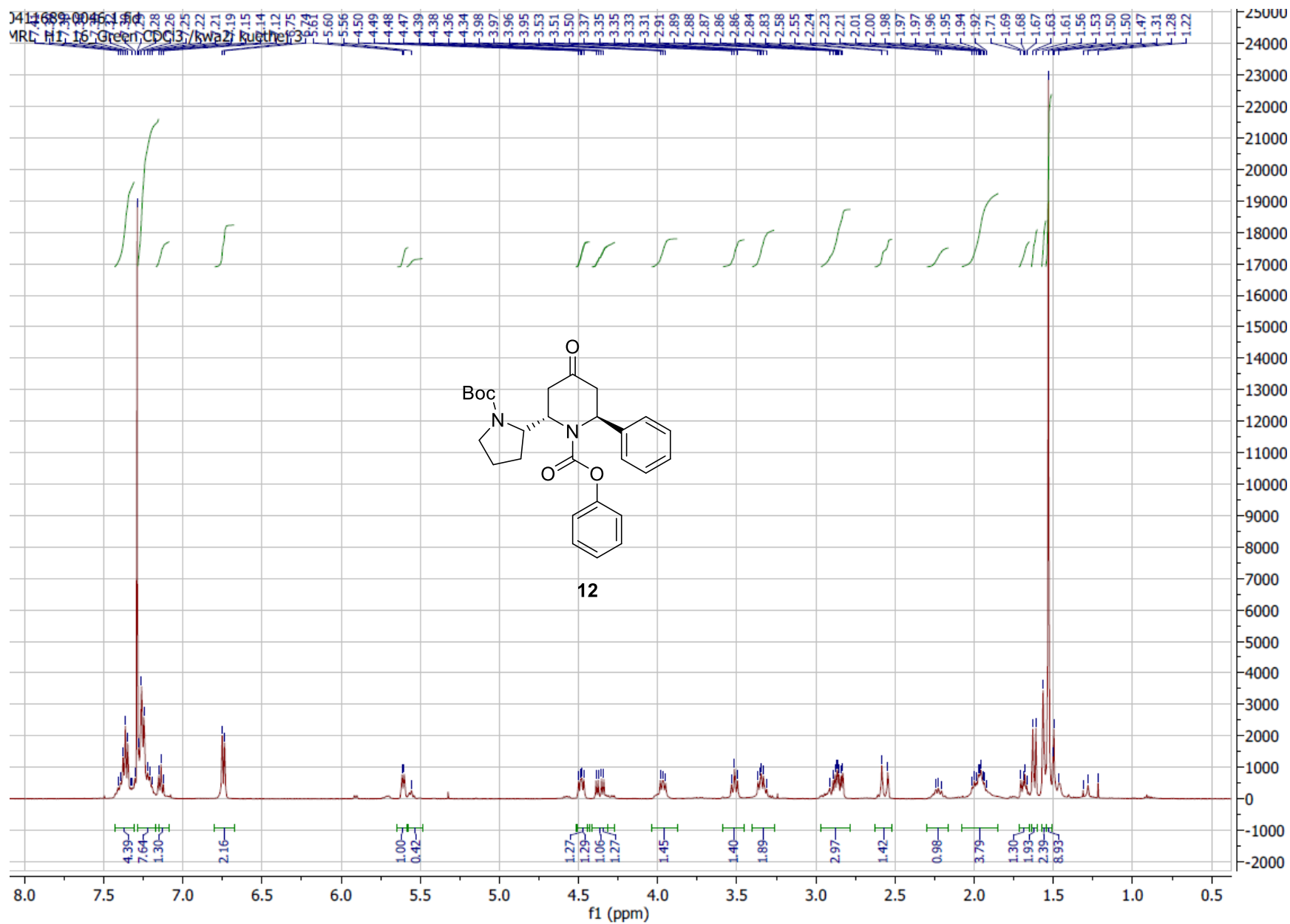


Supplimentary Material

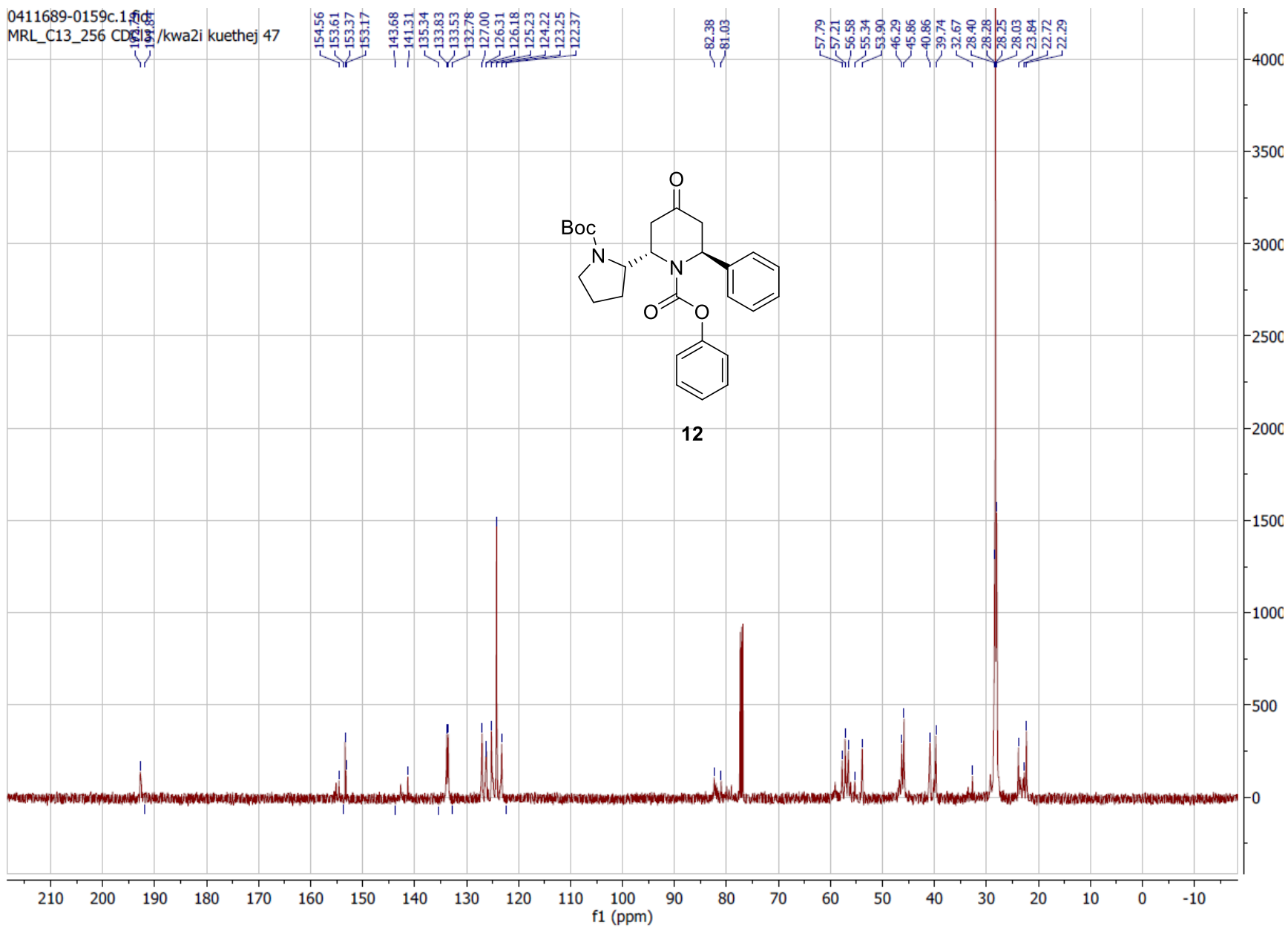
Photoredox-Catalyzed Giese Reactions: Decarboxylative Additions of Cyclic Vinylogous Amides and Esters

Kevin Dykstra, Alexei Buevich, Qi Gao, Yu-Hong Lam, and Jeffrey T. Kuethe*

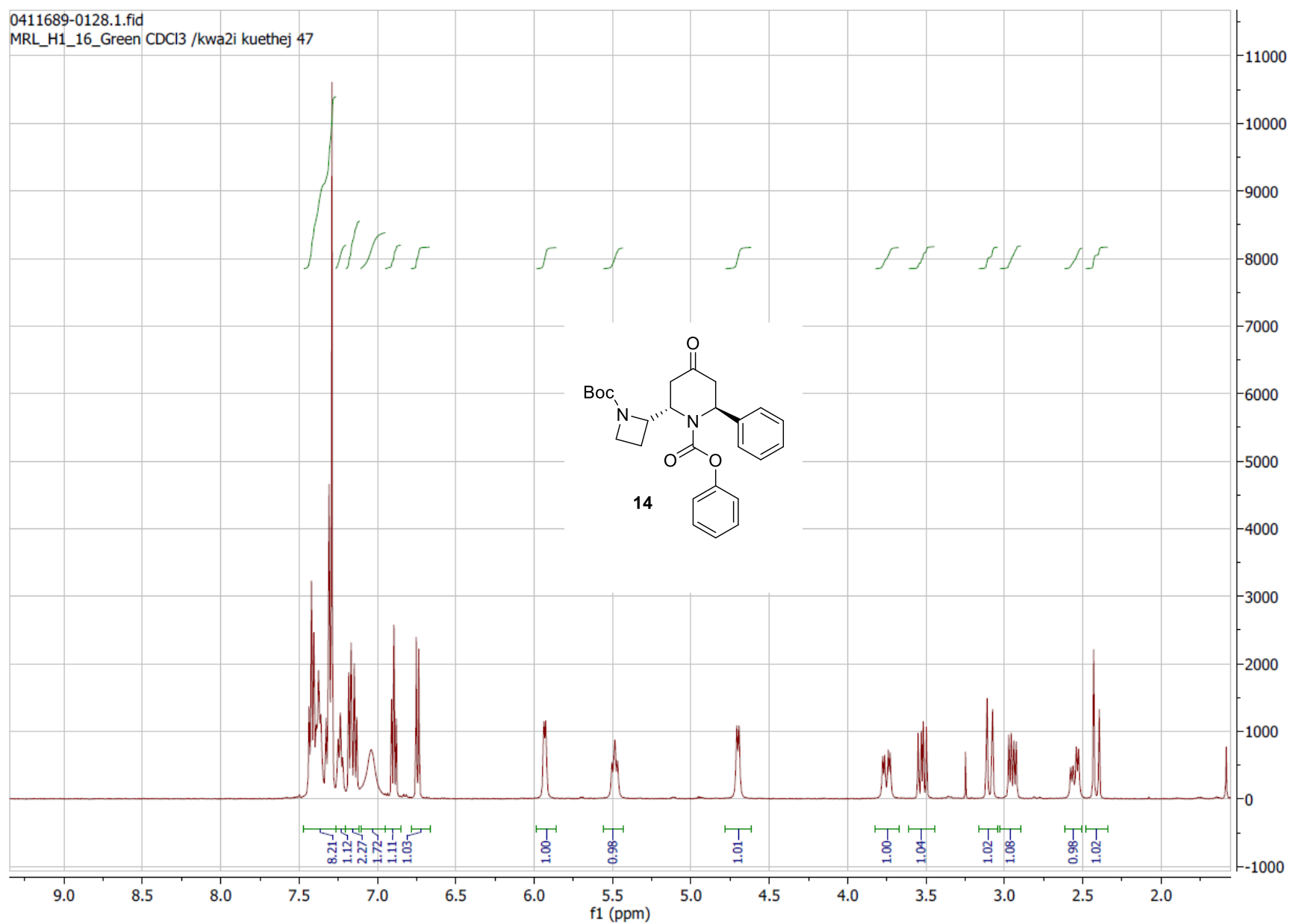
- | | |
|--|-------------|
| 1. ^1H NMR and ^{13}C NMR of all new compounds | pages 2-51 |
| 2. Characterization of Compound 8 | pages 52-57 |
| 3. Characterization of Compounds 9 and 10 | pages 58-73 |
| 4. Characterization of Compound 26a | pages 74-80 |



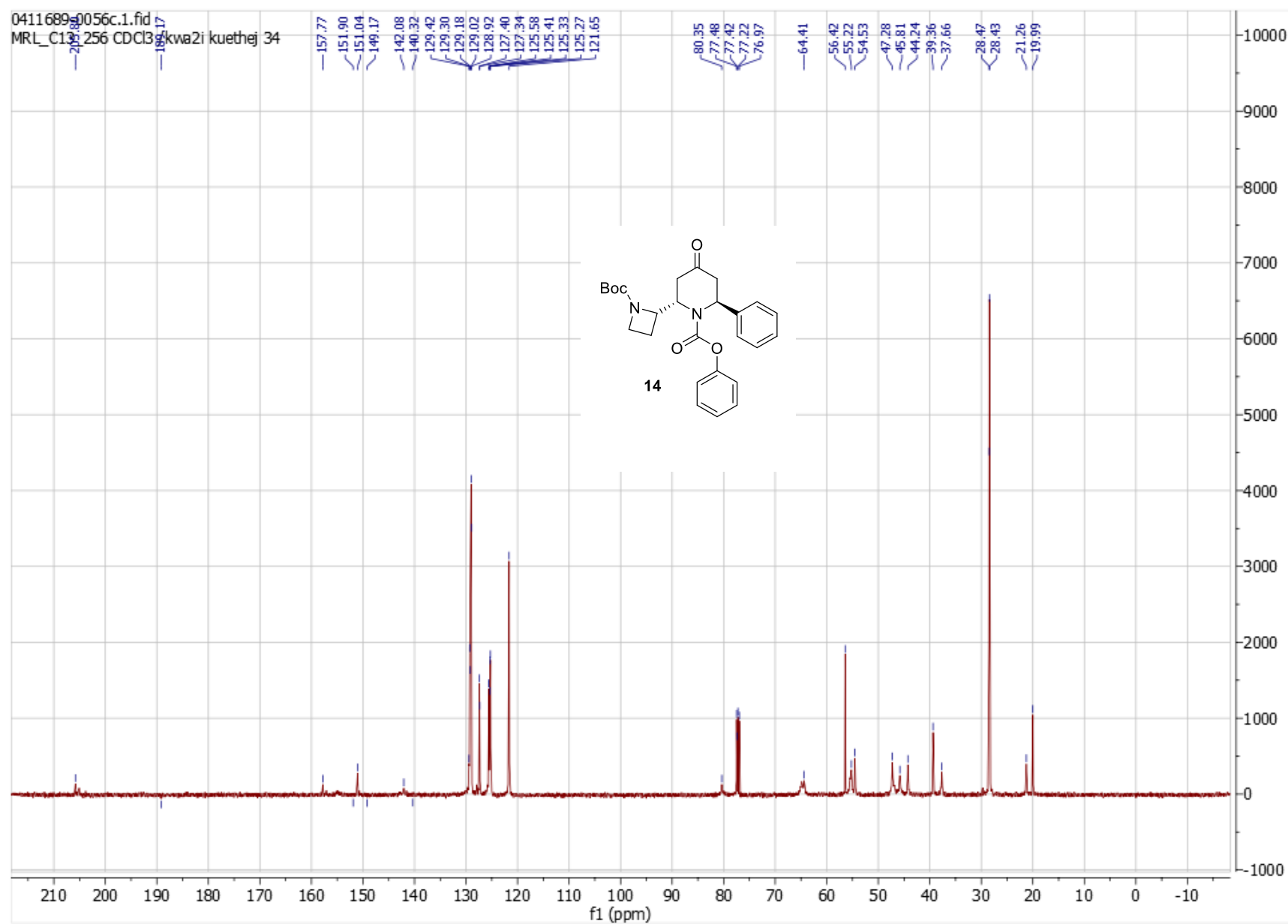
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MRL_C13_256 CDCl₃/kwa2i kuethej 47

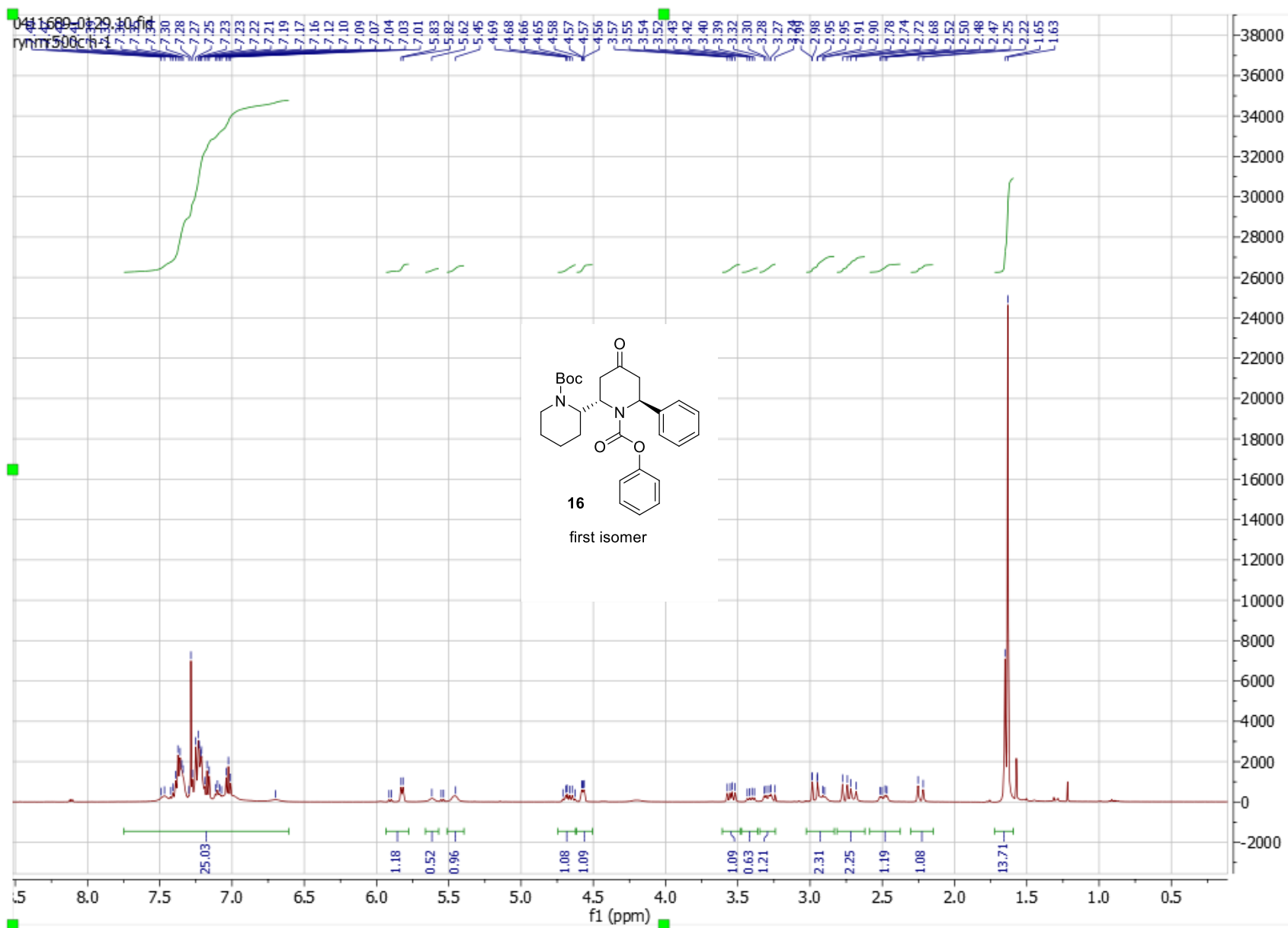


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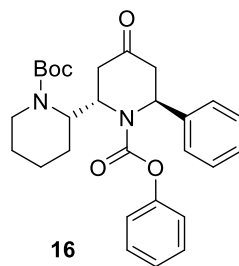


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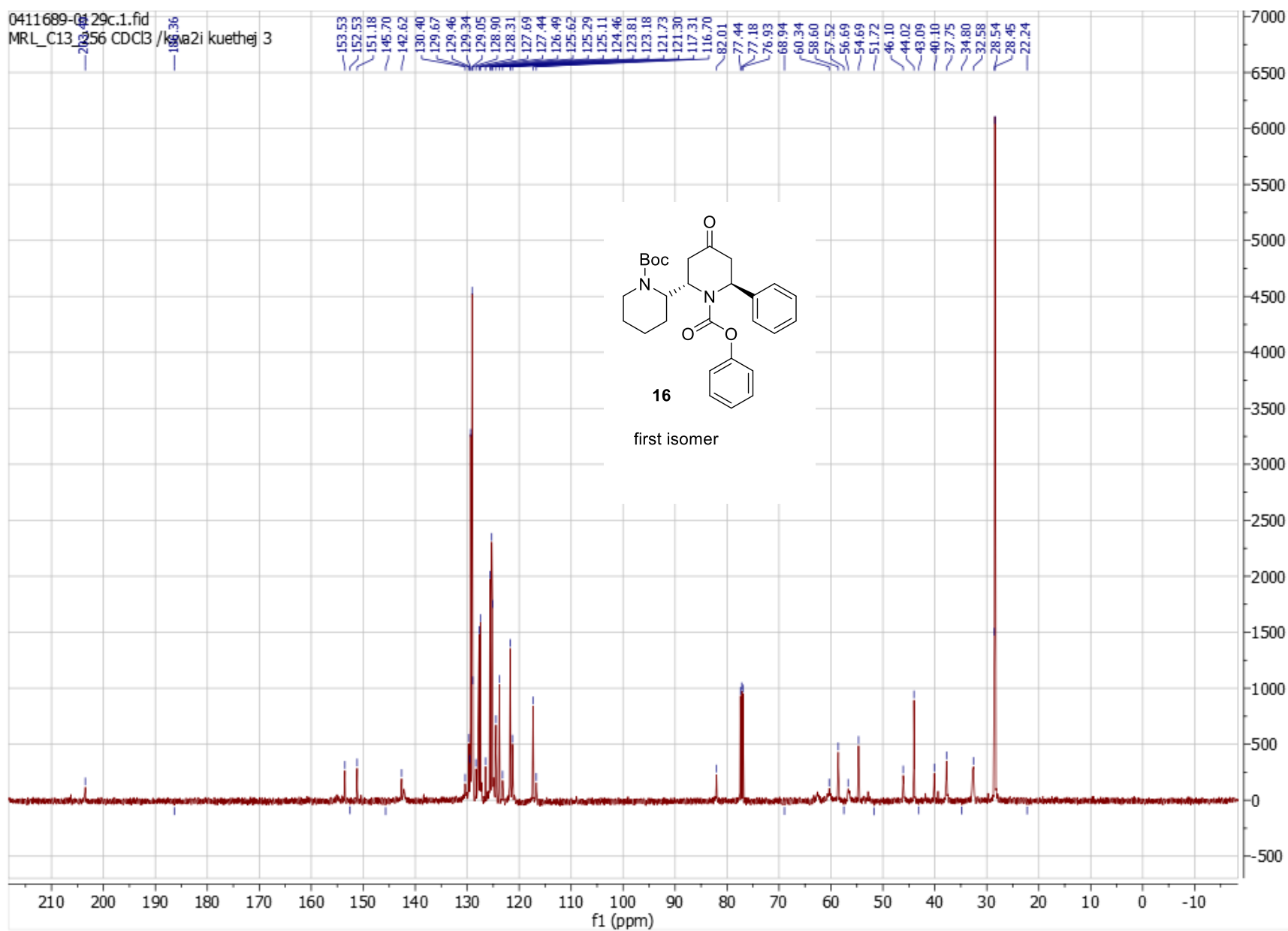




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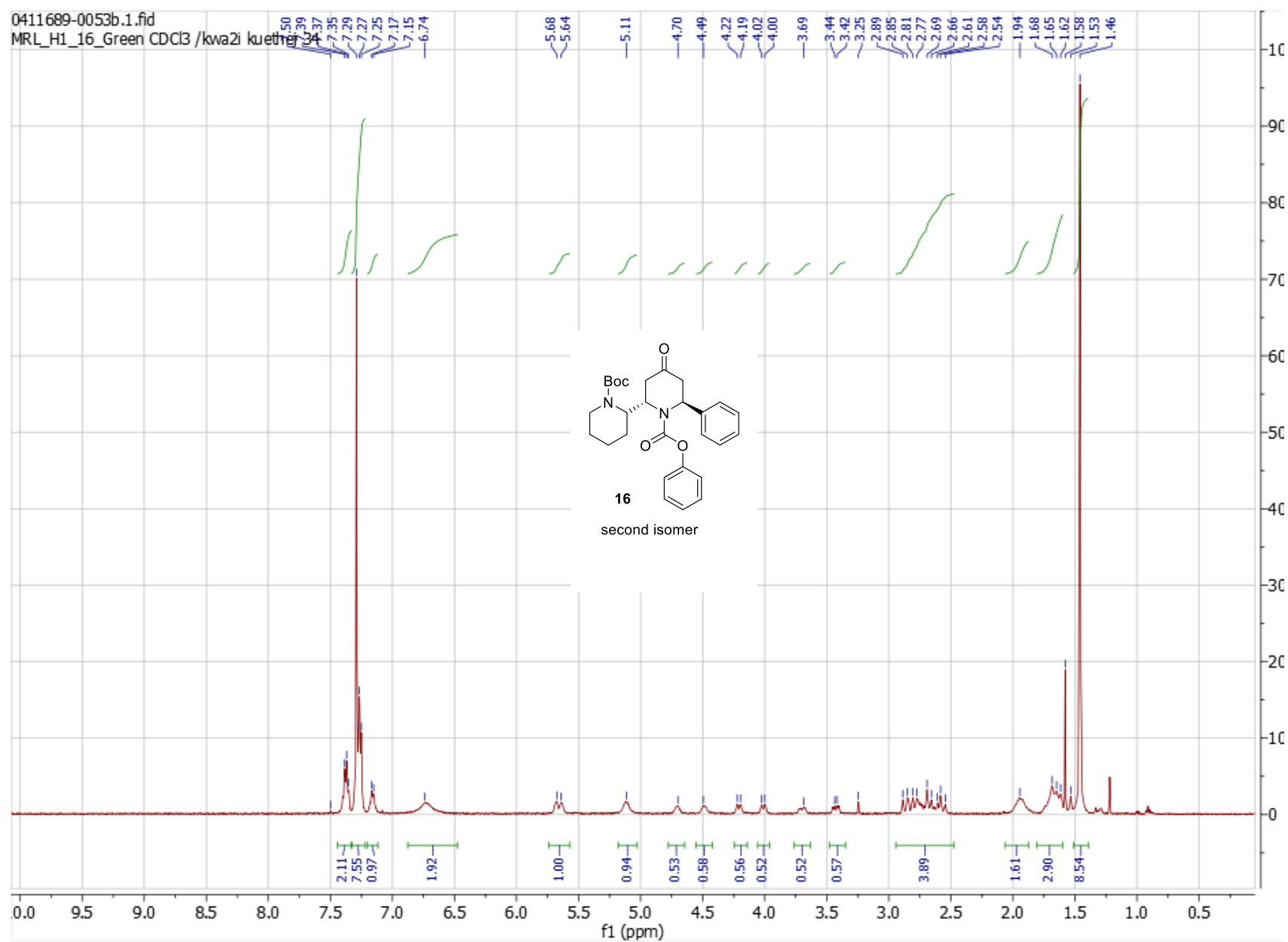


first isomer

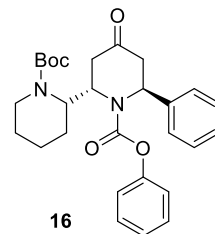


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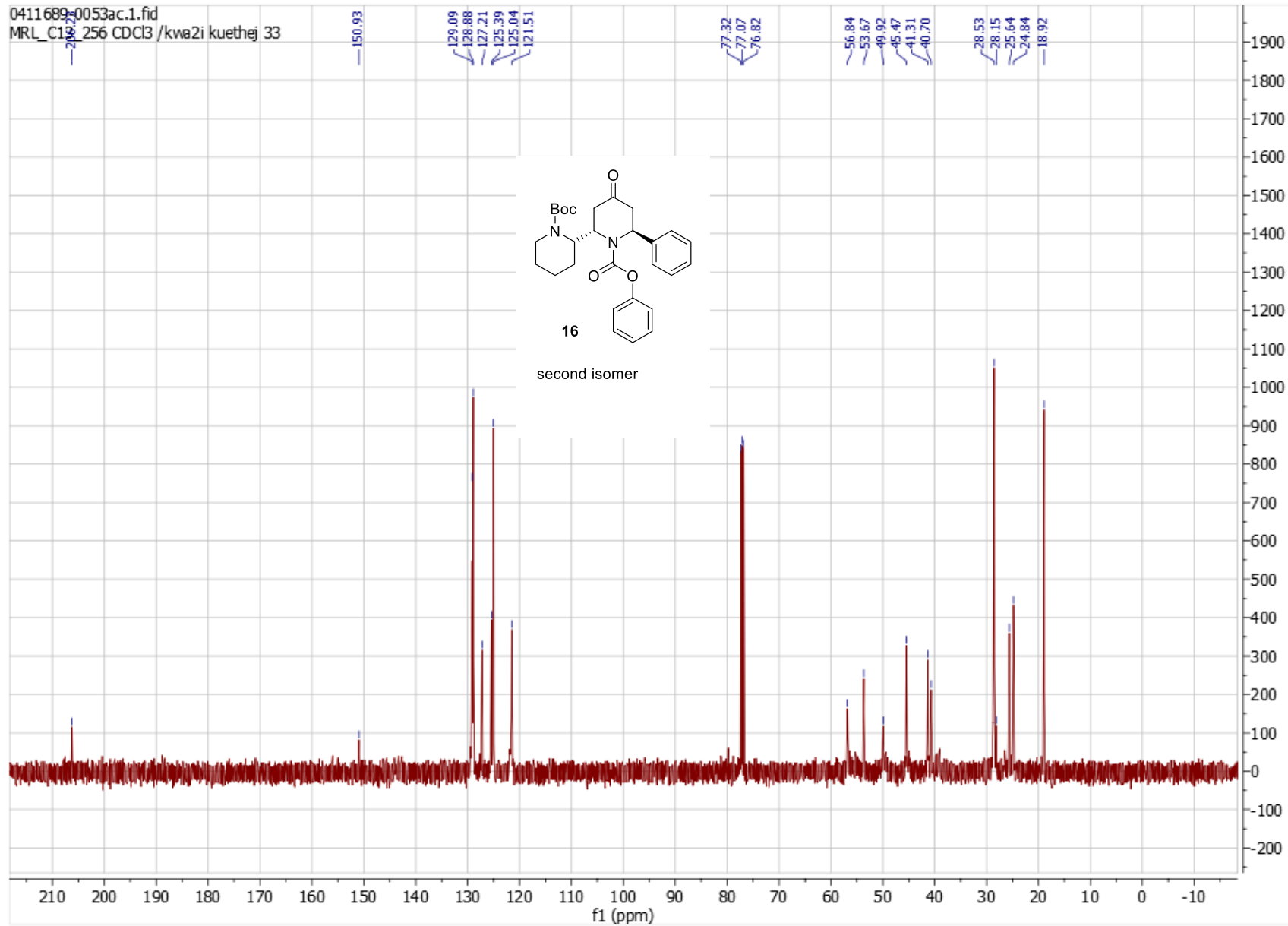
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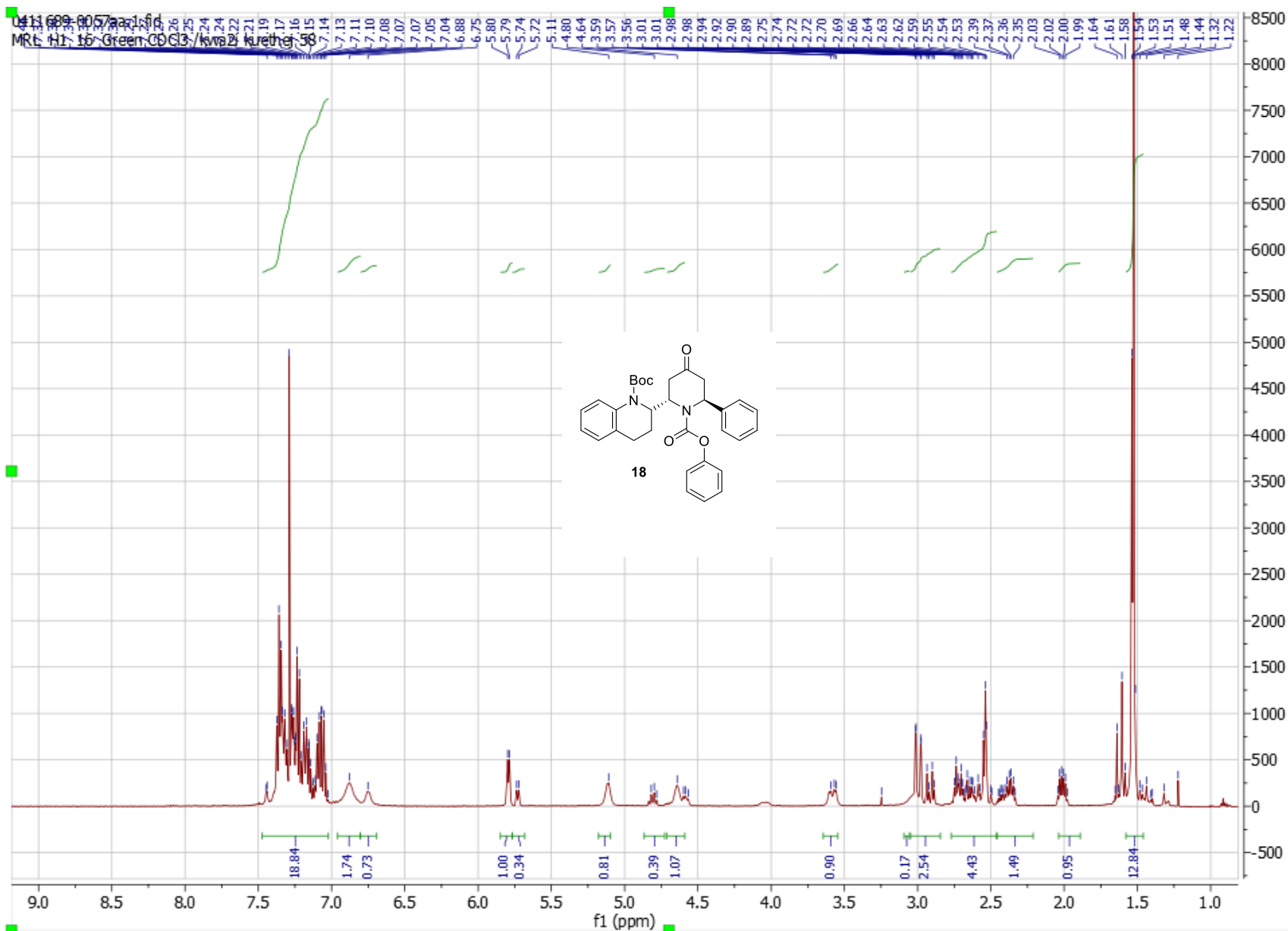


