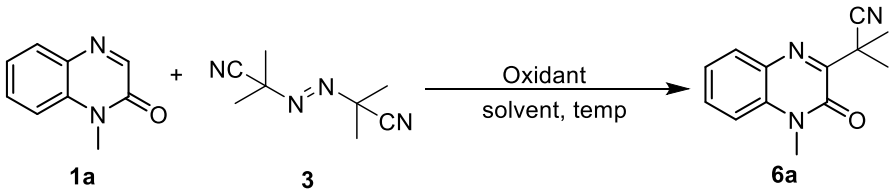
Supporting Information

CONTENTS:

Table: Reaction optimization studies for the synthesis of **6a**[a,b]

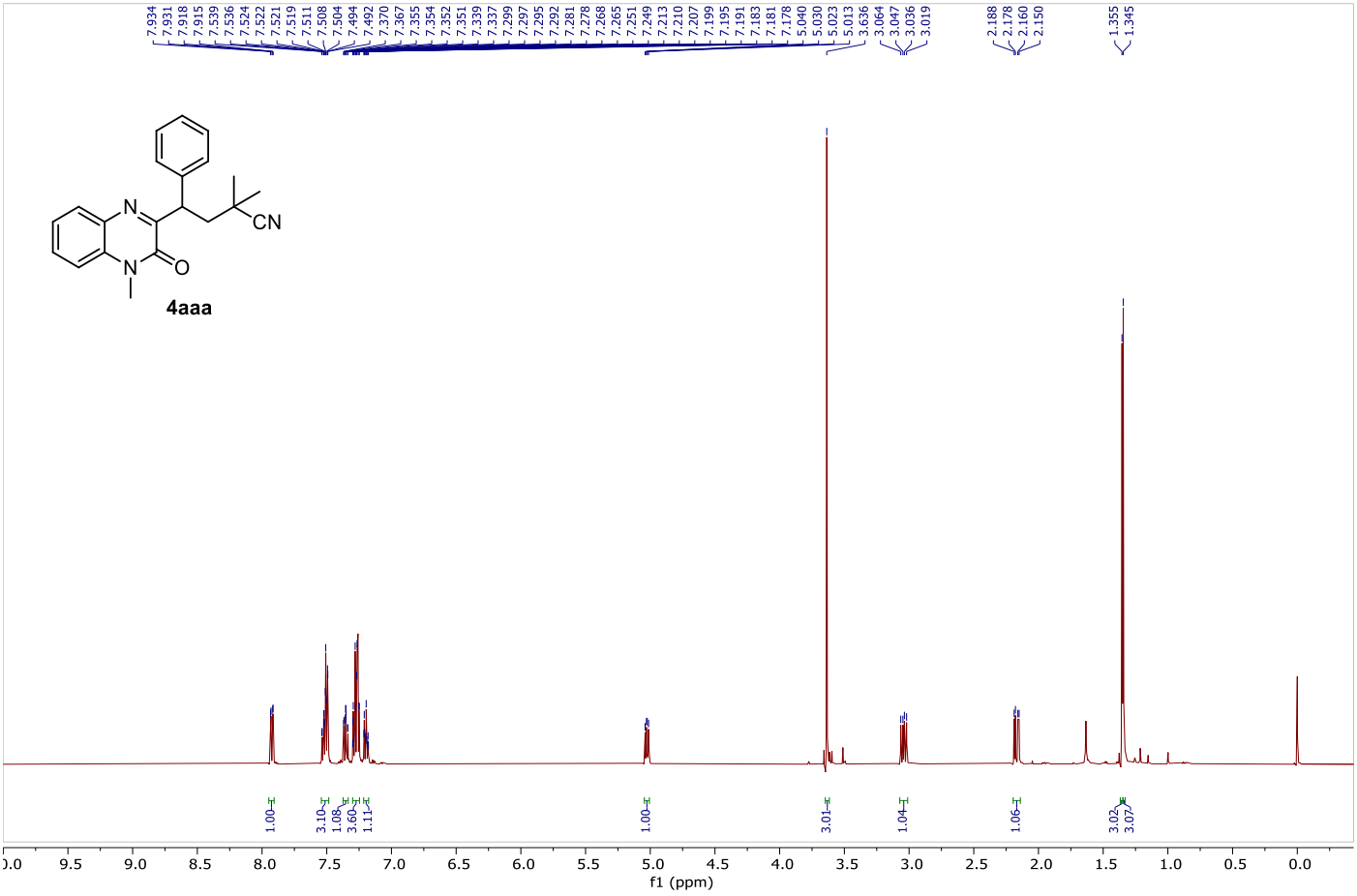


1a **3** **6a**

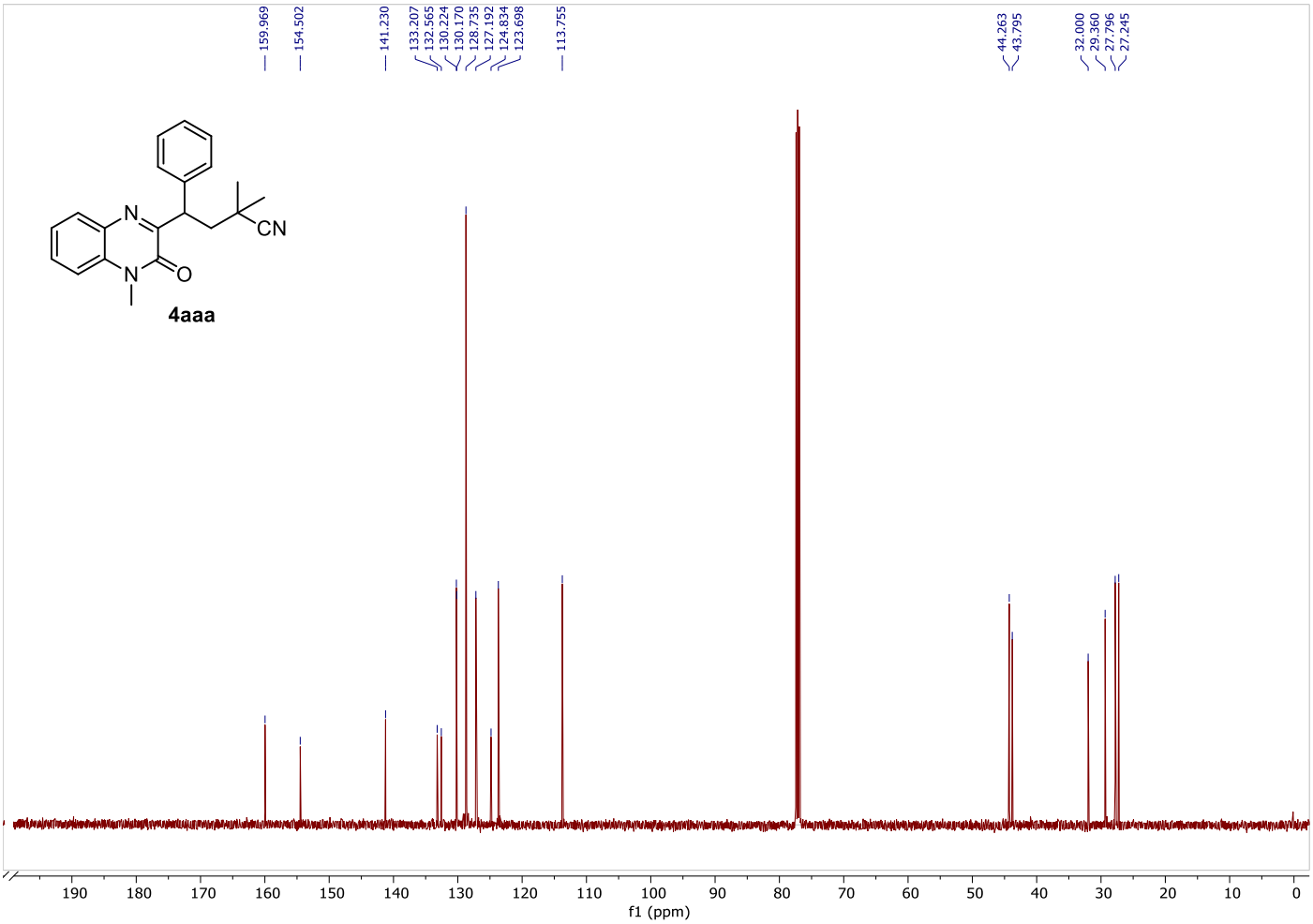
Entry	Oxidant (Equiv)	Additive	Solvent (2 mL)	Temp (^oC)	Yield (%)
1	$K_2S_2O_8$ (1.5)		EtOAc	80	20
2	$K_2S_2O_8$ (1.5)		Cyclohexane	80	trace
3	$K_2S_2O_8$ (1.5)		n-Hexane	60	n.r.
4	**$K_2S_2O_8$ (1.5)**		**Cyclohexene**	**80**	**50**
5	$K_2S_2O_8$ (1.5)		DMF	80	trace
6	$K_2S_2O_8$ (1.5)		CH_3CN: Cyclohexene (1:1)	80	25
7	$K_2S_2O_8$ (1.5)		CH_3CN	80	35
8	$K_2S_2O_8$ (1.5)	0.2 mL cyclohexene	CH_3CN	80	15

[a]*Reaction conditions:* A mixture of 1**a** (0.2 mmol), **3** (0.3 mmol) in the presence of oxidant and solvent was stirred as mentioned above in the table. [b]isolated yields, n.r. = no reaction.

^{1}H-NMR (500 MHz, $CDCl_3$)



^{13}C-NMR (125 MHz, $CDCl_3$)



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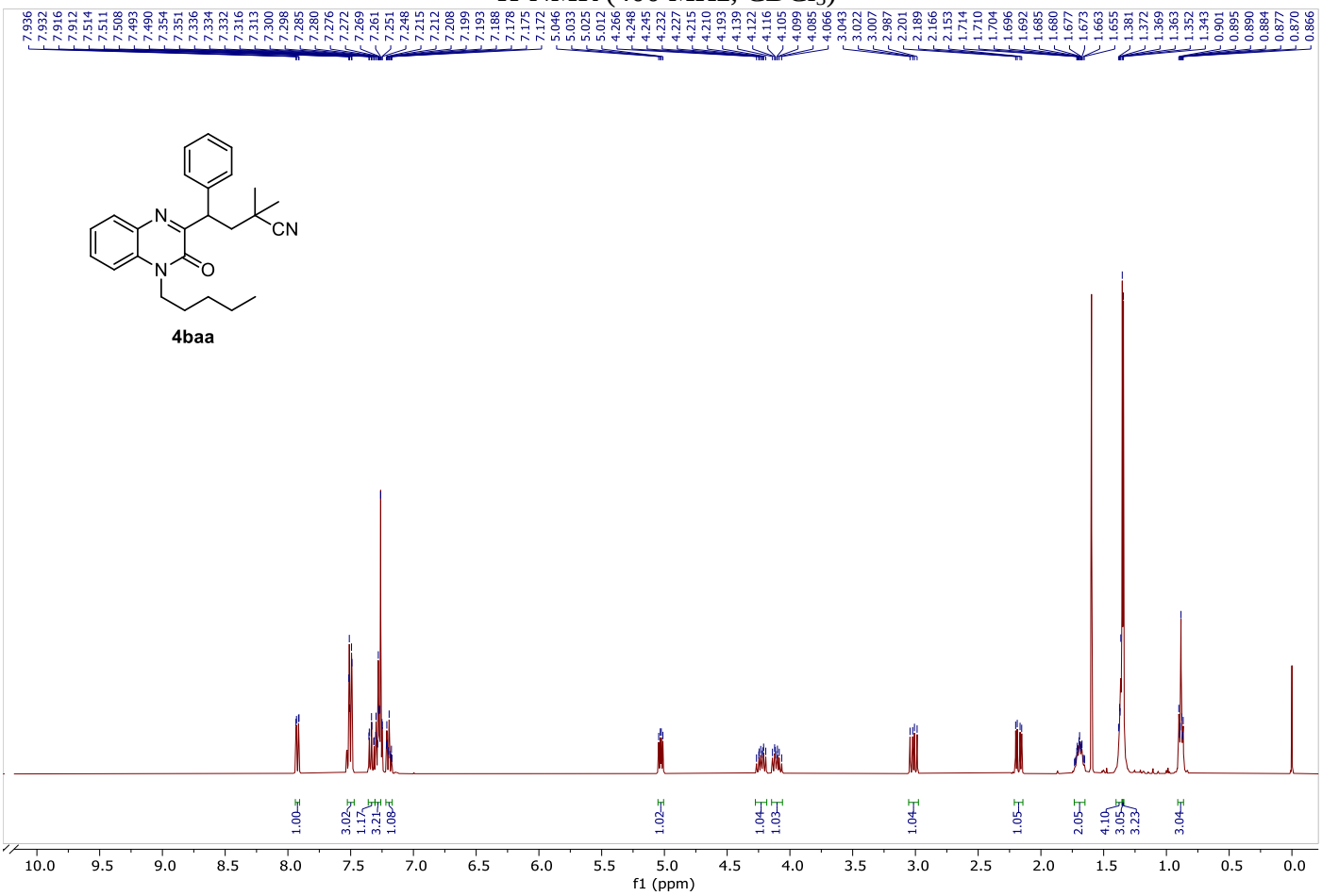

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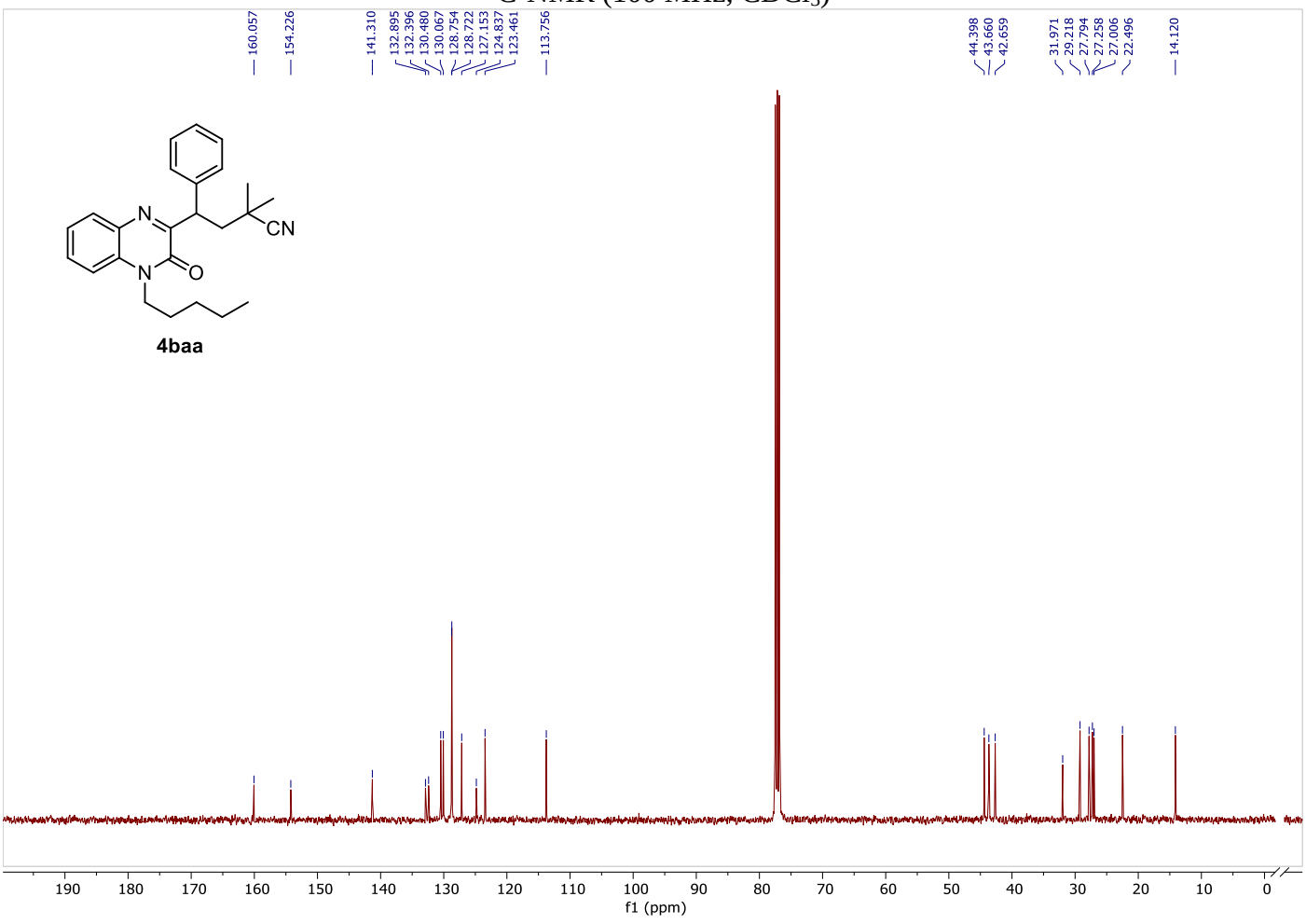

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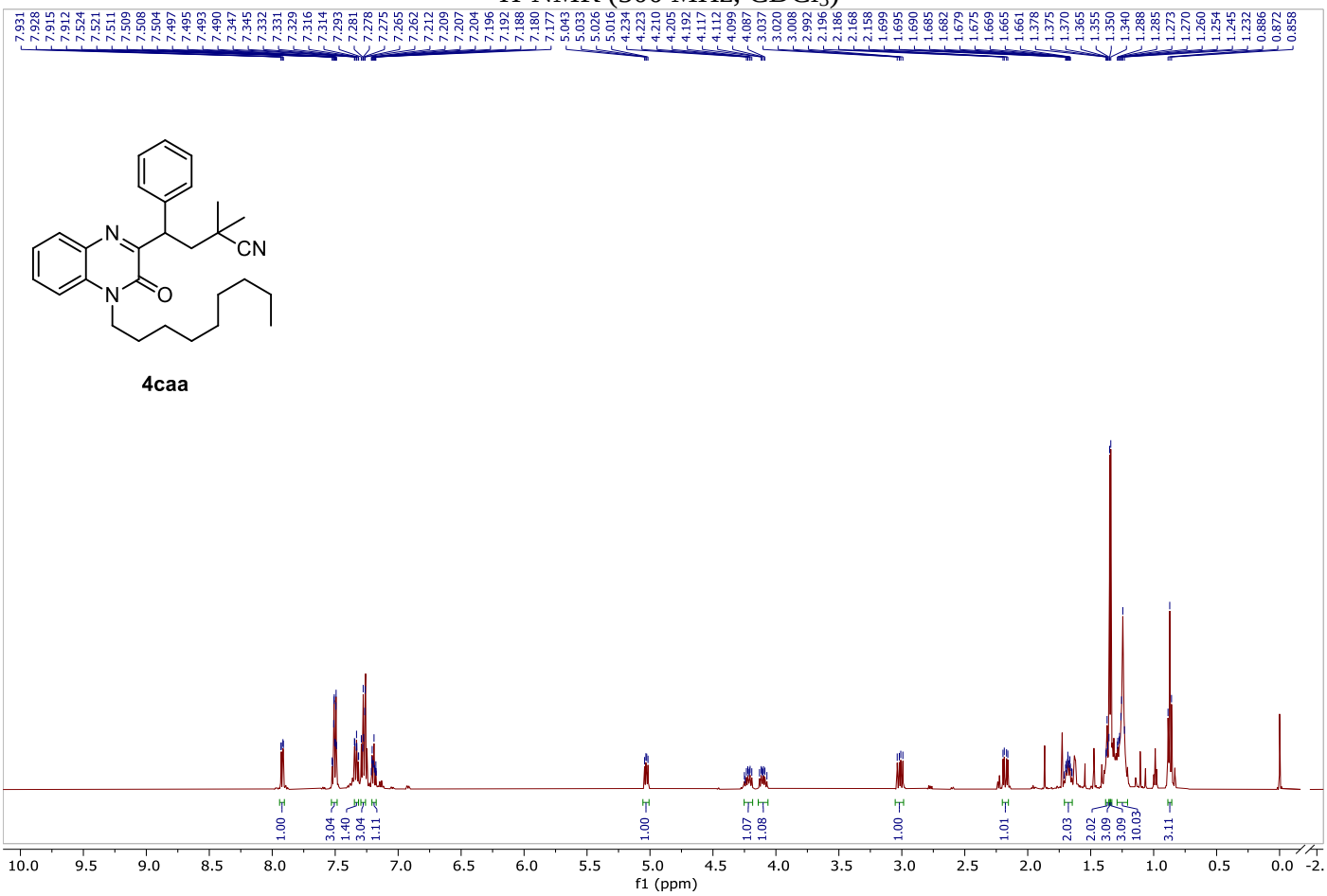

