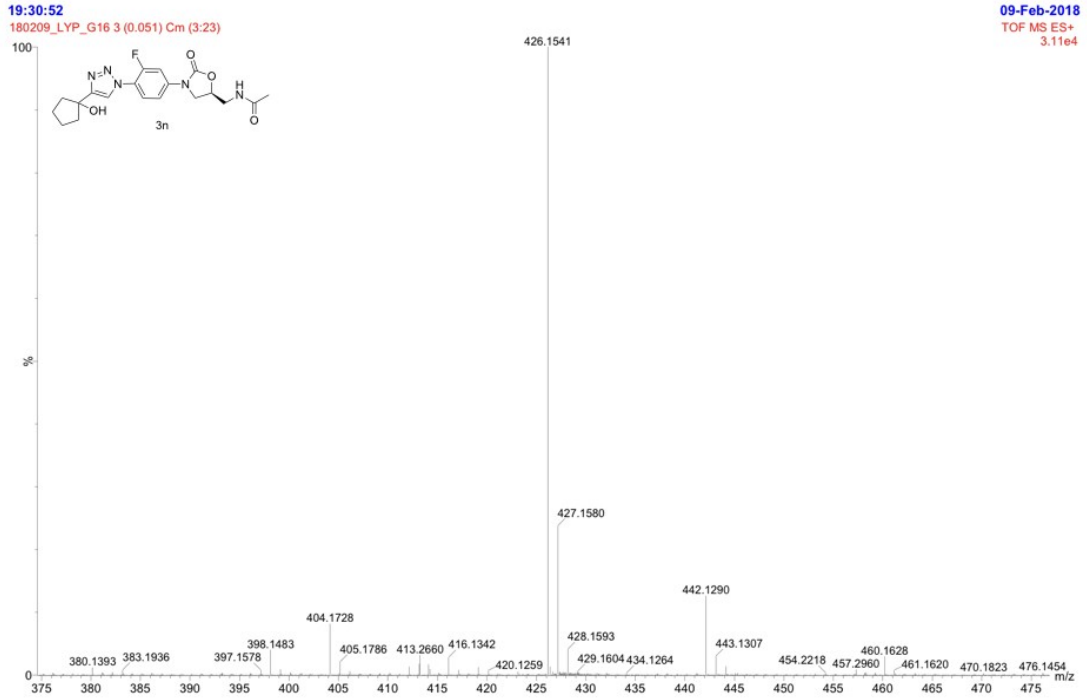

19:16:29
180209_LYP_G9 4 (0.068) Cm (4:24)
09-Feb-2018
TOF MS ES+
2.37e5
3i
463.1147
464.1186
435.1081
479.0910
465.1204
430.7017
436.1093
441.1326
457.2951
466.1284
477.0910
488.6619
490.6584
492.6556
499.1091
507.1489
514.1658
521.0783
523.0791
443.1400
454.1045
m/z

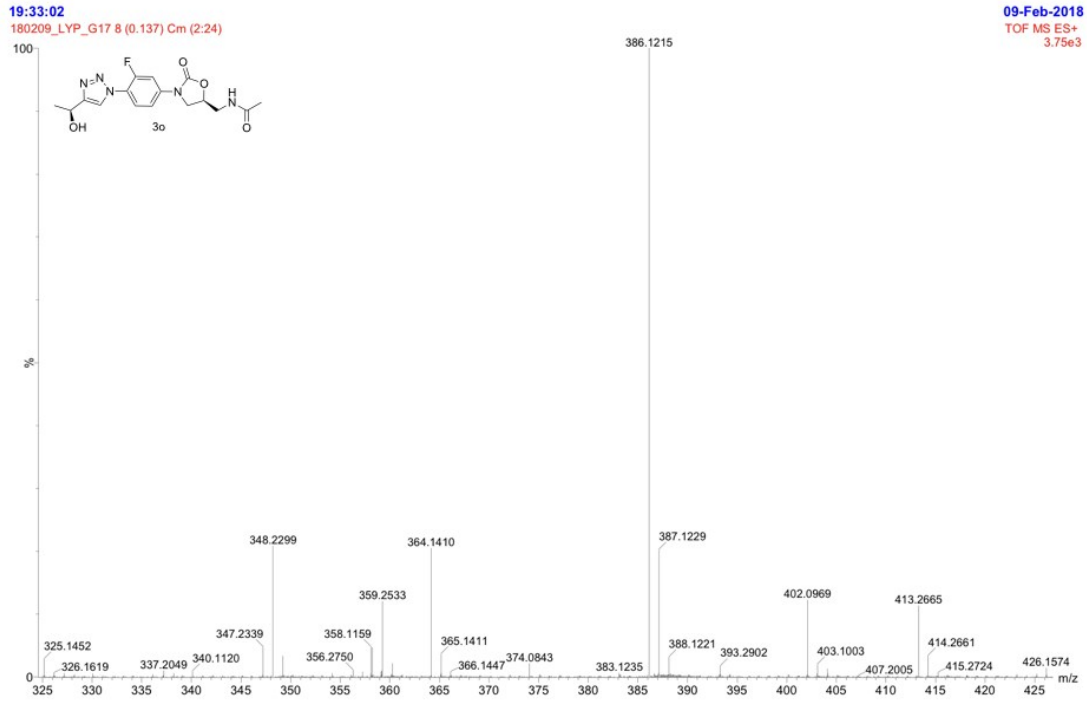

19:19:44
180209_LYP_G11 7 (0.120) Cm (4:23)
09-Feb-2018
TOF MS ES+
1.65e4
3j
460.1663
416.1393
461.1708
348.2361
417.1431
359.2563
347.2387
358.2625
360.2596
462.1716
476.1404
388.1317
394.1550
438.1843
314.2449
324.2347
332.3336
337.2095
361.2716
383.2372
413.1263
432.1270
439.1905
419.1449
474.1461
482.2091
492.1042
496.1200
m/z