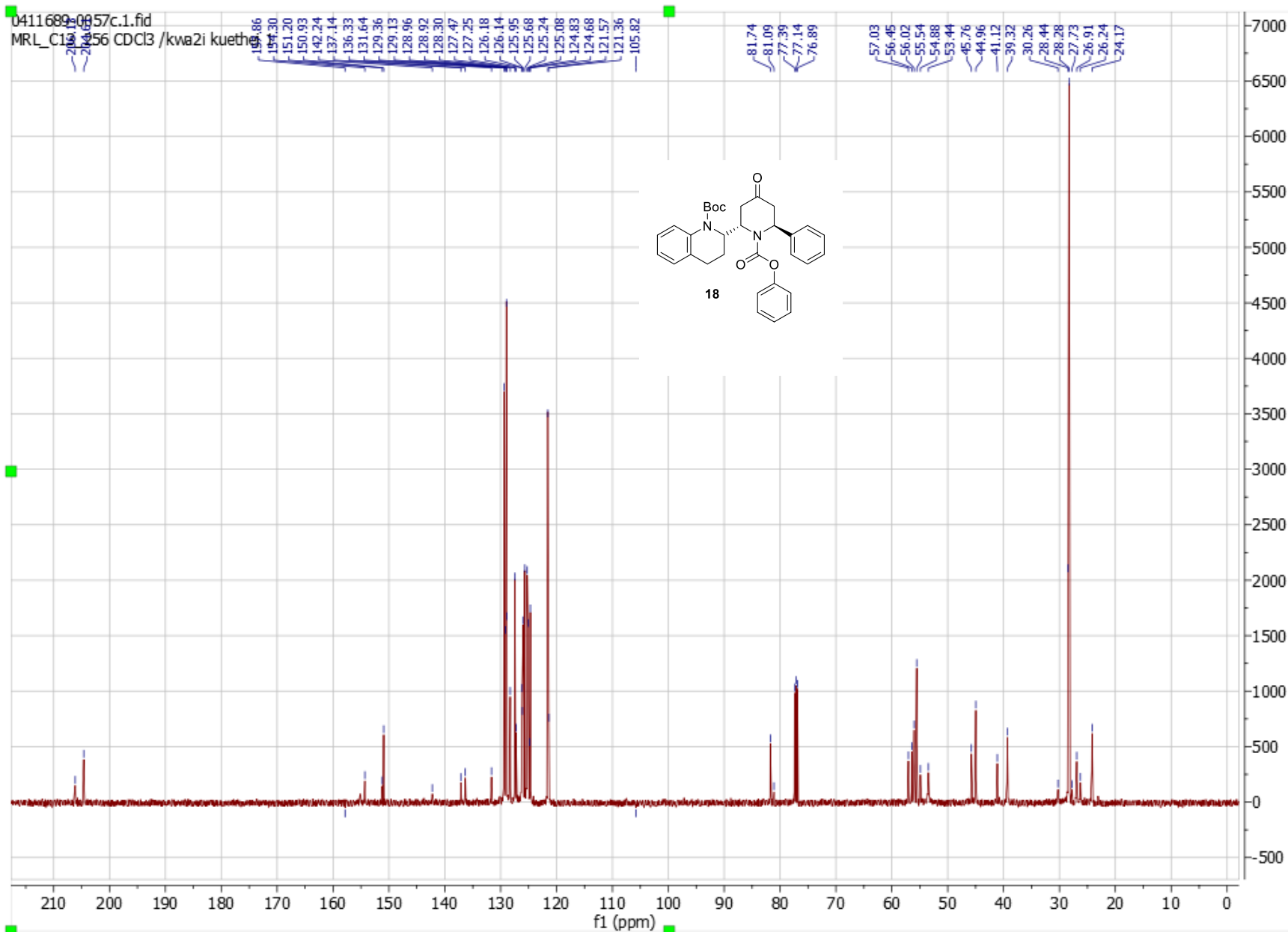
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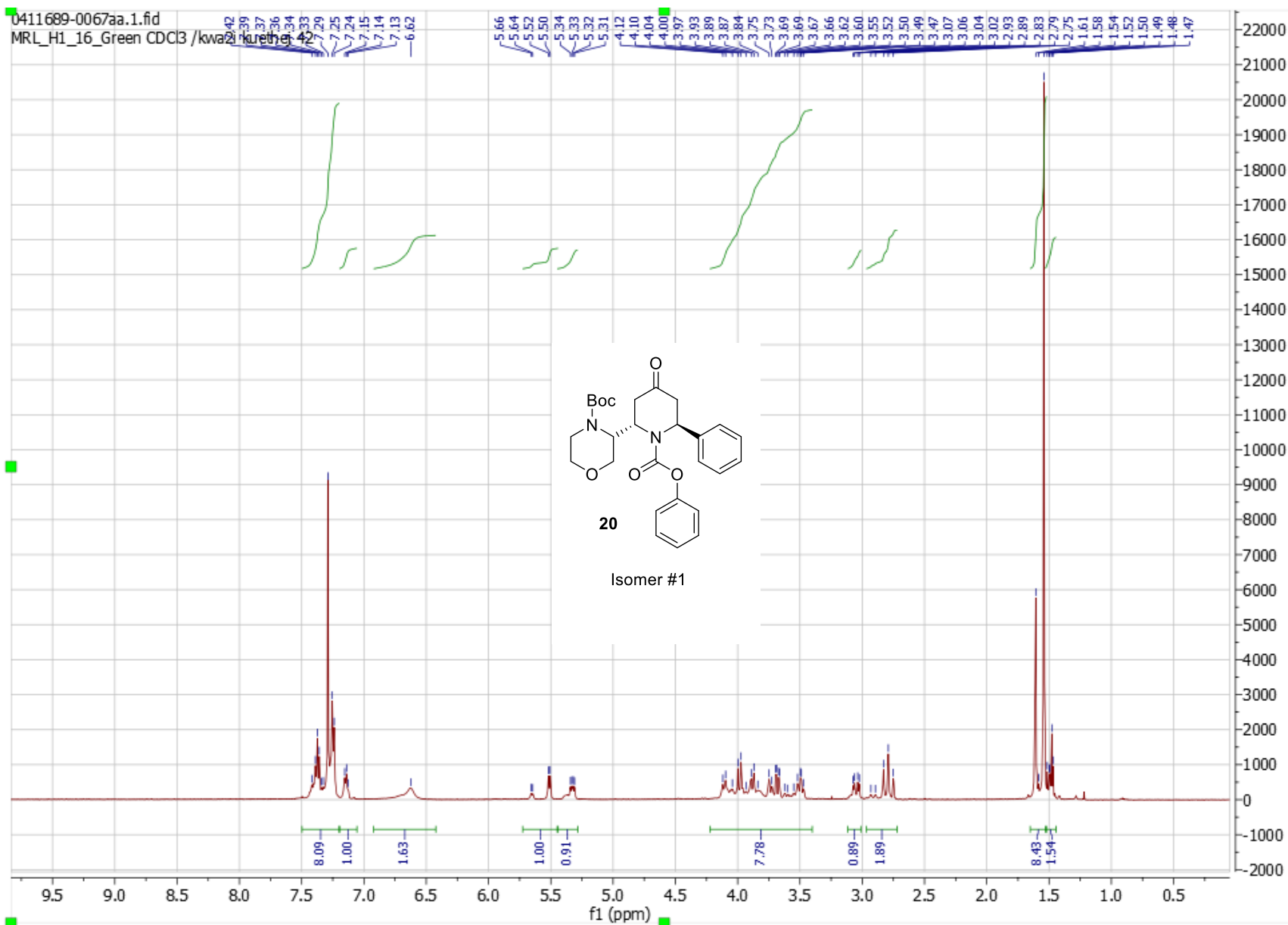


second isomer

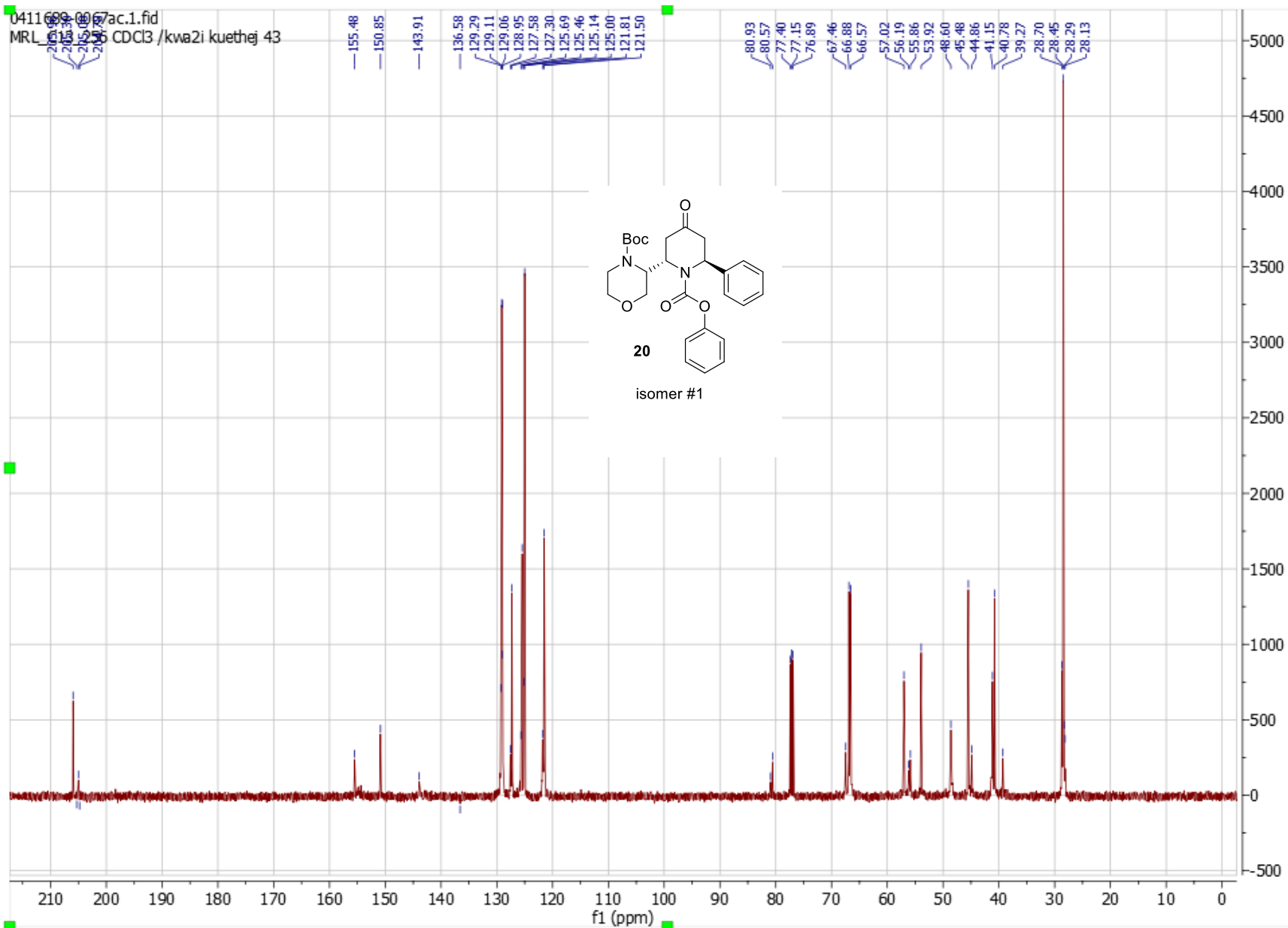
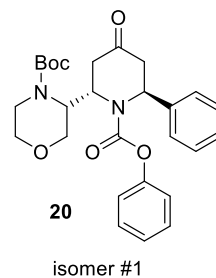


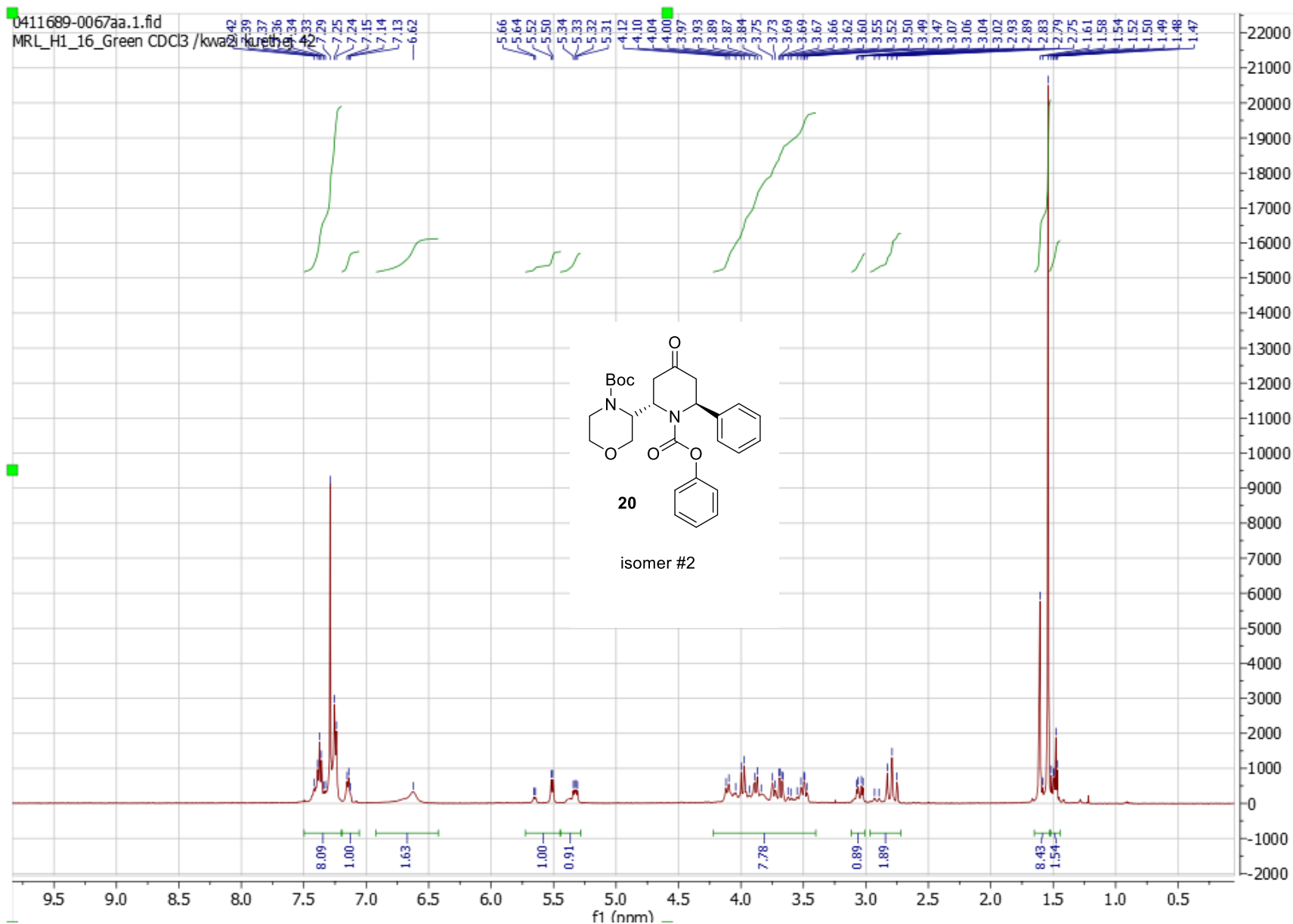


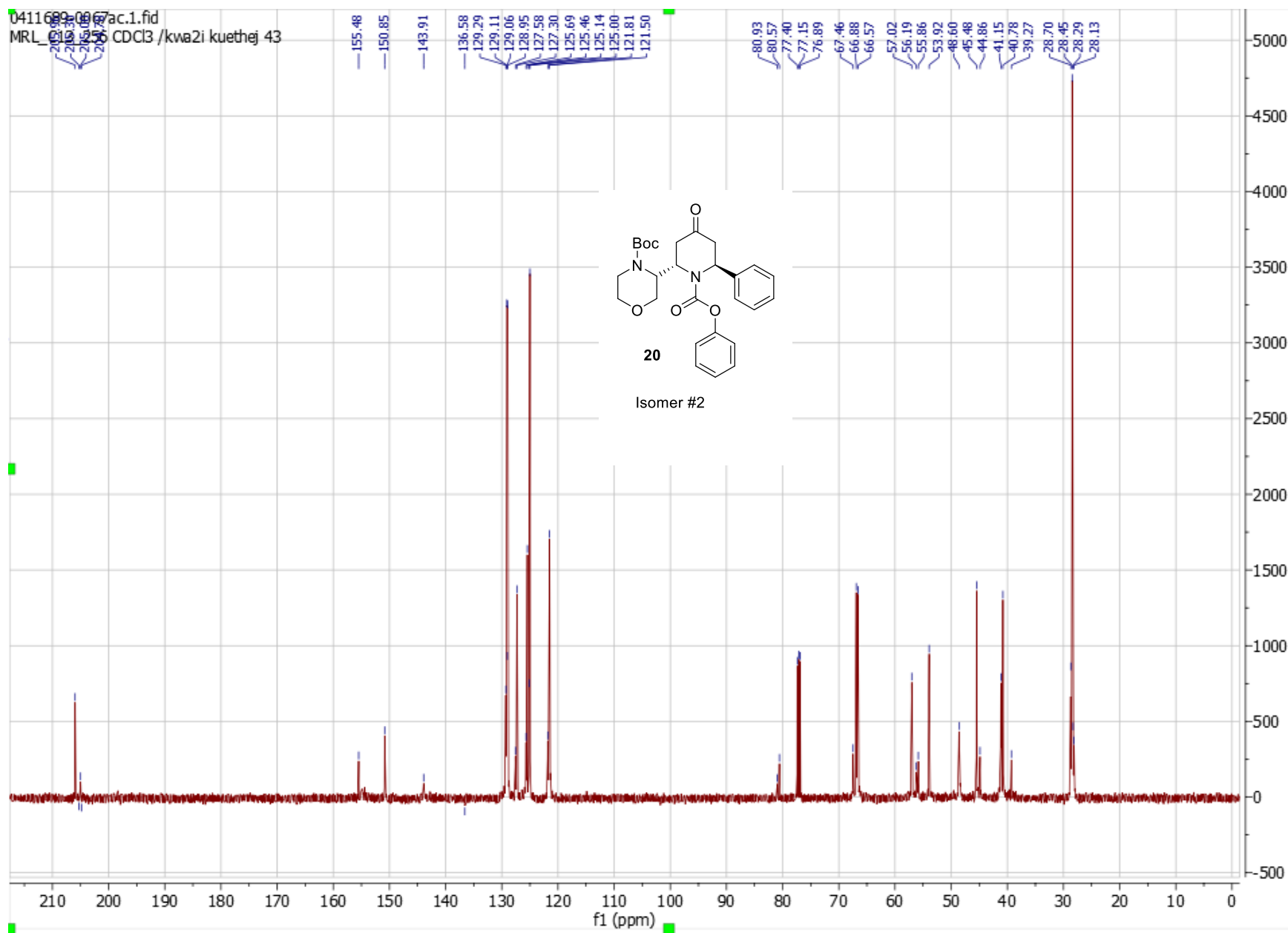


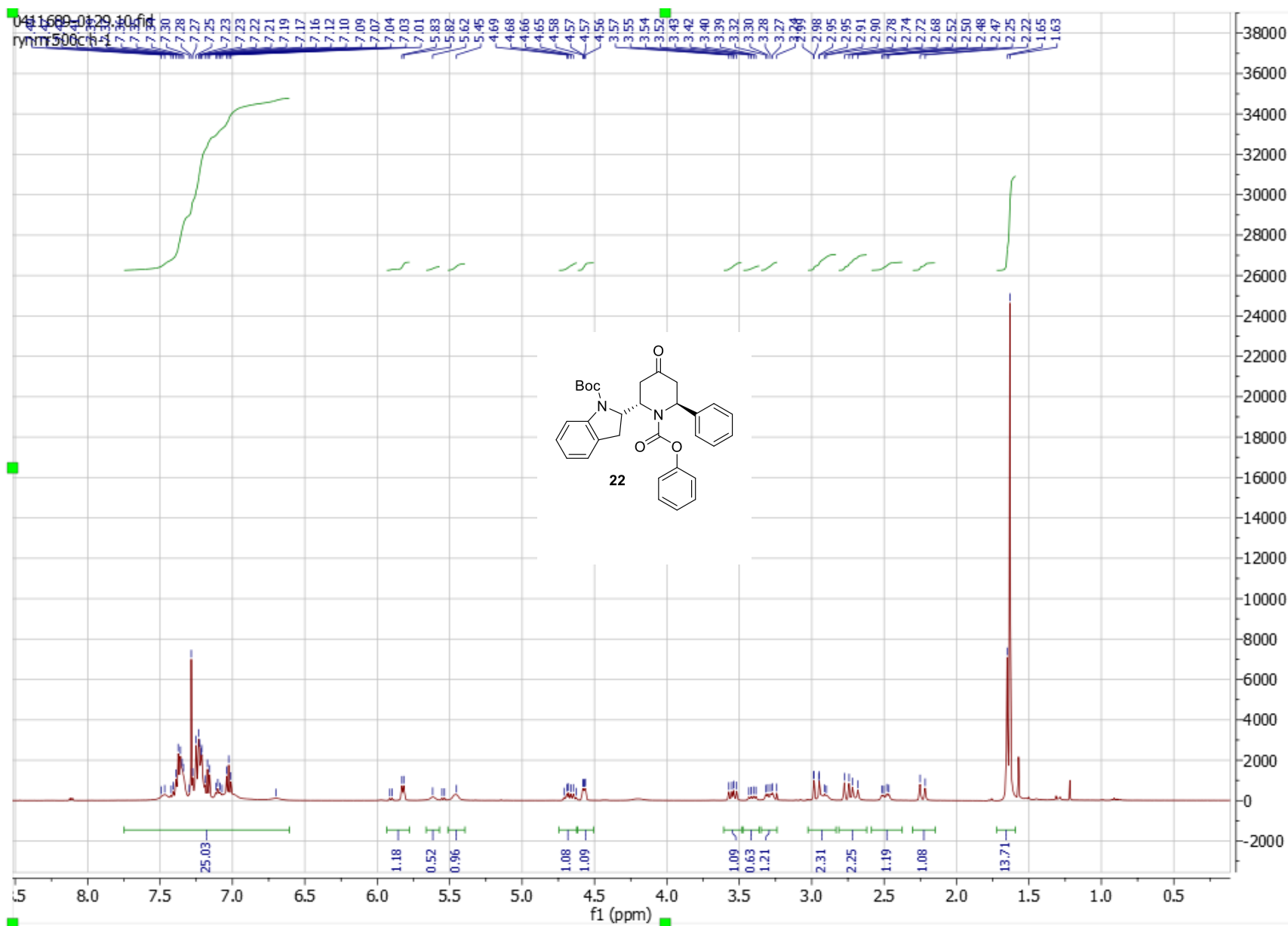


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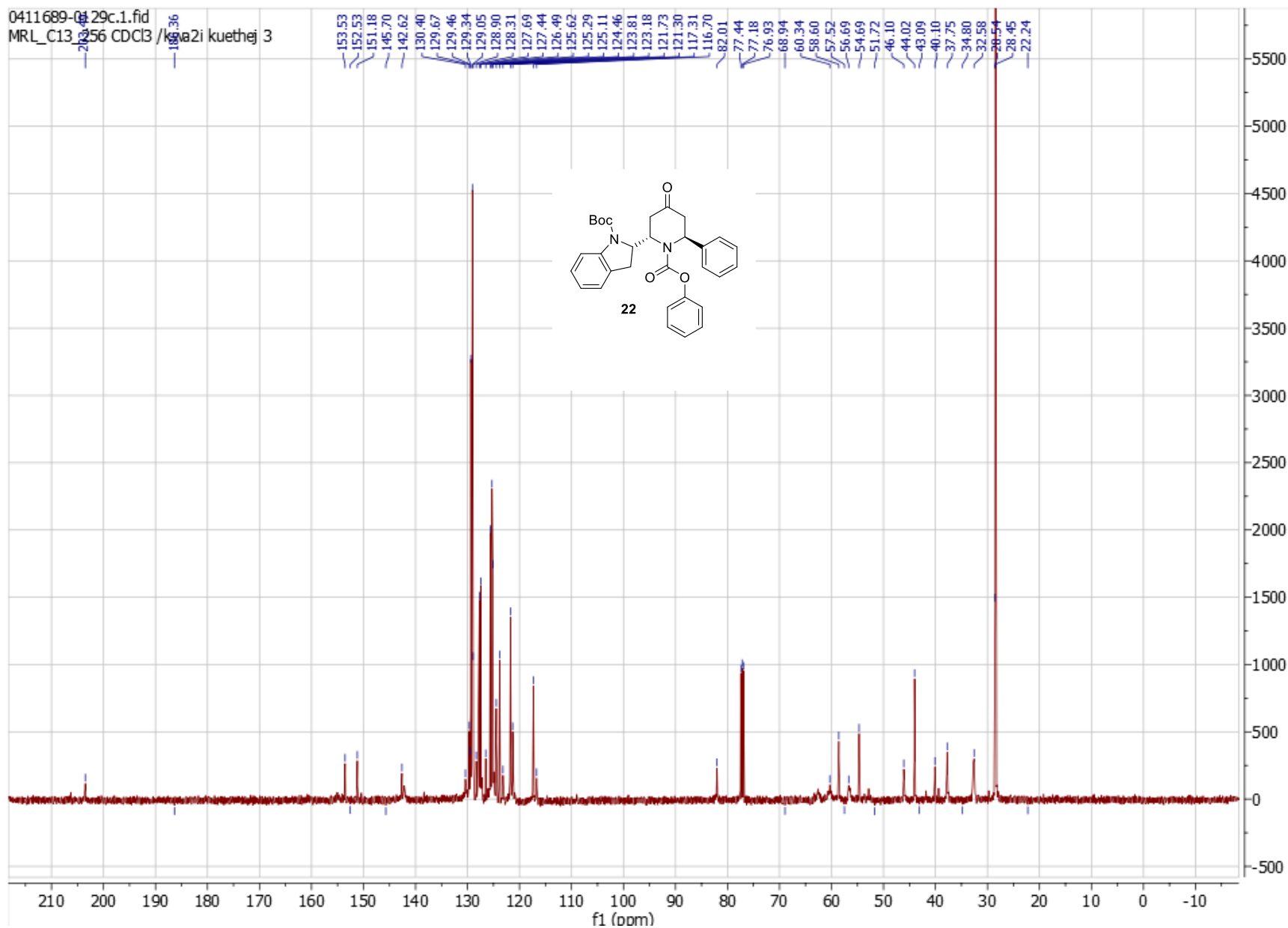


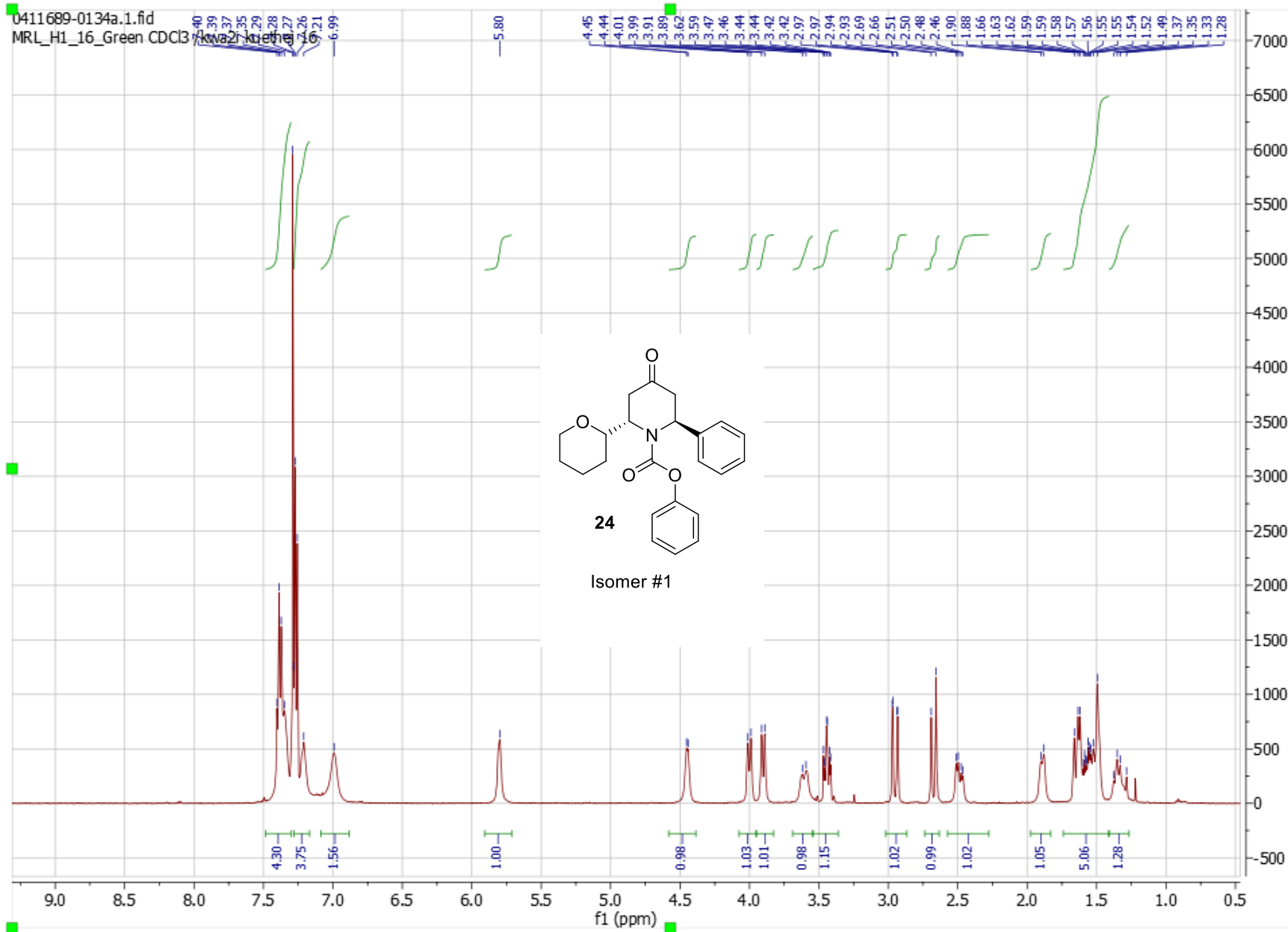




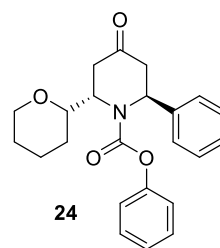


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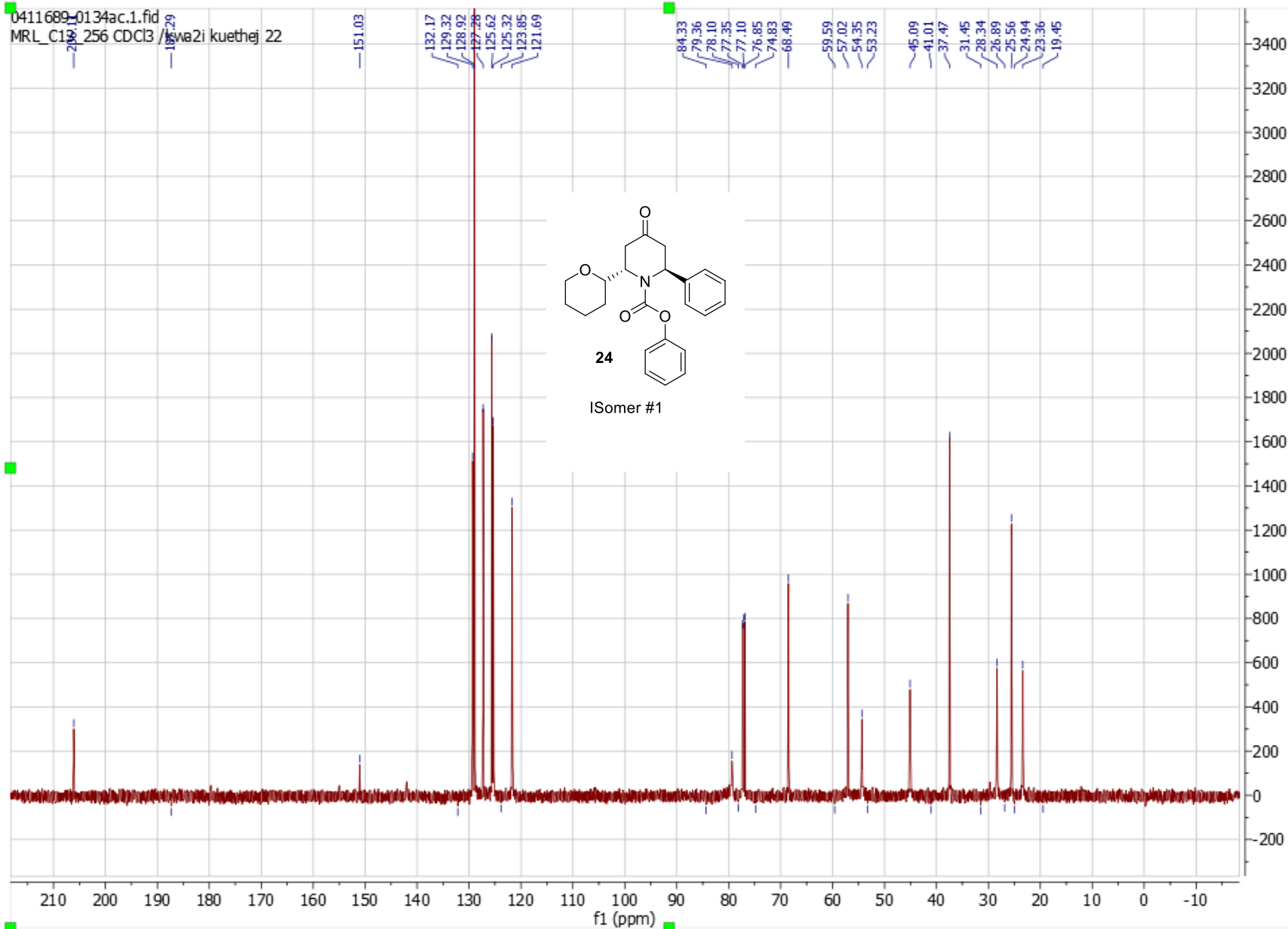




