

**Support studies toward the hicksoane alkaloids reveals cascade
reactions of a (tryptophanamido)methylglycinate**

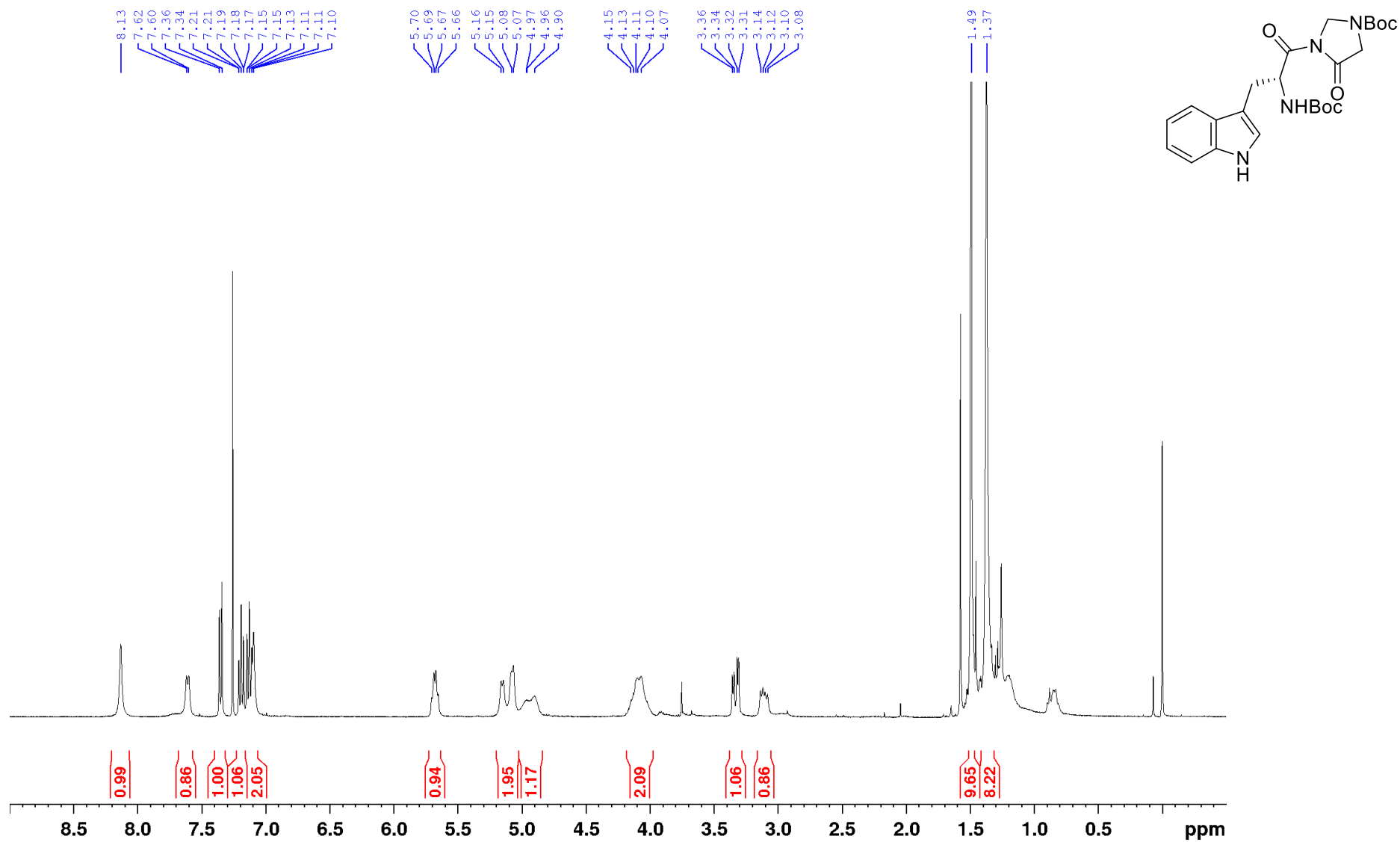
Stephanie Lee, Tilo Söhnel and Jonathan Sperry*

j.sperry@auckland.ac.nz

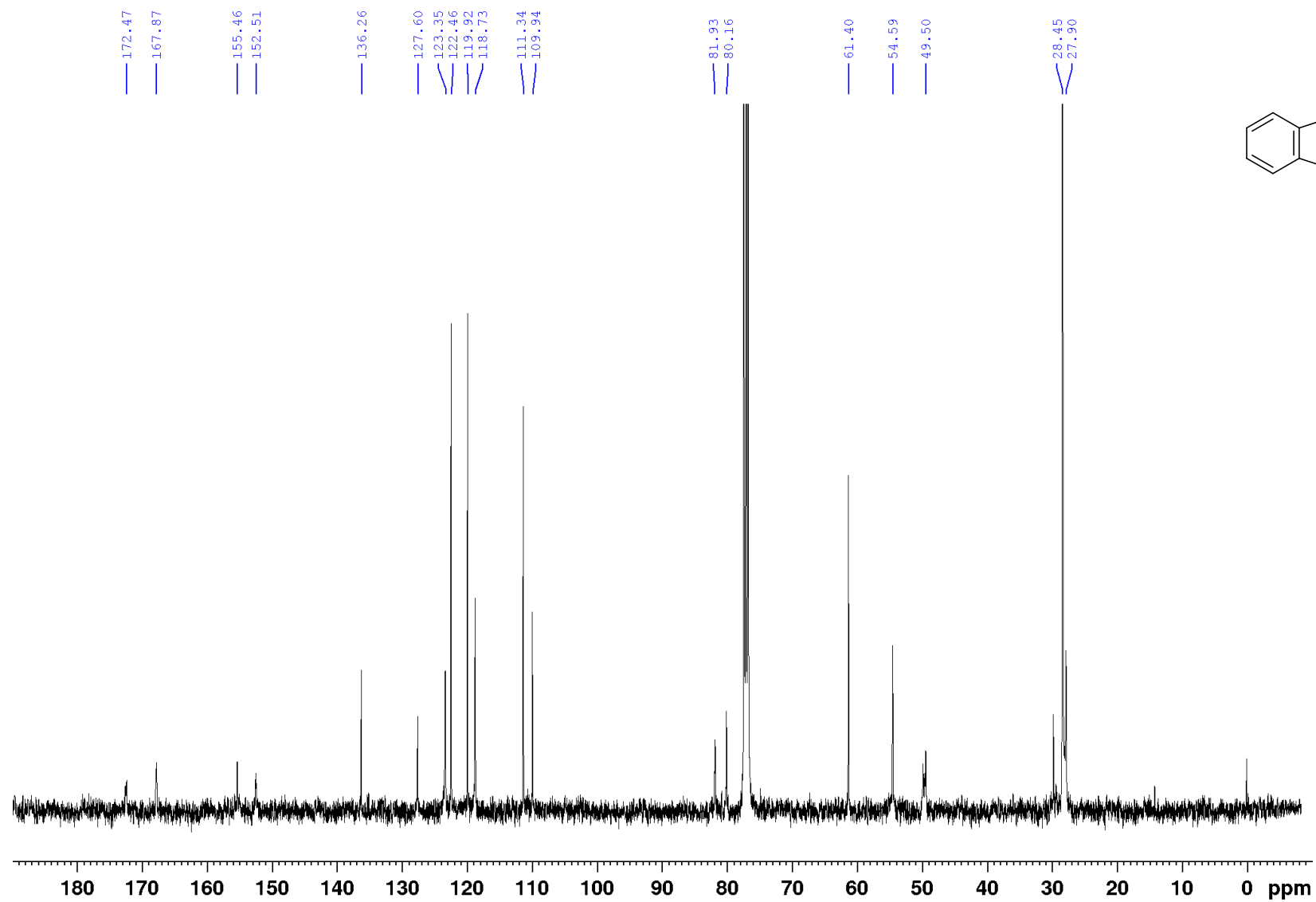
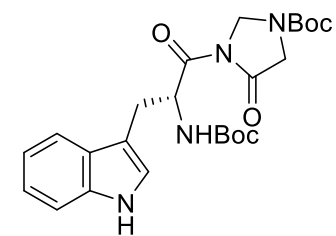
SUPPORTING INFORMATION