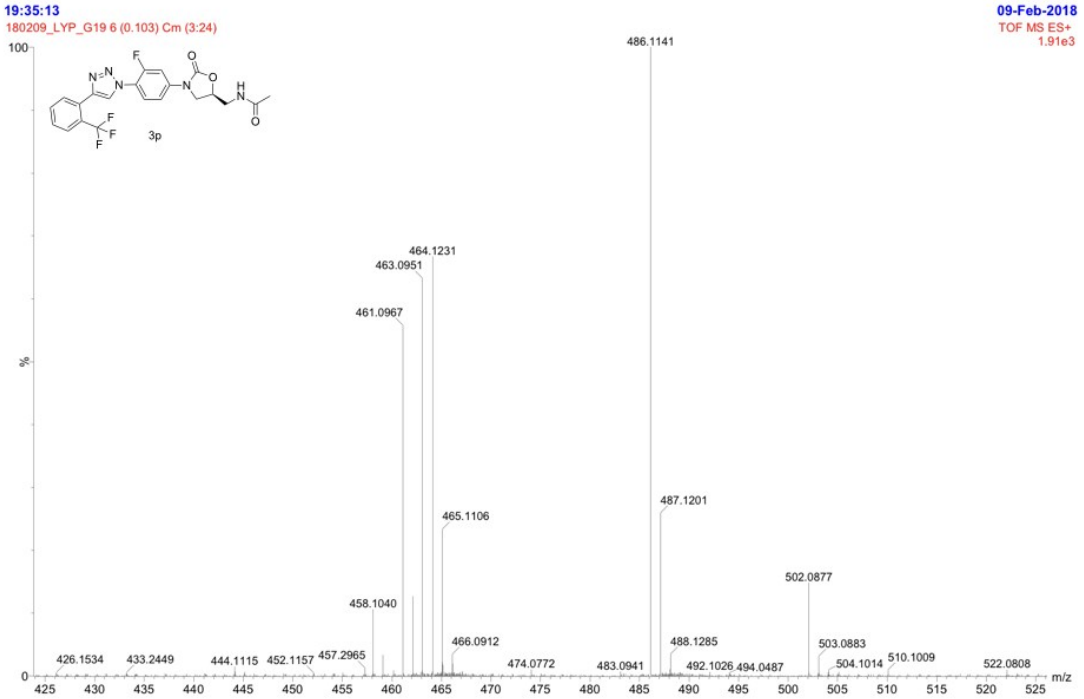

19:22:01
180209_LYP_G13 4 (0.068) Cm (3:24)
09-Feb-2018
TOF MS ES+
7.92e3
3k
413.1418
414.1452
359.2605
391.1596
358.2648
416.1429
429.1162
385.1354
367.1709
392.1630
357.2769
364.2124
369.1567
383.2135
401.1054
410.1307
419.1275
421.1298
430.1078
438.1836
440.2546
445.1664
%
m/z

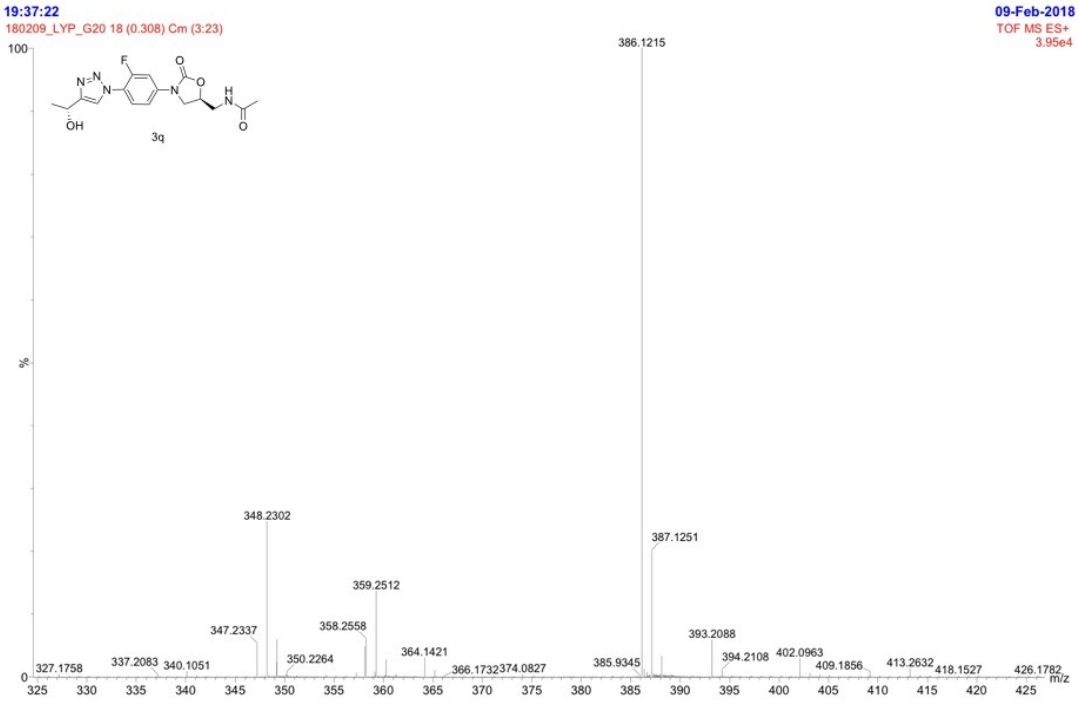

19:24:11
180209_LYP_G14 23 (0.393) Cm (2:24)
09-Feb-2018
TOF MS ES+
2.10e3
3l
412.1415
413.1403
413.2687
359.2550
384.1335
358.2574
383.2069
414.2684
428.1113
360.2576
372.1484
390.1623
416.1362
411.1789
429.1109
350.2341
362.1621
373.1662
385.1739
391.1587
400.1041
401.0870
418.1471
439.2477
441.3014
443.2402
%
m/z