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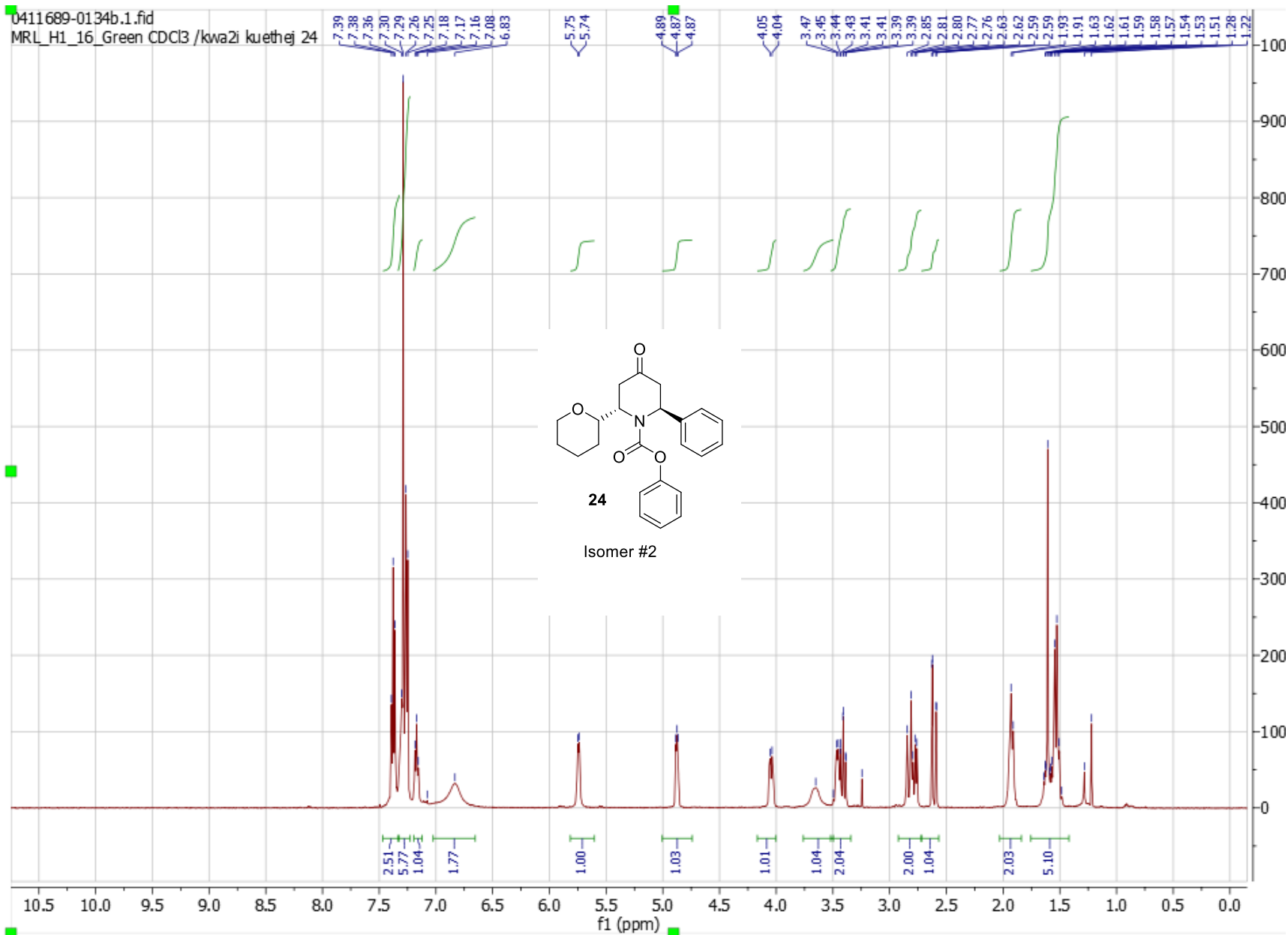
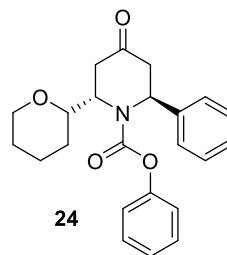


ISomer #1

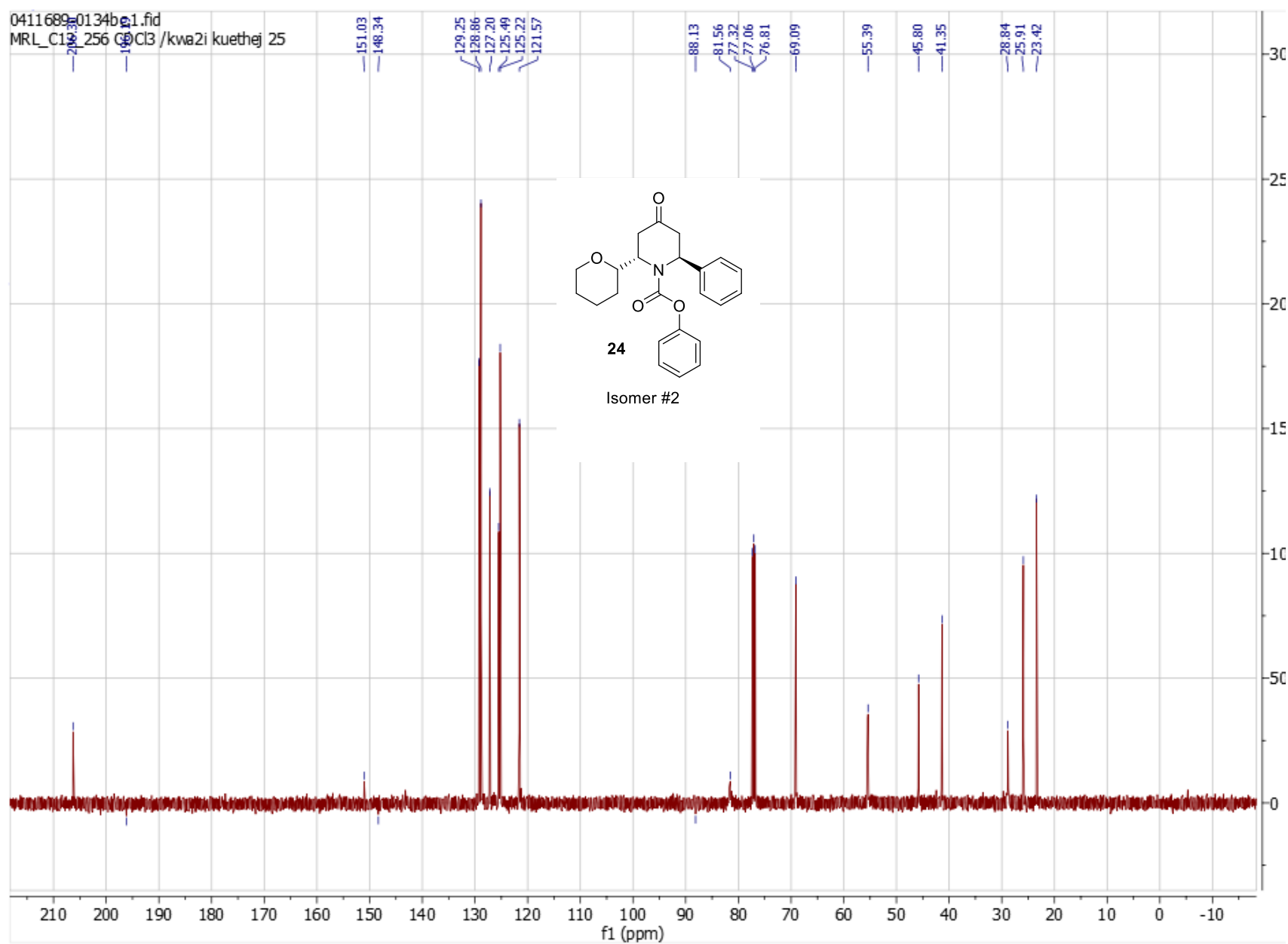


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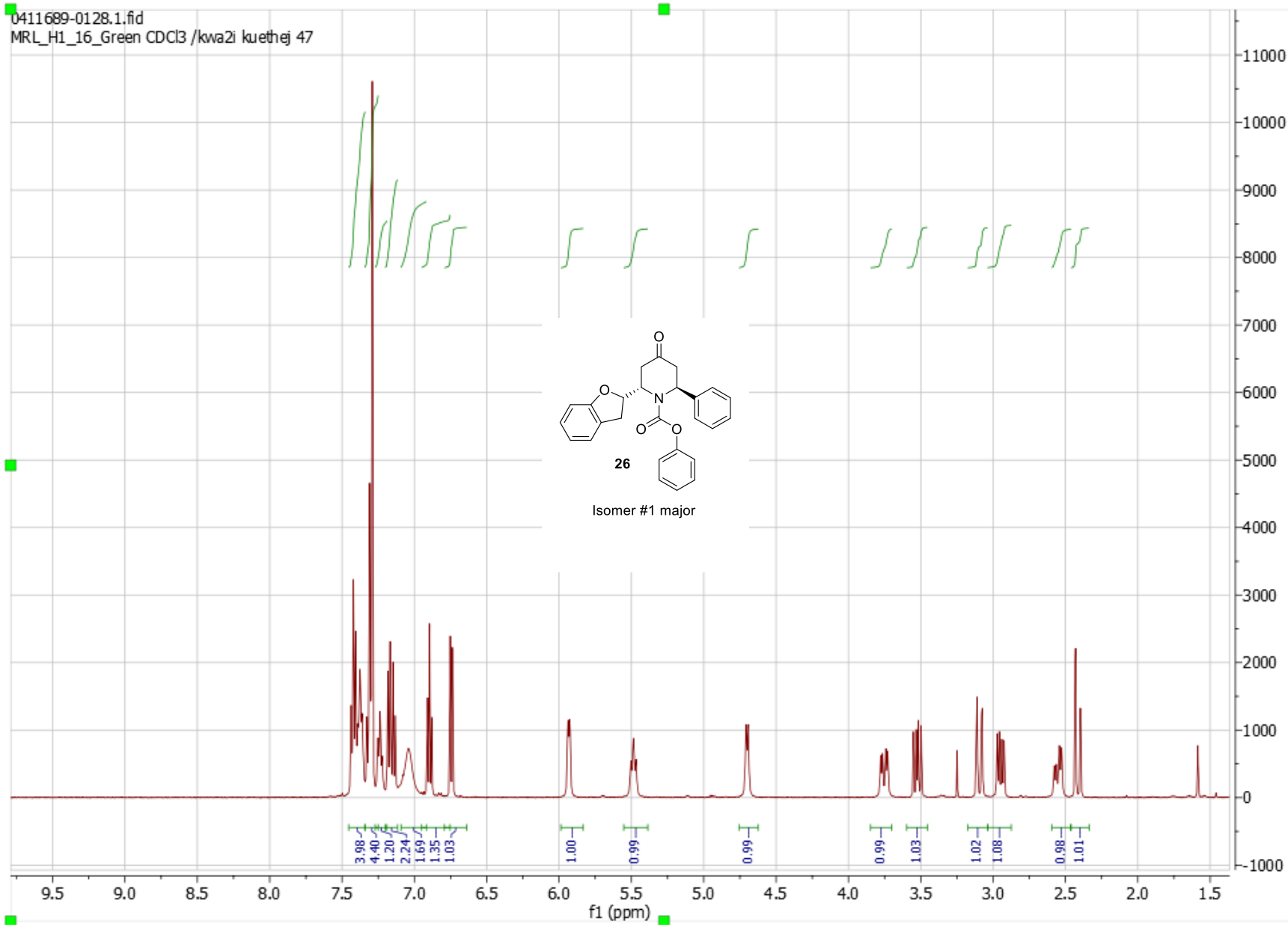
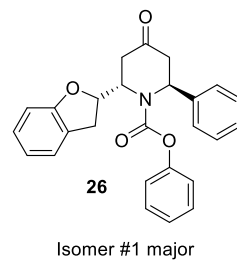
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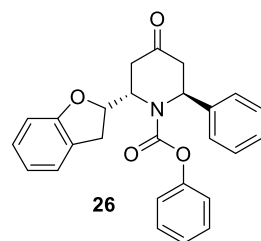
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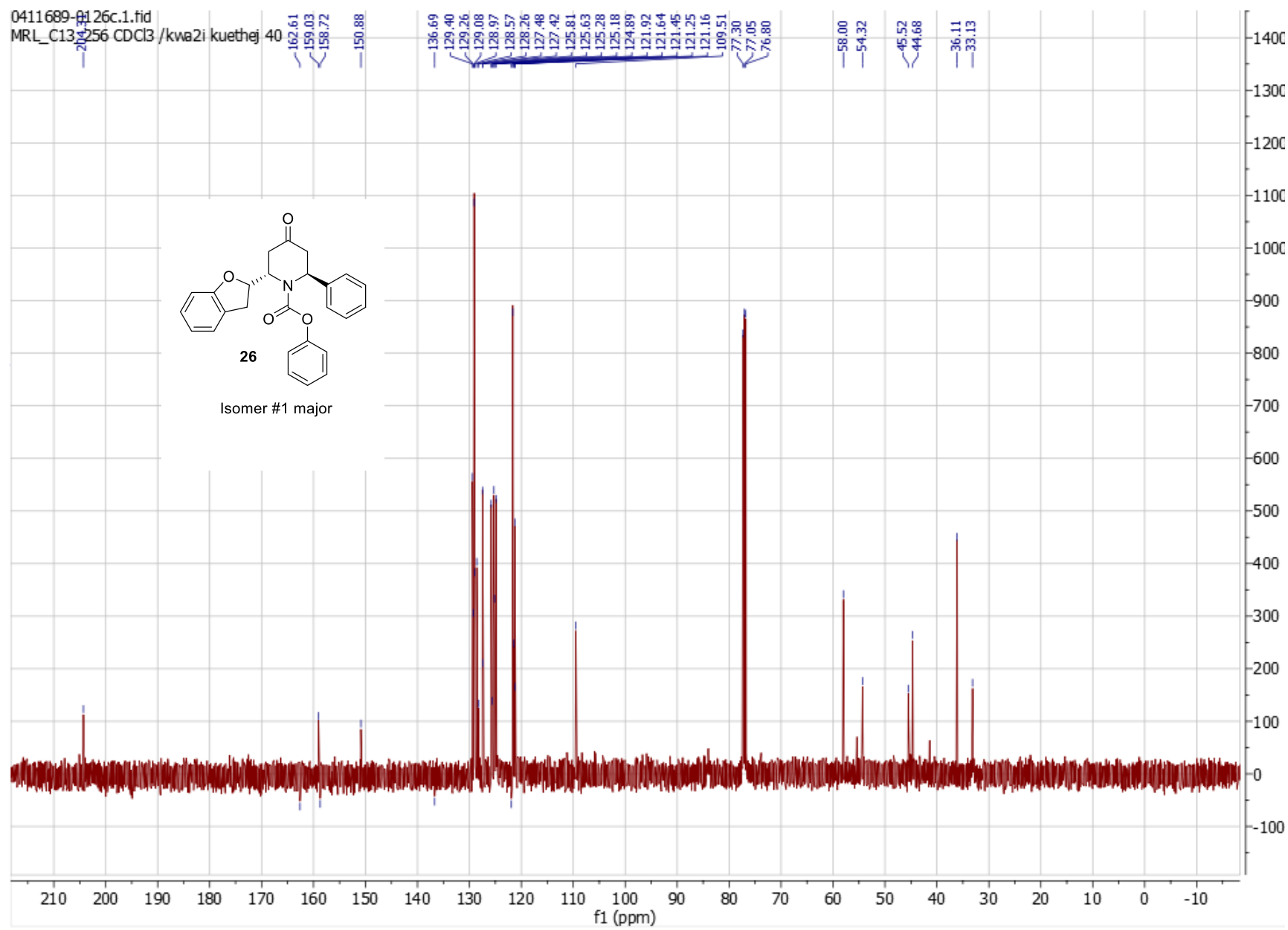


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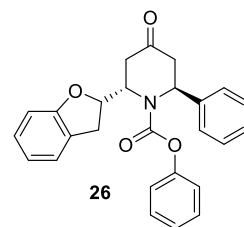


26

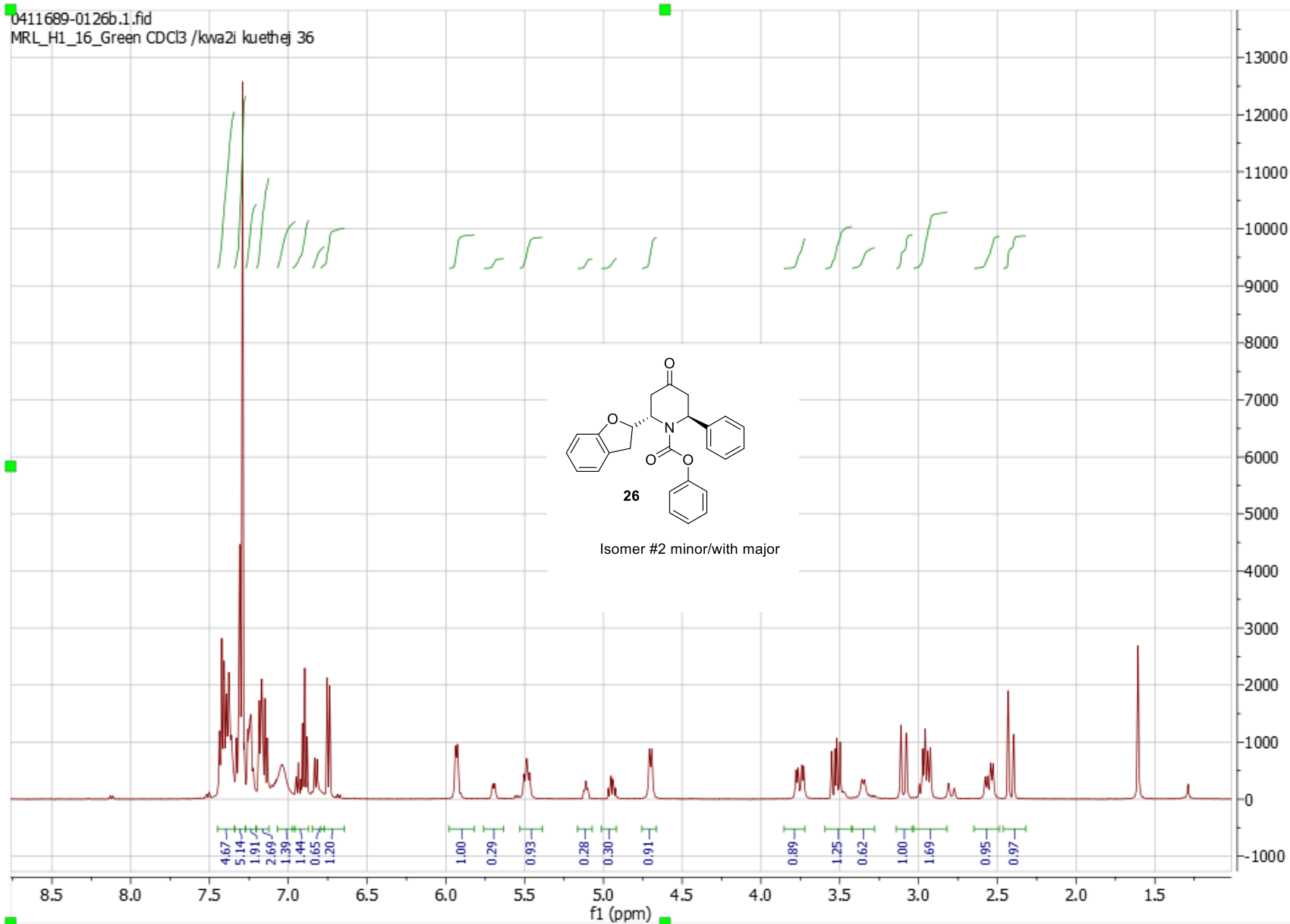
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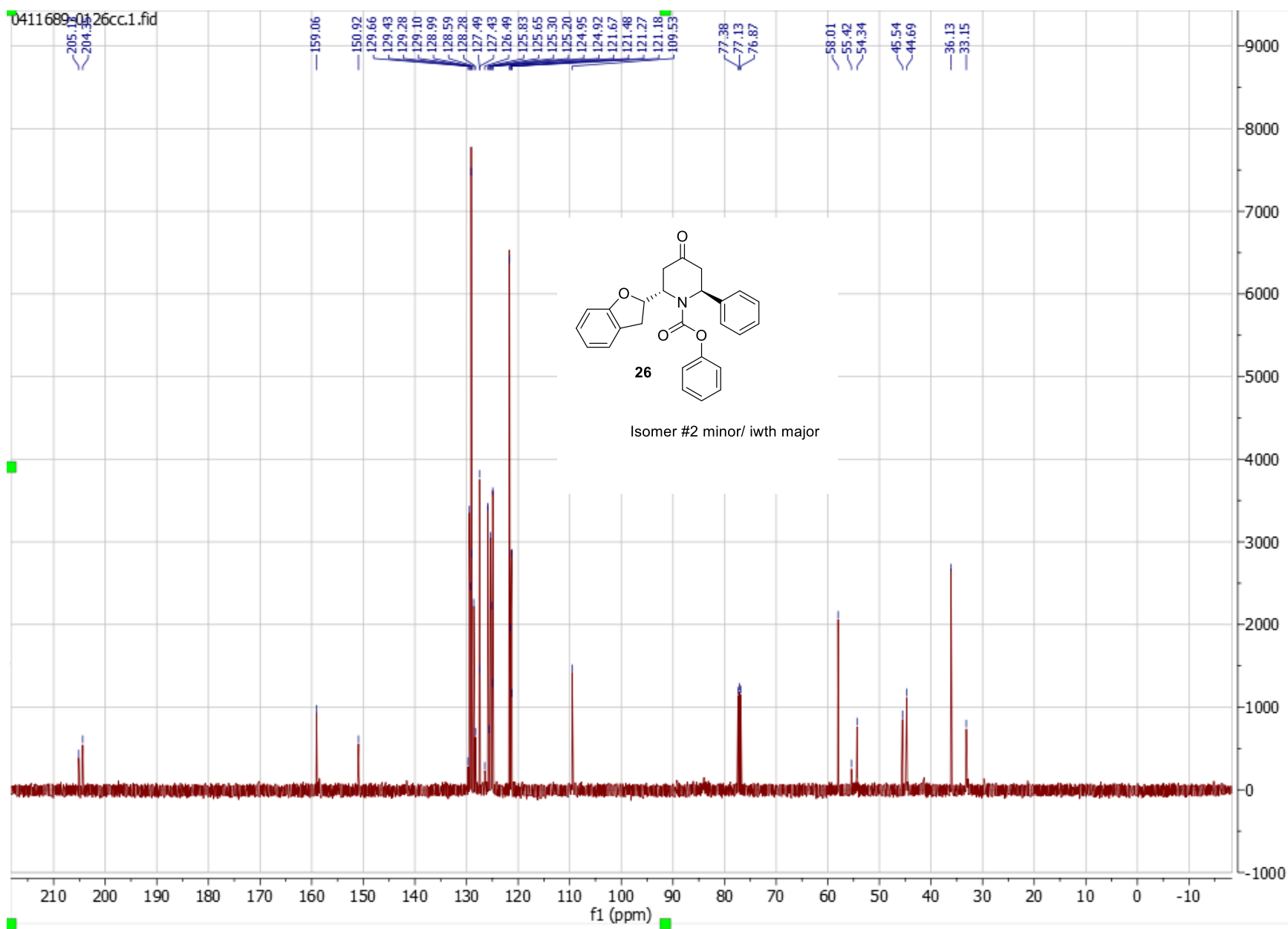
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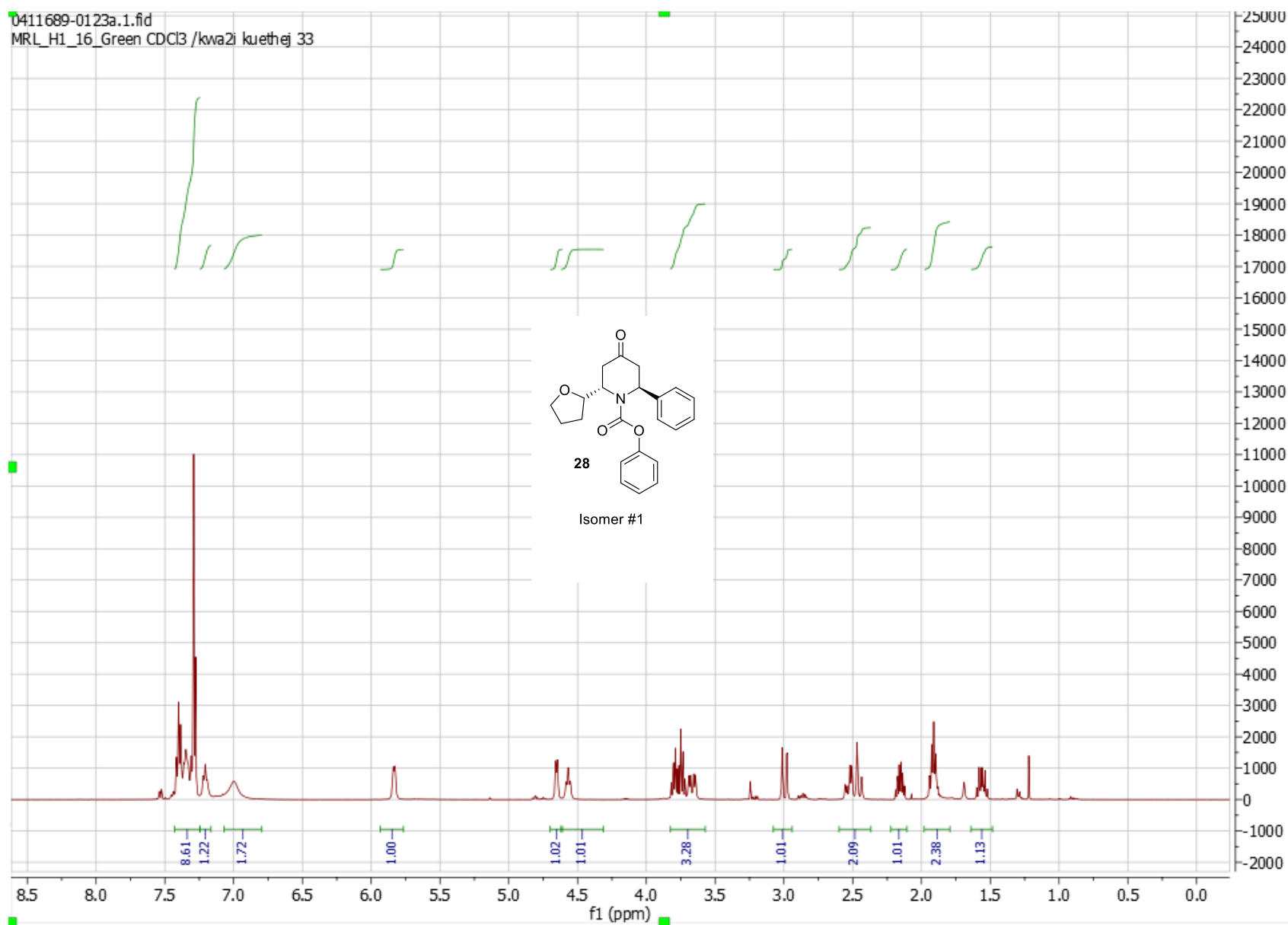
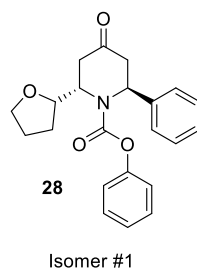
Isomer #2 minor/with major



