Supporting information

Second generation steroidal 4-aminoquinolines are potent, dual-target inhibitors of the botulinum neurotoxin serotype A metalloprotease and *P. falciparum*

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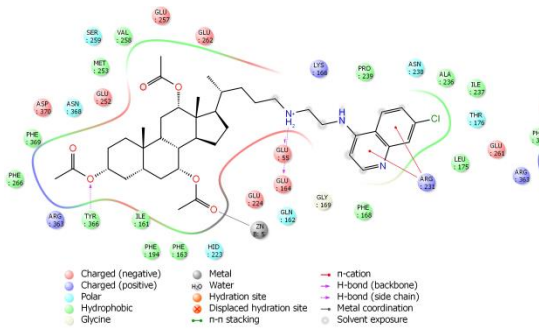
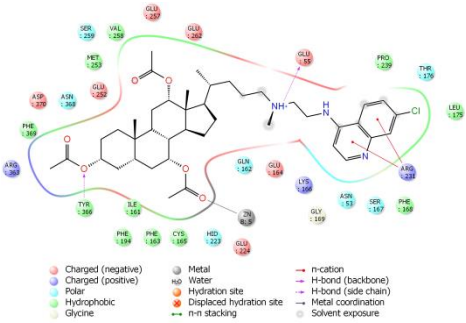
Table 1S. In vitro inhibitory activities of tested compounds against BoNT/A LC

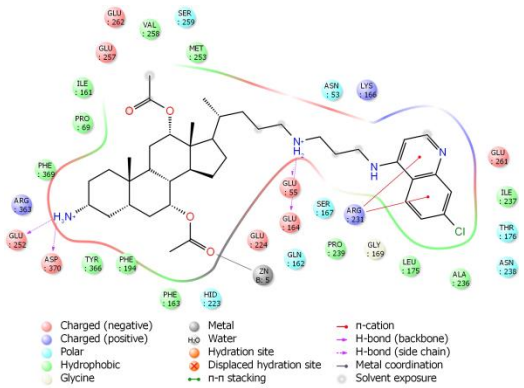
Compound	% Inhibition (10 µM)
10	72.95
62	97.09
63	99.00

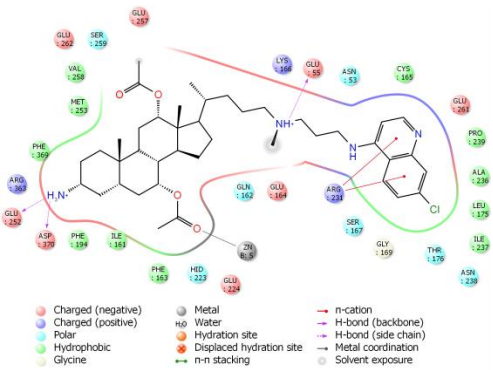
Ligand interaction diagrams



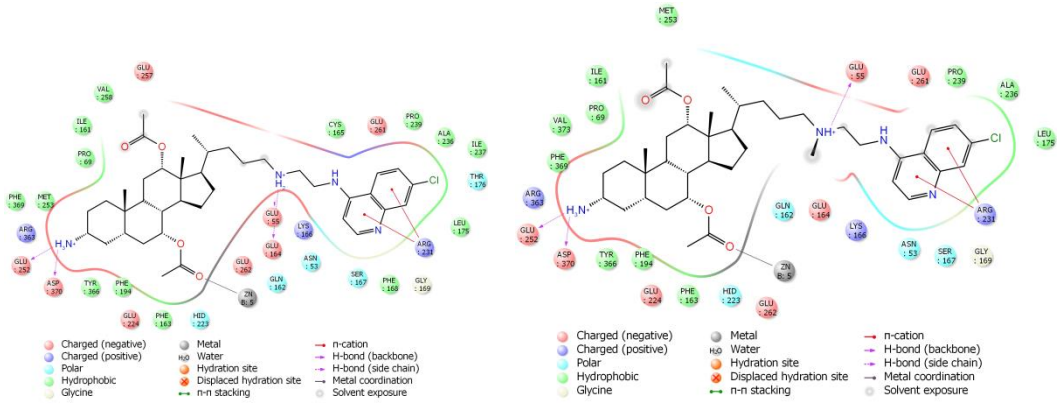


12 **20**



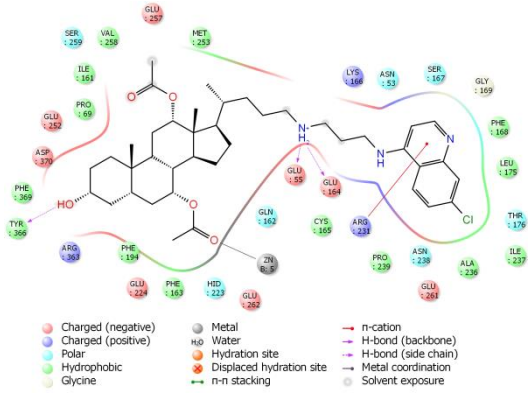


53 **55**



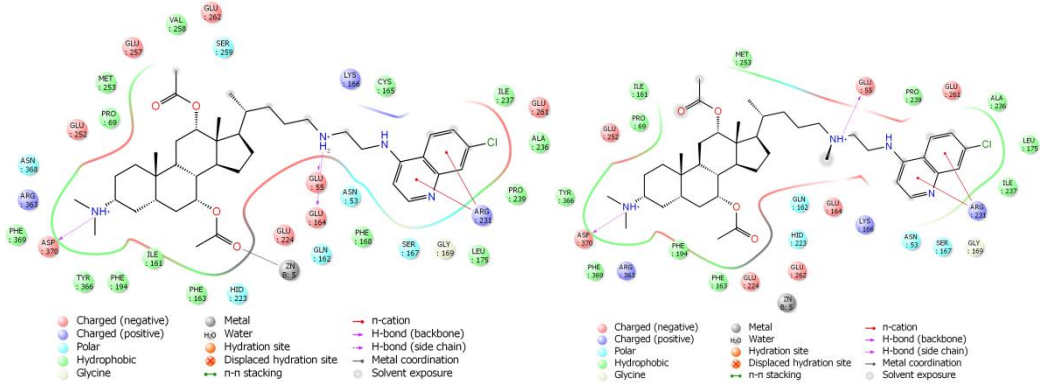
52 **54**

Figure S1. Ligand interaction diagrams for derivatives **12** (a), **20** (b), **53** (c) and **55** (d), (e) **52**, (f) **54**.

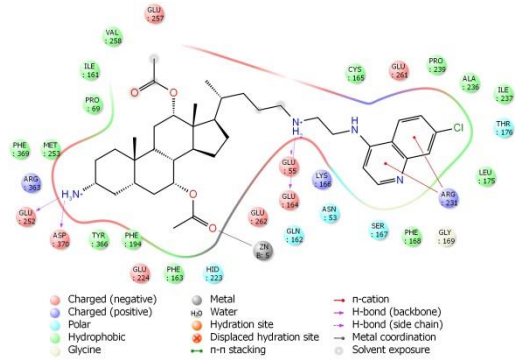


17

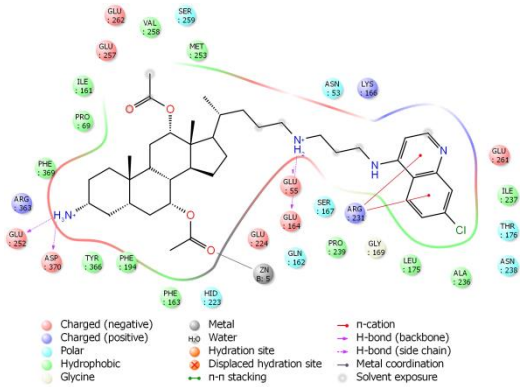
Figure S2. Ligand interaction diagrams for derivative **17**.



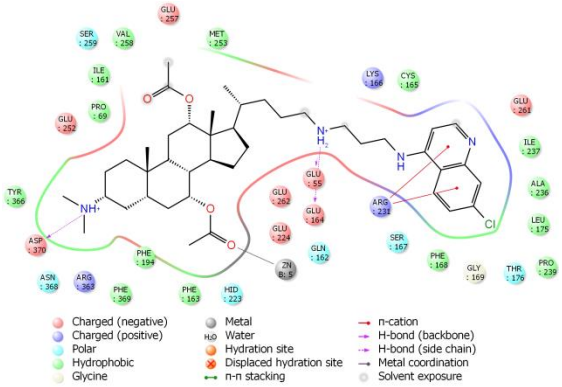
50 **56**



52

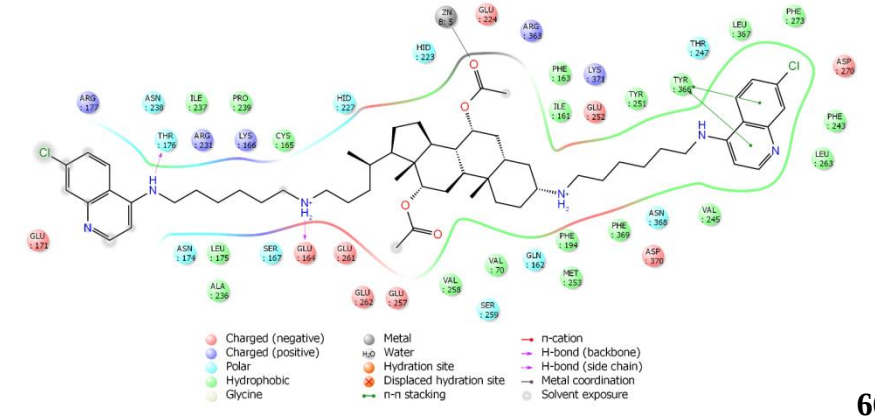


53

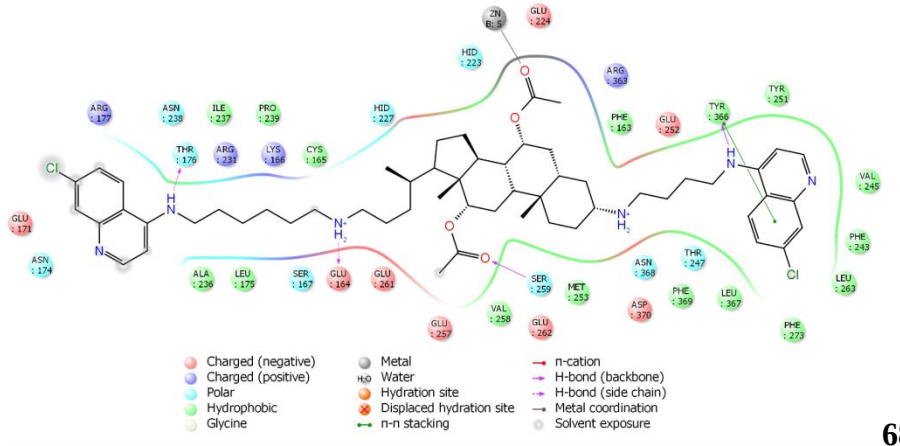


51

Figure S3. Ligand interaction diagrams for derivatives, **50**, **56 or 52, 53,** and **51**.



66



68

Figure S4. Ligand interaction diagrams for derivatives (a) **66** (b) **68**.

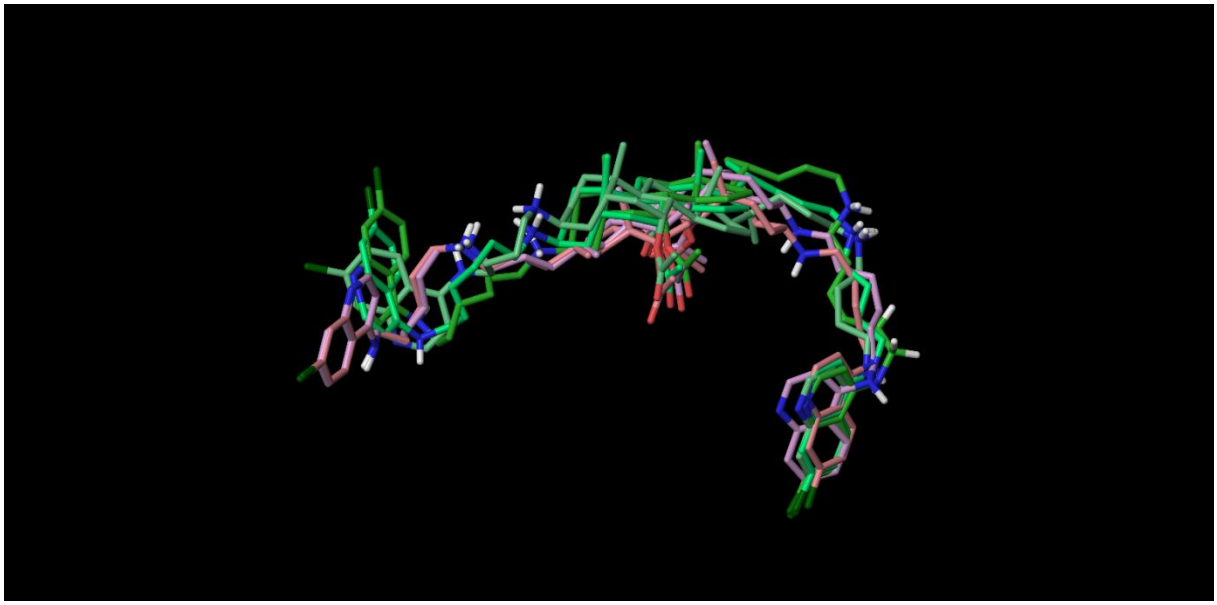
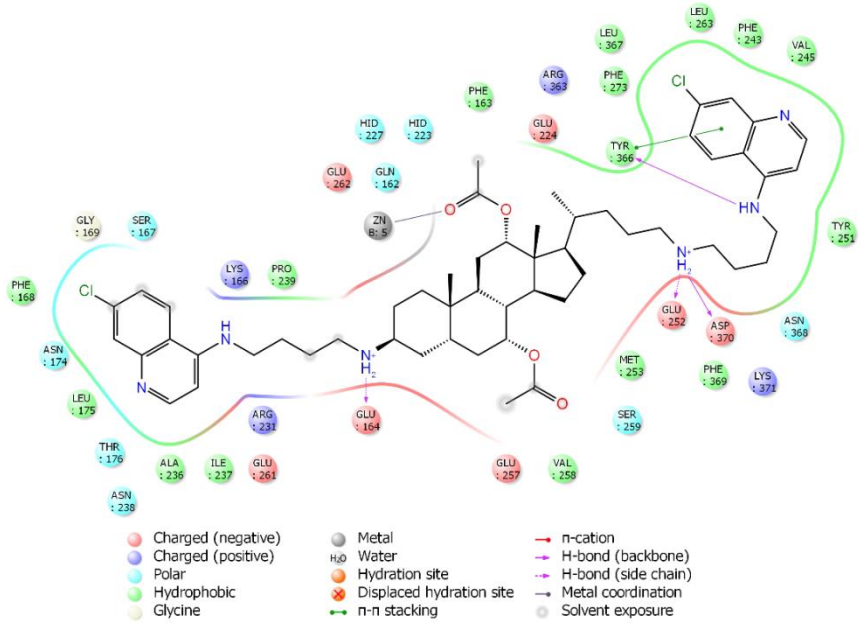
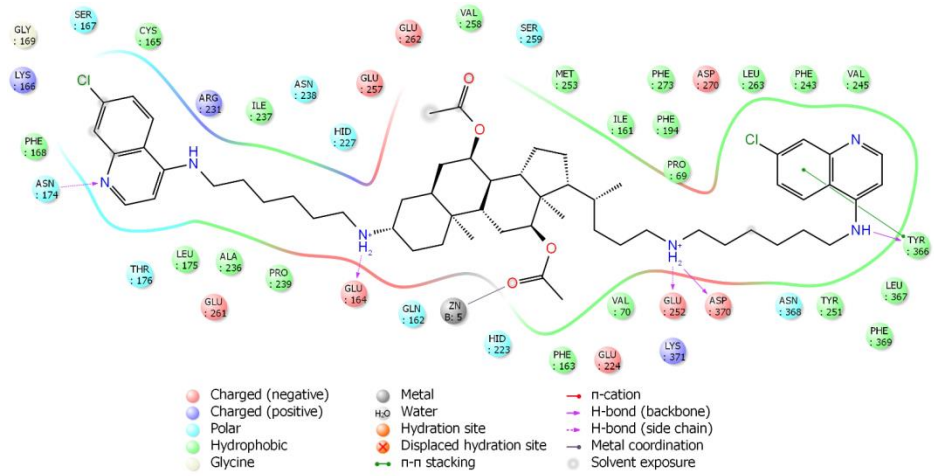


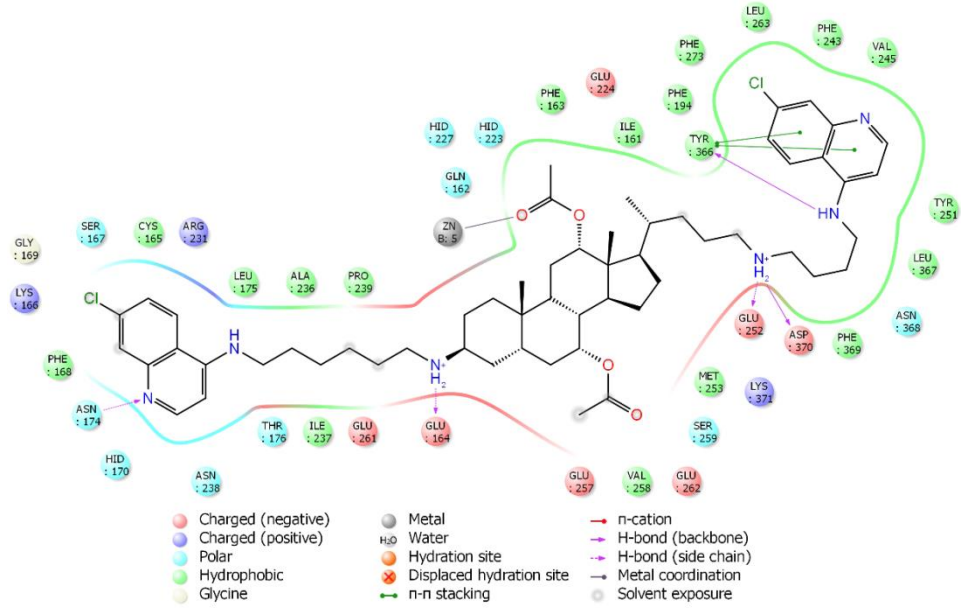
Figure S5. Overlapped docked structures of α- and β-series of bis-ACQ derivatives. α-Series (**66** and **68**) is in pink, β-series (**64**, **65** and **67**) is in green).



64



65



67

Figure S6. Ligand interaction diagrams for derivatives (a) **64**, (b) **65** and (c) **67**.

Chemistry

Synthesis

***N*-(3α,7α,12α-Triacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-propane-1,3-diamine (13)**. Compound **13** was obtained according to procedure described for **12,** using **11** (1.9 g, 3.65 mmol) and ACQ3 (1.99 g, 8.44 mmol). Yield 1.18g (44 %). Colorless foam softens at 91-95 ºC. $[\alpha]_D^{20}$ = +0.106 (c = 2.0×10^{-3} g/mL, DCM). IR (ATR): 2936w, 2866w,

1727s, 1610s, 1579s, 1535w, 1446w, 1365m, 1330w, 1232s, 1136w, 1021m, 964w, 938w, 882w, 820w, 803w cm^{-1}. ^1H NMR (500 MHz, $CDCl_3$, δ): 8.46 (*d*, *J* = 5.5, H-C(2')), 7.906 (*d*, *J* = 2.0, H-C(8')), 7.76 (*d*, *J* = 9.0, H-C(5')), 7.34, (*dd*, J_1= 2.5, J_2 = 9.0, H-C(6')), 6.29 (*d*, *J* = 5.5, H-C(3')), 5.11-5.10 (*m*, H-C(12)), 4.91-4.89 (*m*, H-C(7)), 4.62-4.40 (*m*, H-C(3)), 3.395 (*t*, *J* = 6.0, 2H-C(9')), 2.99-2.92 (*m*, 2H-C(11')), 2.82-2.62 (*m*, 2H-N, 2H-C(24)), 2.12 (*s*, CH_3COO), 2.06 (*s*, CH_3COO), 2.03 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.85 (*d*, *J* = 6.5, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.54, 170.50, 170.39, 151.53, 150.76, 148.50, 134.87, 127.96, 124.82, 122.26, 117.45, 98.22, 75.43, 74.01, 70.61, 50.38, 49.28, 47.39, 45.04, 43.79, 43.55, 40.88, 37.69, 34.86, 34.57, 34.25, 33.24, 31.19, 28.98, 27.28, 26.87, 26.81, 26.09, 25.61, 22.74, 22.52, 21.48, 21.45, 21.39, 17.87, 12.23. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 738.4226 (error -2.40 ppm). Combustion analysis for ($C_{42}H_{60}ClN_3O_6 \times 1.5H_2O$): calculated C 65.91, H 8.30, N 5.49; found C 66.12, H 7.92, N 5.49. HPLC purity: Method A: RT 2.092, area 98.69 %; method B: RT 8.698, area 95.46 %.

***N*-(3α,7α,12α-Triacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-butane-1,4-diamine (14)**. Alcohol **11** (2.11 g, 4.08 mmol) was dissolved in DCM (440 mL), PCC (1.32 g, 6.11 mmol) was added and mixture was stirred at r.t. for 6 h. Reaction mixture was filtered through short column of SiO_2 (eluent DCM/EA= 9/1). Crude aldehyde was dissolved in dry MeOH (40 mL), ACQ4 (1.01 g; 4.06 mmol) was added and mixture was stirred overnight at r.t. followed by $NaBH_4$ (307 mg, 8.12 mmol) added in one portion. After 5h solvent was removed under reduced pressure and the product was purified by column chromatography (dry flash, SiO_2, eluent EA/Hex gradient 1/1 → EA, EA/MeOH gradient 95/5 → 1/1, MeOH). Yield 2.16 g (71%). Colorless foam softens at 80-83 ºC. $[\alpha]_D^{20}$ = +0.116 (c = 1.4×10^{-3} g/mL, DCM). IR (KBr): 3396w, 3304w, 2936s, 2866m, 1730s, 1610w, 1579s, 1536s, 1448w, 1370m, 1331w, 1245s, 1133w, 1068w, 1023w, 965w, 886w, 807w cm^{-1}. ^1H NMR (500 MHz,

$CDCl_3$, δ): 8.70 (*d*, *J* = 5.2 H-C(2')), 8.12 (*d*, *J* = 2.1, H-C(8')), 7.93 (*d*, *J* = 8.8, H-C(5')), 7.50, (*dd*, J_1 = 8.9, J_2 = 2.1, H-C(6')), 6.55 (*d*, *J* = 5.2, H-C(3')), 6.28 (bs, H-N), 5.28 (*bs*, H-C(12)), 5.13-5.08 (*m*, H-C(7)), 4.82-4.73 (*m*, H-C(3)), 3.49 (*t*, *J* = 6.6, 2H-C(9')), 2.91 (*t*, *J* = 6.7, 2H-C(12')), 2.85-2.73 (*m*, 2H-C(24)), 2.31 (*s*, CH_3COO), 2.27 (*s*, CH_3COO), 2.24 (*s*, CH_3COO), 1.11 (*s*, CH_3-C(10)), 1.02 (*d*, *J* = 6.4, CH_3-C(20)), 0.91 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.49, 170.33, 151.98, 150.00, 149.08, 134.68, 128.58, 124.88, 121.47, 117.30, 98.80, 75.40, 74.04, 70.67, 50.40, 49.03, 47.55, 44.99, 43.36, 43.11, 40.89, 37.71, 34.92, 34.65, 34.28, 33.32, 31.22, 28.86, 27.63, 27.25, 27.14, 26.84, 26.33, 26.20, 25.53, 22.77, 22.51, 21.55, 21.44, 21.39, 17.87, 12.19. (+)ESI-HRMS (*m*/*z*): $[M + 2H]^{2+}$ 376.72256 (error -2.85 ppm), $[M + H]^+$ 752.43999 (error -4.73 ppm) ; Combustion analysis for ($C_{43}H_{62}ClN_3O_6 \times 3H_2O$): calculated C 64.04, H 8.50, N 5.21; found C 64.43, H 8.27, N 5.13. HPLC purity: Method A: RT 1.900, area 98.59 %; method C: RT 10.694, area 99.15%.

***N*-(3*α*,7*α*,12*α*-Triacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-hexane-1,6-diamine (15)**. Aldehyde was obtained according to procedure described for **14,** using **11** (1.30 g, 2.49 mmol) and PCC (807 mg, 3.74 mmol). Reductive amination was performed using ACQ6 (614 mg, 2.21 mmol) and $NaBH_4$ (170 mg, 4.50 mmol). Crude product was purified by column chromatography (dry flash, SiO_2, eluent EA/Hex gradient 1/1 → 8/2, EA, EA/MeOH gradient 9/1 → 1/9, MeOH). Yield 814 mg (42%). colorless foam softens at 74-76 ºC. $[\alpha]_D^{20}$ = +0.089 (c = 1.3×10^{-3} g/mL, DCM). IR (KBr): 2931w, 2862w, 1728s, 1609w, 1577s, 1536w, 1447m, 1367m, 1330w, 1235s, 1133w, 1070w, 1021m, 964w, 938w, 886w, 849w, 805w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.52 (*d*, *J* = 5.4 H-C(2')), 7.95 (*d*, *J* = 2.2, H-C(8')), 7.69 (*d*, *J* = 9.0, H-C(5')), 7.35, (*dd*, J_1 = 2.1, J_2 = 8.9, H-C(6')), 6.40 (*d*, *J* = 5.4, H-C(3')), 5.12 (*bs*, H-N, exchangeable with D_2O), 5.08 (*bs*, H-C(12)), 4.91-4.90 (*m*, H-C(7)), 4.60-4.50 (*m*, H-C(3)), 3.40-3.20 (*m*, 2H-C(9')), 2.70-2.50 (*m*, 2H-C(14') and 2H-C(24)),

2.13 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.91 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.5, CH_3-C(20)), 0.71 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.49, 170.35, 151.99, 149.71, 149.09, 134.78, 128.77, 125.18, 120.91, 117.10, 99.00, 75.43, 74.06, 70.69, 50.27, 49.61, 47.46, 44.98, 43.36, 43.11, 40.91, 37.72, 34.83, 34.67, 34.58, 34.30, 33.26, 31.24, 29.59, 28.86, 28.70, 27.23, 26.99, 26.94, 26.86, 26.06, 25.54, 22.78, 22.52, 21.57, 21.45, 21.40, 17.87, 12.18. (+)ESI-HRMS (*m*/*z*):$[M + 2H]^{2+}$ 390.7382 (error -2.89 ppm), ; $[M + H]^+$ 780.4713 (error -3.76 ppm); Combustion analysis for ($C_{45}H_{66}ClN_3O_6 \times 1.5H_2O$): calculated C 66.93, H 8.61, N 5.20; found C 66.59, H 8.31, N 5.13. HPLC purity: Method A: RT 1.971, area 99.39 %; method C: RT 11.700, area 95.41 %.

***N*-(3α-Hydroxy-7α,12α-diacetoxy-5β-cholan-24-yl)-*N*'-(7'-chloroquinolin-4'-yl)-propane-1,3-diamine (17)**. Alcohol **17** was obtained according to procedure described for **16**, using **13** (727 mg, 0.24 mmol) and anh. K_2CO_3 (241 mg, 0.43 mmol). Yield 626 mg (91%). Colorless foam softens at 110-114 ºC. $[\alpha]_D^{20}$ = +0.114 (c = 2.0×10^{-3} g/mL, DCM). IR (ATR): 3249w, 2930m, 2863m, 1714m, 1610s, 1577s, 1540m, 1433m, 1372s, 1330w, 1240s, 1138w, 1114w, 1073m, 1019m, 966w, 902w, 853w, 803w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 8.47 (*d*, *J* = 5.6, H-C(2')), 7.92 (*d*, *J* = 2.2, H-C(8')), 7.80 (*bs*, H-N), 7.73 (*d*, *J* = 9.0, H-C(5')), 7.32, (*dd*, J_1= 2.0, J_2 = 8.7, H-C(6')), 6.30 (*d*, *J* = 5.6, H-C(3')), 5.11 (*bs*, H-C(12)), 4.95-4.85 (*m*, H-C(7)), 3.60-3.35 (*m*, H-C(3) and 2H-C(9')), 2.96-2.86 (*m*, 2H-C(11')), 2.70-2.58 (*m*, 2H-C(24)), 2.11 (*s*, CH_3COO), 2.04 (*s*, CH_3COO), 0.91 (*s*, CH_3-C(10)), 0.86 (*d*, *J* = 6.2, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.69, 151.94, 150.59, 148.94, 134.64, 128.29, 124.70, 122.12, 117.51, 98.21, 75.43, 71.50, 70.77, 50.49, 49.42, 47.50, 44.99, 43.88, 43.43, 40.95, 38.58, 37.67, 34.92, 34.80, 34.18, 33.30, 31.26, 30.41, 28.93, 27.24, 27.15, 26.57, 25.53, 22.69, 22.49, 21.52, 21.38, 17.85, 12.17. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.27 (*d*, *J* = 5.6, H-C(2')), 7.77-7.73 (*m*, H-C(8') and H-C(5')), 7.24

(*dd*, J_1= 8.9, J_2 = 2.1, H-C(6')), 6.25 (*d*, *J* = 5.6, H-C(3')), 5.00 (*bs*, H-C(12)), 4.81-4.77 (*m*, H-C(7)), 3.75 (*bs*, H-N, exchangeable with D_2O), 3.39-3.31 (*m*, H-C(3), 3.31-3.35 (*m*, 2H-C(9')), 2.71 (*t*, *J* = 6.3, 2H-C(11')), 2.55-2.44 (*m*, 2H-C(24)), 2.01 (*s*, CH_3COO), 1.97 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.74 (*d*, *J* = 6.4, CH_3-C(20)), 0.64 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.02, 170.85, 151.11, 150.72, 148.18, 134.90, 127.05, 124.83, 122.13, 117.19, 98.08, 75.51, 70.98, 70.87, 50.11, 49.22, 49.05, 48.88, 48.71, 48.54, 48.37, 47.98, 47.45, 44.83, 43.17, 42.08, 40.75, 38.12, 37.51, 34.79, 34.61, 34.00, 33.11, 31.07, 29.94, 28.70, 27.29, 27.05, 26.25, 25.26, 22.52, 22.24, 21.13, 20.96, 17.59. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 696.4133 (error -0.71 ppm). Combustion analysis for ($C_{40}H_{58}ClN_3O_5\times2H_2O$): calculated C 65.60, H 8.53, N 5.74; found C 65.95, H 8.20, N 5.85. HPLC purity: Method B: RT 8.583, area 95.71 %; method C: RT 13.187, area 95.02 %.

***N*-(3α-Hydroxy-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-butane-1,4-diamine (18).** Alcohol **18** was obtained according to procedure described for **16**, using **14** (2.21 g, 0.24 mmol) and anh. K_2CO_3 (673 mg, 4.87 mmol). Product was isolated after column chromatography purification (Biotage SP1 flash, RP-column, eluent gradient MeOH/H_2O 7:3 → MeOH, NH-column eluent gradient EA → EA/MeOH 8:2). Yield 1.67 g (80 %). colorless foam softens at 101-103 ºC. $[\alpha]_D^{20}$ = +0.064 (c = 1.4×10^{-3} g/mL, DCM). IR (ATR): 3303m, 3059w, 29.36s, 2866m, 1726s, 1610w, 1581s, 1540w, 1450w, 1374m, 1332w, 1250s, 1138w, 1076m, 1021m, 967w, 900w, 852w, 808w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.51 (*d*, *J* = 5.5, H-C(2')), 7.94 (*d*, *J* = 2.1, H-C(8')), 7.71 (*d*, *J* = 8.9, H-C(5')), 7.33, (*dd*, J_1= 8.9, J_2 = 2.1, H-C(6')), 6.37 (*d*, *J* = 5.5, H-C(3')), 6.01 (bs, H-N, exchangeable with D_2O), 5.11-5.07 (*m*, H-C(12)), 4.92-4.88 (*m*, H-C(7)), 3.55-3.46 (*m*, H-C(3)), 3.30 (*t*, *J* = 6.4, 2H-C(9')), 2.70 (t, *J* = 6.8, 2H-C(12')), 2.64-2.52 (*m*, 2H-C(24)), 2.11 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.6, CH_3-C(20)), 0.72 (*s*, CH_3-C(13)).

^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.64, 170.61, 152.05, 149.99, 149.15, 134.71, 128.70, 124.94, 121.37, 117.31, 98.85, 75.47, 71.65, 70.84, 50.54, 49.14, 47.56, 45.02, 43.41, 43.21, 38.69, 37.76, 34.98, 34.85, 34.27, 33.37, 31.36, 30.49, 28.96, 27.87, 37.30, 36.55, 26.30, 25.56, 22.80, 22.55, 21.62, 21.45, 17.92, 12.22. (+)ESI-HRMS (*m*/*z*):$[M + Na]^+$ 732.4113 (error -0.09 ppm). Combustion analysis for ($C_{41}H_{60}ClN_3O_5 \times 0.5H_2O$): calculated C 68.45, H 8.55, N 5.84; found C 65.22, H 8.35, N 5.62. HPLC purity: Method A: RT 1.879, area 99.04 %; method D: RT 5.495, area 97.05 %.

***N*-(3α-Hydroxy-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-hexane-1,6-diamine (19)**. Alcohol **19** was obtained according to procedure described for **16**, using **15** (204.9 mg, 0.26 mmol) and anh. K_2CO_3 (64 mg, 0.46 mmol). Yield 180 mg (92%), colorless foam softens at 98-101 ºC. $[\alpha]_D^{20} = +0.074$ (c = 1.6×10^{-3} g/mL, DCM). IR (ATR): 3302m, 306w, 2933s, 2863m, 1725s, 1609w, 1581s, 1540w, 1450m, 1373m, 1332w, 1250s, 1140w, 1076m, 1022m, 966w, 939w, 899w, 852w, 809w, 736m cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 8.50 (*d*, *J* = 5.6, H-C(2')), 7.94 (*d*, *J* = 1.6, H-C(8')), 7.76 (*d*, *J* = 9.0, H-C(5')), 7.40-7.30, (*m*, H-C(6')), 6.38 (*d*, *J* = 5.6, H-C(3')), 5.37 (*bs*, H-N, exchangeable with D_2O), 5.07 (*bs*, H-C(12)), 4.89 (*bs*, H-C(7)), 3.60-3.20 (*m*, H-C(3) and 2H-C(9')), 2.50-2.80 (*m*, 2H-C(14') and 2H-C(24)), 2.10 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.80 (*d*, *J* = 6.2, CH_3-C(20)), 0.70 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.69, 151.81, 149.85, 148.92, 134.86, 128.47, 125.20, 121.15, 117.07, 98.90, 75.45, 71.39, 70.85, 49.98, 49.29, 47.43, 44.96, 43.34, 42.92, 40.97, 38.58, 37.69, 34.81, 34.21, 33.16, 31.30, 30.40, 29.22, 28.88, 28.53, 27.20, 26.84, 25.77, 25.49, 22.74, 22.49, 21.58, 21.40, 17.79, 12.13. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.52 (*d*, *J* = 5.5, H-C(2')), 7.95 (*d*, *J* = 2.1, H-C(8')), 7.73 (*d*, *J* = 9.2, H-C(5')), 7.35, (*dd*, J_1 = 8.9, J_2 = 2.1, H-C(6')), 6.40 (*d*, *J* = 5.3, H-C(3')), 5.20 (*bs*, H-N, exchangeable with D_2O), 5.08 (*bs*, H-C(12)), 4.92-4.86 (*m*, H-C(7)), 3.55-3.45 (*m*,

H-C(3)), 3.34-3.24 (*m*, 2H-C(9')), 2.50-2.80 (*m*, 2H-C(14') and 2H-C(24)), 2.11 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.81 (*d*, *J* = 6.4, CH_3-C(20)), 0.70 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.61, 151.83, 149.85, 148.96, 134.82, 128.55, 125.16, 121.14, 117.12, 98.93, 75.44, 71.54, 70.82, 49.82, 49.10, 47.48, 44.98, 43.36, 43.03, 41.01, 38.68, 37.72, 34.83, 34.24, 33.16, 31.34, 30.48, 28.91, 28.56, 27.23, 26.81, 25.52, 22.76, 22.51, 26.60, 21.43, 17.81, 12.17. (+)ESI-HRMS (*m*/*z*): $[M + 2H]^{2+}$ 369.7326 (error -3.80 ppm). Combustion analysis for ($C_{43}H_{64}ClN_3O_5 \times 0.5H_2O$): calculated C 69.10, H 8.77, N 5.62; found C 68.85, H 8.95, N 5.40. HPLC purity: Method A: RT 1.869, area 99.39 %; method C: RT=11.500, area 95.59 %.

***N*-Methyl-*N*-(3α,7α,12α-triacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-propane-1,3-diamine (21)**. Compound **21** was obtained according to procedure described for **20**, using **13** (303 mg, 0.41 mmol. Yield 254 mg (83%), colorless foam softens at 76-80 ºC. $[\alpha]_D^{20} = +0.103$ (c = 1.2×10^{-3} g/mL, DCM). IR (KBr): 3404w, 2945m, 2869w, 2797w, 1734s, 1611w, 1582s, 1538w, 1451w, 1375m, 1331w, 1248s, 1138s, 1072w, 1025w, 965w, 938w, 889w, 849w, 806w cm^{-1}. ^1H NMR (500 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5.4, H-C(2')), 7.94 (*d*, *J* = 1.9, H-C(8')), 7.90 (bs, H-N, exchangeable with D_2O), 7.66 (*d*, *J* = 9.0, H-C(5')), 7.34 (*dd*, J_1 = 9.0, J_2 = 2.1, H-C(6')), 6.31 (*d*, *J* = 5.4, H-C(3')), 5.06 (*s*, H-C(12)), 4.90-4.87 (*m*, H-C(7)), 4.60-4.53 (*m*, H-C(3)), 3.39 (*bs*, 2H-C(9')), 2.64, (*t*, *J* = 5.1, 2H-C(11')), 2.44-2.40 (*m*, 2H-C(24)), 2.37 (*s*, CH_3-N), 2.07 (*s*, CH_3COO), 2.06 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.78 (*d*, *J* = 6.4, CH_3-C(20)), 0.68 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.53, 170.46, 170.38, 151.78, 150.74, 148.81, 134.73, 128.24, 124.85, 121.98, 117.54, 98.29, 75.37, 74.03, 70.62, 58,78, 57.57, 47.71, 45.01, 44.16, 43.39, 42.06, 40.89, 37.69, 35.03, 34.61, 34.57, 34.26, 33.63, 31.19, 29.65, 28.91, 27.19, 26.82, 25.56, 24.18, 23.90, 22.72, 22.52, 21.55, 21.45, 21.33, 17.87, 12.19. (+)ESI-HRMS (*m*/*z*):

$[M + H]^+$ 752.43936 (error -0.84 ppm). Combustion analysis for ($C_{43}H_{62}ClN_3O_6 \times 1.5H_2O$): calculated C 66.26, H 8.41, N 5.39; found C 66.54, H 8.25, N 5.41. HPLC purity: Method A: RT 2.032, area 99.46 %; method B: RT 8.689, area 96.92 %.

***N*-(3-Oxo-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-propane-1,3-diamine (23)**. Ketone **30** was obtained according to procedure described for **22**, using **17** (416 mg, 0.59 mmol) and IBX (822 mg, 2.94 mmol). Yield 366 mg (88%), colorless foam softens at 100-105 ºC. $[\alpha]_D^{20} = +0.149$ ($c = 2.0 \times 10^{-3}$ g/mL, DCM). IR (ATR): 3409m, 2948m, 2869w, 1733s, 1719sm, 1653w, 1642w, 1612w, 1582s, 1541m, 1445m, 1376s, 1332w, 1244s, 1215m, 1138w, 1078w, 1024w, 964w, 901w, 852w, 807w cm^{-1}. ^1H NMR (200 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5.1, H-C(2')), 7.92 (*d*, *J* = 1.7, H-C(8')), 7.84 (bs, H-N), 7.73 (*d*, *J* = 8.4, H-C(5')), 7.36-7.25, (*m*, H-C(6')), 6.31 (*d*, *J* = 5.1, H-C(3')), 5.16 (*bs*, H-C(12)), 5.05-4.95 (*m*, H-C(7)), 3.39 (*bs*, 2H-C(9')), 3.10-2.84 (*m*, Hα-C(4) and 2H-C(11')), 2.72-2.56 (*m*, 2H-C(24)), 2.11 (*s*, CH_3COO), 2.03 (*s*, CH_3COO), 1.03 (*s*, CH_3-C(10)), 0.87 (*d*, *J* = 6.7, CH_3-C(20)), 0.78 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 212.02, 170.37, 170.09, 151.98, 150.45, 148.95, 134.35, 128.25, 127.85, 124.45, 122.12, 117.46, 98.12, 75.14, 70.39, 50.40, 49.38, 47.40, 44.92, 44.39, 43.85, 43.19, 42.02, 37.53, 36.47, 35.96, 35.27, 34.81, 34.20, 33.19, 30.70, 29.64, 27.06, 26.46, 25.69, 22.60, 21.47, 21.25, 21.18, 17.75, 12.11. ^1H NMR (500 MHz, $CDCl_3$, δ): 8.47 (*d*, *J* = 5.5, H-C(2')), 7.90 (*d*, *J* = 2.1, H-C(8')), 7.77 (bs, H-N, exchangeable with D_2O), 7.70 (*d*, *J* = 8.9, H-C(5')), 7.30, (*dd*, $J_1 = 8.8$, $J_2 = 2.2$, H-C(6')), 6.29 (*d*, *J* = 5.5, H-C(3')), 5.14 (*bs*, H-C(12)), 5.00-4.95 (*m*, H-C(7)), 3.37 (*bs*, 2H-C(9')), 2.99 (*dd*, $J_1 = 15.1$, $J_2 = 14$, Hα-C(4)), 2.93-2.87 (*m*, 2H-C(11')), 2.69-2.57 (*m*, 2H-C(24)), 2.09 (*s*, CH_3COO), 2.01 (*s*, CH_3COO), 1.00 (*s*, CH_3-C(10)), 0.86 (*d*, *J* = 6.6, CH_3-C(20)), 0.76 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 212.01, 170.39, 170.13, 152.14, 150.50, 149.14, 134.46, 128.53, 124.57, 122.07, 117.57, 98.26, 75.26, 70.51, 50.55,

49.62, 47.56, 45.07, 44.51, 44.11, 43.34, 42.15, 37.70, 36.58, 36.10, 34.98, 34.35, 33.35, 30.86, 29.81, 27.24, 26.68, 25.84, 22.74, 21.61, 21.36, 21.29, 17.92, 12.25. (+)ESI-HRMS (*m*/*z*): $[M + 2H]^{2+}$ 347.7032 (error + 1.58 ppm), $[M + H]^{+}$ 694.3964 (error -2.48 ppm);. Combustion analysis for ($C_{40}H_{56}ClN_3O_5 \times H_2O$): calculated C 67.44, H 8.21, N 5.90; found C 67.78, H 8.00, N 5.82. HPLC purity: Method C: RT=13.105, area 95.15%; method D: RT 5.414, area 95.21%.

***N*-(3-Oxo-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-butane-1,4-diamine (24)**. Ketone **24** was obtained according to procedure described for **22**, using **18** (1.35 g, 1.91 mmol) and IBX (2.58 g, 9.13 mmol). Yield 1.26 g (93%), colorless foam softens at 91-92 ºC. $[\alpha]_D^{20} = +0.069$ ($c = 1.8 \times 10^{-3}$ g/mL, DCM). IR (ATR): 3405m, 2948m, 2870w, 1732s, 1667w, 1612w, 1581s, 1539w, 1449w, 1374m, 1332w, 1245s, 1136w, 1078w, 1025m, 966w, 901w, 851w, 810w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.52 (*d*, *J* = 5.5, H-C(2')), 7.94 (*d*, *J* = 2.1, H-C(8')), 7.70 (*d*, *J* = 8.9, H-C(5')), 7.32, (*dd*, J_1 = 8.8, J_2 = 2.2, H-C(6')), 6.37 (*d*, *J* = 5.5, H-C(3')), 6.02 (bs, H-N, exchangeable with D_2O), 5.14 (*bs*, H-C(12)), 5.02-4.97 (*m*, H-C(7)), 3.34-3.27 (*m*, 2H-C(9')), 3.03-2.93 (*m*, Hα-C(4)), 2.70, (*t*, *J* = 6.6, 2H-C(12')), 2.65-2.53 (*m*, H-N and 2H-C(24)), 2.10 (*s*, CH_3COO), 2.06 (*s*, CH_3COO), 1.02 (*s*, CH_3-C(10)), 0.84 (*d*, *J* = 6.6, CH_3-C(20)), 0.76 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 212.06, 170.40, 170.13, 152.11, 149.95, 149.21, 134.66, 128.76, 124.89, 121.35, 117.32, 98.86, 75.28, 70.58, 50.56, 49.19, 47.60, 45.06, 44.55, 43.26, 43.22, 42.14, 37.74, 36.60, 36.11, 34.98, 34.38, 33.37, 30.91, 29.80, 27.91, 27.24, 26.61, 26.31, 25.81, 22.80, 21.62, 21.44, 21.31, 17.94, 12.25. (+)ESI-HRMS (*m*/*z*): $[M + Na]^{+}$ 730.3964 (error +0.86 ppm). Combustion analysis for ($C_{41}H_{58}ClN_3O_5 \times 0.5H_2O$): calculated C 68.64, H 8.29, N 5.86; found C 68.39, H 8.41, N 5.63. HPLC purity: Method A: RT 1.872, Area 99.17 %; method C: RT 12.077, area 95.14 %.

***N*-(3-Oxo-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinolin-4'-yl)-hexane-1,6-diamine (25).** Ketone **32** was obtained according to procedure described for **22**, using **19** (349 mg, 0.47 mmol) and IBX (632 mg, 2.26 mmol). Yield 283 mg (81%), colorless foam softens at 85-90 ºC. $[\alpha]_D^{20}$ = +0.042 (c = 1.5×10^{-3} g/mL, DCM). IR (ATR): 3314w, 2938s, 2867m, 1733s, 1611w, 1583s, 1539w, 1451w, 1376m, 1333w, 1250s, 1216w, 1136w, 1027w, 852w, 811w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.52 (*d*, *J* = 5.35, H-C(2')), 7.95 (*d*, *J* = 2.2, H-C(8')), 7.66 (*d*, *J* = 9.0, H-C(5')), 7.35 (*dd*, J_1 = 8.8, J_2 = 2.2, H-C(6')), 6.40 (*d*, *J* = 5.5, H-C(3')), 5.15-5.11 (*m*, H-C(12)), 5.03 (bs, H-N, exchangeable with D_2O), 5.01-4.98 (*m*, H-C(7)), 3.35-3.27 (*m*, 2H-C(9')), 2.98 (*dd*, J_1 = 15.1, J_2 = 13.8, Hα-C(4)), 2.64-2.48, (*m*, 2H-C(14') and 2H-C(24)), 2.10 (*s*, CH_3COO), 2.06 (*s*, CH_3COO), 1.01 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.6, CH_3-C(20)), 0.76 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 212.09, 170.41, 170.14, 152.01, 149.65, 149.10, 134.77, 128.81, 125.20, 120.80, 117.07, 99.03, 75.29, 70.57, 50.56, 49.93, 47.45, 45.01, 44.53, 43.24, 43.15, 42.13, 37.73, 36.58, 36.09, 34.85, 34.36, 33.29, 30.90, 30.03, 29.78, 28.78, 27.19, 27.09, 27.03, 26.44, 25.79, 22.79, 21.60, 21.43, 21.30, 17.90, 12.21. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 736.4416 (error -4.79 ppm). Combustion analysis for ($C_{43}H_{62}ClN_3O_5$): calculated C 70.13, H 8.49, N 5.71; found C 69.83, H 8.19, N 5.73. HPLC purity: Method A: RT 1.810, area 99.47 %; method C: RT=12.061, area 97.17 %.

Methyl 3α-amino-7α,12α-diacetoxy-5β-cholanoate (26). Amine **26** was synthesized according to procedures described in ref. **Error! Bookmark not defined.**.

Methyl 3α-acetamido-7α,12α-diacetoxy-5β-cholate (27). Into stirred solution of **26** (238 mg, 0.47 mmol) and Et_3N (130 μL, 0.94 mmol) in DCM (3 mL), Ac_2O (67 μL, 0.705 mmol) was added. Mixture was stirred at r.t. for 1.5 h, diluted with DCM (25 mL), washed with

brine (2×10 mL) and dried over anh. Na_2SO_4. Solution was filtered off and solvent was removed under reduced pressure. Into remained oil, heptane was added and evaporated to dryness to remove traces of AcOH and Ac_2O. Crude product was purified by column chromatography (dry flash, SiO_2, EA). Yield 197.2 mg (76.6%). Mp = 164-167 ºC (acetone/hexane). $[\alpha]_D^{20}$ = +0.122 (c = 1.52×10^{-3} g/mL, DCM). IR (KBr): 3396m, 2953m, 2871m, 1736s, 1653m, 1541m, 1438m, 1377m, 1248s, 1174w, 1024m, 967w, cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.81 (*d*, *J* = 7.2, N-H), 5.39 (*d*, *J* = 8.0, H-N), 5.09 (*bs*, H-C(12)), 4.91 (*bs*, H-C(7)), 4.14 (*bs*, H-C(3)), 3.66 (*s*, CO_2CH_3), 2.126 (*s*, CH_3COO), 2.12 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 1.97 (*bs*, C*H*$_3$CONH), 0.95 (*s*, CH_3-C(10)), 0.92 (*s*, CH_3-C(10)), 0.81 (*d*, *J* = 6.2, CH_3-C(20)), 0.73 (*bs*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 174.52, 170.49, 170.38, 170.31, 170.17, 169.38, 169.15, 75.42, 75.25, 70.76, 70.61, 51.46, 49.58, 47.23, 44.96, 44.90, 43.35, 43.26, 41.37, 37.60, 36.91, 36.09, 35.34, 34.58, 34.50, 34.20, 32.63, 31.48, 31.21, 30.77, 30.64, 28.84, 28.9, 28.04, 27.08, 25.49, 24.62, 23.54, 23.09, 22.69, 22.54, 21.58, 21.50, 21.32, 21.25, 17.39, 14.02, 12.13. (+)ESI-HRMS (*m*/*z*): $[M + K]^+$ 586.31366 (error -0.68 ppm). Combustion analysis for ($C_{31}H_{49}NO_7\times0.5$ H_2O): calculated C 66.88, H 9.05, N 2.52; found C 66.99, H 8.77, N 2.40.

Methyl 3α-methanesulfonamido-7α,12α-diacetoxy-5β-cholanoate (28). Compound **28** was obtained according to procedure described for **27**, using **26** (250 mg, 0.494 mmol), methanesulfonylchloride (50 μL, 0.646 mmol). Yield 257 mg (89%), colorless foam softens at 92-100 ºC. $[\alpha]_D^{20}$ = +0.10 (c = 1.2×10^{-3} g/mL, DCM). IR (KBr): 3530w, 3284w, 2953m, 2872w, 173s, 1441m, 1379m, 1319m, 1249s, 1152m, 1082w, 1024m, 968w, cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 5.10-5.07 (*m*, H-C(12)), 4.93-4.89 (*m*, H-C(7)), 4.32 (*d*, *J* = 7, N-H, exchangeable with D_2O), 3.66 (*s*, CO_2CH_3), 3.19-3.09 (*m*, H-C(3)), 2.94 (*s*, CH_3-SO_2NH), 2.38-2.30 (*m*, 1H), 2.26-2.16 (*m*, 1H), 2.13 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 0.92 (*s*, CH_3-

C(10)), 0.81 (*d*, *J* = 6.5, CH_3-C(20)), 0.73 (*bs*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 174.49, 170.43, 170.23, 75.33, 70.66, 54.02, 51.50, 47.34, 45.03, 43.31, 41.89, 41.61, 37.69, 37.37, 35.42, 34.58, 34.08, 31.20, 30.86, 30.73, 29.41, 28.80, 27.13, 25.45, 22.77, 22.61, 21.59, 21.35, 17.48, 12.19. (+)ESI-HRMS (*m*/*z*): $[M + NH_4]^+$ 601.3501 (error -2.69 ppm), $[M + Na]^+$ 606.30589 (error -2.0 ppm). Combustion analysis for ($C_{30}H_{49}NO_8S \times H_2O$): calculated C 59.87, H 8.54, N 2.33; found C 59.90, H 8.48, N 2.37.

Methyl 3α-*N*-*tert*-butylcarbamate-7α,12α-diacetoxydiacetoxy-5β-cholanoate (29). Compound **29** was obtained according to procedure described for **27**, using **26** (6.04 g, 11.94 mmol) and Boc_2O (3.91 g, 17.91 mmol). Yield of crude product 7.00 g (97%). Analytical sample was obtained after column purification (dry-flash, SiO_2, eluent Hex / EA). Colorless foam softens at 84-86 ºC. $[\alpha]_D^{20}$ = +0.061 (c = 1.1×10^{-3} g/mL, DCM). IR (KBr): 3444s, 2954m, 2872w, 1736s, 1517m, 1451w, 1378m, 1246s, 1172m, 1067w, 1024m, 966w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.12-5.06 (*m*, H-C(12)), 4.94-4.86 (*m*, H-C(7)), 4.36 (*bs*, H-N-Boc), 3.66 (*s*, CO_2CH_3), 3.34-3.20 (*m*, H-C(3)), 2.12 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 1.44 (*s*, $(CH_3)_3$C-N(Boc)), 0.91 (*s*, CH_3-C(10)), 0.81 (*d*, *J* = 6.0, CH_3-C(20)), 0.72 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 174.56, 170.44, 170.31, 155.16, 79.22, 75.40, 70.83, 51.49, 50.84, 47.30, 45.01, 43.34, 41.50, 37.65, 36.36, 35.45, 34.56, 34.21, 31.25, 30.83, 30.72, 28.81, 28.37, 27.13, 25.46, 22.76, 22.67, 21.60, 21.34, 17.44, 12.15. (+)ESI-HRMS (*m*/*z*): $[M + Na]^+$ 628.3820 (error -1.45 ppm). Combustion analysis for ($C_{34}H_{55}NO_8 \times 0.5$ H_2O): calculated C 66.42, H 9.18, N 2.28; found C 66.65, H 8.88, N 2.27.

3α-Acetamido-7α,12α-diacetoxy-5β-cholanoic acid (30). Methyl ester **27** (200 mg, 0.365 mmol) was hydrolyzed at 80 ^{o}C with NaOH (22 mg, 0.55 mmol) in *i*-PrOH / H_2O mixture (8 mL, 3:1 v / v). After 2 h reaction was cooled and poured onto ice / water / HCl. The mixture was extracted with DCM (4×20 mL). Combined organic layers were washed once with brine,

dried over anh. Na_2SO_4, filtered and solvent was removed under reduced pressure. Yield: 176 mg (90 %), colorless foam softness at 134-138 ^oC. $[\alpha]_D^{20}$ = +0.112 (c = 1.0×10^{-3} g/mL, DCM). IR (KBr): 3440m, 2952m, 2871m, 1733s, 1647m, 1552w, 1443w, 1378m, 1249s, 1122w, 1024w, 968w cm^{-1}. ^1H NMR (200 MHz, $CDCl_3$, δ): 5.41 (*d*, *J* = 7.8, H-N), 5.09 (*bs*, H-C(12)), 4.91 (*bs*, H-C(7)), 3.65 (bs, H-C(3)), 2.13 (*s*, CH_3COO), 2.09 (*s*, CH_3COO), 1.88 (*s*, C*H*$_3$CONH), 0.92 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 5.8, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 178.67, 170.42, 170.29, 169.57, 75.47, 70.83, 49.71, 47.29, 45.01, 43.37, 41.39, 37.64, 36.05, 35.36, 34.47, 34.23, 31.23, 30.74, 30.54, 28.86, 28.02, 27.09, 25.51, 23.49, 22.71, 21.61, 21.34, 17.43, 12.16. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 534.34219 (error -0.63 ppm). Combustion analysis for ($C_{30}H_{47}NO_8 \times 1.5\ H_2O$): calculated C 64.26, H 8.99, N 2.50; found C 64.55, H 8.72, N 2.47.

3α-Methanesulfonamido-7α,12α-diacetoxy-5β-cholanoic acid (31). Cholanoic acid **31** was obtained according to procedure described for **30**, using **27** (204 mg, 0.349 mmol). Yield 188 mg (94%), colorless foam softens at 108-117 ºC. $[\alpha]_D^{20}$ = +0.034 (c = 1.0×10^{-3} g/mL, DCM). IR (KBr): 3525w, 3280m, 2932s, 2872m, 1732s, 1444m, 1379s, 1317m, 1250s, 1151m, 1082m, 1024m, 967w, 759w cm^{-1}. ^1H NMR (500 MHz, $CDCl_3$, δ): 5.09 (*bs*, H-C(12)), 4.93-4.90 (*m*, H-C(7)), 4.50 (*d*, *J* = 7.5, N-H, exchangeable with D_2O), 3.19-3.09 (*m*, H-C(3)), 2.97 (*s*, CH_3-SO_2NH), 2.42-2.34 (*m*, 1H), 2.28-2.20 (*m*, 1H), 2.13 (*s*, CH_3COO), 2.09 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.5, CH_3-C(20)), 0.73 (*bs*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.46, 170.30, 75.34, 70.69, 53.99, 47.33, 45.04, 43.31, 41.89, 41.60, 37.69, 37.33, 35.42, 34.54, 34.07, 31.18, 30.72, 30.52, 29.39, 28.79, 27.14, 25.44, 22.77, 22.60, 21.58, 21.35, 17.47, 12.20. (+)ESI-HRMS (*m*/*z*): $[M + K]^+$ 608.26569 (error +0.49 ppm). Combustion analysis for ($C_{29}H_{47}NO_8S \times 0.5\ H_2O$): calculated C 60.18, H 8.36, N 2.42; found C 59.91, H 8.45, N 2.38.

3α-*N*-tert-Butylcarbamate-7α,12α-diacetoxy-5β-cholanoic acid (32). Methyl ester **29** (7.20 g, 11.89 mmol) was hydrolyzed at 80 ^{o}C with NaOH (710 mg, 17.75 mmol) in *i*-PrOH / H_2O mixture (290 mL, 3:1 v / v). After 4 h the reaction mixture was cooled and poured onto ice cold water and neutralized with diluted HCl (1:1, v/v) to pH 7 and DCM was added (150 mL). Layers were separated, water layer was extracted with CH_2Cl_2 (3× 20 mL) and combined organic layers were washed with water, brine, dried over anh. Na_2SO_4 and evaporated to dryness. Yield 6.90 g (98%) of crude product. Analytical sample obtained upon column chromatography (dry-flash, SiO_2, eluent Hex /EA). Colorless foam softens at 197-202 ºC. $[\alpha]_D^{20} = +0.110$ (c = 1.55×10^{-3} g/mL, DCM). IR (KBr): 3411w, 3260w, 2954m, 2870w, 1732s, 1712m, 1681m, 1505m, 1451w, 1378m, 1315w, 1284m, 1245m, 1173m, 1126w, 1072w, 1033w, 1000w, 969w, 889,w, 858w, cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.09 (*bs*, H-C(12)), 4.90-4.70 (*m*, H-C(7)), 3.26 (*bs*, H-C(3)), 2.12 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 1.45 (*s*, $(CH_3)_3C$-N(Boc)), 0.91(*s*, CH_3-C(10)), 0.82 (*d*, *J* = 5.8, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.46, 75.42, 70.85, 51.02, 47.34, 45.01, 43.34, 41.50, 37.67, 36.31, 35.43, 34.54, 34.20, 31.23, 30.57, 28.79, 28.37, 27.15, 25.44, 22.76, 22.65, 21.58, 21.32, 17.44, 12.15. (+)ESI-HRMS (*m*/*z*):$[M + Na]^+$ 614.3663 (error -0.97 ppm). Combustion analysis ($C_{33}H_{53}NO_8$): Calculated C 66.98, H 9.03, N 2.37; found C 67.33, H 9.07, N 2.33.

3α-Acetamido-7α,12α-diacetoxy-5β-cholan-24-ol (33). Mixture of **30** (200 mg, 0.37 mmol), Et_3N (51 μL, 0.37 mmol), and $ClCO_2Et$ (35 μL, 0.37 mmol) in DCM (10 mL) were stirred at r.t. After 3 h reaction mixture was evaporated to dryness, residue was dissolved in DCM/THF mixture (20 mL, 3:1 v/v), $NaBH_4$ (56 mg, 1.48 mmol) was added, and after 15 min of intensive stirring MeOH (4 mL) was added in one portion, and stirring was continued. After 90 min mixture was poured onto ice / brine / HCl and left for 1 h. Mixture was

extracted with CH_2Cl_2 (6×20 mL), and organic layer was washed once with brine, dried over anh. Na_2SO_4, and filtered. The solvent was removed under reduced pressure and product was isolated after column chromatography (dry flash, SiO_2, eluent Hex/EA gradient 9/1 → EA and EA/MeOH 95/5). Yield 124 mg (63.5 %), colorless foam softness at 129-131 °C. $[\alpha]_D^{20}$ = +0.056 (c = 1.0×10^{-3} g/mL, DCM). IR (KBr): 3443s, 2946s, 2869m, 1734s, 1650s, 1553m, 1444w, 1378s, 1248s, 1115w, 1023w, 968.7w, cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.45 (d, J = 7.8, H-N), 5.10 (*bs*, H-C(12)), 4.96-4.88 (*m*, H-C(7)), 3.70-3.52 (m, H-C(3) and 2H-C(24)), 2.13 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 1.97 (*s*, C*H*$_3$CONH), 0.92(*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.2, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.38, 170.22, 169.29, 75.52, 70.79, 63.22, 49.60, 47.40, 44.92, 43.32, 41.35, 37.58, 36.03, 35.32, 34.63, 34.18, 31.52, 31.19, 28.97, 28.82, 28.00, 27.13, 25.47, 23.49, 22.67, 21.58, 21.32, 17.34, 12.11. (+)ESI-HRMS (*m*/*z*):$[M + K]^+$ 558.31923 (error +0.15 ppm). Combustion analysis ($C_{30}H_{49}NO_6\times0.5H_2O$): calculated C 68.15, H 9.53, N 2.65; found C 68.15, H 9.77, N 2.58.

3α-Sulfonamido-7α,12α-diacetoxy-5β-cholan-24-ol (34). Alcohol **34** was obtained according to procedure described for **33**, using **31** (155 mg, 0.272 mmol). The product was isolated after column chromatography (dry flash, SiO_2, eluent DCM/MeOH gradient 9/1 → 1/1 and Lobar Lichroprep A, SiO_2, DCM/EA=65/35).Yield 81.9 mg (54%). **C**olorless foam softens at 96-98 ºC. $[\alpha]_D^{20}$ = +0.090 (c = 1.4×10^{-3} g/mL, DCM). IR (KBr): 3442m, 2946m, 2871w, 1733s, 1631w, 1448w, 1379m, 1318m, 1248s, 1150m, 1079w, 1023m, 972w, 896w, 759w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.10 (*bs*, H-C(12)), 4.94-4.88 (*m*, H-C(7)), 4.46 (*d*, *J* = 7.4, N-H), 3.68-3.54 (m, 2H-C(24)), 3.24-3.02 (*m*, H-C(3)), 2.97 (*s*, CH_3-SO_2NH), 2.16 (*s*, CH_3COO), 2.09 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.2, CH_3-C(20)), 0.73 (*bs*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.57, 170.37, 75.40, 70.68, 63.34, 53.97, 47.43, 44.94, 43.26, 41.82, 41.57, 37.64, 37.27, 35.38, 34.70, 34.03, 31.54, 31.15,

29.33, 29.06, 28.75, 27.17, 25.40, 22.72, 22.56, 21.56, 21.34, 17.79, 12.15. (+)ESI-HRMS (*m*/*z*): $[M + NH_4]^+$ 573.3575 (error +1.25 ppm). Combustion analysis for ($C_{29}H_{49}NO_7S \times 0.5$ H_2O): calculated C 61.67, H 8.92, N 2.48, S 5.68 found C 61.55, H 8.79, N 2.55, S 5.92.

3α-*N*-tert-Butylcarbamate-7α,12α-diacetoxy-5β-cholan-24-ol (35). Compound **35** was obtained according to procedure described for **33**, using **32** (7.00 g**,** 11.82 mmol). When reduction was completed, the solvent was removed under reduced pressure, and the residue was dissolved in DCM and transferred to separatory funnel. Water was added and pH was adjusted to pH 1 with diluted HCl. Layers was separated, water layer was extracted with DCM (3×50 mL), combined organic layer was washed with sat. $NaHCO_3$ and brine, and dried over anh. Na_2SO_4. After filtration solvent was removed under reduced pressure, the product was isolated after column chromatography (dry flash, SiO_2, eluent Hex/EA gradient 8/2 to 1/1). Yield 5.20 g (76 %), colorless foam softens at 104-107 ºC. $[\alpha]_D^{20}$ = + 0.084 (c = 1.25×10^{-3} g/mL, DCM). IR (KBr): 3444m, 2940m, 2870m, 2357w, 1735s, 1716s, 1521m, 1451w, 1378m, 1248*s*, 1172m, 1062m, 1024m, 999w, 966w, 894w, 853w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 5.12-5.06 (*m*, H-C(12)), 4.94-4.86 (*m*, H-C(7)), 4.38 (*bs*, H-N-Boc), 3.68-3.54 (*m*, 2H-C(24)), 3.25 (*bs*, H-O), 2.12 (*s*, CH_3COO), 2.08 (*s*, CH_3COO), 1.44 (*s*, $(CH_3)_3C$-N(Boc)), 0.91 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.4, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.50, 170.37, 155.18, 79.24, 75.49, 70.88, 63.38, 50.82, 47.45, 44.96, 43.34, 41.50, 37.65, 36.36, 35.45, 34.72, 34.21, 31.57, 31.26, 29.08, 28.81, 28.37, 27.20, 25.46, 22.67, 21.61, 21.36, 17.81, 12.16. (+)ESI-HRMS (*m*/*z*):$[M + Na]^+$ 600.3871 (error +4.85 ppm). Combustion analysis ($C_{33}H_{55}NO_7$): Calculated C 68.60, H 9.59, N 2.42; found C 68.73, H 9.19, N 2.39.

24-*N*-[(7-Chloroquinoline-4-yl)amino]propylamino-3α-acetamido-7α,12α-diacetoxy-5β-cholane (37). Compound **37** was obtained according to procedure described for **36**, using alcohol **33** (134 mg, 0.26 mmol). Yield 75 mg (39%), colorless foam softens at 108-112 ºC. $[\alpha]_D^{20}$ = +0.085 (c = 1.5×10^{-3} g/mL, DCM). IR (KBr): 3296m, 3067w, 2937s, 2867s, 1731s, 1653m, 1612m, 1583s, 1542m, 1449m, 1376s, 1331w, 1249s, 1137w, 1077w, 1023m, 968w, 899w, 878w, 852w, 806w, 768w, 733w, cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5.4, H-C(2')), 7.92 (*d*, *J* = 2.1, H-C(8')), 7.89 (bs, H-N,, exchangeable with D_2O), 7.75 (*d*, *J* = 9.0, H-C(5')), 7.36 (*dd*, J_1 = 8.9, J_2 = 2.2, H-C(6')), 6.31 (*d*, *J* = 5.4, H-C(3')), 5.36 (*d*, *J* = 8.0, H-N), 5.11 (*bs*, H-C(12)), 4.93-4.88 (*m*, H-C(7)), 3.68-3.58 (*bs*, H-C(3)), 3.44-3.35 (m, 2H-C(9')), 2.98-2.88 (*m*, 2H-C(11')), 2.72-2.59 (*m*, 2H-C(24)), 2.08 (*s*, CH_3COO), 2.00 (*s*, CH_3COO), 1.98 (*s*, C*H*$_3$CONH), 0.92 (*bs*, CH_3-C(10)), 0.85 (*d*, *J* = 6.6, CH_3-C(20)), 0.74 (*bs*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.35, 170.24, 169.19, 152.11, 150.60, 149.07, 134.49, 128.45, 124.62, 122.24, 117.63, 98.29, 75.57, 70.75, 50.55, 49.63, 47.37, 45.07, 44.15, 43.69, 41.45, 37.68, 36.08, 35.42, 34.88, 34.23, 33.33, 31.27, 29.09, 28.12, 27.32, 27.19, 26.31, 25.68, 23.63, 22.76, 21.53, 21.37, 17.92, 12.26. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 737.43954 (error -1.06 ppm). Combustion analysis ($C_{42}H_{61}ClN_4O_5\times2H_2O$): calculated C 65.22, H 8.47, N 7.24; found C 64.73, H 8.33, N 7.34. HPLC purity: Method A: RT 1.792, area 99.09 %; method C: RT=13.145, area 95.23 %.

24-*N*-[(7-Chloroquinoline-4-yl)amino]ethylamino-3α-methanesulfonamido-7α,12α-diacetoxy-5β-cholane (38). Compound **38** was obtained according to procedure described for **36**, using alcohol **34** (503 mg, 0.9 mmol). Column chromatography (flash SP RP column MeOH/H_2O gradient 65:35 →9:1, dry flash, SiO_2, EA, EA/MeOH gradient 9:1 → 6:4, EA/MeOH/NH_3 = 18:0.4:0.4→9:2:2, flash chromatography (Biotage SP1 RP column MeOH/H_2O gradient 65:35 →9:1). Yield 248 mg (36%). Colorless foam softens at 108-110

ºC. $[\alpha]_D^{20}$ = +0.151 (c = 1.8×10^{-3} g/mL, DCM). IR (KBr): 3289w, 2938m, 2868w, 1729s, 1612w, 1582s, 1538w, 1451w, 1377m, 1318m, 1250s, 1147m, 1080w, 1023w, 968w, 880w, 808w, 763w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 8.51 (*d*, *J* = 5.1, H-C(2')), 7.94 (*d*, *J* = 2.2, H-C(8')), 7.74 (*d*, *J* = 9.0, H-C(5')), 7.35 (*dd*, J_1 = 8.7, J_2 = 2.0, H-C(6')), 6.38 (*d*, *J* = 5.1, H-C(3')), 5.99 (*bs*, H-N, exchangeable with D_2O), 5.09 (*bs*, H-C(12)), 4.95-4.85 (*m*, H-C(7)), 4.52 (*d*, *J* = 7.4, N-H, exchangeable with D_2O), 3.40-3.30 (m, 2H-C(9')), 3.25-2.95 (*m*, H-C(3) and 2H-C(10')), 2.96 (*s*, CH_3-SO_2N), 2.60-2.55 (m, 2H-C(24)), 2.10 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 1.99 (*bs*, H-N, exchangeable with D_2O), 0.92 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.7, CH_3-C(20)), 0.71 (*bs*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.49, 170.29, 151.96, 149.92, 134.83, 128.53, 125.19, 121.37, 117.33, 99.10, 75.36, 70.65, 53.97, 49.67, 47.58, 47.38, 44.97, 43.28, 41.84, 41.55, 37.62, 37.31, 35.38, 34.91, 34.01, 33.21, 31.15, 29.35, 28.79, 27.24, 26.55, 25.42, 22.73, 22.56, 21.54, 21.30, 17.85, 12.15. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.53 (*d*, *J* = 5.3, H-C(2')), 7.96 (*d*, *J* = 2.1, H-C(8')), 7.70 (*d*, *J* = 8.9, H-C(5')), 7.36 (*dd*, J_1 = 8.9, J_2 = 2.1, H-C(6')), 6.40 (*d*, *J* = 5.3, H-C(3')), 5.86 (*bs*, H-N, exchangeable with D_2O), 5.09 (*bs*, H-C(12)), 4.95-4.85 (*m*, H-C(7)), 4.26 (*d*, *J* = 7.3, N-H, exchangeable with D_2O), 3.40-3.30 (m, 2H-C(9')), 3.25-2.95 (*m*, H-C(3)), 3.06-2.99 (*m*, 2H-C(10')), 2.97 (*s*, CH_3-SO_2N), 2.68-2.56 (m, 2H-C(24)), 2.10 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.4, CH_3-C(20)), 0.71 (*bs*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.41, 170.19, 152.14, 149.85, 149.19, 134.79, 128.83, 125.20, 121.18, 117.38, 99.24, 75.40, 70.68, 54.05, 49.71, 47.67, 47.49, 45.04, 43.36, 41.97, 41.93, 41.62, 37.71, 37.43, 35.44, 34.98, 34.10, 33.32, 31.22, 29.44, 28.86, 27.32, 26.80, 25.50, 22.80, 21.59, 21.37, 17.93, 12.23. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 759.39211 (error +0.60 ppm). Combustion analysis for ($C_{40}H_{59}ClN_4O_6S \times 2\ H_2O$): calculated C 60.40, H 7.98, N 7.04, S 4.03 found C 60.39, H 7.84, N 7.20, S 3.95. HPLC purity: Method A: RT 1.884, area 98.92 %; method C: RT 10.467, area 98.11 %.

24-*N*-[(7-Chloroquinoline-4-yl)amino]proylamino-3α-methanesulfonamido-7α,12α-diacetoxy-5β-cholane (39). Compound **39** was obtained according to procedure described for **36**, using alcohol **34** (496 mg, 0.89 mmol). Column chromatography (dry flash, SiO_2, EA, EA/MeOH gradient 9:1 → 6:4, EA/MeOH/NH_3 = 18:0.4:0.4→18:1.4:1.4, flash chromatography Biotage SP1RP column MeOH/H_2O gradient 75:25 →9:1). Yield 221 mg (32 %). Colorless foam softens at 102-105 ºC. $[\alpha]_D^{20}$ = +0.058 (c = 1.0×10^{-3} g/mL, DCM). IR (KBr): 3404m, 3298m, 2936m, 2868m, 1728m, 1611w, 1583s, 1539w, 1449m, 1377m, 1319m, 1249s, 1147m, 1080w, 1023w, 694w, 900w, 880w, 852w, 807w, 762w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5.1, H-C(2')), 7.95-7.85 (*m*, H-C(8') and N-H, exchangeable with D_2O), 7.74 (*d*, *J* = 9.0, H-C(5')), 7.34 (*dd*, J_1 = 9.0, J_2 = 2.2, H-C(6')), 6.31 (*d*, *J* = 5.6, H-C(3')), 5.11 (*bs*, H-C(12)), 4.95-4.84 (*m*, H-C(7)), 4.48 (*d*, *J* = 7.3, N-H, exchangeable with D_2O), 3.38 (bs, 2H-C(9')), 3.14 (*bs*, H-C(3)), 3.00-2.85 (*m*, CH_3-SO_2N and 2H-C(11')), 2.63 (bs, 2H-C(24)), 2.10 (*s*, CH_3COO), 2.02 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.86 (*d*, *J* = 6.2, CH_3-C(20)), 0.74 (*bs*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 170.55, 170.37, 152.16, 150.57, 149.12, 134.50, 128.49, 124.59, 122.19, 117.60, 98.25, 75.40, 70.59, 53.99, 50.55, 49.65, 47.40, 44.99, 44.15, 43.46, 41.92, 41.55, 37.60, 37.24, 35.36, 34.89, 34.54, 34.01, 33.29, 31.14, 29.32, 28.90, 28.37, 27.26, 27.17, 26.48, 25.51, 22.69, 22.60, 21.49, 21.34, 17.86, 12.20. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 773.40793 (error +0.81 ppm). Combustion analysis for ($C_{41}H_{61}ClN_4O_6S \times 1.5\ H_2O$): calculated C 61.52, H 8.06, N 7.00, S 4.01 found C 61.45, H 8.07, N 7.06, S 3.60. HPLC purity: Method A: RT 1.773, area 98.86 %; method B: RT 1.843, area 98.21 %.

24-*N*-Methyl-*N*-[(7-chloroquinoline-4-yl)amino]propylamino-3α-methanesulfonamide-7α,12α-diacetoxy-5β-cholane (43). Compound **43** was obtained according to procedure described for **42**, using amine **39** (100 mg, 0.13 mmol). Yield 72 mg (71%), colorless foam

softness at 80-85 ºC. $[\alpha]_D^{20}$ = +0.085 (c = 2.0×10^{-3} g/mL, DCM). IR (KBr): 3065w, 2947m, 2869m, 2800w, 1731s, 1610w, 1582s, 1539w, 1448w, 1376s, 1320m, 1246s, 1148m, 1080w, 1023w, 971w, 939w, 899w, 850w, 808w, 764w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.50 (*d*, *J* = 5.5, H-C(2')), 7.95 (*d*, *J* = 2.1, H-C(8'), 7.82 (*bs*, H-N, exchangeable with D_2O), 7.69 (*d*, *J* = 8.8, H-C(5'), 7.34 (*dd*, J_1 = 8.8, J_2 = 2.1, H-C(6')), 6.31 (*d*, *J* = 5.5, H-C(3')), 5.06 (b*s*, H-C(12)), 4.91-4.88 (*m*, H-C(7)), 4.39 (*bs*, H-N, exchangeable with D_2O), 3.42-3.35 (*m*, 2H-C(9')), 3.19-3.10 (*m*, H-C(3)), 2.97 (*s*, CH_3-N), 2.70-2.61 (*m*, 2H-C(11')), 2.43 (*t*, *J* = 7.6, 2H-C(24)), 2.38 (*s*, CH_3-SO_2N), 2.06 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 0.91 (*s*, CH_3-C(10)), 0.78 (*d*, *J* = 6.4, CH_3-C(20)), 0.68 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.41, 170.26, 151.78, 150.78, 148.80, 134.74, 128.19, 124.88, 122.02, 117.55, 98.31, 75.34, 70.62, 58.71, 57.34, 54.02, 47.73, 45.02, 44.04, 43.35, 42.00, 41.97, 41.62, 37.66, 37.34, 35.42, 35.05, 34.06, 33.62, 31.18, 29.39, 28.89, 27.18, 25.50, 24.23, 23.82, 22.72, 22.61, 21.57, 21.31, 17.88, 12.20. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 787.42335 (error +0.50 ppm). Combustion analysis for ($C_{42}H_{63}ClN_4O_6S \times 2H_2O$): calculated C 61.26, H 8.20, N 6.80, S 3.89. Found C 60.91, H 8.08, N 6.80, S 3.98. HPLC purity: Method A: RT 1.879, area 99.37 %; method B: RT 1.866, area 99.37 %.

24-*N*-Methyl-*N*-[(7-chloroquinoline-4-yl)amino]propylamino-3*α*-*N'*-*tert*-butylcarbamate-7*α*,12*α*-diacetoxy-5β-cholane (45). Into stirred solution of **41** (1.38 g, 1.73 mmol) and formaldehyde (37 %, 581 μL, 20.9 mmol) in DCM (85 mL), $NaBH(OAc)_3$ (3.65 g, 17.2 mmol) was added in 3 equal portions in 8 h intervals. Upon completion of the reaction, the reaction mixture was suspended in DCM/H_2O mixture, pH was adjusted to pH 12 with 0.5 M NaOH and transferred to separatory funnel and worked-up in usual manner. Product was isolated after flash column chromatography purification (Biotage SP1, NH column, eluent EA/Hex gradient 6/4 → EA, Biotage SP1, RP column, eluent MeOH/H_2O

gradient 75/25 → MeOH and RP column MeOH/H_2O = 95/5). Yield 880.1 mg (63 %). **45:** Colorless foam softens at 108-110 ºC. $[\alpha]_D^{20}$ = +0.042 (c = 1.6×10^{-3} g/mL, DCM). IR (KBr): 3674w, 3430s, 2946m, 2867m, 2800w, 1731s, 1613m, 1581s, 1535m, 1456m, 1372m, 1331w, 1244s, 1170m, 1066w, 1024m, 966w, 850w, 806w, 768w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.49 (*d, J* = 4.5, H-C(2')), 7.93 (*s*, H-C(8')), 7.86 (*s*, H-N-Boc, exchangeable with D_2O), 7.62 (*d, J* = 8.8, H-C(5')), 7.32 (*d, J* = 8.6, H-C(6')), 6.31 (*d, J* = 4.9, H-C(3')), 5.06 (*s*, H-C(12)), 4.88 (*s*, H-C(7)), 3.38 (*bs*, 2H-C(9')), 3.27 (*bs*, H-C(3)), 2.61 (*bs*, 2H-C(11')), 2.45-2.31 (*m*, 2H-C(24) and CH_3-N)), 2.05 (*s*, 2xCH_3COO), 1.44 (*s*, $(CH_3)_3$C-N(Boc)), 0.90 (*s*, CH_3-C(10)), 0.77 (*d, J* = 5.8, CH_3-C(20)), 0.68 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.37, 170.32, 152.06, 150.65, 149.09, 134.59, 128.49, 124.78, 121.90, 117.61, 98.34, 79.18, 75.42, 70.80, 58.93, 57.74, 47.78, 45.01, 44.37, 43.36, 42.23, 41.54, 37.68, 36.38, 35.48, 35.09, 34.65, 34.23, 33.70, 31.27, 30.97, 28.88, 28.41, 27.21, 25.52, 24.28, 24.11, 22.75, 22.70, 21.62, 21.32, 17.90, 12.19. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 809.4978 (error -0.49 ppm). Combustion analysis for $C_{46}H_{69}ClN_4O_6$: Calculated C 68.25, H 8.59, N 6.92; found C 68.02, H 8.63, N 6.75. HPLC purity: Method C: RT 7.896, area 96.46; method D: RT 5.553, area 96.83 %.

24-*N*-Fmoc-*N*-[(7-Chloroquinoline-4-yl)amino]ethylamino-3α-*N'*-tert-butylcarbamate-7α,12α-diacetoxy-5β-cholane (46). Mixture of **40** (ST10) (1.07 g, 1.36 mmol) and Fmoc-Su (460 mg, 1.36 mmol) in 32 mL DCM was stirred for 4 h at r.t. Solvent was evaporated under reduced pressure and product was isolated after flash column chromatography purification (Biotage SP1, SiO_2 column, eluent EA/Hex gradient 9/1→EA). Yield 1.00 g (74 %). Colorless foam softens at 63-68 ºC. $[\alpha]_D^{20}$ = +0.036 (c =1.5×10^{-3} g/mL, DCM). IR (ATR): 3351w, 2936m, 2867m, 1704s1611w, 1582m, 1522w, 1452m, 1371m, 1239s, 1169m, 1067m, 1022w, 880w, 814w, 741w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.33 (*bs*, H-C(2')),

7.90-7.10 (*m*, Ar), 6.21 (*bs*, H-C(3')), 5.01 (*bs*, H-C(12)), 4.88 (*bs*, H-C(7)), 3.75-3.55 (*m*, H-C(3) and 2H-C(9')), 3.30 (*bs*, 2H-C(10')), 2.95-2.80 (*m*, 2H-C(24)), 2.07 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 1.43 (s, $(CH_3)_3C$-N(Boc)), (*s*, CH_3-C(10)), 0.68 (*d*, *J* = 5.85, CH_3-C(20)), 0.60 (*s*, CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 174.15, 170.36, 158.57, 152.47, 148.10, 143.57, 141.36, 137.08, 127.78, 127.03, 126.51, 124.54, 122.57, 120.02, 116.18, 97.54, 75.38, 70.81, 50,80, 47.80, 47.23, 44.99, 43.30, 41.48, 37.65, 36.34, 34.89, 34.21, 32.59, 31.26, 28.77, 28.37, 27.26, 25.42, 22.65, 21.61, 21.38, 19.19, 17.79, 12.20. (+)ESI-HRMS (*m*/*z*): $[M + Na]^+$ 1025.51865 (error +2.04 ppm). Combustion analysis for $C_{44}H_{64}ClN_4O_8 \times H_2O$: Calculated C 66.19, H 8.33, N 7.02; found C 65.86, H 5.42, N 6.96.

24-*N*-Fmoc-*N*-[(7-Chloroquinoline-4-yl)amino]propylamino-3α-*N'-tert*-butylcarbamate-7α,12α-diacetoxy-5β-cholane (47). Compound **47** was obtained according to procedure described for **46** using **41** (2.24 g, 2.81 mmol) and Fmoc-Su (947.9 mg, 2.81 mmol). Product was isolated after column chromatography purification [dry flash, SiO_2, eluent EA, EA/MeOH gradient 95/5 → 8/2, flash chromatography (Biotage SP1, RP column, eluent MeOH/H_2O gradient 9/1 to 95/5, SiO_2 column, eluent EA/Hex gradient 9/1 → EA)]. Yield 2.45 g (86 %). Colorless foam softens at 112-116 ºC. $[\alpha]_D^{20}$ = + 0.060 (c = 1.8×10^{-3} g/mL, DCM). IR (KBr): 3394m, 3066w, 2934m, 2868m, 1731s, 1706s, 1611m, 1580s, 1534m, 1479m, 1450m, 1426m, 1372m, 1244s, 1170m, 1135m, 1102w, 1066w, 1024m, 1000w, 966*w*, 939w, 881w, 851w, 808w cm^{-1}. ^1H NMR (200 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5.4, H-C(2'), 8.0-7.2 (*m*, Ar), 6.48 (*bs*, H-N-Boc, exchangeable with D_2O), 6.34 (*d*, *J* = 5.4, H-C(3')), 5.09 (bs, H-C(12)), 4.91 (bs, H-C(7)), 4.65 (*d*, *J* = 5.6, C*H*$_2$CH (Fmoc)), 4.23 (*t*, *J* = 5.6, CH_2C*H*(Fmoc)), 3.50-2.80 (*m*, 2H-C(9'), 2H-C(11'), 2H-C(24) and H-C(3)), 2.37 (*s*, H-N, exchangeable with D_2O), 2.11 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 1.45 (*s* , $(CH_3)_3C$-N(Boc)), 0.91 (*s*, CH_3-C(10)), 0.75 (*d*, *J* = 6.0 CH_3-C(20)), 0.71 (*s*, CH_3-C(13)). ^{13}C NMR

(50 MHz, $CDCl_3$, δ): 170.37, 170.29, 157.17, 155.15, 151.85, 149.85, 149.19, 143.86, 141.38, 134.83, 128.42, 127.67, 127.03, 125.23, 124.59, 121.85, 119.93, 98.21, 79.20, 75.38, 70.79, 66.86, 50.75, 47.45, 44.96, 43.86, 43.32, 41.44, 38.62, 37.60, 36.31, 35.40, 34.78, 34.16, 32.59, 31.23, 28.79, 28.35, 27.22, 26.06, 25.44, 25.11, 22.62, 21.58, 21.34, 17.73, 14.11, 12.16. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 1017.5503 (error +1.39 ppm). Combustion analysis for $C_{44}H_{66}ClN_4O_8 \times H_2O$: Calculated C 68.03, H 8.37, N 7.05; found C 67.86, H 8.42, N 7.96.

24-*N*-Fmoc-*N*-[(7-Chloroquinoline-4-il)amino]ethylamino-3α-amino-7α,12α-diacetoxy-5β-cholane (48). Compound **46** (946 mg, 0.94 mmol) was stirred at r.t. in DCM/ TFA mixture (13 mL, 3:1, v/v) for 4 h. Solvent was removed under reduced pressure; the residue was transferred as DCM solution to separatory funnel and worked-up in usual manner. Crude product 817 mg was forwarded to the next reaction step without additional purification.

24-*N*-Fmoc-*N*-[(7-Chloroquinoline-4-il)amino]propylamino-3α-amino-7α,12α-diacetoxy-5β-cholane (49). Compound **47** (1.26 g, 1.24 mmol) was stirred at r.t. in DCM/ TFA mixture (20 mL, 1:1, v/v) for 95 min. Solvent was removed under reduced pressure, and the residue was transferred as DCM solution to separatory funnel and worked-up in usual manner. Product was isolated after column chromatography purification. Yield 1.10 g (96 %). Colorless foam softens at 88-91 ºC. $[\alpha]_D^{20}$ = +0.025 (c = 1.6×10^{-3} g/mL, DCM). IR (KBr): 3409m, 3065w, 2942m, 2864m, 1728s, 1610m, 1581s, 1538m, 1449m, 1427m, 1376m, 1330m, 1244s, 1136m, 1077m, 1024m, 964w, 897w, 850w cm^{-1}. ^1H NMR (200 MHz, $CDCl_3$, δ): 8.48 (*d, J* = 5.3, H-C(2')), 8.00-7.20 (*m,* Ar), 6.48 (*bs*, H-N, exchangeable with D_2O), 6.29 (*m*, H-C(3')), 5.07 (*bs*, H-C(12)), 4.89 (*bs*, H-C(7)), 4.64 (*d, J* = 5.6, C*H*$_2$CH-C(Fmoc)), 4.23 (*t, J* = 5.6, CH_2C*H*(Fmoc)), 3.40-2.80 (*m,* 2H-C(9'), 2H-C(11') and 2H-C(24)), 2.70-

2.50 (*m*, H-N and H-C(3)), 2.12 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.78-0.64 (*m*, CH_3-C(20) and CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 223.59, 170.66, 151.85, 150.58, 149.19, 143.88, 141.40, 134.85, 128.69, 128.36, 127.67, 127.03, 125.25, 124.59, 122.15, 120.95, 119.93, 119.68, 117.55, 107.73, 98.21, 75.43, 70. 85, 66.88, 51.58, 50.47, 49.43, 47.77, 47.49, 44.99, 43.92, 43.34, 41.42, 39.31, 37.70, 35.43, 34.81, 34.32, 33.28, 32.63, 31.37, 28.92, 27.24, 26.48, 25.53, 22.72, 21.61, 21.45, 17.71, 12.18. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 917.4978 (error -0.93 ppm). Combustion analysis for $C_{55}H_{69}ClN_4O_6 \times H_2O$: Calculated C 70.60, H 7.65, N 5.99; found C 70.48, H 7.42, N 6.01.

24-*N*-[(7-Chloroquinoline-4-yl)amino]propylamino-3α-*N*',*N*'-dimethylamino-7α,12α-diacetoxy-5β-cholane (51). To a stirred mixture of **49** (589 mg, 0.64 mmol) and formaldehyde (37%, 0.3 mL, 4.04 mmol) in dry methanol (20 mL) at r.t. was added a suspension of anh. $ZnCl_2$ (87 mg, 0.64 mmol) and $NaBH_3CN$ (81 mg, 1.28 mmol) in dry methanol (20 mL). After 24 h of stirring at r.t. the solvent was removed under reduced pressure, and the residue was transferred into separatory funnel as DCM solution, water was added and pH was adjusted to pH 12 with 0.1 M NaOH. Then, the layers were separated, water layer was extracted with DCM (2×15 mL), combined organic layers were washed with sat. $NaHCO_3$ and brine and dried over anh. Na_2SO_4. Solution was filtered of, solvent removed under reduced pressure and crude product (584 mg) was dissolved in solution of piperidine in DCM (20 %, 25 mL). After stirring at r.t. the solvent was removed under reduced pressure, transferred to separatory funnel as DCM solution and worked-up in a usual manner. After column chromatography [dry flash, SiO_2, eluent MeOH, MeOH/NH_3 gradient 99/1 → 94/6, flash chromatography (Biotage SP1, SiO_2 column, eluent MeOH/NH_3 gradient 98/2 → 95/5, and N-H column, eluent EA/ether = 9/1, EA, gradient EA/MeOH 95/5 → 9/1)] **51** (130.7 mg, 28 %) and **57** (26.3 mg, 6 %) was isolated**. 51:** colorless foam softens at 78-82

ºC. $[\alpha]_D^{20}$ = +0.140 (c = 1.8×10^{-3} g/mL, DCM). IR (KBr): 3426s, 2936m, 2868m, 1730m, 1613m, 1582s, 1451m, 1376m, 1331w, 1244s, 1163w, 1140w, 1070w, 1026m, 966w, 899w, 877w, 851w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.48 (*d, J* = 5.5, H-C(2')), 7.93 (*d, J* = 2.2, H-C(8')), 7.83 (*d, J* = 9.0, H-C(5')), 7.32 (*dd, J*$_1$ = 8.9, *J*$_2$ = 2.1, H-C(6')), 6.30 (*d, J* = 5.5, H-C(3')), 5.09 (*bs*, H-C(12)), 4.93 ((*bs*, H-N, exchangeable with D_2O), 4.92-4.87 (*m*, , H-C(7)), 3.41 (*t*, J = 5.9, 2H-C(9')), 2.95 (*t, J* = 5.7, 2H-C(11')), 2.75-2.61 (*m*, 2H-C(24)), 2.35 (*s*, 2CH_3-N), 2.23-2.13, (*m*, H-C(3)), 2.10 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.91 (*s*, CH_3-C(10)), 0.83 (*d, J* = 6.5, CH_3-C(20)), 0.71 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.53, 170.48, 151.51, 150.71, 148.53, 134.90, 127.95, 124.94, 122.29, 117.48, 98.26, 75.40, 70.82, 64.71, 50.00, 48.53, 47.66, 45.04, 43.32, 43.14, 41.65, 41.04, 37.73, 35.54, 34.99, 34.38, 33.26, 32.61, 31.47, 28.86, 27.28, 26.54, 25.93, 25.42, 23.19, 23.06, 22.77, 22.65, 21.54, 21.34, 17.86, 12.21. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 723.4611 (error -1.19 ppm). Combustion analysis for $C_{42}H_{63}ClN_4O_4$: Calculated C 69.73, H 8.78, N 7.74; found C 70.12, H 8.98, N 7.68. HPLC purity: Method A: RT 1.804, area 97.63 %; method C: RT 12.462, area 95.41 %.

24-*N*-[(7-Chloroquinoline-4-yl)amino]propylamino-3α-amino-7α,12α-diacetoxy-5β-cholane (53). Compound **41** (260 mg, 0.326 mmol) was stirred at r.t. in DCM/ TFA mixture (5 mL, 1:1, v/v) for 90 min. Solvent was removed under reduced pressure, and the residue was transferred as DCM solution to separatory funnel and worked-up in a usual manner. Yield 187 mg (82 %). Colorless foam softens at 79–82 ºC. $[\alpha]_D^{20}$ = +0.084 (c = 1.4×10^{-3} g/mL, DCM). IR (KBr): 3410m, 2940m, 2866m, 1730m, 1611m, 1582s, 1542m, 1450m, 1377m, 1332w, 1244s, 1138w, 1079w, 1026w, 965w, 898w, 852w cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.48 (*d, J* = 5.3, H-C(2')), 7.93 (*d, J* = 1.9, H-C(8')), 7.82 (*bs*, H-N, exchangeable with D_2O), 7.73 (*d, J* = 9.0, H-C(5')), 7.31 (*dd, J*$_1$ = 8.8, *J*$_2$ = 2.1, H-C(6')), 6.29 (*d, J* = 5.4,

H-C(3')), 5.10 (*bs*, H-C(12)), 4.92-4.85 (*m*, H-C(7)), 3.38 (*t*, *J* = 5.7, 2H-C(9')), 2.97-2.87 (*m*, 2H-C(11')), 2.75-2.55 (*m*, 2H-C(24) and H-C(3)), 2.11 (*s*, CH_3COO), 2.04 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.85 (*d*, *J* = 6.6, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.64, 151.98, 150.60, 148.90, 134.64, 128.25, 124.69, 122.15, 117.52, 98.21, 75.49, 70.85, 51.64, 50.49, 49.42, 47.54, 45.03, 43.91, 43.46, 41.49, 39.41, 37.73, 35.51, 34.96, 34.31, 33.33, 31.38, 31.18, 29.01, 27.28, 27.13, 26.54, 25.59, 22.76, 21.57, 21.44, 17.87, 12.21. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 695.4280 (error -2.49 ppm). Combustion analysis for $C_{40}H_{59}ClN_4O_4 \times 0.5H_2O$: Calculated C 68.21, H 8.59, N 7.95; found C 68.01, H 8.54, N 7.64. HPLC purity: Method C: RT 11.493, area 97.92%; method D: RT 5.137, area 97.997 %.

24-*N*-Methyl-*N*-[(7-chloroquinoline-4-yl)amino]propylamino-3α-amino-7α,12α-diacetoxy-5β-cholane (55). Compound **45** (133 mg, 0.164 mmol) was stirred at r.t. in DCM/ TFA mixture (2.5 mL, 1:1, v/v) 3 h. Solvent was removed under reduced pressure, and the residue was transferred as DCM solution into separatory funnel and worked-up in a usual manner. Product was isolated after column chromatography (dry flash, SiO_2, eluent EA, EA/MeOH gradient 9/1 → 7/3, gradient EA/MeOH/NH_3 18 / 0.2 / 0.2 → 18 / 1.4 / 1.4). Yield 41 mg (35 %). Colorless foam softens at 75-77 ºC. $[\alpha]_D^{20}$ = +0.090 (c = 2.0×10^{-3} g/mL, DCM). IR (KBr): 3408m, 2939s, 2865m, 1731m, 1611m, 1582s, 1542m, 1452m, 1377m, 1332m, 1243s, 1158w, 1137m, 1026m, 966w, 898w, 850w, 807w cm^{-1}. ^1H NMR (500 MHz, $CDCl_3$, δ): 8.50 (*d*, *J* = 5.5, H-C(2')), 7.94 (*d*, *J* = 2, H-C(8')), 7.82 (*bs*, 2H-N, exchangeable with D_2O), 7.70 (*d*, *J* = 8.9, H-C(5')), 7.33 (*dd*, J_1 = 8.9, J_2 = 2.2, H-C(6')), 6.31 (*d*, *J* = 5.5, H-C(3')), 5.06 (*s*, H-C(12)), 4.87 (*d*, *J* = 2.6, H-C(7)), 3.38 (*t*, *J* = 5.7, 2H-C(9')), 2.81 (*bs*, 2H-N, exchangeable with D_2O), 2.70-2.57 (*m*, 2H-C(11') and H-C(3)), 2.48-2.40 (*m*, 2H-C(24)), 2.38 (*s*, CH_3-N), 2.08 (*s*, CH_3COO), 2.07 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.78 (*d*,

J = 6.5, CH_3-C(20)), 0.68 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.64, 151.74, 150.80, 148.76, 134.79, 128.16, 124.93, 122.02, 117.55, 98.29, 75.45, 70.86, 58.63, 57.30, 51.57, 47.81, 45.05, 43.96, 43.38, 41.89, 41.89, 39.11, 37.76, 35.50, 35.09, 34.36, 33.63, 31.40, 30.92, 28.98, 27.23, 25.58, 24.20, 23.77, 22.79, 22.67, 21.63, 21.42, 17.87, 12.21. (+)ESI-HRMS (*m*/*z*):$[M+H]^+$ 709.4454 (error -0.68 ppm). Combustion analysis for $C_{41}H_{61}ClN_4O_4$: Calculated C 67.70, H 8.73, N 7.70; found C 67.65, H 8.83, N 7.60. HPLC purity: Method A: RT 2.240, area 96.94 %; method B: RT 1.792, area 98.41 %.

24-*N*-Methyl-*N*-[(7-chloroquinoline-4-yl)amino]propylamino-3α-*N*',*N*'-dimethylamino-7α,12α-diacetoxy-5β-cholane (57). Mixture of **55** (453.8 mg, 0.64 mmol) and formaldehyde (37 %, 0.48 mL, 6.43 mmol) in 3 mL of CH_3CN was stirred at r.t. for 20 min. Then, $NaBH_3CN$ (122 mg, 1.94 mmol) was added and which was after 30 min followed by glac. AcOH (0.7 mL, pH = 6). After 72 h the solvent was removed under reduced pressure, and the obtained crude was transferred into separatory funnel as DCM solution, water was added and pH was adjusted to pH 12 with 0.1 M NaOH and the reaction mixture was further worked-up in usual manner. Product was isolated after column chromatography [dry flash, SiO_2, eluent EA, EA/MeOH gradient 9/1 → 1/1, EA/MeOH/NH_3 gradient 18/ 0.2 / 0.2 → 18/ 3.4 / 3.4), flash chromatography (Biotage SP1 RP column, eluent MeOH/H_2O gradient 7/3 → MeOH and NH column, eluent EA/Hex gradient 7/3 → EA)]. Yield 59 mg (13 %). Colorless foam softens at 73-76 ºC. $[\alpha]_D^{20}$ = +0.049 (c =1.8 ×10^{-3} g/mL, DCM). IR (KBr): 3431s, 2925m, 2868m, 1731m, 1613m, 1582s, 1452m, 1379m, 1244m, 1125m, 1028m, 607m cm^{-1}. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.50 (*d*, *J* = 5.2, H-C(2')), 7.93 (*d*, *J* = 2.0, H-C(8')), 7.82 (*bs*, H-N, exchangeable with D_2O), 7.64 (*d*, *J* = 8.9, H-C(5')), 7.32 (*dd*, J_1 = 8.9, J_2 = 2.1, H-C(6')), 6.31 (*d*, *J* = 5.4, H-C(3')), 5.06 (*bs*, H-C(12)), 4.88 (*d*, *J* = 2.5, H-C(7)), 3.42-3.35 (*m*, 2H-C(9')), 2.63 (*t*, *J* = 5.5, 2H-C(11')), 2.41 (*t*, *J* = 6.5, 2H-C(24)), 2.37 (*s*, CH_3-N), 2.31 (*s*, $(CH_3)_2$N-C(3)), 2.07 (*s*, CH_3COO), 2.06 (*s*, CH_3COO), 0.90 (*s*, CH_3-C(10)), 0.78 (*d*, *J* = 6.6,

CH_3-C(20)), 0.68 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.60, 170.56, 152.00, 150.68, 149.04, 134.65, 128.45, 124.83, 121.91, 117.60, 98.34, 75.44, 70.88, 64.97, 58.82, 57.64, 47.85, 45.04, 44.24, 43.29, 42.09, 41.74, 41.68, 37.74, 35.66, 35.14, 34.41, 33.68, 32.22, 31.53, 28.89, 27.22, 25.44, 24.27, 24.03, 23.59, 22.76, 22.71, 21.63, 21.37, 17.88, 12.20. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 737.4767 (error -0.43 ppm). Combustion analysis for $C_{43}H_{65}ClN_4O_4$: Calculated C 70.03, H 8.88, N 7.60; found C 69.82, H 8.60, N 7.63.

Higher yields were obtained when **57** was prepared starting from **51** (59 mg, 0.08 mmol) according to procedure described for **56**. Column purification: dry-flash, SiO_2 column, eluent EA/MeOH gradient 9:1 → 3:7, MeOH, eluent MeOH/NH_3 conc. gradient 3.9:0.1 → 3.5:0.5; flash Biotage SP1, NH column, eluent EA/hexane gradient 8:2 → EA. Yield 58 mg (93%). HPLC purity: Method C: RT 9.682, area 95.17 %; method D: RT 5.092, area 98.86 %.

***N*,*N*-di(3α-Amino-7α,12α-diacetoxy-5β-cholan-24-yl)-*N'*-(7'-chloroquinoline-4'-yl)-1,3-propanediamine (61).** Compound **61** was obtained according to procedure described for **60** using **59** (656 mg, 0.484 mmol). After 5 h the solvent was removed under reduced pressure, and the residue was transferred as DCM solution to separatory funnel and worked-up in a usual manner. Product was isolated after column chromatography procedure (dry flash, SiO_2, eluent EA, EA/MeOH gradient 9/1 → 7/3 and EA/MeOH/NH_3 gradient 18 / 0.2 / 0.2 → 18 / 1.7 / 1.7). Yield 511 mg (91 %). Colorless foam softens at 113-117 ºC. $[\alpha]_D^{20}$ = +0.065 (c = 2.1×10^{-3} g/mL, DCM). IR (KBr): 3752w, 3402m, 2948m, 2856m, 1731s, 1668s, 1613m, 1581s, 1540w, 1452m, 1379*s*, 1245s, 1137w, 1024m, 965w, 851w cm^{-1}. ^{1}H NMR (200 MHz, $CDCl_3$, δ): 8.49 (*d*, *J* = 5,1, H-C(2')), 7.92 (*d*, *J* = 1.7, H-C(8')), 7.80 (bs, H-N, exchangeable with D_2O), 7.68 (*d*, *J* = 9.0, H-C(5')), 7.33 (*dd*, J_1 = 9.0, J_2 = 1.7, H-C(6')), 6.32 (*d*, *J* = 5.6, H-C(3')), 5.73 (*bs*, 2×NH_2, exchangeable with D_2O), 5.06 (*bs*, 2×H-C(12)), 4.87 (*bs*, 2×H-C(7)), 3,36 (*bs*, 2H-C(9')), 2.72-2.36 (*m*, 2H-C(11'), 2×H-C(3) and 2× 2H-C(24)), 2.07 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 2.02 (*s*, CH_3COO), 0.90 (*s*, 2×CH_3-C(10)), 0.75 (*d*, *J* = 6.2,

2×CH_3-C(20)), 0.67 (*s*, 2×CH_3-C(13)). ^{13}C NMR (50 MHz, $CDCl_3$, δ): 172.77, 170.69, 170.53, 170.49, 152.07, 150.54, 149.06, 134.57, 128.42, 124.61, 122.03, 117.49, 98.37, 75.42, 70.85, 54.90, 54.22, 51.56, 47.83, 44.96, 44.45, 43.30, 41.41, 39.29, 37.64, 35.42, 35.03, 34.85, 34.27, 33.65, 31.34, 31.06, 28.92, 28.13, 27.15, 25.49, 24.38, 23.58, 23.00, 22.73, 22.56, 21.60, 21.38, 17.75, 12.13. ^{1}H NMR (500 MHz, $CDCl_3$, δ): 8.50 (*d*, *J* = 5,3, H-C(2')), 7.93 (*d*, *J* = 2.1, H-C(8')), 7.74-7.63 (m, H-N, exchangeable with D_2O and H-C(5')), 7.33 (*dd*, J_1 = 8.8, J_2 = 2.2, H-C(6')), 6.31 (*d*, *J* = 5.5, H-C(3')), 5.05 (*bs*, 2×H-C(12)), 4.87 (*bs*, 2×H-C(7)), 3,36 (*bs*, 2H-C(9')), 2.72-2.54 (*m*, 2H-C(11'), 2×H-C(3), 2.52-2.40 (*m*, 2× 2H-C(24)), 2.06 (*s*, CH_3COO), 2.05 (*s*, CH_3COO), 2.02 (*s*, CH_3COO), 0.90 (*s*, 2×CH_3-C(10)), 0.75 (*d*, *J* = 6.0, 2×CH_3-C(20)), 0.67 (*s*, 2×CH_3-C(13)). ^{13}C NMR (125 MHz, $CDCl_3$, δ): 170.64, 170.60, 152.14, 150.50, 149.17, 134.58, 128.58, 124.63, 121.96, 117.54, 98.43, 75.46, 70.89, 54.96, 55.30, 53.39, 51.66, 47.91, 45.04, 44.48, 43.38, 41.52, 39.51, 37.74, 35.53, 35.11, 34.36, 33.74, 31.43, 31.27, 29.66, 28.99, 27.22, 25.58, 24.54, 23.66, 22.80, 22.76, 21.65, 21.42, 21.26, 17.85, 12.20. (+)ESI-HRMS (*m*/*z*): $[M + H]^+$ 1154.7660 (error +1.22 ppm). Combustion analysis for $C_{68}H_{104}ClN_5O_8 \times H_2O$: Calculated C 69.62, H 9.11, N 5.97; found C 69.39, H 9.27, N 5.91. HPLC purity: Method C: RT = 10.553, area 95.61 %; method D: RT 5.288, area 95.46 %.

***N,N'*-{4'-[(7-Chloroquinoline-4-yl)amino]propyl}-7α,12α-diacetoxy-3,24-diamine (63**, mixture of diastereoisomers**)**. Compound **63** was obtained according to procedure described for **62** using **23** (852 mg, 1.23 mmol), ACQ3 (579 mg, 2.46 mmol) and $NaBH_3CN$ (107 mg, 1.71 mmol). Column chromatography dry flash, SiO_2, eluent gradient EtOAc → EtOAc/MeOH = 1:9 → MeOH, gradient EtOAc/MeOH/NH_3 = 18:1:1 → EtOAc/MeOH/NH_3 = 9:1:1, flash chromatography Biotage SP1 RP, gradient MeOH/H_2O = 8:2 → 9:1. Yield 286 mg, 26 %. Colorless solid, $[\alpha]_D^{20}$ = +0.041 (c = 1.1×10^{-3} g/mL, DCM). IR (KBr): 3405m, 2930s, 2863w, 1728m, 1610w, 1582s, 1538w, 1450w, 1372w, 1331w, 1246m, 1170w,

1137w, 1077w, 1023w, 963w, 900w, 878w, 852w, 805w, 766w cm^{-1}. ^{1}H NMR (500 MHz, CD_3OD, δ): 8.34 (*d*, J = 5.7, 2×H-C(2')), 8.10-8.02 (*m*, 2×H-C(5')), 7.79-7.76 (*m*, 2×H-C(8')), 7.41-7.34 (*m*, 2×H-C(6')), 6.54-6.48 (*m*, 2×H-C(3')), 5.08-5.02 (*bs*, H-C(12)), 4.85 (*bs*, H-C(7) coverd with methanol signal), 3.41 (*t*, J = 6.7, 2×2H-C(9')), 2.84 (bs, Hα-C(3)), 2.81-2.65 (*m*, , 2×2H-C(11')), 2.75-2.50 (*m*, 2H-C(24)), 2.06 (*s*, CH_3COO), 2.02 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10), one isomer), 0.88 (*s*, CH_3-C(10), second isomer), 0.85-0.78 (*m*, CH_3-C(20)), 0.73 (*s*, CH_3-C(13) one isomer), 0.72 (*s*, CH_3-C(13), second isomer). ^{13}C NMR (125 MHz, CD_3OD, δ): 172.37, 152.86, 152.82, 152.64, 149.86, 136.44 127.83, 126.12, 124.44, 118.96, 99.79, 77.35, 72.86, 54.15, 51.38, 46.41, 46.37, 44.88, 42.89, 42.57, 39.09, 37.24, 36.39, 34.61, 34.17, 32.33, 31.20, 29.97, 29.27, 29.03, 28.42, 27.00, 26.80, 25.40, 23.995, 23.95, 23.26, 21.59, 21.37, 18.58, 12.71 (+)ESI-HRMS (*m*/*z*):$[M + 2H]^{2+}$ 457.24877 (error -0.62 ppm), $[M + H]^{+}$ 913.49058 (error -0.28 ppm). Combustion analysis $C_{52}H_{70}Cl_2N_6O_4 \times H_2O$: Calculated C 67.01, H 7.79, N 9.02; found C 66.95, H 7.99, N 9.07. HPLC purity: Method C: RT1 5.533, RT2 8.731, area 95.07 %; method D: RT1 5.495, RT2 5.495, area 99.55 %.

***N,N'*-{4'-[(7-Chloroquinoline-4-il)amino]butyl}-7α,12α-diacetoxy-3β,24-diamine (64)**. Compound **64** was obtained according to procedure described for **62**, using **24** (150 mg, 0.21 mmol), ACQ4 (105 mg, 0.42 mmol) and $NaBH_3CN$ (22 mg, 0.34 mmol). Column chromatography dry flash, SiO_2, gradient EtOAc → EtOAc/MeOH = 3:7 → MeOH → EtOAc/MeOH/NH_3 = 18:1:1, flash chromatography Biotage SP1 NH column, eluent EtOAc/MeOH and DCM/MeOH). Yield 16 mg (8%) **64** and 10 mg (5%) of unresolvable mixture of epimers. **64**: Colorless solid, $[\alpha]_D^{20} = +0.046$ (c = 1.6×10^{-3} g/mL, MeOH). IR (film): 3898w, 3738w, 3670w, 3646w, 3612w, 3304m, 2942m, 2868w, 2280w, 1721m, 1610w, 1582s, 1540w, 1451w, 1371m, 1332w, 1247m, 1136w, 1078w, 1024w, 900w, 878w,

851w, 806w, 731w cm^{-1}. ^1H NMR (500 MHz, CD_3OD, δ): 8.35-8.30 (*m*, 2×H-C(2')), 8.12-8.05 (*m*, 2×H-C(8')), 7.79-7.74 (*m*, 2×H-C(5')), 7.41-7.35 (*m*, 2×H-C(6')), 6.53-6.47 (*m*, 2×H-C(3')), 5.06 (*bs*, H-C(12)), 4.86 (*bs*, H-C(7), covered with CD_3OD), 3.40-3.34 (*m*, 2×2H-C(9')), 2.84 (*bs*, Hα-C(3)), 2.67-2.62 (*m*, 2H-C(12')), 2.61-2.56 (*m*, 2H-C(12')), 2.55-2.45 (*m*, 2H-C(24)), 2.07 (*s*, CH_3COO), 2.03 (*s*, CH_3COO), 0.93 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.6, CH_3-C(20)), 0.72 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, CD_3OD, δ): 172.40, 172.36, 152.84, 152.59, 149.86, 136.42, 127.78, 126.07, 124.46, 118.93, 99.79, 77.33, 72.85, 54.07, 51.19, 50.37, 48.03, 46.36, 44.84, 43.98, 43.93, 39.09, 37.18, 36.37, 35.97, 34.57, 34.03, 32.33, 31.15, 29.96, 28.44, 28.25, 28.00, 27.45, 27.28, 26.83, 26.78, 25.24, 23.97, 23.26, 21.59, 21.38, 18.56, 12.71. (+)ESI-HRMS (*m*/*z*):$[M + 2H]^{2+}$ 471.26355 (error -2.46 ppm), $[M + H]^+$ 941.51879 (error -3.55 ppm). Combustion analysis $C_{54}H_{74}Cl_2N_6O_4 \times H_2O$: Calculated C 67.55, H 7.98, N 8.75; found C 67.25, H 7.89, N 8.53. HPLC purity: Method C: RT 8.807, area 97.79 %; method D: RT 5.135, area 99.23 %.

***N,N'*-{4'-[(7-Chloroquinoline-4-yl)amino]hexyl}-7α,12α-diacetoxy-5β-cholane-3β,24-diamine (65) and *N,N'*-{4'-[(7-chloroquinoline-4-yl)amino]hexyl}-7α,12α-diacetoxy-5β-cholane-3α,24-diamine (66).** Compounds were obtained according to procedure described for **62**, using **25** (200 mg, 0.27 mmol), ACQ6 (151 mg, 0.54 mmol) and $NaBH_3CN$ (60 mg, 0.95 mmol). Column chromatography: dry flash, SiO_2, eluent EA, gradient EA/MeOH 95/5 → 2/8, MeOH, gradient EA/MeOH/NH_3 18/1/1 → 9/1/1; Lobar RP column, eluent MeOH/H_2O 9/1 and MeOH; flash chromatography Biotage SP1RP column, eluent gradient EA/MeOH/NH_3 8/1/1 → 9/1/1; preparative TLC SiO_2, eluent EA/MeOH/NH_3=9/1/1. Yields 7 mg (2.5%) **65** (β epimer) and 6 mg (2.3%) **66** (α epimer). **65:** Colorless solid, $[\alpha]_D^{20}$ = +0.080 (c = 1.8×10^{-3} g/mL, MeOH). IR (film): 3313w, 2927m, 2856w, 1724w, 1610w, 1581s, 1539w, 1452w, 1371w, 1332w, 1249m, 1136w, 1080w, 1023w, 901w, 879w, 851w,

807w, 766w, 736w cm^{-1}. ^{1}H NMR (500 MHz, CD_3OD, δ): 8.35-8.31 (*m*, 2×H-C(2')), 8.11-8.06 (*m*, 2×H-C(5')), 7.76- (*d*, J = 2.2, 2×H-C(8')), 7.37 (*dd*, J_1 = 9.0, J_2 = 2.1, 2×H-C(6')), 6.50-6.45 (*m*, 2×H-C(3')), 5.07 (*bs*, H-C(12)), 4.86 (*bs*, H-C(7), covered with MeOH), 3.38-3.30 (*m*, 2×2H-C(9')), 2.79 (*bs*, H-C(3)), 2.60-2.42 (*m*, 2×2H-C(14') and 2H-C(24)), 2.08 (*s*, CH_3COO), 2.03 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.5, CH_3-C(20)), 0.74 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, CD_3OD, δ): 172.28, 172.22, 152.73, 152.43, 149.74, 136.24, 127.63, 125.90, 124.32, 118.79, 99.60, 77.20, 72.73, 53.75, 51.24, 50.61, 48.03, 46.22, 44.70, 43.94, 38.96, 37.06, 36.27, 35.82, 34.50, 34.05, 33.07, 32.21, 32.15, 31.01, 30.77, 30.49, 30.38, 30.10, 29.82, 29.32, 29.30, 28.31, 28.19, 28.10, 26.83, 26.65, 25.07, 23.84, 23.74, 23.12, 21.45, 21.24, 18.44, 14.45, 12.57. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 997.5854 (error +0.62 ppm). Combustion analysis $C_{58}H_{82}Cl_2N_6O_4 \times H_2O$: Calculated C 68.55, H 8.33, N 8.27; found C 68.27, H 8.49, N 8.53. HPLC purity: Method C: RT 11.422, area 97.88 %; method D: RT 5.150, area 99.24.

66: Colorless solid, $[\alpha]_D^{20} = +0.122$ (c = 3.9×10^{-3} g/mL, MeOH). IR (film): 3303w, 3061w, 2928s, 2856m, 1726m, 1610w, 1580s, 1538w, 1452w, 1372w, 1332w, 1250m, 1136w, 1079w, 1023w, 879w, 851w, 807w, 766w, 737w cm^{-1}. ^{1}H NMR (500 MHz, CD_3OD, δ): 8.36-8.31 (*m*, 2×H-C(2')), 8.09 (*d*, *J* = 9.1, 2×H-C(5')), 7.77 (*d*, *J* = 2.0, 2×H-C(8')), 7.38 (*dd*, J_1 = 9.0, J_2 = 2.1, 2×H-C(6')), 6.51 (*d*, *J* = 5.8, 2×H-C(3')), 5.06 (*bs*, H-C(12)), 4.87 (*bs*, H-C(7)), 3.36 (*t*, J = 7.0, 2×2H-C(9')), 2.60-2.45 (*m*, 2×2H-C(14') and 2H-C(24)), 2.36-2.30 (*m*, H-C(3)), 2.06 (*s*, CH_3COO), 2.04 (*s*, CH_3COO), 0.94 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.6, CH_3-C(20)), 0.76 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, CD_3OD, δ): 172.42, 172.30, 152.76, 152.45, 149.76, 136.28, 127.62, 125.91, 124.32, 118.80, 99.61, 77.17, 72.64, 59.35, 51.13, 50.51, 47.76, 46.24, 44.76, 43.92, 43.88, 42.80, 39.02, 37.10, 36.51, 36.26, 35.86, 34.45, 32.46, 30.48, 30.28, 30.20, 30.09, 29.29, 29.24, 28.31, 28.14, 28.06, 26.66, 26.46, 23.83, 23.14, 21.48, 21.23, 18.41, 12.54. (+)ESI-HRMS (*m*/*z*): $[M + 2H]^{2+}$ 499.2938 (error -4.31

ppm) $[M + H]^+$ 997.5824 (error -2.30 ppm). Combustion analysis $C_{58}H_{82}Cl_2N_6O_4 \times H_2O$: Calculated C 68.55, H 8.33, N 8.27; found C 68.60, H 8.30, N 8.35. HPLC purity: Method C: RT 9.878, area 99. 98 %; method D: RT 5.208, area 96.76 %.

3β-*N*-{6'-[(7-Chloroquinoline-4-yl)amino]hexyl}-24-*N*'-{4'-[(7-chloroquinolin-4-yl)amino]butyl}-7α,12α-diacetoxy-5β-cholane-3,24-diamine (67) and 3α-*N*-{6'-[(7-chloroquinoline-4-yl)amino]hexyl}-24-*N*'-{4'-[(7-chloroquinoline-4-yl)amino]butyl}-7α,12α-diacetoxy-5β-cholane-3,24-diamine (68). Compounds were obtained according to procedure described for **62**, using **24** (200 mg, 0.28 mmol), ACQ6 (157 mg, 0.56 mmol) and $NaBH_3CN$ (27 mg, 0.42 mmol). Column chromatography: dry flash, SiO_2, gradient EtOAc → EtOAc/MeOH = 2:8, MeOH, gradient EtOAc/MeOH/NH_3 = 18:1:1 → 9:1:1; flash chromatography (Biotage SP1 RP column, gradient MeOH/H_2O = 9:1 → MeOH; preparative TLC, SiO_2, eluent EtOAc/MeOH/NH_3 = 9:1:1). Yields 14.4 mg (5%) **67** and 4.2 mg (2%) **68.** Compound **67**: Colorless solid, $[\alpha]_D^{20} = +0.020$ (c = 1.8×10^{-3} g/mL, MeOH). IR (film): 3297m, 2932m, 2861w, 1724m, 1610w, 1581s, 1539w, 1451w, 1371w, 1332w, 1250m, 1167w, 1136w, 1079w, 1023w, 901w, 879w, 851w, 807w, 736w cm^{-1}. ^1H NMR (500 MHz, CD_3OD, δ): 8.35-8.32 (*m*, H-C(2') and H-C(2'')), 8.10-8.07 (*m*, H-C(8') and H-C(8'')), 7.78-7.75 (*m*, H-C(5') and H-C(5'')), 7.40-7.35 (*m*, H-C(6') and H-C(6'')), 6.52-6.47 (*m*, H-C(3') and H-C(3'')), 5.06 (*bs*, H-C(12)), 4.85 (*bs*, H-C(7), covered with MeOH), 3.40-3.32 (*m*, 2H-C(9') and 2H-C(9'')), 2.83 (*bs*, Hα-C(3)), 2.68-2.61 (*m*, 2H-C(12'')), 2.58-2.46 (*m*, 2H-C(12') and 2H-C(24)), 2.08 (*s*, CH_3COO), 2.03 (*s*, CH_3COO), 0.92 (*s*, CH_3-C(10)), 0.83 (*d*, *J* = 6.6, CH_3-C(20)), 0.73 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, CD_3OD, δ): 170.85, 170.80, 151.32, 151.28, 151.03, 151.00, 148.31, 134.85, 126.23, 126.21, 124.52, 124.49, 122.90, 117.38, 98.24, 98.19, 75.76, 71.28, 52.50, 49.64, 48.82, 46.56, 44.81, 43.28, 42.51, 42.37, 37.54, 35.62, 34.82, 34.39, 33.02, 32.40, 30.76, 29.57, 28.84, 28.42,

27.90, 26.89, 26.83, 26.66, 26.45 25.72, 25.28, 25.23, 23.50, 22.42, 21.67, 20.03, 19.82, 17.00, 11.15. (+)ESI-HRMS (*m*/*z*):$[M + H]^+$ 969.55129 (error -2.22 ppm). Combustion analysis $C_{56}H_{78}Cl_2N_6O_4 \times 0.5H_2O$: Calculated C 68.69, H 8.13, N 8.58; found C 68.57, H 8.29, N 8.45. HPLC purity: Method C: RT 8.674, area 95.27 %; method D: RT 5.072, area 99.21 %.

68: Colorless solid, $[\alpha]_D^{20} = +0.013$ (c = 8.0×10^{-4} g/mL, MeOH). IR (film): 3300m, 2927s, 2856w, 1728m, 1670w, 1610w, 1580s, 1540w, 1452w, 1372w, 1332w, 1246m, 1134w, 1078w, 1024w, 964w, 939w, 880w, 850w, 805w, 732w cm^{-1}. ^1H NMR (500 MHz, CD_3OD, δ): 8.37-8.30 (*m*, H-C(2') and H-C(2'')), 8.12-8.07 (*m*, H-C(8') and H-C(8'')), 7.79-7.75 (*m*, H-C(5') and H-C(5'')), 7.42-7.36 (*m*, H-C(6') and H-C(6'')), 6.54-6.48 (*m*, H-C(3') and H-C(3'')), 5.06 (*bs*, H-C(12)), 4.87 (*bs*, H-C(7)), 3.42-3.34 (*m*, 2H-C(9') and 2H-C(9'')), 2.70-2.63 (*m*, 2H-C(12'')), 2.63-2.48 (*m*, 2H-C(14') and 2H-C(24)), 2.42-2.34 (*m*, Hβ-C(3)), 2.06 (*s*, CH_3COO), 2.04 (*s*, CH_3COO), 0.94 (*s*, CH_3-C(10)), 0.82 (*d*, *J* = 6.4, CH_3-C(20)), 0.74 (*s*, CH_3-C(13)). ^{13}C NMR (125 MHz, CD_3OD, δ): 172.38, 172.28, 152.76, 152.73, 152.46, 152.43, 149.74, 136.29, 127.63, 125.95, 125.92, 124.31, 118.81, 99.66, 99.60, 77.14, 72.60, 59.33, 50.97, 50.15, 49.62, 47.61, 46.25, 44.74, 43.86, 43.75, 42.75, 39.00, 36.80, 36.43, 36.22, 35.83, 34.39, 32.43, 32.14, 30.28, 30.22, 30.09, 29.23, 28.30, 28.11, 28.01, 27.89, 27.72, 27.10, 26.56, 26.47, 23.82, 23.11, 21.48, 21.23, 18.38, 12.54. (+)ESI-HRMS (*m*/*z*):$[M + 2H]^{2+}$ 485.28020 (error -0.32 ppm), $[M + H]^+$ 969.55344 (error 0.65 ppm). Combustion analysis $C_{56}H_{78}Cl_2N_6O_4 \times 0.5H_2O$: Calculated C 68.69, H 8.13, N 8.58; found C 68.51, H 8.21, N 8.77. HPLC purity: method C: RT 8.846, area 99.18 %; method D: RT 5.181, area 96.31 %.

HPLC analyses for purity

Compounds were analyzed for purity (HPLC) using a Waters 1525 HPLC dual pump system equipped with an Alltech, Select degasser system, and dual λ 2487 UV-VIS detector. For data processing, Empower software was used (methods A and B). Methods C and D: Agylent Technologies 1260 Liquid Chromatograph equipped with Quat Pump (G1311B), Injector (G1329B) 1260 ALS, TCC 1260 (G1316A) and Detector 1260 DAD VL+ (G1315C). For data processing, LC OpenLab CDS ChemStation software was used.

Method A: Octadecylsilica was used as the stationary phase (Symmetry C18 analytical column, 4.6 mm _ 150 mm, 5 μm, series no. 021336278136 37). Compounds were dissolved in mixture containing 0.2% HCOOH/CH_3OH 1/1 [%, *v*/*v*] final concentrations were 0.1-0.5 mg/mL and injection volume was 10μl. Eluent was made from the following solvents: 0.2% formic acid in water (A) and methanol (B). The analysis were performed at the UV max of the compounds (at 340 nm) to maximize selectivity.

Compounds **12**, **52**, **16**, **22**, **23**, were eluted using gradient protocol: 0 - 2 min 98 %A, 2 - 7 min 98 %A→ 2 %A, 7-9 min 2 %A, 9-16 min 2 %A→ 98 %A.

Compounds **36**, **40**, **60**, **41**, **21**, **37**, **38**, **39**, **42**, **43**, **13**, **62**, **51**, **50**, **44**, **54**, **56**, **55**, **15**, **19**, **25**, **14**, **18**, **24** were eluted using gradient protocol: 0-3 min 10 %A, 3-6 min 10 %A→ 90 %A, 6-9 min 90 %A, 9-12 min 90 %A→ 10 %A, 12-13 min 10 % A.

Compound **17** was eluted using gradient protocol: 0 - 2 min 95 %A, 2 - 7 min 95 %A→ 5 %A, 7-9 min 5 %A, 9-16 min 5 %A→ 95 %A.

Compounds **66**, **65**, were eluted using gradient protocol: 0-3 min 20 %A, 3-6 min 20 %A→ 80 %A, 6-9 min 80 %A, 9-12 min 80 %A→ 20 %A, 12-13 min 20 % A.

Compounds **61**, **57**, **20** were eluted using gradient protocol: : 0-3 min 6 %A, 3-6 min 6 %A→ 94 %A, 6-9 min 94 %A, 9-12 min 94 %A→ 6 %A, 12-13 min 6 % A.

Method B: Octadecylsilica was used as the stationary phase (Nucleosil C18 analytical column, 4 mm _ 150 mm, 5 μm). Compounds were dissolved in mixture containing 0.2%

$HCOOH/CH_3OH$ 1/1 [%, v/v], final concentrations were 0.1-0.5 mg/mL and injection volume was 10µL. Eluent was made from the following solvents: 0.2 % formic acid in water (A) and methanol (B). The analysis were performed at the UV max of the compounds (at 340 nm) to maximize selectivity.

Compounds **12**, **40**, **52**, **16**, **22**, **20**, **21**, **13**, **17**, **50** were eluted using gradient protocol: 0 - 2 min 98 %A, 2 - 7 min 98 %A→ 2 %A, 7-9 min 2 %A, 9-16 min 2 %A→ 98 %A.

Compounds **60**, **53**, **37**, **38**, **39**, **42**, **43**, **62**, **59**, **44**, **54**, **56**, **15**, **19**, **25**, **14**, **18**, **24** were eluted using gradient protocol: 0-3 min 10 %A, 3-6 min 10 %A→ 90 %A, 6-9 min 90 %A, 9-12 min 90 %A→ 10 %A, 12-13 min 10 % A.

Compounds **51, 55** were eluted using gradient protocol: 0 - 3 min 6 %A, 3 - 6 min 6 %A→ 94 %A, 6-9 min 94 %A, 9-12 min 94 %A→ 6 %A, 12-13 min 6 %A.

Compounds **36**, **41**, **23**, **57**, were eluted using gradient protocol: 0 - 3 min 2 %A, 3 - 6 min 2 %A→ 98 %A, 6-9 min 98 %A, 9-12 min 98 %A→ 2 %A, 12-13 min 2 %A.

Compounds **66**, **65**, were eluted using gradient protocol: 0-3 min 20 %A, 3-6 min 20 %A→ 80 %A, 6-9 min 80 %A, 9-12 min 80 %A→ 20 %A, 12-13 min 20 % A.

Compound **61** was eluted using gradient protocol: 0-3 min 4 %A, 3-6 min 4 %A→ 96 %A, 6-9 min 96 %A, 9-12 min 96 %A→ 4 %A, 12-13 min 4 % A.

Method C: Zorbax Eclipse Plus C18 4.6 _ 150mm, 1.8µ, S.N. USWKY01594 was used as the stationary phase. Eluent was made from the following solvents: 0.2% formic acid in water (A) and methanol (B). The analysis were performed at the UV max of the compounds (at 330 nm or 254 nm for compound **63**) to maximize selectivity. Compounds were dissolved in methanol, final concentrations were ~ 1mg/mL. Flow rate was 0.5mL/min.

Compounds were eluted using gradient protocol: 0 - 1 min 95%A, 1 - 6 min 95%A→ 5%A, 6 - 11 min 5%A, 11 – 15 min 5%A→ 95%A, 15 – 20 min 95%A.

Compounds **45** and **57** were eluted using gradient protocol: 0 - 1 min 95%A, 1 - 6 min 95%A→ 0%A, 6 - 11 min 0%A, 11 – 15 min 0%A→ 95%A, 15 – 20 min 95%A.

Method D: Poroshell 120 EC-C18, 4.6 _ 50mm, 2.7μ, S.N. USCFU07797 was used as the stationary phase. Eluent was made from the following solvents: 0.2% formic acid in water (A) and methanol (B). The analysis were performed at the UV max of the compounds (at 330 nm or 254 nm for compound **66**) to maximize selectivity. Compounds were dissolved in methanol, final concentrations were ~ 1mg/mL. Flow rate was 0.5mL/min. Compounds were eluted using gradient protocol: 0 - 1 min 95%A, 1 - 3 min 95%A→ 0%A, 3 - 10 min 0%A, 10 – 12 min 0%A→ 95%A, 12 – 15 min 95%A.

Empower software

Method A

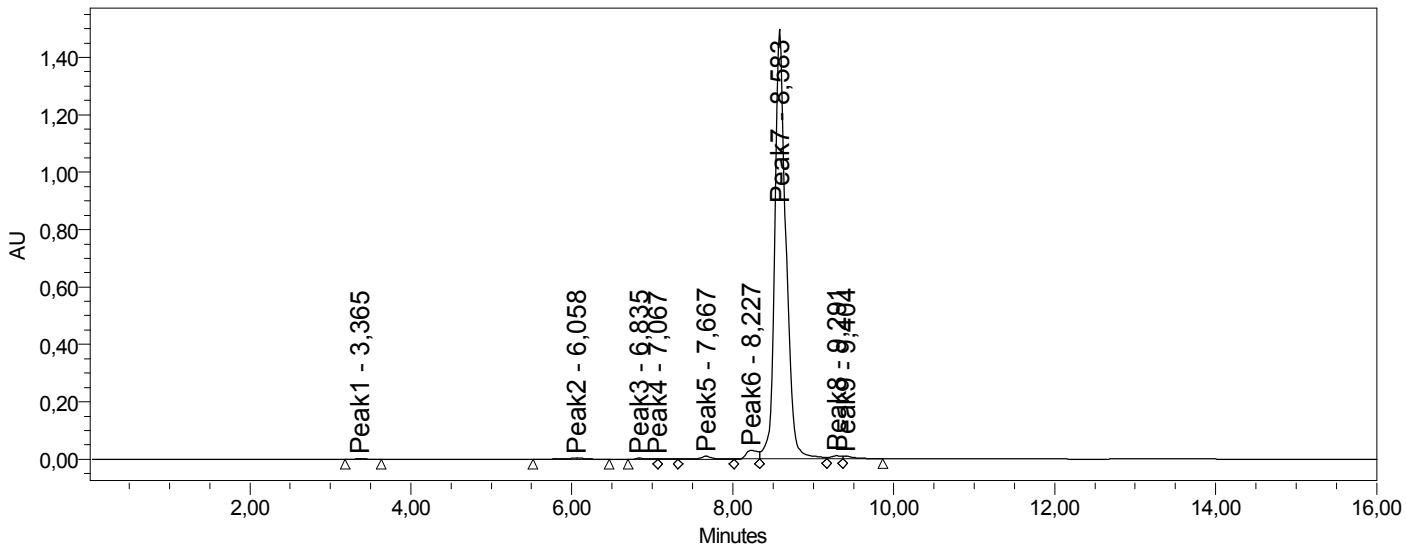
Multi Sample Summary

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO152 Compound 12	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	4.6.2012 14:09:40
Vial:	5	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	4.6.2012 15:28:18
Injection Volume:	10,00 ul	Processing Method:	do152 11
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	3,365	17300	0,11	1699
2	Peak2	6,058	86364	0,56	4728
3	Peak3	6,835	45929	0,30	3843
4	Peak4	7,067	16655	0,11	1982
5	Peak5	7,667	116557	0,75	10064
6	Peak6	8,227	305824	1,98	29779
7	Peak7	8,583	14675122	95,04	1489514
8	Peak8	9,291	94072	0,61	9950
9	Peak9	9,404	83317	0,54	8496

Empower software

Method A

Multi Sample Summary

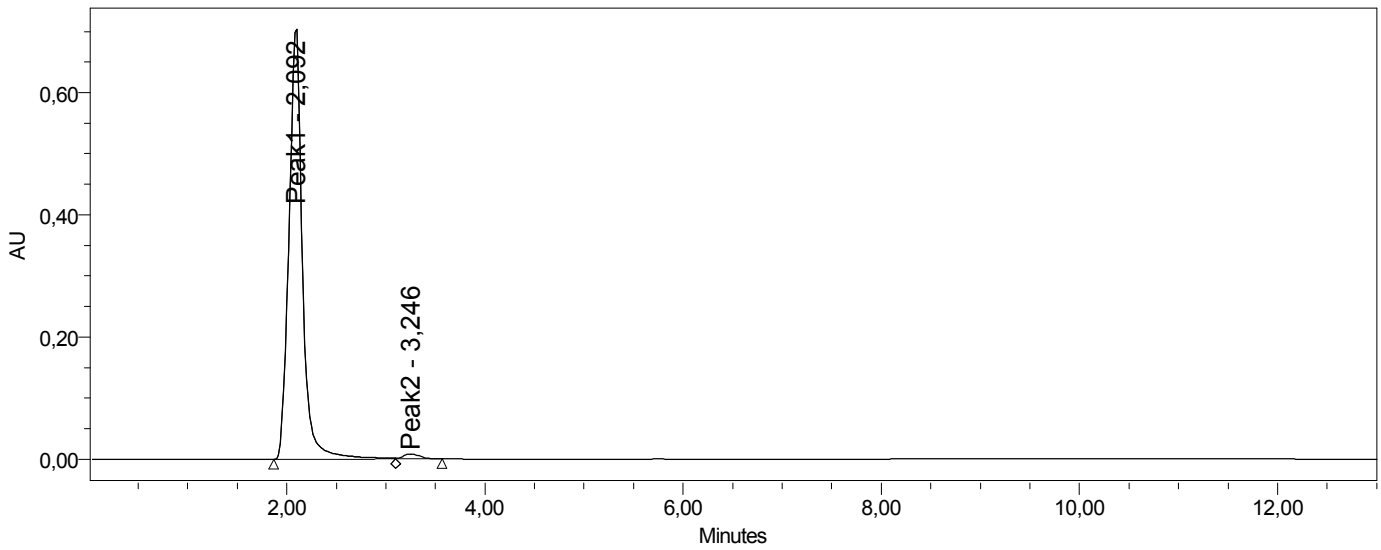
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 13

Sample Name:	DR06	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 11:17:59
Vial:	1	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 11:40:54
Injection Volume:	10,00 ul	Processing Method:	DR06
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



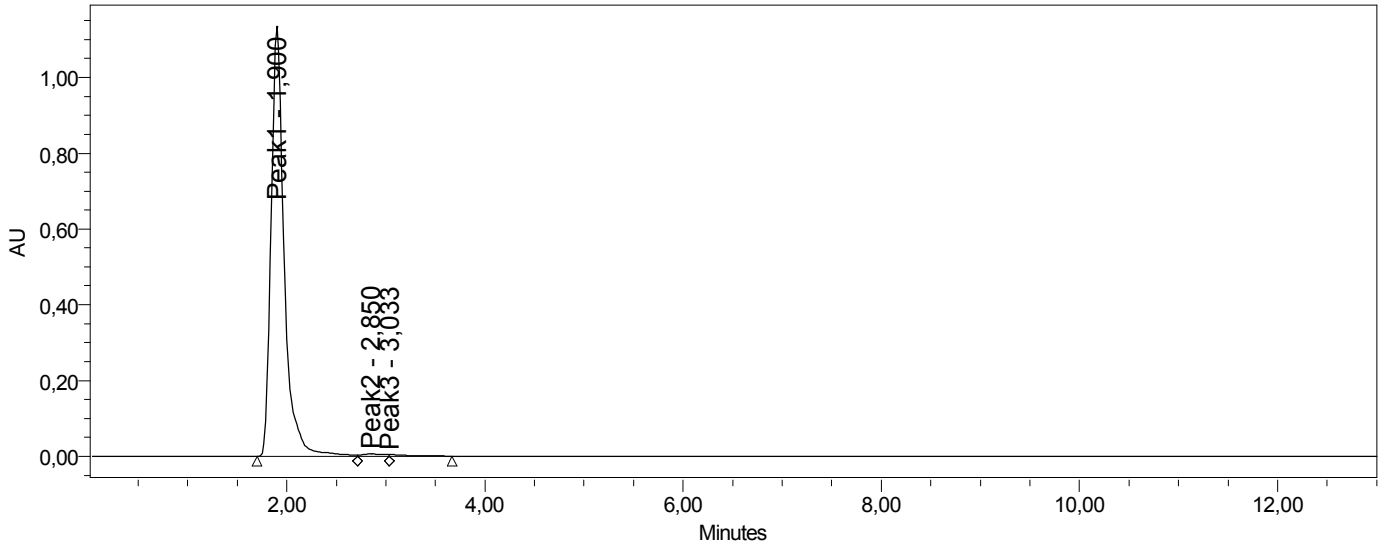
	Peak Name	RT	Area	% Area	Height
1	Peak1	2,092	6660900	98,69	706478
2	Peak2	3,246	88276	1,31	7570

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DOZS11 Compound 14	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 11:37:31
Vial:	4	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 11:52:21
Injection Volume:	10,00 ul	Processing Method:	DOZS11
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



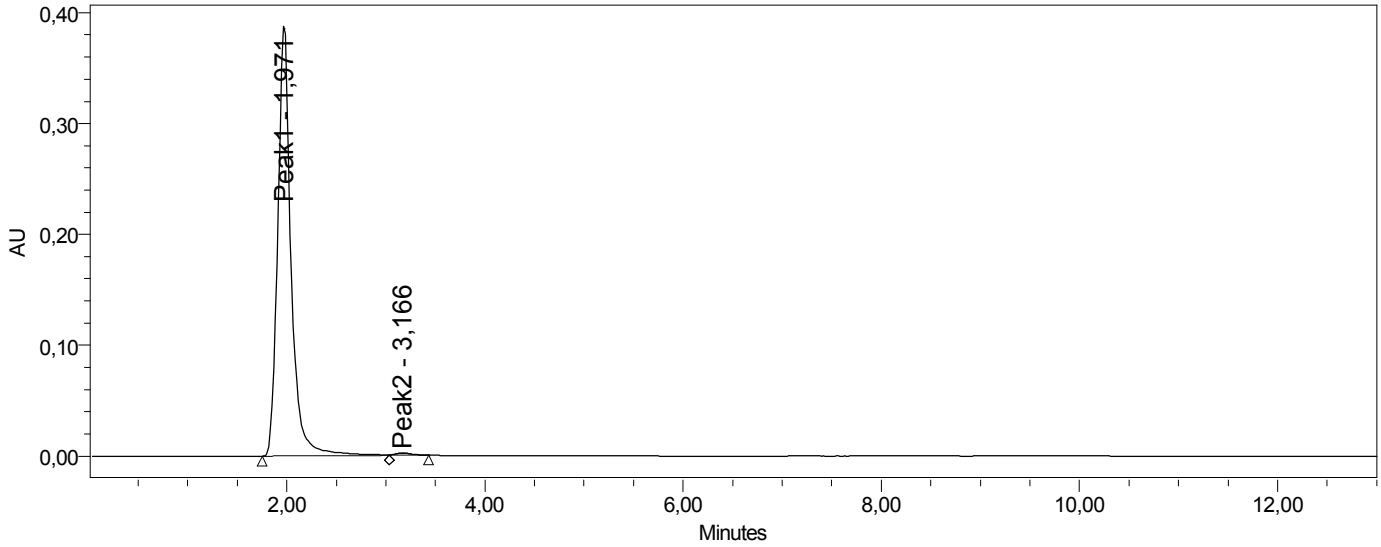
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,900	10480061	98,59	1131248
2	Peak2	2,850	94128	0,89	6179
3	Peak3	3,033	55912	0,53	4825

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DOJK06	Compound 15	Acquired By:	System
Sample Type:	Unknown		Date Acquired:	19.7.2012 10:55:50
Vial:	1		Acq. Method Set:	10902543400513m_MS
Injection #:	1		Date Processed:	19.7.2012 11:12:06
Injection Volume:	10,00 ul		Processing Method:	DOJK06
Run Time:	13,0 Minutes		Channel Name:	2487Channel 2
Sample Set Name:			Proc. Chnl. Descr.:	



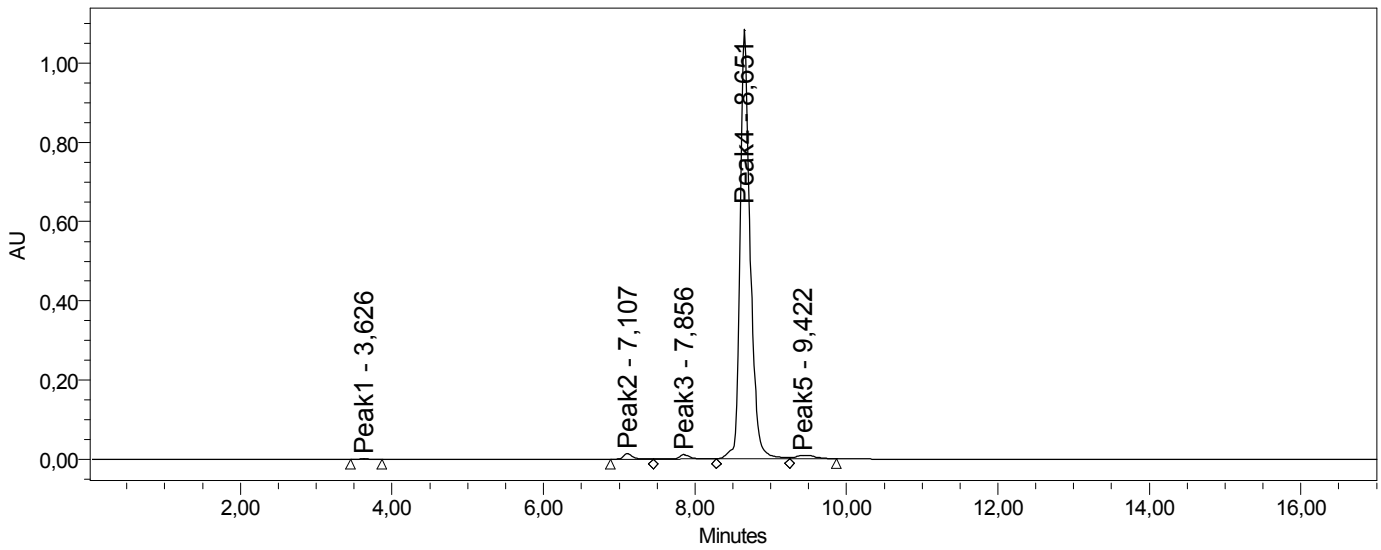
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,971	3633586	99,39	387128
2	Peak2	3,166	22169	0,61	2037

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO183 Compound 16	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	5.6.2012 11:07:08
Vial:	2	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	5.6.2012 11:28:53
Injection Volume:	10,00 ul	Processing Method:	DO183 2
Run Time:	17,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



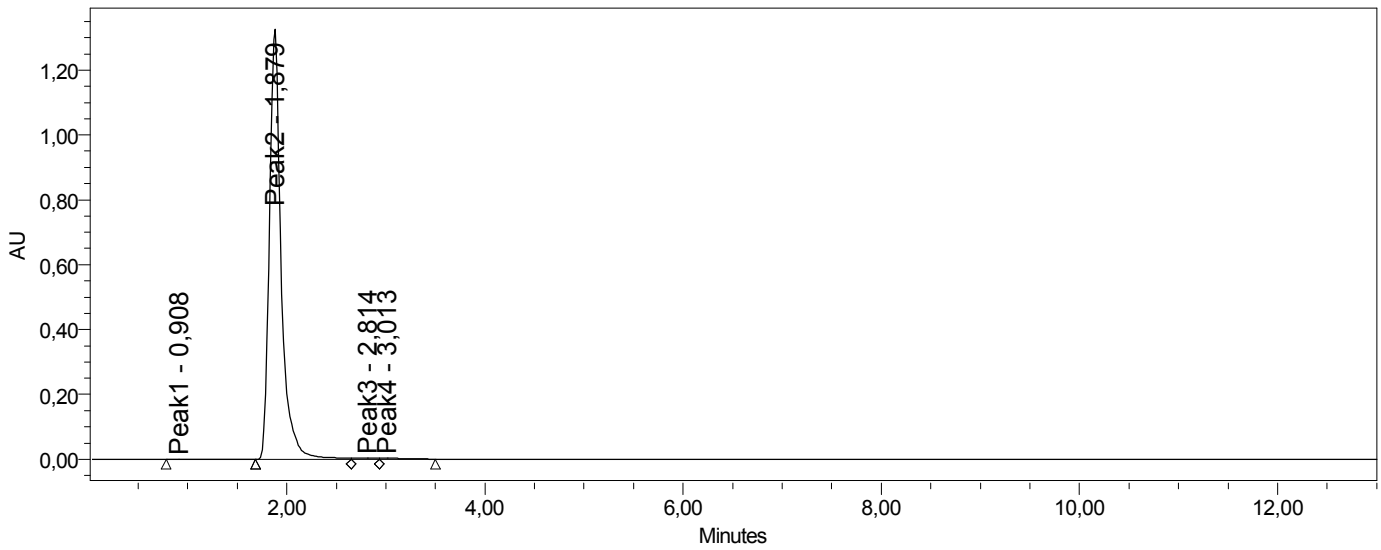
	Peak Name	RT	Area	% Area	Height
1	Peak1	3,626	9572	0,09	931
2	Peak2	7,107	112946	1,08	14450
3	Peak3	7,856	120199	1,15	11172
4	Peak4	8,651	10042346	96,19	1075678
5	Peak5	9,422	155045	1,49	8483

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DOZS12 Compound 18	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 11:51:18
Vial:	5	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 12:21:59
Injection Volume:	10,00 ul	Processing Method:	DOZS12
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	0,908	6572	0,06	272
2	Peak2	1,879	10985407	99,04	1324027
3	Peak3	2,814	49573	0,45	3150
4	Peak4	3,013	50386	0,45	3601

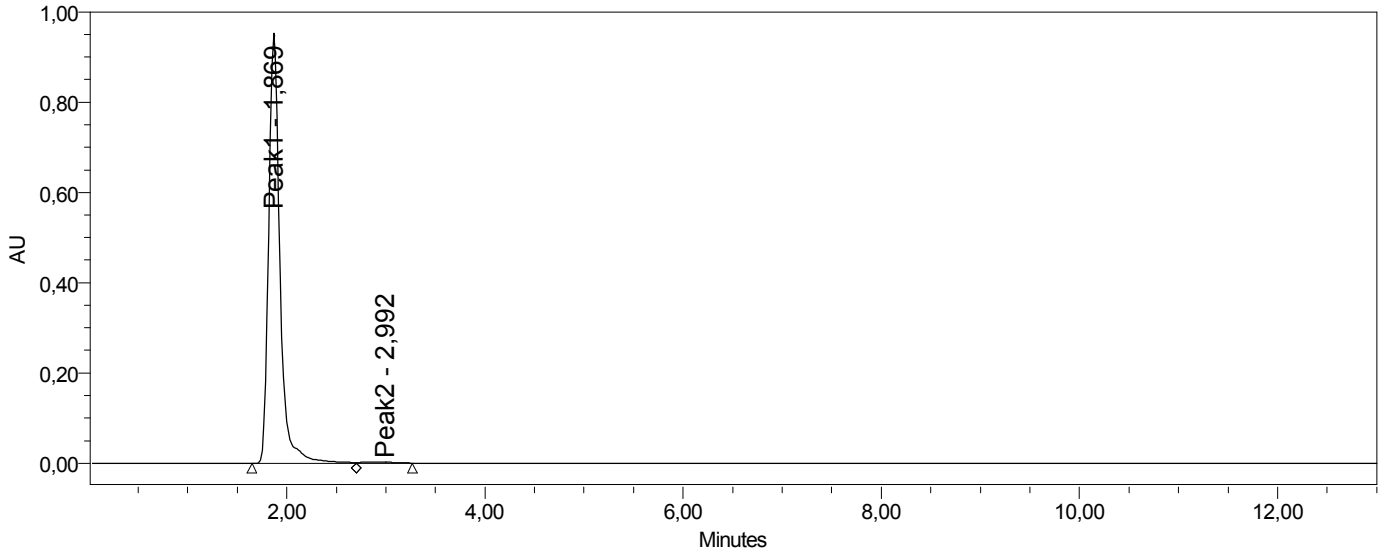
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 19

Sample Name:	DOJK07	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 11:23:36
Vial:	3	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 11:38:53
Injection Volume:	10,00 ul	Processing Method:	DOJK07
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



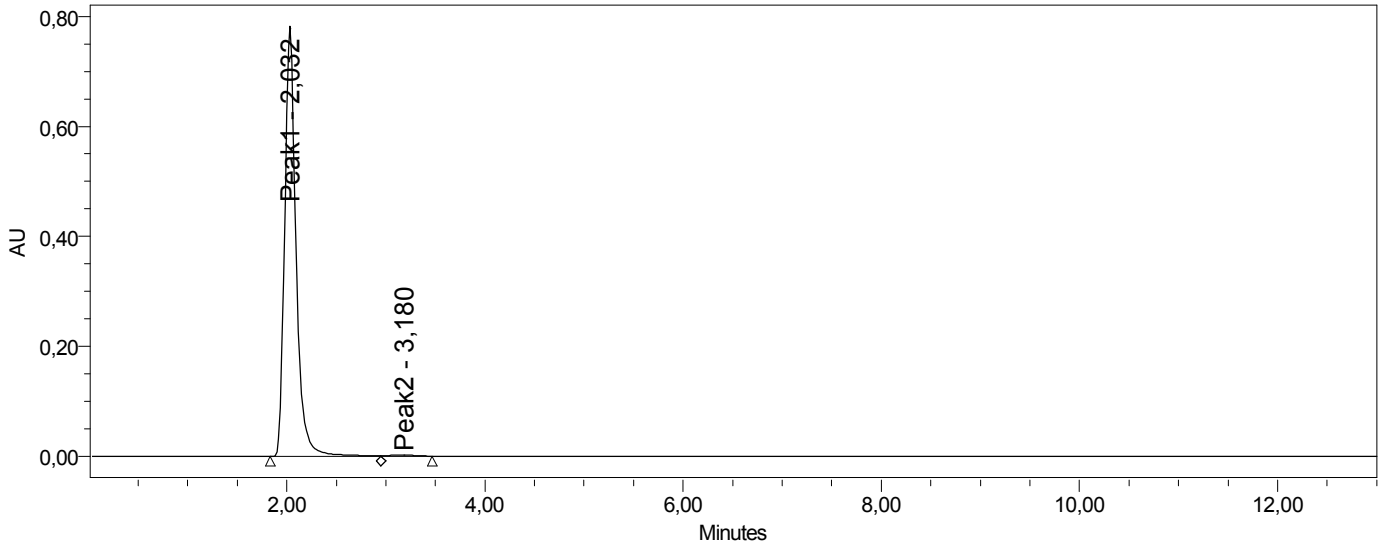
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,869	7549586	99,39	948295
2	Peak2	2,992	45965	0,61	2058

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO193 Compound 21	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 14:26:02
Vial:	13	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 14:41:14
Injection Volume:	10,00 ul	Processing Method:	DO193
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,032	6247539	99,46	777700
2	Peak2	3,180	34076	0,54	2146

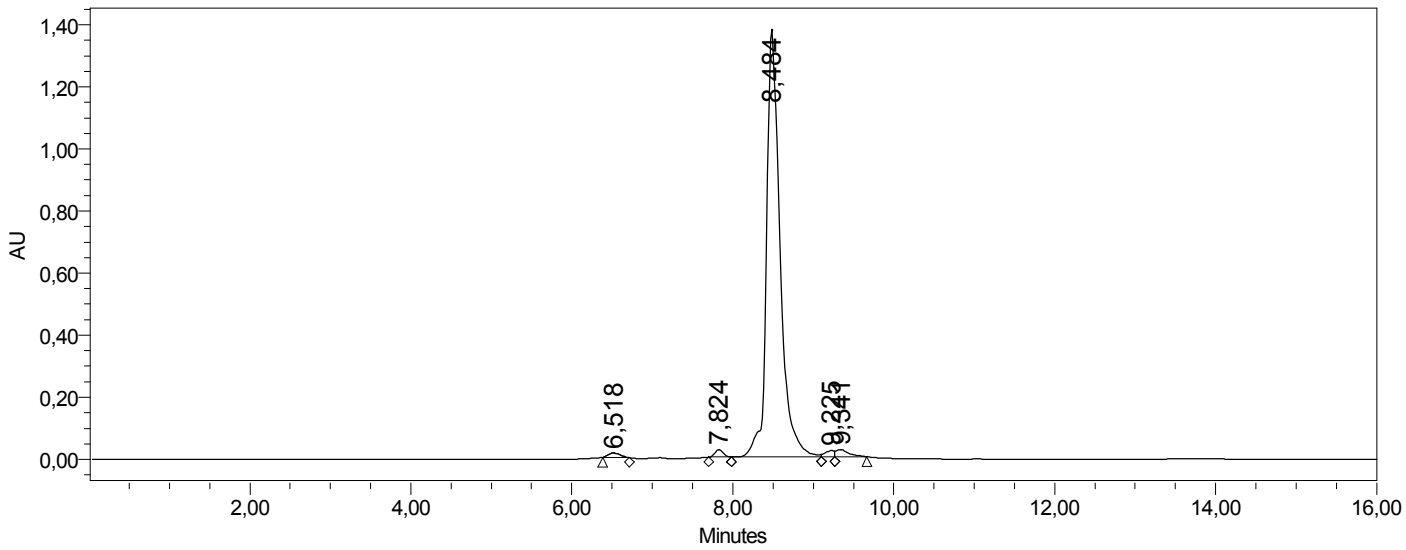
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 22

Sample Name:	DO184	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	5.6.2012 12:14:01
Vial:	5	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	5.6.2012 13:27:27
Injection Volume:	10,00 ul	Processing Method:	proba4rtr
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	RT	Area	% Area	Height
1	6,518	136102	0,81	13769
2	7,824	168970	1,00	24317
3	8,484	16157420	95,76	1371249
4	9,225	156009	0,92	19973
5	9,341	254034	1,51	22655

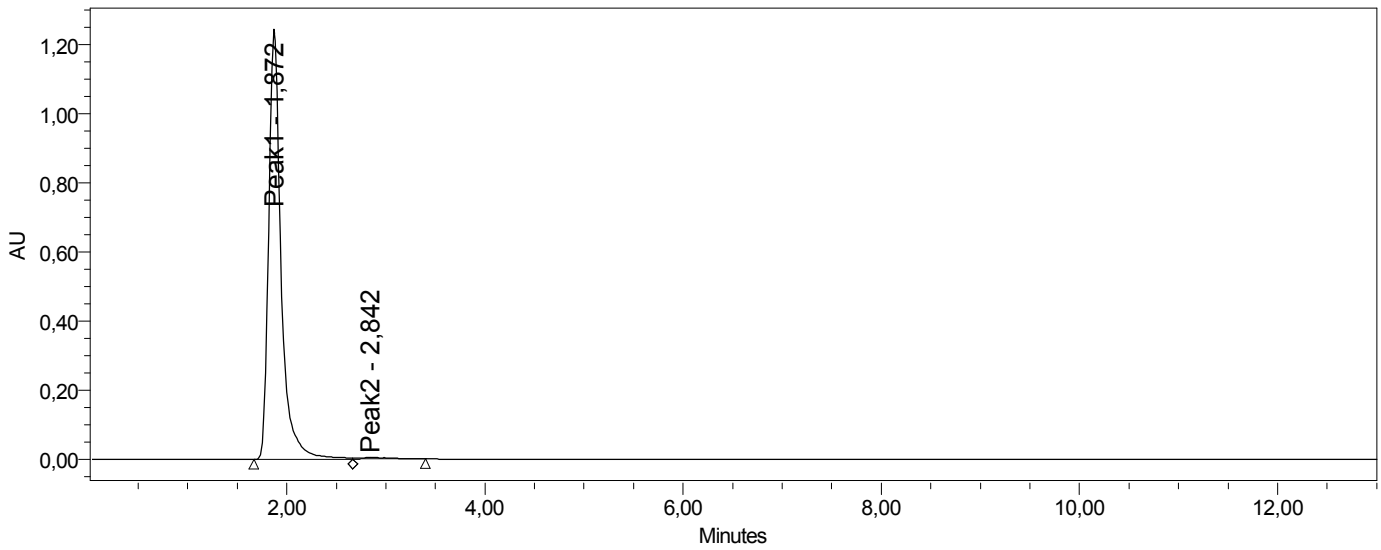
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 24

Sample Name:	DOZS13	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 12:05:11
Vial:	6	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 12:23:11
Injection Volume:	10,00 ul	Processing Method:	DOZS13
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,872	10842029	99,17	1243086
2	Peak2	2,842	90494	0,83	3733

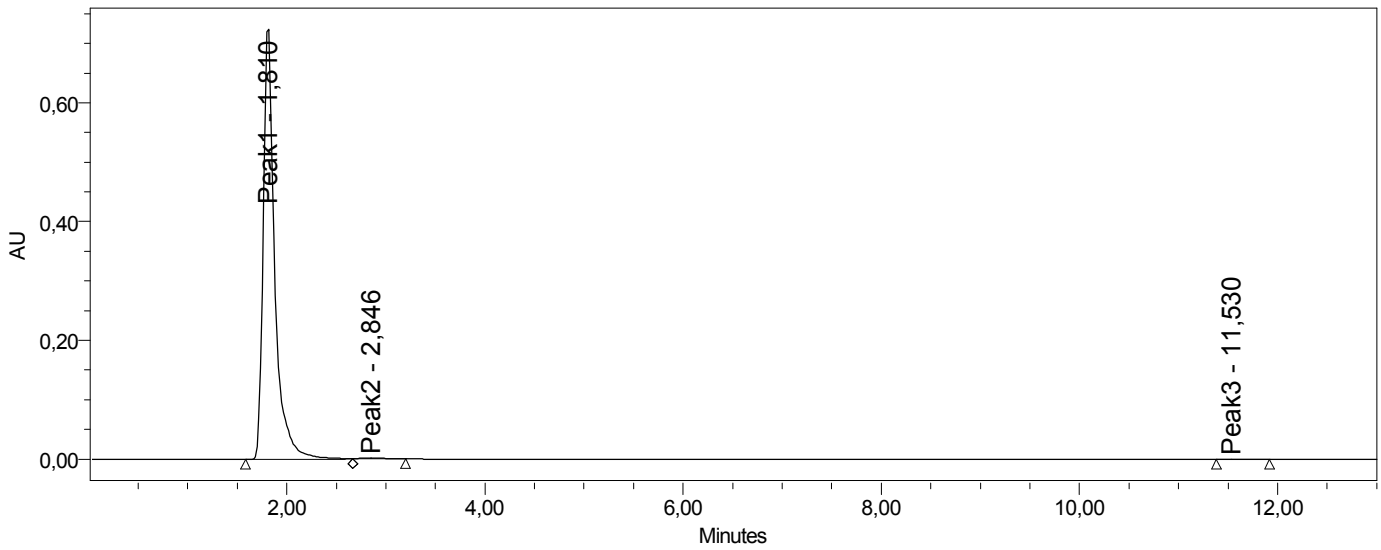
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 25

Sample Name:	DOJK08	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 11:09:47
Vial:	2	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 11:24:59
Injection Volume:	10,00 ul	Processing Method:	DOJK08
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,810	5905692	99,47	725594
2	Peak2	2,846	27517	0,46	1637
3	Peak3	11,530	3833	0,06	407

Empower software

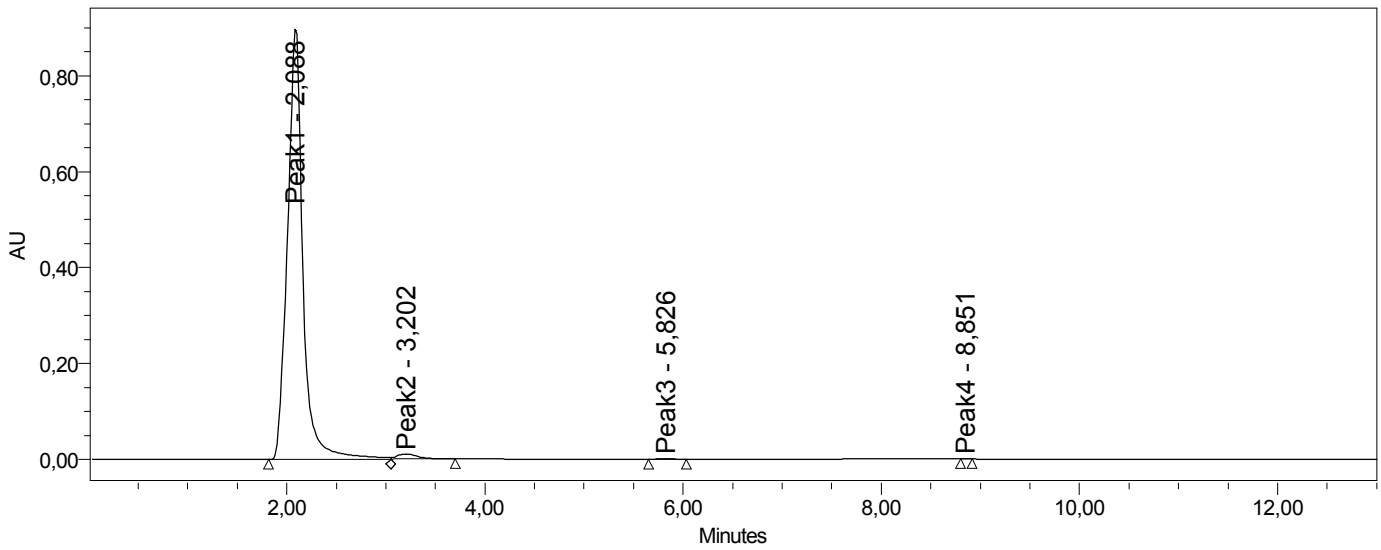
Multi Sample Summary

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO174 Compound 36	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 11:45:33
Vial:	2	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 12:00:12
Injection Volume:	10,00 ul	Processing Method:	DO174
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,088	9692935	98,43	896550
2	Peak2	3,202	148240	1,51	10323
3	Peak3	5,826	5674	0,06	501
4	Peak4	8,851	928	0,01	331

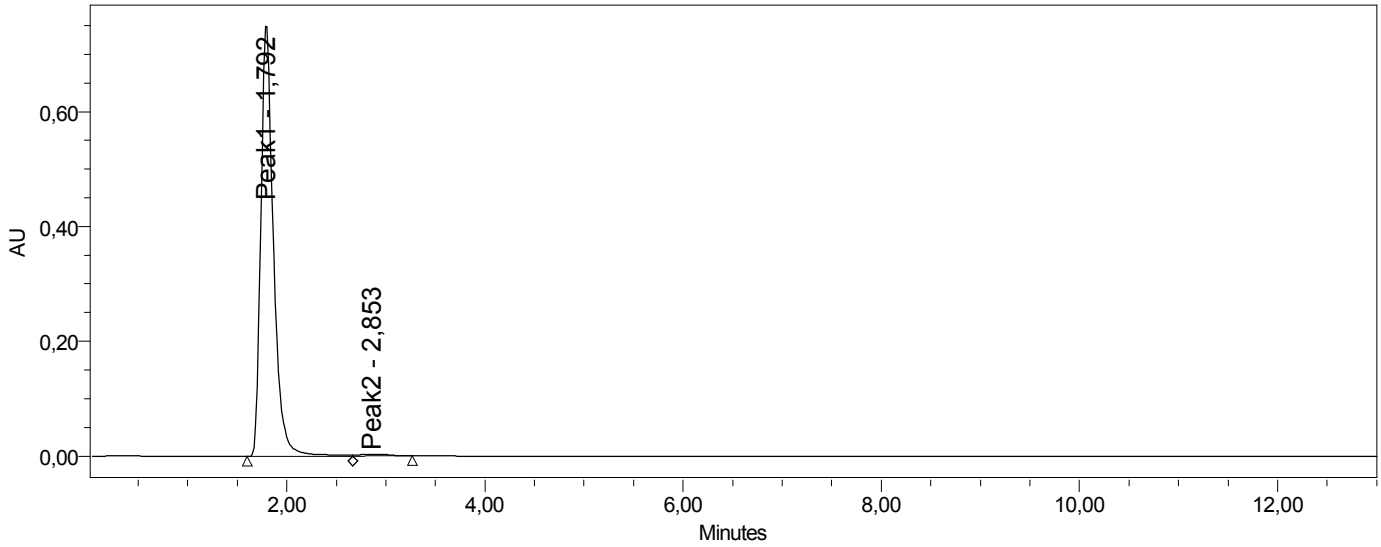
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 37

Sample Name:	DO194	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 12:17:23
Vial:	4	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 12:32:47
Injection Volume:	10,00 ul	Processing Method:	DO194
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,792	6673440	99,09	755512
2	Peak2	2,853	61429	0,91	3057

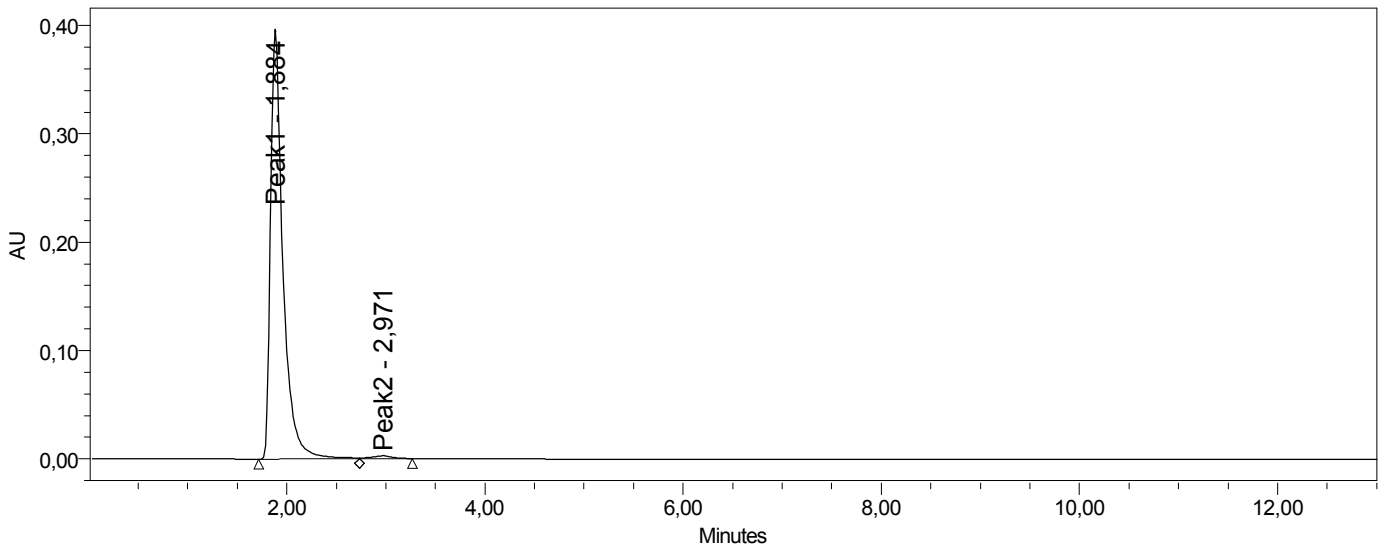
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 38

Sample Name:	DO195	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 12:45:01
Vial:	6	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 13:00:17
Injection Volume:	10,00 ul	Processing Method:	DO195
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,884	3446210	98,92	395282
2	Peak2	2,971	37663	1,08	2613

Empower software

Method A

Multi Sample Summary

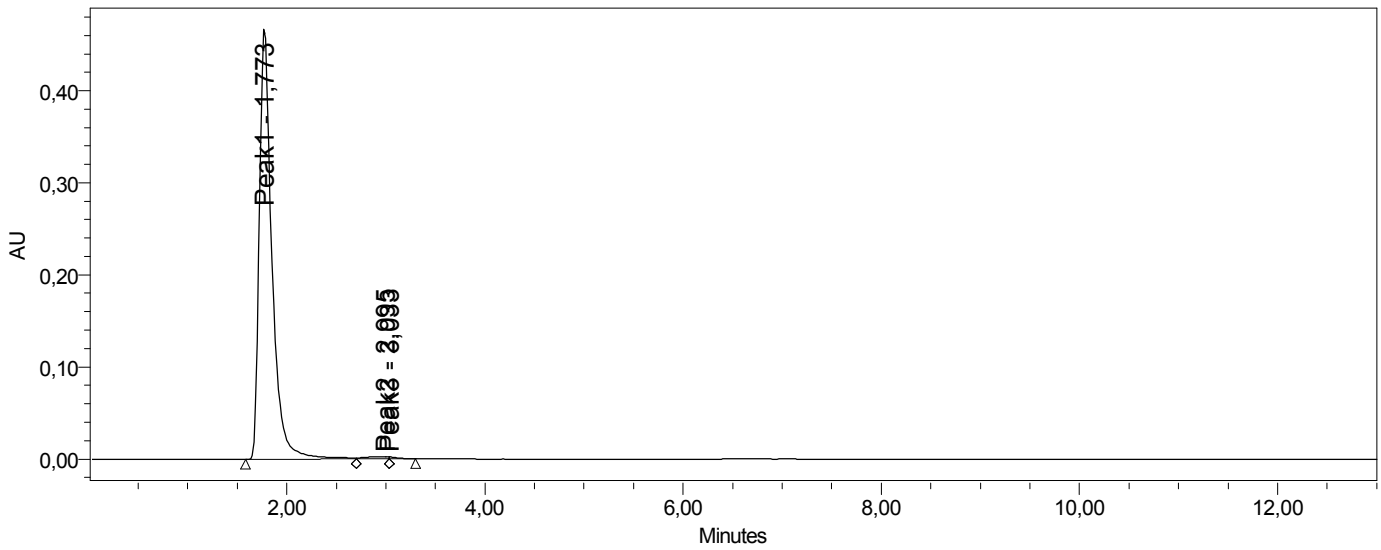
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 39

Sample Name:	DO196	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 13:13:54
Vial:	8	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 13:29:01
Injection Volume:	10,00 ul	Processing Method:	DO196
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



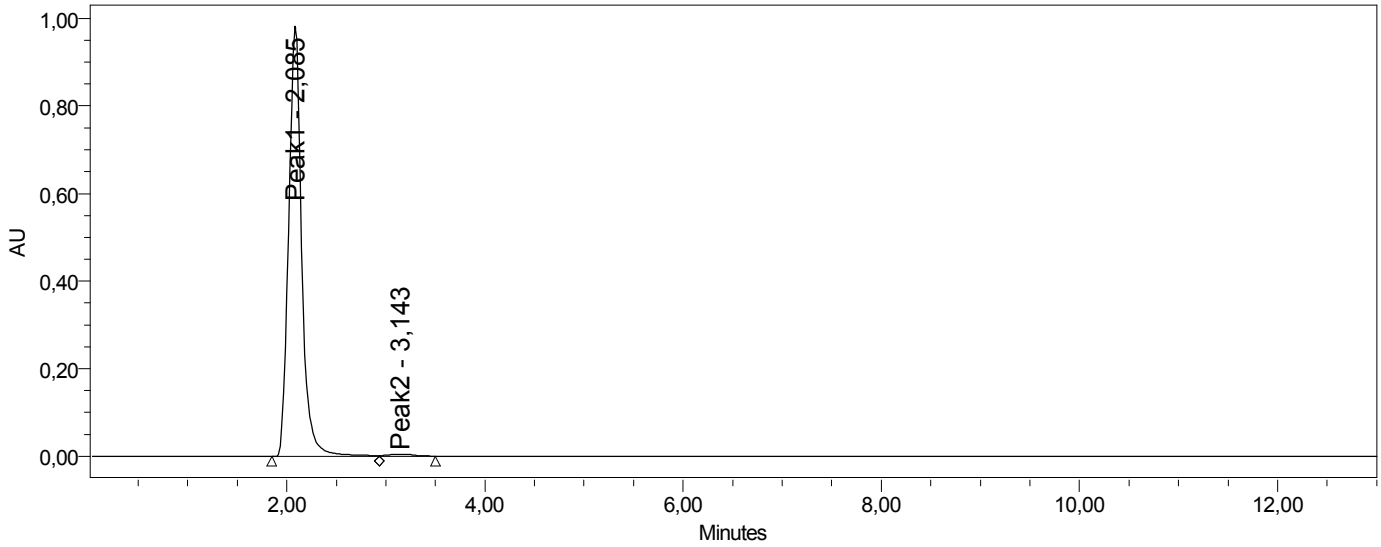
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,773	4160601	98,86	468149
2	Peak2	2,995	37246	0,88	2336
3	Peak3	3,033	10807	0,26	2117

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO179 Compound 40	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 12:02:53
Vial:	3	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 12:18:41
Injection Volume:	10,00 ul	Processing Method:	DO179
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,085	8971779	99,22	978169
2	Peak2	3,143	70514	0,78	3959

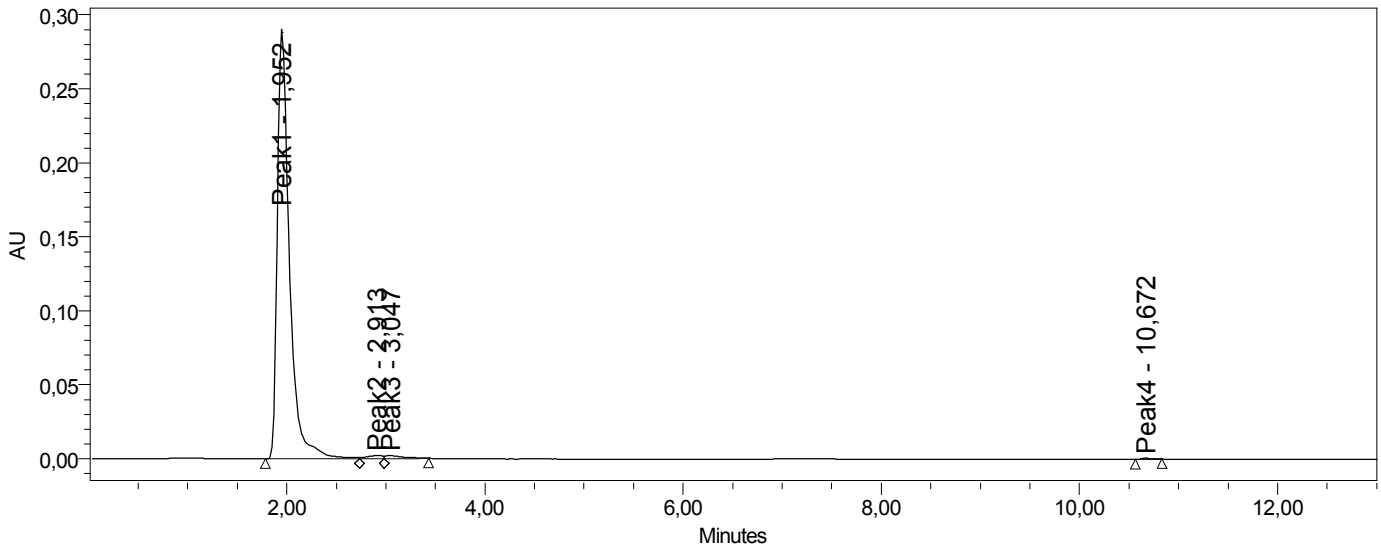
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 41

Sample Name:	DO191	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 12:31:11
Vial:	5	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 12:46:25
Injection Volume:	10,00 ul	Processing Method:	DO191
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,952	2469475	98,07	289267
2	Peak2	2,913	21184	0,84	1876
3	Peak3	3,047	23458	0,93	1833
4	Peak4	10,672	4055	0,16	620