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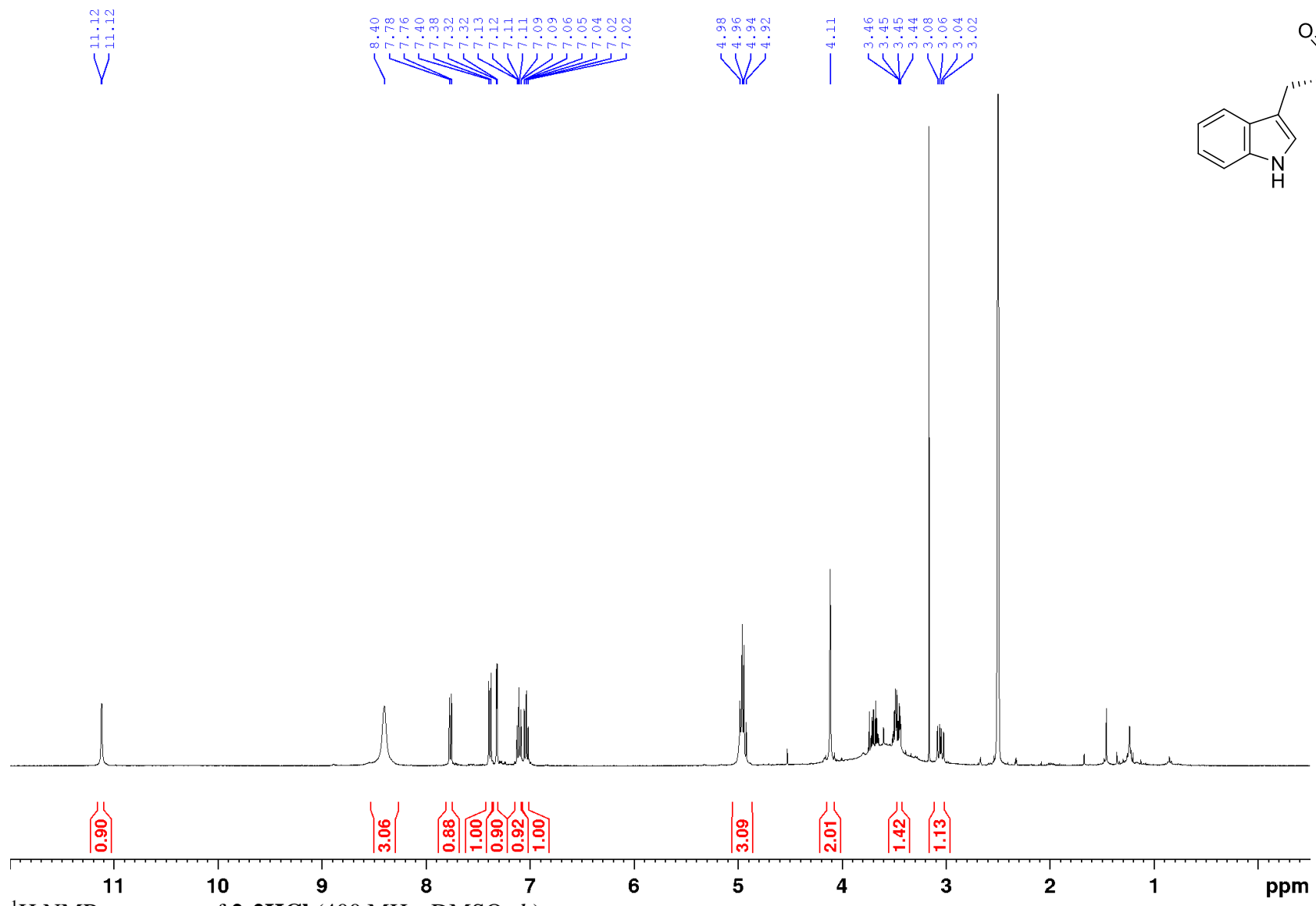
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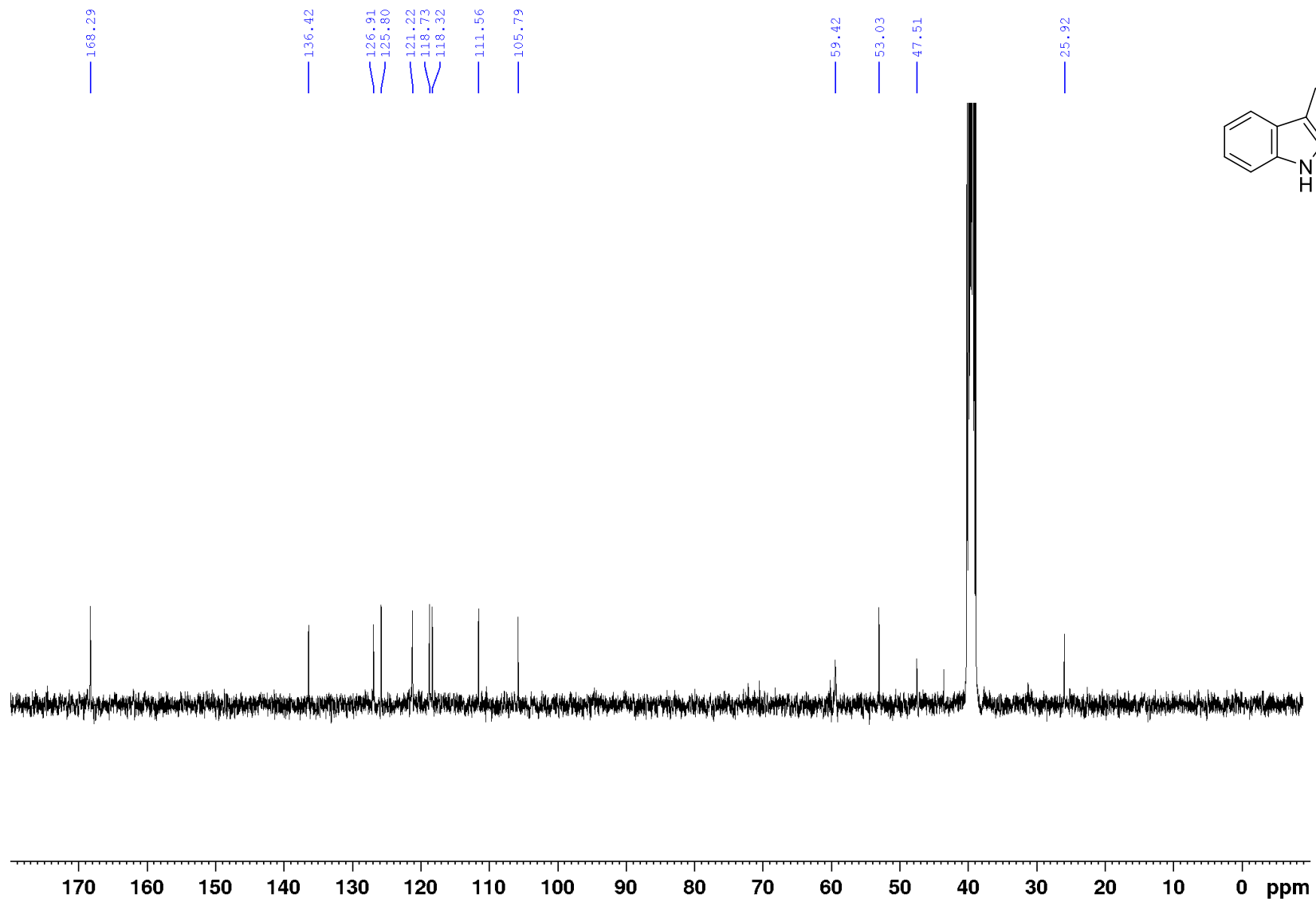
^1H NMR spectrum of **5** (400 MHz, CDCl_3).