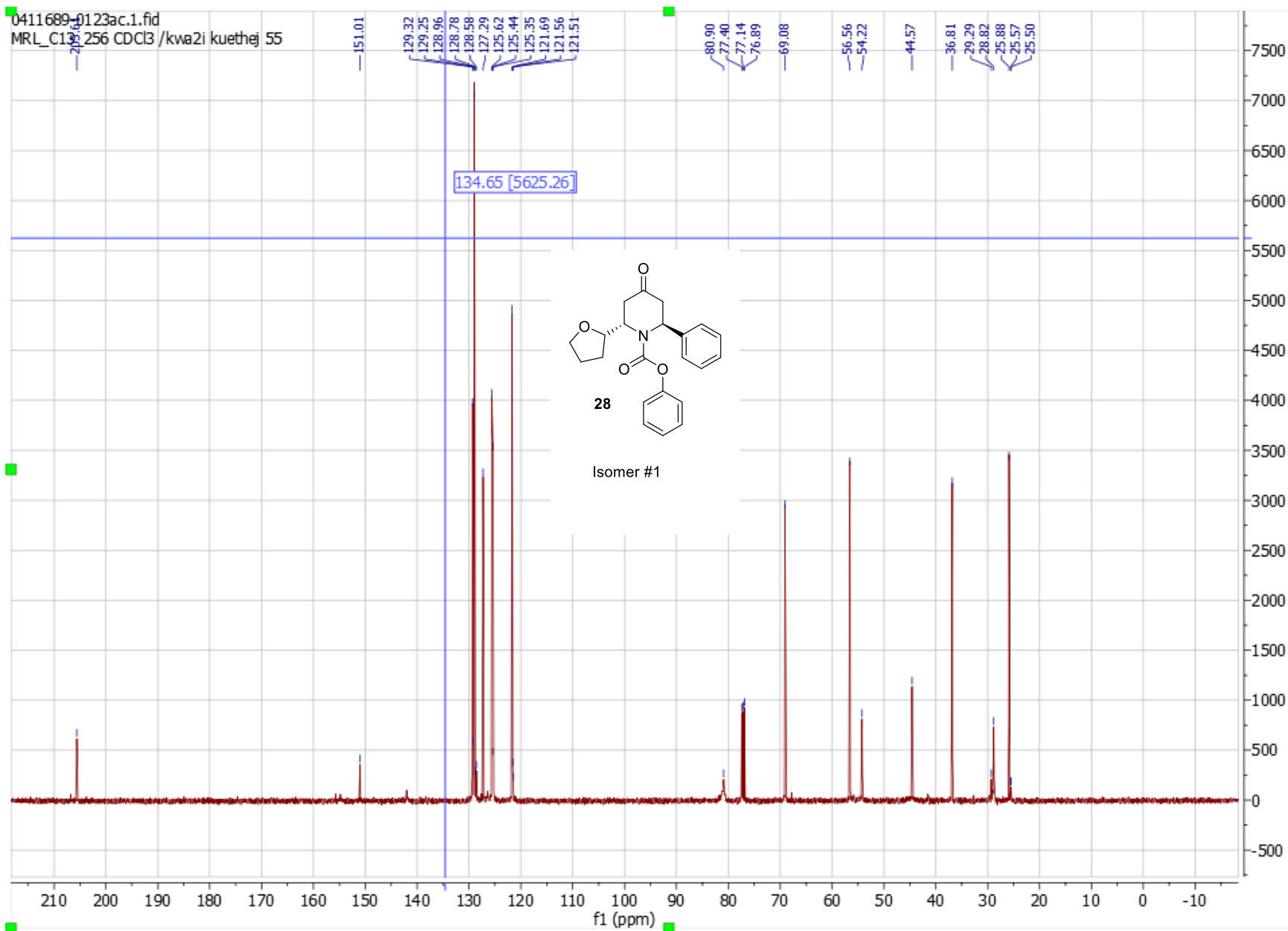
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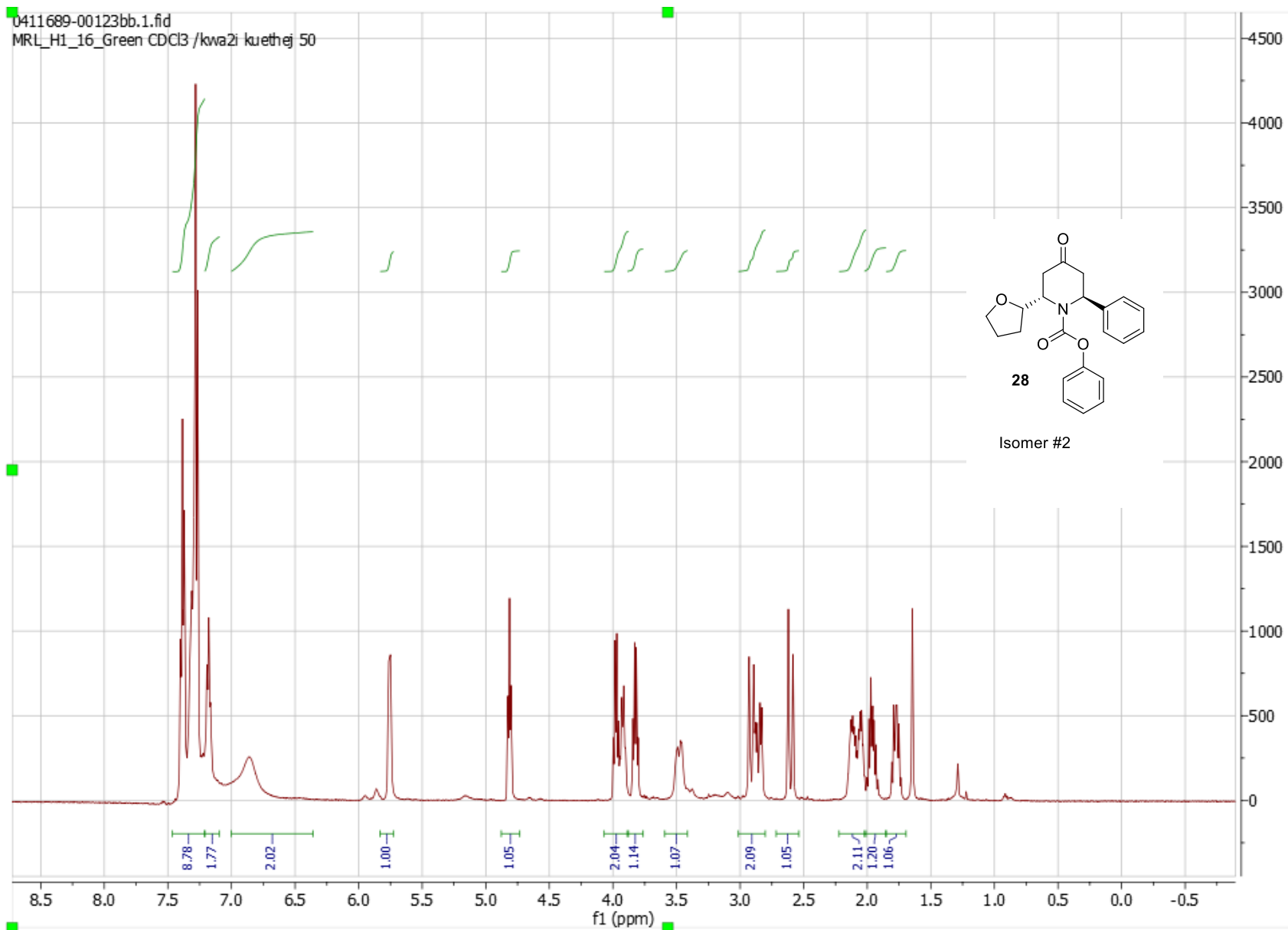
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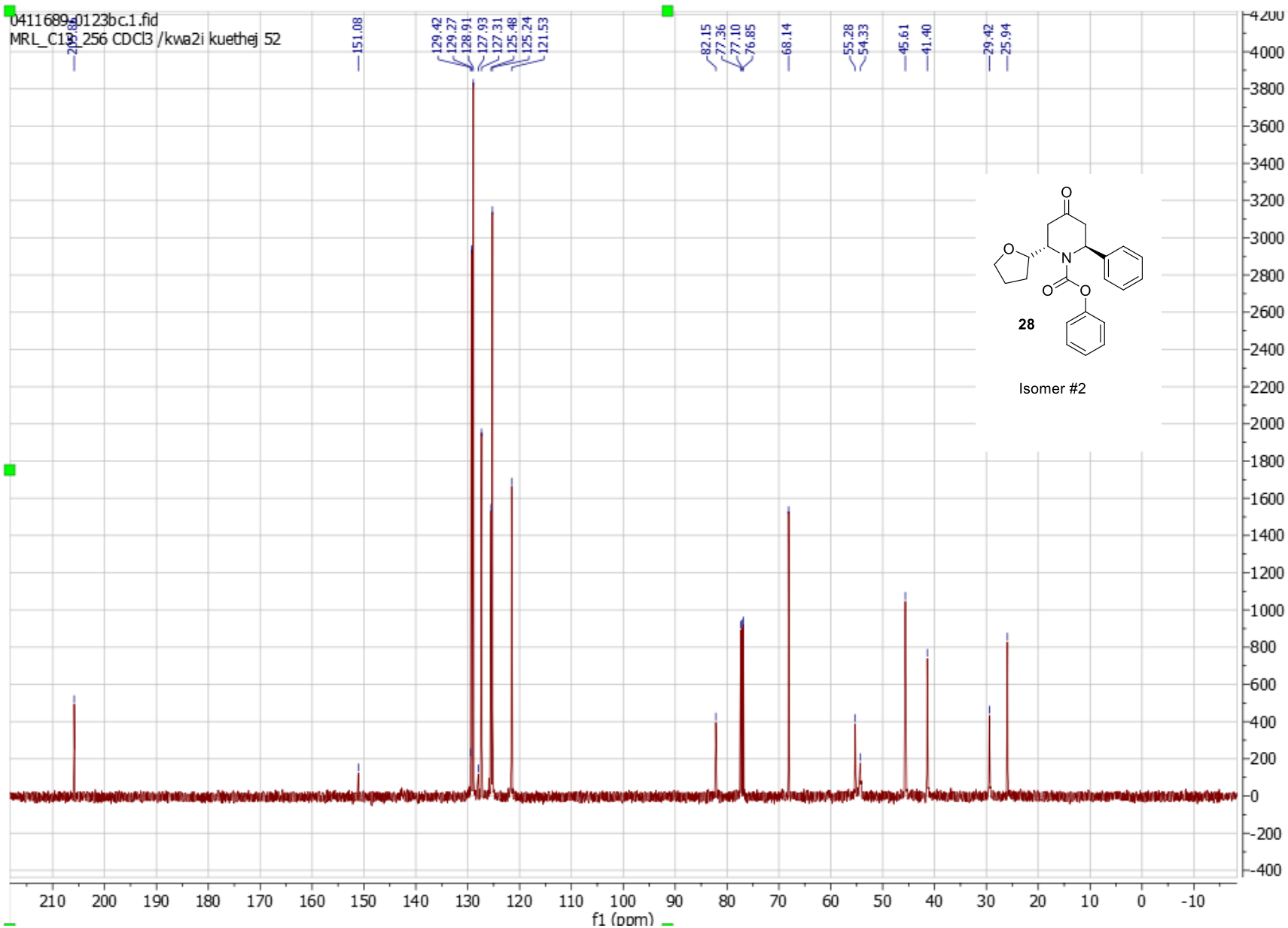
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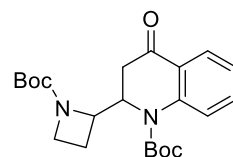
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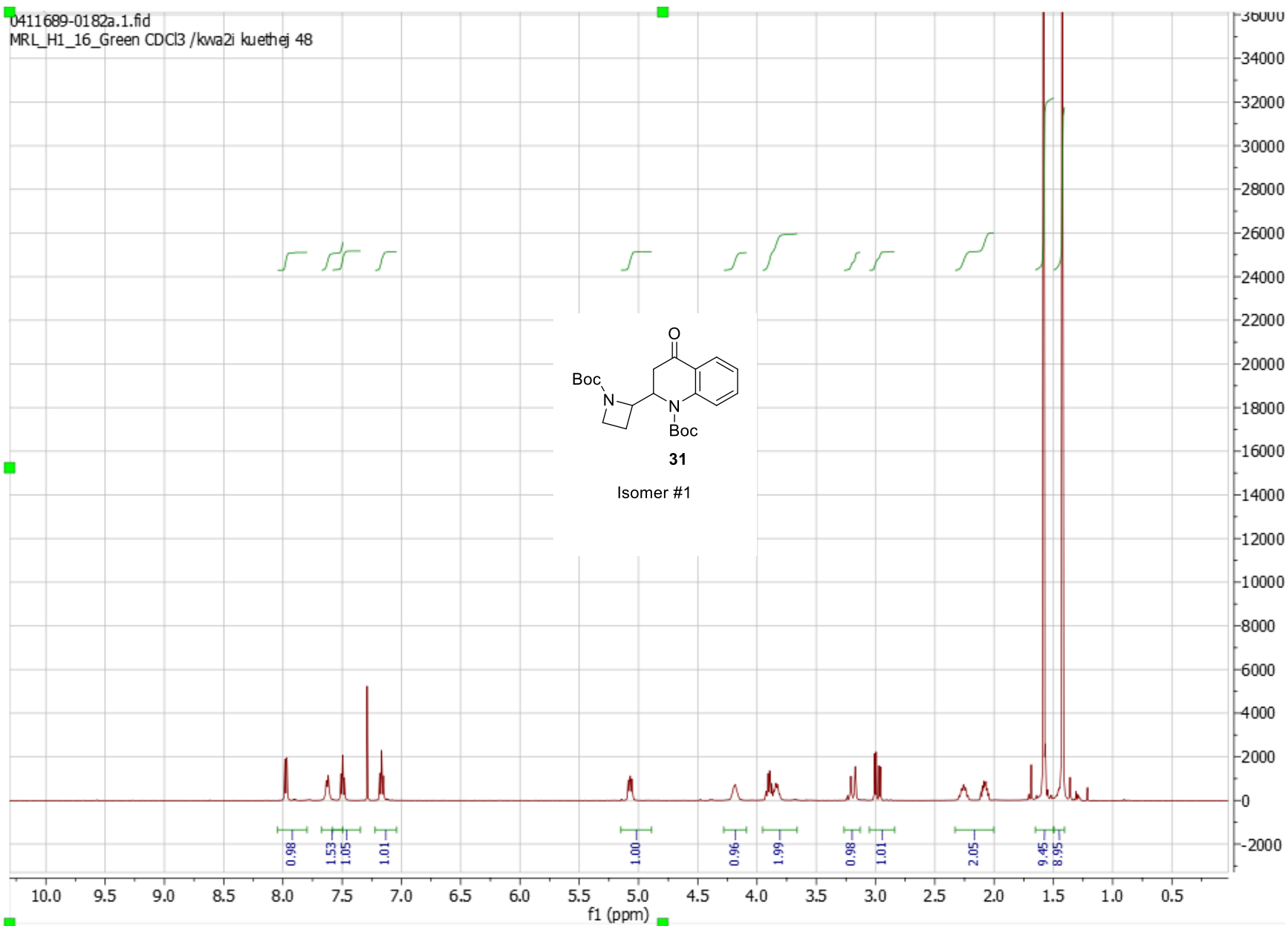


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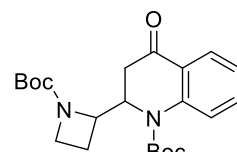


31

Isomer #1

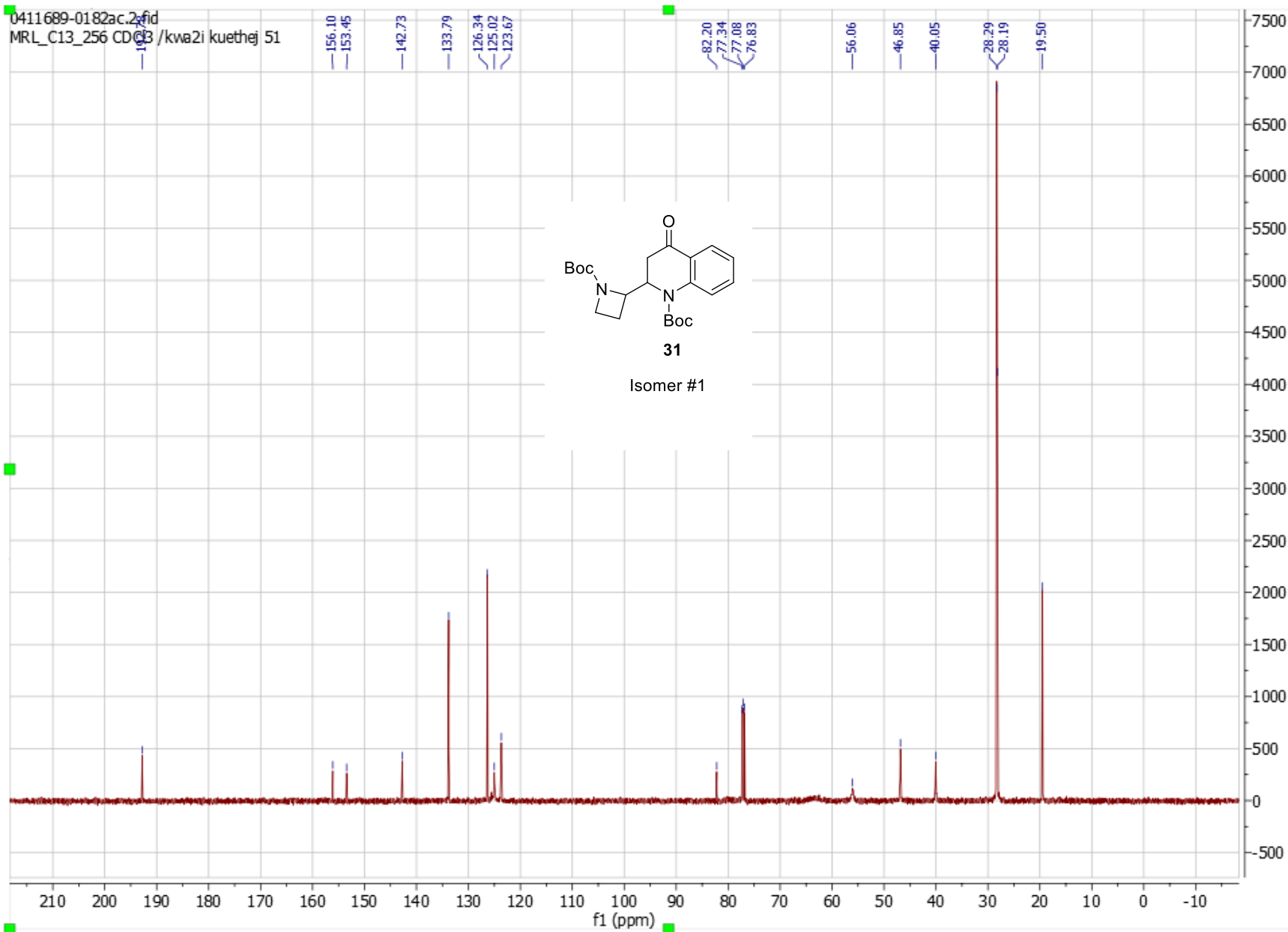


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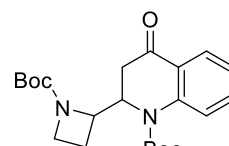


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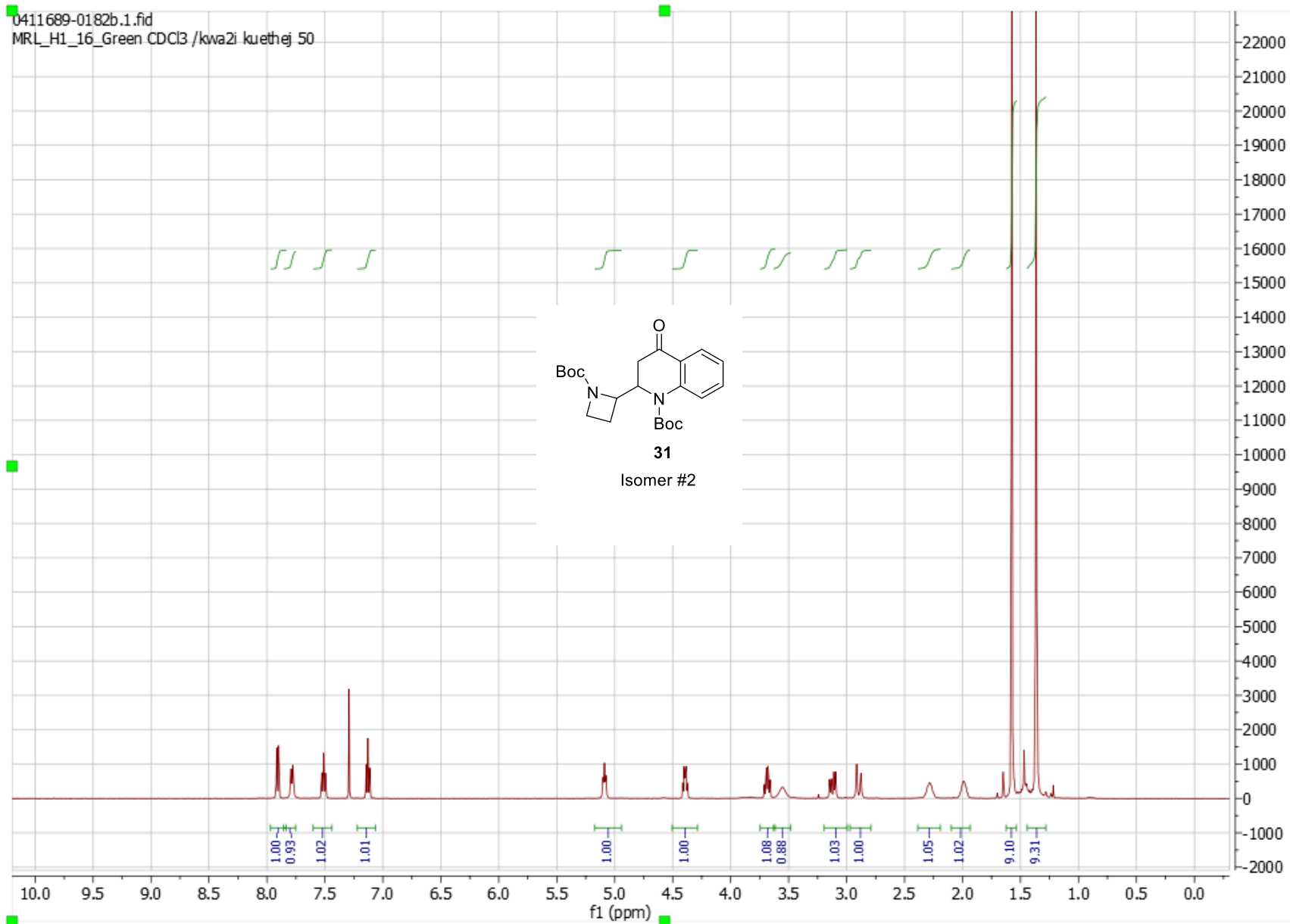


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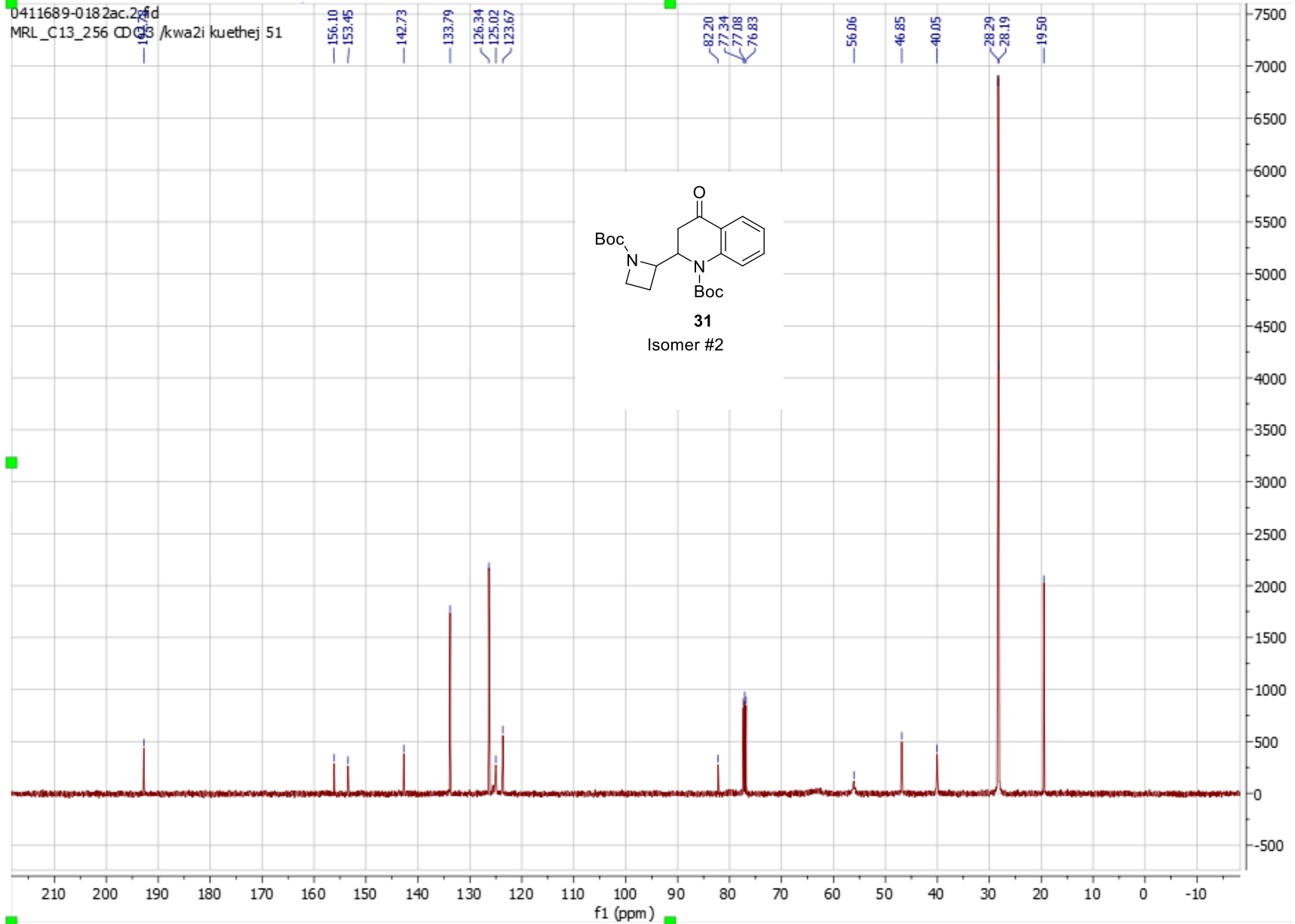
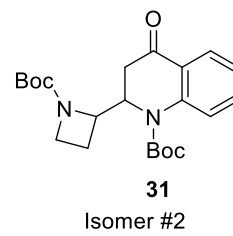


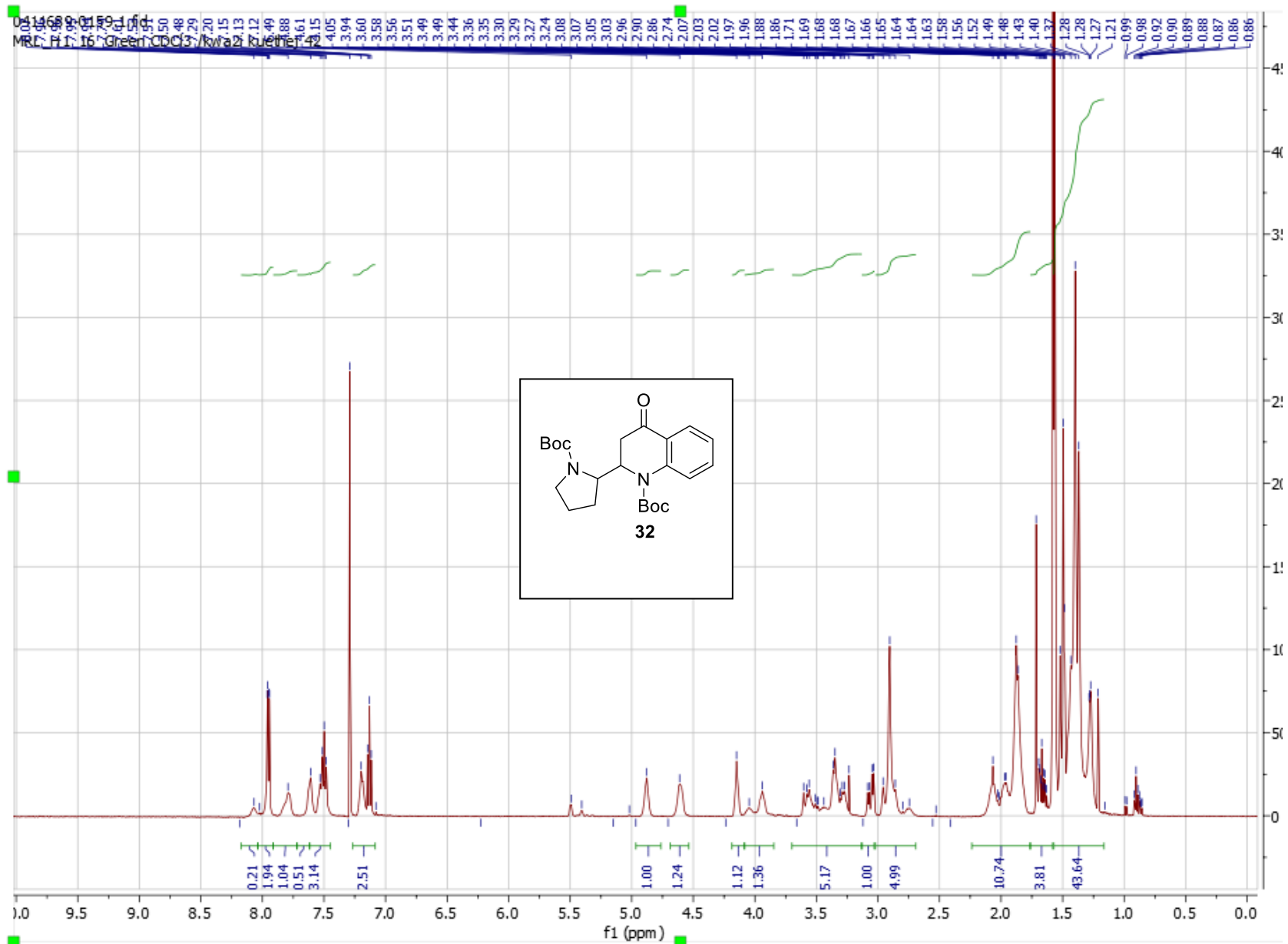
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Isomer #2



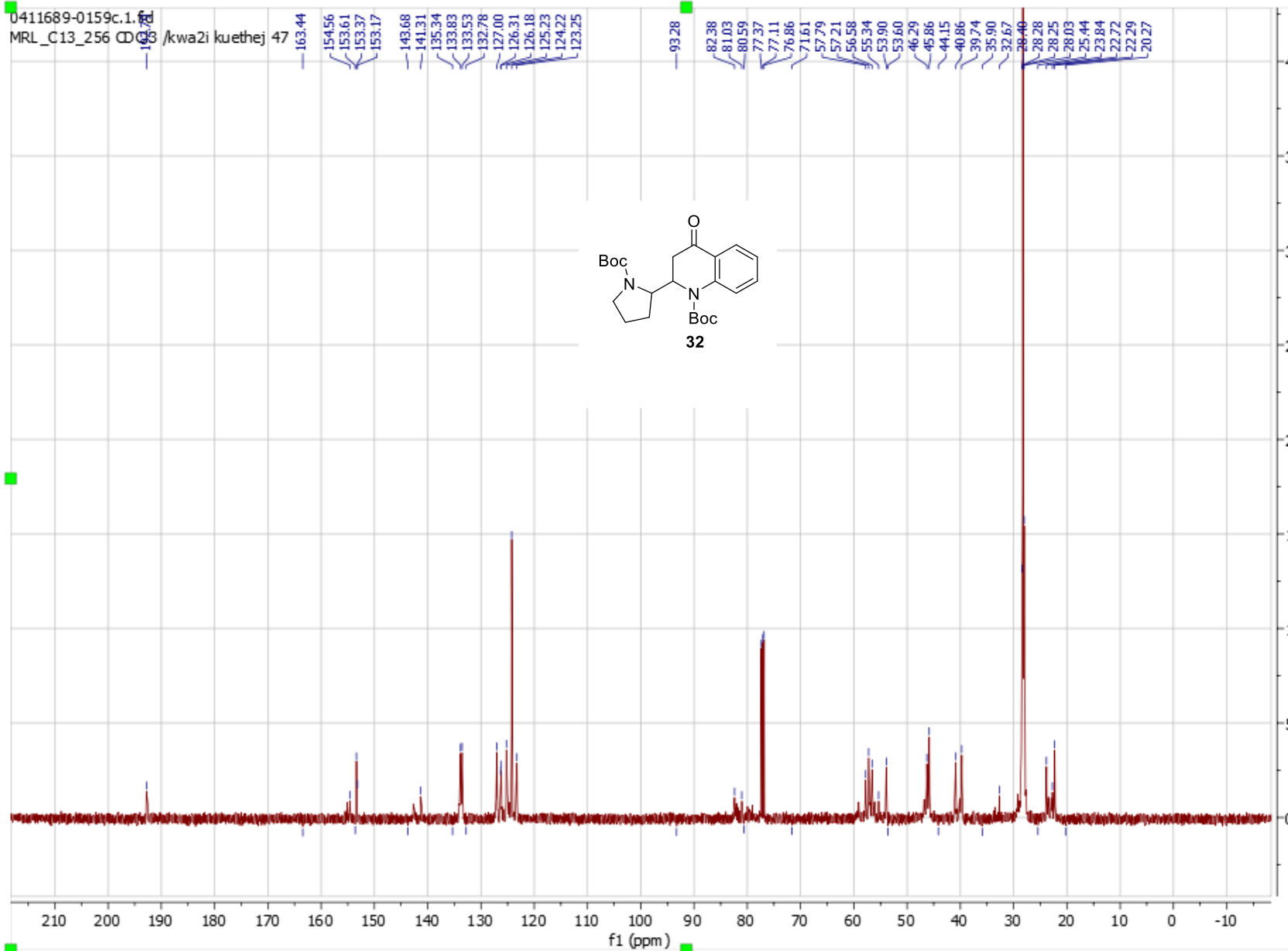
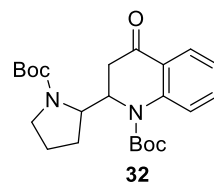
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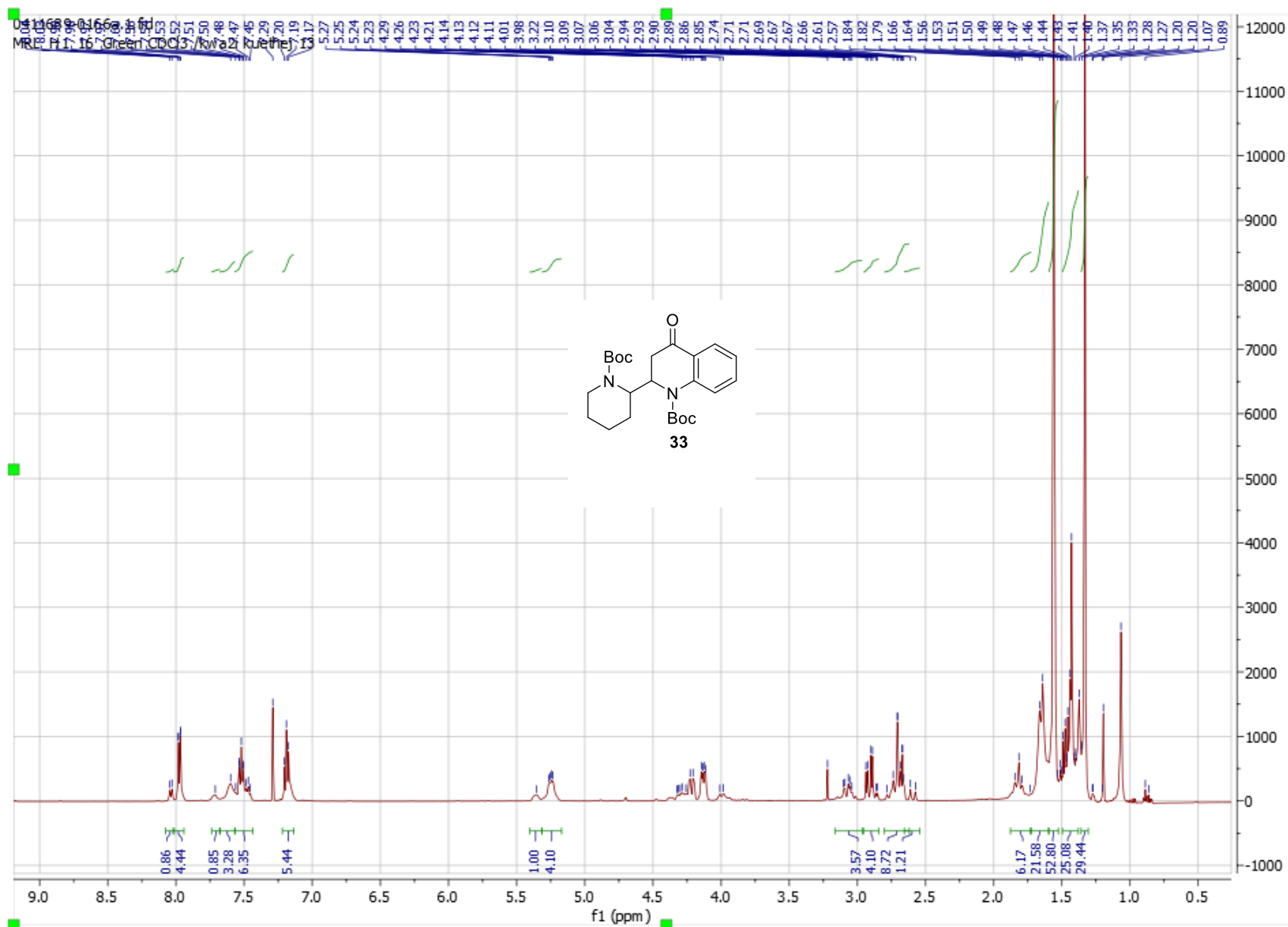