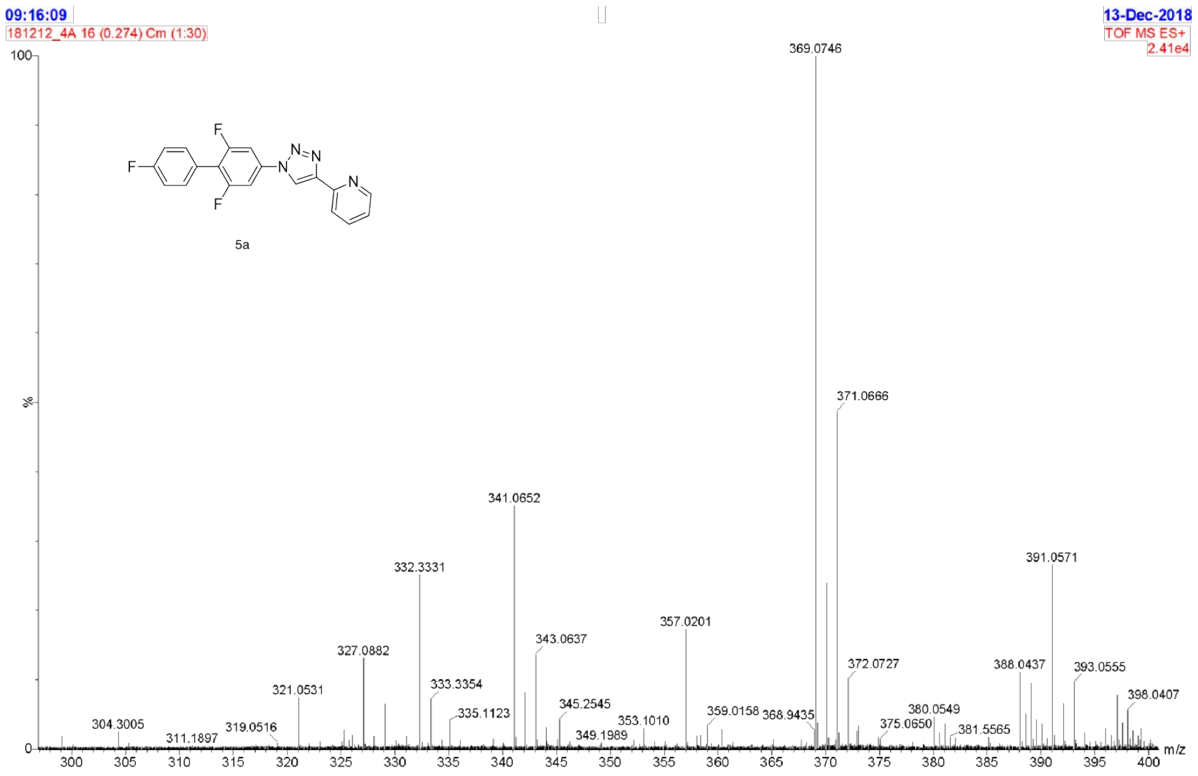

19:27:51
180209_LYP_G15 24 (0.410) Cm (2:24)
09-Feb-2018
TOF MS ES+
3.71e3
3m
501.1303
502.1358
517.1044
479.1463
460.1641
518.1091
480.1527
503.1365
519.1140
454.2264
457.2953
461.1563
465.2483
473.1308
481.2657
489.0823
497.2531
504.1944
509.1182
525.2736
533.1467
541.2799
548.3387
%
m/z

