Electronic Supplementary Material (ESI) for RSC Advances

Killing double bonds softly: The reduction of polymer-bound alkenes

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General procedures:

GP1: *Attachment of monoprotected diamines to the resin on the example N-(3-aminopropyl)-2-nitrobenzenesulfonamide*

2.00 mmol of the 2-Cl-Trt-Cl resin (**4**) were swollen in 12 mL dry CH_2Cl_2 and treated with 6.00 mmol *N*,*N*-diisopropylethylamine (DIPEA) and 6.00 mmol *N*-(3-aminopropyl)-2-nitrobenzenesulfonamide. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, 3 mL methanol were added and the mixture was shaken for another 15 minutes. The solvents were removed and the resin was washed with CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/ CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **5** was dried in *vacuo* overnight.

GP2: *Fukuyama-Alkylation and Nosyl-deprotection*

0.20 mmol of the resin **5** were swollen in 6 mL *N*,*N*-dimethylformamide (DMF) and treated with 1.20 mmol 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU) and 1.20 mmol halide. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, the solvents were removed and the resin was washed with DMF, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **6** was dried in *vacuo* overnight.

0.20 mmol of the resin **6** were swollen in 6 mL DMF and treated with 1.00 mmol DBU and 2.00 mmol 2-mercaptoethanol. The reaction vessel was closed and shaken for 1 h at room temperature. Afterwards the solvents were removed and the resin was washed with DMF until the filtrate stayed colorless. The whole procedure was repeated with only 30 minutes of reaction time until the reaction mixture stayed colorless. Afterwards, the resin was washed with DMF, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **8** was dried in *vacuo* overnight.

GP3: *Nosyl-deprotection and Acylation with a carboxylic acid*

0.20 mmol of the resin **5** were swollen in 6 mL DMF and treated with 1.00 mmol DBU and 2.00 mmol 2-mercaptoethanol. The reaction vessel was closed and shaken for 1 h at room temperature. Afterwards the solvents were removed and the resin was washed with DMF until the filtrate stayed colorless. The whole procedure was repeated with only 30 minutes of reaction time until the reaction mixture stayed colorless. Afterwards, the resin was washed with DMF, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **7** was dried in *vacuo* overnight.

0.20 mmol of the resin **7** were swollen in 6 mL DMF and treated with 1.00 mmol 1-hydroxybenzotriazole (HOBt) and 1.00 mmol carboxylic acid. The reaction vessel was shaken for 5 minutes. Then, 1.00 mmol *N*,*N'*-diisopropylcarbodiimide (DIC) was added. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, the solvents were removed and the resin was washed with DMF, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **8** was dried in *vacuo* overnight.

GP4: *Reduction and Cleavage*

1.00 mmol dimethylamine-borane adduct was dissolved in 3 mL dry CH_2Cl_2 and Argon was bubbled through for 5 minutes. After the addition of 0.02 mmol of Wilkinson's catalyst (tris(triphenylphosphine)-rhodium(I) chloride), the mixture was added to the resin **8**, which had been previously swollen in 3 mL dry dichloromethane. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, the solvent was removed and the resin was washed with CH_2Cl_2, methanol (3 ×) and again CH_2Cl_2 (3 ×). The resin **9** was dried in *vacuo* overnight.

In a vial 0.20 mmol of the resin **9** were treated with 5% trifluoroacetic acid (TFA) solution in CH_2Cl_2. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, the solvents were removed and the resin was washed with CH_2Cl_2, MeOH (2 ×), CH_2Cl_2/MeOH/CH_2Cl_2/ MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The organic phases were combined and the solvent was removed under reduced pressure to yield the crude product **10**.

GP5: *Nosyl-deprotection and Acylation with an acid chloride*

0.20 mmol of the resin **5** were swollen in 6 mL DMF and treated with 1.00 mmol DBU and 2.00 mmol 2-mercaptoethanol. The reaction vessel was closed and shaken for 1 h. Afterwards

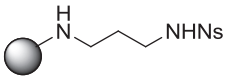
the solvents were removed and the resin was washed with DMF until the filtrate stayed colorless. The whole procedure was repeated with only 30 minutes of reaction time until the reaction mixture stayed colorless. Afterwards, the resin was washed with DMF, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **7** was dried in *vacuo* overnight.

0.20 mmol of the resin **7** were swollen in 6 mL dry CH_2Cl_2 and treated with 0.60 mmol triethylamine (TEA) and 0.60 mmol carboxylic acid chloride. The reaction vessel was closed and shaken for 15 h. Afterwards, the solvents were removed and the resin was washed with CH_2Cl_2, CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin **8** was dried in *vacuo* overnight.

GP6: *Imine formation*

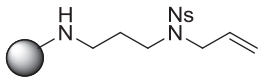
0.20 mmol of the resin **8** were swollen in 6 mL dry CH_2Cl_2 2.00 mmol amine were added. The reaction vessel was closed and shaken for 15 h at room temperature. Afterwards, the solvent was removed and the resin was washed with CH_2Cl_2/MeOH/CH_2Cl_2/MeOH/CH_2Cl_2 and again CH_2Cl_2 (3 ×). The resin was dried in *vacuo* overnight.

Resin **5**



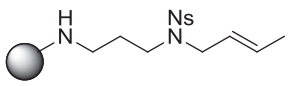
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 147.7 (C_{Ar}–NO_2), 133.3 (C_{Ar}), 132.5 (C_{Ar}), 130.7 (C_{Ar}), 127.6 (C_{Ar}), 125.1 (C_{Ar}), 42.3 (CH_2NH), 40.1 (CH_2NH), 30.5 (CH_2CH_2) ppm.

Resin **6a**



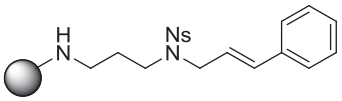
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 147.7 (C_{Ar}–NO_2), 133.3 (C_{Ar}), 132.7 (CH=CH_2), 131.5 (C_{Ar}), 130.6 (C_{Ar}), 127.6 (C_{Ar}), 124.0 (C_{Ar}), 119.1 (CH=CH_2), 49.8 (CH_2CH=CH_2), 45.1 (CH_2N), 41.7 (CH_2N), 29.1 ($CH_2(CH_2)_2$) ppm.

Resin **6b**



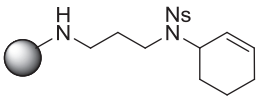
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 147.8 (C_{Ar}–NO_2), 136.6 (C=$CHCH_3$), 133.3 (C_{Ar}), 131.5 (C_{Ar}), 130.6 (C_{Ar}), 127.7 (C_{Ar}), 125.1 (C_{Ar}), 123.9 (C=$CHCH_3$), 49.1 (C=$CHCH_2$N), 44.7 (NHCH$_2$CH$_2$$CH_2$N), 41.7 ($CH_2$NH), 40.3 ($CH_2$NH), 28.5 ($CH_2(CH_2)_2$), 17.7 (*trans*-$CH_3$) , 12.8 (*cis*-$CH_3$) ppm.

Resin **6c**



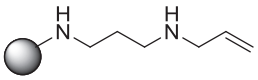
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 147.7 (C_{Ar}–NO_2), 134.2 (C_{Ar}), 133.4 (C_{Ar}), 131.5 (PhC=*C*H), 130.7 (C_{Ar}), 128.5 (C_{Ar}), 127.9 (C_{Ar}), 126.4 (Ph*C*=CH), 124.0 (C_{Ar}), 49.4 (C=CH*C*H_2N), 45.2 (*C*H_2N), 40.2 (*C*H_2N), 29.3 (*C*H_2(CH_2)$_2$) ppm.

Resin **6d**



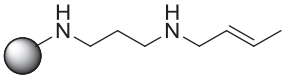
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 147.9 (C_{Ar}–NO_2), 133.8 (C_{Ar}), 133.2 (C_{Ar}), 132.1 (C_{Ar}), 131.4 (NCH*C*H=CH), 130.6 (C_{Ar}), 125.7 (C_{Ar}), 123.9 (NCHCH=*C*H), 42.9 (*C*H_2N), 40.5 (*C*H_2N), 32.8 (*C*H_2(CH_2)$_2$), 28.7 (NCH*C*H_2), 24.3 (CH=CH*C*H_2), 21.6 (CH=CHCH_2*C*H_2) ppm.

Resin **8a**



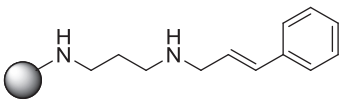
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 136.9 (*C*H=CH_2), 115.6 (CH=*C*H_2), 47.6 (*C*H_2CH=CH_2), 42.7 (*C*H_2N), 40.3 (*C*H_2N), 31.1 (*C*H_2(CH_2)$_2$) ppm.

Resin **8b**



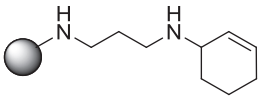
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 129.5 (*trans*-*C*=CHCH_3), 127.6 (*cis*-*C*=CHCH_3), 126.9 (*trans*-C=*C*HCH_3), 125.8 (*cis*-C=*C*HCH_3), 51.7 (C=CH*C*H_2N), 47.6 (NH$CH_2$$CH_2$*C*$H_2$N), 46.0 (*C*$H_2$NH), 42.7 (*C*$H_2$NH), 31.2 (*C*$H_2$($CH_2$)$_2$), 17.7 (*trans*-*C*$H_3$) , 13.0 (*cis*-*C*$H_3$) ppm.

Resin **8c**



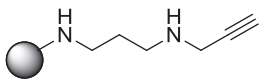
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 137.0 (C_{Ar}), 131.0 (PhC=*C*H), 128.4 (C_{Ar}), 127.2 (C_{Ar}), 126.1 (Ph*C*=CH), 124.0 (C_{Ar}), 51.9 (C=CH*C*H_2N), 47.7 (*C*H_2N), 42.8 (*C*H_2N), 31.2 (*C*H_2(CH_2)$_2$) ppm.

Resin **8d**



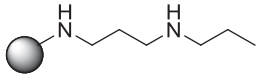
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 130.0 (NCH*C*H=CH), 128.5 (NCHCH=*C*H), 45.2 (*C*H_2N), 42.8 (*C*H_2N), 31.5 (*C*H_2(CH_2)$_2$), 29.5 (NCH*C*H_2), 25.2 (CH=CH*C*H_2), 20.2 (CH=CHCH_2*C*H_2) ppm.

Resin **8e**



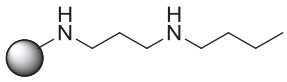
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 82.2 (*C*CH), 71.3 (C*C*H), 46.9 (*C*H_2N), 42.7 (*C*H_2N), 38.0 (*C*H_2N), 30.8 (*C*H_2(CH_2)$_2$) ppm.

Resin **9a**



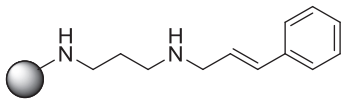
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 22.2 (*C*H_2), 11.7 (*C*H_3) ppm.

Resin **9b**



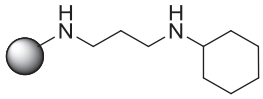
^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 19.4 (*C*H_2) , 14.0 (*C*H_3) ppm.

Resin **9c**



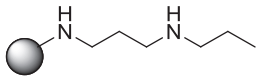
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 128.2 (C_{Ar}) ppm.

Resin **9d**



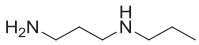
^{13}C NMR(Gel) (75 MHz, $CDCl_3$): δ = 26.9 (*C*H_2), 24.9 (*C*H_2) ppm.

Resin **9e**



^{13}C NMR(Gel) (100 MHz, $CDCl_3$): δ = 10.5 (*C*H_3) ppm.

***N*^{1}-Propylpropane-1,3-diamine (10a)**: Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.10 mL (145 mg; 1.20 mmol; 6.00 equiv.) allyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively.



The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 17 mg (0.146 mmol; 73% overall yield) of a colorless oil were obtained.

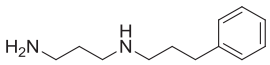
^{1}H NMR (400 MHz, MeOH-d_4): δ = 3.11 (t, *J* = 7.8 Hz, 2 H, C*H*$_2$NH$_2$), 3.05 (t, *J* = 7.6 Hz, 2 H, C*H*$_2$NH), 2.98 (t, *J* = 7.8 Hz, 2 H, C*H*$_2$NH), 2.07 (tt, *J* = 7.8 Hz, *J* = 7.6 Hz, 2 H, CH$_2$C*H*$_2$CH$_2$), 1.72 (tq, *J* = 7.8 Hz, *J* = 7.4 Hz, 2 H, C*H*$_2$CH$_3$), 1.02 (t, *J* = 7.4 Hz, 3 H, C*H*$_3$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 50.7 (–, *C*H$_2$NH), 45.8 (–, *C*H$_2$NH), 37.9 (–, *C*H$_2$NH$_2$), 25.4 (–, CH$_2$*C*H$_2$CH$_2$), 20.7 (–, *C*H$_2$CH$_3$), 11.2 (+, *C*H$_3$) ppm. [Impurity: 2-mercaptoethanol < 15%]. – MS (ESI): *m/z*: 117.1 [M$^+$+H]. – MS (FAB): *m/z*: 117.1 [M$^+$+H]. – HRMS ($C_6H_{16}N_2$): calc. 116.1313; found 116.1312. – IR (ATR): ṽ = 3039 (w), 2974 (w), 2809 (w), 2558 (w), 2246 (vw), 1665 (s), 1608 (m), 1531 (w), 1485 (m), 1428 (m), 1349 (vw), 1195 (s), 1177 (s), 1124 (vs), 1004 (w), 962 (vw), 834 (m), 796 (m), 771 (w), 722 (s), 600 (w), 519 (w), 442 (w), 414 (w) cm^{-1}.

***N*^{1}-Butylpropane-1,3-diamine (10b)**: Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.15 mL (191 mg; 1.20 mmol; 6.00 equiv.) crotyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 20 mg (0.154 mmol; 77% overall yield) of an almost colorless solid were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 3.11 (t, *J* = 7.8 Hz, 2 H, C*H*$_2$NH$_2$), 3.08 – 2.99 (m, 4 H, 2 × C*H*$_2$NH), 2.07 (tt, *J* = 7.8 Hz, 2 H, CH$_2$C*H*$_2$CH$_2$), 1.67 (tt, *J* = 7.8 Hz, 2 H, CH$_2$C*H*$_2$CH$_2$), 1.43 (tq, *J* = 7.8 Hz, *J* = 7.3 Hz, 2 H, C*H*$_2$CH$_3$), 0.98 (t, *J* = 7.3 Hz, 3 H, C*H*$_3$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 48.9 (–, *C*H$_2$NH), 45.8 (–, *C*H$_2$NH), 37.9 (–, *C*H$_2$NH$_2$), 29.2 (–, CH$_2$*C*H$_2$CH$_2$), 25.4 (–, CH$_2$*C*H$_2$CH$_2$), 20.8 (–, *C*H$_2$CH$_3$), 13.9 (+, *C*H$_3$) ppm. [Impurity: 2-mercaptoethanol < 15%]. – MS (ESI): *m/z*: 131.2 [M$^+$+H].– MS (FAB): *m/z*:

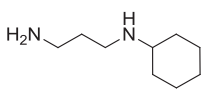
131.1 [M^++H]. – HRMS ($C_7H_{18}N_2$): calc. 130.1470; found 130.1475. – IR (ATR): $\tilde{\nu}$ = 3038 (w), 2870 (w), 2230 (vw), 1665 (s), 1606 (m), 1531 (w), 1485 (m), 1429 (m), 1349 (vw), 1177 (s), 1124 (s), 969 (w), 920 (vw), 834 (m), 796 (m), 770 (w), 721 (s), 600 (w), 519 (w), 442 (w), 412 (w) cm^{-1}. – mp: 149.4 °C.

***N*^{1}-(3-Phenylpropyl)propane-1,3-diamine (10c)**: Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.18 mL (244 mg; 1.20 mmol; 6.00 equiv.) cinnamyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 23 mg (0.120 mmol; 60% overall yield) of a white solid were obtained.



^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.32 – 7.17 (m, 5 H, H_{Ar}), 3.10 (t, J = 7.8 Hz, 2 H, CH_2NH$_2$), 3.07 – 2.99 (m, 4 H, 2 × CH_2NH), 2.72 (t, J = 7.8 Hz, 2 H, CH_2C$_{Ar}$), 2.06 (tt, J = 7.8 Hz, 2 H, CH$_2$CH_2CH$_2$), 2.01 (tt, J = 7.8 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 141.6 (C_{quart}), 129.7 (+, 2 × CH$_{Ar}$), 129.4 (+, 2 × CH$_{Ar}$), 127.5 (+, CH$_{Ar}$), 48.7 (–, CH$_2$NH), 45.8 (–, CH$_2$NH), 37.8 (–, CH$_2$NH$_2$), 33.5 (–, CH$_2$C$_{Ar}$), 29.0 (–, CH$_2$CH$_2$), 25.4 (–, CH$_2$CH$_2$) ppm. – MS (ESI): *m/z*: 193.2 [M^++H]. – MS (FAB): *m/z*: 193.2 [M^++H]. – HRMS ($C_{12}H_{21}N_2$): calc. 193.1705; found 193.1704. – IR (ATR): $\tilde{\nu}$ = 3028 (w), 2944 (w), 2797 (w), 2231 (vw), 1663 (s), 1536 (w), 1496 (w) 1484 (w), 1454 (w), 1429 (w), 1326 (vw), 1177 (s), 1130 (s), 906 (vw), 836 (m), 796 (m), 768 (w), 751 (m), 723 (s), 694 (m), 600 (w), 570 (w), 519 (w), 493 (w), 461 (w), 441 (w), 411 (w) cm^{-1}. – mp: 157.9 °C.

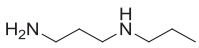
***N*^{1}-Cyclohexylpropane-1,3-diamine (10d)**: Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of Resin **5** were swollen in 6 mL DMF and treated with 0.15 mL (203 mg; 1.20 mmol; 6.00 equiv.) 3-bromocyclohexene as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively.



The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 30 mg (0.192 mmol; 96% overall yield) of an almost colorless solid were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 3.21 – 3.02 (m, 5 H, C*H*$_2$NH$_2$, C*H*$_2$NH, C*H*NH), 2.16 – 2.02 (m, 4 H, C*H*$_2$CH$_2$N + 2 × cHex*H*), 1.93 – 1.85 (m, 2 H, cHex*H*), 1.75 – 1.68 (m, 1 H, cHex*H*), 1.43 – 1.32 (m, 4 H, cHex*H*), 1.29 – 1.16 (m, 1 H, cHex*H*) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 58.7 (+, *C*HNH), 42.7 (–, *C*H$_2$NH), 37.9 (–, *C*H$_2$NH$_2$), 30.3 (–, NH$_2$CH$_2$*C*H$_2$), 26.1 (–, 2 × CH*C*H$_2$), 25.6 (–, CHCH$_2$CH$_2$*C*H$_2$), 25.5 (–, 2 × CHCH$_2$*C*H$_2$) ppm. [Impurity: 2-mercaptoethanol < 10%]. – MS (ESI): *m/z*: 157.2 [M$^+$+H]. – MS (FAB): *m/z*: 157.2 [M$^+$+H]. – HRMS ($C_9H_{21}N_2$): calc. 157.1705; found 157.1704. – IR (ATR): $\tilde{\nu}$ = 3034 (m), 2934 (m), 2857 (m), 1665 (s), 1529 (w), 1500 (w), 1431 (m), 1394 (w), 1172 (s), 1120 (s), 1069 (m), 1053 (m), 1032 (w), 972 (vw), 942 (vw), 897 (vw), 838 (m), 797 (s), 765 (w), 721 (s), 674 (vw), 598 (w), 581 (vw), 517 (w), 447 (w), 414 (w) cm^{-1}. – mp: 153.7 °C.