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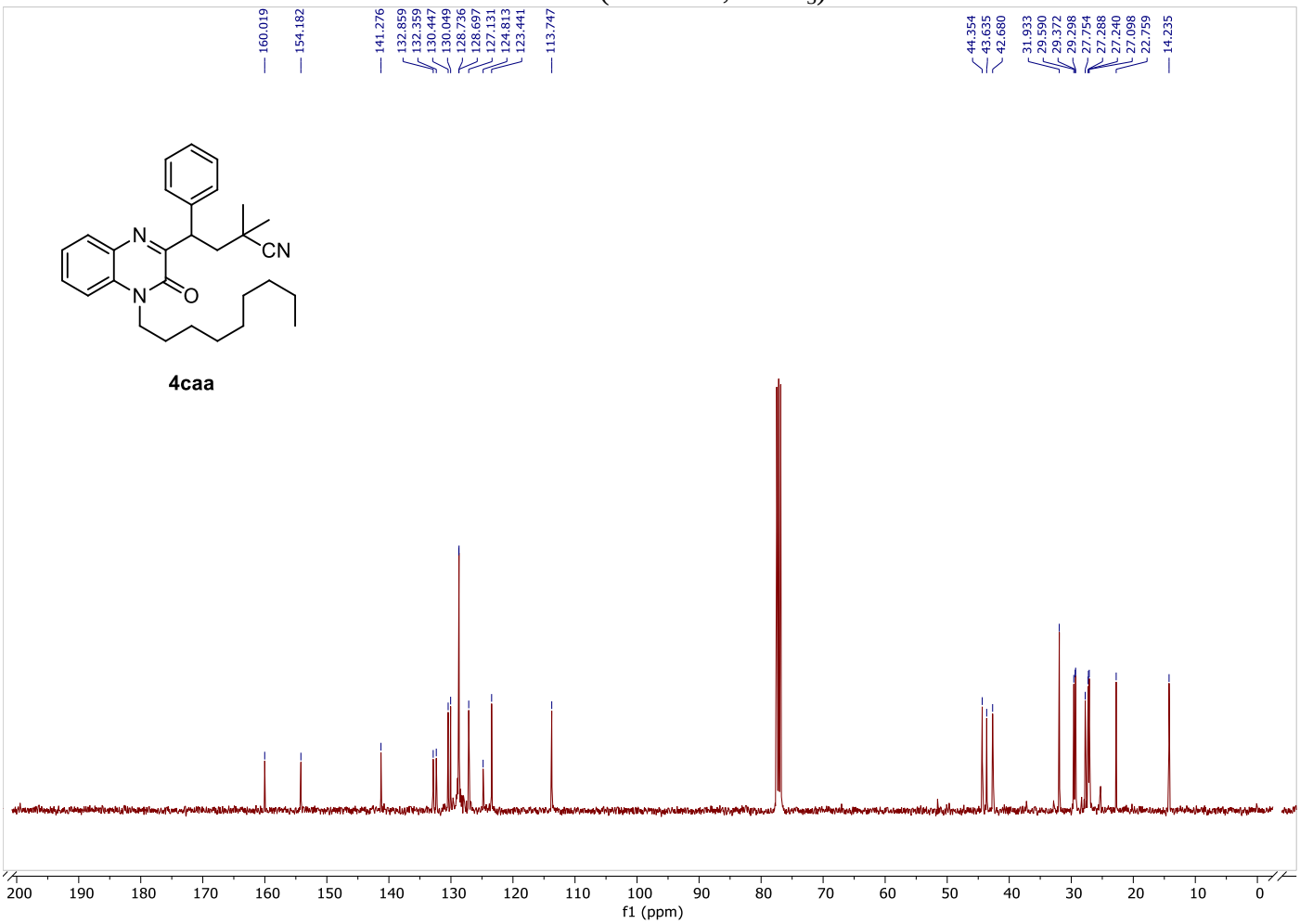

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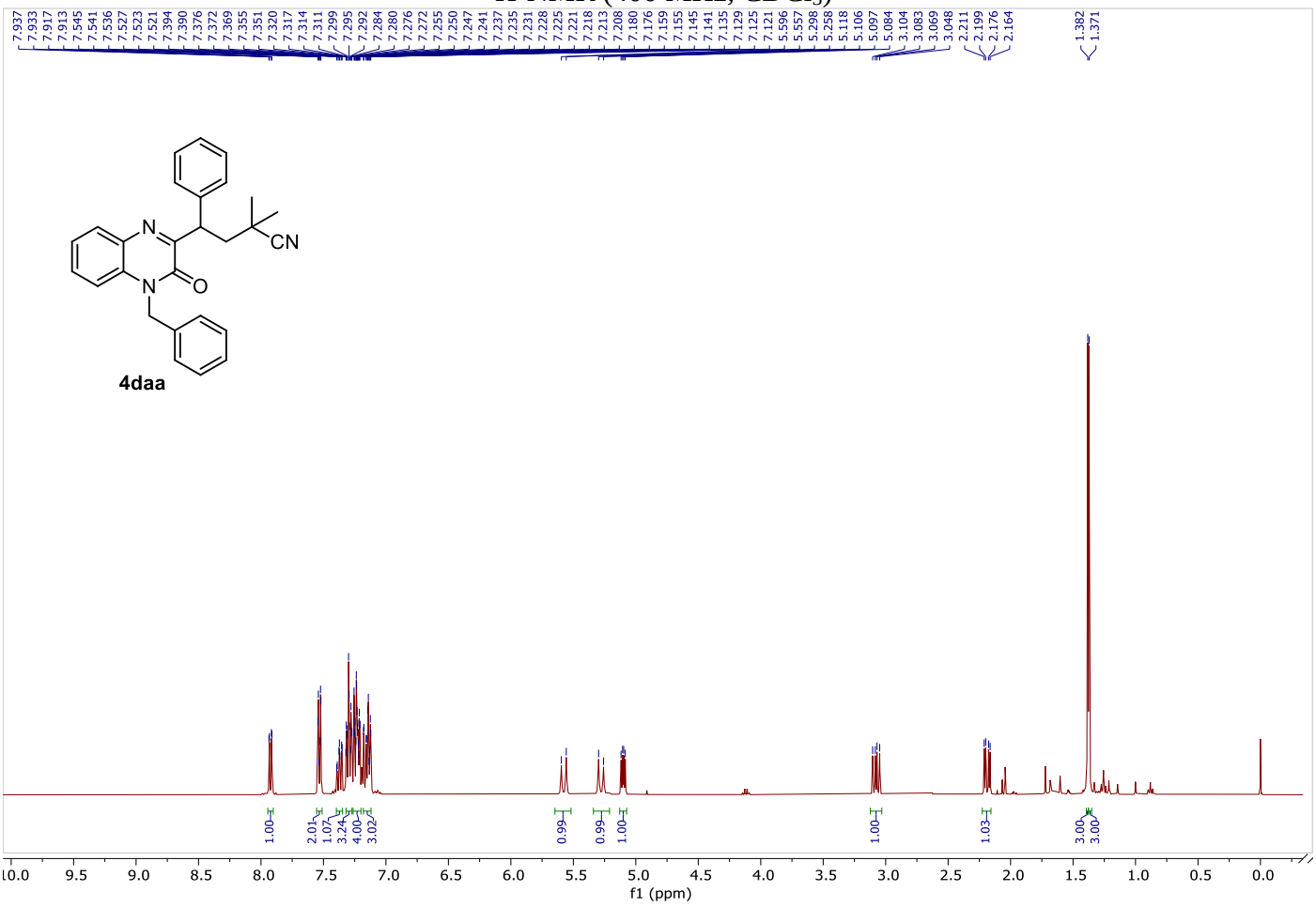

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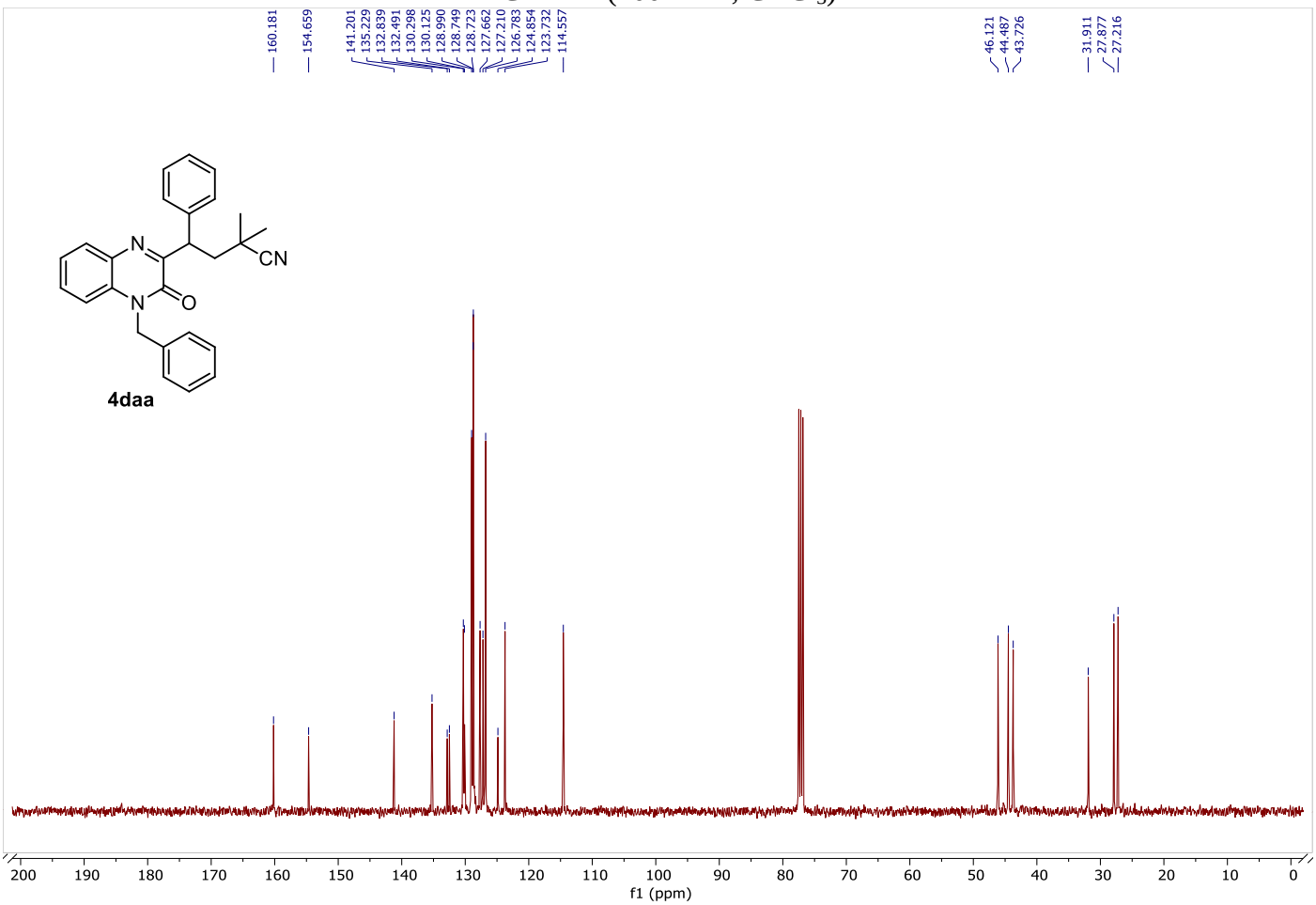

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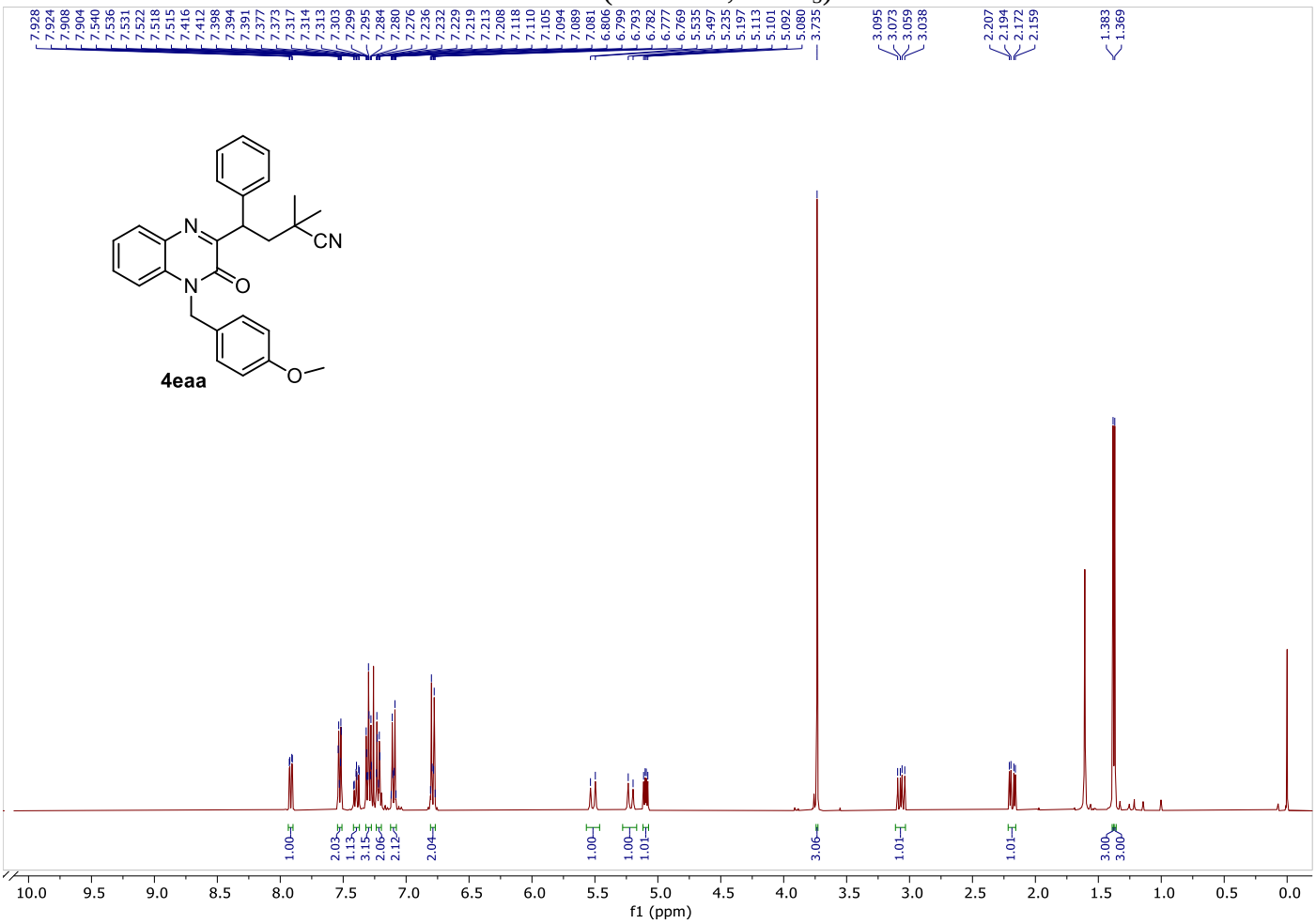

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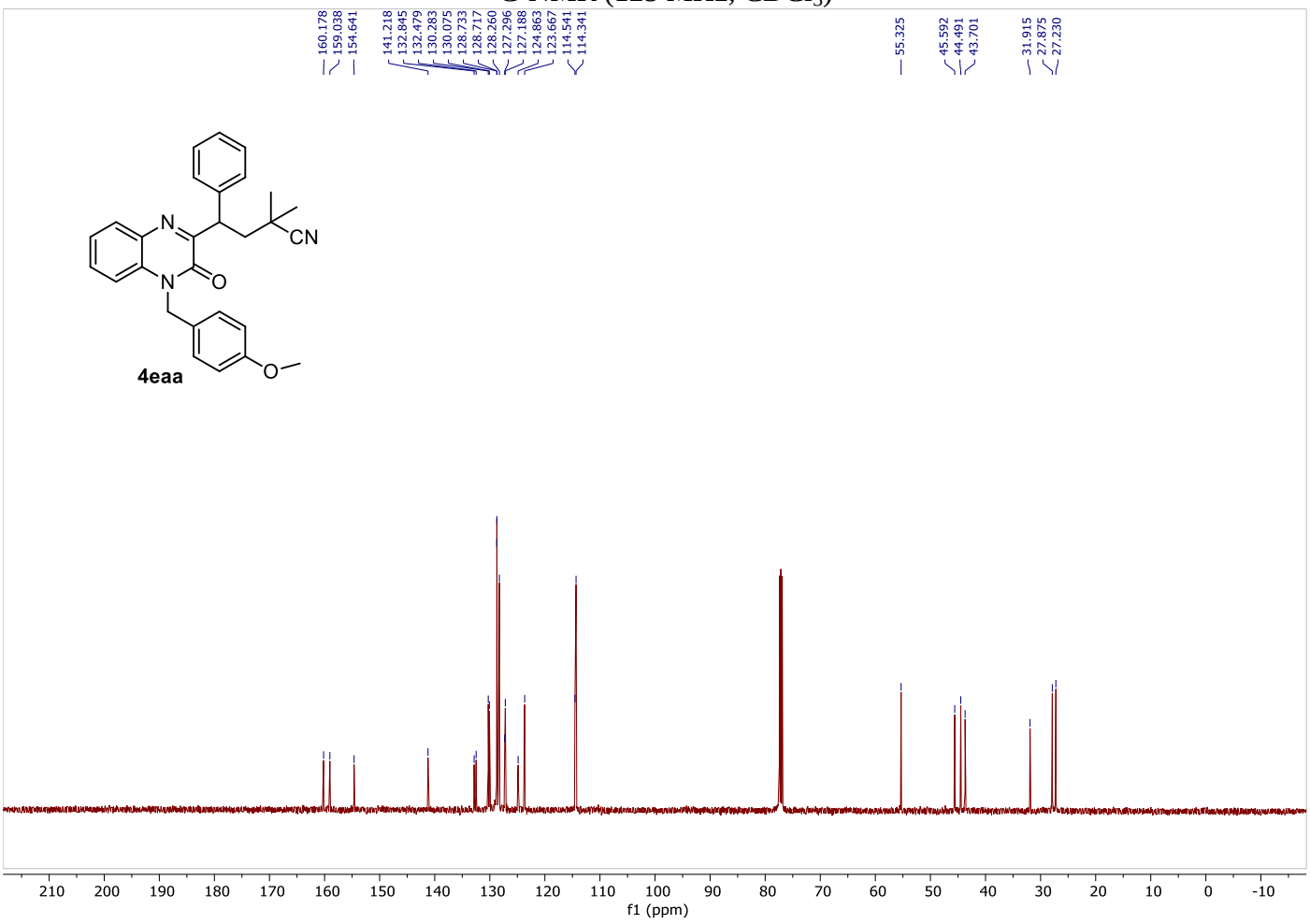

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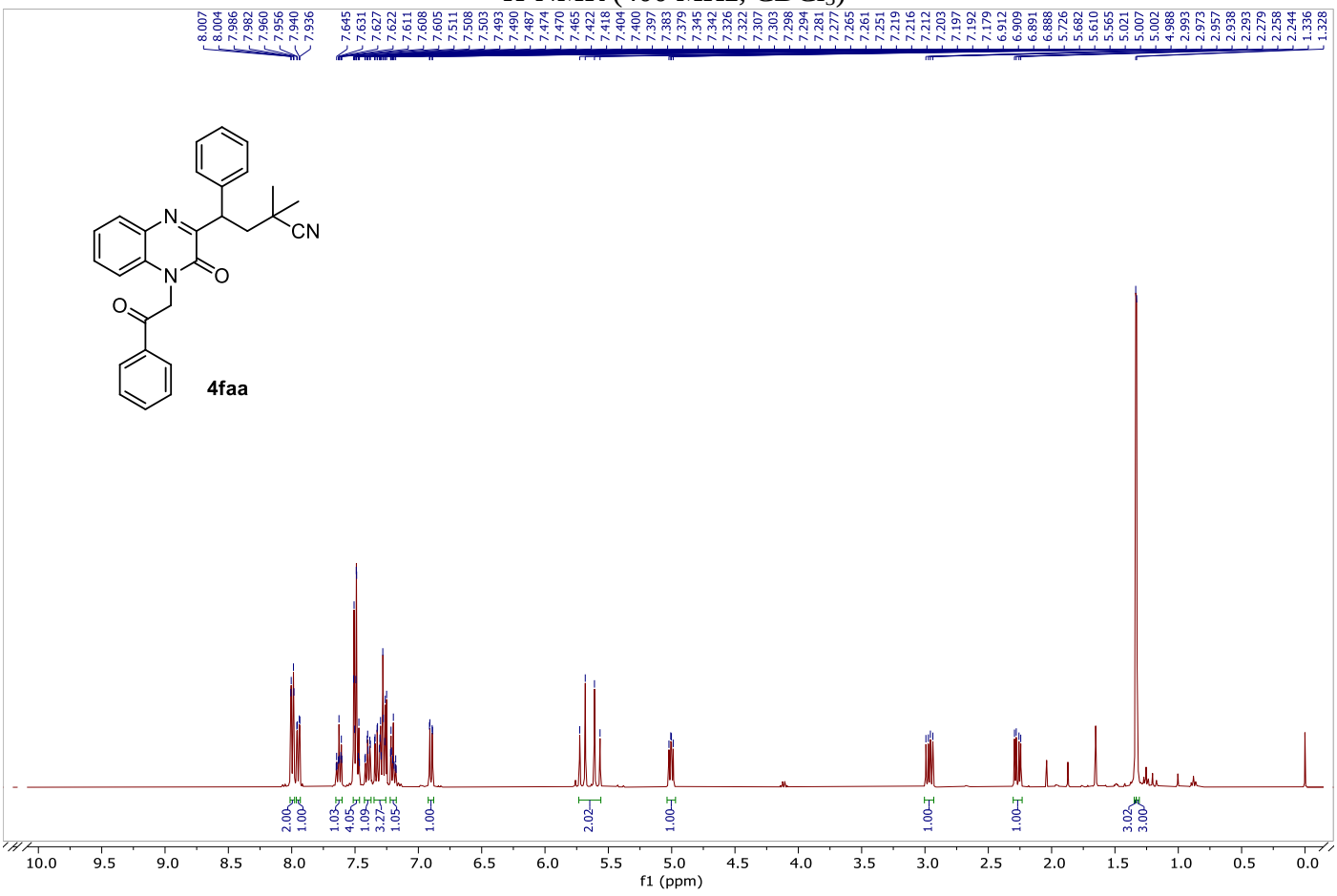