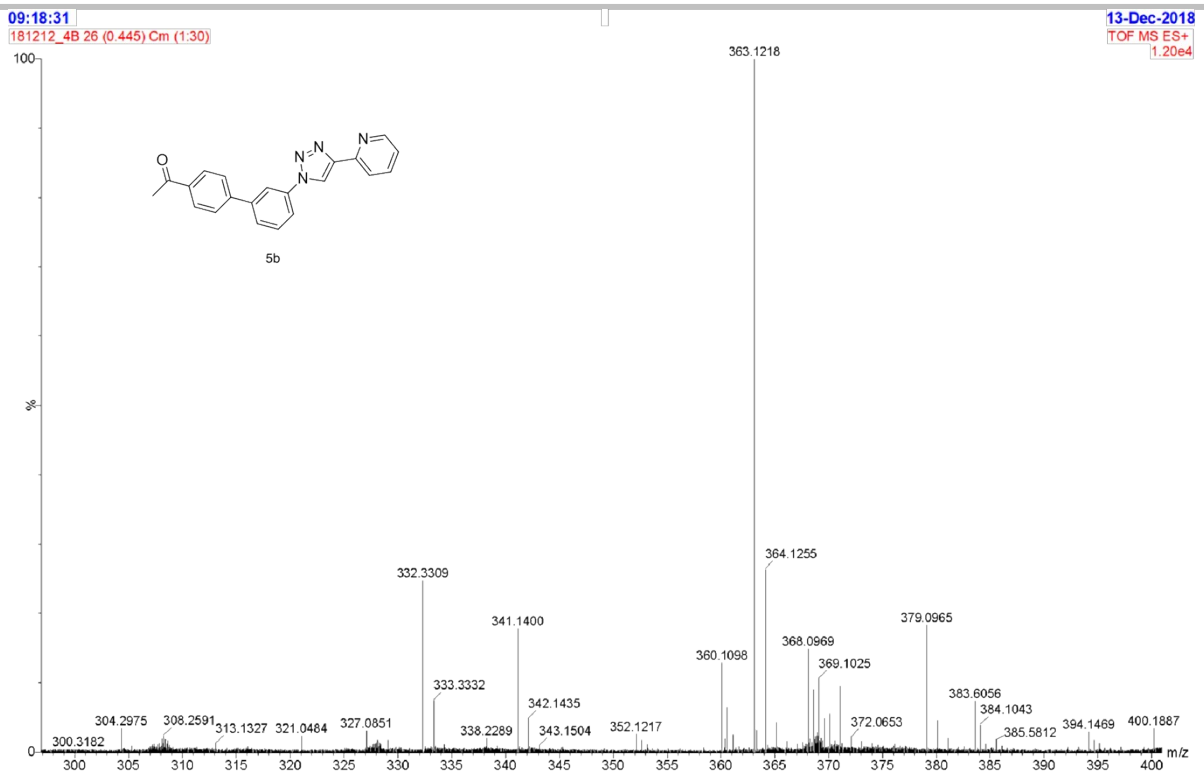

19:30:52
180209_LYP_G16 3 (0.051) Cm (3:23)
09-Feb-2018
TOF MS ES+
3.11e4
3n
426.1541
427.1580
442.1290
404.1728
428.1593
398.1483
443.1307
405.1786
413.2660
416.1342
460.1628
380.1393
383.1936
397.1578
420.1259
429.1604
434.1264
454.2218
457.2960
461.1620
470.1823
476.1454
%
m/z

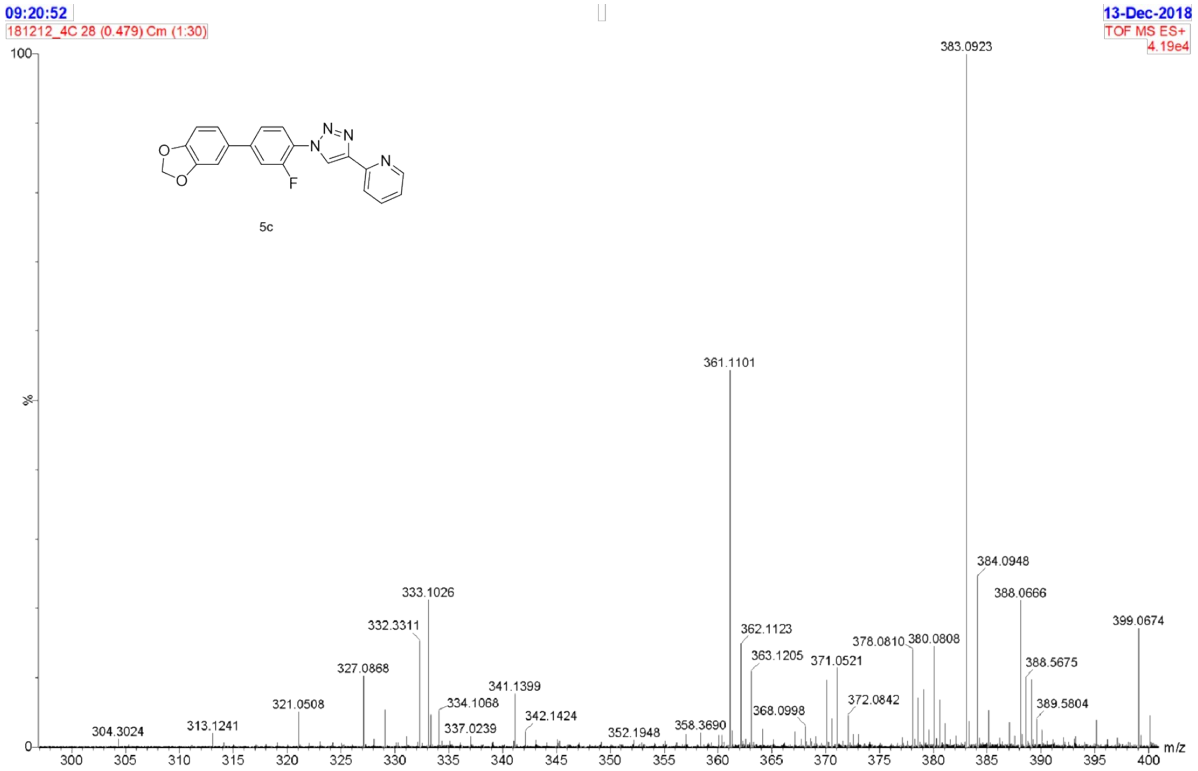

19:33:02
180209_LYP_G17 8 (0.137) Cm (2:24)
09-Feb-2018
TOF MS ES+
3.75e3
3o
386.1215
348.2299
364.1410
387.1229
359.2533
402.0969
413.2665
347.2339
358.1159
365.1411
325.1452
388.1221
414.2661
393.2902
403.1003
340.1120
356.2750
374.0843
326.1619
337.2049
366.1447
383.1235
407.2005
415.2724
426.1574
m/z