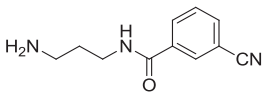
***N*^{1}-Propylpropane-1,3-diamine (10e)**: Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 179 mg (1.20 mmol; 6.00 equiv.) propargyl bromide solution (80 wt.% in toluene) as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 15 mg (0.129 mmol; 65% overall yield) of an almost colorless oil were obtained.



^{1}H NMR (400 MHz, MeOH-d_4): δ = 3.11 (t, *J* = 7.8 Hz, 2 H, C*H*$_2$NH$_2$), 3.05 (t, *J* = 7.6 Hz, 2 H, C*H*$_2$NH), 2.98 (t, *J* = 7.8 Hz, 2 H, C*H*$_2$NH), 2.07 (tt, *J* = 7.8 Hz, 2 H, CH$_2$C*H*$_2$CH$_2$), 1.72 (tq, *J* = 7.6 Hz, *J* = 7.4 Hz, 2 H, C*H*$_2$CH$_3$), 1.02 (t, *J* = 7.4 Hz, 3 H, C*H*$_3$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 50.7 (–, *C*H$_2$NH), 45.8 (–, *C*H$_2$NH), 37.9 (–, *C*H$_2$NH$_2$), 25.4 (–, CH$_2$*C*H$_2$CH$_2$), 20.7 (–, *C*H$_2$CH$_3$), 11.2 (+, *C*H$_3$) ppm. [Impurity: 2-mercaptoethanol < 30%]. –

MS (ESI): *m/z*: 117.1 [M^++H]. – MS (FAB): *m/z*: 117.1 [M^++H]. – HRMS ($C_6H_{16}N_2$): calc. 116.1313; found 116.1314. – IR (ATR): $\tilde{\nu}$ = 2794 (w), 1666 (s), 1475 (w), 1427 (w), 1193 (s), 1126 (s), 835 (m), 798 (m), 758 (w), 721 (m), 598 (w), 518 (w), 438 (w), 411 (w) cm^{-1}.

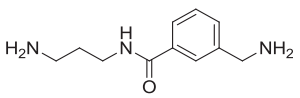
***N*-(3-Aminopropyl)-3-cyanobenzamide (Table 2, Entry 6)**: Resin **5** was synthesized



according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 147 mg (1.00 mmol; 5.00 equiv.) 3-cyanobenzoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 12 mg (0.059 mmol; 30% overall yield) of a light yellow oil were obtained.

^{1}H NMR (300 MHz, MeOH-d_4): δ = 8.23 – 8.18 (m, 1 H, H_{Ar}), 8.18 – 8.11 (m, 1 H, H_{Ar}), 7.96 – 7.89 (m, 1 H, H_{Ar}), 7.73 – 7.64 (m, 1 H, H_{Ar}), 3.51 (t, *J* = 6.5 Hz, 2 H, CH_2NH), 3.01 (t, *J* = 7.2 Hz, 2 H, C$H_2$$NH_2$), 1.97 (tt, *J* = 7.2 Hz, *J* = 6.5 Hz, 2 H, $CH_2CH_2CH_2$) ppm. (For further analytical data see **Entry 7** on page 10/11)

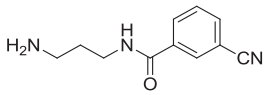
3-(Aminomethyl)-*N*-(3-aminopropyl)benzamide (Table 2, Entry 6): Resin **5** was



synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 147 mg (1.00 mmol; 5.00 equiv.) 3-cyanobenzoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 10 mg (0.048 mmol; 24% overall yield) of a colorless oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.97 – 7.95 (m, 1 H, H_{Ar}), 7.90 – 7.86 (m, 1 H, H_{Ar}), 7.67 – 7.64 (m, 1 H, H_{Ar}), 7.59 – 7.54 (m, 1 H, H_{Ar}), 4.19 (bs, 2 H, $C_{Ar}CH_2$), 3.51 (t, *J* = 6.6 Hz, 2 H, CH_2NH), 3.01 (t, *J* = 7.3 Hz, 2 H, CH_2NH_2), 1.98 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, $CH_2CH_2CH_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 170.1 (C_{quart}, *C*=O), 136.2 (C_{quart}, $C_{Ar}CH_2NH_2$), 135.2 (C_{quart}, $C_{Ar}CO$), 133.3 (+, CH_{Ar}), 130.6 (+, CH_{Ar}), 129.3 (+, CH_{Ar}), 128.8 (+, CH_{Ar}), 44.1 (–, $C_{Ar}CH_2$), 38.4 (–, CH_2NH_2), 37.7 (–, CH_2NH), 28.9 (–, $CH_2CH_2CH_2$) ppm. – MS (FAB): *m/z*: 208.1 [M^++H]. – HRMS ($C_{11}H_{18}N_3O$): calc. 208.1450; found 208.1453. – IR (KBr): ṽ = 3049 (s), 2658 (m), 1678 (vs), 1545 (m), 1434 (m), 1384 (w), 1325 (m), 1203 (s), 1136 (s), 926 (vw), 839 (m), 800 (m), 723 (m), 699 (w), 598 (w), 518 (w), 410 (vw) cm^{-1}.

***N*-(3-Aminopropyl)-3-cyanobenzamide (Table 2, Entry 7)**: Resin **5** was synthesized

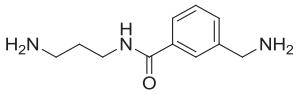


according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 147 mg (1.00 mmol; 5.00 equiv.) 3-cyanobenzoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4 with minor modifications. 121 mg (2.00 mmol; 10.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 20 mg (0.098 mmol; 49% overall yield) of a light yellow oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 8.21 – 8.18 (m, 1 H, H_{Ar}), 8.15 – 8.11 (m, 1 H, H_{Ar}), 7.94 – 7.90 (m, 1 H, H_{Ar}), 7.71 – 7.66 (m, 1 H, H_{Ar}), 3.51 (t, *J* = 6.6 Hz, 2 H, CH_2NH), 3.00 (t, *J* = 7.3 Hz, 2 H, CH_2NH_2), 1.97 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, $CH_2CH_2CH_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 168.6 (C_{quart}, *C*=O), 136.6 (C_{quart}, $C_{Ar}CO$), 136.1 (+, CH_{Ar}), 132.8 (+, CH_{Ar}), 132.2 (+, CH_{Ar}), 131.0 (+, CH_{Ar}), 119.0 (C_{quart}, *C*≡N), 114.0 (C_{quart}, $C_{Ar}CN$), 38.4 (–, CH_2NH_2), 37.7 (–, CH_2NH), 28.9 (–, $CH_2CH_2CH_2$) ppm. – MS (EI): *m/z* (%): 203.1 (35) [M^+], 186.1 (27) [M^+-NH_3], 173.1 (51) [M^+-NH_2CH_2], 159.1 (72) [M^+-$NH_2CH_2CH_2$], 130.0 (88) [$C_8H_4NO^+$], 44.1 (100) [$C_2H_6N^+$]. – HRMS ($C_{11}H_{13}N_3O$): calc. 203.1059; found 203.1060. – IR (ATR): ṽ = 3281 (w), 2942 (w), 2227 (w), 1683 (m), 1637 (m), 1544 (m), 1476 (w), 1434 (w), 1397 (w), 1370 (vw), 1325 (w), 1185 (m), 1127 (m), 1000 (w), 917 (w),

834 (w), 800 (w), 769 (w), 753 (w), 720 (m), 666 (w), 587 (w), 562 (w), 539 (vw), 518 (w), 495 (w), 423 (w) cm^{-1}.

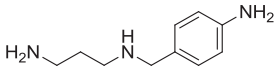
3-(Aminomethyl)-*N*-(3-aminopropyl)benzamide (Table 2, Entry 7): Resin **5** was



synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 147 mg (1.00 mmol; 5.00 equiv.) 3-cyanobenzoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4 with minor modifications. 121 mg (2.00 mmol; 10.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 21 mg (0.101 mmol; 51% overall yield) of a colorless oil were obtained.

^{1}H NMR (300 MHz, MeOH-d_4): δ = 7.98 – 7.94 (m, 1 H, H_{Ar}), 7.91 – 7.85 (m, 1 H, H_{Ar}), 7.68 – 7.62 (m, 1 H, H_{Ar}), 7.60 – 7.51 (m, 1 H, H_{Ar}), 4.19 (bs, 2 H, CH_2NH$_2$), 3.51 (t, J = 6.8 Hz, 2 H, CH_2NH), 3.01 (t, J = 7.4 Hz, 2 H, CH_2NH$_2$), 1.98 (tt, J = 7.4 Hz, J = 6.8 Hz, 2 H, $CH_2CH_2CH_2$) ppm. (For further analytical data see **Entry 6** on page 9/10)

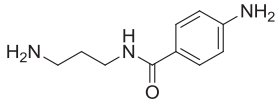
***N*^{1}-(4-Aminobenzyl)propane-1,3-diamine (Table 2, Entry 8)**: Resin **5** was synthesized



according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 267 mg (1.20 mmol; 6.00 equiv.) 4-nitrobenzyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 17 mg (0.0949 mmol; 47% overall yield) of a light yellow oil were obtained.

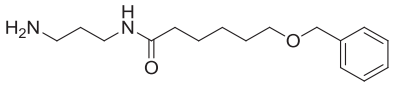
^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.41 – 7.35 (m, 2 H, 2 × H_{Ar}), 7.05 – 6.99 (m, 2 H, 2 × H_{Ar}), 4.14 (s, 2 H, CH_2C$_{Ar}$), 3.14 (t, *J* = 7.8 Hz, 2 H, CH_2NH$_2$), 3.04 (t, *J* = 7.8 Hz, 2 H, CH_2NH), 2.08 (tt, *J* = 7.8 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 144.7 (C$_{quart}$, C_{Ar}NH$_2$), 132.5 (+, 2 × CH$_{Ar}$), 124.9 (C$_{quart}$, C_{Ar}), 119.4 (+, 2 × CH$_{Ar}$), 52.3 (–, CH$_2$C$_{Ar}$), 45.2 (–, CH$_2$NH), 37.9 (–, CH$_2$NH$_2$), 25.4 (–, CH$_2$$CH_2CH_2$) ppm. [Impurity: 2-mercaptoethanol 31%]. – MS (ESI): *m/z*: 180.1 [M$^+$+H]. – MS (FAB): *m/z*: 180.2 [M$^+$+H]. – HRMS (C$_{10}$H$_{18}$N$_3$): calc. 180.1501; found 180.1503. – IR (KBr): $\tilde{\nu}$ = 3380 (m), 2938 (m), 1678 (s), 1523 (m), 1431 (m), 1281 (w), 1203 (s), 1134 (s), 1077 (w), 979 (vw), 838 (m), 800 (m), 723 (m), 559 (w), 515 (w), 410 (vw) cm^{-1}.

4-Amino-*N*-(3-aminopropyl)benzamide (Table 2, Entry 9): Resin **5** was synthesized

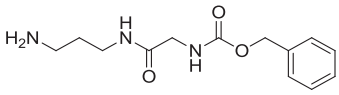


according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP5, 0.20 mmol of resin **5** were swollen and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 0.08 mL (61 mg; 0.60 mmol; 3.00 equiv.) TEA as well as 111 mg (0.60 mmol; 3.00 equiv.) 4-nitrobenzoic acid chloride, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 24 mg (0.124 mmol; 62% overall yield) of a brown oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.70 – 7.64 (m, 2 H, 2 × H_{Ar}), 6.83 – 6.77 (m, 2 H, 2 × H_{Ar}), 3.47 (t, *J* = 6.6 Hz, 2 H, CH_2NH$_2$), 2.97 (t, *J* = 7.3 Hz, 2 H, CH_2NH), 1.93 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 170.9 (C$_{quart}$, C=O), 150.8 (C$_{quart}$, C_{Ar}NH$_2$), 130.1 (+, 2 × CH$_{Ar}$), 124.5 (C$_{quart}$, C_{Ar}), 116.2 (+, 2 × CH$_{Ar}$), 38.2 (–, CH$_2$NH$_2$), 37.2 (–, CH$_2$NH), 29.0 (–, CH$_2$$CH_2CH_2$) ppm. [Impurity: 2-mercaptoethanol 39%]. – MS (ESI): *m/z*: 194.1 [M$^+$+H]. – MS (FAB): *m/z*: 194.2 [M$^+$+H]. – HRMS (C$_{10}$H$_{16}$N$_3$O): calc. 194.1293; found 194.1291. – IR (ATR): $\tilde{\nu}$ = 3078 (w), 1672 (s), 1606 (m), 1550 (m), 1508 (m), 1434 (m), 1312 (w), 1186 (s), 1132 (s), 1075 (m), 841 (m), 797 (m), 770 (w), 723 (m), 610 (w), 519 (w) cm^{-1}.

***N*-(3-Aminopropyl)-6-(benzyloxy)hexanamide (Table 2, Entry 10)**: Resin **5** was  synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 222 mg (1.00 mmol; 5.00 equiv.) 6-benzyloxyhexanoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 31 mg (0.111 mmol; 55% overall yield) of a colorless oil were obtained.

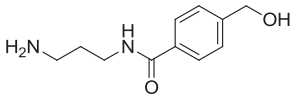
^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.37 – 7.24 (m, 5 H, H_{Ar}), 4.48 (s, 2 H, CH_2C_{Ar}), 3.49 (t, J = 6.6 Hz, 2 H, CH_2O), 2.95 (t, J = 7.3 Hz, 2 H, CH_2NH), 2.22 (t, J = 7.6 Hz, 2 H, CH_2NH_2), 1.88 (tt, J = 7.6 Hz, J = 7.3 Hz, 2 H, $NH_2CH_2CH_2$), 1.67 – 1.58 (m, 4 H, 2 × CH_2), 1.45 – 1.37 (m, 2 H, CH_2), 1.37 – 1.27 (m, 2 H, CH_2) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 177.0 (C_{quart}, C=O), 139.8 (C_{quart}, C_{Ar}), 129.4 (+, 2 × CH_{Ar}), 128.9 (+, 2 × CH_{Ar}), 128.7 (+, CH_{Ar}), 73.9 (–, CH_2C_{Ar}), 71.2 (–, CH_2O), 38.3 (–, CH_2NH_2), 37.0 (–, CH_2NH), 36.9 (–, CH_2CO), 30.4 (–, $CH_2CH_2NH_2$), 28.6 (–, CH_2CH_2O), 26.9 (–, CH_2CH_2CO), 26.8 (–, $CH_2CH_2CH_2O$) ppm. – MS (ESI): *m/z*: 279.2 [M^++H]. – MS (FAB): *m/z*: 279.3 [M^++H]. – HRMS ($C_{16}H_{27}N_2O_2$): calc. 279.2073; found 279.2071. – IR (ATR): ν = 3343 (w), 2940 (w), 2085 (vw), 1640 (w), 1453 (vw), 1086 (m), 836 (vw), 799 (vw), 721 (vw), 697 (vw), 598 (w) cm^{-1}.

Benzyl (2-((3-aminopropyl)amino)-2-oxoethyl)carbamate (Table 2, Entry 11): Resin **5**  was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 213 mg (1.00 mmol; 5.00 equiv.) *N*-benzyloxycarbonyl glycine, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The

cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 35 mg (0.132 mmol; 66% overall yield) of a yellow oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.35 – 7.25 (m, 5 H, H_{Ar}), 5.06 (bs, 2 H, CH_2O), 3.72 (bs, 2 H, CH_2CO), 3.30 – 3.25 (m, 2 H, CH_2NHCO), 2.90 (t, J = 7.1 Hz, 2 H, CH_2NH$_2$), 1.80 (tt, J = 7.1 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 173.4 (C$_{quart}$, C=O), 159.2 (C$_{quart}$, CO_2), 138.1 (C$_{quart}$, C_{Ar}), 129.5 (+, 2 × CH_{Ar}), 129.1 (+, CH_{Ar}), 129.0 (+, 2 × CH_{Ar}), 67.9 (–, CH_2O), 45.0 (–, CH_2CO), 38.1 (–, CH_2NH), 36.8 (–, CH_2NH_2), 28.7 (–, CH$_2$CH$_2$CH$_2$) ppm. – MS (ESI): *m/z*: 266.2 [M$^+$ + H]. – MS (FAB): *m/z*: 266.2 [M$^+$ + H]. – HRMS ($C_{13}H_{20}N_3O_3$): calc. 266.1505; found 266.1504. – IR (KBr): $\tilde{\nu}$ = 3302 (w), 3068 (w), 2949 (w), 1687 (m), 1677 (m), 1544 (m), 1439 (w), 1353 (w), 1260 (m), 1203 (m), 1136 (m), 1085 (w), 1052 (w), 984 (w), 837 (w), 800 (w), 778 (w), 741 (w), 723 (w), 699 (w), 597 (vw), 518 (vw) cm^{-1}.

***N*-(3-Aminopropyl)-4-(hydroxymethyl)benzamide (Table 2, Entry 12)**: Resin **5** was

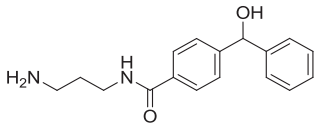


synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 150 mg (1.00 mmol; 5.00 equiv.) 4-carboxybenzaldehyde, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 31 mg (0.149 mmol; 74% overall yield) of a colorless oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.82 (d, J = 8.3 Hz, 2 H, 2 × H_{Ar}), 7.46 (d, J = 8.3 Hz, 2 H, 2 × H_{Ar}), 4.67 (s, 2 H, CH_2OH), 3.50 (t, J = 6.6 Hz, 2 H, CH_2NH), 3.00 (t, J = 7.3 Hz, 2 H, CH_2NH$_2$), 1.97 (tt, J = 7.3 Hz, J = 6.6 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 170.8 (C$_{quart}$, C=O), 147.1 (C$_{quart}$, C_{Ar}CH$_2$), 133.9 (C$_{quart}$, C_{Ar}), 128.4 (+, 2 × CH_{Ar}), 127.8 (+, 2 × CH_{Ar}), 64.6 (–, CH_2OH), 38.4 (–, CH_2NH_2), 37.5 (–, CH_2NH), 28.9 (–, CH$_2$CH$_2$CH$_2$) ppm. – MS (ESI): *m/z*: 209.1 [M$^+$+H]. – MS (FAB): *m/z*: 209.2 [M$^+$+H]. – HRMS ($C_{11}H_{17}N_2O_2$): calc. 209.1290; found 209.1289. – IR (KBr): $\tilde{\nu}$ = 3316 (m), 3060 (m), 2941 (m), 2106 (vw), 1801 (vw), 1677 (m), 1638 (m), 1545 (m), 1508 (w), 1437 (w), 1319

(w), 1203 (m), 1136 (m), 1046 (w), 1015 (w), 920 (vw), 839 (w), 800 (w), 753 (w), 723 (w), 519 (vw), cm^{-1}.