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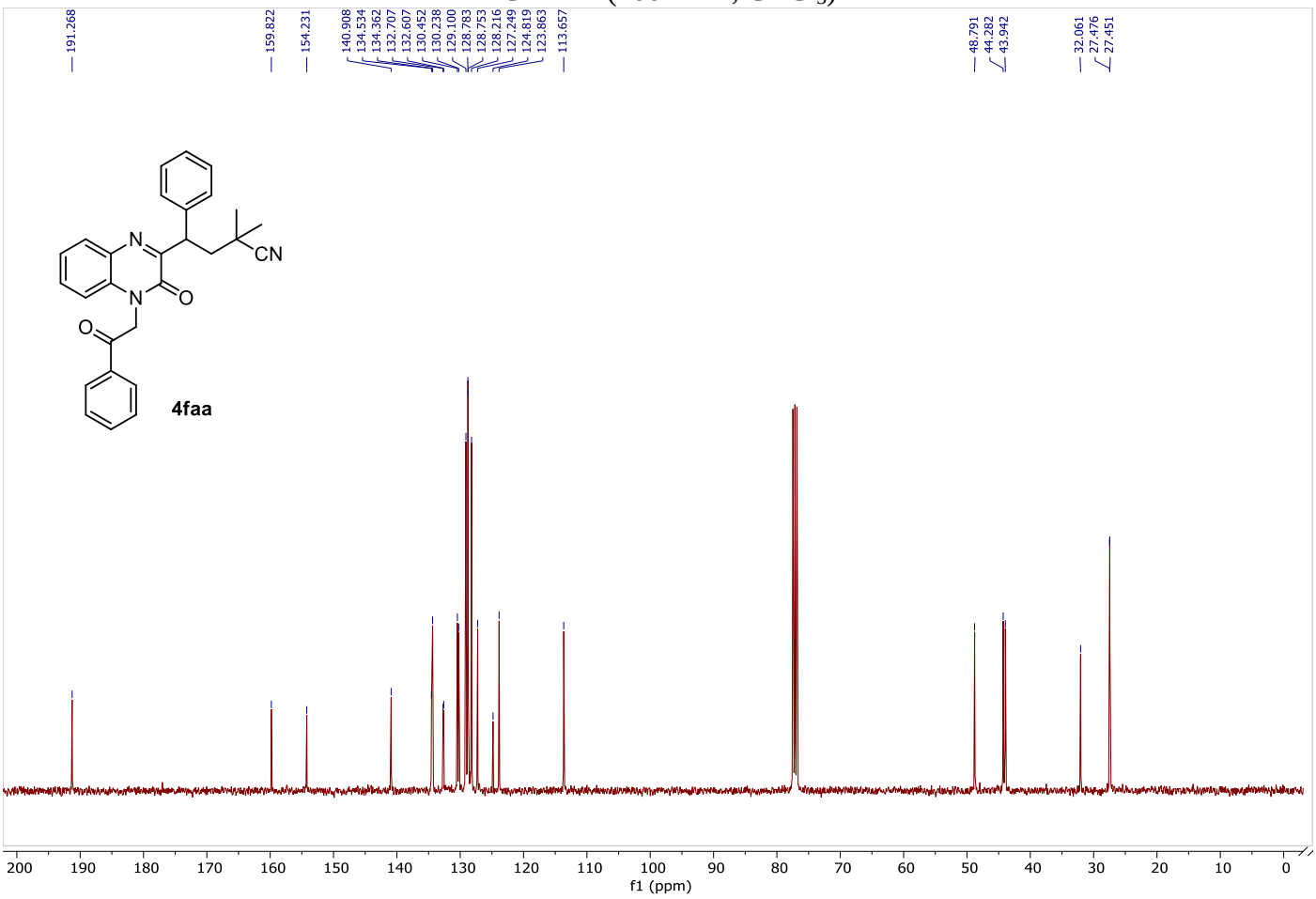

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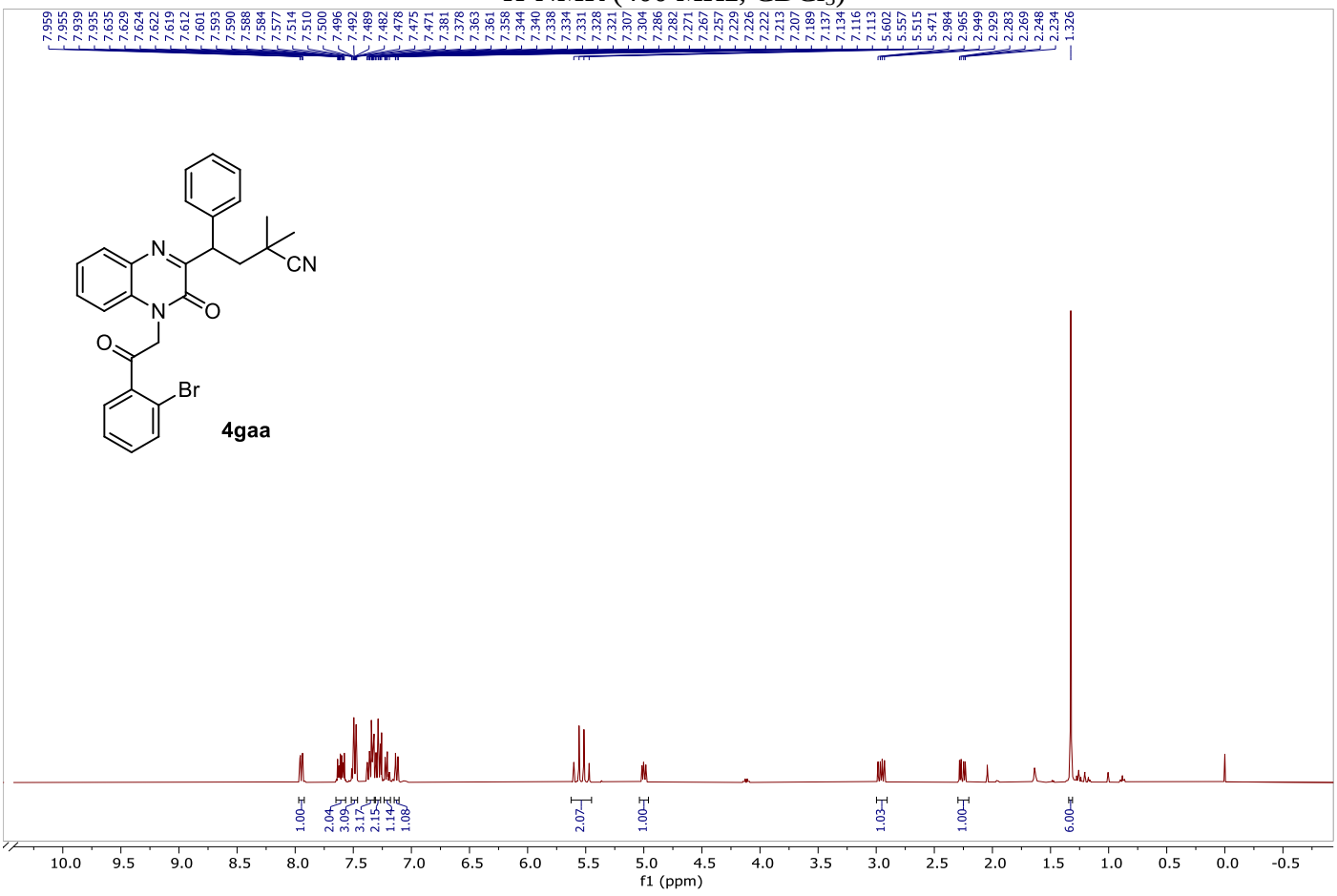

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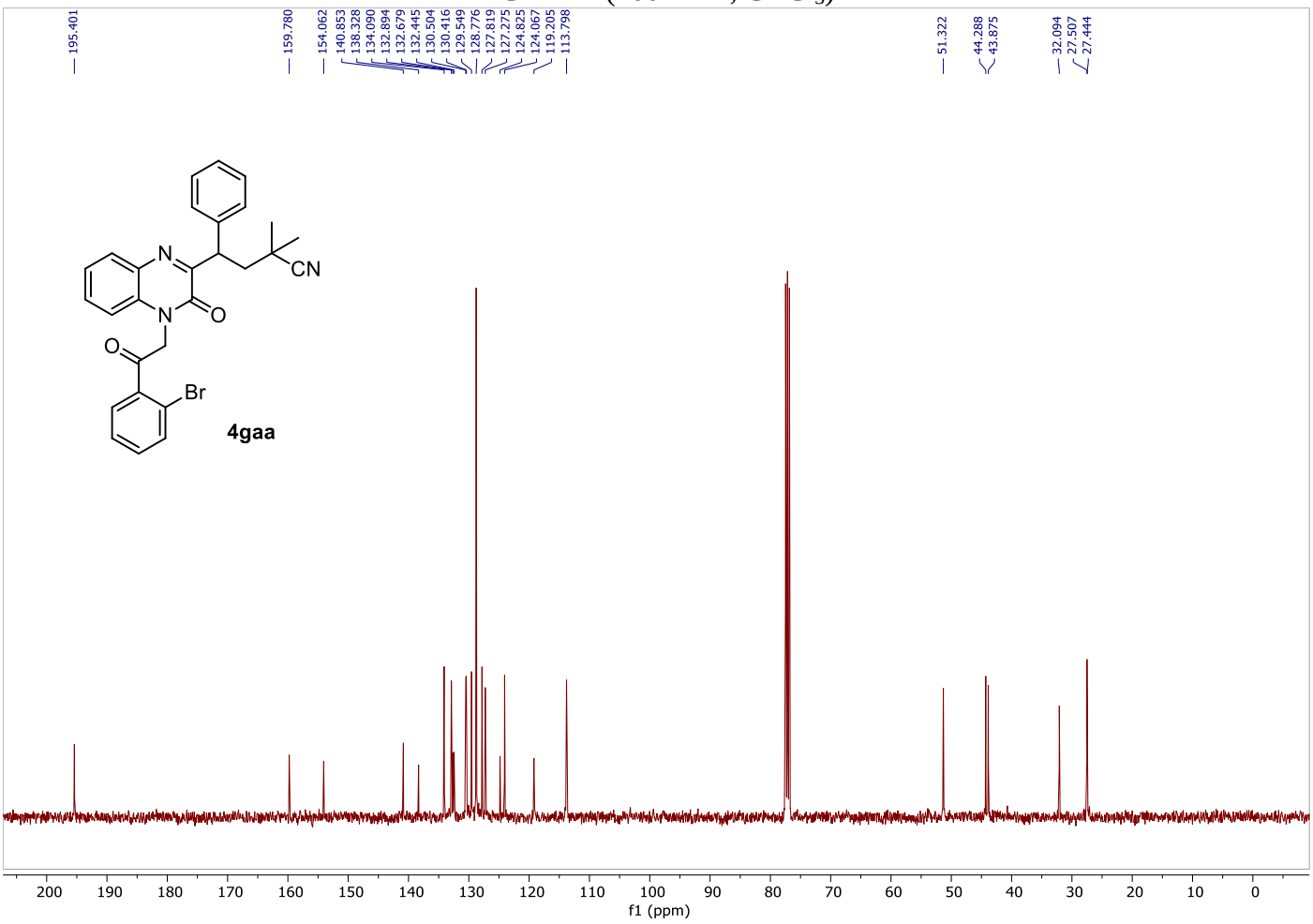

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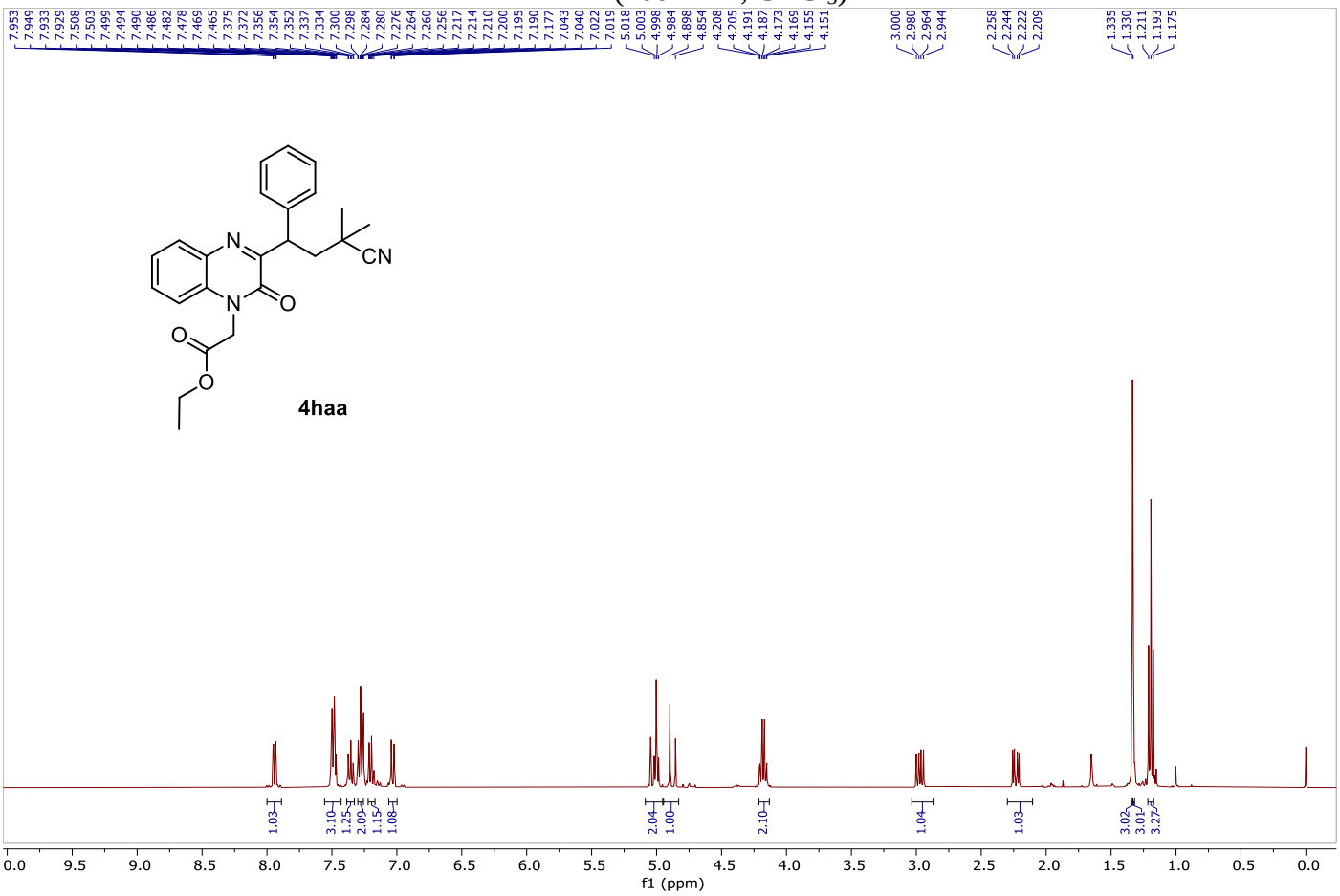

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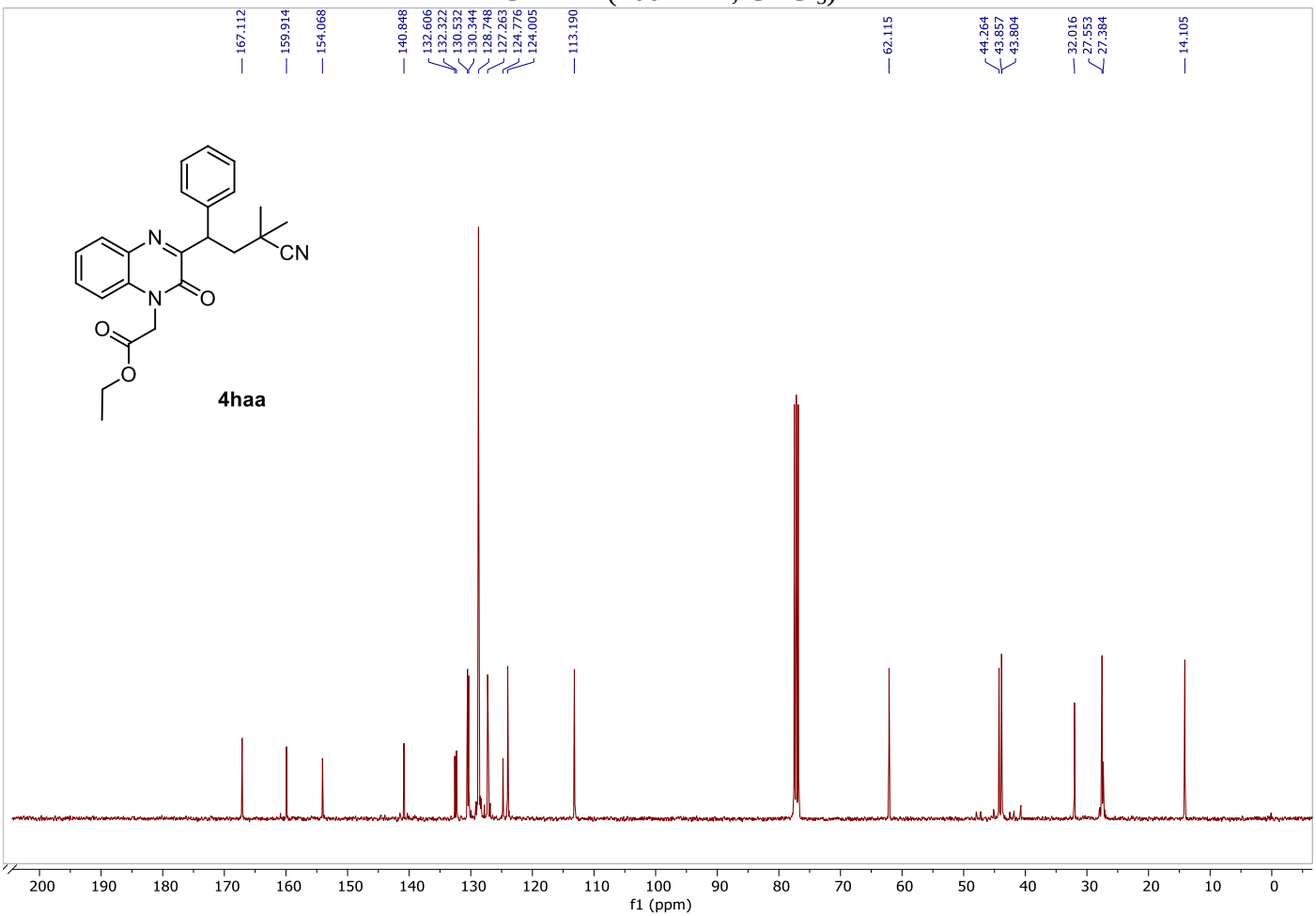

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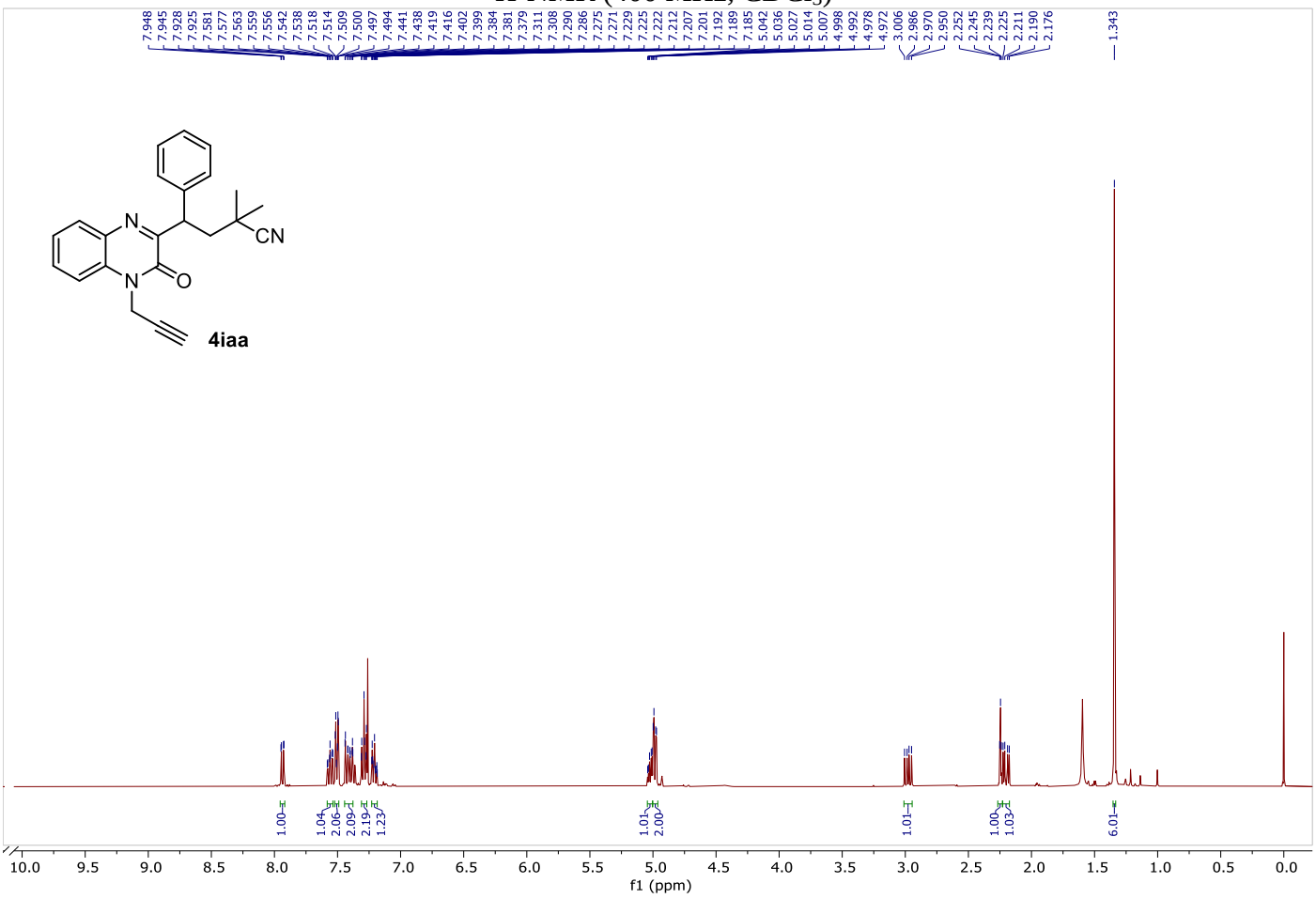