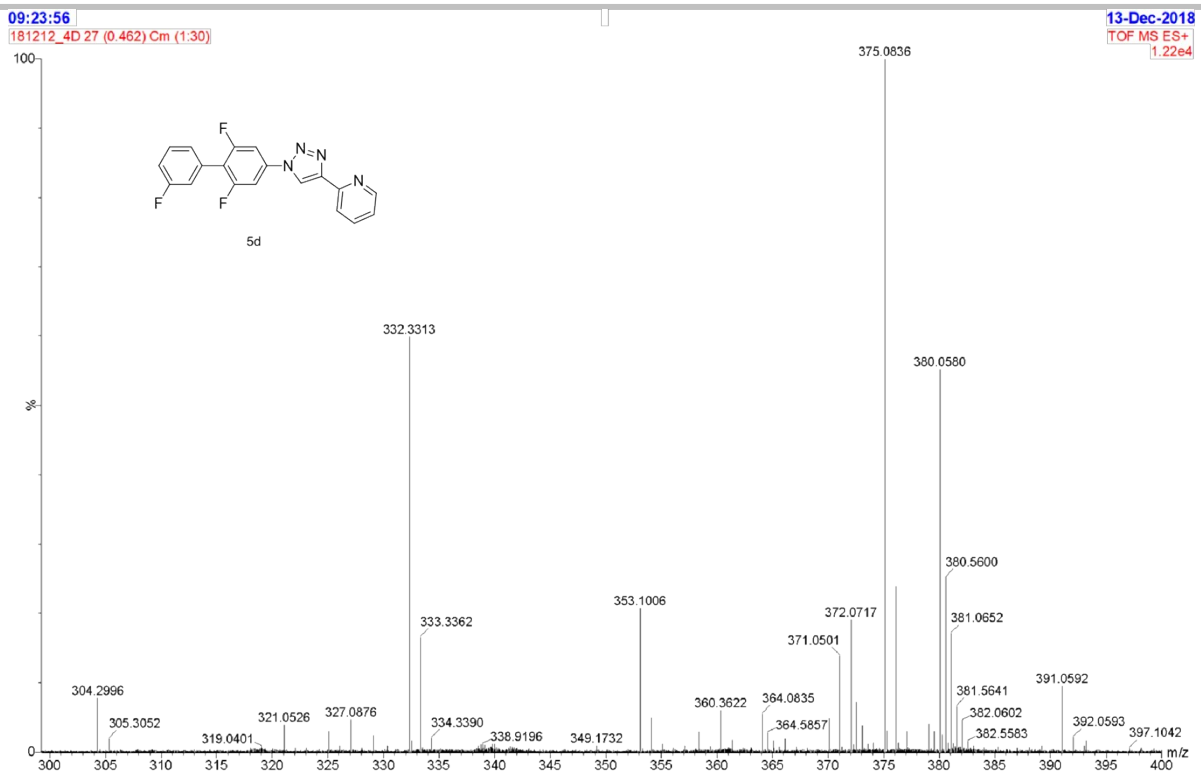

19:35:13
180209_LYP_G19 6 (0.103) Cm (3:24)
09-Feb-2018
TOF MS ES+
1.91e3
3p
486.1141
464.1231
463.0951
461.0967
487.1201
465.1106
502.0877
458.1040
466.0912
488.1285
503.0883
426.1534
433.2449
444.1115
452.1157
457.2965
474.0772
483.0941
492.1026
494.0487
504.1014
510.1009
522.0808
m/z


19:37:22
180209_LYP_G20 18 (0.308) Cm (3:23)
09-Feb-2018
TOF MS ES+
3.95e4
3q
386.1215
348.2302
387.1251
359.2512
347.2337
358.2558
393.2088
364.1421
394.2108
402.0963
327.1758
337.2083
340.1051
350.2264
366.1732
374.0827
385.9345
409.1856
413.2632
418.1527
426.1782
m/z


09:16:09
181212_4A 16 (0.274) Cm (1:30)
13-Dec-2018
TOF MS ES+
2.41e4
5a
369.0746
371.0666
341.0652
391.0571
332.3331
357.0201
343.0637
327.0882
372.0727
388.0437
393.0555
321.0531
333.3354
398.0407
345.2545
335.1123
359.0158
368.9435
380.0549
304.3005
319.0516
353.1010
375.0650
311.1897
349.1989
381.5565
m/z


09:18:31
181212_4B 26 (0.445) Cm (1:30)
13-Dec-2018
TOF MS ES+
1.20e4
100
%
0
363.1218
364.1255
332.3309
341.1400
379.0965
368.0969
360.1098
369.1025
333.3332
383.6056
342.1435
384.1043
304.2975
308.2591
313.1327
321.0484
327.0851
338.2289
343.1504
352.1217
372.0653
385.5812
394.1469
400.1887
300.3182
m/z
300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400
5b


09:20:52
181212_4C 28 (0.479) Cm (1:30)
13-Dec-2018
TOF MS ES+
4.19e4
100
%
0
383.0923
361.1101
384.0948
388.0666
333.1026
399.0674
332.3311
362.1123
378.0810
380.0808
327.0868
363.1205
371.0521
388.5675
341.1399
321.0508
334.1068
372.0842
389.5804
342.1424
368.0998
304.3024
313.1241
337.0239
352.1948
358.3690
m/z
300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400
5c