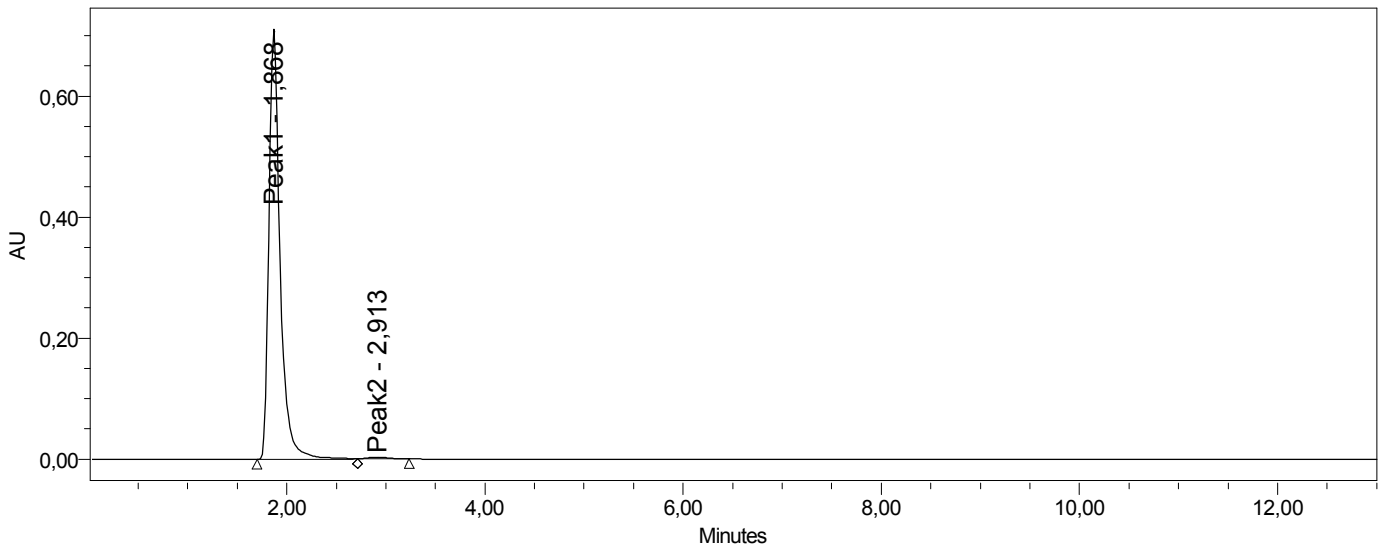
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 42

Sample Name:	DO197	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 12:58:57
Vial:	7	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 13:14:53
Injection Volume:	10,00 ul	Processing Method:	DO197
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



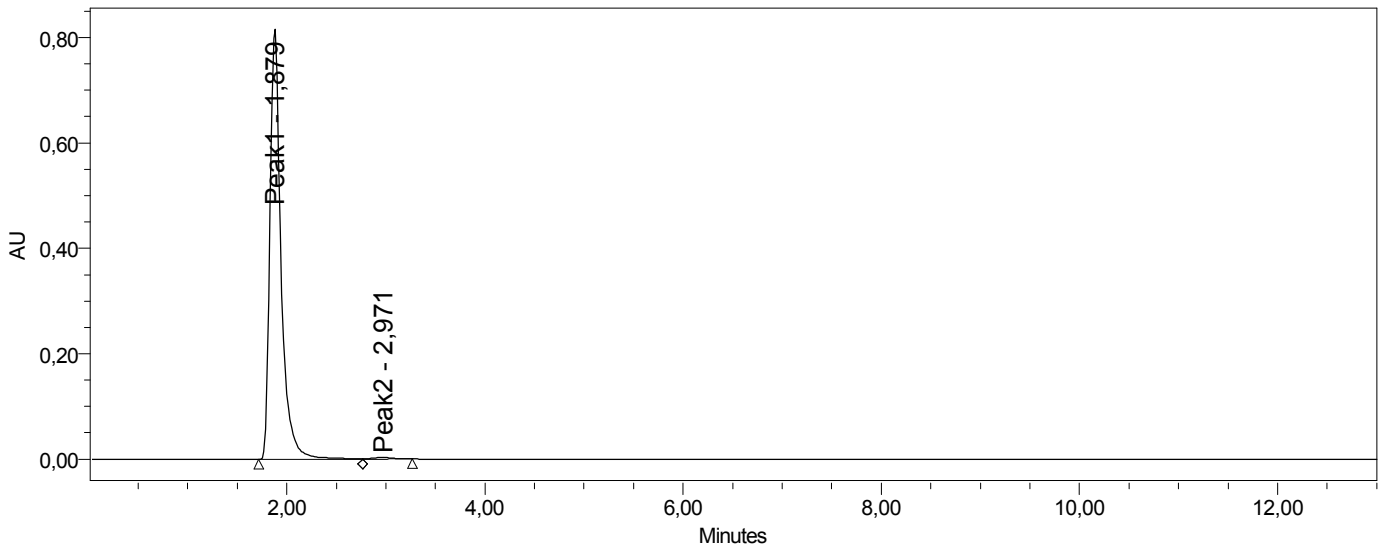
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,868	5571036	99,31	706487
2	Peak2	2,913	38854	0,69	2378

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO199 Compound 43	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 13:27:44
Vial:	9	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 13:42:47
Injection Volume:	10,00 ul	Processing Method:	DO199
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



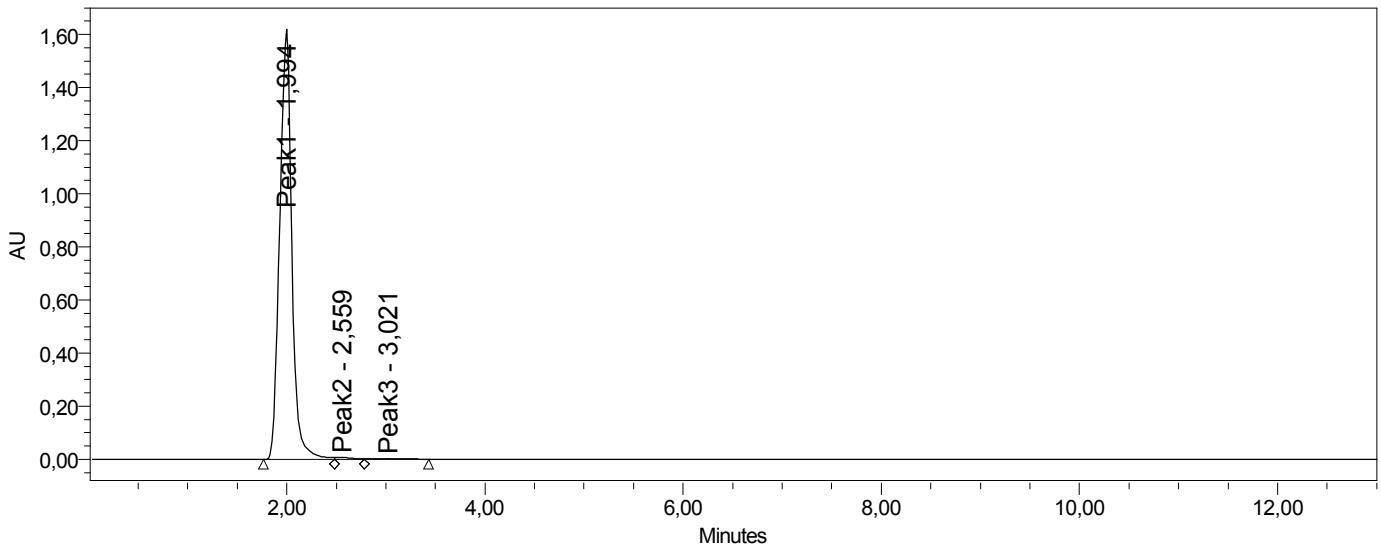
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,879	6377676	99,37	814645
2	Peak2	2,971	40401	0,63	3137

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	ST11 Compound 44	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 13:41:34
Vial:	10	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 13:56:46
Injection Volume:	10,00 ul	Processing Method:	ST11
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



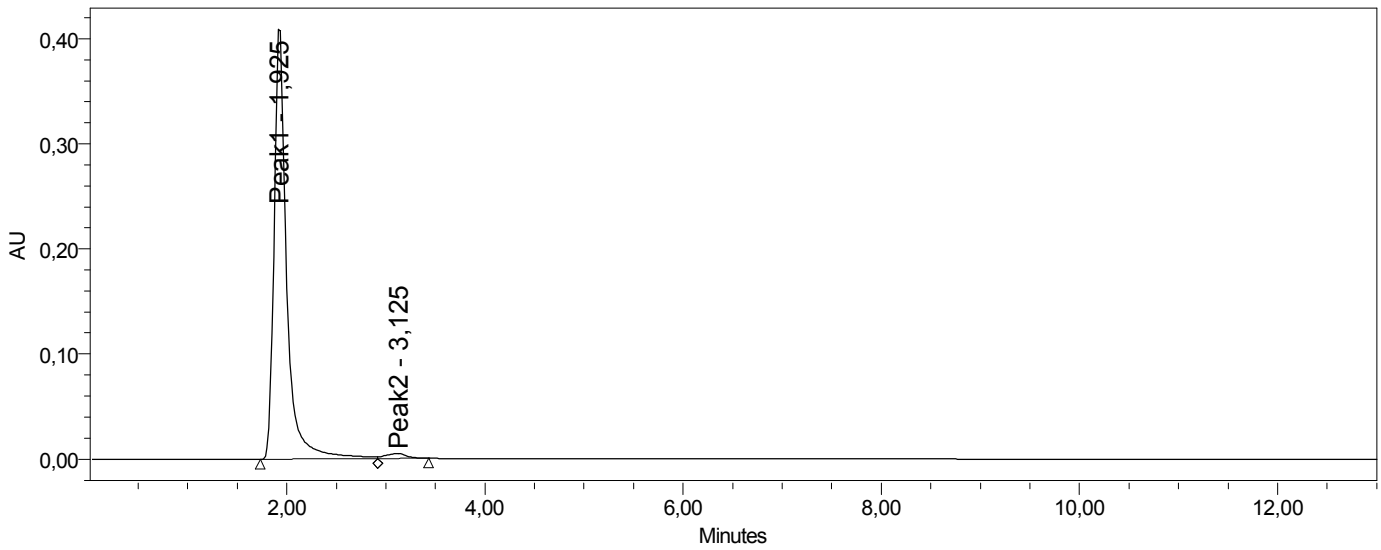
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,994	13768996	99,12	1618399
2	Peak2	2,559	74020	0,53	6674
3	Peak3	3,021	48607	0,35	2175

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	MV78 Compound 50	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	19.7.2012 14:28:45
Vial:	18	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	19.7.2012 14:45:14
Injection Volume:	10,00 ul	Processing Method:	MV78
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



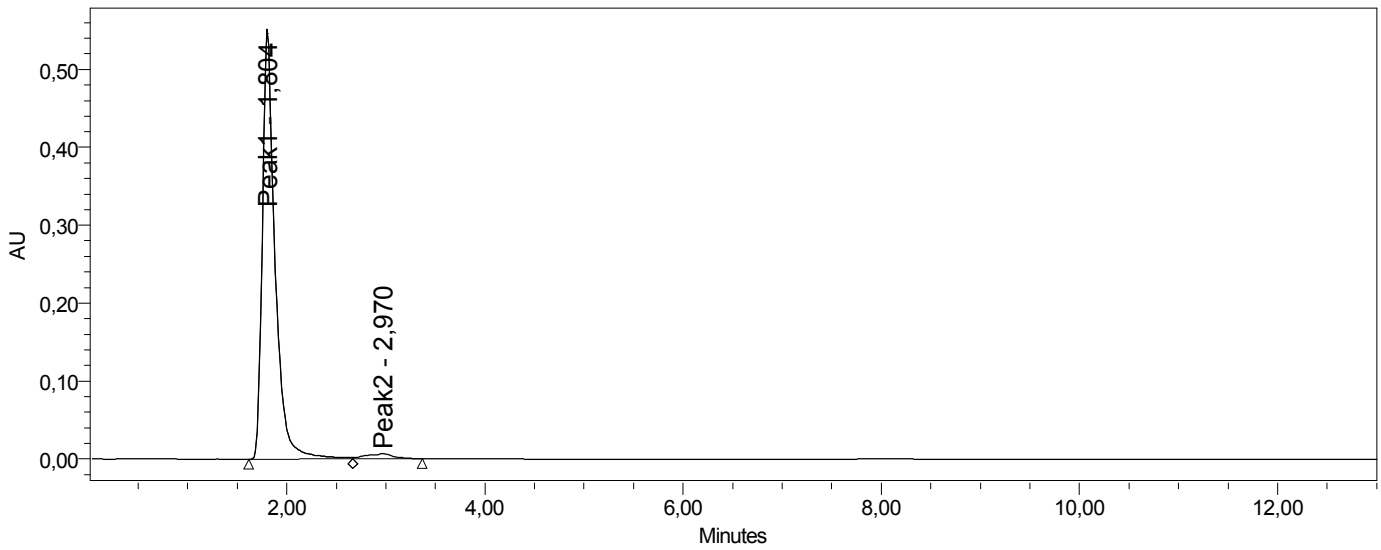
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,925	3625124	98,15	411540
2	Peak2	3,125	68261	1,85	4922

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	MV61 Compound 51	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 14:40:13
Vial:	14	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 14:55:42
Injection Volume:	10,00 ul	Processing Method:	MV61
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,804	4925314	97,63	550272
2	Peak2	2,970	119351	2,37	6371

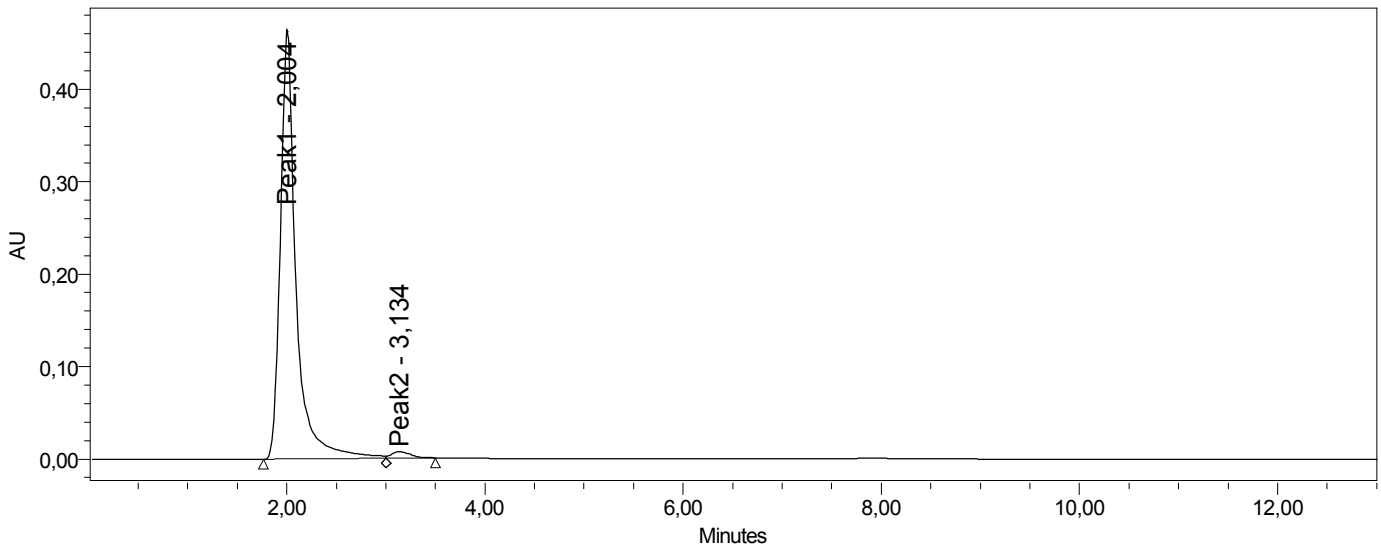
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 52

Sample Name:	DO181	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	26.7.2012 11:50:45
Vial:	2	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	26.7.2012 12:11:51
Injection Volume:	10,00 ul	Processing Method:	DO181
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



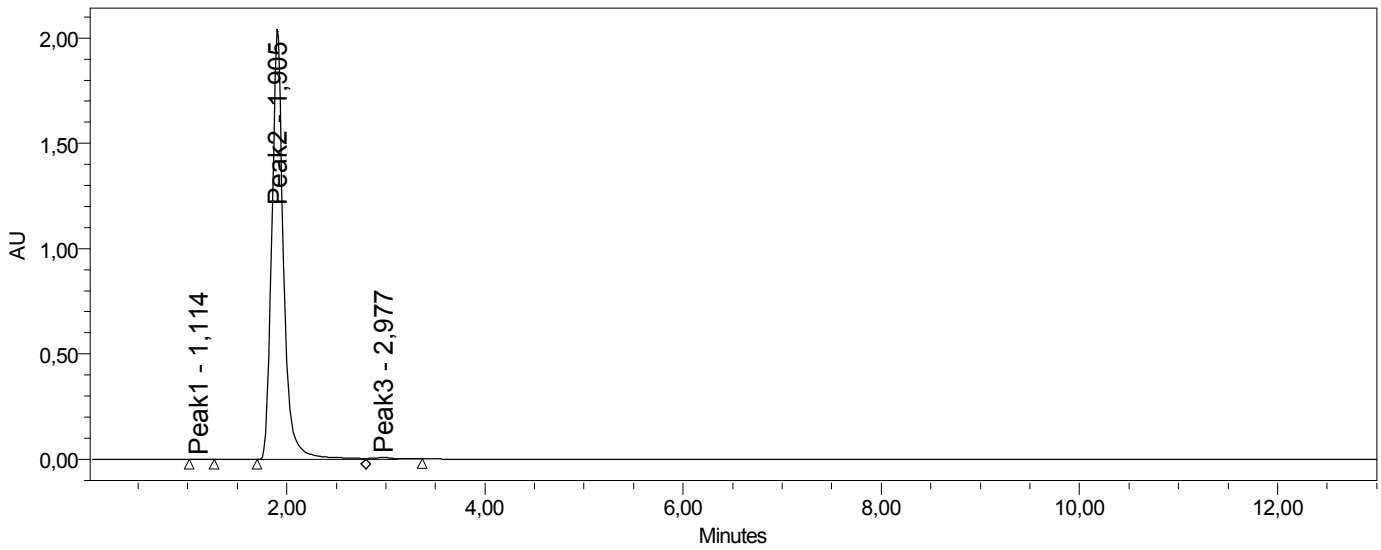
	Peak Name	RT	Area	% Area	Height
1	Peak1	2,004	5081751	98,23	464041
2	Peak2	3,134	91549	1,77	6875

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	ST13 Compound 54	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 13:55:19
Vial:	11	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 14:27:55
Injection Volume:	10,00 ul	Processing Method:	ST13
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,114	2682	0,02	389
2	Peak2	1,905	16841376	99,44	2040094
3	Peak3	2,977	92952	0,55	7056

Multi Sample Summary

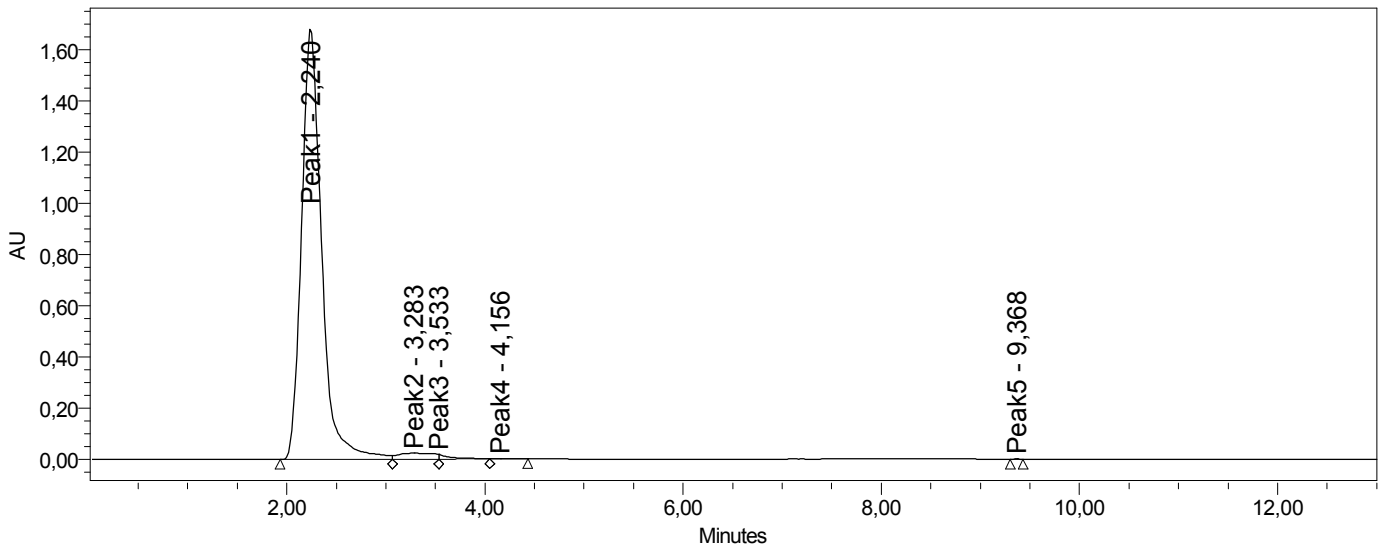
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 55

Sample Name:	MV29	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	17.8.2012 13:24:21
Vial:	14	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	17.8.2012 13:38:46
Injection Volume:	10,00 ul	Processing Method:	MV29
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,240	23588920	96,94	1682321
2	Peak2	3,283	572035	2,35	23420
3	Peak3	3,533	149199	0,61	17852
4	Peak4	4,156	19466	0,08	1481
5	Peak5	9,368	4506	0,02	1650

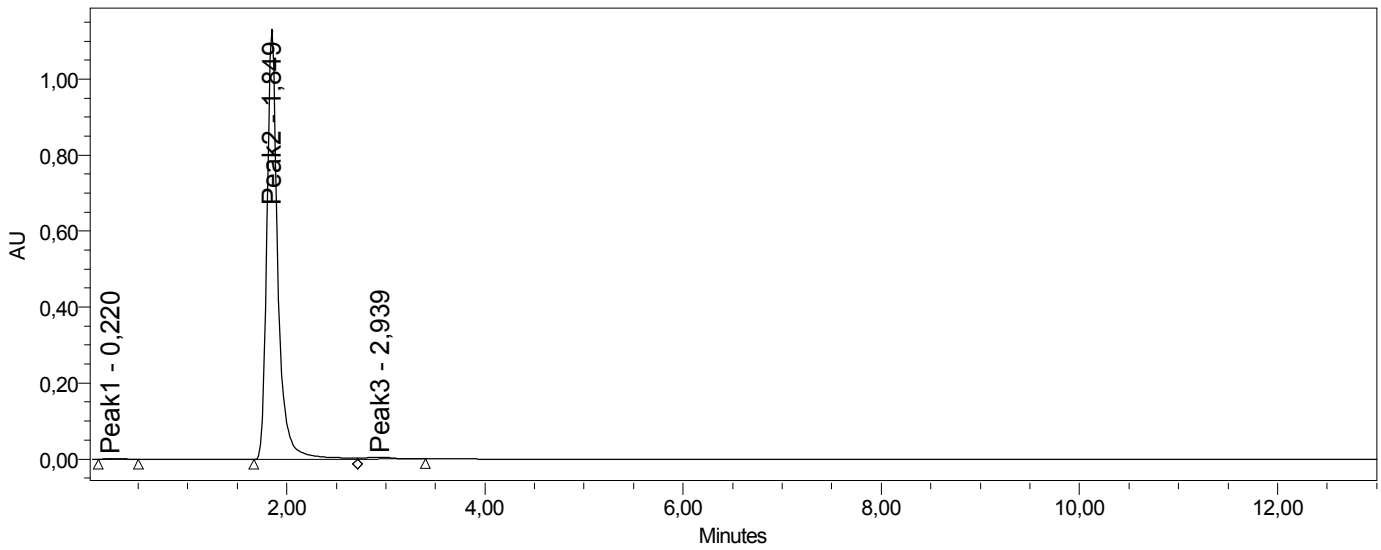
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 56

Sample Name:	ST14	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 14:09:13
Vial:	12	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 14:29:31
Injection Volume:	10,00 ul	Processing Method:	ST14
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



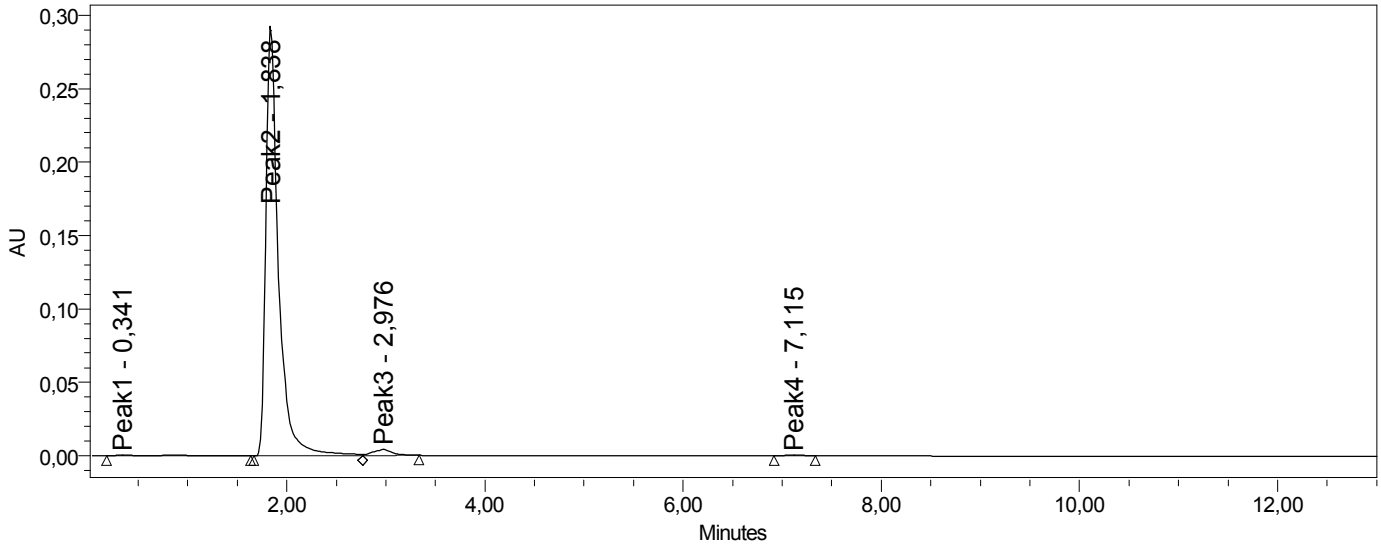
	Peak Name	RT	Area	% Area	Height
1	Peak1	0,220	13715	0,16	1463
2	Peak2	1,849	8707139	98,82	1121724
3	Peak3	2,939	89964	1,02	5042

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO180 Compound 60	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	18.7.2012 14:54:03
Vial:	15	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	18.7.2012 15:09:12
Injection Volume:	10,00 ul	Processing Method:	DO180
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



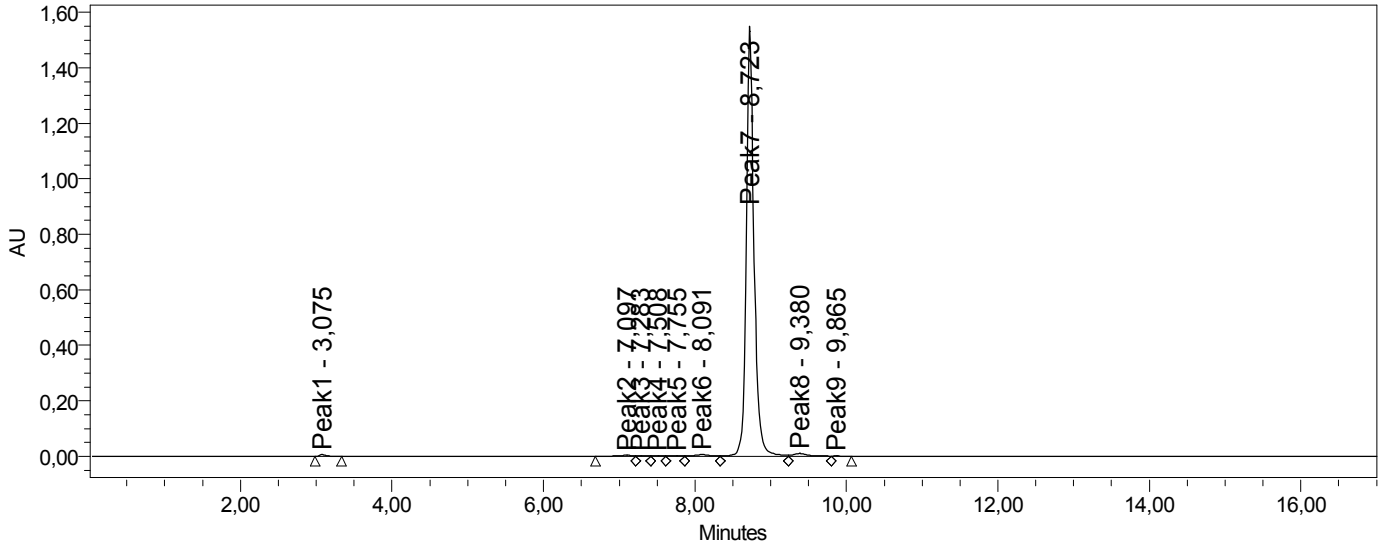
	Peak Name	RT	Area	% Area	Height
1	Peak1	0,341	15198	0,57	398
2	Peak2	1,838	2593563	97,10	292198
3	Peak3	2,976	55470	2,08	4070
4	Peak4	7,115	6766	0,25	595

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO152 6 Compound 12	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	23.5.2012 15:47:45
Vial:	10	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	9.7.2012 13:20:04
Injection Volume:	10,00 ul	Processing Method:	DO152 10
Run Time:	17,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



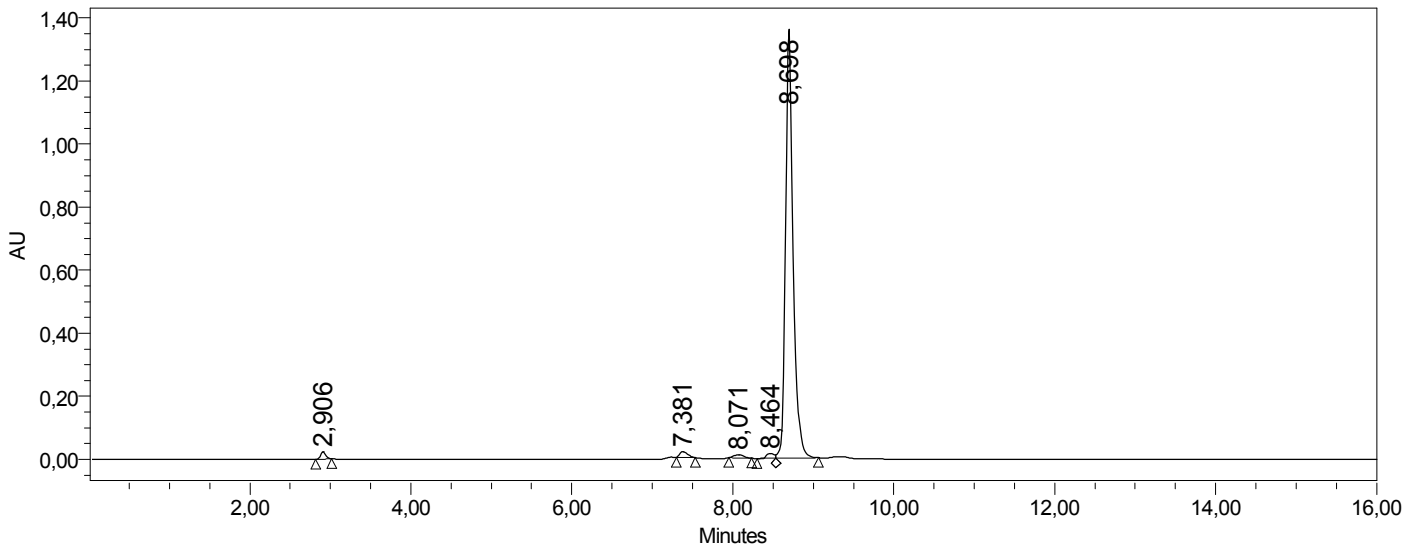
	Peak Name	RT	Area	% Area	Height
1	Peak1	3,075	35790	0,31	5733
2	Peak2	7,097	50713	0,43	4047
3	Peak3	7,283	19393	0,17	1991
4	Peak4	7,508	17530	0,15	1693
5	Peak5	7,755	20545	0,18	1582
6	Peak6	8,091	85555	0,73	5876
7	Peak7	8,723	11308508	96,87	1546669
8	Peak8	9,380	129209	1,11	9796
9	Peak9	9,865	6393	0,05	782

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DR06 Compound 13	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	9.7.2012 13:33:29
Vial:	8	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	9.7.2012 13:57:51
Injection Volume:	10,00 ul	Processing Method:	DR06 8
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



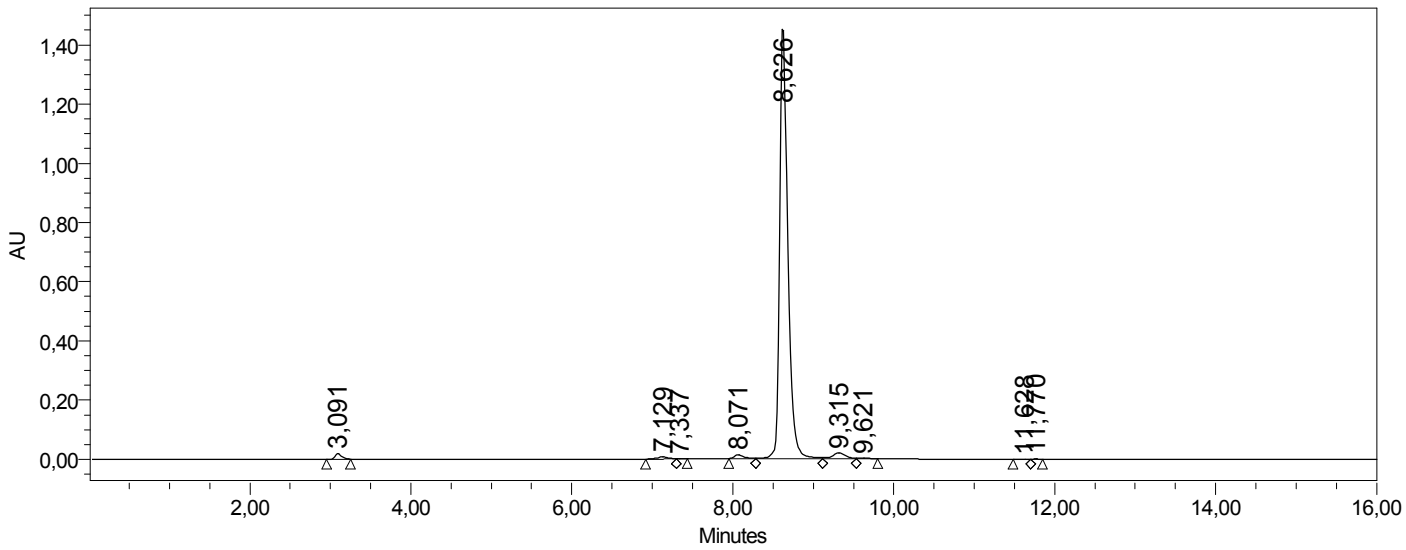
	RT	Area	% Area	Height
1	2,906	103254	1,12	22809
2	7,381	123863	1,35	18673
3	8,071	87062	0,95	10796
4	8,464	102613	1,12	15942
5	8,698	8763478	95,46	1347666

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO183 Compound 16	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	9.7.2012 11:41:35
Vial:	2	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	9.7.2012 12:08:43
Injection Volume:	10,00 ul	Processing Method:	DO183 2
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	RT	Area	% Area	Height
1	3,091	109050	1,02	19219
2	7,129	72970	0,68	8040
3	7,337	6525	0,06	1407
4	8,071	93936	0,88	12458
5	8,626	10133114	95,11	1466196
6	9,315	211542	1,99	19259
7	9,621	19960	0,19	2303
8	11,628	3066	0,03	378
9	11,770	3986	0,04	1008

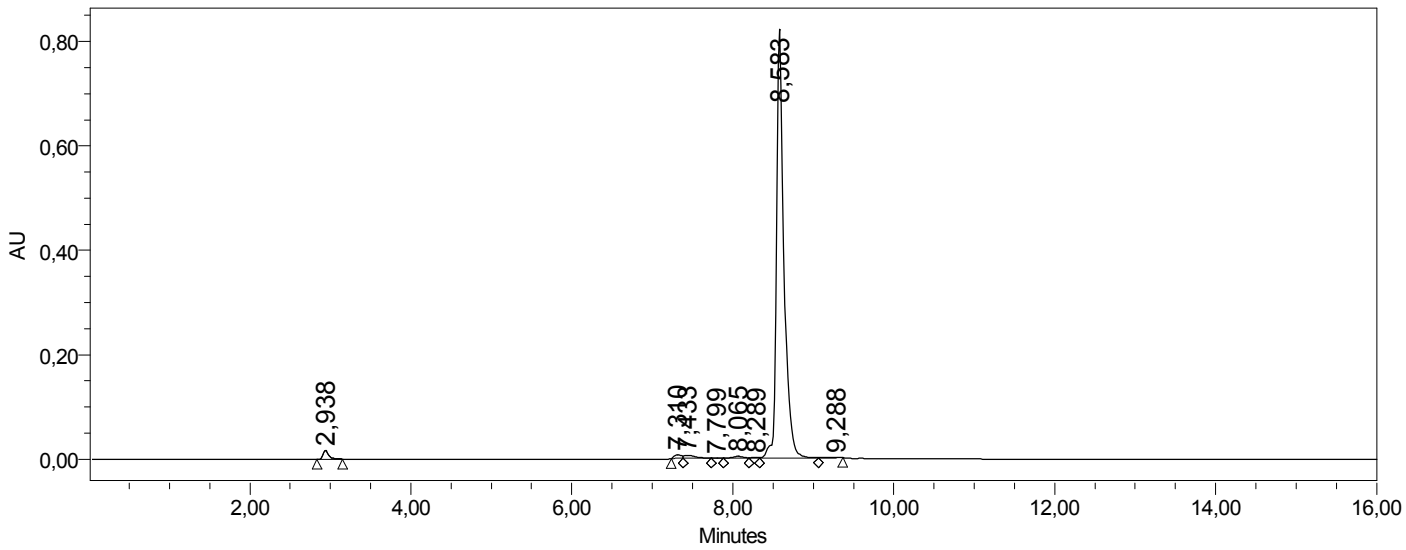
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 17

Sample Name:	DR07	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 10:58:51
Vial:	1	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 11:16:50
Injection Volume:	10,00 ul	Processing Method:	DR07
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	RT	Area	% Area	Height
1	2,938	85244	1,52	16912
2	7,310	44674	0,80	7242
3	7,433	58121	1,04	5810
4	7,799	988	0,02	199
5	8,065	29315	0,52	3413
6	8,289	9291	0,17	1746
7	8,583	5353520	95,71	810755
8	9,288	12465	0,22	1433

Empower software

Method B

Multi Sample Summary

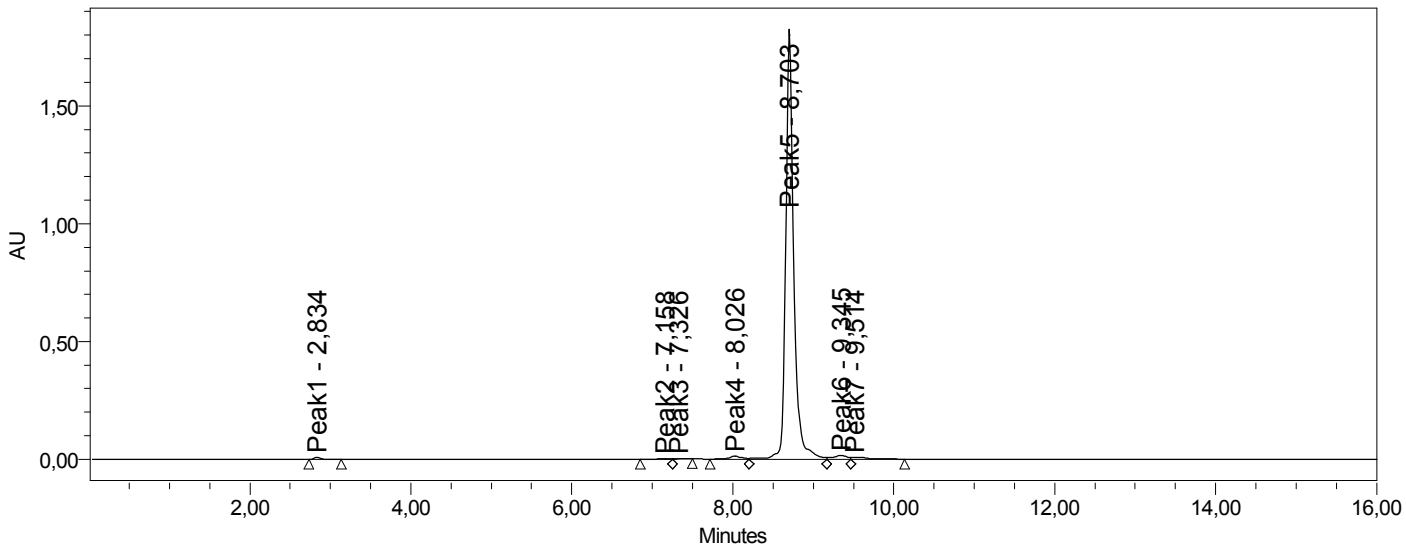
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 20

Sample Name:	DO186	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 14:55:44
Vial:	12	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 15:15:03
Injection Volume:	10,00 ul	Processing Method:	DO186
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,834	47150	0,36	8747
2	Peak2	7,158	20178	0,16	2104
3	Peak3	7,326	15664	0,12	2069
4	Peak4	8,026	125759	0,97	13255
5	Peak5	8,703	12449570	96,21	1803552
6	Peak6	9,345	178880	1,38	15269
7	Peak7	9,514	102965	0,80	6955

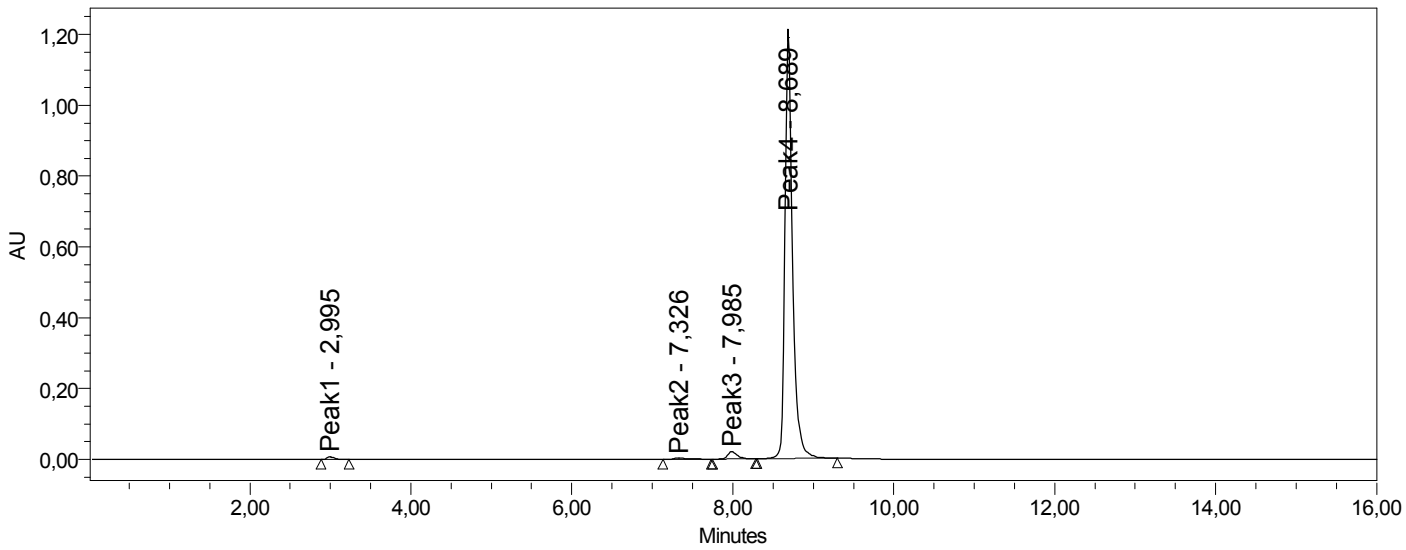
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 21

Sample Name:	DO193	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 15:34:31
Vial:	14	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 15:52:12
Injection Volume:	10,00 ul	Processing Method:	DO193
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	2,995	41857	0,52	7322
2	Peak2	7,326	36546	0,46	3048
3	Peak3	7,985	167544	2,10	21556
4	Peak4	8,689	7750627	96,92	1204189

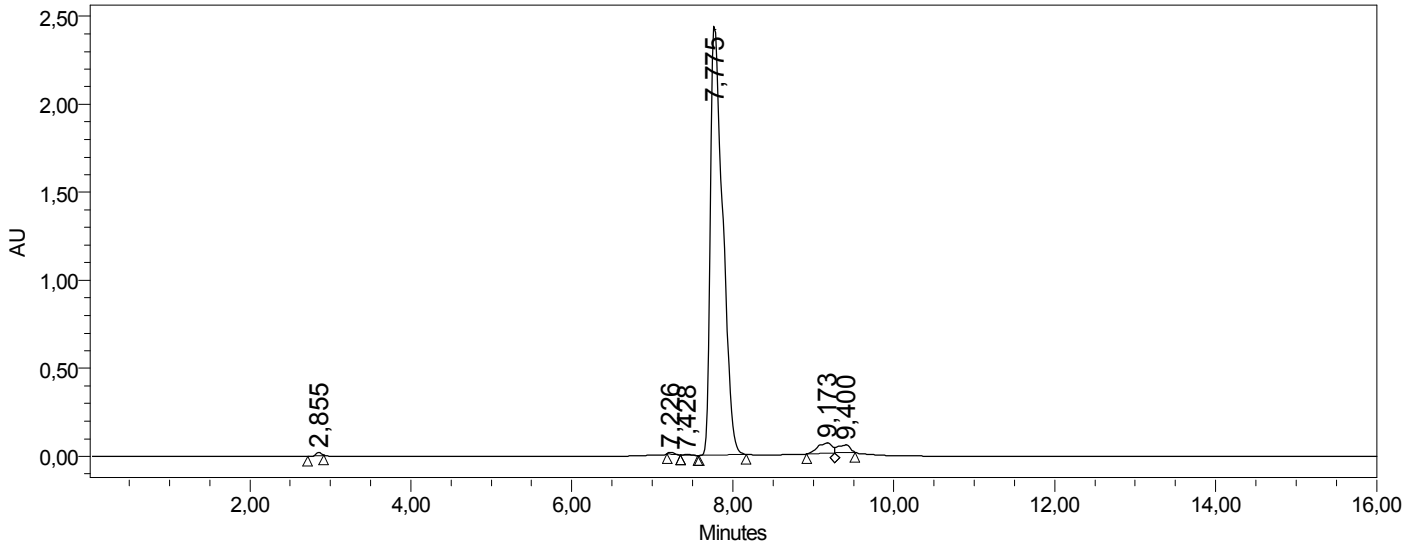
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 22

Sample Name:	DO184	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	9.7.2012 12:17:50
Vial:	4	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	9.7.2012 13:06:45
Injection Volume:	10,00 ul	Processing Method:	DO184 4
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



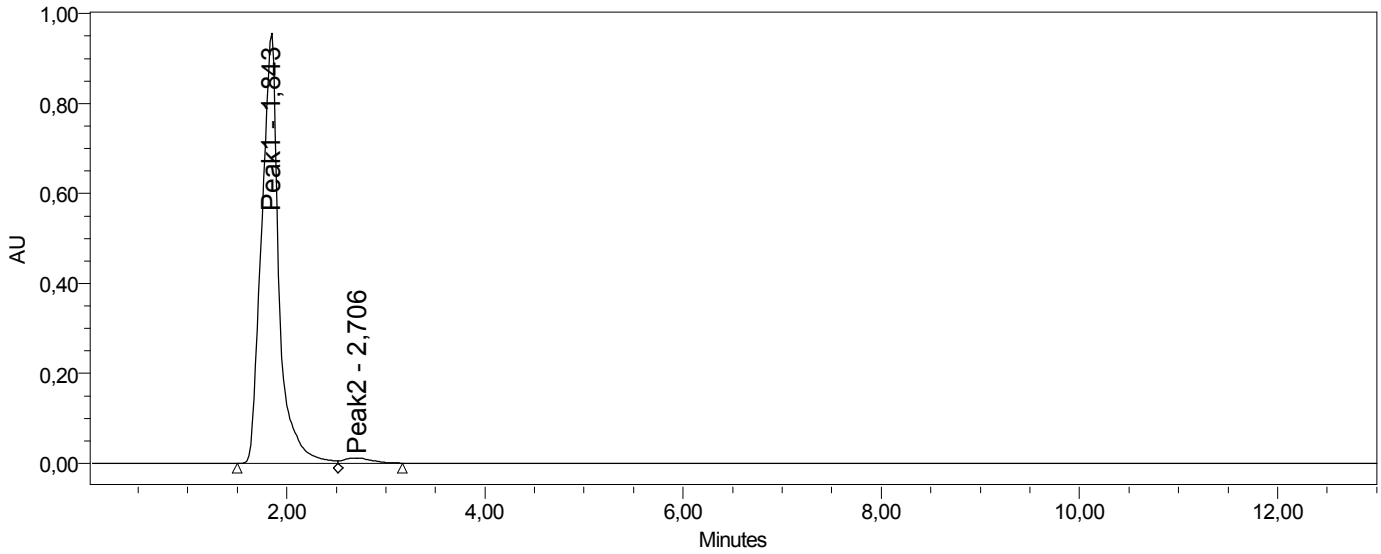
	RT	Area	% Area	Height
1	2,855	78731	0,29	19420
2	7,226	47556	0,18	10140
3	7,428	25503	0,09	4210
4	7,775	25737693	95,05	2457603
5	9,173	720071	2,66	57546
6	9,400	469672	1,73	42467

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO196	Compound 39	Acquired By:	System
Sample Type:	Unknown		Date Acquired:	11.7.2012 13:23:10
Vial:	9		Acq. Method Set:	10902543400513m_MS
Injection #:	1		Date Processed:	11.7.2012 13:49:49
Injection Volume:	10,00 ul		Processing Method:	Do196
Run Time:	13,0 Minutes		Channel Name:	2487Channel 2
Sample Set Name:			Proc. Chnl. Descr.:	



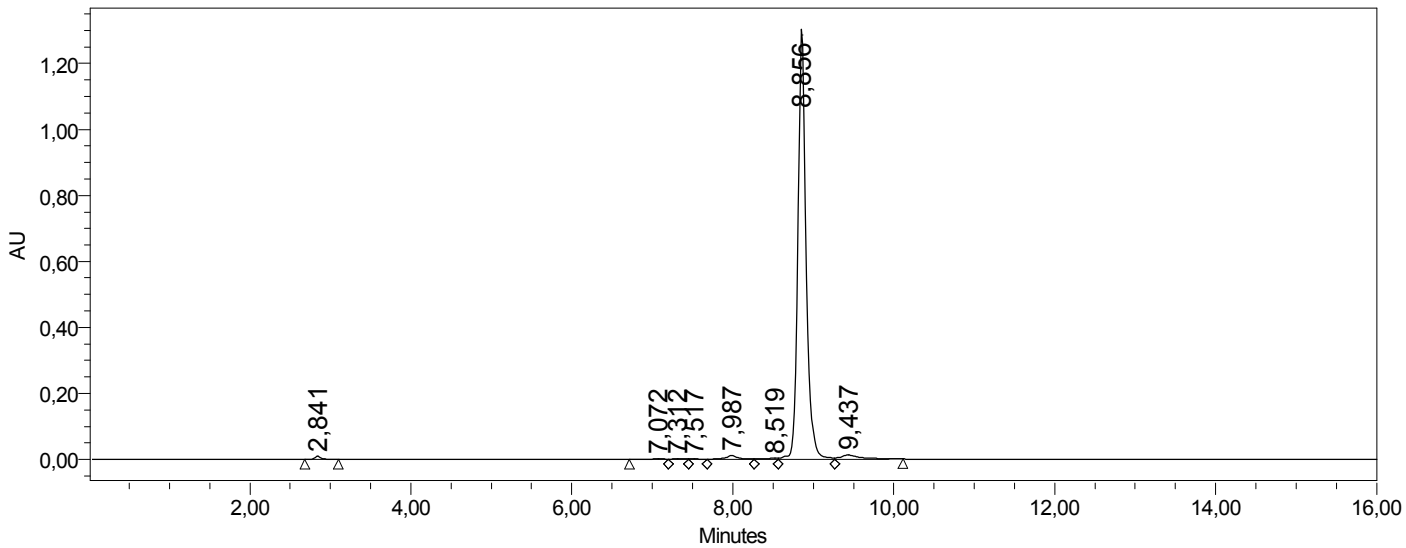
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,843	11643932	98,21	958195
2	Peak2	2,706	212803	1,79	11120

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO179 Compound 40	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 12:27:16
Vial:	5	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 12:45:56
Injection Volume:	10,00 ul	Processing Method:	DO179
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



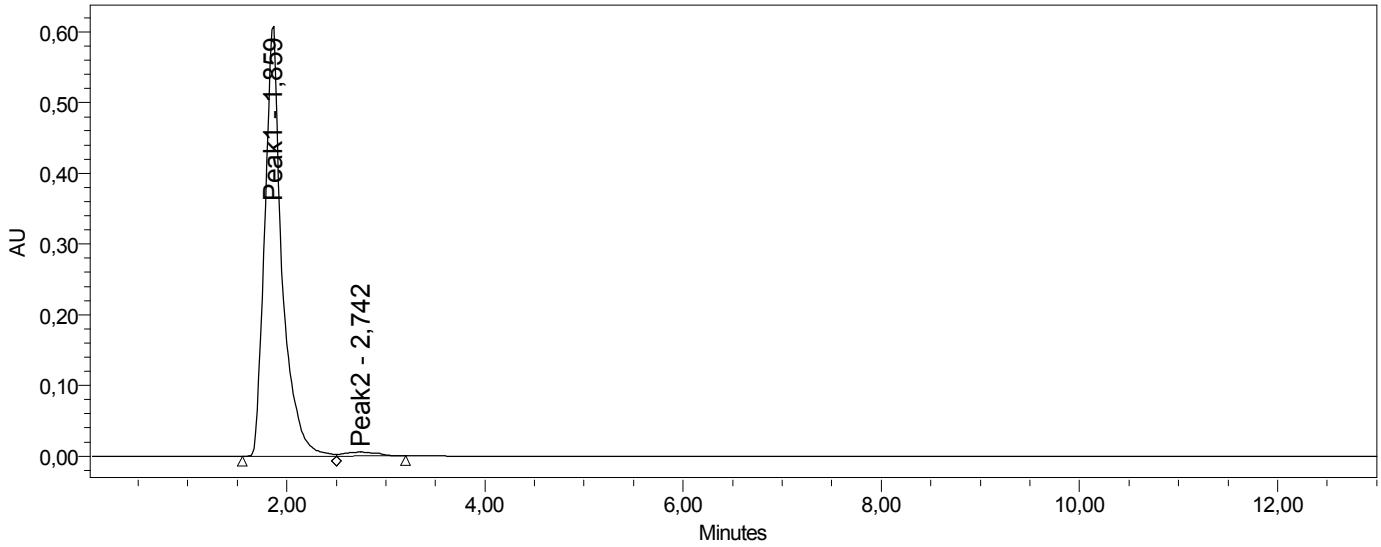
	RT	Area	% Area	Height
1	2,841	50248	0,53	8937
2	7,072	20870	0,22	2116
3	7,312	18966	0,20	1942
4	7,517	9047	0,10	859
5	7,987	118230	1,24	12090
6	8,519	33517	0,35	3359
7	8,856	9054210	95,25	1298066
8	9,437	201127	2,12	12718

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	DO197 Compound 42	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	11.7.2012 13:59:42
Vial:	11	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	11.7.2012 14:16:19
Injection Volume:	10,00 ul	Processing Method:	DO197
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,859	7406062	98,31	609527
2	Peak2	2,742	127100	1,69	5603

Multi Sample Summary

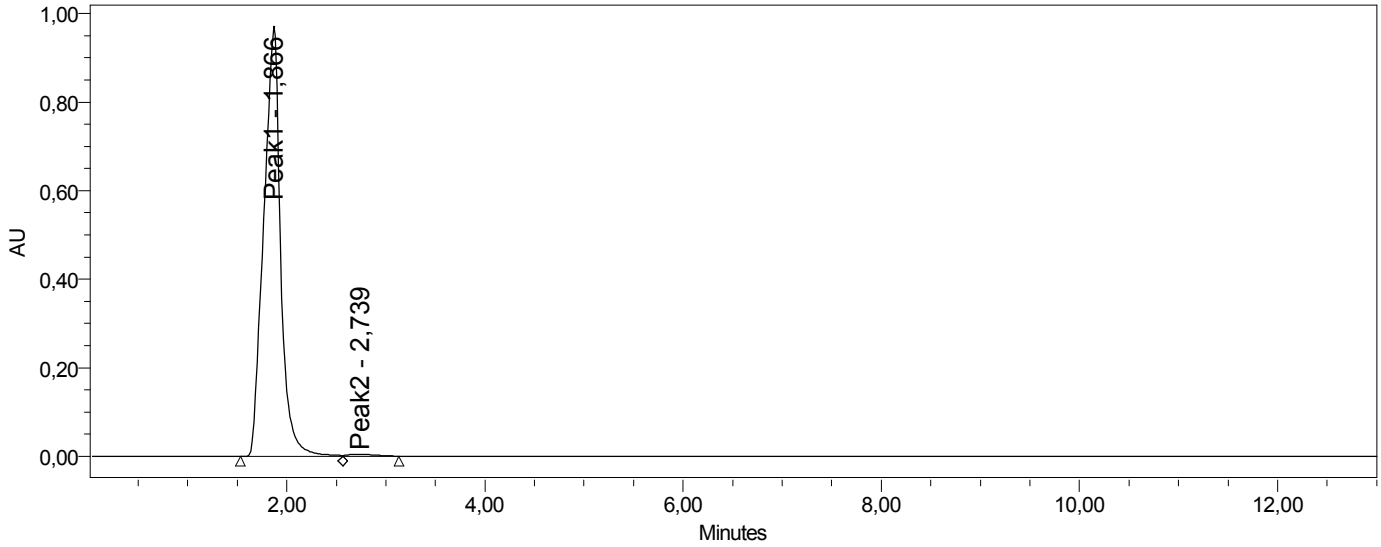
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 43

Sample Name:	DO199	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	11.7.2012 13:07:43
Vial:	8	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	22.8.2012 9:38:17
Injection Volume:	10,00 ul	Processing Method:	DO199
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,866	11502563	99,37	969345
2	Peak2	2,739	72644	0,63	4037

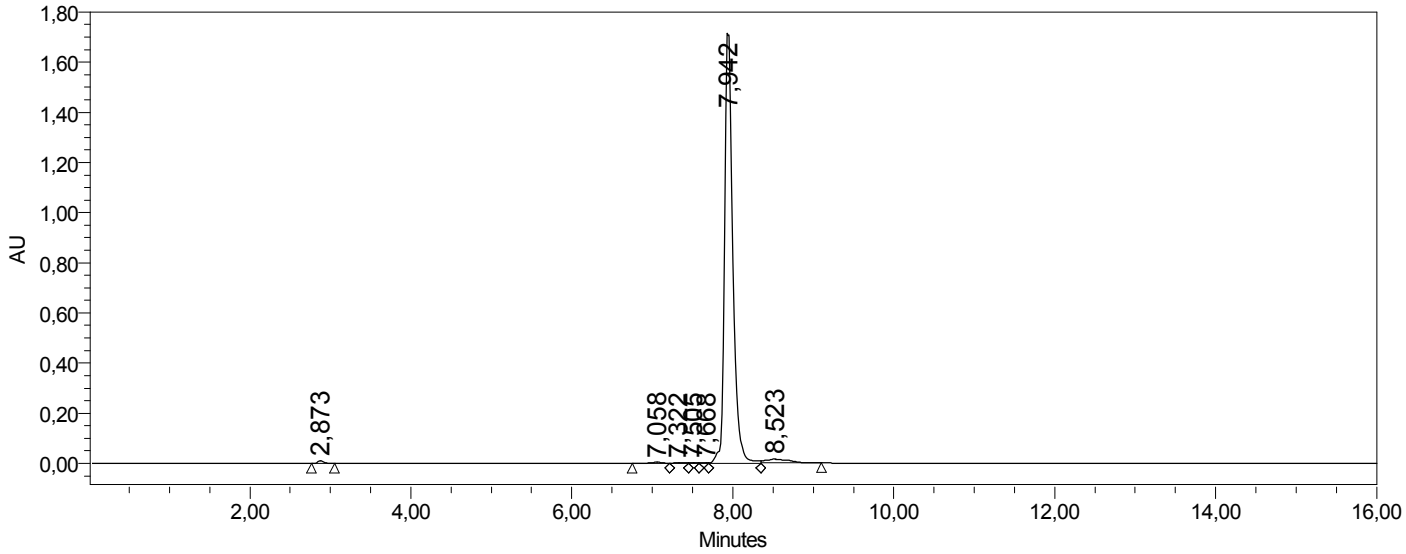
Multi Sample Summary

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Sample Name:	NV78 Compound 50	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 15:13:58
Vial:	13	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 15:35:48
Injection Volume:	10,00 ul	Processing Method:	MV78
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	RT	Area	% Area	Height
1	2,873	47104	0,38	9512
2	7,058	37378	0,30	4081
3	7,322	21853	0,18	2906
4	7,505	6308	0,05	912
5	7,668	8073	0,07	1486
6	7,942	11897269	96,45	1728281
7	8,523	317314	2,57	15479

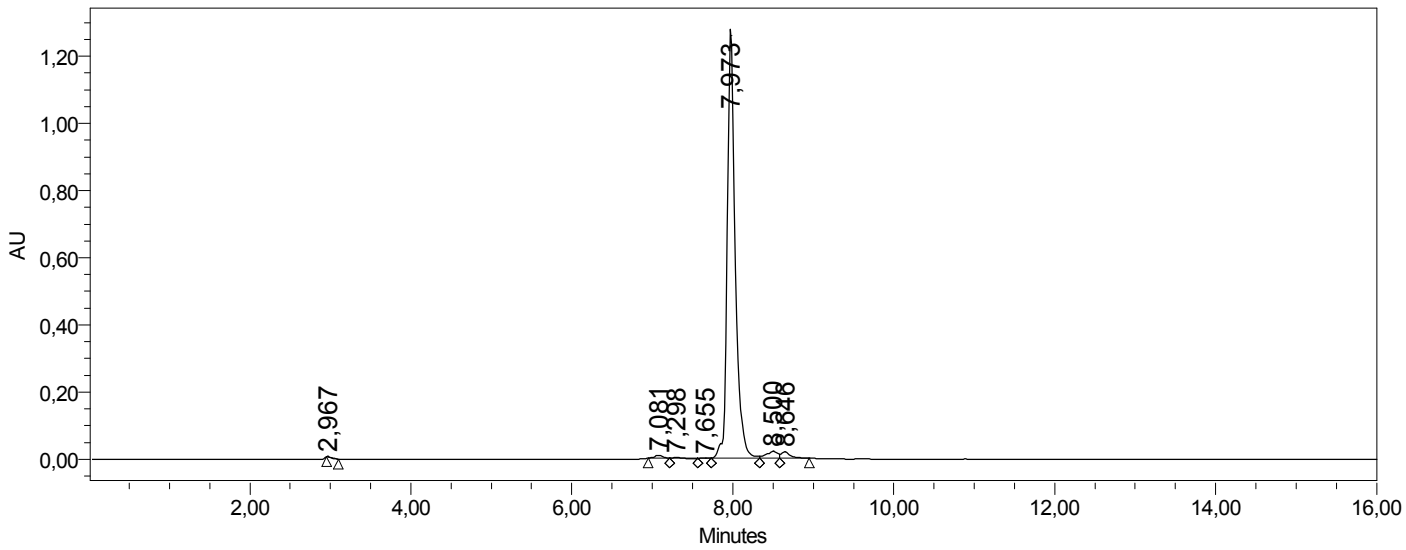
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 52

Sample Name:	DO181	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	10.7.2012 12:10:12
Vial:	4	Acq. Method Set:	98225434005_MS
Injection #:	1	Date Processed:	10.7.2012 12:34:01
Injection Volume:	10,00 ul	Processing Method:	DO181
Run Time:	16,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	RT	Area	% Area	Height
1	2,967	9899	0,11	1955
2	7,081	60180	0,66	8892
3	7,298	18844	0,21	2095
4	7,655	7613	0,08	1125
5	7,973	8694118	95,08	1275092
6	8,500	203211	2,22	20936
7	8,646	149925	1,64	18766

Multi Sample Summary

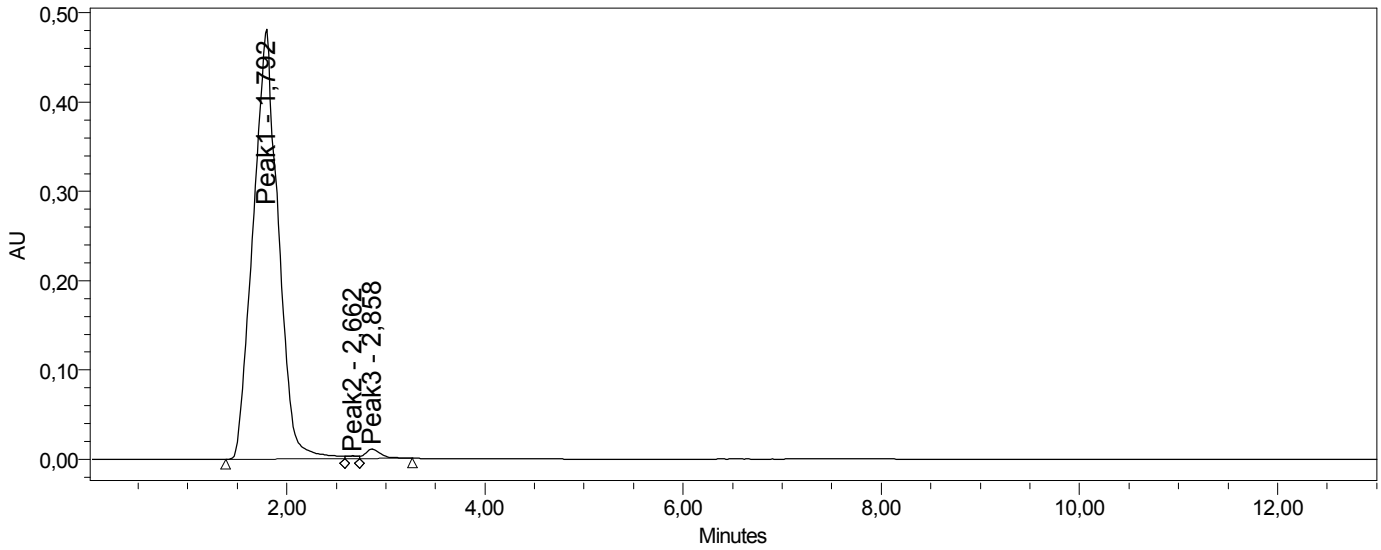
Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

Compound 55

Sample Name:	MV29	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	8.8.2012 10:34:01
Vial:	3	Acq. Method Set:	6942543400513m_MS
Injection #:	1	Date Processed:	8.8.2012 10:48:19
Injection Volume:	10,00 ul	Processing Method:	MV29k2
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



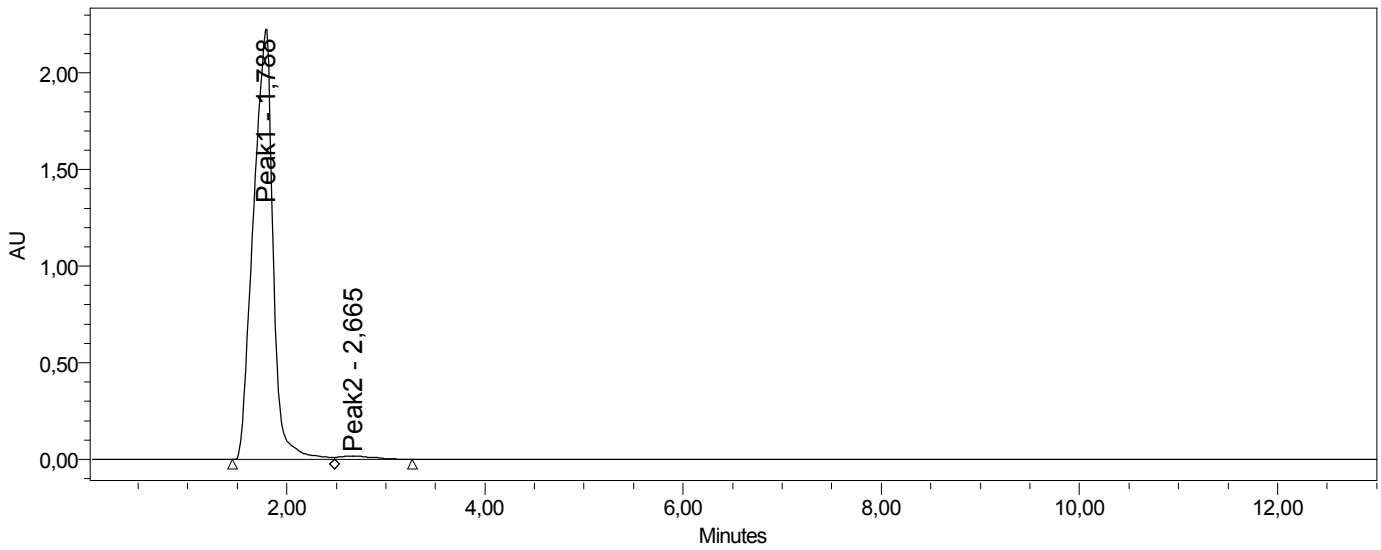
	Peak Name	RT	Area	% Area	Height
1	Peak1	1,792	8498337	98,41	482280
2	Peak2	2,662	23495	0,27	2952
3	Peak3	2,858	114002	1,32	10699

Reported by User: System

Project Name: Organskajedinjenja

SAMPLE INFORMATION

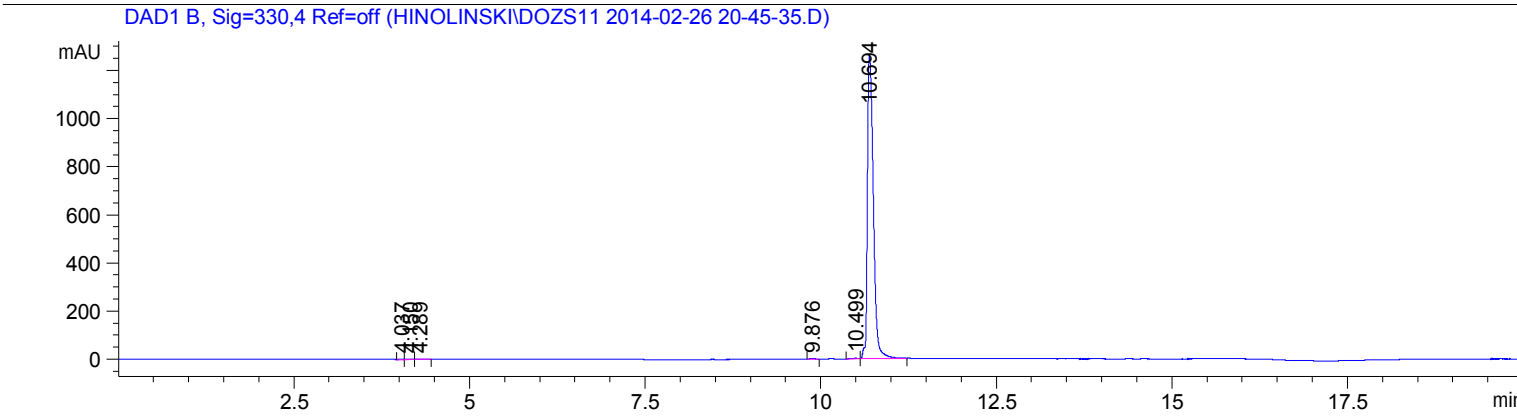
Sample Name:	JK05 Compound 62	Acquired By:	System
Sample Type:	Unknown	Date Acquired:	13.7.2012 14:03:35
Vial:	16	Acq. Method Set:	10902543400513m_MS
Injection #:	1	Date Processed:	13.7.2012 14:18:46
Injection Volume:	10,00 ul	Processing Method:	JK05
Run Time:	13,0 Minutes	Channel Name:	2487Channel 2
Sample Set Name:		Proc. Chnl. Descr.:	



	Peak Name	RT	Area	% Area	Height
1	Peak1	1,788	30564596	98,83	2254359
2	Peak2	2,665	362651	1,17	16434

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOZS11 2014-02-26 20-45-35.D
Sample Name: DOZS11 Compound 14 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 84
Injection Date  : 2/26/2014 8:46:43 PM
                                                 Inj Volume : 3.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/26/2014 8:44:29 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
========================================================================
                        Area Percent Report
========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


  Signal 2: DAD1 B, Sig=330,4 Ref=off

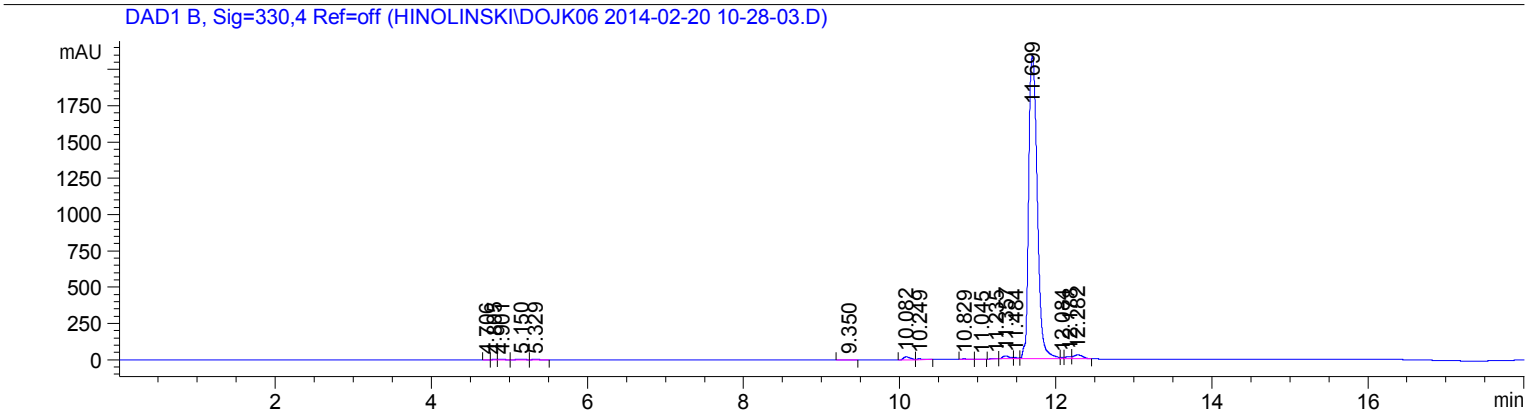
  Peak RetTime Type  Width     Area      Height     Area
    #   [min]        [min]   [mAU*s]     [mAU]       %
  ----|-------|----|-------|----------|----------|--------|
     1   4.037 BV    0.0563    8.69776    2.10002   0.1166
     2   4.150 VV    0.0837   17.49445    2.59416   0.2346
     3   4.289 VB    0.0951   13.40362    1.67149   0.1797
     4   9.876 VB    0.0708    8.55184    1.57636   0.1147
     5  10.499 BV    0.0819   15.50056    2.38157   0.2078
     6  10.694 VB    0.0931 7394.27734 1258.24707  99.1466

  Totals :                  7457.92557 1268.57067


  ========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\JK06 2014-02-20 10-28-03.D
Sample Name: DOJK06 Compound 15 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 22
Injection Date  : 2/20/2014 10:29:16 AM
                                                 Inj Volume : 7.500 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/20/2014 10:40:45 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/19/2014 3:10:21 PM by SYSTEM
```




```
================================================================================
                          Fraction Information
================================================================================
================================================================================
No Fractions found.
================================================================================
================================================================================
                        Area Percent Report
================================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\JK06 2014-02-20 10-28-03.D
Sample Name: JK06

Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	4.706	VV	0.0622	7.23272	1.42613	0.0431
2	4.805	VV	0.0586	11.70099	2.67164	0.0697
3	4.901	VB	0.0796	16.67839	2.55658	0.0993
4	5.150	BV	0.1040	21.87318	2.49038	0.1302
5	5.329	VB	0.0821	8.87225	1.28471	0.0528
6	9.350	BB	0.0972	8.60202	1.04878	0.0512
7	10.082	BV	0.0886	117.61160	20.00121	0.7003
8	10.249	VB	0.0790	29.08188	4.84406	0.1732
9	10.829	BB	0.0717	17.86604	3.67498	0.1064
10	11.045	BB	0.0681	6.03111	1.08016	0.0359
11	11.235	BB	0.0989	9.60299	1.17490	0.0572
12	11.357	BV	0.0998	125.79803	19.11553	0.7491
13	11.484	VV	0.0573	36.52851	7.92797	0.2175
14	11.699	VV	0.1215	1.60226e4	2087.60083	95.4097
15	12.084	VV	0.0322	28.99114	11.18867	0.1726
16	12.178	VV	0.0750	91.37415	16.79968	0.5441
17	12.282	VB	0.1138	233.03242	28.66618	1.3876
Totals :				1.67935e4	2213.55241	

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 6 2014-02-21 16-44-21\TEST0000002.D
Sample Name: DR07 Compound 17 method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   2
Acq. Instrument : HPLC-Solaja                     Location : Vial 34
Injection Date  : 2/21/2014 5:11:54 PM                 Inj :   1
                                                 Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 6 2014-02-21 16-44-21\METODA 7.M (
                  Sequence Method)
Last changed    : 2/21/2014 4:44:22 PM by SYSTEM
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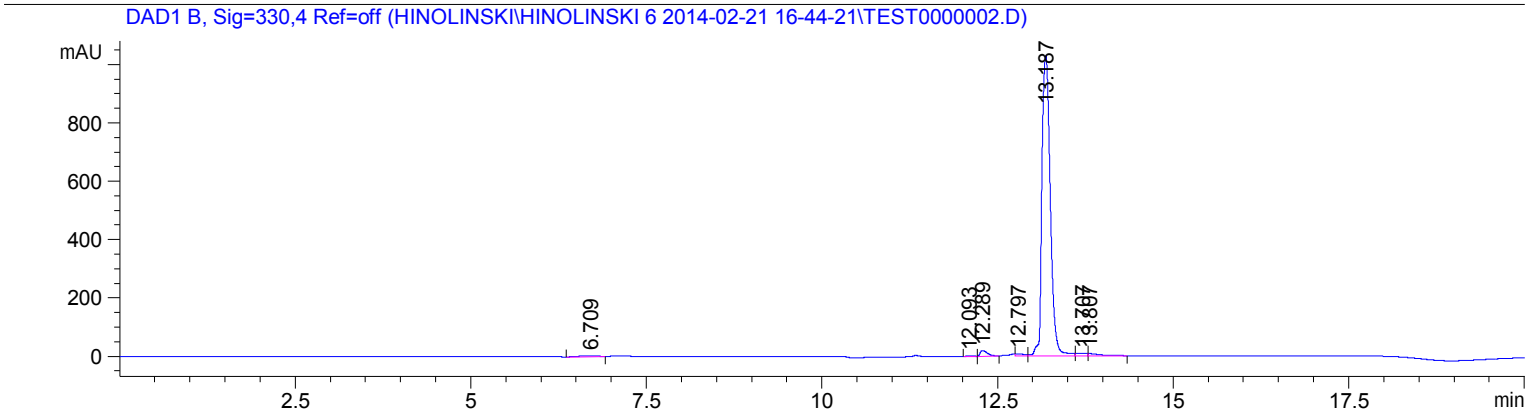


```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   6.709 BV    0.2344   86.05817    4.32957   0.9602
   2  12.093 BB    0.0762   10.51504    1.72388   0.1173
   3  12.289 BB    0.1046  128.86201   18.88998   1.4378
   4  12.797 VV    0.1066   58.68514    7.01316   0.6548
   5  13.187 VV    0.1327 8516.03027 1027.66528  95.0174
   6  13.707 VV    0.1197   83.13605    8.24247   0.9276
   7  13.807 VB    0.1299   79.31776    7.23449   0.8850

Totals :                  8962.60445 1075.09886


==========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOJK07 2014-02-20 10-50-48.D
Sample Name: DOJK07 Compound 19 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 23
Injection Date  : 2/20/2014 10:52:04 AM
                                                 Inj Volume : 7.500 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/20/2014 10:40:45 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/19/2014 3:10:21 PM by SYSTEM
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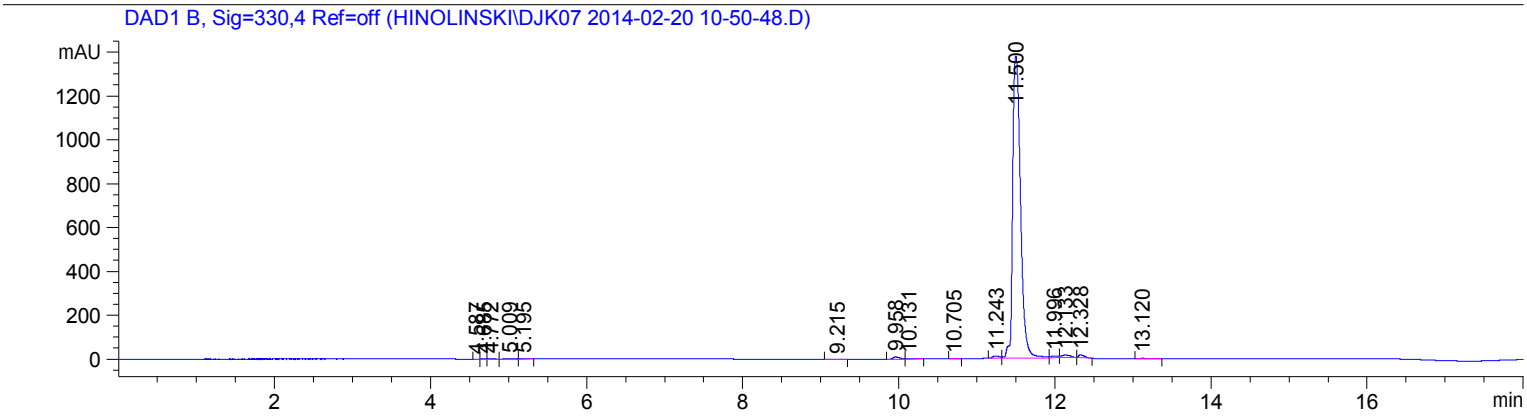



```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	4.587	VV	0.0565	5.81544	1.26840	0.0579
2	4.685	VV	0.0570	10.07004	2.35113	0.1003
3	4.772	VB	0.0755	13.99395	2.28411	0.1394
4	5.009	BV	0.0940	18.05120	2.28976	0.1798
5	5.195	VB	0.0733	6.31388	1.07773	0.0629
6	9.215	BB	0.0933	8.41399	1.06941	0.0838
7	9.958	BV	0.0852	60.36195	10.32249	0.6011
8	10.131	VB	0.0784	19.00268	3.04076	0.1892
9	10.705	BB	0.0549	7.22036	1.57765	0.0719
10	11.243	BV	0.0928	65.36218	10.68954	0.6509
11	11.500	VV	0.1098	9598.78711	1377.40308	95.5881
12	11.996	VV	0.0862	52.47046	7.92991	0.5225
13	12.133	VB	0.1115	97.59934	12.04516	0.9719
14	12.328	BB	0.0739	68.86954	13.51773	0.6858
15	13.120	VB	0.0855	9.48490	1.32480	0.0945
Totals :				1.00418e4	1448.19166	

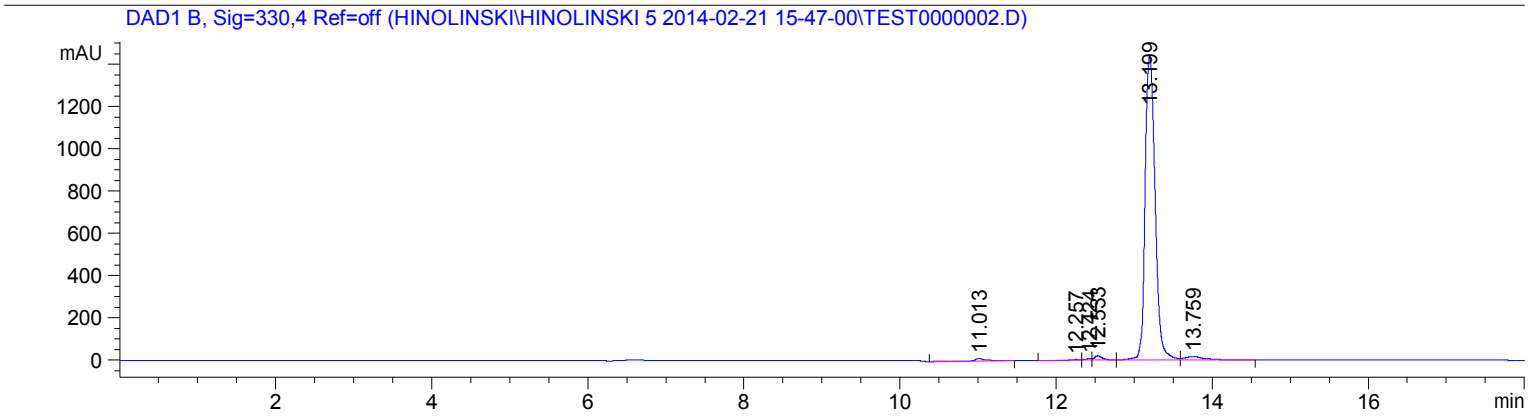
==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 5 2014-02-21 15-47-00\TEST0000002.D
Sample Name: DO186

Compound 20 Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   2
Acq. Instrument : HPLC-Solaja                     Location : Vial 32
Injection Date  : 2/21/2014 4:12:30 PM                 Inj :   1
                                                 Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 5 2014-02-21 15-47-00\METODA 7.M (
                  Sequence Method)
Last changed    : 2/21/2014 3:47:00 PM by SYSTEM
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


   Signal 2: DAD1 B, Sig=330,4 Ref=off

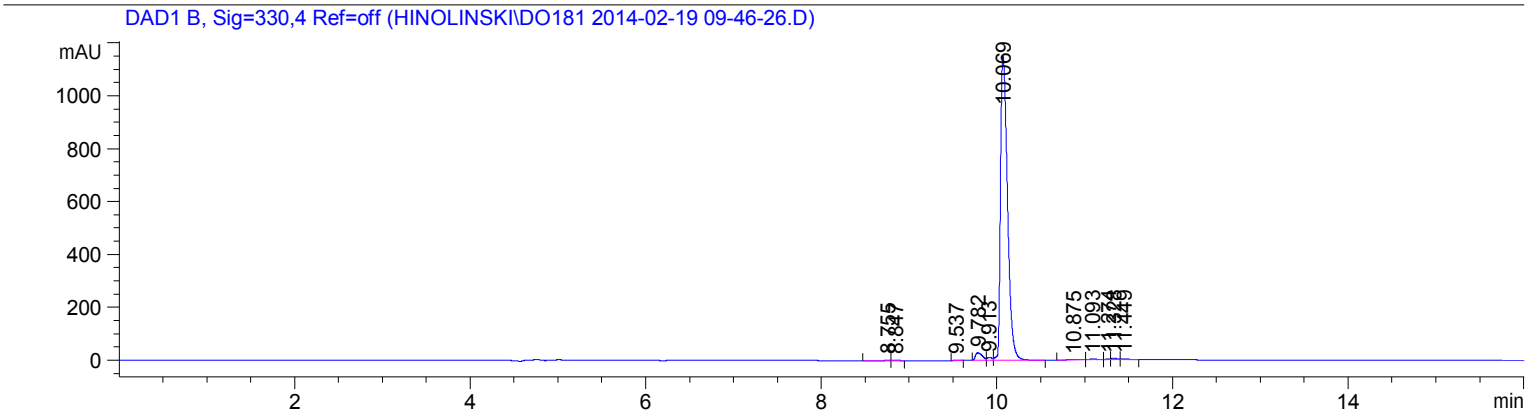
   Peak RetTime Type  Width     Area      Height     Area
     #   [min]        [min]   [mAU*s]     [mAU]       %
   ----|-------|----|-------|----------|----------|--------|
      1  11.013 BB    0.1744  166.23553   12.12893   1.2392
      2  12.257 BV    0.1204   30.58098    3.05293   0.2280
      3  12.424 VV    0.0728   34.70166    5.97099   0.2587
      4  12.533 VB    0.1054  135.93785   20.10739   1.0133
      5  13.199 BV    0.1423 1.27679e4  1434.42065  95.1766
      6  13.759 VB    0.2141  279.60245   15.94336   2.0843

   Totals :                  1.34150e4  1491.62425


   ===================================================================
                              *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO184 2014-02-19 09-46-26.D
Sample Name: DO184 Compound 22

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 41
Injection Date  : 2/19/2014 9:47:39 AM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/19/2014 9:23:40 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

 Compound 22

Signal 2: DAD1 B, Sig=330,4 Ref=off

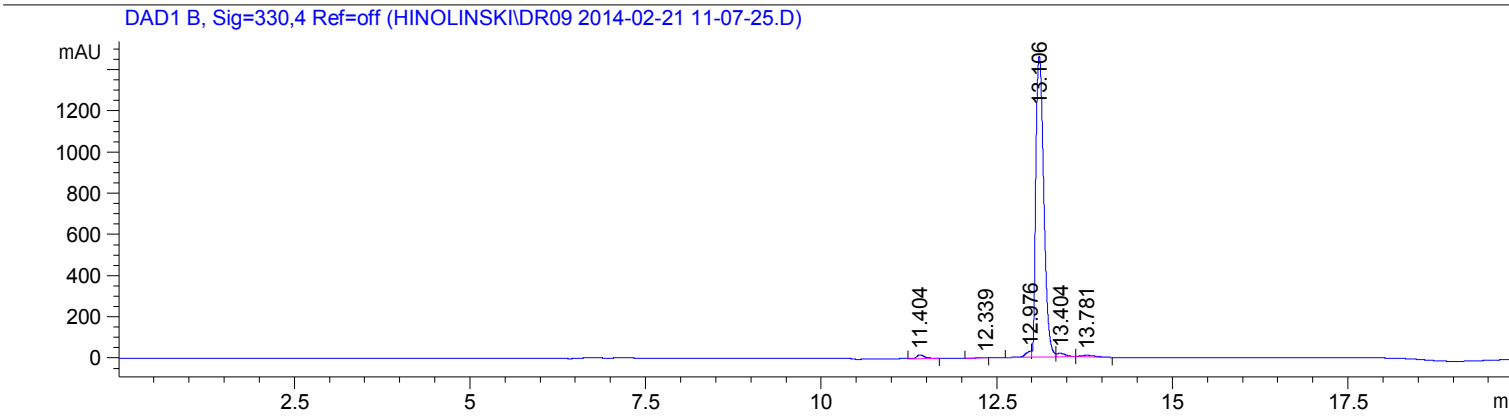
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	8.755	BV	0.0843	14.75049	2.19836	0.2204
2	8.847	VV	0.0769	20.37475	3.47413	0.3045
3	9.537	BB	0.0551	6.45124	1.40293	0.0964
4	9.782	BV	0.0844	145.50365	27.66089	2.1743
5	9.913	VV	0.0616	38.97849	9.16115	0.5825
6	10.069	VB	0.0866	6363.96094	1149.05420	95.0962
7	10.875	BV	0.1022	18.90684	2.29344	0.2825
8	11.093	VB	0.0766	20.12285	3.34847	0.3007
9	11.274	BV	0.0460	12.53524	4.30000	0.1873
10	11.328	VV	0.0701	28.63871	5.56271	0.4279
11	11.449	VB	0.0730	21.90523	3.65288	0.3273
Totals :				6692.12843	1212.10918	

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\DR09 2014-02-21 11-07-25.D
Sample Name: DR09 Compound 23 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 8
Injection Date  : 2/21/2014 11:08:40 AM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/21/2014 11:07:18 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/20/2014 2:58:40 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                         Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


  Signal 2: DAD1 B, Sig=330,4 Ref=off

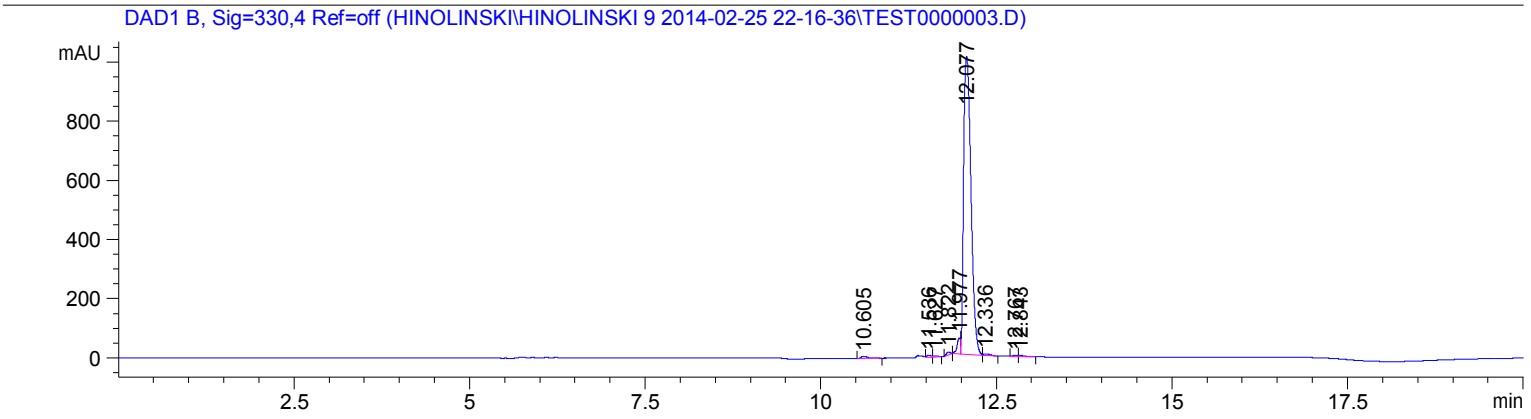
  Peak RetTime Type  Width     Area      Height     Area
    #   [min]        [min]   [mAU*s]     [mAU]       %
  ----|-------|----|-------|----------|----------|--------|
     1  11.404 VB    0.1187  147.29094   17.85912   1.2157
     2  12.339 BV    0.1197   13.35825    1.34118   0.1103
     3  12.976 BV    0.0856  179.39629   28.23582   1.4807
     4  13.106 VV    0.1261 1.15281e4  1460.27515  95.1511
     5  13.404 VB    0.1080  145.85057   16.12716   1.2038
     6  13.781 BB    0.1663  101.57732    7.25804   0.8384

  Totals :                  1.21156e4  1531.09648


  ========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\TEST0000003.D
Sample Name: DOZS13 Compound 24 Method C

```
==================================================================
Acq. Operator   : SYSTEM                        Seq. Line :   3
Acq. Instrument : HPLC-Solaja                    Location : Vial 56
Injection Date  : 2/25/2014 11:10:31 PM               Inj :   1
                                               Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\METODA 24.M (
                  Sequence Method)
Last changed    : 2/25/2014 10:16:36 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

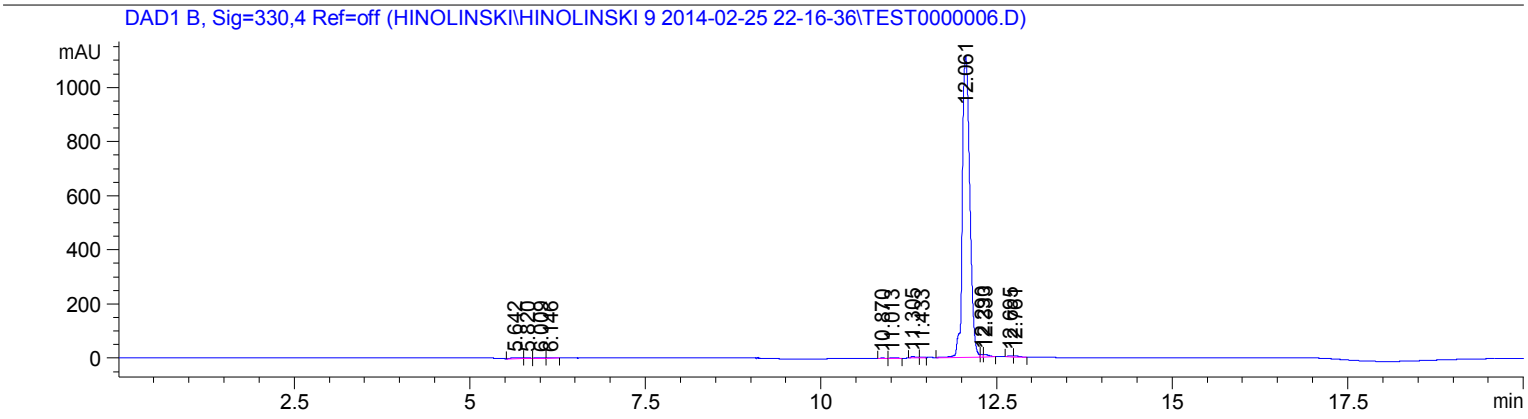
Signal 2: DAD1 B, Sig=330,4 Ref=off
```

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	10.605	BB	0.0891	45.47674	6.88395	0.5932
2	11.536	VV	0.0668	29.65431	6.04188	0.3868
3	11.627	VB	0.0629	16.13100	3.49195	0.2104
4	11.822	BB	0.0673	34.05287	8.48385	0.4442
5	11.977	BV	0.0524	176.41385	52.86920	2.3010
6	12.077	VV	0.1161	7294.38867	1006.11627	95.1406
7	12.336	VB	0.0988	33.36090	4.30850	0.4351
8	12.767	VV	0.0660	17.46827	3.28944	0.2278
9	12.843	VB	0.0731	20.00685	3.30386	0.2609
Totals :				7666.95346	1094.78890	

```
==================================================================
                        *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\TEST0000006.D
Sample Name: DOJK08 Compound 25 Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   6
Acq. Instrument : HPLC-Solaja                      Location : Vial 62
Injection Date  : 2/26/2014 12:29:28 AM                Inj :   1
                                                 Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\METODA 24.M (
                  Sequence Method)
Last changed    : 2/25/2014 10:16:36 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.642	BV	0.1278	36.26812	3.36398	0.4312
2	5.820	VV	0.0748	17.15714	2.88639	0.2040
3	6.009	VV	0.0977	18.80373	2.28020	0.2236
4	6.146	VB	0.0826	10.56242	1.62935	0.1256
5	10.870	BV	0.0627	6.37159	1.22561	0.0758
6	11.013	VB	0.0773	8.66594	1.35110	0.1030
7	11.305	BV	0.0777	25.77197	4.61158	0.3064
8	11.433	VB	0.0484	6.06162	1.55901	0.0721
9	12.061	BV	0.1168	8172.54492	1110.94275	97.1698
10	12.290	VV	0.0395	25.65238	9.06508	0.3050
11	12.333	VB	0.0672	44.77309	8.68314	0.5323
12	12.695	VV	0.0728	18.50238	3.46563	0.2200
13	12.761	VB	0.0638	19.44583	3.67121	0.2312
Totals :				8410.58114	1154.73502	

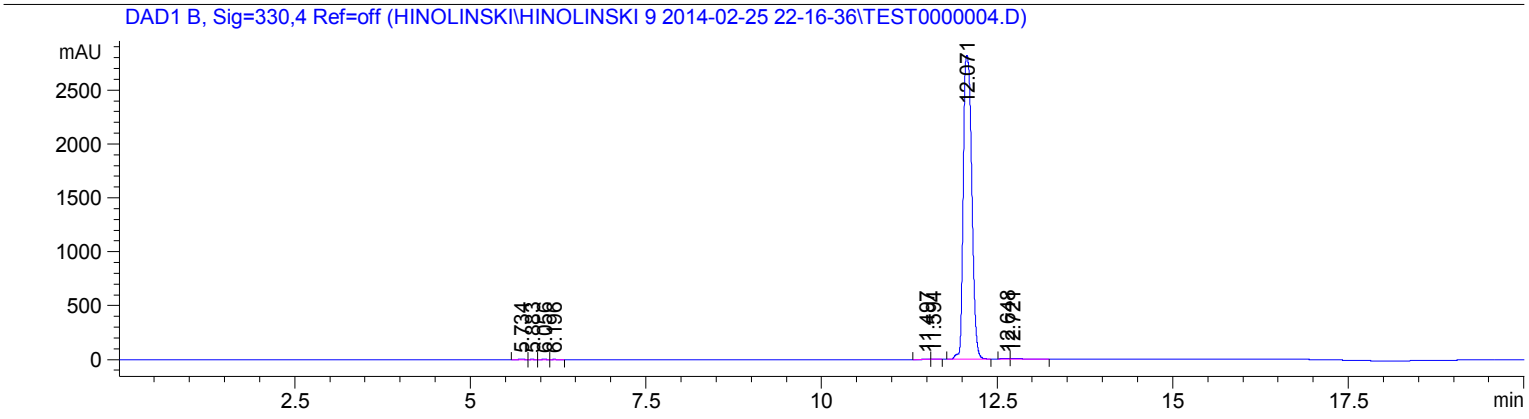
==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\TEST0000004.D
Sample Name: DO174

Compound 36 Method C

Acq. Operator	: SYSTEM	Seq. Line	: 4
Acq. Instrument	: HPLC-Solaja	Location	: Vial 57
Injection Date	: 2/25/2014 11:36:51 PM	Inj	: 1
		Inj Volume	: 5.000 µl
Method	: C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\METODA 24.M (Sequence Method)		
Last changed	: 2/25/2014 10:16:36 PM by SYSTEM		



Fraction Information

No Fractions found.

Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

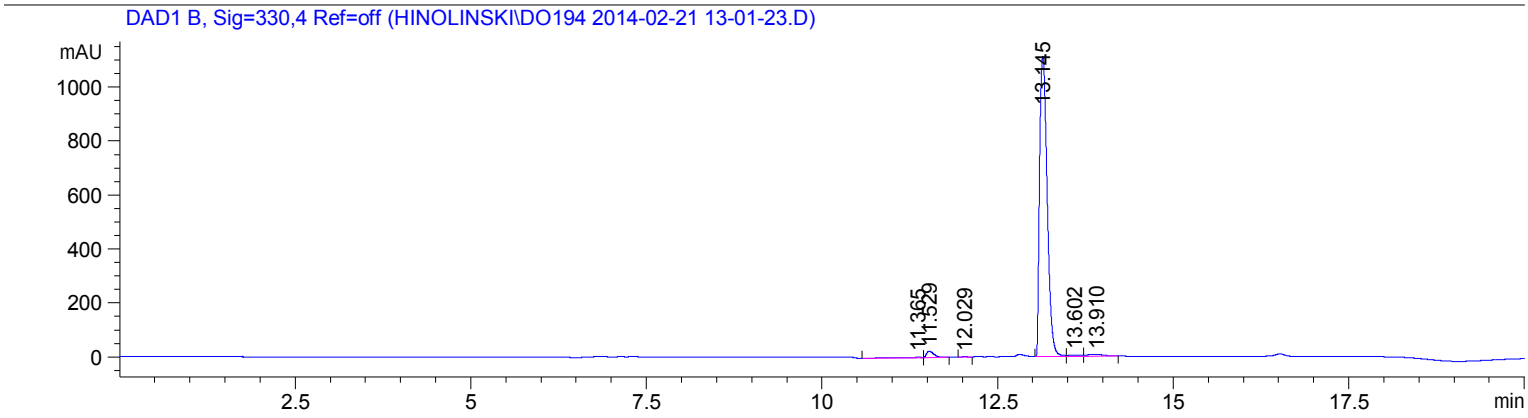
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.734	BV	0.1247	34.74579	3.31755	0.1456
2	5.883	VV	0.0804	18.31310	2.99248	0.0767
3	6.056	VV	0.0919	18.64886	2.44772	0.0782
4	6.196	VB	0.0860	11.68477	1.71578	0.0490
5	11.497	BV	0.0852	13.33289	2.02765	0.0559
6	11.594	VB	0.0664	7.07617	1.34354	0.0297
7	12.071	BV	0.1012	2.36822e4	2813.83350	99.2431
8	12.648	BV	0.0889	30.85190	4.19247	0.1293
9	12.721	VB	0.1278	45.96009	4.45875	0.1926
Totals :				2.38628e4	2836.32944	

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO194 2014-02-21 13-01-23.D
Sample Name: DO194 Compound 37 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 11
Injection Date  : 2/21/2014 1:02:35 PM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/21/2014 12:38:38 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/20/2014 2:58:40 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1  11.365 BV    0.4126   66.33316    1.88258   0.7592
   2  11.529 VB    0.1153  174.55154   23.47076   1.9979
   3  12.029 BV    0.0710   12.85775    2.20732   0.1472
   4  13.145 BV    0.1209 8320.55859 1111.08850  95.2343
   5  13.602 VV    0.1422   54.91820    4.55336   0.6286
   6  13.910 VB    0.1828  107.71581    6.92975   1.2329

Totals :                  8736.93505 1150.13227


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO195 2014-02-26 19-30-27.D
Sample Name: DO195 Compound 38 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 83
Injection Date  : 2/26/2014 7:31:34 PM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/26/2014 7:30:08 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
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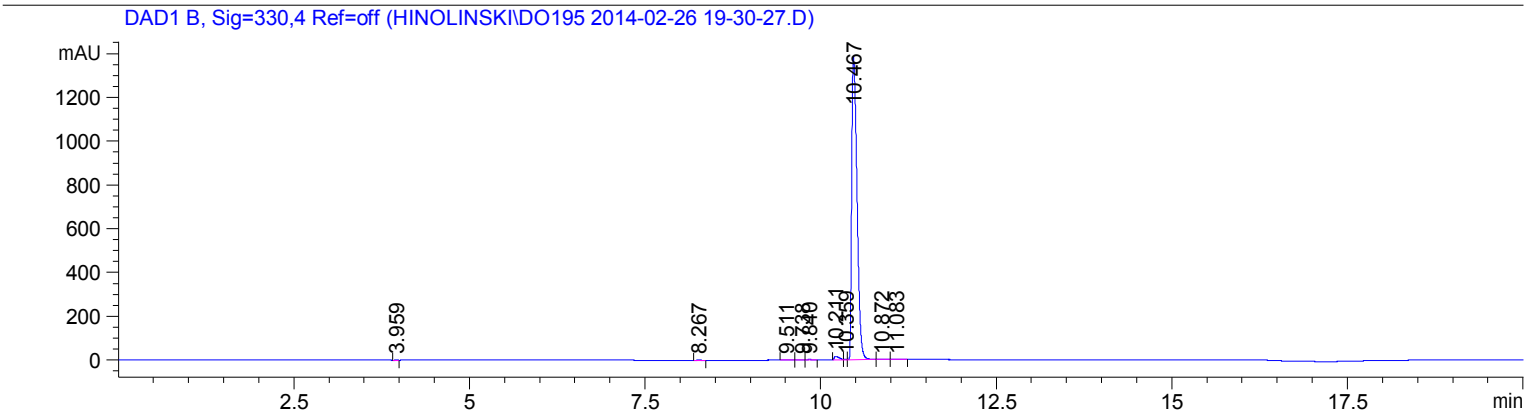



```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                            Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.959	BB	0.0469	6.22457	2.17706	0.0841
2	8.267	BB	0.0549	5.25604	1.15871	0.0710
3	9.511	BV	0.0824	9.35642	1.36666	0.1264
4	9.738	VV	0.0776	8.47712	1.40132	0.1145
5	9.840	VB	0.0681	9.86576	1.86846	0.1333
6	10.211	VV	0.0689	77.25272	15.55775	1.0438
7	10.359	VV	0.0350	5.75576	2.31383	0.0778
8	10.467	VB	0.0842	7261.27490	1384.18518	98.1114
9	10.872	BV	0.0778	7.18719	1.09850	0.0971
10	11.083	VB	0.0744	10.40300	1.68820	0.1406
Totals :				7401.05349	1412.81568	

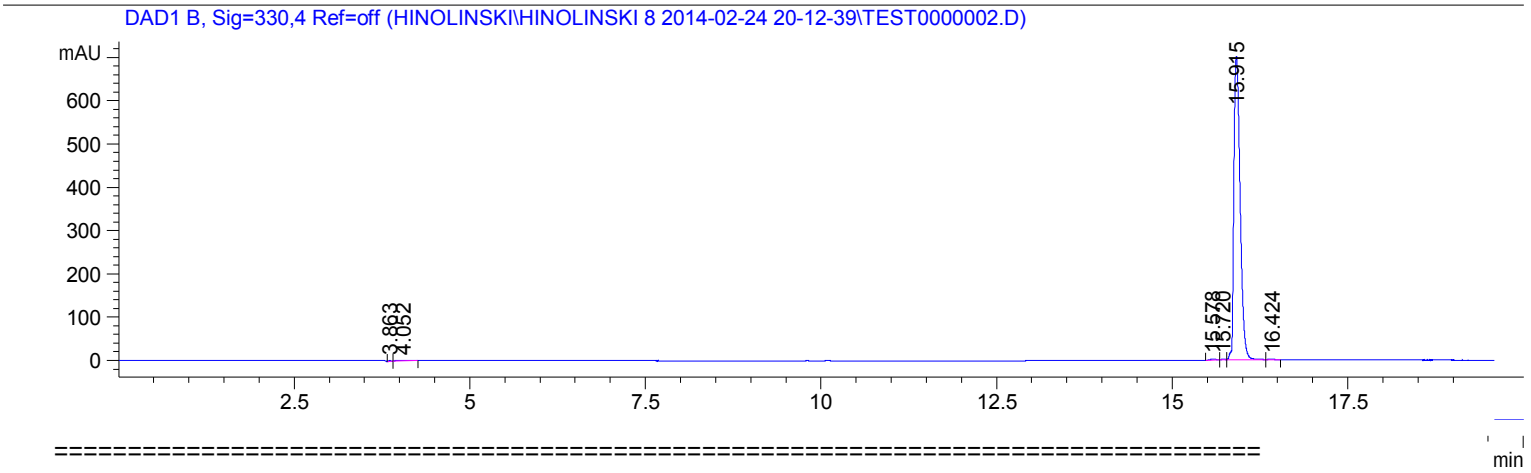
==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 8 2014-02-24 20-12-39\TEST0000002.D
Sample Name: DO191 Compound 41

Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   2
Acq. Instrument : HPLC-Solaja                      Location : Vial 72
Injection Date  : 2/24/2014 8:40:01 PM                  Inj :   1
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 8 2014-02-24 20-12-39\METODA 8.M
Last changed    : 2/24/2014 8:34:12 PM by SYSTEM
Analysis Method : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 8 2014-02-24 20-12-39\METODA 8.M (
                  Sequence Method)
Last changed    : 2/24/2014 8:12:39 PM by SYSTEM
Method Info     : BENZOTIAZOLI
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

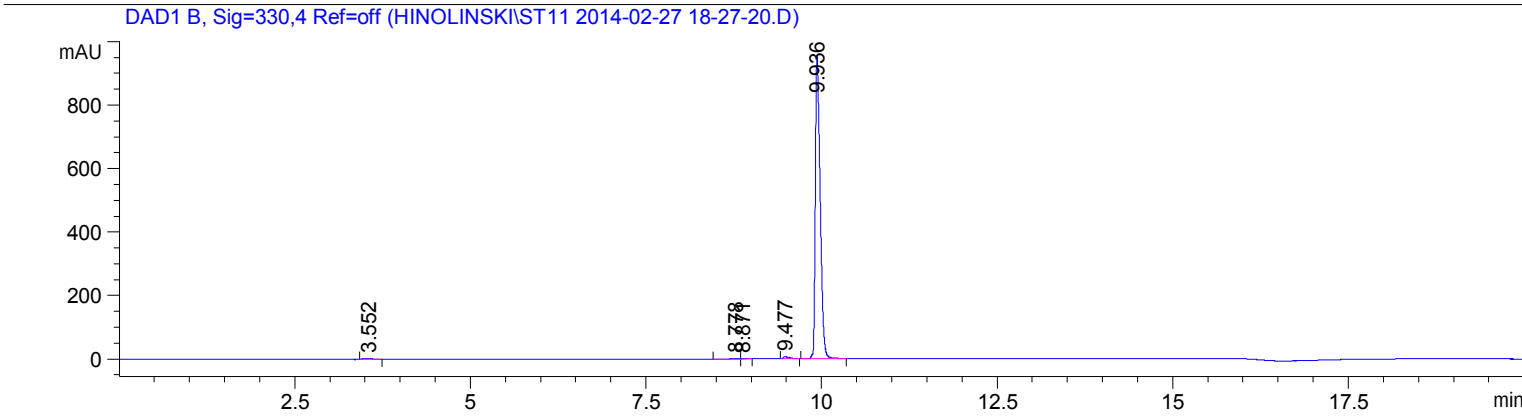
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   3.863 BV    0.0390    5.16061    1.79463   0.1172
   2   4.052 VB    0.1515   25.32899    1.98973   0.5754
   3  15.578 BV    0.0753   14.38167    2.58968   0.3267
   4  15.720 VV    0.0629    8.63869    1.81897   0.1962
   5  15.915 VV    0.0982 4340.81494  701.01807  98.6065
   6  16.424 VB    0.0900    7.83396    1.05020   0.1780

Totals :                  4402.15886  710.26128


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\ST11 2014-02-27 18-27-20.D
Sample Name: ST11 Compound 44 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 77
Injection Date  : 2/27/2014 6:28:38 PM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 6:25:04 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                          Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

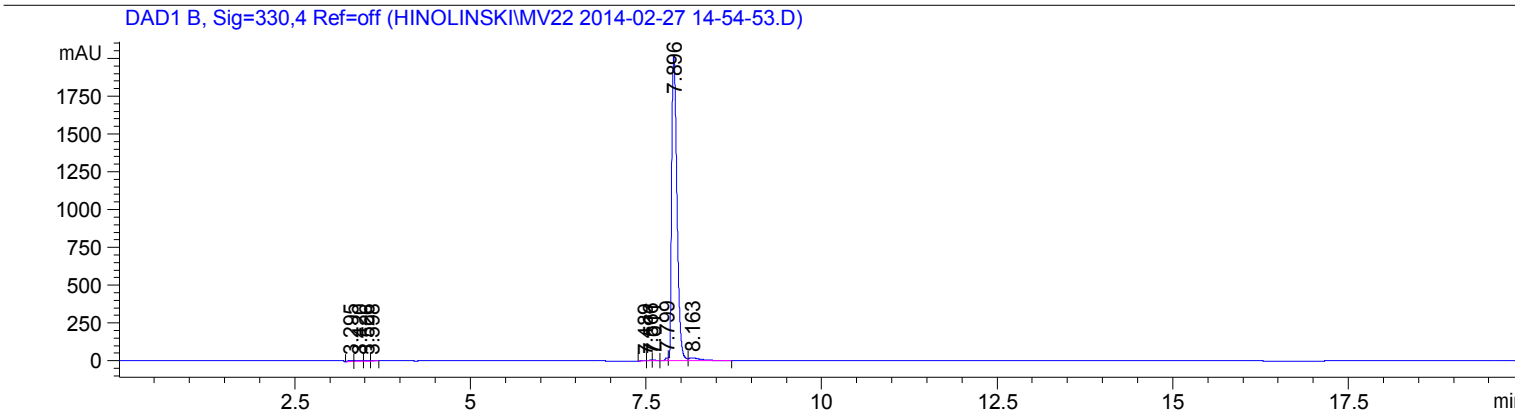
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   3.552 VB    0.1360   21.57221    1.88557   0.4633
   2   8.778 BV    0.1134   17.16291    1.80479   0.3686
   3   8.871 VB    0.0537    5.04941    1.16190   0.1085
   4   9.477 BB    0.0811   39.85469    6.67863   0.8560
   5   9.936 BB    0.0760 4572.14014  952.83606  98.2035

Totals :                   4655.77936  964.36694


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\MV22 2014-02-27 14-54-53.D
Sample Name: MV22 Compound 45 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 71
Injection Date  : 2/27/2014 2:55:59 PM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 2:39:03 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

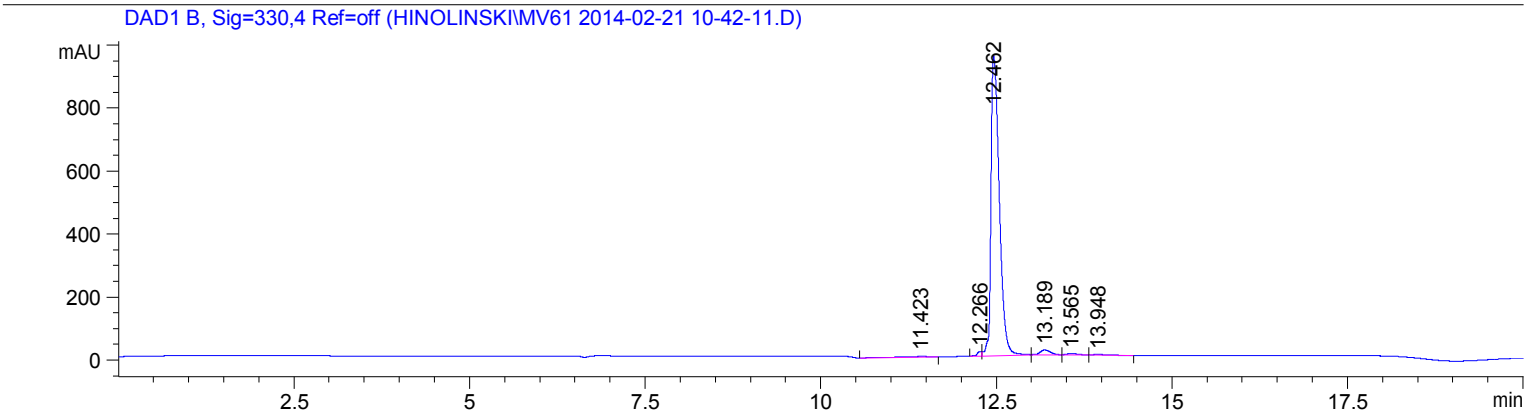
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.295	BV	0.0700	29.83358	5.94979	0.2733
2	3.420	VV	0.0820	38.07766	5.55012	0.3488
3	3.526	VV	0.0681	21.82052	3.97027	0.1999
4	3.598	VB	0.0514	10.97804	2.56818	0.1006
5	7.489	BV	0.0448	7.40382	2.35009	0.0678
6	7.566	VV	0.0491	13.15521	3.87252	0.1205
7	7.611	VB	0.0540	13.90615	3.49097	0.1274
8	7.799	BV	0.0436	46.89835	16.77225	0.4296
9	7.896	VV	0.0826	1.05308e4	2010.04443	96.4580
10	8.163	VB	0.1538	204.62837	17.77680	1.8743
Totals :				1.09175e4	2072.34543	

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\MV61 2014-02-21 10-42-11.D
Sample Name: MV61 Compound 51 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 7
Injection Date  : 2/21/2014 10:43:28 AM
                                                 Inj Volume : 1.500 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/21/2014 10:54:24 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/20/2014 2:58:40 PM by SYSTEM
```




```
================================================================================
                          Fraction Information
================================================================================
================================================================================
No Fractions found.
================================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

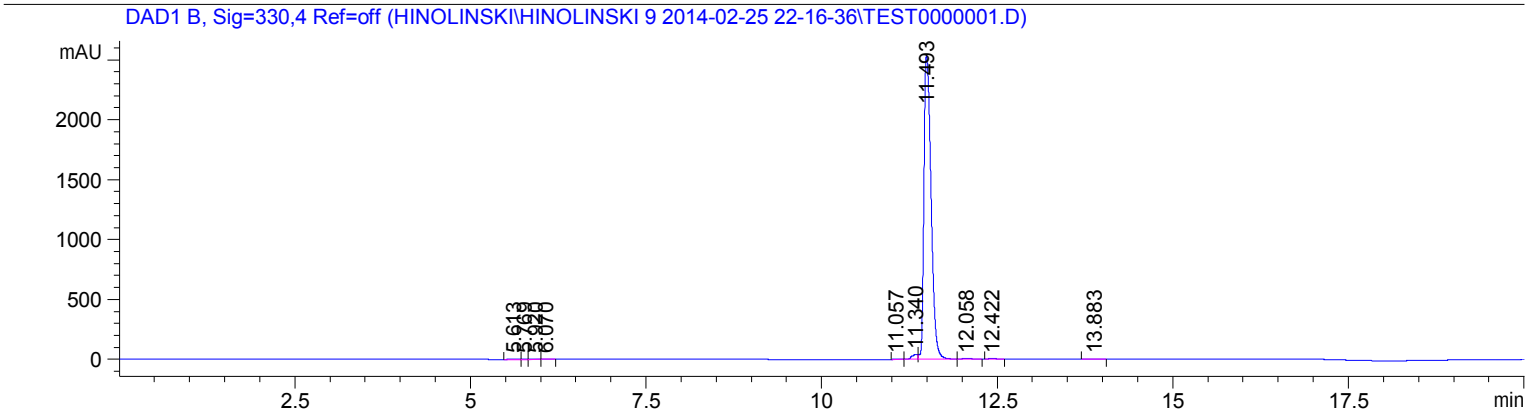
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1  11.423 BB    0.3545   80.20527    2.68111   0.9768
    2  12.266 BV    0.0686   60.87838   13.25480   0.7414
    3  12.462 VB    0.1281 7834.17725  950.83105  95.4108
    4  13.189 BV    0.1326  150.77586   15.01812   1.8363
    5  13.565 VV    0.1404   53.32525    4.54446   0.6494
    6  13.948 VB    0.1795   31.63280    2.07948   0.3852

 Totals :                  8210.99481  988.40904


 ========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\TEST0000001.D
Sample Name: DO192 Compound 53 Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   1
Acq. Instrument : HPLC-Solaja                       Location : Vial 54
Injection Date  : 2/25/2014 10:17:54 PM                 Inj :   1
                                                  Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\METODA 24.M (
                  Sequence Method)
Last changed    : 2/25/2014 10:16:36 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
========================================================================
                        Area Percent Report
========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

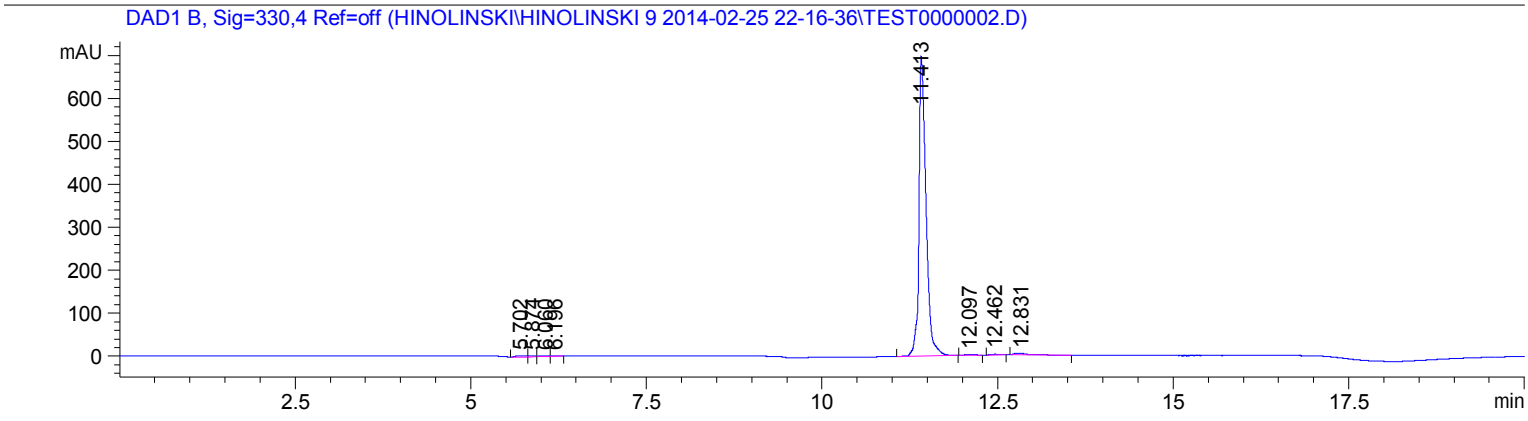
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   5.613 BV    0.1217   24.77264    2.42405   0.1356
   2   5.769 VV    0.0628    8.54417    1.63935   0.0468
   3   5.920 VV    0.0901   12.88919    1.72560   0.0706
   4   6.070 VB    0.0762    7.49557    1.18722   0.0410
   5  11.057 BV    0.0866   16.42900    2.51783   0.0899
   6  11.340 VV    0.0815  238.29944   40.27359   1.3044
   7  11.493 VV    0.1109 1.78894e4  2532.88477  97.9245
   8  12.058 VB    0.1252   40.66521    3.84978   0.2226
   9  12.422 BB    0.0971   16.75681    2.08881   0.0917
  10  13.883 BB    0.0769   13.31058    2.17637   0.0729

Totals :                  1.82685e4  2590.76737


========================================================================
                        *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\TEST0000002.D
Sample Name: ST13 Compound 54 Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   2
Acq. Instrument : HPLC-Solaja                     Location : Vial 55
Injection Date  : 2/25/2014 10:44:13 PM               Inj :   1
                                                Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 9 2014-02-25 22-16-36\METODA 24.M (
                  Sequence Method)
Last changed    : 2/25/2014 10:16:36 PM by SYSTEM
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

 Signal 2: DAD1 B, Sig=330,4 Ref=off

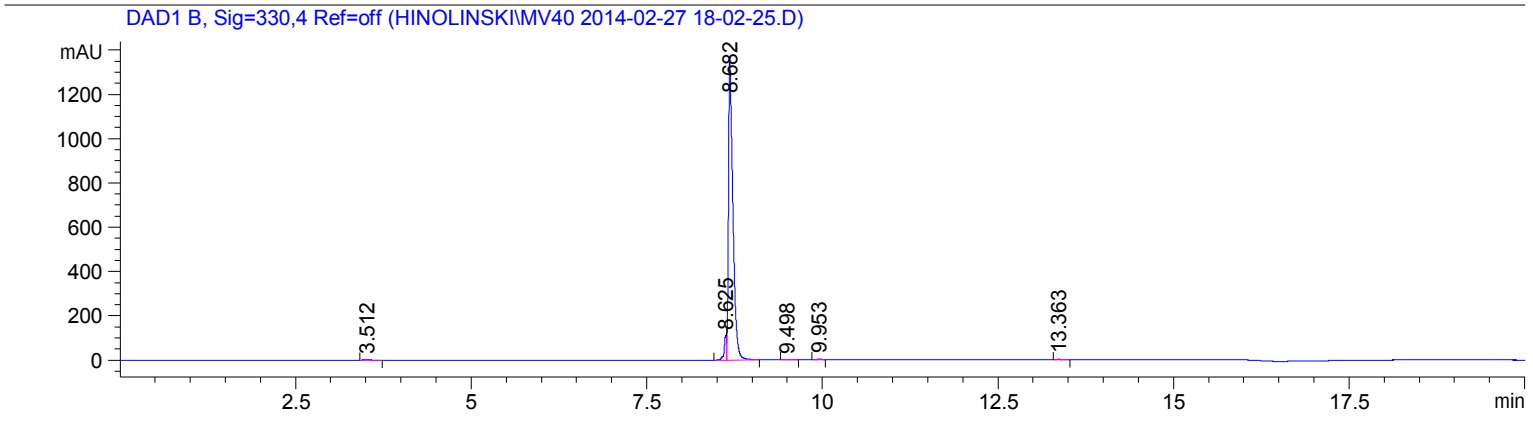
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   5.702 BV    0.1296   36.57756    3.35749   0.7252
    2   5.874 VV    0.0715   18.11462    3.03915   0.3592
    3   6.060 VV    0.0989   19.11790    2.32680   0.3791
    4   6.196 VB    0.0833   11.05497    1.65761   0.2192
    5  11.413 BB    0.1077 4883.66016  697.03918  96.8300
    6  12.097 BB    0.0941   13.61810    1.71603   0.2700
    7  12.462 BB    0.0969   11.65178    1.43263   0.2310
    8  12.831 BB    0.1806   49.74744    3.30498   0.9864

 Totals :                  5043.54253  713.87387


 ==========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\MV40 2014-02-27 18-02-25.D
Sample Name: MV40 Compound 57 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 72
Injection Date  : 2/27/2014 6:03:31 PM
                                                 Inj Volume : 1.500 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 6:02:10 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

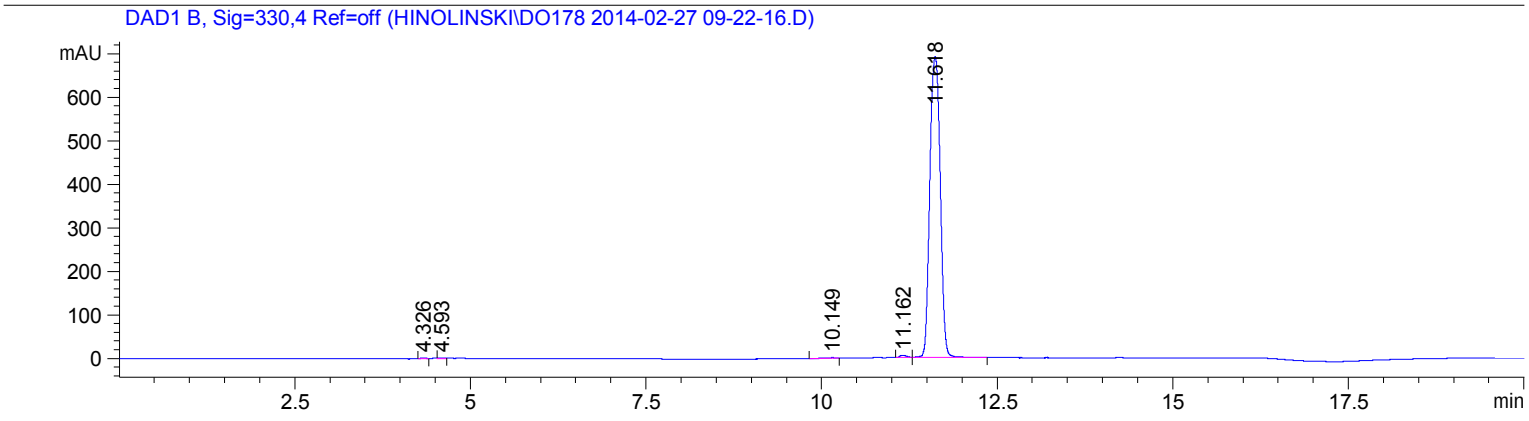
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
    1   3.512 VB    0.1292   21.04389    1.93720   0.3362
    2   8.625 BV    0.0336  252.08754  112.73808   4.0278
    3   8.682 VV    0.0602 5956.11426 1370.96179  95.1661
    4   9.498 BB    0.0684    6.69030    1.27198   0.1069
    5   9.953 BV    0.0697   12.64812    2.45145   0.2021
    6  13.363 BB    0.0622   10.06762    2.31454   0.1609

 Totals :                  6258.65173 1491.67503


==========================================================================
                        *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO178 2014-02-27 09-22-16.D
Sample Name: DO178 Compound 58 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 87
Injection Date  : 2/27/2014 9:23:31 AM
                                                 Inj Volume : 10.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 8:32:34 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                          Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

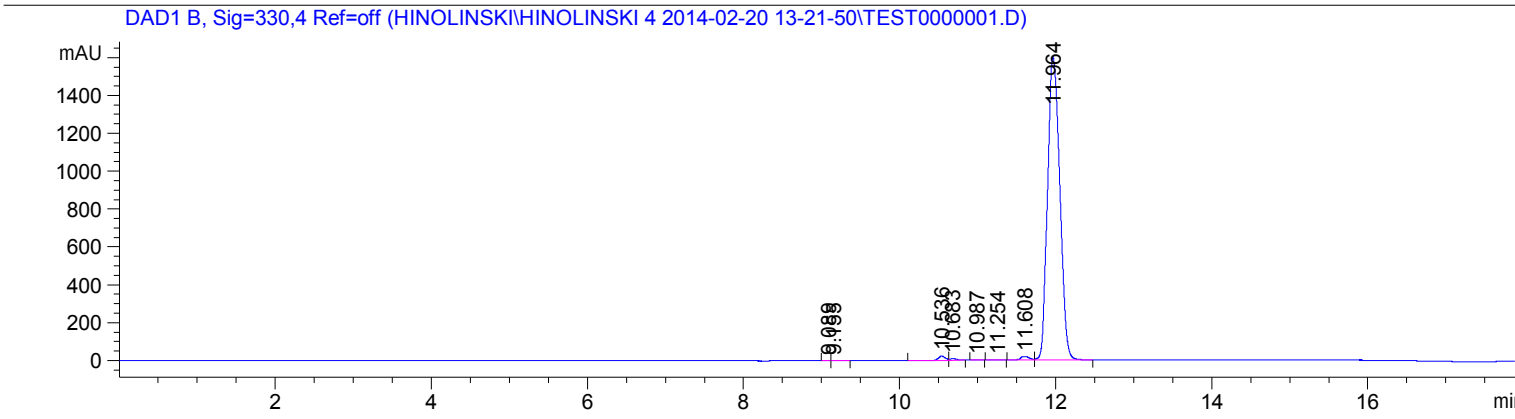
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	4.326	BB	0.0662	8.77658	1.64607	0.1219
2	4.593	VV	0.0619	6.46930	1.28189	0.0899
3	10.149	BB	0.0979	10.87971	1.32378	0.1511
4	11.162	BV	0.0861	34.76116	4.88114	0.4829
5	11.618	VB	0.1665	7137.80811	691.08551	99.1542
Totals :				7198.69486	700.21840	

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 4 2014-02-20 13-21-50\TEST0000001.D
Sample Name: MV31 Compound 59 Method C

```
==================================================================
Acq. Operator   : SYSTEM                        Seq. Line :   1
Acq. Instrument : HPLC-Solaja                    Location : Vial 1
Injection Date  : 2/20/2014 1:23:06 PM                Inj :   1
                                                Inj Volume : 10.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 4 2014-02-20 13-21-50\METODA 7.M (
                  Sequence Method)
Last changed    : 2/20/2014 1:21:50 PM by SYSTEM
```




```
================================================================================
                          Fraction Information
================================================================================
================================================================================
No Fractions found.
================================================================================
================================================================
                       Area Percent Report
================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

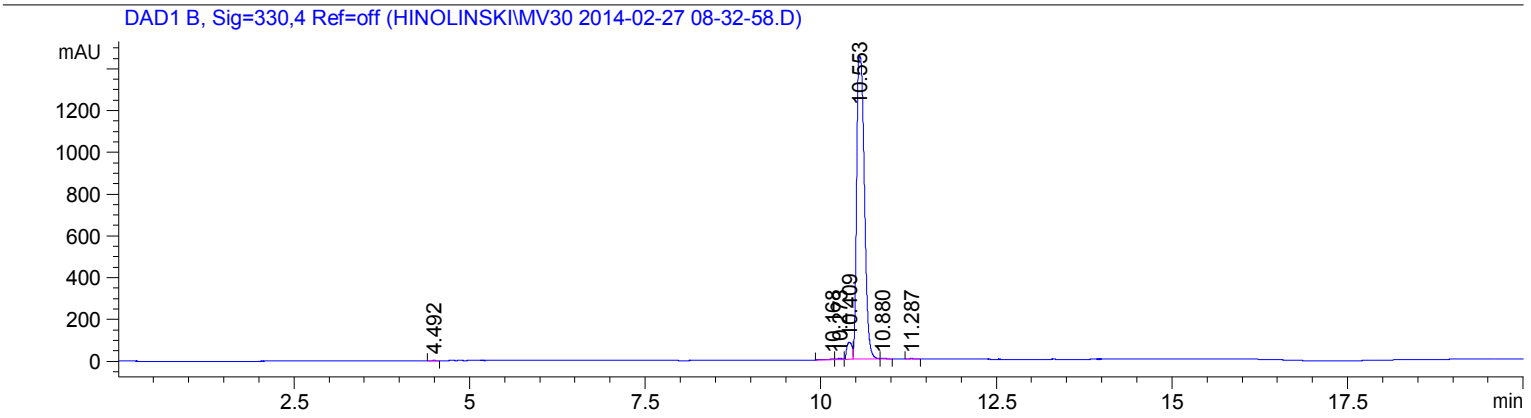
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   9.089 VV    0.0618    8.54477    1.70955   0.0479
   2   9.155 VB    0.0707   12.71255    2.15816   0.0712
   3  10.536 BV    0.0908  141.91032   23.05680   0.7949
   4  10.683 VB    0.0870   51.84019    8.33943   0.2904
   5  10.987 BB    0.0560    5.44765    1.17759   0.0305
   6  11.254 BB    0.0884    9.70442    1.36534   0.0544
   7  11.608 BV    0.1009  139.59642   18.31508   0.7819
   8  11.964 VB    0.1659 1.74833e4  1601.37720  97.9289

Totals :                  1.78530e4  1657.49914


================================================================
                       *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\MV30 2014-02-27 08-32-58.D
Sample Name: MV30 Compound 61 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 85
Injection Date  : 2/27/2014 8:34:10 AM
                                                 Inj Volume : 10.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 8:32:34 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

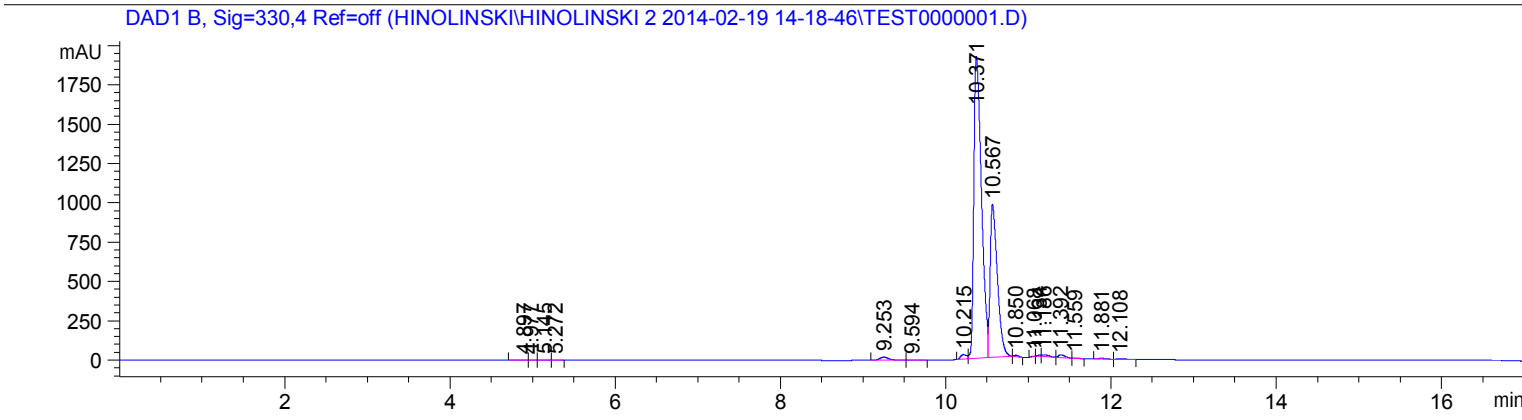
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   4.492 BB    0.0673    6.42647    1.17558   0.0556
   2  10.168 BV    0.0933   18.56855    2.46612   0.1606
   3  10.273 VV    0.0830   26.76161    4.24795   0.2314
   4  10.409 VV    0.0862  426.93210   82.11183   3.6917
   5  10.553 VB    0.1210 1.10575e4  1449.50037  95.6142
   6  10.880 BB    0.0677   10.34705    1.97354   0.0895
   7  11.287 BB    0.0784   18.17168    2.83167   0.1571

Totals :                  1.15647e4  1544.30705


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 2 2014-02-19 14-18-46\TEST0000001.D
Sample Name: JK05 Compound 62 Method C

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   1
Acq. Instrument : HPLC-Solaja                     Location : Vial 21
Injection Date  : 2/19/2014 2:20:00 PM                 Inj :   1
                                                 Inj Volume : 5.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 2 2014-02-19 14-18-46\METODA 7.M (
                  Sequence Method)
Last changed    : 2/19/2014 2:18:46 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 2: DAD1 B, Sig=330,4 Ref=off

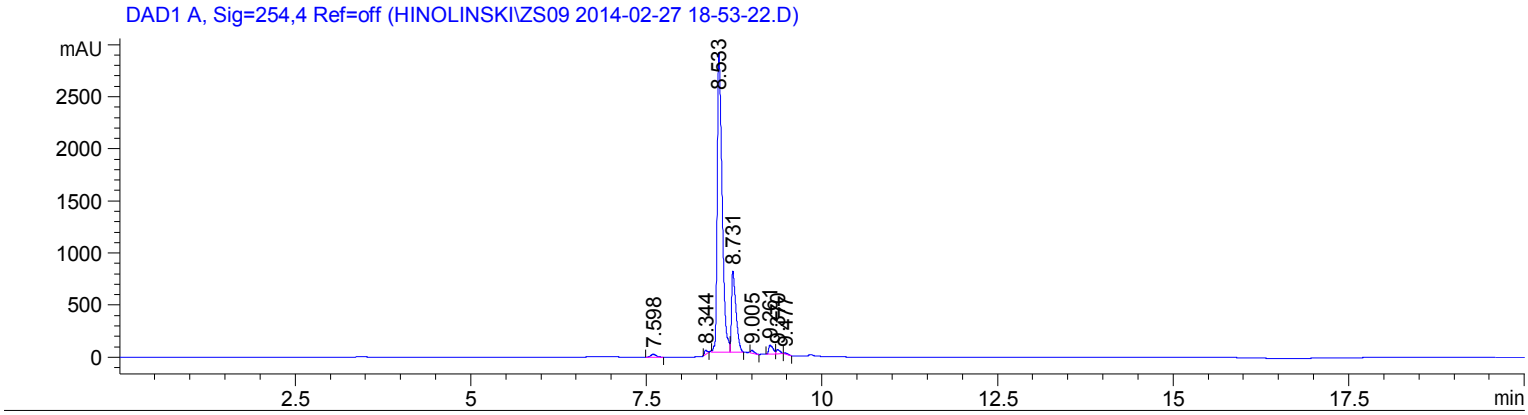
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	4.897	BV	0.1073	24.18136	2.84077	0.1276
2	4.977	VB	0.0554	8.57369	2.20271	0.0452
3	5.145	BV	0.0819	20.64248	3.01480	0.1089
4	5.272	VB	0.0673	7.01048	1.28158	0.0370
5	9.253	BV	0.1219	176.33762	21.35053	0.9307
6	9.594	VB	0.0936	9.36458	1.19286	0.0494
7	10.215	BV	0.0802	150.01939	29.57986	0.7918
8	10.371	VV	0.0992	1.23132e4	1922.30261	64.9853
9	10.567	VB	0.0940	5926.94336	974.06238	31.2806
10	10.850	BB	0.0654	37.13902	9.33766	0.1960
11	11.068	BB	0.0502	7.29534	2.17178	0.0385
12	11.134	BV	0.0427	21.07627	7.75579	0.1112
13	11.186	VB	0.0798	69.94500	11.52516	0.3691
14	11.392	BV	0.0884	96.42045	17.19282	0.5089
15	11.559	VB	0.0803	16.61453	2.84007	0.0877
16	11.881	BB	0.0897	36.33640	5.28650	0.1918
17	12.108	BB	0.0912	26.56188	3.88792	0.1402
Totals :				1.89477e4	3017.82580	

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\ZS09 2014-02-27 18-53-22.D
Sample Name: ZS09 Compound 63 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 82
Injection Date  : 2/27/2014 6:54:29 PM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 6:53:18 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
================================================================================
                          Fraction Information
================================================================================
================================================================================
No Fractions found.
================================================================================
==============================================================
                        Area Percent Report
==============================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

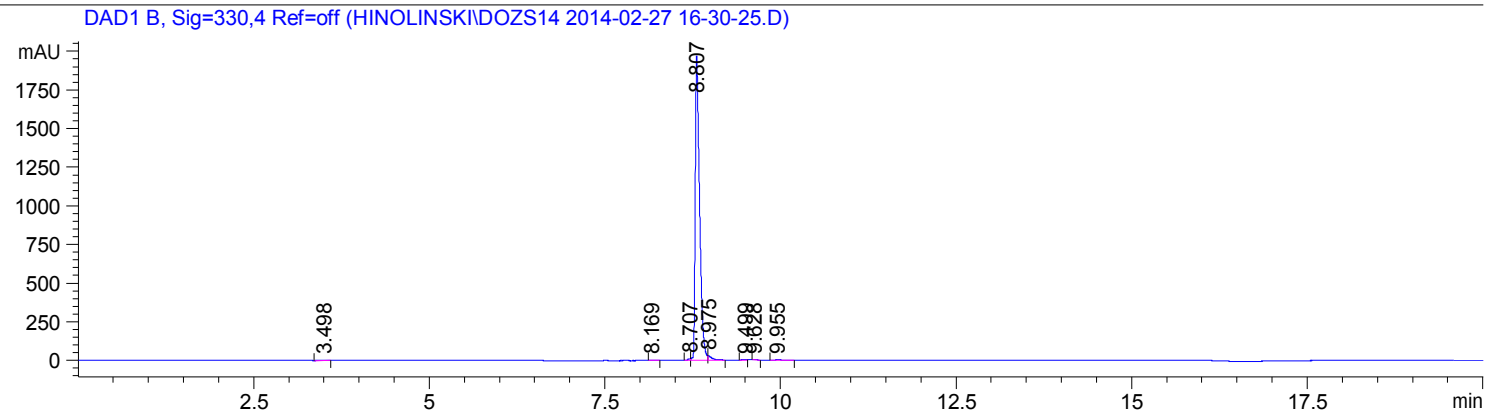
Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.598	BV	0.0737	140.26274	27.65811	0.7675
2	8.344	BB	0.0408	103.46177	39.16729	0.5662
3	8.533	VV	0.0752	1.39331e4	2867.69385	76.2442
4	8.731	VB	0.0612	3441.26855	783.84924	18.8312
5	9.005	VB	0.0527	106.27769	29.41607	0.5816
6	9.261	BV	0.0698	364.46271	86.19911	1.9944
7	9.370	VB	0.0553	150.82022	39.68163	0.8253
8	9.477	BB	0.0490	34.65574	10.37789	0.1896
Totals :				1.82743e4	3884.04320	

*** End of Report ***

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOZS14 2014-02-27 16-30-25.D
Sample Name: DOZS14 Compound 64 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 73
Injection Date  : 2/27/2014 4:31:34 PM
                                                 Inj Volume : 1.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 4:19:47 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


   Signal 2: DAD1 B, Sig=330,4 Ref=off

   Peak RetTime Type  Width     Area      Height     Area
     #   [min]        [min]   [mAU*s]     [mAU]       %
   ----|-------|----|-------|----------|----------|--------|
      1   3.498 BB    0.1294   14.24063    1.31998   0.1657
      2   8.169 BB    0.0566    8.48523    2.14619   0.0988
      3   8.707 BV    0.0358   22.70088    9.87396   0.2642
      4   8.807 VV    0.0604 8401.68164 1965.13196  97.7876
      5   8.975 VB    0.0556  111.71908   26.84266   1.3003
      6   9.499 BV    0.0575   10.53282    2.38458   0.1226
      7   9.628 BB    0.0417    5.60133    1.83113   0.0652
      8   9.955 BB    0.0788   16.80678    2.80718   0.1956

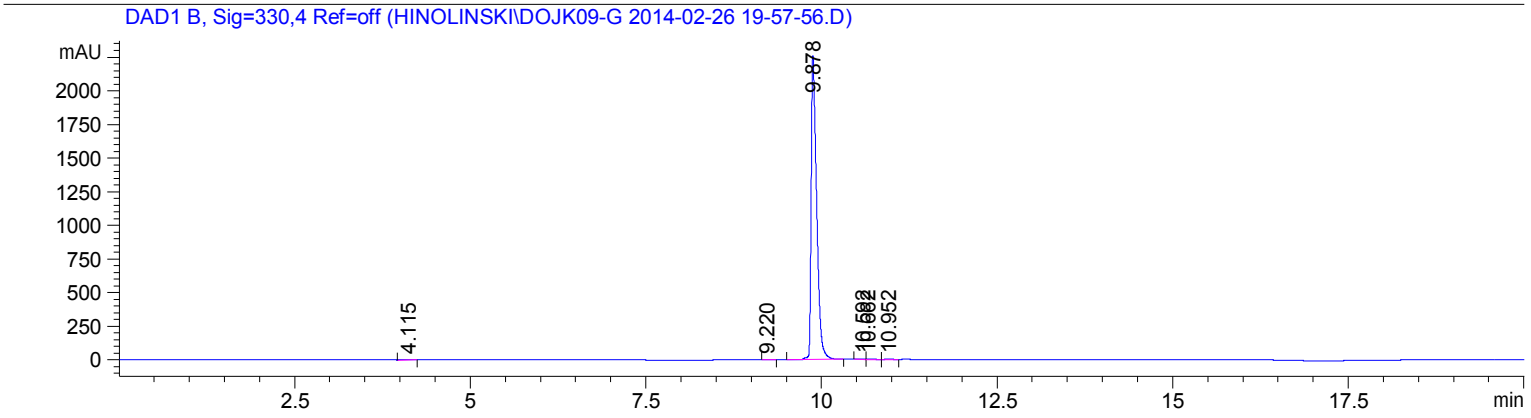
   Totals :                  8591.76839 2012.33765


   ========================================================================
                            *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOJK09-G 2014-02-26 19-57-56.D
Sample Name: DOJK09-G

Compound 65 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 82
Injection Date  : 2/26/2014 7:59:02 PM
                                                 Inj Volume : 1.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 7.M
Last changed    : 2/26/2014 7:52:38 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

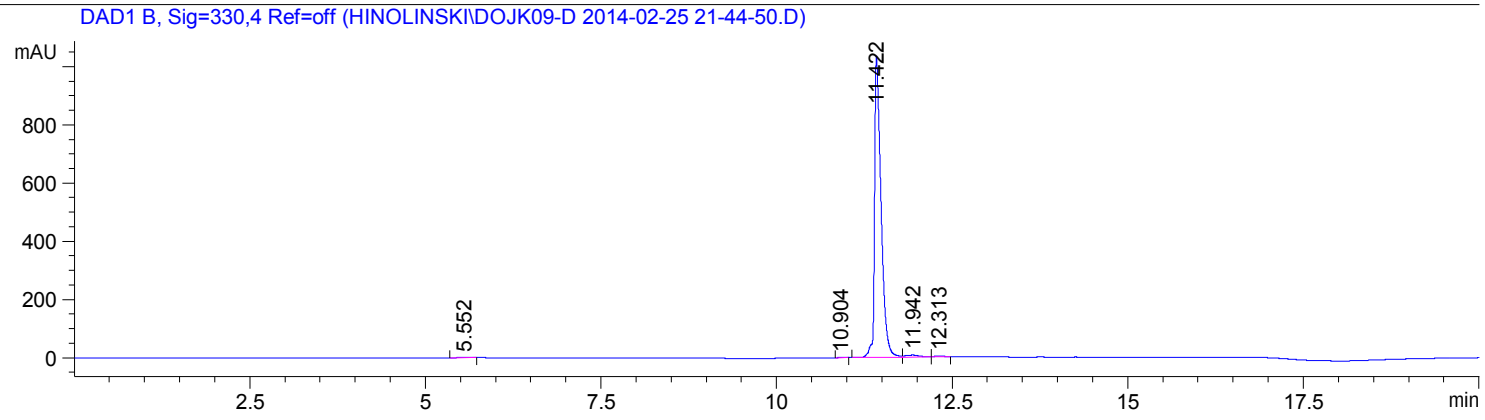
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   4.115 BB    0.1399   15.96979    1.36559   0.1294
    2   9.220 BB    0.0590    9.45455    1.98570   0.0766
    3   9.878 BB    0.0843 1.22533e4  2258.72559  99.2982
    4  10.592 VV    0.0887   27.94959    4.17232   0.2265
    5  10.662 VB    0.0714   20.14357    3.76592   0.1632
    6  10.952 BB    0.0733   13.08130    2.17050   0.1060

 Totals :                  1.23399e4  2272.18561


 ========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOJK09-D 2014-02-25 21-44-50.D
Sample Name: DOJK09-D Compound 66 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 53
Injection Date  : 2/25/2014 9:46:04 PM
                                                 Inj Volume : 1.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/25/2014 9:44:32 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                         Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

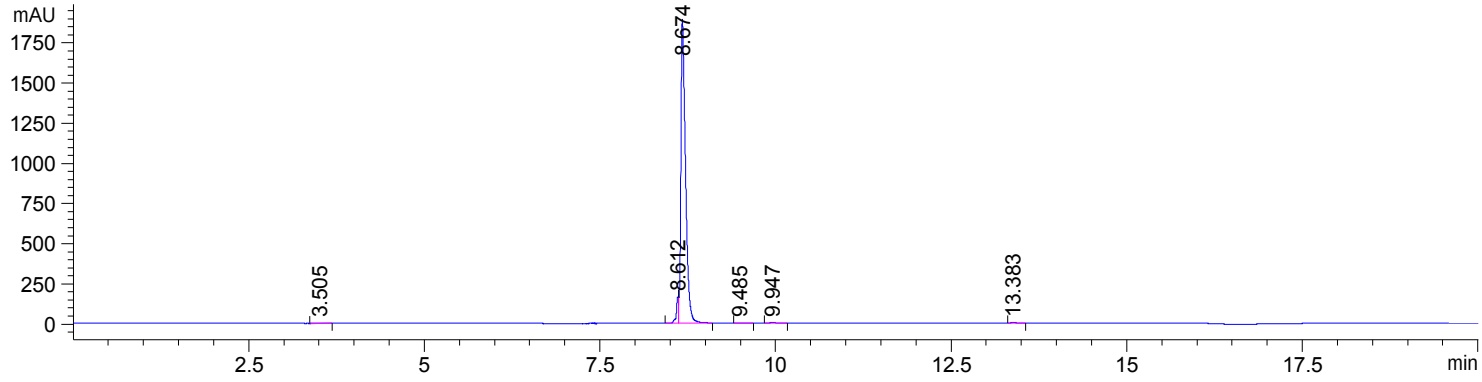
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   5.552 BB    0.1717   26.37626    1.80815   0.3859
    2  10.904 BB    0.0723    6.59273    1.14211   0.0965
    3  11.422 BV    0.1004 6690.54980 1035.42749  97.8823
    4  11.942 VV    0.1677   91.68605    6.89334   1.3414
    5  12.313 VB    0.1062   20.09461    2.38632   0.2940

 Totals :                  6835.29945 1047.65742


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOZS15 2014-02-27 17-39-59.D
Sample Name: DOZS15 Compound 67 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 72
Injection Date  : 2/27/2014 5:41:07 PM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 5:39:53 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


  Signal 2: DAD1 B, Sig=330,4 Ref=off

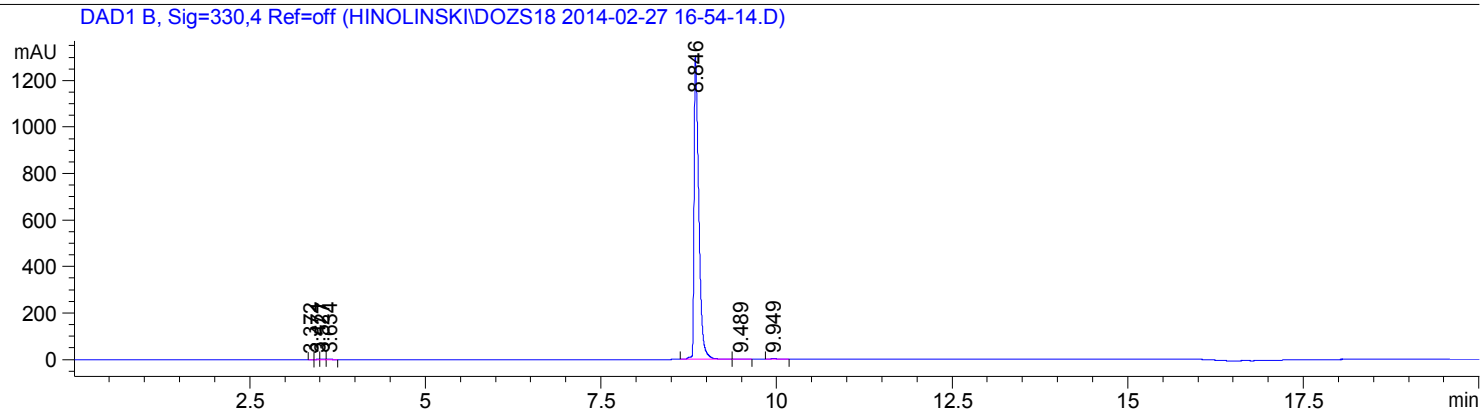
  Peak RetTime Type  Width     Area      Height     Area
    #   [min]        [min]   [mAU*s]     [mAU]       %
  ----|-------|----|-------|----------|----------|--------|
     1   3.505 VB    0.1397   21.50900    1.85658   0.2362
     2   8.612 BV    0.0337  369.45660  164.55032   4.0564
     3   8.674 VV    0.0710 8677.65723 1891.88940  95.2748
     4   9.485 BB    0.0673    7.12599    1.29212   0.0782
     5   9.947 BB    0.0775   14.55247    2.55314   0.1598
     6  13.383 BB    0.0620   17.73038    4.05211   0.1947

  Totals :                  9108.03167 2066.19368


  ==========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOZS18 2014-02-27 16-54-14.D
Sample Name: DOZS18 Compound 68 Method C

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 75
Injection Date  : 2/27/2014 4:55:30 PM
                                                 Inj Volume : 3.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 4:54:03 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
========================================================================
                        Area Percent Report
========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

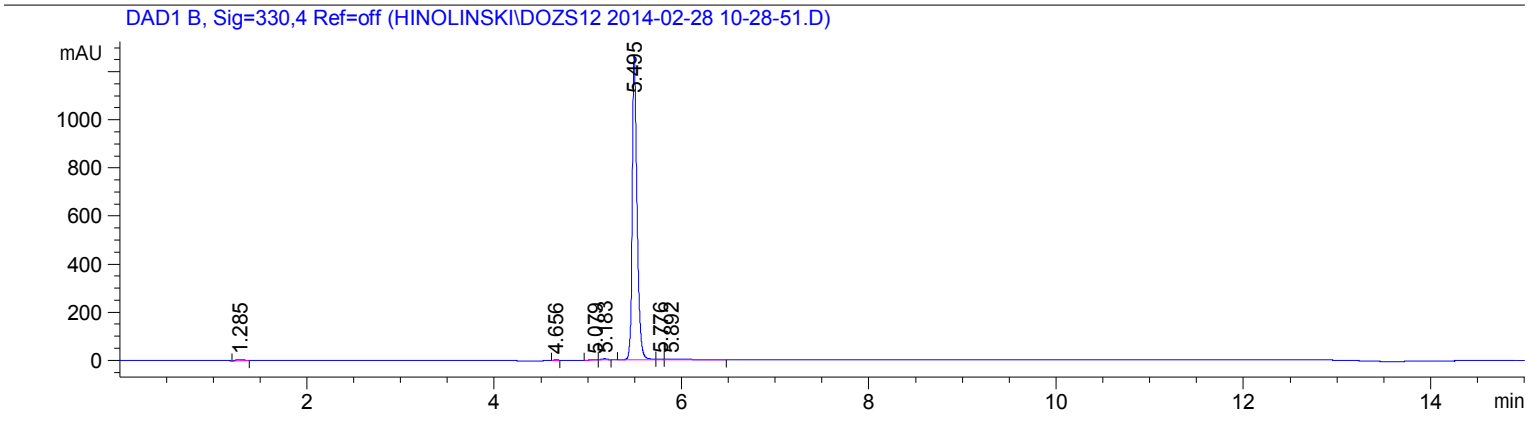
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   3.372 BB    0.0478    5.04487    1.79225   0.0824
    2   3.471 BV    0.0395    6.55165    2.01043   0.1071
    3   3.527 VV    0.0584    8.95814    1.85144   0.1464
    4   3.634 VB    0.0631    7.79292    1.50062   0.1273
    5   8.846 BB    0.0728 6070.18457 1305.10754  99.1846
    6   9.489 BB    0.0736    7.81022    1.34760   0.1276
    7   9.949 BB    0.0834   13.74327    2.17074   0.2246

 Totals :                  6120.08563 1315.78062


========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DOZS12 2014-02-28 10-28-51.D
Sample Name: DOZS12 Compound 18 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 5
Injection Date  : 2/28/2014 10:30:04 AM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 10:28:47 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

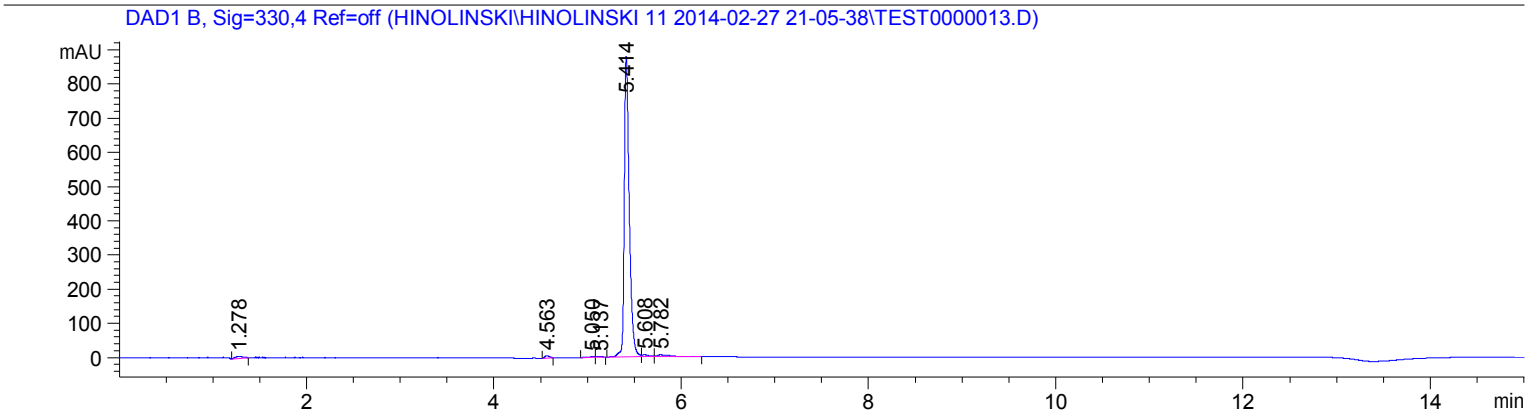
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
    1   1.285 BB    0.0764   30.82211    5.10553   0.6626
    2   4.656 BV    0.0422   12.17721    4.09883   0.2618
    3   5.079 BV    0.0544   11.05448    2.69109   0.2376
    4   5.183 VV    0.0616   22.25791    4.98515   0.4785
    5   5.495 BV    0.0538 4514.38184 1260.92078  97.0470
    6   5.776 VV    0.0597   14.55320    3.22330   0.3129
    7   5.892 VB    0.1987   46.50219    2.79328   0.9997

 Totals :                   4651.74893 1283.81795


 ========================================================================
                            *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000013.D
Sample Name: DR09 Compound 23 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :  13
Acq. Instrument : HPLC-Solaja                     Location : Vial 8
Injection Date  : 2/28/2014 1:21:32 AM                 Inj :   1
                                                 Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                         Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

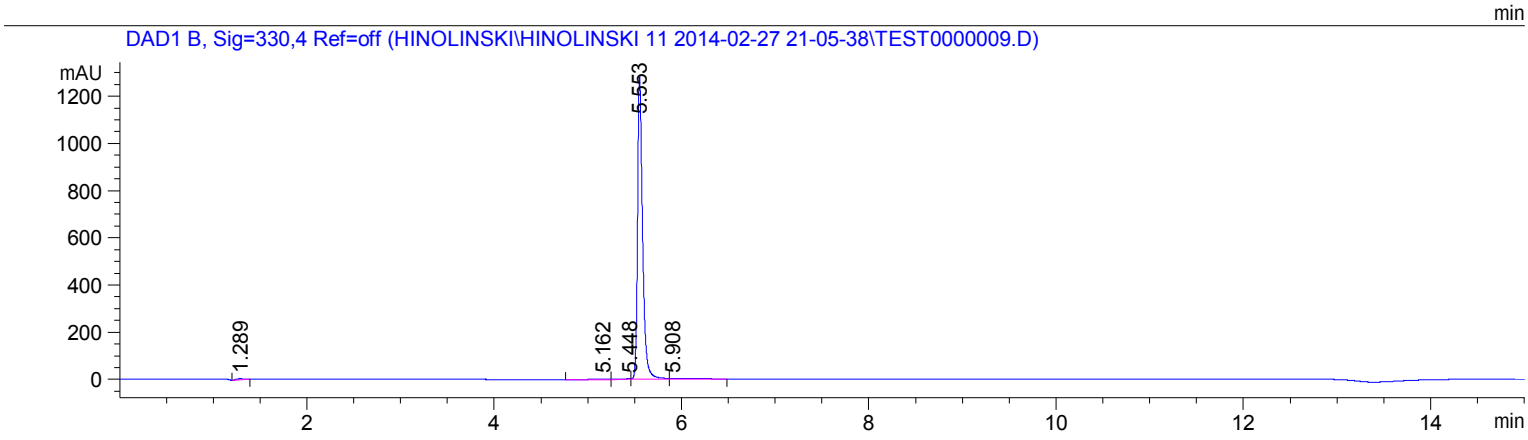
Signal 2: DAD1 B, Sig=330,4 Ref=off
```

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	1.278	BB	0.0829	30.16064	5.26103	0.8854
2	4.563	BV	0.0490	24.65857	7.36841	0.7239
3	5.050	BV	0.0678	9.85083	1.90565	0.2892
4	5.137	VB	0.0582	7.27694	1.59584	0.2136
5	5.414	BV	0.0556	3243.31909	878.57385	95.2153
6	5.608	VV	0.0748	32.73571	6.08543	0.9610
7	5.782	VB	0.1270	58.29859	5.66954	1.7115
Totals :				3406.30037	906.45975	

```
==========================================================================
                         *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000009.D
Sample Name: MV22 Compound 45 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   9
Acq. Instrument : HPLC-Solaja                     Location : Vial 71
Injection Date  : 2/27/2014 11:56:36 PM                Inj :   1
                                                 Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

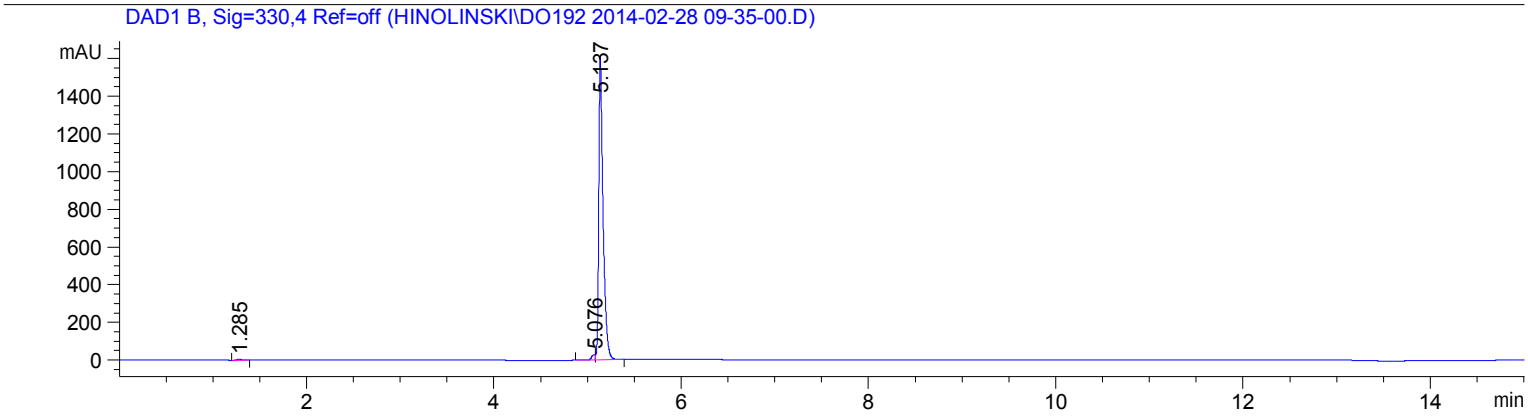
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.289 BB    0.0772   32.15473    5.23525   0.6476
   2   5.162 BV    0.1235   31.88377    3.17802   0.6421
   3   5.448 VV    0.0875   29.10960    4.27066   0.5862
   4   5.553 VV    0.0558 4808.14307 1280.33252  96.8295
   5   5.908 VB    0.2011   64.28740    3.75680   1.2947

Totals :                  4965.57857 1296.77325


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO192 2014-02-28 09-35-00.D
Sample Name: DO192 Compound 53 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 54
Injection Date  : 2/28/2014 9:36:13 AM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 9:12:27 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
                  (modified after loading)
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

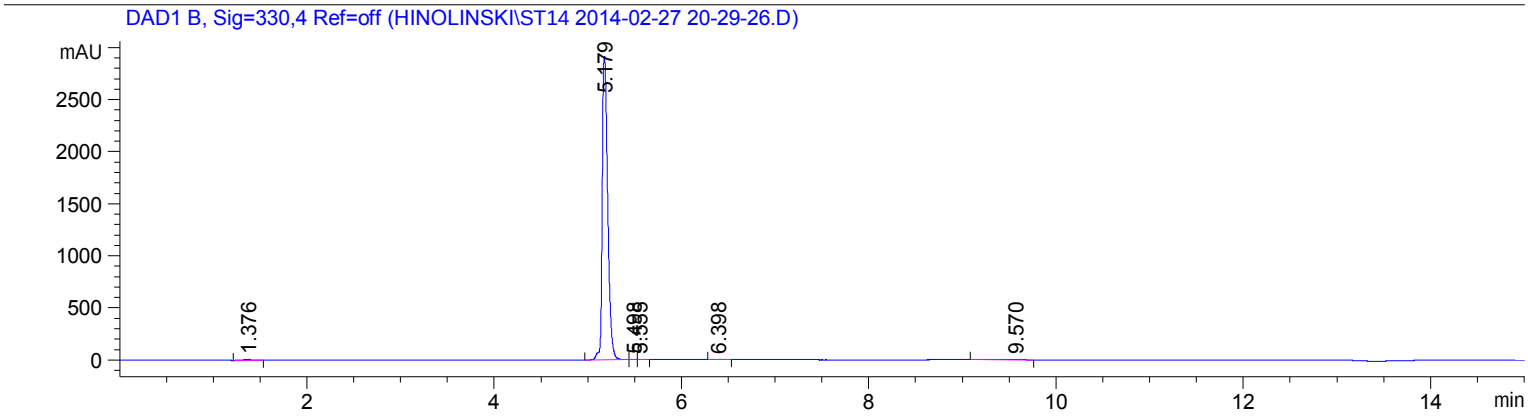
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
    1   1.285 BB    0.0900   31.90867    5.24447   0.6086
    2   5.076 BV    0.0408   73.09942   28.11178   1.3943
    3   5.137 VB    0.0457 5137.63428 1611.56714  97.9970

 Totals :                   5242.64236 1644.92340


 ========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\ST14 2014-02-27 20-29-26.D
Sample Name: ST14 Compound 56

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 54
Injection Date  : 2/27/2014 8:30:42 PM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 24.M
Last changed    : 2/27/2014 8:33:45 PM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

 Signal 2: DAD1 B, Sig=330,4 Ref=off

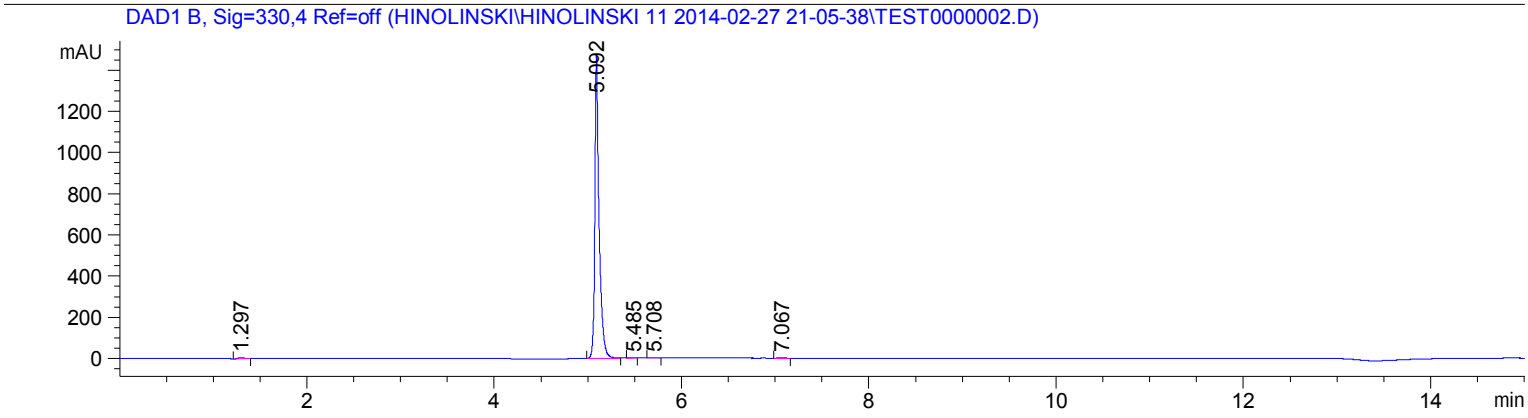
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   1.376 BB    0.1502   70.69771    5.77826   0.5856
    2   5.179 VV    0.0552 1.19118e4  2914.95850  98.6723
    3   5.498 VV    0.0564   12.32152    2.88321   0.1021
    4   5.555 VB    0.0545   10.09038    2.22248   0.0836
    5   6.398 VB    0.0602   16.21222    3.36451   0.1343
    6   9.570 BB    0.2250   50.95580    2.66631   0.4221

 Totals :                  1.20721e4  2931.87327


 ==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000002.D
Sample Name: MV40 Compound 57 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   2
Acq. Instrument : HPLC-Solaja                     Location : Vial 72
Injection Date  : 2/27/2014 9:28:04 PM                 Inj :   1
                                                 Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

 Signal 2: DAD1 B, Sig=330,4 Ref=off

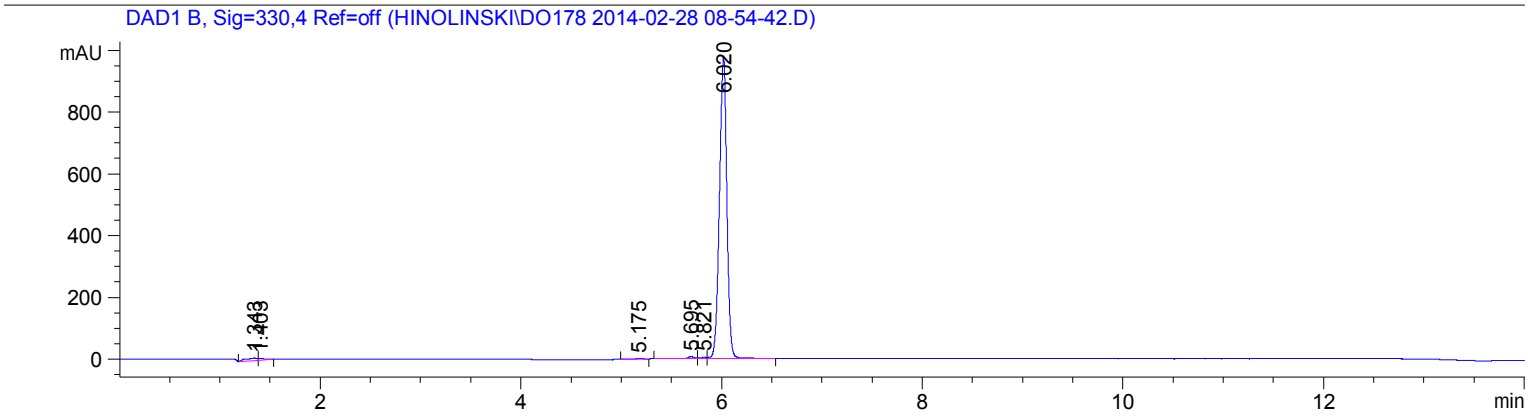
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.297 BB    0.0766   30.77659    5.15579   0.6570
   2   5.092 BV    0.0443 4631.22754 1468.61035  98.8594
   3   5.485 VV    0.0625    8.02072    1.55961   0.1712
   4   5.708 VV    0.0625    8.42438    1.72487   0.1798
   5   7.067 BB    0.0536    6.20943    1.68097   0.1325

 Totals :                  4684.65866 1478.73159


 ==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO178 2014-02-28 08-54-42.D
Sample Name: DO178 Compound 58 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 87
Injection Date  : 2/28/2014 8:55:56 AM
                                                 Inj Volume : 7.500 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 8:54:30 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                         Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

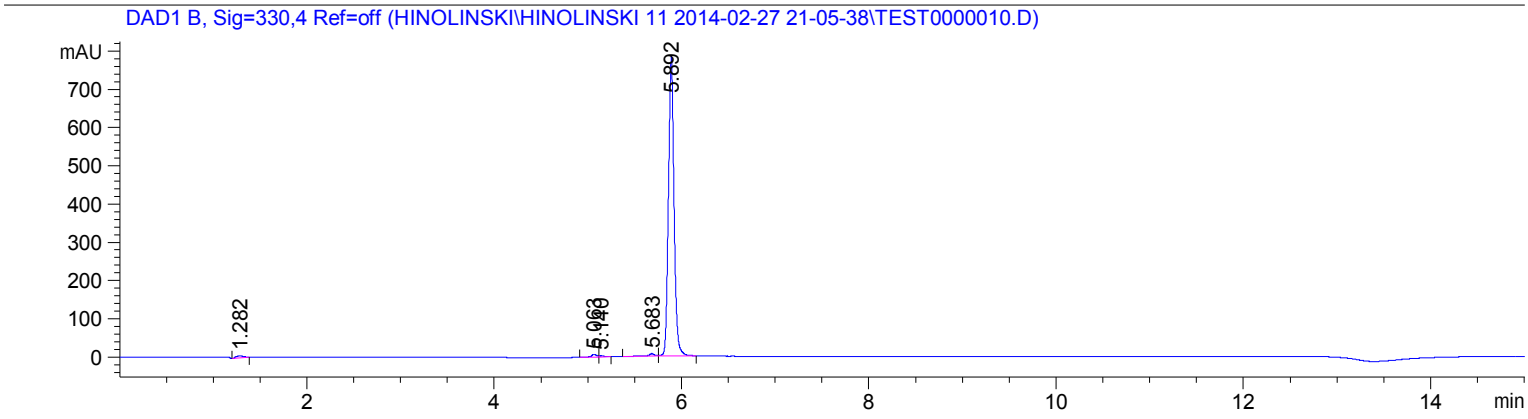
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
    1   1.343 BV    0.1169   67.87621    7.51195   1.3109
    2   1.403 VB    0.0573   23.39939    5.42418   0.4519
    3   5.175 BV    0.0677    8.89435    1.59157   0.1718
    4   5.695 BV    0.0760   43.59182    7.58748   0.8419
    5   5.821 VV    0.0586   18.57452    3.96548   0.3587
    6   6.020 VB    0.0793 5015.60059  977.76709  96.8648

 Totals :                   5177.93688 1003.84776


==========================================================================
                         *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000010.D
Sample Name: MV31 Compound 59 Method D

```
==================================================================
Acq. Operator   : SYSTEM                        Seq. Line :  10
Acq. Instrument : HPLC-Solaja                    Location : Vial 61
Injection Date  : 2/28/2014 12:17:50 AM               Inj :   1
                                                Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==================================================================
                         Area Percent Report
==================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


 Signal 2: DAD1 B, Sig=330,4 Ref=off

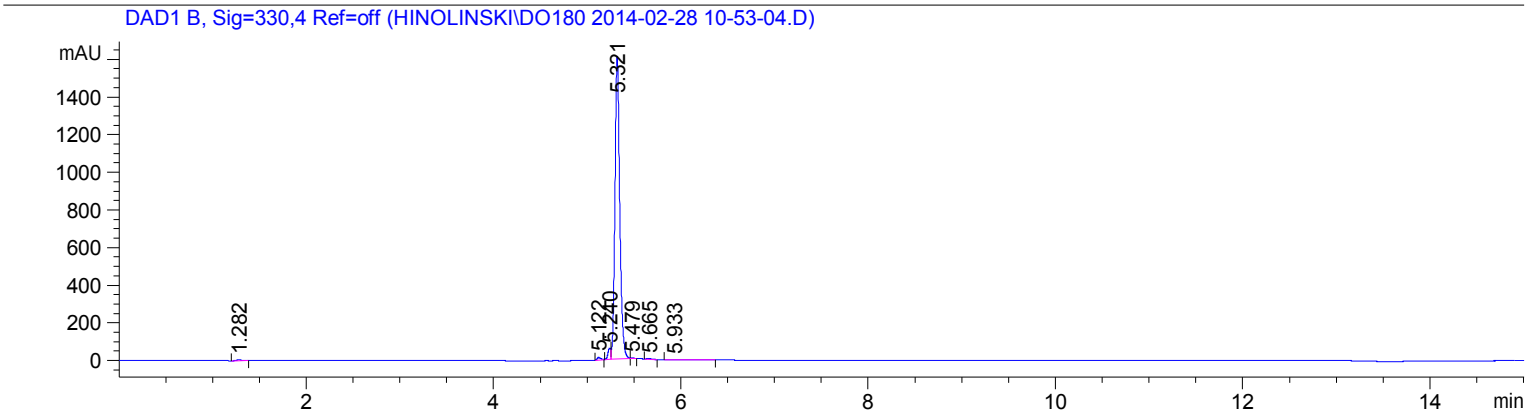
 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   1.282 BB    0.0879   31.53892    5.34119   0.9388
    2   5.063 BV    0.0566   26.59043    6.95812   0.7915
    3   5.140 VB    0.0493   11.97652    3.34003   0.3565
    4   5.683 BV    0.0710   36.46378    6.86361   1.0854
    5   5.892 VB    0.0655 3252.84106  782.67798  96.8277

 Totals :                   3359.41072  805.18092


 ==================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\DO180 2014-02-28 10-53-04.D
Sample Name: DO180 Compound 60 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 53
Injection Date  : 2/28/2014 10:54:17 AM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 10:28:47 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

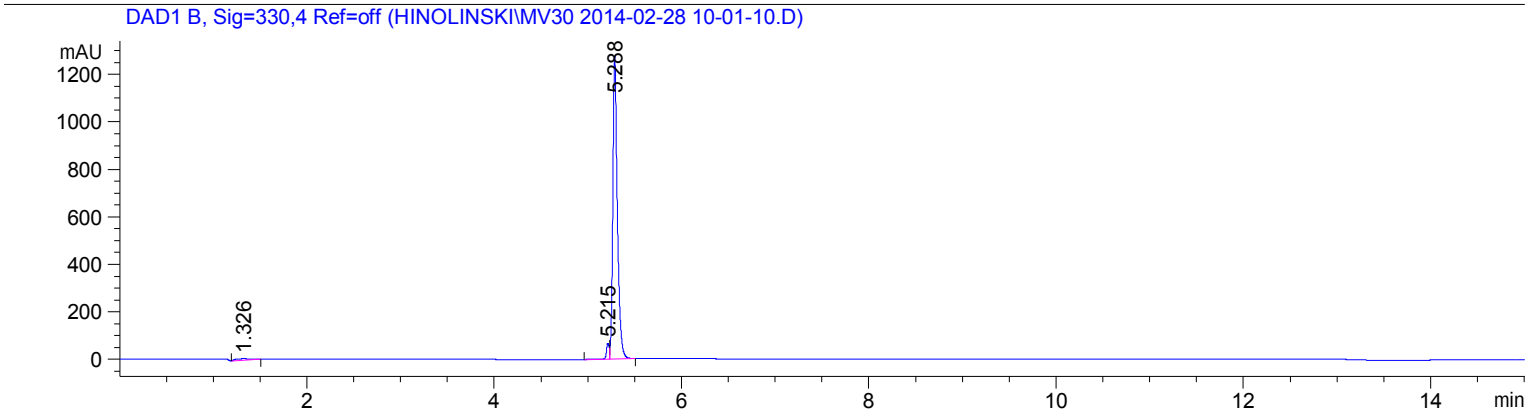
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.282 BB    0.0746   31.32107    5.21197   0.5260
   2   5.122 BB    0.0346   30.97727   13.10603   0.5202
   3   5.240 BV    0.0324  123.60563   59.16384   2.0758
   4   5.321 VV    0.0536 5735.92188 1607.23230  96.3262
   5   5.479 VB    0.0357   10.29071    4.26195   0.1728
   6   5.665 BB    0.0448   11.20796    3.41772   0.1882
   7   5.933 VB    0.1189   11.36069    1.14377   0.1908

Totals :                  5954.68520 1693.53758


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\MV30 2014-02-28 10-01-10.D
Sample Name: MV30 Compound 61 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 85
Injection Date  : 2/28/2014 10:02:20 AM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 10:01:03 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

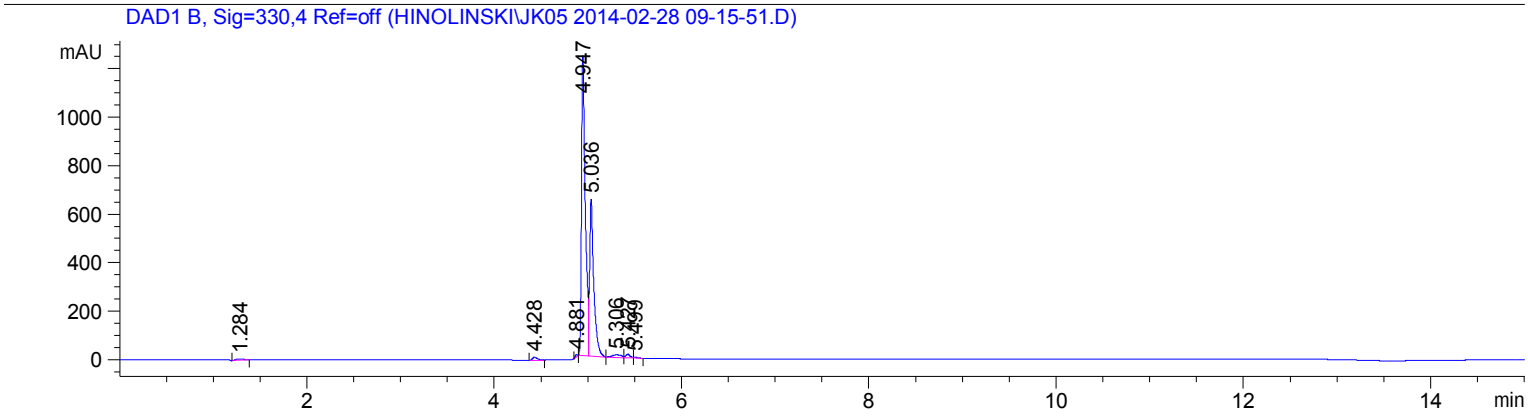
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.326 BB    0.1329   70.05448    6.49267   1.5604
   2   5.215 BV    0.0298  133.64371   66.92734   2.9768
   3   5.288 VB    0.0492 4285.82715 1276.07971  95.4628

Totals :                   4489.52534 1349.49972


==========================================================================
                        *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\JK05 2014-02-28 09-15-51.D
Sample Name: JK05 Compound 62 Method D

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 21
Injection Date  : 2/28/2014 9:17:02 AM
                                                 Inj Volume : 2.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 9:12:27 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================================
                            Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                          Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
 se Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

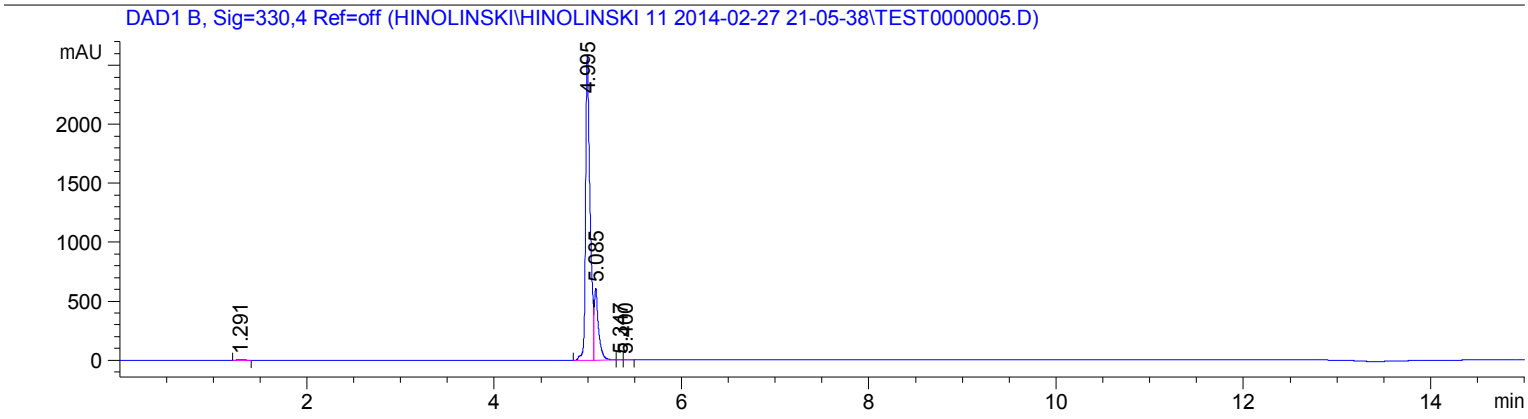
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.284 BB    0.0762   30.68703    5.20760   0.5389
   2   4.428 BV    0.0558   44.56494   12.14464   0.7826
   3   4.881 BB    0.0273   14.29690    8.65168   0.2511
   4   4.947 BV    0.0402 3469.44141 1236.32007  60.9227
   5   5.036 VB    0.0435 2001.60938  647.83722  35.1479
   6   5.306 BV    0.0763   75.77526   12.75458   1.3306
   7   5.427 VV    0.0473   48.33295   14.92499   0.8487
   8   5.499 VB    0.0419   10.11355    3.37761   0.1776

Totals :                  5694.82140 1941.21838


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000005.D
Sample Name: ZS09 Compound 63 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   5
Acq. Instrument : HPLC-Solaja                       Location : Vial 74
Injection Date  : 2/27/2014 10:31:48 PM                 Inj :   1
                                                  Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

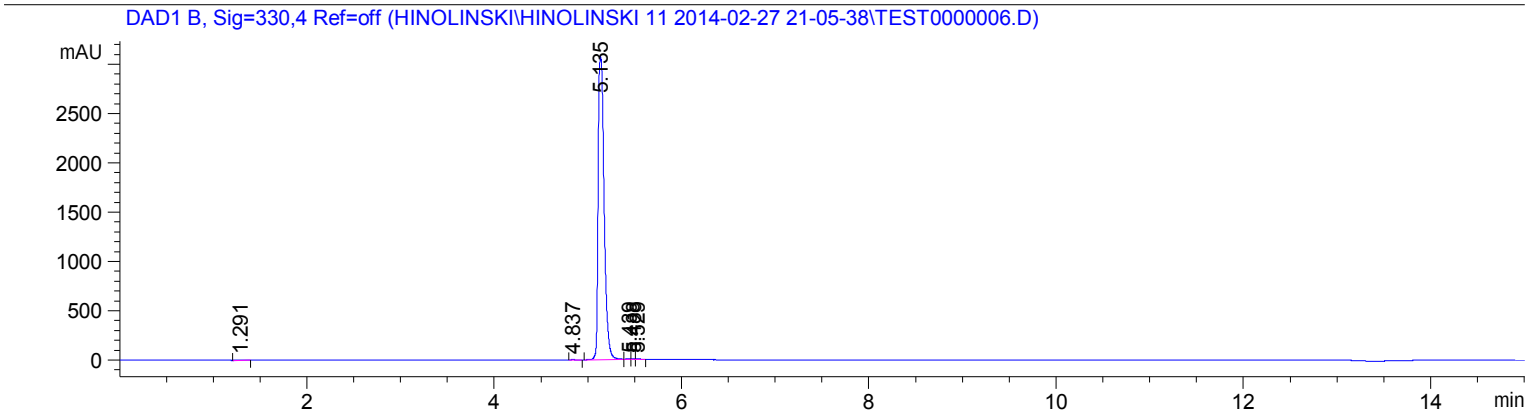
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.291 BB    0.0761   33.34475    5.36028   0.3144
   2   4.995 BV    0.0488 8674.29395 2574.86401  81.7809
   3   5.085 VV    0.0431 1884.24561  608.60223  17.7646
   4   5.347 VV    0.0493    8.57778    2.23154   0.0809
   5   5.400 VB    0.0514    6.29111    1.60006   0.0593

Totals :                  1.06068e4  3192.65812


==========================================================================
                          *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000006.D
Sample Name: DOZS14 Compound 64 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   6
Acq. Instrument : HPLC-Solaja                      Location : Vial 73
Injection Date  : 2/27/2014 10:53:00 PM                Inj :   1
                                                 Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 2: DAD1 B, Sig=330,4 Ref=off

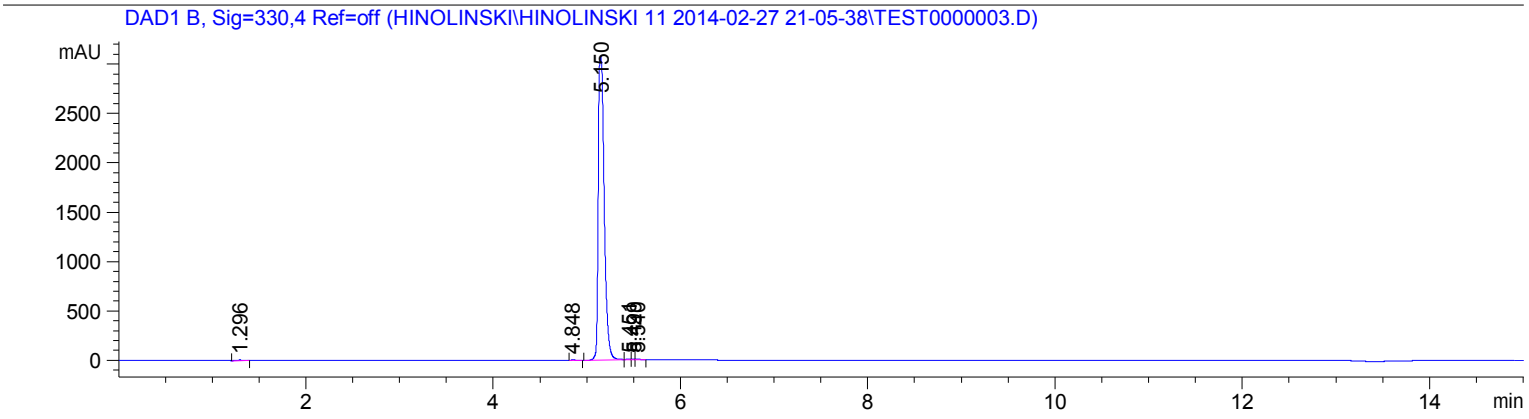
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.291 BB    0.0843   32.10134    5.14675   0.2346
   2   4.837 BB    0.0448   16.26962    5.09167   0.1189
   3   5.135 BB    0.0545 1.35803e4  3076.87012  99.2306
   4   5.439 BV    0.0365   14.59687    5.77229   0.1067
   5   5.488 VV    0.0364   16.51150    6.66786   0.1206
   6   5.529 VB    0.0421   25.82304    8.83148   0.1887

Totals :                  1.36856e4  3108.38018


==========================================================================
                           *** End of Report ***
```

Data File C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000003.D
Sample Name: DOJK09-G Compound 65 Method D

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   3
Acq. Instrument : HPLC-Solaja                       Location : Vial 73
Injection Date  : 2/27/2014 9:49:14 PM                   Inj :   1
                                                  Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off

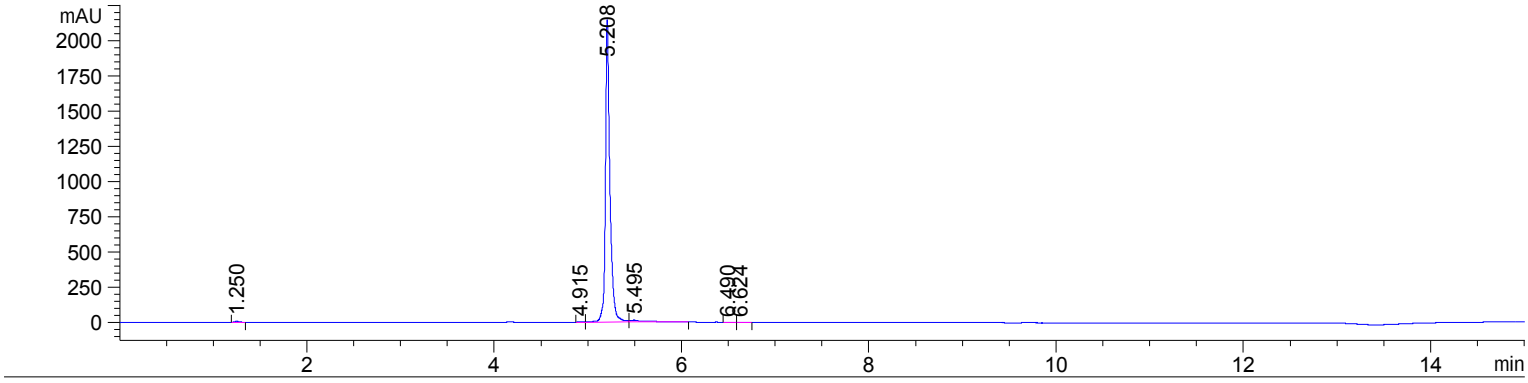
Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.296 BB    0.0732   31.22255    5.15455   0.2272
   2   4.848 BB    0.0475   16.73750    5.07316   0.1218
   3   5.150 BB    0.0543 1.36351e4  3073.64551  99.2389
   4   5.451 BV    0.0366   14.51578    5.71865   0.1056
   5   5.499 VV    0.0346   16.28599    6.64245   0.1185
   6   5.540 VB    0.0420   25.80930    8.72343   0.1878

Totals :                  1.37397e4  3104.95775


==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Acq. Operator   : SYSTEM                        Seq. Line :   4
Acq. Instrument : HPLC-Solaja                    Location : Vial 63
Injection Date  : 2/27/2014 10:10:30 PM               Inj :   1
                                               Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```

DAD1 A, Sig=254,4 Ref=off (HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\TEST0000004.D)




```
==========================================================================================
                              Fraction Information
==========================================================================================
==========================================================================================
No Fractions found.
==========================================================================================
==========================================================================
                           Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

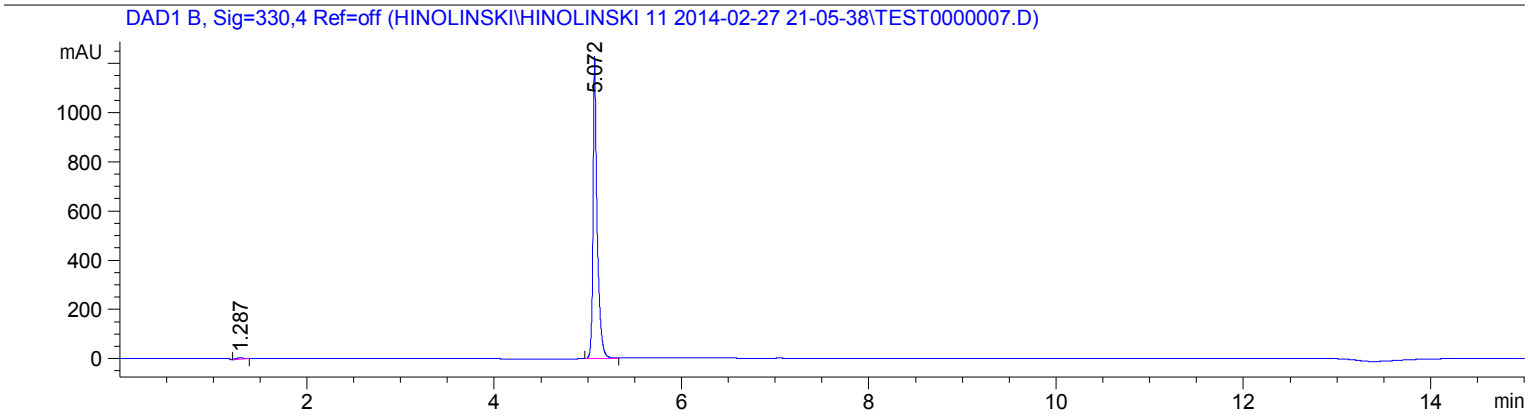

Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak RetTime Type  Width     Area      Height     Area
  #   [min]        [min]   [mAU*s]     [mAU]       %
----|-------|----|-------|----------|----------|--------|
   1   1.250 BB    0.0775   38.33717    8.06219   0.5200
   2   4.915 BV    0.0549    6.66064    1.65775   0.0903
   3   5.208 VV    0.0468 7133.92041 2146.30713  96.7591
   4   5.495 VB    0.1583  182.20453   14.23526   2.4713
   5   6.490 VV    0.0705    6.17663    1.08386   0.0838
   6   6.624 VB    0.0591    5.56605    1.24736   0.0755

Totals :                  7372.86544 2172.59354

==========================================================================
                         *** End of Report ***
```

```
==========================================================================
Acq. Operator   : SYSTEM                          Seq. Line :   7
Acq. Instrument : HPLC-Solaja                       Location : Vial 72
Injection Date  : 2/27/2014 11:14:09 PM                 Inj :   1
                                                  Inj Volume : 2.000 µl
Method          : C:\CHEM32\1\DATA\HINOLINSKI\HINOLINSKI 11 2014-02-27 21-05-38\METODA 25.M (
                  Sequence Method)
Last changed    : 2/27/2014 9:05:38 PM by SYSTEM
```




```
==============================================================================
                          Fraction Information
==============================================================================
==============================================================================
No Fractions found.
==============================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

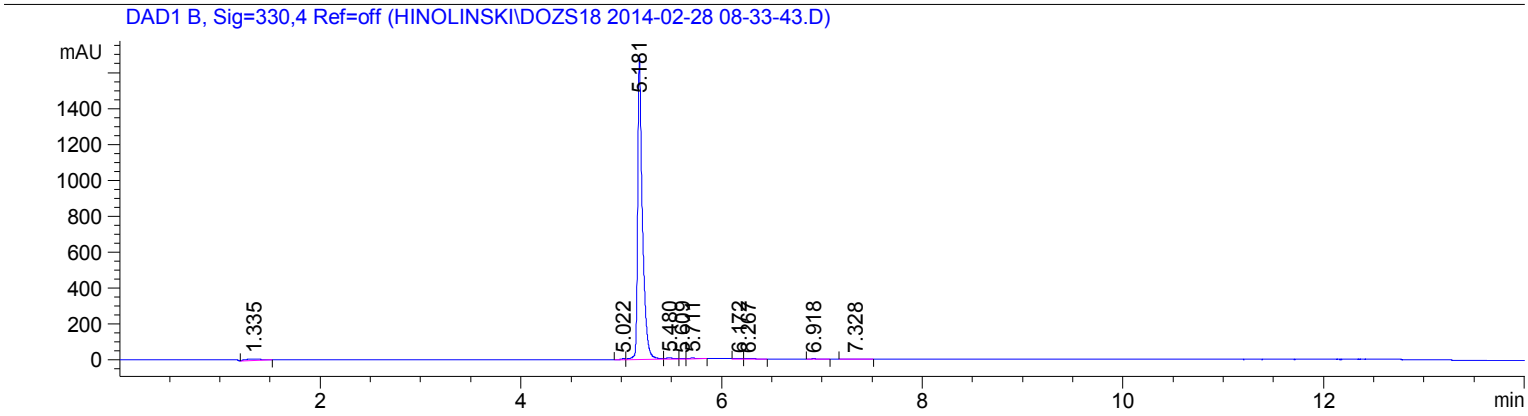

 Signal 2: DAD1 B, Sig=330,4 Ref=off

 Peak RetTime Type  Width     Area      Height     Area
   #   [min]        [min]   [mAU*s]     [mAU]       %
 ----|-------|----|-------|----------|----------|--------|
    1   1.287 BB    0.0899   30.25244    5.05081   0.7935
    2   5.072 BV    0.0435 3782.41846 1227.06824  99.2065

 Totals :                   3812.67089 1232.11905


 ========================================================================
                          *** End of Report ***
```

```
==========================================================================
Acq. Operator   : SYSTEM
Acq. Instrument : HPLC-Solaja                    Location : Vial 75
Injection Date  : 2/28/2014 8:35:00 AM
                                                 Inj Volume : 5.000 µl
Acq. Method     : C:\CHEM32\1\METHODS\METODA 25.M
Last changed    : 2/28/2014 8:35:51 AM by SYSTEM
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\PRANJE.M
Last changed    : 9/18/2013 2:53:53 PM by SYSTEM
```




```
==========================================================================
                        Fraction Information
==========================================================================
==========================================================================
No Fractions found.
==========================================================================
==========================================================================
                       Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 2: DAD1 B, Sig=330,4 Ref=off
```

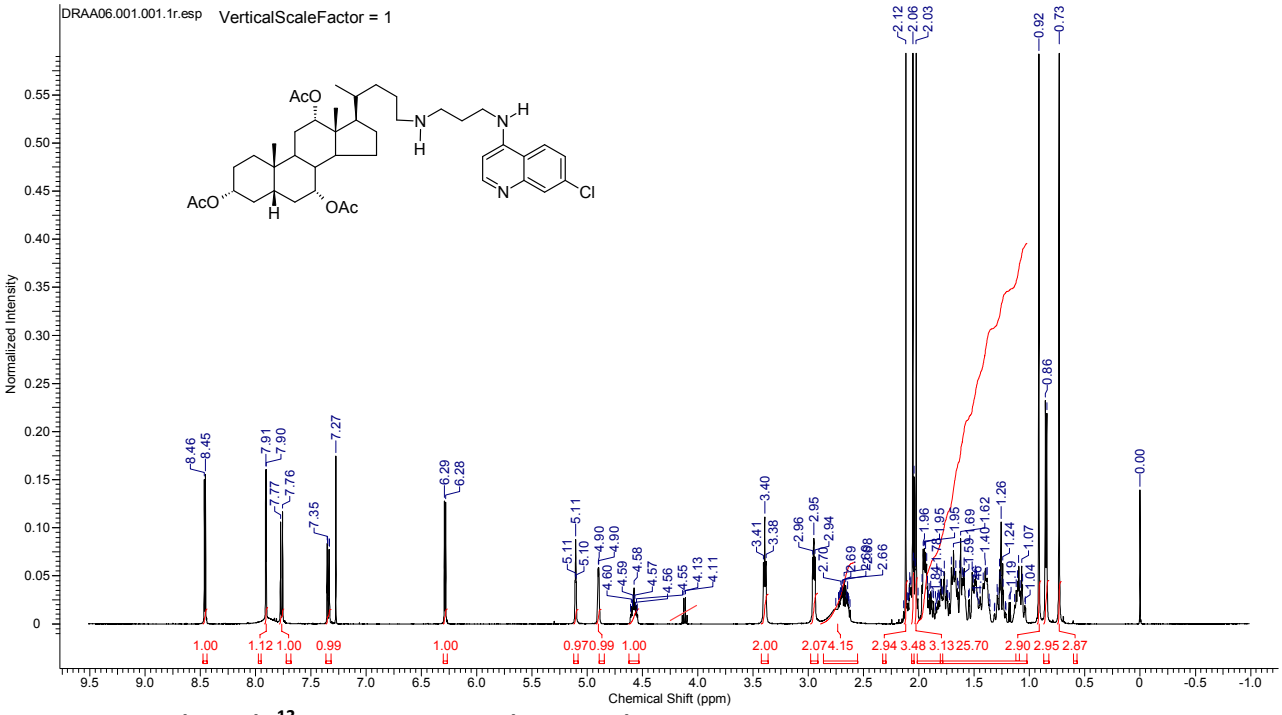
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	1.335	BB	0.1327	75.52184	7.03539	1.3104
2	5.022	BV	0.0386	11.59436	4.34548	0.2012
3	5.181	VV	0.0463	5550.89209	1691.44263	96.3123
4	5.480	VV	0.0821	41.15622	6.85275	0.7141
5	5.609	VV	0.0464	9.74525	2.67977	0.1691
6	5.711	VB	0.0670	24.94572	4.93526	0.4328
7	6.172	VV	0.0567	5.22887	1.11552	0.0907
8	6.267	VB	0.0753	18.34690	3.25498	0.3183
9	6.918	BB	0.0556	13.23581	3.66509	0.2297
10	7.328	BB	0.0749	12.76073	2.17729	0.2214
Totals :				5763.42779	1727.50416	

```
==========================================================================
                        *** End of Report ***
```

Compound 13 (DR06): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 2.092, area 98.69 %; method B: RT 8.698, area 95.46 %.

2/26/2014 11:33:48 AM

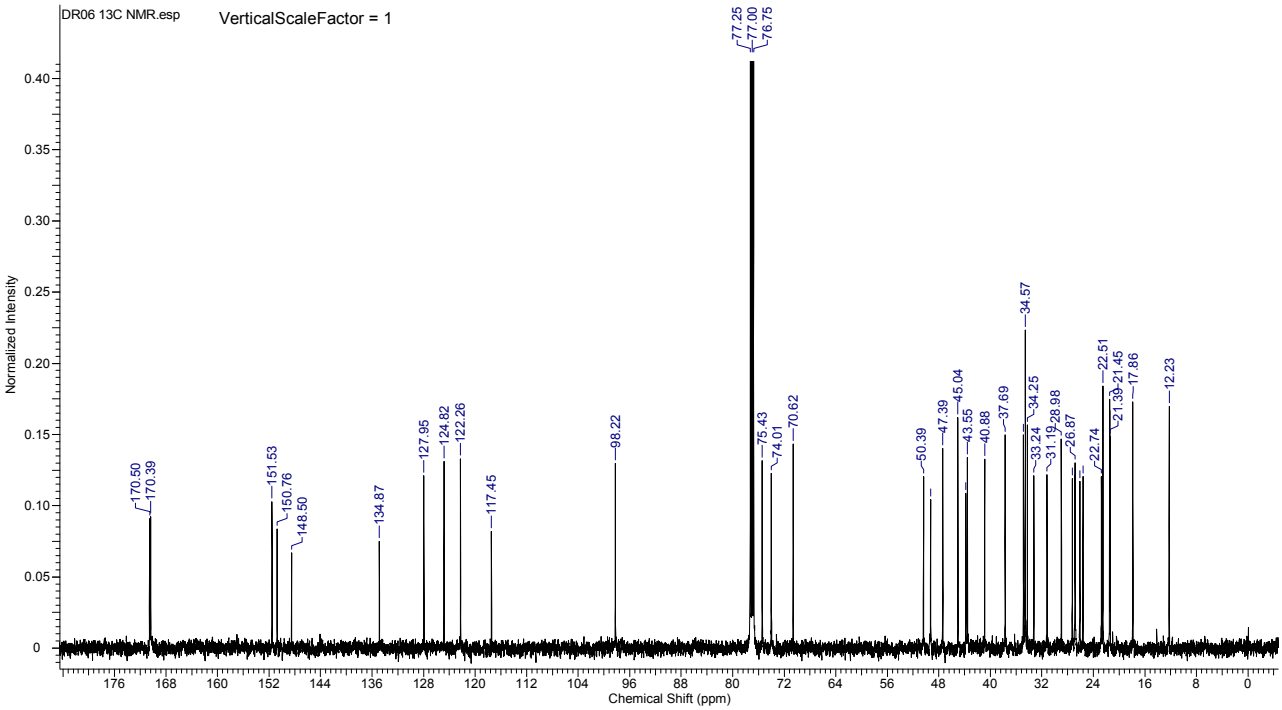
Number of Nuclei	0 H's						
Acquisition Time (sec)	3.1195	*Date*	22 May 2009 10:53:20			*Date Stamp*	22 May 2009 10:53:20
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DR06\DRAA06\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	80.60	*SW(cyclical) (Hz)*	5252.10	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2132.0439
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5251.94	*Temperature (degree C)*	25.000		



Compound 13 (DR06): ^{13}C NMR spectrum (125 MHz).

2/26/2014 11:38:43 AM

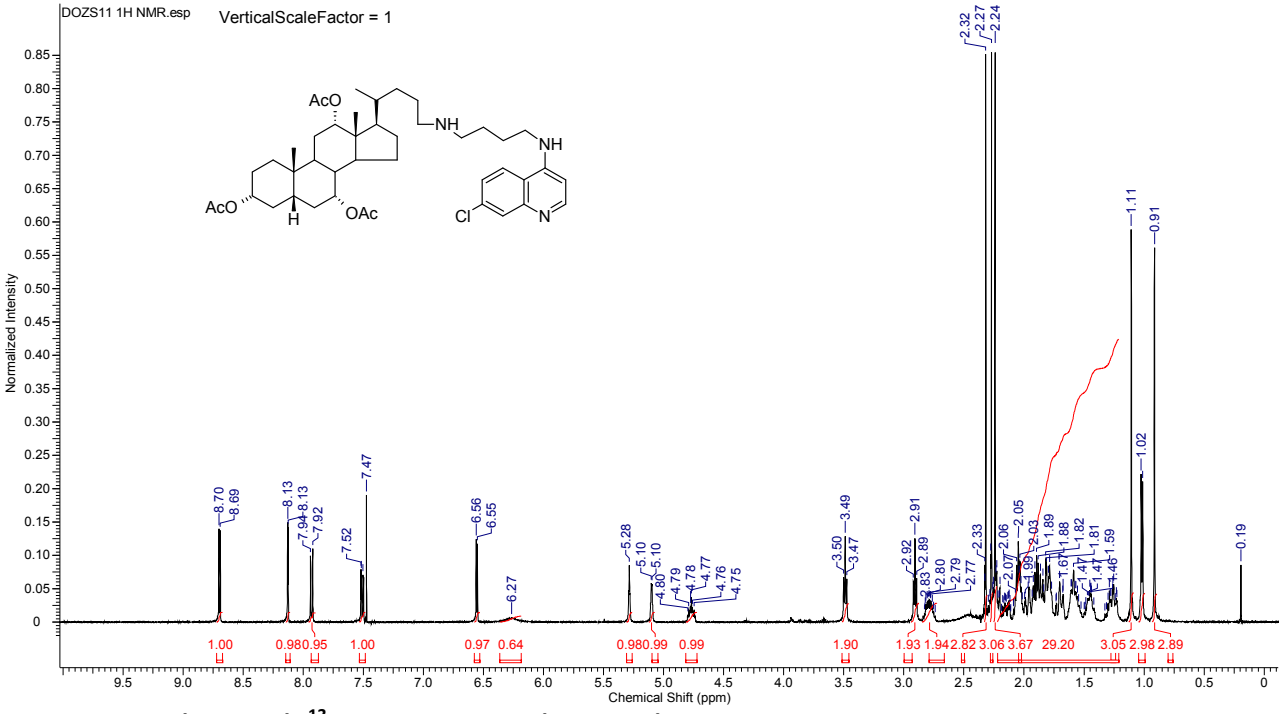
Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	*Date*	22 May 2009 11:06:08			*Date Stamp*	22 May 2009 11:06:08
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DR06\DRAA06\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	516	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	2050.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13830.7002
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 14 (DOZS11): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.900, area 98.59 %; method C: RT 10.694, area 99.15 %.

2/26/2014 6:55:24 PM

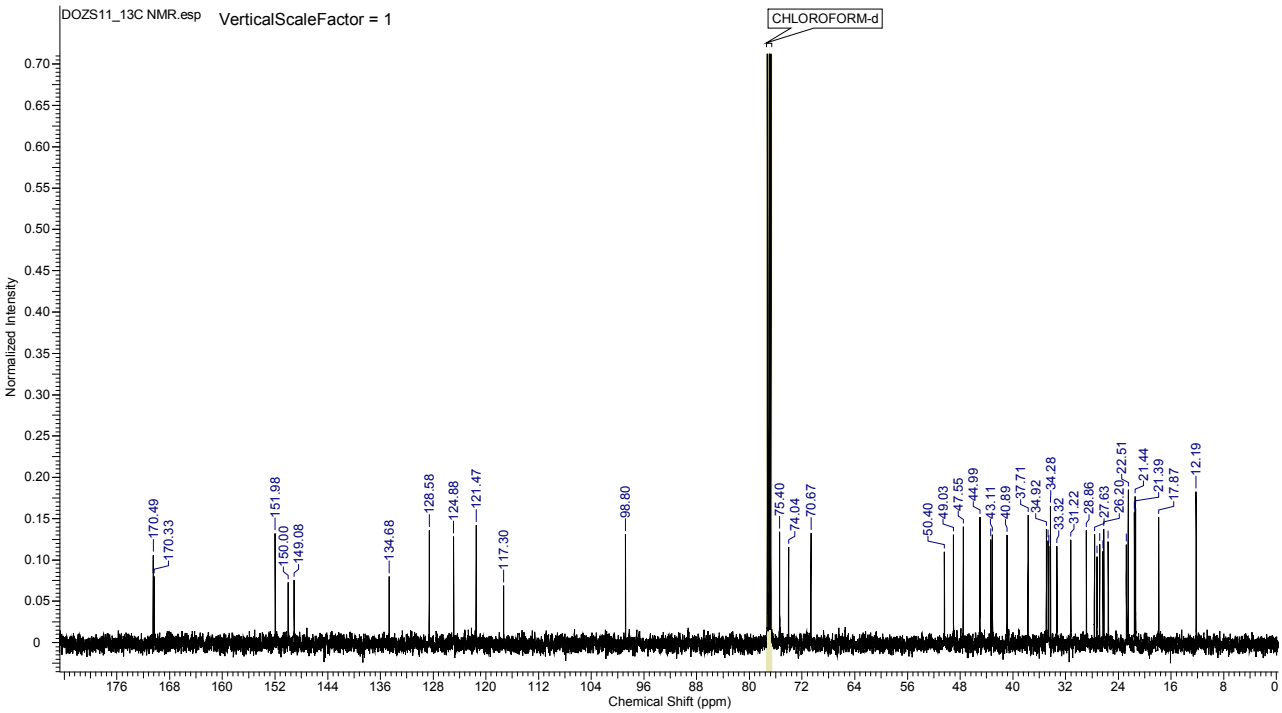
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.6384	***Date***	22 Mar 2011 18:18:56			***Date Stamp***	22 Mar 2011 18:18:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DOZS11\dozsaa015\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	12	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	101.00	***SW(cyclical) (Hz)***	10000.00	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	4594.2544
Spectrum Type	STANDARD	***Sweep Width (Hz)***	9999.70	***Temperature (degree C)***	25.000		



Compound 14 (DOZS11): ^{13}C NMR spectrum (125 MHz).

3/2/2014 11:43:47 AM

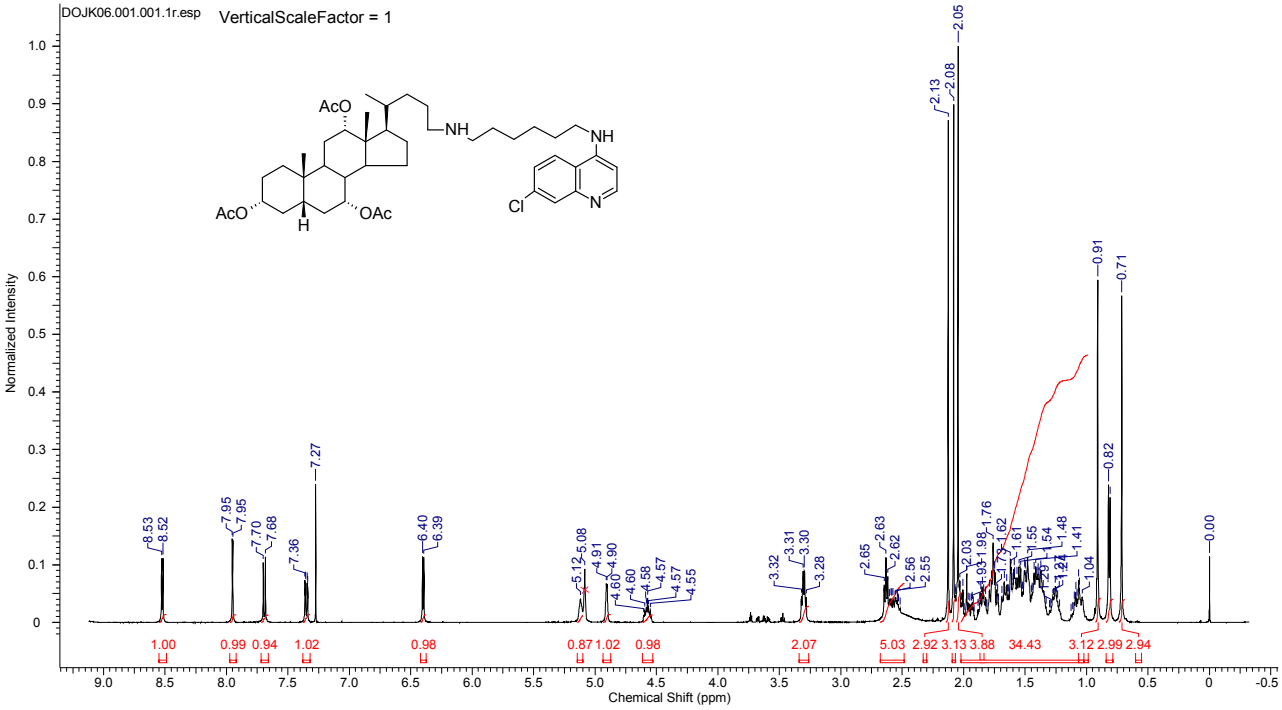
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	22 Mar 2011 18:23:12			***Date Stamp***	22 Mar 2011 18:23:12
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\dozsaa015\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	191	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	724.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13829.8105
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		



Compound 15 (DOJK06): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.971, area 99.39 %; method C: RT 11.700, area 95.41 %.

2/26/2014 3:48:05 PM

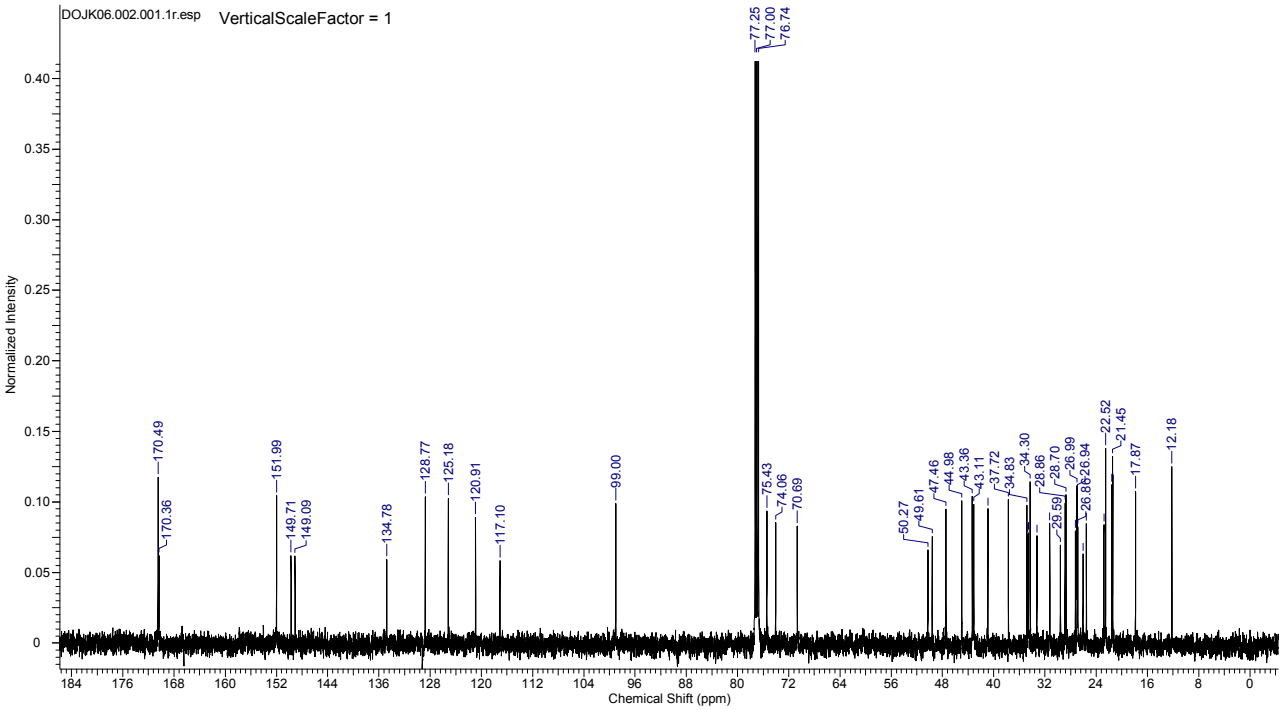
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.4669	***Date***	22 Mar 2011 15:58:08			***Date Stamp***	22 Mar 2011 15:58:08
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DOJK06\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	101.00	***SW(cyclical) (Hz)***	4725.90	***Solvent***	CHLOROFORM-d		
Spectrum Offset (Hz)	2200.9209	***Spectrum Type***	STANDARD	***Sweep Width (Hz)***	4725.75	***Temperature (degree C)***	25.000



Compound 15 (DOJK06): ^{13}C NMR spectrum (125 MHz).

2/26/2014 3:50:16 PM

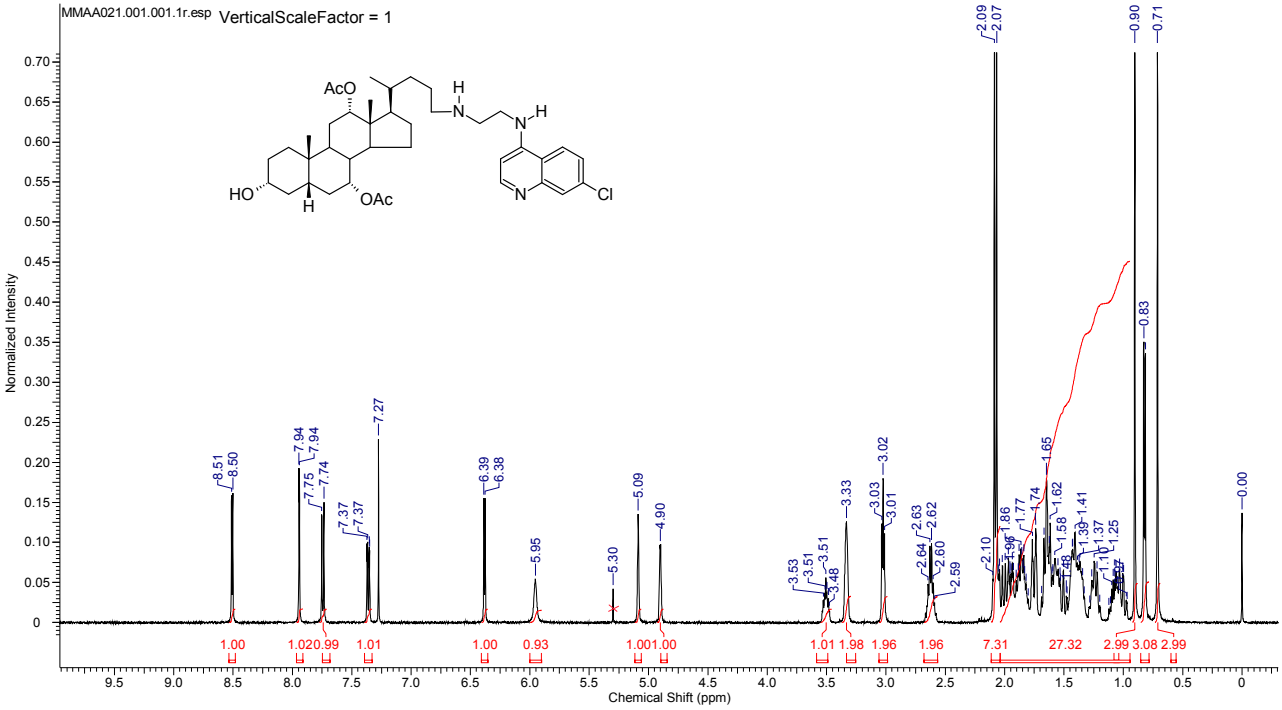
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	22 Mar 2011 16:00:16			***Date Stamp***	22 Mar 2011 16:00:16
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DOJK06\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	269	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	724.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13831.0020
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.200		



Compound 16 (DO183): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 8.651, area 96.19 %; method B: RT 8.626, area 95.11 %

2/26/2014 3:53:39 PM

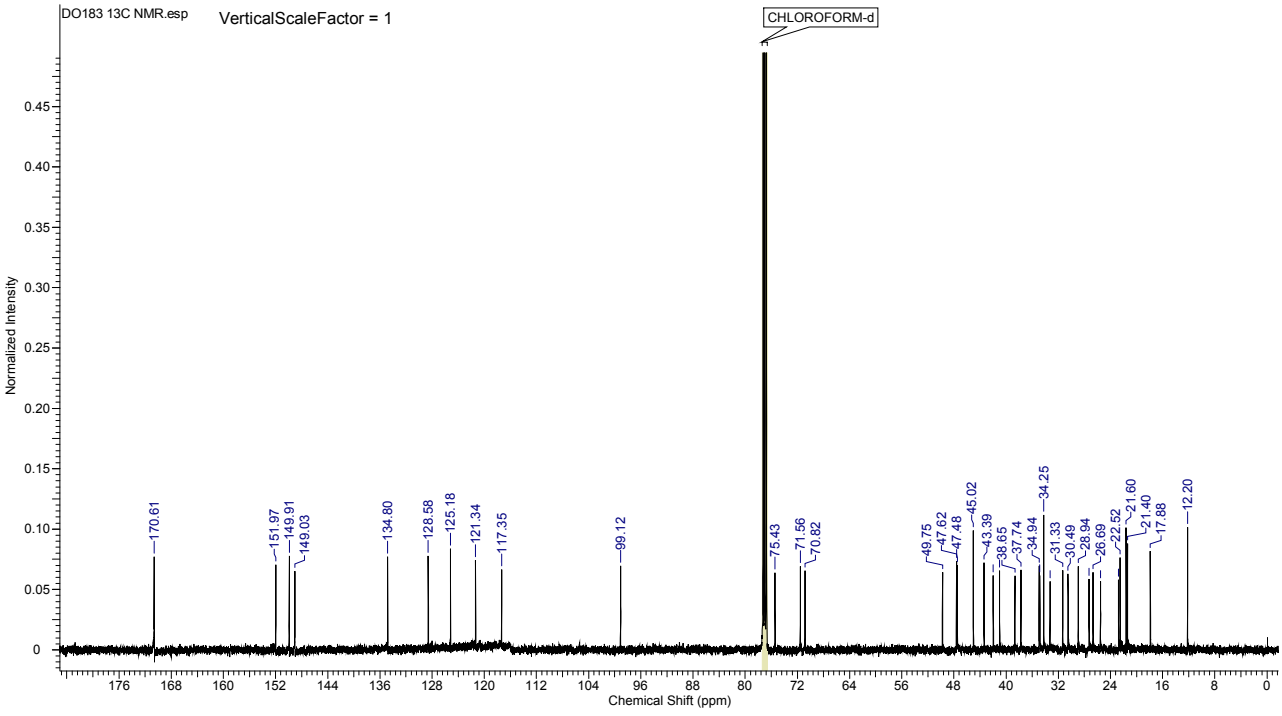
Number of Nuclei	0 H's						
Acquisition Time (sec)	2.7525	*Date*	28 Apr 2008 10:40:32			*Date Stamp*	28 Apr 2008 10:40:32
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO183\MMAA021\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	1	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	16384	*Pulse Sequence*	zg30
Receiver Gain	45.20	*SW(cyclical) (Hz)*	5952.38	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2502.6123
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5952.02	*Temperature (degree C)*	24.900		



Compound 16 (DO183): ^{13}C NMR spectrum (125 MHz).

3/2/2014 11:51:50 AM

Number of Nuclei	0 C's						
Acquisition Time (sec)	1.1010	*Date*	28 Apr 2008 10:51:12			*Date Stamp*	28 Apr 2008 10:51:12
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO183\MMAA021\2\pdata\2\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	2611	*Origin*	spect
Original Points Count	32768	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	203.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13831.6260
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		

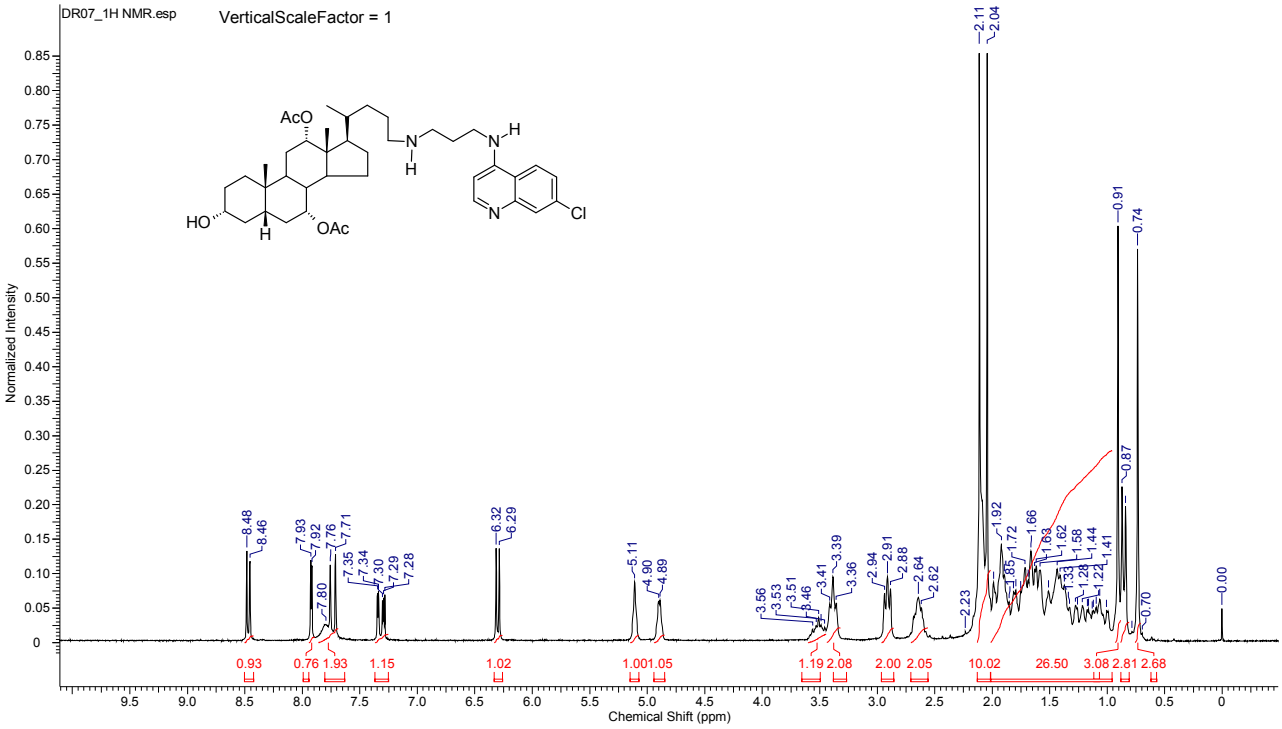


Compound 17 (DR07): ^{1}H NMR spectrum (200 MHz): HPLC purity: method B: RT 8.583, area 95.71 %; method C: RT 13.187, area 95.02 %.

2/25/2014 11:26:24 AM

Number of Nuclei 0 H's

Acquisition Time (sec)	1.4400	*Comment*	DRAA007	*Date*	May 25 09	*Date Stamp*	May 25 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DR07\hdraa007.fid\fid						
Frequency (MHz)	199.97	*Nucleus*	1H	*Number of Transients*	32	*Original Points Count*	6624
Points Count	8192	*Pulse Sequence*	s2pul	*Receiver Gain*	5.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	1687.8647	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	4600.00	*Temperature (degree C)*	AMBIENT TEMPERATURE

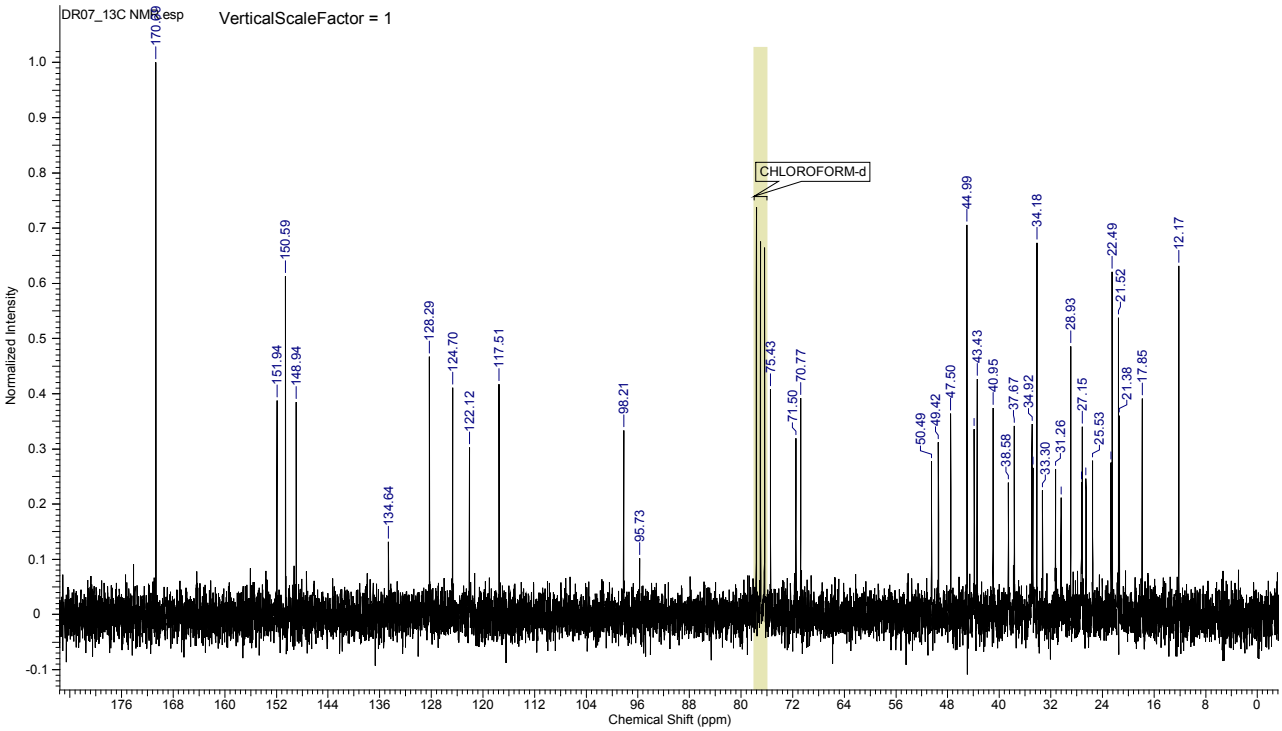


Compound 17 (DR07): ^{13}C NMR spectrum (50 MHz)

3/2/2014 12:02:21 PM

Number of Nuclei 0 C's

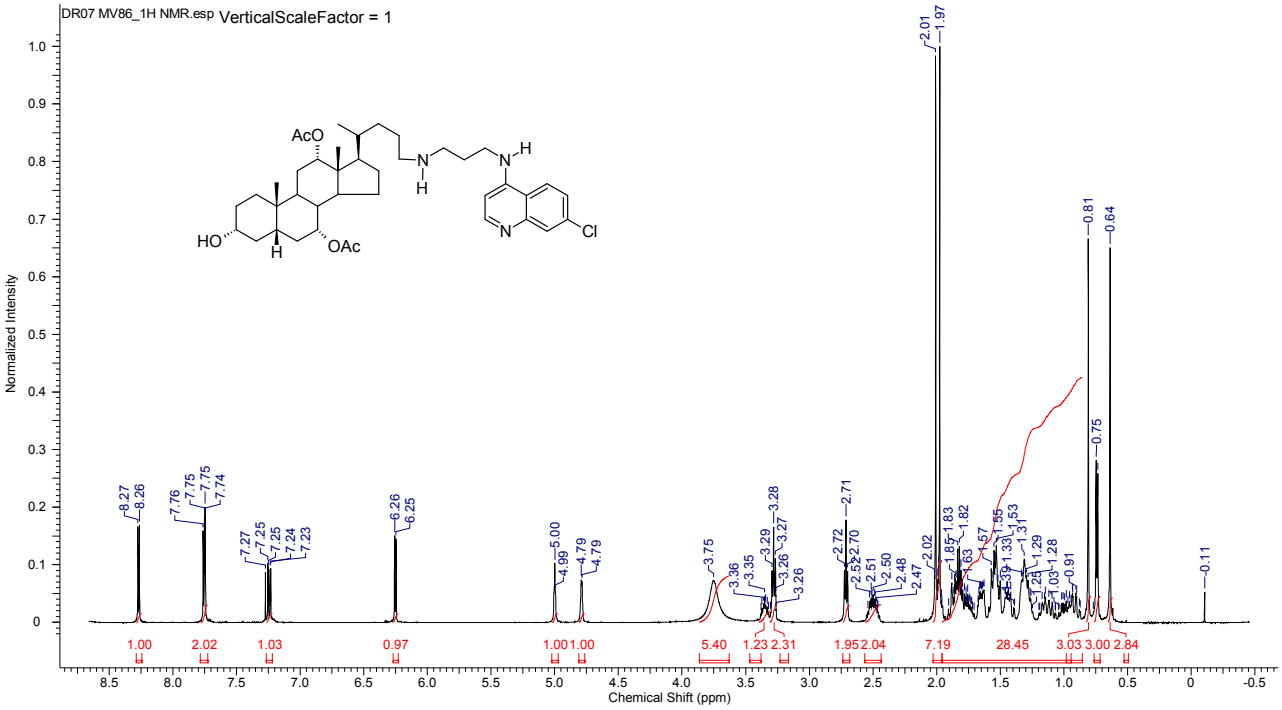
Acquisition Time (sec)	1.0667	*Comment*	DRAA007	*Date*	May 25 09	*Date Stamp*	May 25 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DR07\cdraa007.fid\fid						
Frequency (MHz)	50.29	*Nucleus*	13C	*Number of Transients*	803	*Original Points Count*	16000
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	25.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	4813.8223	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	15000.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 17 (DR07): ^{1}H NMR spectrum (500 MHz)

2/25/2014 11:37:54 AM

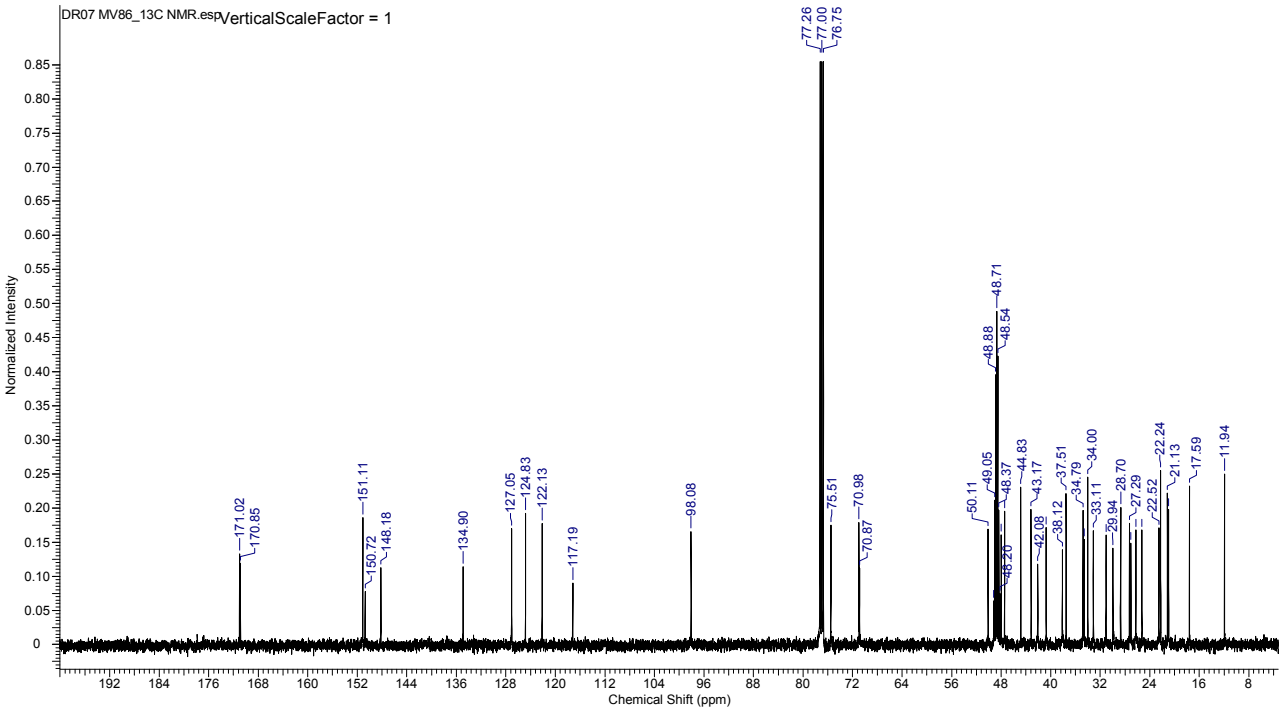
Number of Nuclei	0 H's						
Acquisition Time (sec)	3.5914	Date	22 Mar 2011 16:23:44			Date Stamp	22 Mar 2011 16:23:44
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV86\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	13	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	101.00	SW(cyclical) (Hz)	4562.04	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2052.5569
Spectrum Type	STANDARD	Sweep Width (Hz)	4561.90	Temperature (degree C)	25.000		



Compound 17 (DR07): ^{13}C NMR spectrum (125 MHz)

2/25/2014 11:38:55 AM

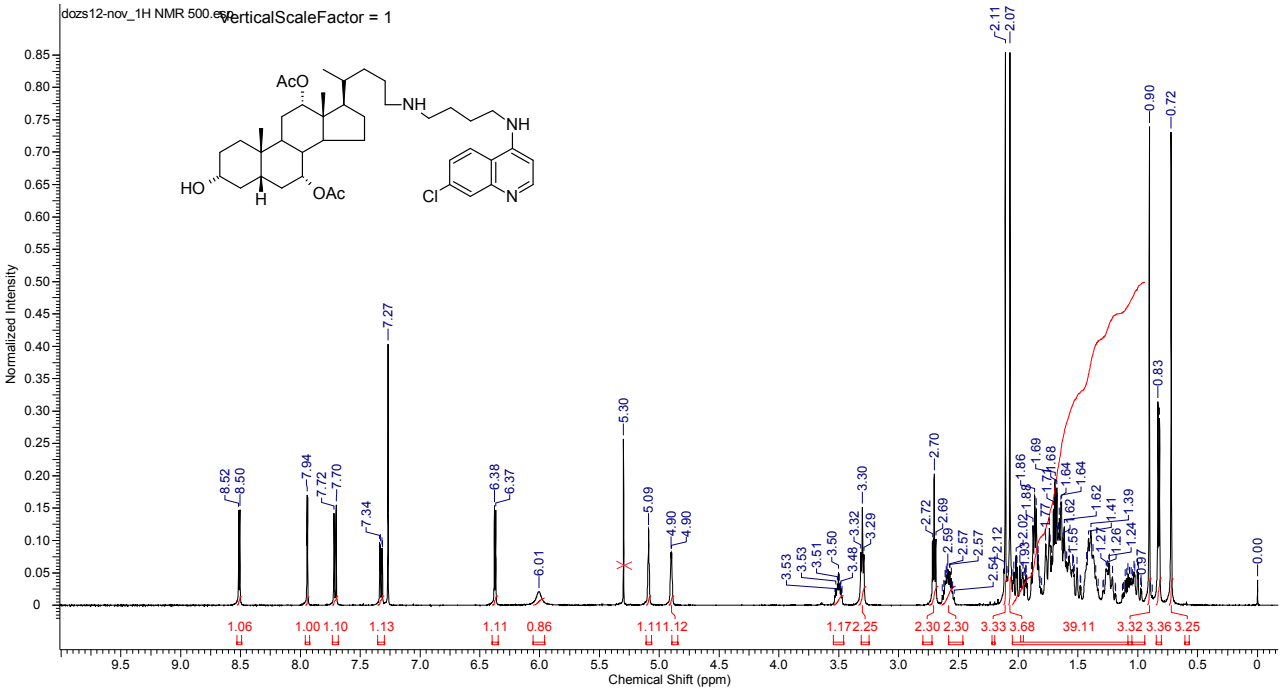
Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	Date	22 Mar 2011 16:28:00			Date Stamp	22 Mar 2011 16:28:00
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV86\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	293	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	724.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13819.6709
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 18 (DOZS12): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.879, area 99.04 %; method D: RT 5.495, area 97.05 %.

2/25/2014 11:51:41 AM

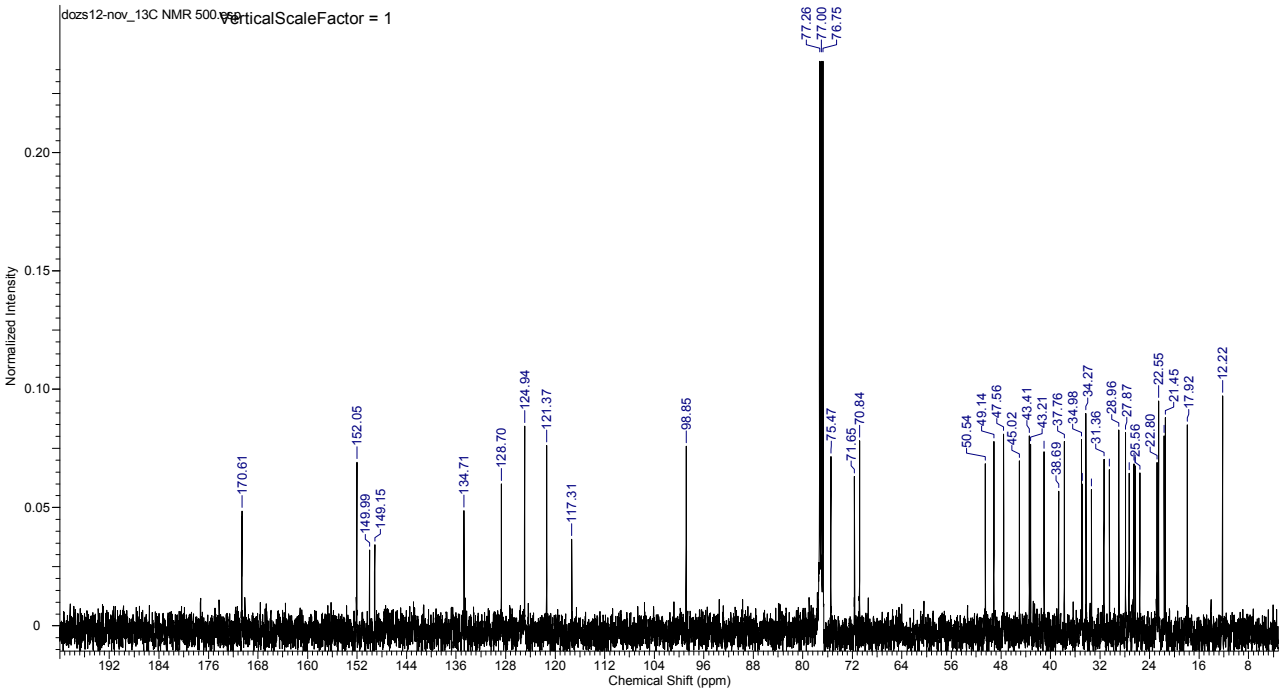
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:40:16
Date Stamp	22 Feb 2014 10:40:16						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dozs12-nov\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	22	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3490.9019
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	24.900		



Compound 18 (DOZS12): ^{13}C NMR spectrum (125 MHz):

2/25/2014 11:59:00 AM

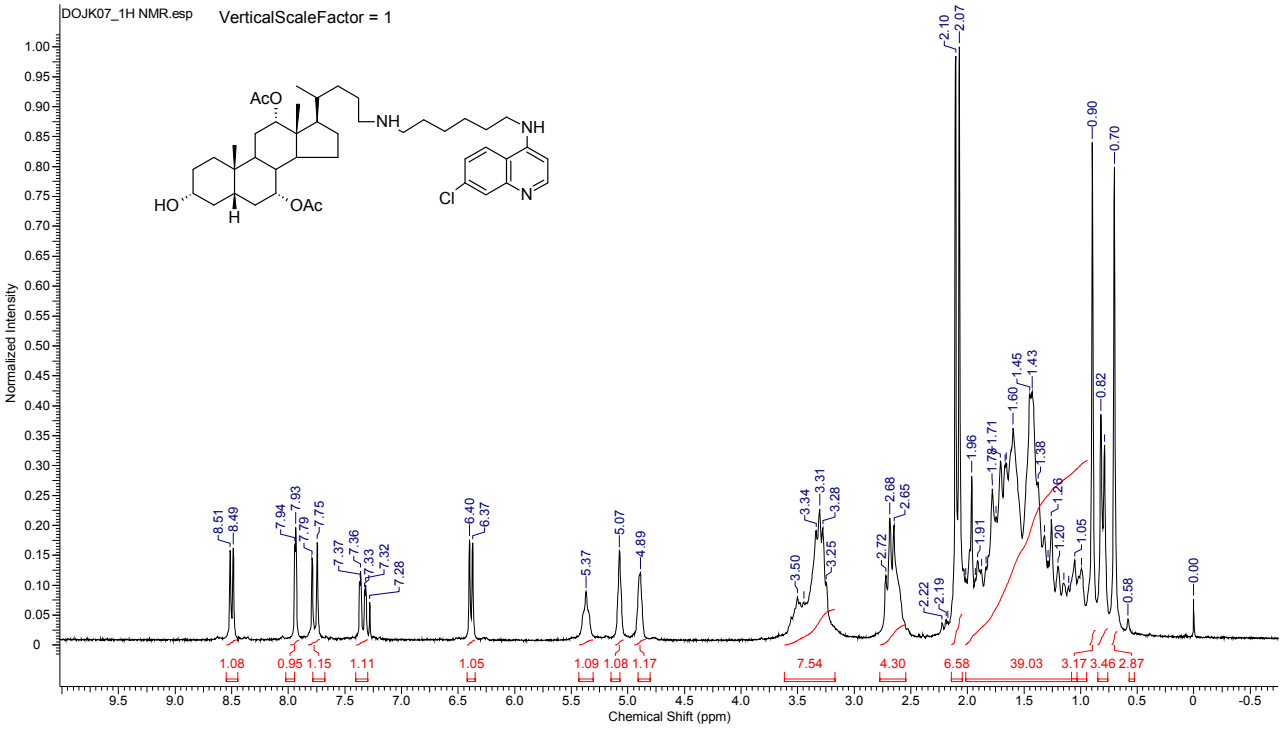
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:29:36
Date Stamp	22 Feb 2014 10:29:36						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dozs12-nov\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	283	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13832.3740
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.45	***Temperature (degree C)***	25.200		



Compound 19 (DOJK07): ^{1}H NMR spectrum (200 MHz): HPLC purity: method A: RT 1.869, area 99.39 %; method C: RT=11.500, area 95.59 %.

2/25/2014 12:03:22 PM

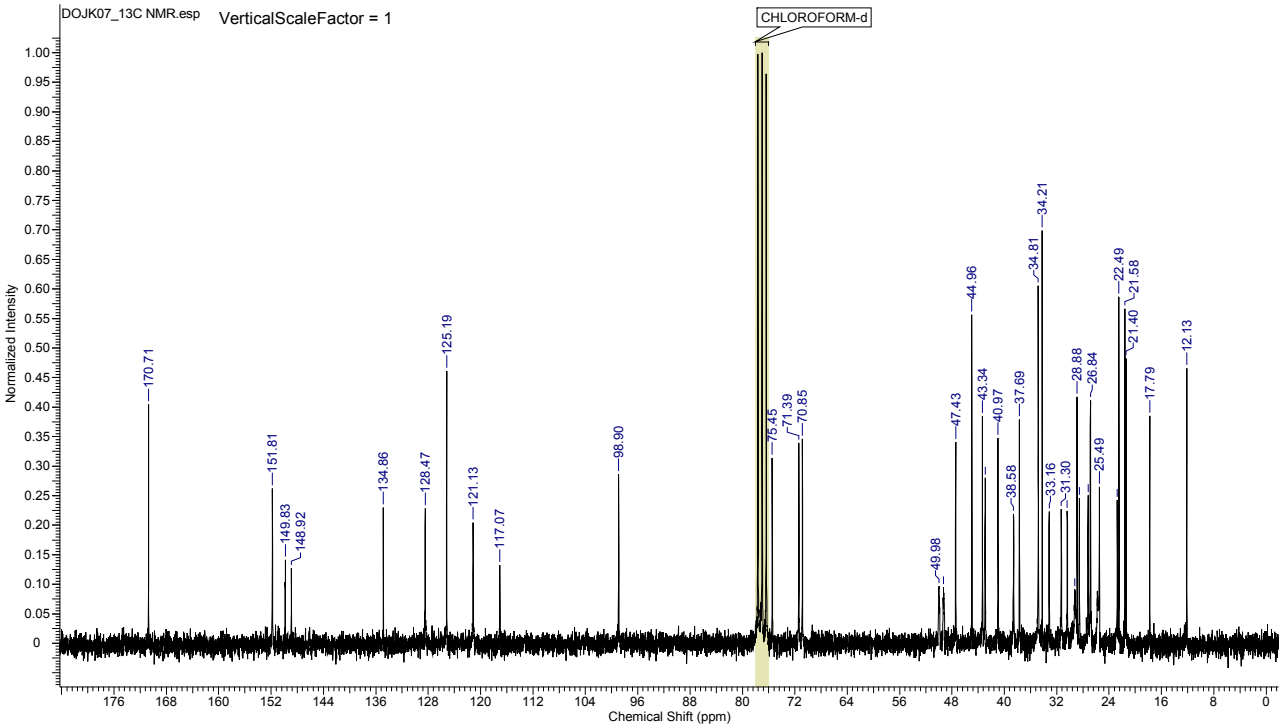
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.3913	Comment	dojk07	Date	Apr 5 11	Date Stamp	Apr 5 11
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DOJK07\hdojk07.fid\fid						
Frequency (MHz)	199.97	Nucleus	1H	Number of Transients	66	Original Points Count	6400
Points Count	8192	Pulse Sequence	s2pul	Receiver Gain	9.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	1687.8647	Spectrum Type	STANDARD	Sweep Width (Hz)	4600.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 19 (DOJK07): ^{13}C NMR spectrum (50 MHz):

2/27/2014 5:22:32 PM

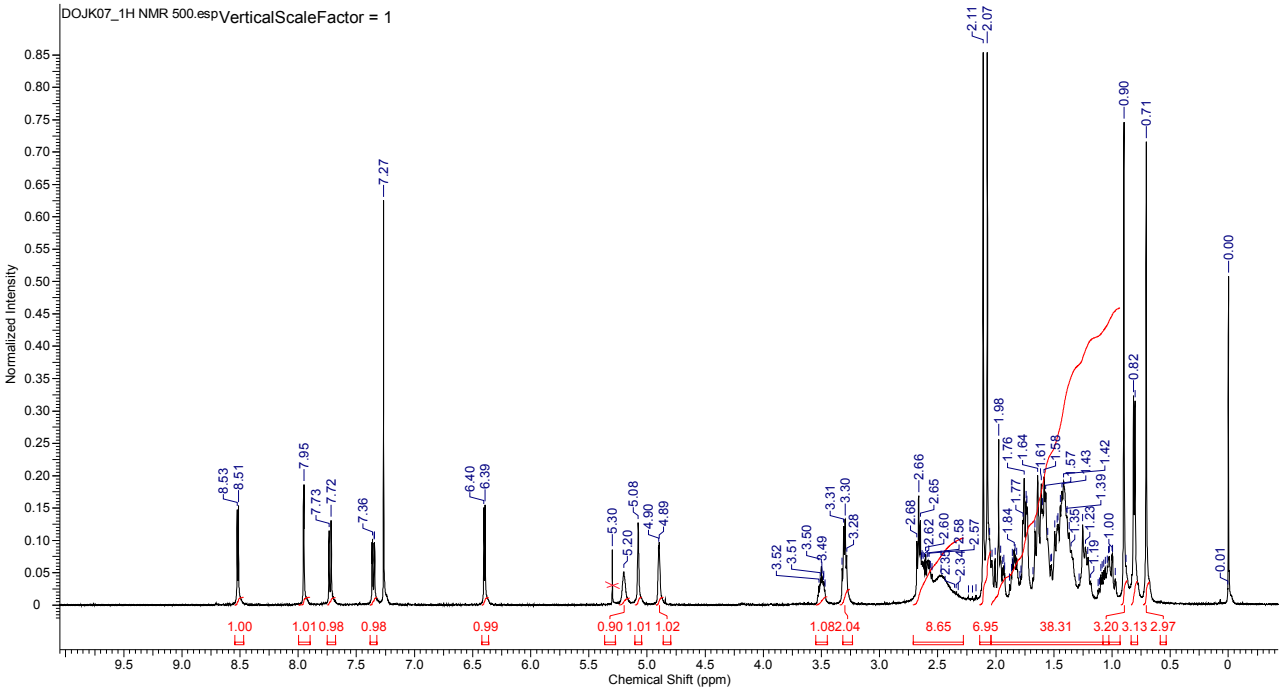
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.0667	Comment	dojk07	Date	Apr 5 11	Date Stamp	Apr 5 11
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DOJK07\cdojk07.fid\fid						
Frequency (MHz)	50.29	Nucleus	13C	Number of Transients	17116	Original Points Count	16000
Points Count	16384	Pulse Sequence	s2pul	Receiver Gain	25.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5120.5610	Spectrum Type	STANDARD	Sweep Width (Hz)	15000.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 19 (DOJK07): ^{1}H NMR spectrum (500 MHz):

2/25/2014 12:06:27 PM

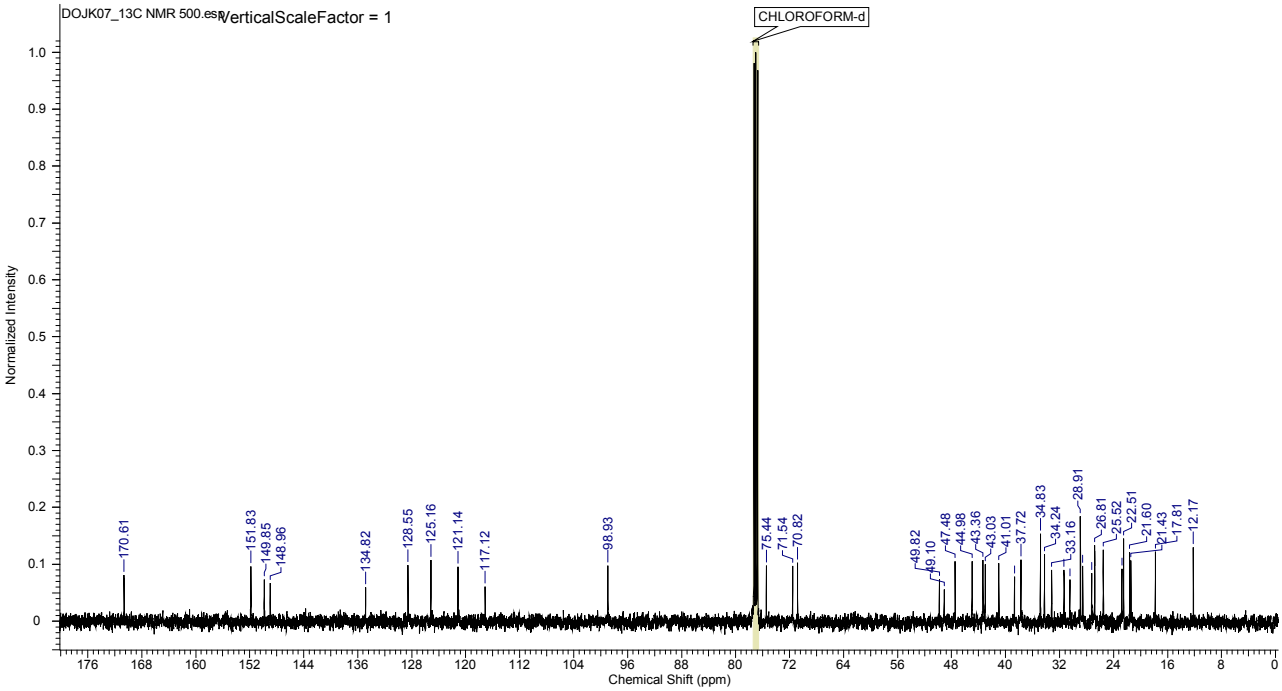
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	19 Feb 2014 10:44:32
Date Stamp	19 Feb 2014 10:44:32						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dojk07\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3489.7109
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	27.000		



Compound 19 (DOJK07): ^{13}C NMR spectrum (125 MHz):

2/27/2014 5:20:33 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	20 Feb 2014 10:29:36
Date Stamp	20 Feb 2014 10:29:36						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dojk07\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	100	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13830.0361
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.45	***Temperature (degree C)***	25.200		

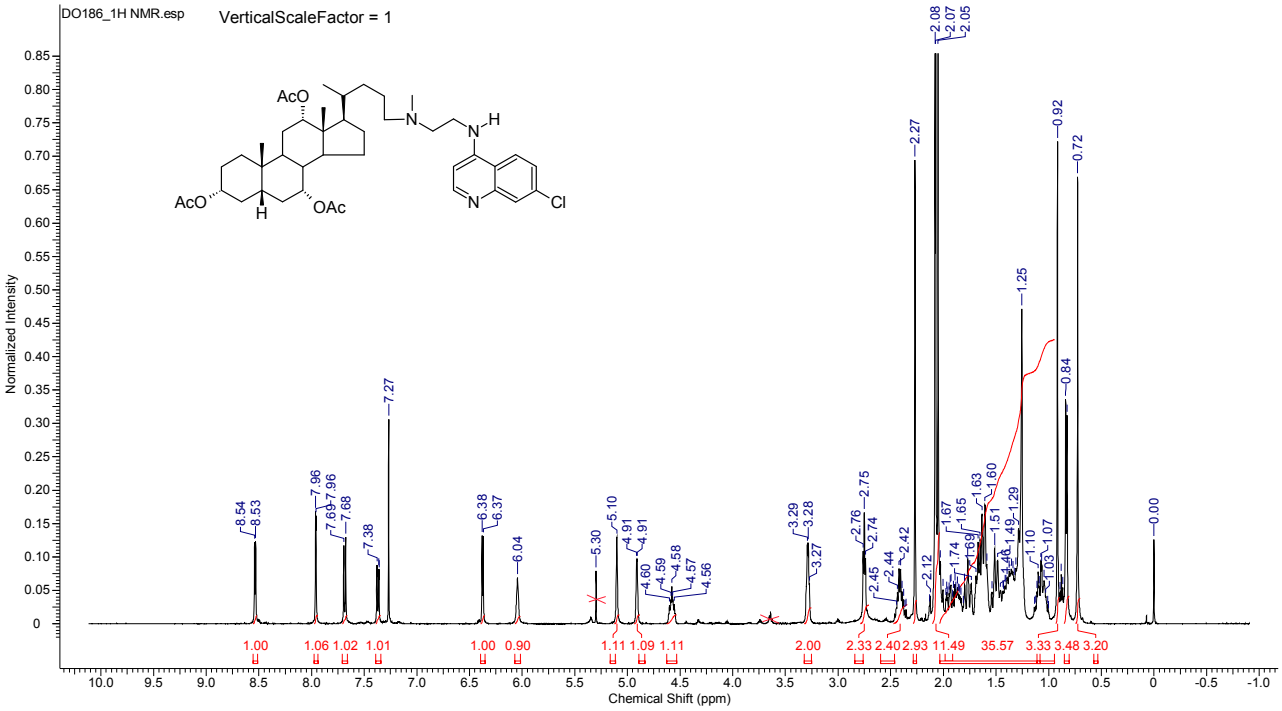


Compound 20 (DO186): ^{1}H NMR spectrum (500 MHz): HPLC purity: method B: RT 8.703, area 96,21 %; method C: RT 13.199, area 95.18 %.

2/25/2014 12:10:29 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	2.9710	*Date*	19 Feb 2009 11:05:52			*Date Stamp*	19 Feb 2009 11:05:52
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DO186\DOAA074a\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	16384	*Pulse Sequence*	zg30
Receiver Gain	114.00	*SW(cyclical) (Hz)*	5514.71	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2304.3628
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5514.37	*Temperature (degree C)*	25.000		

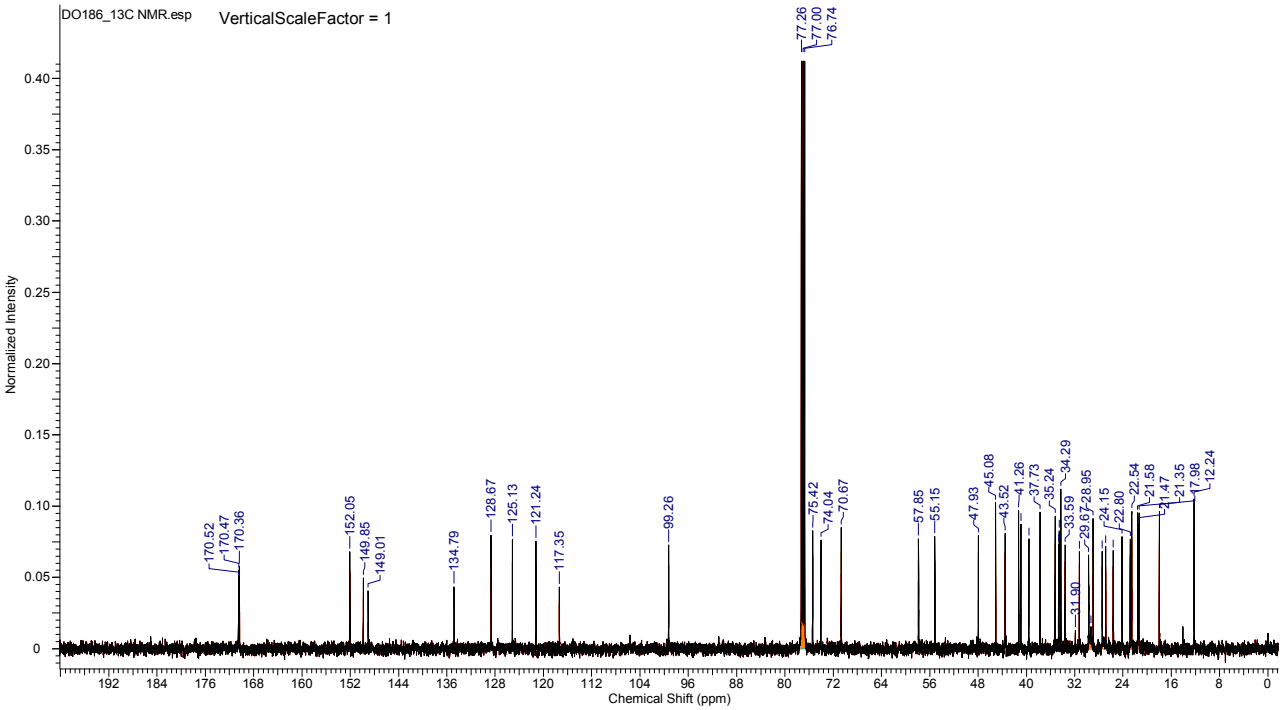


Compound 20 (DO186): ^{13}C NMR spectrum (125 MHz):

2/25/2014 12:12:29 PM

Number of Nuclei 0 C's

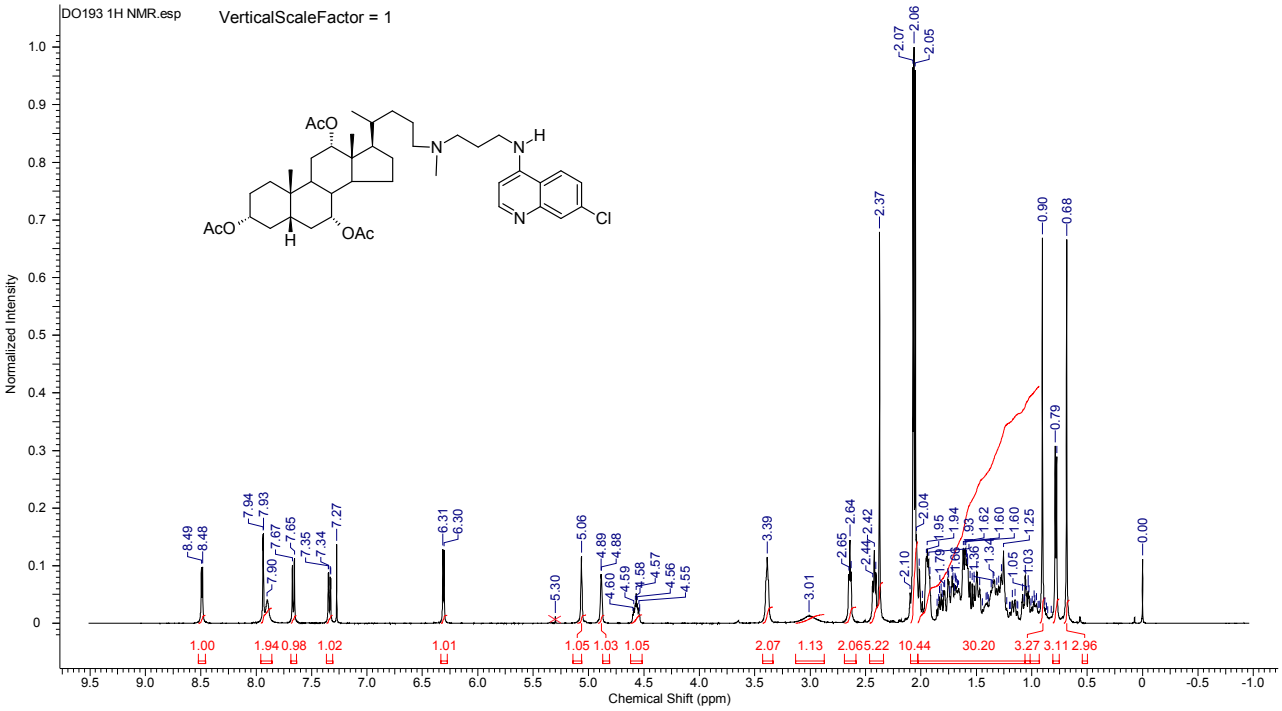
Acquisition Time (sec)	1.1010	*Date*	19 Feb 2009 11:16:32			*Date Stamp*	19 Feb 2009 11:16:32
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DO186\DOAA074a\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	643	*Origin*	spect
Original Points Count	32768	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	812.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13833.8828
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 21(DO193): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 2.032, area 99.46 %; method B: RT 8.689, area 96.92 %.

2/26/2014 4:32:33 PM

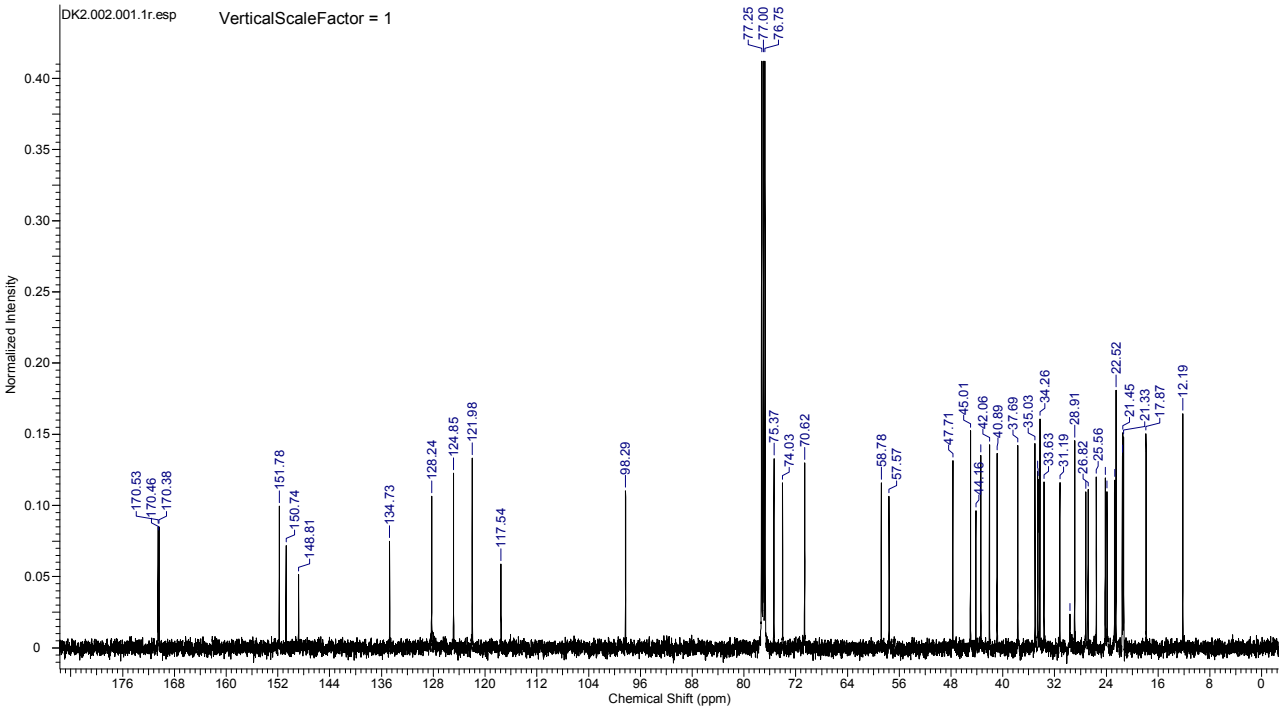
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.1261	Date	02 Sep 2009 12:20:48			Date Stamp	02 Sep 2009 12:20:48
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO193\DK2\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	71.80	SW(cyclical) (Hz)	5241.09	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2138.4419
Spectrum Type	STANDARD	Sweep Width (Hz)	5240.93	Temperature (degree C)	25.000		



Compound 21(DO193): ^{13}HC NMR spectrum (125MHz):

2/26/2014 4:34:17 PM

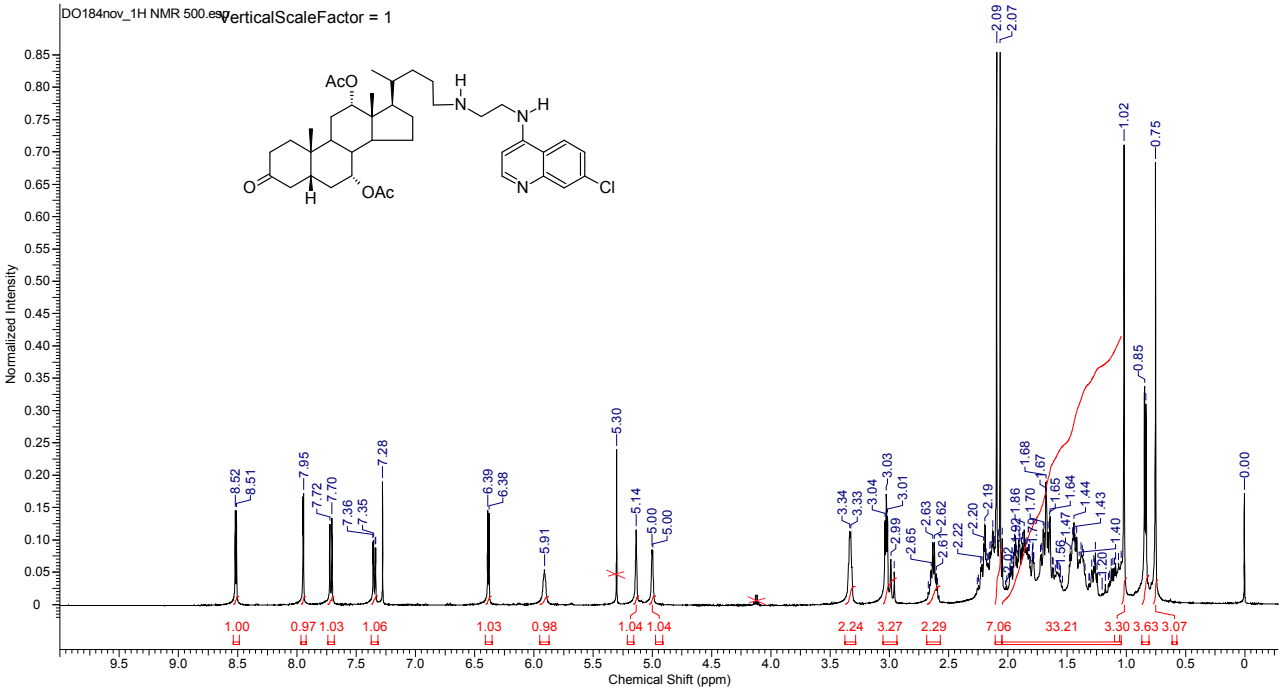
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	Date	02 Sep 2009 11:25:20			Date Stamp	02 Sep 2009 11:25:20
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO193\DK2\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	587	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1820.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13830.7754
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 22(DO184): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 8.484, area 95.76 %; method B: RT 7.775, area 95.05 %; method C: RT 10.069, area 95.10 %.

2/25/2014 12:26:00 PM

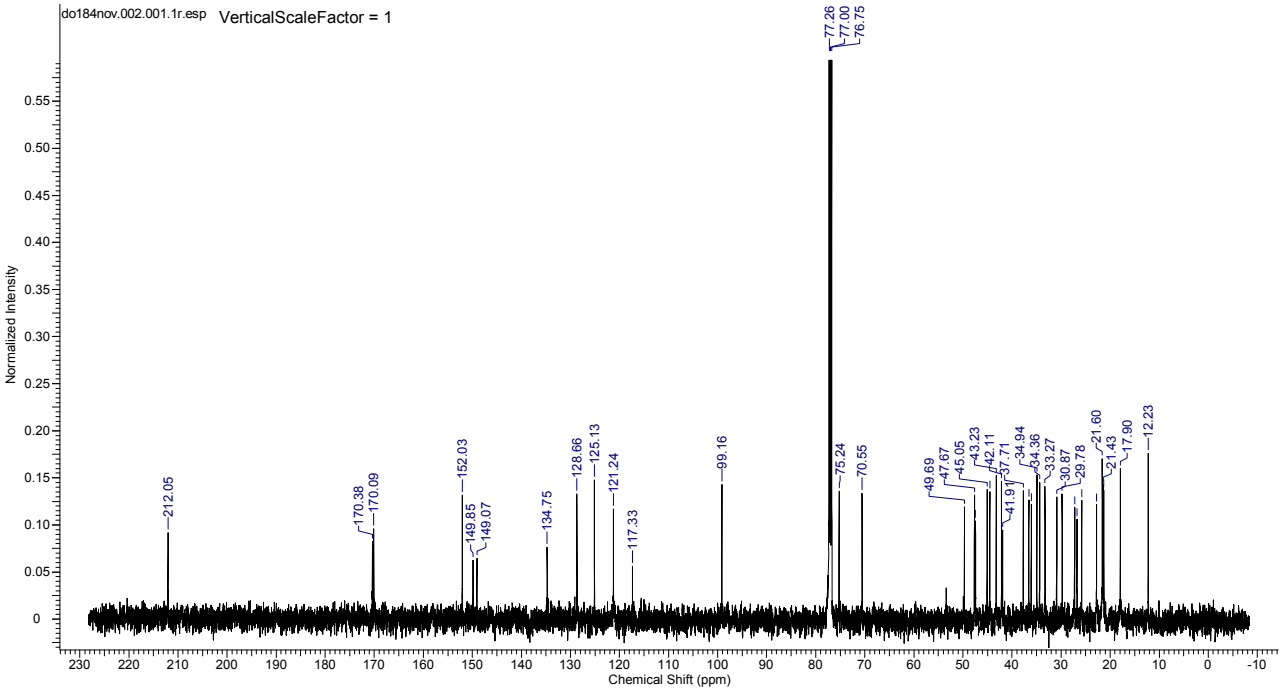
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	21 Feb 2014 10:06:08
Date Stamp	21 Feb 2014 10:06:08						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do184nov\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	14	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3495.1990
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	24.800		



Compound 22(DO184): 13HC NMR spectrum (125 MHz):

2/25/2014 12:27:53 PM

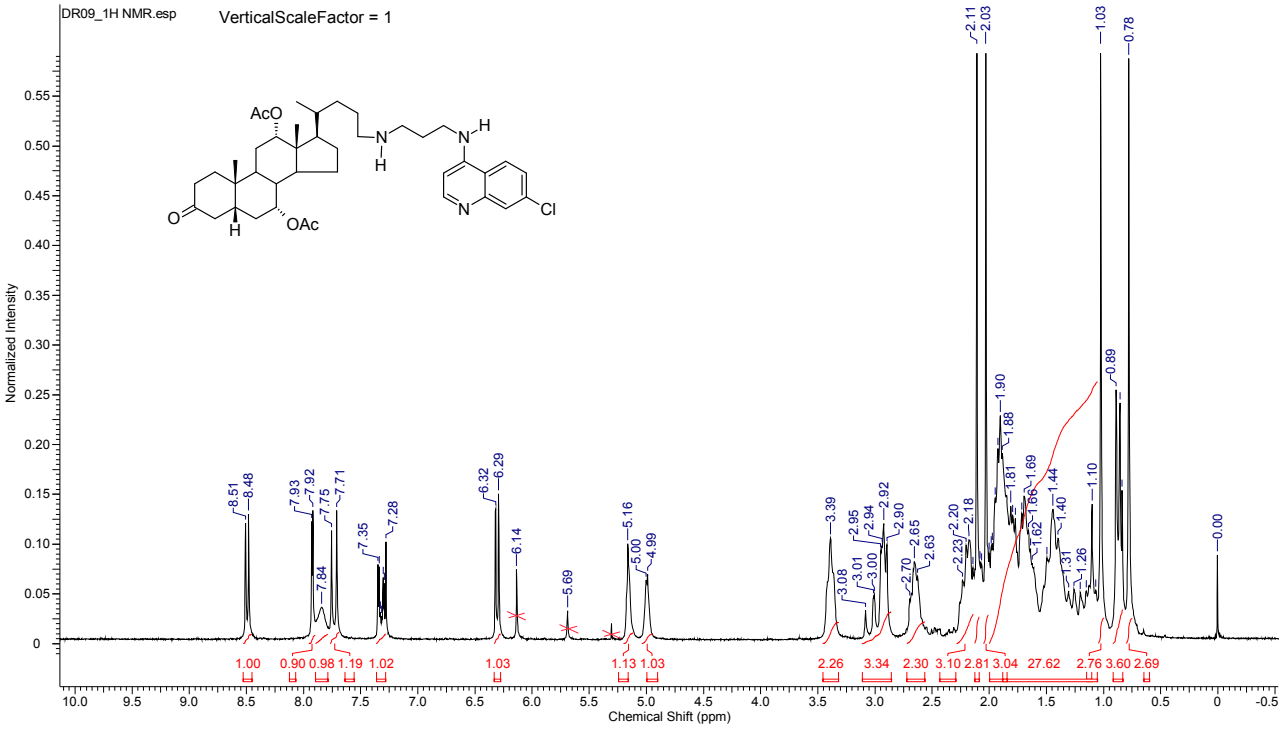
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	21 Feb 2014 10:06:08
Date Stamp	21 Feb 2014 10:06:08						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do184nov\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	174	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13829.1396
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.45	***Temperature (degree C)***	25.000		



Compound 23(DR09): ^{1}H NMR spectrum (200 MHz): HPLC purity: method C: RT=13.105, area 95.15 %; method D: RT 5.414, area 95.21 %.

2/25/2014 12:32:13 PM

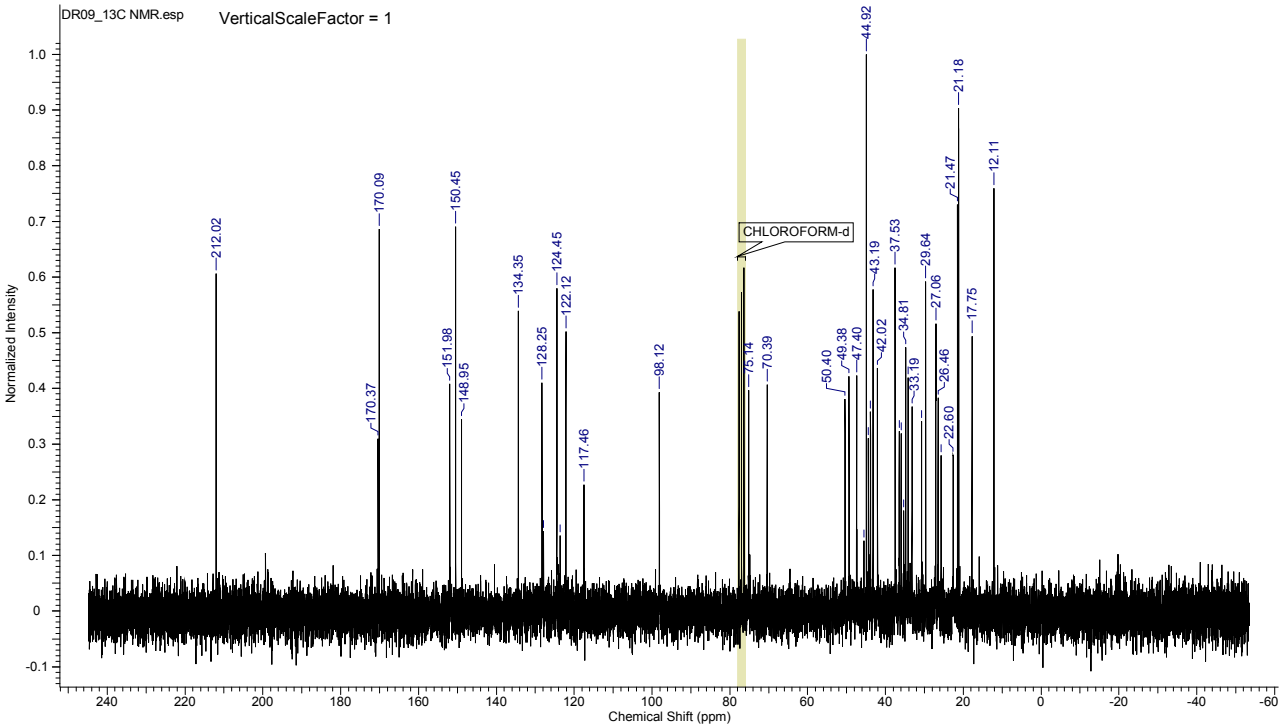
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.3913	Comment	DR09	Date	Jun 1 09	Date Stamp	Jun 1 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DR09\hdr09.fid\fid						
Frequency (MHz)	199.97	Nucleus	1H	Number of Transients	104	Original Points Count	6400
Points Count	8192	Pulse Sequence	s2pul	Receiver Gain	7.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	1687.3032	Spectrum Type	STANDARD	Sweep Width (Hz)	4600.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 23(DR09): ^{13}HC NMR spectrum (50 MHz):

2/27/2014 6:17:05 PM

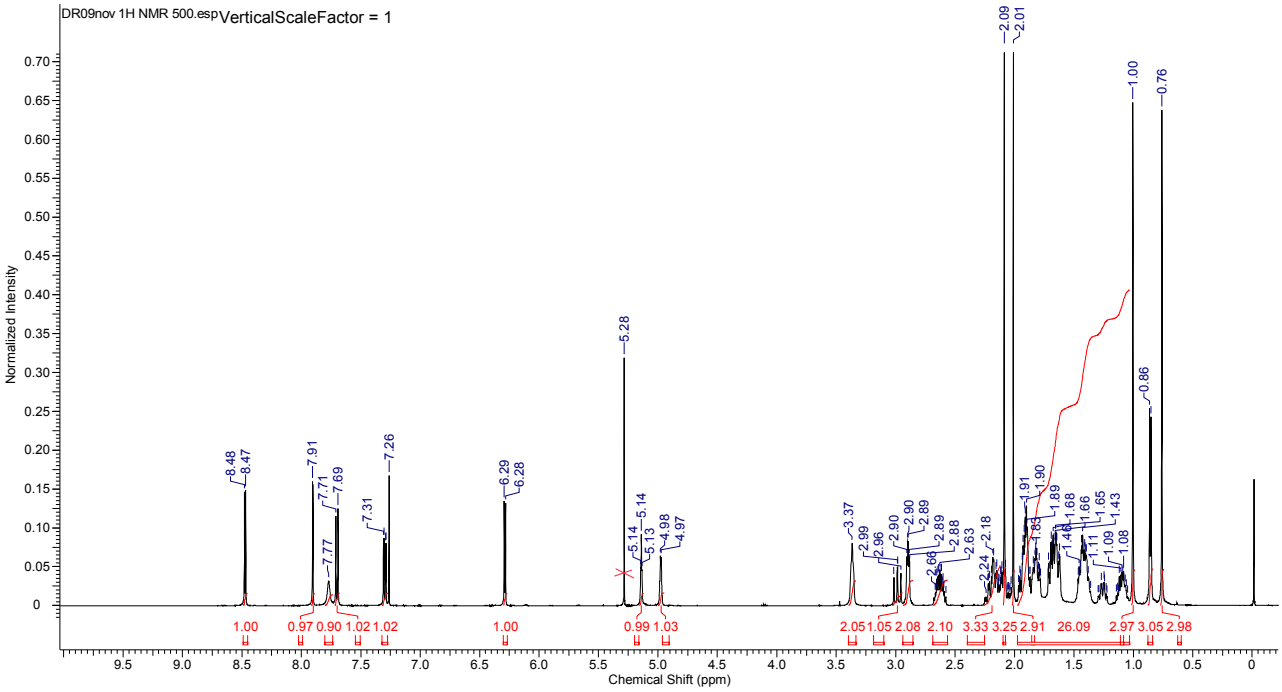
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.0667	Comment	DR09	Date	Jun 1 09	Date Stamp	Jun 1 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DR09\cdr09.fid\fid						
Frequency (MHz)	50.29	Nucleus	13C	Number of Transients	330	Original Points Count	16000
Points Count	16384	Pulse Sequence	s2pul	Receiver Gain	25.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	4810.1602	Spectrum Type	STANDARD	Sweep Width (Hz)	15000.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 23(DR09): ^{1}H NMR spectrum (500 MHz):

2/25/2014 12:36:09 PM

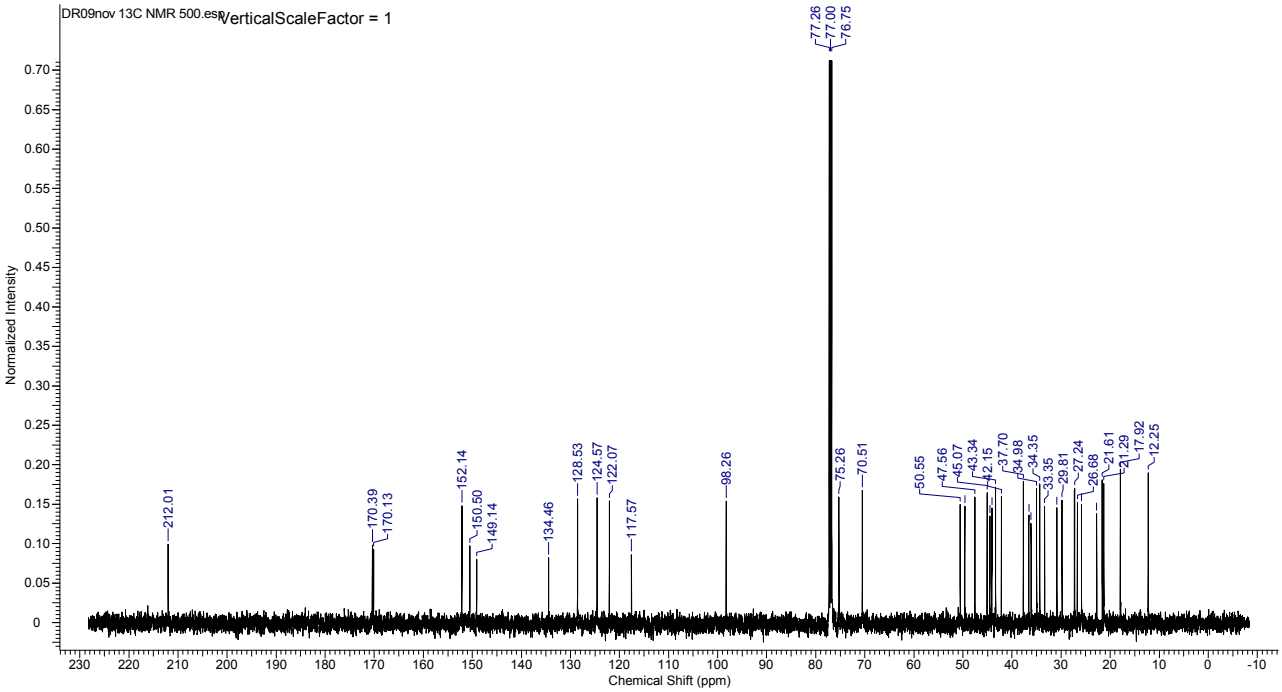
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	21 Feb 2014 09:21:20
Date Stamp	21 Feb 2014 09:21:20						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dr09nov\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	14	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	71.80	*SW(cyclical) (Hz)*	7507.51	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	3489.0959
Spectrum Type	STANDARD	*Sweep Width (Hz)*	7507.28	*Temperature (degree C)*	25.000		



Compound 23(DR09): ^{13}HC NMR spectrum (125 MHz):

2/25/2014 12:37:03 PM

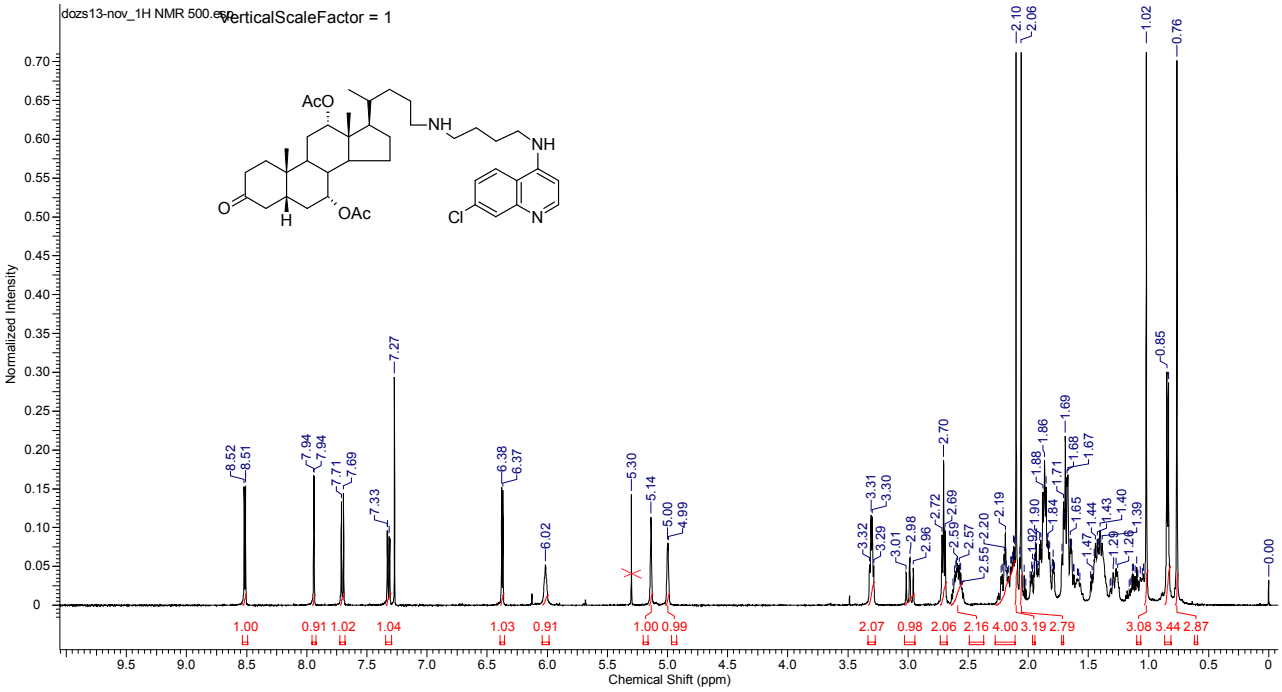
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	21 Feb 2014 09:23:28
Date Stamp	21 Feb 2014 09:23:28						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dr09nov\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	88	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	65536	*Pulse Sequence*	zgpg30
Receiver Gain	2050.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13829.1035
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.45	*Temperature (degree C)*	25.200		



Compound 24(DOZS13): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.872, area 99.17 %; method C: RT 12.077, area 95.14 %.

2/25/2014 1:26:52 PM

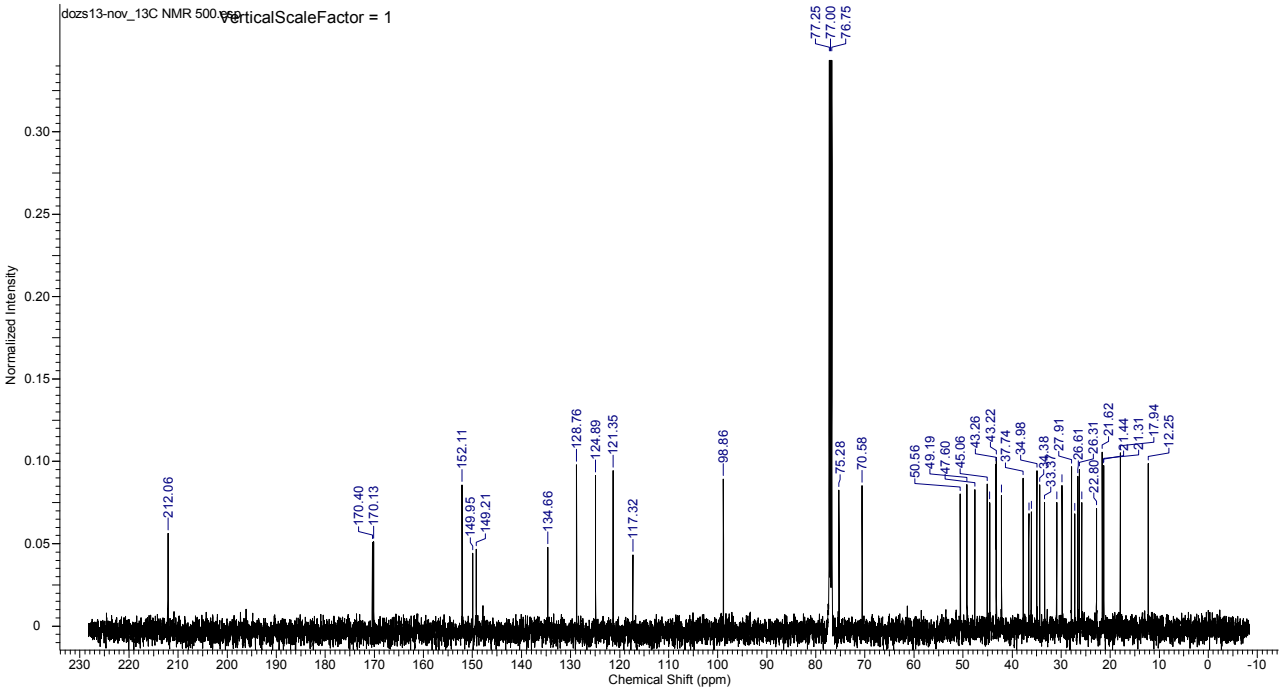
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:21:04
Date Stamp	22 Feb 2014 10:21:04						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dozs13-nov\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	14	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3491.4070
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	24.800		



Compound 24(DOZS13): ^{13}C NMR spectrum (125 MHz):

2/25/2014 12:42:27 PM

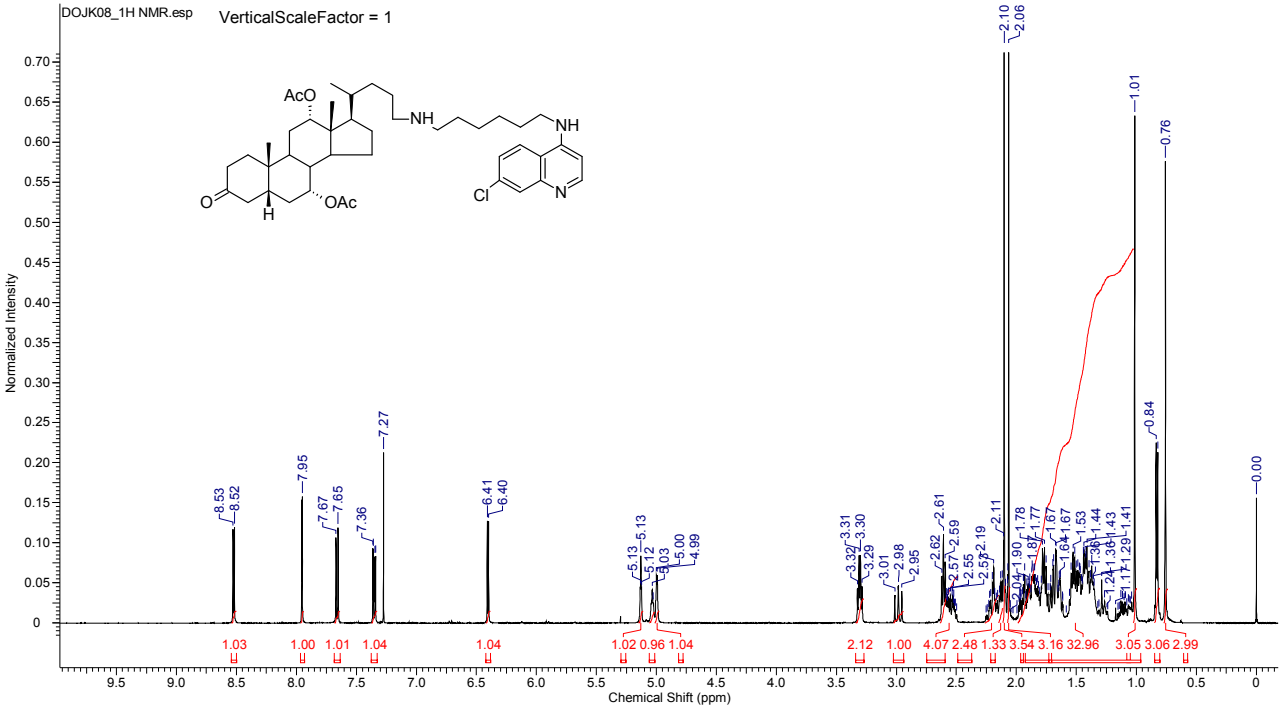
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:12:32
Date Stamp	22 Feb 2014 10:12:32						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\dozs13-nov\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	265	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13831.5049
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.45	***Temperature (degree C)***	25.000		



Compound 25(DOJK08): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.810, area 99.47 %; method C: RT=12.061, area 97.17 %.

2/25/2014 12:45:40 PM

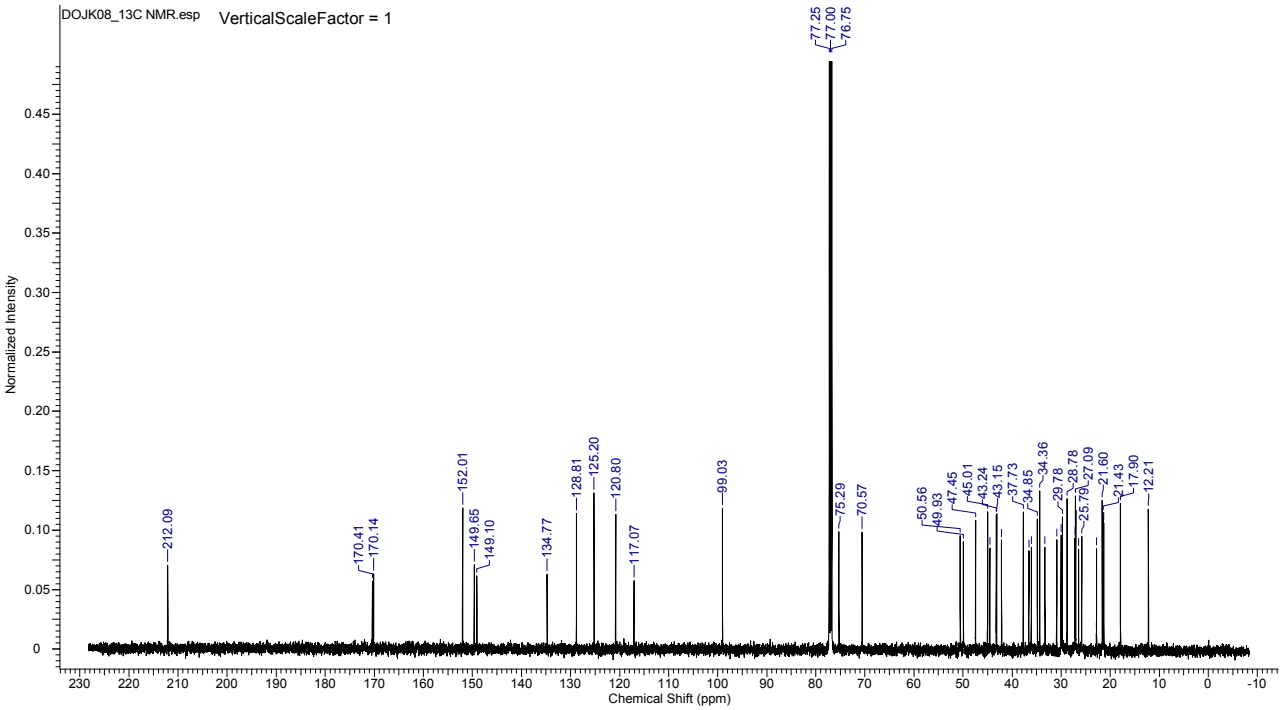
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.7263	***Date***	02 Jun 2011 09:00:16			***Date Stamp***	02 Jun 2011 09:00:16
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJKKET\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	20	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	256.00	***SW(cyclical) (Hz)***	6009.62	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	2562.5410
Spectrum Type	STANDARD	***Sweep Width (Hz)***	6009.43	***Temperature (degree C)***	25.000		



Compound 25(DOJK08): ^{13}C NMR spectrum (125 MHz):

2/25/2014 12:47:16 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	02 Jun 2011 09:04:32			***Date Stamp***	02 Jun 2011 09:04:32
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJKKET\6\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	703	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	1030.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13830.7256
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		

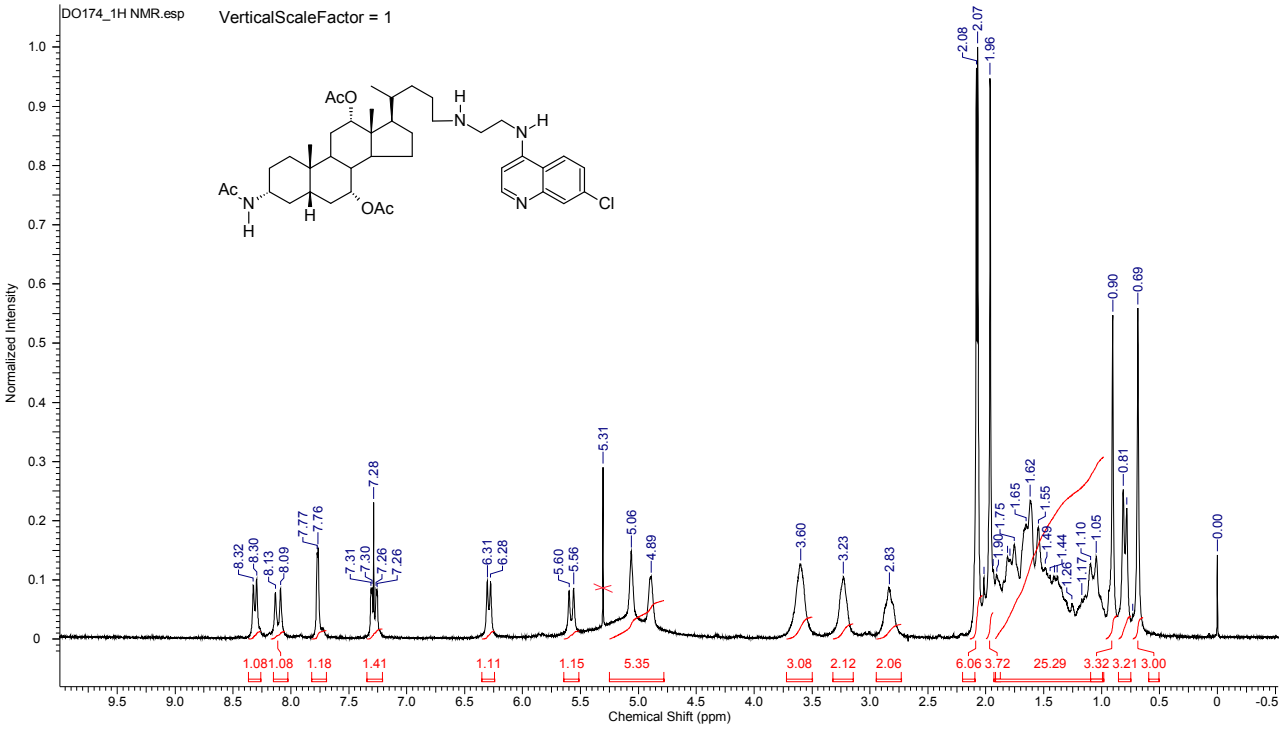


Compound 36(DO174): ^{1}H NMR spectrum (200 MHz): HPLC purity: method A: RT 2.088, area 98.43 %; method C: RT 12.072, area 99.24 %.

2/25/2014 1:03:56 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	3.4763	*Comment*	DOAA032cd6	*Date*	Jul 16 07	*Date Stamp*	Jul 16 07
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO174\hdoaa032cd6.fid\fid						
Frequency (MHz)	199.97	*Nucleus*	1H	*Number of Transients*	32	*Original Points Count*	10448
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	6.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	1103.7272	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	3005.46	*Temperature (degree C)*	AMBIENT TEMPERATURE

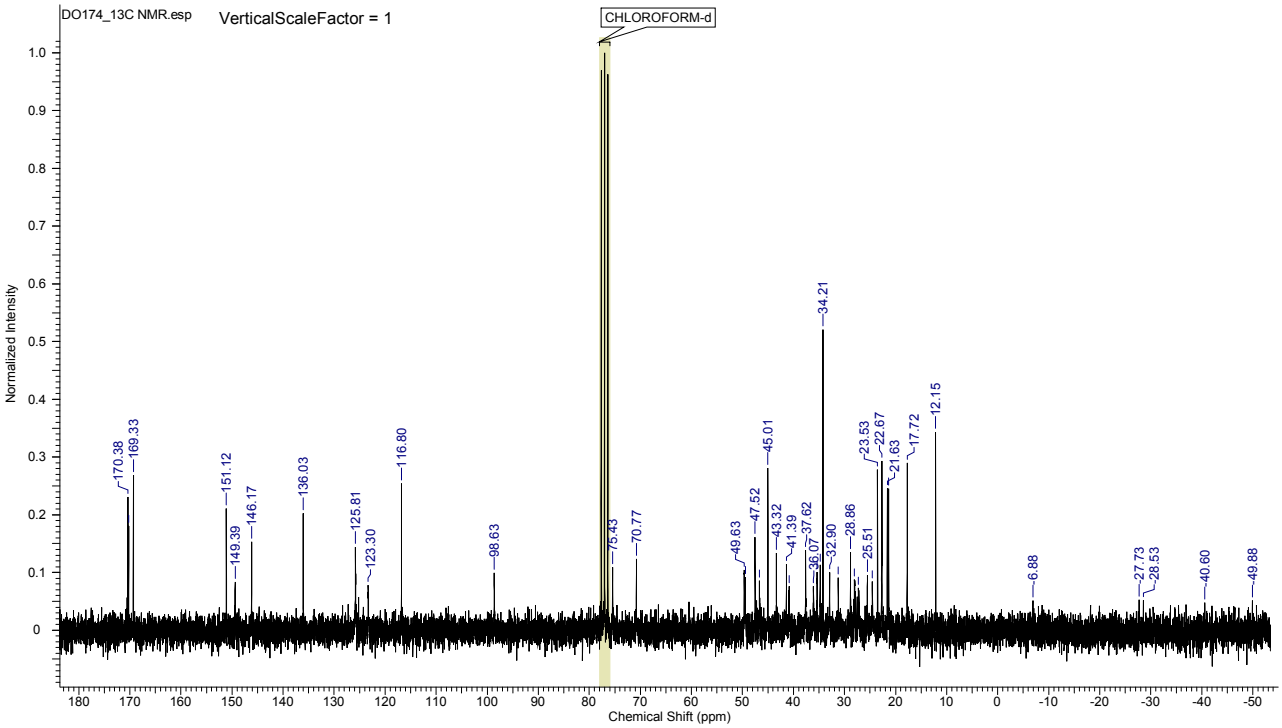


Compound 36(DO174): ^{13}C NMR spectrum (50 MHz):

2/28/2014 11:33:13 AM

Number of Nuclei 0 C's

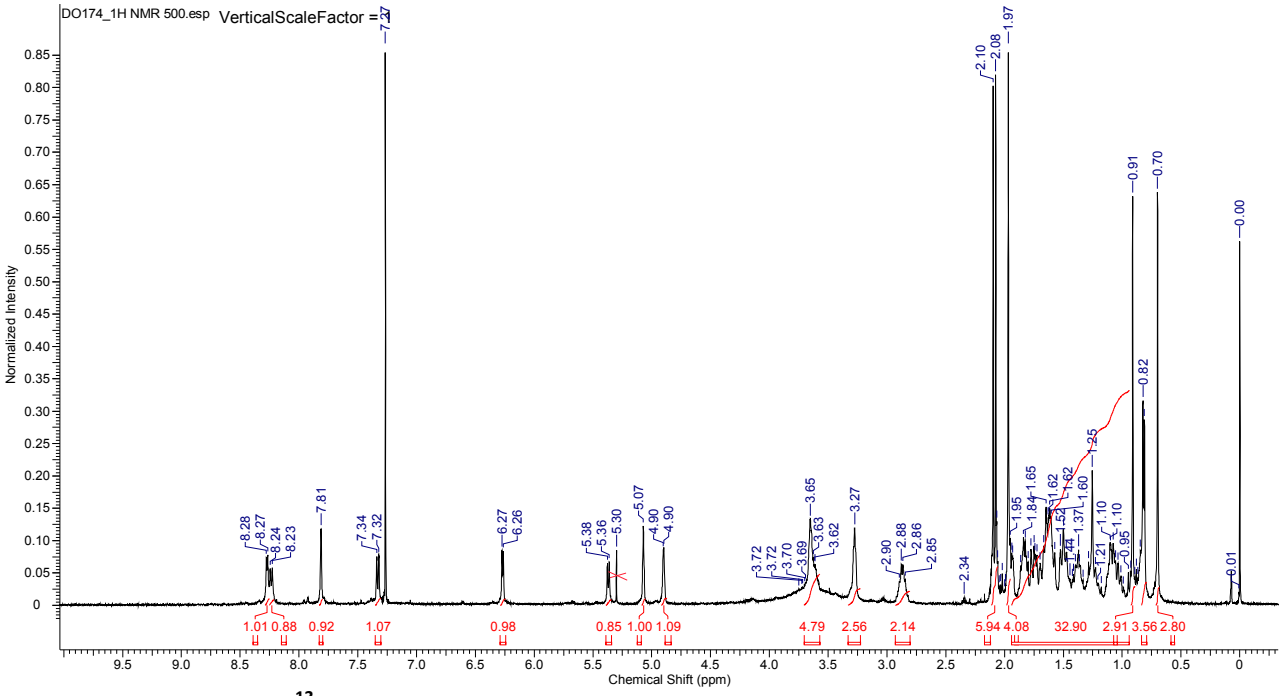
Acquisition Time (sec)	1.0667	*Comment*	DOAA032cd6	*Date*	Jul 16 07	*Date Stamp*	Jul 16 07
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO174\cdoaa032cd6.fid\fid						
Frequency (MHz)	50.29	*Nucleus*	13C	*Number of Transients*	3399	*Original Points Count*	16000
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	25.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	4814.7378	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	15000.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 36 (DO174): ^{1}H NMR spectrum (500 MHz):