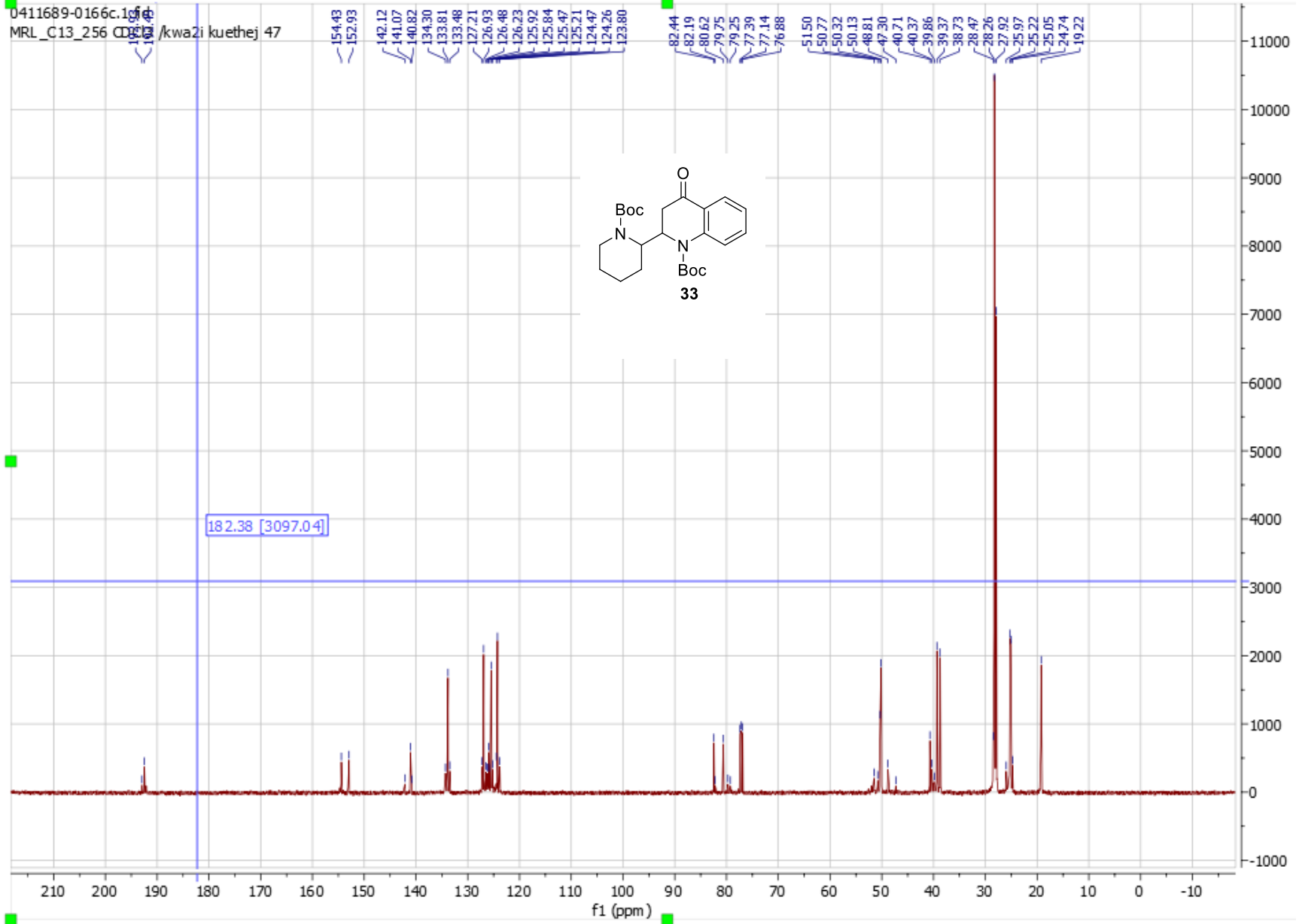
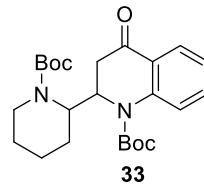
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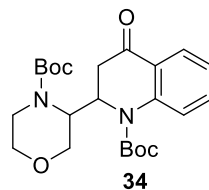
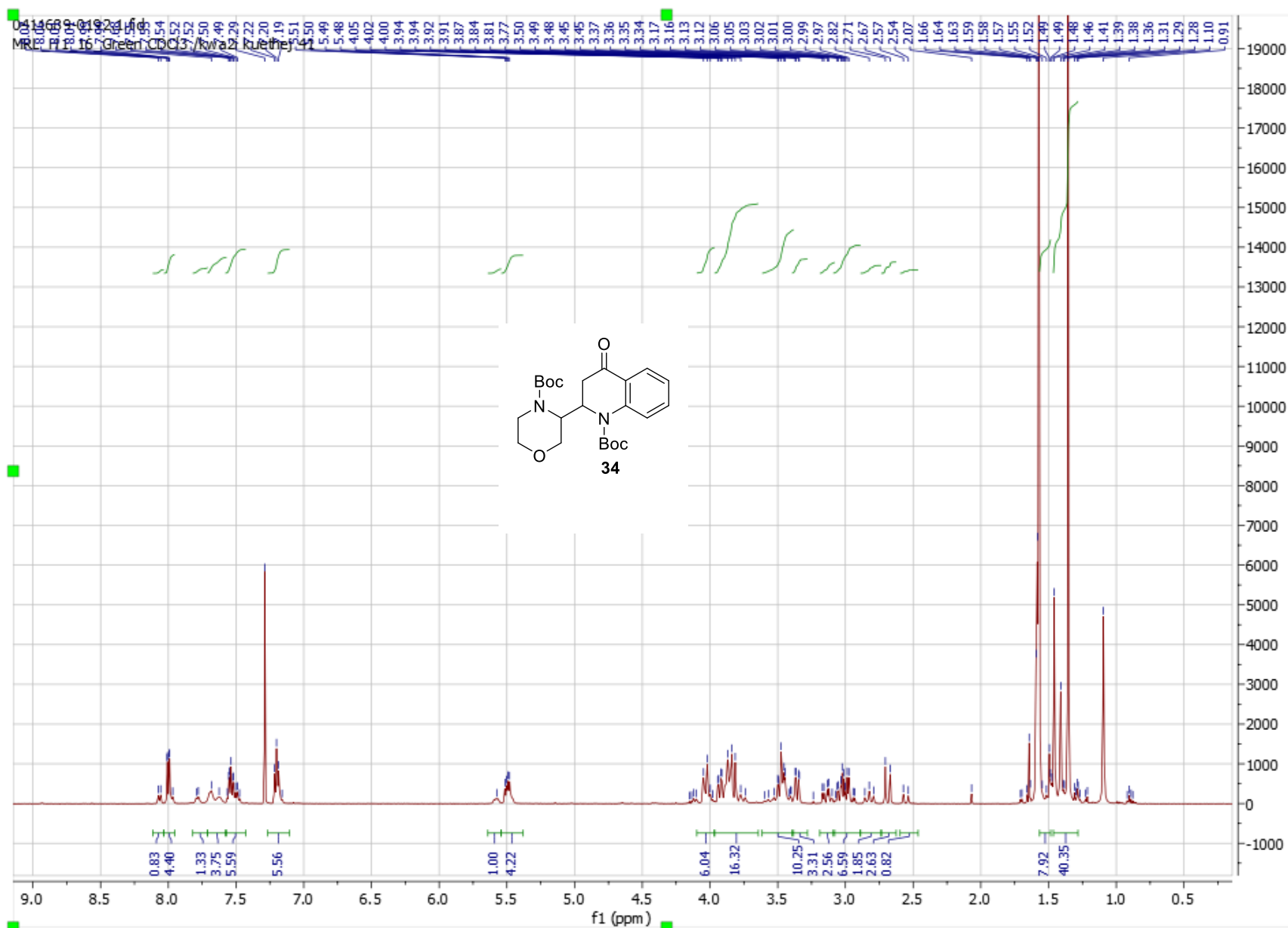
/kwa2i kuethej 47



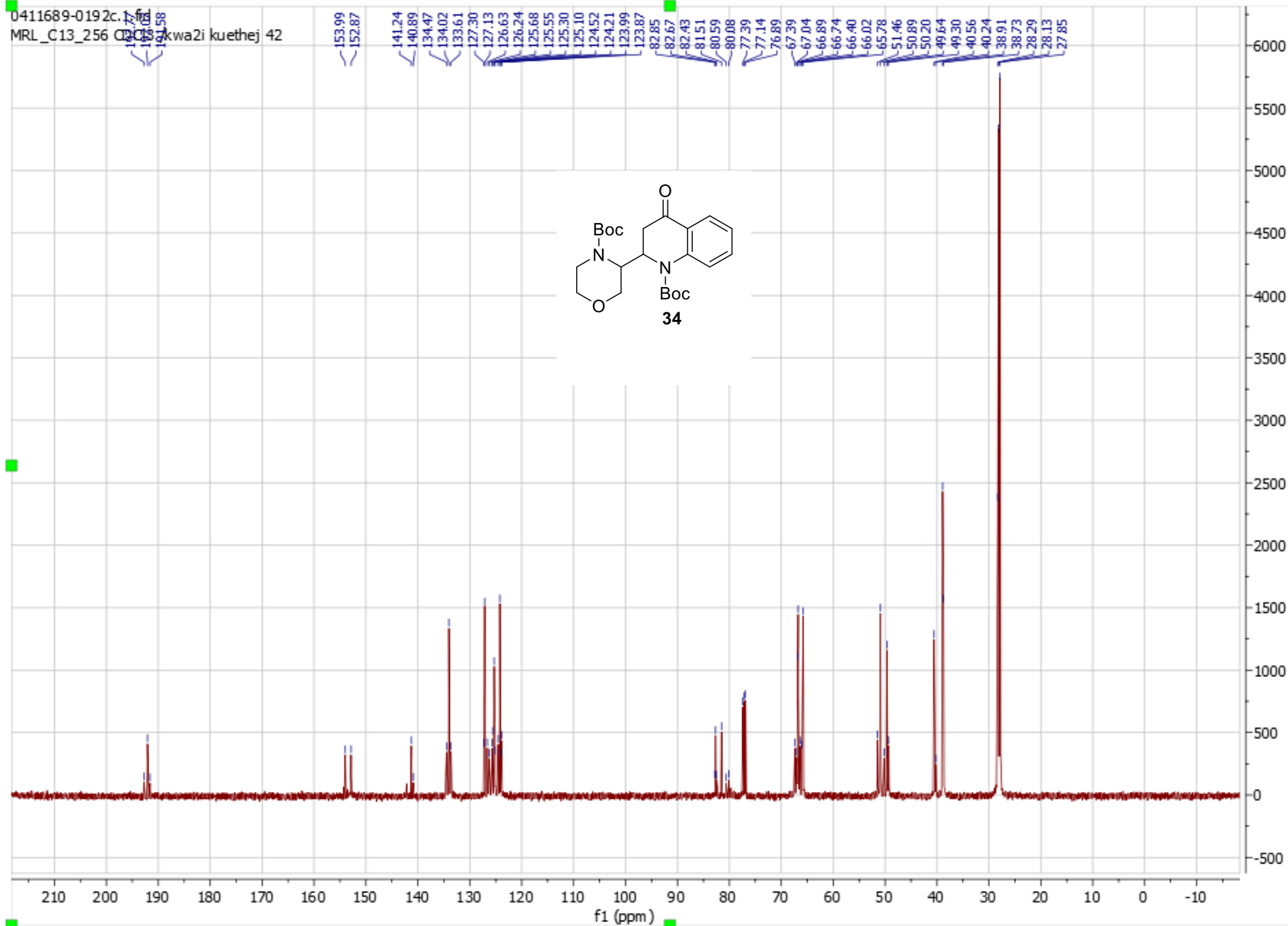
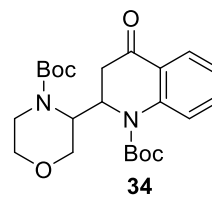


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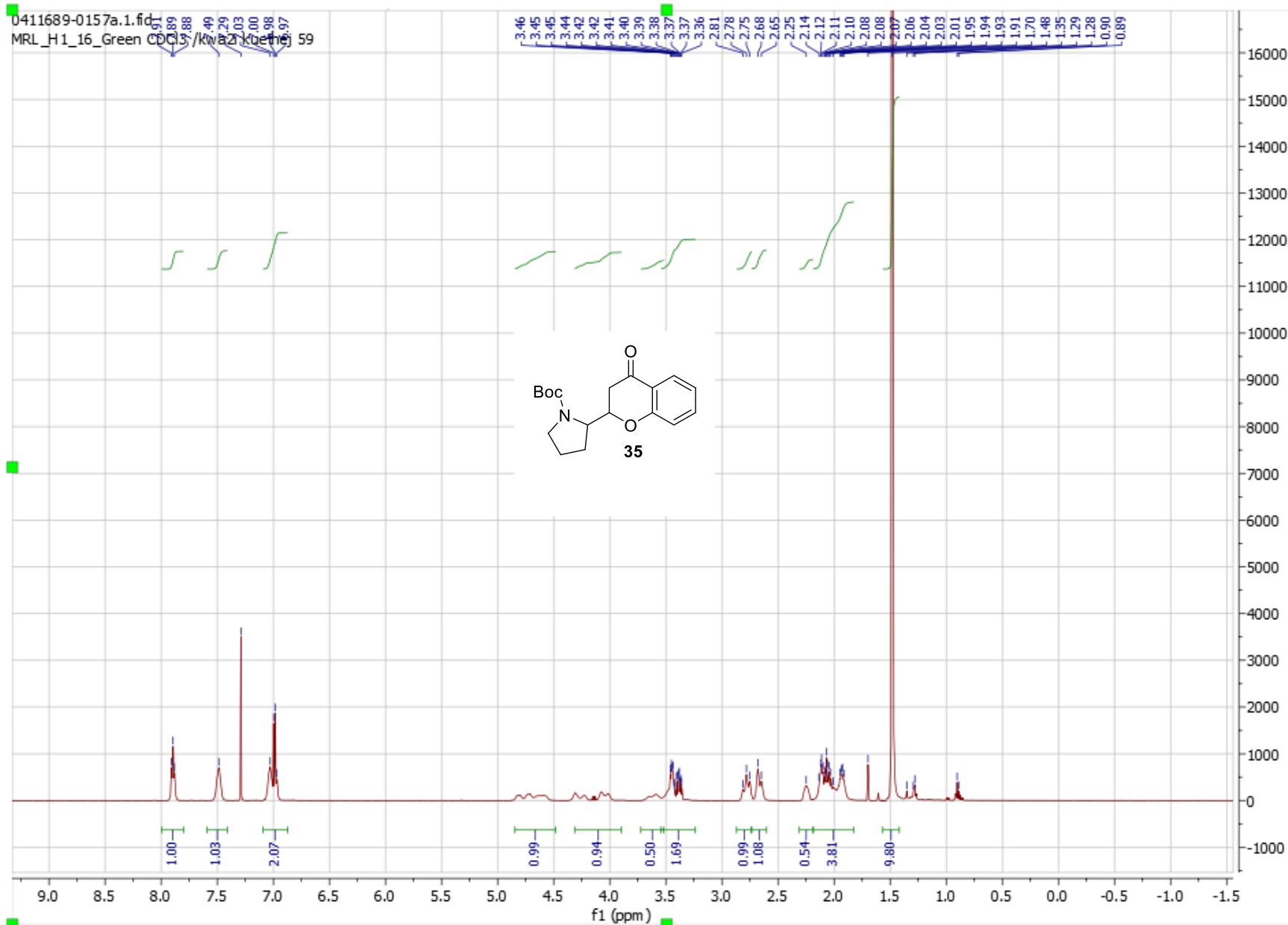
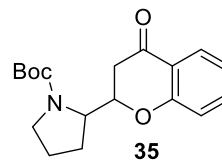


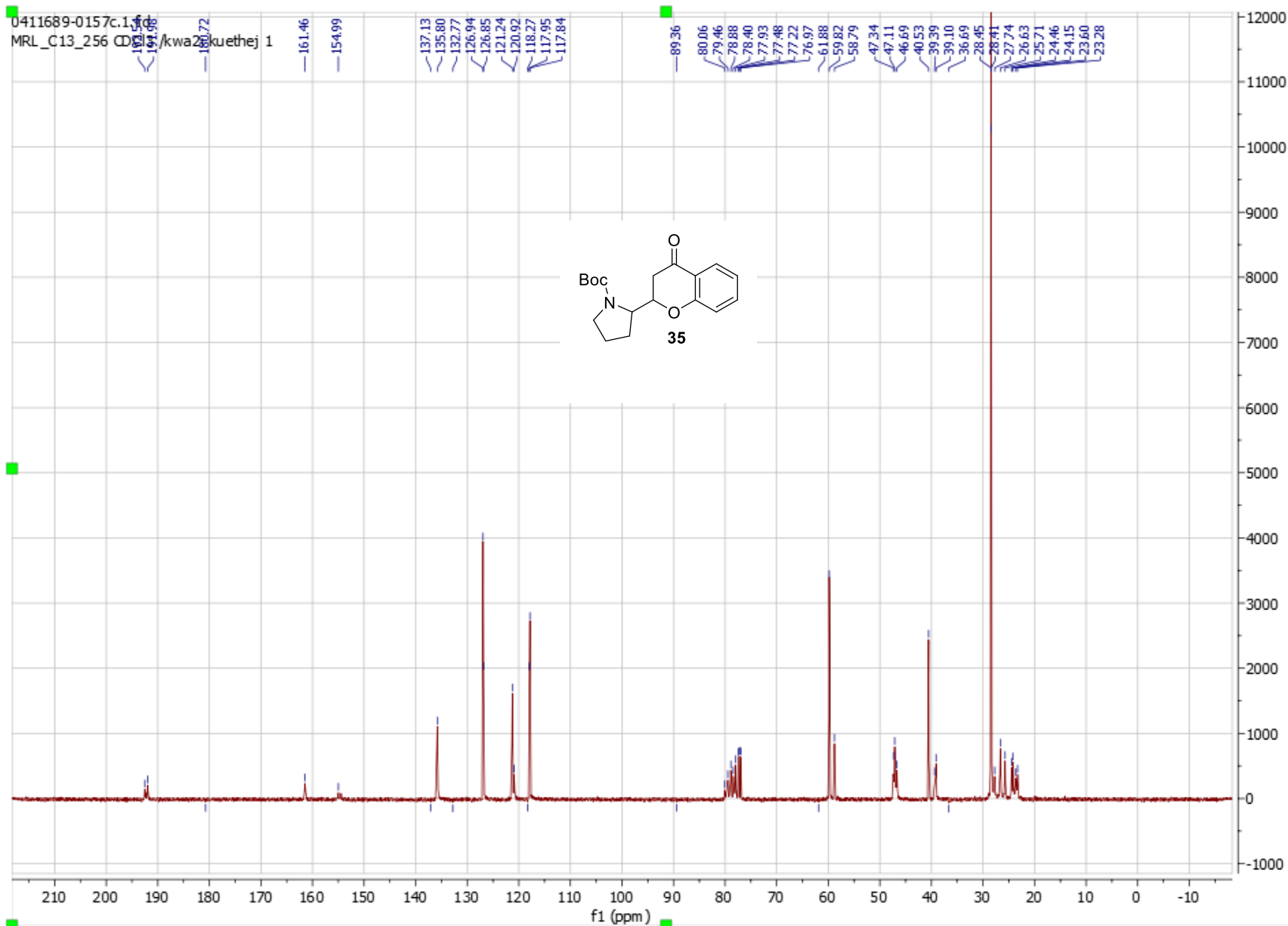


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MRL_C13_256 C13 kwazi kuethej 42



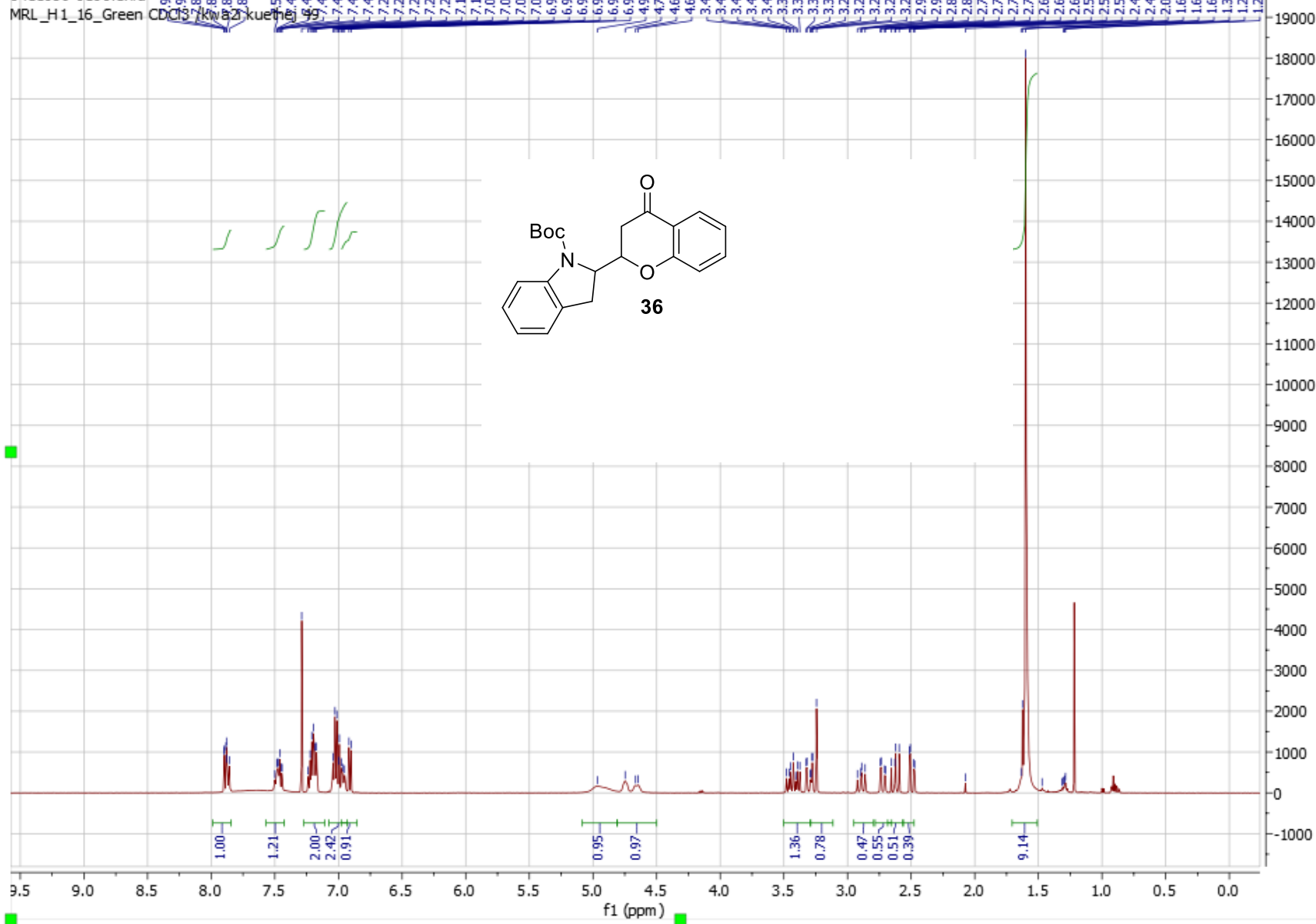
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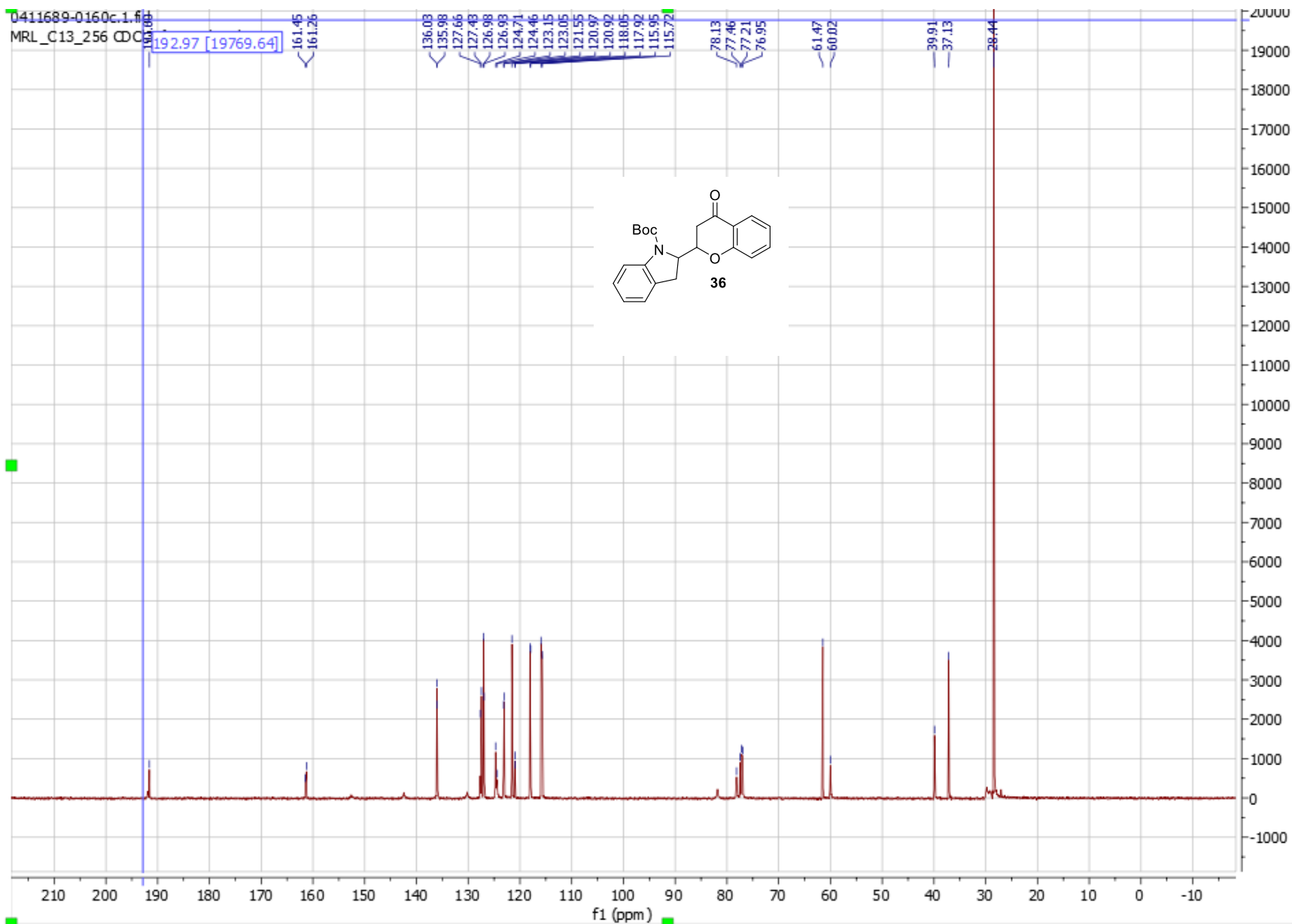


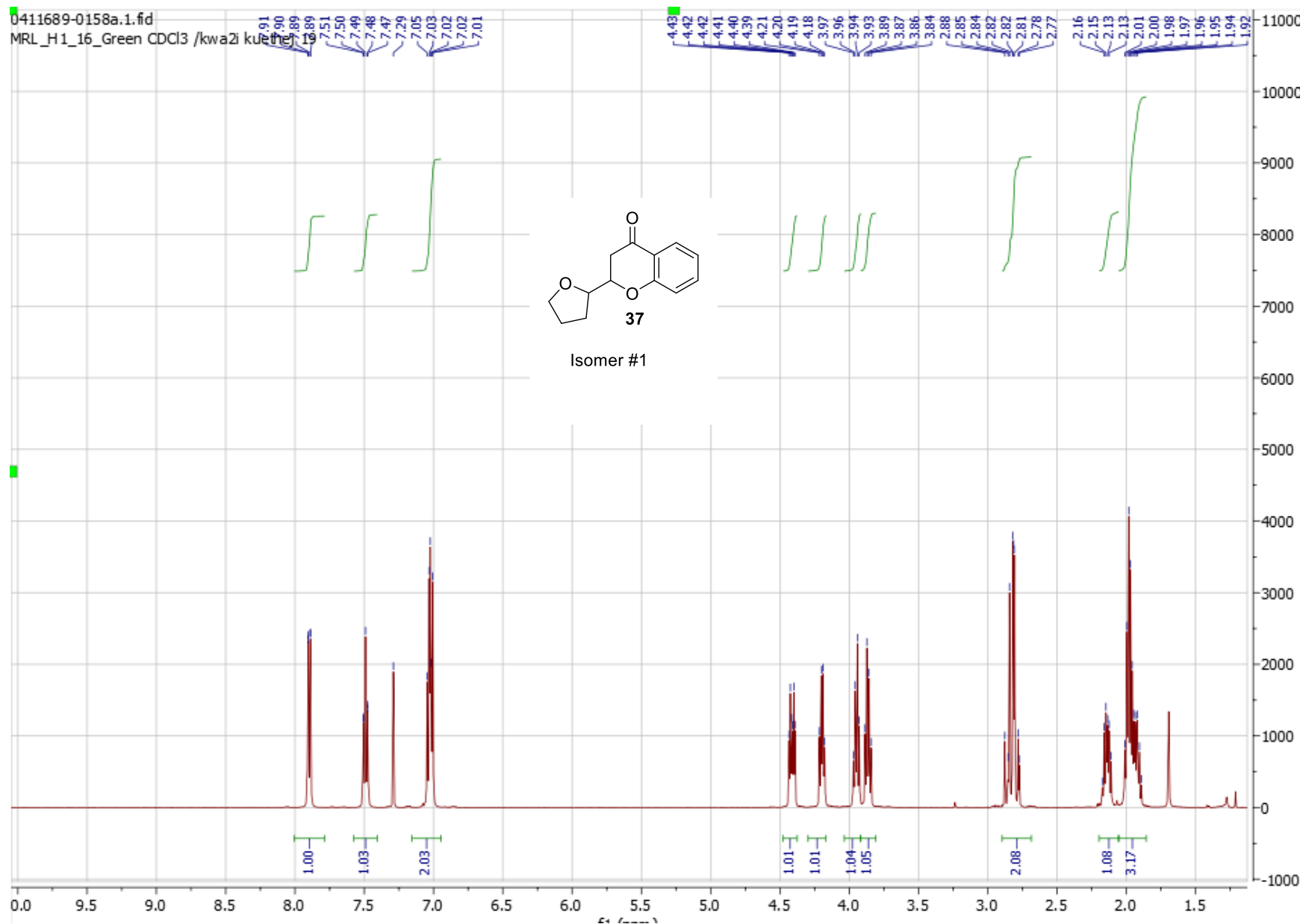


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MRL_H1_16_Green CDCl₃ (Kwazikuehej 99

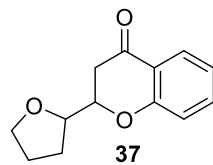




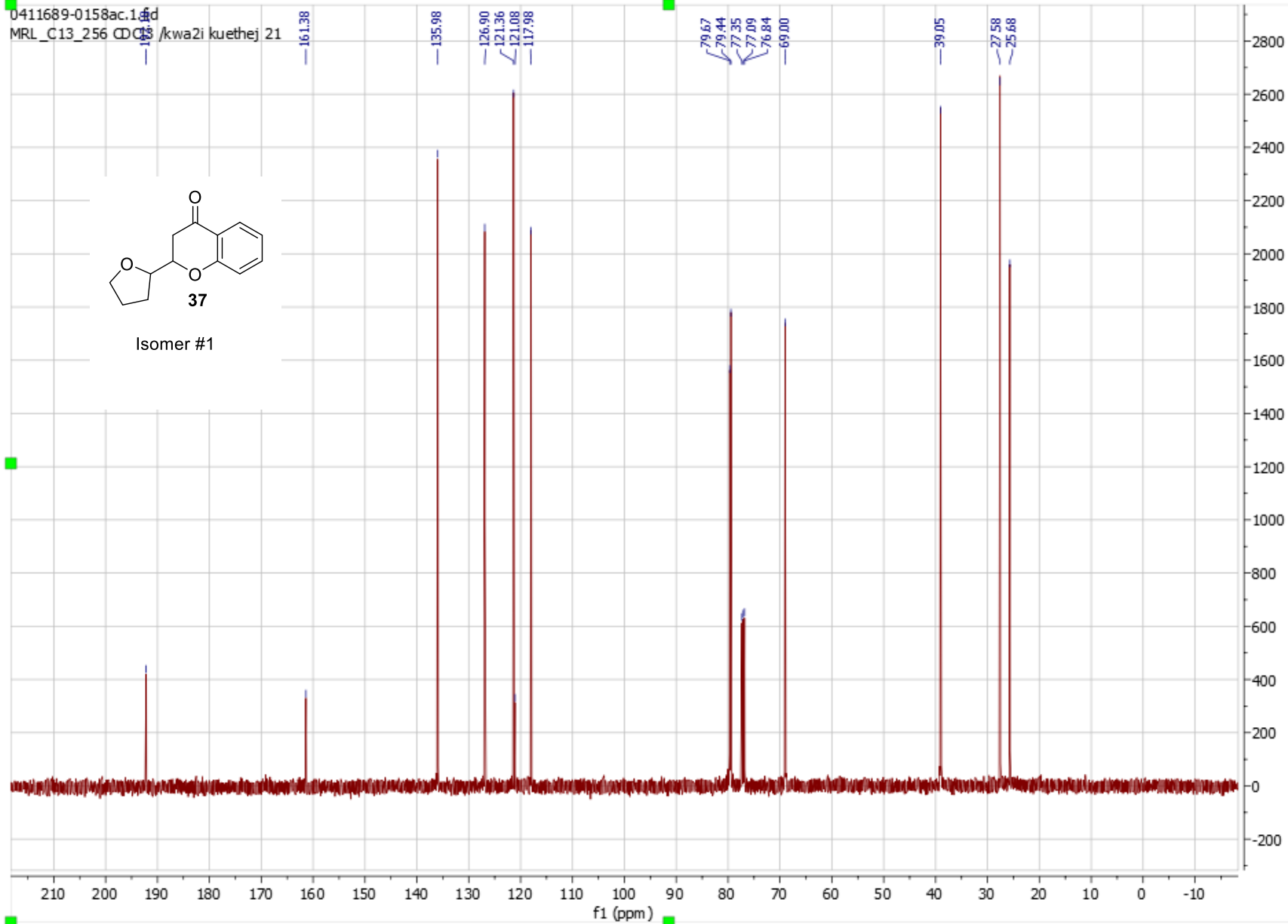


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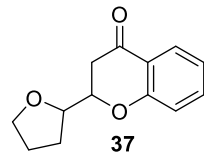