09:23:56
181212_4D 27 (0.462) Cm (1:30)
13-Dec-2018
TOF MS ES+
1.22e4
5d
375.0836
332.3313
380.0580
380.5600
353.1006
372.0717
333.3362
381.0652
371.0501
391.0592
304.2996
360.3622
364.0835
381.5641
305.3052
321.0526
327.0876
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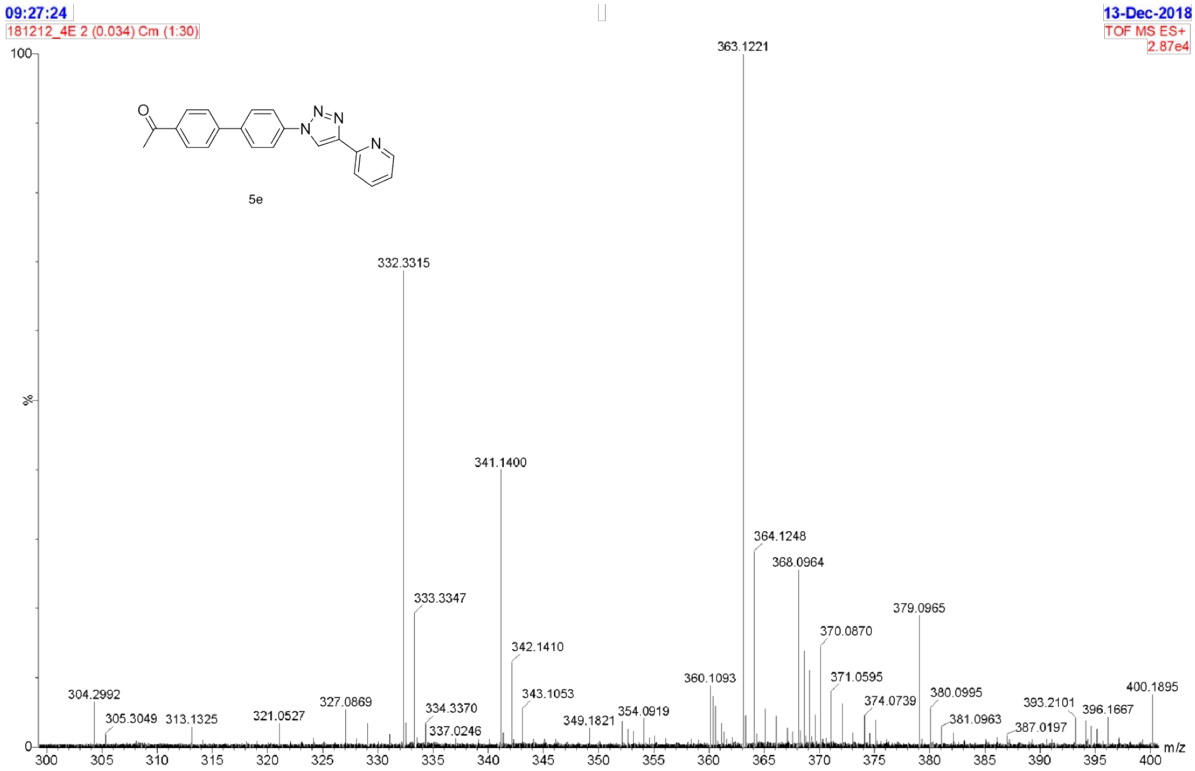
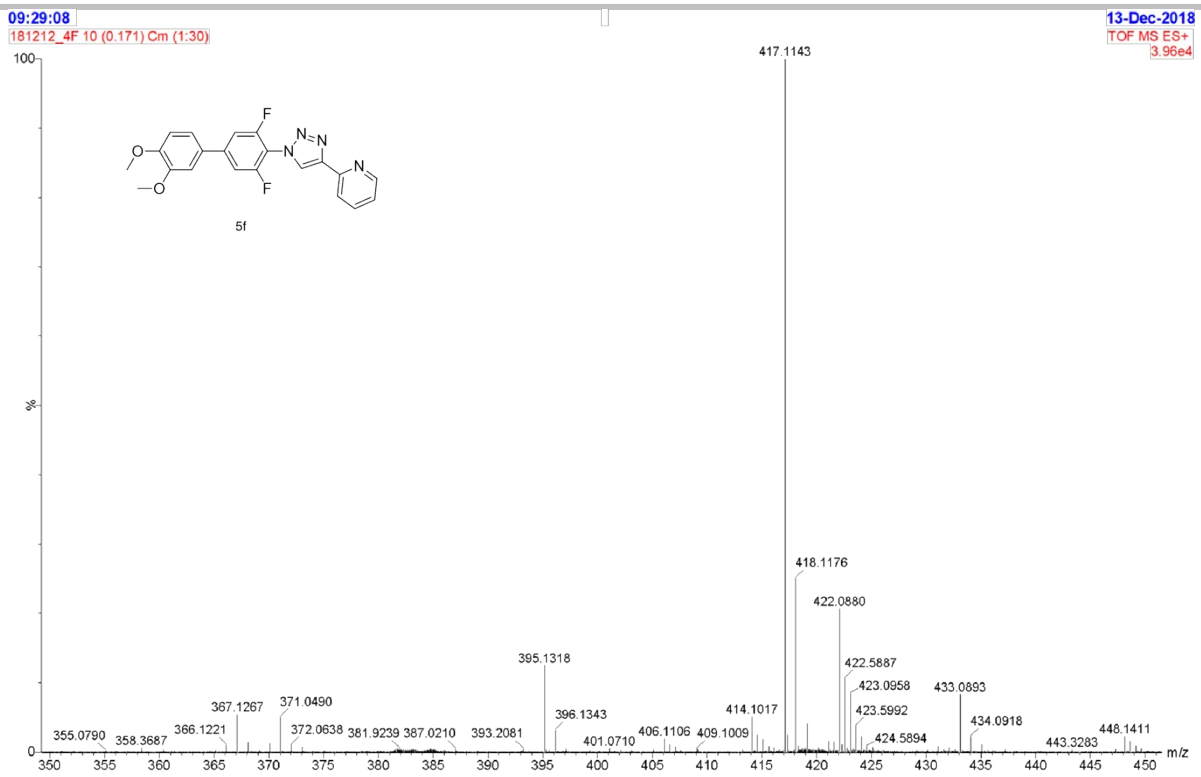
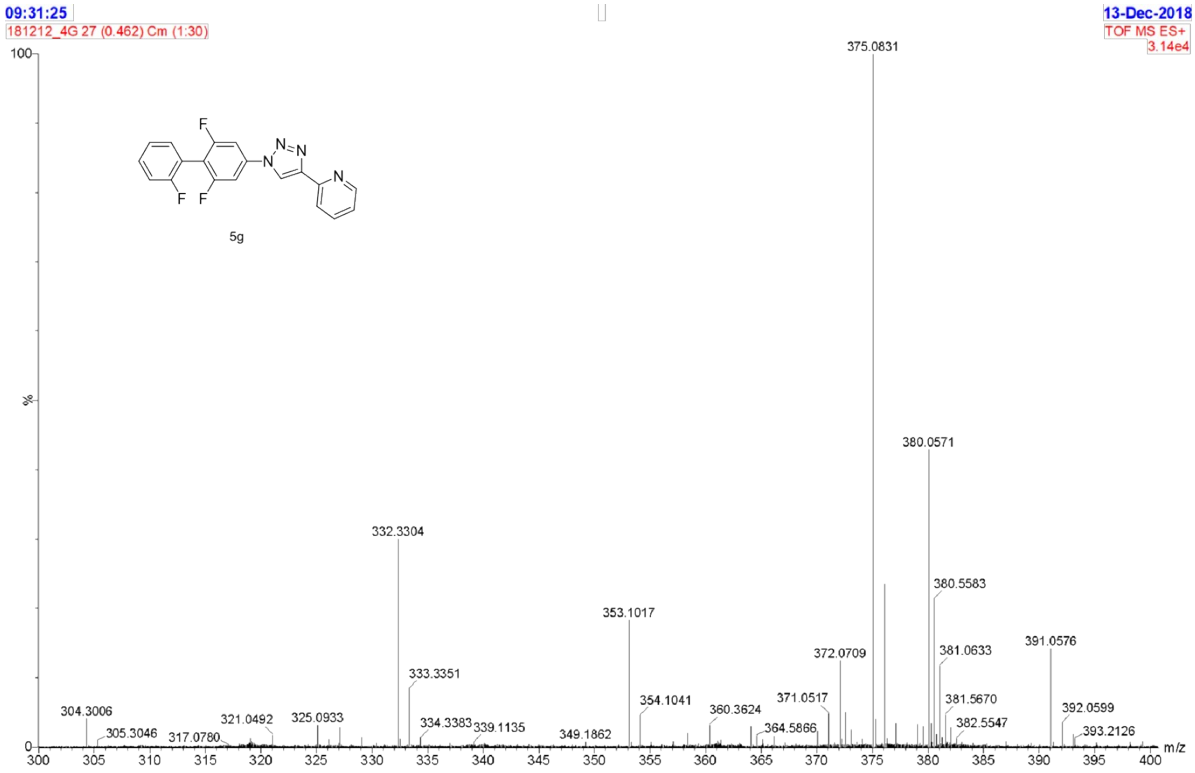
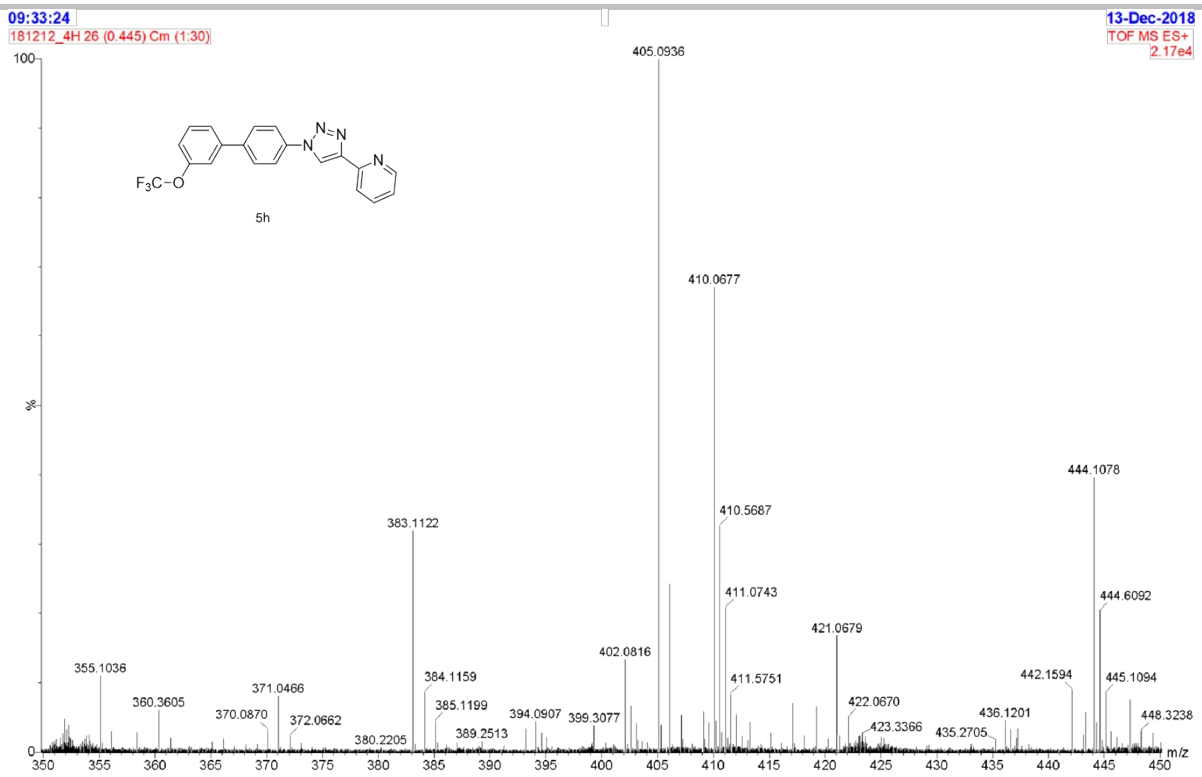
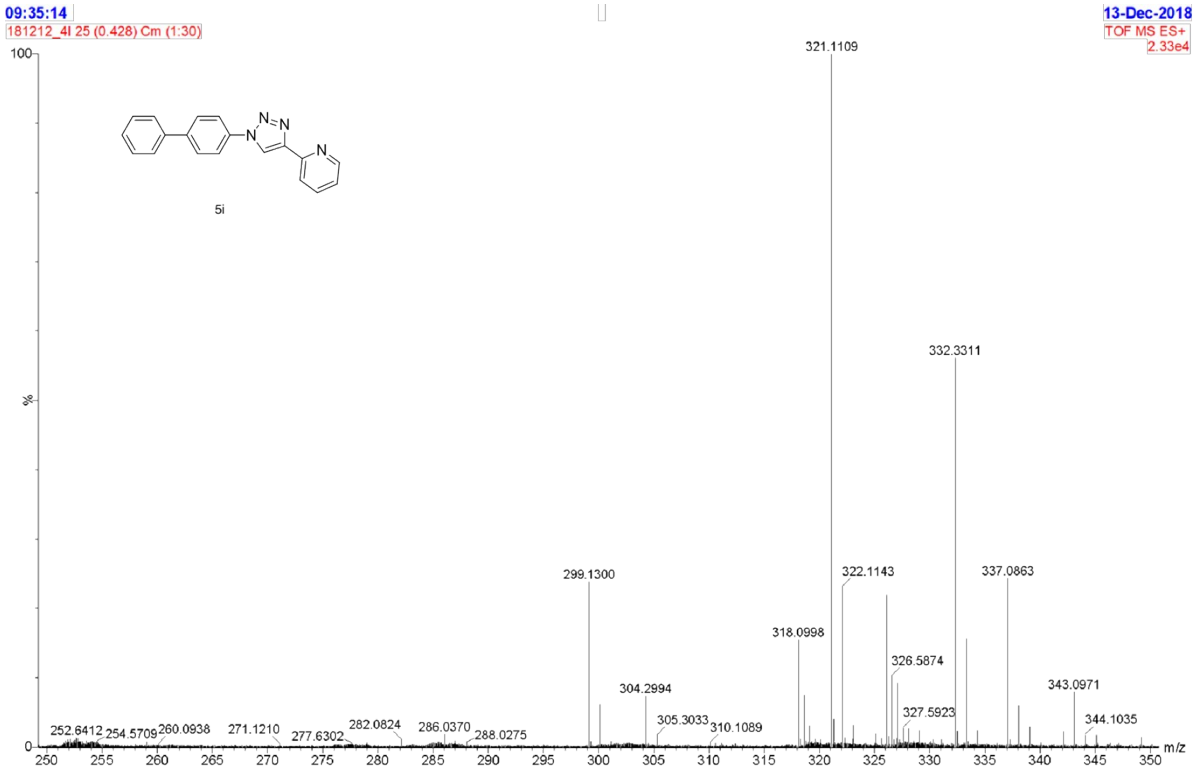
392.0593
319.0401
334.3390
338.9196
349.1732
382.5583
397.1042
m/z