2/25/2014 1:10:23 PM

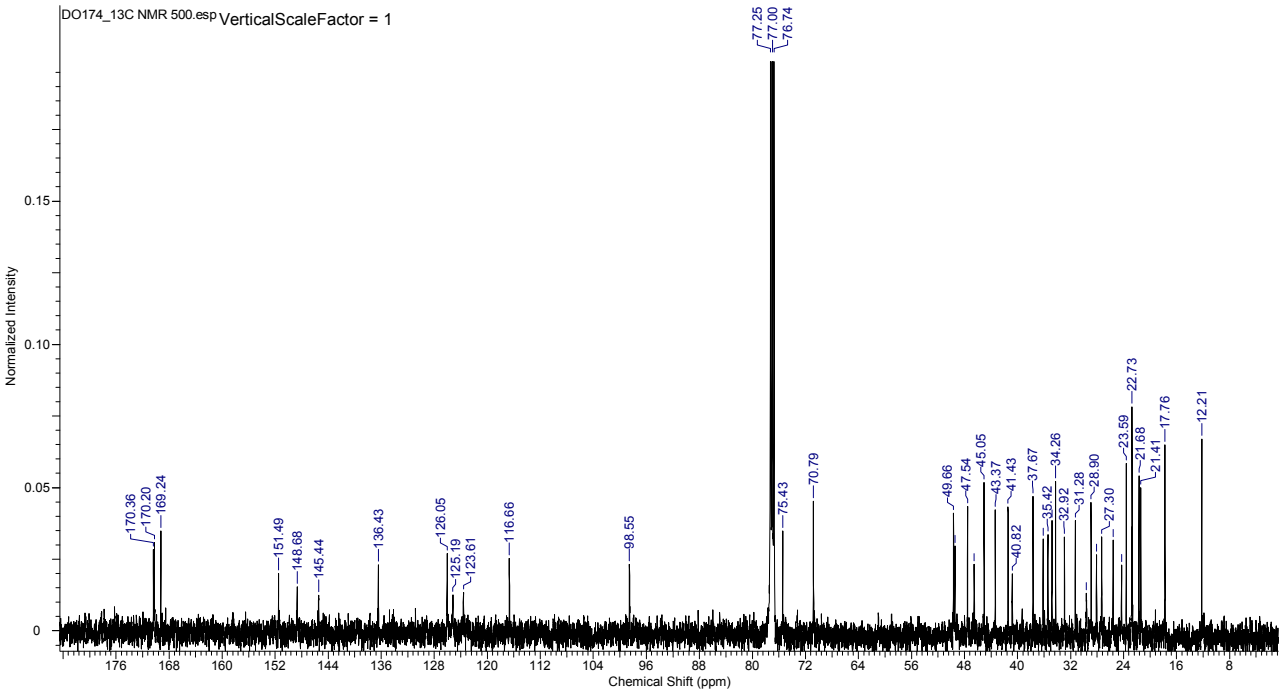
Number of Nuclei	0 H's						
Acquisition Time (sec)	2.1823	Comment	5 mm BBO BB-1H/D Z-GRD Z8007/0118			Date	19 Feb 2014 10:55:12
Date Stamp	19 Feb 2014 10:55:12						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do174\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	362.00	SW(cyclical) (Hz)	7507.51	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	3489.8513
Spectrum Type	STANDARD	Sweep Width (Hz)	7507.28	Temperature (degree C)	25.000		



Compound 36 (DO174): ^{13}C NMR spectrum (125 MHz):

2/25/2014 1:11:26 PM

Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	Comment	5 mm BBO BB-1H/D Z-GRD Z8007/0118			Date	20 Feb 2014 09:53:20
Date Stamp	20 Feb 2014 09:53:20						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do174\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	700	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	65536	Pulse Sequence	zgpg30
Receiver Gain	2050.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13830.8887
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.45	Temperature (degree C)	25.300		

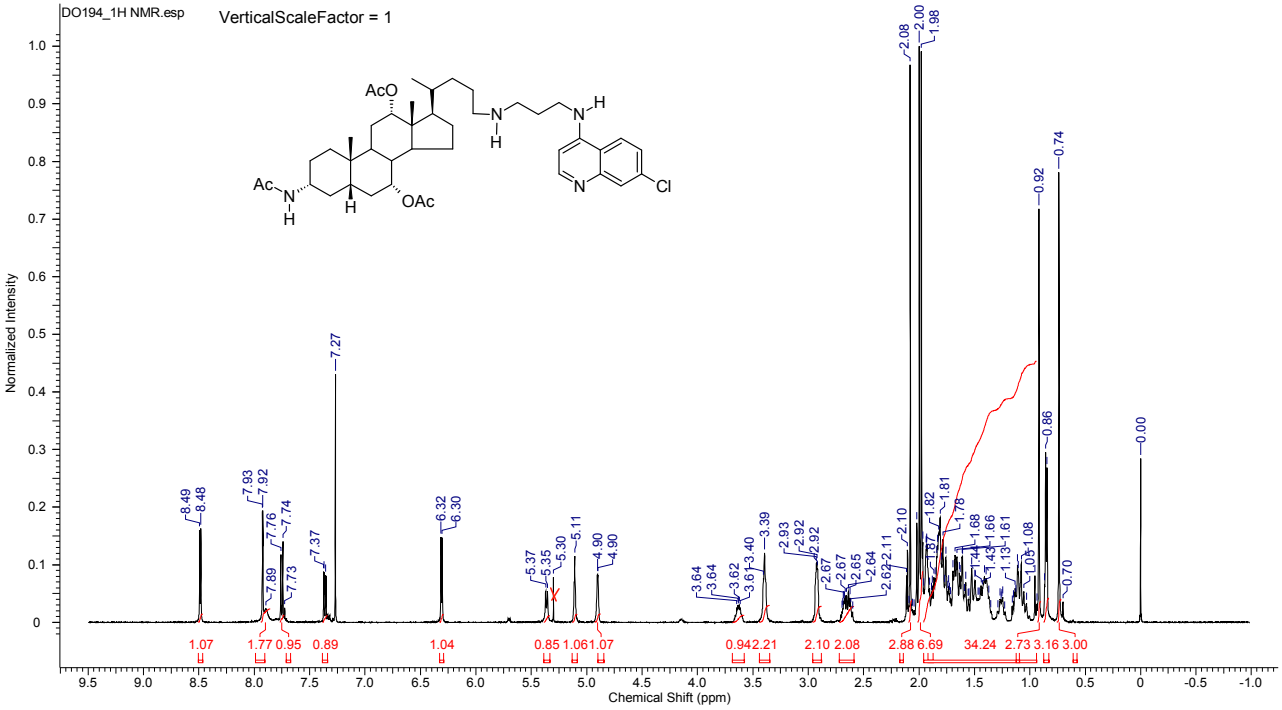


Compound 37 (DO194): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.792, area 99.09 %; method C: RT=13.145, area 95.23 %.

2/28/2014 12:10:35 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	3.1261	*Date*	18 Sep 2009 13:22:40			*Date Stamp*	18 Sep 2009 13:22:40
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DO194\1\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	181.00	*SW(cyclical) (Hz)*	5241.09	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2129.9771
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5240.93	*Temperature (degree C)*	25.000		

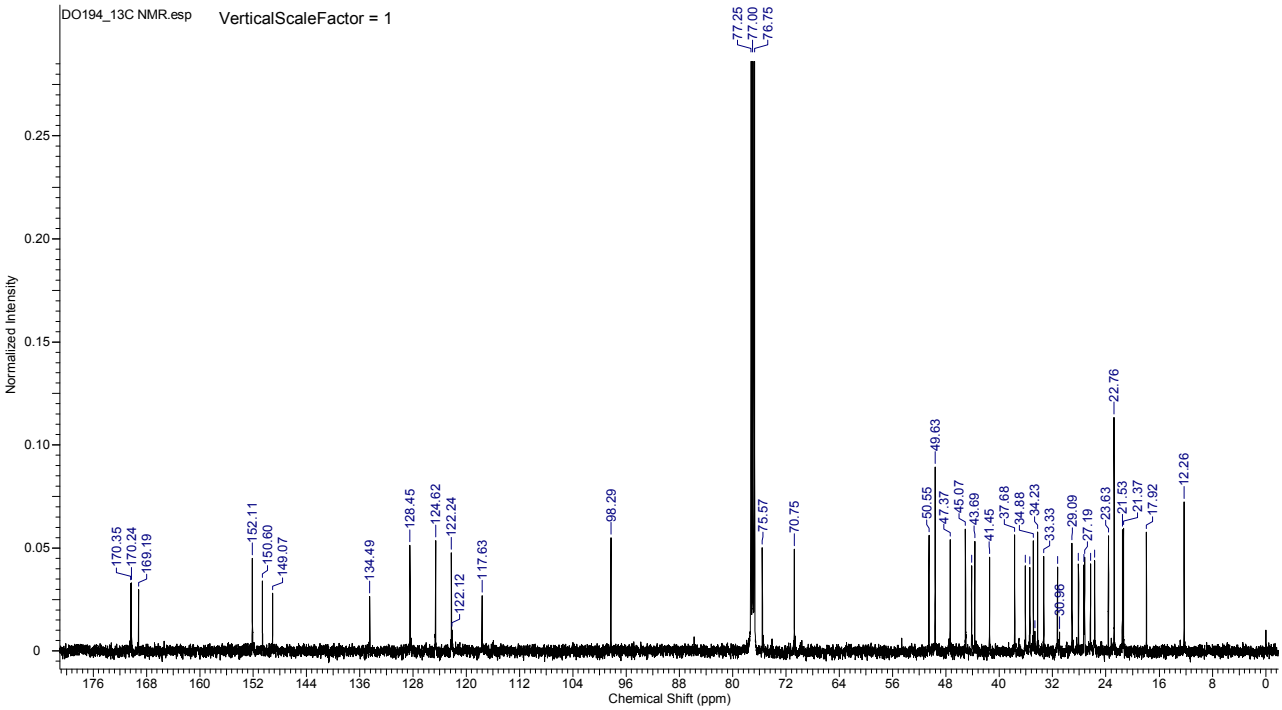


Compound 37(DO194): ^{13}C NMR spectrum (125 MHz):

2/25/2014 1:31:33 PM

Number of Nuclei 0 C's

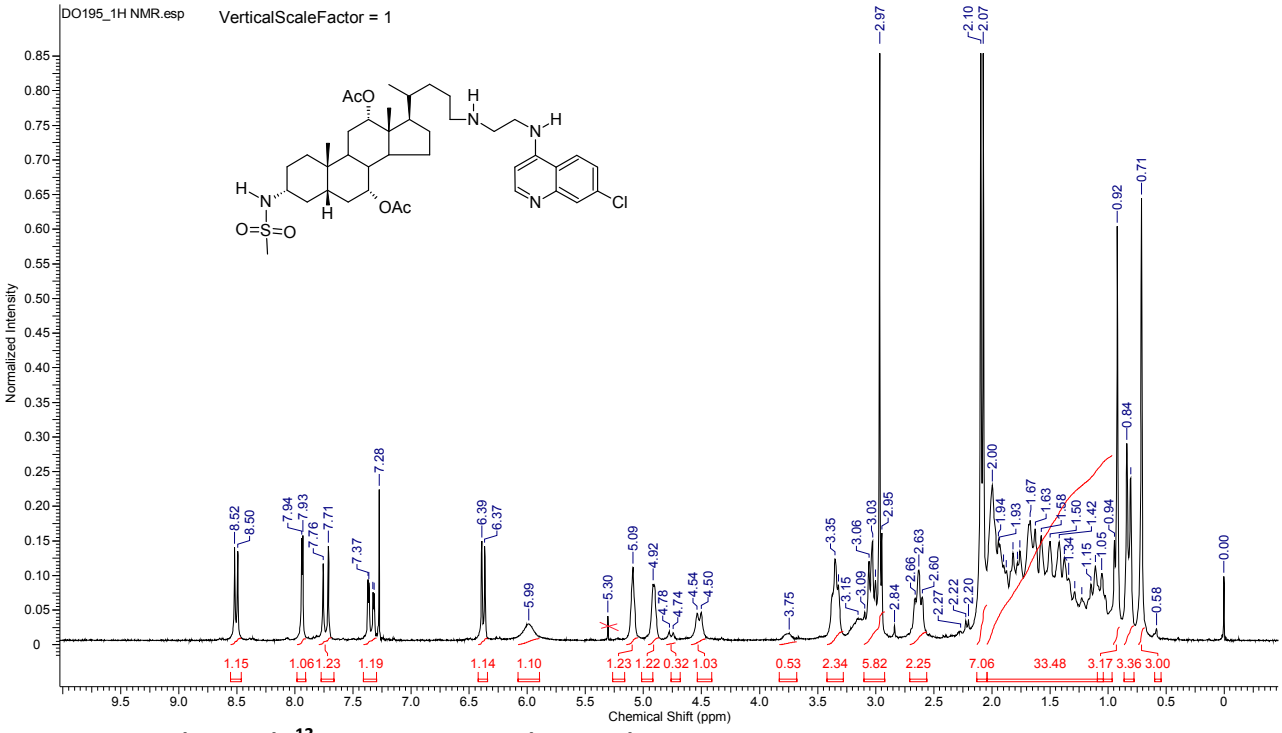
Acquisition Time (sec)	0.5505	*Date*	18 Sep 2009 13:26:56			*Date Stamp*	18 Sep 2009 13:26:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DO194\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	1815	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13832.5488
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 38 (DO195): ^{1}H NMR spectrum (200 MHz): HPLC purity: method A: RT 1.884, area 98.92 %; method C: RT 10.467, area 98.11 %.

2/25/2014 1:34:49 PM

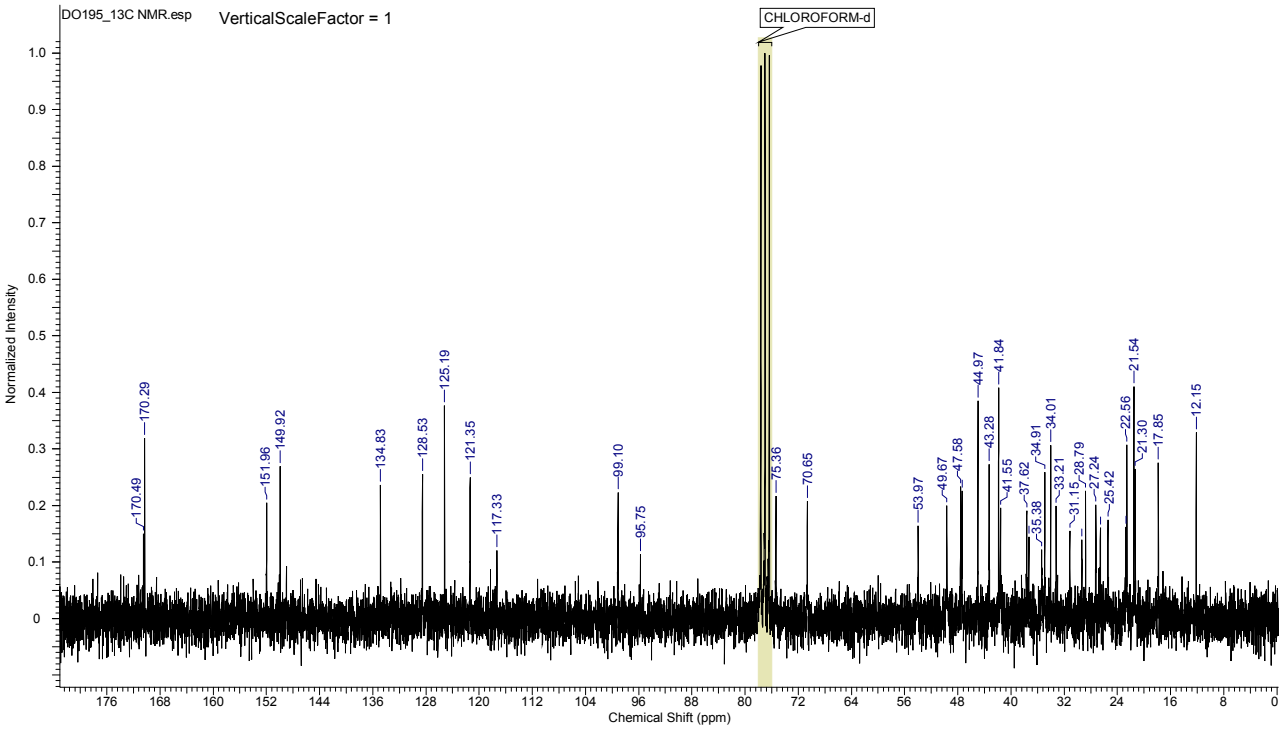
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.3913	Comment	DO195	Date	Oct 28 09	Date Stamp	Oct 28 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO195\hdo195.fid\fid						
Frequency (MHz)	199.97	Nucleus	1H	Number of Transients	128	Original Points Count	6400
Points Count	8192	Pulse Sequence	s2pul	Receiver Gain	11.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	1686.7415	Spectrum Type	STANDARD	Sweep Width (Hz)	4600.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 38 (DO195): ^{13}C NMR spectrum (50 MHz):

2/28/2014 12:30:31 PM

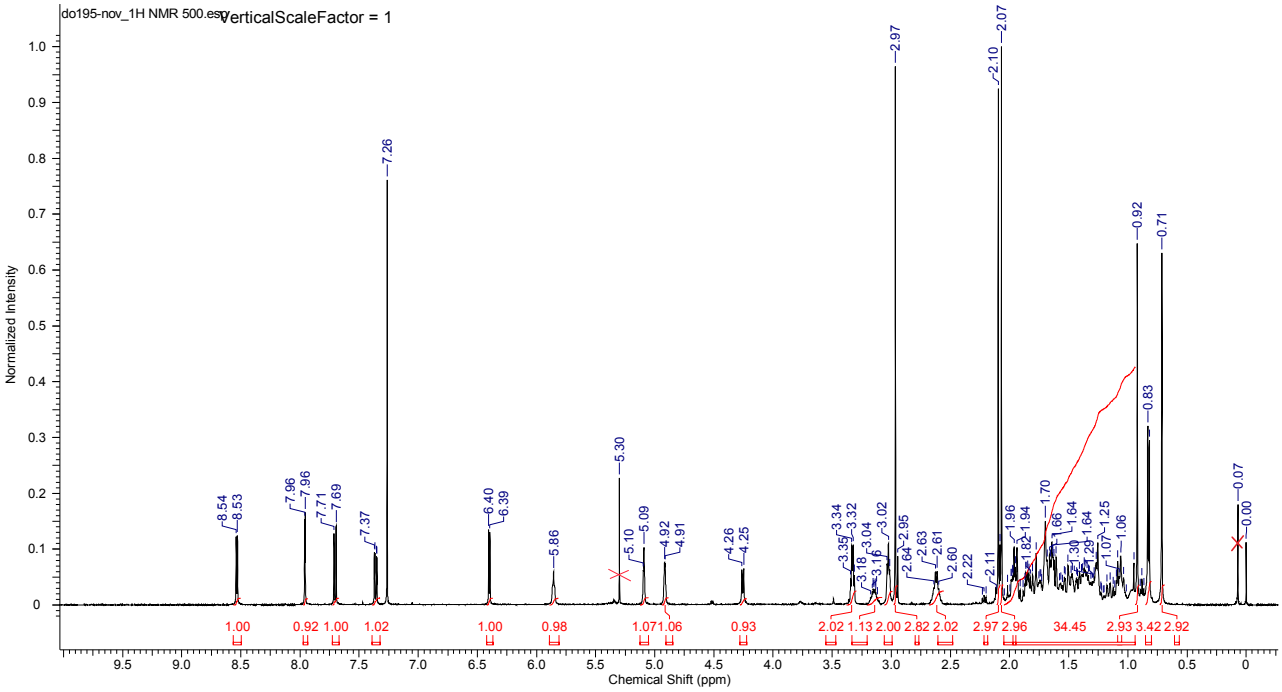
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.0667	Comment	DO195	Date	Oct 28 09	Date Stamp	Oct 28 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO195\cdo195.fid\fid						
Frequency (MHz)	50.29	Nucleus	13C	Number of Transients	2797	Original Points Count	16000
Points Count	16384	Pulse Sequence	s2pul	Receiver Gain	25.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	4814.7378	Spectrum Type	STANDARD	Sweep Width (Hz)	15000.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 38 (DO195): ^{1}H NMR spectrum (500 MHz):

2/25/2014 1:38:48 PM

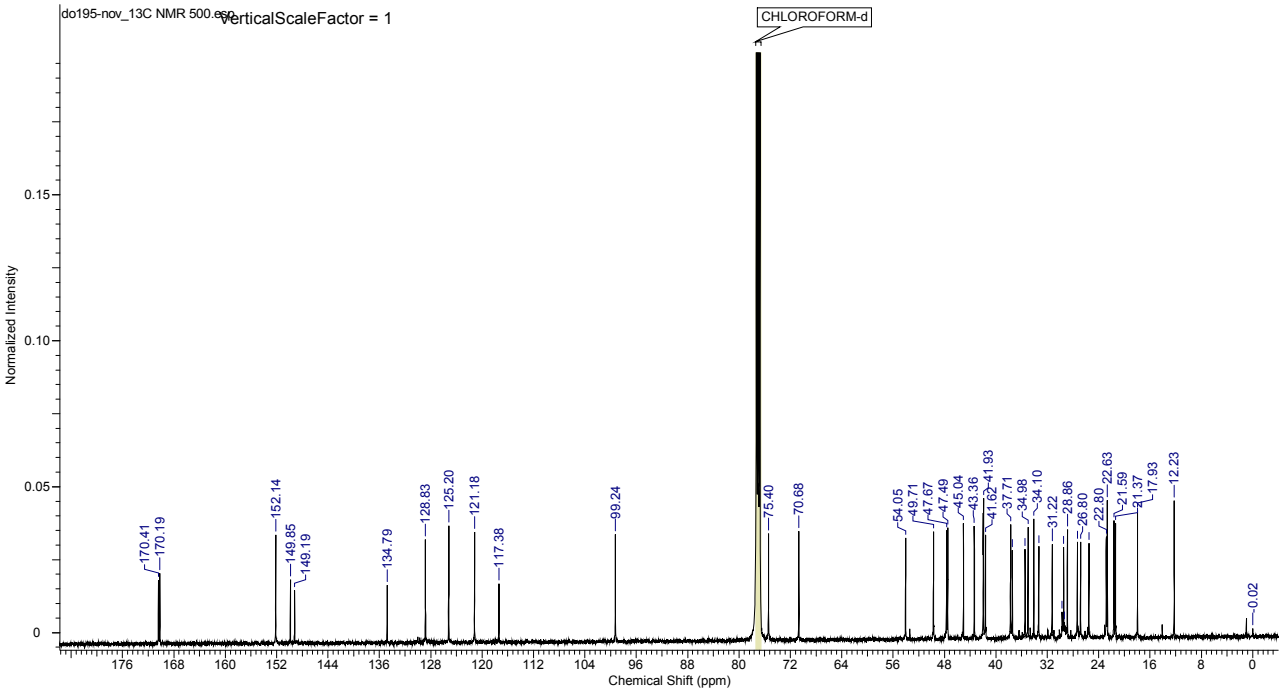
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:53:04
Date Stamp	22 Feb 2014 10:53:04						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do195-nov\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	42	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3488.3303
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	25.000		



Compound 38 (DO195): ^{13}C NMR spectrum (125 MHz):

2/28/2014 12:52:01 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	22 Feb 2014 10:57:20
Date Stamp	22 Feb 2014 10:57:20						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do195-nov\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Origin***	spect	***Original Points Count***	16384
Owner	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30	***Receiver Gain***	2050.00
SW(cyclical) (Hz)	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13833.2148	***Spectrum Type***	STANDARD
Sweep Width (Hz)	29761.45	***Temperature (degree C)***	25.100				

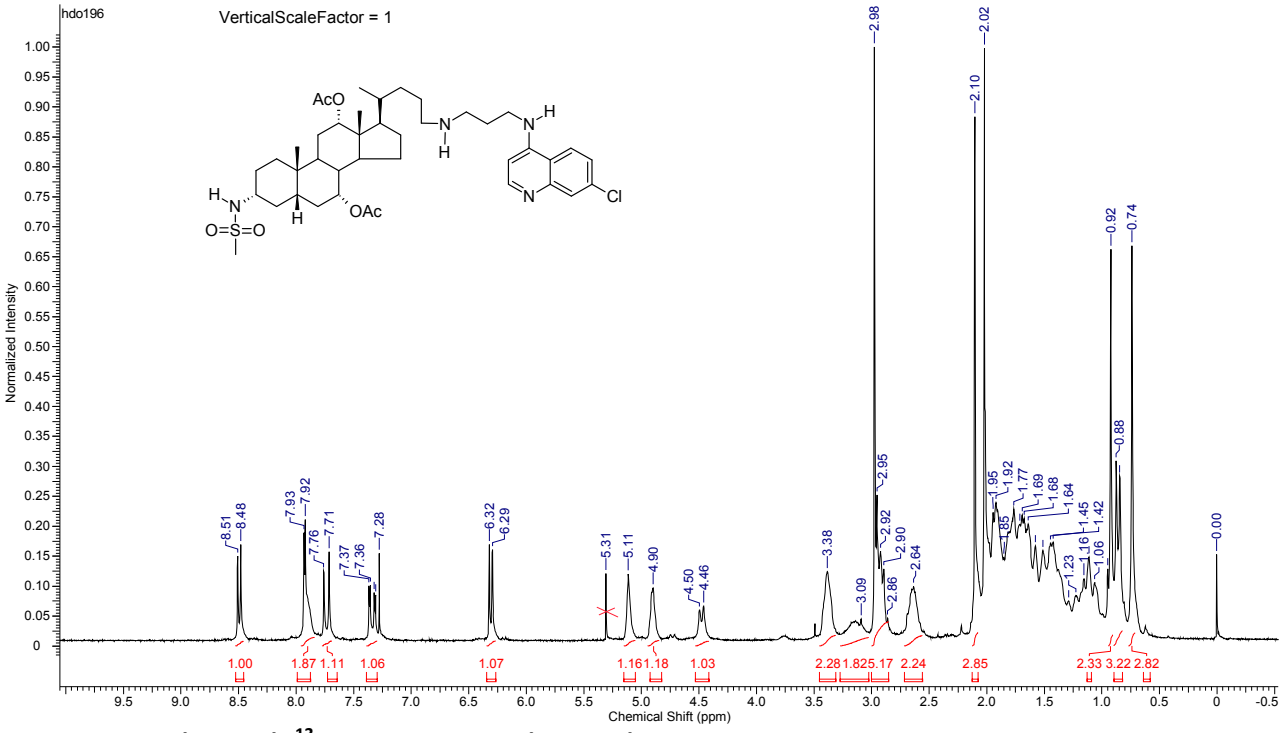


Compound 39 (DO196): ^{1}H NMR spectrum (200 MHz): HPLC purity: method A: RT 1.773, area 98.86 %; method B: RT 1.843, area 98.21 %.

2/26/2014 4:51:59 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	1.3913	*Comment*	DO196	*Date*	Dec 17 09	*Date Stamp*	Dec 17 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO196\hdo196.fid\fid						
Frequency (MHz)	199.97	*Nucleus*	1H	*Number of Transients*	128	*Original Points Count*	6400
Points Count	8192	*Pulse Sequence*	s2pul	*Receiver Gain*	11.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	1686.7415	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	4600.00	*Temperature (degree C)*	AMBIENT TEMPERATURE

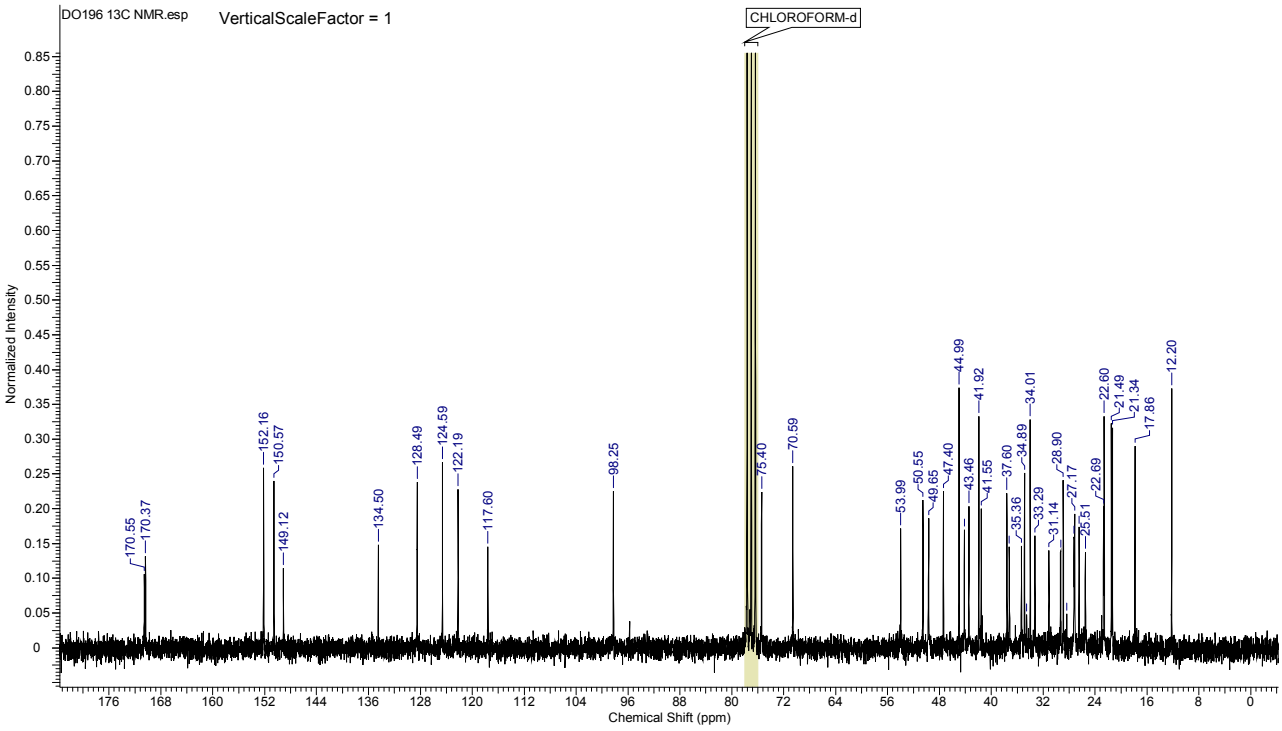


Compound 39 (DO196): ^{13}C NMR spectrum (50 MHz):

2/28/2014 12:59:50 PM

Number of Nuclei 0 C's

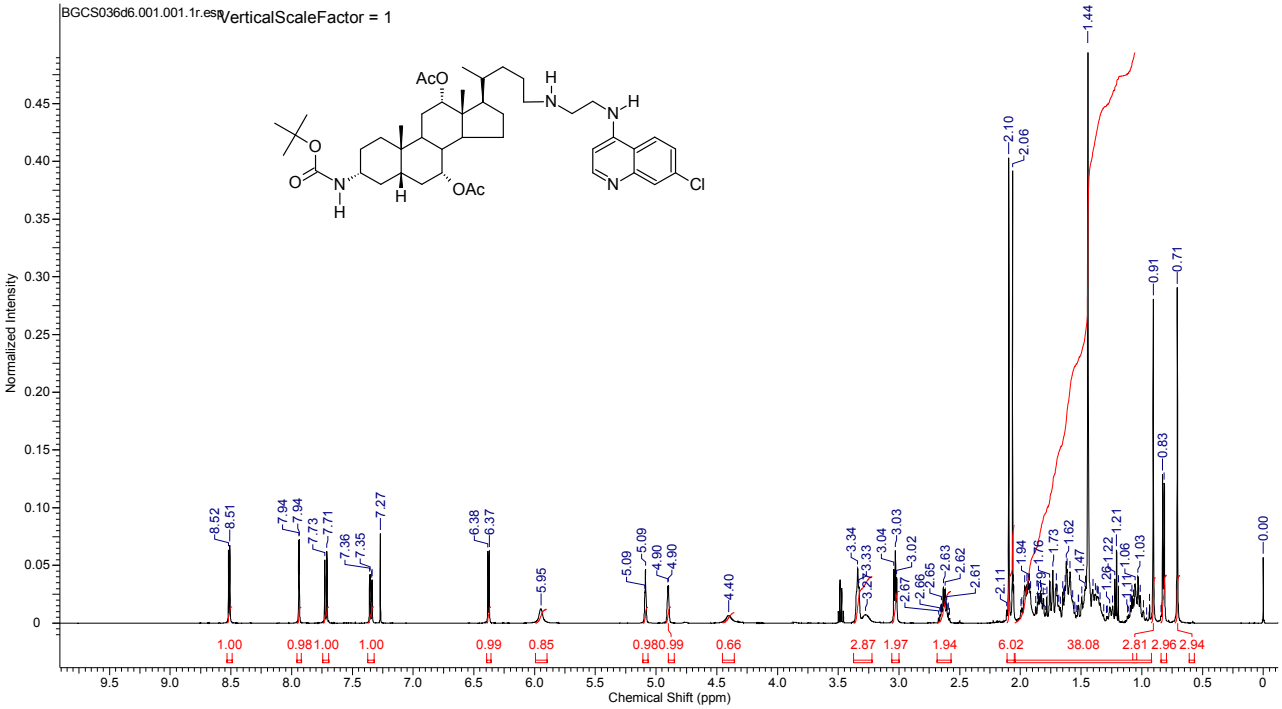
Acquisition Time (sec)	1.0667	*Comment*	DO196	*Date*	Dec 17 09	*Date Stamp*	Dec 17 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO196\cdo196.fid\fid						
Frequency (MHz)	50.29	*Nucleus*	13C	*Number of Transients*	16400	*Original Points Count*	16000
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	25.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	4814.7378	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	15000.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 40 (DO179): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 2.085, area 99.22 %; method B: RT 8.856, area 95.25 %.

2/26/2014 6:46:29 PM

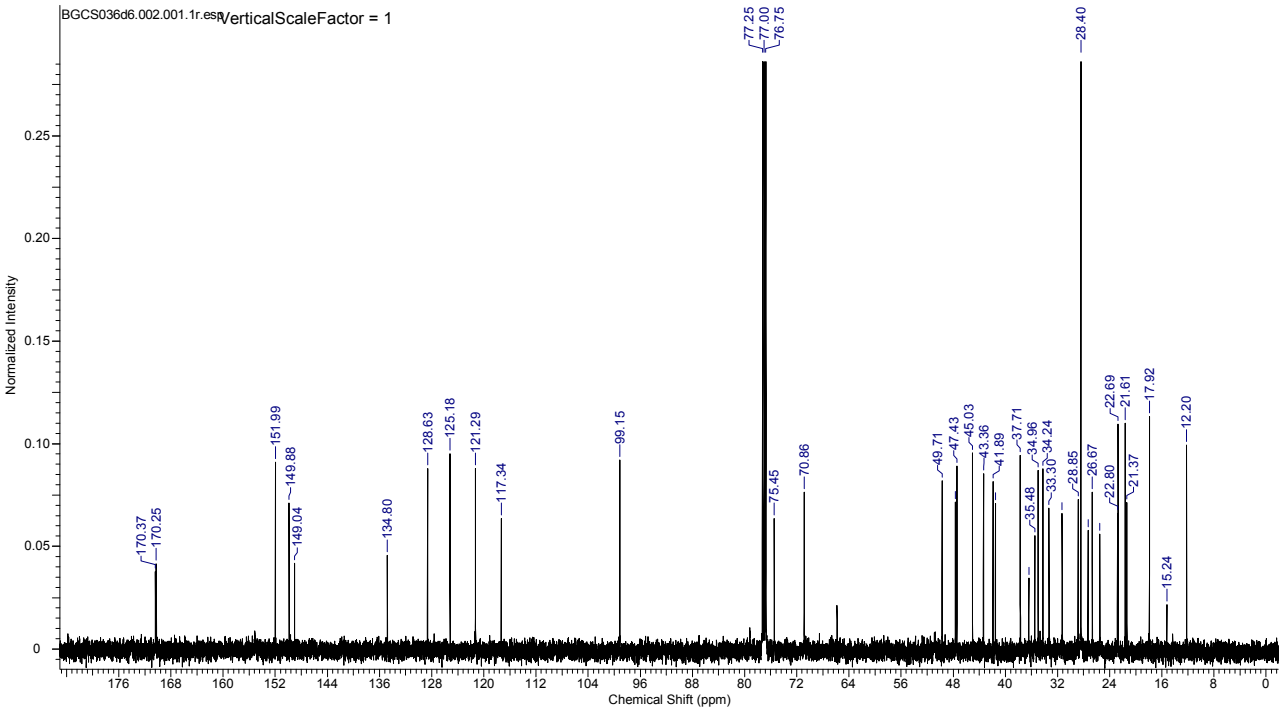
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.7263	***Date***	03 Mar 2008 14:13:36			***Date Stamp***	03 Mar 2008 14:13:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO179\BGCS036d6\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	16384	***Pulse Sequence***	zg30
Receiver Gain	114.00	***SW(cyclical) (Hz)***	6009.62	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	2554.9321
Spectrum Type	STANDARD	***Sweep Width (Hz)***	6009.25	***Temperature (degree C)***	25.000		



Compound 40 (DO179): ^{13}C NMR spectrum (125 MHz):

2/26/2014 6:47:45 PM

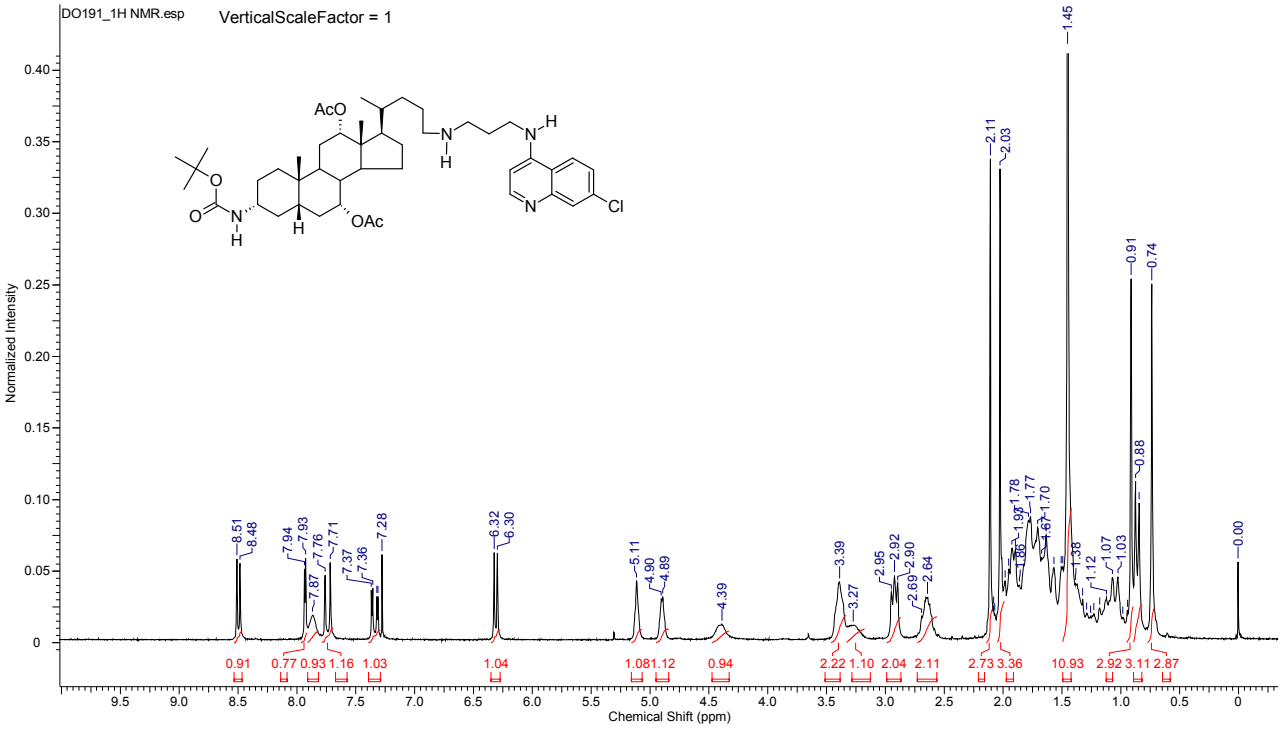
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.1010	***Date***	03 Mar 2008 14:22:08			***Date Stamp***	03 Mar 2008 14:22:08
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO179\BGCS036d6\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	536	***Origin***	spect
Original Points Count	32768	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	1030.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13833.4551
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		



Compound 41 (DO191): ^{1}H NMR spectrum (200 MHz): HPLC purity: method A: RT 1.952, area 98.07 %; method C: RT 15.915, area 98.61 %.

2/25/2014 1:45:15 PM

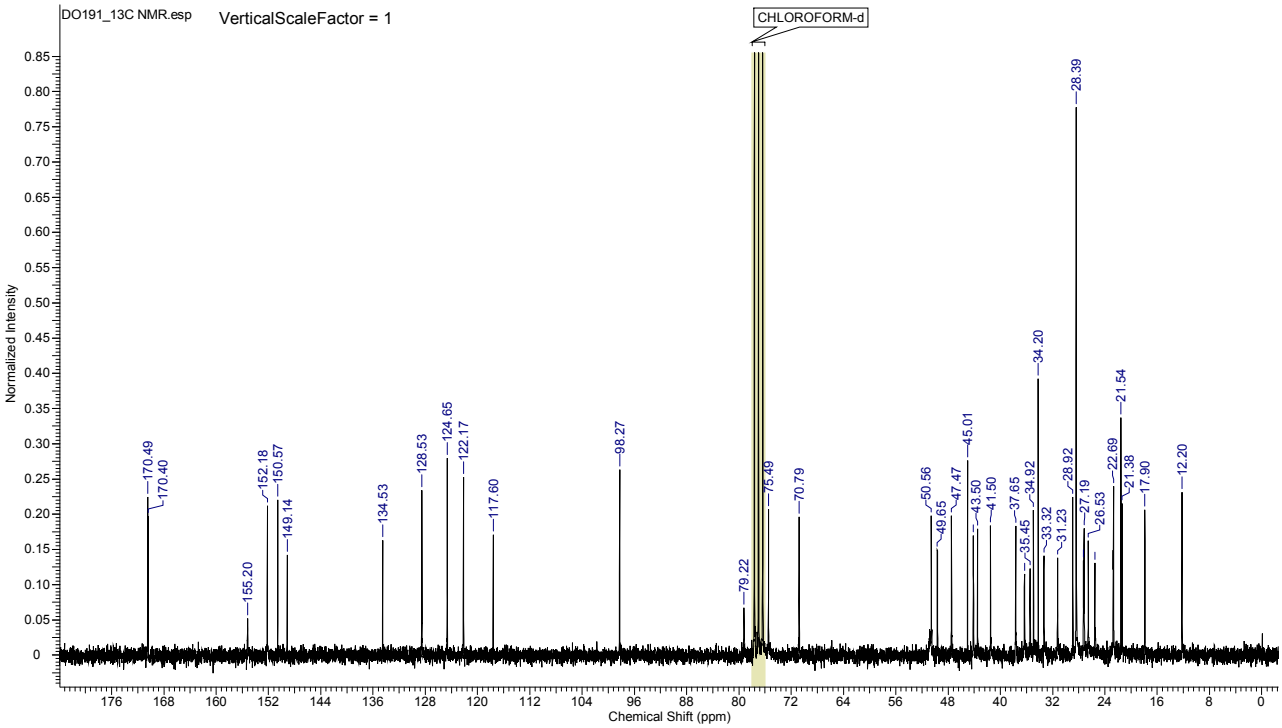
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.3913	Comment	VF1	Date	Aug 22 09	Date Stamp	Aug 22 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO191\hvf1.fid\fid						
Frequency (MHz)	199.97	Nucleus	1H	Number of Transients	128	Original Points Count	6400
Points Count	8192	Pulse Sequence	s2pul	Receiver Gain	11.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	1686.7415	Spectrum Type	STANDARD	Sweep Width (Hz)	4600.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 41 (DO191): ^{13}C NMR spectrum (50 MHz):

2/28/2014 1:48:21 PM

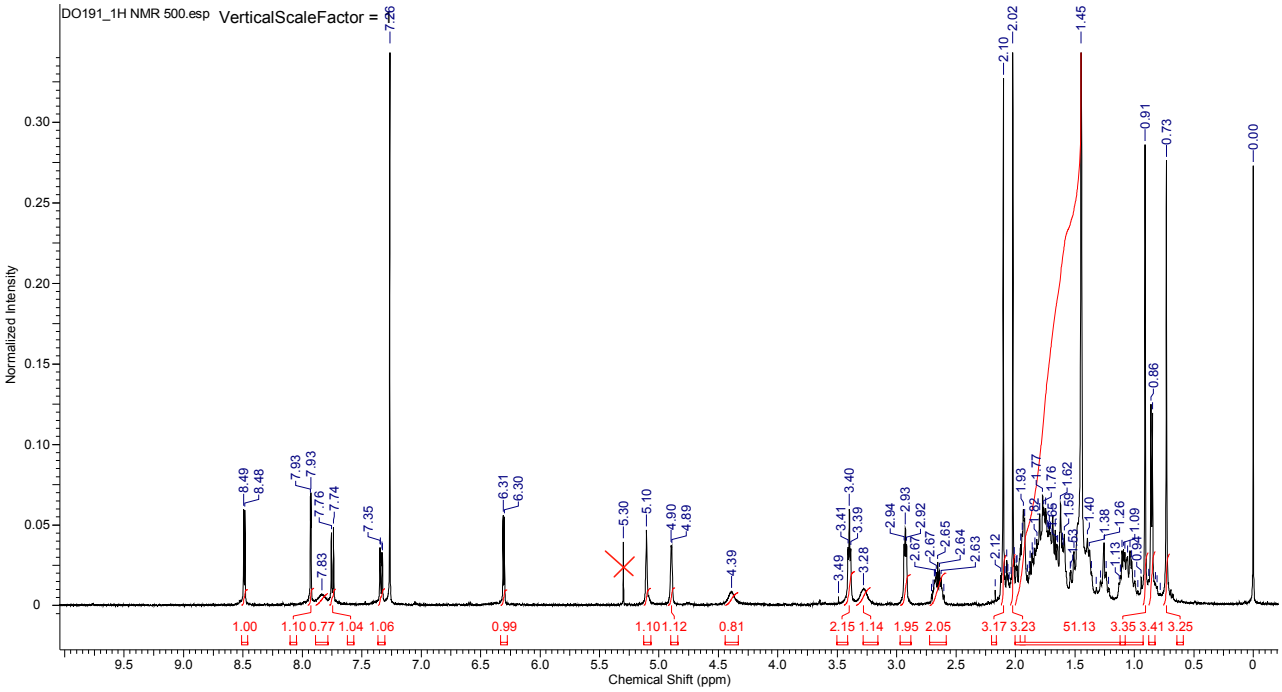
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.0667	Comment	VF1	Date	Aug 22 09	Date Stamp	Aug 22 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\DO191\cvf1.fid\fid						
Frequency (MHz)	50.29	Nucleus	13C	Number of Transients	24000	Original Points Count	16000
Points Count	16384	Pulse Sequence	s2pul	Receiver Gain	25.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	4815.6533	Spectrum Type	STANDARD	Sweep Width (Hz)	15000.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 41 (DO191): ^{1}H NMR spectrum (500 MHz):

2/25/2014 1:48:04 PM

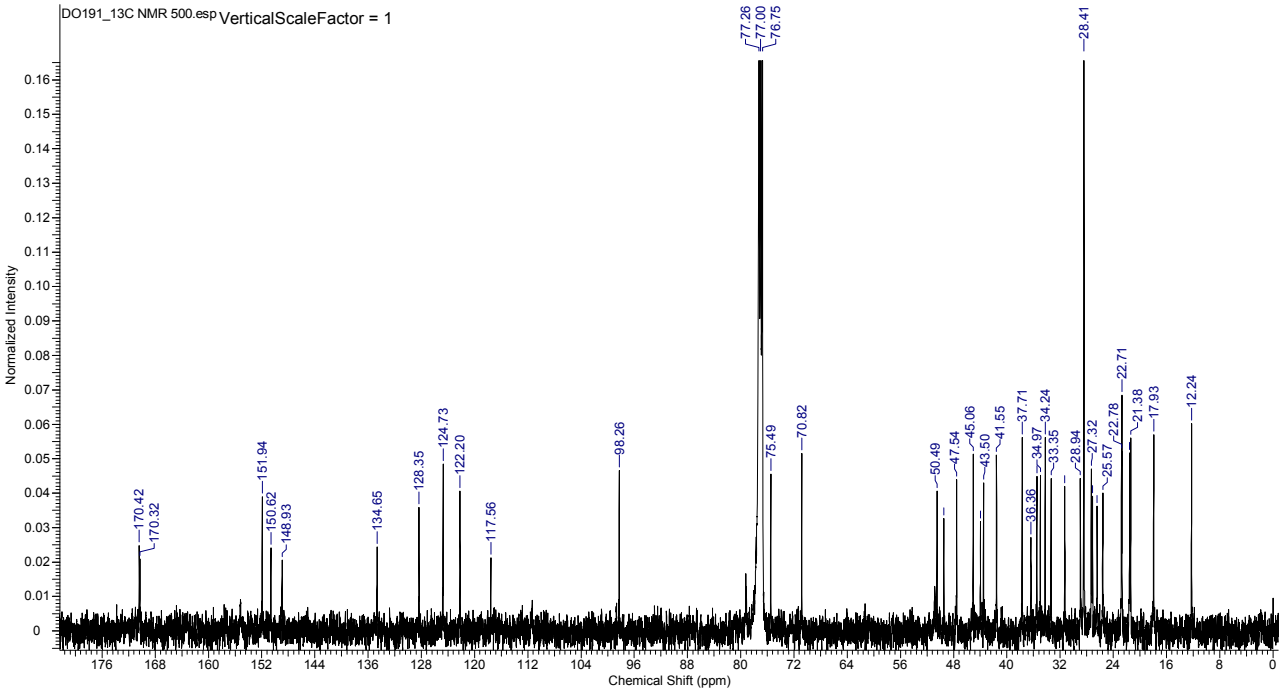
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	19 Feb 2014 10:50:56
Date Stamp	19 Feb 2014 10:50:56						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do191\1\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	362.00	***SW(cyclical) (Hz)***	7507.51	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	3489.0959
Spectrum Type	STANDARD	***Sweep Width (Hz)***	7507.28	***Temperature (degree C)***	27.000		



Compound 41 (DO191): ^{13}C NMR spectrum (125 MHz):

2/25/2014 1:49:22 PM

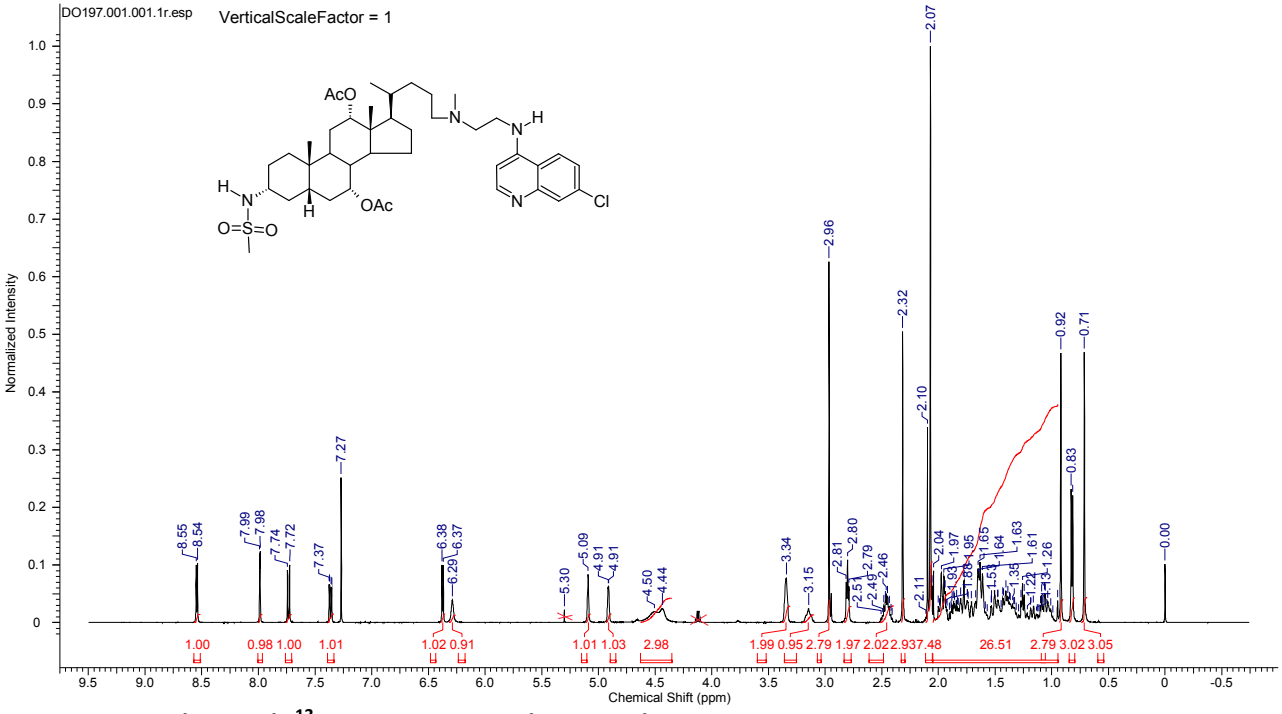
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Comment***	5 mm BBO BB-1H/D Z-GRD Z8007/0118			***Date***	20 Feb 2014 15:06:56
Date Stamp	20 Feb 2014 15:06:56						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do191\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	1687	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	65536	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13832.2607
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.45	***Temperature (degree C)***	25.200		



Compound 42 (DO197): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.868, area 99.31 %; method B: RT 1.859, area 98.31 %.

2/26/2014 5:06:15 PM

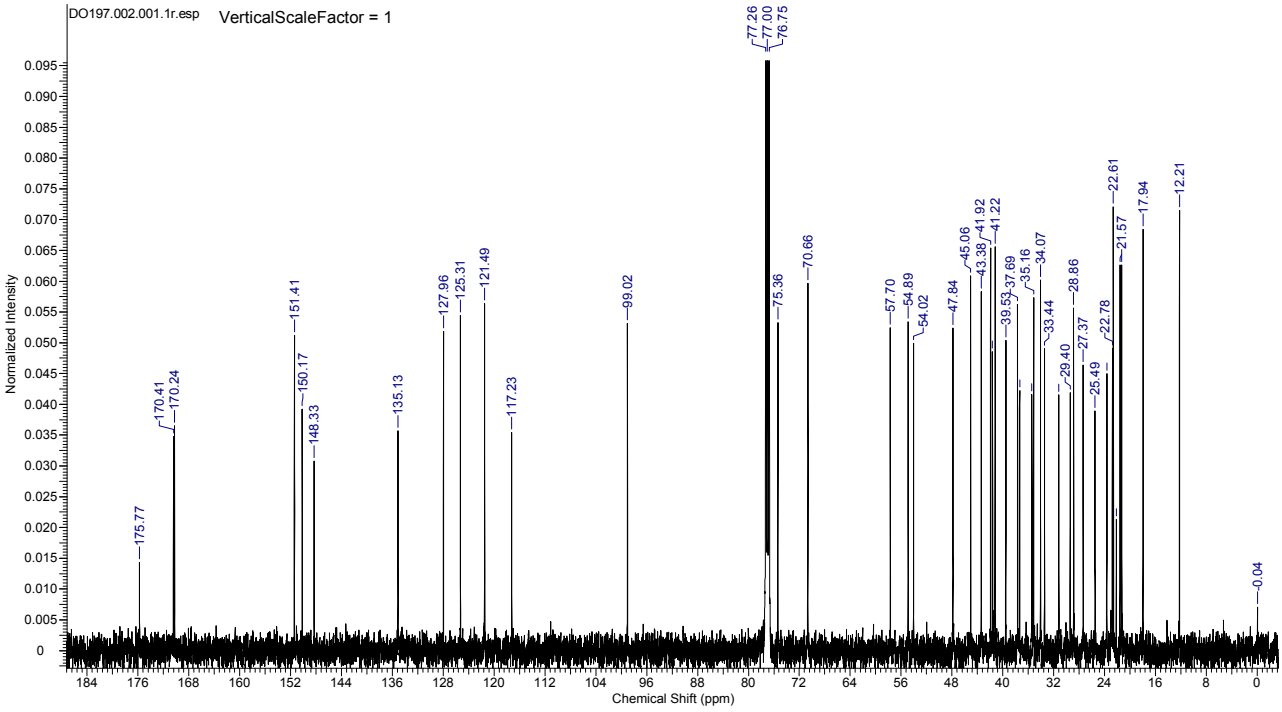
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.1982	Date	04 Nov 2009 12:26:56			Date Stamp	04 Nov 2009 12:26:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO197\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	101.00	SW(cyclical) (Hz)	5122.95	Solvent	CHLOROFORM-d		
Spectrum Offset (Hz)	2190.0869	Spectrum Type	STANDARD	Sweep Width (Hz)	5122.79	Temperature (degree C)	24.900



Compound 42 (DO197): ^{13}C NMR spectrum (125 MHz):

2/26/2014 5:08:26 PM

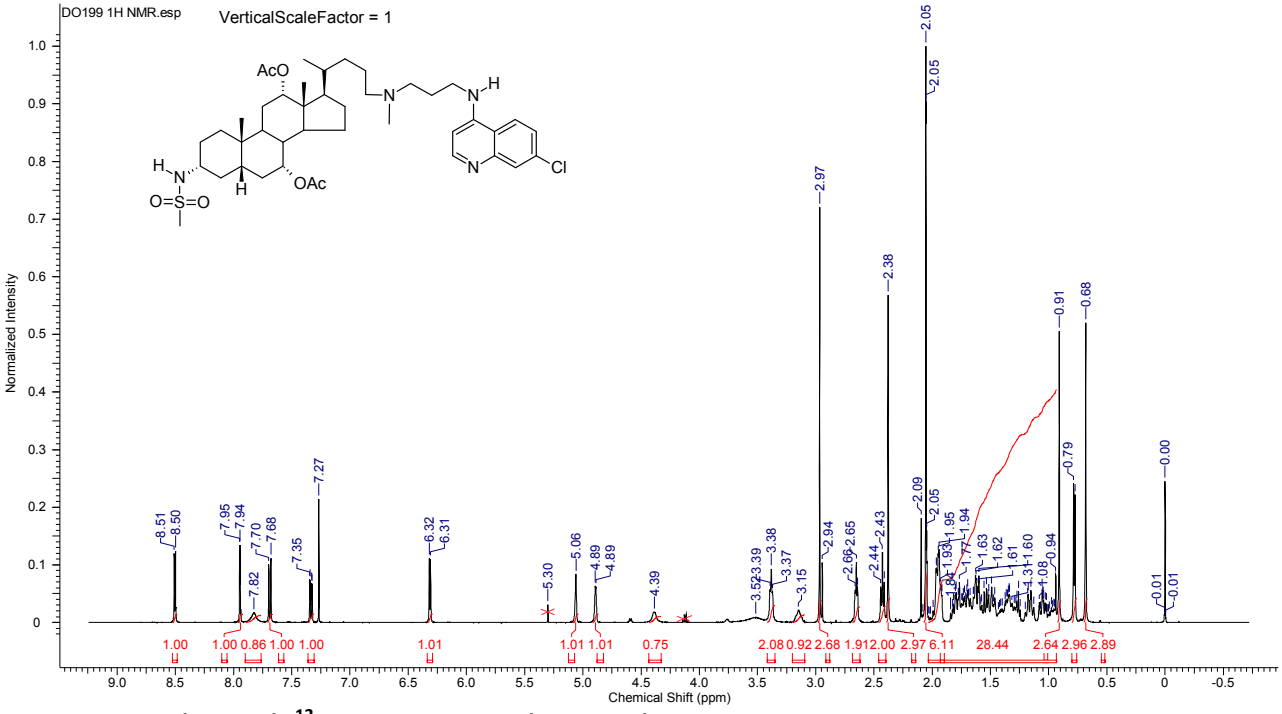
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	Date	04 Nov 2009 12:35:28			Date Stamp	04 Nov 2009 12:35:28
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO197\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	1027	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1440.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13831.9326
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 43 (DO199): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.879, area 99.37 %; method B: RT 1.866, area 99.37 %.

2/28/2014 3:21:13 PM

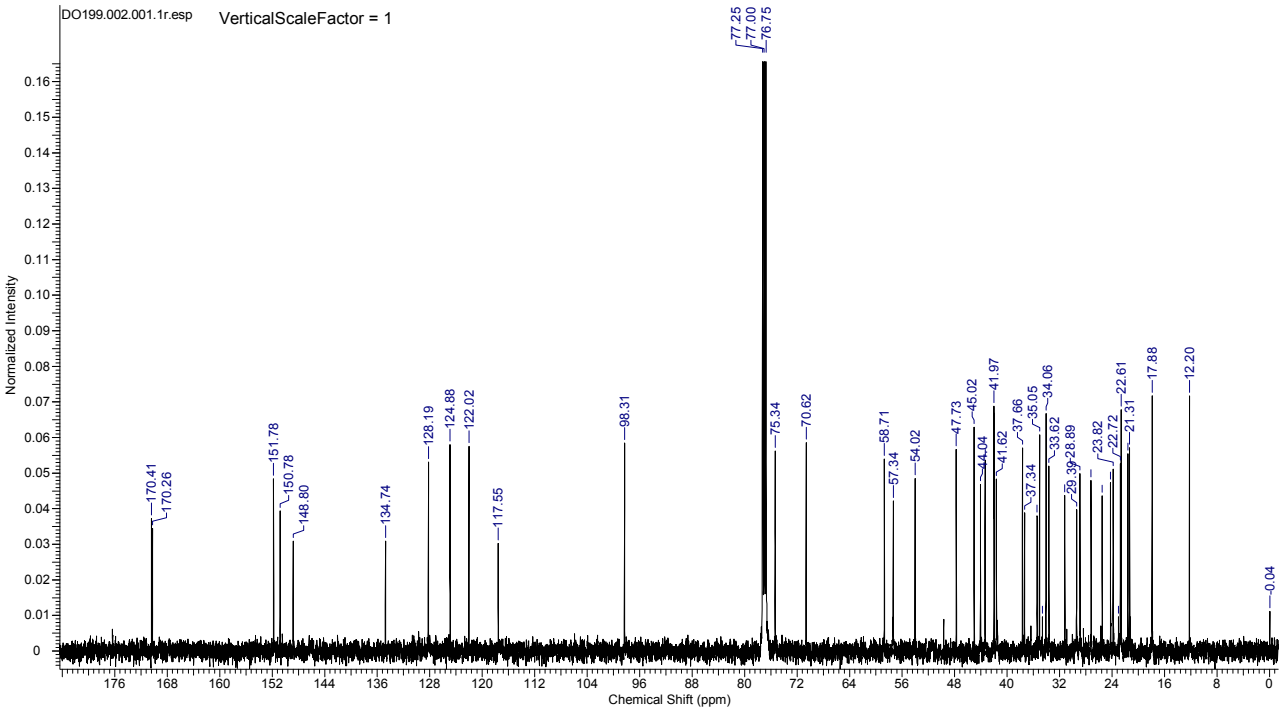
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.2855	***Date***	11 Jan 2010 11:16:32			***Date Stamp***	11 Jan 2010 11:16:32
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO199\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	16384	***Pulse Sequence***	zg30
Receiver Gain	144.00	***SW(cyclical) (Hz)***	4986.70	***Solvent***	CHLOROFORM-d		
Spectrum Offset (Hz)	2131.6174	***Spectrum Type***	STANDARD	***Sweep Width (Hz)***	4986.40	***Temperature (degree C)***	25.000



Compound 43 (DO199): ^{13}C NMR spectrum (125 MHz):

2/26/2014 5:21:25 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	11 Jan 2010 11:27:12			***Date Stamp***	11 Jan 2010 11:27:12
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO199\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	1216	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	912.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13832.2471
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		

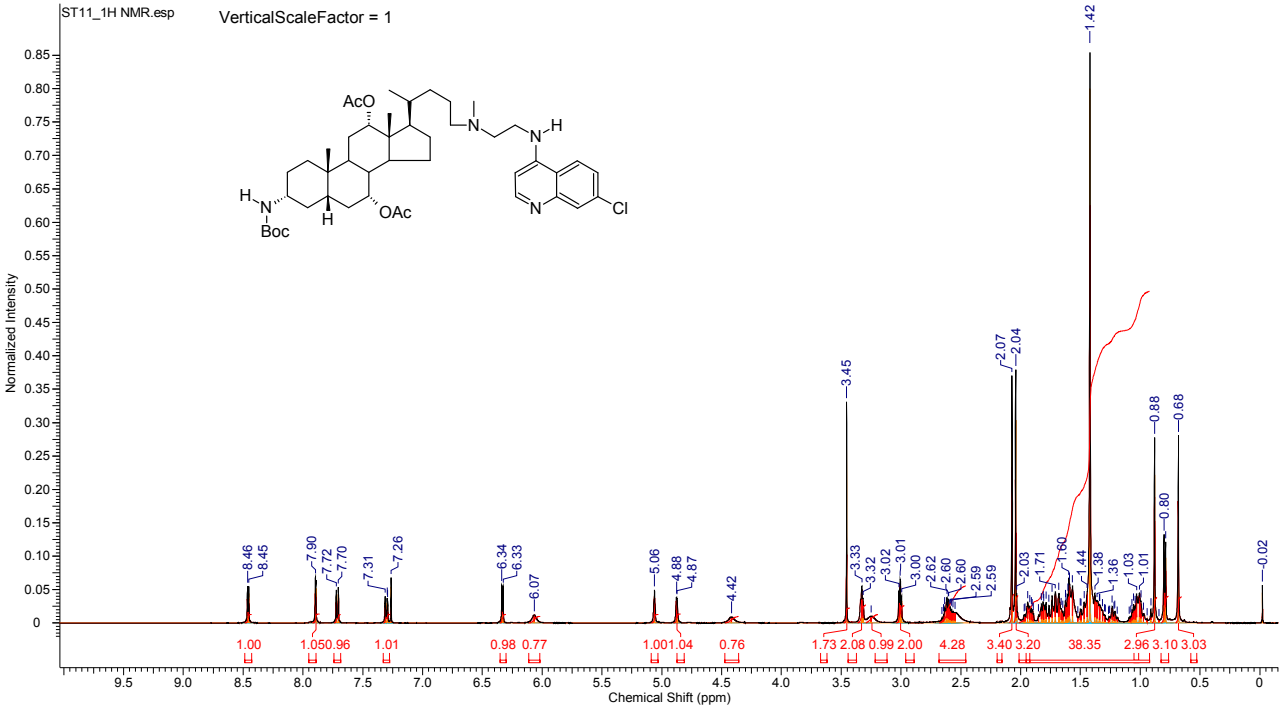


Compound 44 (ST11): ^{1}H NMR spectrum (500 MHz): HPLC purity: method A: RT 1.994, area 99.12 %; method C: RT 9.936, area 98.20 %.

2/25/2014 2:07:18 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	2.5166	*Date*	19 Mar 2012 09:46:56			*Date Stamp*	19 Mar 2012 09:46:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\JKAA074-3\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	11	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	57.00	*SW(cyclical) (Hz)*	6510.42	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2753.9351
Spectrum Type	STANDARD	*Sweep Width (Hz)*	6510.22	*Temperature (degree C)*	25.000		

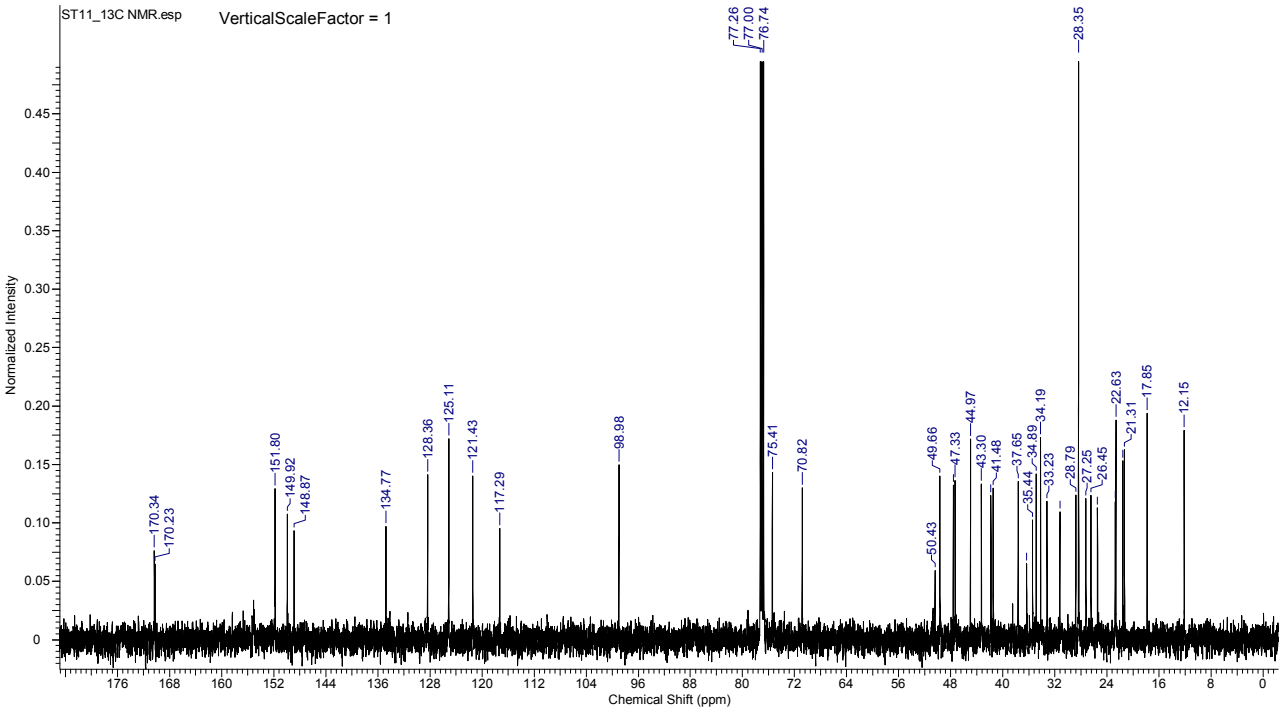


Compound 44 (ST11): ^{13}C NMR spectrum (125 MHz):

2/25/2014 2:08:41 PM

Number of Nuclei 0 C's

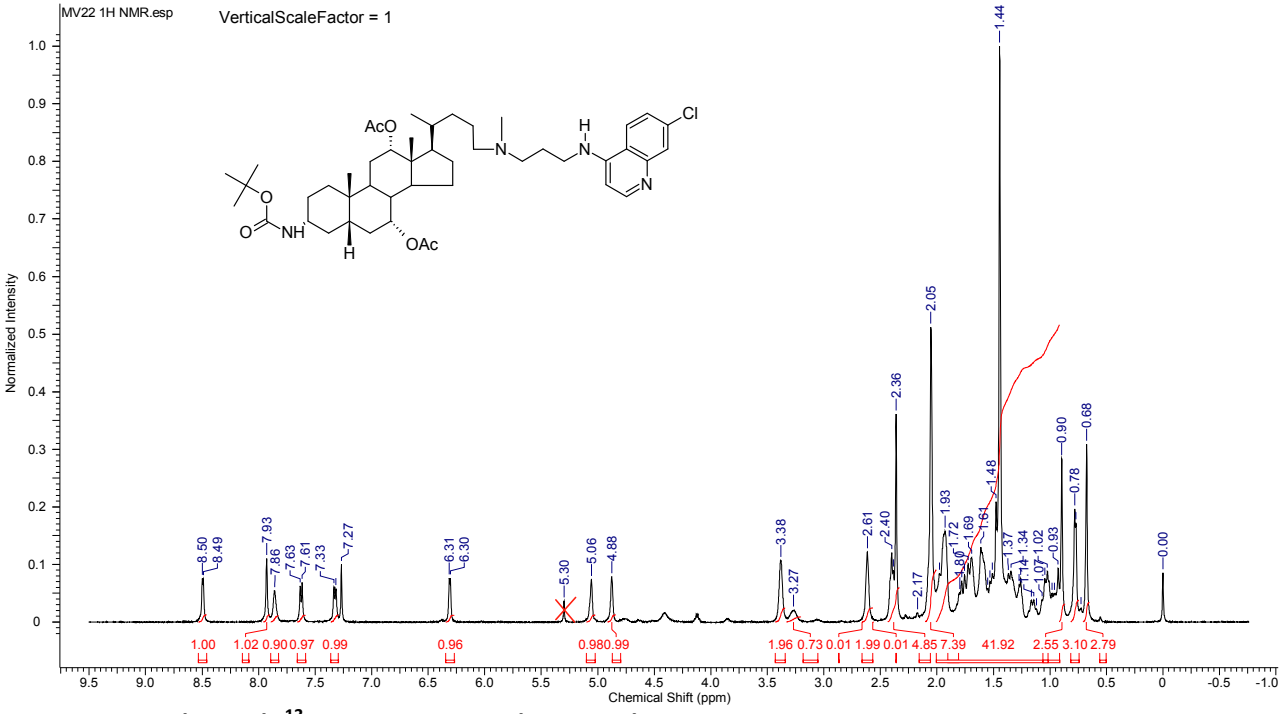
Acquisition Time (sec)	0.5505	*Date*	19 Mar 2012 09:51:12			*Date Stamp*	19 Mar 2012 09:51:12
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\JKAA074-3\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	78	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13827.5557
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.100		



Compound 45 (MV22): ^{1}H NMR spectrum (500 MHz): HPLC purity: method C: RT 7.896, area 96.46; method D: RT 5.553, area 96.83 %.

2/26/2014 7:22:00 PM

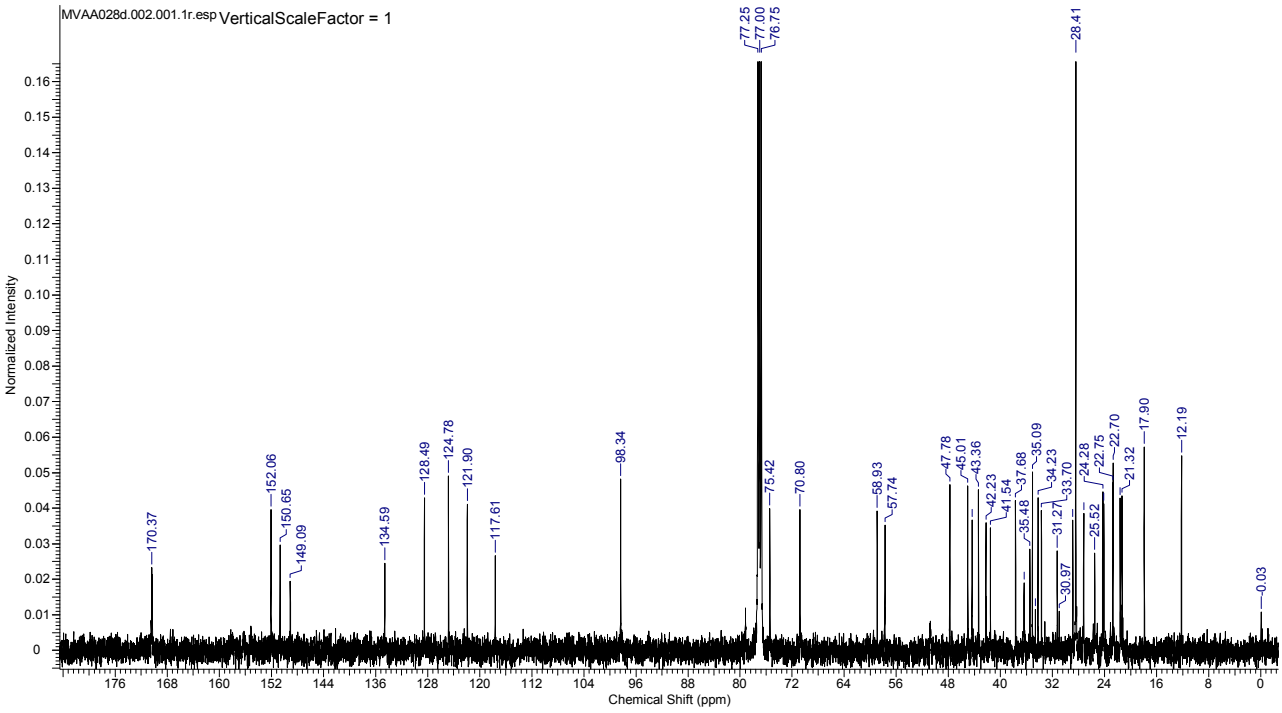
Number of Nuclei	0 H's						
Acquisition Time (sec)	3.1894	Date	10 Dec 2009 16:28:00			Date Stamp	10 Dec 2009 16:28:00
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV22\MVAA028d\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	144.00	SW(cyclical) (Hz)	5136.99	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2186.4534
Spectrum Type	STANDARD	Sweep Width (Hz)	5136.83	Temperature (degree C)	25.000		



Compound 45 (MV22): ^{13}C NMR spectrum (125 MHz):

2/26/2014 5:26:36 PM

Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	Date	10 Dec 2009 16:34:24			Date Stamp	10 Dec 2009 16:34:24
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV22\MVAA028d\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	835	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	812.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13832.5371
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		

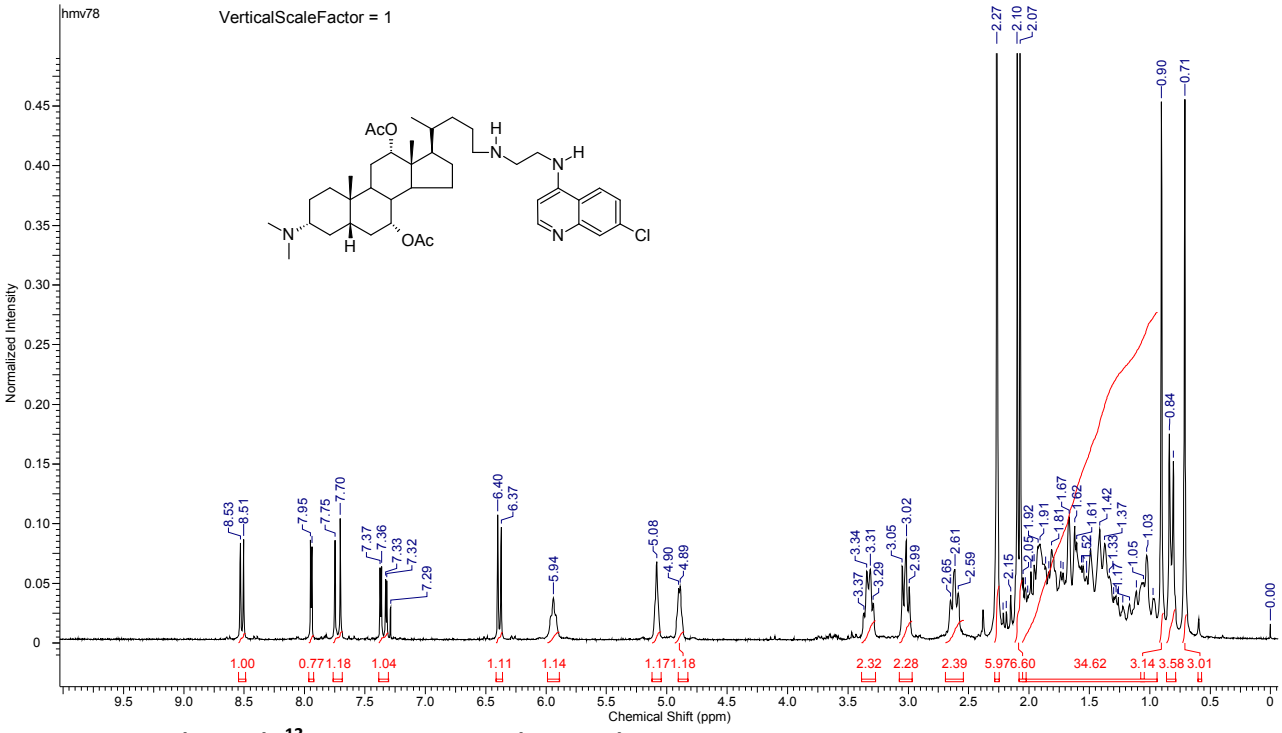


Compound 50 (MV78): ^{1}H NMR spectrum (200 MHz). HPLC purity: method A: RT 1.925, area 98.15 %; method B: RT 7.942, area 96.45 %.

2/26/2014 7:26:32 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	1.3878	Comment	MV78	Date	Feb 11 11	Date Stamp	Feb 11 11
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV78\hmv78.fid\fid						
Frequency (MHz)	199.97	Nucleus	1H	Number of Transients	32	Original Points Count	6384
Points Count	8192	Pulse Sequence	s2pul	Receiver Gain	4.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	1689.5496	Spectrum Type	STANDARD	Sweep Width (Hz)	4600.00	Temperature (degree C)	AMBIENT TEMPERATURE

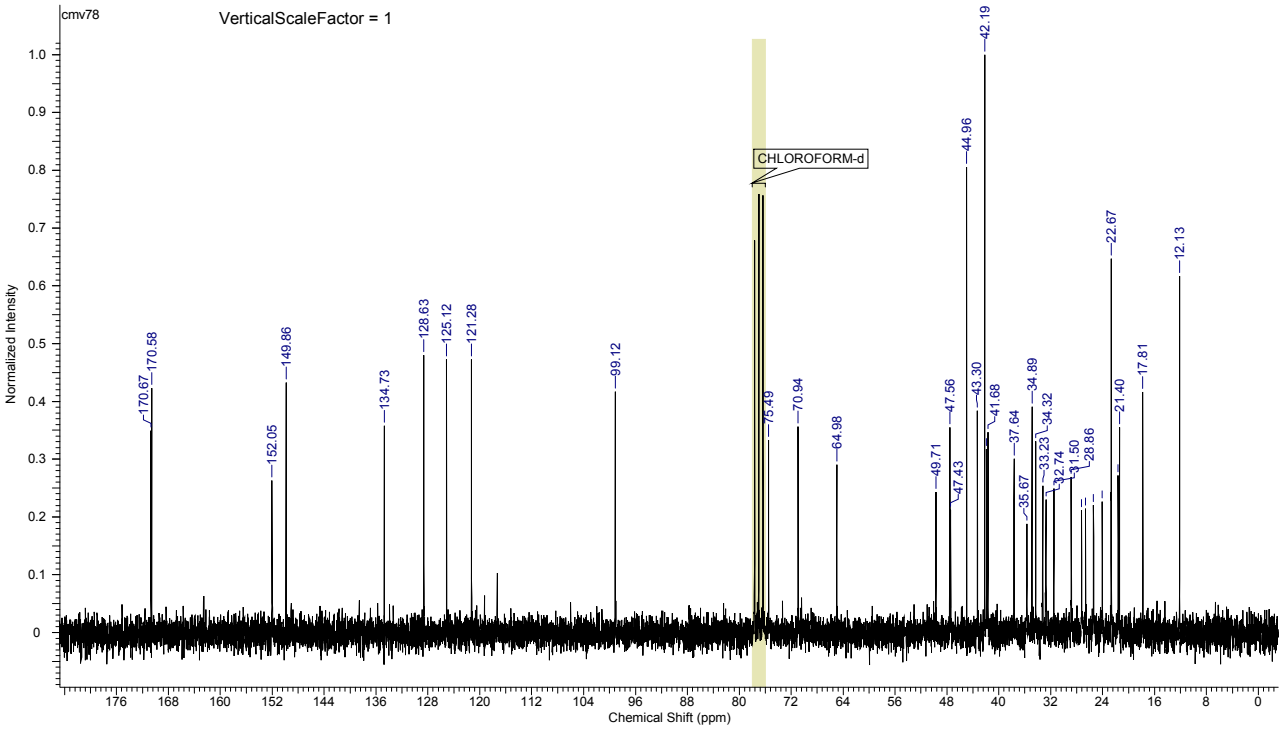


Compound 50 (MV78): ^{13}C NMR spectrum (50 MHz).

2/28/2014 4:13:47 PM

Number of Nuclei 0 C's

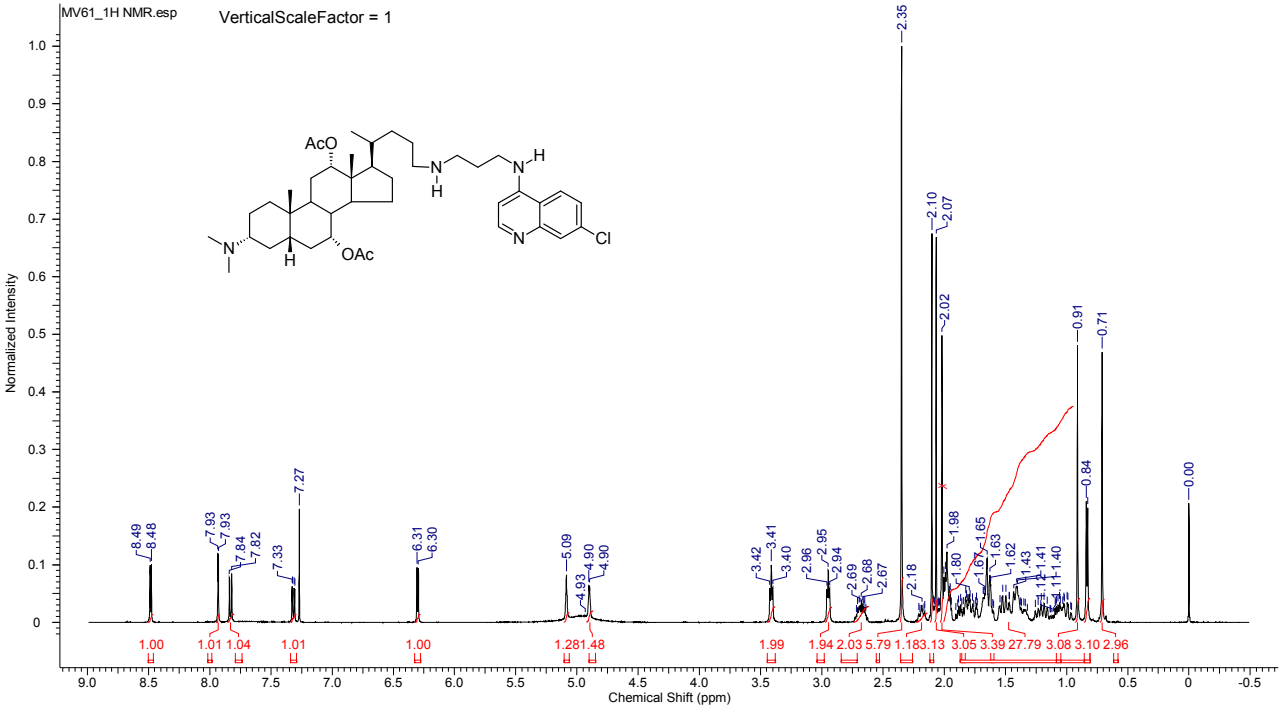
Acquisition Time (sec)	1.0667	Comment	MV78	Date	Feb 11 11	Date Stamp	Feb 11 11
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV78\cmv78.fid\fid						
Frequency (MHz)	50.29	Nucleus	13C	Number of Transients	1307	Original Points Count	16000
Points Count	16384	Pulse Sequence	s2pul	Receiver Gain	25.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	4813.8223	Spectrum Type	STANDARD	Sweep Width (Hz)	15000.00	Temperature (degree C)	AMBIENT TEMPERATURE



Compound 51 (MV61): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.804, area 97.63 %; method B: RT 1.922, area 98.03 %; method C: RT 12.462, area 95.41 %.

2/26/2014 7:28:52 PM

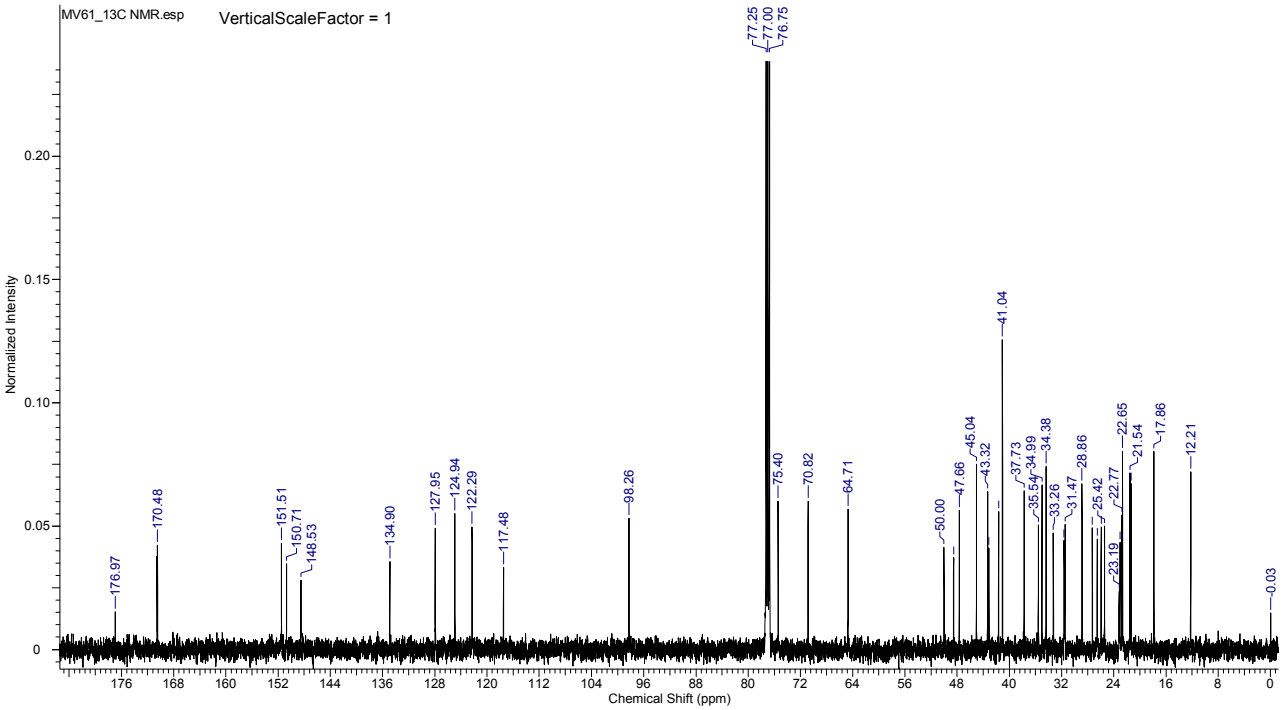
Number of Nuclei	0 H's						
Acquisition Time (sec)	3.4537	Date	15 Mar 2010 12:31:12			Date Stamp	15 Mar 2010 12:31:12
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV61\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	228.00	SW(cyclical) (Hz)	4743.83	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2125.5134
Spectrum Type	STANDARD	Sweep Width (Hz)	4743.69	Temperature (degree C)	25.000		



Compound 51 (MV61): ^{13}C NMR spectrum (125 MHz).

2/25/2014 2:28:55 PM

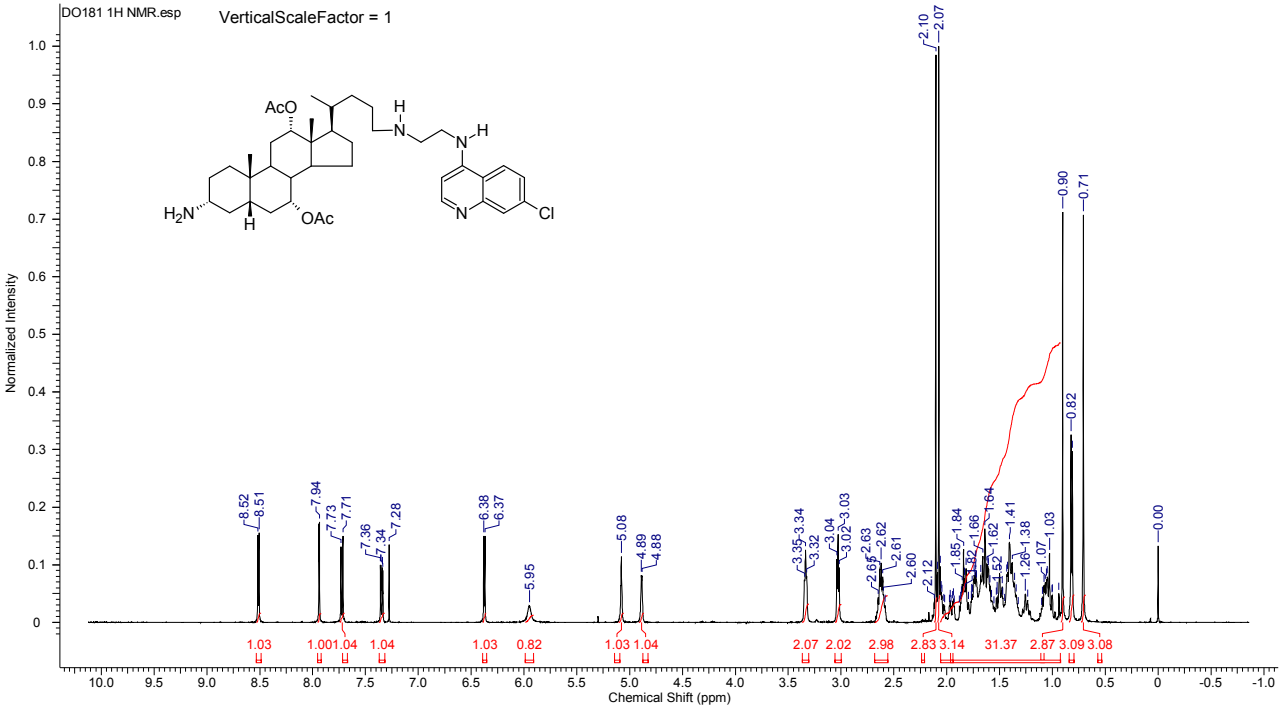
Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	Date	15 Mar 2010 12:37:36			Date Stamp	15 Mar 2010 12:37:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV61\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	825	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	912.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13832.5234
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 52 (DO181): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 2.004, area 98.23 %; method B: RT 7.973, area 95.08 %;

2/26/2014 5:47:00 PM

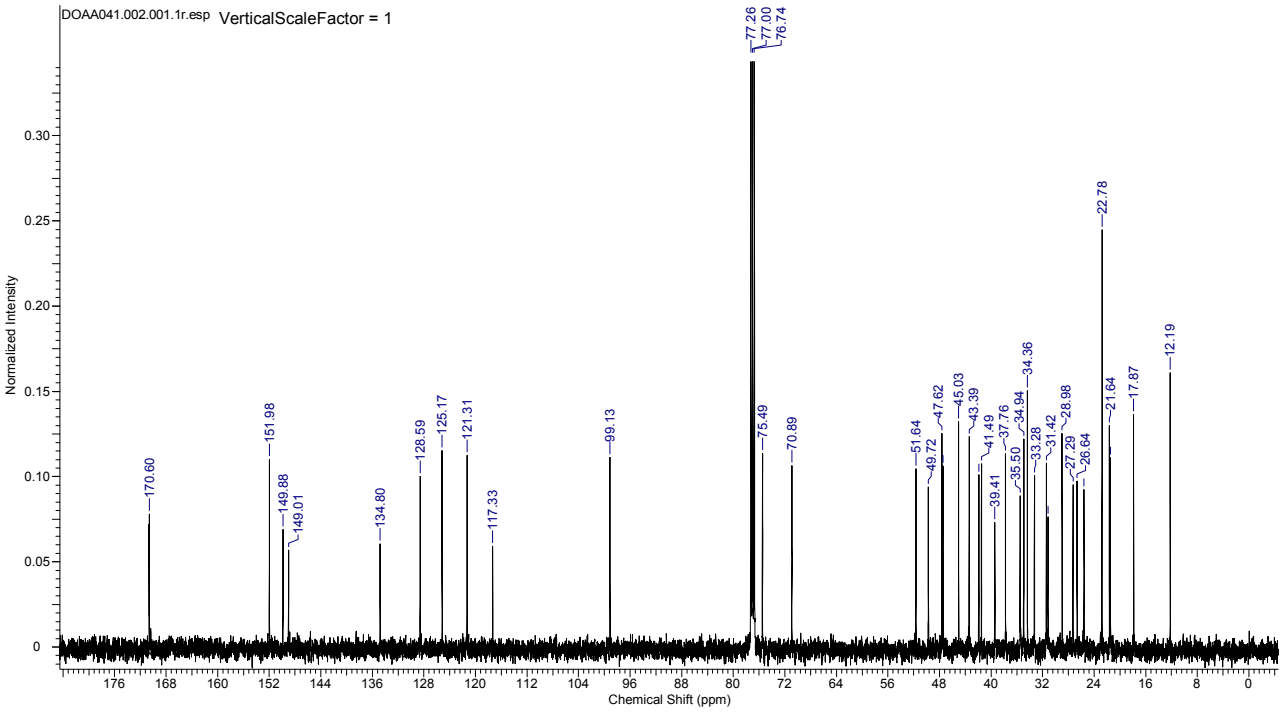
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.9819	Date	20 Mar 2008 11:01:36			Date Stamp	20 Mar 2008 11:01:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO181\DOAA041\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	16384	Pulse Sequence	zg30
Receiver Gain	114.00	SW(cyclical) (Hz)	5494.51	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2315.4834
Spectrum Type	STANDARD	Sweep Width (Hz)	5494.17	Temperature (degree C)	25.000		



Compound 52 (DO181): ^{13}C NMR spectrum (125 MHz).

2/26/2014 5:48:41 PM

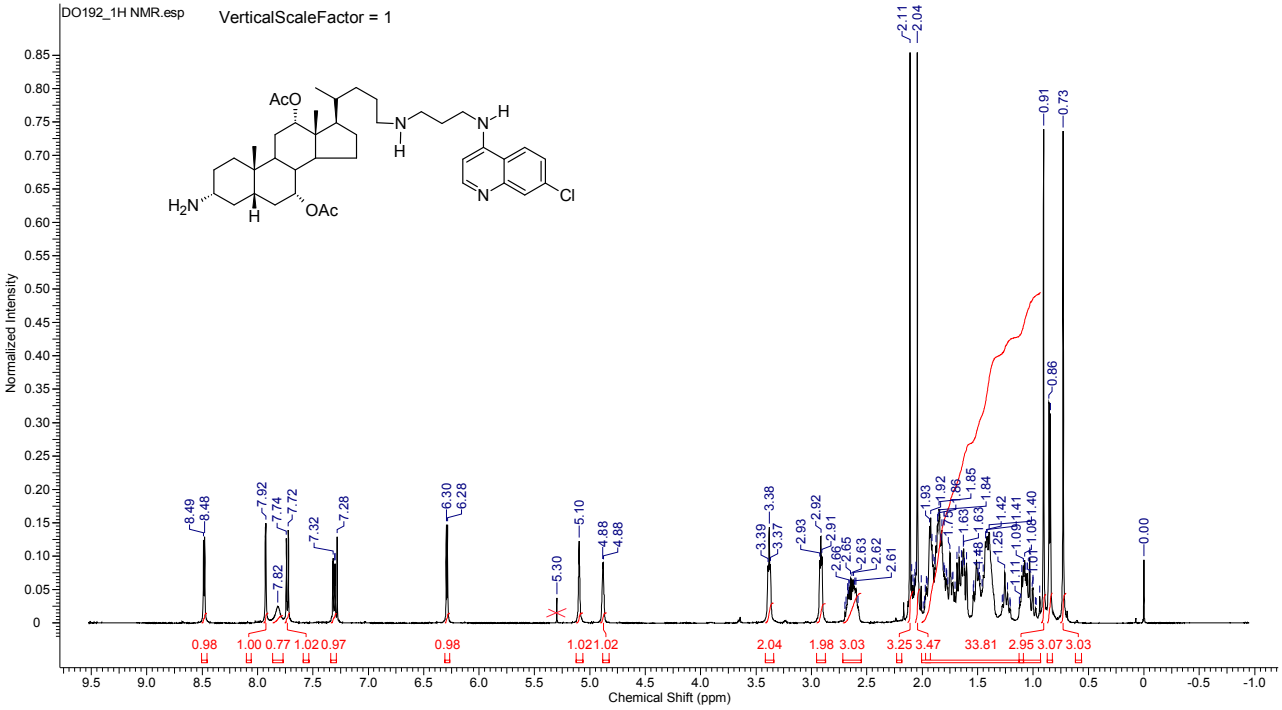
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.1010	Date	20 Mar 2008 11:08:00			Date Stamp	20 Mar 2008 11:08:00
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO181\DOAA041\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	349	Origin	spect
Original Points Count	32768	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1030.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13831.9209
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 53(DO192): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 11.493, area 97.92%; method D: RT 5.137, area 97.997 %.

2/25/2014 4:25:18 PM

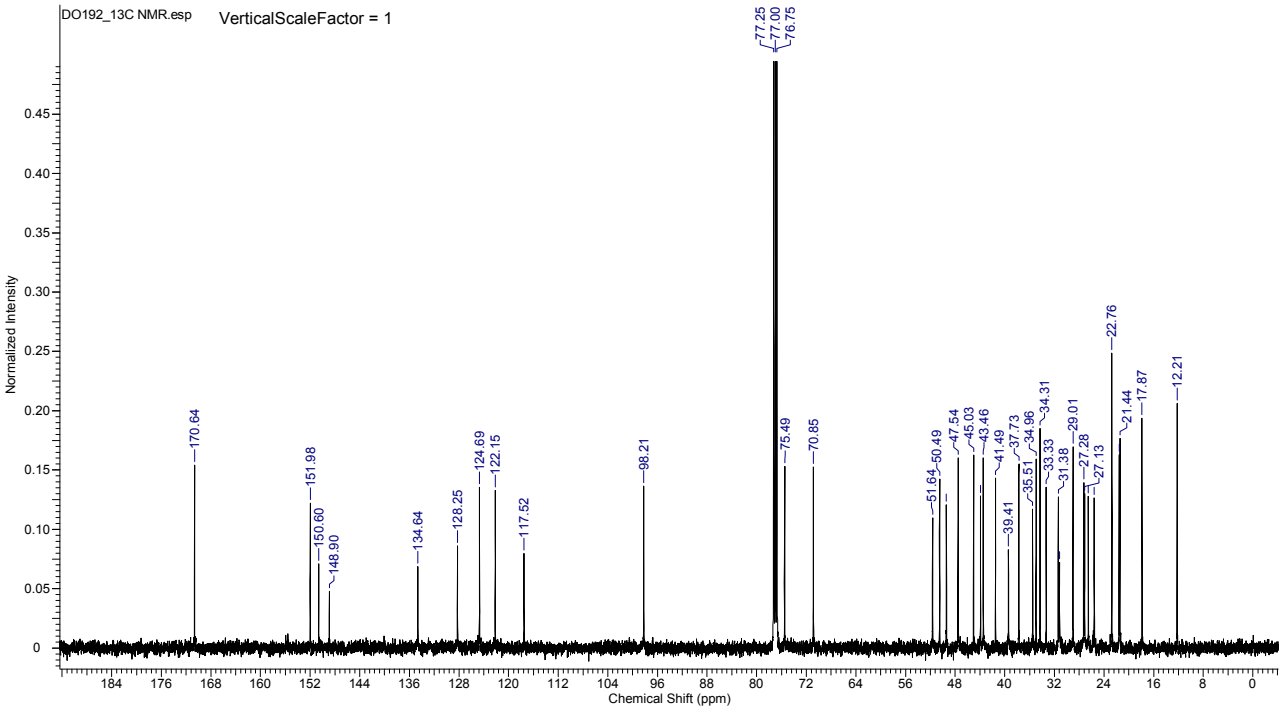
Number of Nuclei	0 H's						
Acquisition Time (sec)	3.1261	*Date*	26 Aug 2009 15:47:44			*Date Stamp*	26 Aug 2009 15:47:44
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOAA089\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	71.80	*SW(cyclical) (Hz)*	5241.09	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2144.5515
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5240.93	*Temperature (degree C)*	25.000		



Compound 53 (DO192): ^{13}C NMR spectrum (125 MHz).

2/25/2014 4:26:45 PM

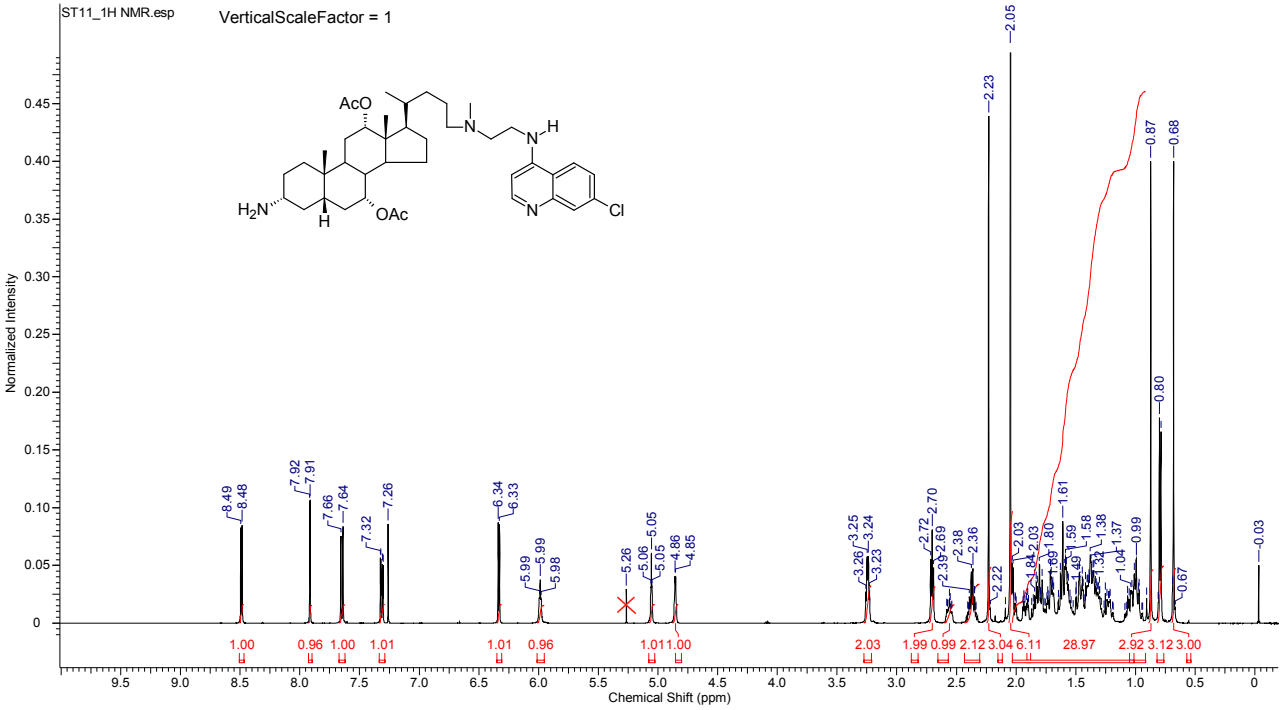
Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	*Date*	26 Aug 2009 14:07:28			*Date Stamp*	26 Aug 2009 14:07:28
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOAA089\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	662	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	912.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	12571.2354
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.100		



Compound 54 (ST13): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.905, area 99.44%; method C: RT 11.413, area 96.83 %.

2/26/2014 7:30:53 PM

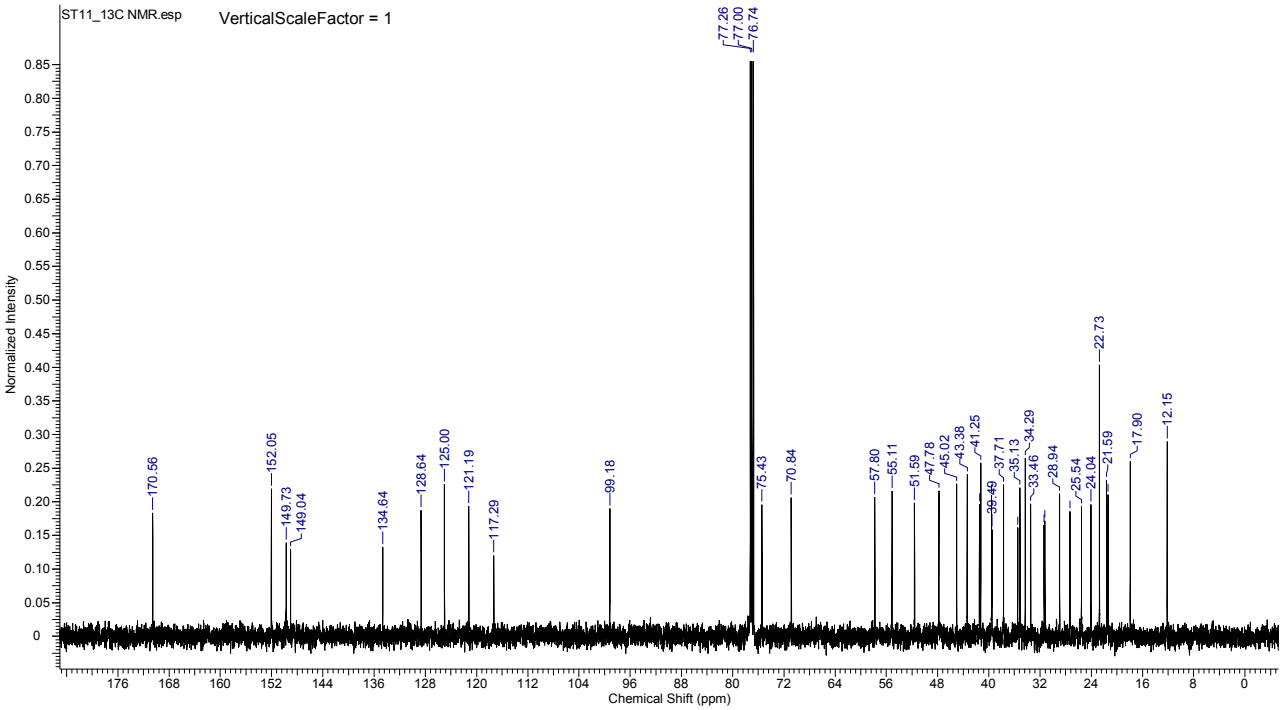
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.7394	Date	29 Mar 2012 09:21:36			Date Stamp	29 Mar 2012 09:21:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\JKAA077\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	71.80	SW(cyclical) (Hz)	5980.86	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2546.4924
Spectrum Type	STANDARD	Sweep Width (Hz)	5980.68	Temperature (degree C)	25.000		



Compound 54 (ST13): ^{13}C NMR spectrum (125 MHz).

2/25/2014 4:39:44 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	Date	29 Mar 2012 09:21:36			Date Stamp	29 Mar 2012 09:21:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\JKAA077\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	42	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1030.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12567.7393
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.400		

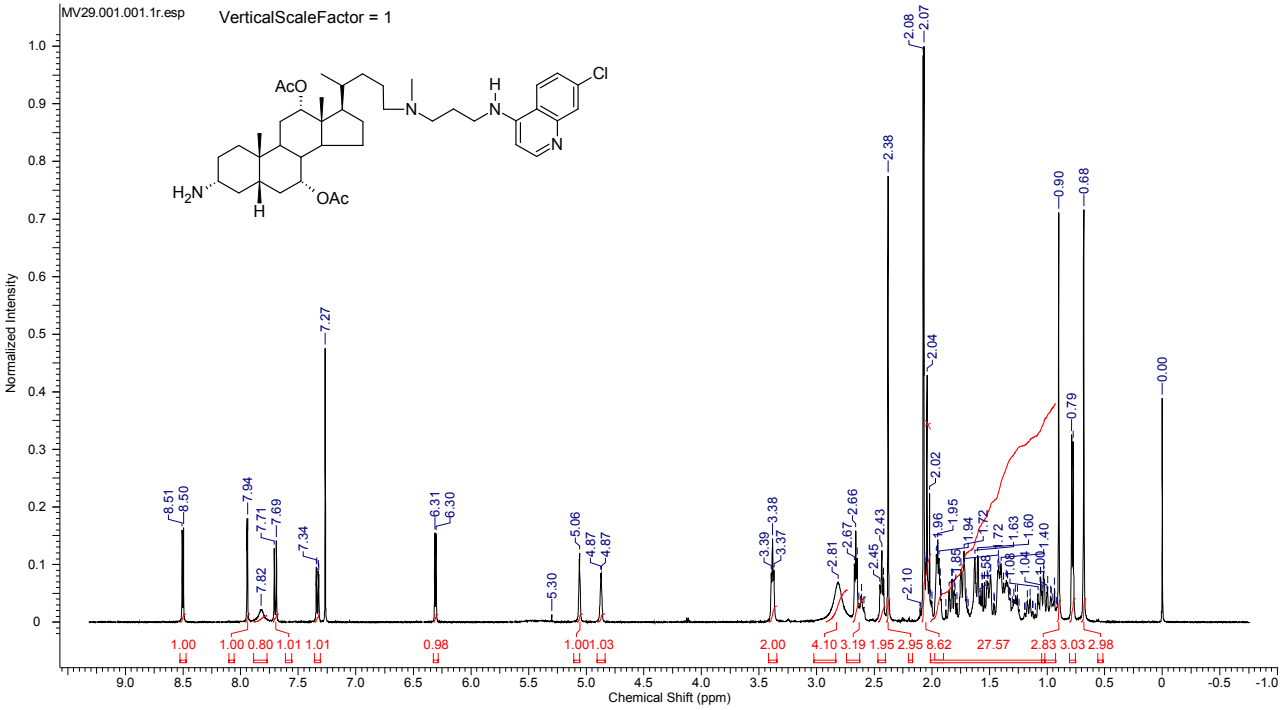


Compound 55 (MV29): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 2.240, area 96.94 %; method B: RT 1.792, area 98.41 %.

2/26/2014 5:53:24 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	3.2506	*Date*	18 Dec 2009 12:58:56			*Date Stamp*	18 Dec 2009 12:58:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV29\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	256.00	*SW(cyclical) (Hz)*	5040.32	*Solvent*	CHLOROFORM-d		
Spectrum Offset (Hz)	2142.3103	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	5040.17	*Temperature (degree C)*	25.000

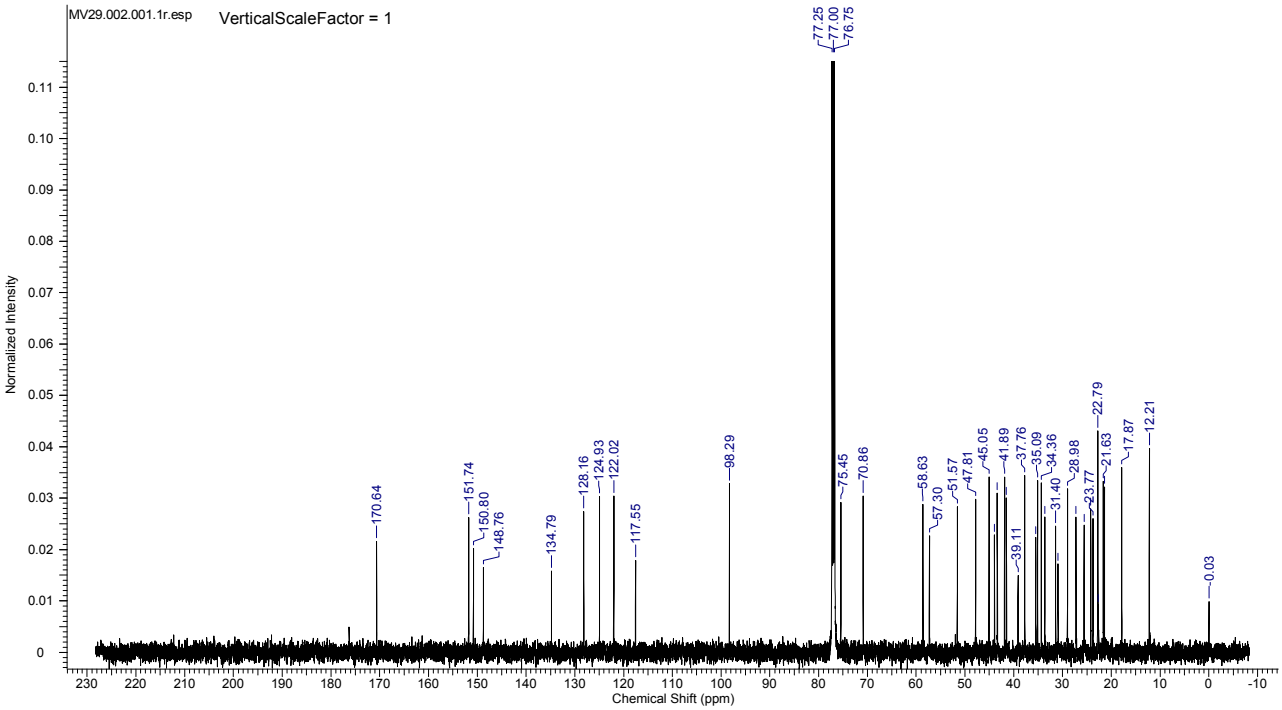


Compound 55 (MV29): ^{13}C NMR spectrum (125 MHz).

2/26/2014 5:55:10 PM

Number of Nuclei 0 C's

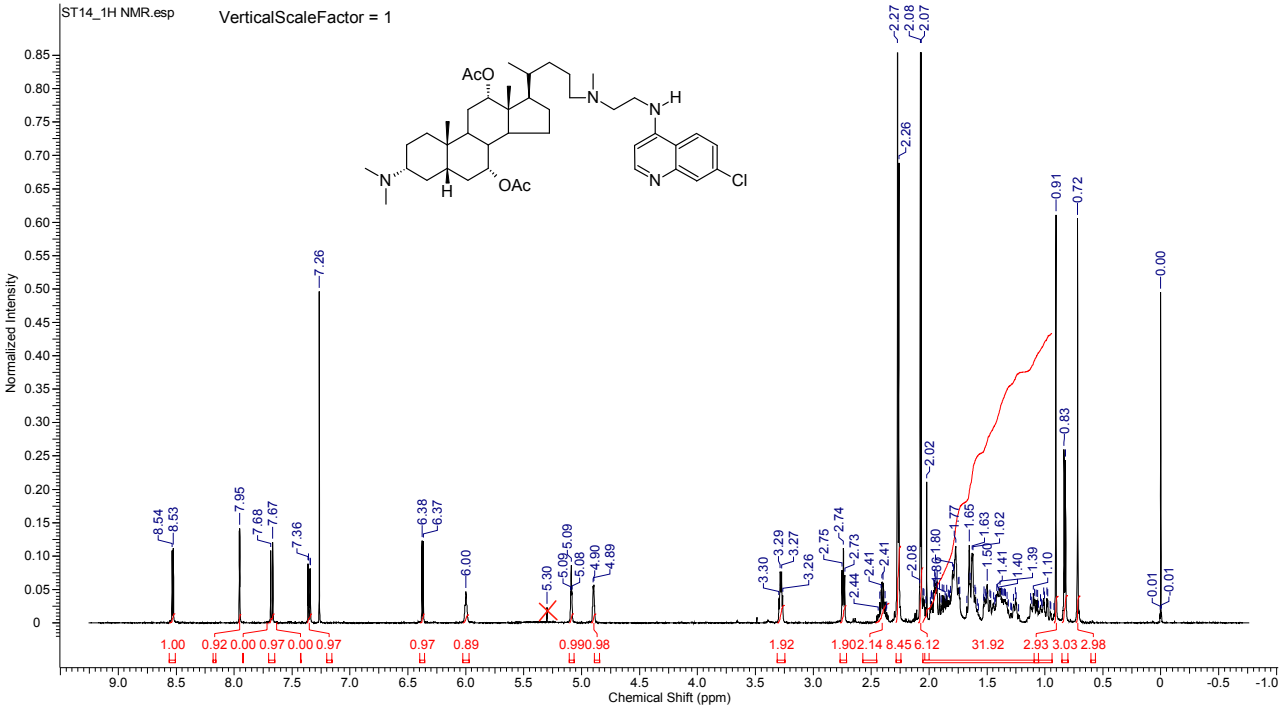
Acquisition Time (sec)	0.5505	*Date*	18 Dec 2009 12:22:40			*Date Stamp*	18 Dec 2009 12:22:40
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\MV29\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	2007	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13833.4160
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 56 (ST14): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.849, area 98.82 %; method D: RT 5.179, area 98.67 %.

2/26/2014 7:32:06 PM

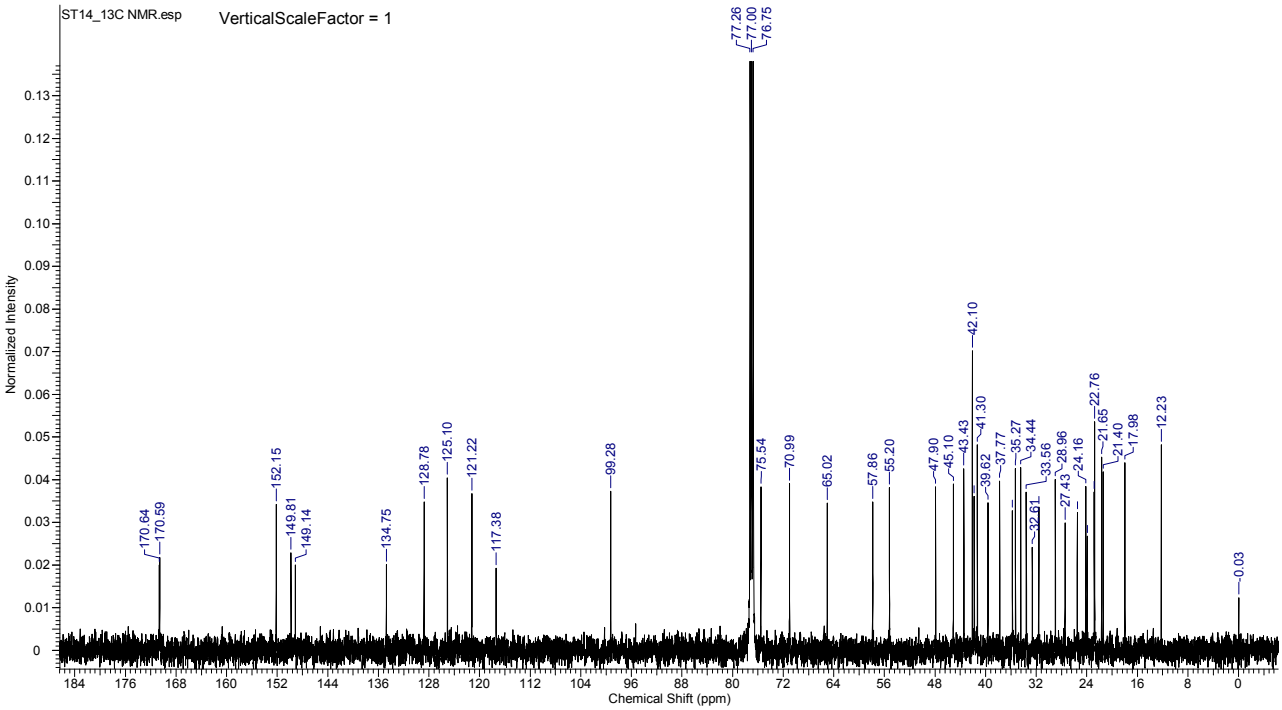
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.2681	***Date***	21 Jun 2010 10:46:56			***Date Stamp***	21 Jun 2010 10:46:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\STAA038\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	256.00	***SW(cyclical) (Hz)***	5013.37	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	2124.4246
Spectrum Type	STANDARD	***Sweep Width (Hz)***	5013.22	***Temperature (degree C)***	25.000		



Compound 56 (ST14): ^{13}C NMR spectrum (125 MHz).

2/25/2014 4:44:35 PM

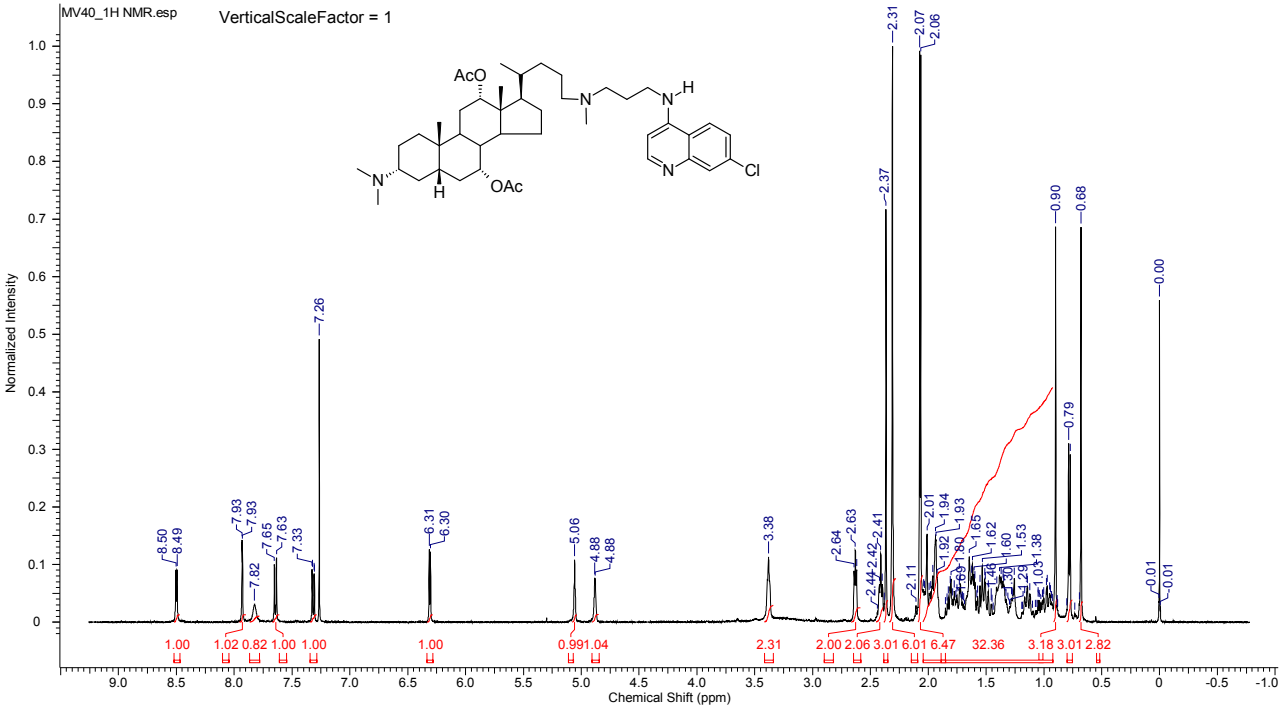
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	21 Jun 2010 10:57:36			***Date Stamp***	21 Jun 2010 10:57:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\STAA038\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	1402	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	1030.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13833.7441
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		



Compound 57 (MV40): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 9.682, area 95.17 %; method D: RT 5.092, area 98.86 %.

2/25/2014 4:48:20 PM

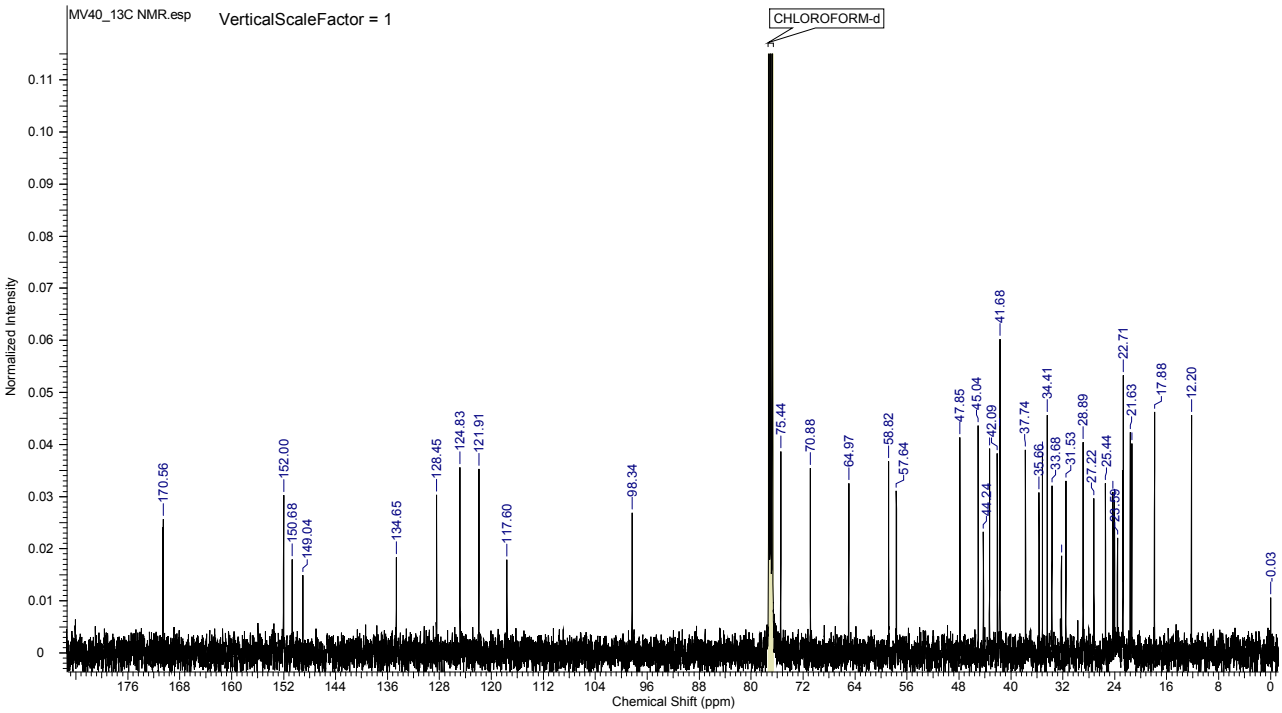
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.2637	*Date*	15 Mar 2010 11:25:04			*Date Stamp*	15 Mar 2010 11:25:04
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV40\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	228.00	*SW(cyclical) (Hz)*	5020.08	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	2122.0854
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5019.93	*Temperature (degree C)*	25.000		



Compound 57 (MV40): ^{13}C NMR spectrum (125 MHz).

3/1/2014 8:59:52 PM

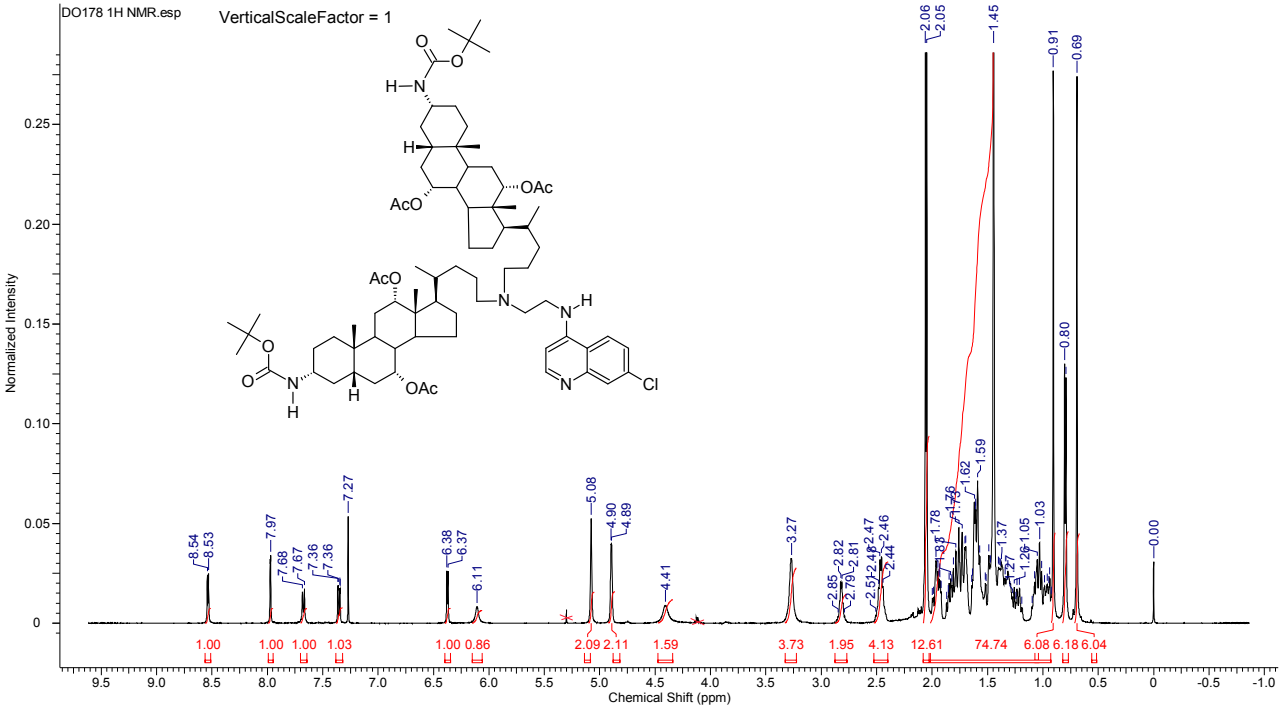
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	*Date*	15 Mar 2010 11:31:28			*Date Stamp*	15 Mar 2010 11:31:28
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MV40\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	1205	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13833.4434
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 58 (DO178): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT=11.618, area 99.15 %; method D: RT 6.020, area 96.86 %.

2/26/2014 6:20:08 PM

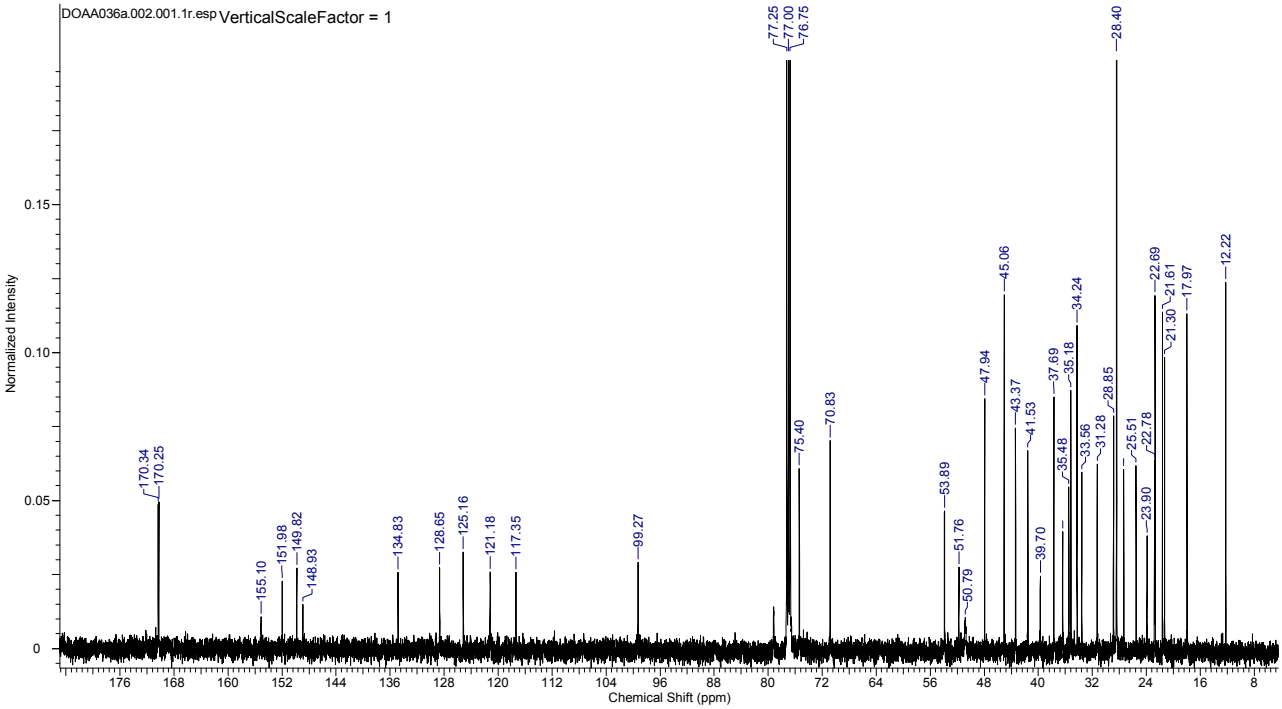
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.1261	Date	04 Mar 2008 13:33:04			Date Stamp	04 Mar 2008 13:33:04
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO178\DOAA036a\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	16384	Pulse Sequence	zg30
Receiver Gain	114.00	SW(cyclical) (Hz)	5241.09	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2188.8513
Spectrum Type	STANDARD	Sweep Width (Hz)	5240.77	Temperature (degree C)	25.000		



Compound 58 (DO178): ^{13}C NMR spectrum (125 MHz).

2/26/2014 6:24:23 PM

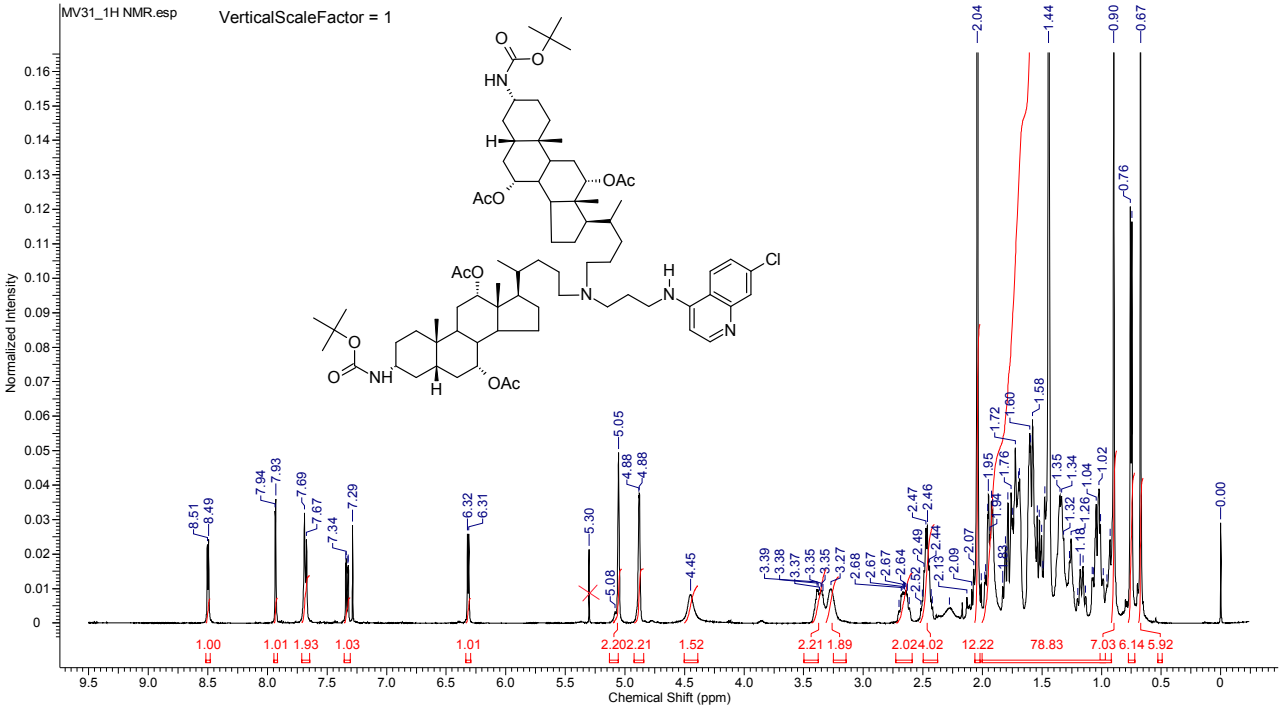
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.1010	Date	04 Mar 2008 13:41:36			Date Stamp	04 Mar 2008 13:41:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Ostalo\DO178\DOAA036a\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	869	Origin	spect
Original Points Count	32768	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1620.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13833.4043
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	24.900		



Compound 59 (MV31): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 11,964, area 97.93 %; method D: RT 5.892, area 96.83 %.

2/26/2014 7:33:28 PM

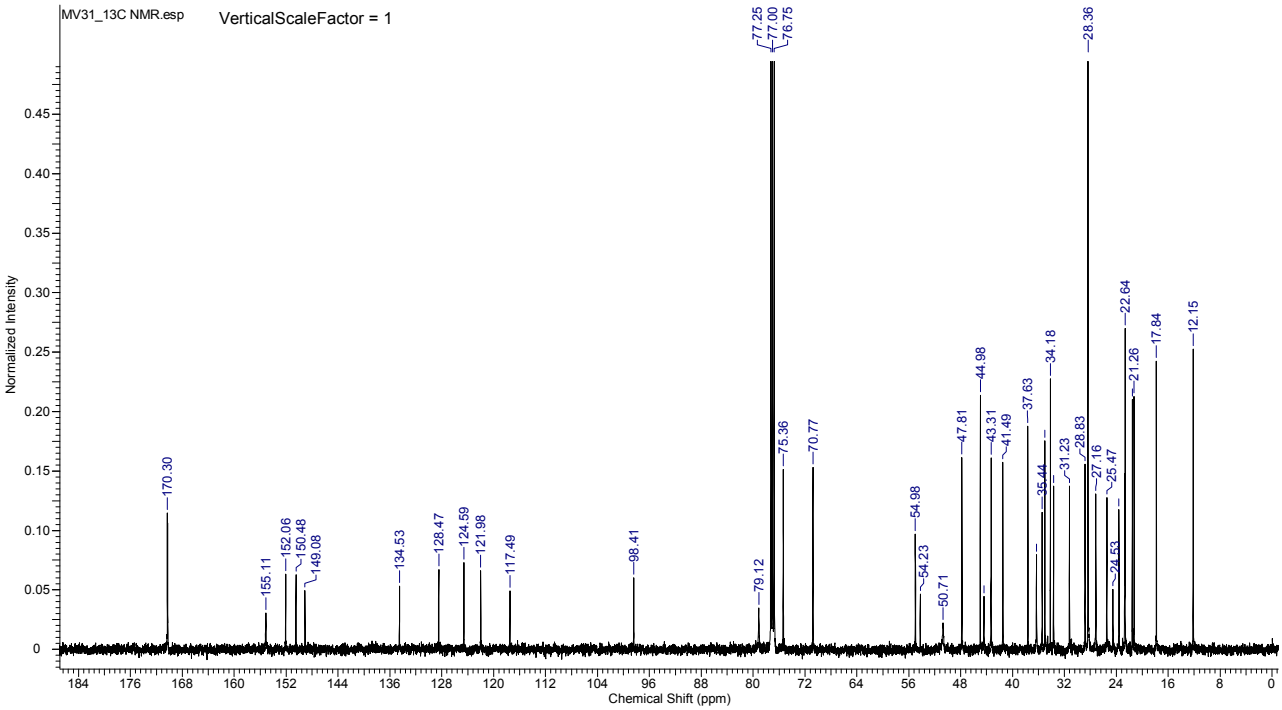
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.3620	***Date***	11 Nov 2009 13:30:56			***Date Stamp***	11 Nov 2009 13:30:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MVAA018a\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	50.80	***SW(cyclical) (Hz)***	4873.29	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	2316.7156
Spectrum Type	STANDARD	***Sweep Width (Hz)***	4873.15	***Temperature (degree C)***	25.000		



Compound 59 (MV31): ^{13}C NMR spectrum (125 MHz).

2/25/2014 5:06:16 PM

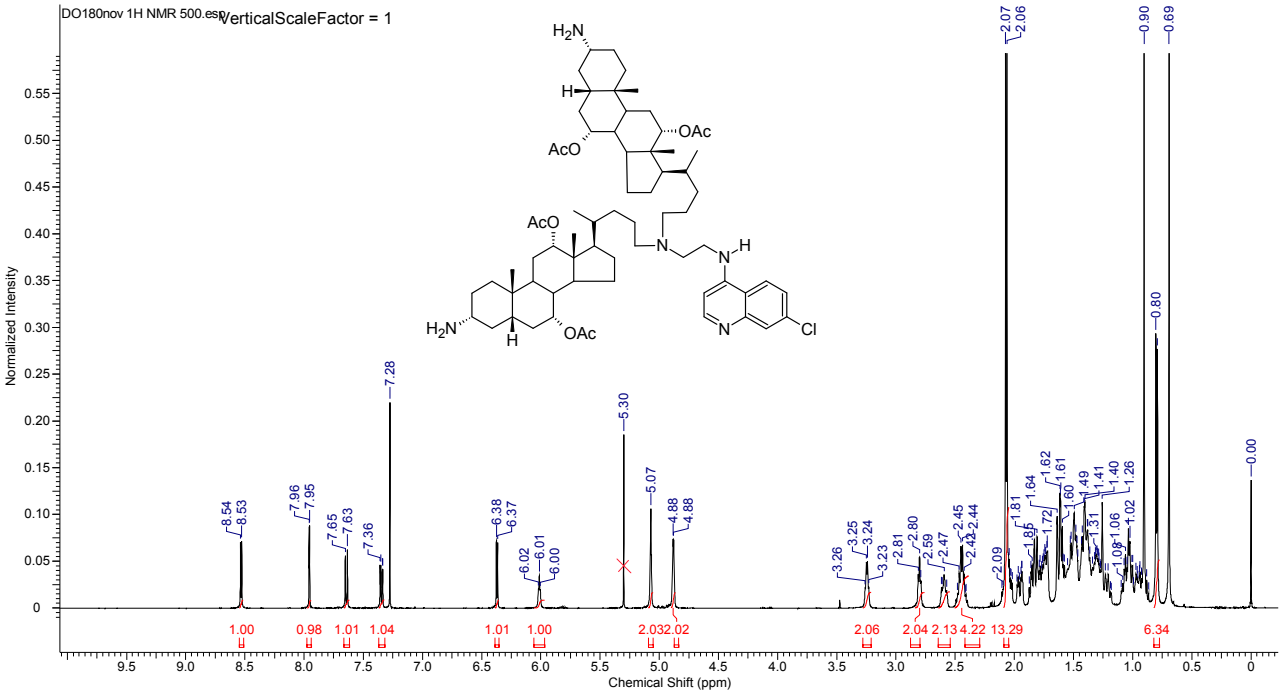
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	11 Nov 2009 13:39:28			***Date Stamp***	11 Nov 2009 13:39:28
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\MVAA018a\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	620	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	CHLOROFORM-d	***Spectrum Offset (Hz)***	13827.9844
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		



Compound 60 (DO180): ^{1}H NMR spectrum (500 MHz). HPLC purity: method A: RT 1.838, area 97.10 %; method D: RT 5.321, area 96.33 %.

3/1/2014 10:04:28 PM

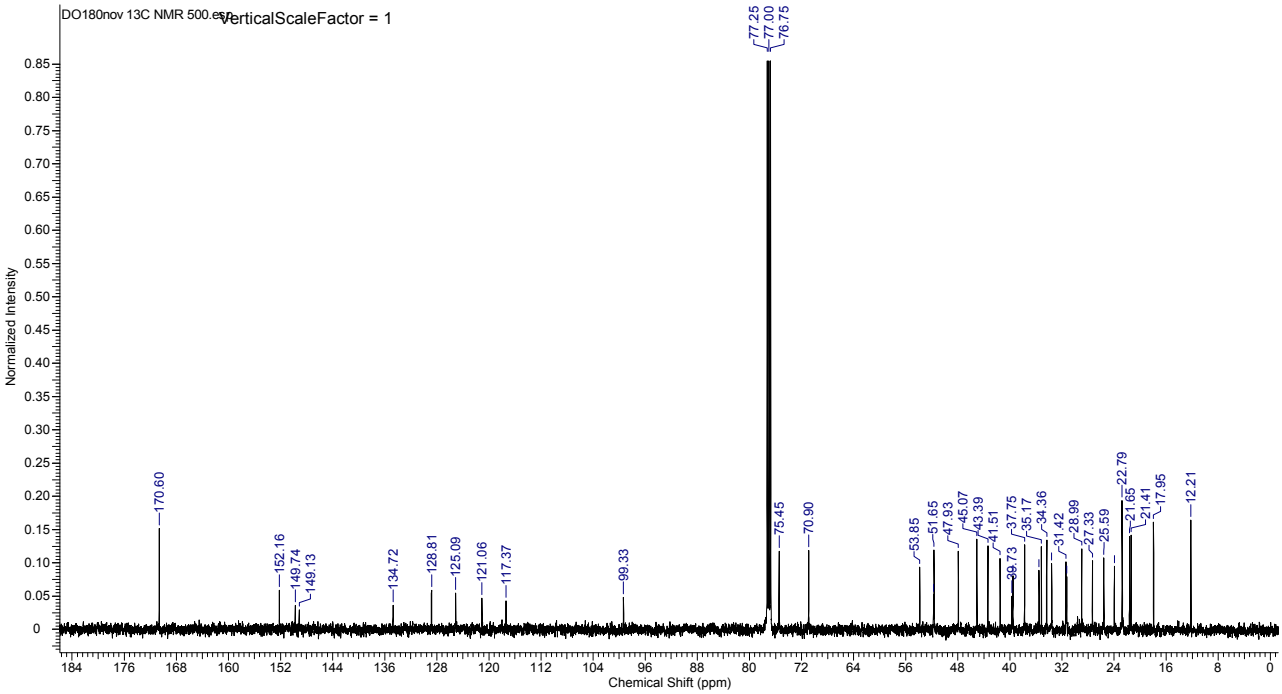
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	28 Feb 2014 09:44:48
Date Stamp	28 Feb 2014 09:44:48						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do180-nov\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	16	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	101.00	*SW(cyclical) (Hz)*	7507.51	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	3496.3342
Spectrum Type	STANDARD	*Sweep Width (Hz)*	7507.28	*Temperature (degree C)*	25.000		



Compound 60 (DO180): ^{13}C NMR spectrum (125 MHz).

3/1/2014 10:07:20 PM

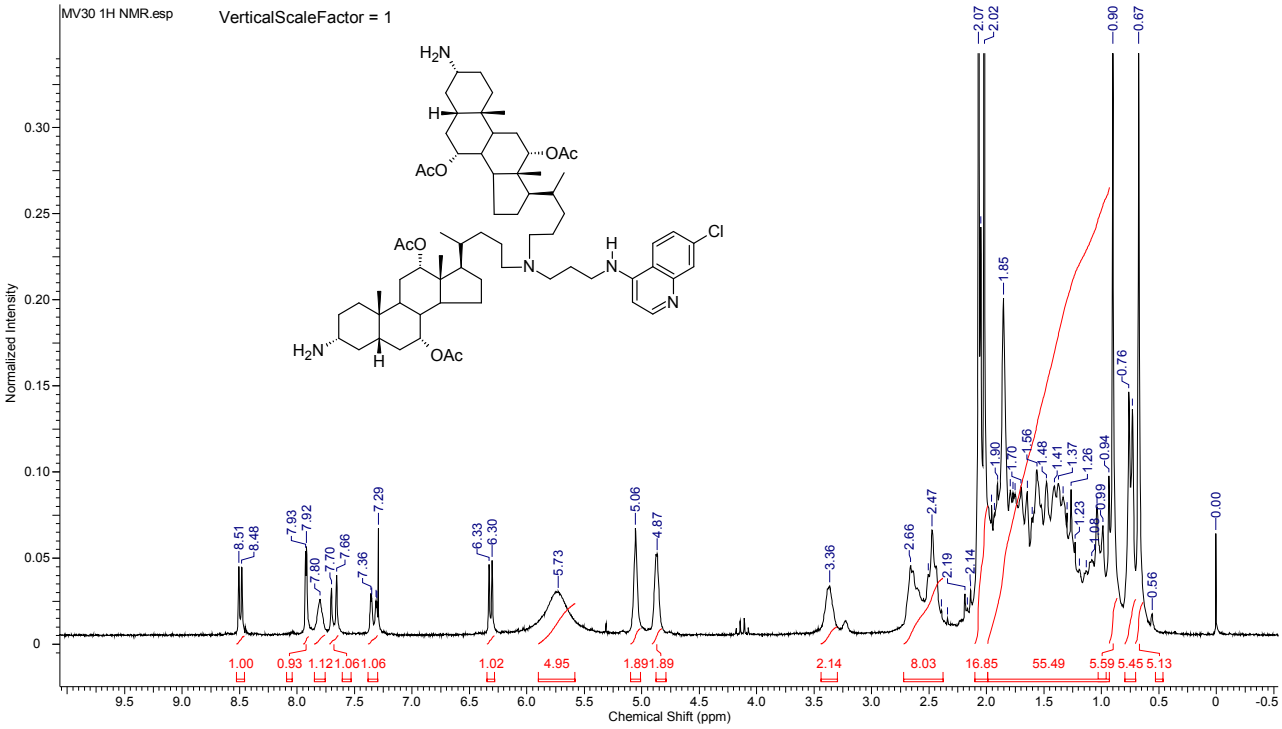
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	28 Feb 2014 09:46:56
Date Stamp	28 Feb 2014 09:46:56						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\do180-nov\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	176	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	65536	*Pulse Sequence*	zgpg30
Receiver Gain	2050.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13831.1650
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.45	*Temperature (degree C)*	25.200		



Compound 61 (MV30): ^{1}H NMR spectrum (200 MHz). HPLC purity: method C: RT = 10.553, area 95.61 %; method D: RT 5.288, area 95.46 %.

2/25/2014 5:09:57 PM

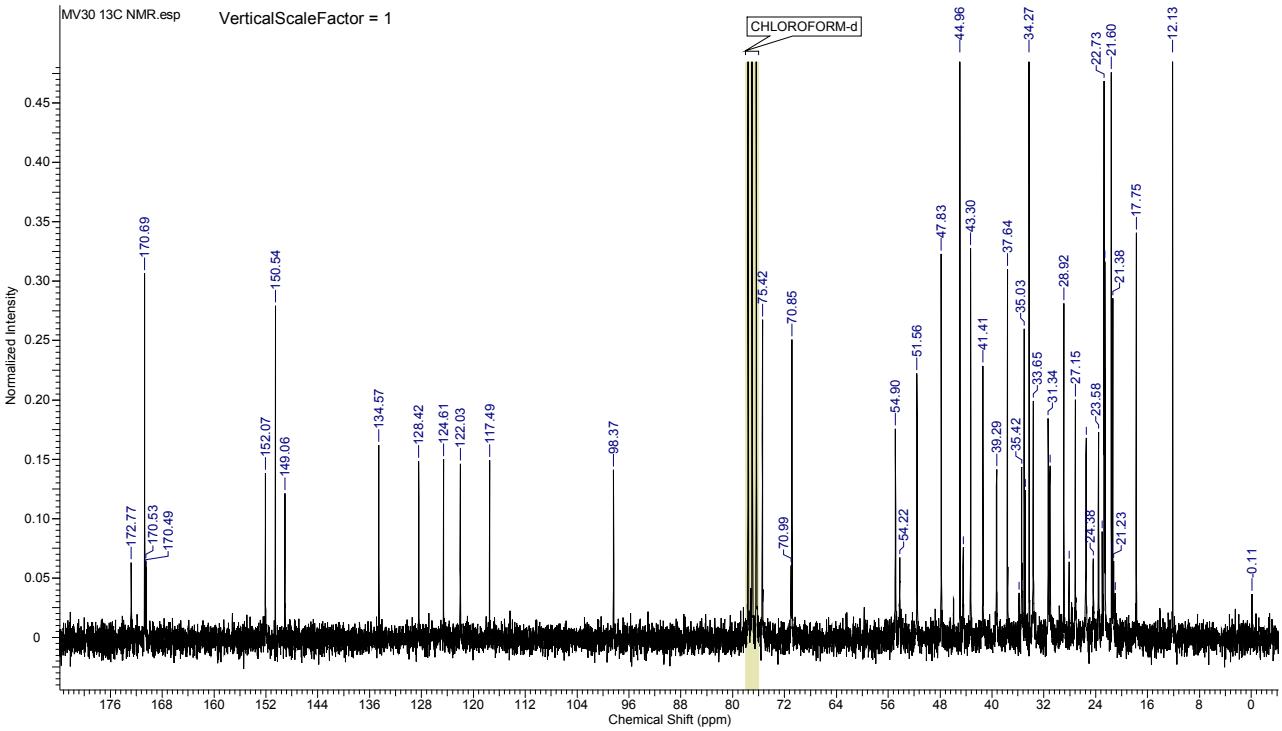
Number of Nuclei 0 H's							
Acquisition Time (sec)	1.3913	*Comment*	MV30	*Date*	Dec 15 09	*Date Stamp*	Dec 15 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\MV30\hmv30.fid\fid						
Frequency (MHz)	199.97	*Nucleus*	1H	*Number of Transients*	55	*Original Points Count*	6400
Points Count	8192	*Pulse Sequence*	s2pul	*Receiver Gain*	9.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	1690.1111	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	4600.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 61 (MV30): ^{13}C NMR spectrum (50 MHz).

3/1/2014 10:27:11 PM

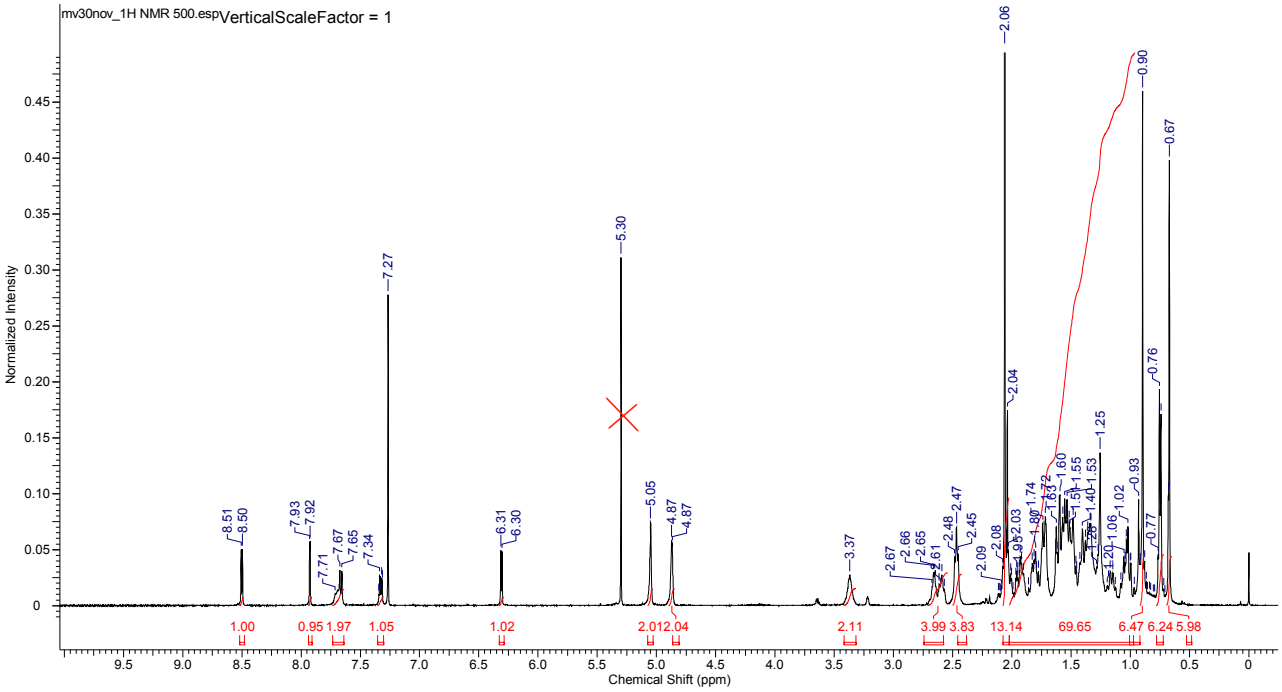
Number of Nuclei 0 C's							
Acquisition Time (sec)	1.0667	*Comment*	MV30	*Date*	Dec 15 09	*Date Stamp*	Dec 15 09
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\MV30\cmv30.fid\fid						
Frequency (MHz)	50.29	*Nucleus*	13C	*Number of Transients*	17172	*Original Points Count*	16000
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	25.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	4813.8223	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	15000.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 61 (MV30): ^{1}H NMR spectrum (500 MHz).

2/25/2014 5:12:22 PM

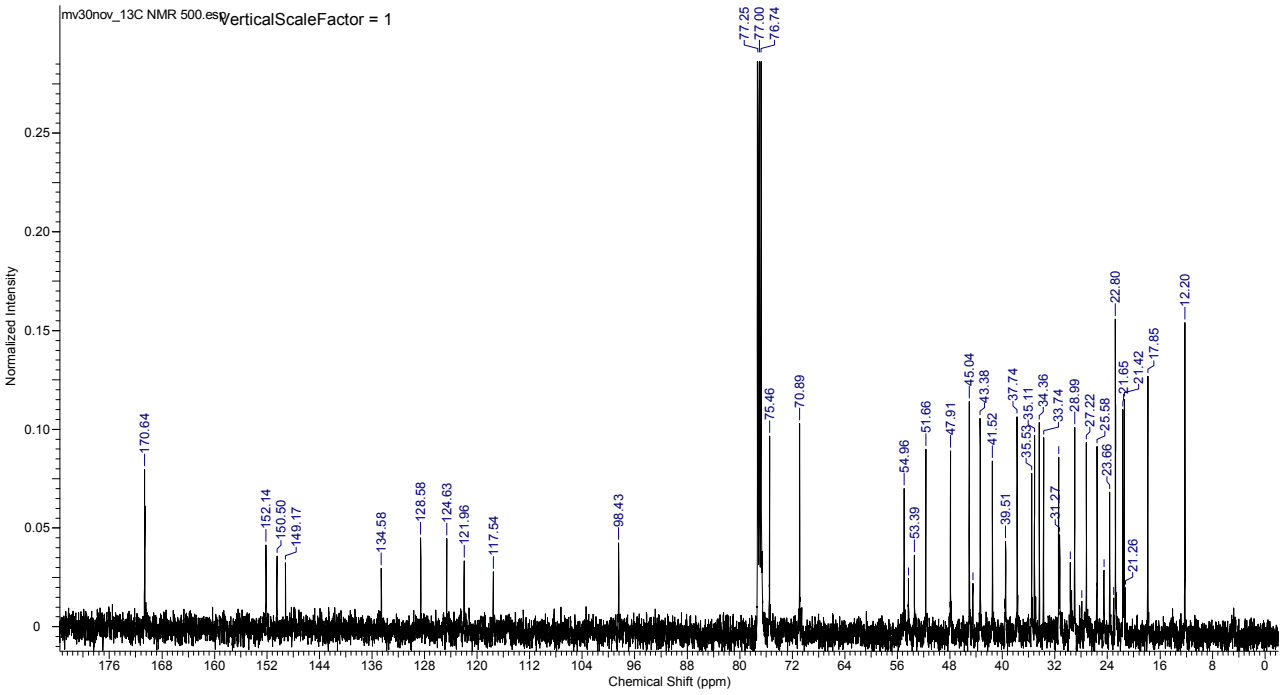
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.1823	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	22 Feb 2014 09:59:44
Date Stamp	22 Feb 2014 09:59:44						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\mv30nov\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	38	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	362.00	*SW(cyclical) (Hz)*	7507.51	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	3491.4070
Spectrum Type	STANDARD	*Sweep Width (Hz)*	7507.28	*Temperature (degree C)*	25.100		



Compound 61 (MV30): ^{13}C NMR spectrum (125 MHz).

2/25/2014 5:13:20 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	22 Feb 2014 09:29:52
Date Stamp	22 Feb 2014 09:29:52						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\mv30nov\2\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	700	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	65536	*Pulse Sequence*	zgpg30
Receiver Gain	2050.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	CHLOROFORM-d	*Spectrum Offset (Hz)*	13831.5049
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.45	*Temperature (degree C)*	25.000		

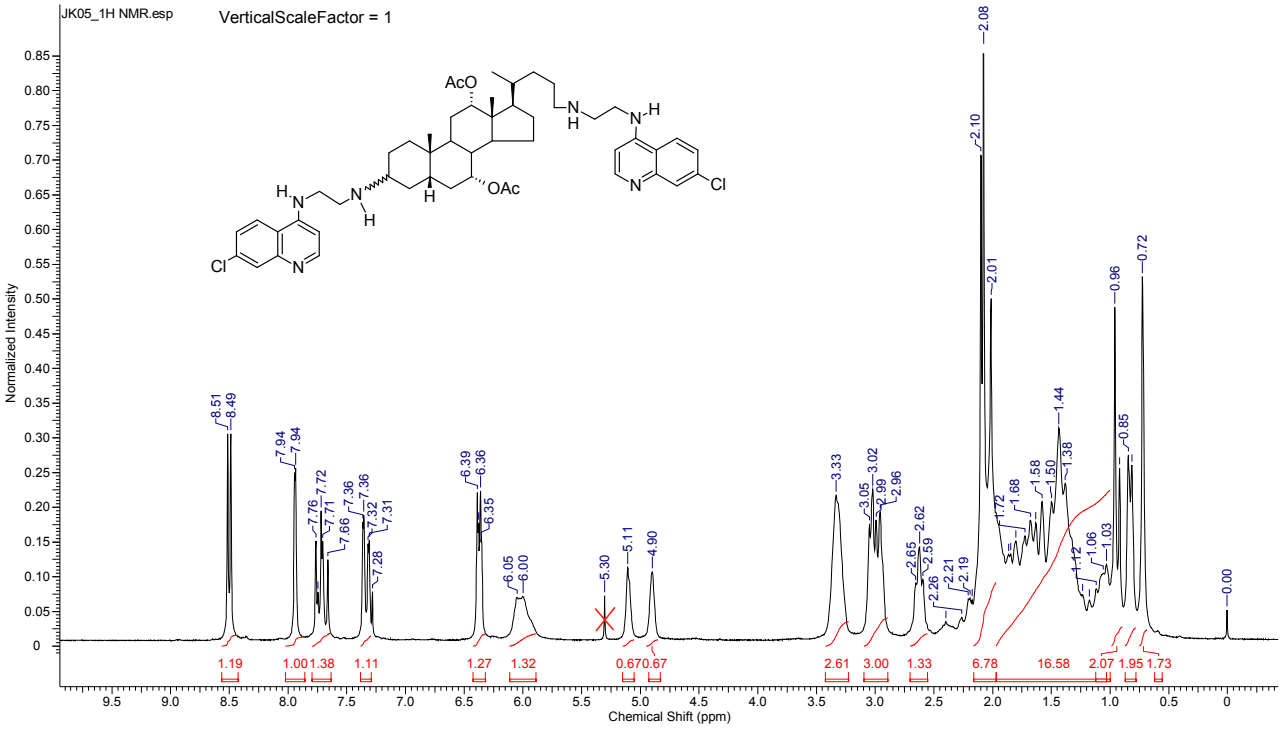


Compound 62 (JK05): ^{1}H NMR spectrum (200 MHz). HPLC purity: method B: RT 1.788, area 98.83 %; method C: RT1=10.371, RT2=10,566, area 95.15 %; method D: RT1 4.947, RT2 5.036, area 96.07 %.

2/25/2014 5:35:11 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	1.3913	*Comment*	JK05	*Date*	Sep 29 10	*Date Stamp*	Sep 29 10
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\JK05\hjk05.fid\fid						
Frequency (MHz)	199.97	*Nucleus*	1H	*Number of Transients*	512	*Original Points Count*	6400
Points Count	8192	*Pulse Sequence*	s2pul	*Receiver Gain*	9.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	1688.4263	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	4600.00	*Temperature (degree C)*	AMBIENT TEMPERATURE

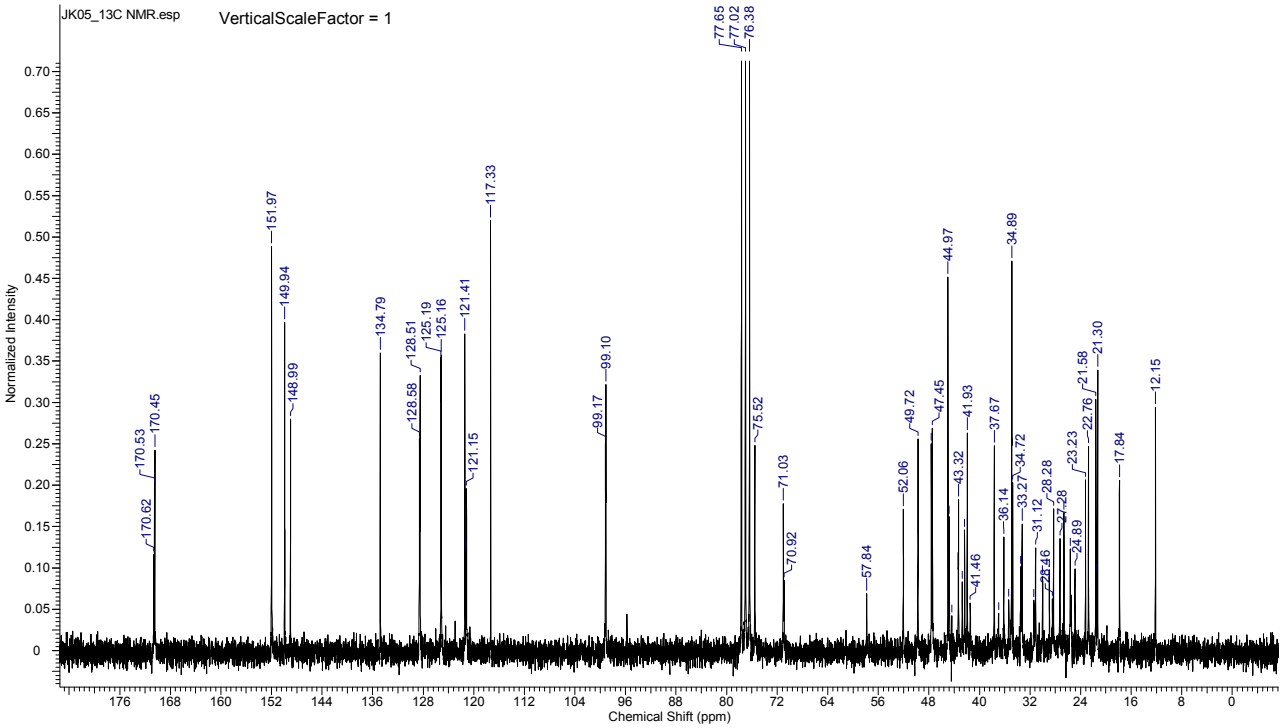


Compound 62 (JK05): ^{13}C NMR spectrum (50 MHz).

2/25/2014 5:37:17 PM

Number of Nuclei 0 C's

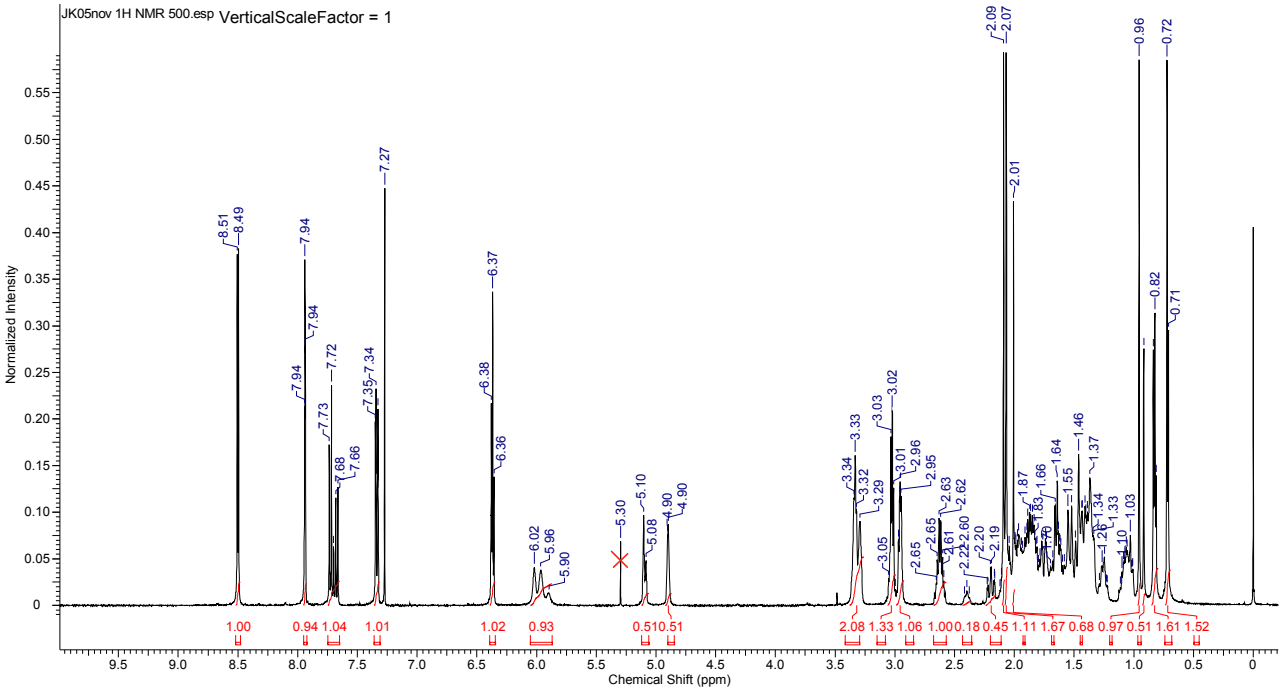
Acquisition Time (sec)	1.0667	*Comment*	JK05	*Date*	Sep 29 10	*Date Stamp*	Sep 29 10
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\200 MHz\JK05\cjk05.fid\fid						
Frequency (MHz)	50.29	*Nucleus*	13C	*Number of Transients*	16984	*Original Points Count*	16000
Points Count	16384	*Pulse Sequence*	s2pul	*Receiver Gain*	25.00	*Solvent*	CHLOROFORM-d
Spectrum Offset (Hz)	4814.6650	*Spectrum Type*	STANDARD	*Sweep Width (Hz)*	15000.00	*Temperature (degree C)*	AMBIENT TEMPERATURE



Compound 62 (JK05): ^{1}H NMR spectrum (500 MHz).

2/25/2014 5:38:33 PM

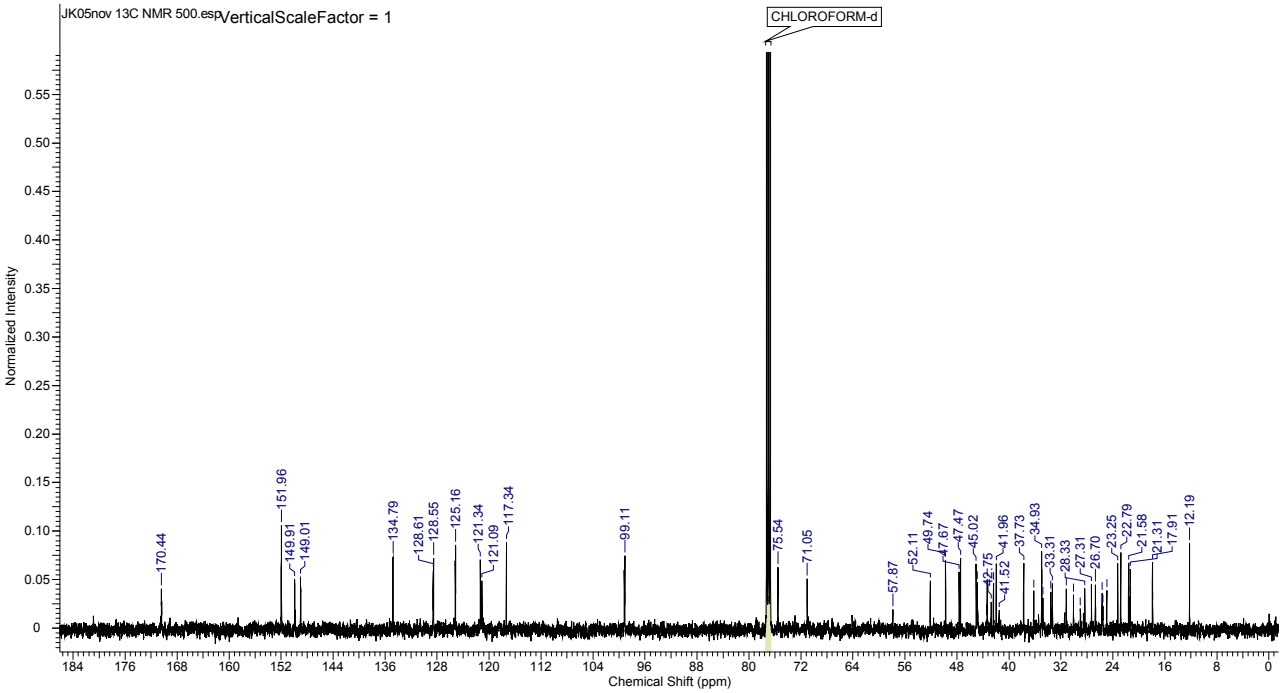
Number of Nuclei	0 H's						
Acquisition Time (sec)	2.1823	Comment	5 mm BBO BB-1H/D Z-GRD Z8007/0118			Date	21 Feb 2014 10:33:52
Date Stamp	21 Feb 2014 10:33:52						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\jk05nov\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	362.00	SW(cyclical) (Hz)	7507.51	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	3493.8381
Spectrum Type	STANDARD	Sweep Width (Hz)	7507.28	Temperature (degree C)	25.000		



Compound 62 (JK05): ^{13}C NMR spectrum (125 MHz).

3/1/2014 11:39:51 PM

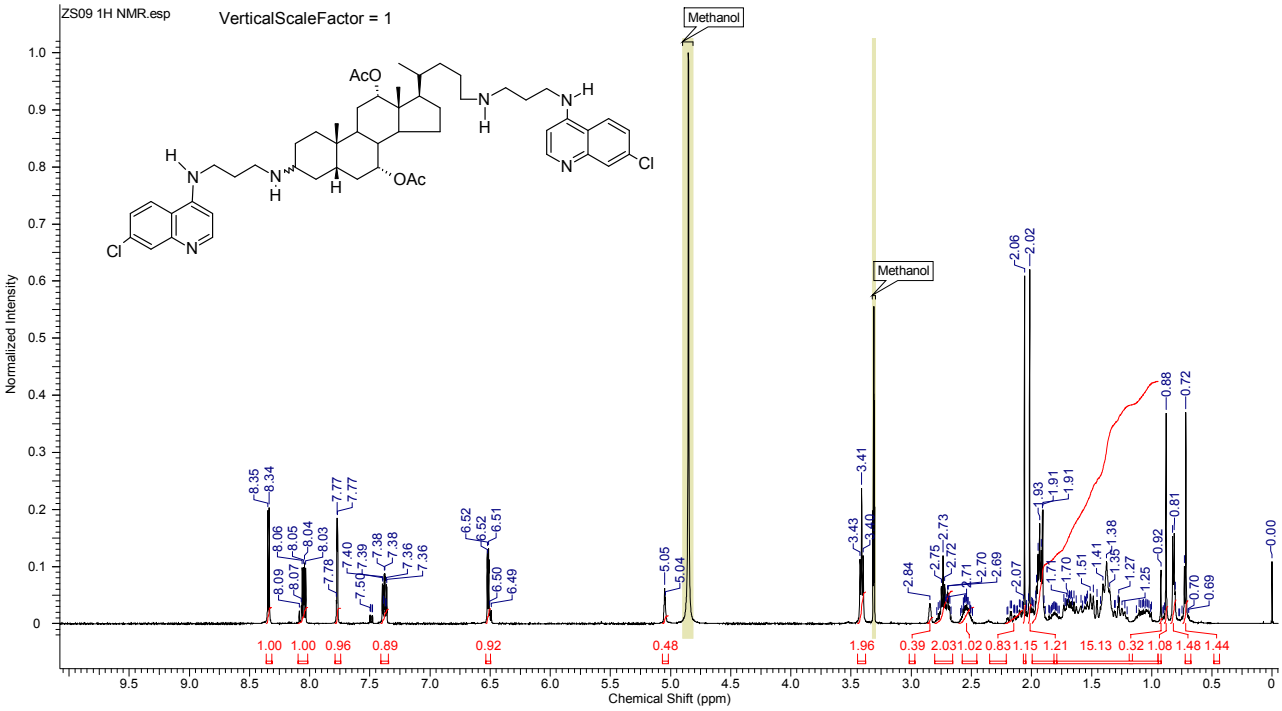
Number of Nuclei	0 C's						
Acquisition Time (sec)	0.5505	Comment	5 mm BBO BB-1H/D Z-GRD Z8007/0118			Date	21 Feb 2014 10:12:32
Date Stamp	21 Feb 2014 10:12:32						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR novi\jk05nov\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	224	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	65536	Pulse Sequence	zgpg30
Receiver Gain	2050.00	SW(cyclical) (Hz)	29761.90	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	13830.0361
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.45	Temperature (degree C)	25.100		



Compound 63 (ZS09): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT1 5.533, RT2 8.731, area 95.07 %; method D: RT1 5.495, RT2 5.495, area 99.55 %.

2/26/2014 7:36:16 PM

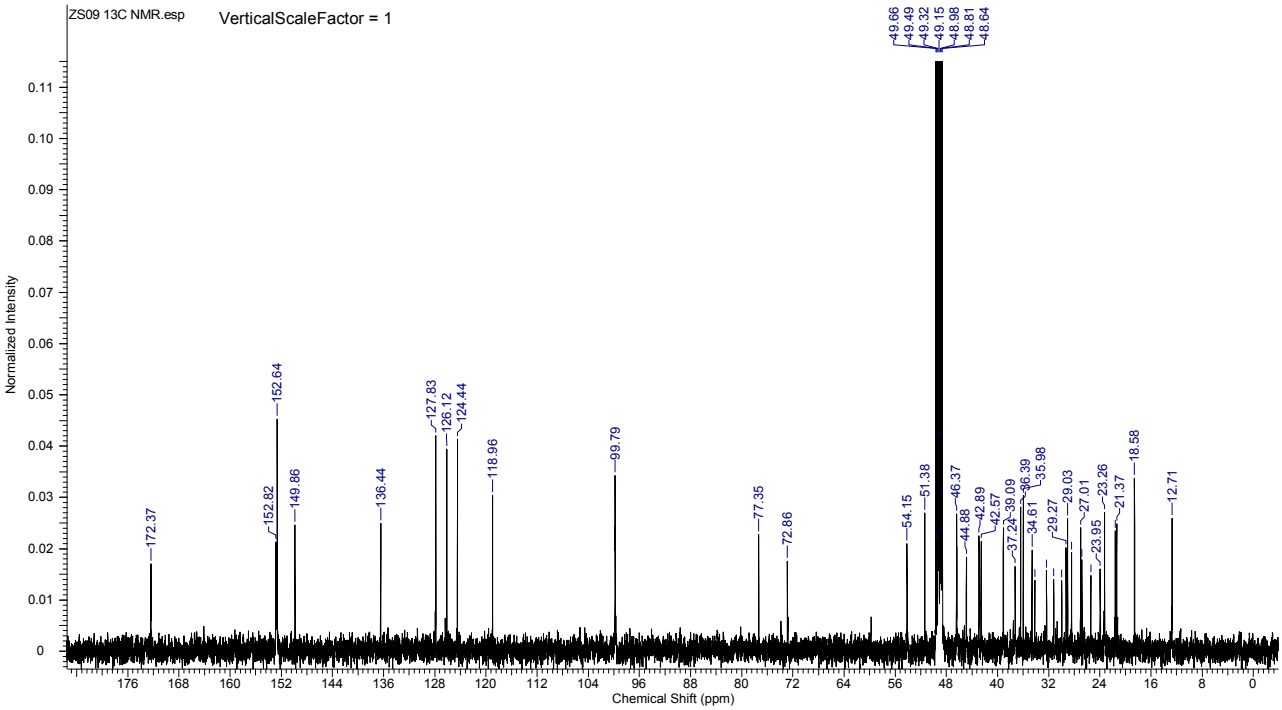
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.6477	Date	23 Mar 2012 08:34:24			Date Stamp	23 Mar 2012 08:34:24
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\ZSAA014\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	322.00	SW(cyclical) (Hz)	6188.12	Solvent	METHANOL-d4	Spectrum Offset (Hz)	2741.7690
Spectrum Type	STANDARD	Sweep Width (Hz)	6187.93	Temperature (degree C)	25.000		



Compound 63 (ZS09): ^{13}C NMR spectrum (125 MHz).

2/25/2014 5:47:51 PM

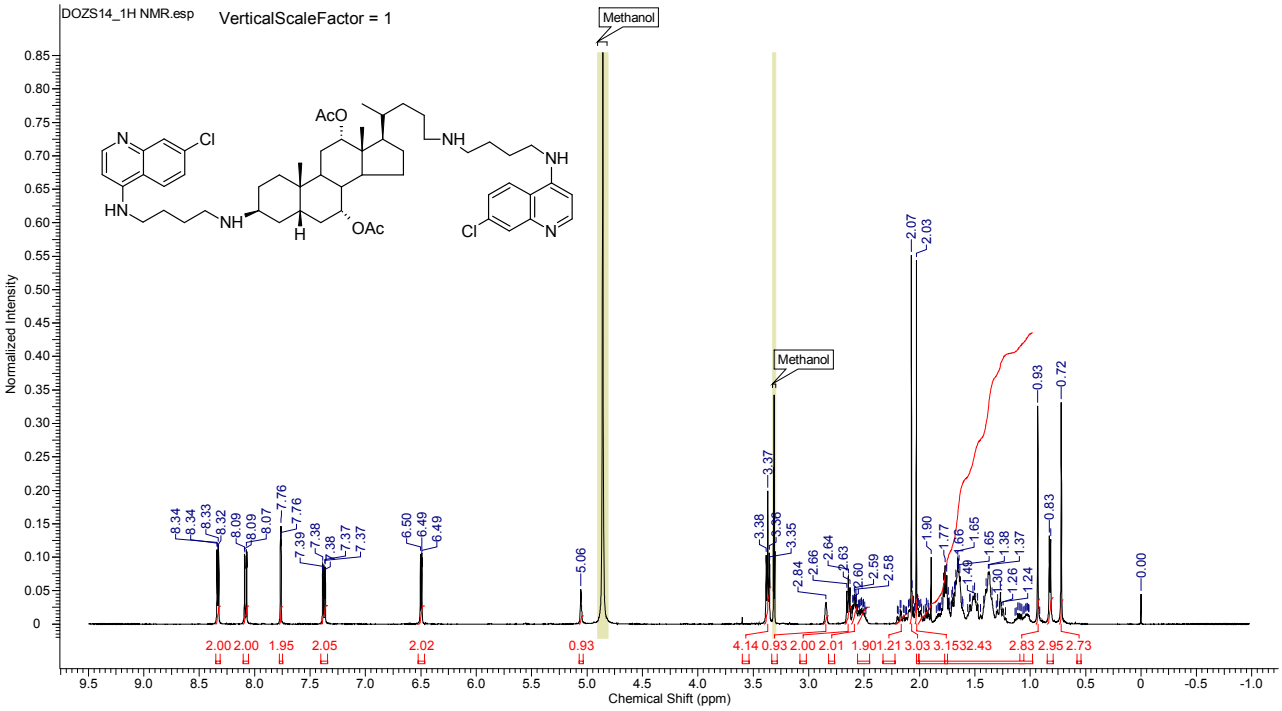
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	Date	23 Mar 2012 08:40:48			Date Stamp	23 Mar 2012 08:40:48
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\ZSAA014\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	432	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	1030.00	SW(cyclical) (Hz)	29761.90	Solvent	METHANOL-d4	Spectrum Offset (Hz)	14030.4600
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 64 (DOZS14): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 8.807, area 97.79 %; method D: RT 5.135, area 99.23 %.

2/26/2014 7:38:59 PM

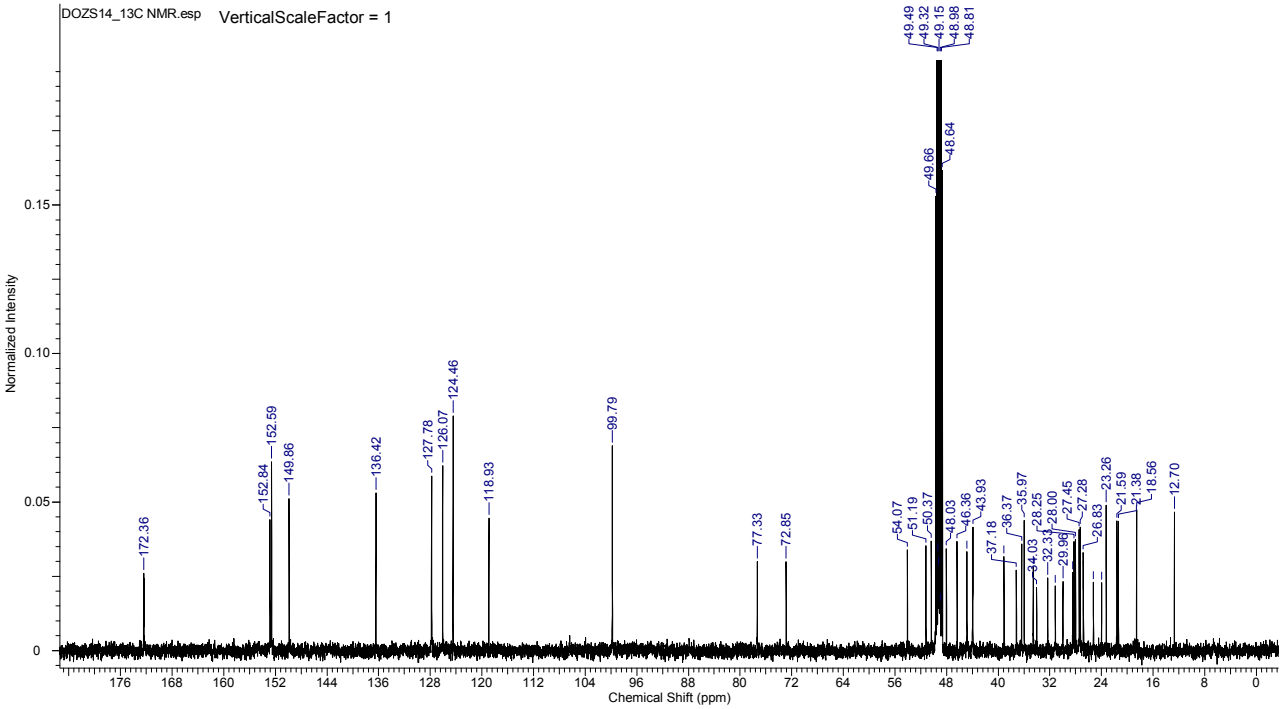
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.1261	***Date***	20 May 2011 14:56:32			***Date Stamp***	20 May 2011 14:56:32
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS14\1\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	114.00	***SW(cyclical) (Hz)***	5241.09	***Solvent***	METHANOL-d4	***Spectrum Offset (Hz)***	2131.7581
Spectrum Type	STANDARD	***Sweep Width (Hz)***	5240.93	***Temperature (degree C)***	25.000		



Compound 64 (DOZS14): ^{13}C NMR spectrum (125 MHz).

2/25/2014 6:17:56 PM

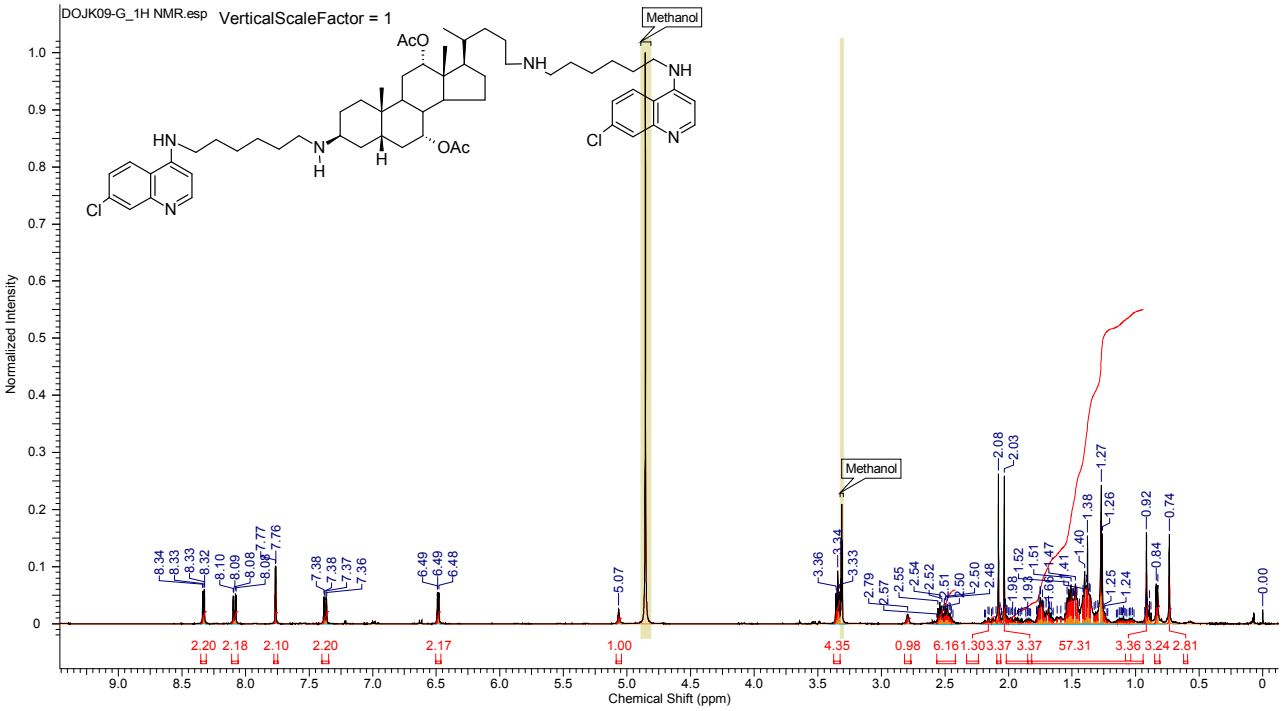
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	20 May 2011 15:05:04			***Date Stamp***	20 May 2011 15:05:04
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS14\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	605	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	METHANOL-d4	***Spectrum Offset (Hz)***	14029.8936
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.000		



Compound 65 (DOJK09-G): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 11.422, area 97.88 %; method D: RT 5.150, area 99.24.

2/25/2014 6:23:48 PM

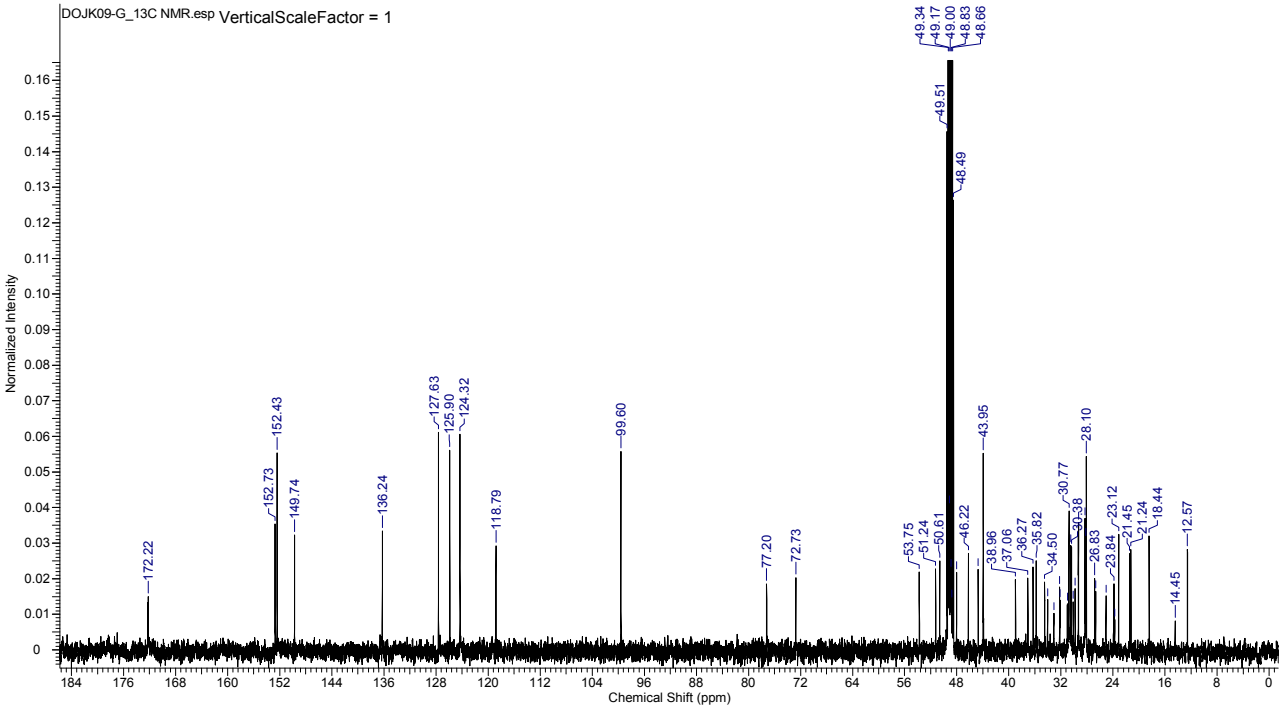
Number of Nuclei 0 H's							
Acquisition Time (sec)	2.9797	***Date***	02 Jun 2011 09:38:40			***Date Stamp***	02 Jun 2011 09:38:40
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJK09-G\1\pdata\1\1r						
Frequency (MHz)	500.26	***Nucleus***	1H	***Number of Transients***	16	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zg30
Receiver Gain	144.00	***SW(cyclical) (Hz)***	5498.53	***Solvent***	METHANOL-d4	***Spectrum Offset (Hz)***	1989.5295
Spectrum Type	STANDARD	***Sweep Width (Hz)***	5498.37	***Temperature (degree C)***	25.000		



Compound 65 (DOJK09-G): ^{13}C NMR spectrum (125 MHz).

2/25/2014 6:25:34 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	***Date***	02 Jun 2011 09:42:56			***Date Stamp***	02 Jun 2011 09:42:56
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJK09-G\2\pdata\1\1r						
Frequency (MHz)	125.79	***Nucleus***	13C	***Number of Transients***	760	***Origin***	spect
Original Points Count	16384	***Owner***	nmrsu	***Points Count***	32768	***Pulse Sequence***	zgpg30
Receiver Gain	2050.00	***SW(cyclical) (Hz)***	29761.90	***Solvent***	METHANOL-d4	***Spectrum Offset (Hz)***	14011.5469
Spectrum Type	STANDARD	***Sweep Width (Hz)***	29761.00	***Temperature (degree C)***	25.100		

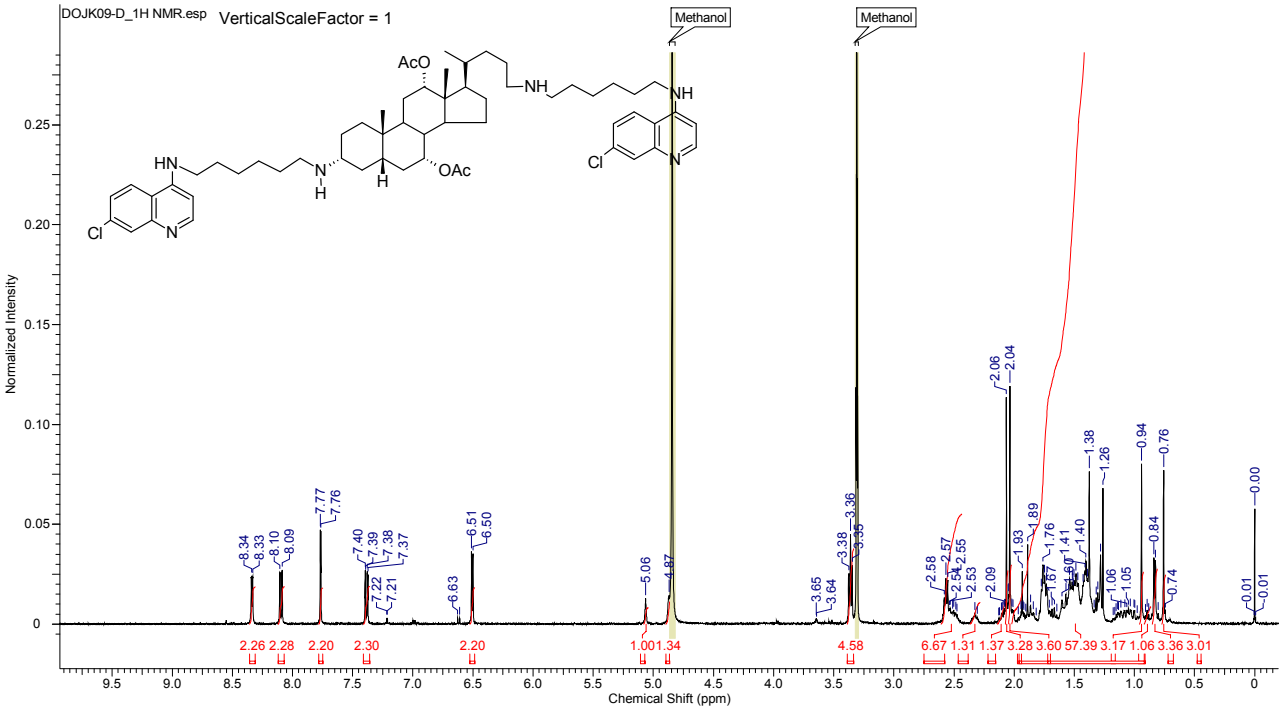


Compound 66 (DOJK09-D): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 9.878, area 99. 98 % ; method D: RT 5.208, area 96.76 %.

2/25/2014 6:27:19 PM

Number of Nuclei 0 H's

Acquisition Time (sec)	2.7394	*Date*	08 Jun 2011 09:17:20			*Date Stamp*	08 Jun 2011 09:17:20
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJK09-D\1\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	32	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	256.00	*SW(cyclical) (Hz)*	5980.86	*Solvent*	METHANOL-d4	*Spectrum Offset (Hz)*	2501.1787
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5980.68	*Temperature (degree C)*	25.000		

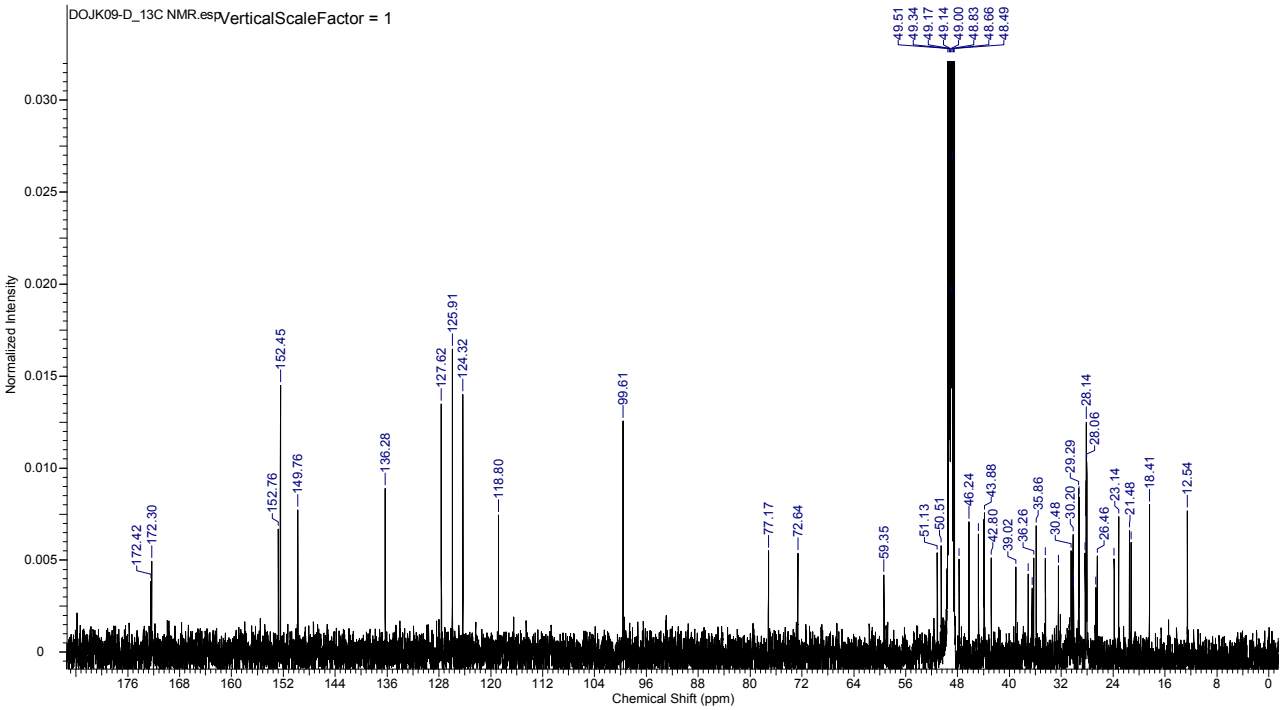


Compound 66 (DOJK09-D): ^{13}C NMR spectrum (125 MHz).

2/25/2014 6:29:08 PM

Number of Nuclei 0 C's

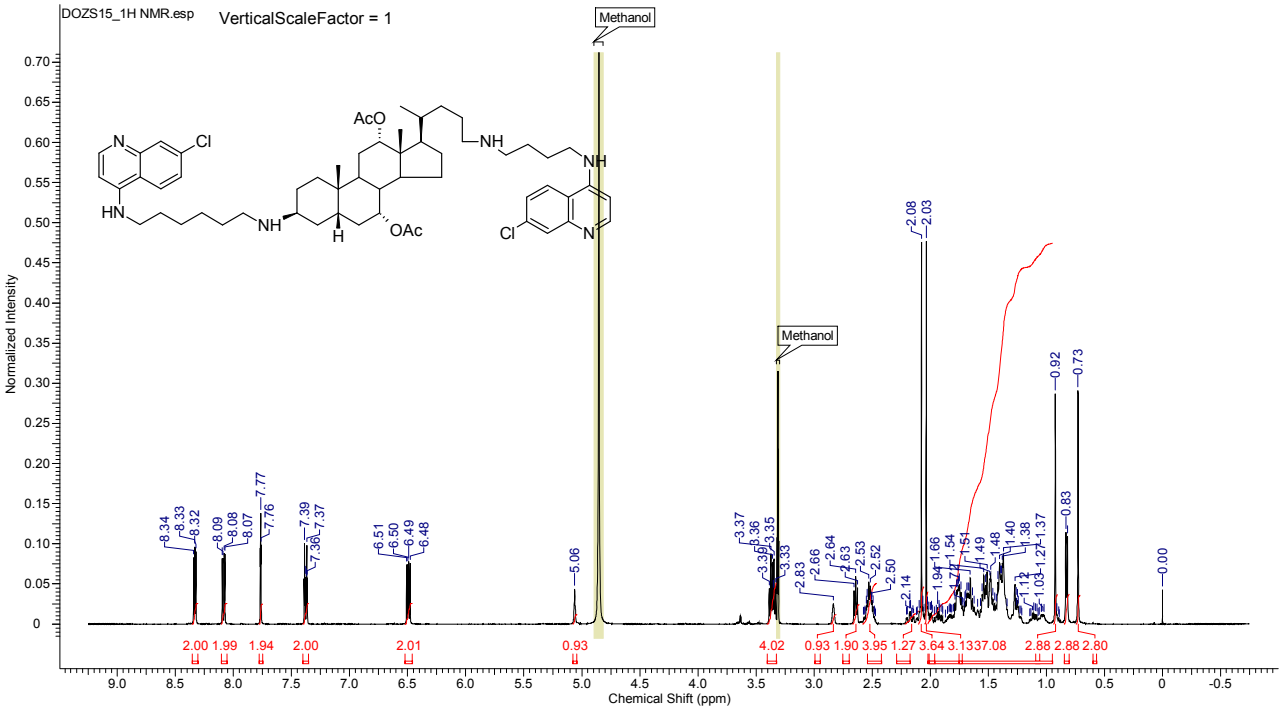
Acquisition Time (sec)	0.5505	*Date*	08 Jun 2011 09:53:36			*Date Stamp*	08 Jun 2011 09:53:36
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOJK09-D\6\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	2159	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	METHANOL-d4	*Spectrum Offset (Hz)*	14013.2061
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000		



Compound 67 (DOZS15): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 8.674, area 95.27 %; method D: RT 5.072, area 99.21 %.

2/26/2014 7:40:26 PM

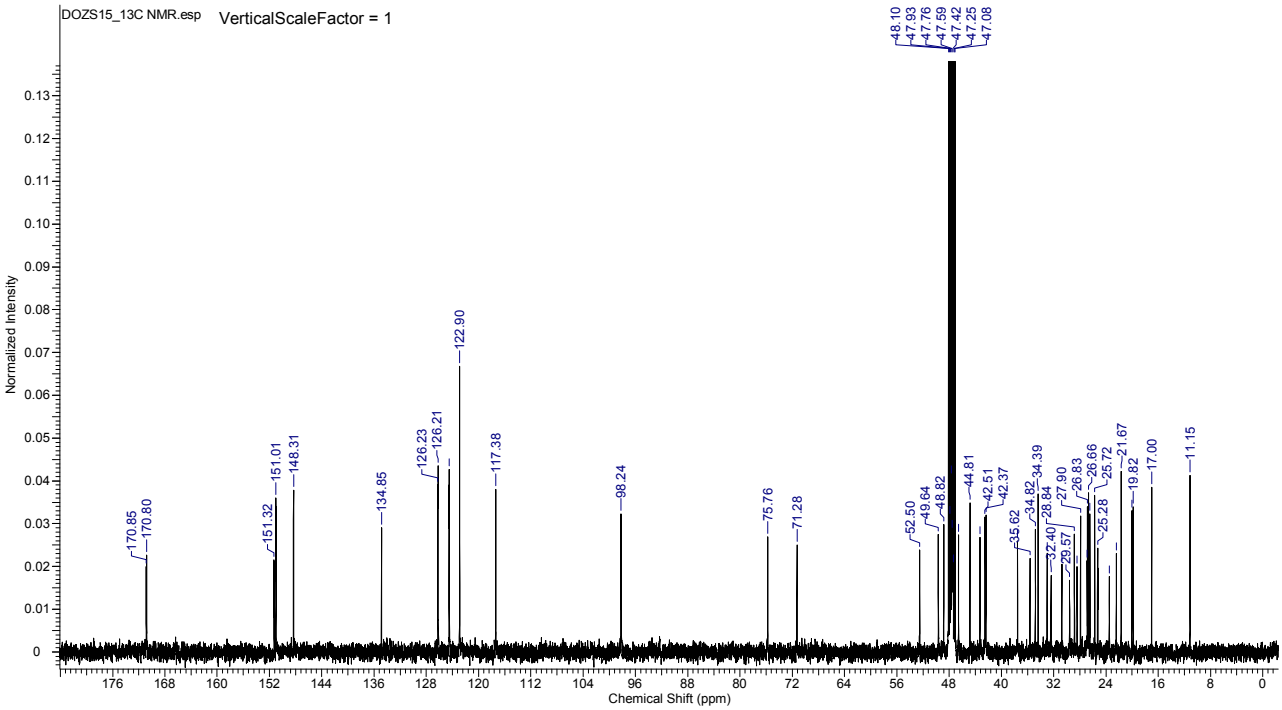
Number of Nuclei 0 H's							
Acquisition Time (sec)	3.2768	Date	27 May 2011 11:57:20			Date Stamp	27 May 2011 11:57:20
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS15\1\pdata\1\1r						
Frequency (MHz)	500.26	Nucleus	1H	Number of Transients	16	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zg30
Receiver Gain	90.50	SW(cyclical) (Hz)	5000.00	Solvent	METHANOL-d4	Spectrum Offset (Hz)	2126.2390
Spectrum Type	STANDARD	Sweep Width (Hz)	4999.85	Temperature (degree C)	25.000		



Compound 67 (DOZS15): ^{13}C NMR spectrum (125 MHz).

2/25/2014 6:32:47 PM

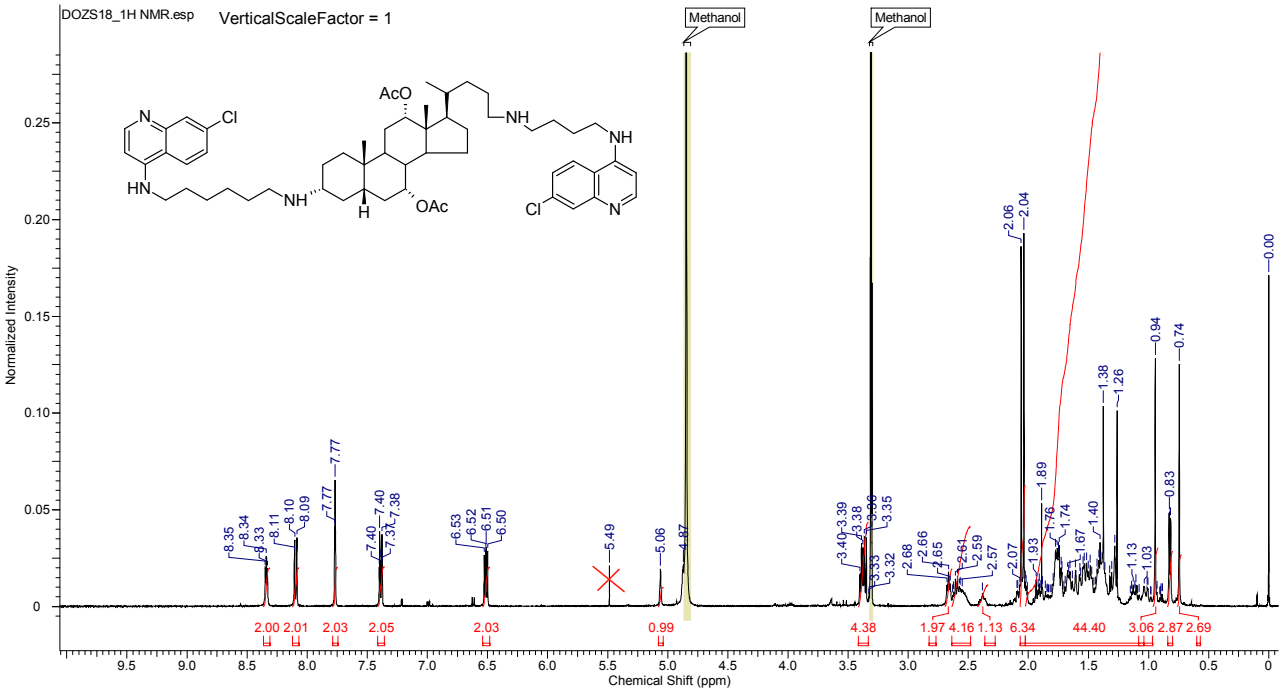
Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	Date	27 May 2011 12:03:44			Date Stamp	27 May 2011 12:03:44
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS15\2\pdata\1\1r						
Frequency (MHz)	125.79	Nucleus	13C	Number of Transients	716	Origin	spect
Original Points Count	16384	Owner	nmrsu	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	2050.00	SW(cyclical) (Hz)	29761.90	Solvent	METHANOL-d4	Spectrum Offset (Hz)	13833.8447
Spectrum Type	STANDARD	Sweep Width (Hz)	29761.00	Temperature (degree C)	25.000		



Compound 68 (DOZS18): ^{1}H NMR spectrum (500 MHz). HPLC purity: method C: RT 8.846, area 99.18 %; method D: RT 5.181, area 96.31 %.

2/26/2014 7:41:43 PM

Number of Nuclei 0 H's							
Acquisition Time (sec)	2.7394	*Comment*	5 mm BBO BB-1H/D Z-GRD Z8007/0118			*Date*	06 Jun 2011 09:25:52
Date Stamp	06 Jun 2011 09:25:52						
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS15B\10\pdata\1\1r						
Frequency (MHz)	500.26	*Nucleus*	1H	*Number of Transients*	33	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zg30
Receiver Gain	256.00	*SW(cyclical) (Hz)*	5980.86	*Solvent*	METHANOL-d4	*Spectrum Offset (Hz)*	2508.4824
Spectrum Type	STANDARD	*Sweep Width (Hz)*	5980.68	*Temperature (degree C)*	24.900		



Compound 68 (DOZS18): ^{13}C NMR spectrum (125 MHz).

2/25/2014 6:35:14 PM

Number of Nuclei 0 C's							
Acquisition Time (sec)	0.5505	*Date*	06 Jun 2011 09:49:20			*Date Stamp*	06 Jun 2011 09:49:20
File Name	C:\Users\Dejan Opsenica\Documents\Radovi\Aminohinolinski\DO152 i ostali\Recenzija\Spektri NMR_Stari\500 MHz\DOZS15B\6\pdata\1\1r						
Frequency (MHz)	125.79	*Nucleus*	13C	*Number of Transients*	2406	*Origin*	spect
Original Points Count	16384	*Owner*	nmrsu	*Points Count*	32768	*Pulse Sequence*	zgpg30
Receiver Gain	1030.00	*SW(cyclical) (Hz)*	29761.90	*Solvent*	METHANOL-d4	*Spectrum Offset (Hz)*	14012.9160
Spectrum Type	STANDARD	*Sweep Width (Hz)*	29761.00	*Temperature (degree C)*	25.000