Isomer #1



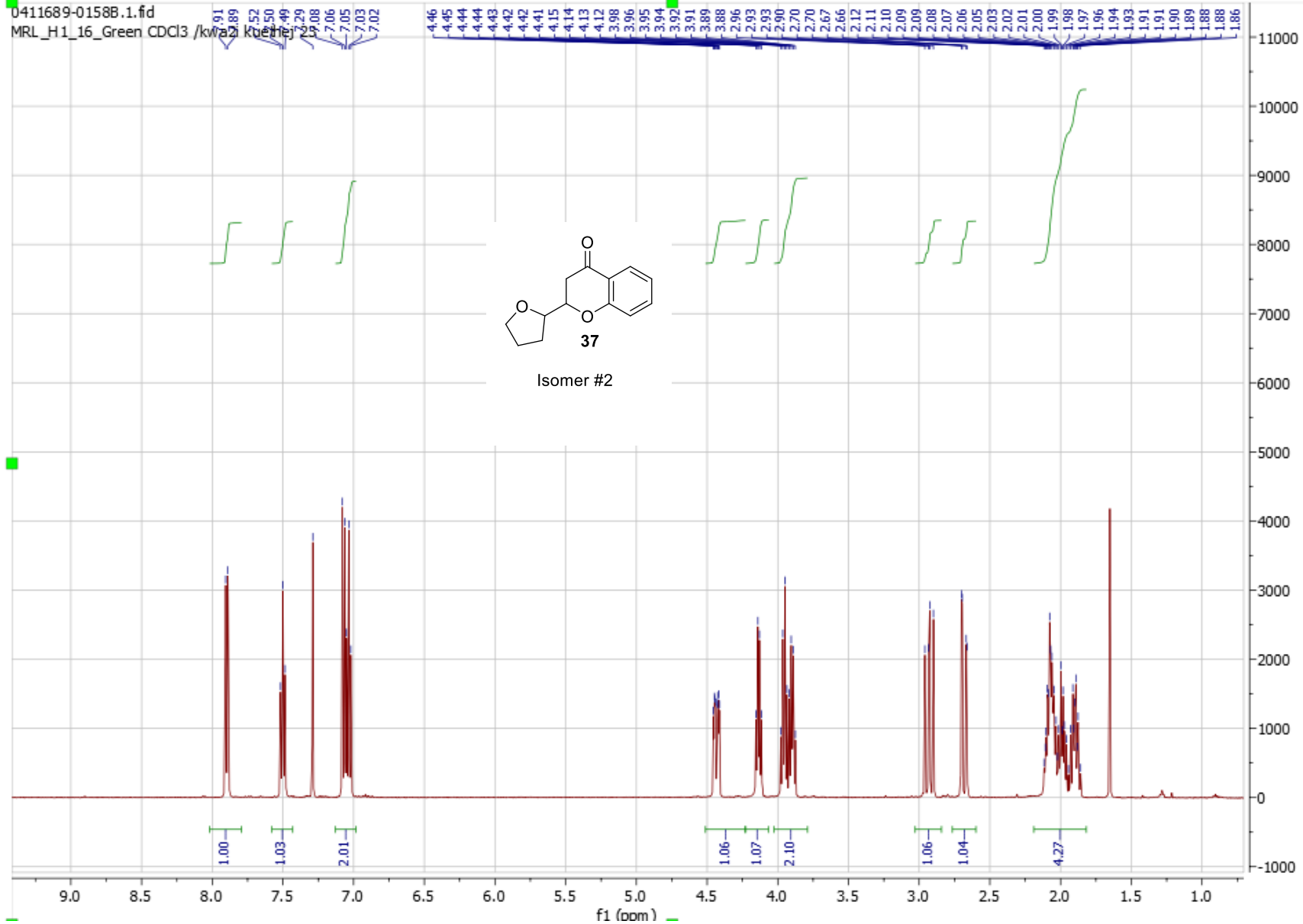
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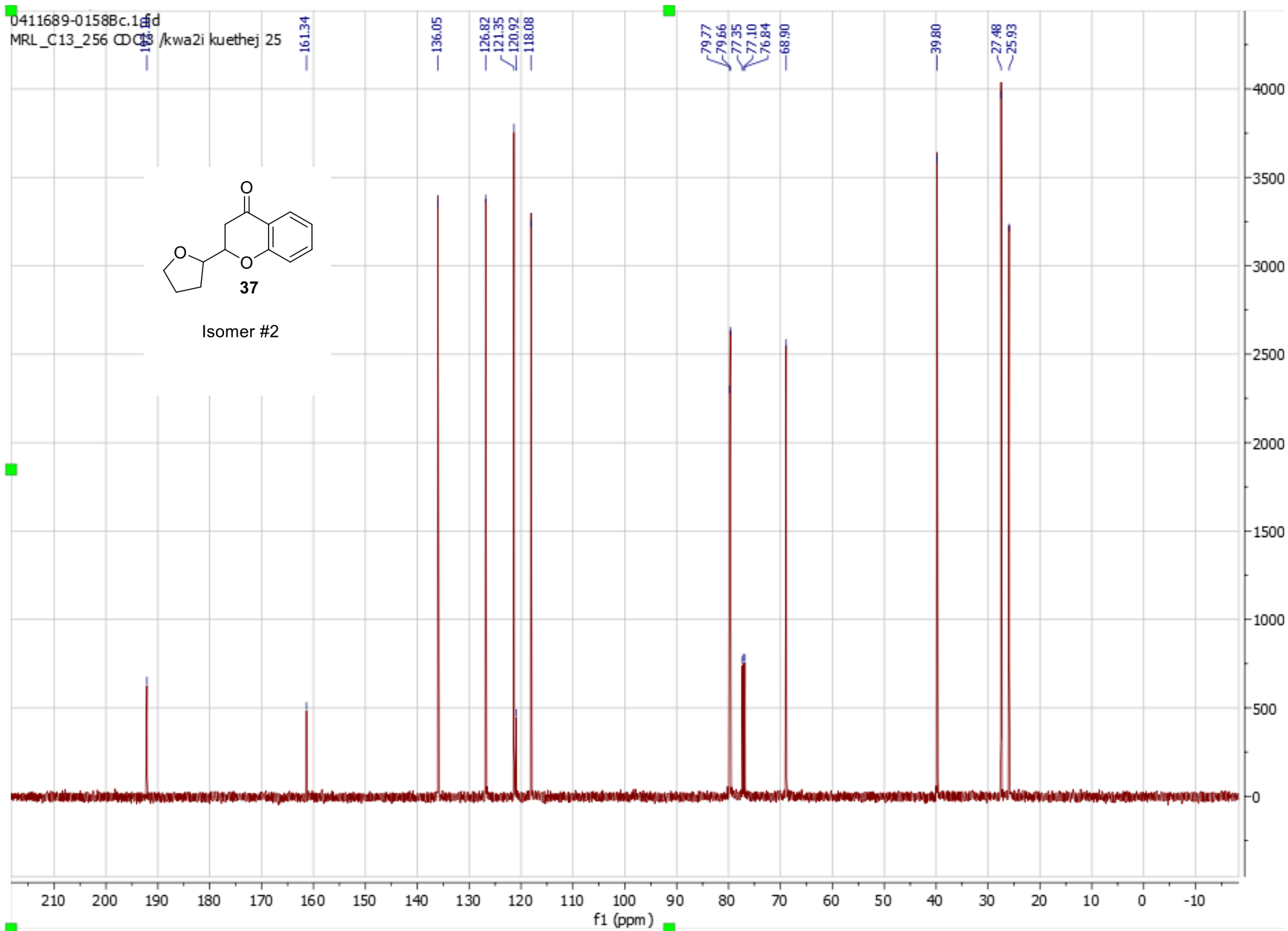
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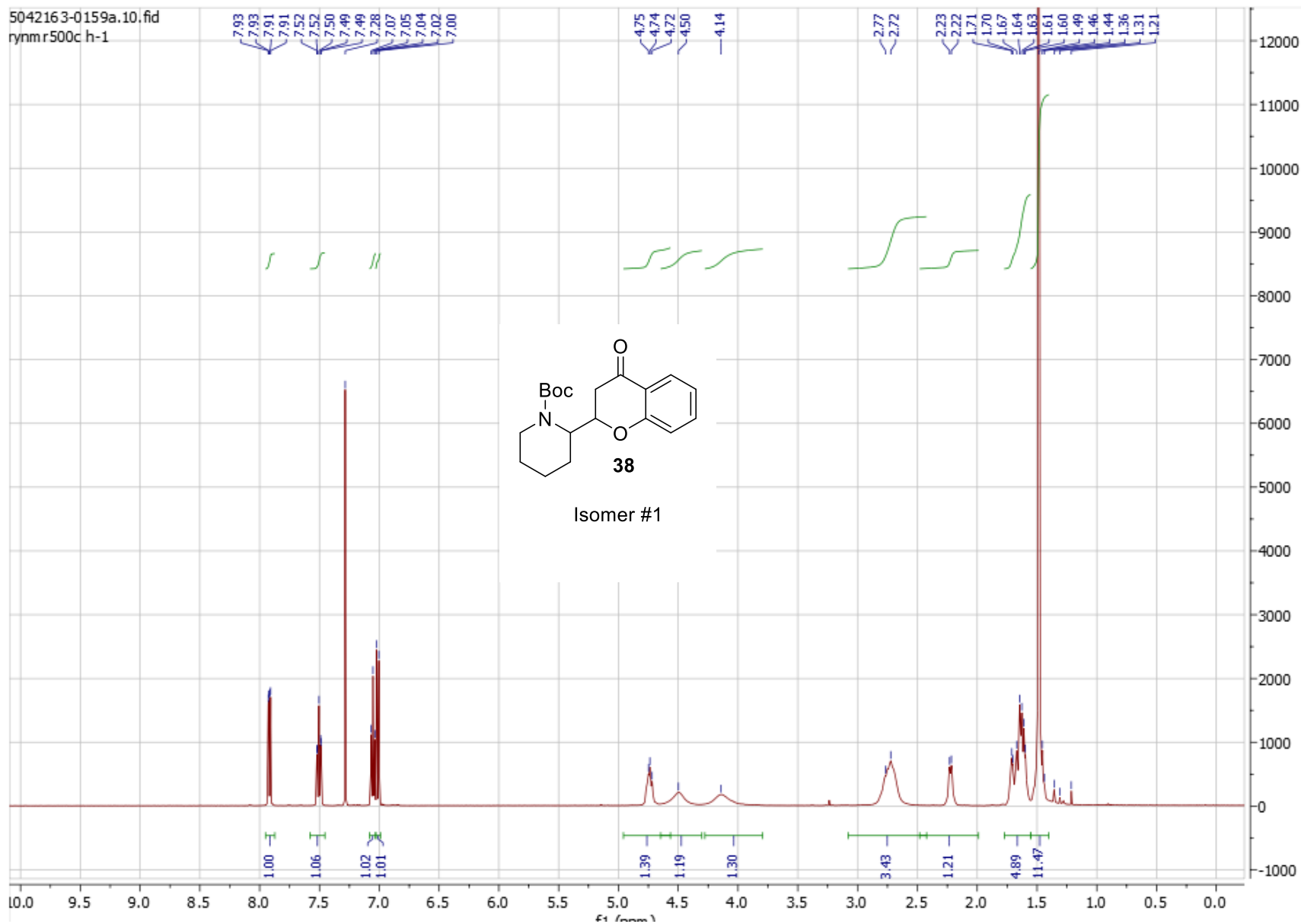
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Isomer #2

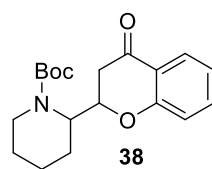




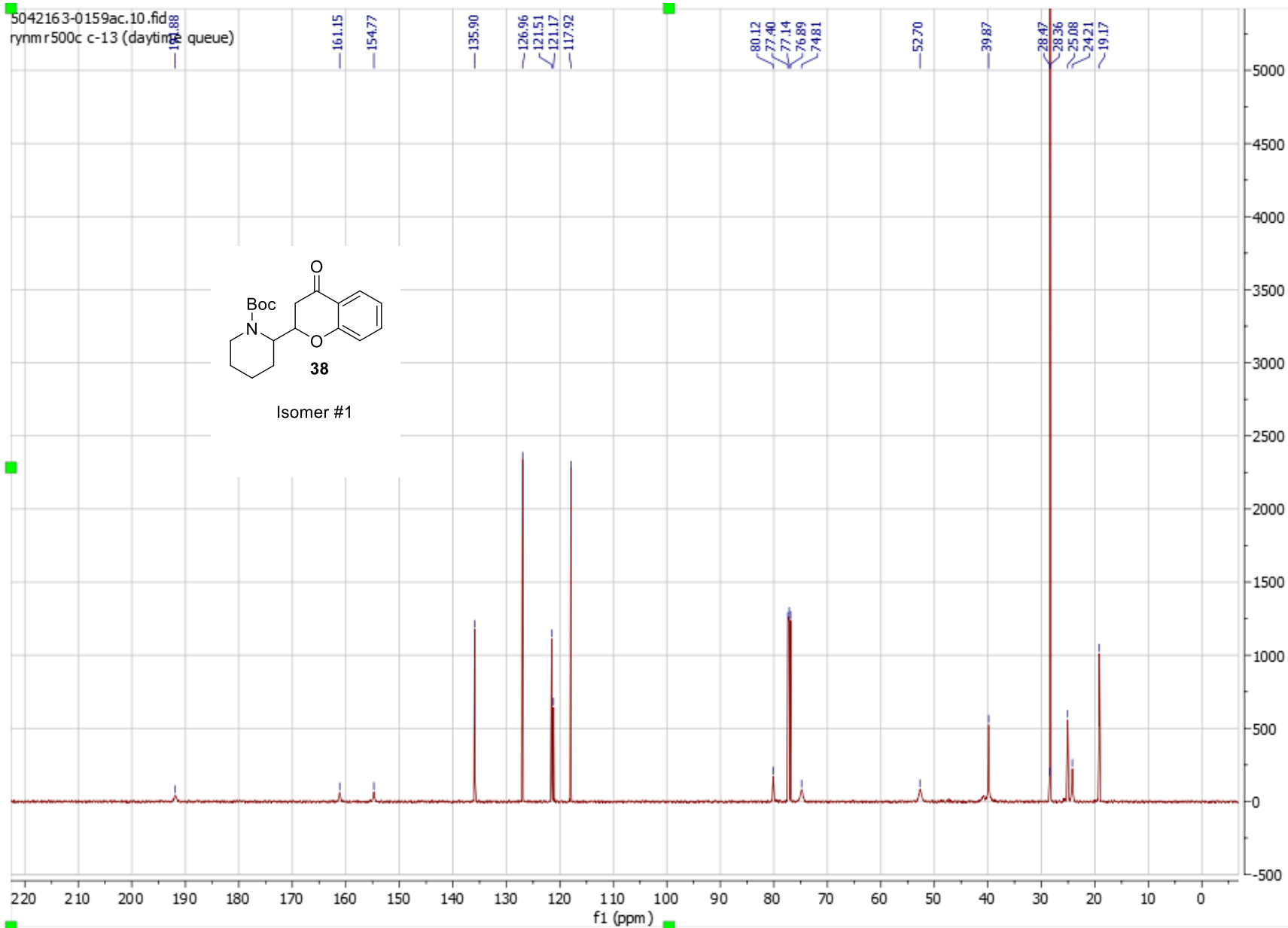
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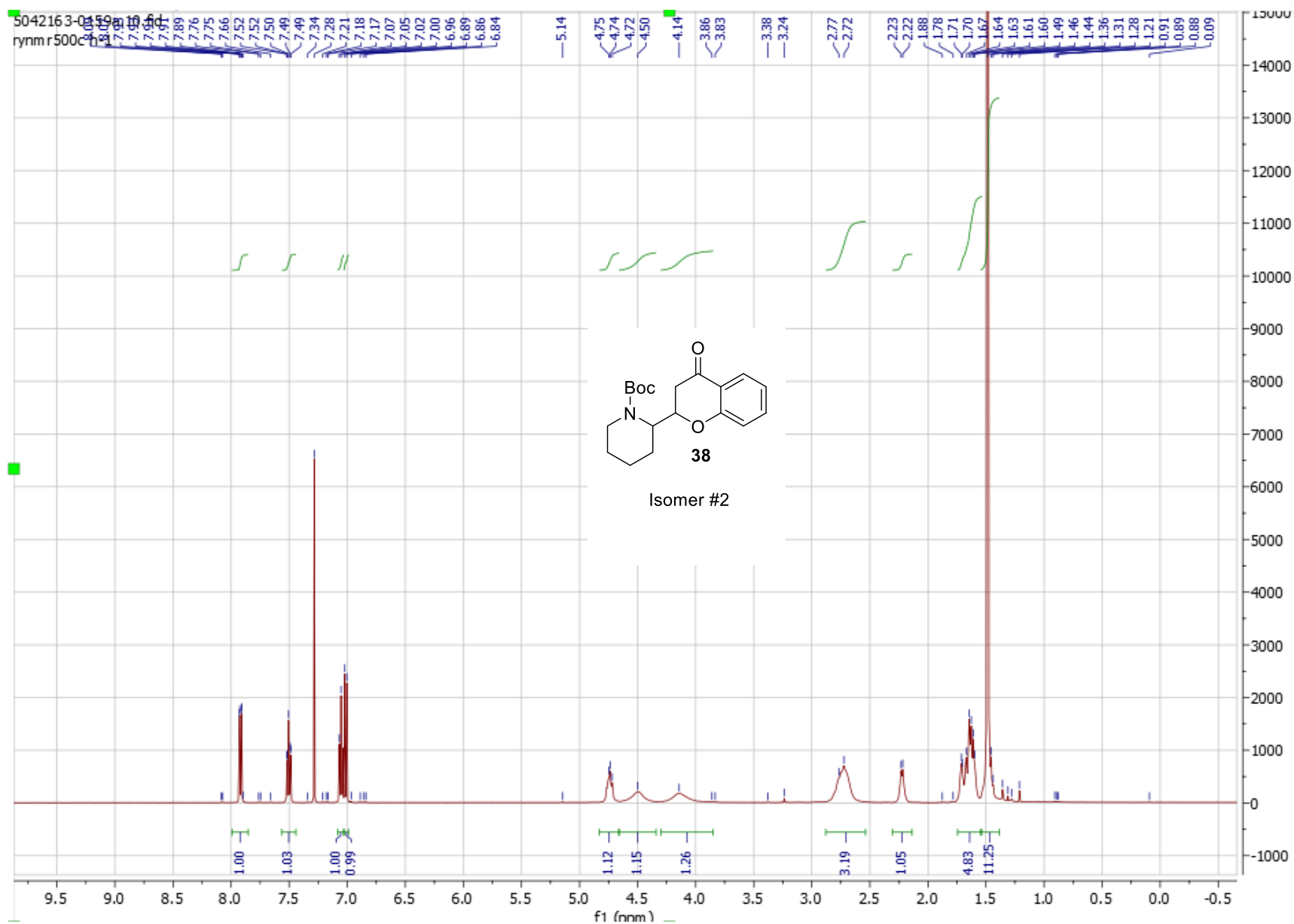


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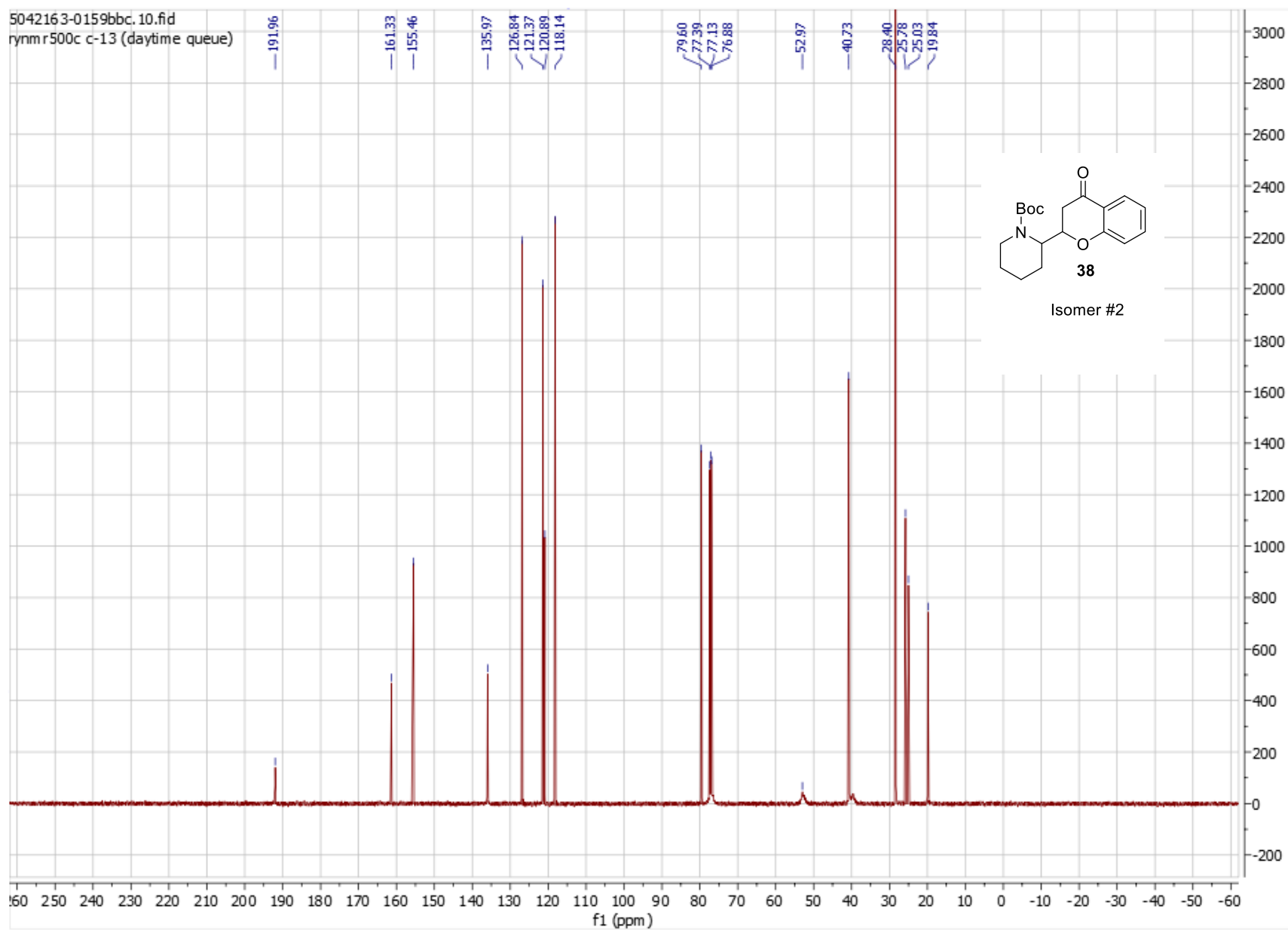


Isomer #1

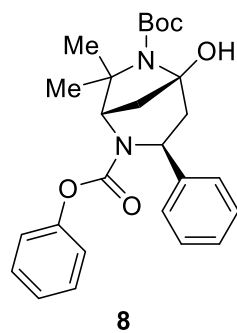


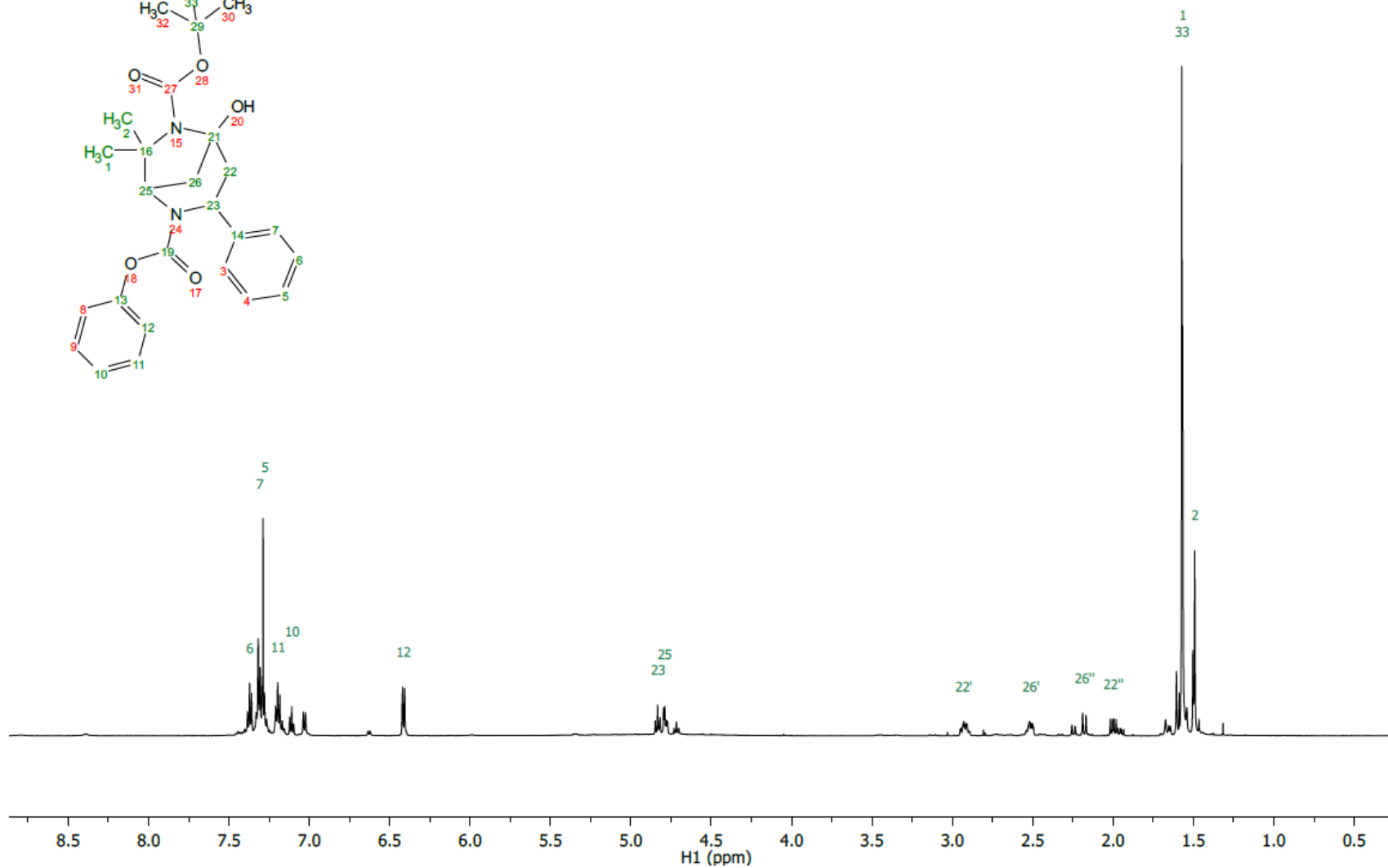
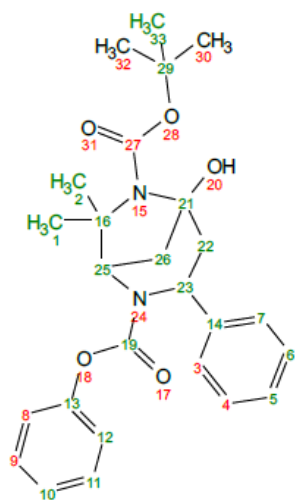


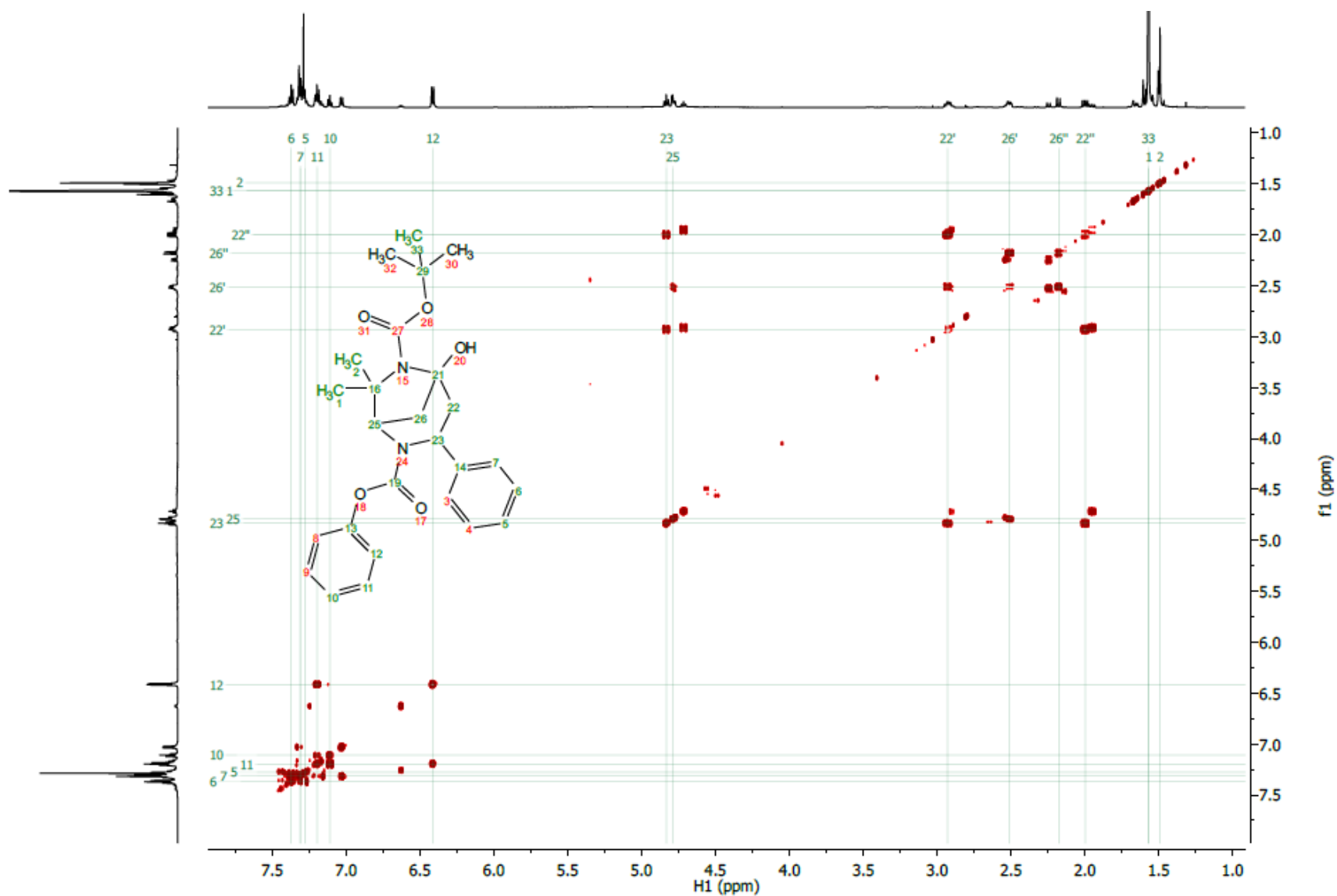
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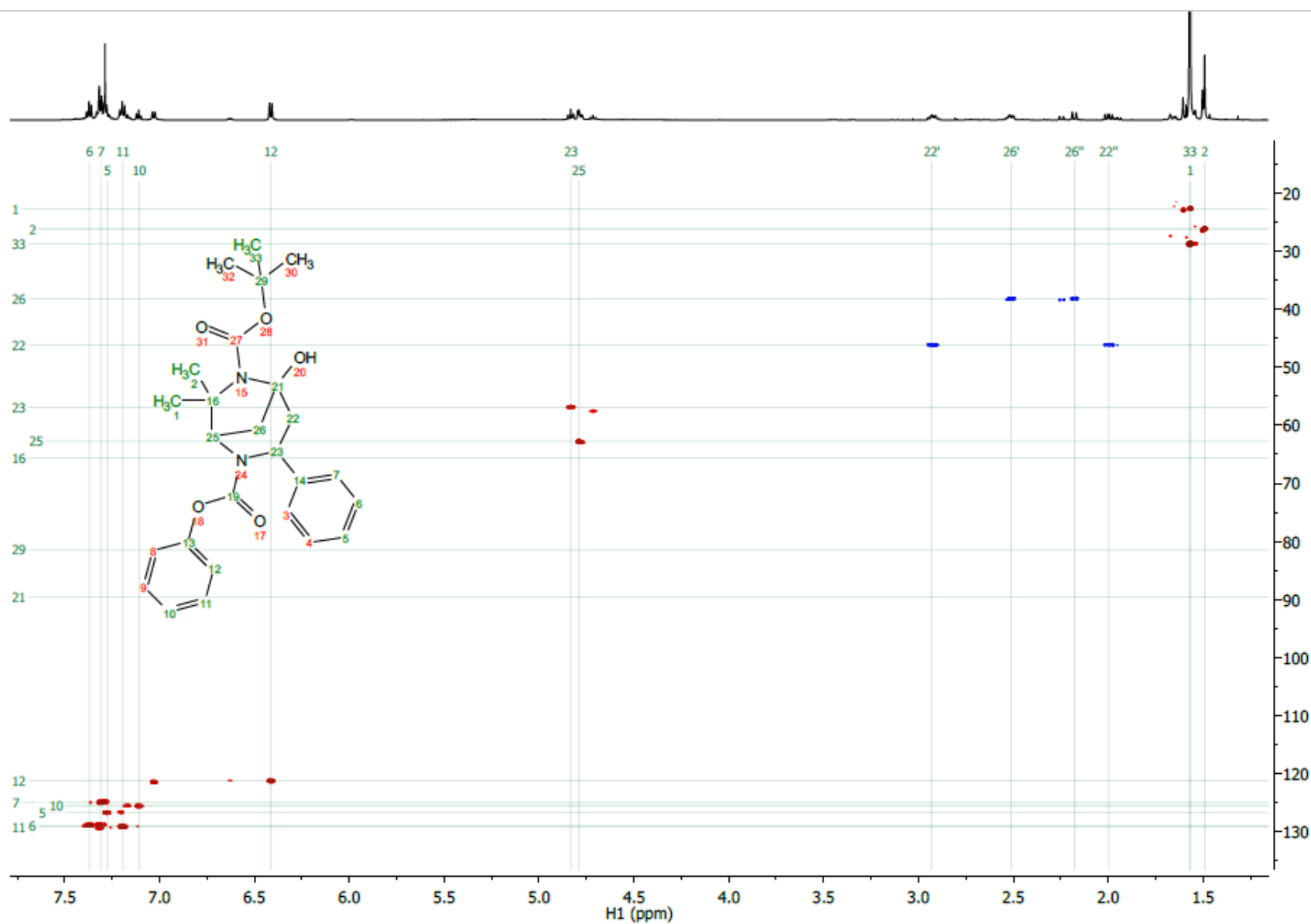