09:27:24
181212_4E 2 (0.034) Cm (1:30)
13-Dec-2018
TOF MS ES+
2.87e4
5e
363.1221
332.3315
341.1400
364.1248
368.0964
333.3347
379.0965
370.0870
342.1410
360.1093
371.0595
343.1053
374.0739
380.0995
400.1895
304.2992
327.0869
393.2101
305.3049
313.1325
321.0527
334.3370
354.0919
396.1667
349.1821
381.0963
337.0246
387.0197
m/z


09:29:08
181212_4F 10 (0.171) Cm (1:30)
13-Dec-2018
TOF MS ES+
3.96e4
5f
417.1143
418.1176
422.0880
395.1318
422.5887
423.0958
433.0893
423.5992
414.1017
434.0918
367.1267
371.0490
396.1343
448.1411
355.0790
366.1221
372.0638
381.9239
387.0210
393.2081
401.0710
406.1106
409.1009
424.5894
443.3283
358.3687
m/z


09:31:25
181212_4G 27 (0.462) Cm (1:30)
13-Dec-2018
TOF MS ES+
3.14e4
5g
375.0831
380.0571
332.3304
380.5583
353.1017
391.0576
372.0709
381.0633
333.3351
354.1041
371.0517
381.5670
304.3006
360.3624
392.0599
321.0492
325.0933
334.3383
339.1135
364.5866
382.5547
393.2126
305.3046
317.0780
349.1862
m/z


09:33:24
181212_4H 26 (0.445) Cm (1:30)
13-Dec-2018
TOF MS ES+
2.17e4
100
%
0
5h
405.0936
410.0677
444.1078
410.5687
383.1122
411.0743
444.6092
421.0679
402.0816
355.1036
384.1159
411.5751
442.1594
445.1094
371.0466
360.3605
385.1199
422.0670
436.1201
448.3238
370.0870
372.0662
394.0907
399.3077
423.3366
435.2705
389.2513
380.2205
350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
m/z


09:35:14
181212_4I 25 (0.428) Cm (1:30)
13-Dec-2018
TOF MS ES+
2.33e4
100
%
0
5i
321.1109
332.3311
299.1300
322.1143
337.0863
318.0998
326.5874
304.2994
343.0971
327.5923
305.3033
344.1035
310.1089
252.6412
254.5709
260.0938
271.1210
277.6302
282.0824
286.0370
288.0275
250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350
m/z

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