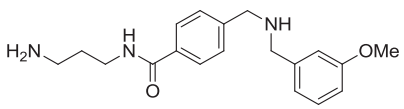
***N*-(3-Aminopropyl)-4-(hydroxy(phenyl)methyl)benzamide (Table 2, Entry 13)**: Resin **5**



was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 226 mg (1.00 mmol; 5.00 equiv.) 4-benzoylbenzoic acid, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 35 mg (0.123 mmol; 62% overall yield) of a white foam were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.80 (d, *J* = 8.1 Hz, 2 H, 2 × H_{Ar}), 7.49 (d, *J* = 8.1 Hz, 2 H, 2 × H_{Ar}), 7.39 – 7.34 (m, 2 H, 2 × H_{Ar}), 7.34 – 7.28 (m, 2 H, 2 × H_{Ar}), 7.26 – 7.21 (m, 1 H, H_{Ar}), 5.83 (s, 1 H, C*H*OH), 3.48 (t, *J* = 6.6 Hz, 2 H, CH_2NH), 2.98 (t, *J* = 7.3 Hz, 2 H, CH_2NH$_2$), 1.95 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, $CH_2CH_2CH_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 170.8 (C_{quart}, *C*=O), 150.2 (C_{quart}, C_{Ar}CHOH), 145.5 (C_{quart}, C_{Ar}CHOH), 133.9 (C_{quart}, C_{Ar}CO), 129.5 (+, 2 × CH_{Ar}), 128.5 (+, CH_{Ar}), 128.4 (+, 2 × CH_{Ar}), 127.8 (+, 2 × CH_{Ar}), 127.8 (+, 2 × CH_{Ar}), 76.5 (+, *C*HOH), 38.3 (–, CH_2NH_2), 37.4 (–, CH_2NH), 28.9 (–, $CH_2CH_2CH_2$) ppm. – MS (FAB): *m/z*: 285.2 [M^++H]. –HRMS ($C_{17}H_{21}N_2O_2$): calc. 285.1603; found 285.1602. – IR (KBr): ṽ = 3307 (s), 3062 (s), 1679 (vs), 1549 (s), 1503 (s), 1435 (s), 1318 (s), 1203 (vs), 1136 (vs), 1079 (m), 1040 (m), 1016 (m), 923 (w), 869 (m), 838 (s), 800 (s), 752 (m), 722 (s), 701 (s), 622 (m), 564 (w), 517 (w) cm^{-1}.

***N*-(3-Aminopropyl)-4-(((3-methoxybenzyl)amino)methyl)benzamide (Table 2, Entry 14)**:

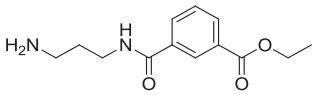


Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 150 mg (1.00 mmol; 5.00 equiv.)

4-carboxybenzaldehyde, 153 mg (1.00 mmol; 5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. Afterwards, the resin was swollen in 6 mL dry dichloromethane and 0.26 mL (274 mg; 2.00 mmol; 10.0 equiv.) 3-methoxybenzylamine were added to give the imine according to GP6. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 43 mg (0.131 mmol; 66% overall yield) of a white solid were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.92 (d, *J* = 8.3 Hz, 2 H, 2 × H_{Ar}), 7.60 (d, *J* = 8.3 Hz, 2 H, 2 × H_{Ar}), 7.36 (t, *J* = 7.9 Hz, 1 H, H_{Ar}), 7.09 – 7.07 (m, 1 H, H_{Ar}), 7.07 – 7.03 (m, 1 H, H_{Ar}), 7.02 – 6.98 (m, 1 H, H_{Ar}), 4.31 (s, 2 H, CH_2C$_{Ar}$), 4.24 (s, 2 H, CH_2C$_{Ar}$), 3.82 (s, 3 H, CH_3), 3.51 (t, *J* = 6.6 Hz, 2 H, CH_2NH), 3.01 (t, *J* = 7.3 Hz, 2 H, CH_2NH$_2$), 1.97 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 170.0 (C$_{quart}$, *C*=O), 161.7 (C$_{quart}$, *C$_{Ar}$*OMe), 136.3 (C$_{quart}$, *C$_{Ar}$*), 136.1 (C$_{quart}$, *C$_{Ar}$*), 133.7 (C$_{quart}$, *C$_{Ar}$*), 131.4 (+, *C*H$_{Ar}$), 131.3 (+, 2 × *C*H$_{Ar}$), 129.2 (+, 2 × *C*H$_{Ar}$), 123.1 (+, *C*H$_{Ar}$), 116.4 (+, *C*H$_{Ar}$), 116.3 (+, *C*H$_{Ar}$), 55.9 (+, *C*H$_3$), 52.2 (–, *C*H$_2$C$_{Ar}$), 51.5 (–, *C*H$_2$C$_{Ar}$), 38.4 (–, *C*H$_2$NH$_2$), 37.6 (–, *C*H$_2$NH), 28.8 (–, CH$_2$*C*H$_2$CH$_2$) ppm. – MS (ESI): *m/z*: 328.2 [M$^+$+H]. – MS (FAB): *m/z*: 328.3 [M$^+$+H]. – HRMS ($C_{19}H_{26}N_3O_2$): calc. 328.2025; found 328.2027. – IR (KBr): $\tilde{\nu}$ = 3357 (m), 3015 (m), 2841 (m), 2636 (w), 1676 (m), 1638 (m), 1550 (m), 1509 (w), 1493 (m), 1460 (m), 1438 (m), 1317 (w), 1269 (m), 1202 (m), 1136 (m), 1039 (w), 837 (w), 800 (m), 763 (w), 723 (m), 696 (w), 598 (vw), 572 (vw), 519 (vw), 459 (vw), 411 (vw) cm^{-1}.

Ethyl 3-((3-aminopropyl)carbamoyl)benzoate (Table 2, Entry 15): Resin **5** was

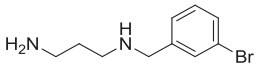


synthesized according to GP1 and was divided in parts. Then according to GP3, 0.25 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.18 mL (195 mg; 2.50 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.19 mL (190 mg; 1.25 mmol; 5.00 equiv.) DBU and 242 mg (1.25 mmol; 5.00 equiv.) 3-(ethoxycarbonyl)benzoic acid, 191 mg (1.25 mmol; 5.00 equiv.) HOBt as well as 0.19 mL (158 mg; 1.25 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 76 mg (1.25 mmol; 5.00 equiv.) dimethylamine-borane adduct and 23 mg (0.025 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in

7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 24 mg (0.096 mmol; 38% overall yield) of a yellow oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 8.51 – 8.48 (m, 1 H, H_{Ar}), 8.21 – 8.16 (m, 1 H, H_{Ar}), 8.10 – 8.05 (m, 1 H, H_{Ar}), 7.60 (t, *J* = 7.8 Hz, 1 H, H_{Ar}), 4.40 (q, *J* = 7.2 Hz, 2 H, OCH_2), 3.52 (t, *J* = 6.6 Hz, 2 H, CH_2NH), 3.01 (t, *J* = 7.3 Hz, 2 H, CH_2NH$_2$), 1.98 (tt, *J* = 7.3 Hz, *J* = 6.6 Hz, 2 H, $CH_2CH_2CH_2$), 1.41 (t, *J* = 7.2 Hz, 3 H, CH_3) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 169.8 (C_{quart}, N*C*=O), 167.3 (C_{quart}, O*C*=O), 135.7 (C_{quart}, C_{Ar}CONH), 133.6 (+, *C*H$_{Ar}$), 132.8 (+, *C*H$_{Ar}$), 132.3 (C_{quart}, $C_{Ar}CO_2$Et), 130.1 (+, *C*H$_{Ar}$), 129.3 (+, *C*H$_{Ar}$), 62.5 (–, *C*H$_2$O), 38.4 (–, *C*H$_2$NH$_2$), 37.6 (–, *C*H$_2$NH), 28.9 (–, $CH_2CH_2CH_2$), 14.6 (+, *C*H$_3$) ppm. – MS (FAB): *m/z*: 251.2 [M$^+$+H]. – HRMS ($C_{13}H_{19}N_2O_3$): calc. 251.1396; found 251.1395. – IR (KBr): ṽ = 3281 (m), 2986 (m), 1680 (s), 1643 (s), 1583 (m), 1545 (s), 1480 (m), 1434 (m), 1395 (w), 1370 (m), 1268 (s), 1203 (s), 1181 (s), 1135 (s), 1022 (w), 928 (vw), 837 (m), 799 (m), 723 (m), 653 (vw), 518 (vw) cm^{-1}.

***N*^{1}-(3-Bromobenzyl)propane-1,3-diamine (Table 2, Entry 16)**: Resin **5** was synthesized



according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 375 mg (1.20 mmol; 6.00 equiv.) 3-bromobenzyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 43 mg (0.178 mmol; 89% overall yield) of a slightly pink solid were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.74 – 7.71 (m, 1 H, H_{Ar}), 7.63 – 7.60 (m, 1 H, H_{Ar}), 7.50 – 7.45 (m, 1 H, H_{Ar}), 7.41 – 7.36 (m, 1 H, H_{Ar}), 4.41 (s, 2 H, CH_2C_{Ar}), 3.26 (t, *J* = 7.8 Hz, 2 H, CH_2NH$_2$), 3.08 (t, *J* = 7.6 Hz, 2 H, CH_2NH), 2.16 (tt, *J* = 7.8 Hz, *J* = 7.6 Hz, 2 H, $CH_2CH_2CH_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 134.6 (+, *C*H$_{Ar}$), 133.1 (+, *C*H$_{Ar}$), 132.8 (+, *C*H$_{Ar}$), 132.1 (C_{quart}, $C_{Ar}CH_2$), 129.7 (+, *C*H$_{Ar}$), 125.9 (C_{quart}, C_{Ar}Br), 52.1 (–, $C_{Ar}CH_2$), 46.0 (–, *C*H$_2$NH), 37.9 (–, *C*H$_2$NH$_2$), 25.3 (–, $CH_2CH_2CH_2$) ppm. – MS (FAB): *m/z*: 243.0/245.0 [M$^+$+H]. – HRMS ($C_{10}H_{16}BrN_2$): calc. 243.0497; found 243.0498. – IR (ATR): ṽ = 3262 (vw), 3004 (w), 2798 (w), 2591 (w), 2462 (vw), 1664 (m), 1603 (m), 1483 (w), 1458

(w), 1427 (w), 1174 (m), 1121 (m), 1045 (w), 1027 (w), 993 (w), 899 (vw), 838 (m), 797 (m), 771 (w), 753 (m), 721 (m), 659 (w), 599 (w), 533 (w), 518 (w), 456 (w), 441 (w), 410 (w) cm^{-1}. – mp: 153.7 °C.

3-(1-Iminoisoindolin-2-yl)propan-1-amine (Table 2, Entry 17): Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP2, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 240 mg (1.20 mmol; 6.00 equiv.) 2-cyanobenzyl bromide as well as 0.18 mL (183 mg; 1.20 mmol; 6.00 equiv.) DBU and 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 36 mg (0.190 mmol; 95% overall yield) of a red oil were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 8.11 – 8.08 (m, 1 H, H_{Ar}), 7.82 – 7.76 (m, 1 H, H_{Ar}), 7.74 – 7.69 (m, 1 H, H_{Ar}), 7.64 (t, J = 7.6 Hz, 1 H, H_{Ar}), 4.93 (s, 2 H, CH_2C$_{Ar}$), 3.91 (t, J = 7.8 Hz, 2 H, CH_2NH$_2$), 3.08 (t, J = 7.8 Hz, 2 H, CH_2N), 2.17 (tt, J = 7.8 Hz, 2 H, CH$_2$CH_2CH$_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 163.7 (C$_{quart}$, *C*=N), 143.3 (C$_{quart}$, C_{Ar}), 135.0 (+, *C*H$_{Ar}$), 130.0 (+, *C*H$_{Ar}$), 129.5 (C$_{quart}$, C_{Ar}), 124.3 (+, *C*H$_{Ar}$), 124.2 (+, *C*H$_{Ar}$), 57.4 (–, *C*H$_2$C$_{Ar}$), 43.8 (–, *C*H$_2$N), 37.8 (–, *C*H$_2$NH$_2$), 26.4 (–, CH$_2$*C*H$_2$CH$_2$) ppm. [Impurity: TFA < 10%]. – MS (ESI): *m/z*: 190.1 [M$^+$+H]. – MS (FAB): *m/z*: 190.2 [M$^+$+H]. – HRMS (C$_{11}$H$_{16}$N$_3$): calc. 190.1344; found 190.1343. – IR (ATR): ṽ = 3062 (w), 1671 (s), 1510 (w), 1457 (w), 1420 (m), 1346 (vw), 1178 (s), 1122 (s), 836 (m), 797 (m), 786 (m), 755 (w), 719 (m), 665 (m), 597 (w), 579 (w), 509 (w), 483 (w), 438 (w), 409 (w) cm^{-1}.

10b-Phenyl-1,3,4,10b-tetrahydropyrimido[2,1-a]isoindol-6(2H)-one (Table 2, Entry 18): Resin **5** was synthesized according to GP1 and was divided in parts with 0.20 mmol loading of substrate. Then according to GP3, 0.20 mmol of resin **5** were swollen in 6 mL DMF and treated with 0.14 mL (156 mg; 2.00 mmol; 10.0 equiv.) 2-mercaptoethanol as well as 0.15 mL (152 mg; 1.00 mmol; 5.00 equiv.) DBU and 226 mg (1.00 mmol; 5.00 equiv.) 2-benzoylbenzoic acid, 153 mg (1.00 mmol;

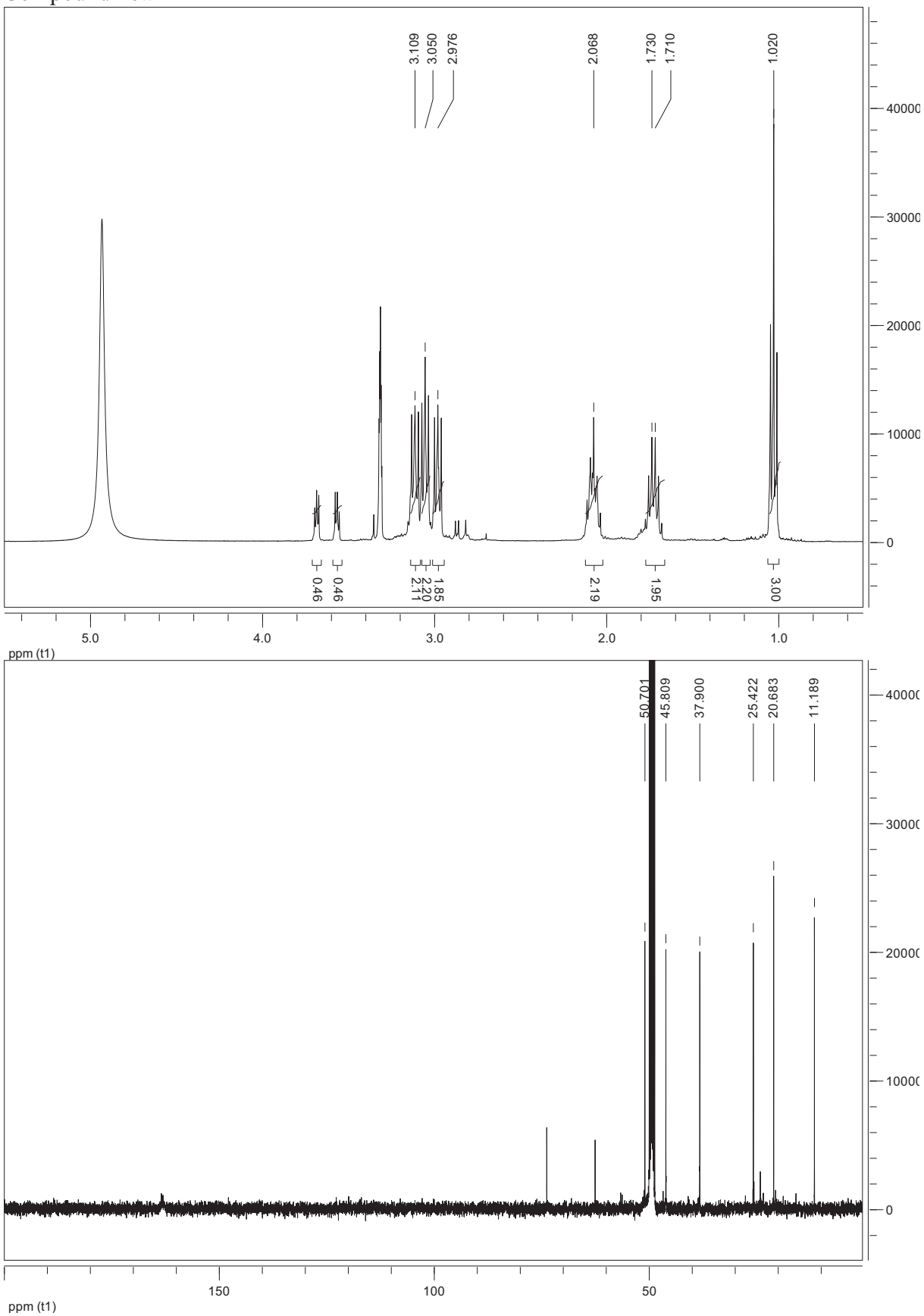
5.00 equiv.) HOBt as well as 0.15 mL (126 mg; 1.00 mmol; 5.00 equiv.) DIC, respectively. The resulting resin was subjected to reduction and cleavage according to GP4. 61 mg (1.00 mmol; 5.00 equiv.) dimethylamine-borane adduct and 19 mg (0.02 mmol; 0.10 equiv.) Wilkinson's catalyst in 6 mL dry CH_2Cl_2 were used for the reduction. The cleavage was performed in 7 mL 5% TFA solution in CH_2Cl_2. After HPLC purification of the crude product, 25 mg (0.095 mmol; 47% overall yield) of a white solid were obtained.

^{1}H NMR (400 MHz, MeOH-d_4): δ = 7.87 – 7.82 (m, 1 H, H_{Ar}), 7.61 – 7.54 (m, 2 H, 2 × H_{Ar}), 7.53 – 7.43 (m, 5 H, 5 × H_{Ar}), 7.43 – 7.35 (m, 1 H, H_{Ar}), 4.47 – 4.39 (m, 1 H, CH_2), 3.46 – 3.39 (m, 1 H, CH_2), 3.26 – 3.16 (m, 1 H, CH_2), 3.15 – 3.04 (m, 1 H, CH_2), 1.82 – 1.73 (m, 2 H, $CH_2CH_2CH_2$) ppm. – ^{13}C NMR (100 MHz, MeOH-d_4): δ = 168.2 (C_{quart}, *C*=O), 146.2 (C_{quart}, C_{Ar}), 134.6 (+, *C*H$_{Ar}$), 134.0 (C_{quart}, C_{Ar}), 132.2 (+, *C*H$_{Ar}$), 131.5 (+, 2 × *C*H$_{Ar}$), 131.1 (+, *C*H$_{Ar}$), 126.7 (+, 2 × *C*H$_{Ar}$), 125.5 (+, *C*H$_{Ar}$), 124.2 (+, *C*H$_{Ar}$), 80.1 (C_{quart}, *C*NH), 42.3 (–, *C*H_2NH), 36.6 (–, *C*H_2N), 23.4 (–, $CH_2CH_2CH_2$) ppm. [one C_{quart} not observed]. – MS (ESI): *m/z*: 265.1 [M^++H]. – MS (FAB): *m/z*: 265.3 [M^++H]. –HRMS ($C_{17}H_{17}N_2O$): calc. 265.1341; found 265.1342. – IR (ATR): $\tilde{\nu}$ = 2704 (vw), 1664 (m), 1611 (w), 1469 (w), 1453 (w), 1384 (w), 1297 (w), 1253 (vw), 1178 (m), 1127 (m), 1043 (w), 998 (w), 970 (vw), 942 (vw), 924 (vw), 890 (vw), 831 (w), 797 (w), 766 (w), 750 (m), 720 (w), 688 (m), 649 (w), 602 (w), 559 (w), 514 (w), 482 (w), 468 (w), 441 (vw), 421 (w) cm^{-1}.