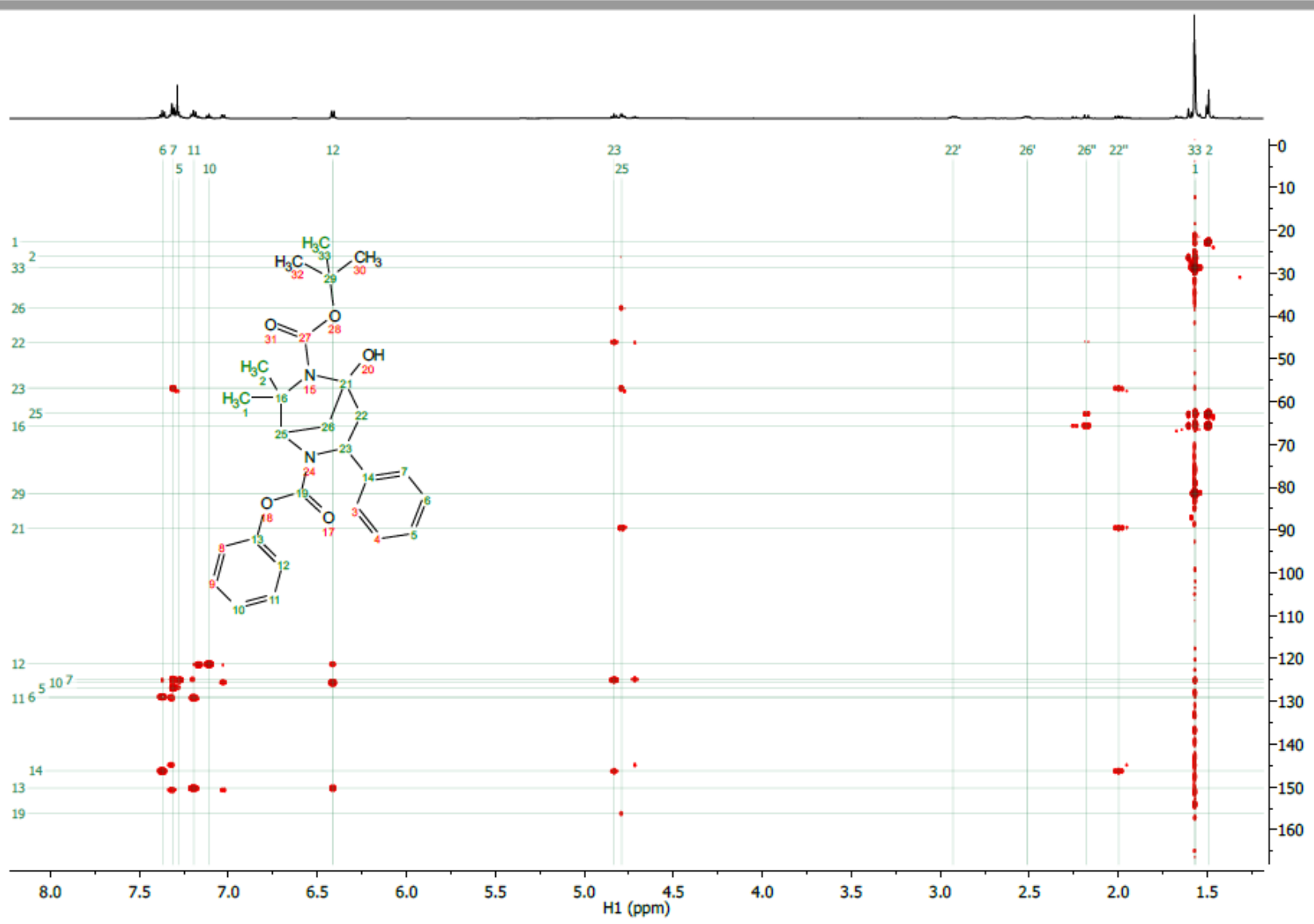
Characterization of Compound 8:

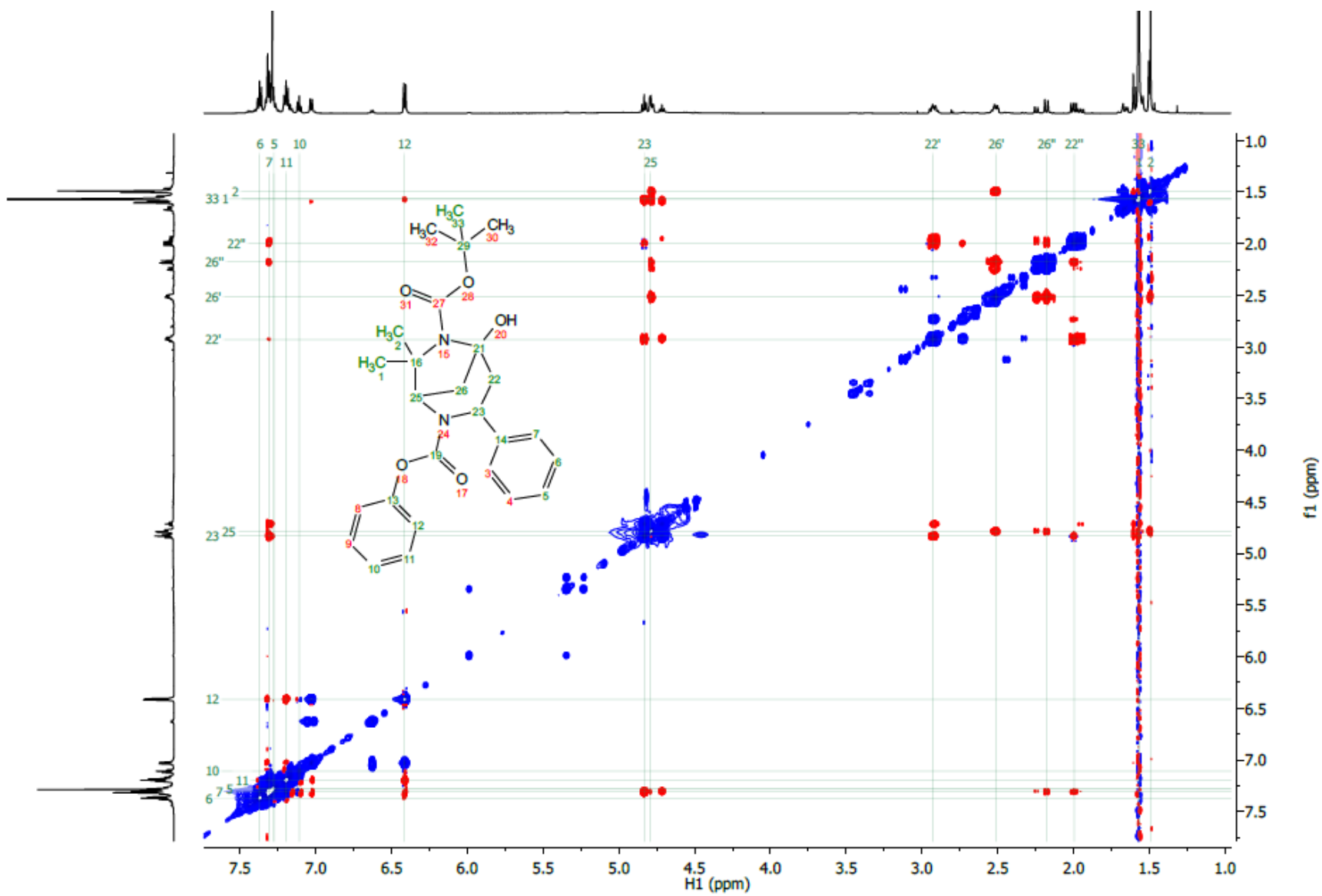




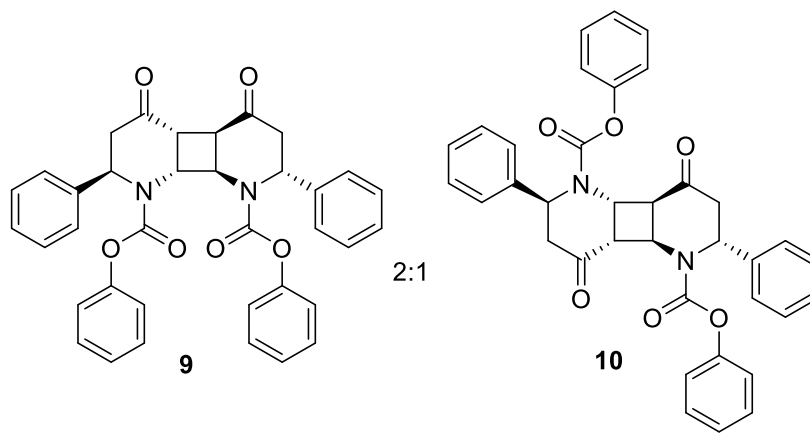




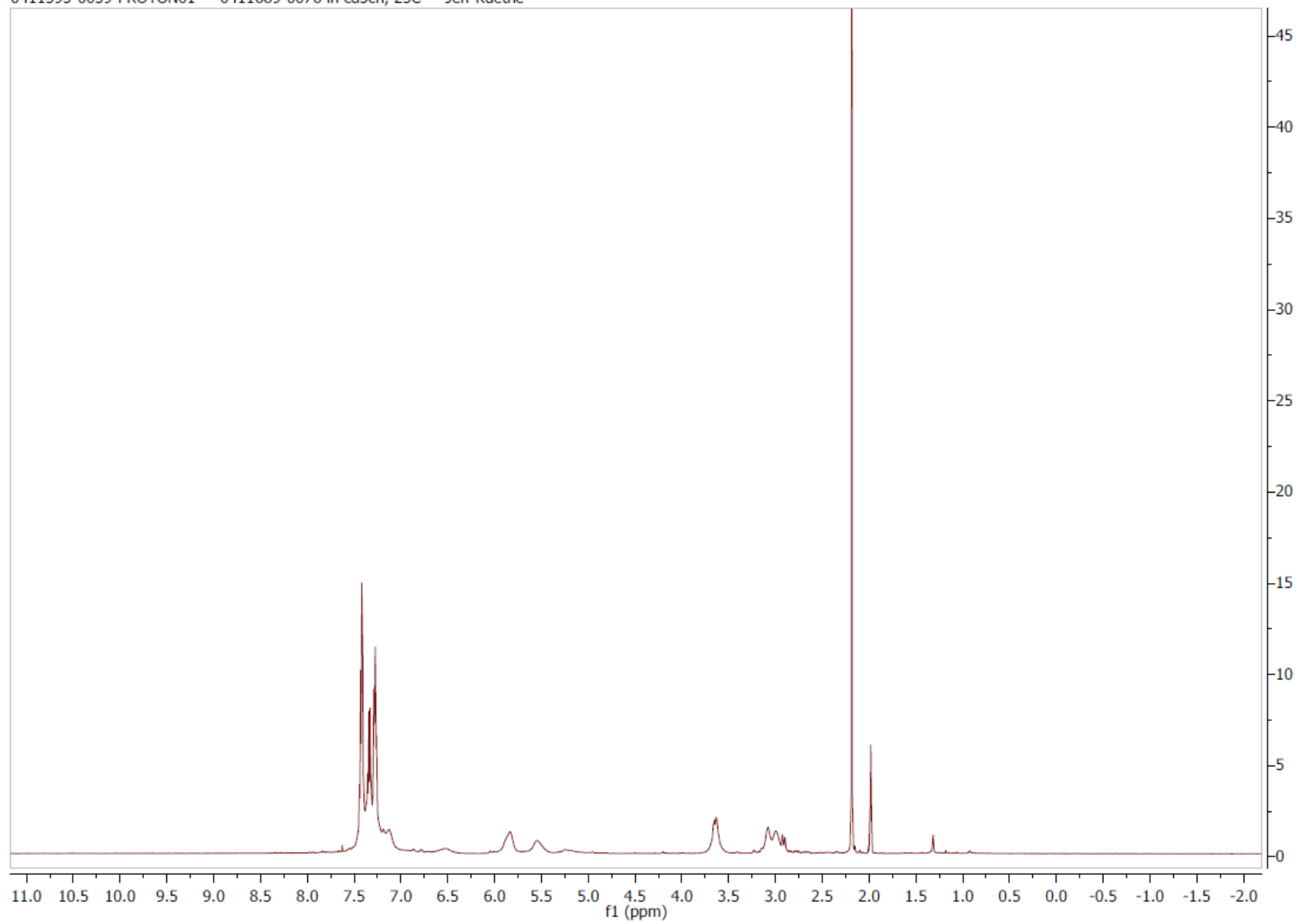




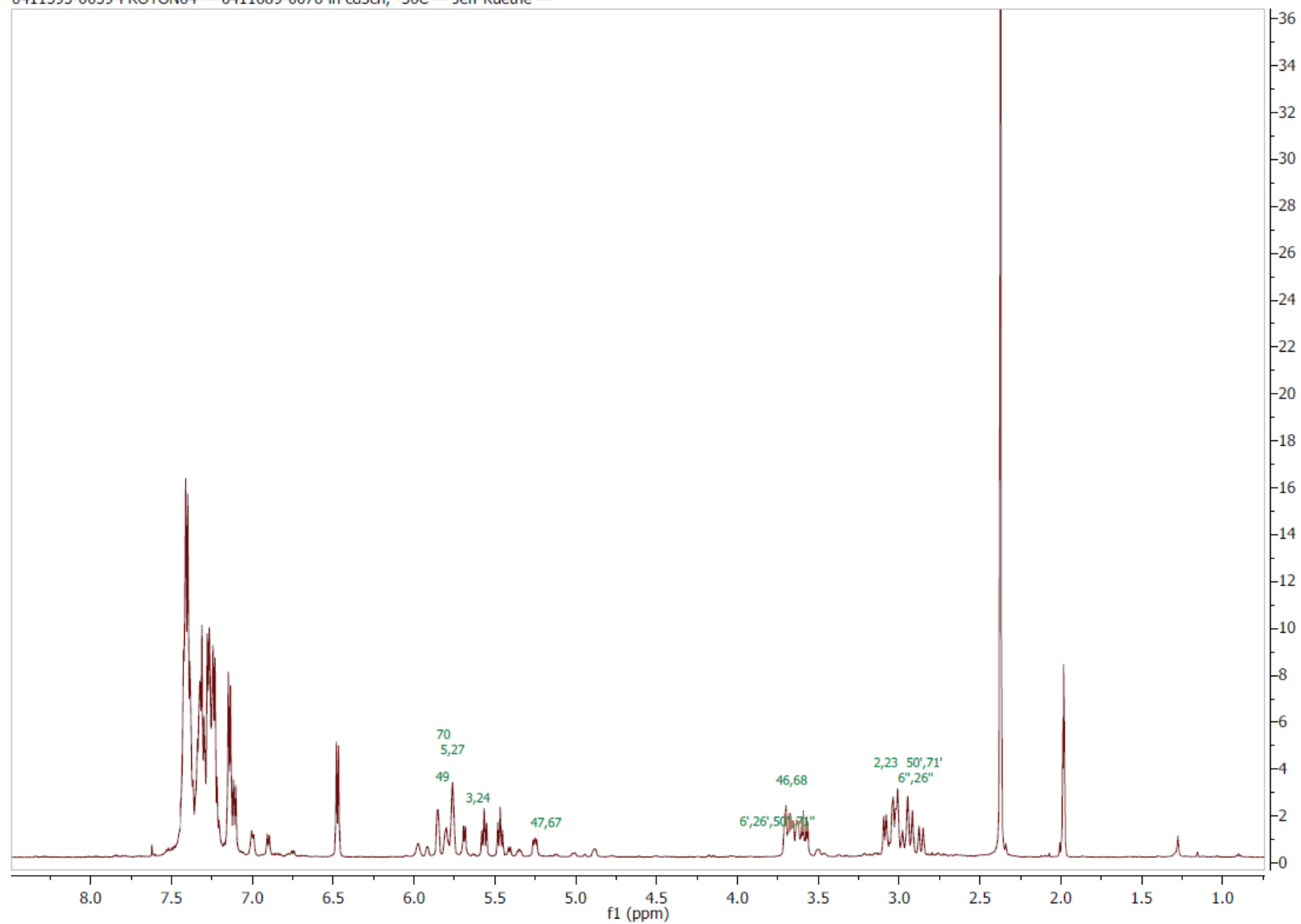
Characterization of Compound 9 and 10:



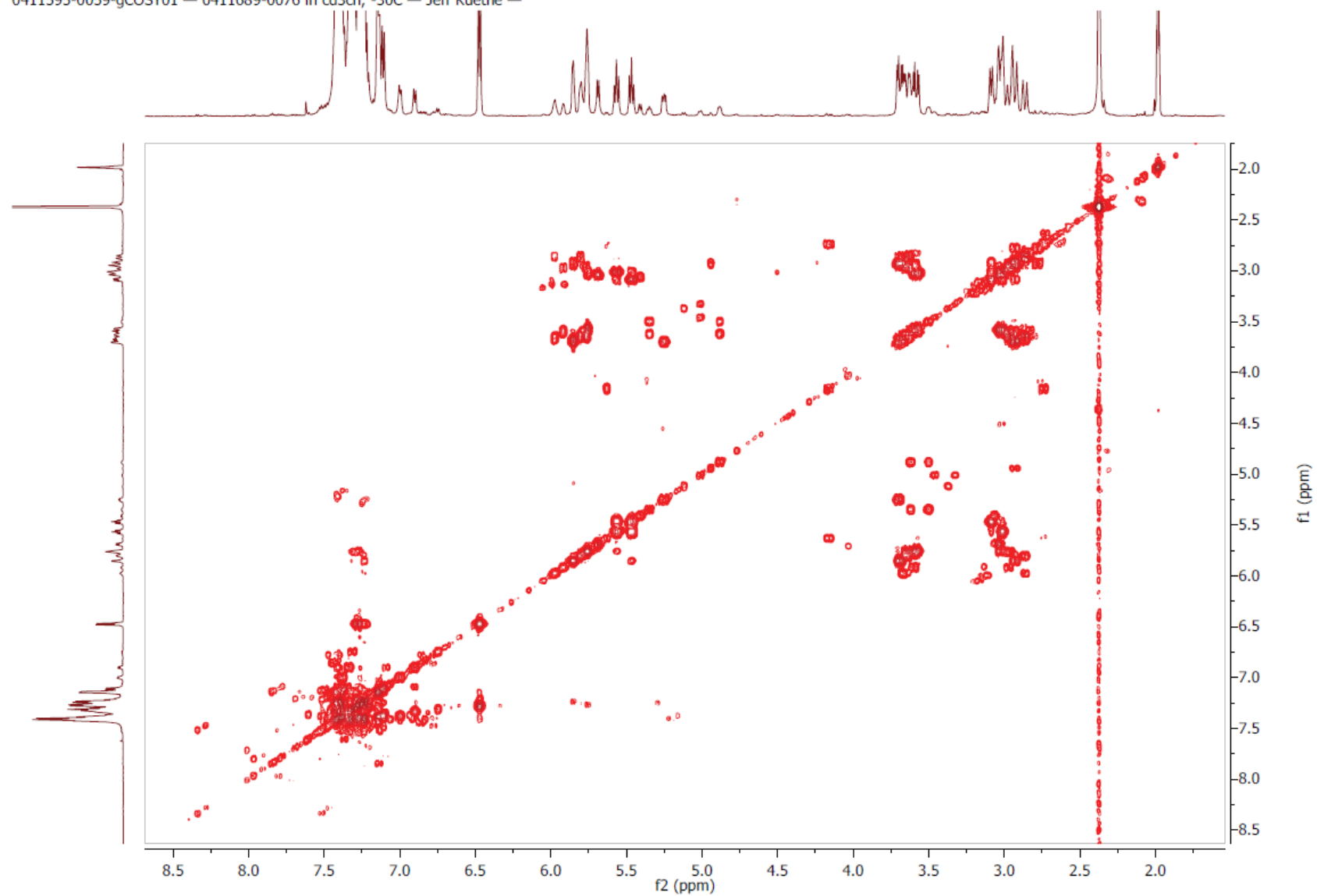
0411595-0059-PROTON01 — 0411689-0076 in cd3cn, 25C — Jeff Kuethe —



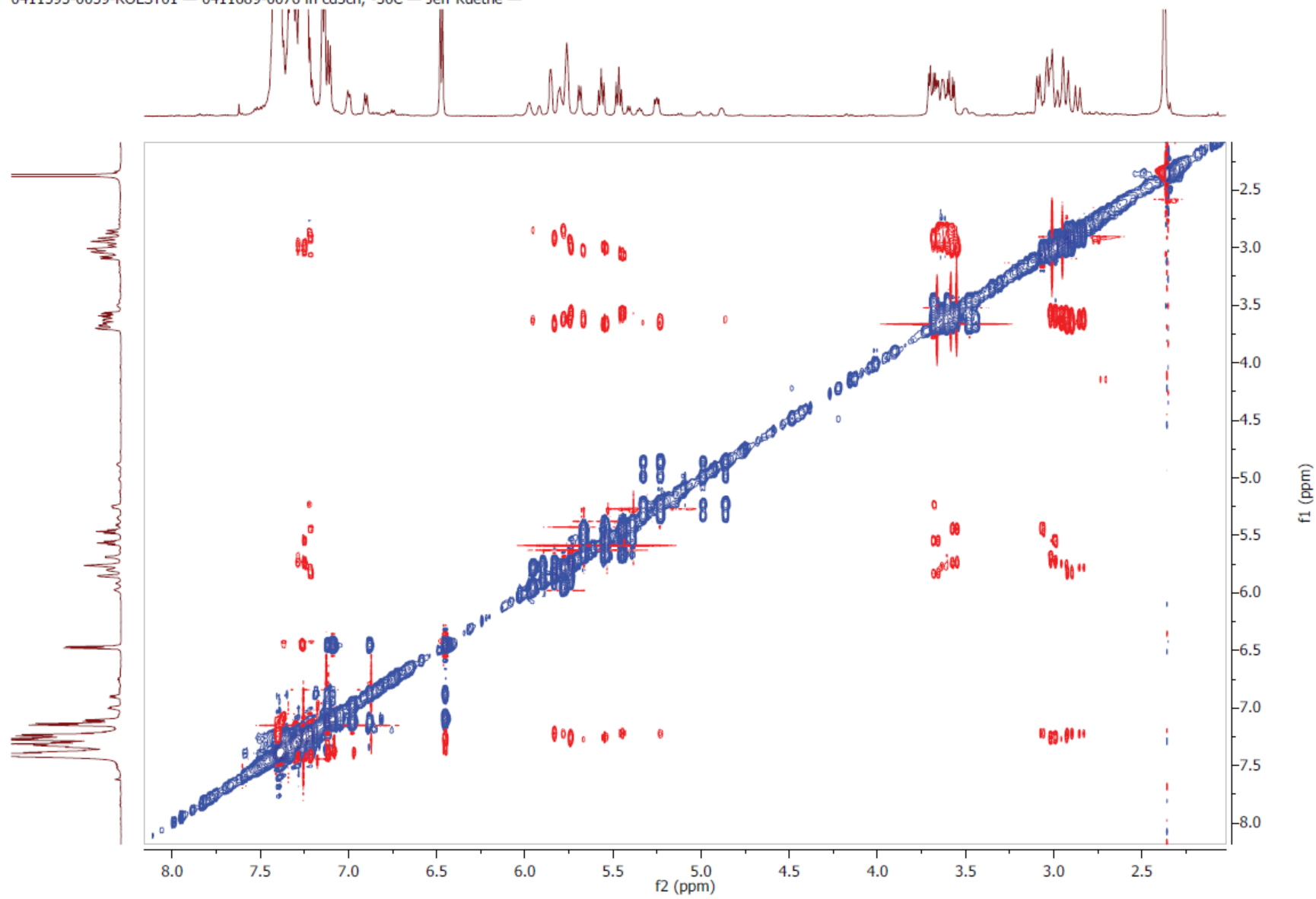
0411595-0059-PROTON04 — 0411689-0076 in cd3cn, -30C — Jeff Kuethe —



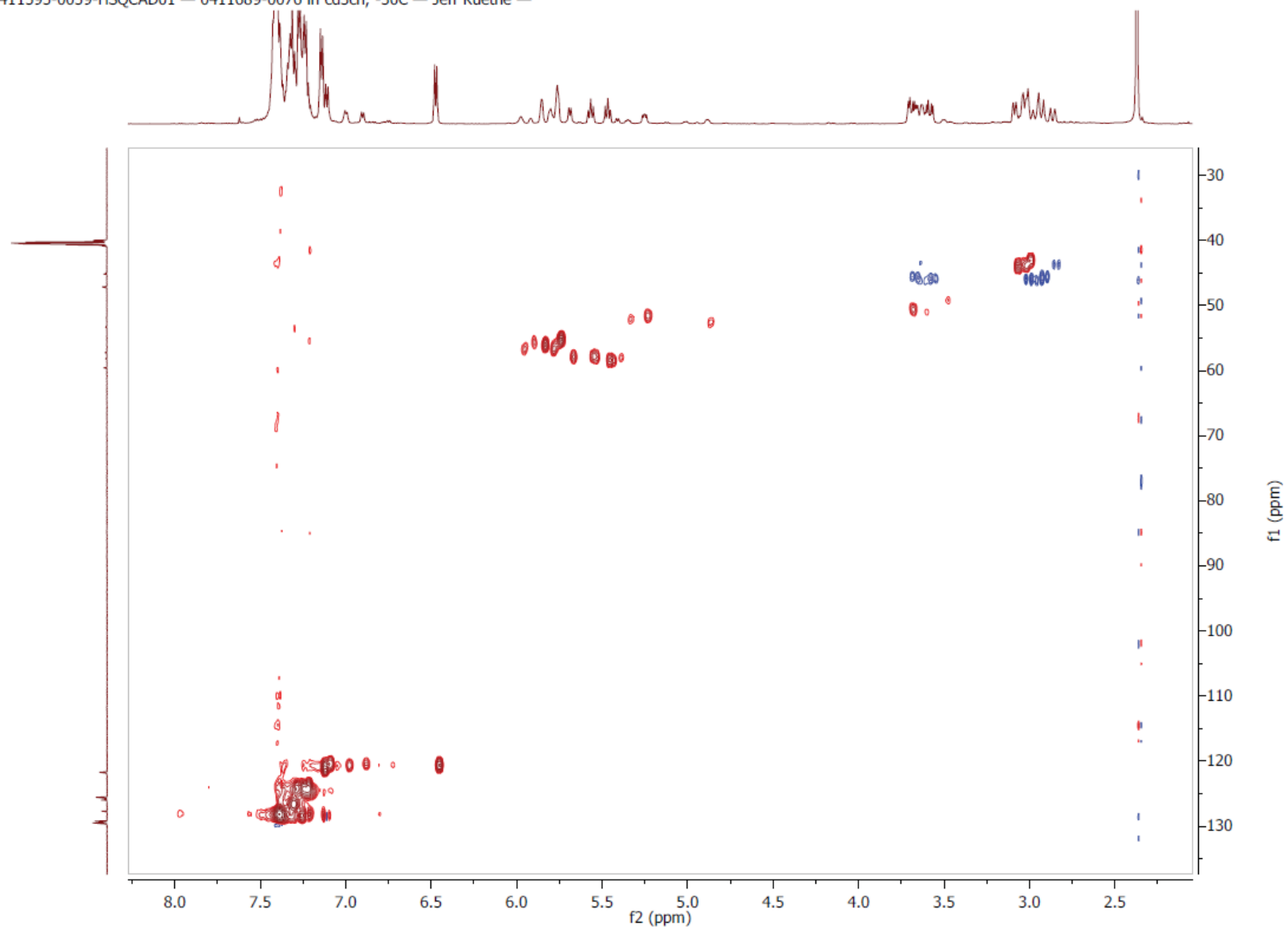
0411595-0059-gCOSY01 — 0411689-0076 in cd3cn, -30C — Jeff Kuethe —



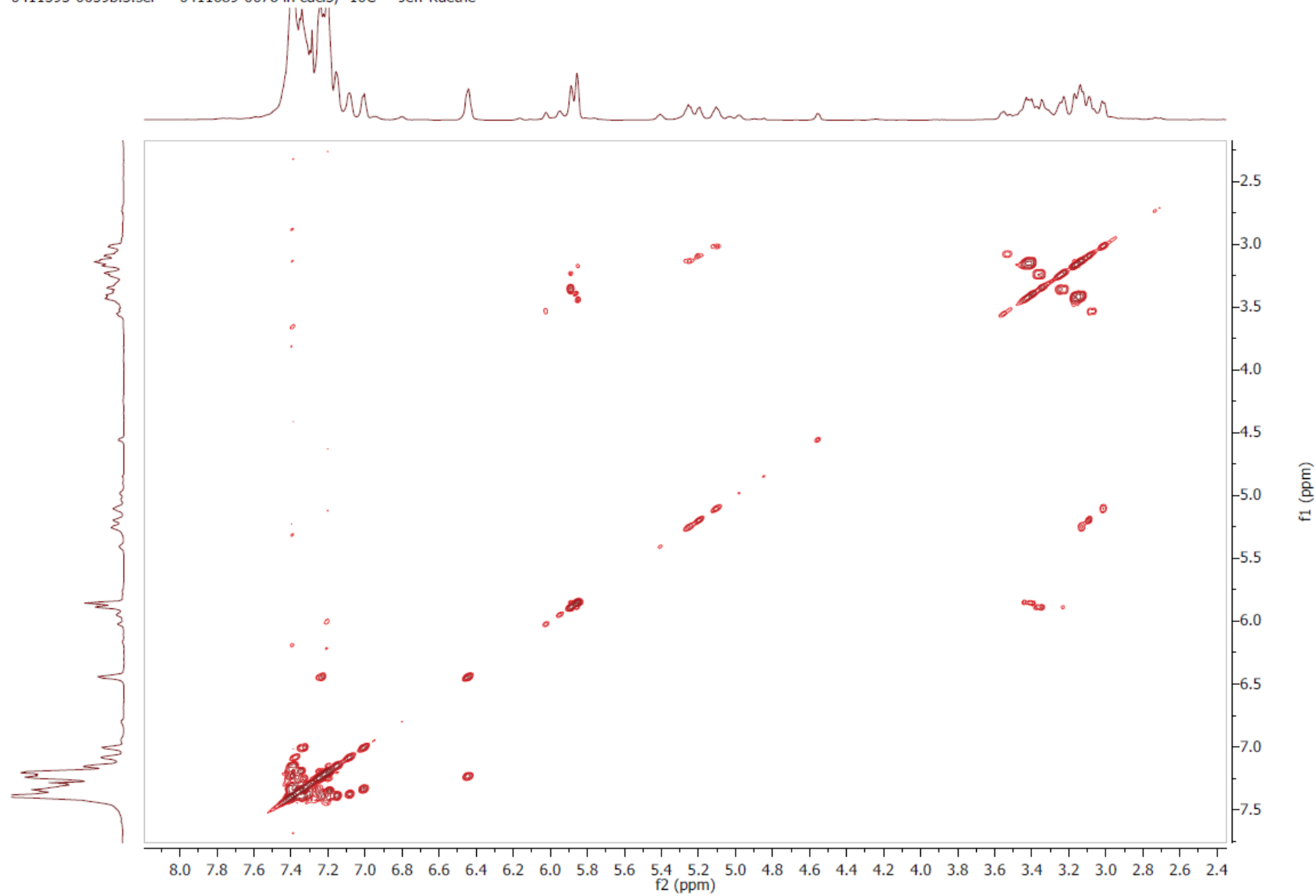
0411595-0059-ROESY01 — 0411689-0076 in cd3cn, -30C — Jeff Kuethe —