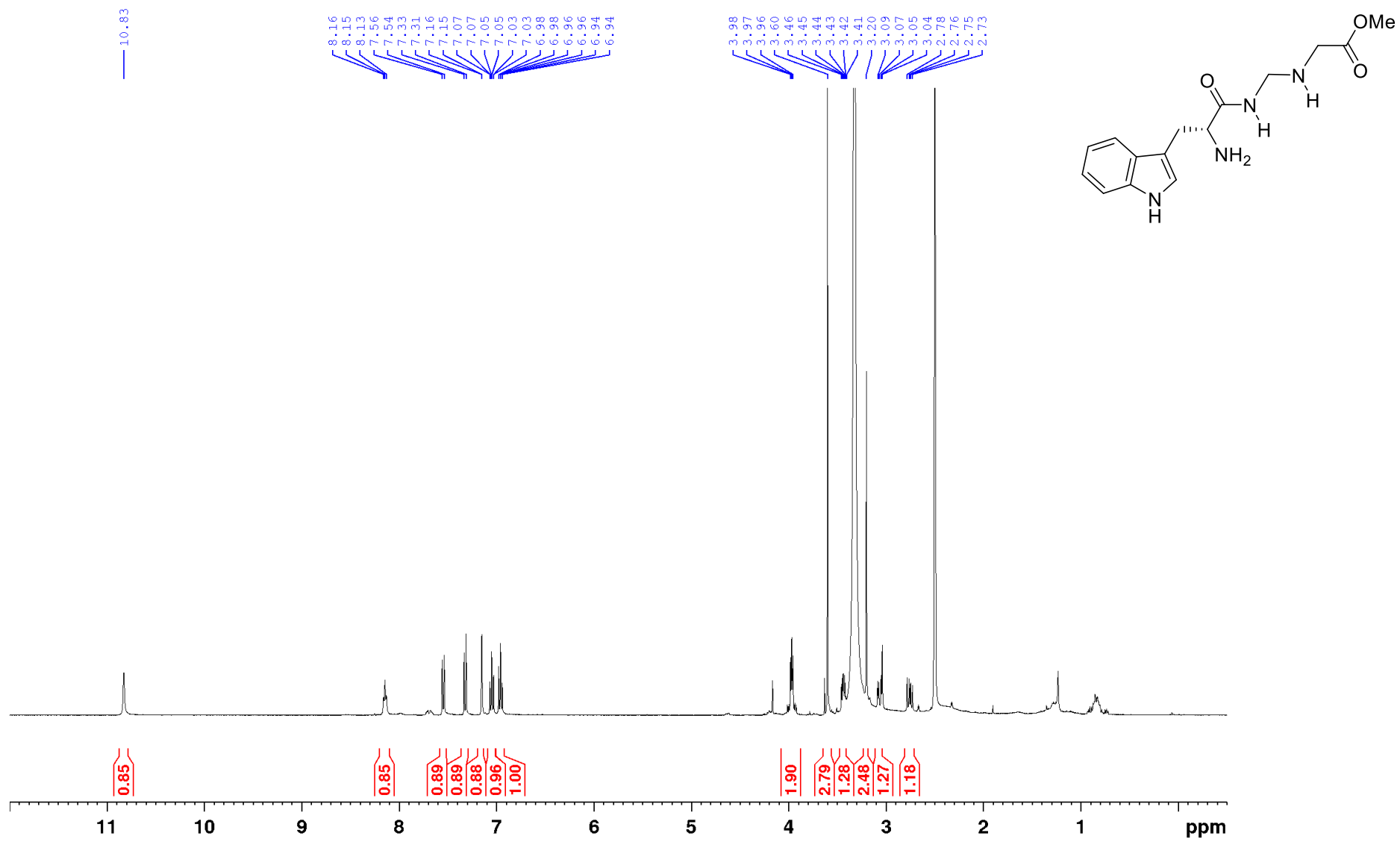
^{13}C NMR spectrum of **5** (100 MHz, CDCl_3).



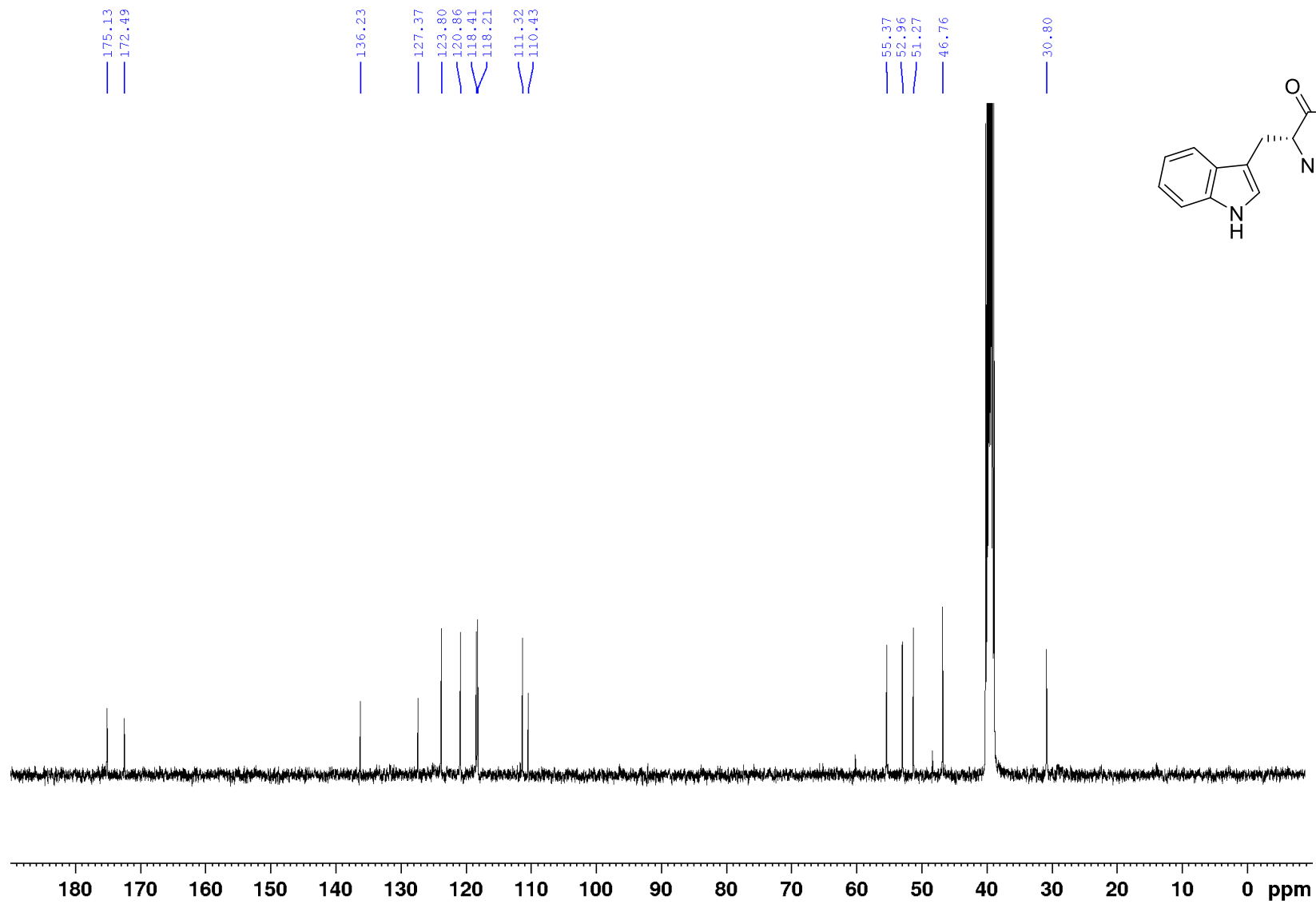
^1H NMR spectrum of **2•2HCl** (400 MHz, $\text{DMSO-}d_6$).