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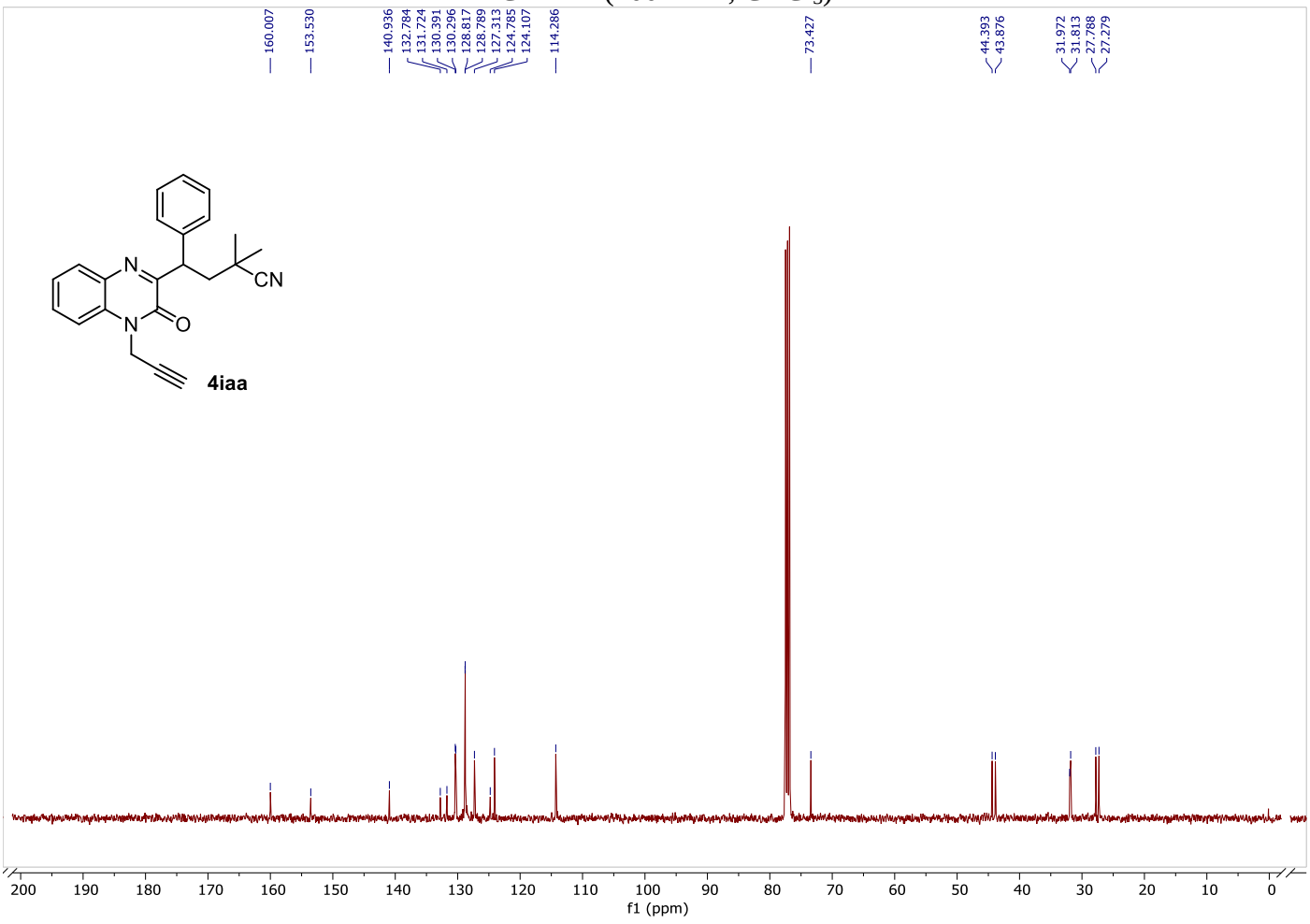

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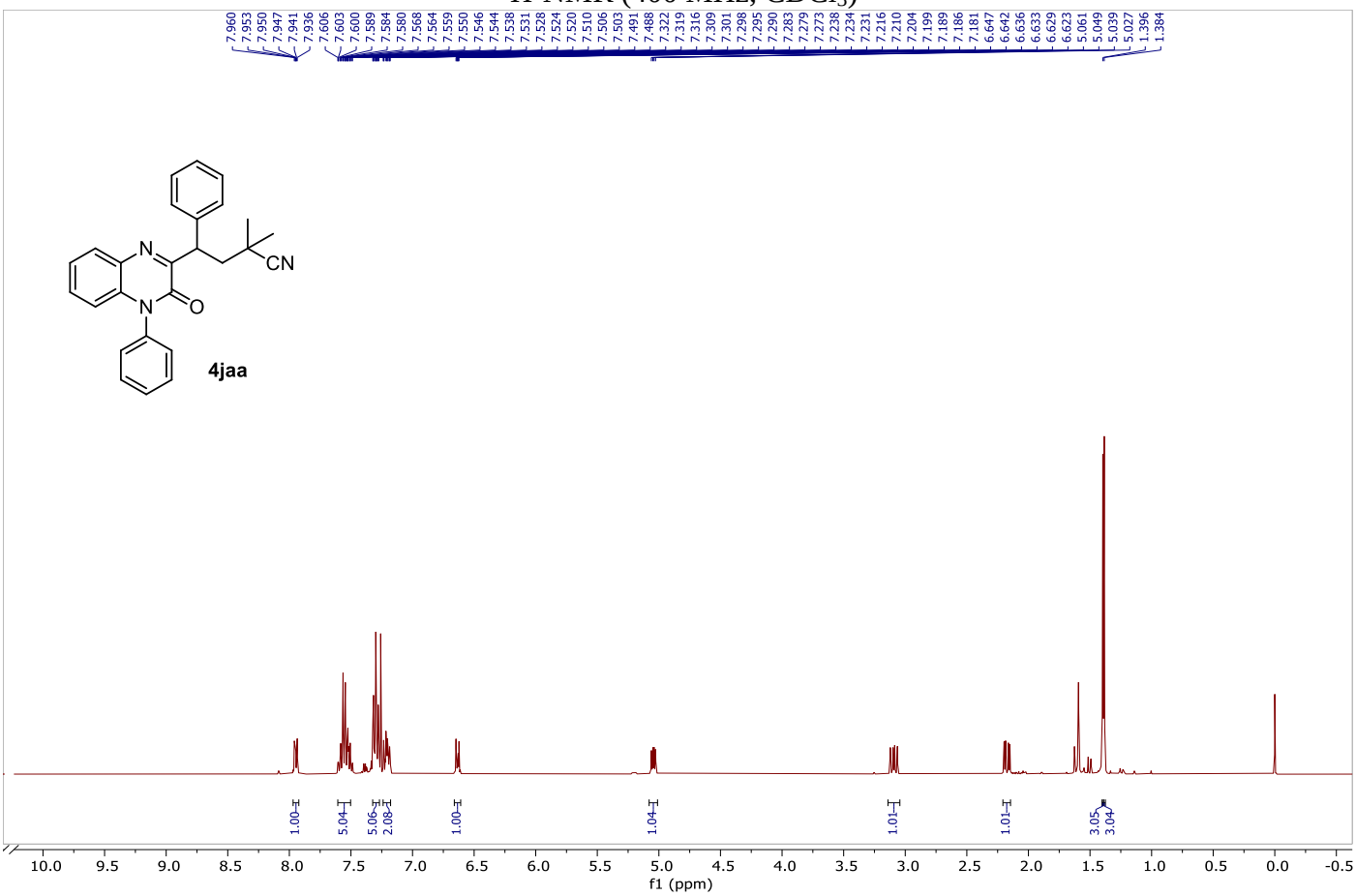

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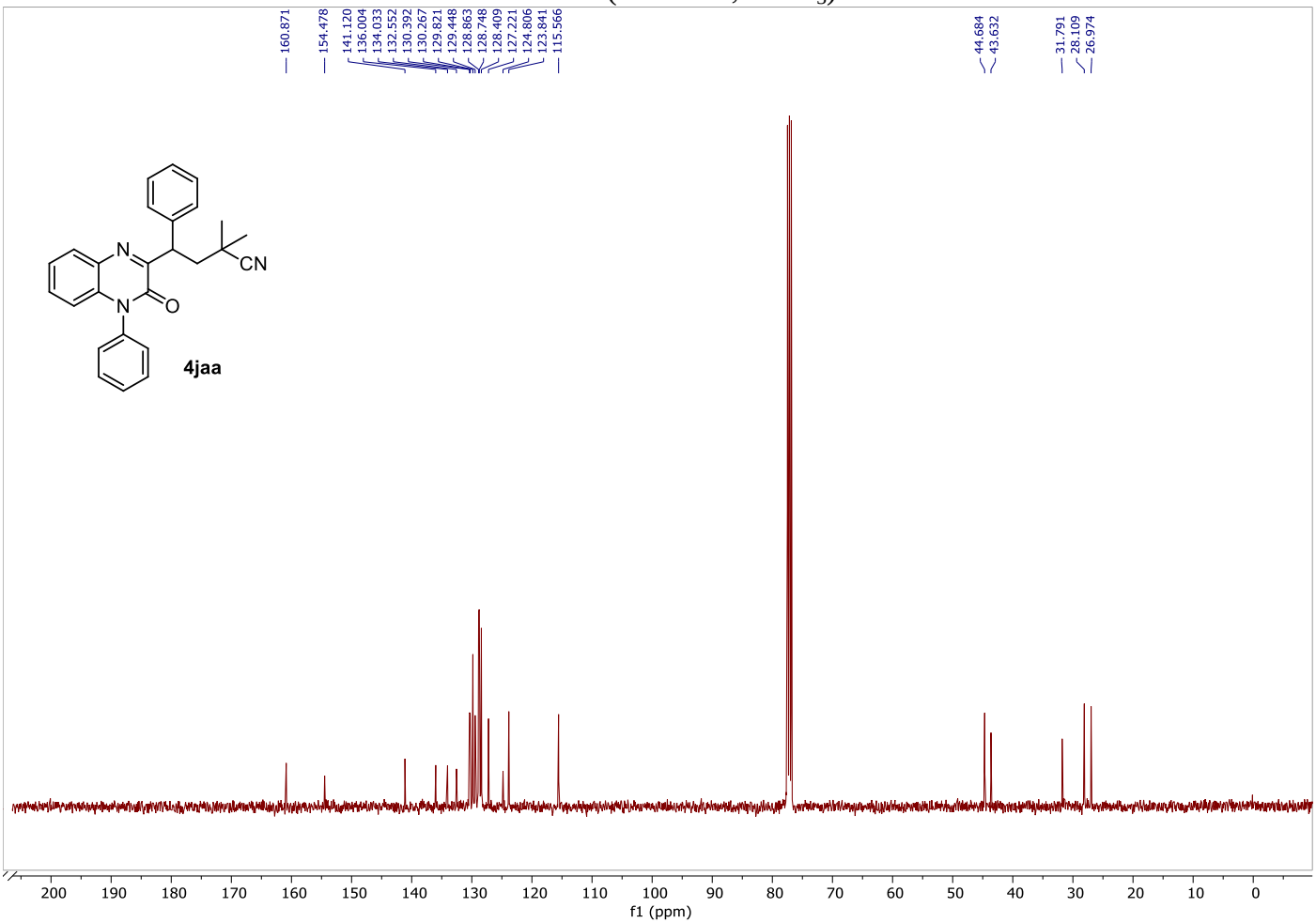

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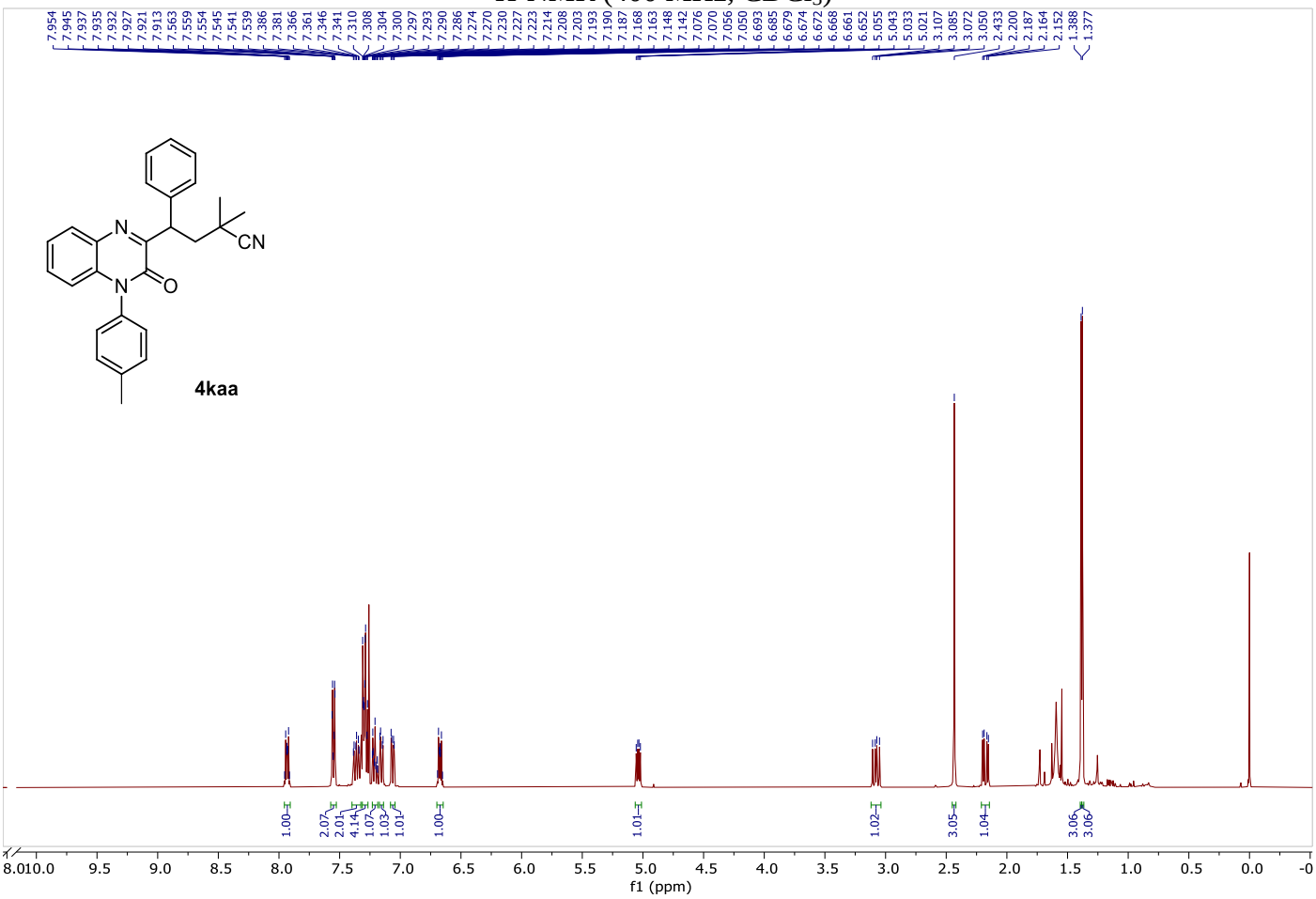

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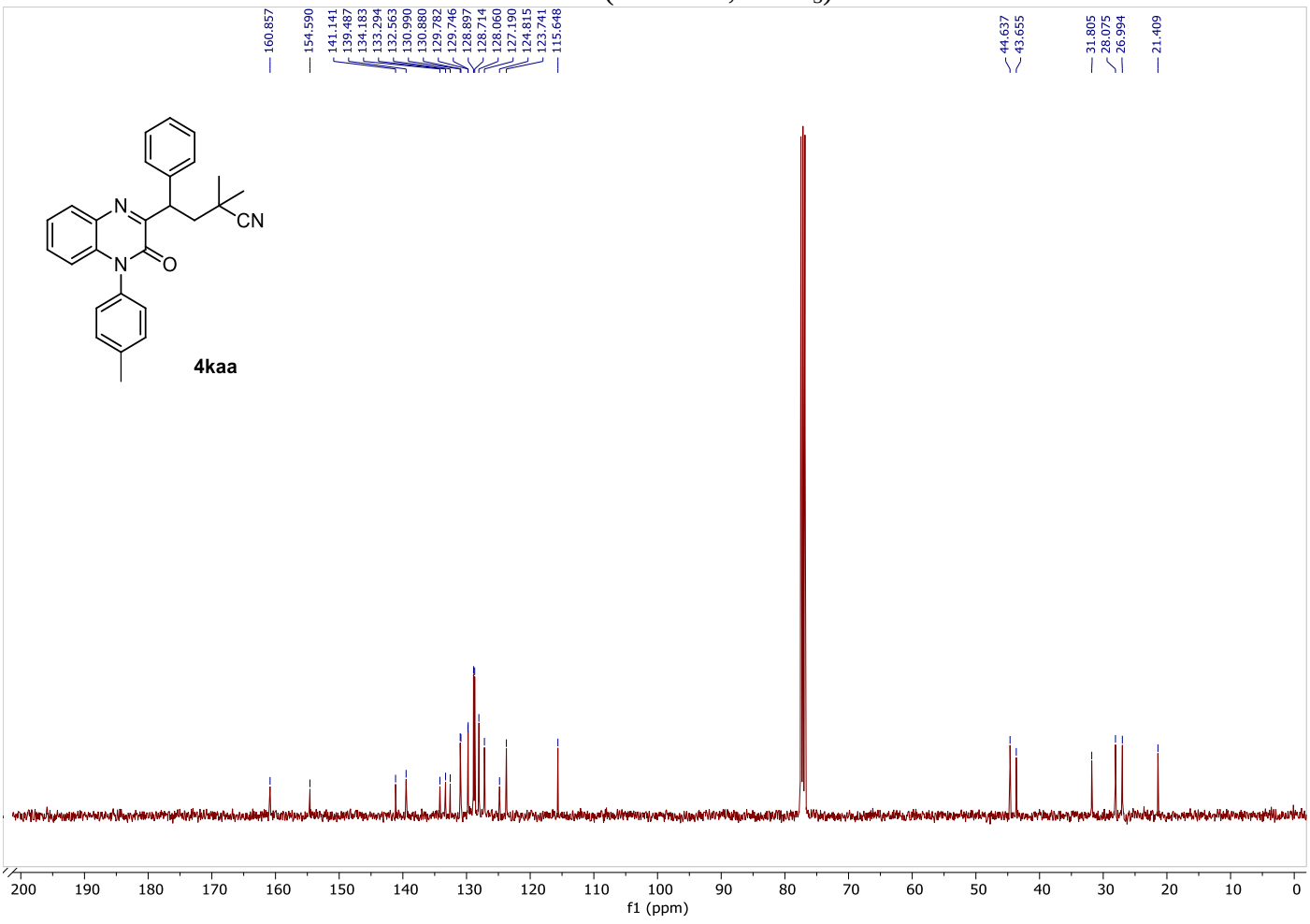

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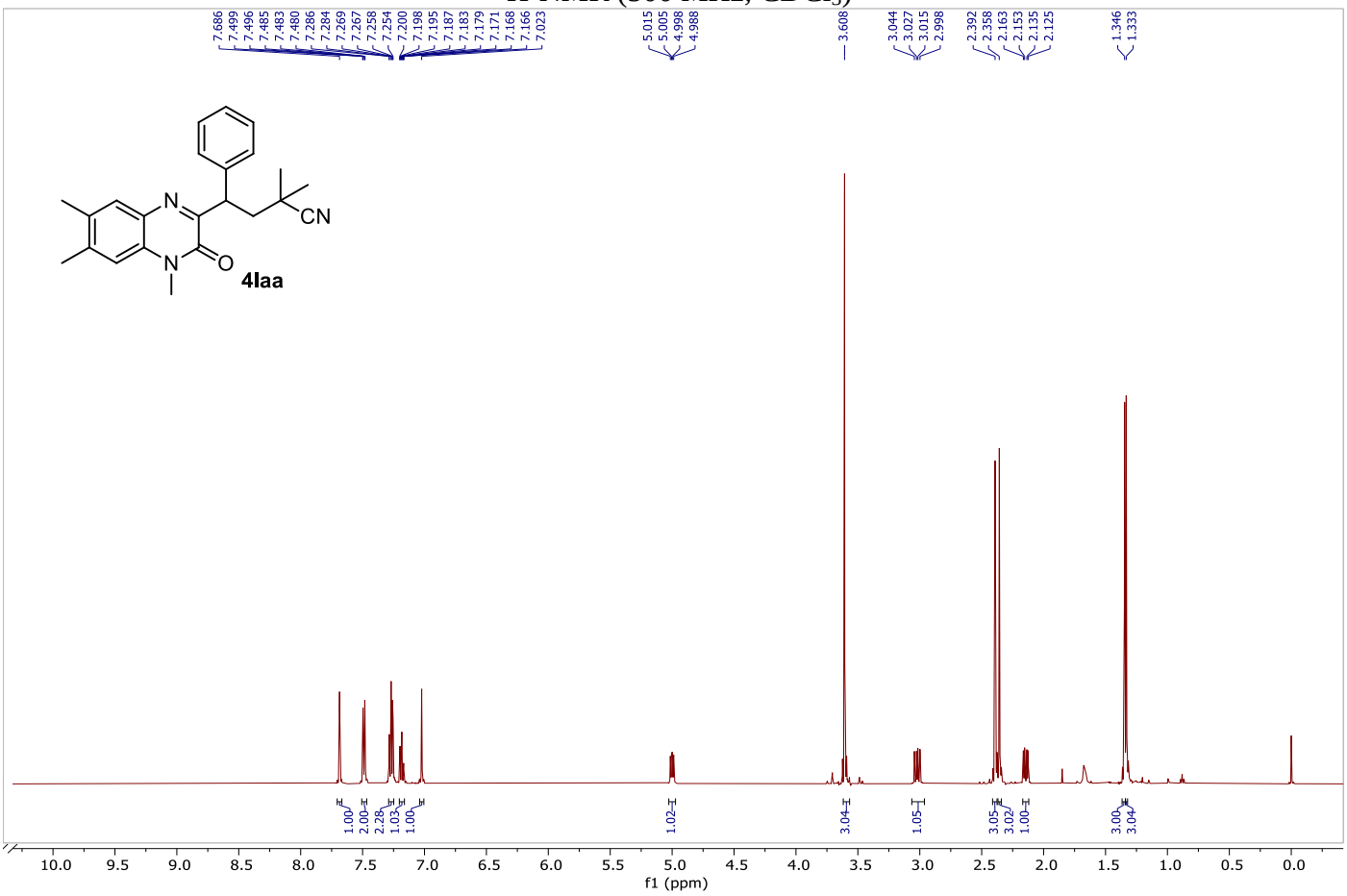