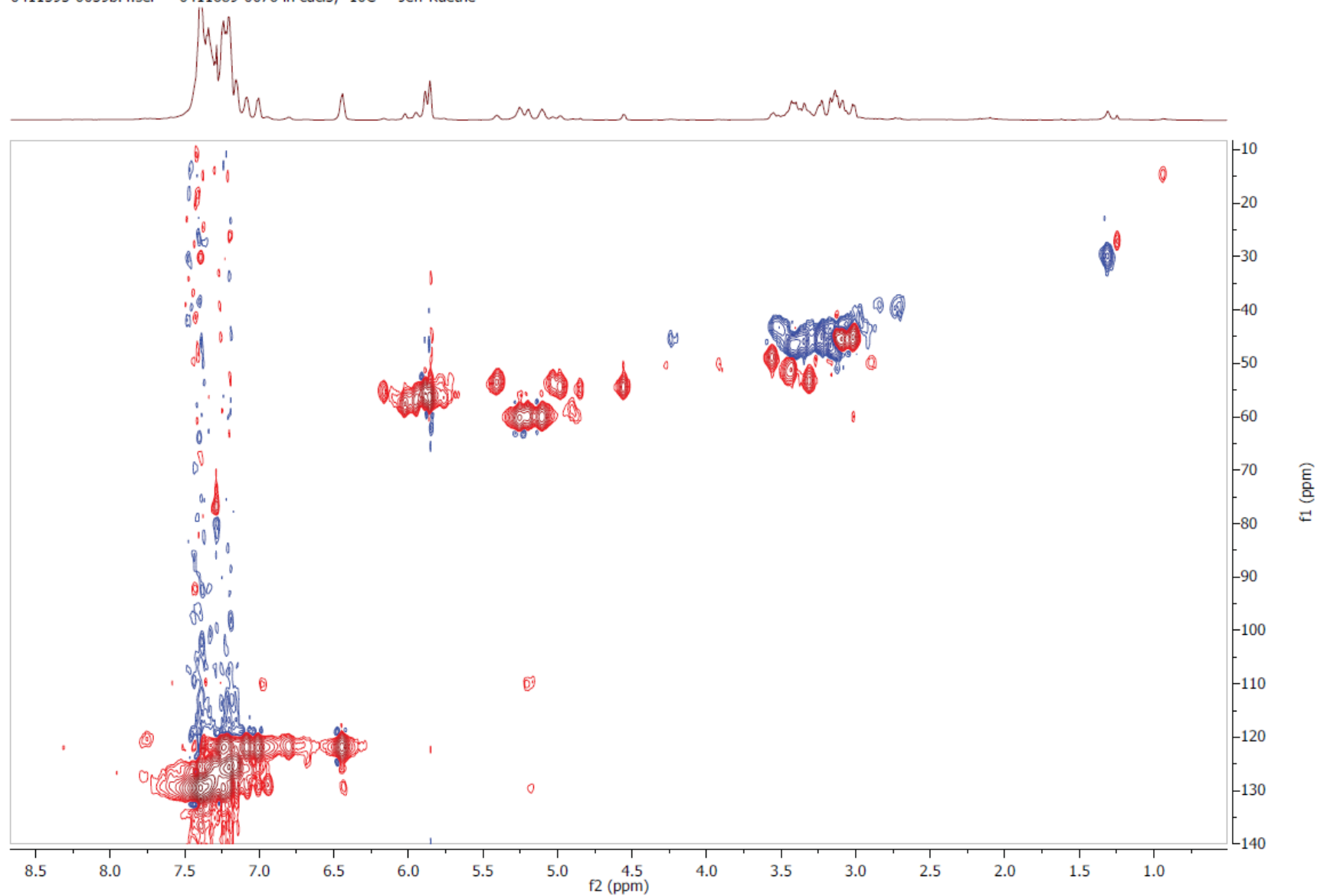
0411595-0059-HSQCAD01 — 0411689-0076 in cd3cn, -30C — Jeff Kuethe —



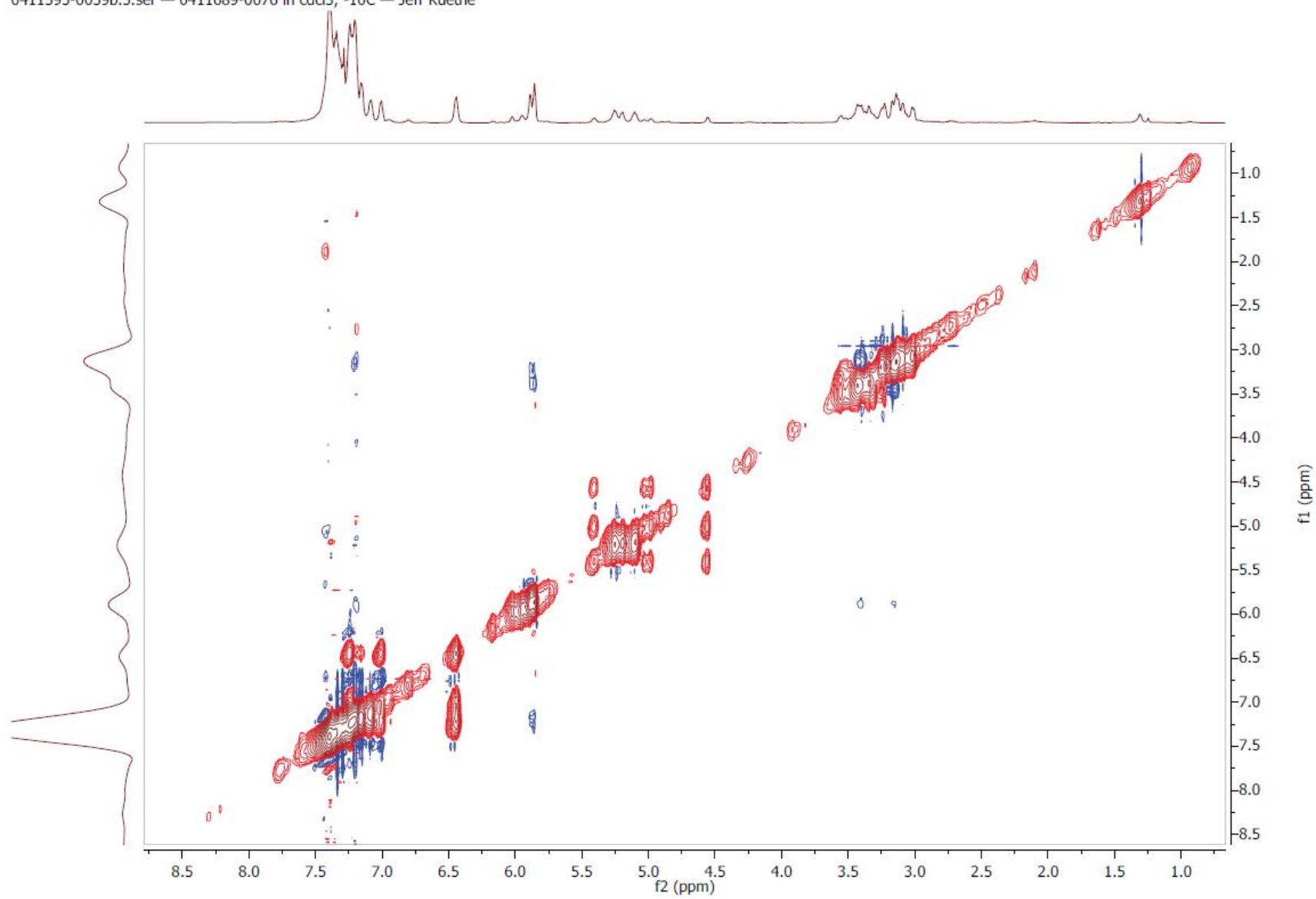
0411595-0059b.3.ser — 0411689-0076 in cdd3, -10C — Jeff Kuethe



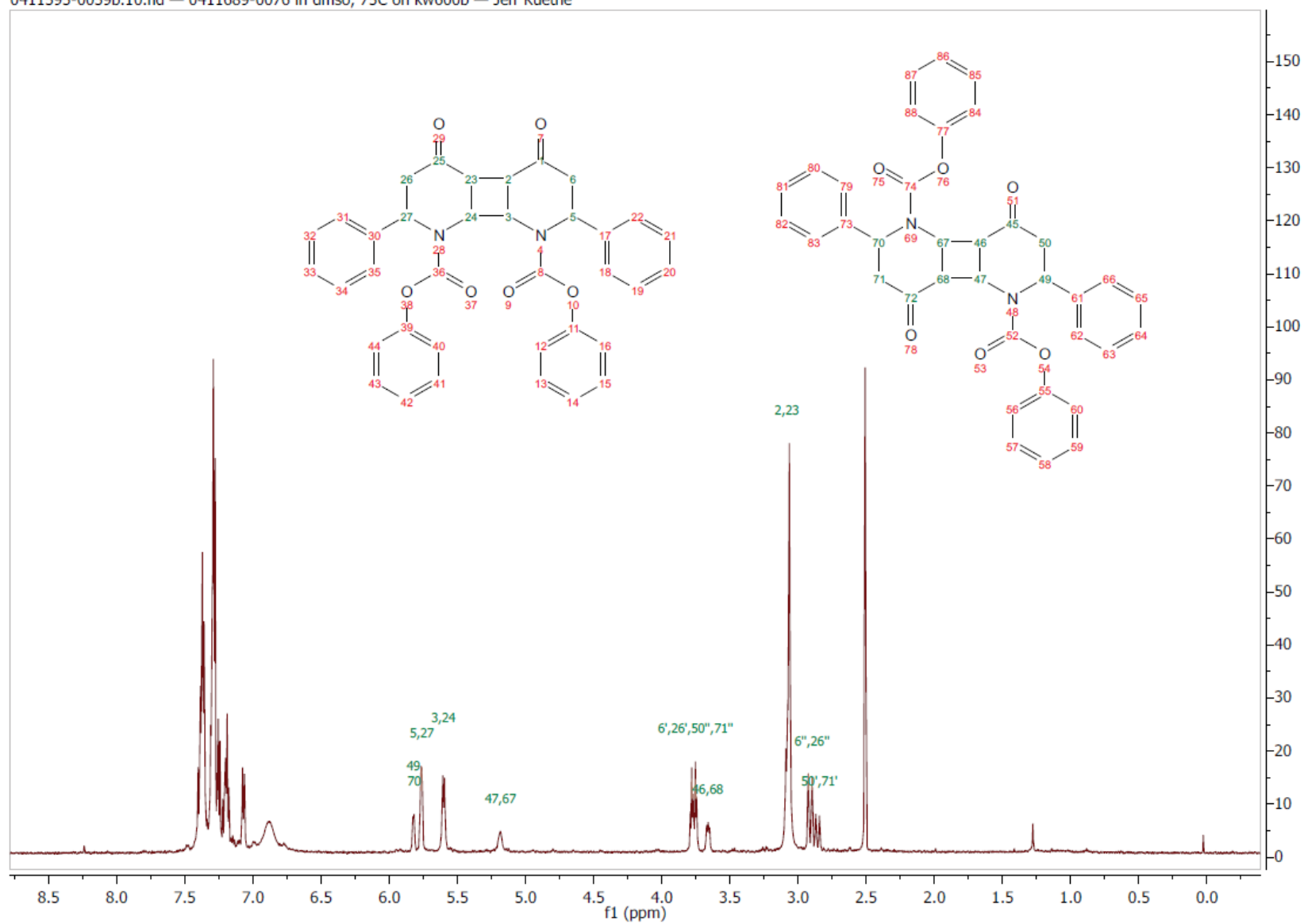
0411595-0059b.4.ser — 0411689-0076 in cdd3, -10C — Jeff Kuethe



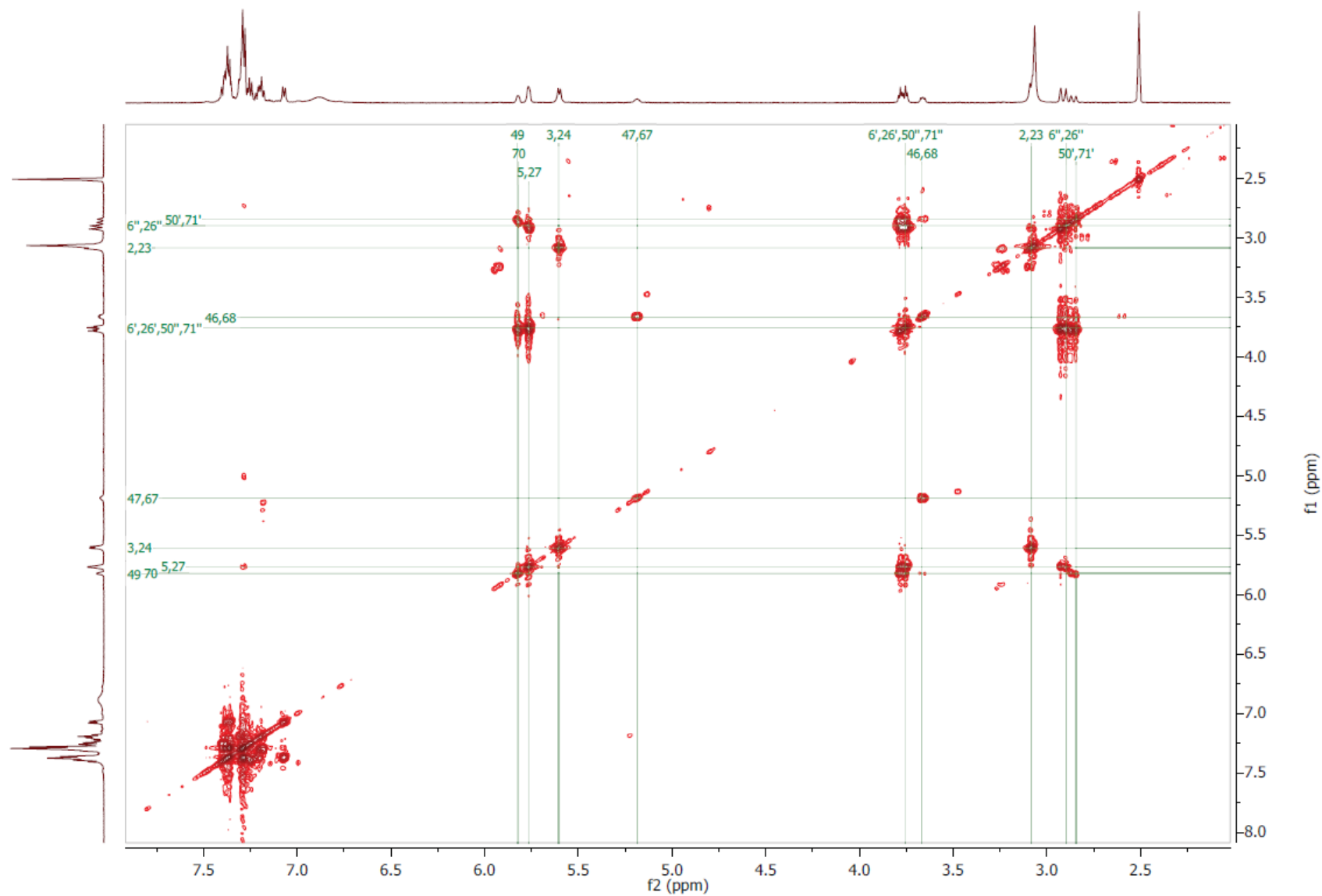
0411595-0059b.5.ser — 0411689-0076 in cdd3, -10C — Jeff Kuethe



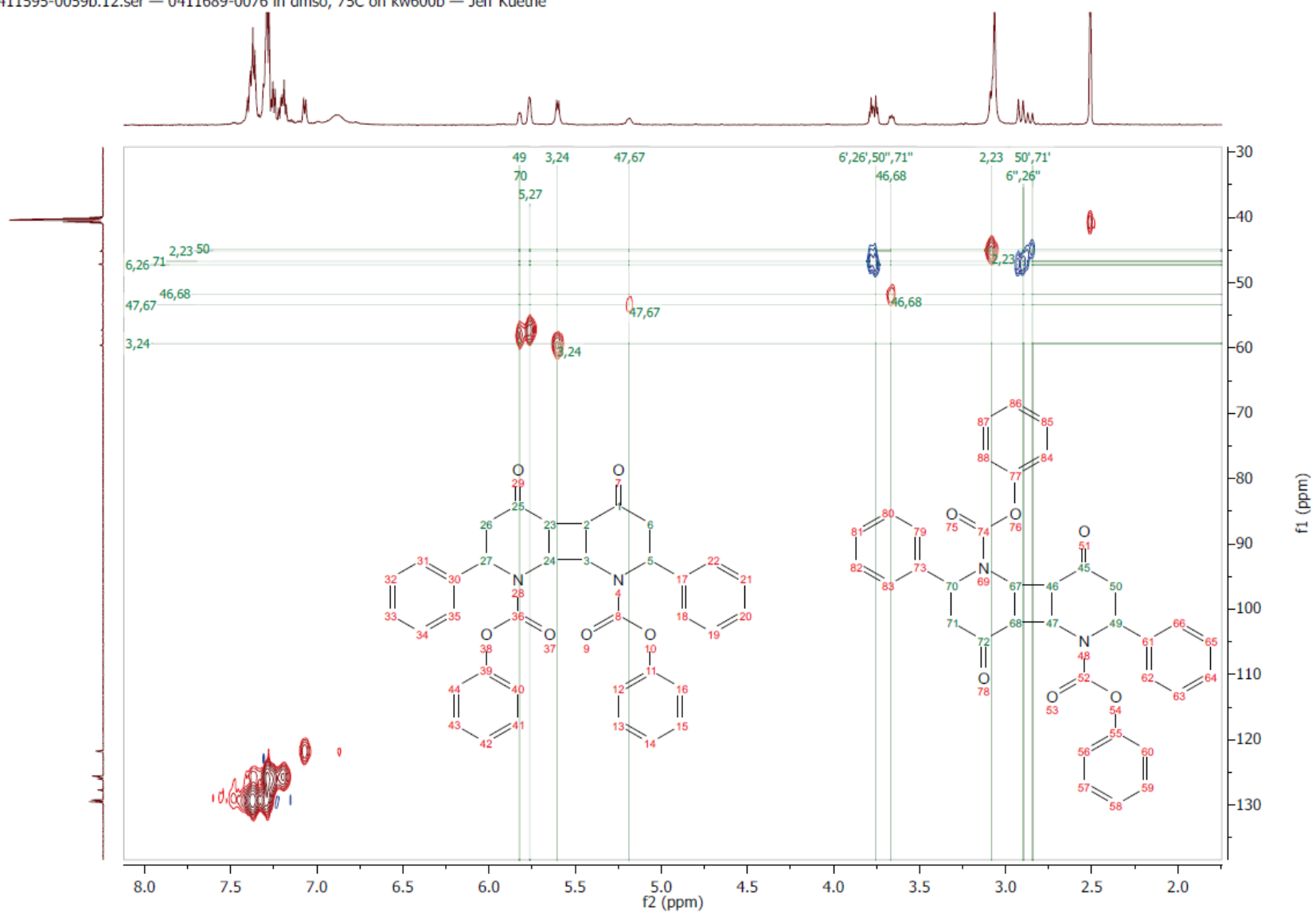
0411595-0059b.10.fid — 0411689-0076 in dmso, 75C on kw600b — Jeff Kuethe



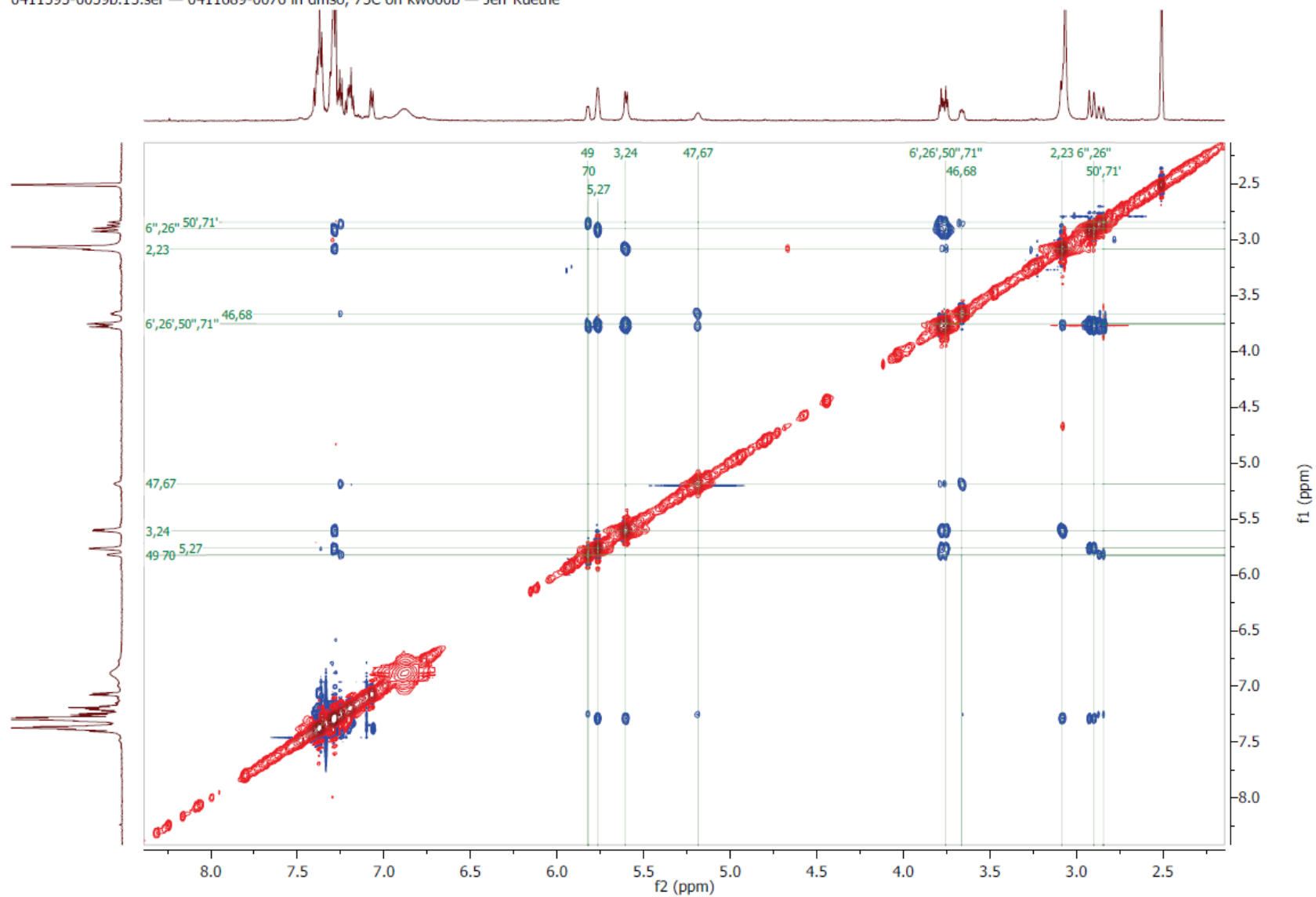
0411595-0059b.11.ser — 0411689-0076 in dms0, 75C on kw600b — Jeff Kuethe



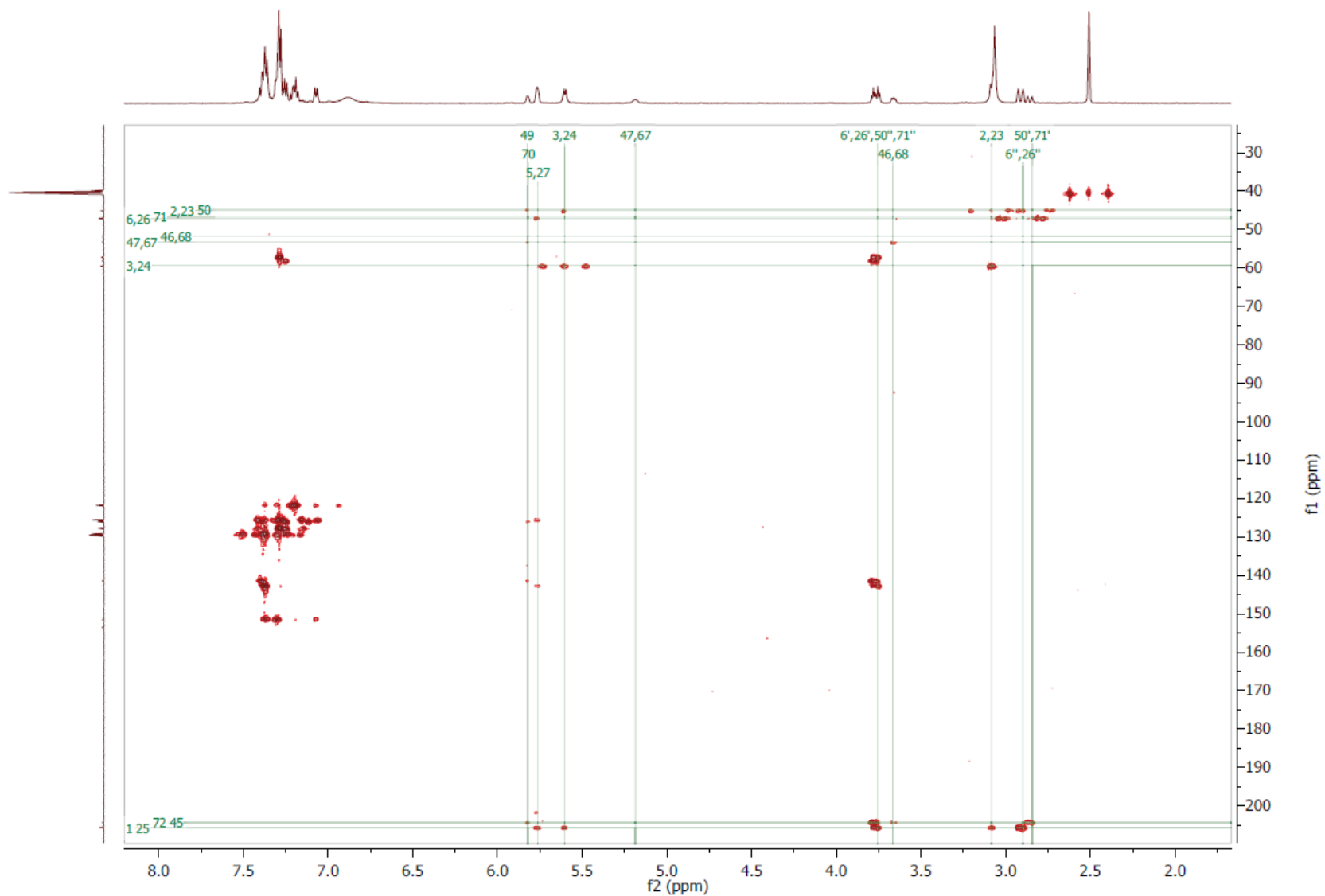
0411595-0059b.12.ser — 0411689-0076 in dmso, 75C on kw600b — Jeff Kuethe



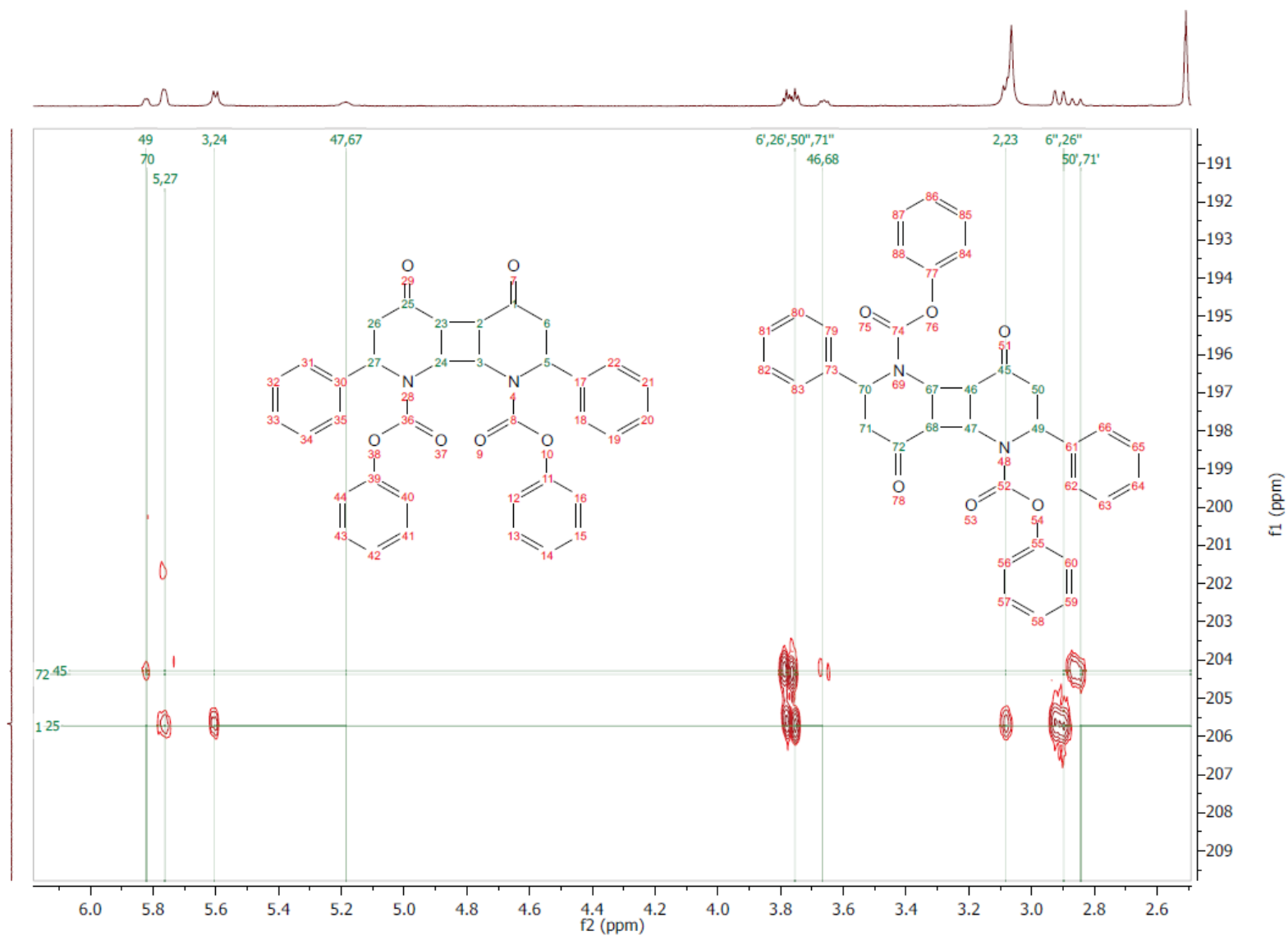
0411595-0059b.13.ser — 0411689-0076 in dmsd, 75C on kw600b — Jeff Kuethe



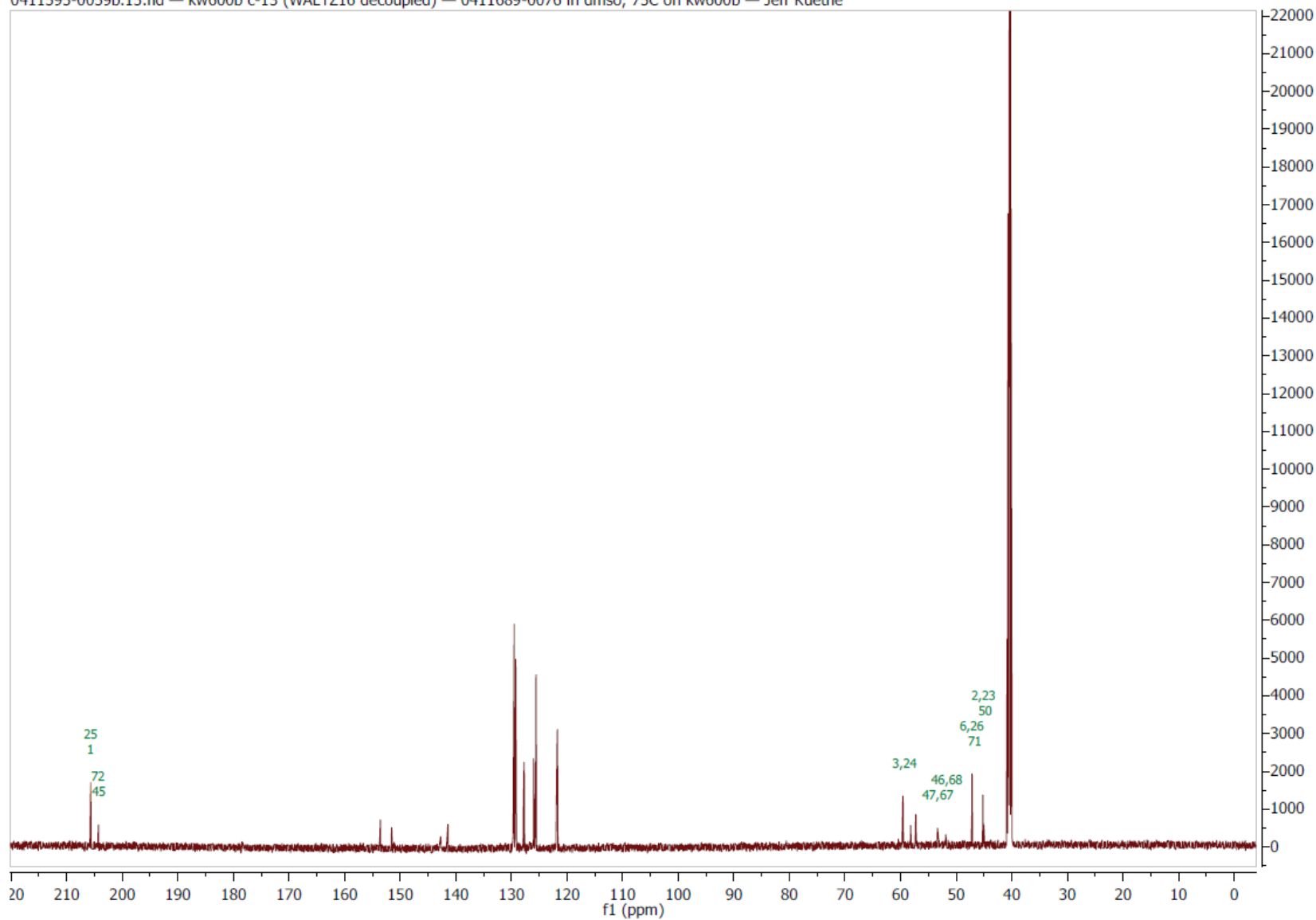
0411595-0059b.14.ser — 0411689-0076 in dms0, 75C on kw600b — Jeff Kuethe



0411595-0059b.14.ser — 0411689-0076 in dmsd, 75C on kw600b — Jeff Kuethe



0411595-0059b.15.fid — kw600b c-13 (WALTZ16 decoupled) — 0411689-0076 in dmso, 75C on kw600b — Jeff Kuethe



Characterization of Compound 26a:

