

<Supporting Information>

**Novel Application of Leuckart-Wallach Reaction for Synthesis of
Tetrahydro-1,4-benzodiazepin-5-ones Library**

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1. General Information.

All commercially available reagents and solvents were used without further purification unless noted otherwise. All the solvents, such as DMF, methanol, dichloromethane, DMSO, were purchased from Aldrich and Baker in HPLC degree.

Bromoacetal resins were obtained from either Advanced ChemTech or Aldrich, but the high loading resins for actual library construction were synthesized from Wang resin in our laboratory using reported procedure.^{1,2} The reaction steps for the library construction were performed in parallel using FlexChem[®] Synthesis System from SciGene (Sunnyvale, CA) with 48 and 96 deep-well filtration blocks. The reaction volume per well of 48-well reaction blocks was set to 3 mL and 96-well reaction blocks was set to 1.2mL unless noted otherwise. The purity of the whole library members was observed by HPLC/MS spectra recorded on Waters Alliance LC/MS system, consisting of Micromass Quattromicro mass spectrometer, photodiode array detector, and 2795 HT-HPLC system, equipped with Thermo Hypersil Gold column (C-18, 50 x 2.1 mm, 5µm). High resolution mass was observed by JEOL JMS-AX505WA mass spectrometer. NMR spectra were obtained on a Bruker 300 MHz spectrophotometers. Chemical shifts are reported as δ in ppm from the residual solvent peak (CDCl_3 , ^{13}C 77.00; TMS: 0.00). IR spectra were measured by Jasco, FT/IR-300E spectrometer.

Reference:

- (1) Vojkovsky, T.; Weichsel, A.; Patek, M. *J. Org. Chem.* **1998**, *63*, 3162.
- (2) Eguchi, M.; Lee, M. S.; Stasiak, M.; Kahn, M. *Tetrahedron Lett.* **2001**, *42*, 1237.

2. General solid phase reaction procedures

Step 1: Amine substitution. Bromoacetal resins (100 mg, 1.6 mmol/g, 0.16 mmol) were loaded into each well of Robbins 48 deep-well filtration block and solutions of 4 different R₁-amine (20 equiv. in 3 mL of DMSO) were dispensed into the designated wells of 48 deep-well reaction block. The reaction mixture was shaken at 60 °C using a rotating oven [Robbins Scientific] for 12 h. The resulting resins were washed extensively with DMF, MeOH, and DCM sequentially (3 times each) and dried in high vacuum dessicator.

Step 2: Anthranilic Acid Coupling. A reaction cocktail of anthranilic Acid or 4-Chloroanthranilic acid (3 equiv.), HATU (3 equiv.), and DIPEA (6 equiv.) in DMF (3 mL per well) was added to each well charged with the resins. After the reaction mixture was incubated in a rotating oven for 12 h at room temperature, the resin were washed extensively with DMF, MeOH, and DCM sequentially (3 times each) and dried in high vacuum dessicator.

Step 3: Reductive amination. To the resin in reaction block was added aldehyde (3 equiv.) and acetic acid (cat.) in DMF (2 mL) and the reaction mixture was shaken for 1 h at room temperature. The NaBH₃CN (5 equiv.) in DMF (1mL) was followed to the reaction resin and the mixture was shaken for 5 h at room temperature. The resins were

washed extensively with DMF, MeOH, and DCM and dried in high vacuum dessicator

Step 4: Cleavage and Cyclization. After drying the resins in the 48-well reaction block under high vacuum, the resins were treated with 100% formic acid (4 mL per well) for 3 h at 60 °C. After the removal of resins by filtration, the filtrate was condensed *in vacuo* using SpeedVac [Thermo Savant] to provide the desired product as a film. The products were diluted with 50% water/acetonitrile and freeze-dried, which yielded pale yellow powder. The purity of final products was observed by LC/MS without further purification.

3. Characterization of 16 representative members of compounds

Characterization of Compound 3a. ^1H NMR (300 MHz, CDCl_3) δ = 7.71 (dd, J = 7.7, 1.7 Hz, 1H), 7.31 (m, 11H), 7.01 (t, J = 7.5 Hz, 1H), 6.90 (d, J = 8.1 Hz, 1H), 4.27 (s, 2H), 3.78 (m, 2H), 3.28 (t, J = 5.7 Hz, 2H), 3.04 (t, J = 5.7 Hz, 2H), 2.94 (m, 2H), ^{13}C NMR (75 MHz, CDCl_3) δ = 34.5, 46.9, 49.3, 55.8, 56.2, 118.3, 121.3, 125.9, 126.7, 127.5, 128.1, 128.4, 129.6, 129.9, 131.3, 137.4, 138.7, 146.1, 169.9; IR (thin film) 3060, 3026, 2930, 1635, 1597, 740, 700 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{24}\text{H}_{24}\text{N}_2\text{O}$ [$\text{M} + \text{H}$] $^+$: m/z 357.1967. Found: m/z 357.1973.

Characterization of Compound 3b. ^1H NMR (300 MHz, CDCl_3) δ = 7.69 (d, J = 7.7 Hz, 1H), 7.24 (m, 8H), 7.00 (t, J = 7.5 Hz, 1H), 6.90 (d, J = 8.1, Hz 1H), 6.71 (d, J = 8.6 Hz, 2H), 4.69 (s, 2H), 4.23 (s, 2H), 3.74 (s, 3H), 3.30 (t, J = 5.7 Hz, 2H), 2.91 (t, J = 5.7 Hz, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ = 113.2, 127.47, 127.74, 128.6, 128.7; IR (thin film) 2926, 1635, 763, 698 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{24}\text{H}_{24}\text{N}_2\text{O}_2$ [$\text{M}+\text{H}]^+$: m/z 373.1916. Found: m/z 373.1925.

Characterization of Compound 3c. ^1H NMR (300 MHz, CDCl_3) δ = 7.73 (d, J = 7.6 Hz, 1H), 7.31 (m, 11H), 7.03 (t, J = 7.5 Hz, 1H), 6.94 (d, J = 8.1, 1H), 4.79 (s, 2H), 4.26 (s, 2H), 3.36 (t, J = 5.7 Hz, 2H), 2.98 (t, J = 5.7 Hz, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ = 45.6, 50.3, 56.2, 56.9, 118.7, 121.8, 127.2, 127.4, 128.1, 128.5, 128.6, 129.9, 130.2, 131.8, 137.3, 137.7, 146.7, 170.6; IR (thin film) 3061, 3028, 2926, 2830, 1637, 1596, 735, 698 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{23}\text{H}_{22}\text{N}_2\text{O}$ [$\text{M} + \text{H}]^+$: m/z 343.1810. Found: m/z 343.1811.

Characterization of Compound 3d. ^1H NMR (300 MHz, CDCl_3) δ = 7.65 (dd, J = 7.6, 1.6 Hz, 1H), 7.30 (m, 6H), 7.01 (t, J = 7.4 Hz, 1H), 6.90 (d, J = 7.4 Hz, 1H), 4.30 (s, 2H), 3.36 (m, 4H), 3.15 (t, J = 5.7 Hz, 2H), 1.89 (m, 1H), 0.93 (d, J = 6.6 Hz, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ = 20.1, 27.8, 46.8, 54.7, 56.5, 56.9, 118.6, 121.7, 127.2, 128.2,

128.4, 130.1, 130.6, 131.6, 137.7, 146.5, 170.6; IR (thin film) 3029, 2957, 2869, 1637, 1596, 760, 704 cm⁻¹; FAB-HRMS Calcd for C₂₀H₂₄N₂O [M + H]⁺: *m/z* 309.1967. Found: *m/z* 309.1968.

Characterization of Compound 3e. ¹H NMR (300 MHz, CDCl₃) δ = 7.65 (d, *J* = 7.6 Hz, 1H), 7.45 (s, 1H), 7.24 (m, 9H), 7.03 (t, *J* = 7.5 Hz, 1H), 6.86 (d, *J* = 8.1 Hz, 1H), 4.22 (s, 2H), 3.79 (t, *J* = 7.2 Hz, 2H), 3.27 (t, *J* = 5.7 Hz, 2H), 3.01 (t, *J* = 5.7 Hz, 2H), 2.95 (t, *J* = 7.9 Hz, 2H); ¹³C NMR (75 MHz, CDCl₃) δ = 34.6, 46.9, 49.3, 55.7, 55.8, 118.3, 121.7, 122.2, 125.9, 126.1, 128.1, 128.4, 129.6, 129.7, 129.9, 130.1, 130.4, 131.3, 138.6, 139.9, 145.7, 169.8; IR (thin film) 3061, 3026, 2932, 2823, 1635, 1596, 762, 701 cm⁻¹; FAB-HRMS Calcd for C₂₄H₂₃BrN₂O [M + H]⁺: *m/z* 435.1072. Found: *m/z* 435.1080.

Characterization of Compound 3f. ¹H NMR (300 MHz, CDCl₃) δ = 7.72 (dd, *J* = 7.6, 1.6 Hz, 1H), 7.45 (s, 1H), 7.38 (m, 2H), 7.17 (m, 4H), 7.05 (t, *J* = 7.5 Hz, 1H), 6.91 (d, *J* = 8.1 Hz, 1H), 6.76 (d, *J* = 8.6 Hz, 2H), 4.72 (s, 2H), 4.20 (s, 2H), 3.77 (s, 3H), 3.32 (t, *J* = 5.7 Hz, 2H), 2.89 (t, *J* = 5.7 Hz, 2H); ¹³C NMR (75 MHz, CDCl₃) δ = 45.2, 49.6, 55.2, 56.3, 113.9, 118.6, 122.1, 122.5, 126.8, 129.2, 129.5, 130.1, 130.2, 130.3, 131.2, 131.8, 140.3, 146.4, 158.9, 170.1; IR (thin film) 2932, 2832, 1635, 1596, 767,

730 cm⁻¹; FAB-HRMS Calcd for C₂₄H₂₃BrN₂O₂ [M + H]⁺: *m/z* 451.1021. Found: *m/z* 451.1017.

Characterization of Compound 3g. ¹H NMR (300 MHz, CDCl₃) δ = 7.72 (dd, *J* = 7.6, 1.6 Hz, 1H), 7.25 (m, 9H), 7.05 (t, *J* = 7.5 Hz, 1H), 6.89 (d, *J* = 8.1 Hz, 1H), 4.77 (s, 2H), 4.19 (s, 2H), 3.34 (t, *J* = 5.7 Hz, 2H), 2.91 (t, *J* = 5.7 Hz, 2H); ¹³C NMR (75 MHz, CDCl₃) δ = 45.4, 50.2, 56.2, 56.3, 118.7, 122.1, 122.5, 126.8, 127.4, 128.1, 128.5, 130.1, 130.2, 130.3, 131.1, 131.9, 137.2, 140.2, 146.3, 170.4; IR (thin film) 3062, 3030, 2930, 1635, 1596, 762, 731 cm⁻¹; FAB-HRMS Calcd for C₂₃H₂₁BrN₂O [M + H]⁺: *m/z* 421.0915. Found: *m/z* 421.0912.

Characterization of Compound 3h. ¹H NMR (300 MHz, CDCl₃) δ = 7.65 (dd, *J* = 7.6, 1.6 Hz, 1H), 7.47 (s, 1H), 7.34 (m, 2H), 7.25 (d, *J* = 9.2 Hz, 1H), 7.04 (t, *J* = 7.4 Hz, 1H), 6.91 (d, *J* = 8.1 Hz, 1H), 4.26 (s, 2H), 3.40 (m, 4H), 3.13 (t, *J* = 5.7 Hz, 2H), 1.89 (m, 1H), 1.89 (d, *J* = 6.9 Hz, 6H); ¹³C NMR (75 MHz, CDCl₃) δ = 19.7, 27.5, 46.3, 54.3, 55.9, 56.1, 118.0, 121.7, 122.1, 126.5, 129.6, 129.9, 130.4, 130.8, 131.2, 139.8, 145.7, 170.0; IR (thin film) 3062, 2957, 2868, 1637, 1471, 762 cm⁻¹; FAB-HRMS Calcd for C₂₀H₂₃BrN₂O [M + H]⁺: *m/z* 387.1072. Found: *m/z* 387.1074.

Characterization of Compound 3i. ¹H NMR (300 MHz, CDCl₃) δ = 7.61 (dd, *J* =

7.7, 1.6 Hz, 1H), 7.24 (m, 6H), 6.93 (d, J = 7.6 Hz, 2H), 3.79 (m, 2H), 3.26(m, 5H), 2.97 (m, 2H), 1.80 (m, 4H), 1.68 – 1.05 (m, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ = 25.7, 25.9, 30.8, 34.9, 47.4, 49.4, 50.0, 59.8, 120.0, 120.8, 126.3, 128.5, 128.8, 130.1, 130.4, 139.1, 147.0, 170.6; IR (thin film) 3061, 3027, 2931, 2854, 1634, 1452, 730, 700 cm^{-1} ; FAB-HRMS calcd for $\text{C}_{20}\text{H}_{23}\text{BrN}_2\text{O}$ [M + H] $^+$: m/z 349.2280. Found: m/z 349.2281.

Characterization of Compound 3j. ^1H NMR (300 MHz, CDCl_3) δ = 7.65 (dd, J = 7.6, 1.7 Hz, 1H), 7.29 (m, 3H), 6.91 (m, 4H), 4.73 (s, 2H), 3.80 (s, 3H), 3.36 (t, J = 5.6 Hz, 2H), 3.26 (m, 1H), 3.07 (t, J = 5.6 Hz, 2H), 1.79 (t, J = 12.7 Hz, 4H), 1.68 – 1.06 (m, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ = 25.8, 25.9, 30.8, 45.9, 49.6, 49.9, 55.3, 59.8, 113.9, 120.1, 120.9, 129.5, 129.7, 130.2, 130.4, 131.6, 147.2, 159.03, 170.7; IR (thin film) 3062, 3029, 2932, 2854, 1634, 759, 731 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{23}\text{H}_{28}\text{N}_2\text{O}_2$ [M + H] $^+$: m/z 365.2229. Found: m/z 365.2227.

Characterization of Compound 3k. ^1H NMR (300 MHz, CDCl_3) δ = 7.66 (dd, J = 7.7, 1.6 Hz, 1H), 7.32 (m, 6H), 6.96 (t, J = 7.6 Hz, 2H), 4.80 (s, 2H), 3.38 (t, J = 5.7 Hz, 2H), 3.27(m, 1H), 3.08 (t, J = 5.7 Hz, 2H), 1.80 (t, J = 13.5 Hz, 4H), 1.68 – 1.06 (m, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ = 25.4, 25.5, 30.4, 45.7, 49.4, 49.9, 59.4, 119.7, 120.6, 125.3, 127.0, 127.7, 128.1, 129.8, 129.9, 131.2, 137.3, 146.8, 170.4; IR (thin

film) 3061, 3029, 2931, 2854, 1634, 757, 730 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{22}\text{H}_{26}\text{N}_2\text{O}$ [M + H]⁺: *m/z* 335.2123. Found: *m/z* 335.2127.

Characterization of Compound 3l. ^1H NMR (300 MHz, CDCl_3) δ = 7.57 (d, *J* = 7.8 Hz, 1H), 7.28 (m, 1H), 6.92 (t, *J* = 7.4 Hz, 2H), 3.32 (m, 7H), 1.89 (m, 5H), 1.68 – 1.06 (m, 6H), 0.93 (d, *J* = 6.6 Hz, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ = 20.1, 25.8, 27.9, 30.8, 54.6, 109.7, 119.8, 119.9, 120.8, 120.9, 130.1, 130.9, 131.4; IR (thin film) 2931, 2854, 1637, 1472, 756, 715 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{19}\text{H}_{28}\text{N}_2\text{O}$ [M + H]⁺: *m/z* 301.2280. Found: *m/z* 301.2279.

Characterization of Compound 3m. ^1H NMR (300 MHz, CDCl_3) δ = 7.61 (d, *J* = 8.2 Hz, 1H), 7.25 (m, 10H), 6.96 (dd, *J* = 8.2, 1.9 Hz, 1H), 6.87 (d, *J* = 1.8, 1H), 4.26 (s, 2H), 3.76 (m, 2H), 3.28 (t, *J* = 5.6 Hz, 2H), 3.05 (t, *J* = 5.6 Hz, 2H), 2.92 (m, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ = 34.4, 46.7, 49.4, 55.5, 56.2, 118.5, 121.1, 125.9, 126.9, 127.4, 127.6, 128.0, 128.3, 131.1, 136.7, 137.0, 138.5, 147.2, 168.9; IR (thin film) 3026, 2930, 1636, 1590, 729, 700 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{24}\text{H}_{23}\text{ClN}_2\text{O}$ [M + H]⁺: *m/z* 391.1577. Found: *m/z* 391.1579.

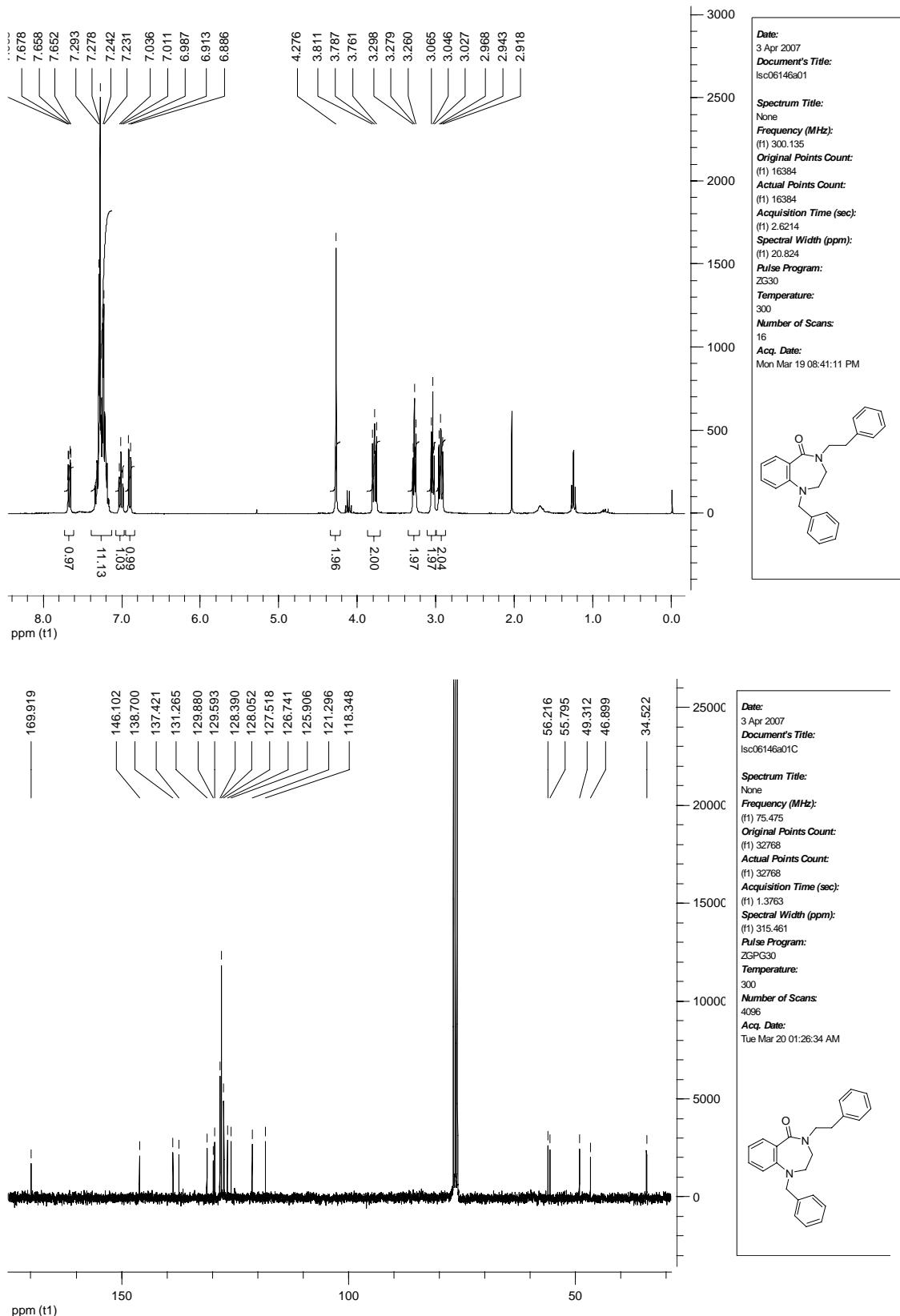
Characterization of Compound 3n. ^1H NMR (300 MHz, CDCl_3) δ = 7.67 (d, *J* = 8.2 Hz, 1H), 7.25 (m, 7H), 6.99 (dd, *J* = 8.2, 1.8 Hz, 1H), 6.92 (t, *J* = 4.7 Hz, 1H), 6.74

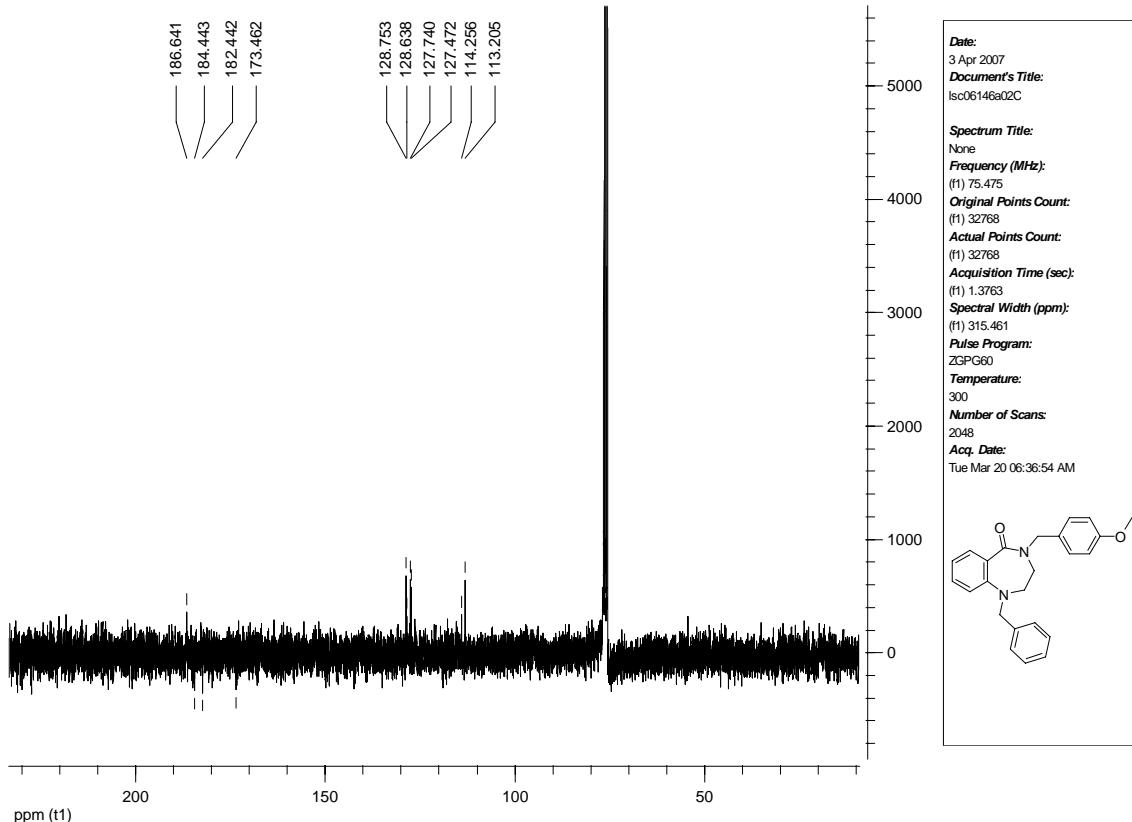
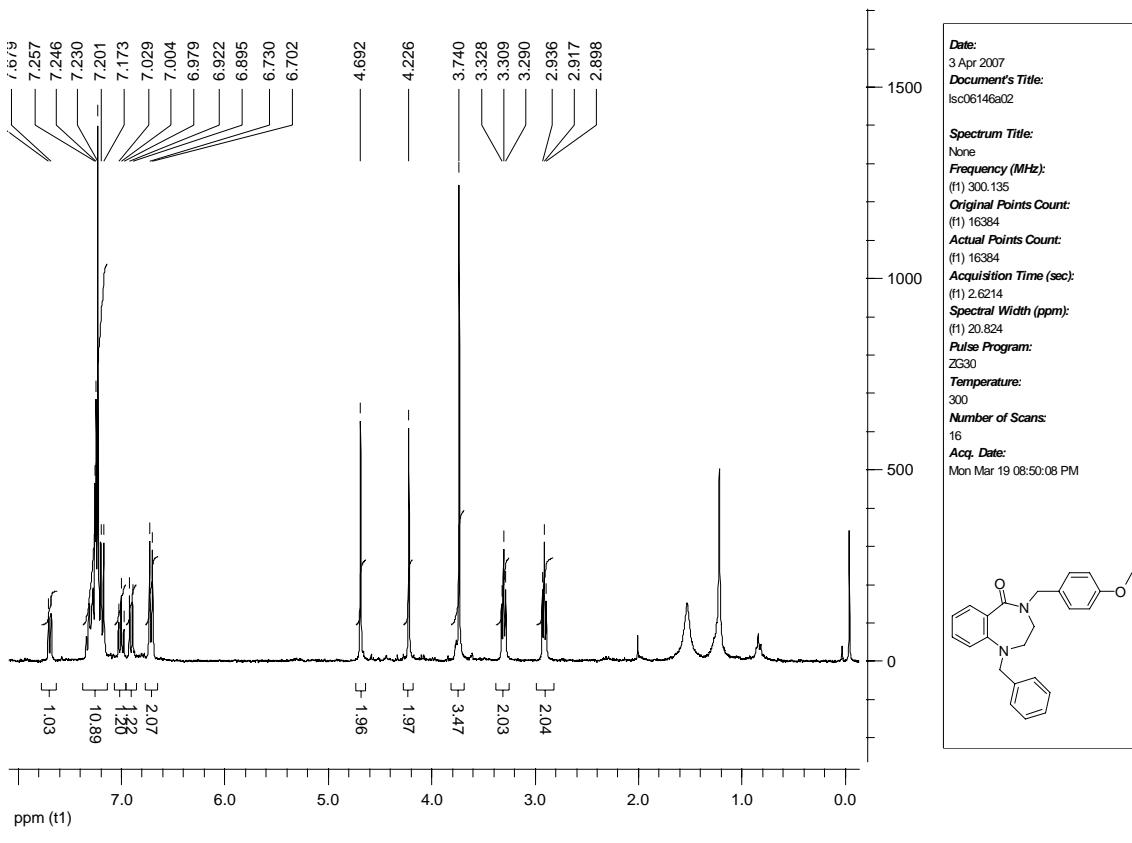
(d, $J = 8.6$ Hz, 2H), 4.67 (s, 2H), 4.22 (s, 2H), 3.77 (s, 3H), 3.34 (t, $J = 5.6$ Hz, 2H), 2.93 (t, $J = 5.6$ Hz, 2H); ^{13}C NMR (75 MHz, CDCl_3) $\delta = 44.8, 49.3, 54.7, 55.5, 56.4, 113.5, 118.5, 121.1, 126.9, 127.4, 127.7, 128.1, 128.6, 129.1, 131.3, 136.6, 137.1, 147.5, 158.6, 169.1$; IR (thin film) 2932, 2833, 1636, 1590, 772, 728 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{24}\text{H}_{23}\text{ClN}_2\text{O}_2$ [M + H] $^+$: m/z 407.1526. Found: m/z 407.1518.

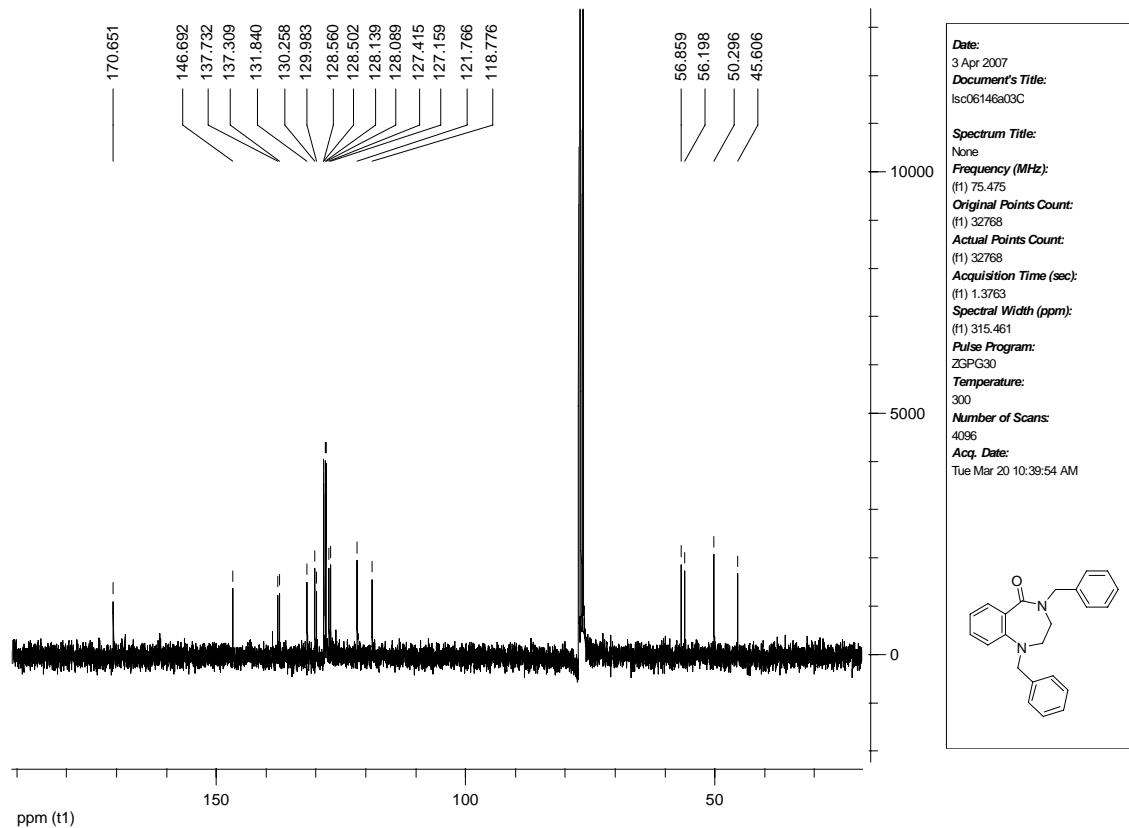
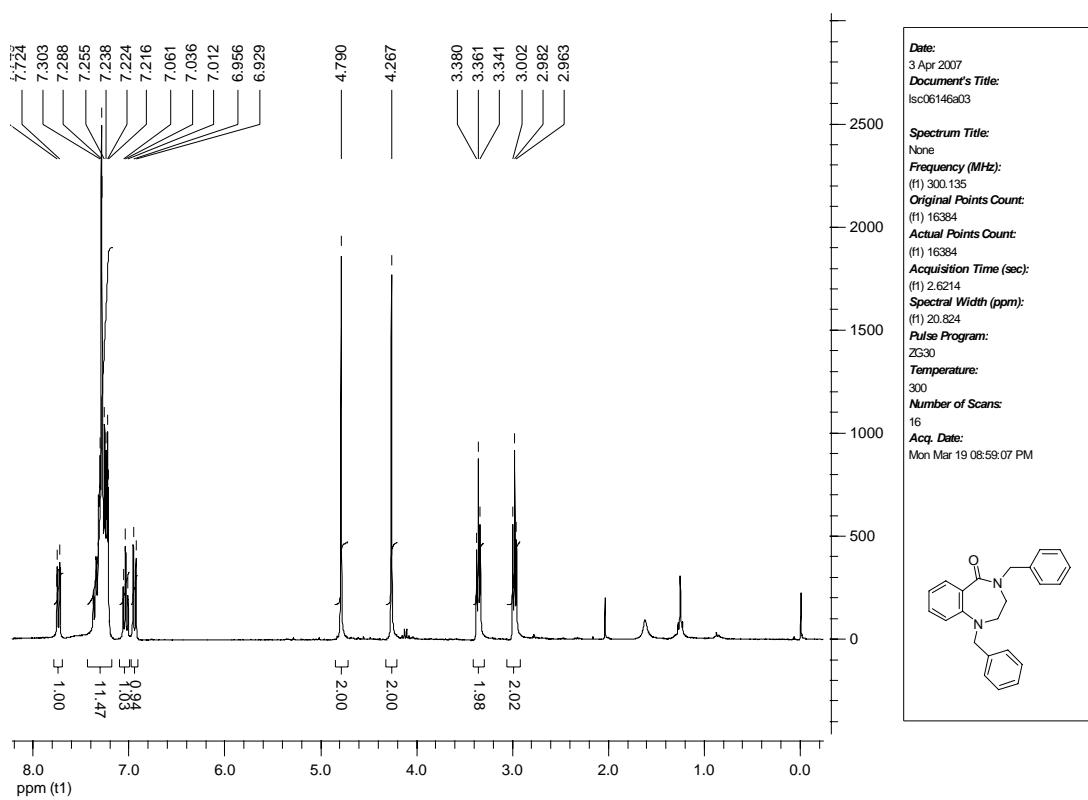
Characterization of Compound 3o. ^1H NMR (300 MHz, CDCl_3) $\delta = 7.68$ (d, $J = 8.3$ Hz, 1H), 7.29 (m, 10H), 6.99 (dd, $J = 8.3, 1.9$ Hz, 1H), 6.92 (d, $J = 1.8$ Hz, 1H), 4.75 (s, 2H), 4.25 (s, 2H), 3.36 (t, $J = 5.6$ Hz, 2H), 2.98 (t, $J = 5.6$ Hz, 2H); ^{13}C NMR (75 MHz, CDCl_3) $\delta = 45.4, 50.4, 55.9, 56.9, 118.9, 121.6, 127.4, 127.5, 127.8, 128.1, 128.6, 131.8, 136.9, 137.6, 147.9, 169.7$; IR (thin film) 3028, 2832, 1643, 1590, 729 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{23}\text{H}_{21}\text{ClN}_2\text{O}$ [M + H] $^+$: m/z 377.1421. Found: m/z 377.1421.