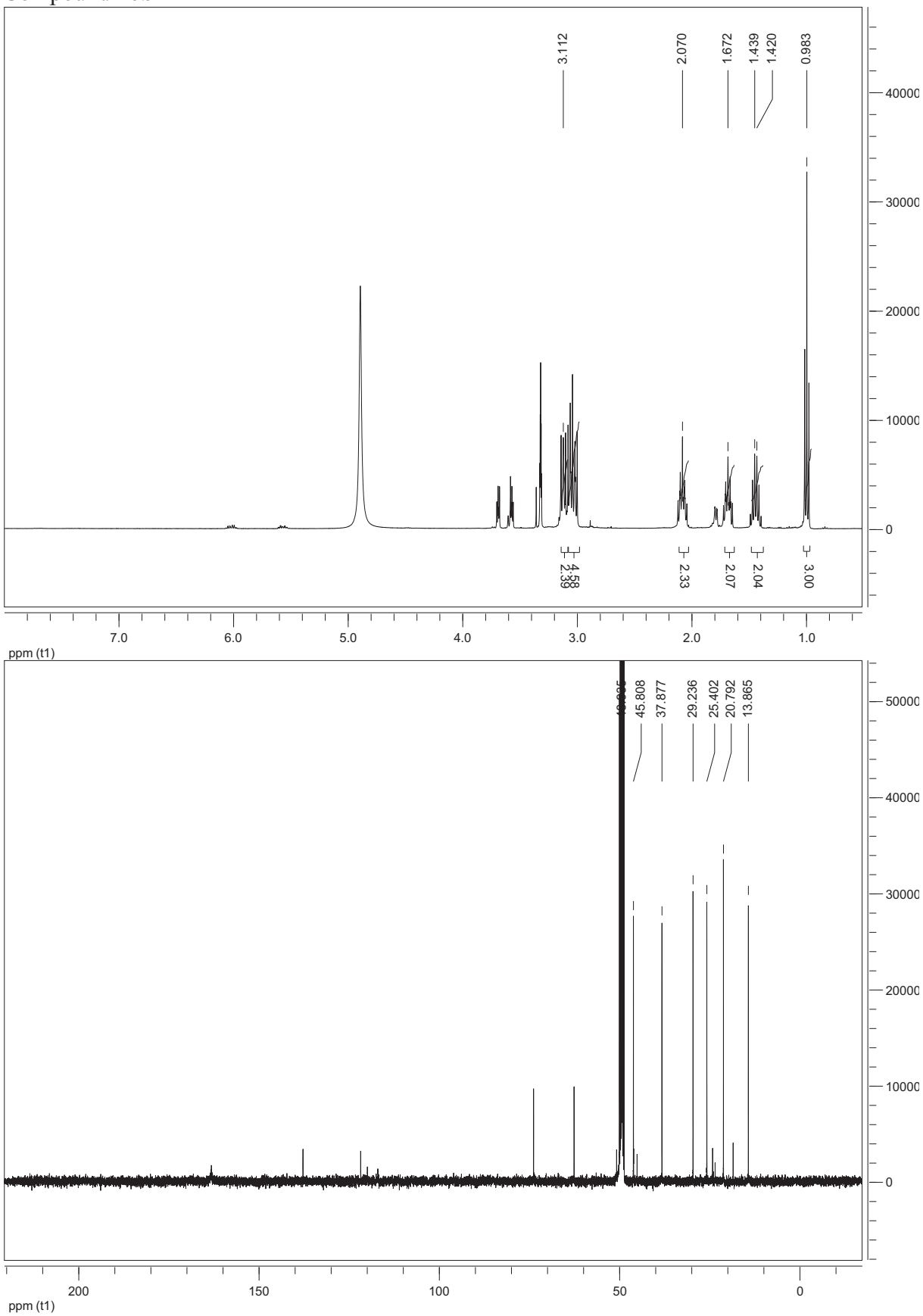
NMR spectra:

Remark: To best of our knowledge the not marked peaks are either solvent peaks or peaks that result from 2-mercaptoethanol.

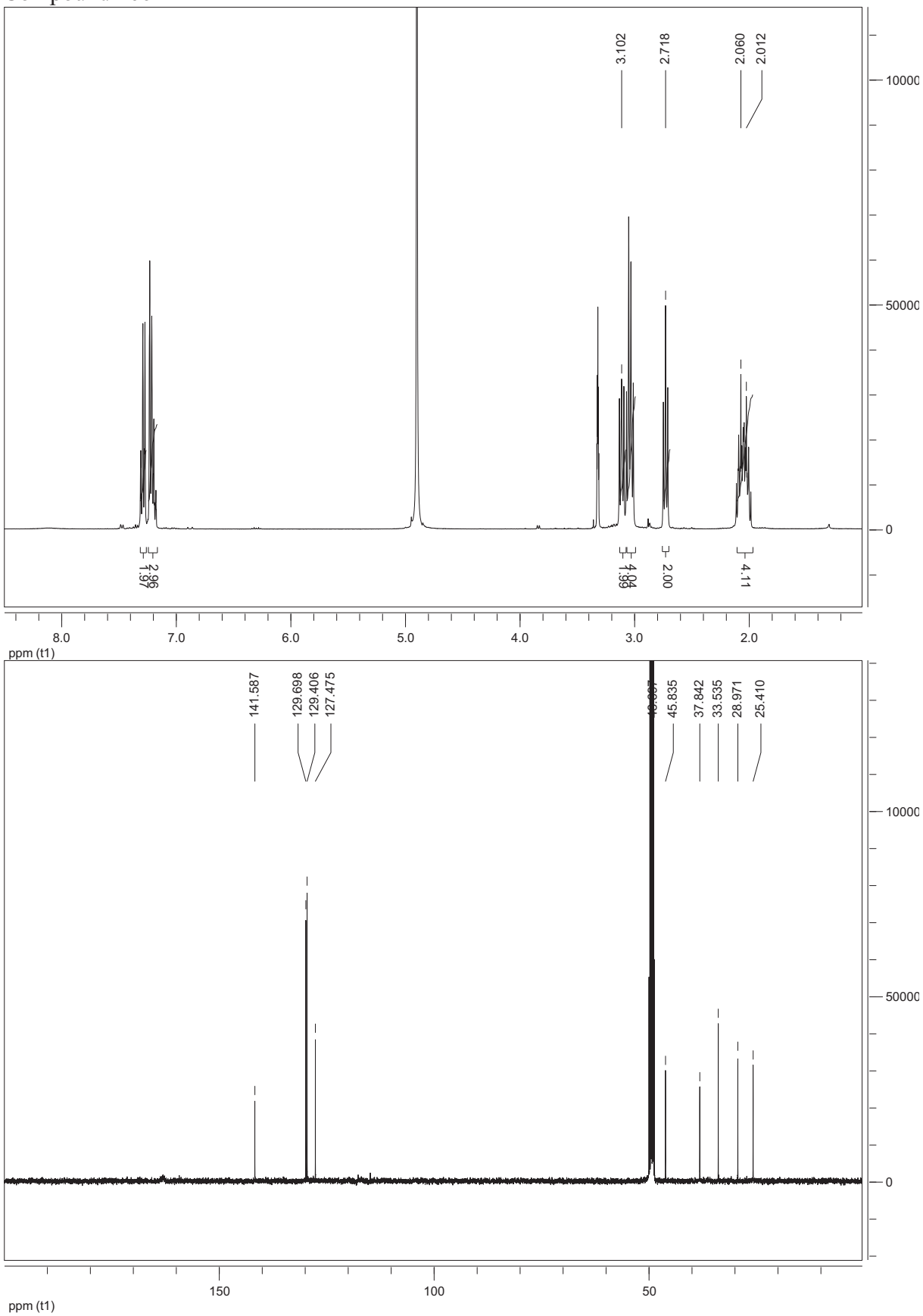
Compound **10a**



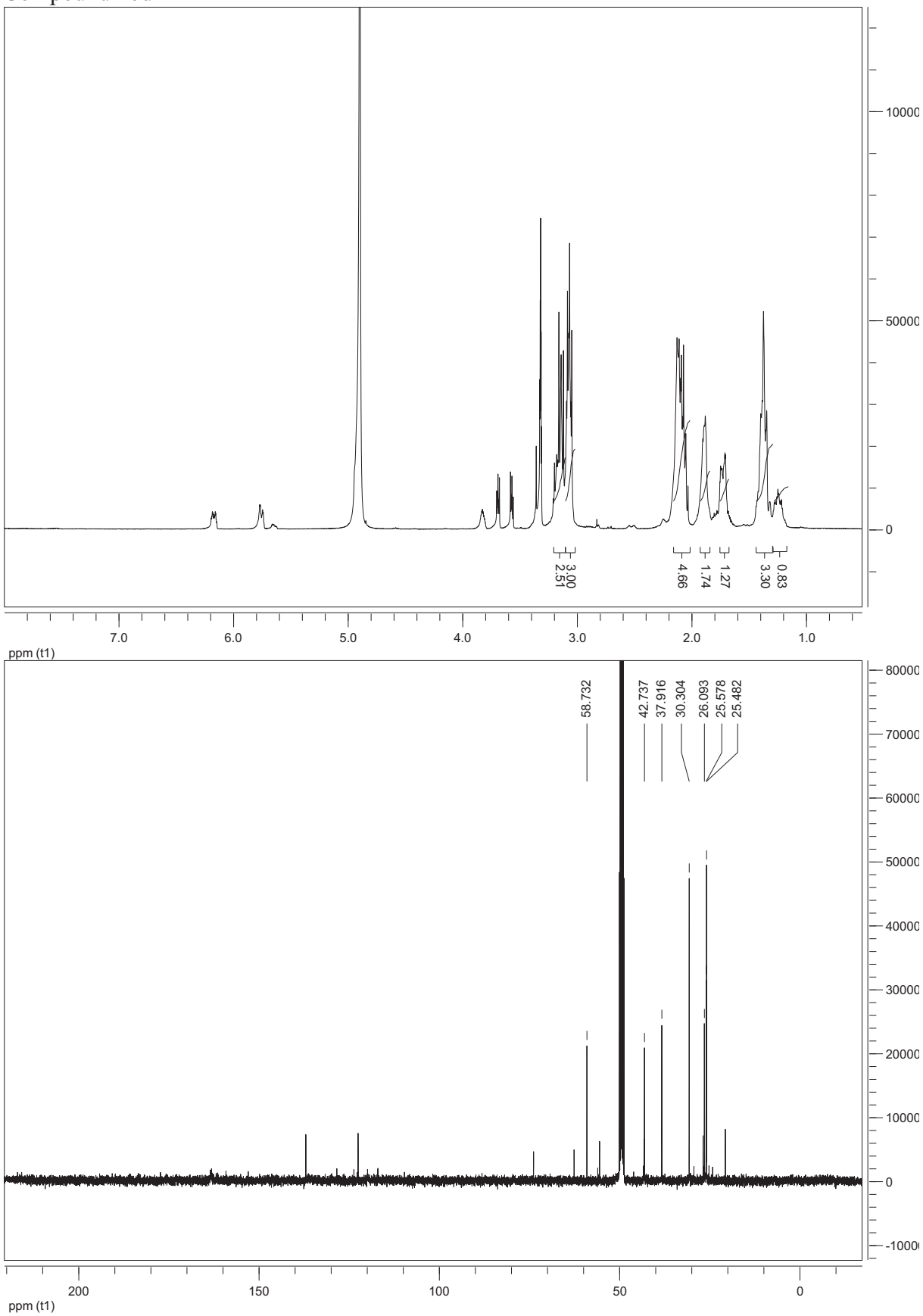
Compound **10b**



Compound **10c**



Compound **10d**



Compound **10e**

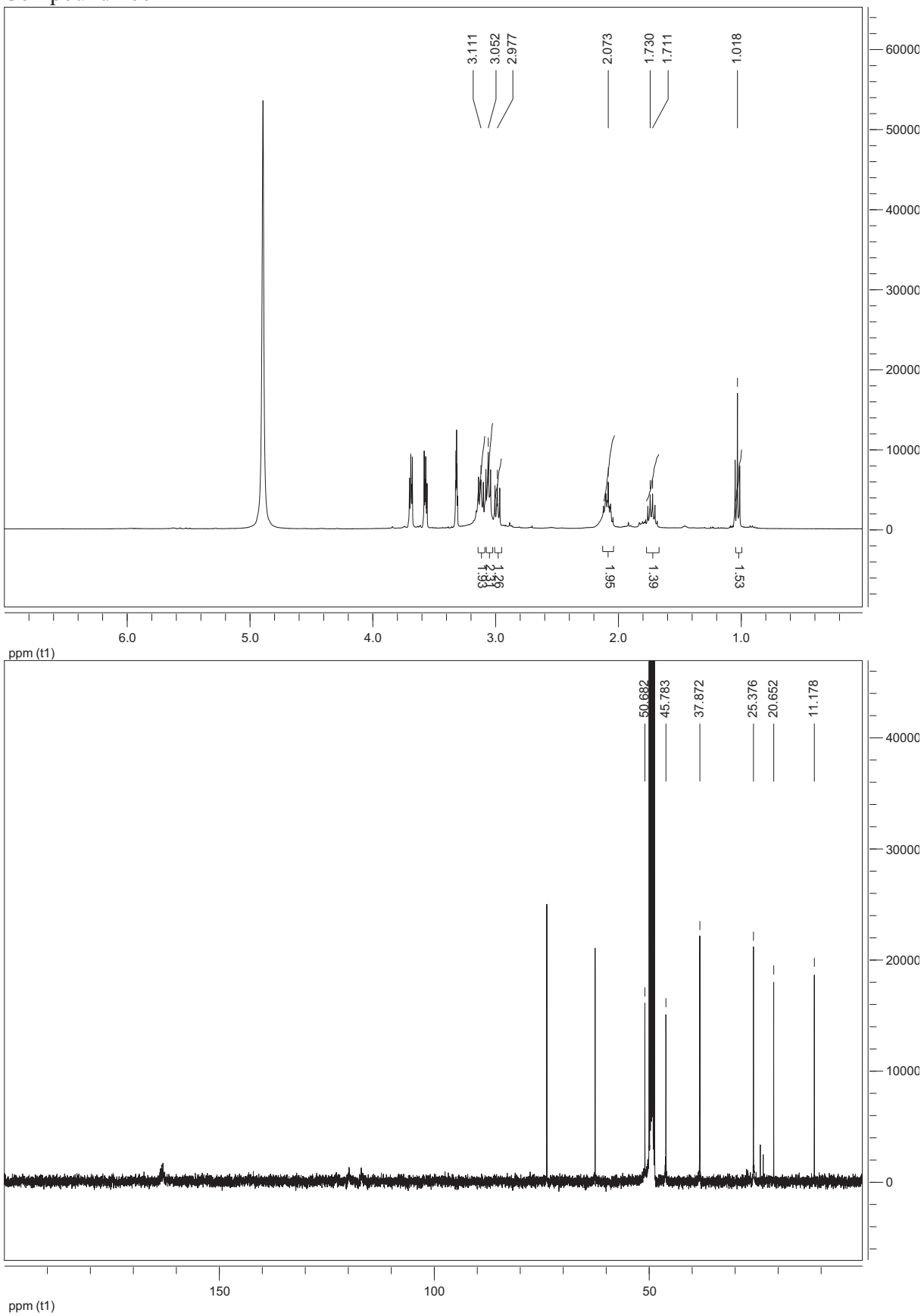
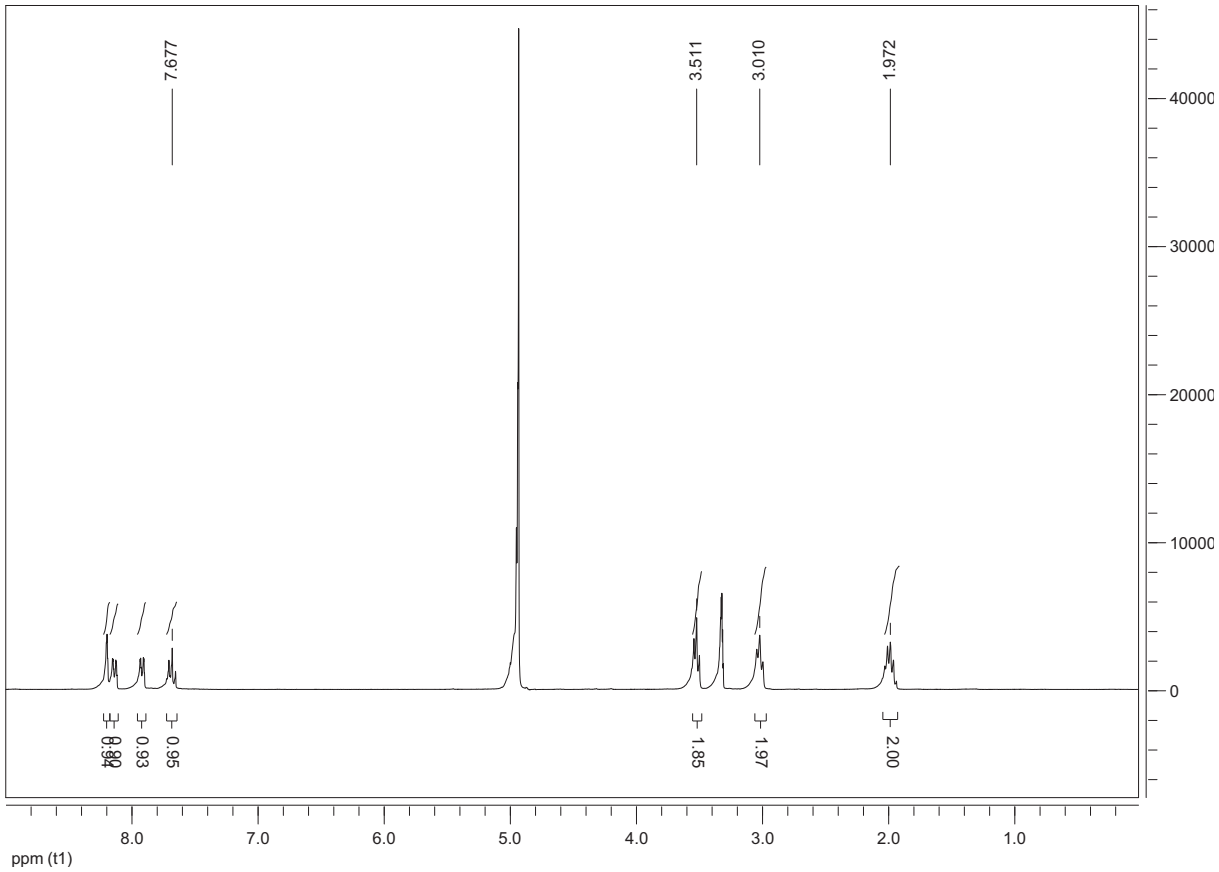


Table 2 Entry 6

Nitrile



Amine

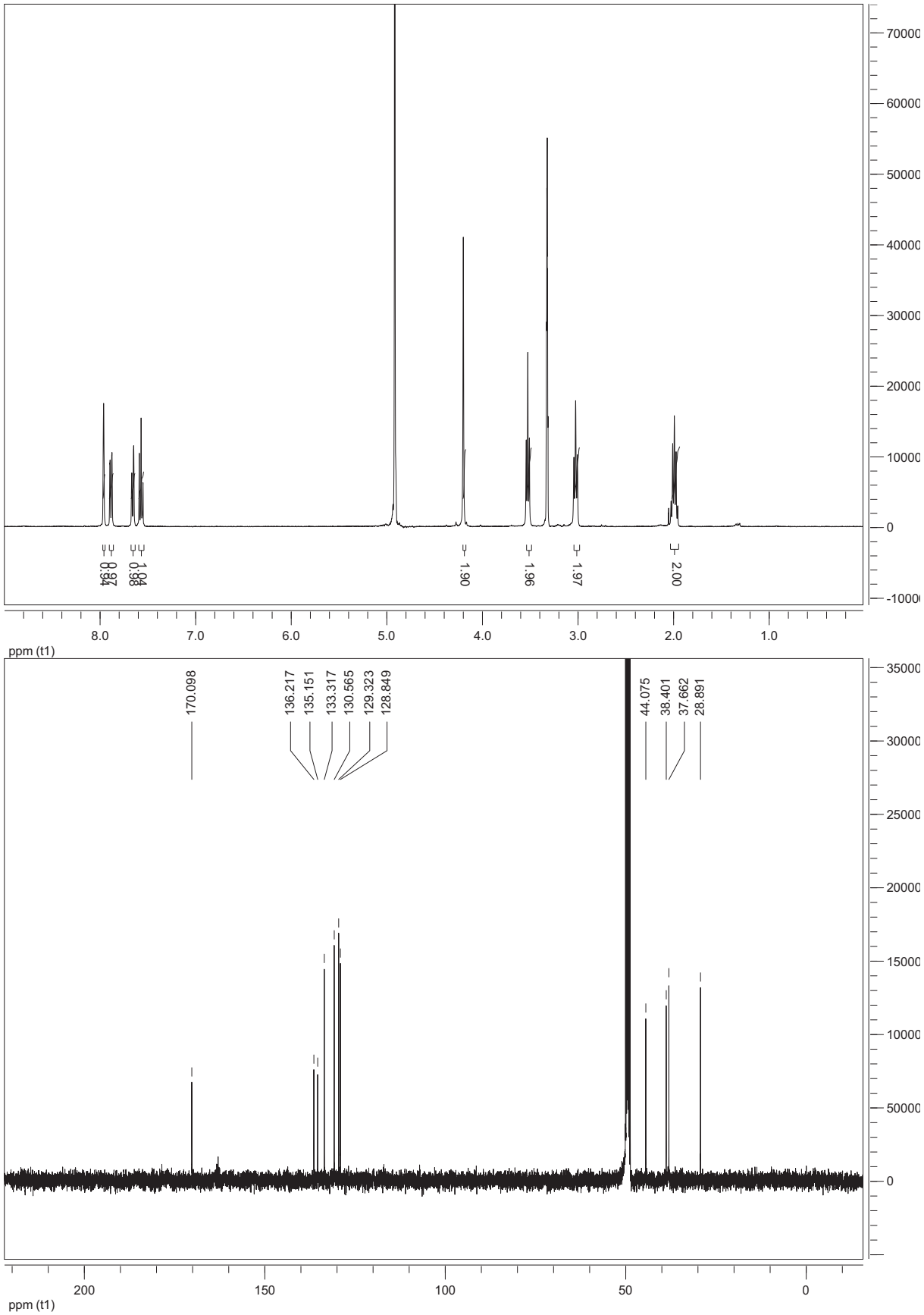
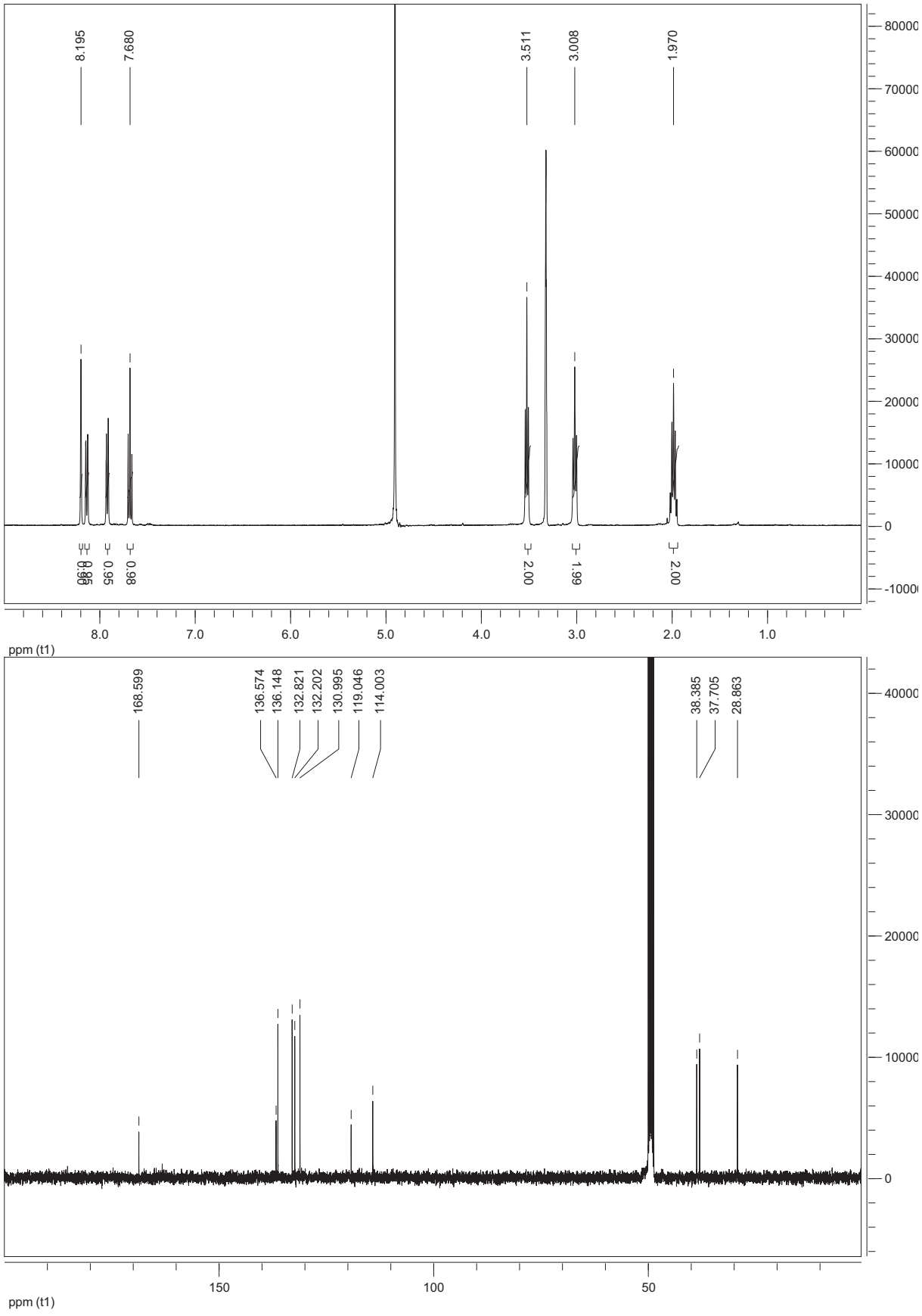
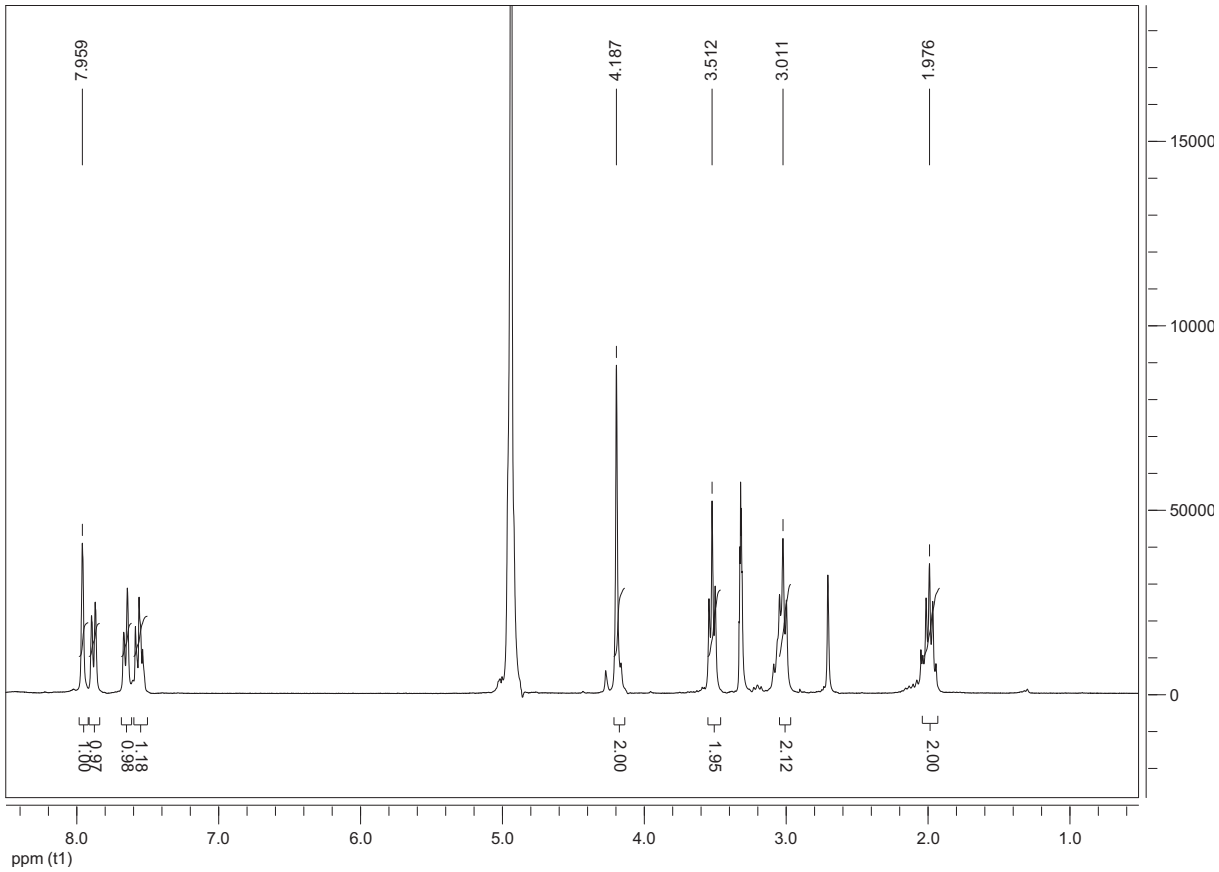


Table 2 Entry 7

Nitrile



Amine



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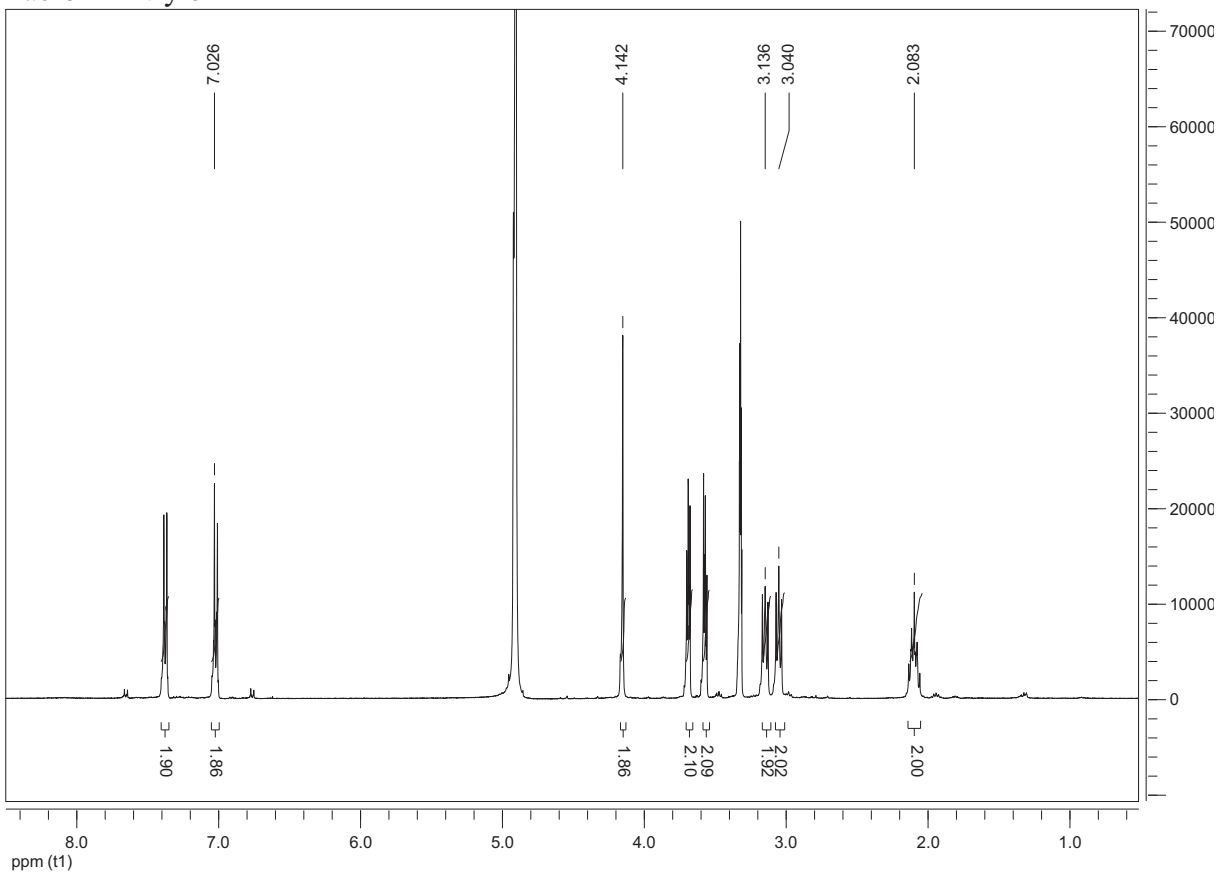

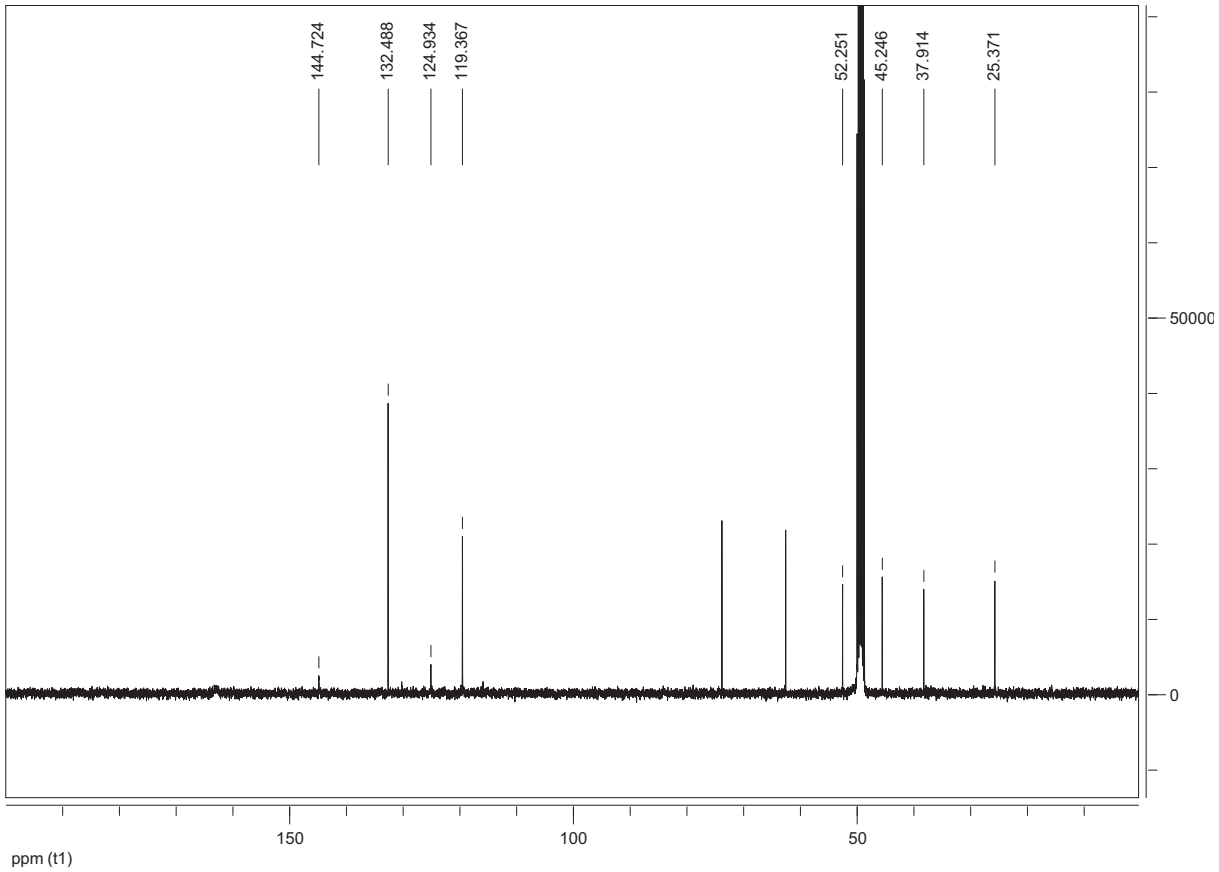

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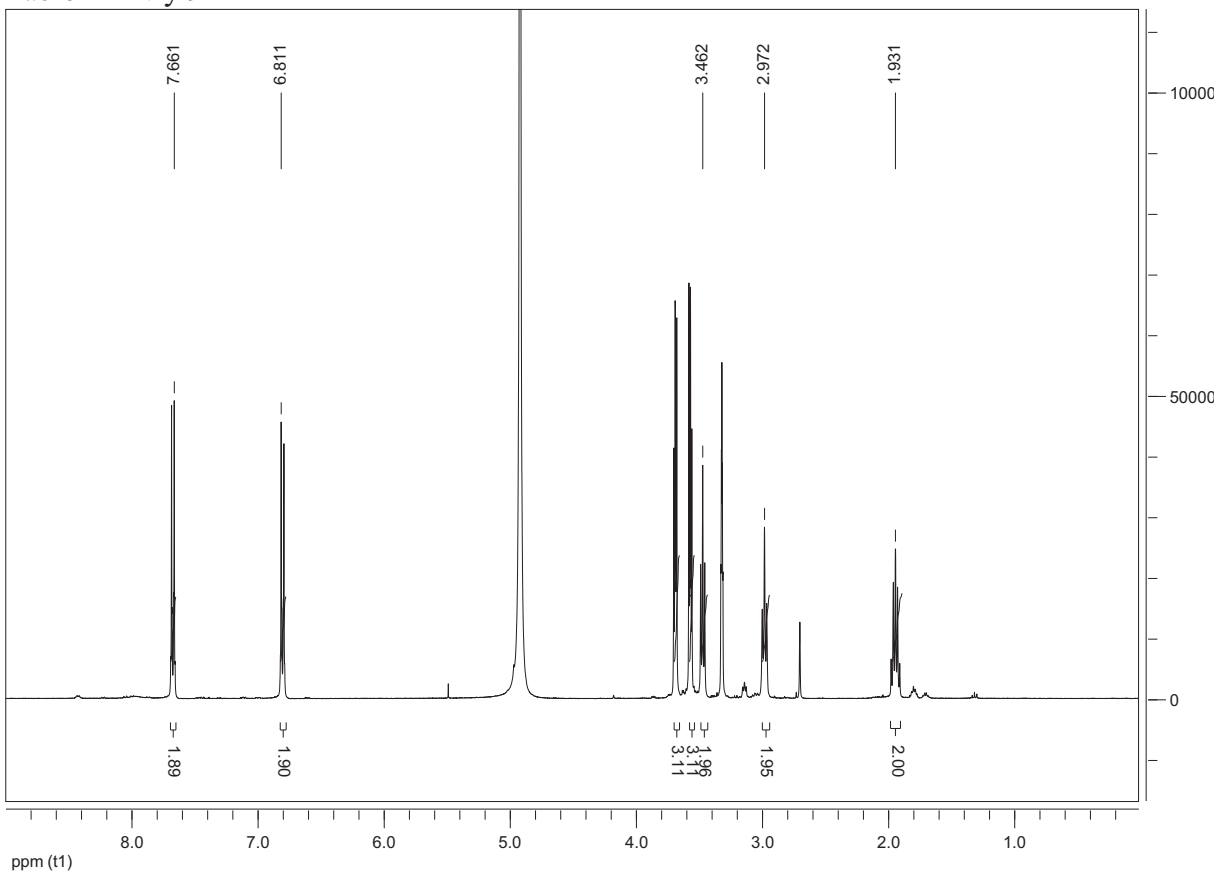