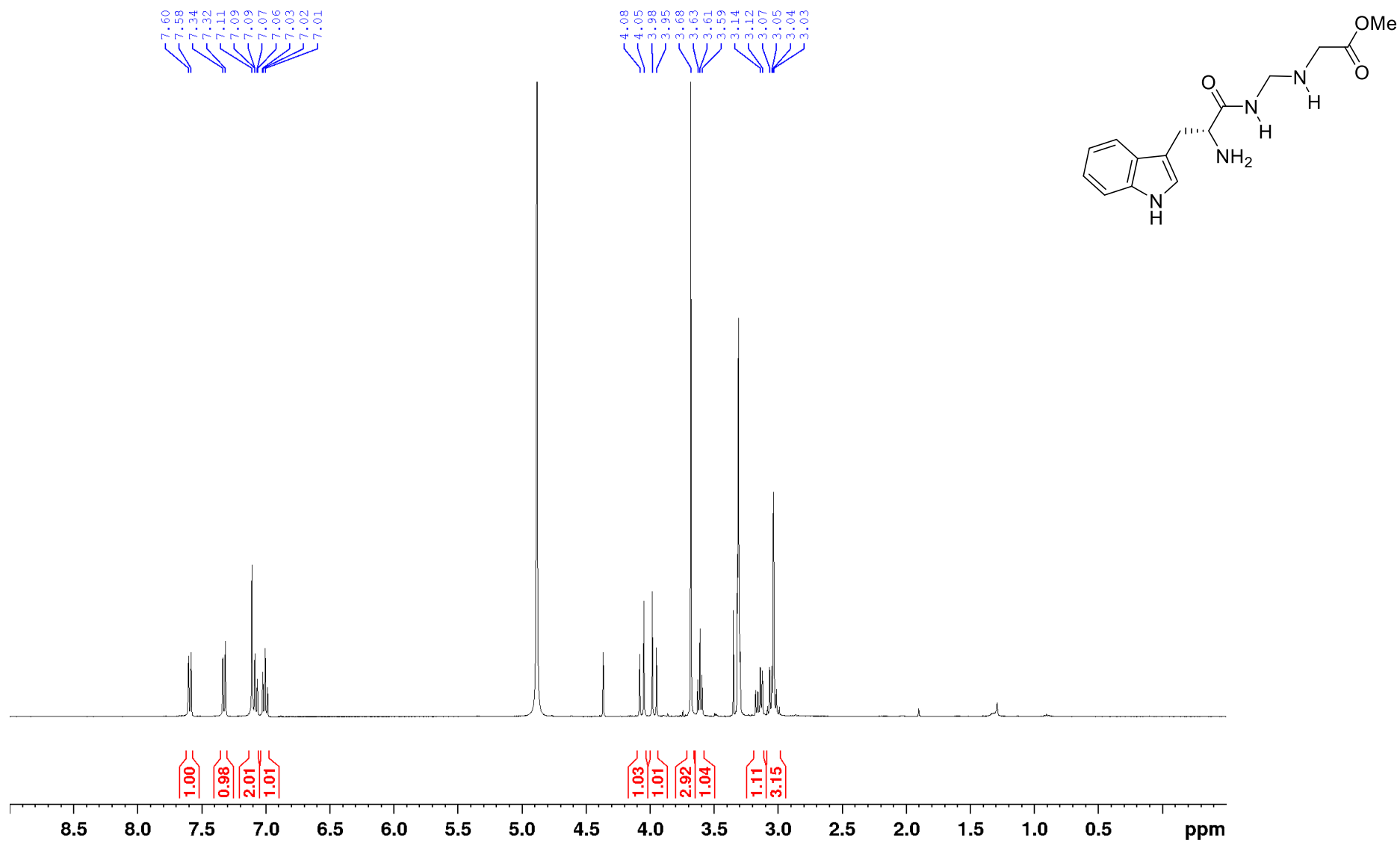
^{13}C NMR spectrum of **2**•**2HCl** (100 MHz, $\text{DMSO-}d_6$).



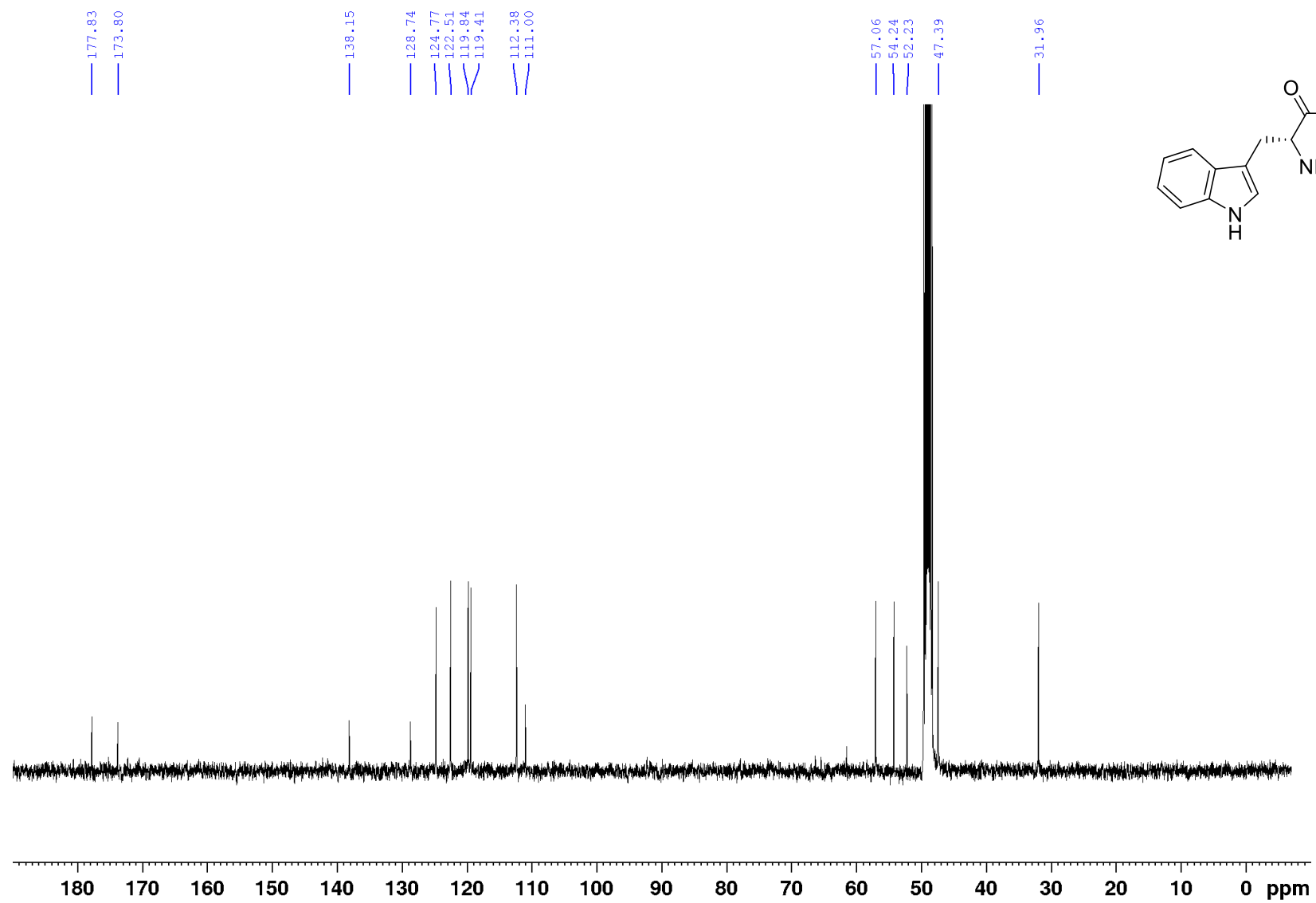
¹H NMR spectrum of 7 (400 MHz, DMSO-*d*₆).