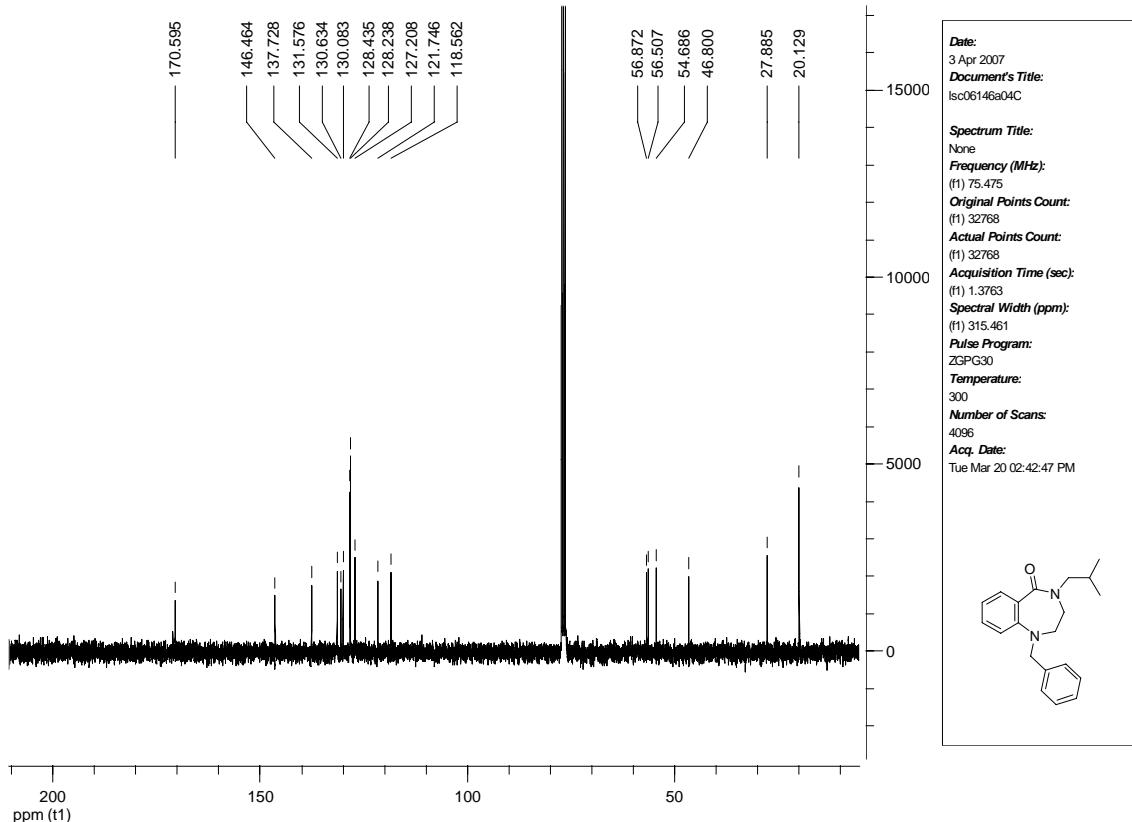
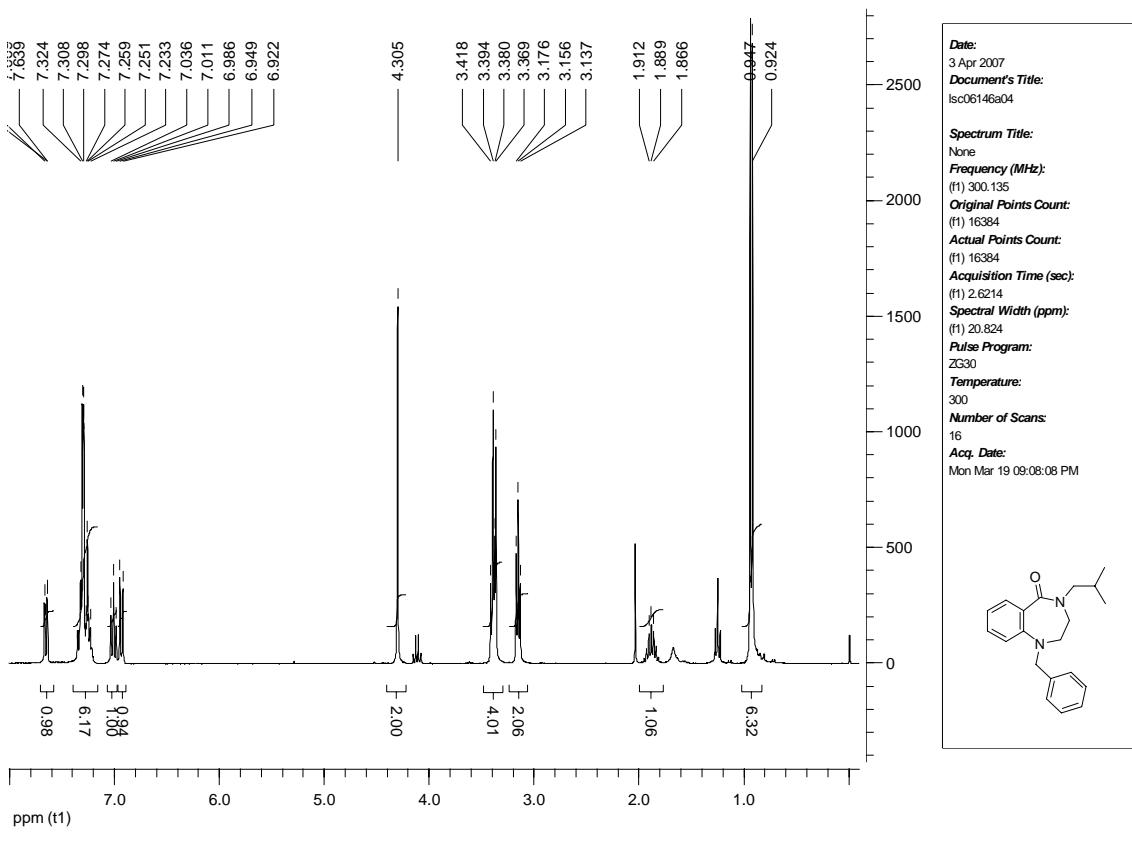
Characterization of Compound 3p. ^1H NMR (300 MHz, CDCl_3) $\delta = 7.57$ (d, $J = 8.2$ Hz, 1H), 7.25 (m, 5H), 6.94 (dd, $J = 8.2, 1.8$ Hz, 1H), 6.89 (d, $J = 1.8$ Hz, 1H), 4.25 (s, 2H), 3.36 (m, 4H), 3.14 (t, $J = 5.6$ Hz, 2H), 1.84 (m, 1H), 0.89 (d, $J = 6.7$ Hz, 6H); ^{13}C NMR (75 MHz, CDCl_3) $\delta = 19.8, 27.5, 46.4, 54.6, 55.9, 56.6, 118.5, 121.3, 127.2, 127.9, 128.2, 128.3, 131.3, 136.7, 137.0, 147.4, 169.4$; IR (thin film) 2958, 2869, 1642, 1590, 728, 703 cm^{-1} ; FAB-HRMS Calcd for $\text{C}_{20}\text{H}_{23}\text{ClN}_2\text{O}$ [M + H] $^+$: m/z 343.1577. Found: m/z 343.1575.

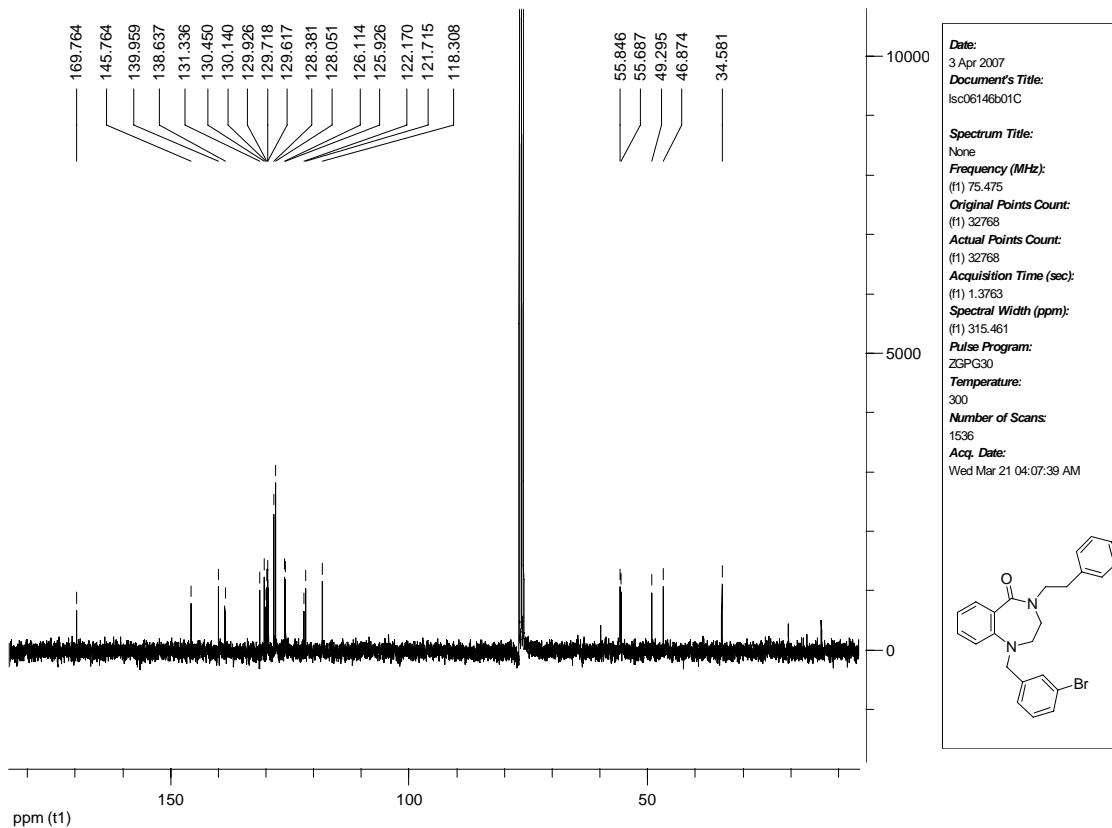
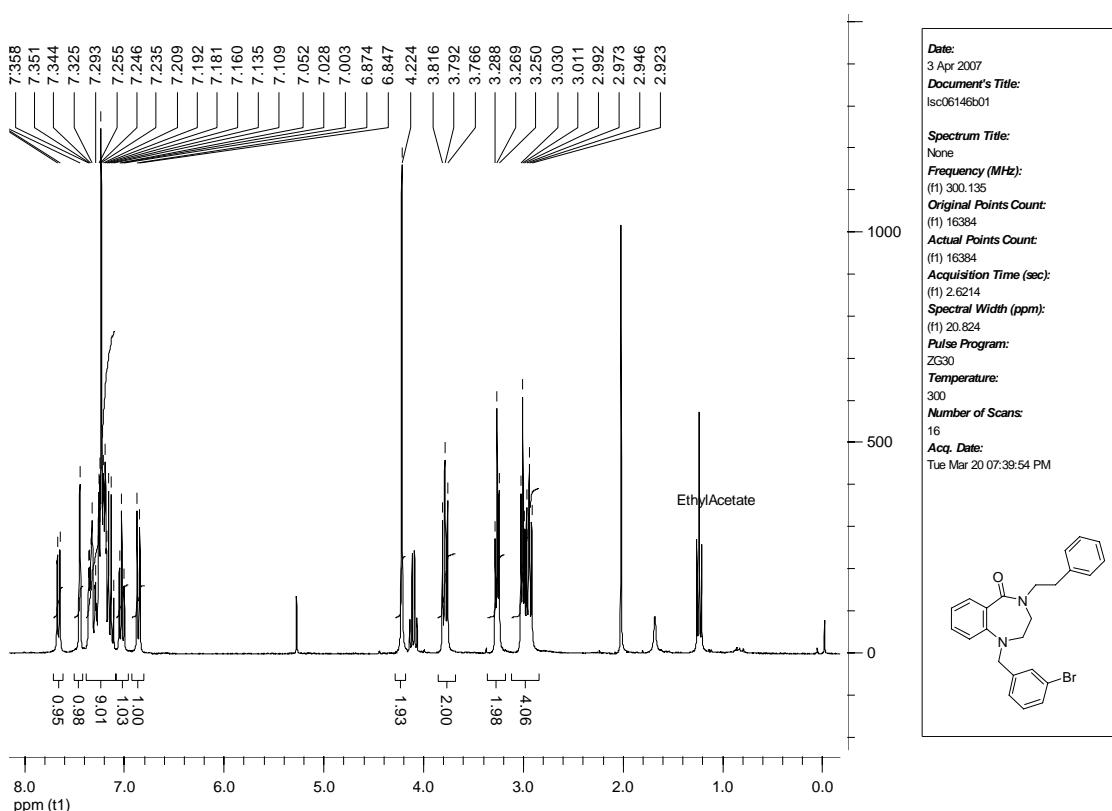
4. ^1H and ^{13}C NMR spectra of all compounds

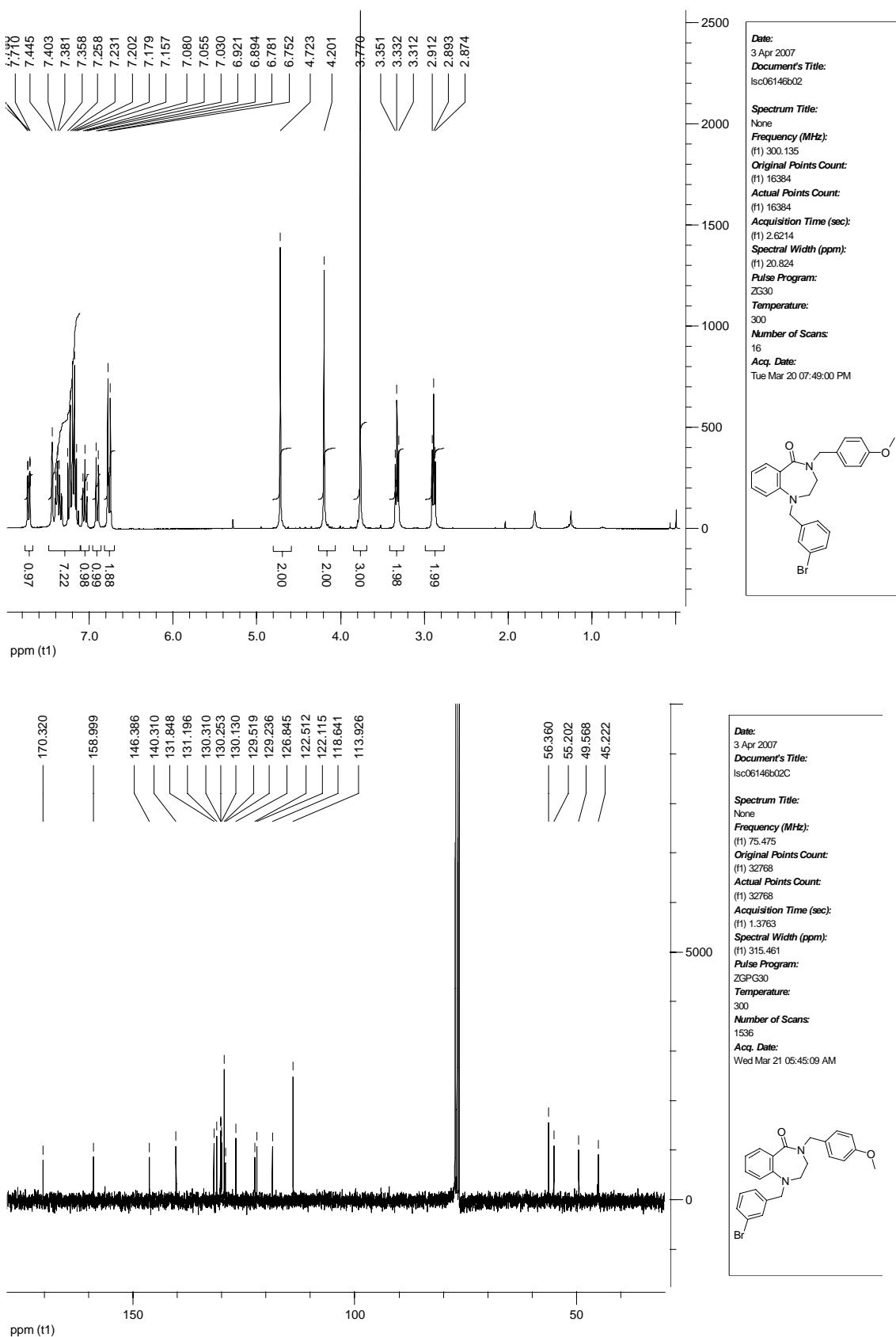


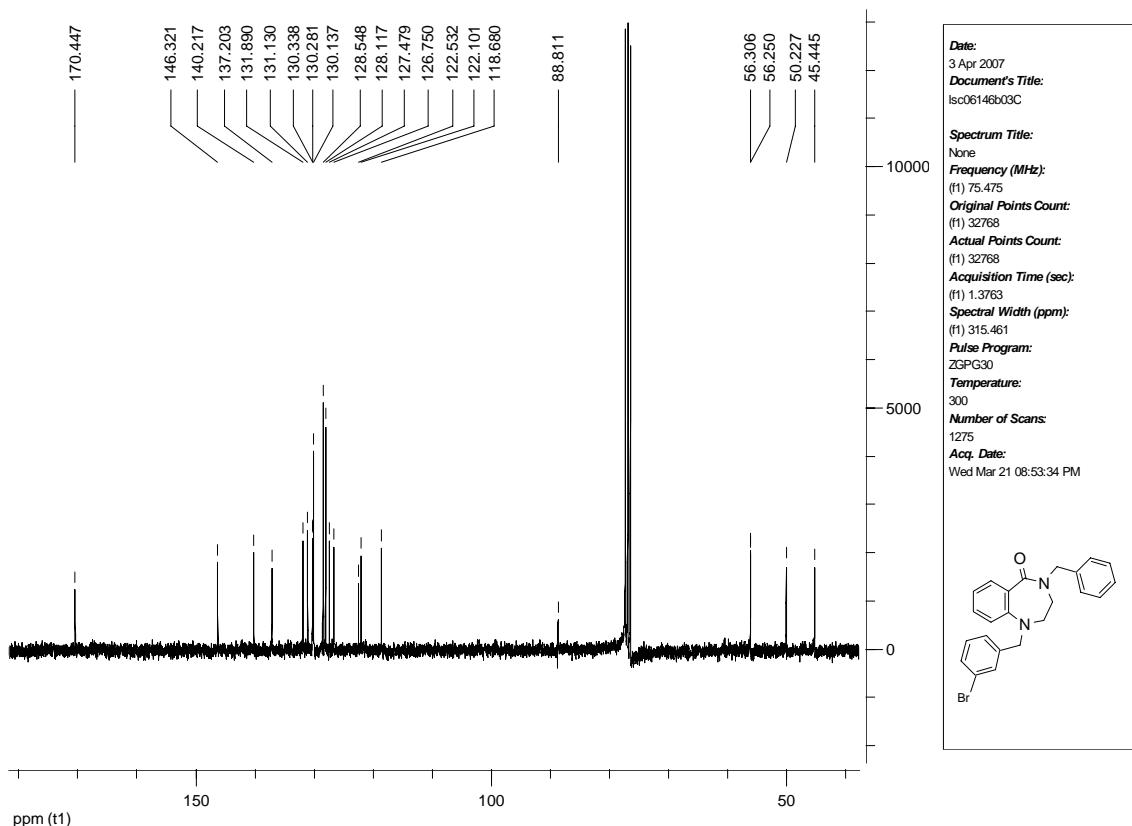
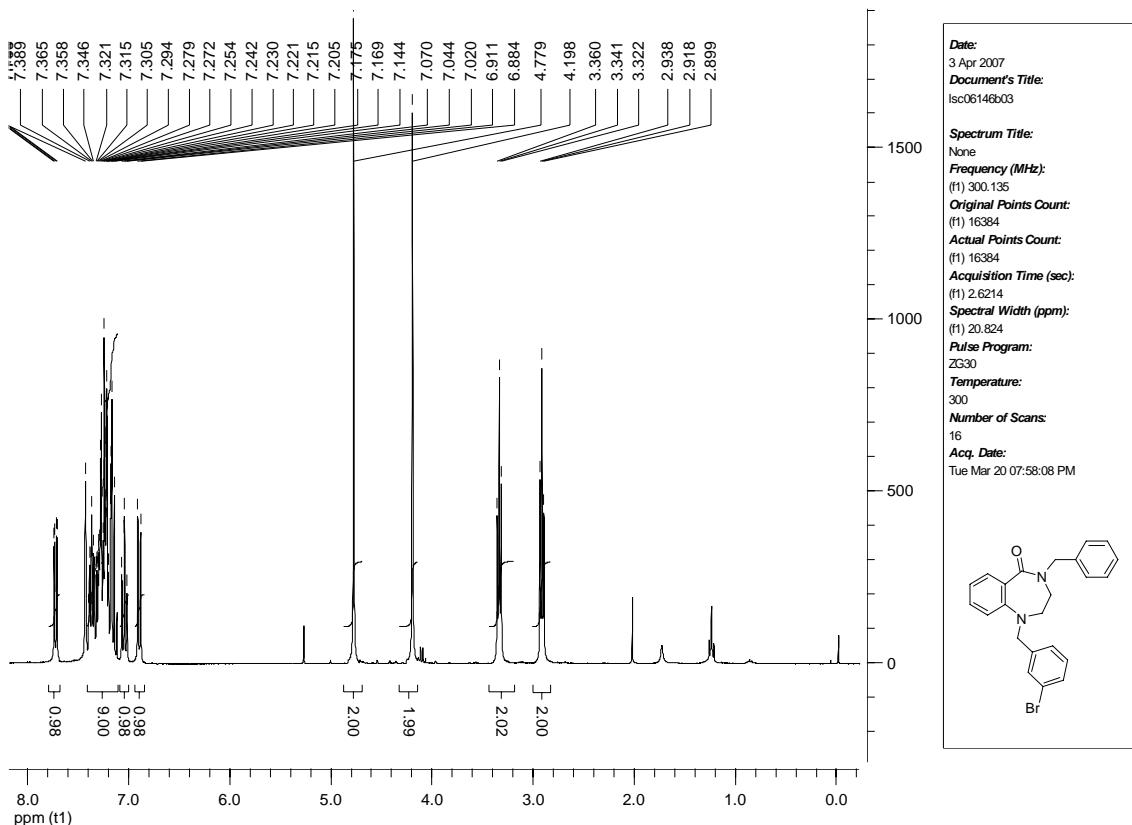


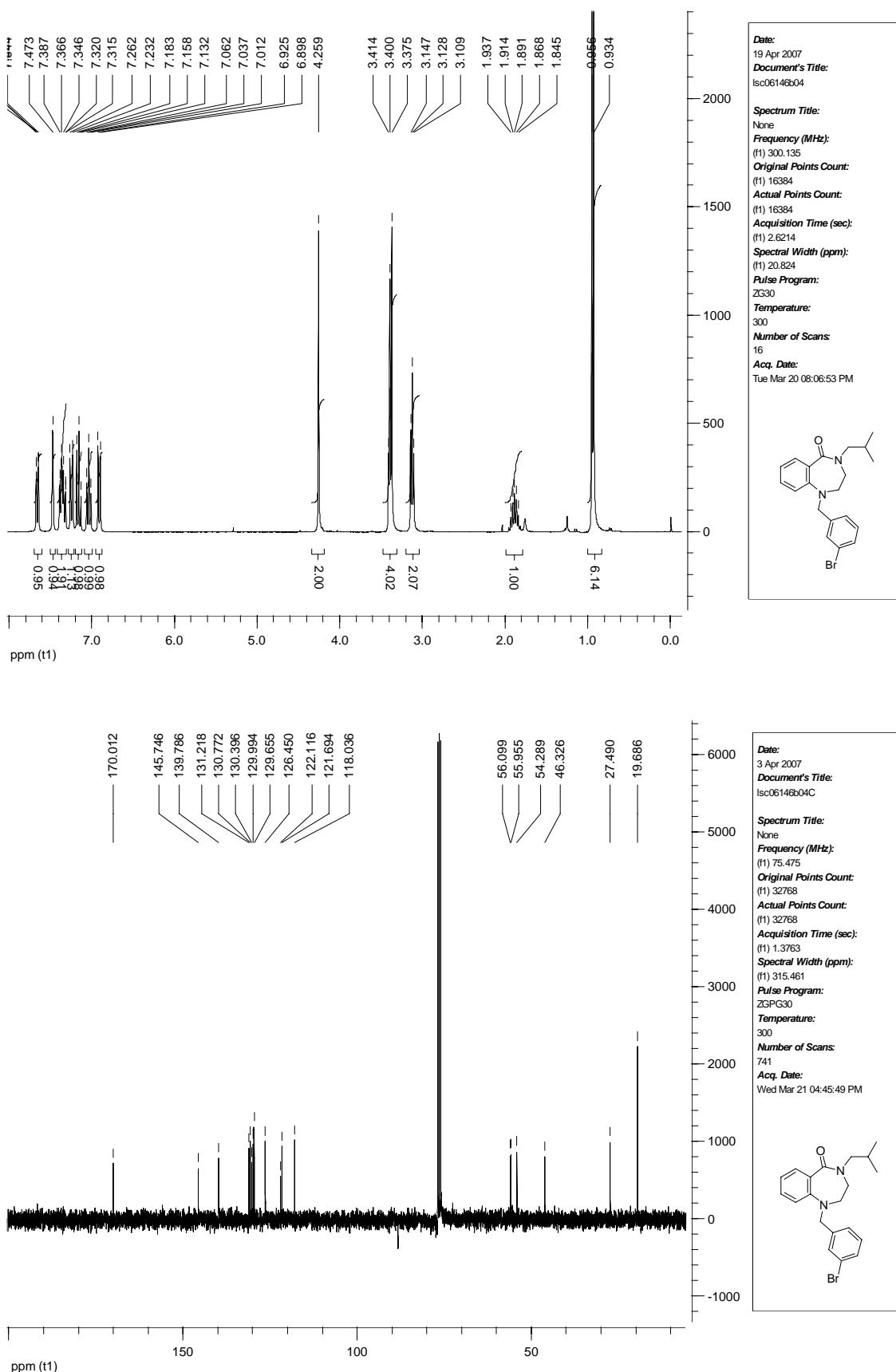


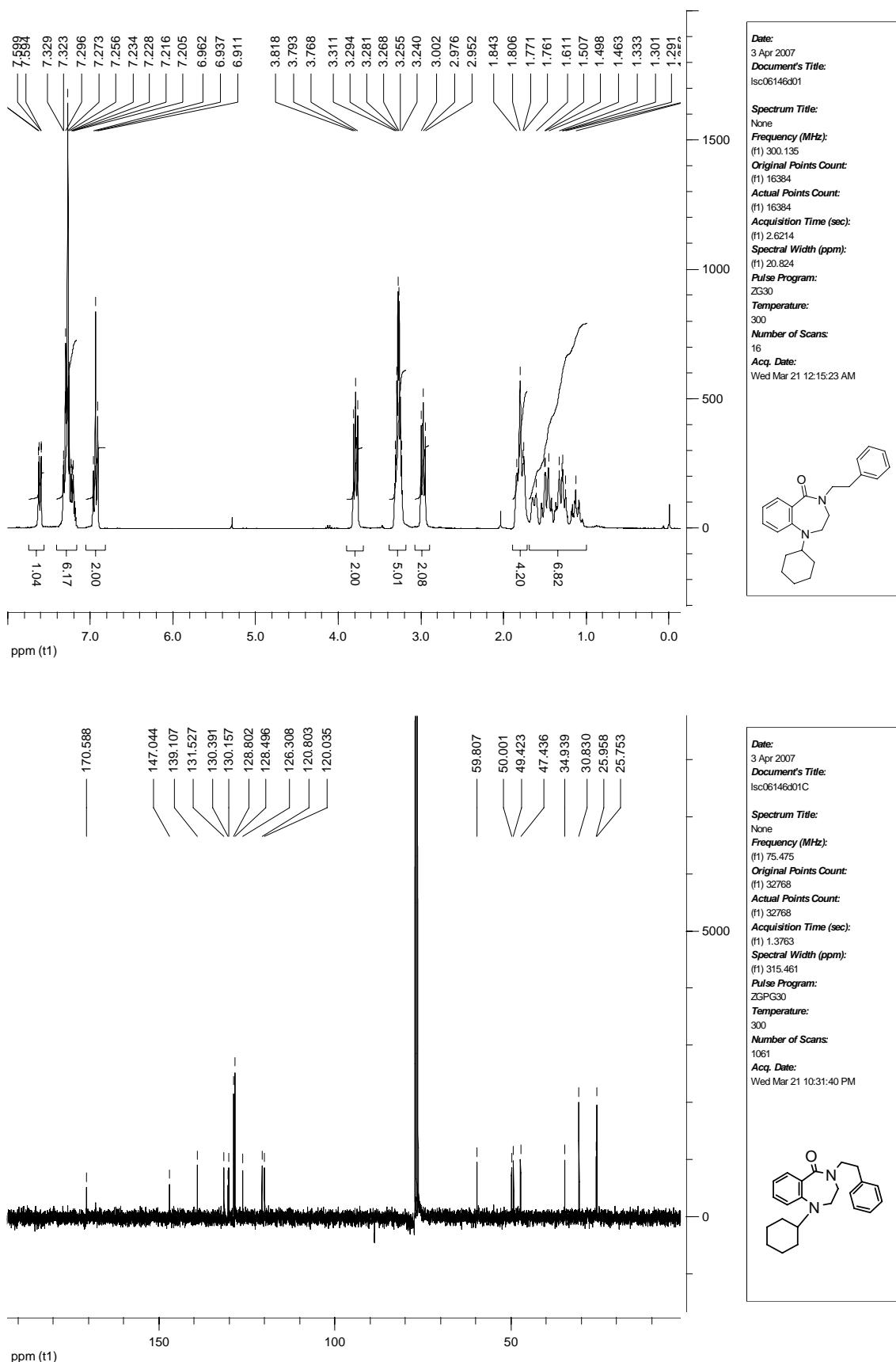


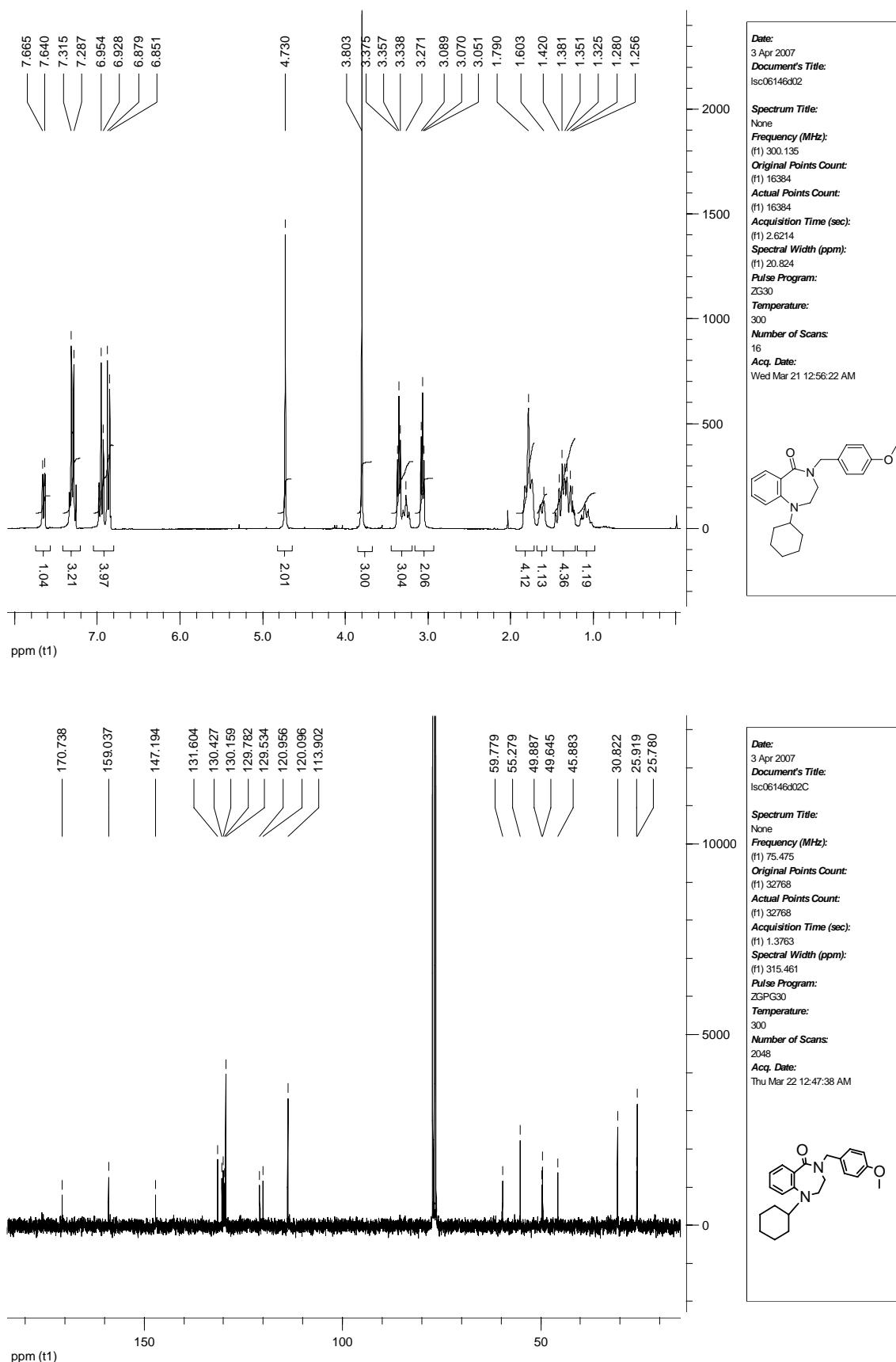


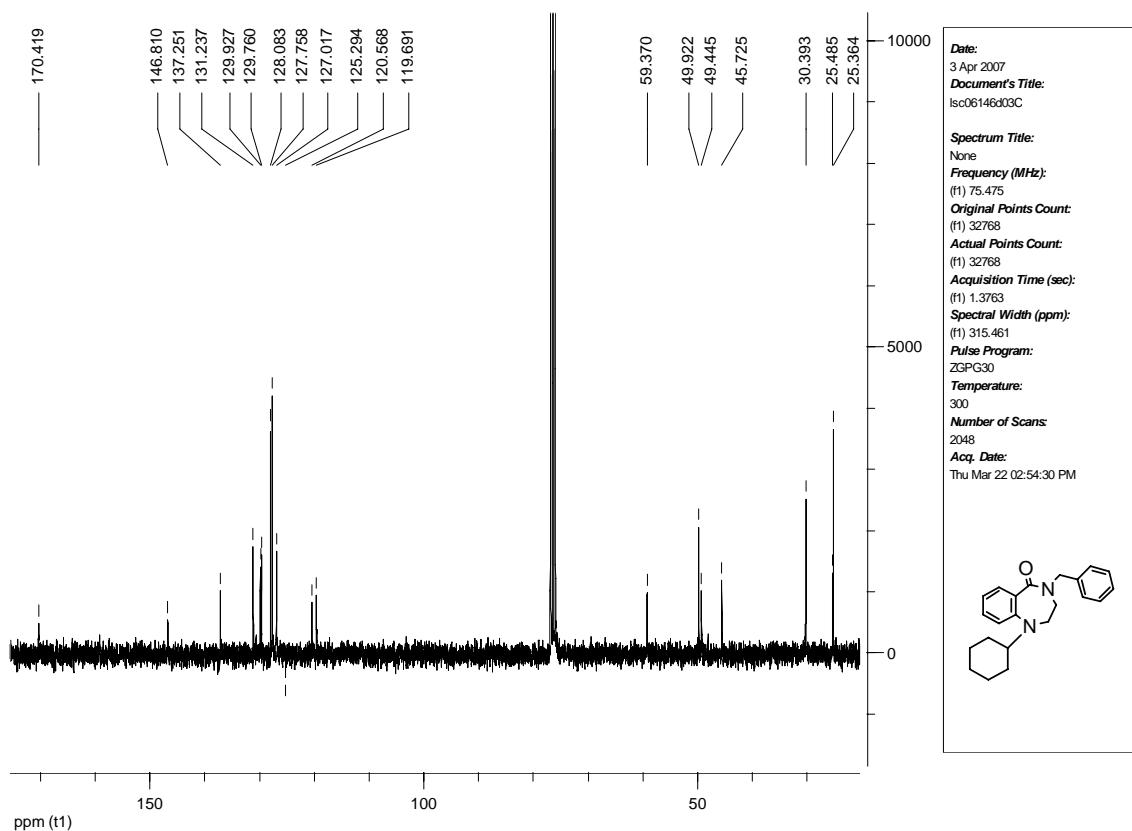
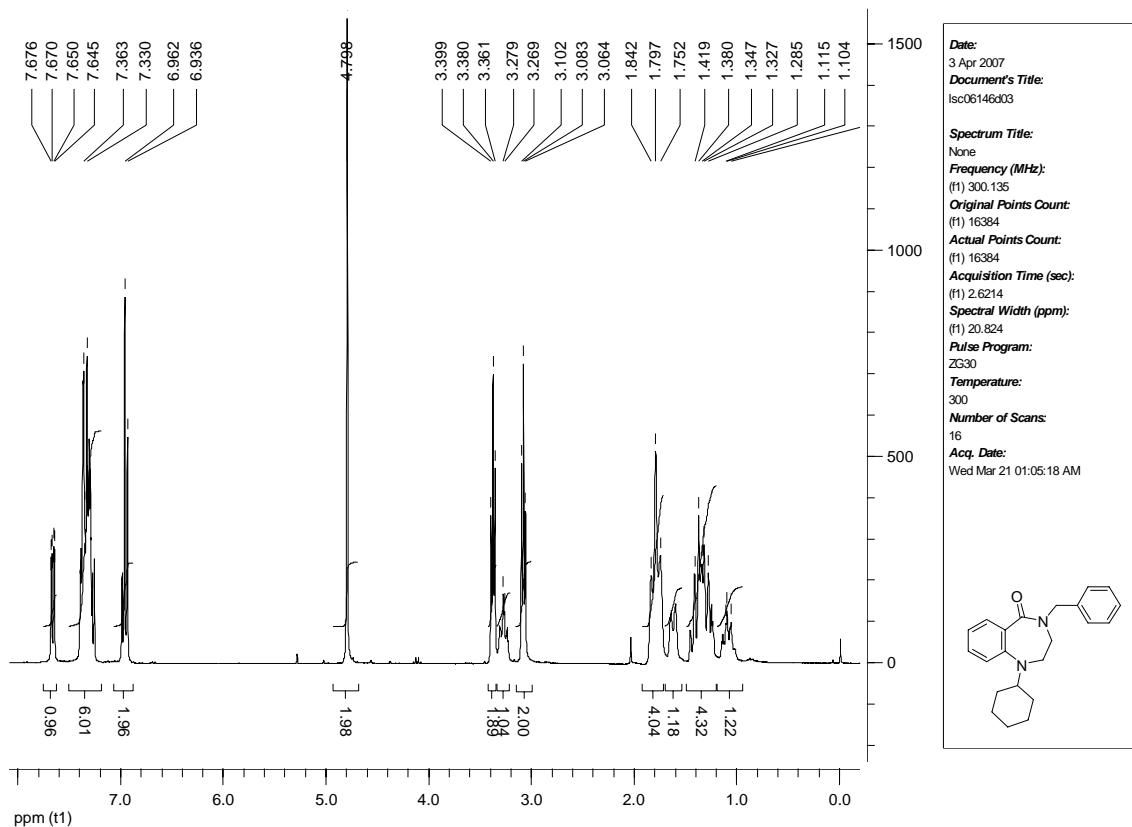