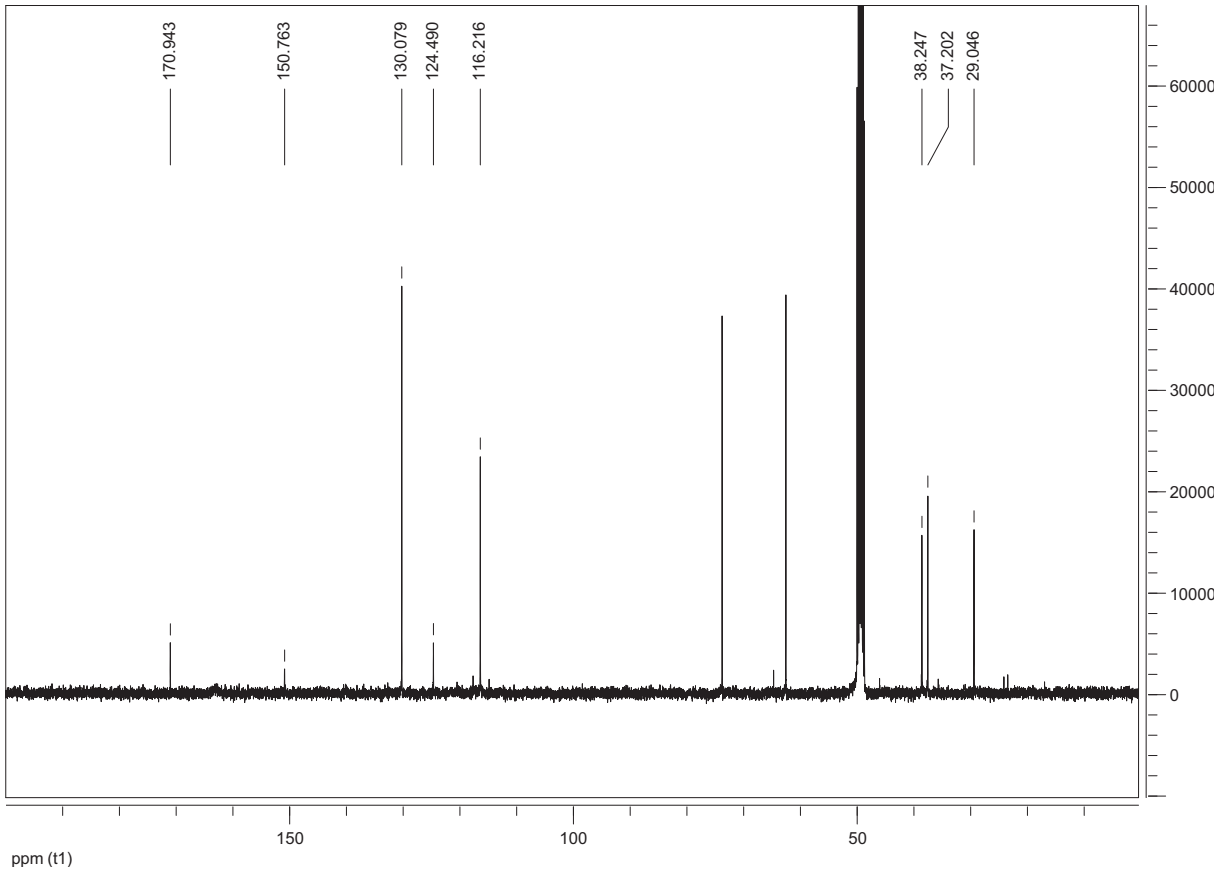
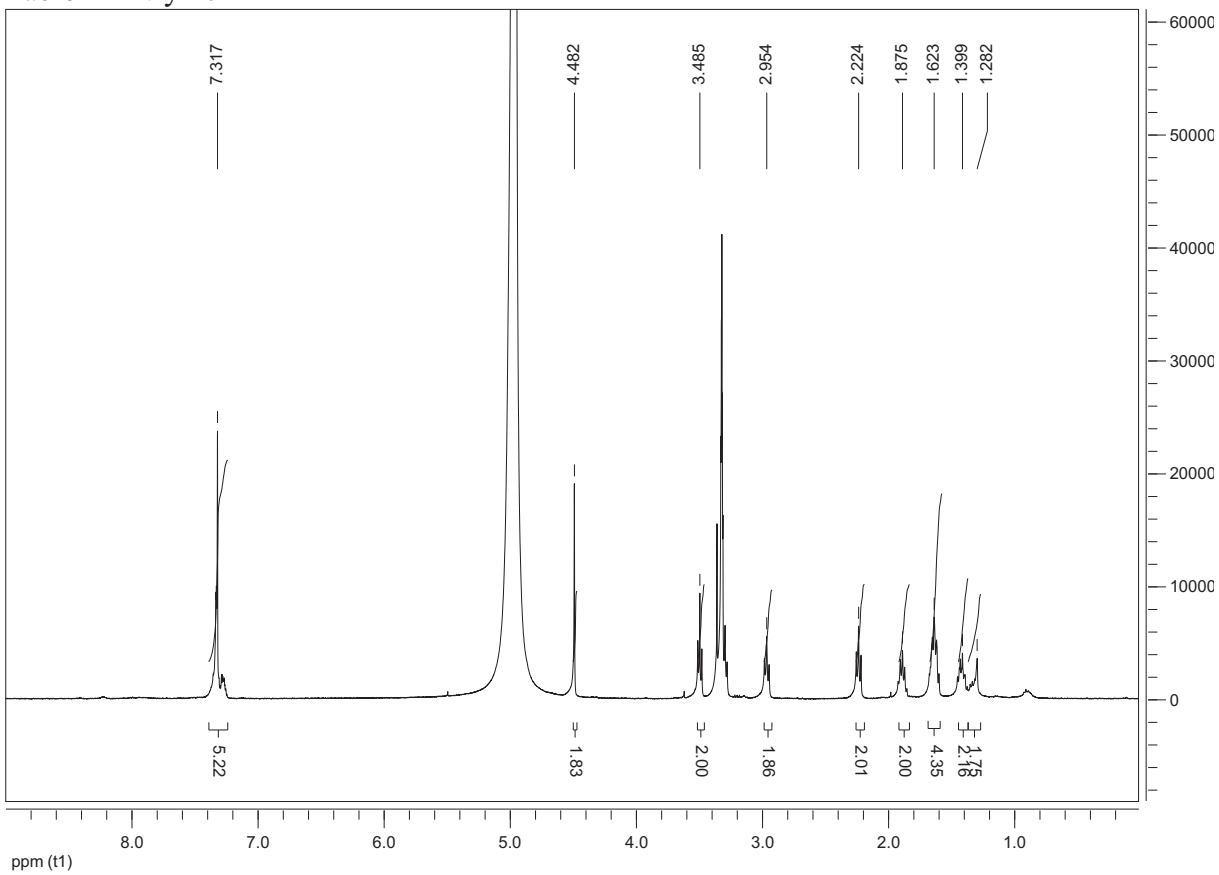


Table 2 Entry 10



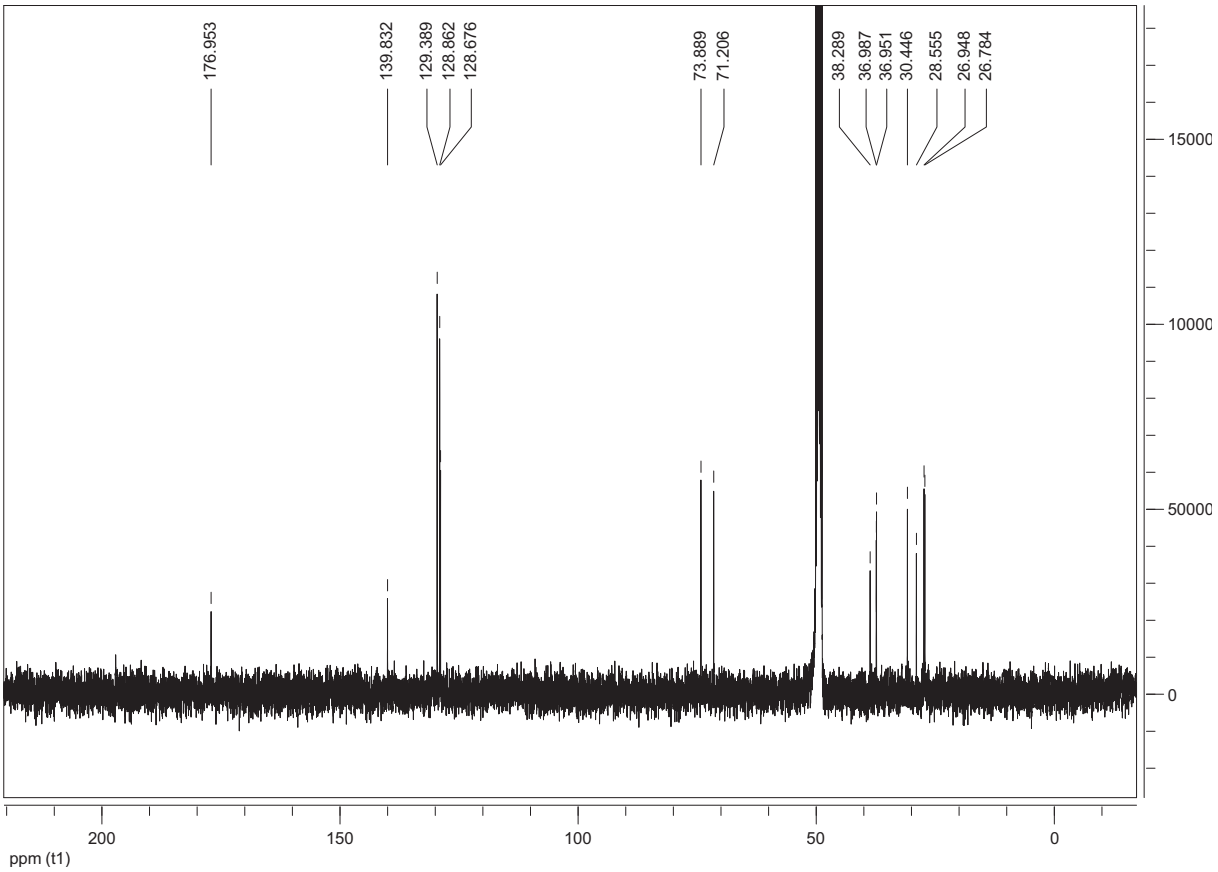
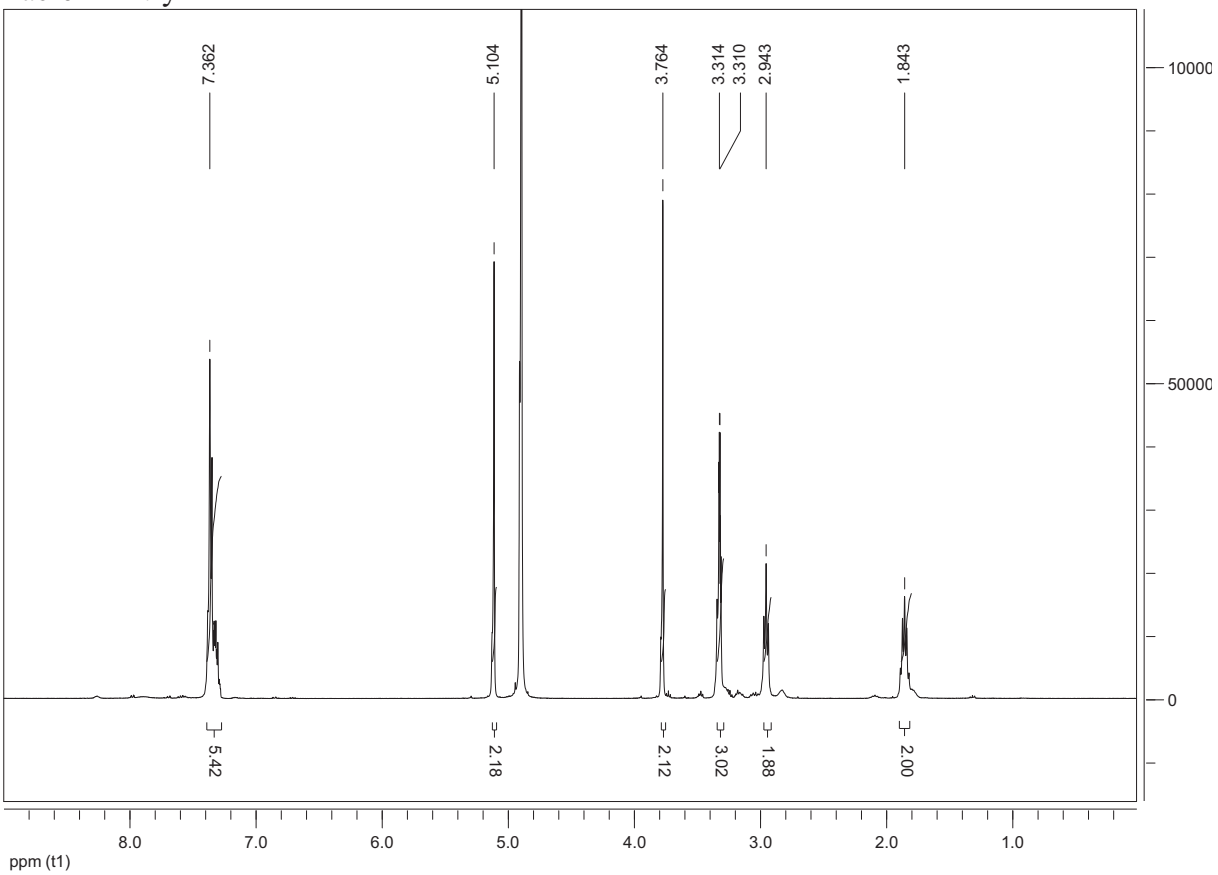
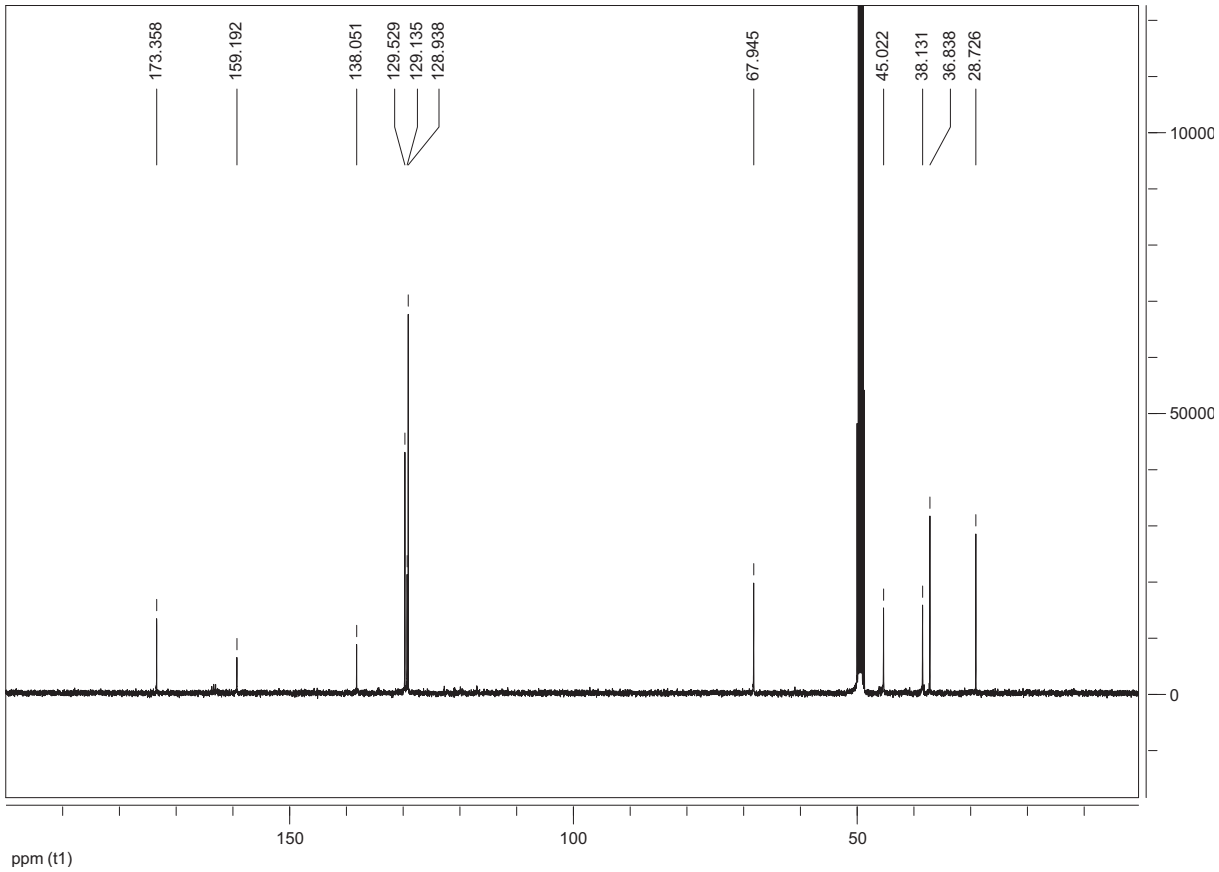


Table 2 Entry 11





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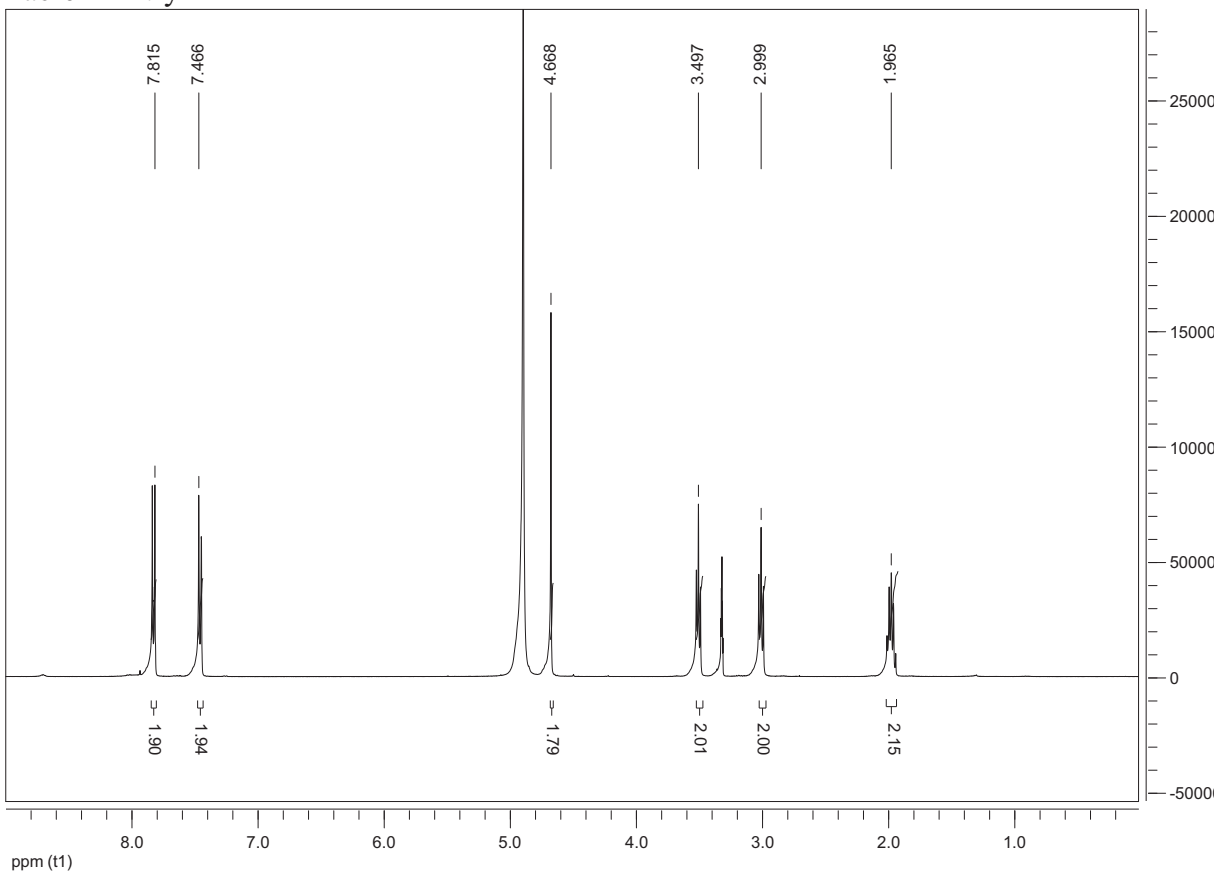

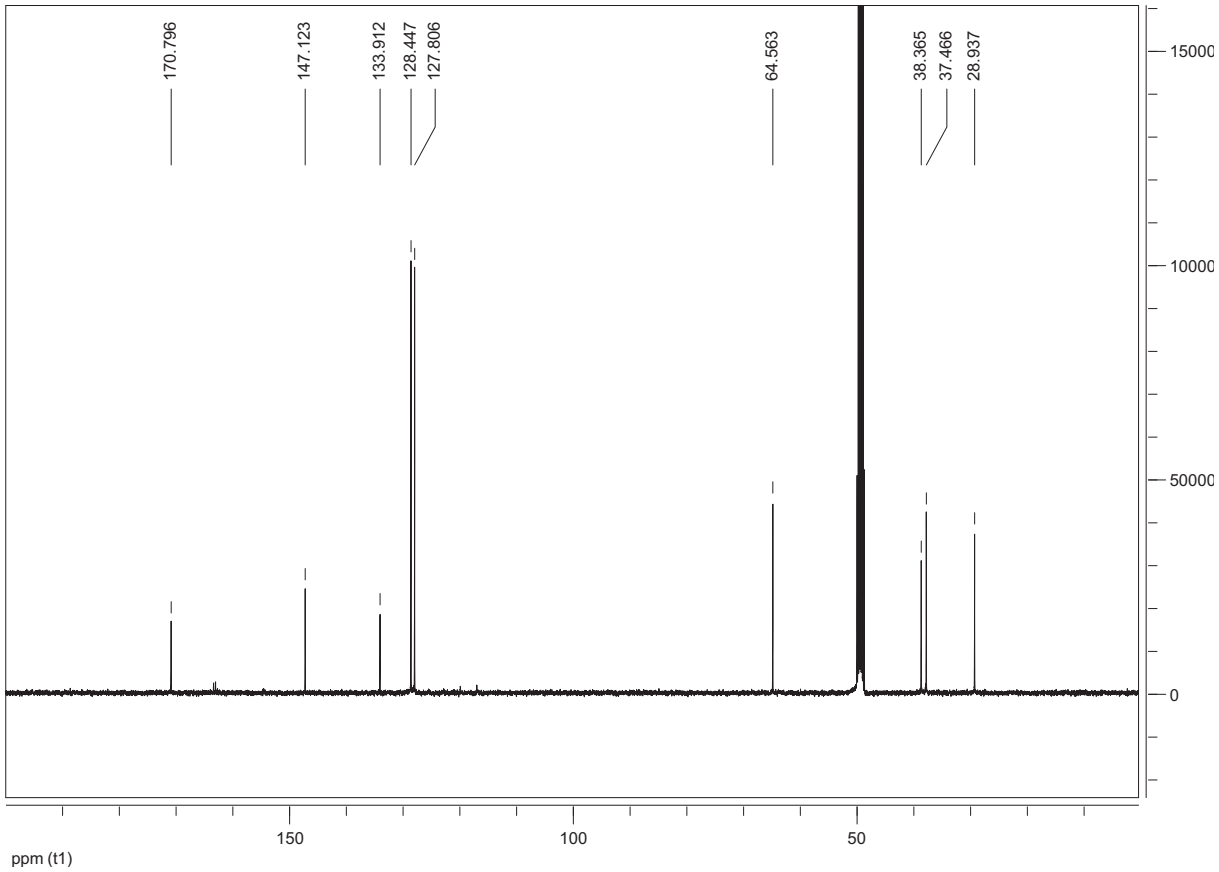

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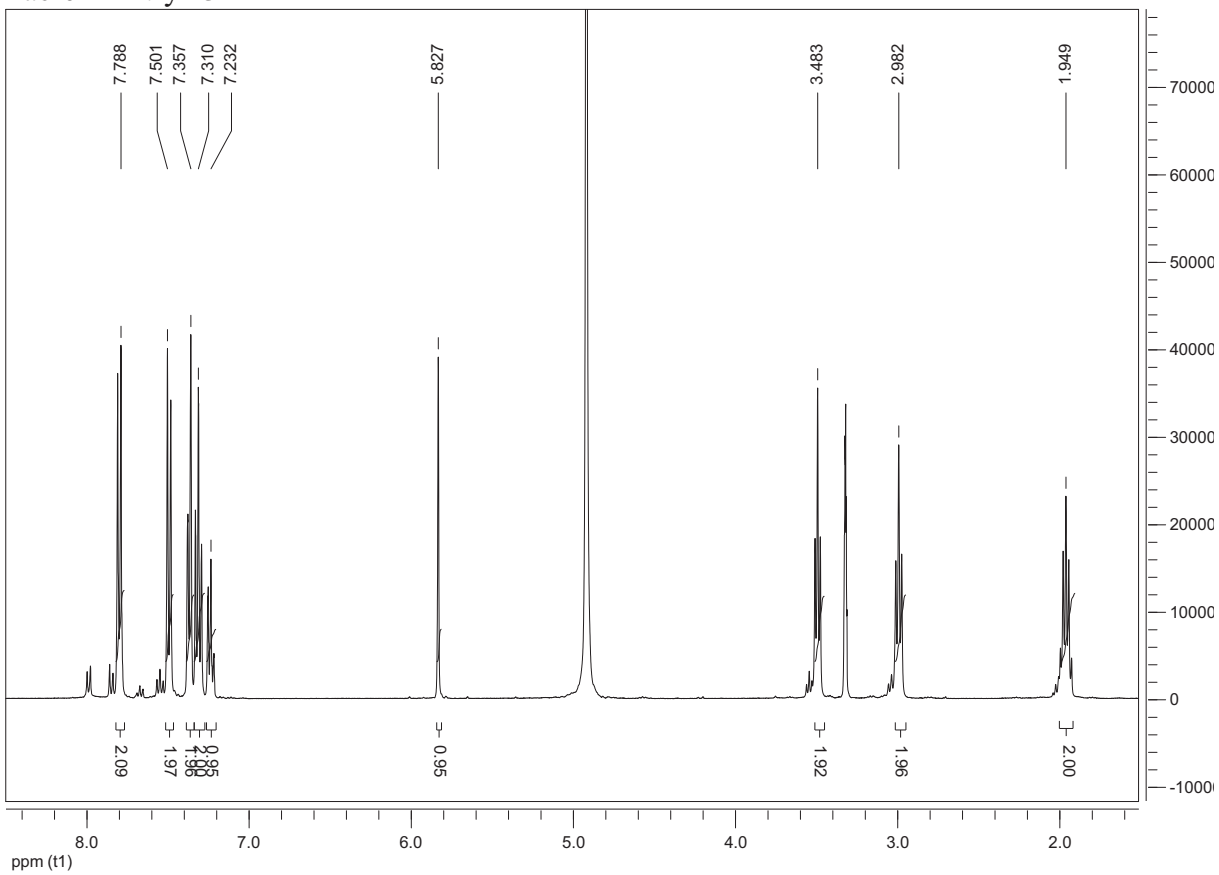

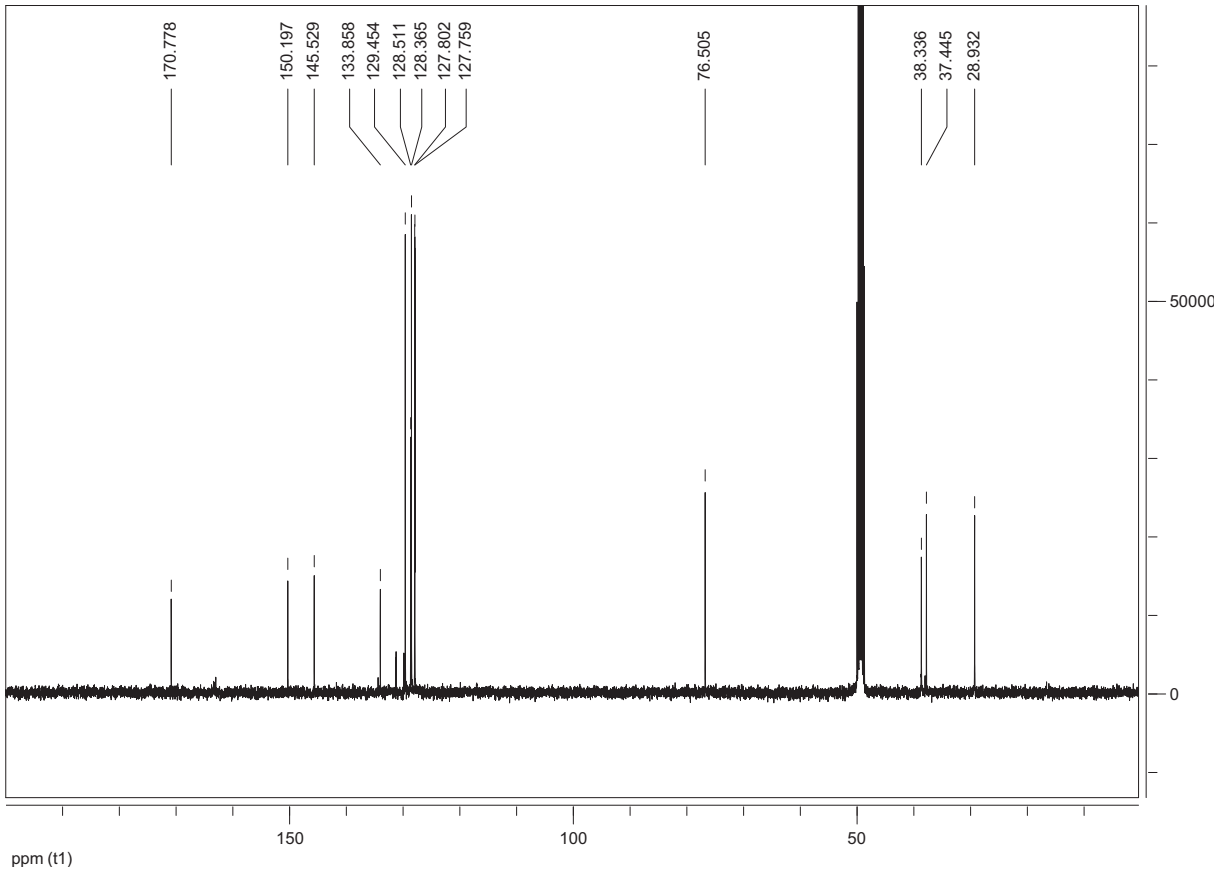

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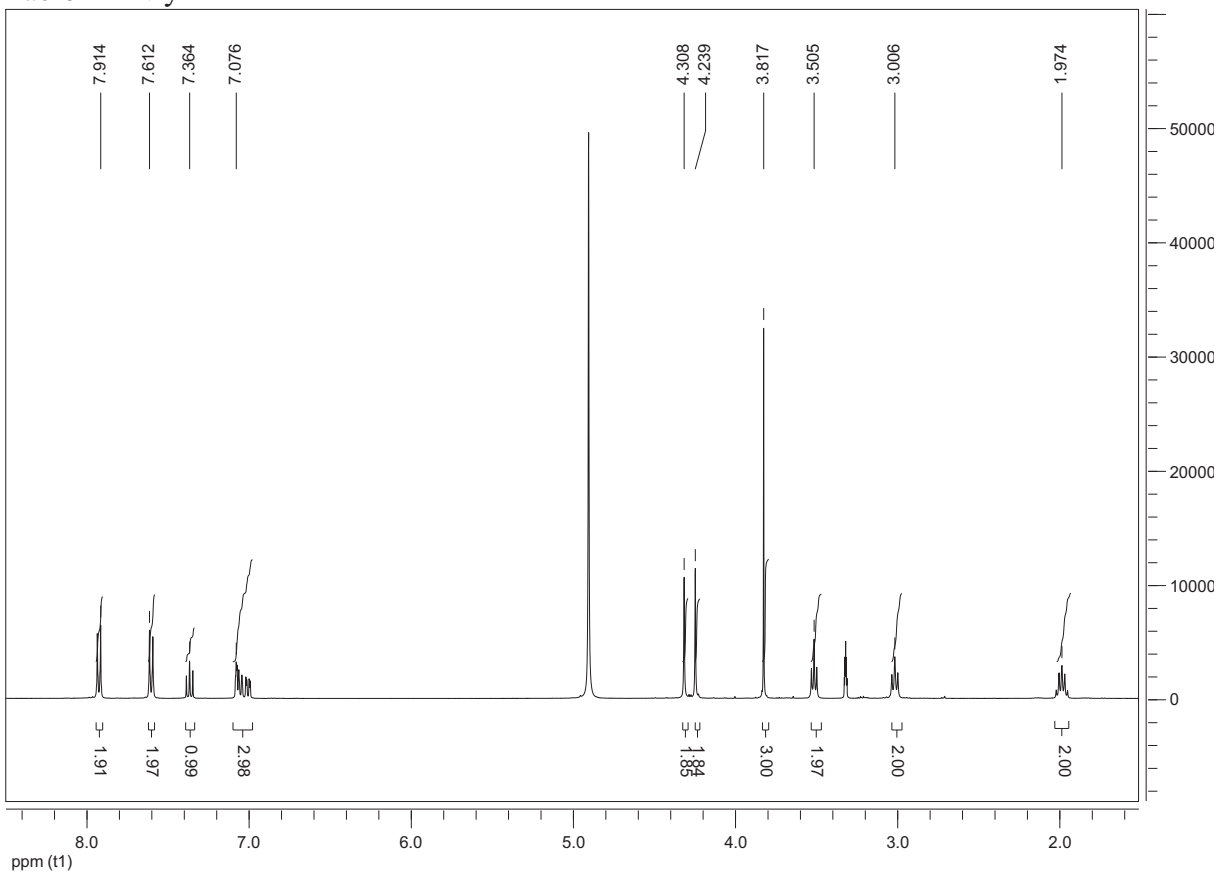


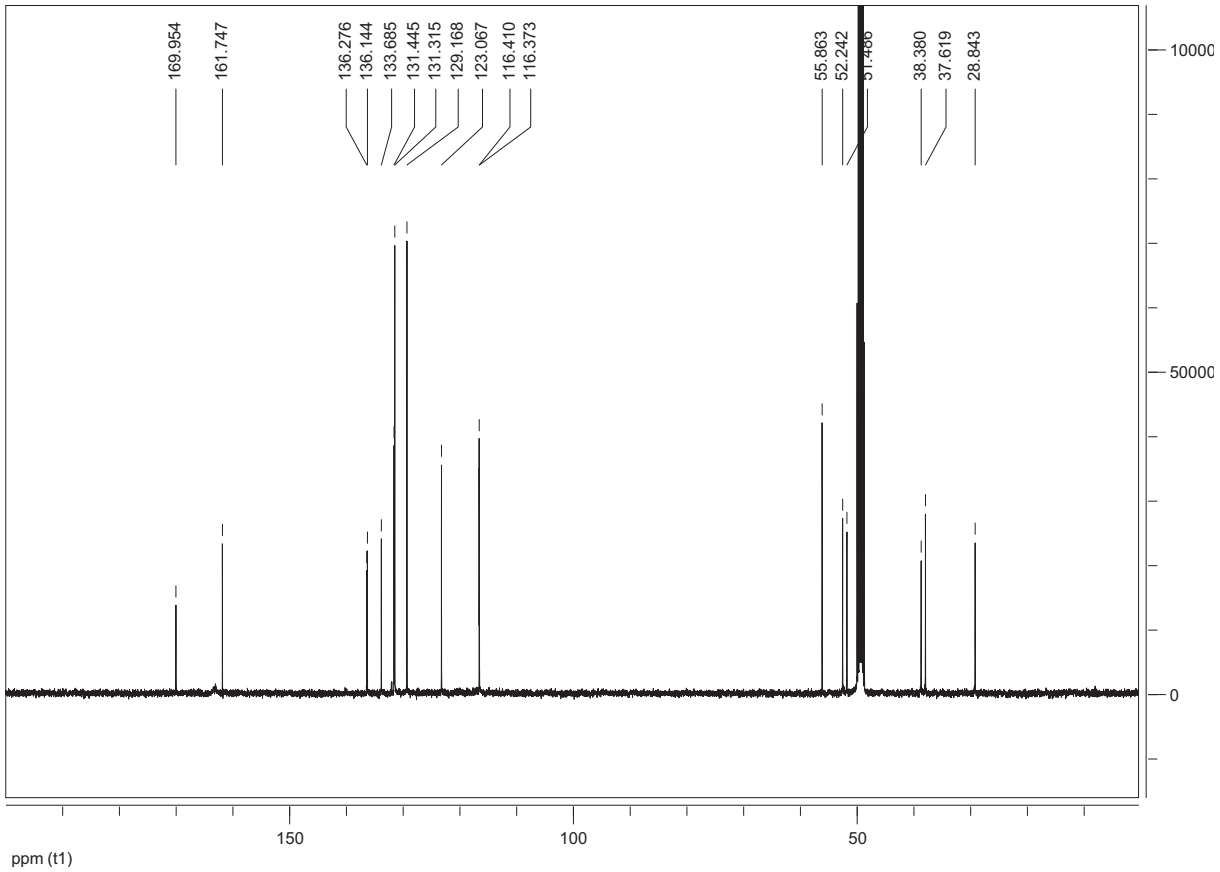
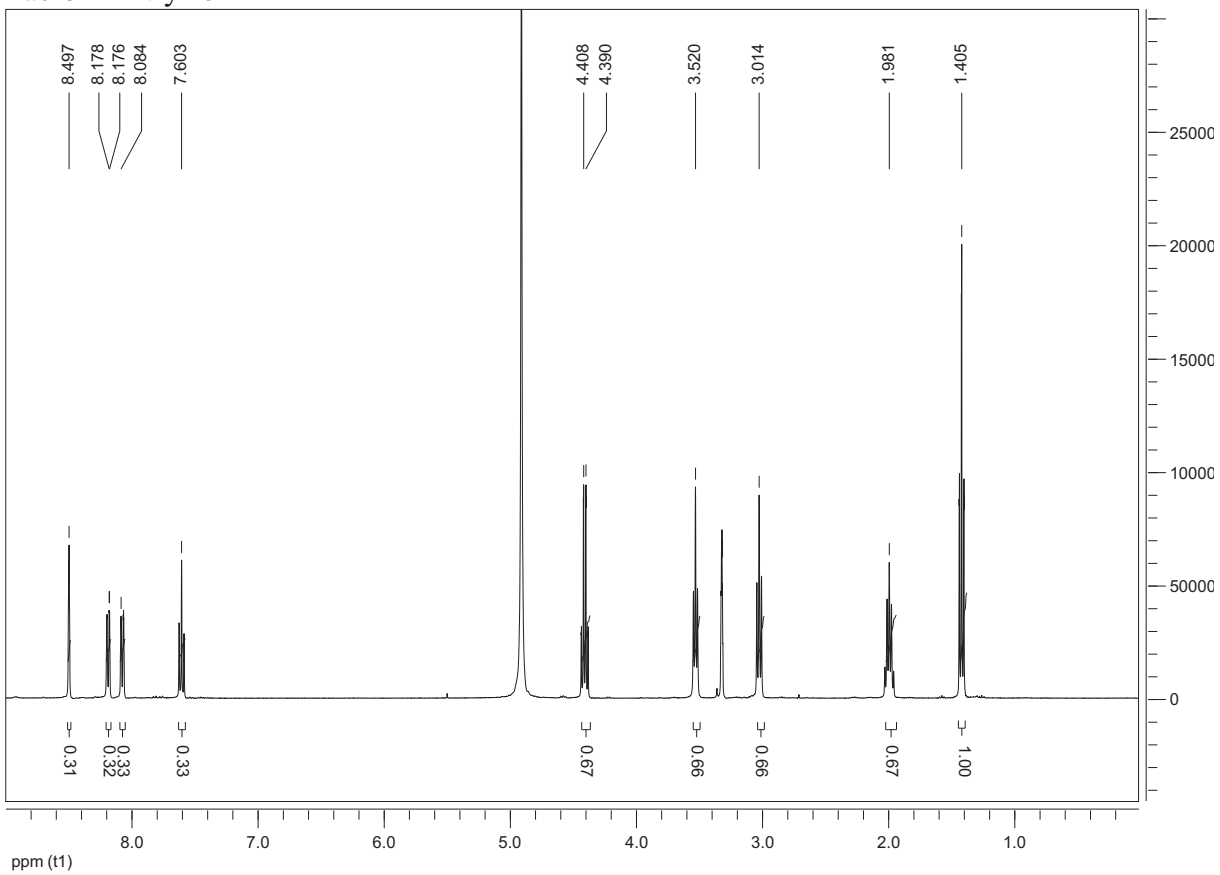


Table 2 Entry 15



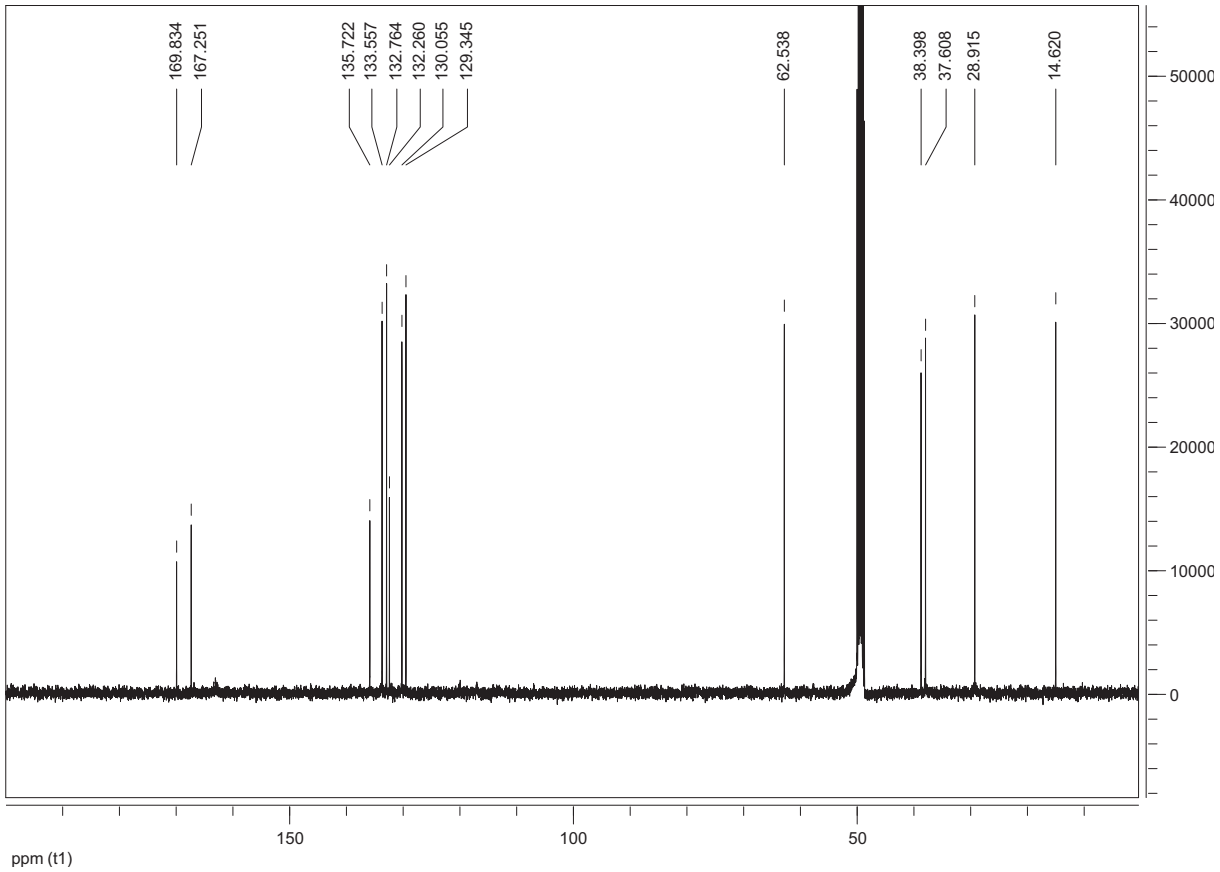
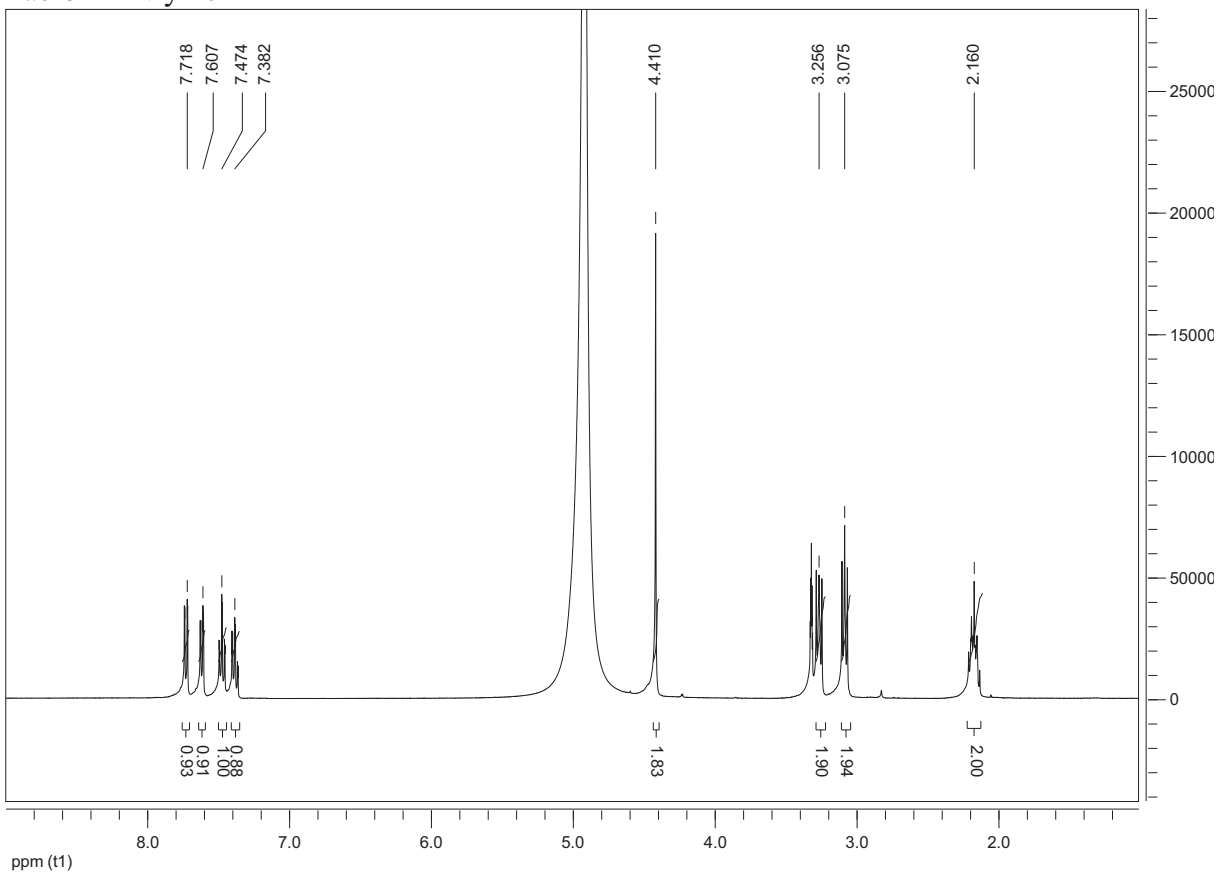


Table 2 Entry 16



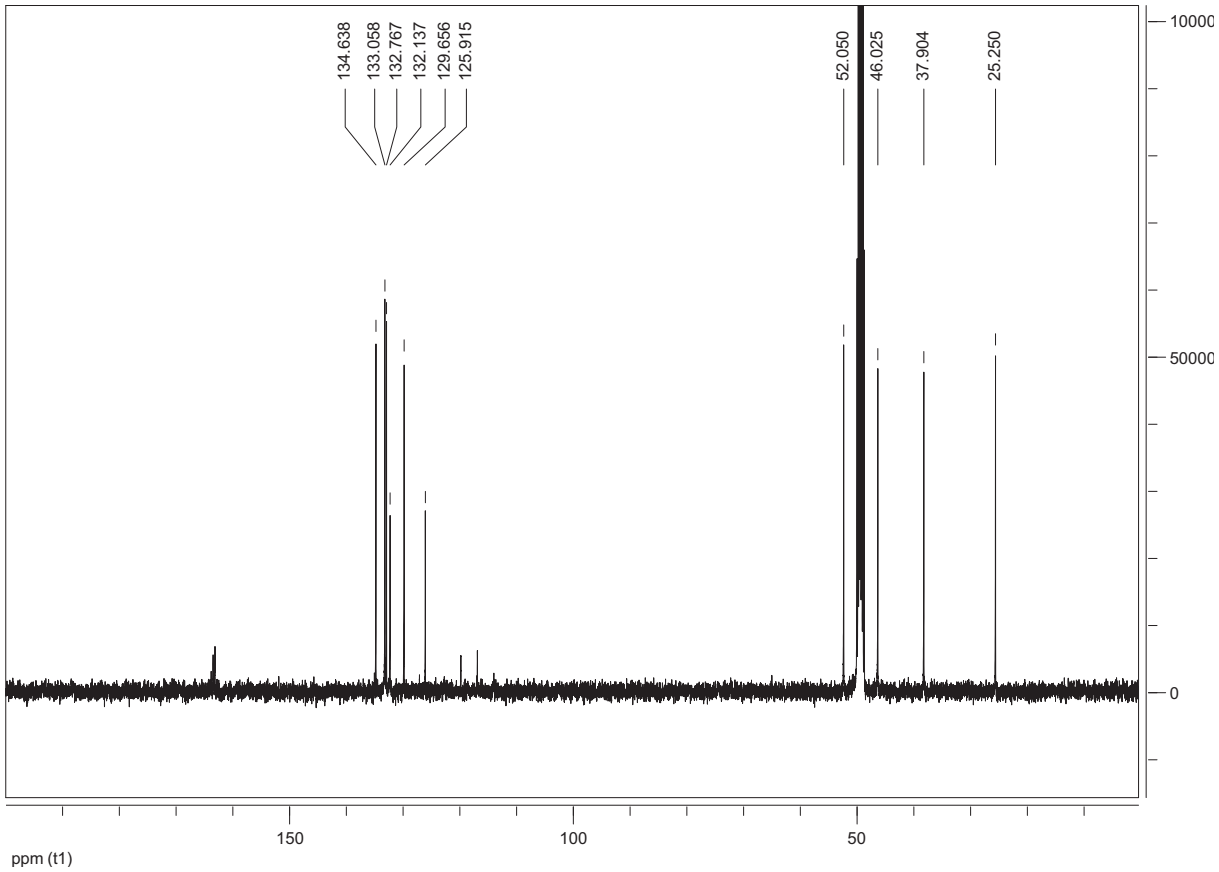
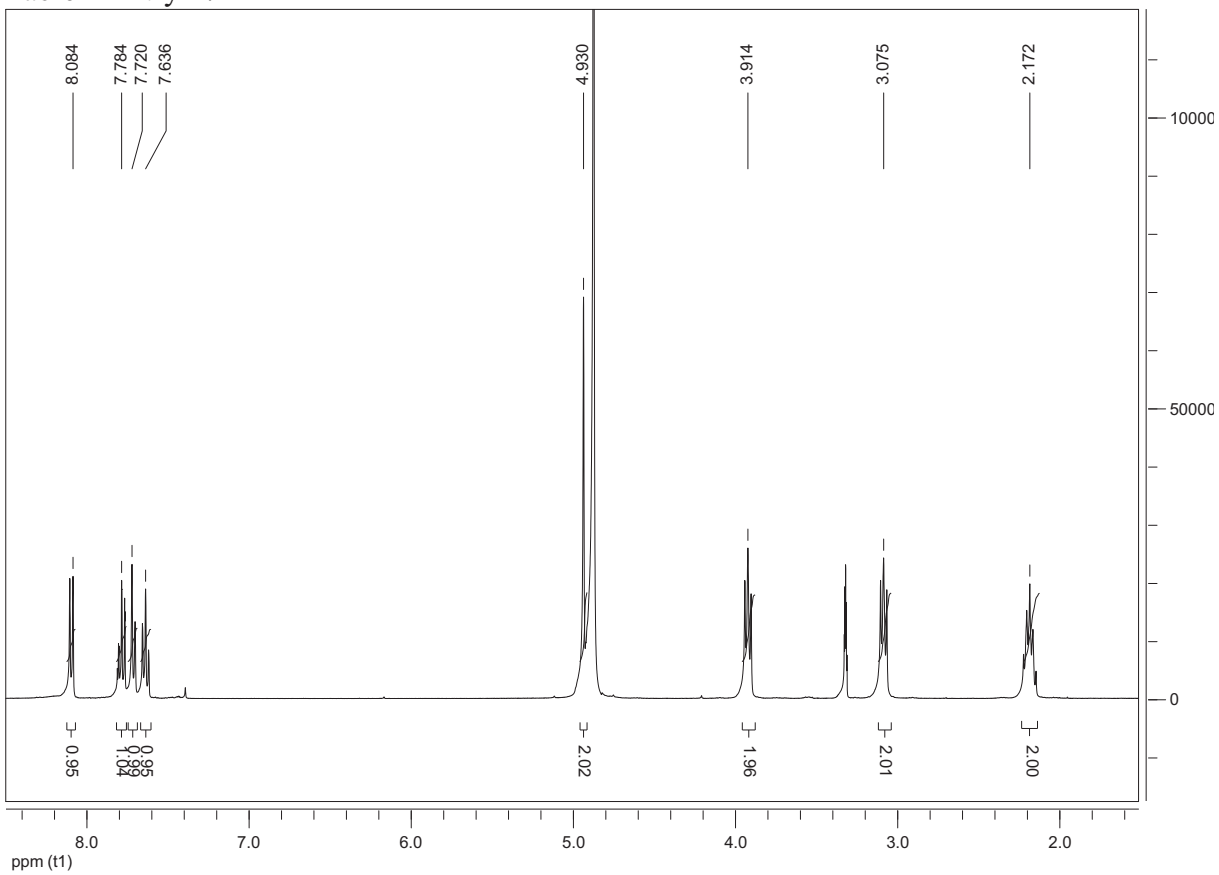


Table 2 Entry 17



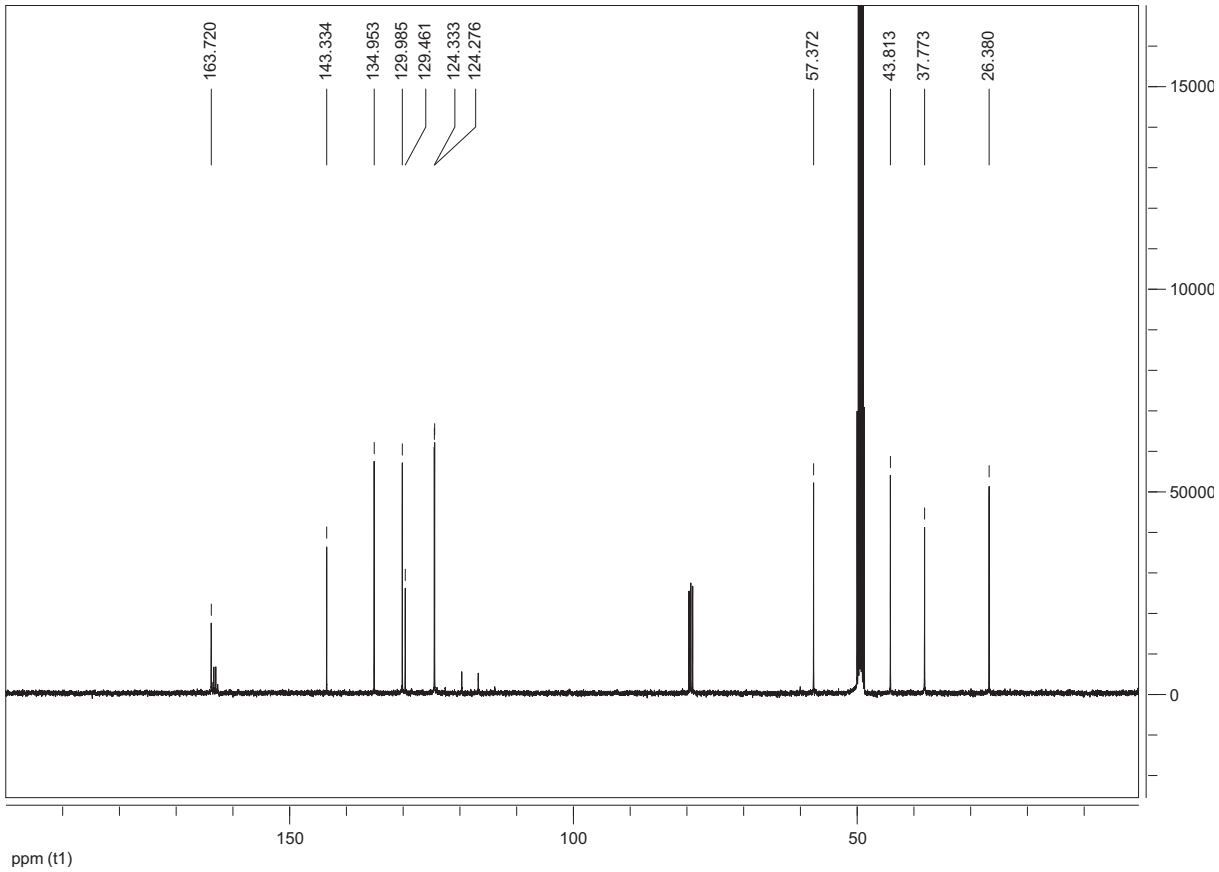


Table 2 Entry 18