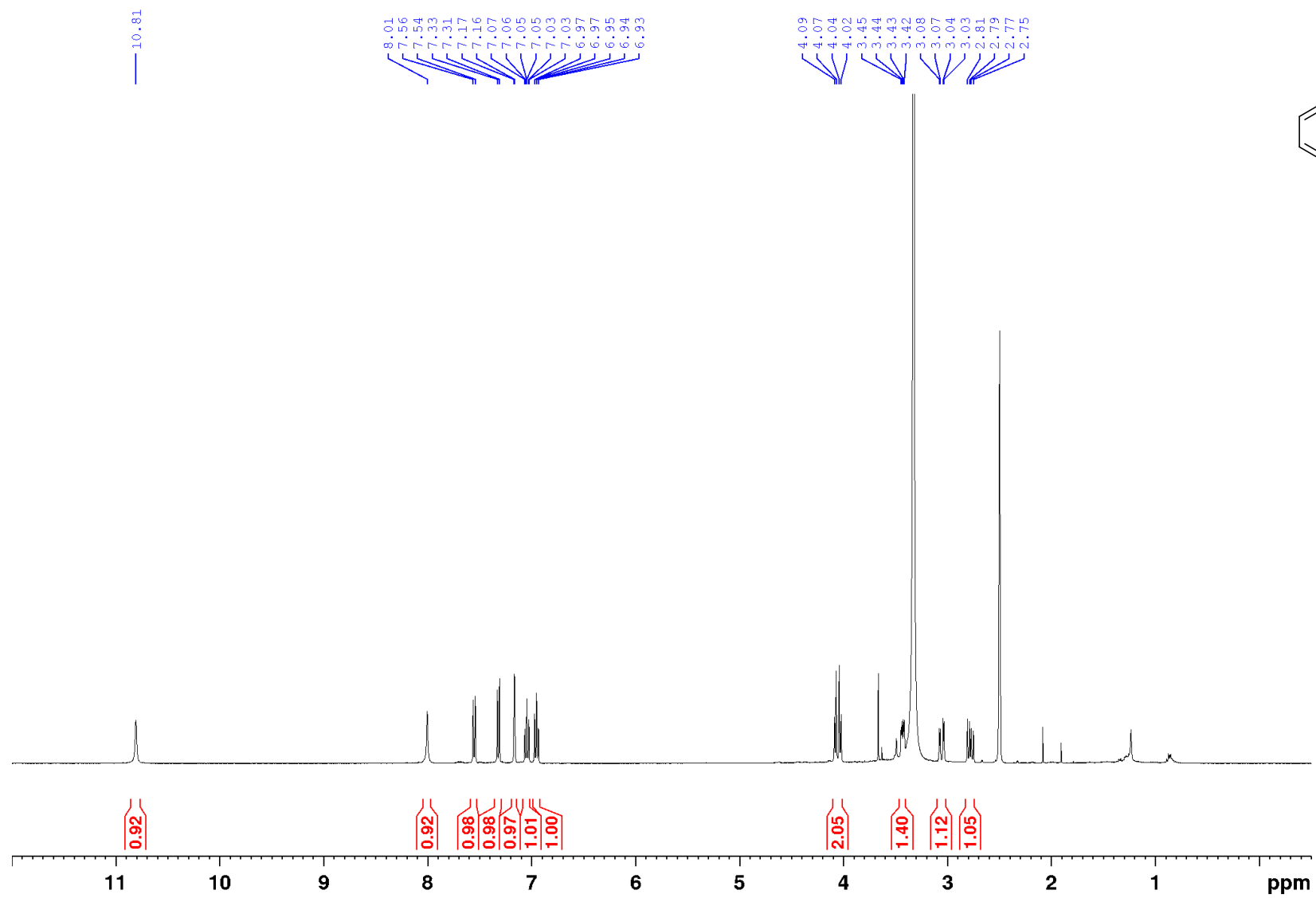
^{13}C NMR spectrum of **7** (100 MHz, $\text{DMSO-}d_6$).



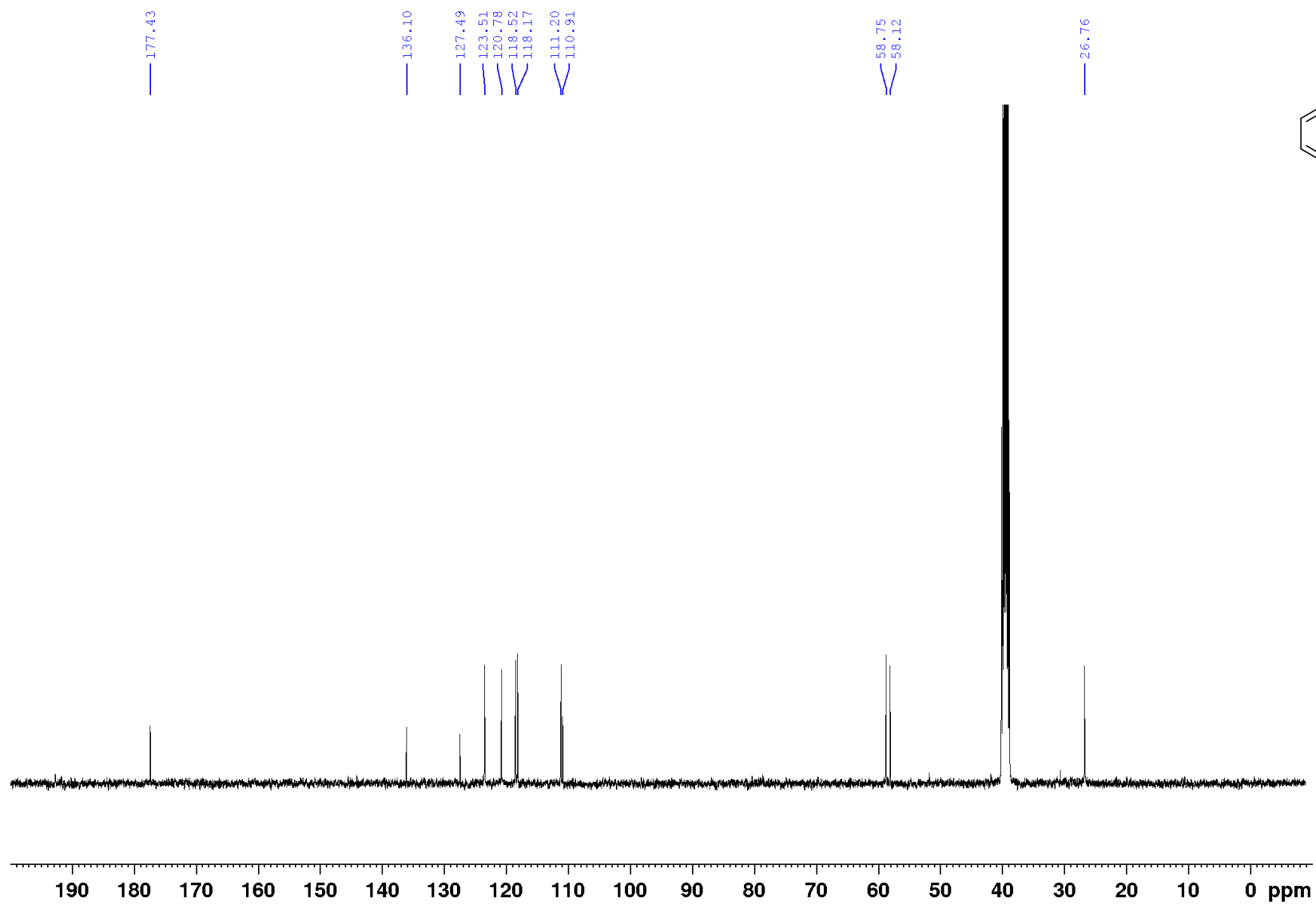
¹H NMR spectrum of **7** (400 MHz, CD₃OD).



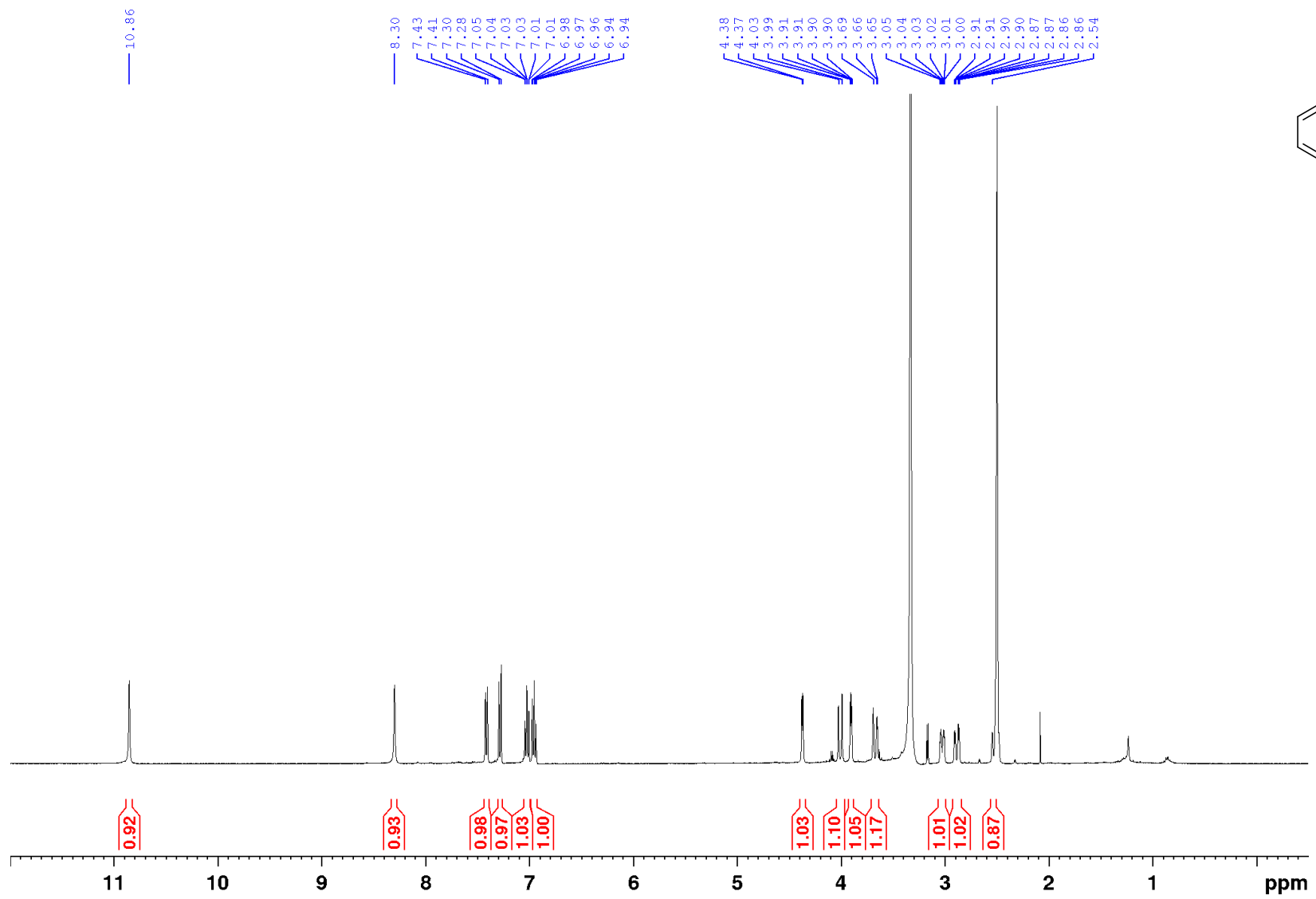
^{13}C NMR spectrum of **7** (100 MHz, CD_3OD).



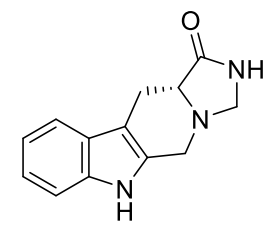
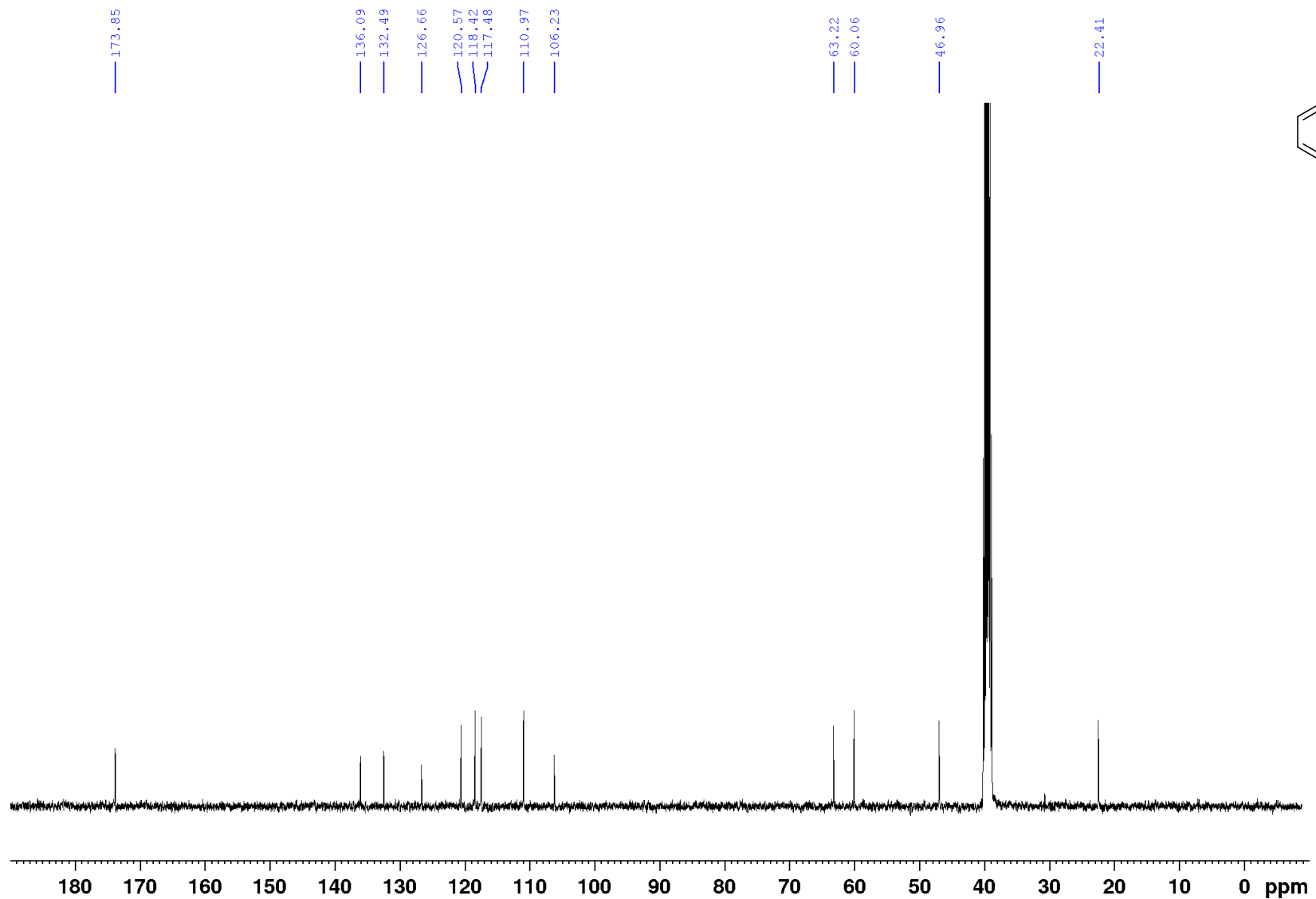
^1H NMR spectrum of **10** (400 MHz, $\text{DMSO-}d_6$).



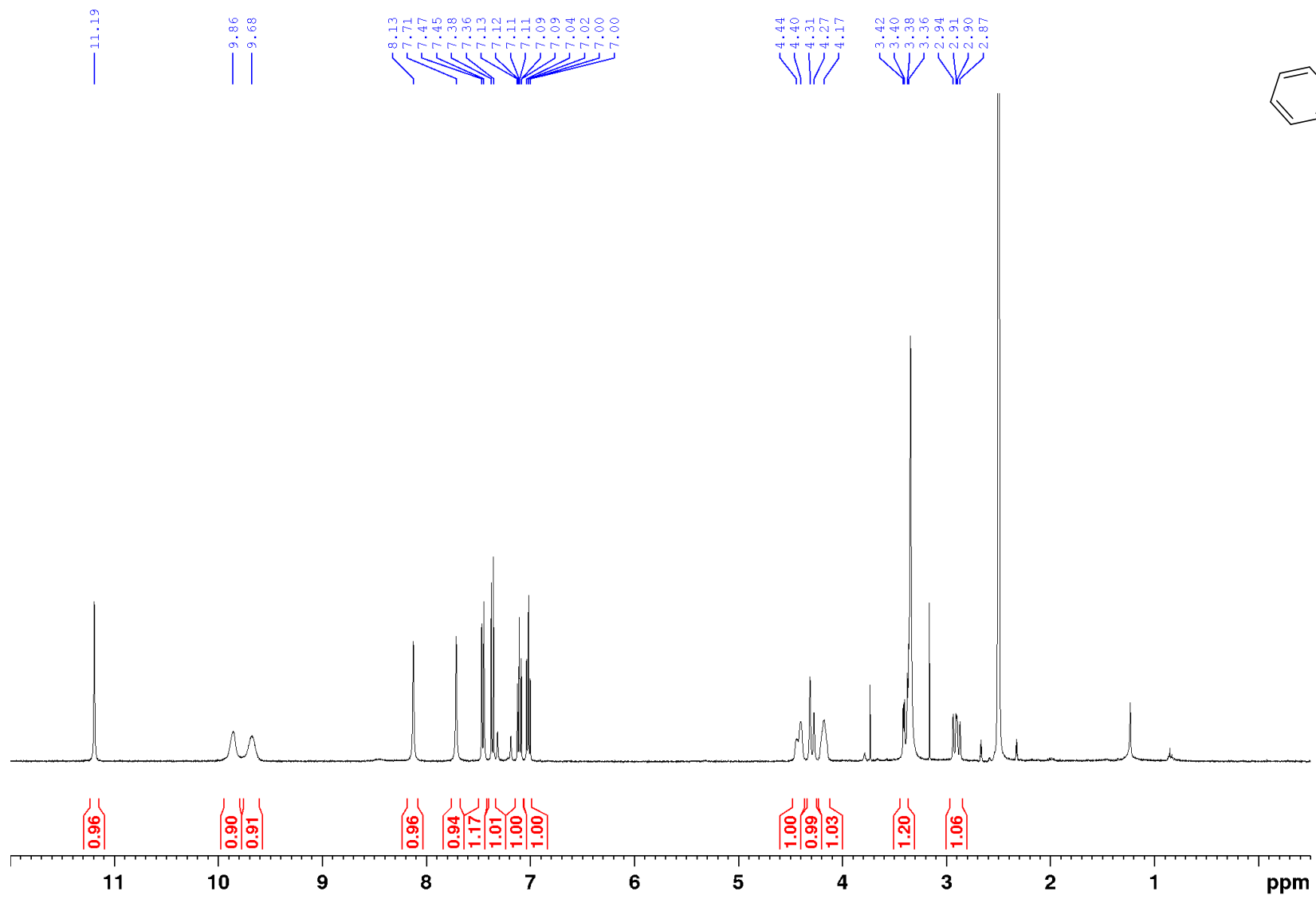
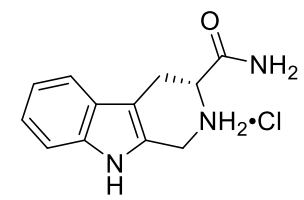
^{13}C NMR spectrum of **10** (100 MHz, $\text{DMSO-}d_6$).



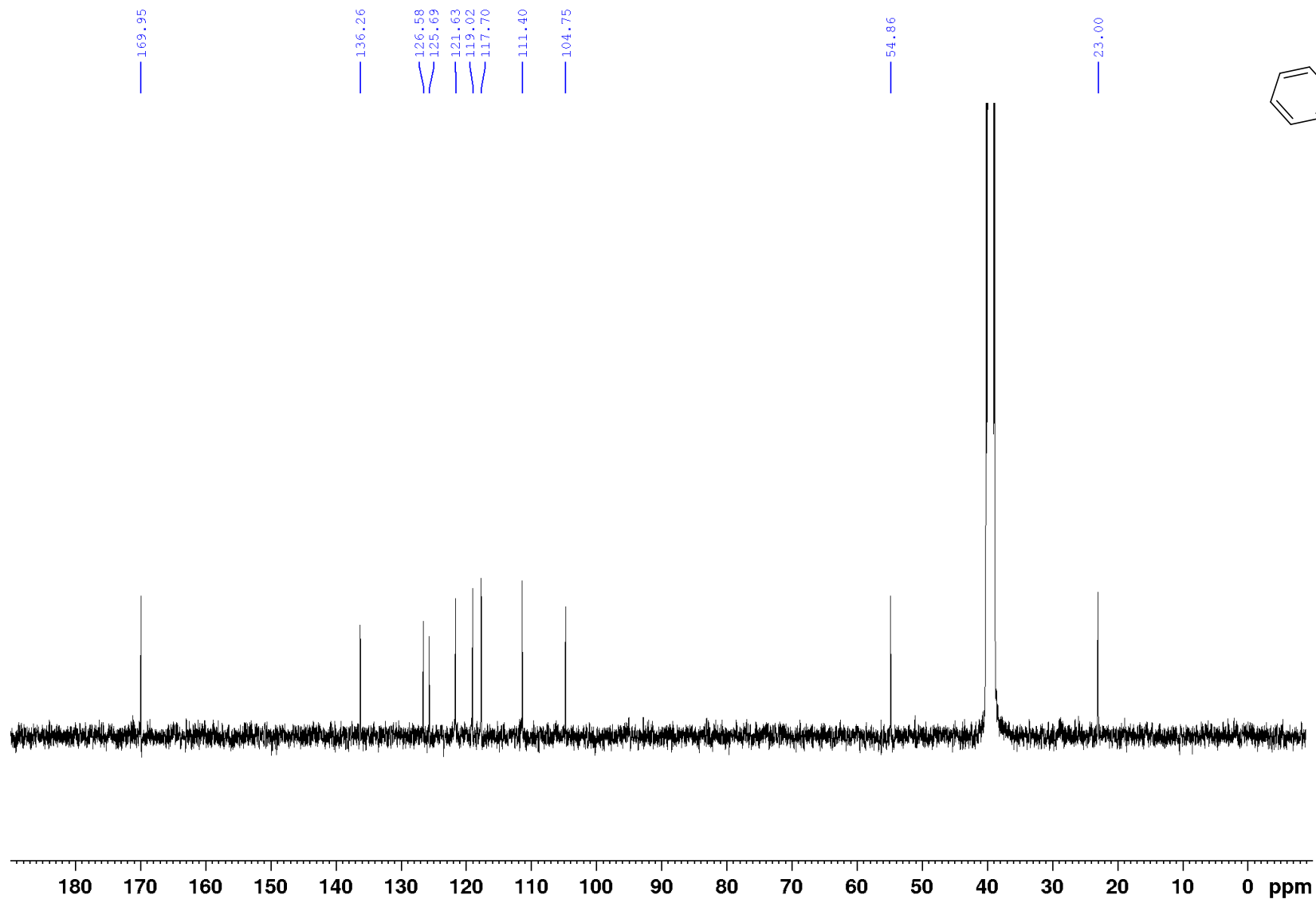
¹H NMR spectrum of **9** (400 MHz, DMSO-*d*₆).



¹³C NMR spectrum of **9** (100 MHz, DMSO-*d*₆).

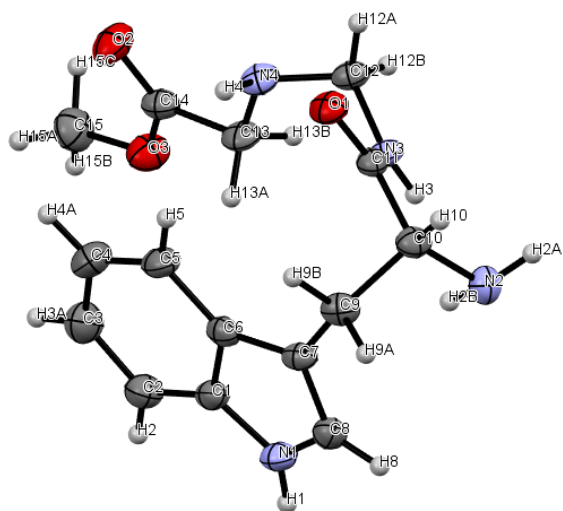


¹H NMR spectrum of **8**·HCl (400 MHz, DMSO-*d*₆).



¹³C NMR spectrum of **8•HCl** (100 MHz, DMSO-*d*₆).

Crystallographic Data for 7

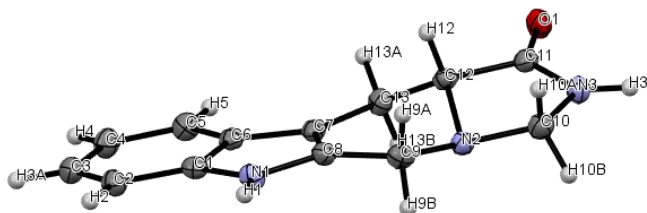
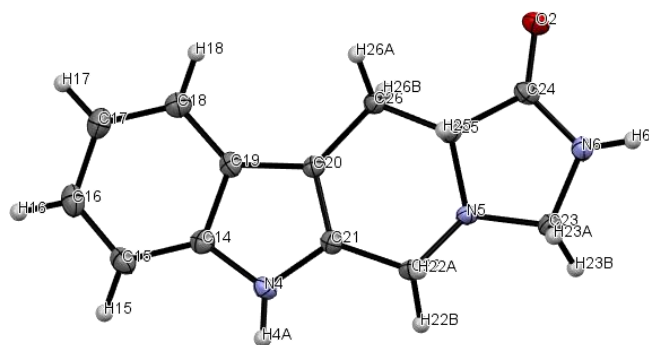


ORTEP representation of 7.

Table S1. Crystal data and structure refinement for **7**.

| | |
|---|---|
| CCDC number | 2281801 |
| Identification code | SYL-06-20_01 |
| Empirical formula | C ₁₅ H ₂₀ N ₄ O ₃ |
| Formula weight | 304.35 |
| Temperature/K | 120(1) |
| Crystal system | monoclinic |
| Space group | C2 |
| a/Å | 16.2851(13) |
| b/Å | 5.2346(4) |
| c/Å | 18.9492(16) |
| α/° | 90 |
| β/° | 112.304(10) |
| γ/° | 90 |
| Volume/Å ³ | 1494.5(2) |
| Z | 4 |
| ρ _{calc} /mm ³ | 1.353 |
| μ/mm ⁻¹ | 0.794 |
| F(000) | 648.0 |
| Crystal size/mm ³ | 0.2 × 0.05 × 0.04 |
| 2θ range for data collection | 11.748 to 135.458° |
| Index ranges | -19 ≤ h ≤ 12, -6 ≤ k ≤ 5, -18 ≤ l ≤ 22 |
| Reflections collected | 4802 |
| Independent reflections | 2156[R(int) = 0.0507] |
| Data/restraints/parameters | 2156/4/206 |
| Goodness-of-fit on F ² | 1.043 |
| Final R indexes [I ≥ 2σ (I)] | R ₁ = 0.0514, wR ₂ = 0.1298 |
| Final R indexes [all data] | R ₁ = 0.0636, wR ₂ = 0.1390 |
| Largest diff. peak/hole / e Å ⁻³ | 0.37/-0.26 |
| Flack parameter | 0.0(3) |
| Crystallisation solvent system | Methanol/Dichloromethane (Slow evaporation) |

Crystallographic Data for **9**

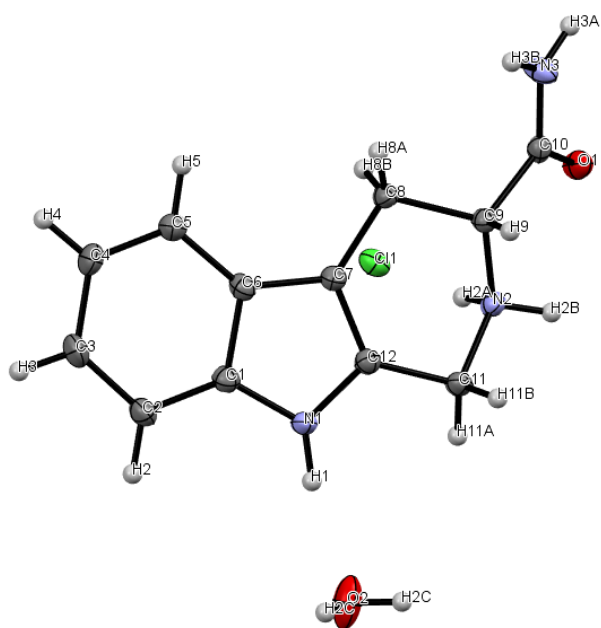


ORTEP representation with labels of two molecules of **9**.

Table S2. Crystal data and structure refinement for **9**.

| | |
|---|---|
| CCDC number | 2281800 |
| Identification code | SYL-06-08 |
| Empirical formula | C ₂₆ H ₂₆ N ₆ O ₂ |
| Formula weight | 454.53 |
| Temperature/K | 113(1) |
| Crystal system | orthorhombic |
| Space group | P2 ₁ 2 ₁ 2 ₁ |
| a/Å | 6.45921(12) |
| b/Å | 15.7500(3) |
| c/Å | 21.1734(4) |
| α/° | 90 |
| β/° | 90 |
| γ/° | 90 |
| Volume/Å ³ | 2154.03(7) |
| Z | 4 |
| ρ _{calc} /mm ³ | 1.402 |
| μ/mm ⁻¹ | 0.743 |
| F(000) | 960.0 |
| Crystal size/mm ³ | 0.35 × 0.03 × 0.03 |
| 2θ range for data collection | 6.994 to 145.042° |
| Index ranges | -7 ≤ h ≤ 7, -13 ≤ k ≤ 18, -25 ≤ l ≤ 25 |
| Reflections collected | 9625 |
| Independent reflections | 3813[R(int) = 0.0388] |
| Data/restraints/parameters | 3813/0/307 |
| Goodness-of-fit on F ² | 1.078 |
| Final R indexes [I ≥ 2σ (I)] | R ₁ = 0.0365, wR ₂ = 0.0914 |
| Final R indexes [all data] | R ₁ = 0.0395, wR ₂ = 0.0926 |
| Largest diff. peak/hole / e Å ⁻³ | 0.17/-0.26 |
| Flack parameter | 0.18(17) |
| Crystallisation solvent system | Methanol (Slow evaporation) |

Crystallographic Data for **8**•HCl



ORTEP representation of **8**•HCl (co-crystallised with one molecule of water).

Table S3. Crystal data and structure refinement for **8•HCl**.

| | |
|---|---|
| CCDC number | 2281802 |
| Identification code | SYL-06-23_2 |
| Empirical formula | C ₁₂ H ₁₅ ClN ₃ O _{1.5} |
| Formula weight | 260.72 |
| Temperature/K | 120(1) |
| Crystal system | monoclinic |
| Space group | C2 |
| a/Å | 12.4988(3) |
| b/Å | 7.09306(15) |
| c/Å | 13.9973(3) |
| α/° | 90 |
| β/° | 102.543(2) |
| γ/° | 90 |
| Volume/Å ³ | 1211.31(4) |
| Z | 4 |
| ρ _{calc} /mm ³ | 1.430 |
| μ/mm ⁻¹ | 2.742 |
| F(000) | 548.0 |
| Crystal size/mm ³ | 0.35 × 0.04 × 0.04 |
| 2θ range for data collection | 6.47 to 144.312° |
| Index ranges | -15 ≤ h ≤ 15, -8 ≤ k ≤ 8, -17 ≤ l ≤ 15 |
| Reflections collected | 4201 |
| Independent reflections | 1911[R(int) = 0.0306] |
| Data/restraints/parameters | 1911/2/162 |
| Goodness-of-fit on F ² | 1.073 |
| Final R indexes [I ≥ 2σ (I)] | R ₁ = 0.0281, wR ₂ = 0.0734 |
| Final R indexes [all data] | R ₁ = 0.0285, wR ₂ = 0.0739 |
| Largest diff. peak/hole / e Å ⁻³ | 0.22/-0.18 |
| Flack parameter | -0.011(11) |
| Crystallisation solvent system | Methanol/Ethanol (Slow evaporation) |