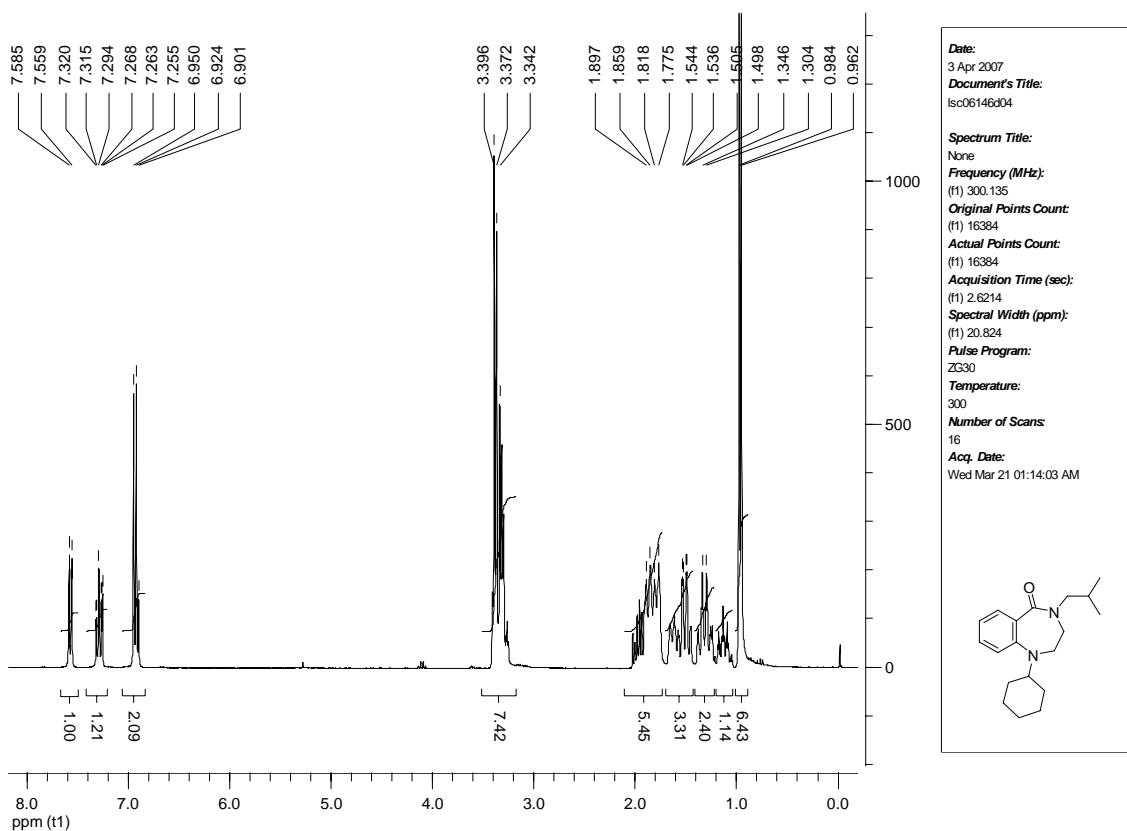






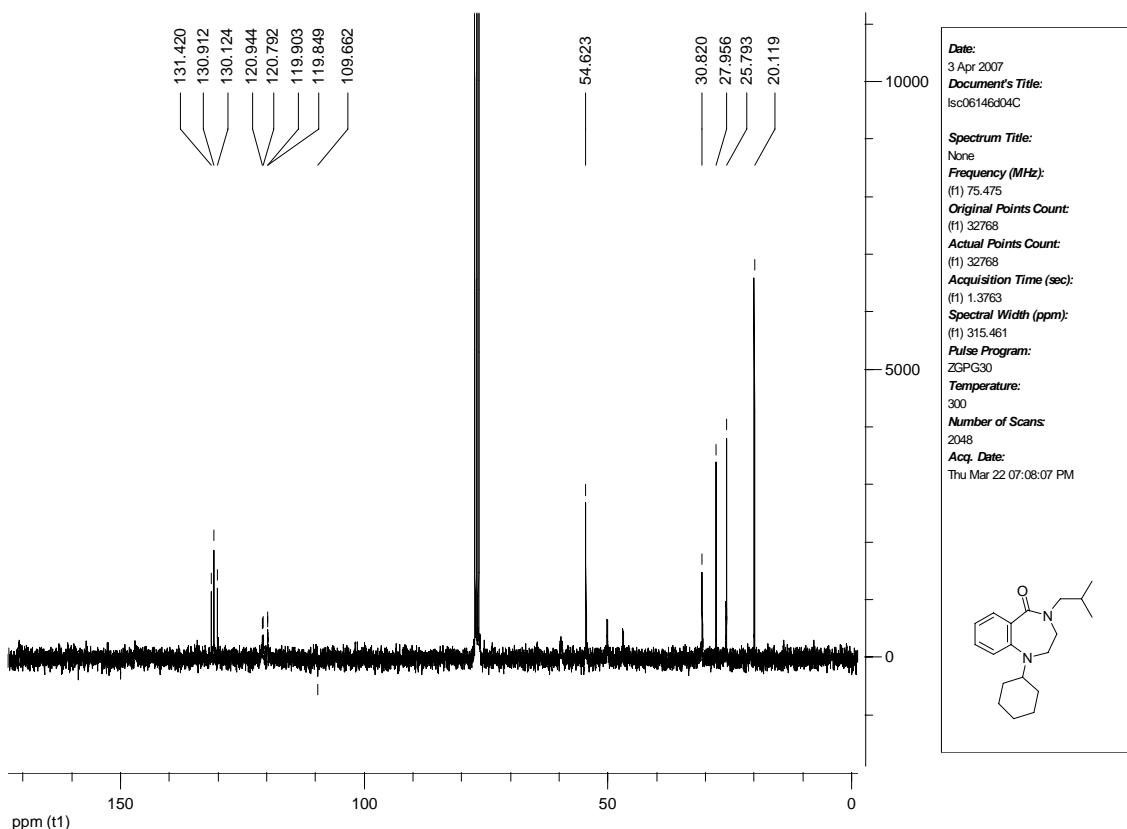
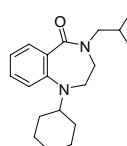






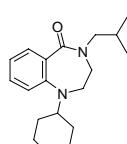
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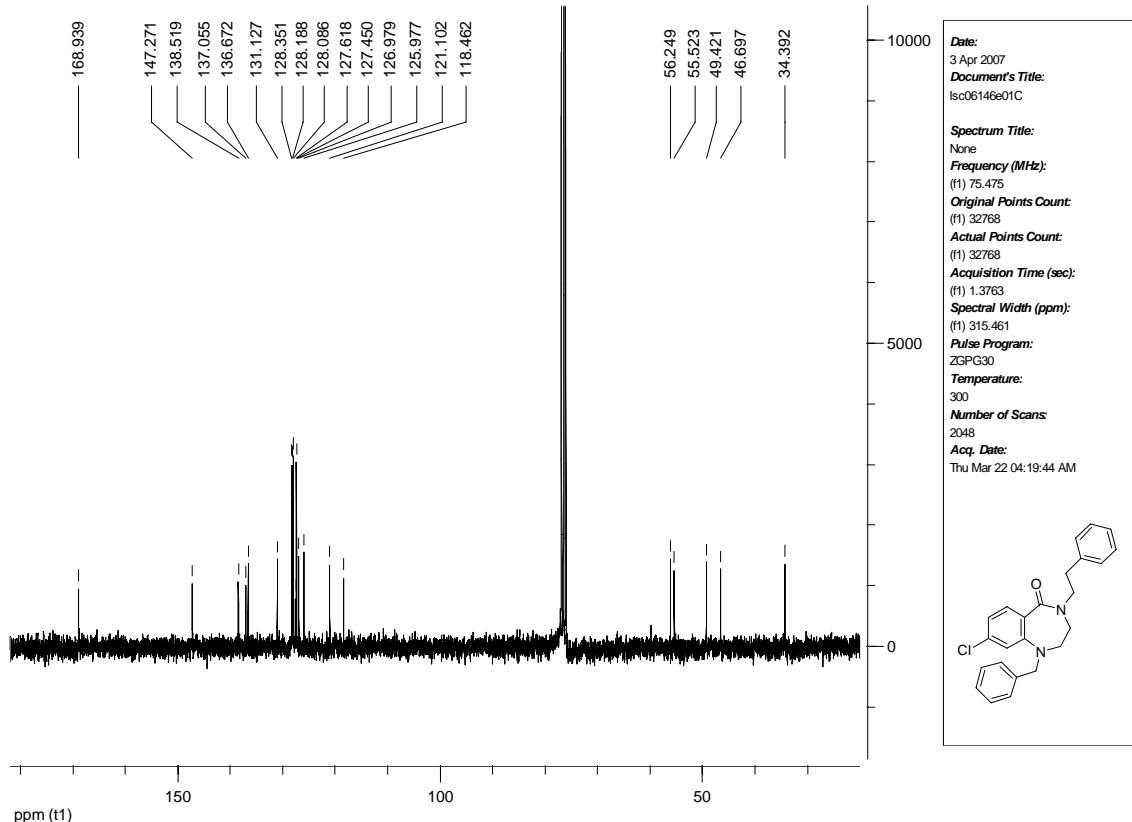
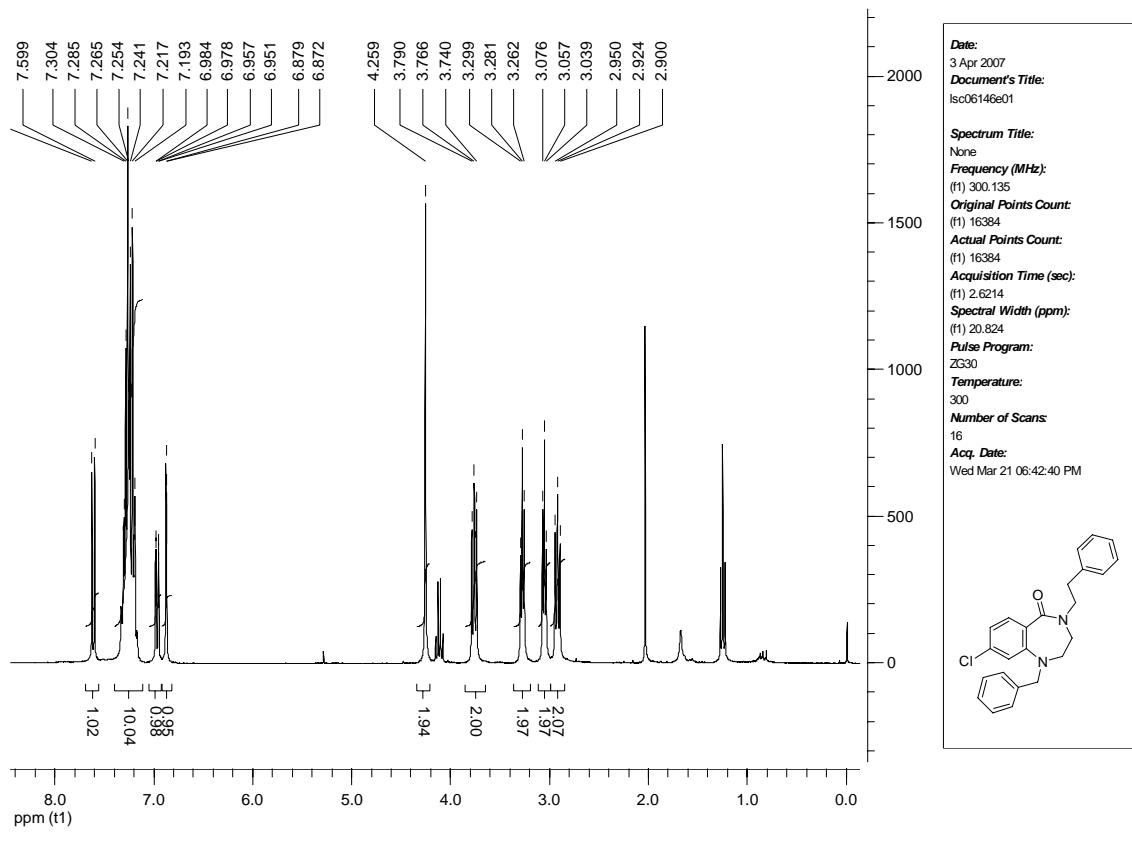
Spectrum Title:
None
Frequency (MHz):
(f1) 300.135
Original Points Count:
(f1) 16384
Actual Points Count:
(f1) 16384
Acquisition Time (sec):
(f1) 2.6214
Spectral Width (ppm):
(f1) 20.824
Pulse Program:
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Temperature:
300
Number of Scans:
16
Acq. Date:
Wed Mar 21 01:14:03 AM

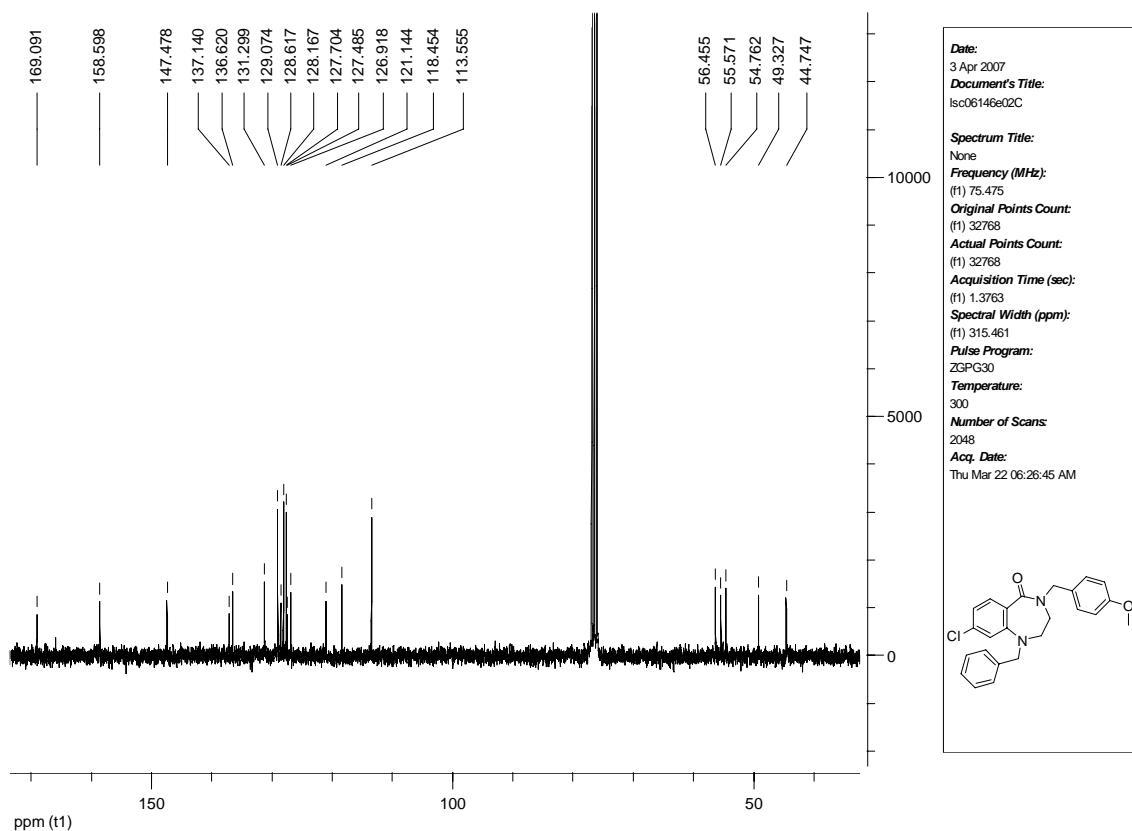
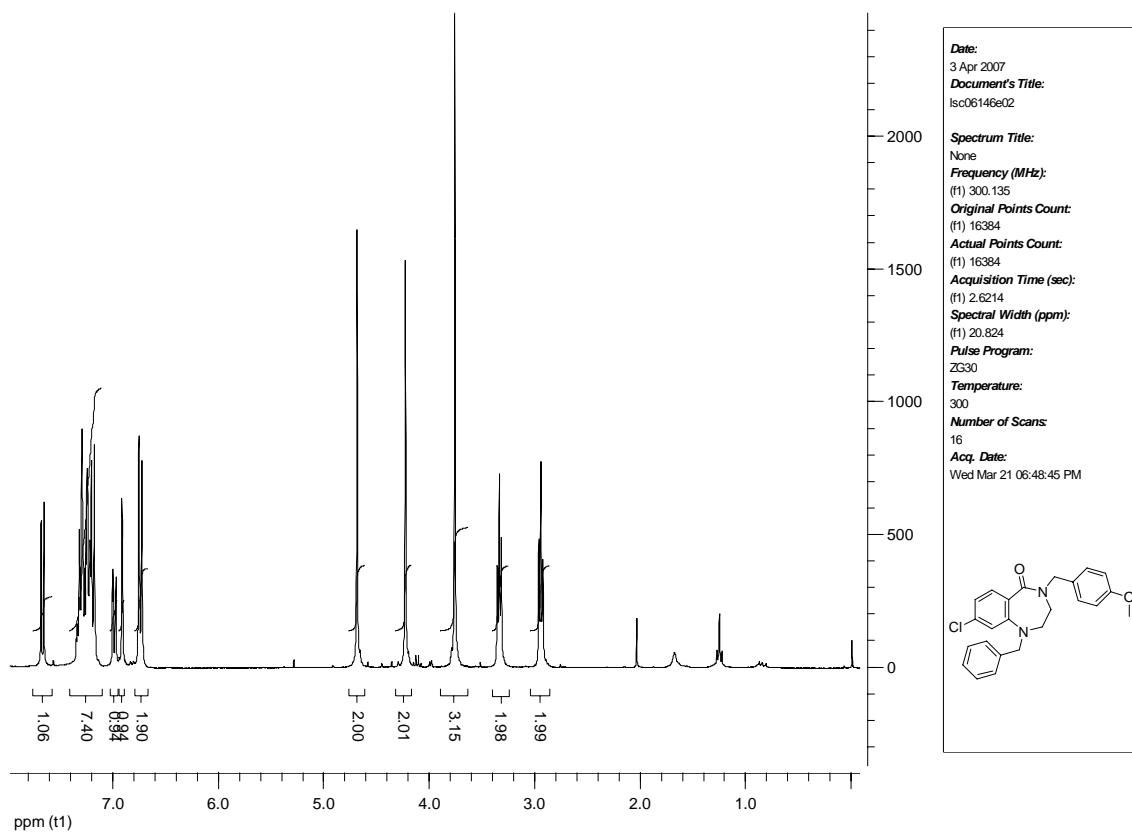


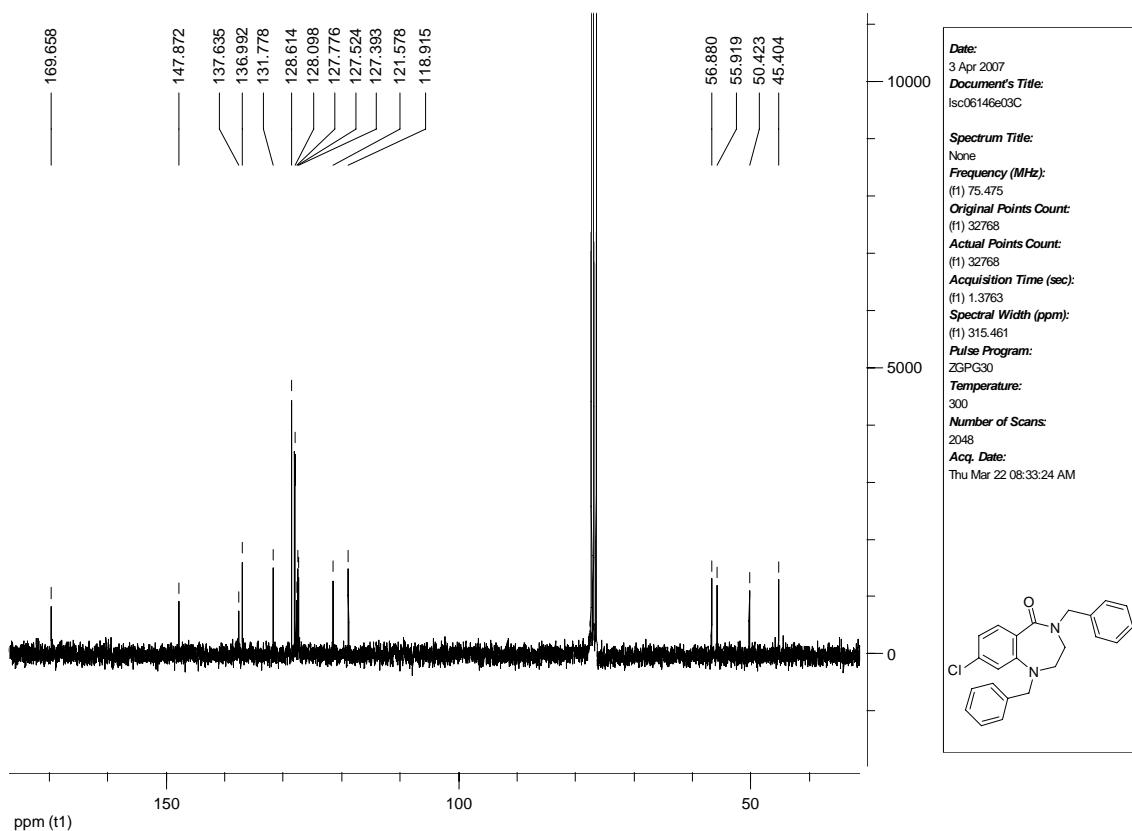
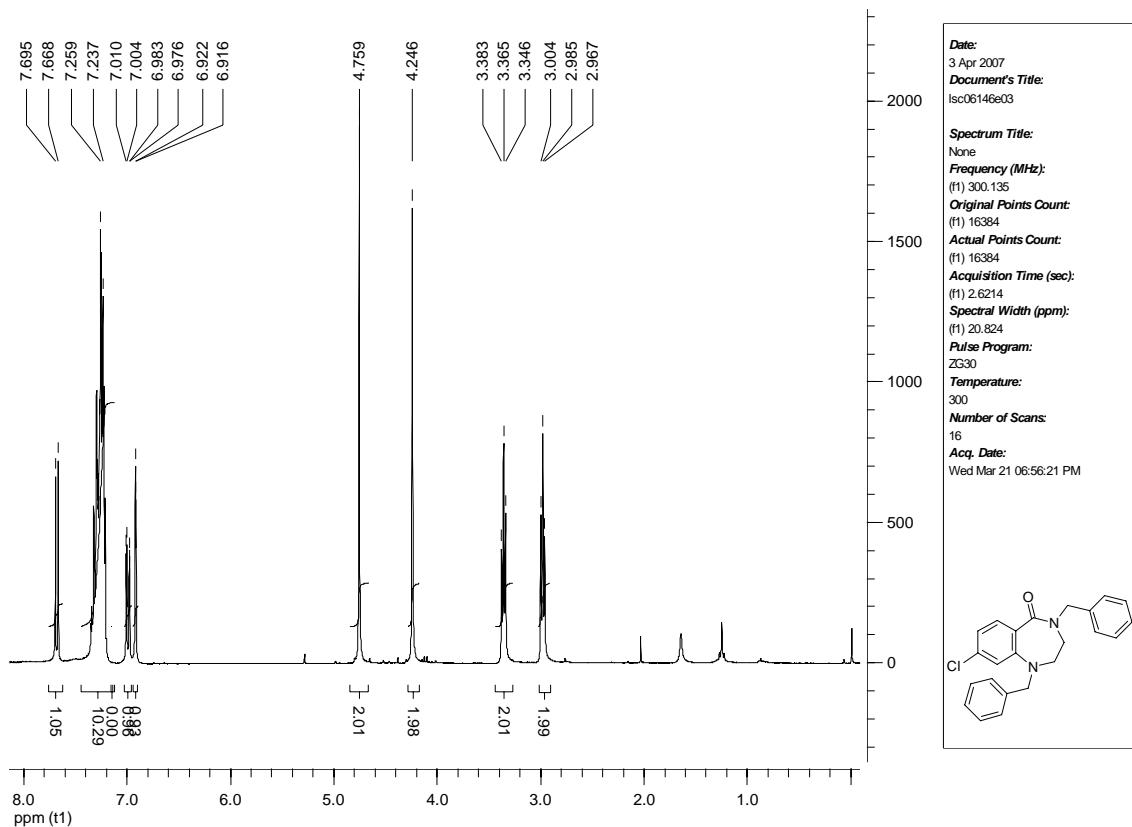
Date:
3 Apr 2007
Document's Title:
lsc06146d04C

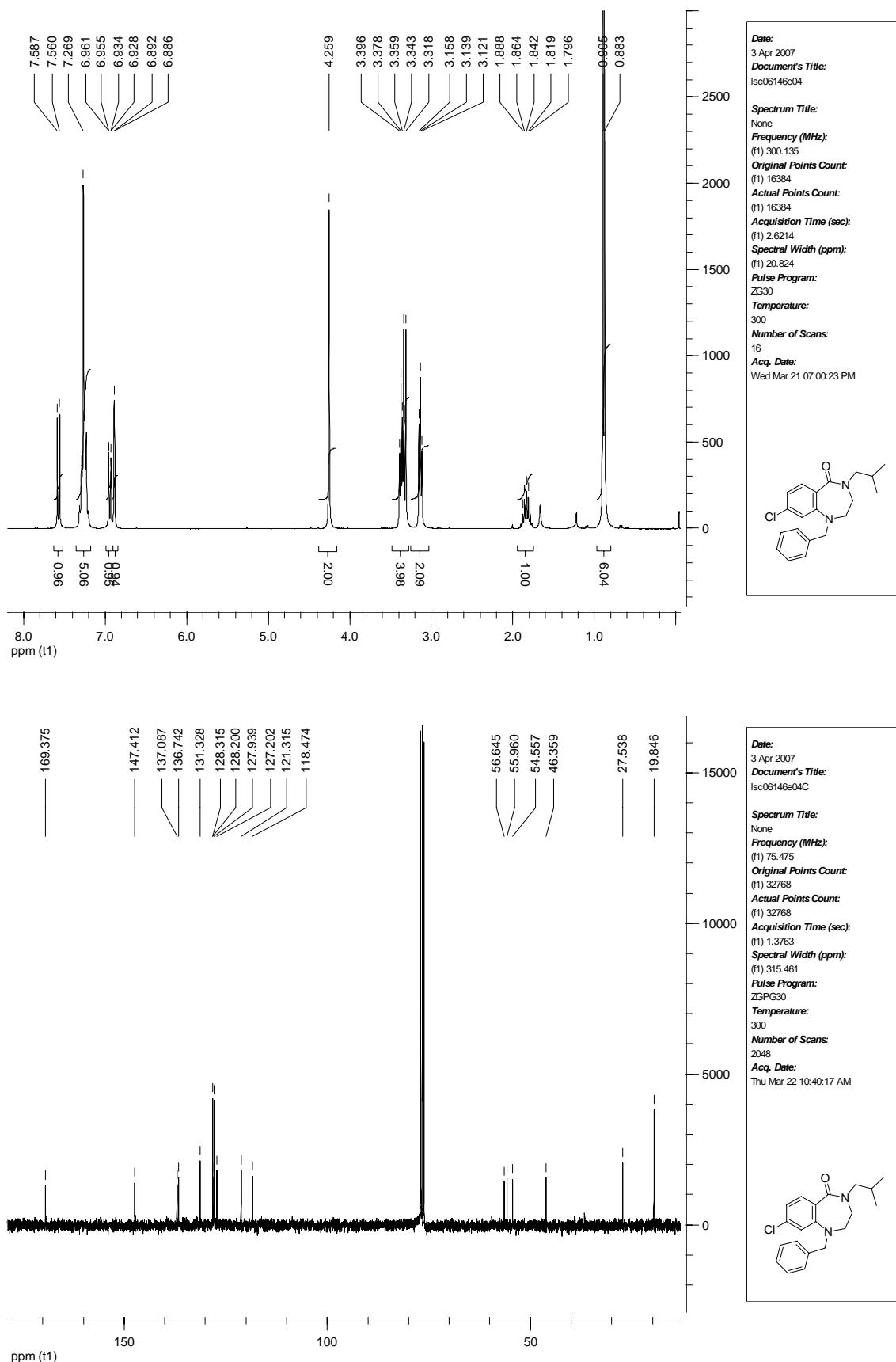
Spectrum Title:
None
Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 32768
Acquisition Time (sec):
(f1) 1.3763
Spectral Width (ppm):
(f1) 315.461
Pulse Program:
Z3PG30
Temperature:
300
Number of Scans:
2048
Acq. Date:
Thu Mar 22 07:08:07 PM







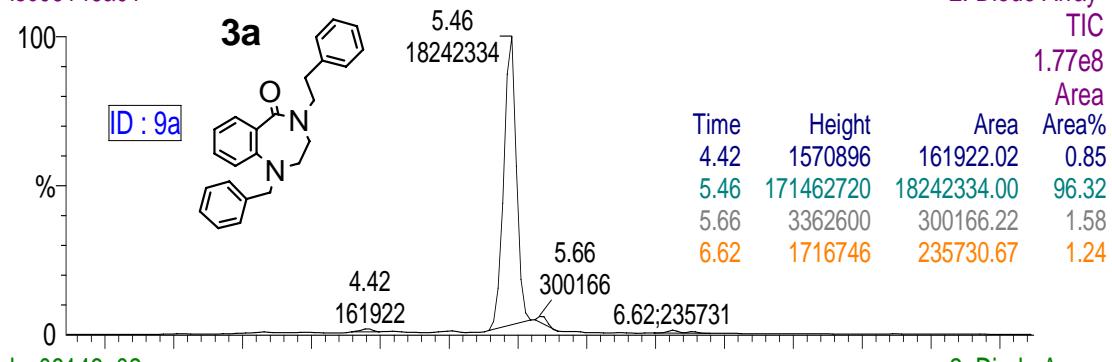




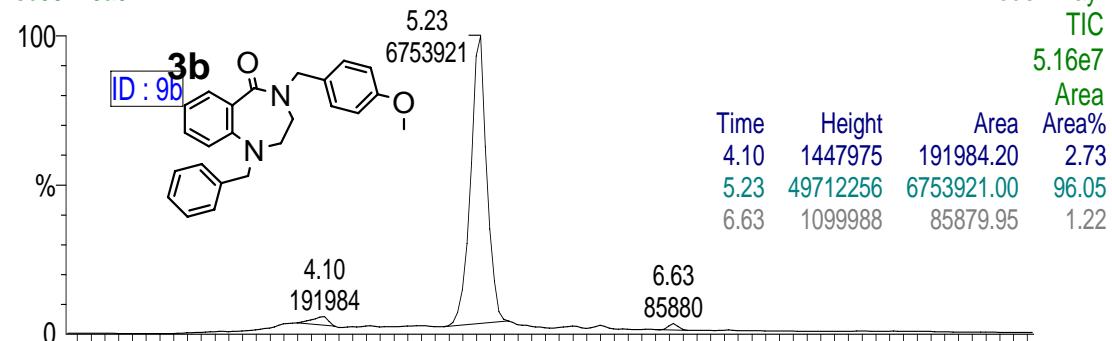
5. LC /MS spectra of all crude compounds

Isc

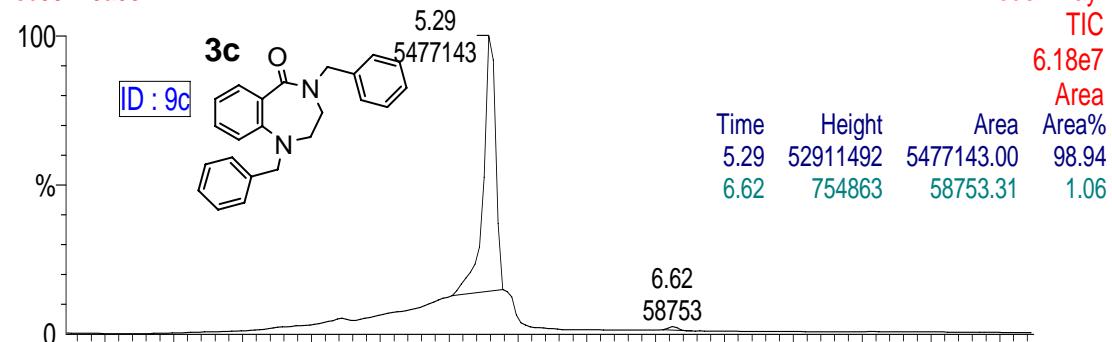
Isc06146a01



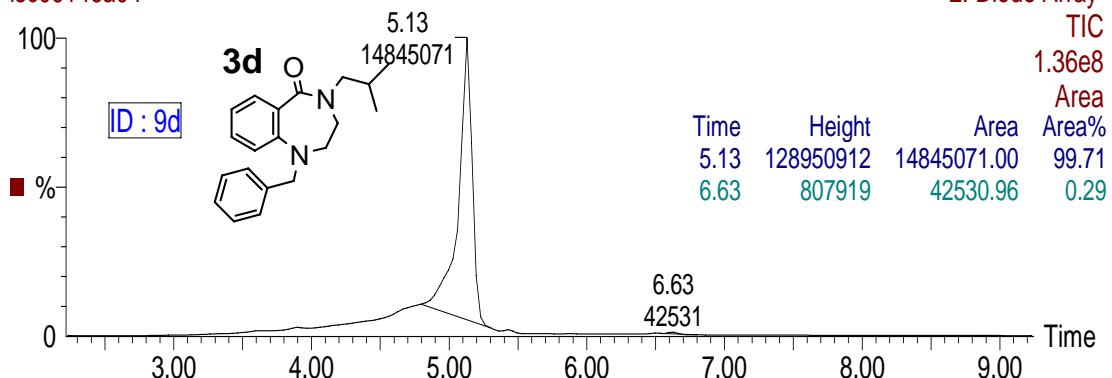
Isc06146a02



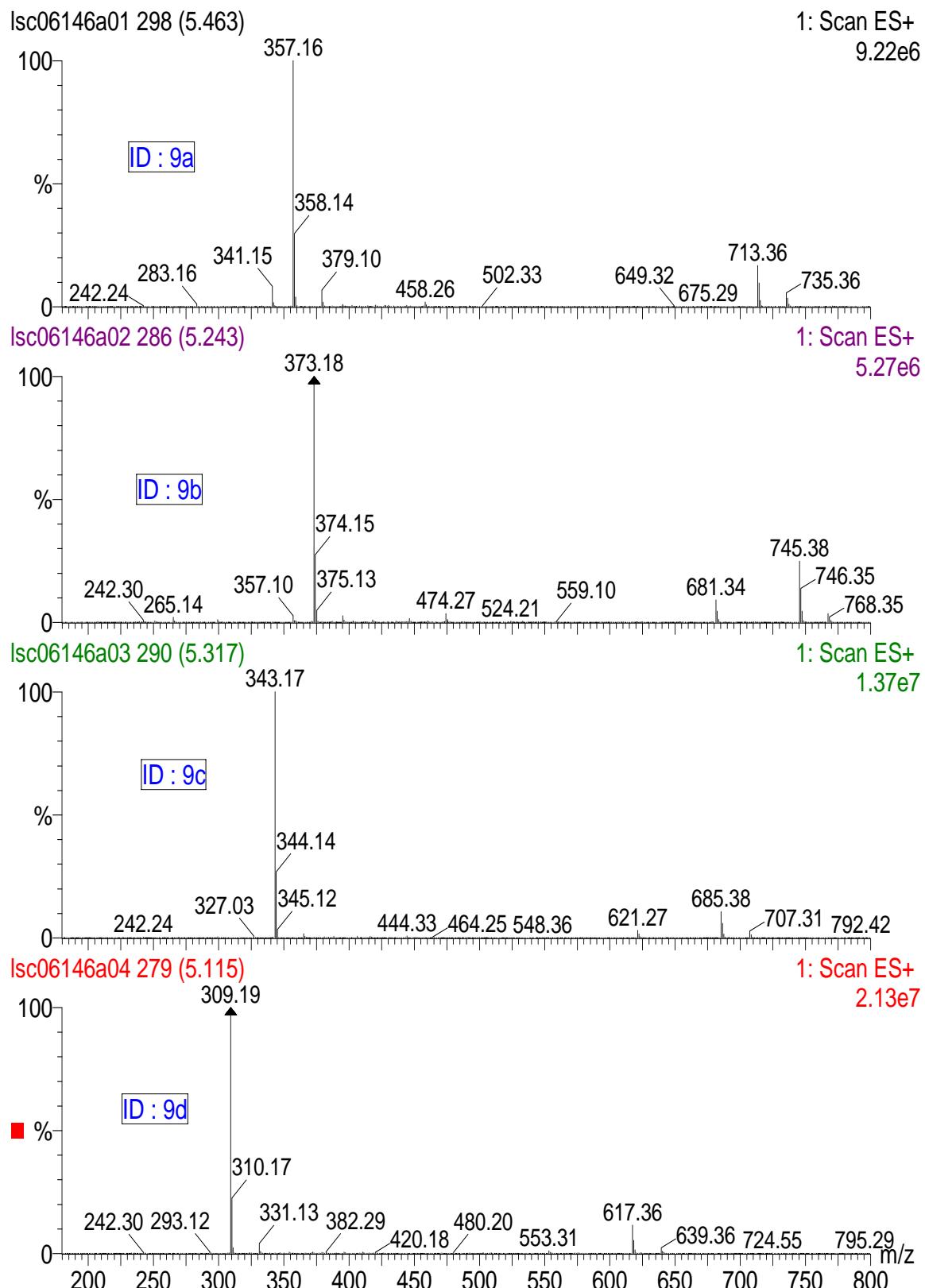
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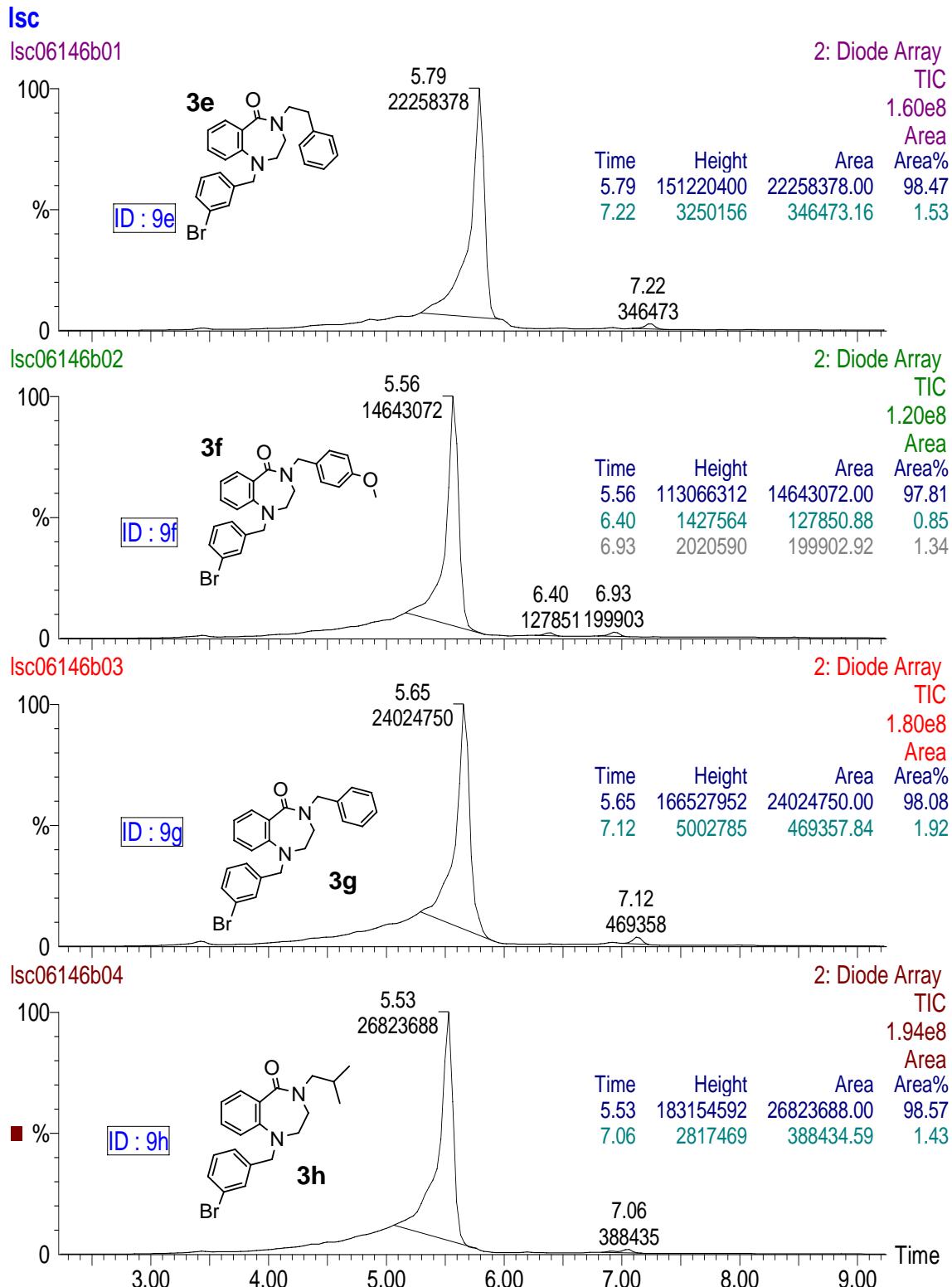


Isc06146a04



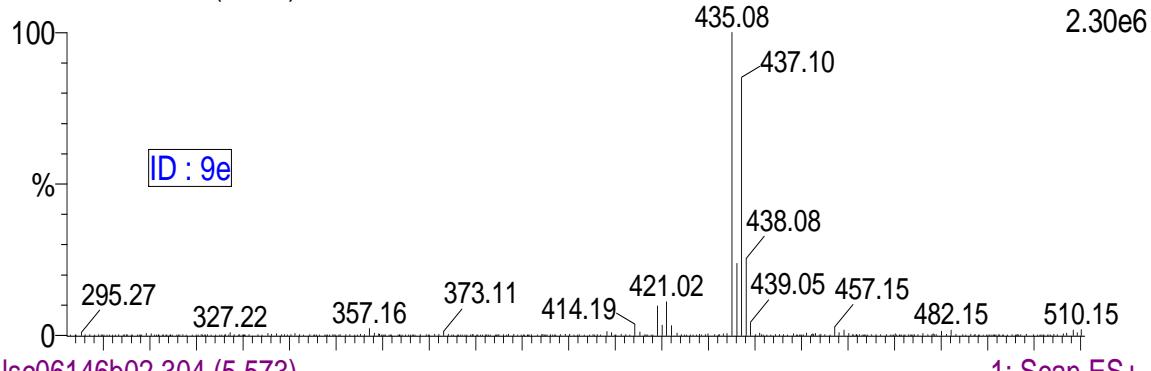
IscC&C



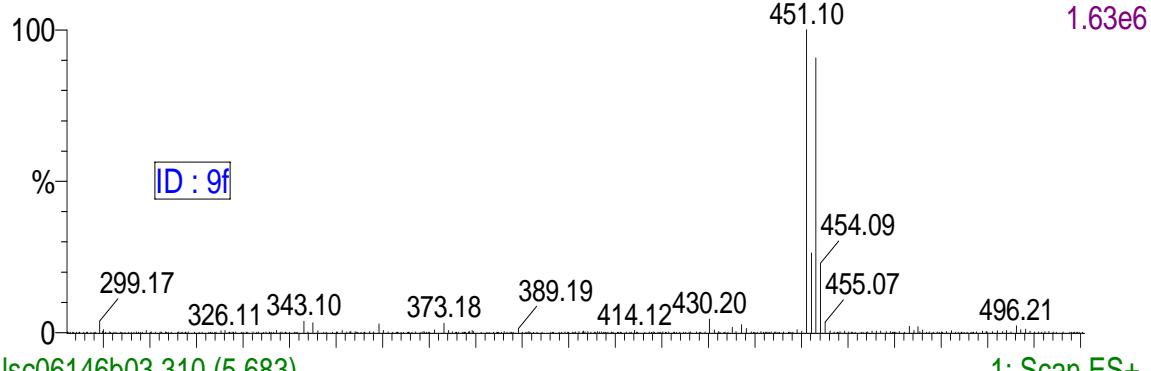


IscC&C

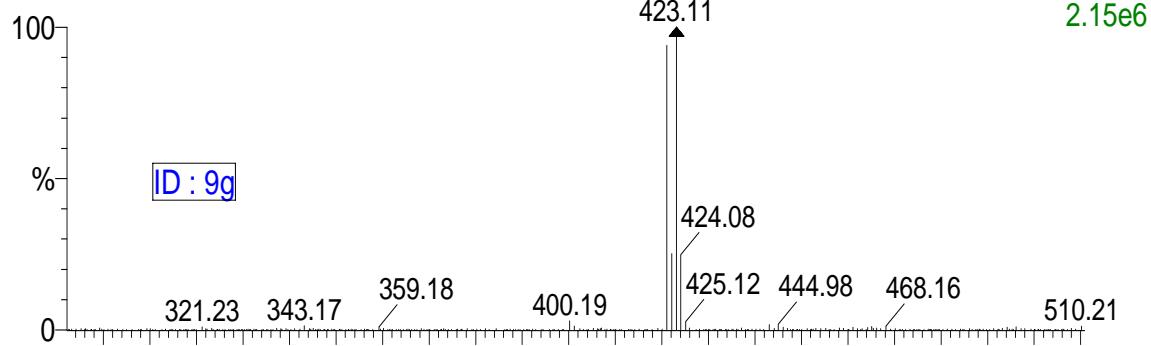
Isc06146b01 314 (5.757)



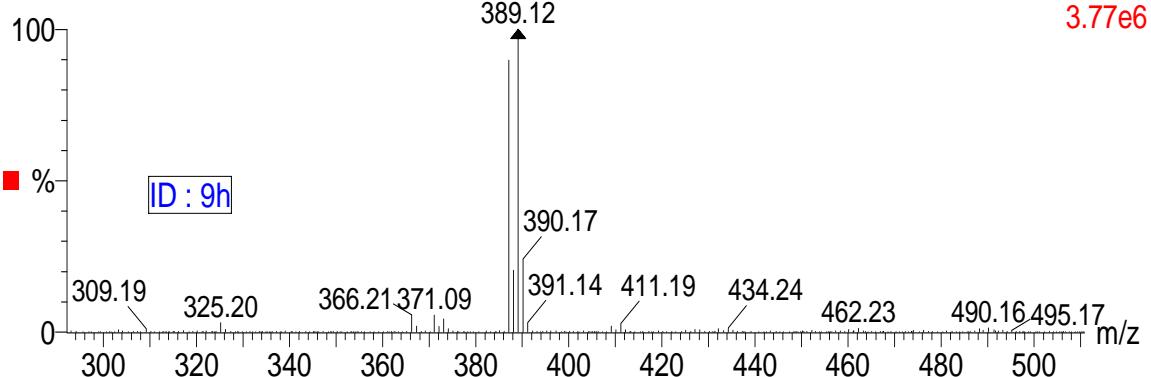
Isc06146b02 304 (5.573)



Isc06146b03 310 (5.683)

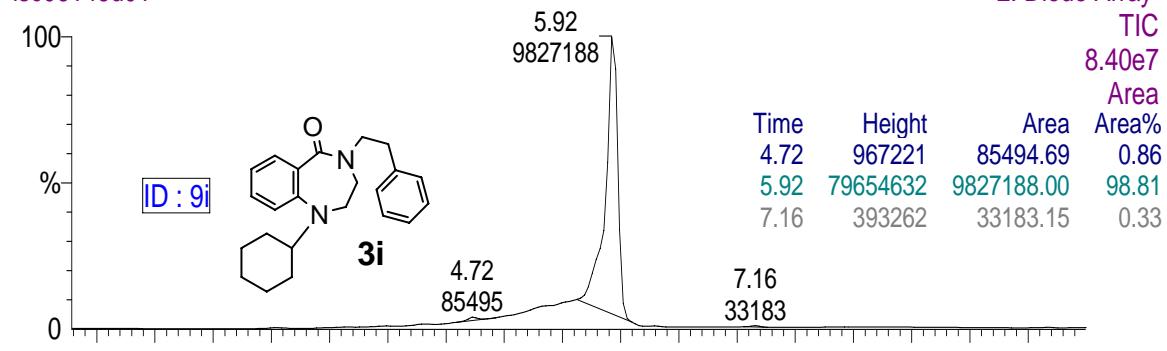


Isc06146b04 302 (5.537)

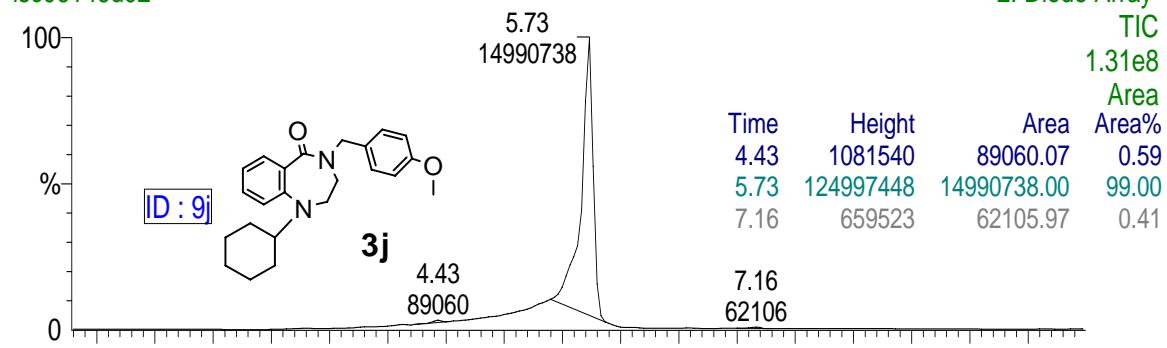


lsc

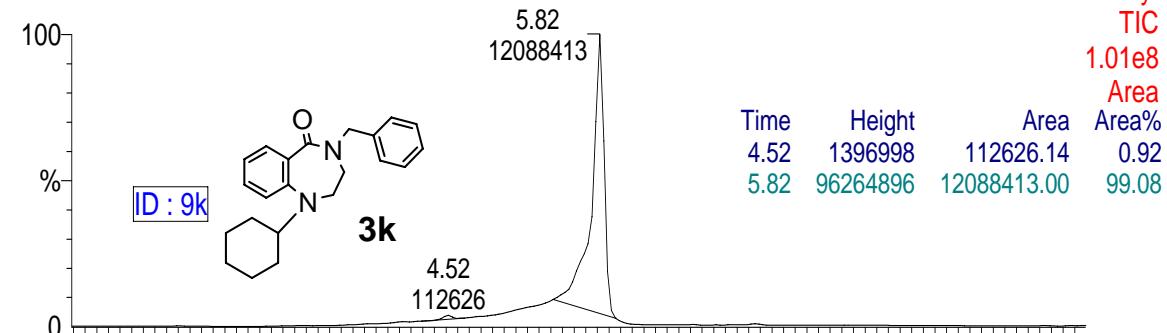
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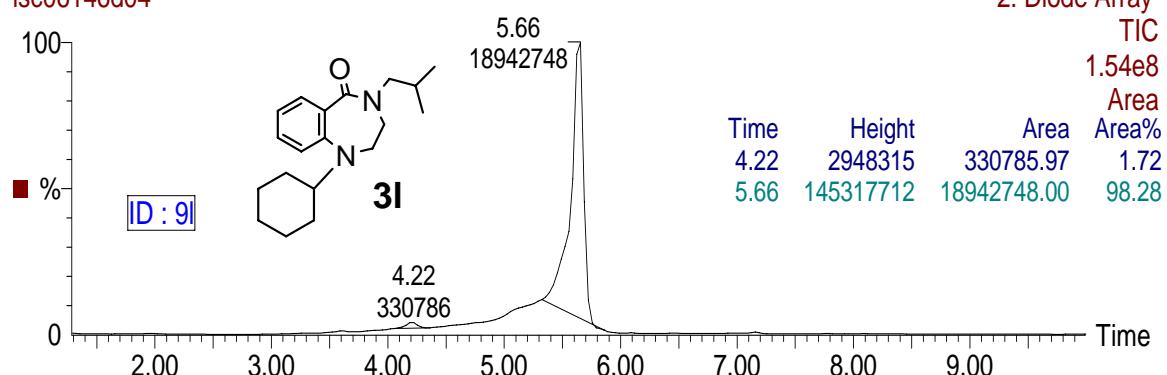
lsc06146d02



lsc06146d03

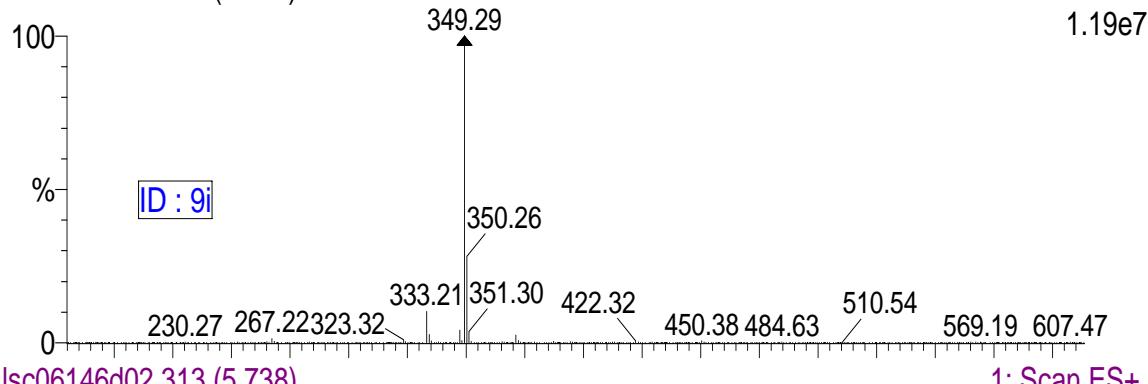


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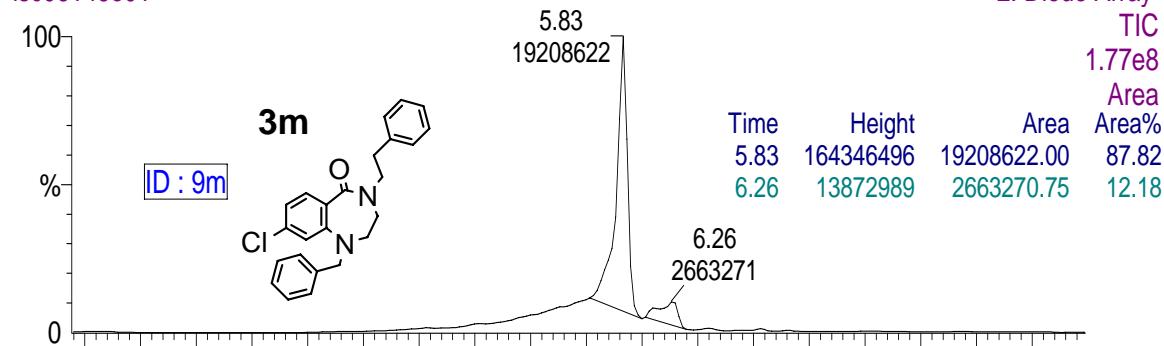
IscC&C

lsc06146d01 324 (5.940)

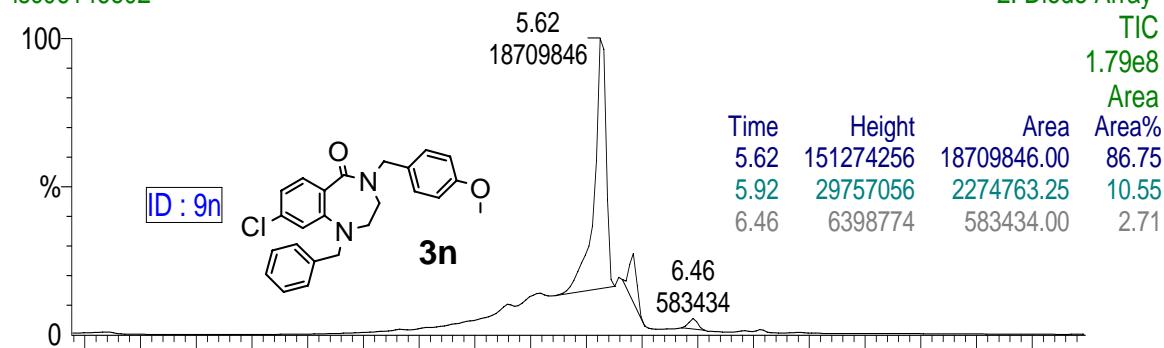


lsc

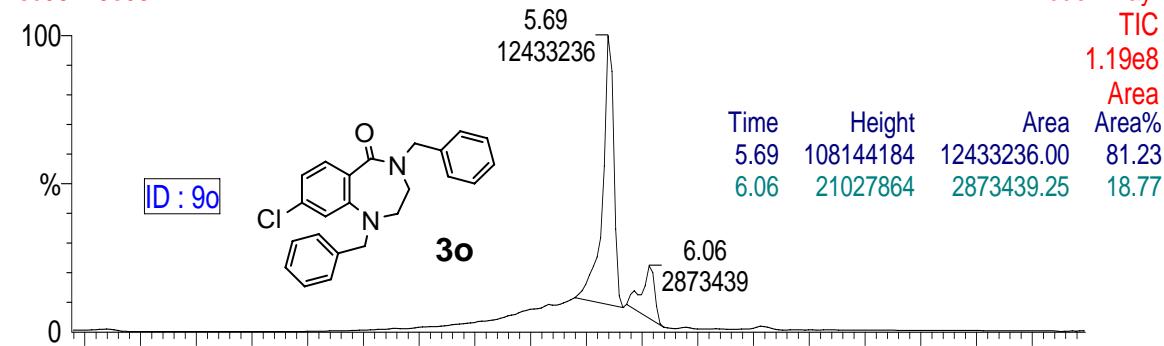
lsc06146e01



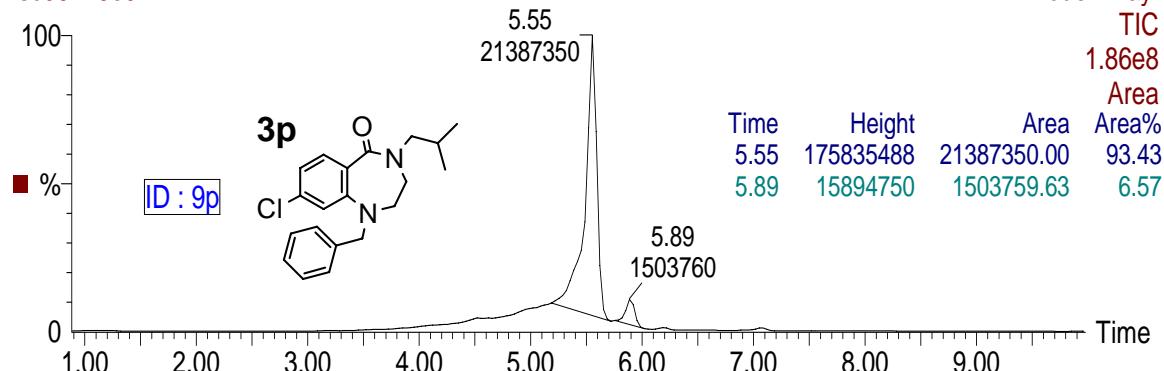
lsc06146e02



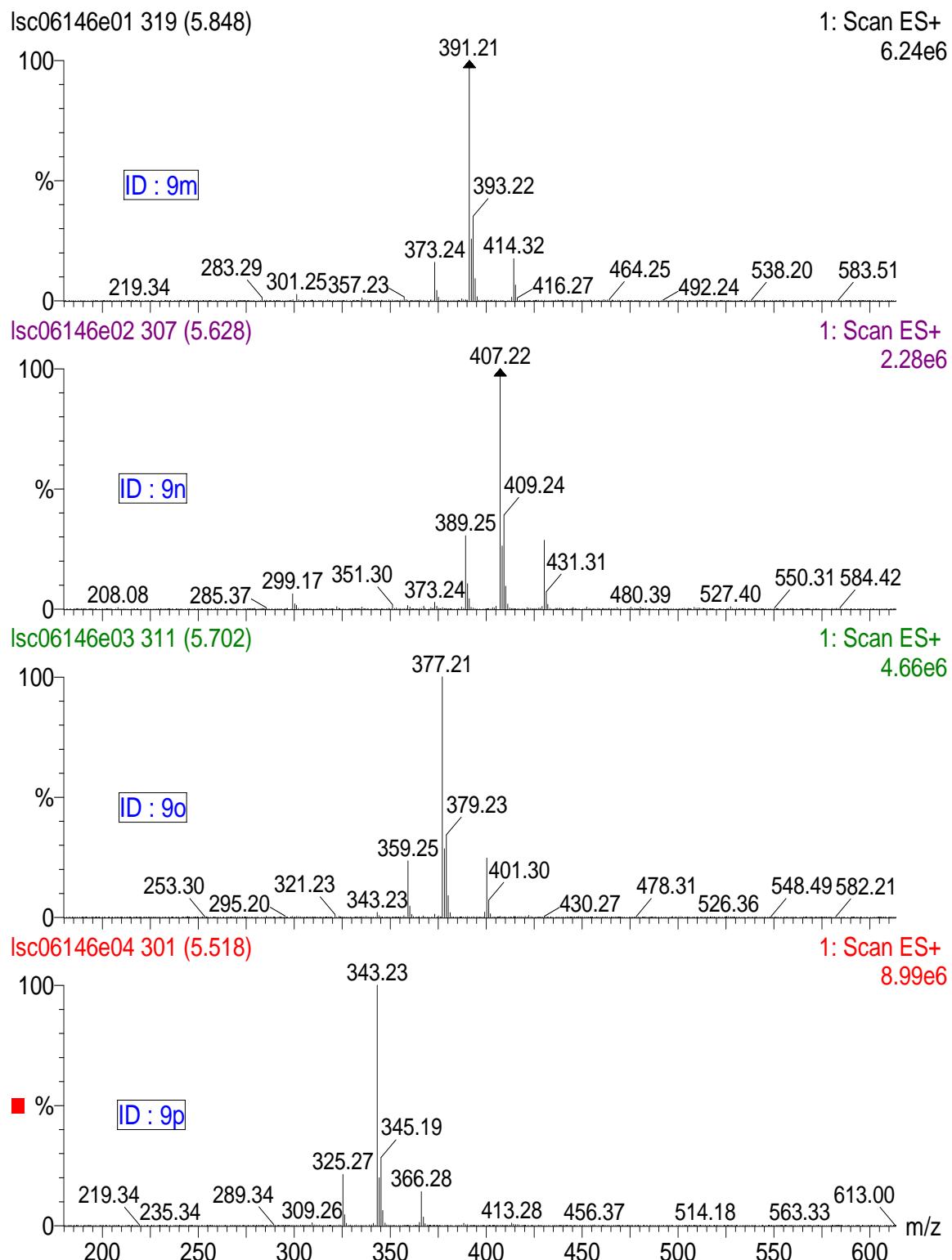
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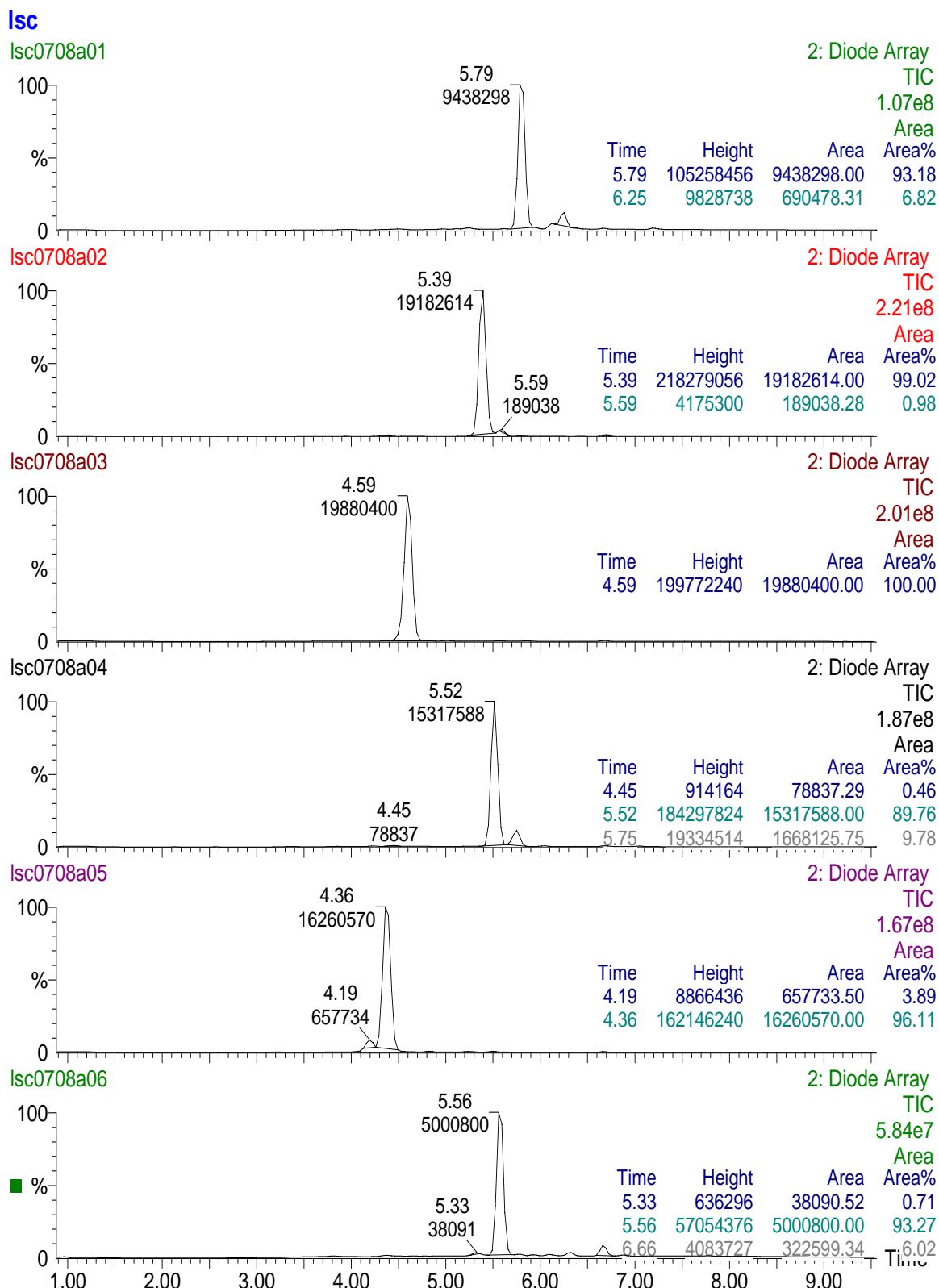
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IscC&C

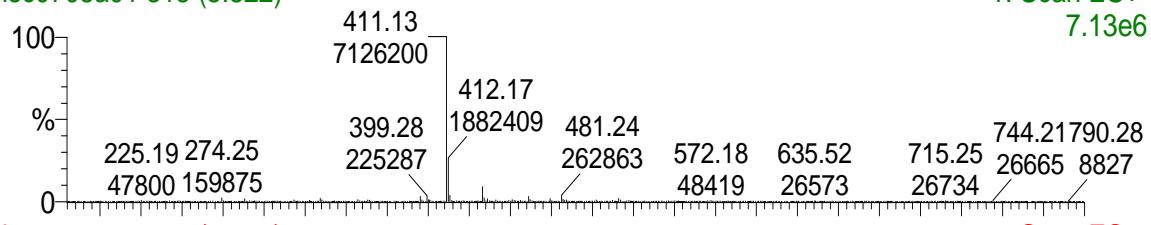


6. LC /MS spectra of 96 member pilot library compounds



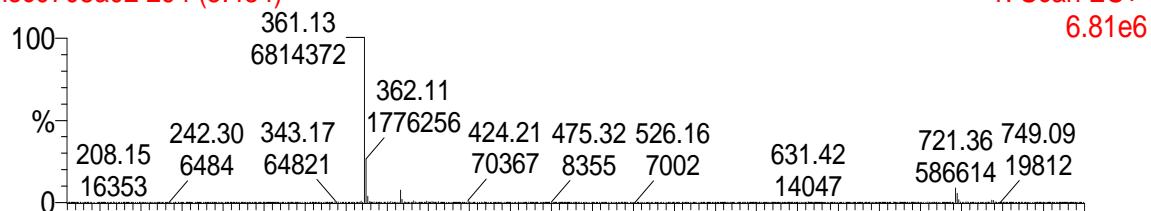
IscC&C

Isc0708a01 315 (5.822)



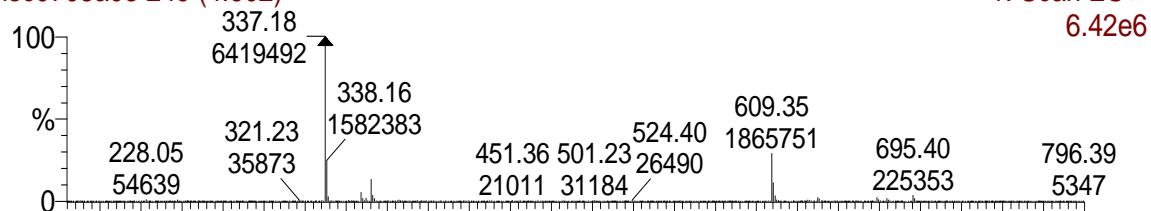
1: Scan ES+
 7.13e6

Isc0708a02 294 (5.434)



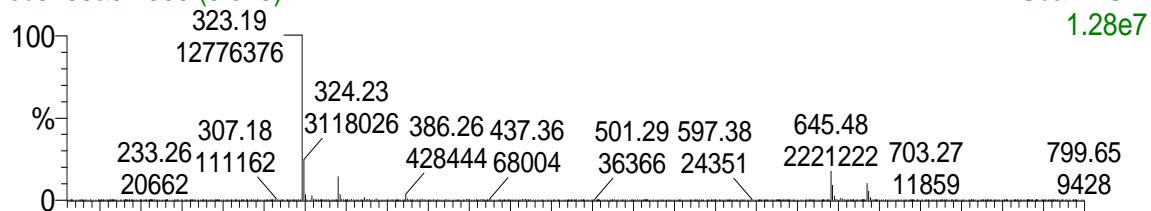
1: Scan ES+
 6.81e6

Isc0708a03 249 (4.602)



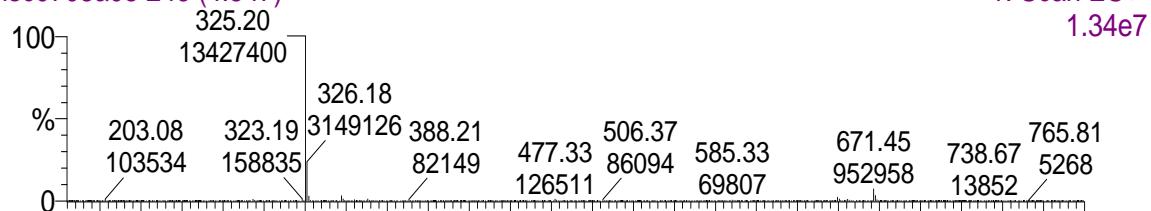
1: Scan ES+
 6.42e6

Isc0708a04 300 (5.545)



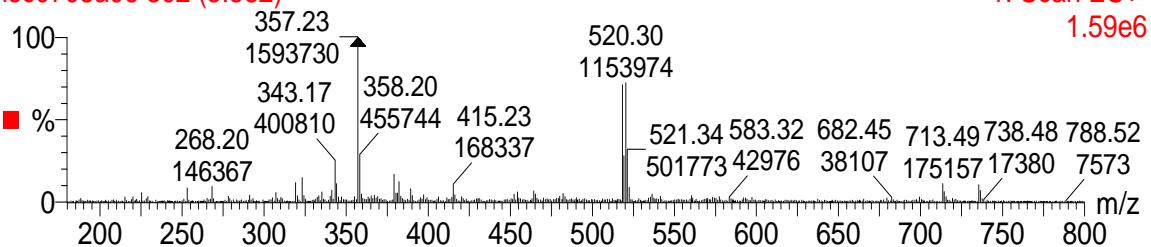
1: Scan ES+
 1.28e7

Isc0708a05 246 (4.547)



1: Scan ES+
 1.34e7

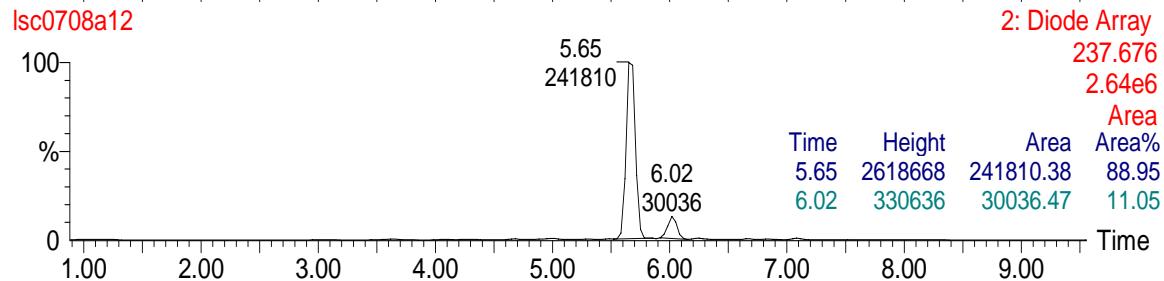
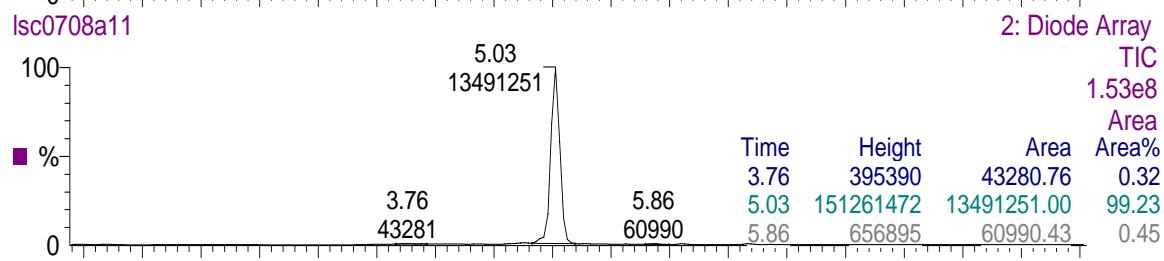
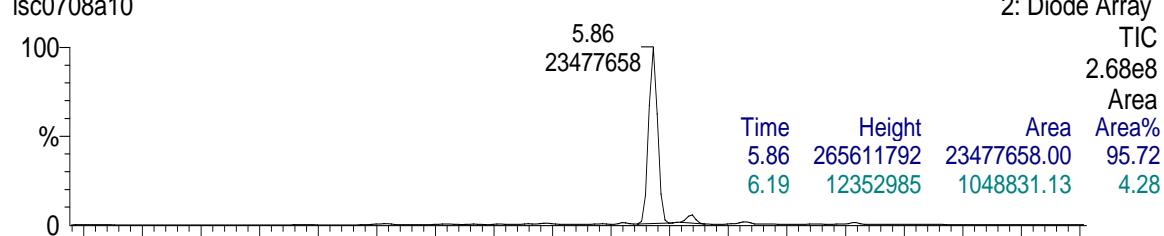
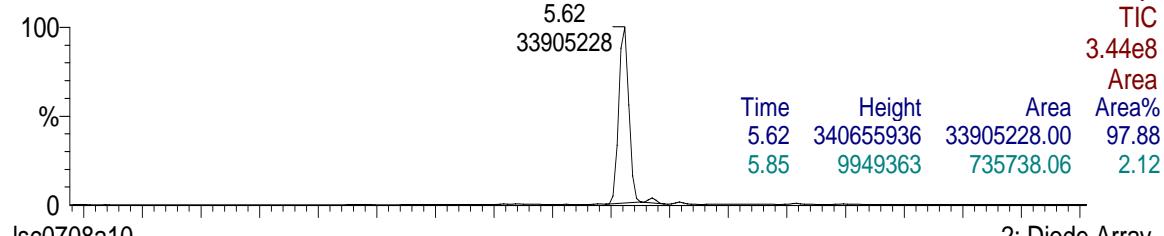
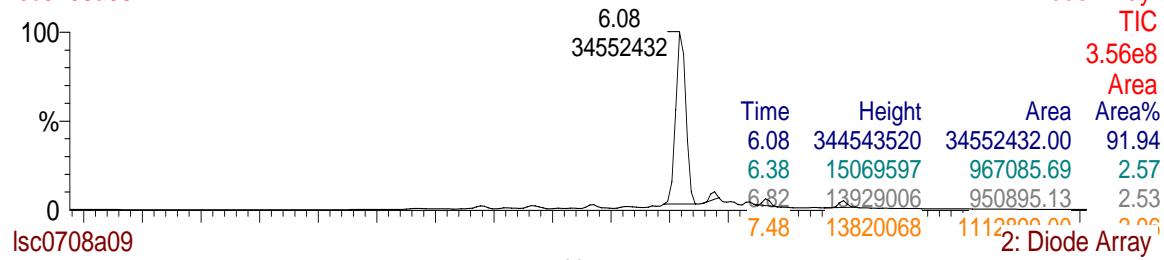
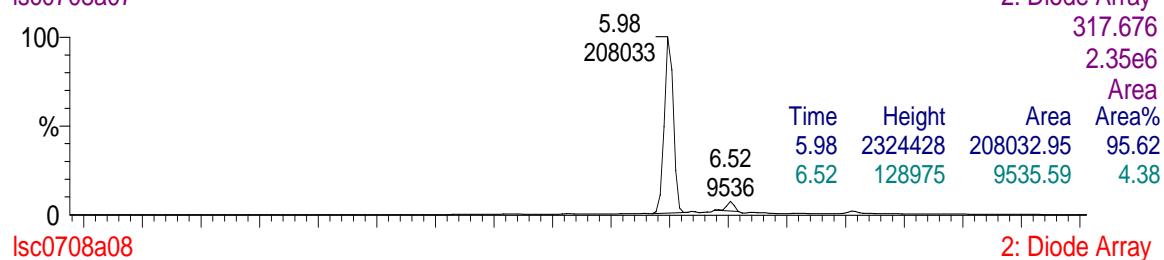
Isc0708a06 302 (5.582)



1: Scan ES+
 1.59e6

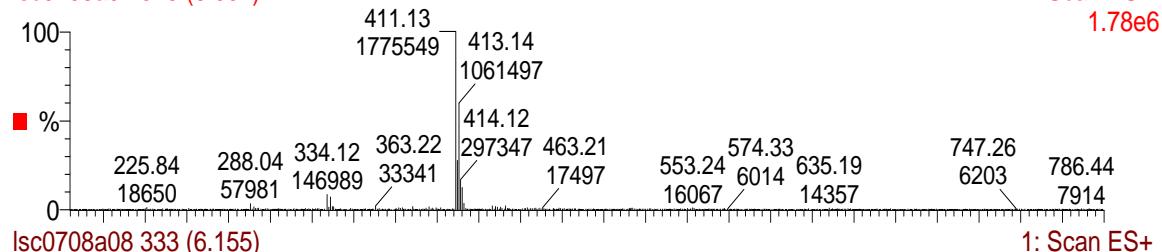
lsc

lsc0708a07



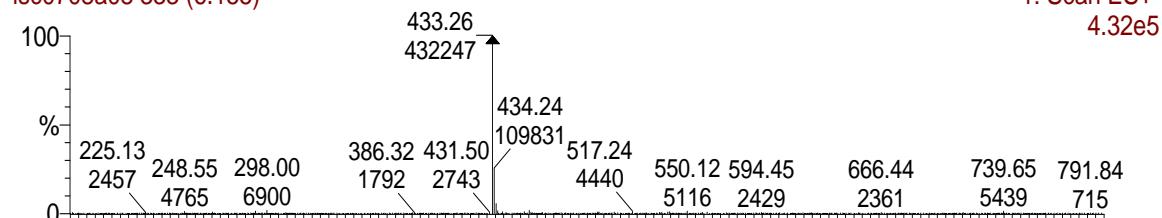
IscC&C

Isc0708a07 325 (6.007)



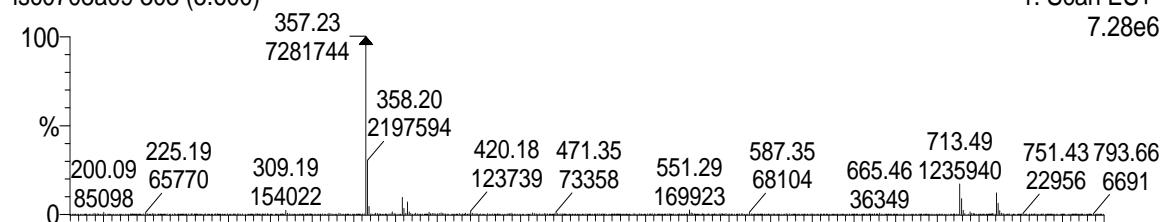
1: Scan ES+
1.78e6

Isc0708a08 333 (6.155)



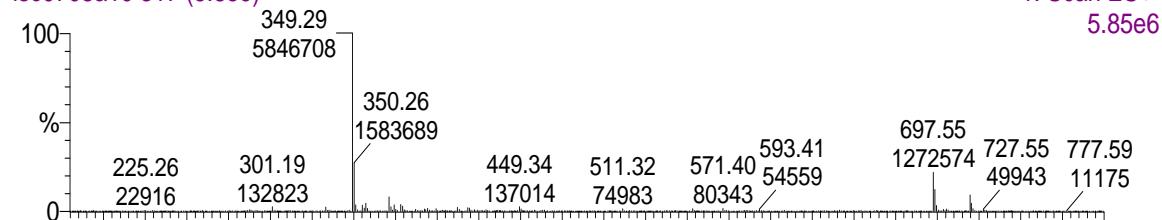
1: Scan ES+
4.32e5

Isc0708a09 303 (5.600)



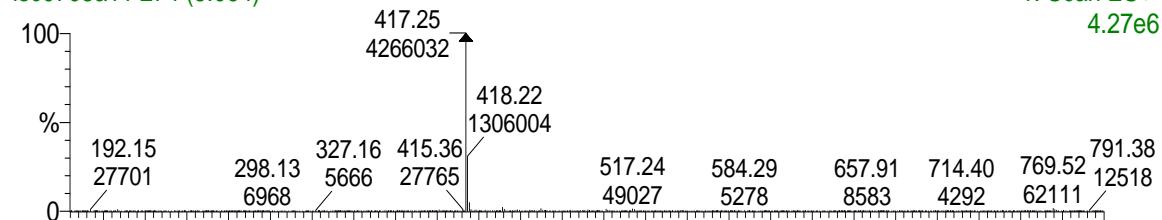
1: Scan ES+
7.28e6

Isc0708a10 317 (5.859)



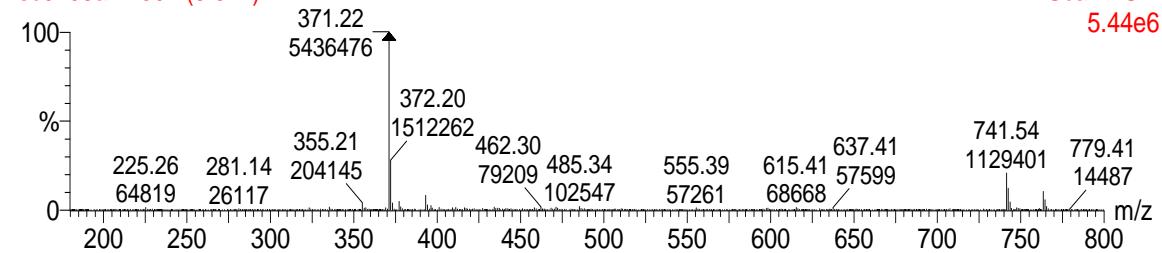
1: Scan ES+
5.85e6

Isc0708a11 274 (5.064)



1: Scan ES+
4.27e6

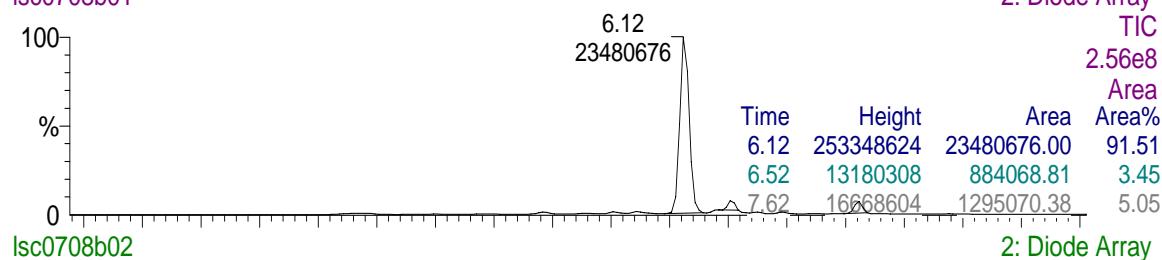
Isc0708a12 307 (5.674)



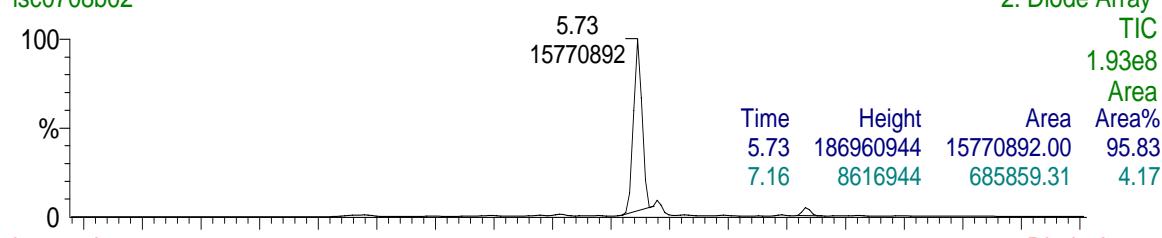
1: Scan ES+
5.44e6

lsc

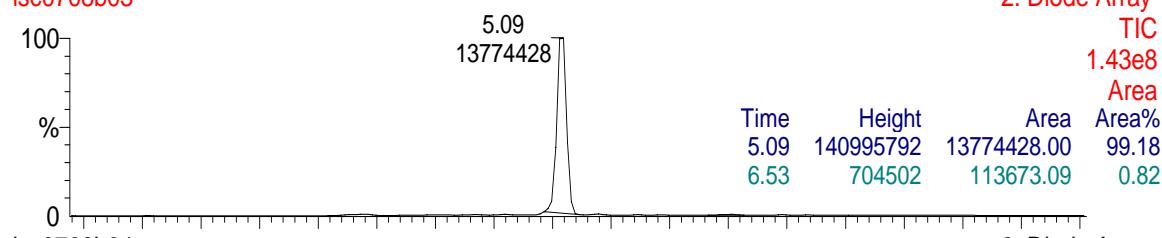
lsc0708b01



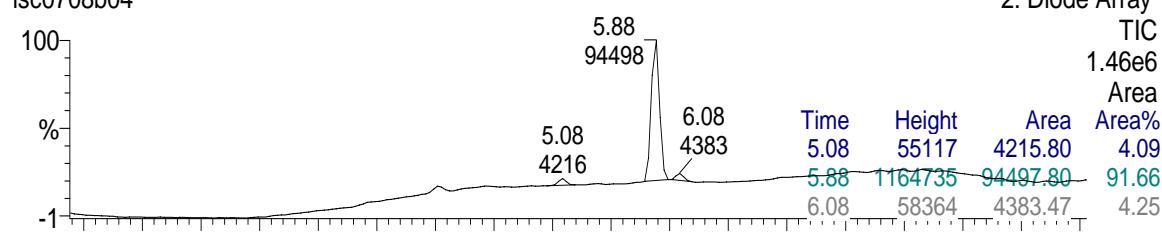
lsc0708b02



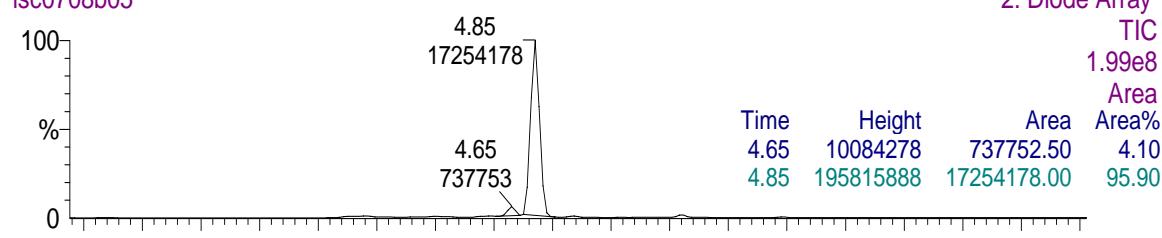
lsc0708b03



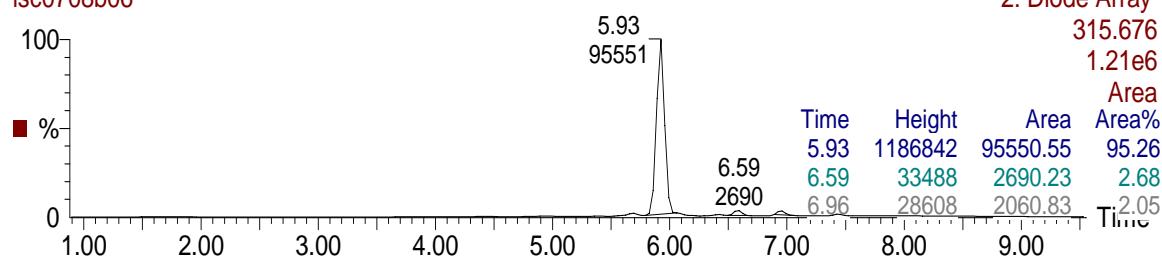
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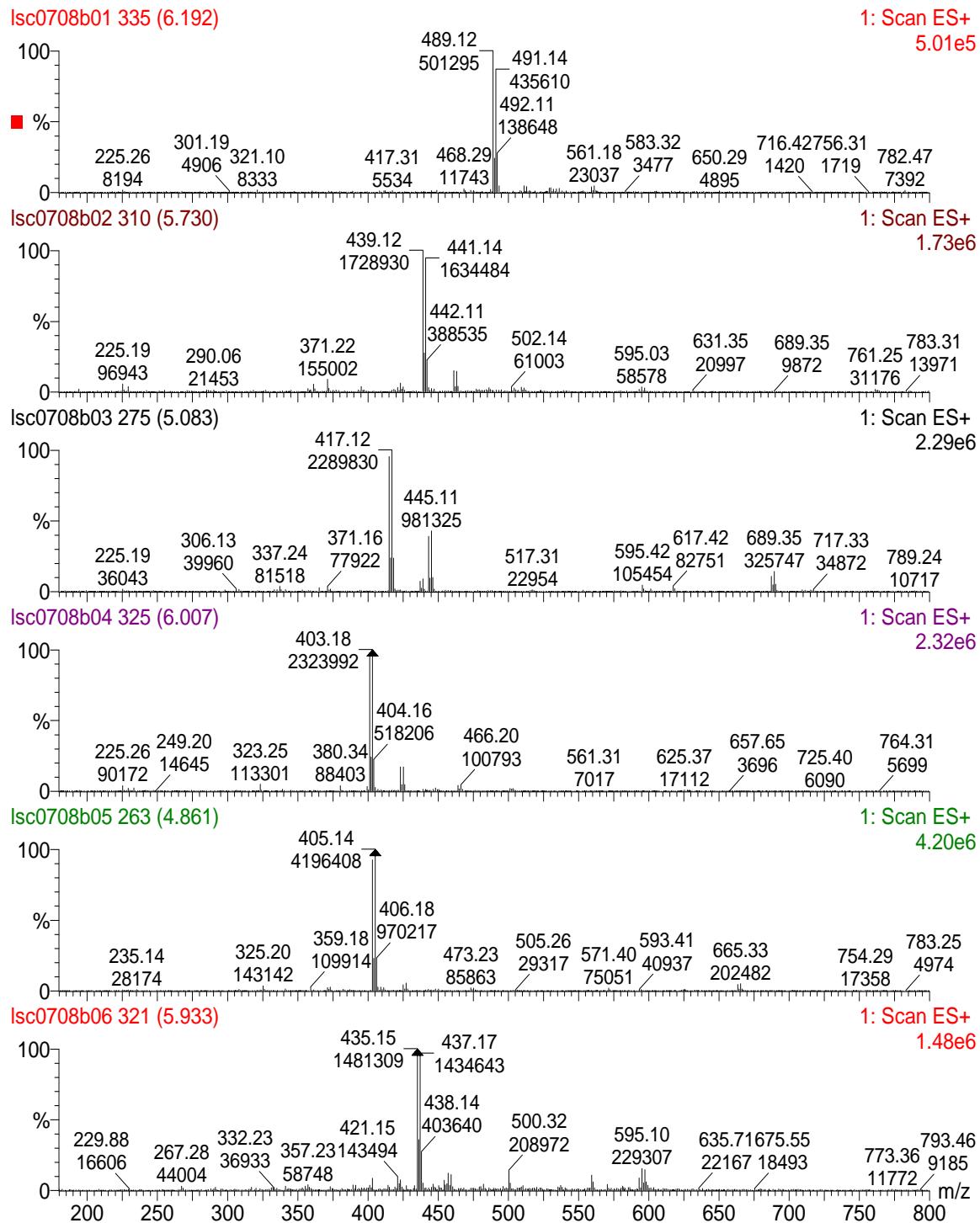
lsc0708b05



lsc0708b06

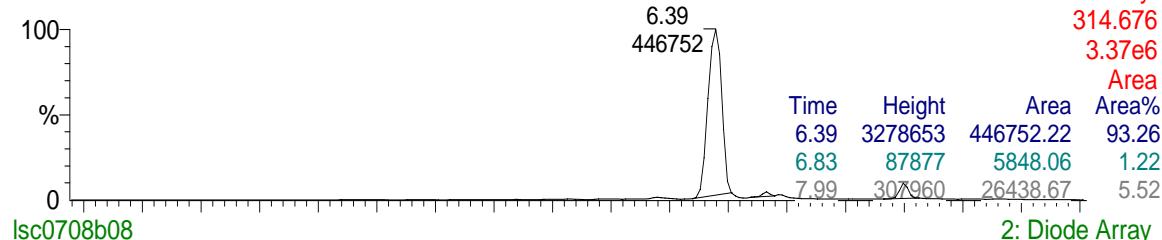


IscC&C

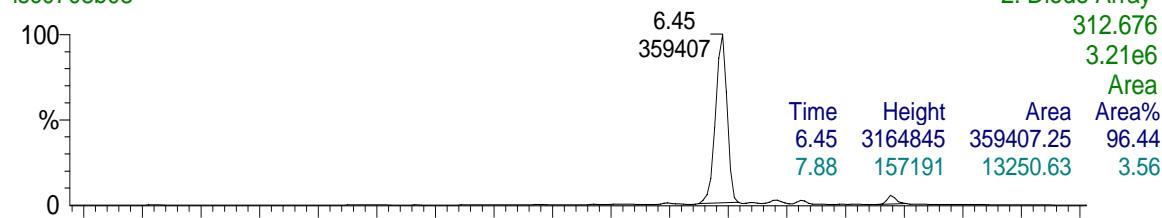


Isc

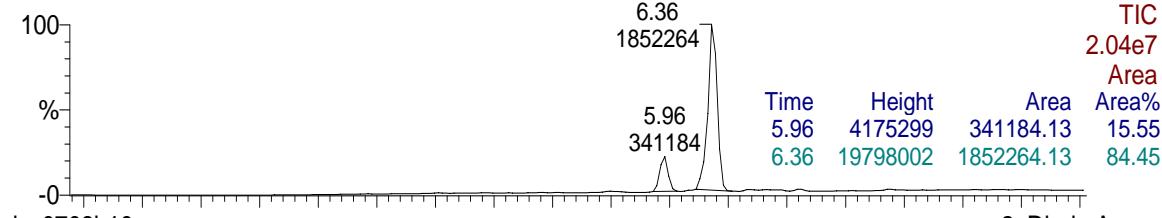
Isc0708b07



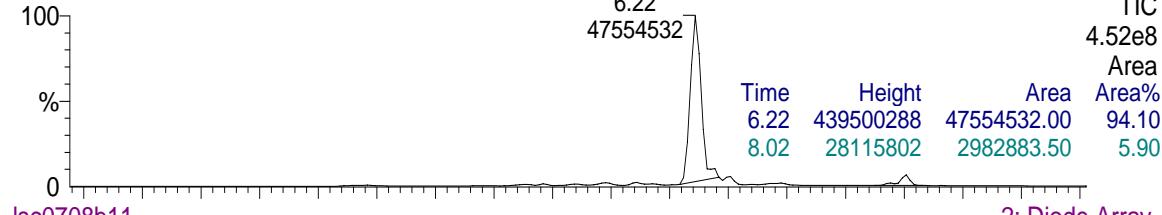
Isc0708b08



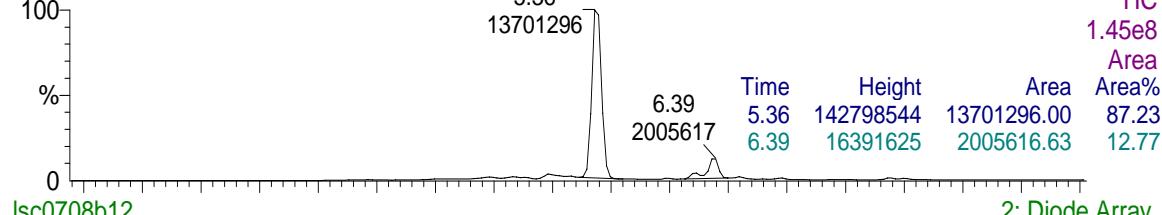
Isc0708b09



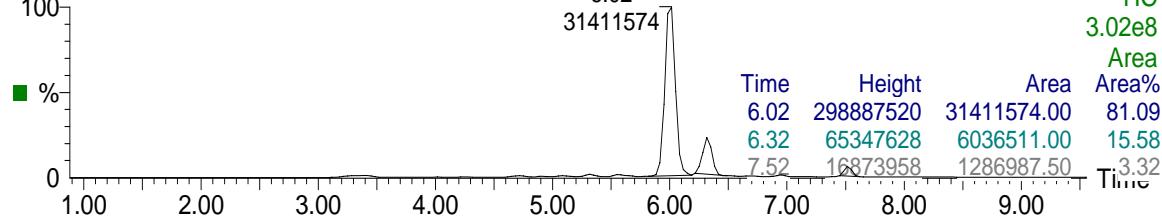
Isc0708b10



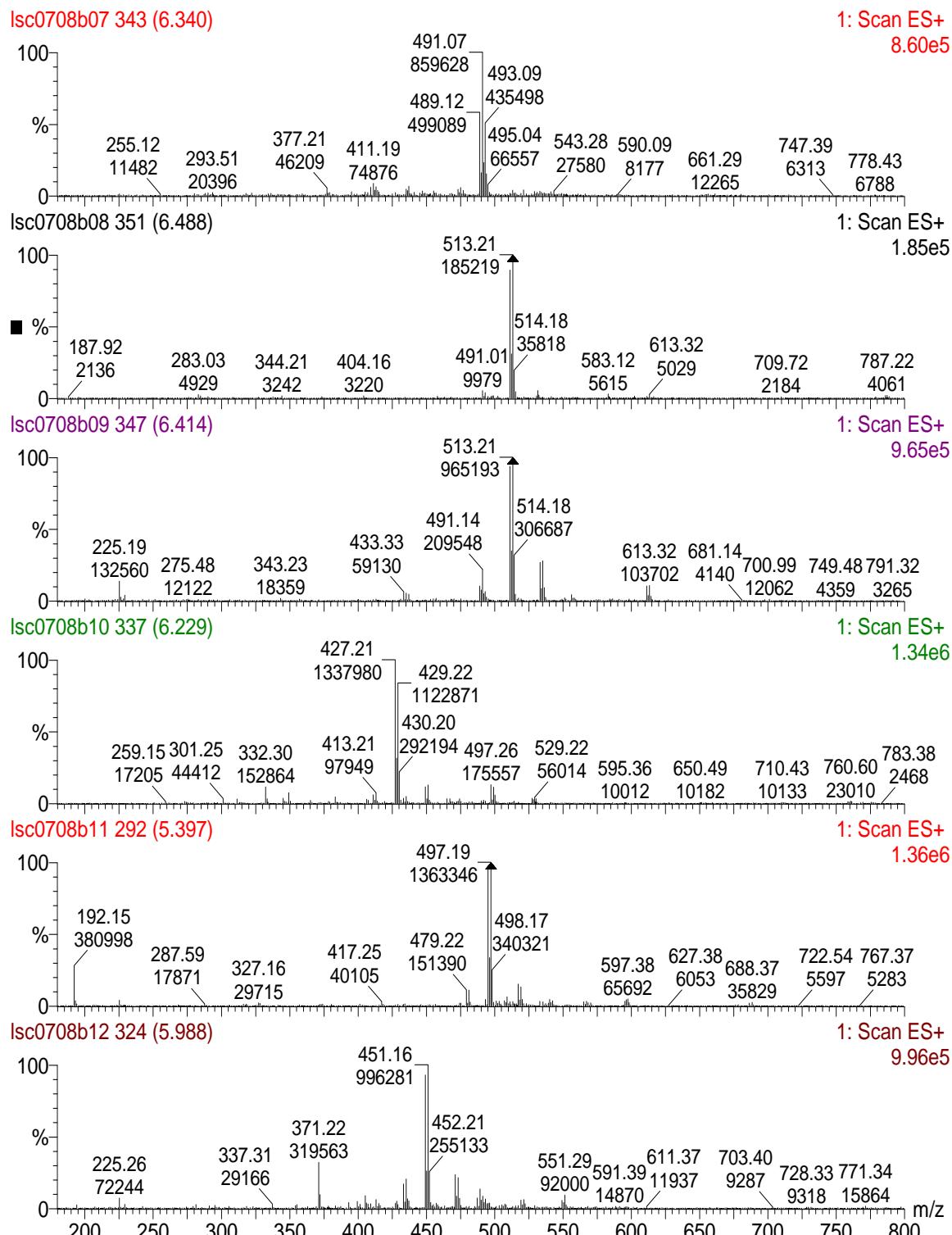
Isc0708b11



Isc0708b12

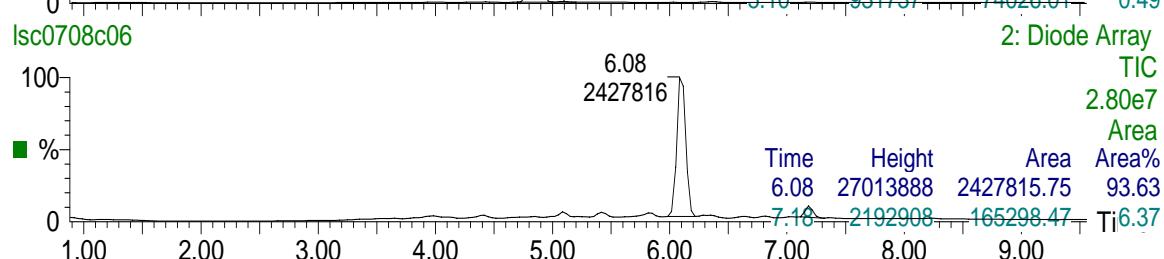
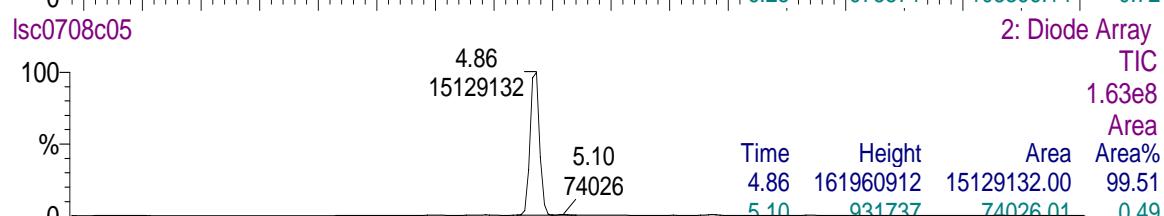
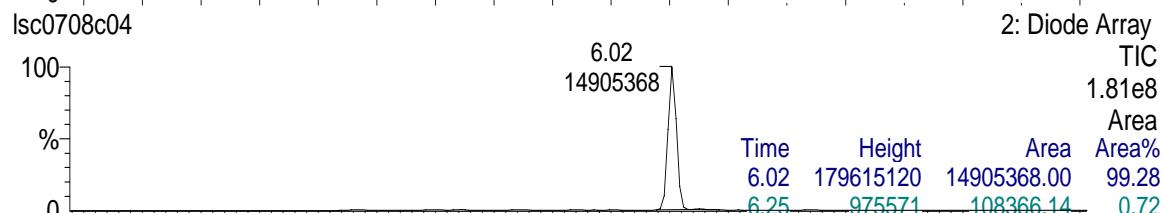
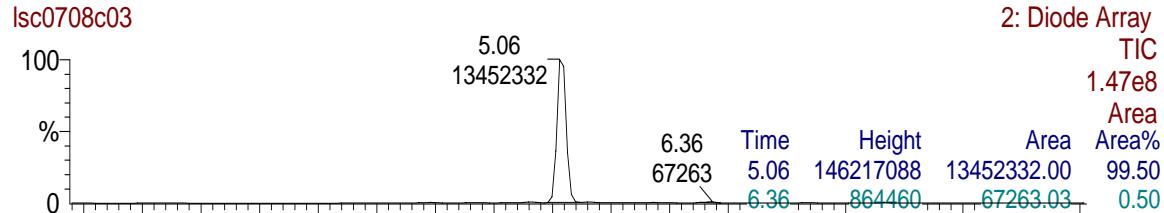
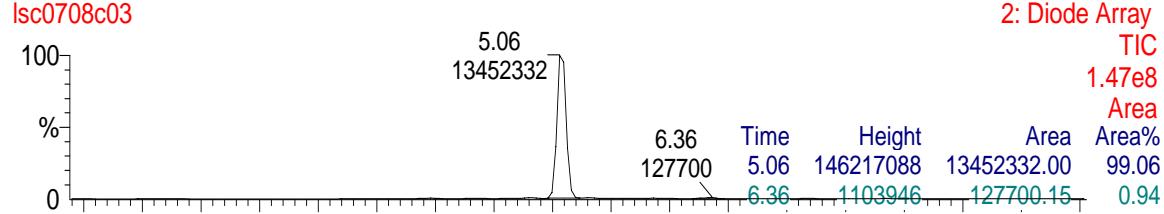
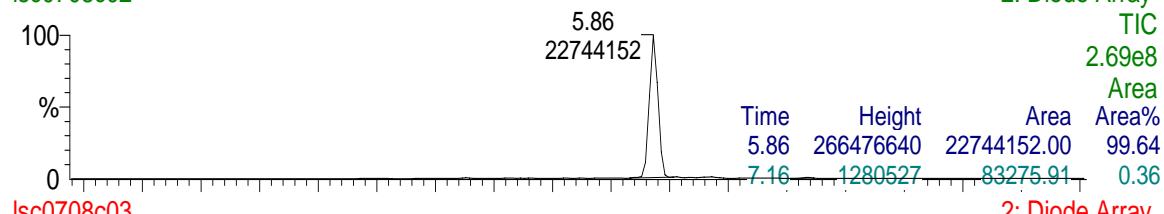
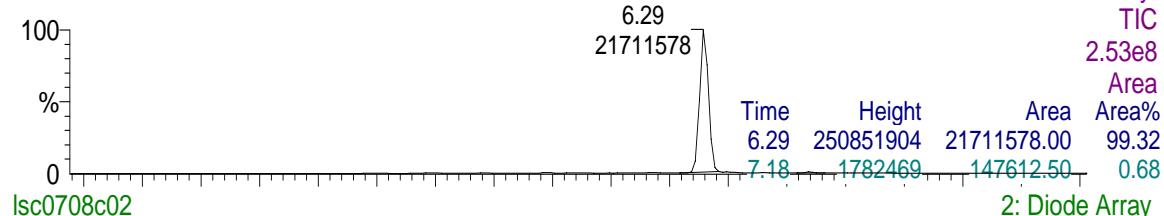


IscC&C

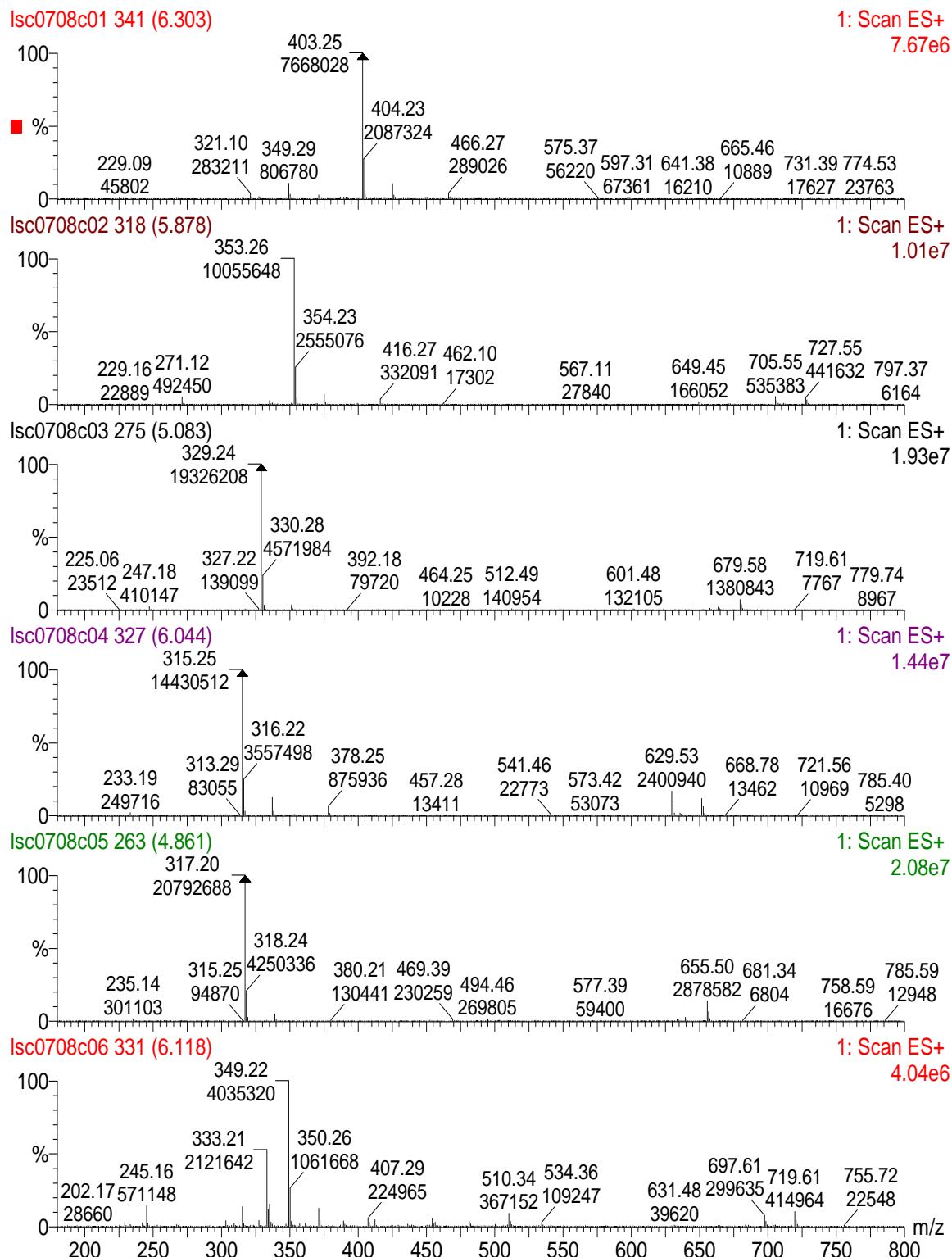


lsc

lsc0708c01

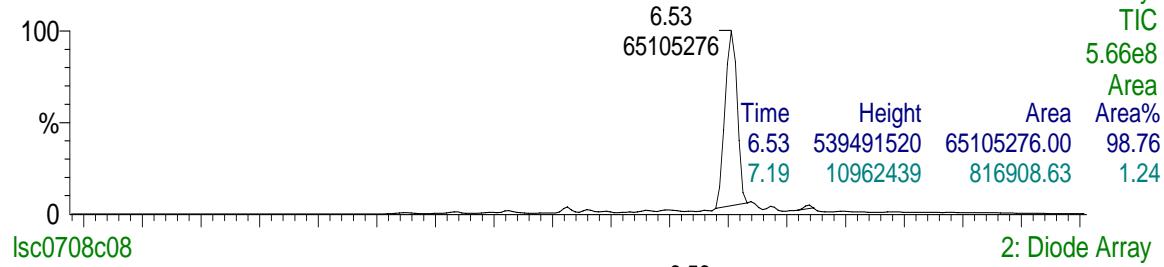


IscC&C

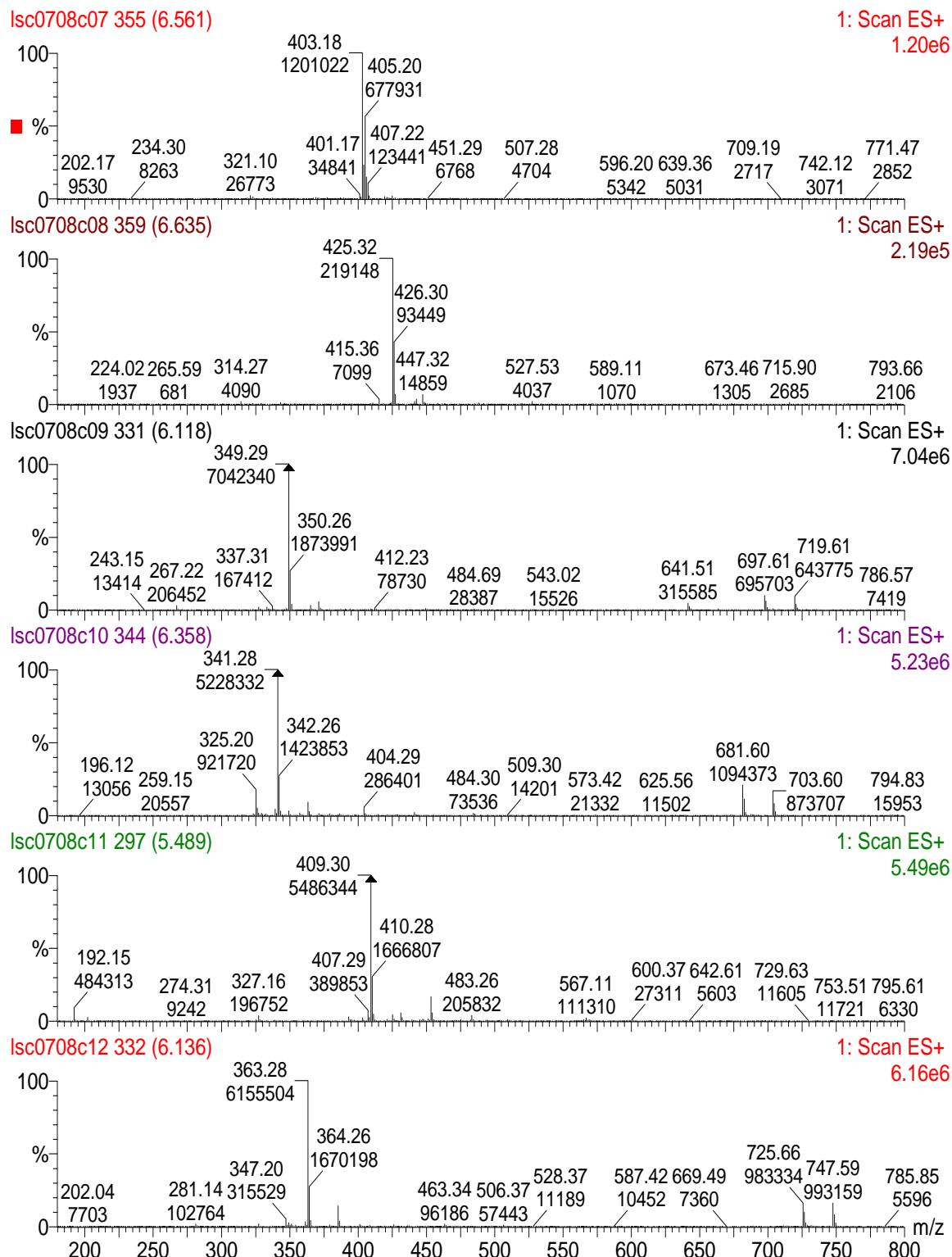


lsc

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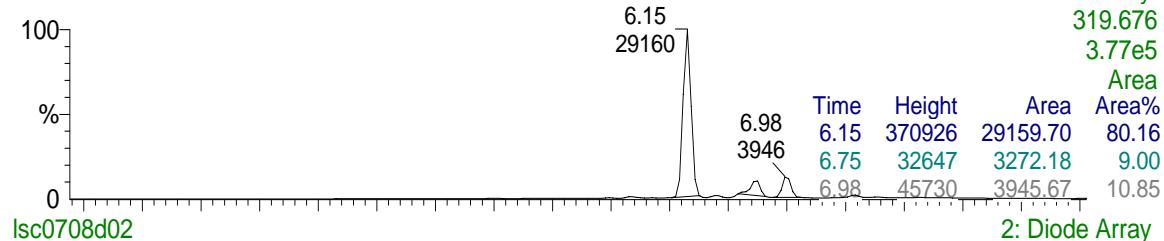


IscC&C

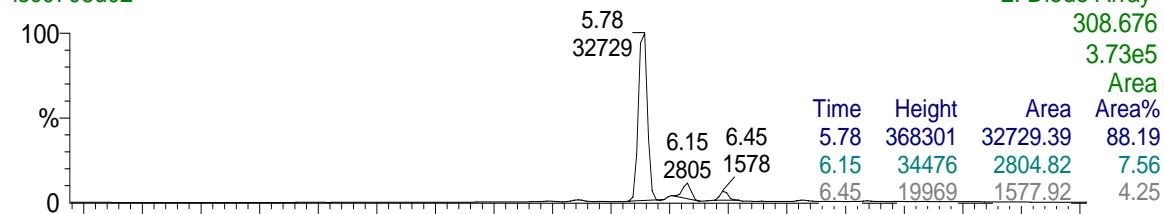


Isc

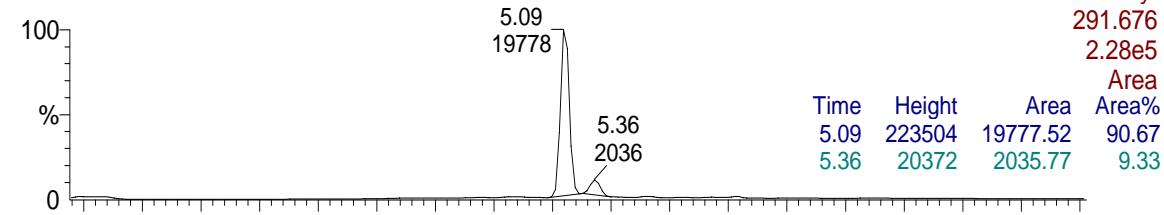
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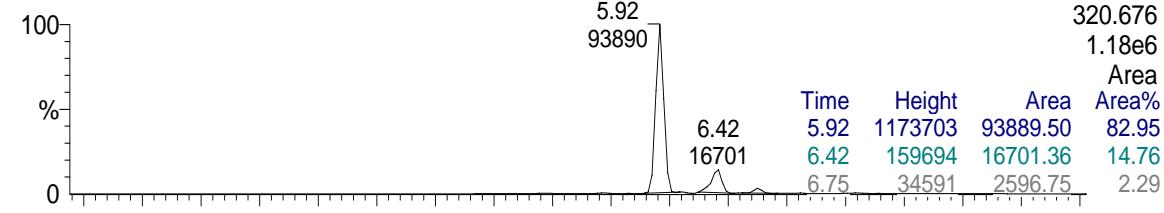
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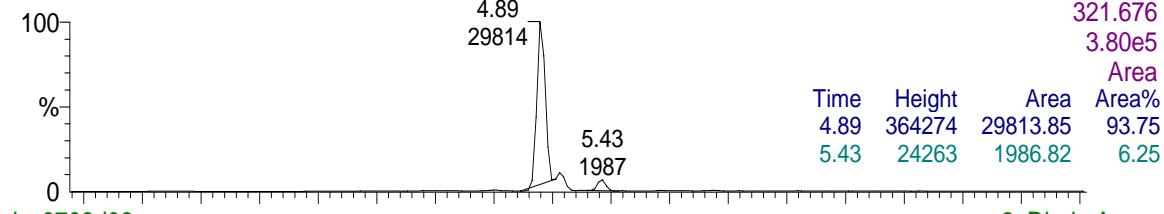
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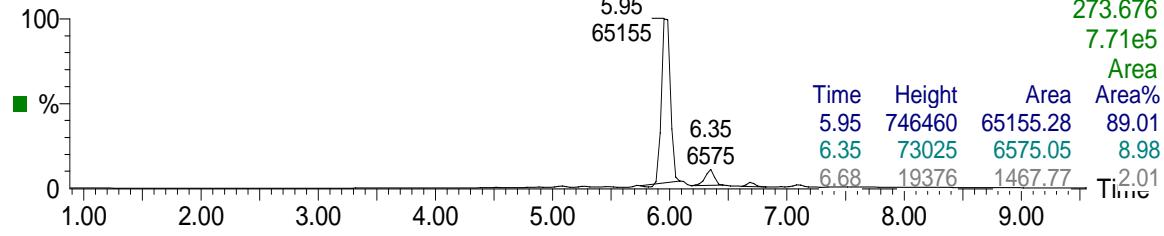
Isc0708d04



Isc0708d05

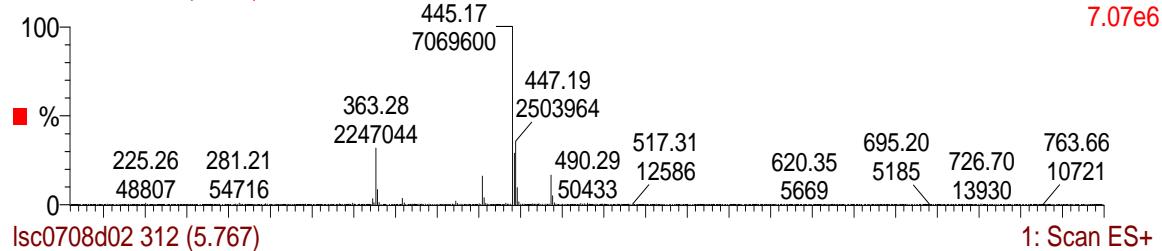


Isc0708d06

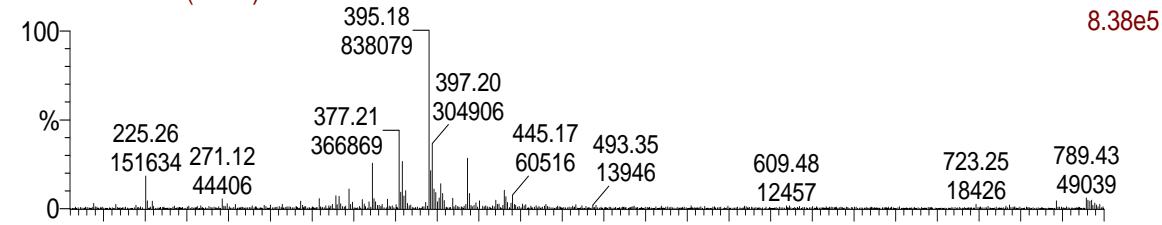


IscC&C

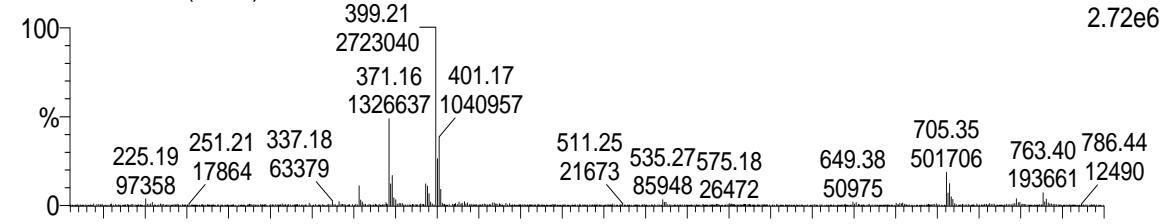
Isc0708d01 339 (6.266)



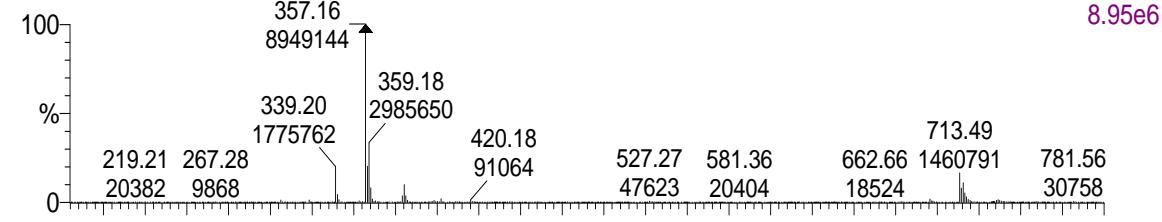
Isc0708d02 312 (5.767)



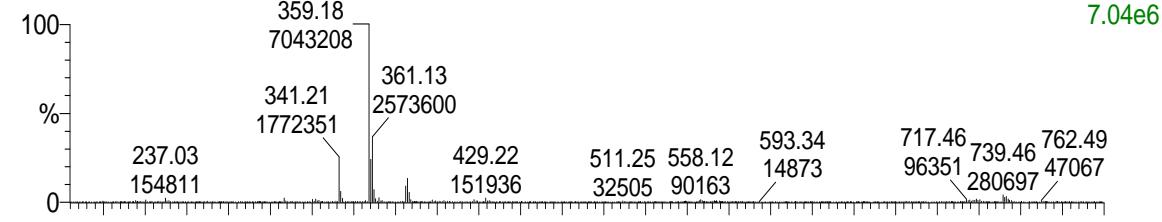
Isc0708d03 276 (5.101)



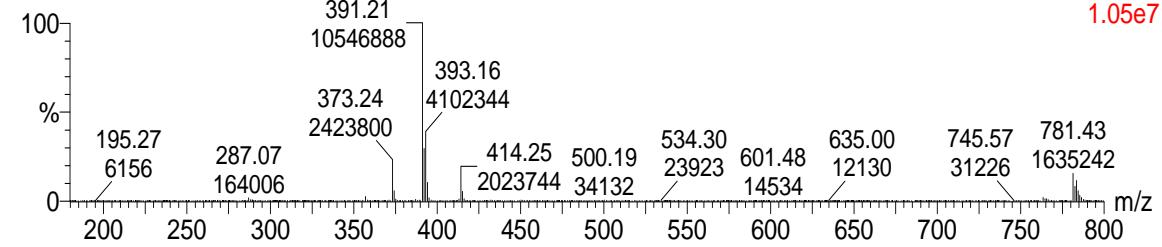
Isc0708d04 322 (5.951)



Isc0708d05 266 (4.916)

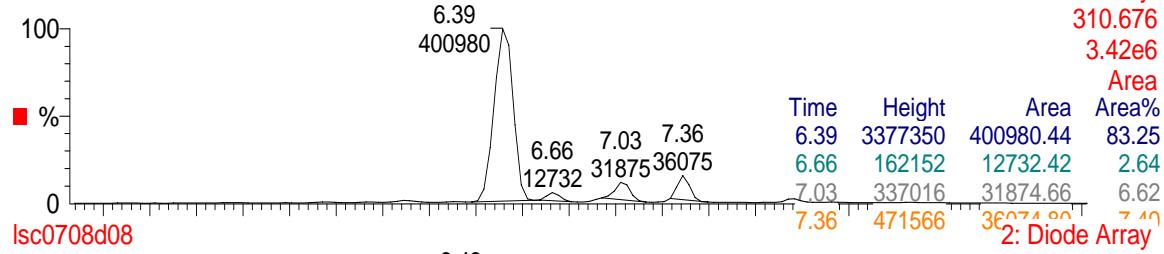


Isc0708d06 330 (6.099)

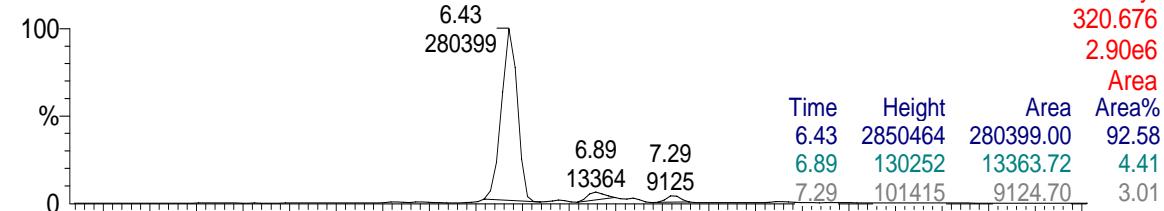


lsc

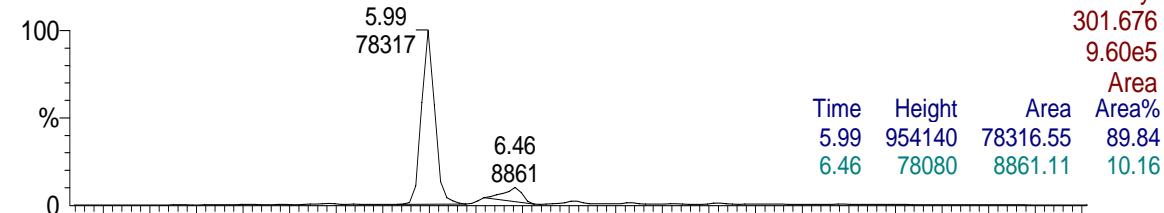
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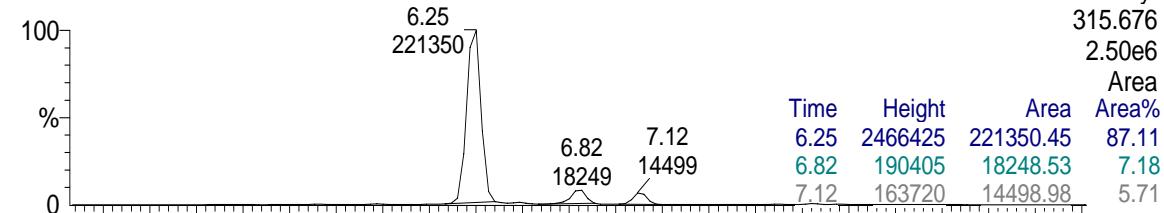
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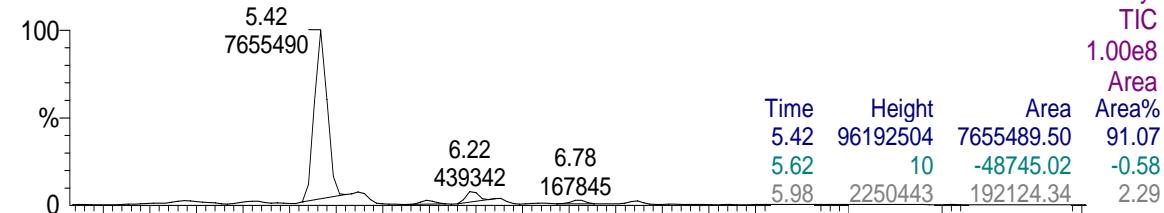
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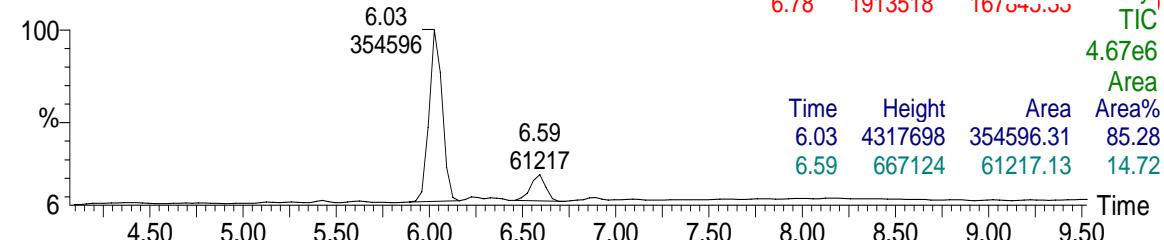
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lsc0708d11

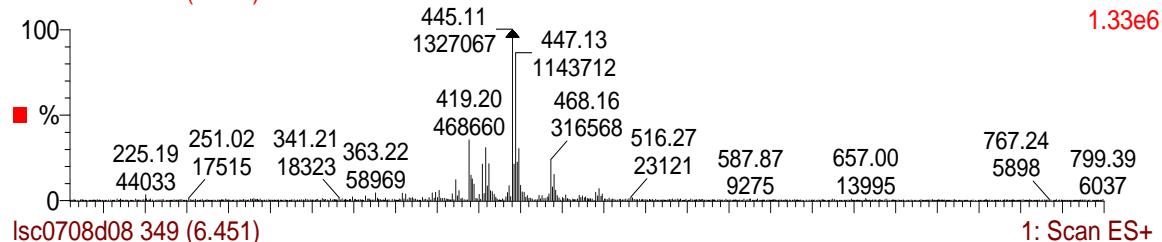


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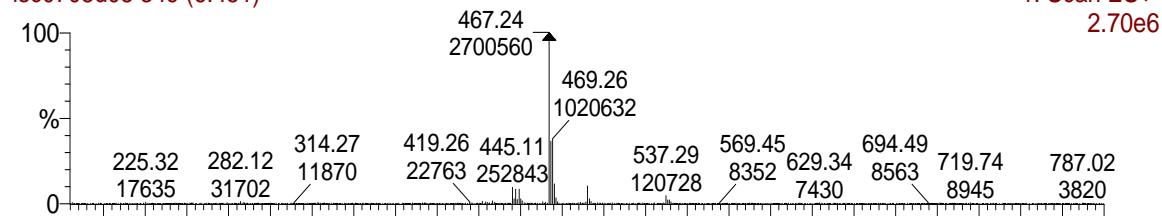


IscC&C

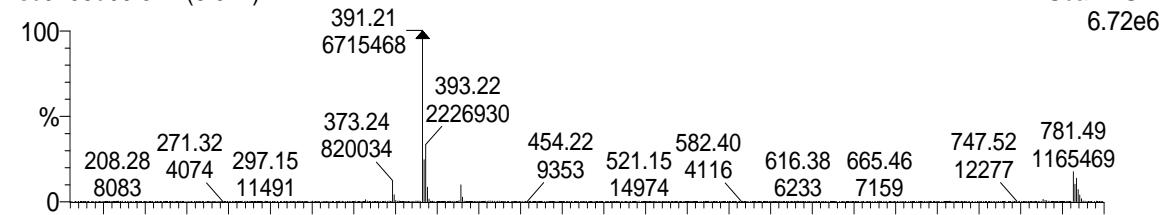
Isc0708d07 345 (6.377)



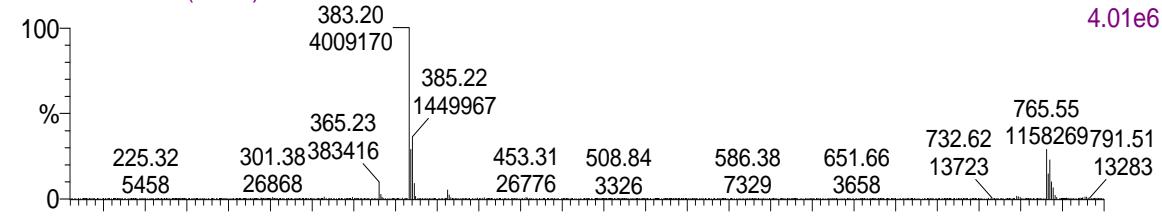
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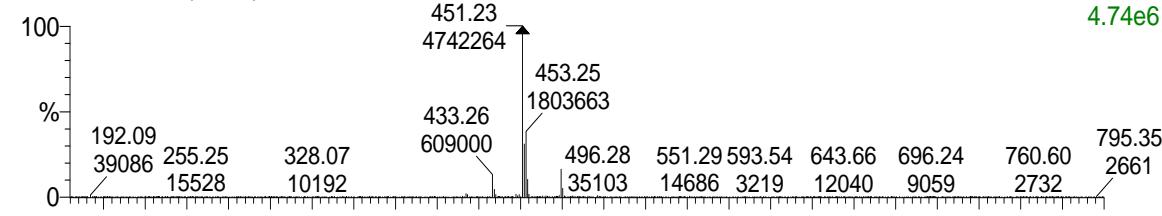
Isc0708d09 327 (6.044)



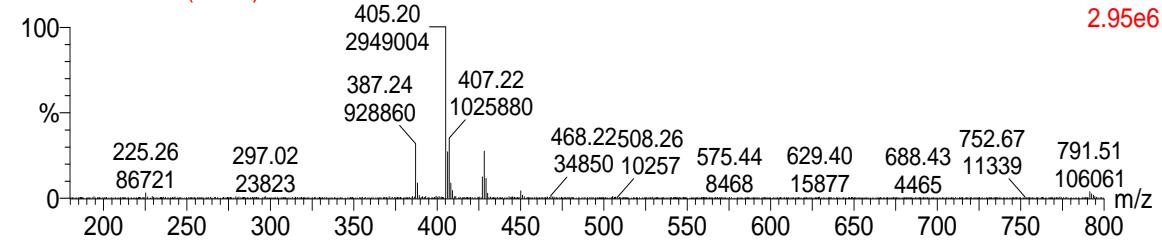
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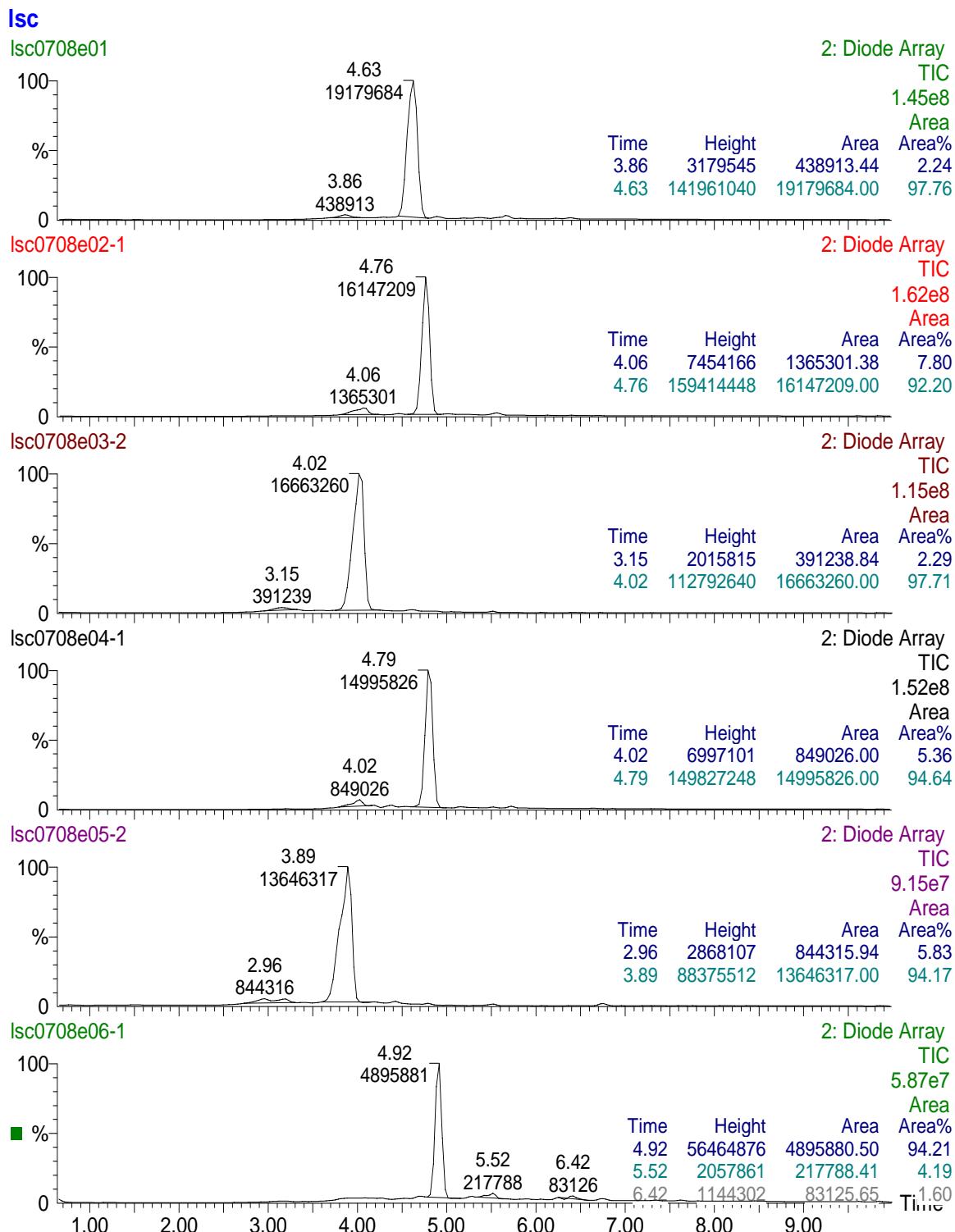


Isc0708d11 298 (5.508)



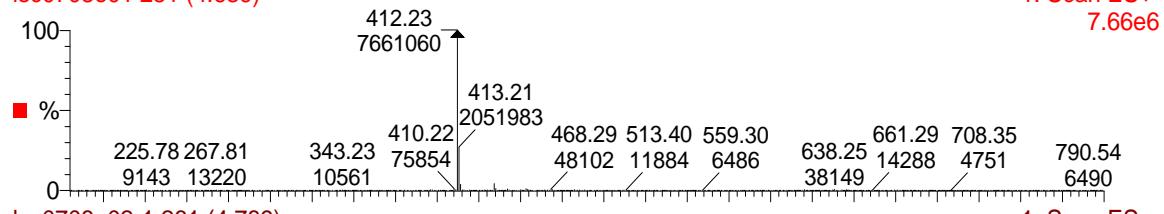
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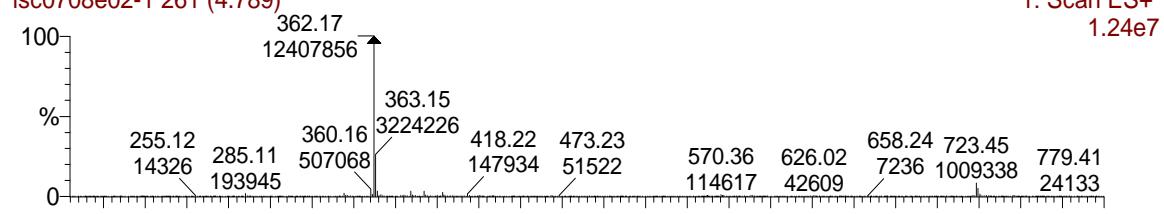
IscC&C

Isc0708e01 251 (4.639)



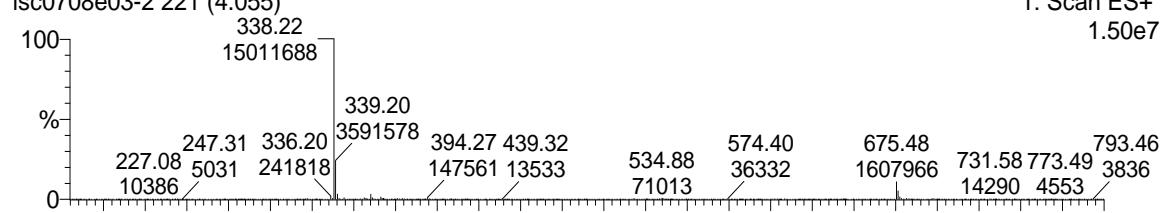
1: Scan ES+
7.66e6

Isc0708e02-1 261 (4.789)



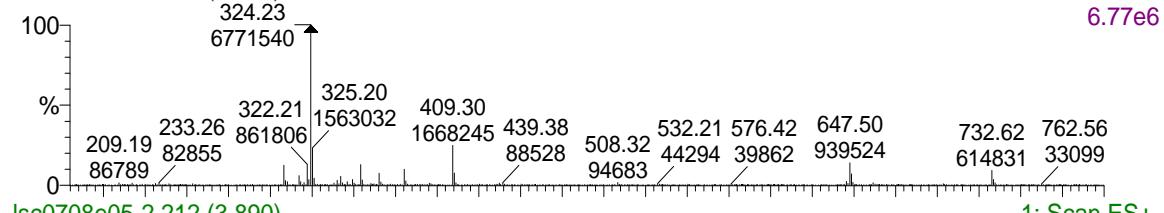
1: Scan ES+
1.24e7

Isc0708e03-2 221 (4.055)



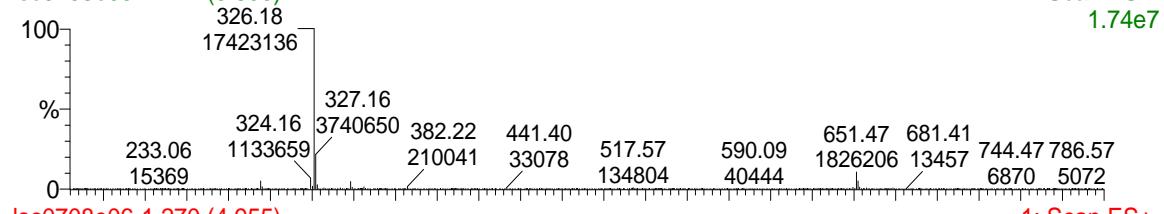
1: Scan ES+
1.50e7

Isc0708e04-1 262 (4.803)



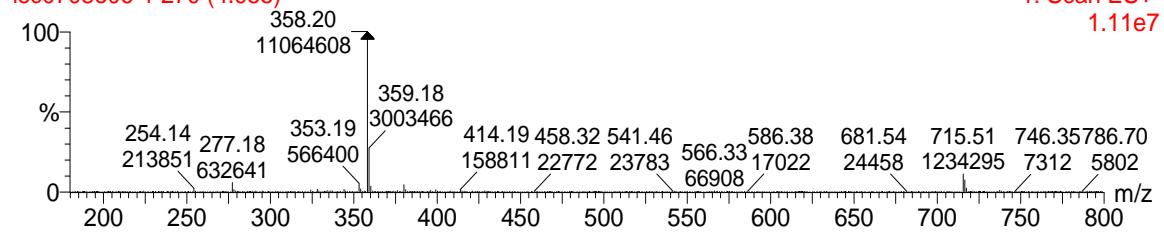
1: Scan ES+
6.77e6

Isc0708e05-2 212 (3.890)



1: Scan ES+
1.74e7

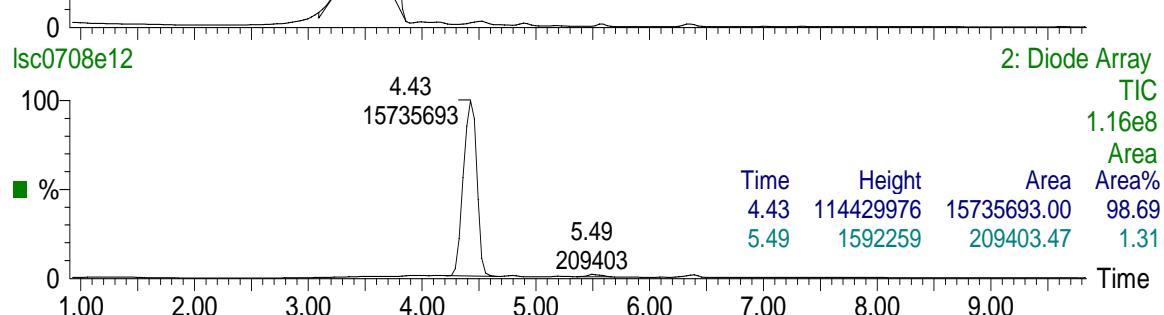
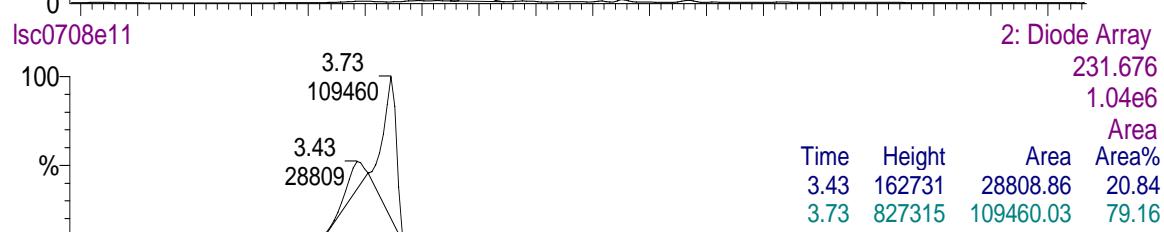
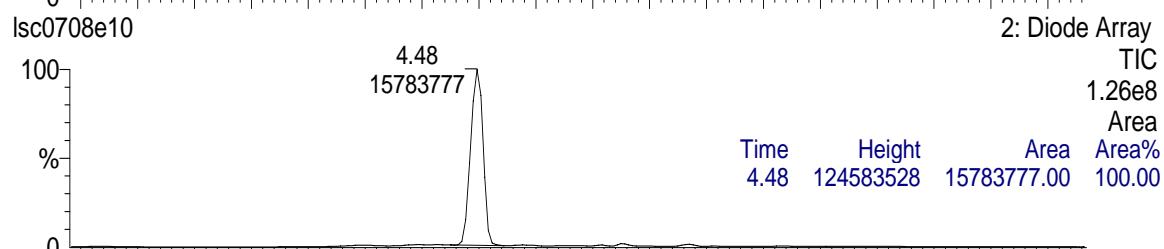
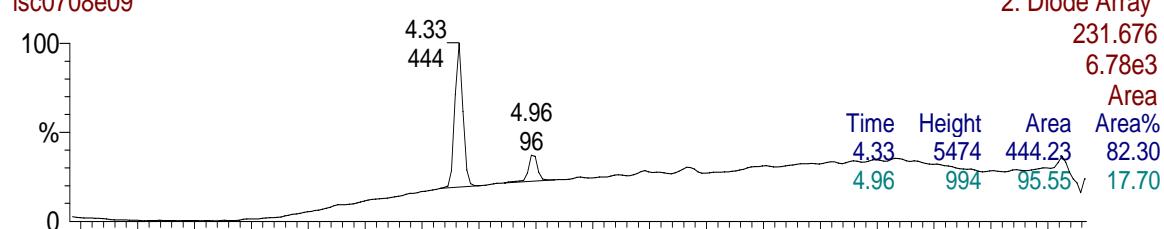
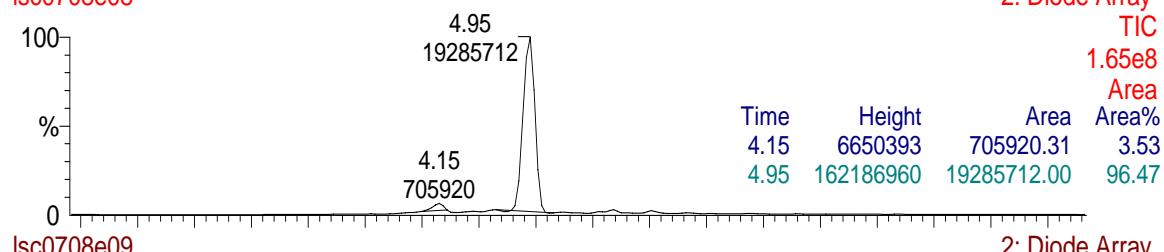
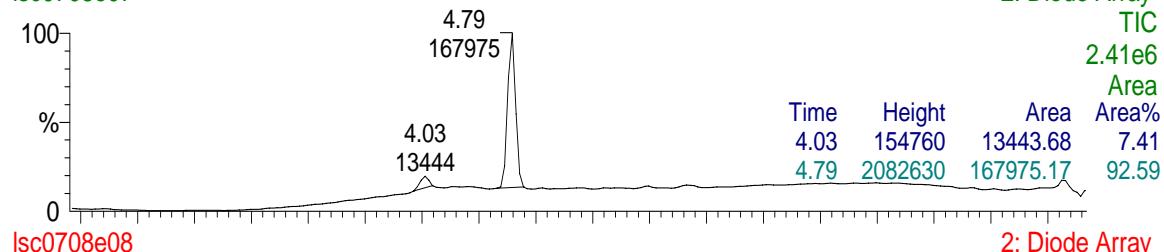
Isc0708e06-1 270 (4.955)



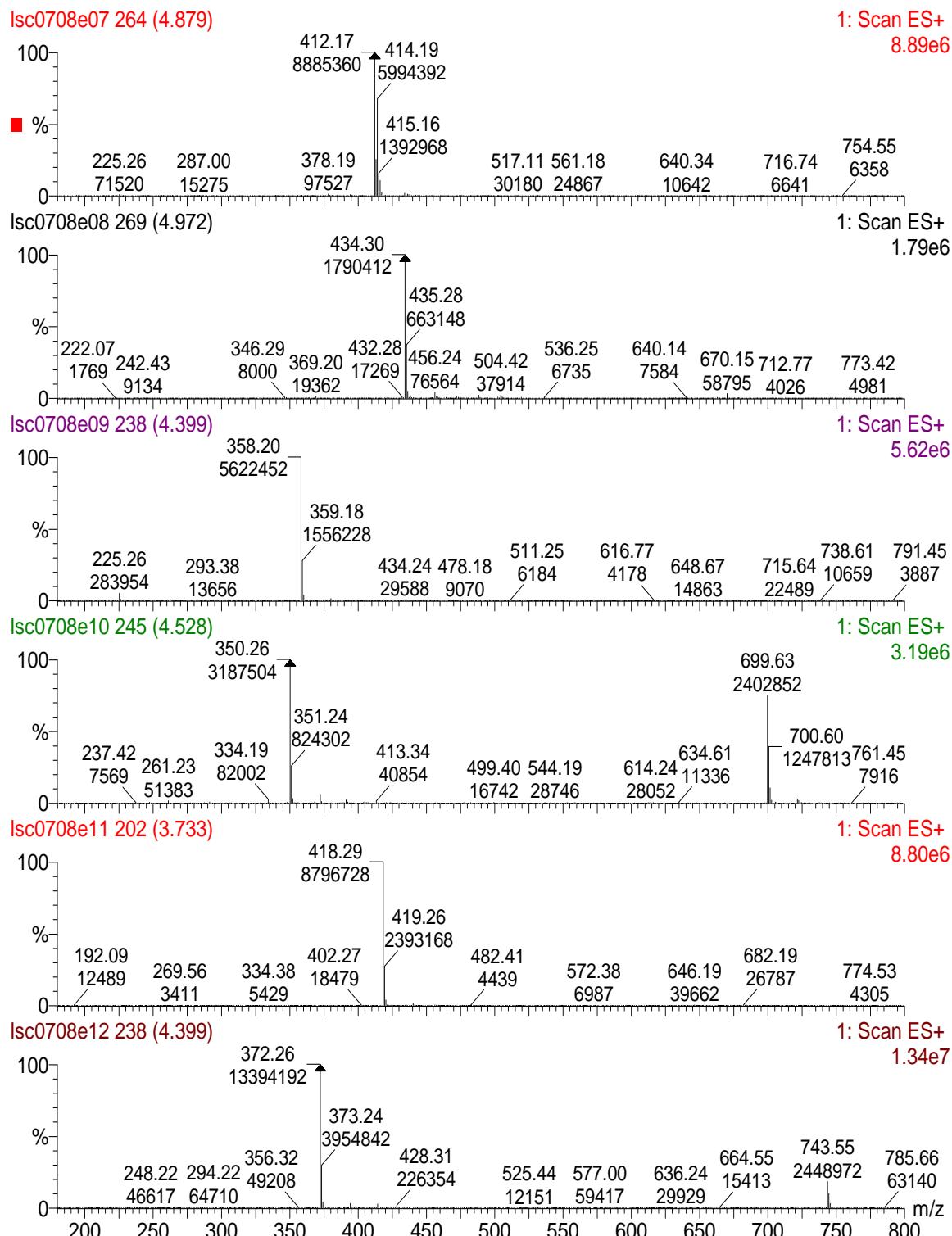
1: Scan ES+
1.11e7

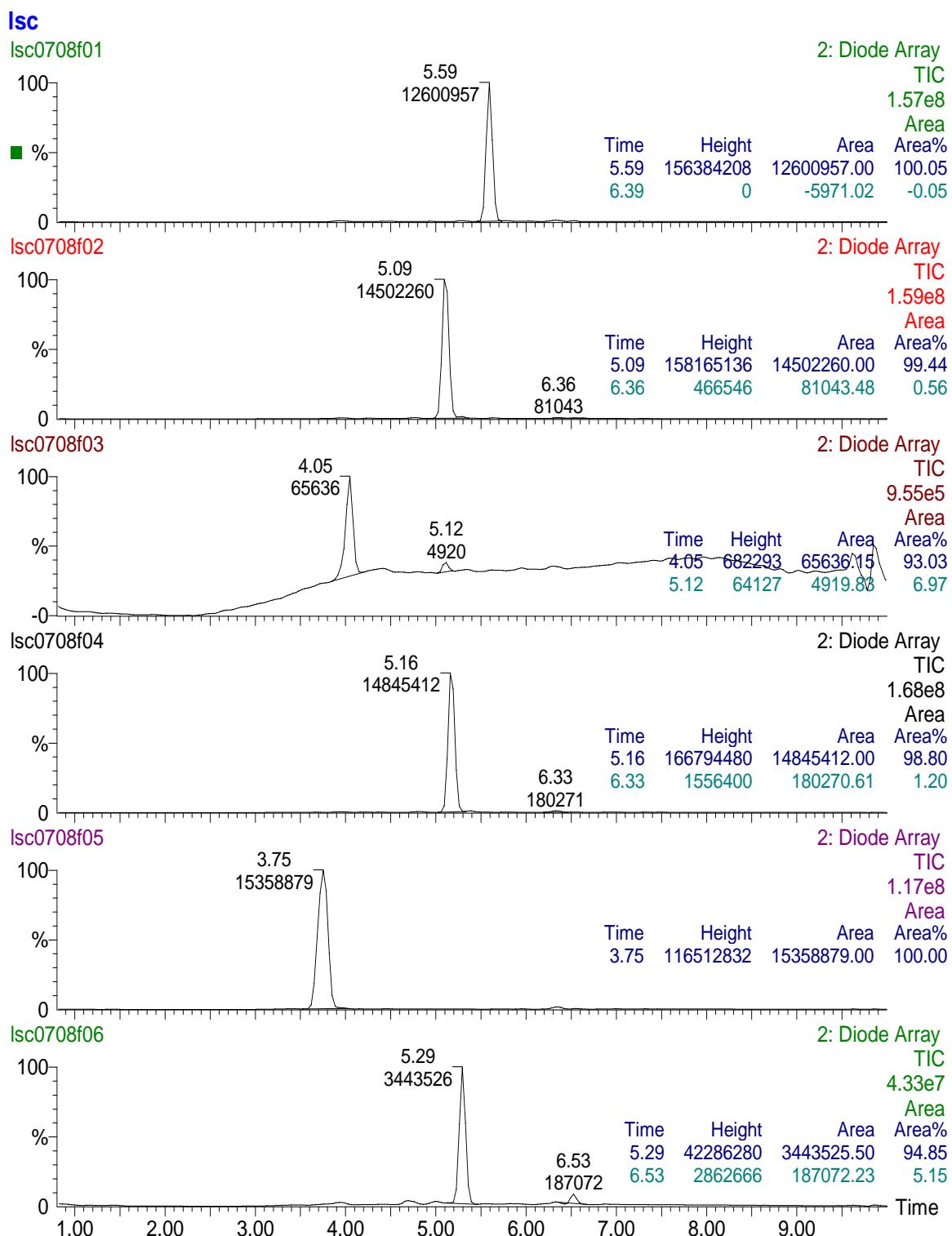
lsc

lsc0708e07

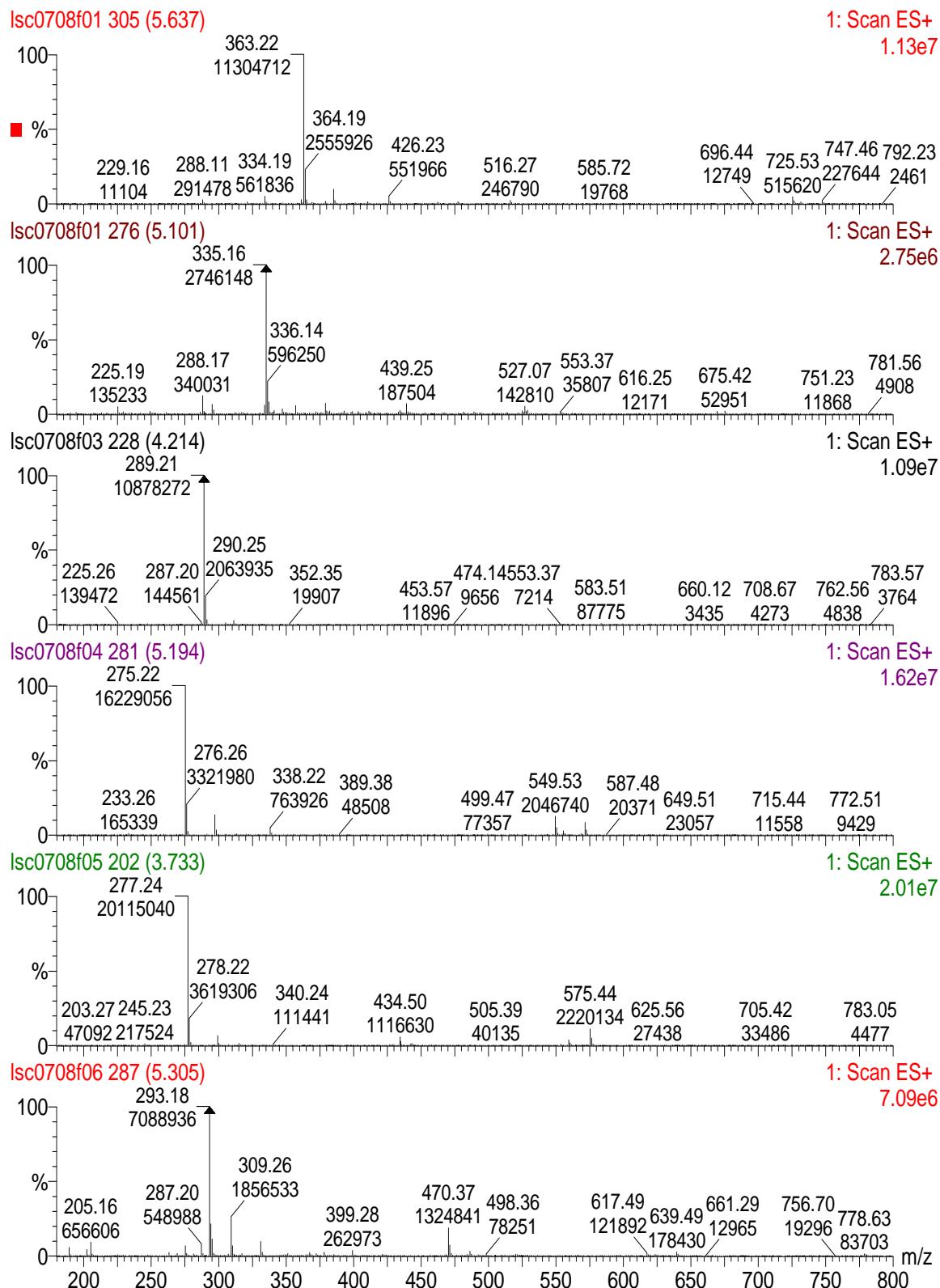


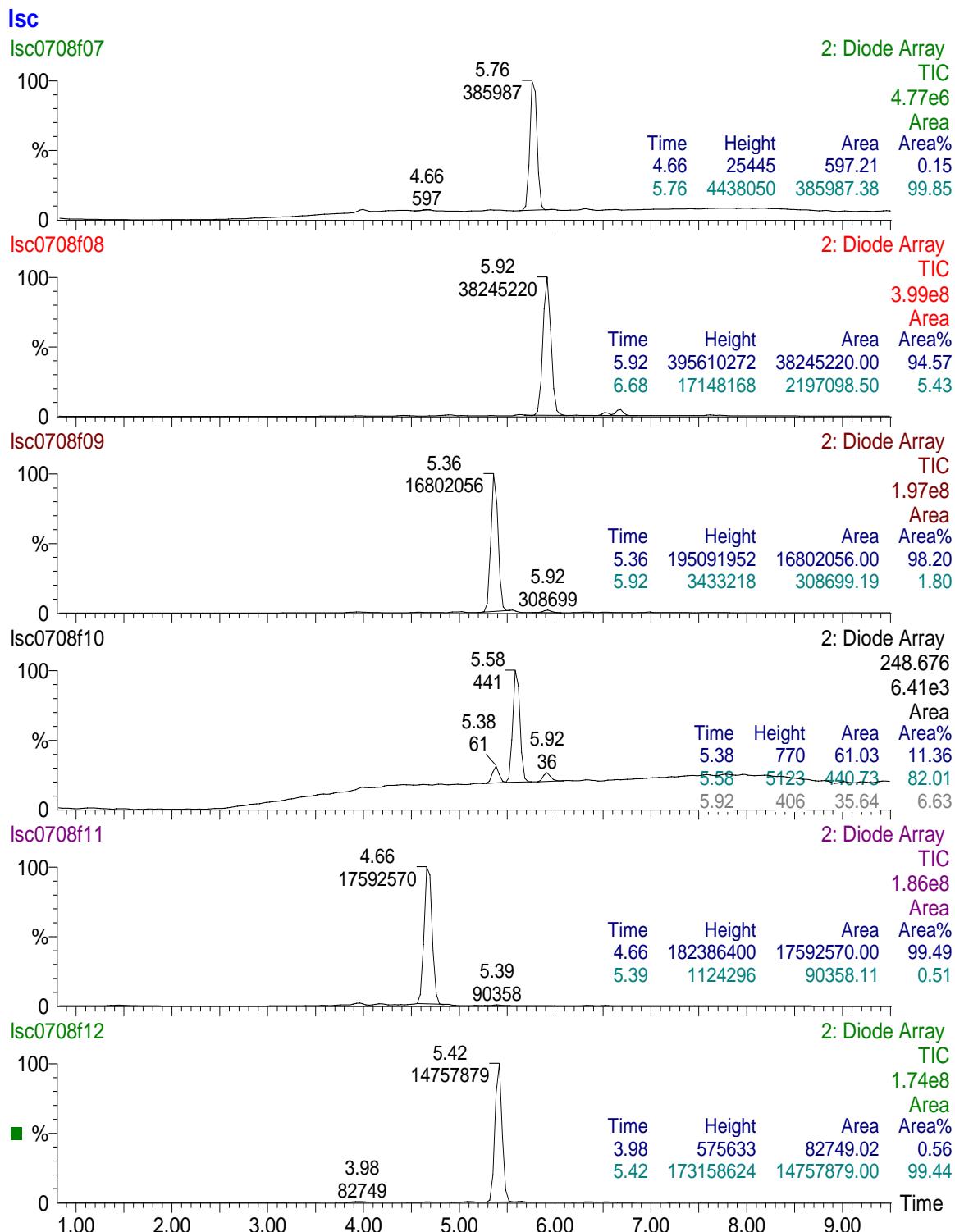
IscC&C



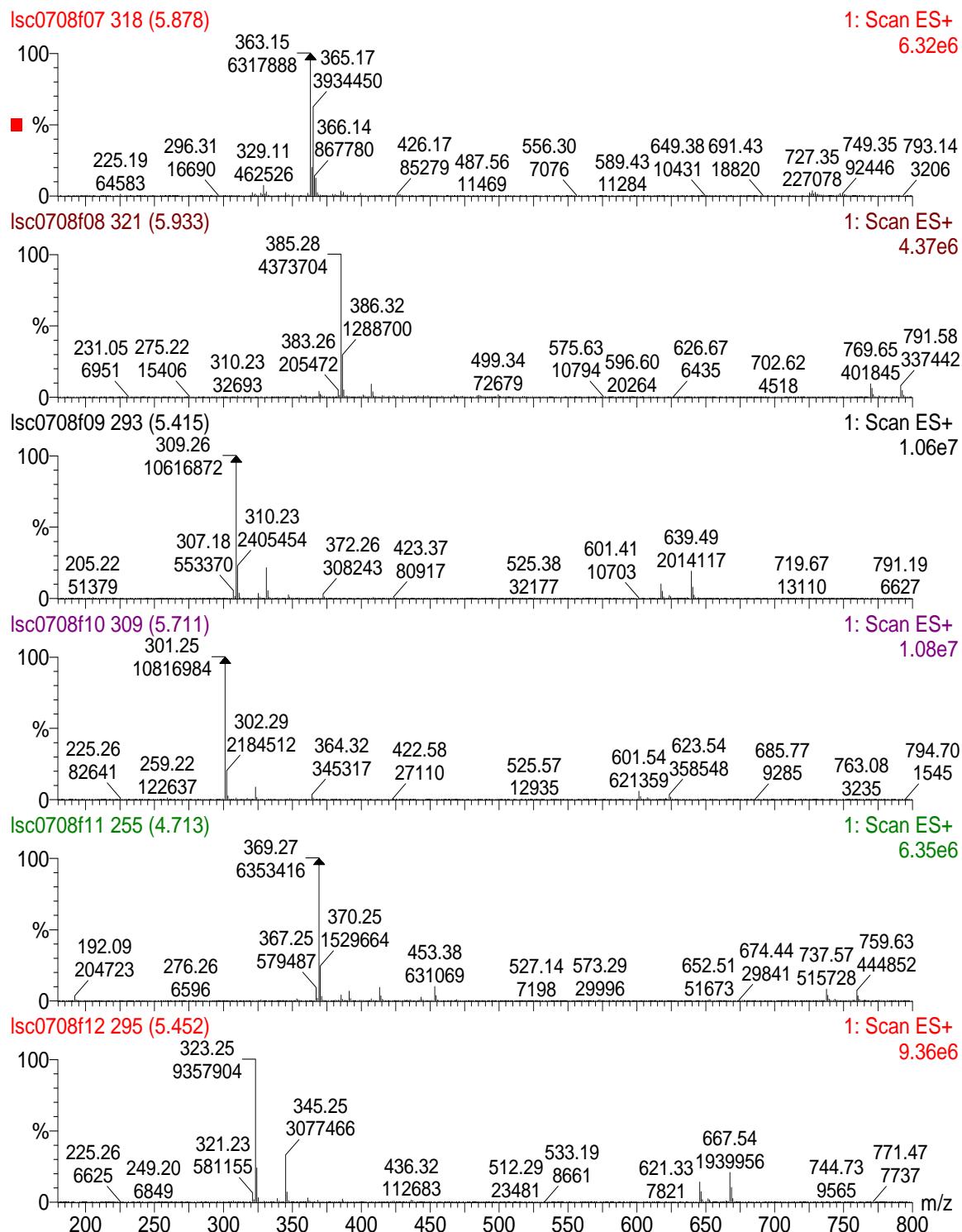


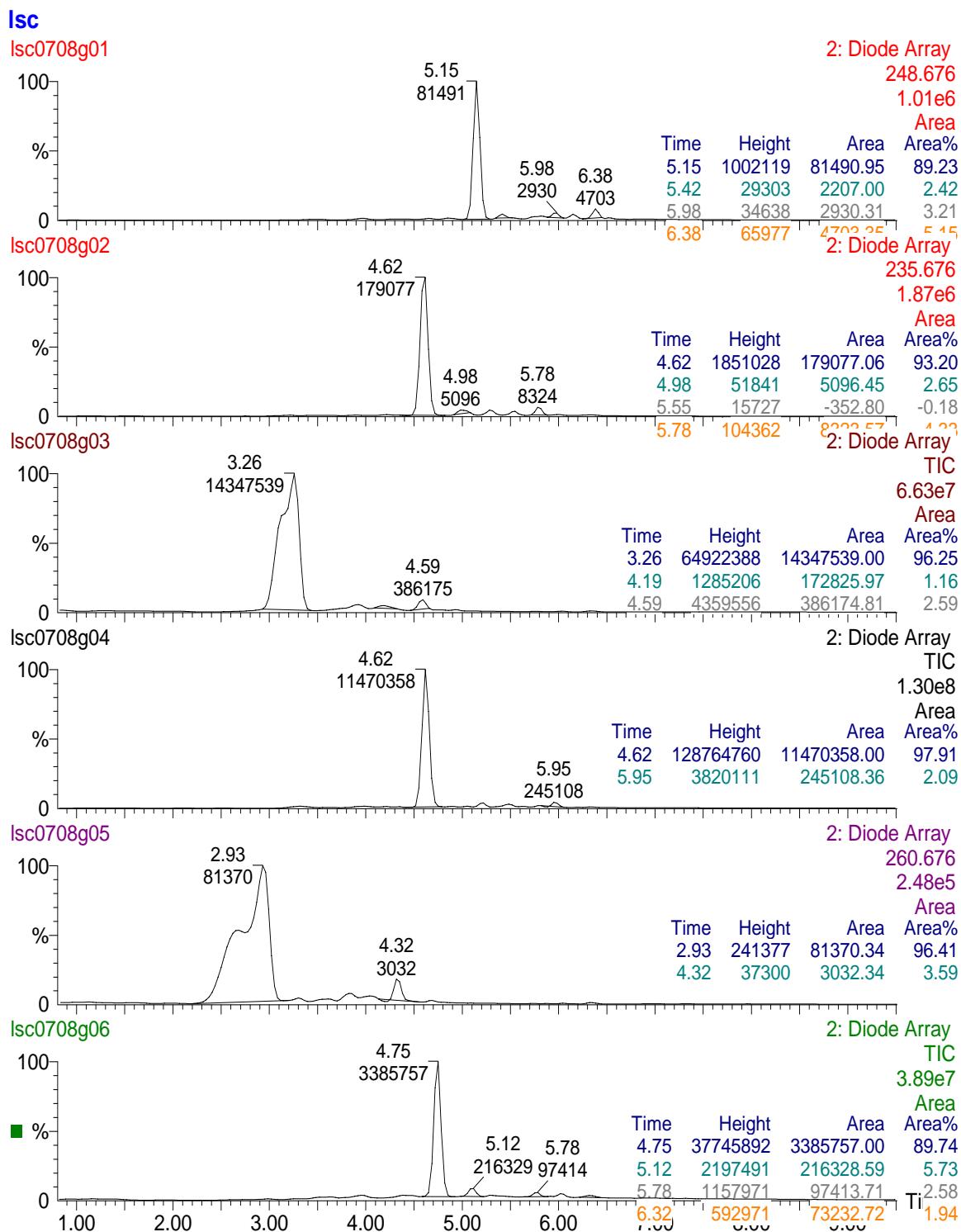
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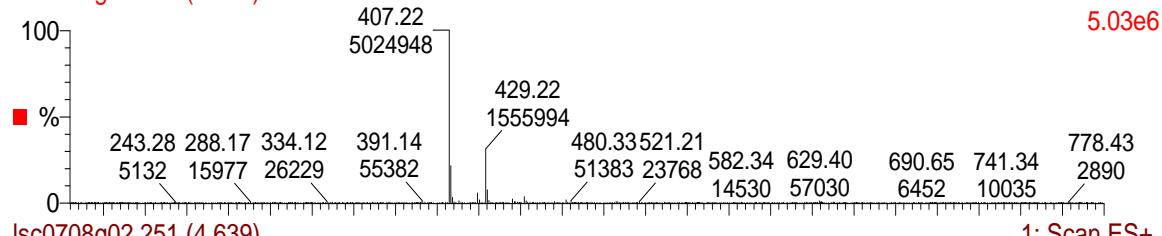
IscC&C



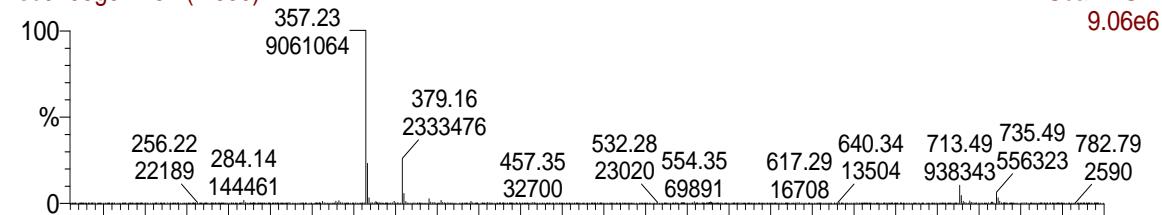


IscC&C

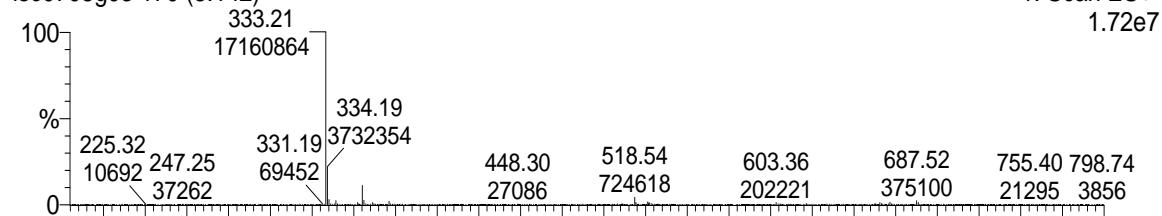
Isc0708g01 282 (5.212)



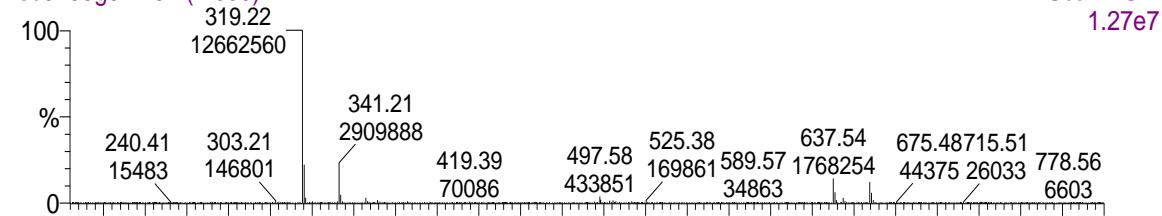
Isc0708g02 251 (4.639)



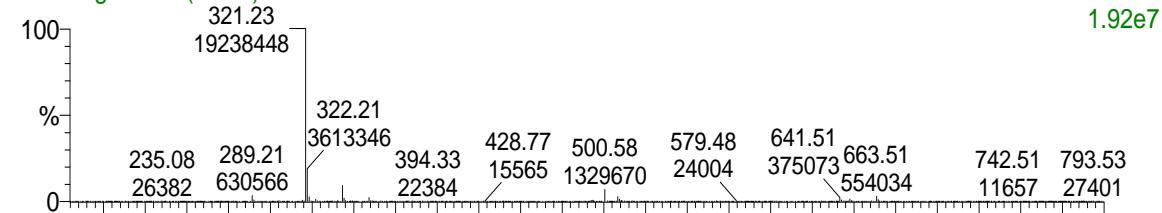
Isc0708g03 170 (3.142)



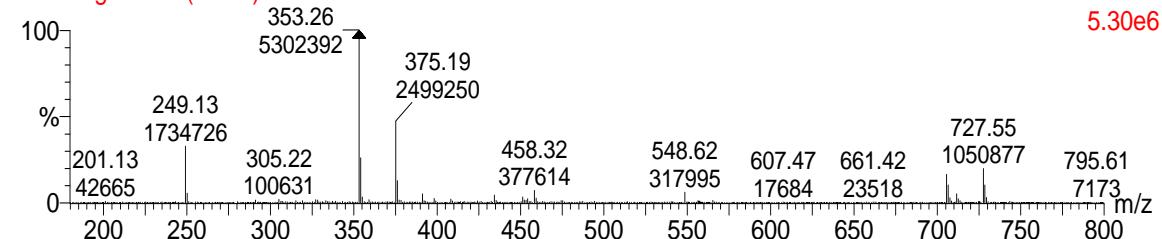
Isc0708g04 251 (4.639)



Isc0708g05 163 (3.013)

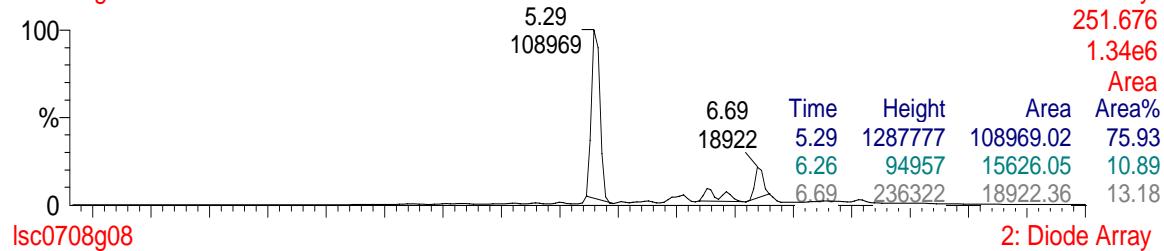


Isc0708g06 259 (4.787)

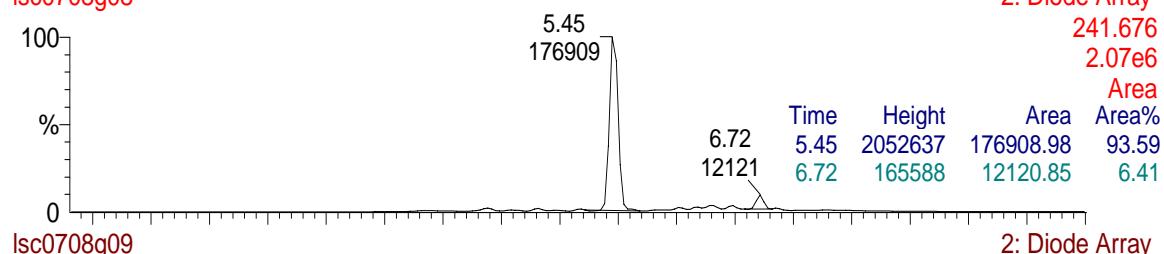


lsc

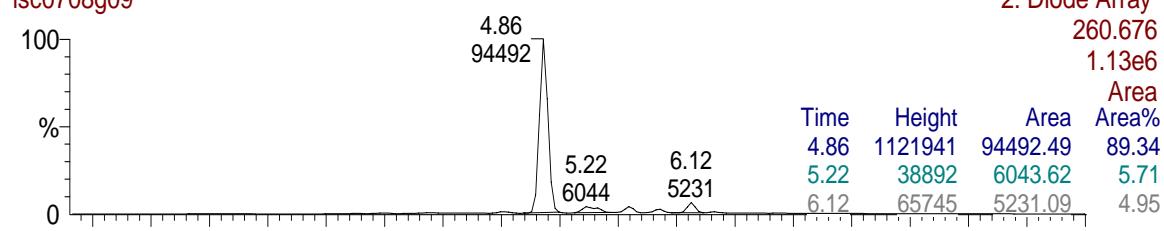
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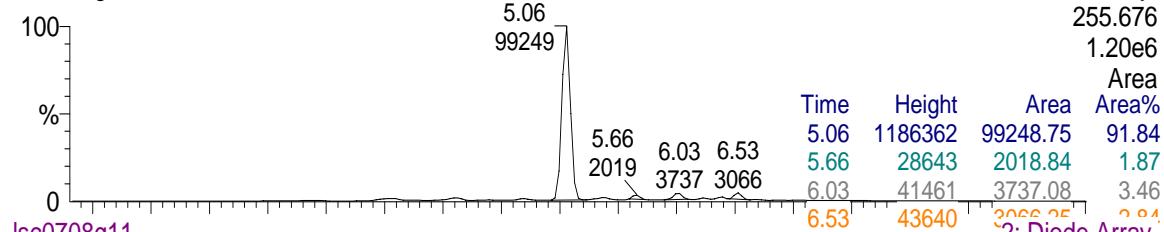
lsc0708g08



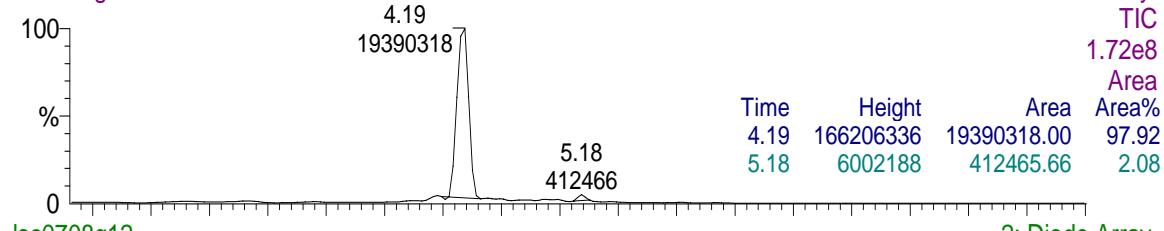
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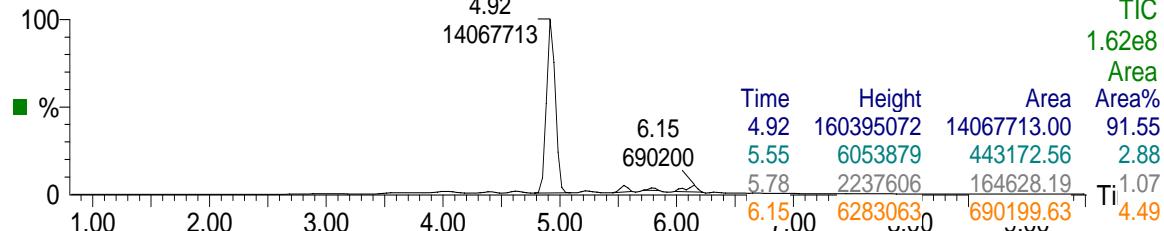
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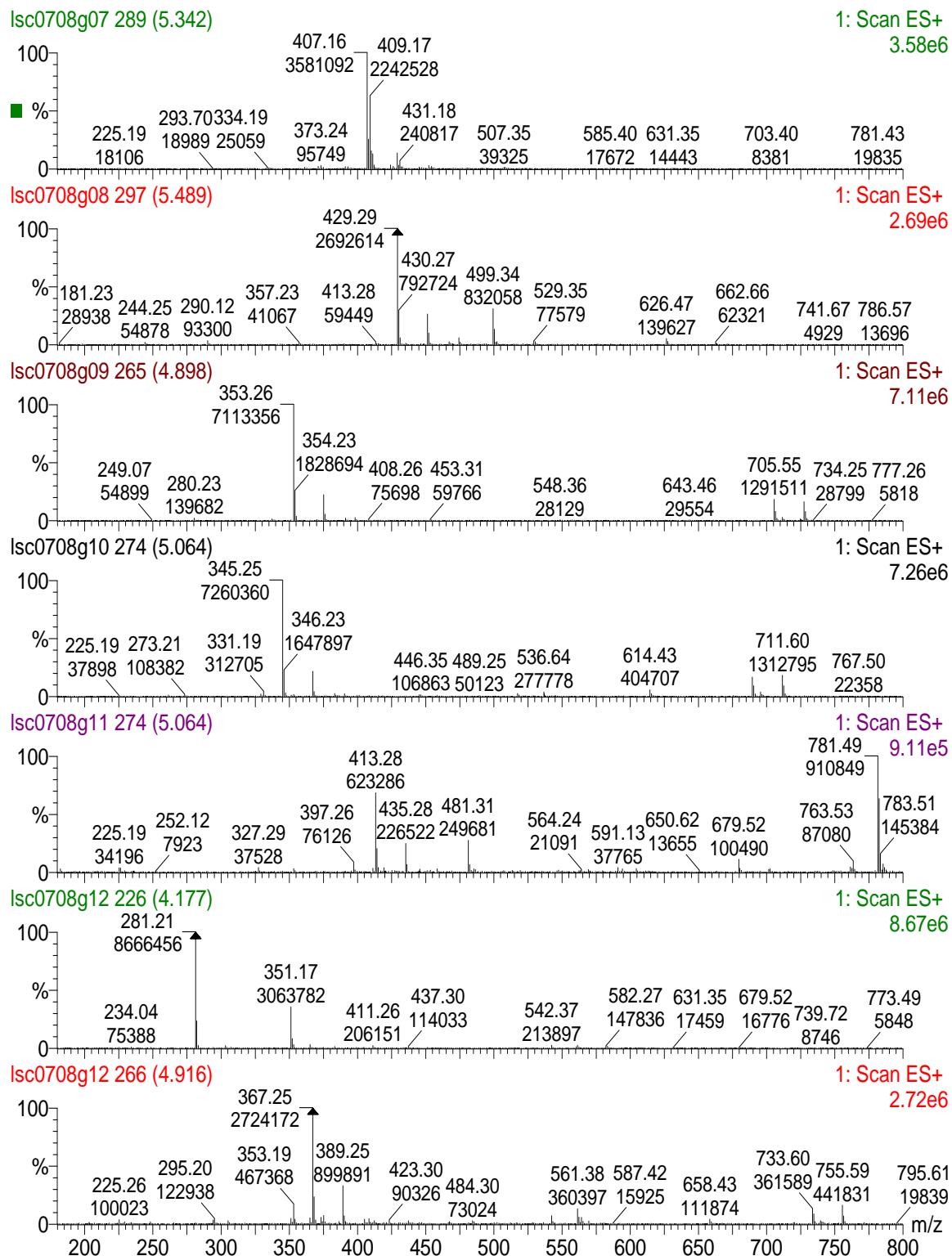
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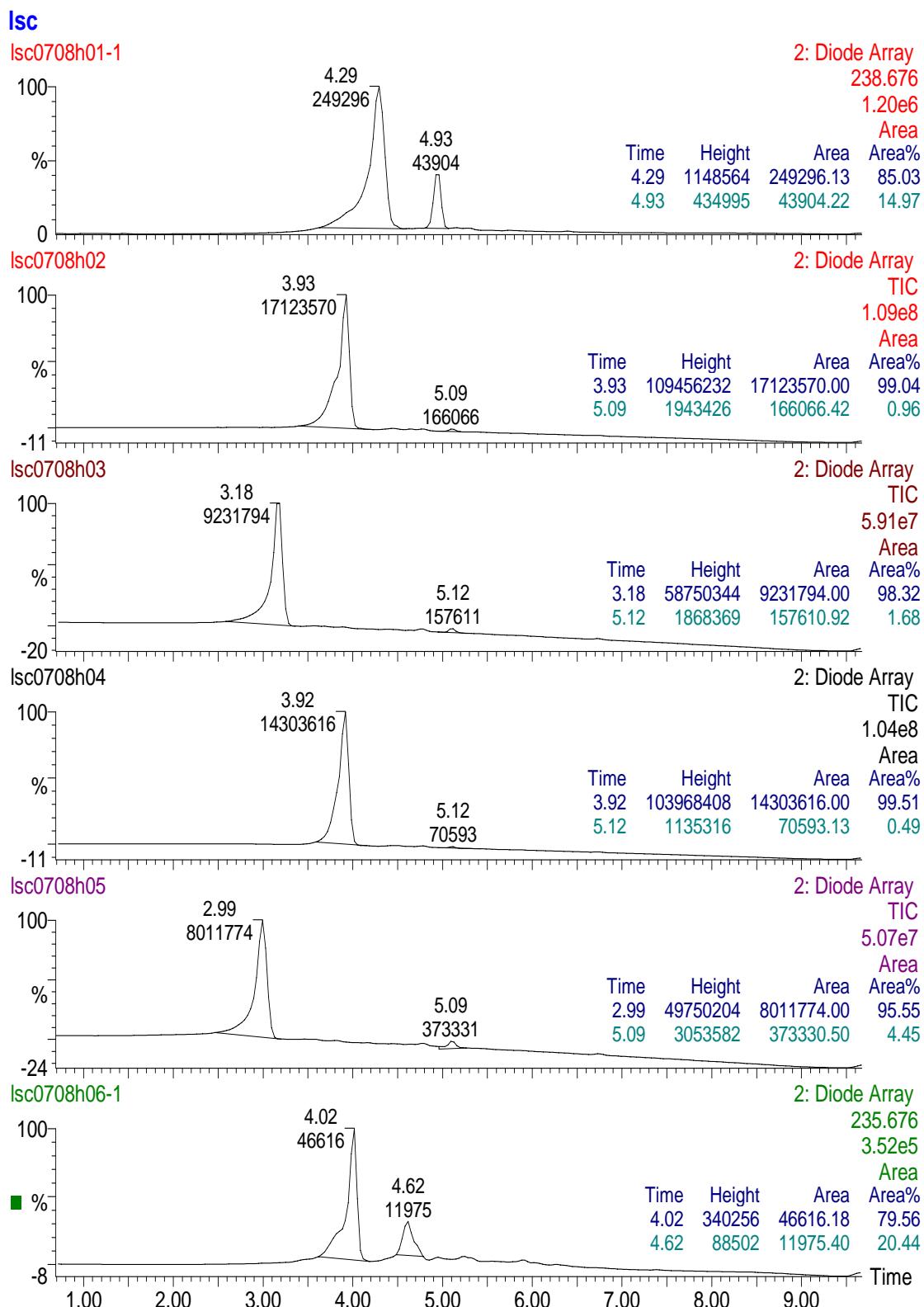


lsc0708g12



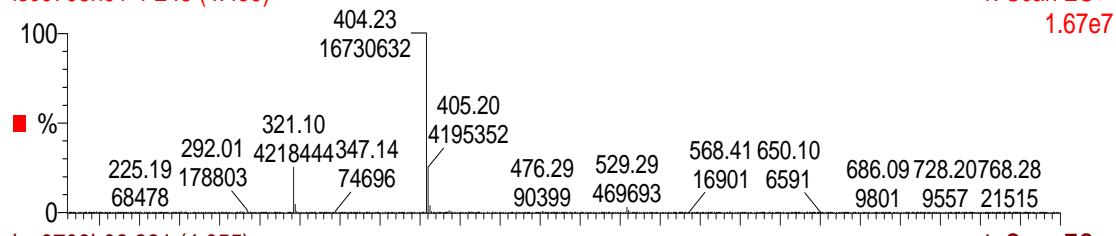
IscC&C



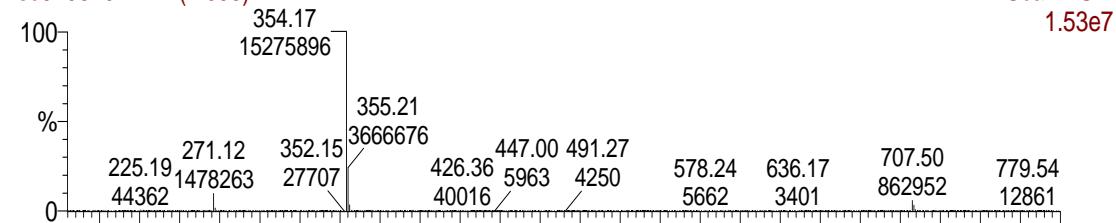


IscC&C

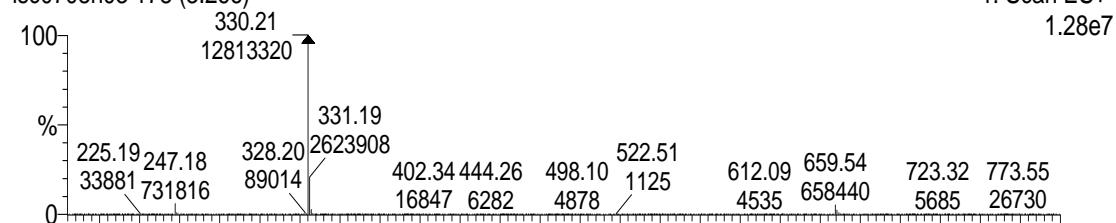
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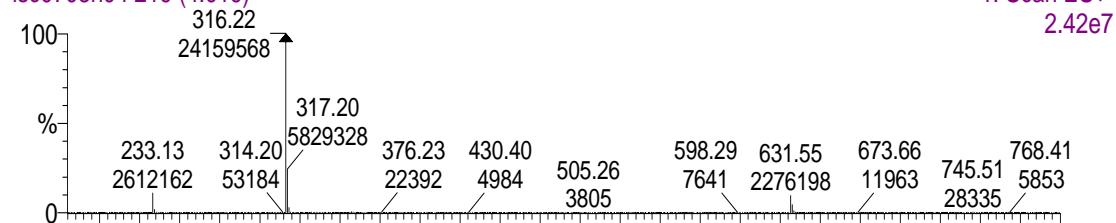
Isc0708h02 221 (4.055)



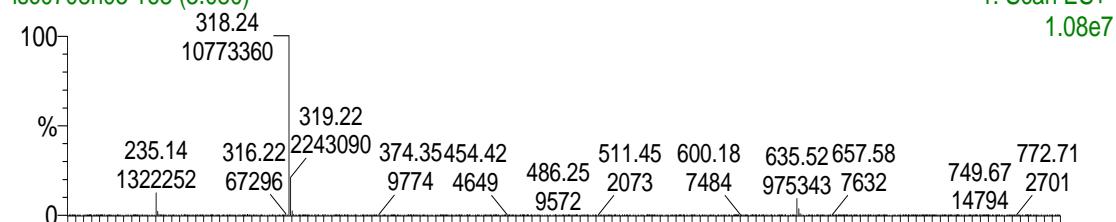
Isc0708h03 178 (3.266)



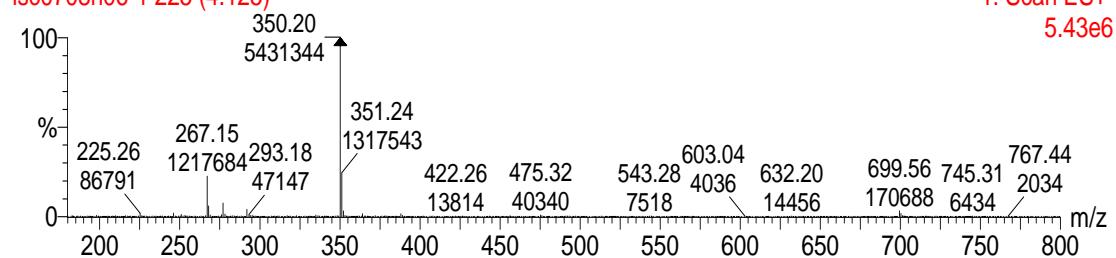
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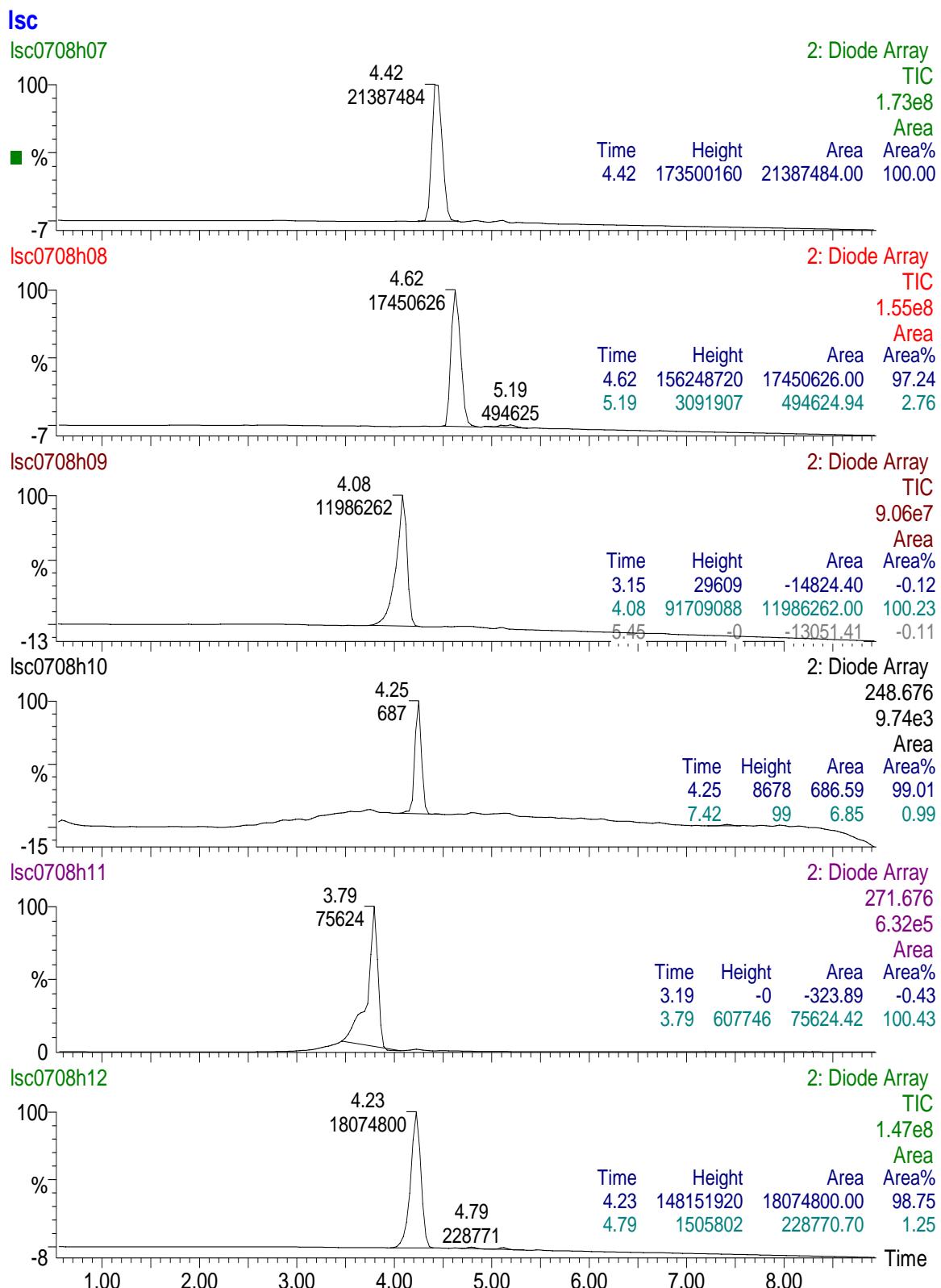


Isc0708h05 168 (3.080)



Isc0708h06-1 225 (4.125)





IscC&C