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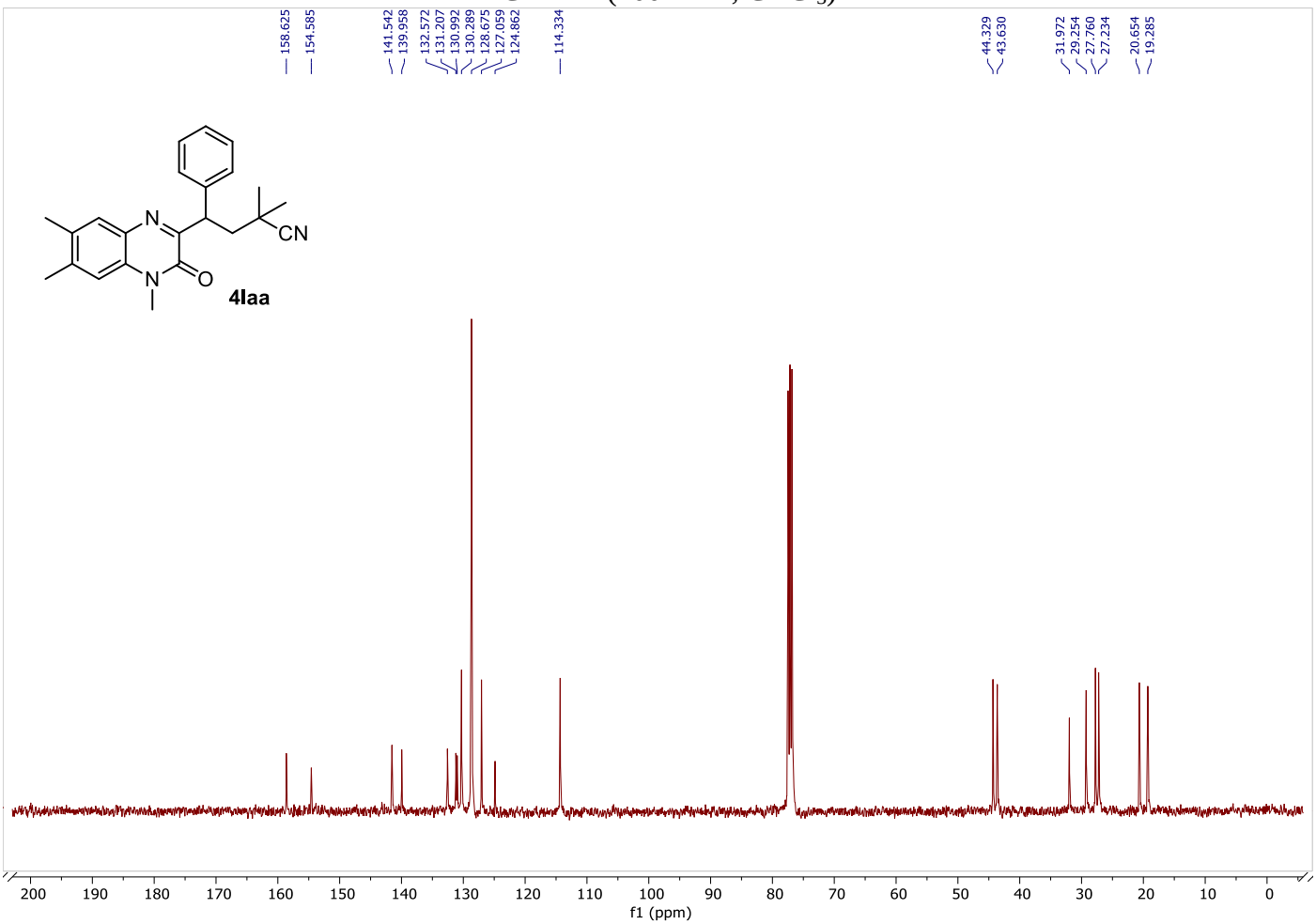

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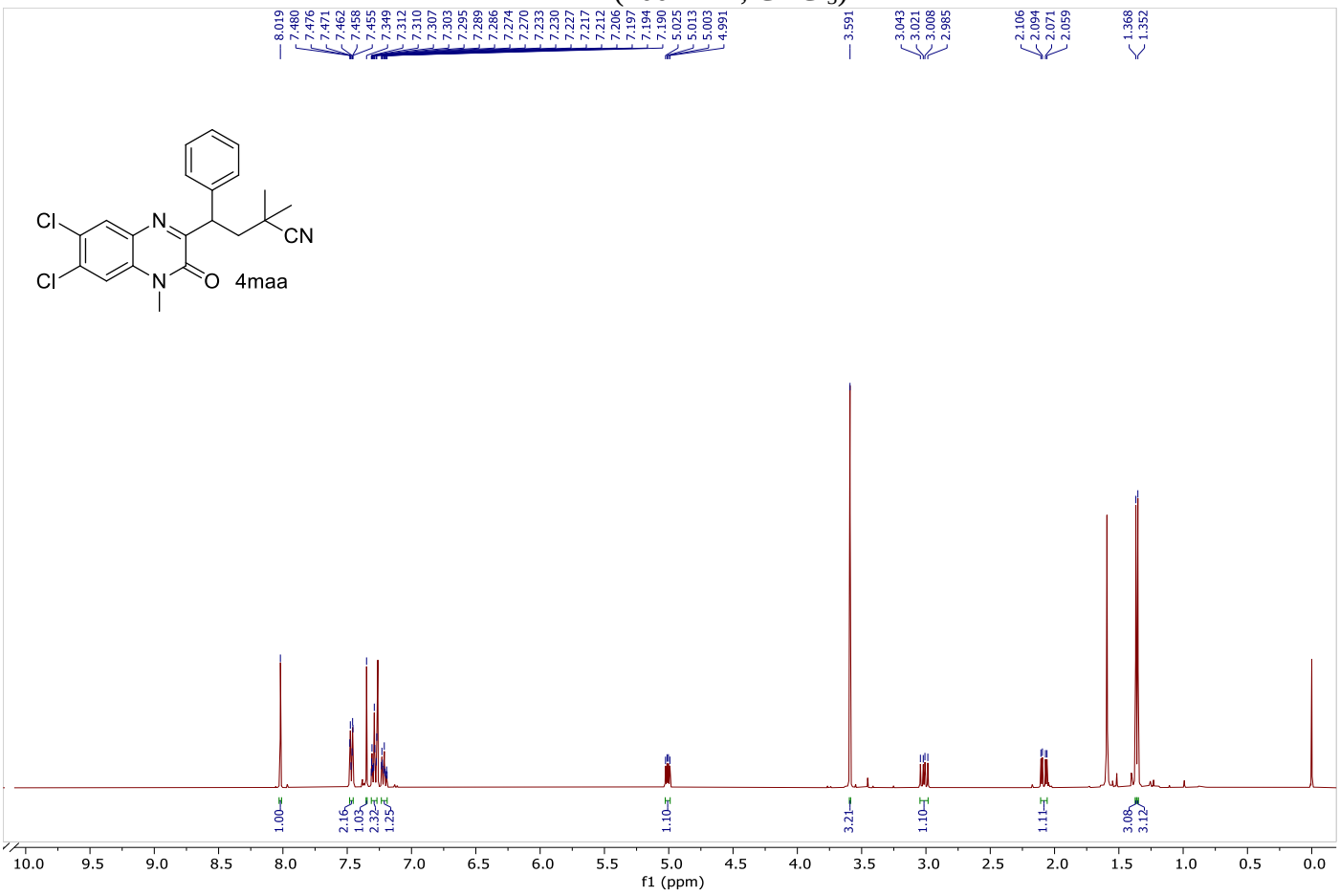

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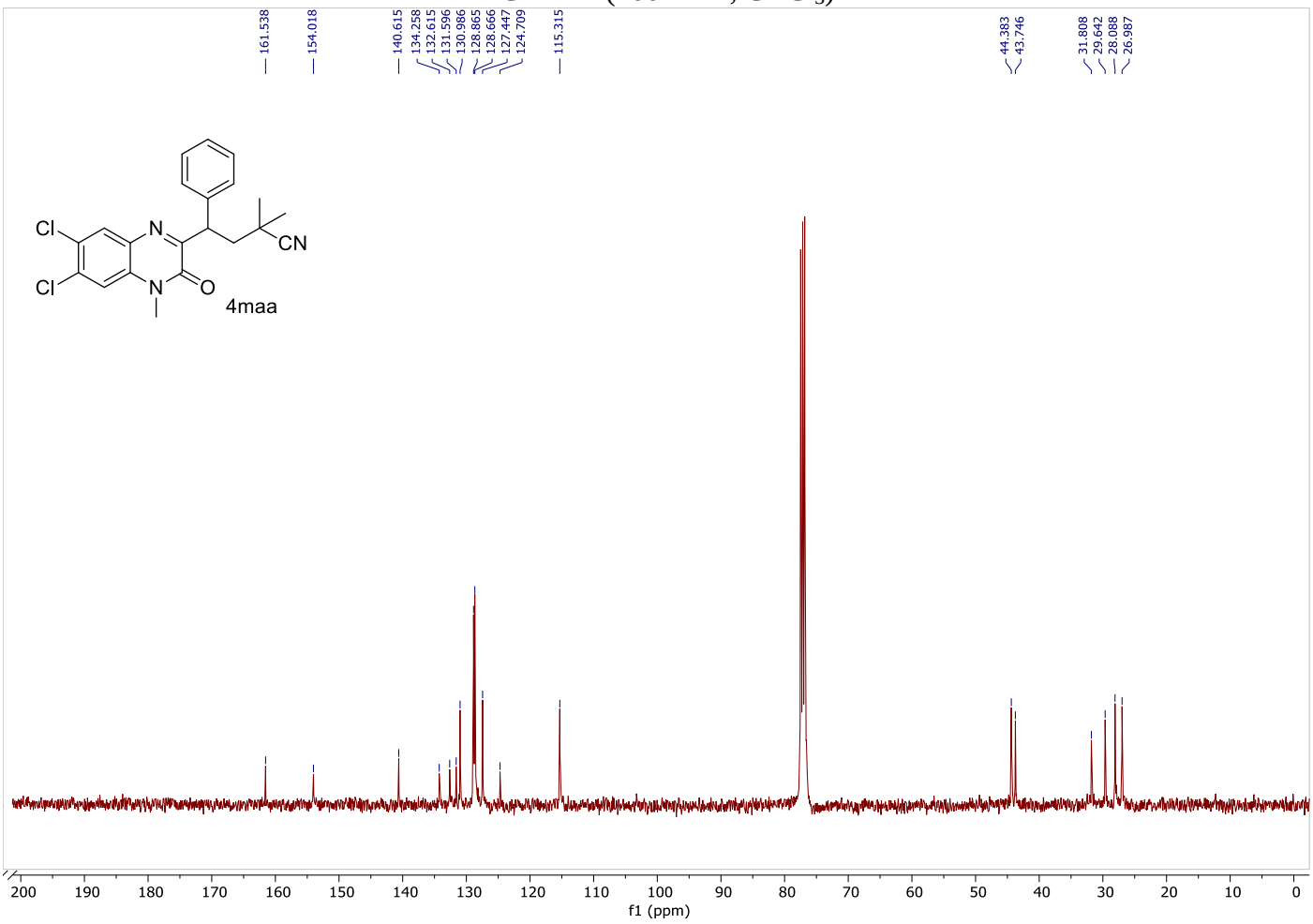

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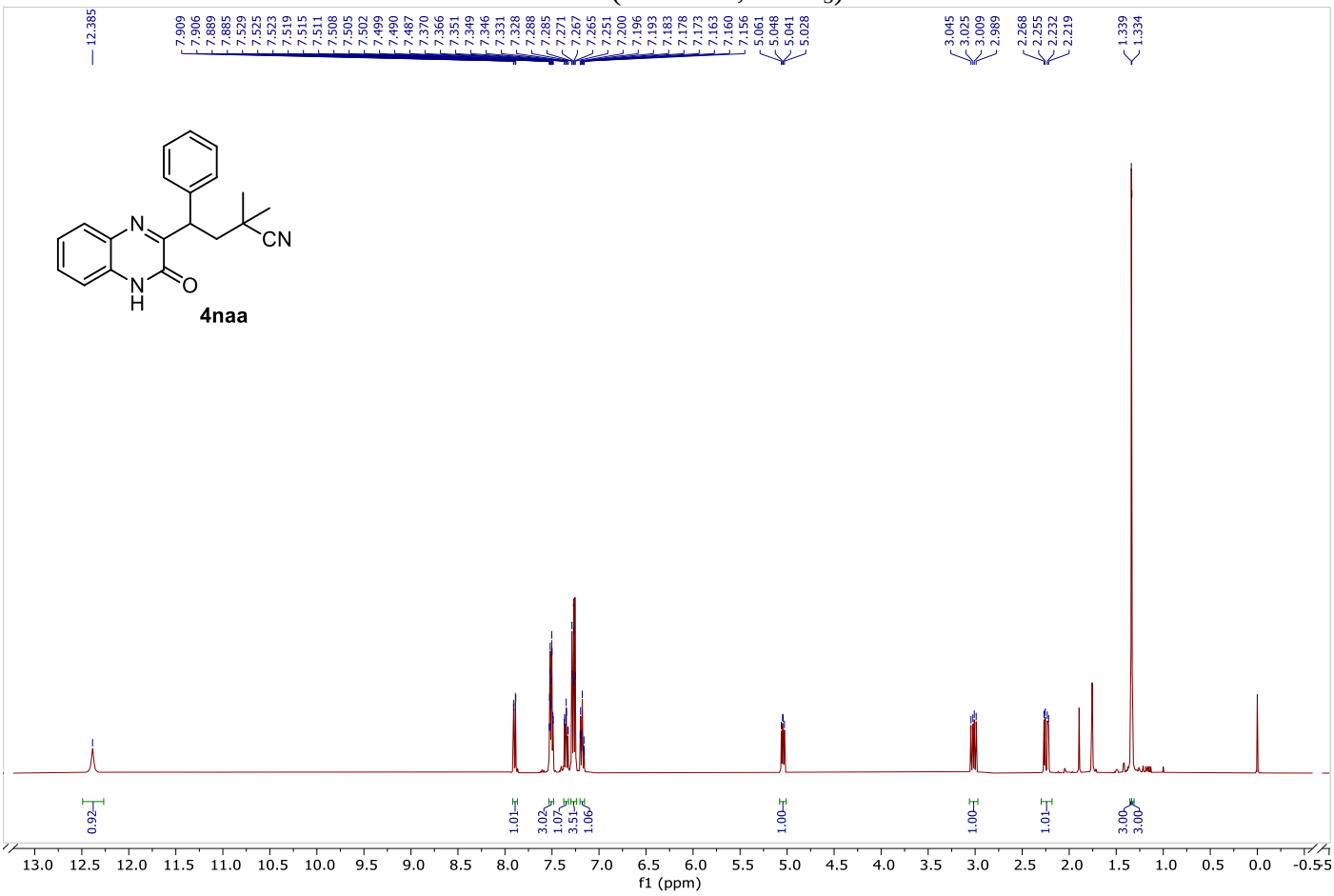

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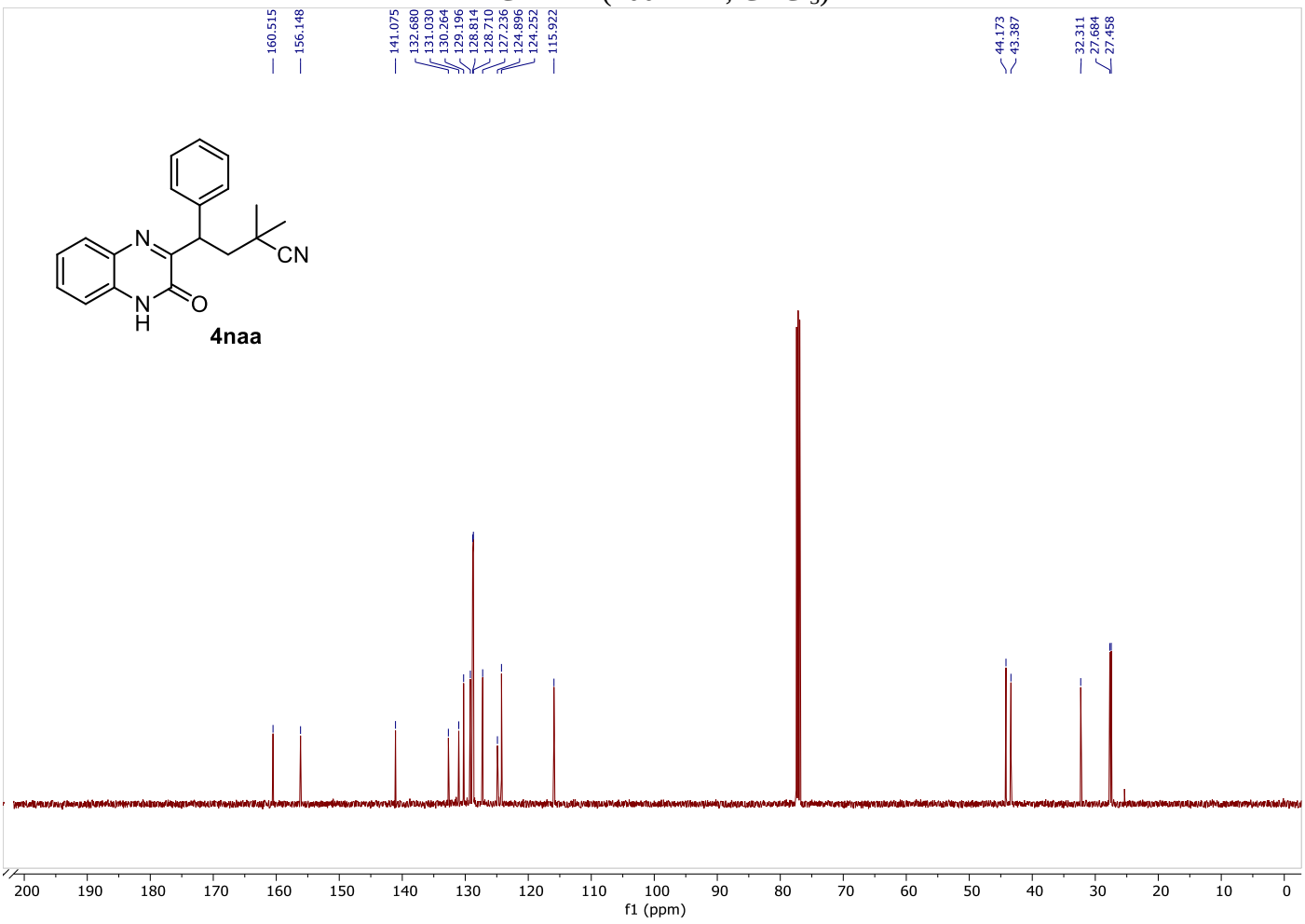

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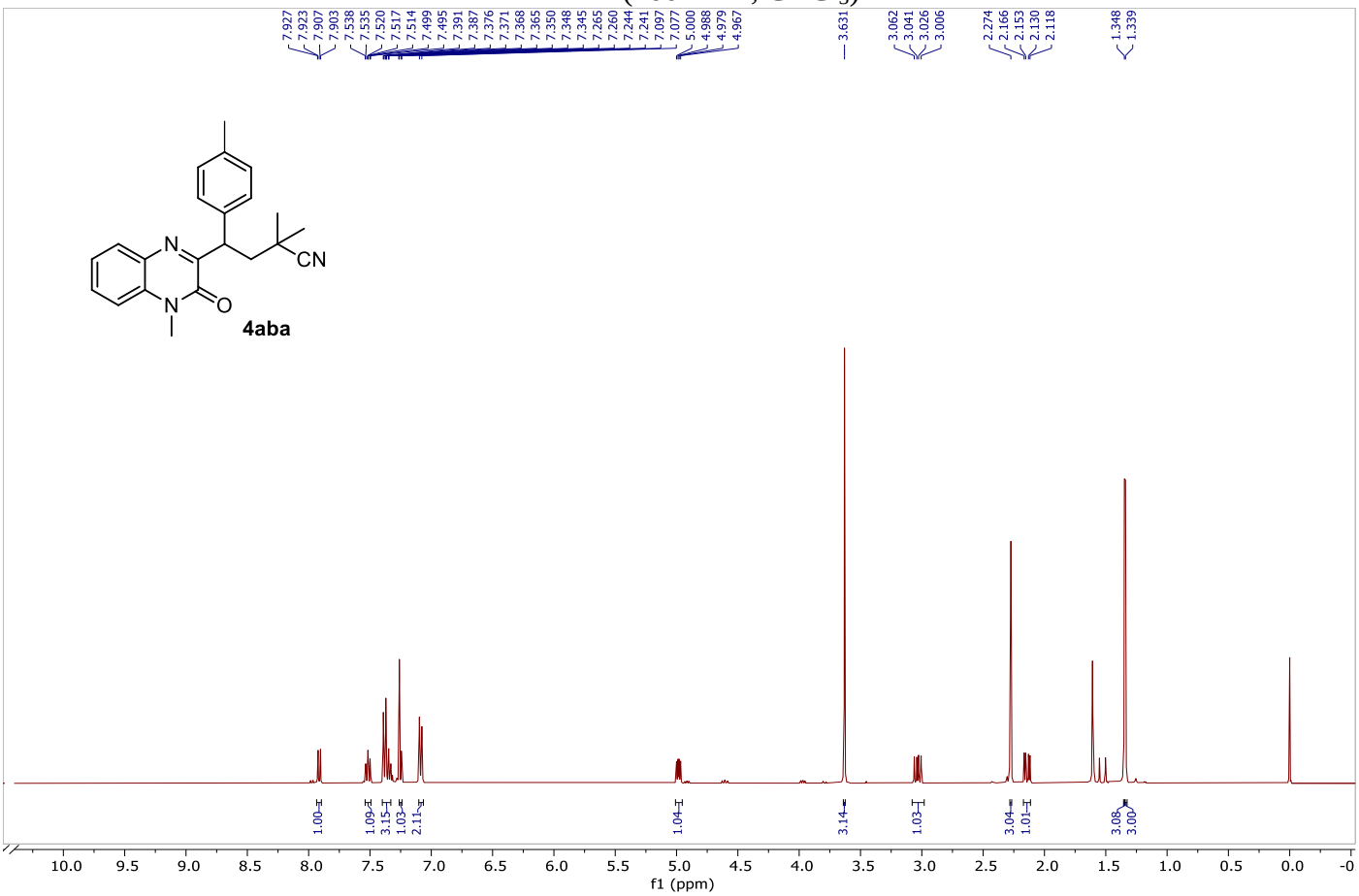

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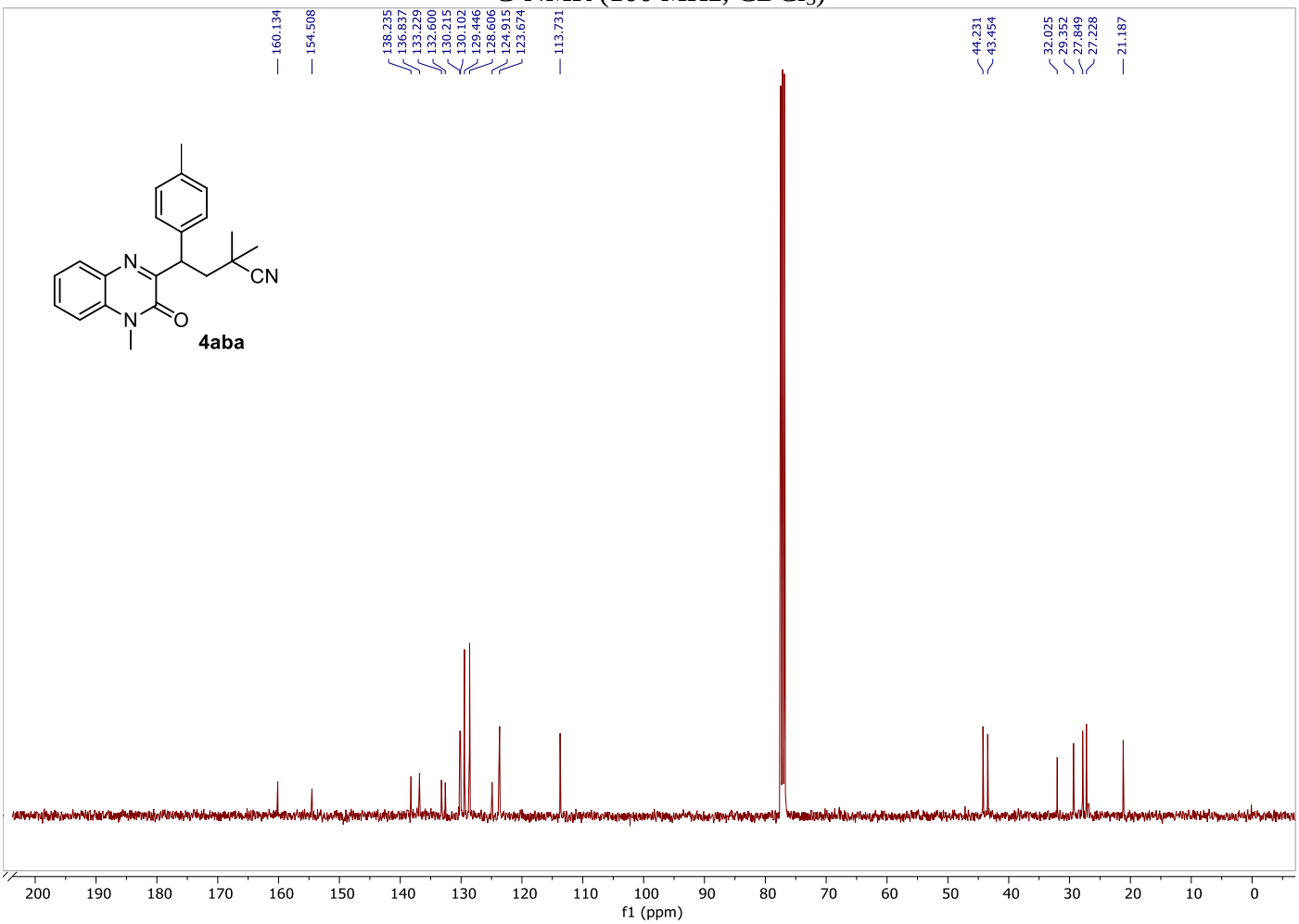

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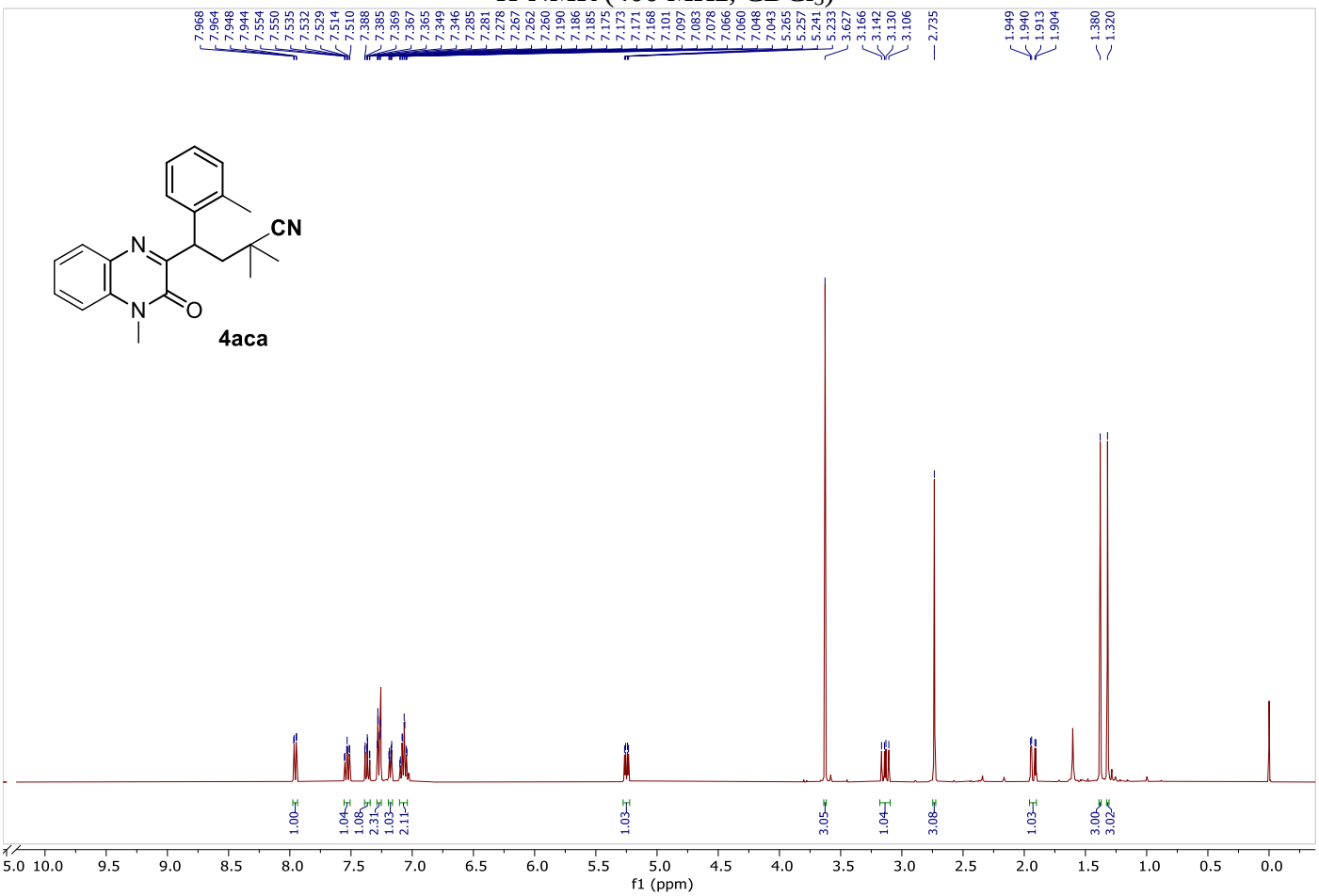

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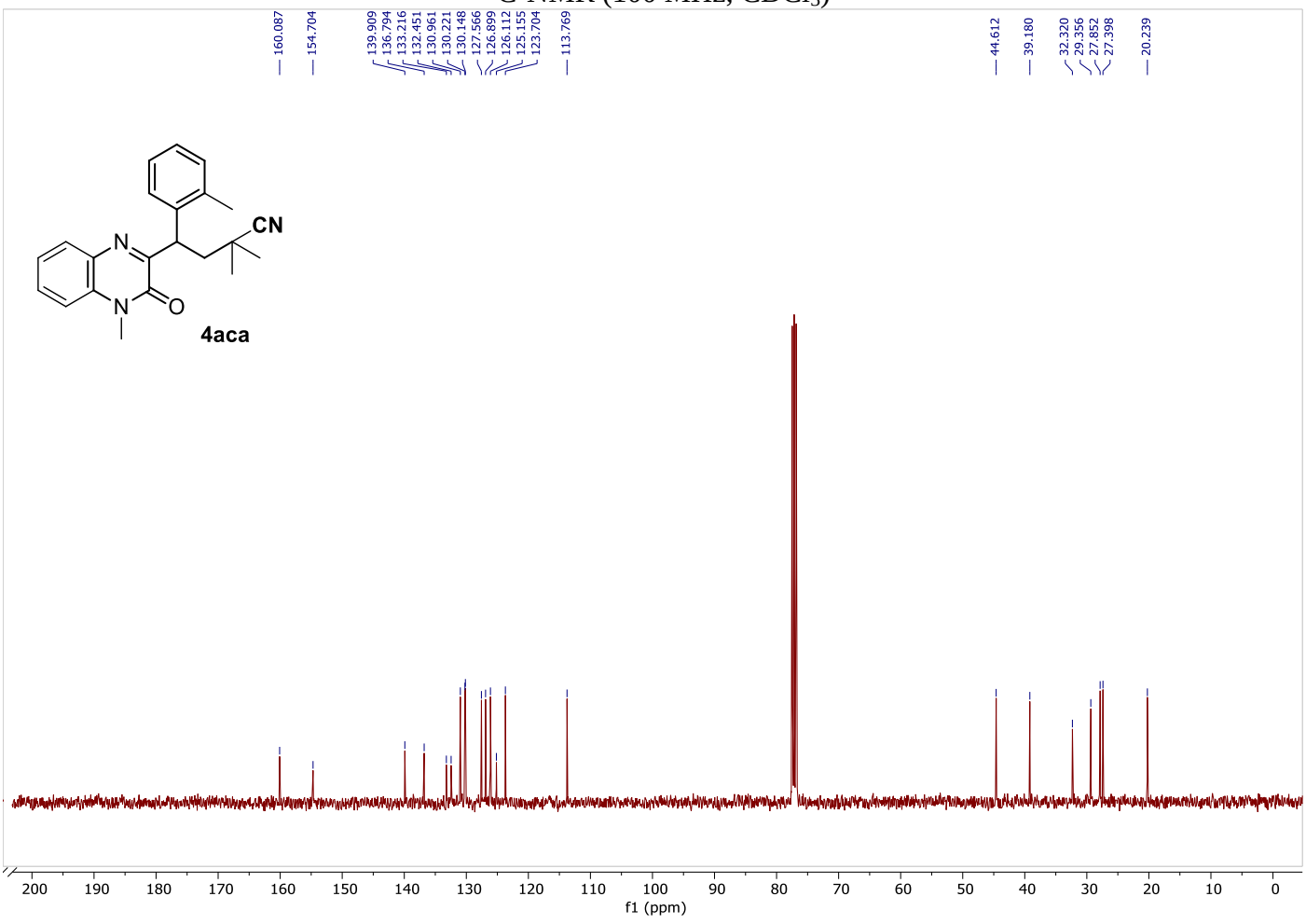

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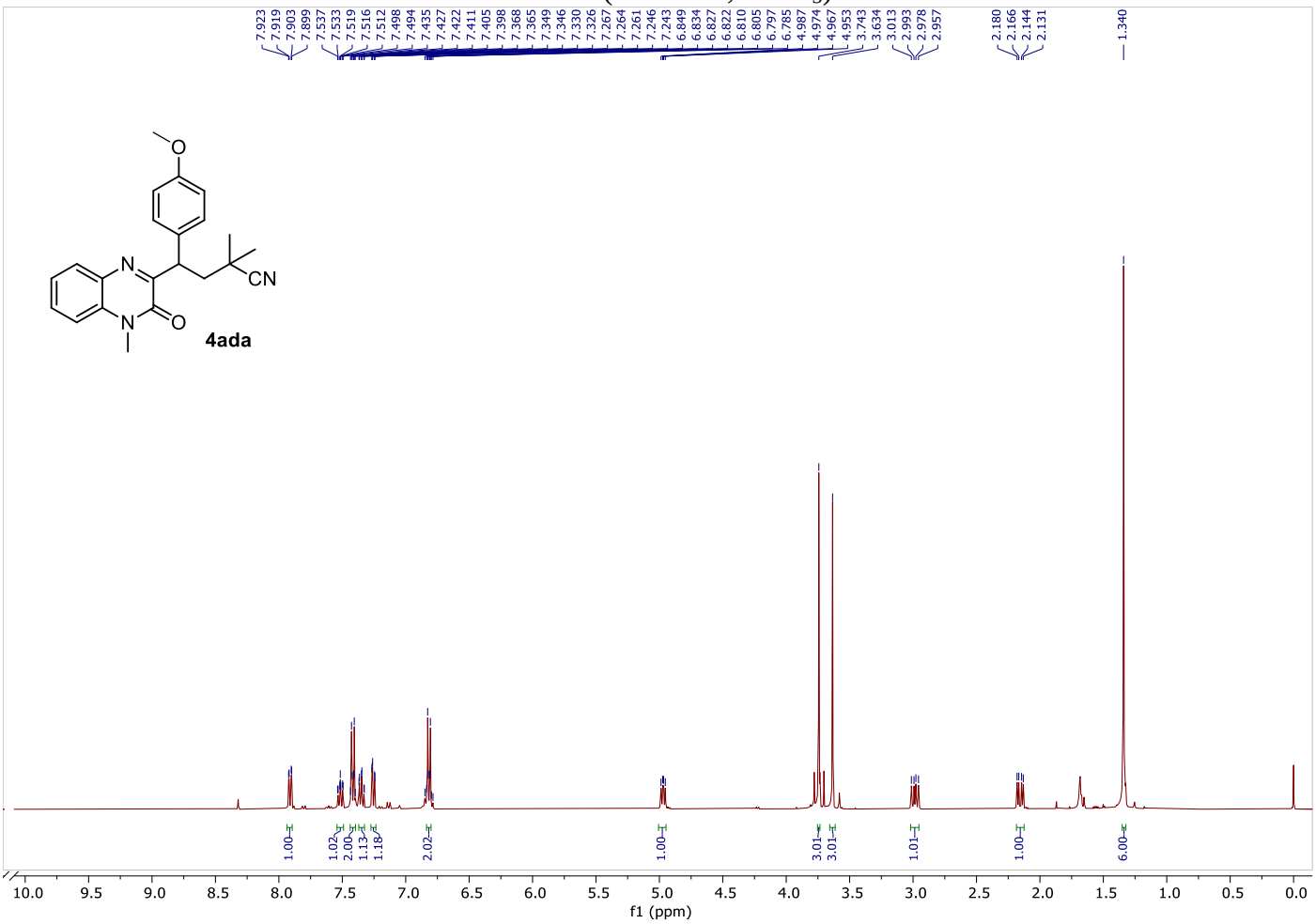

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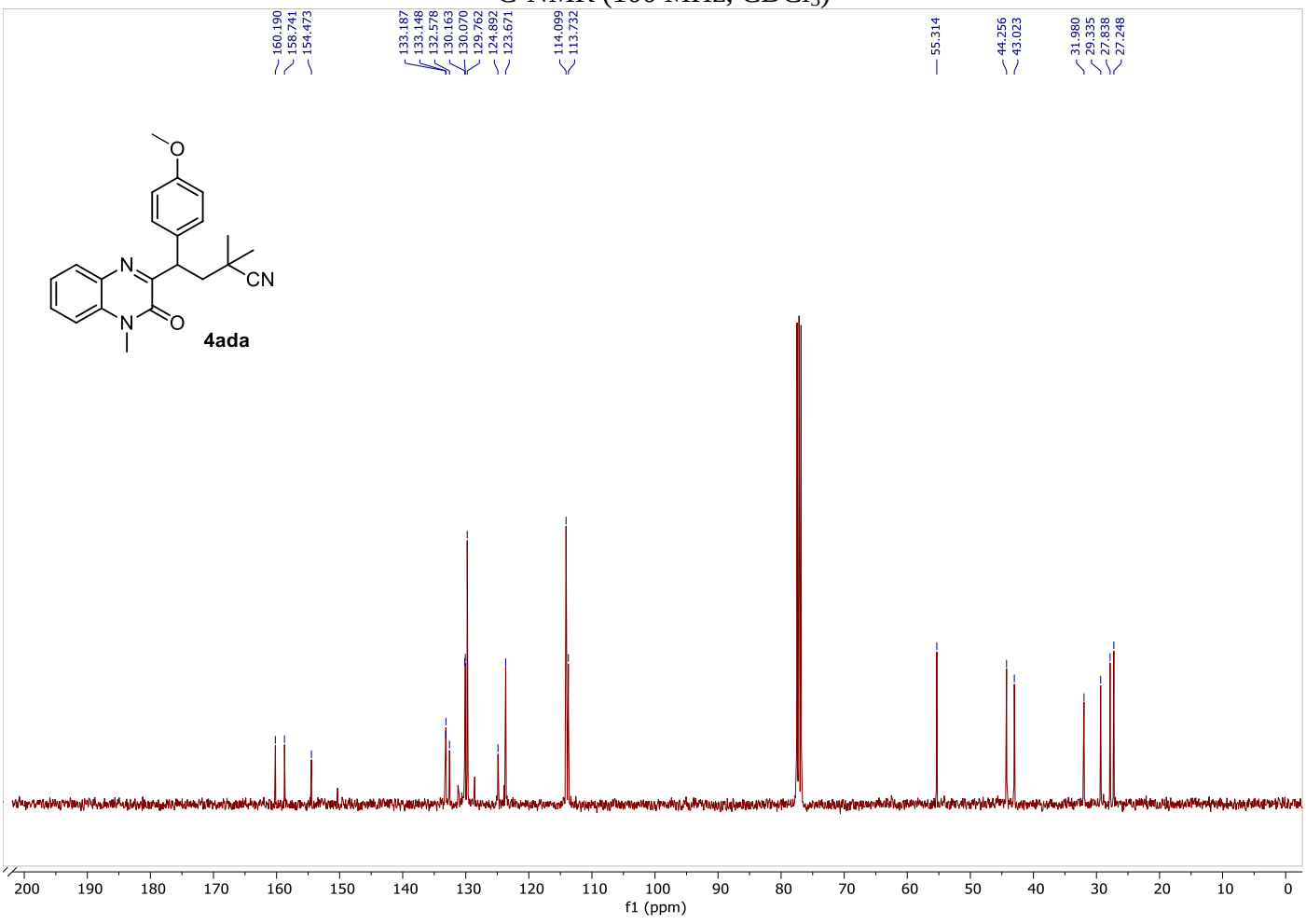

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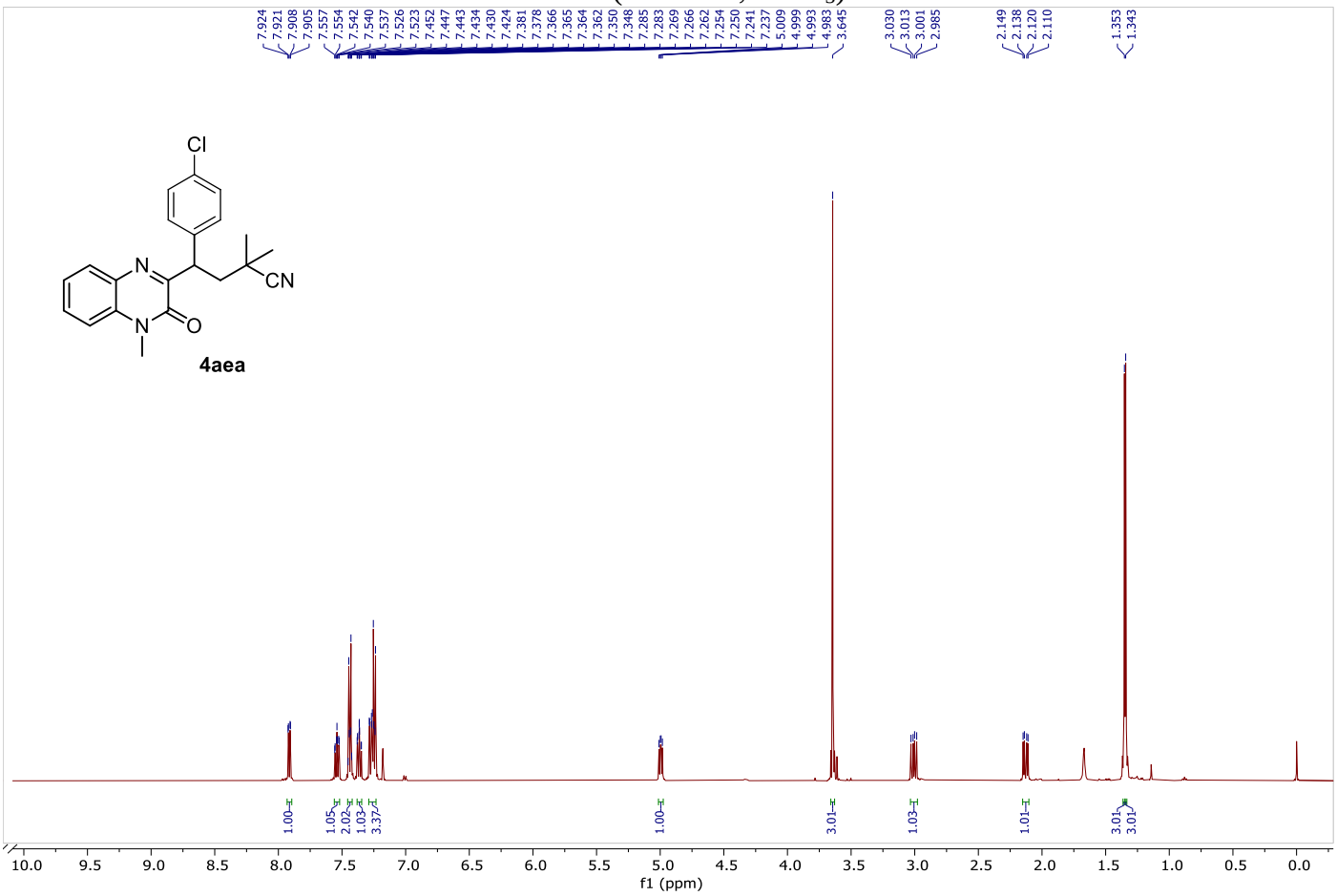

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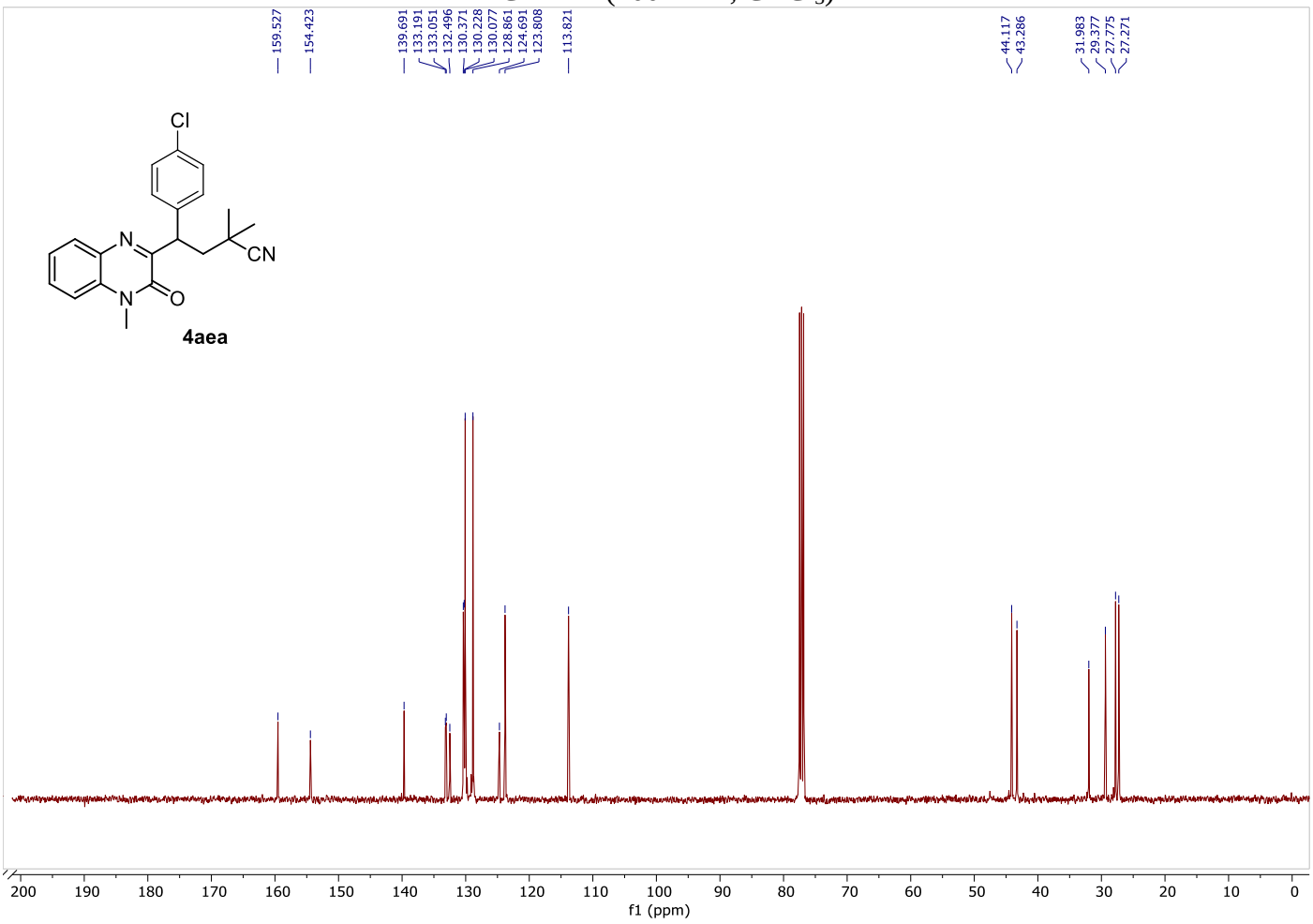

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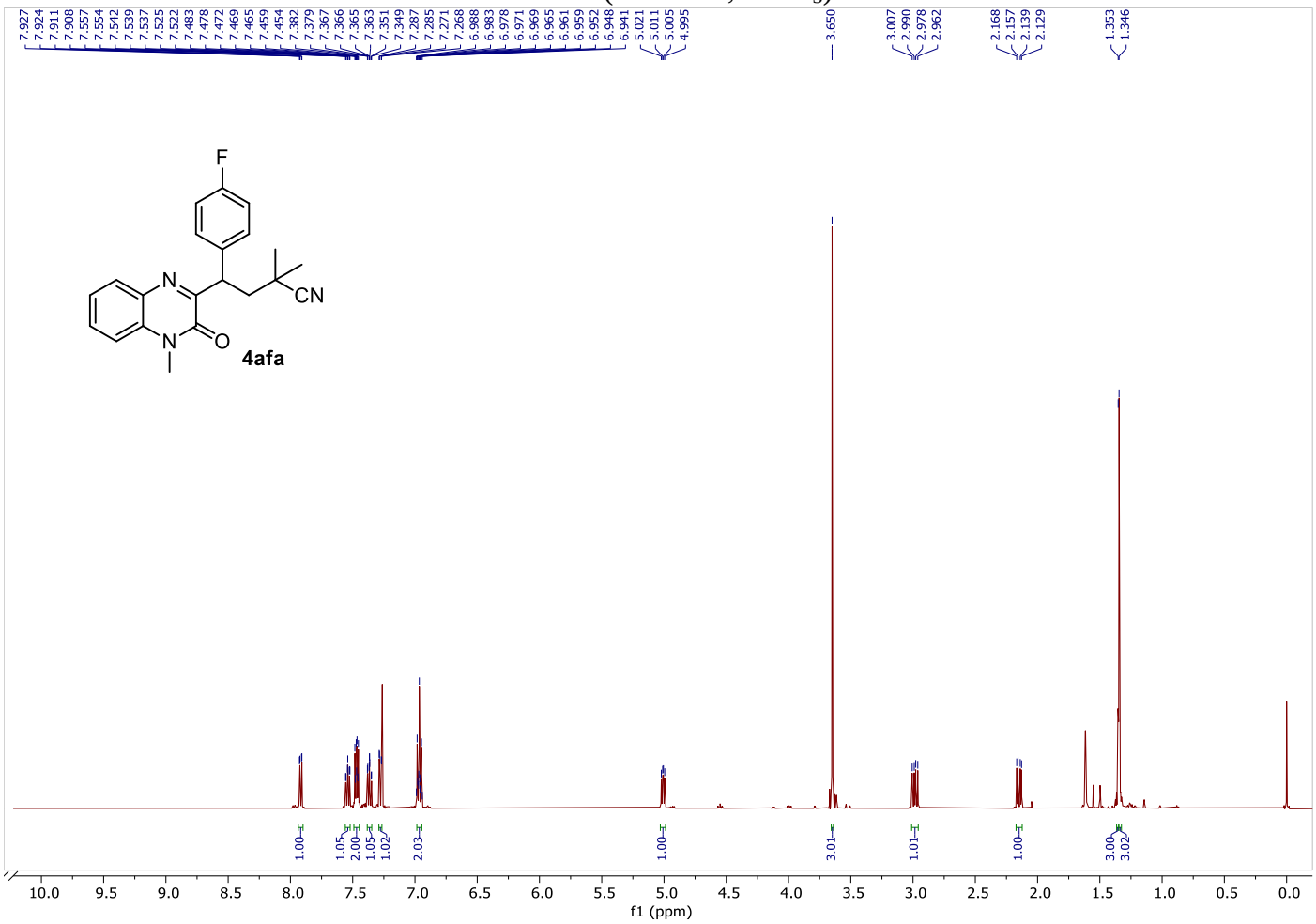

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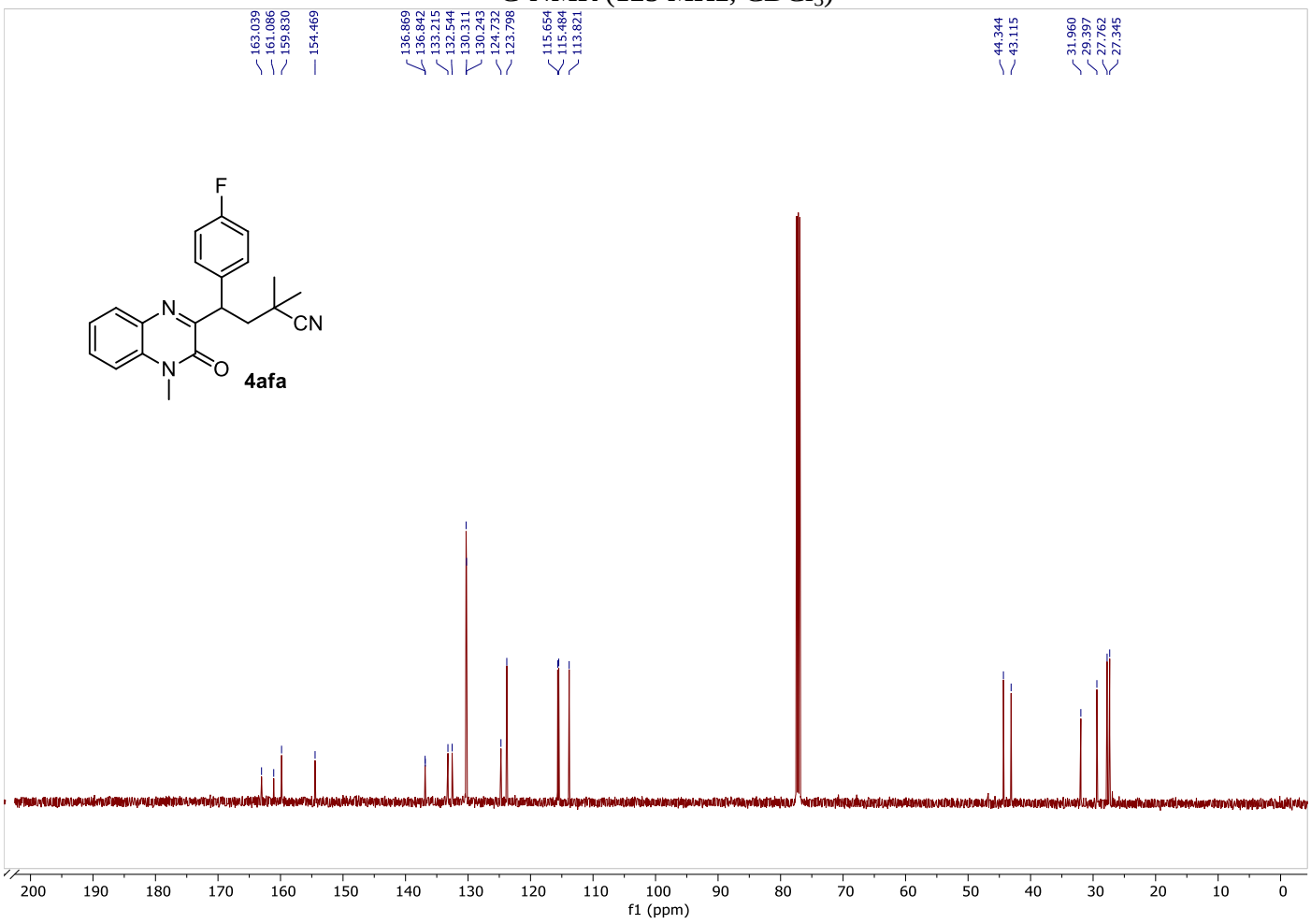

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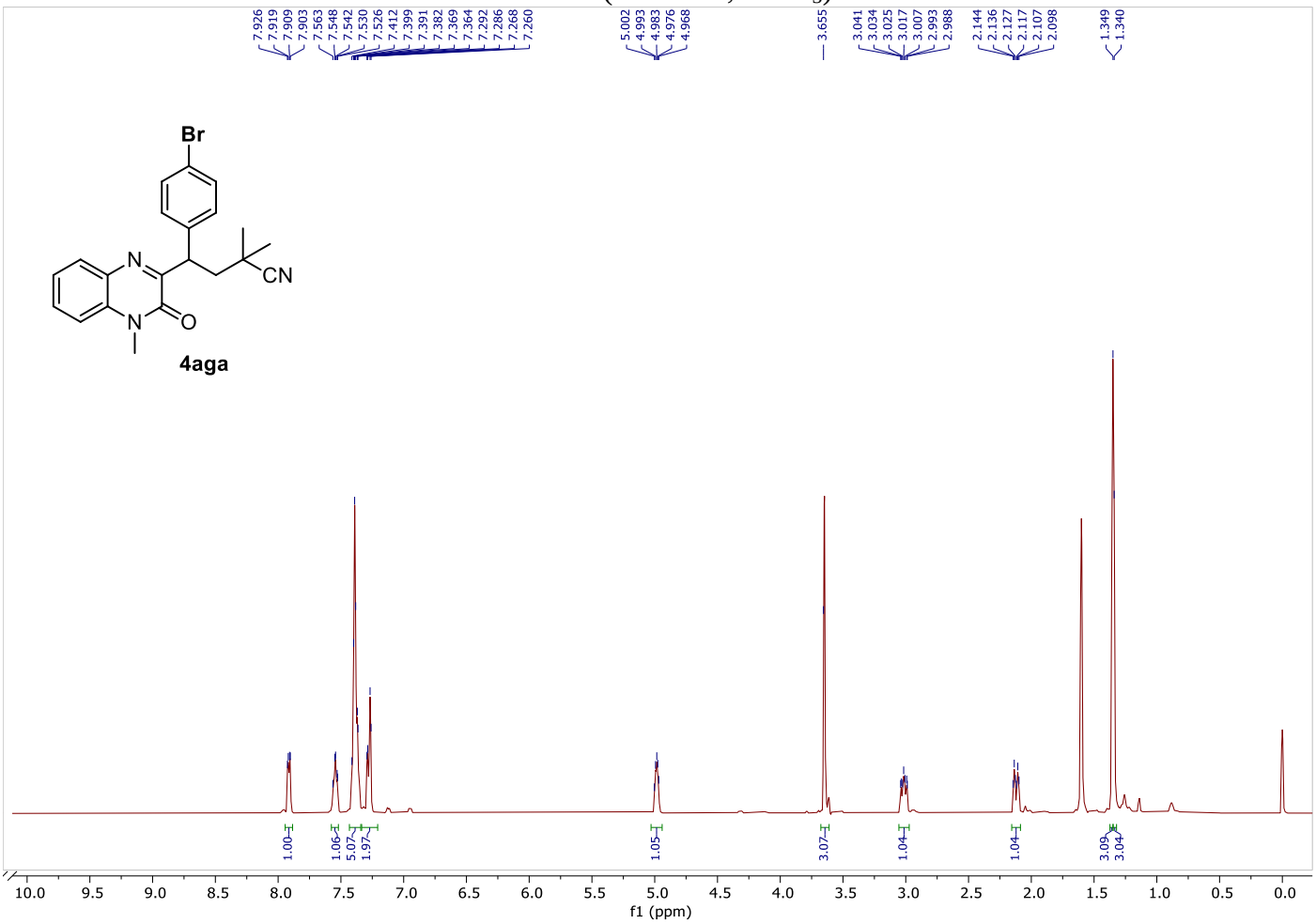

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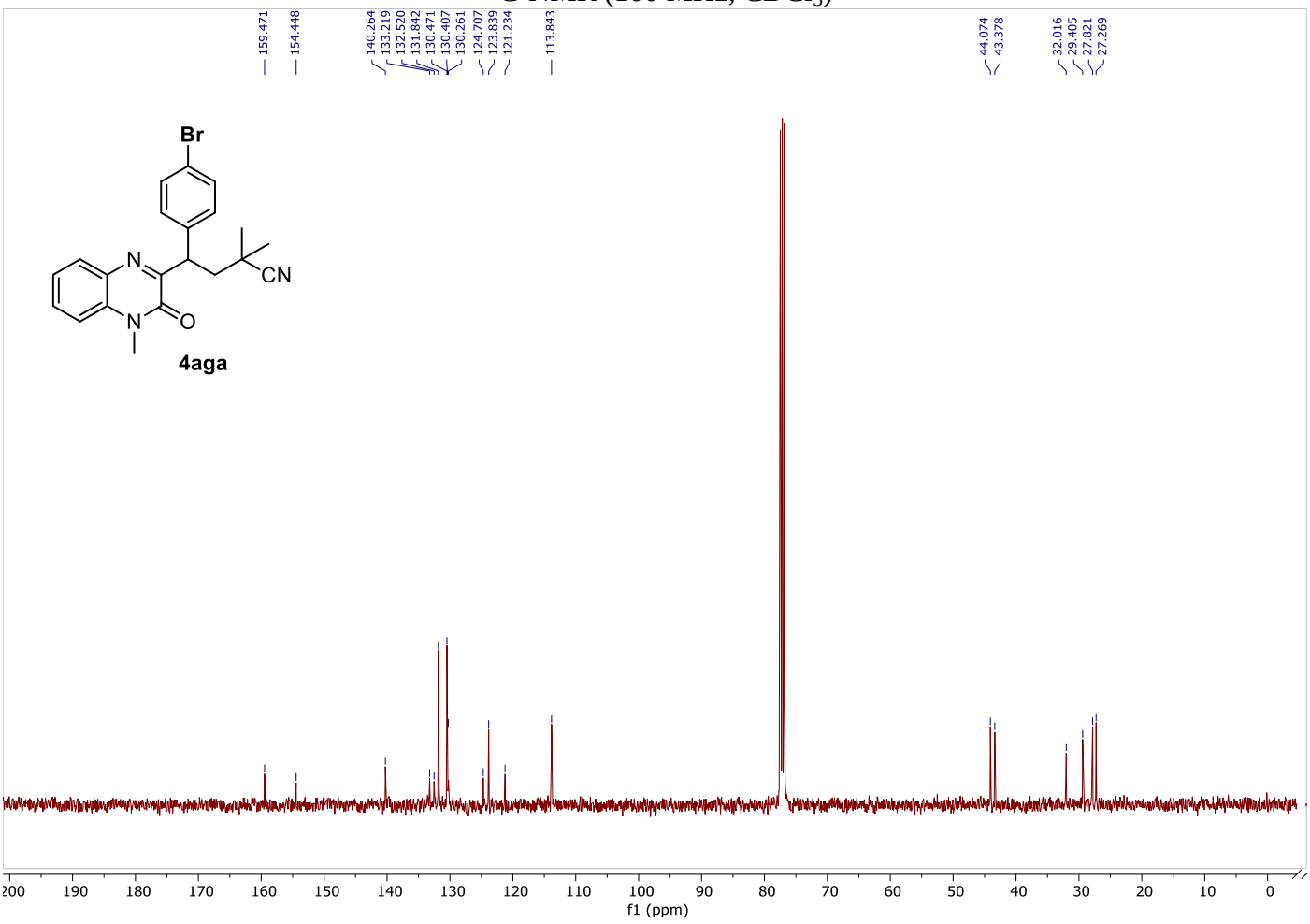

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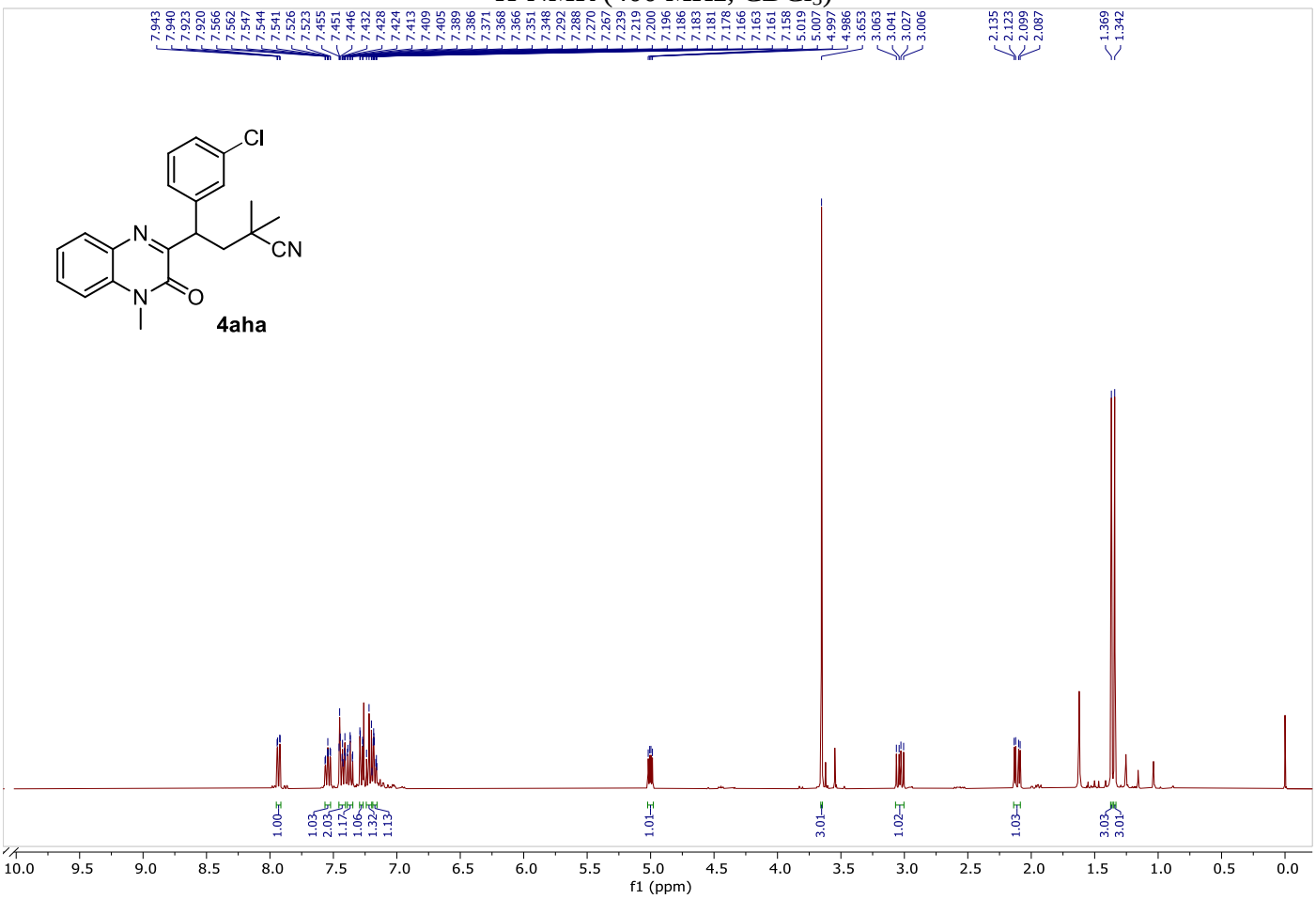

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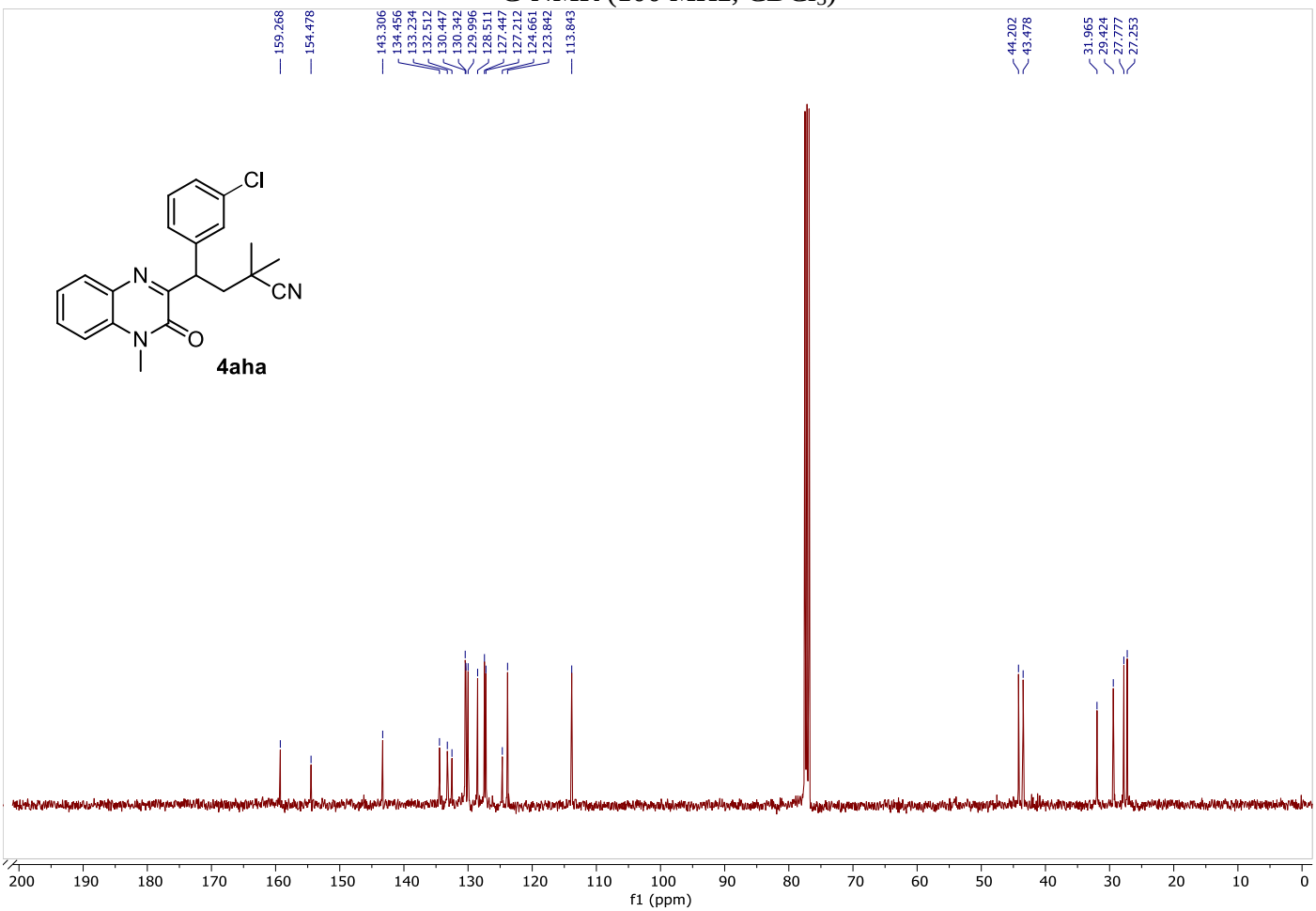

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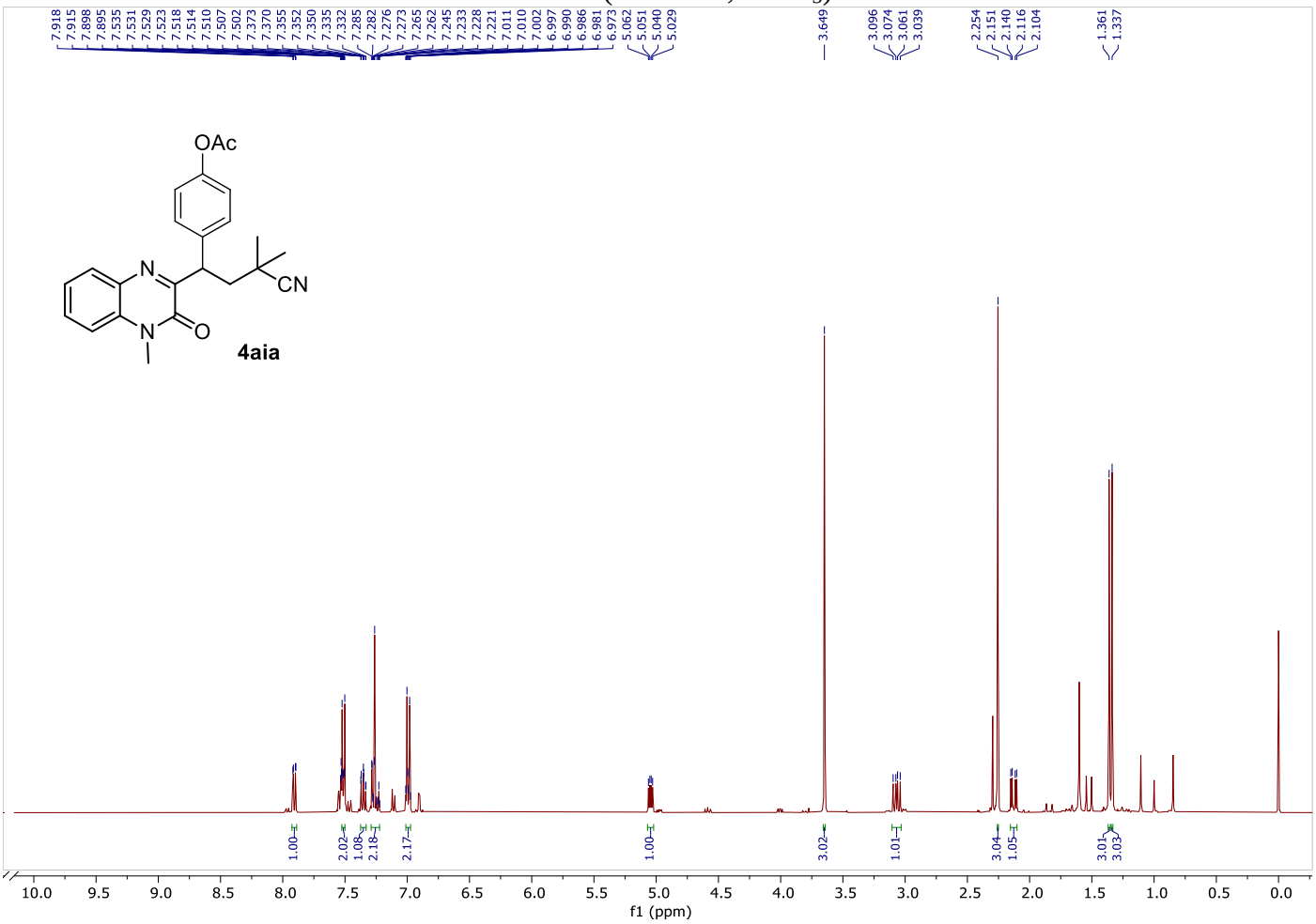

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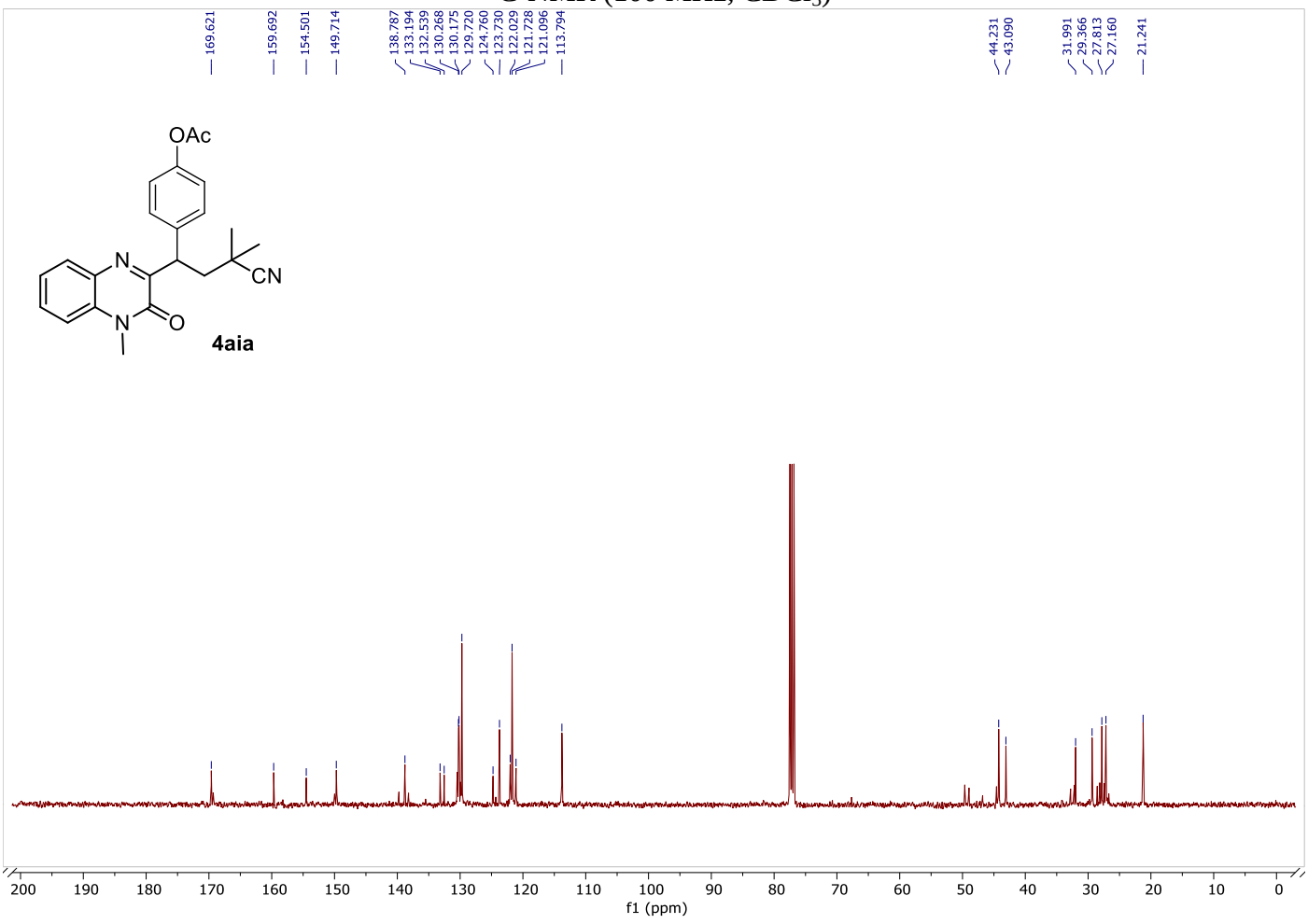

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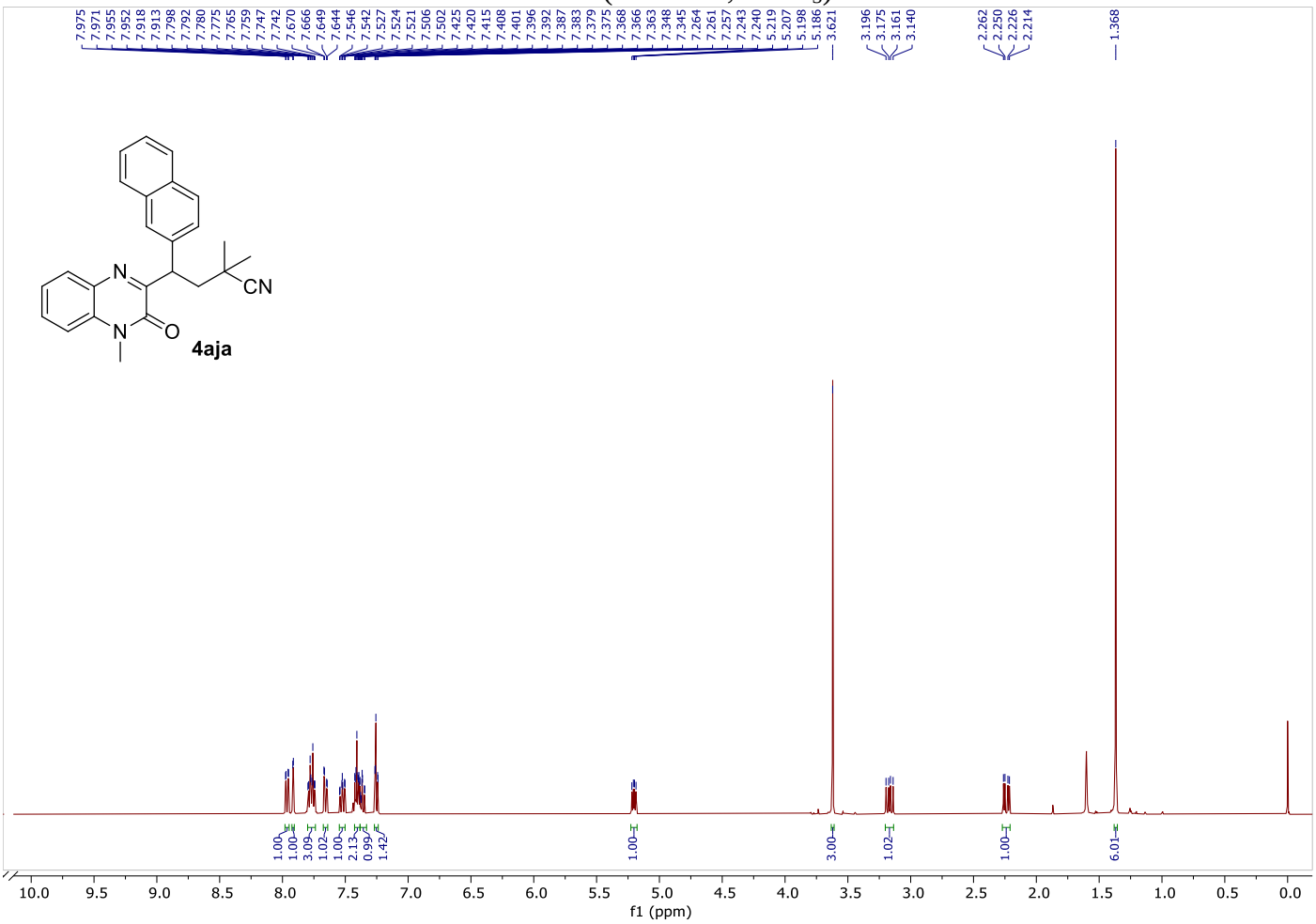

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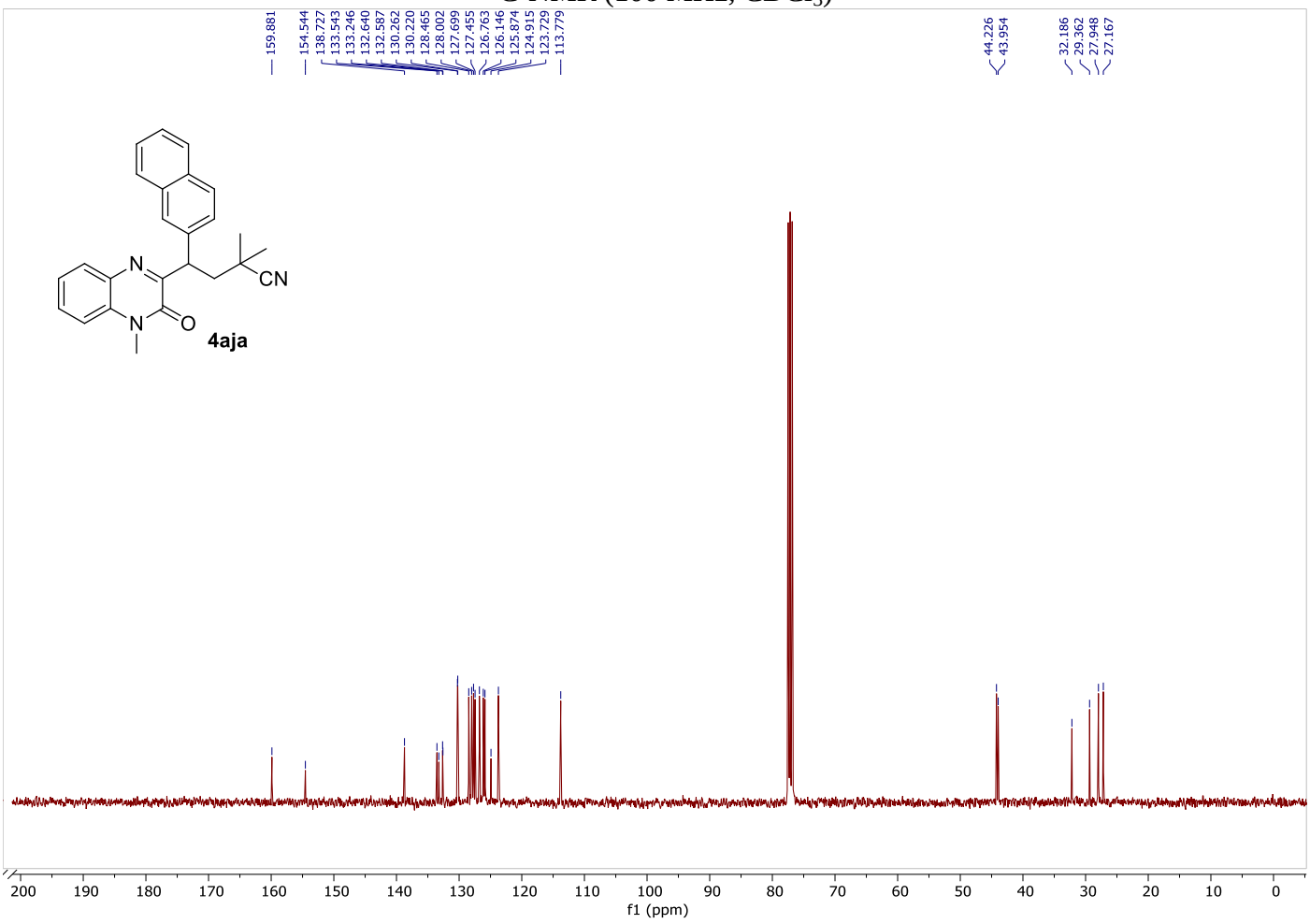

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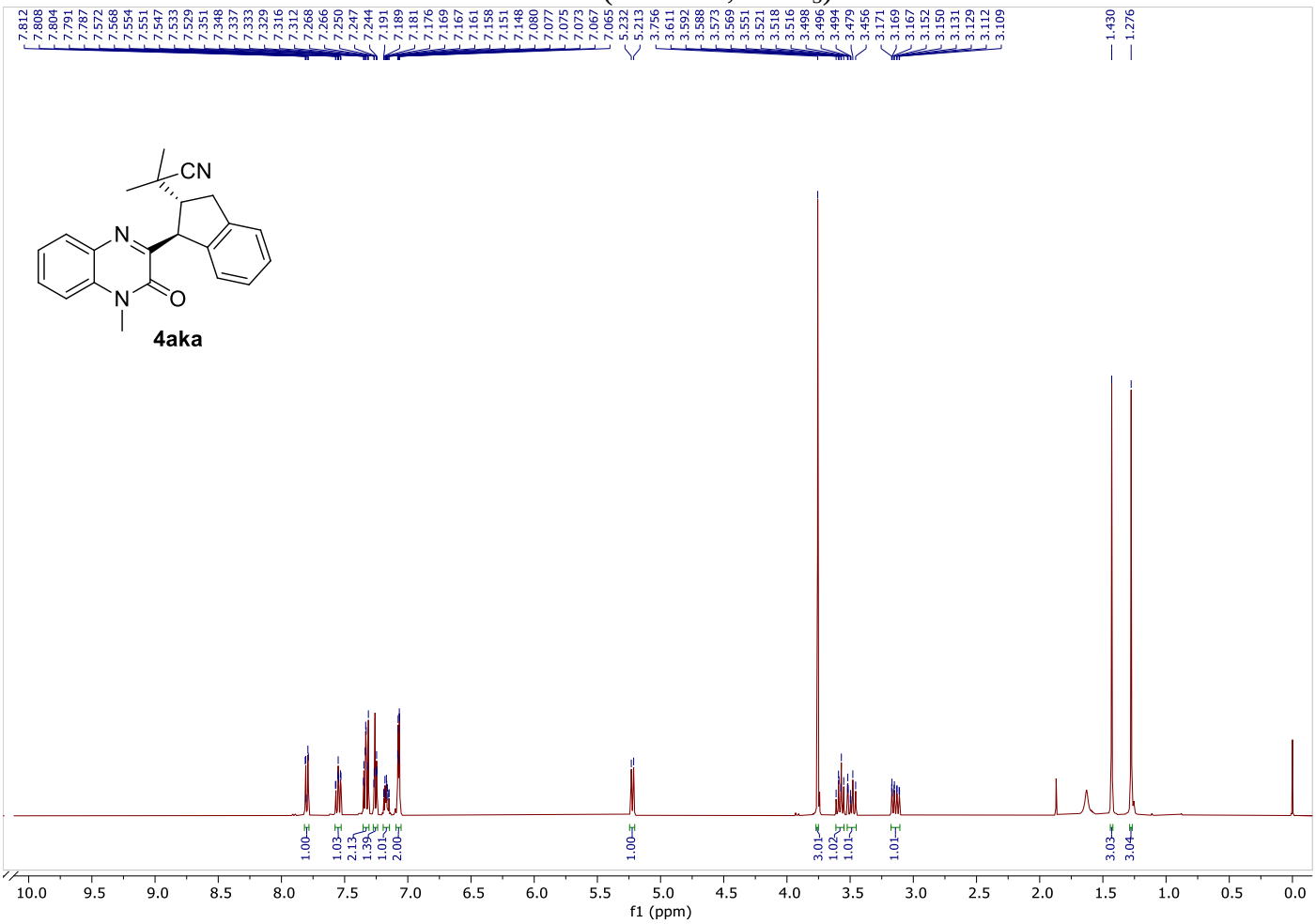

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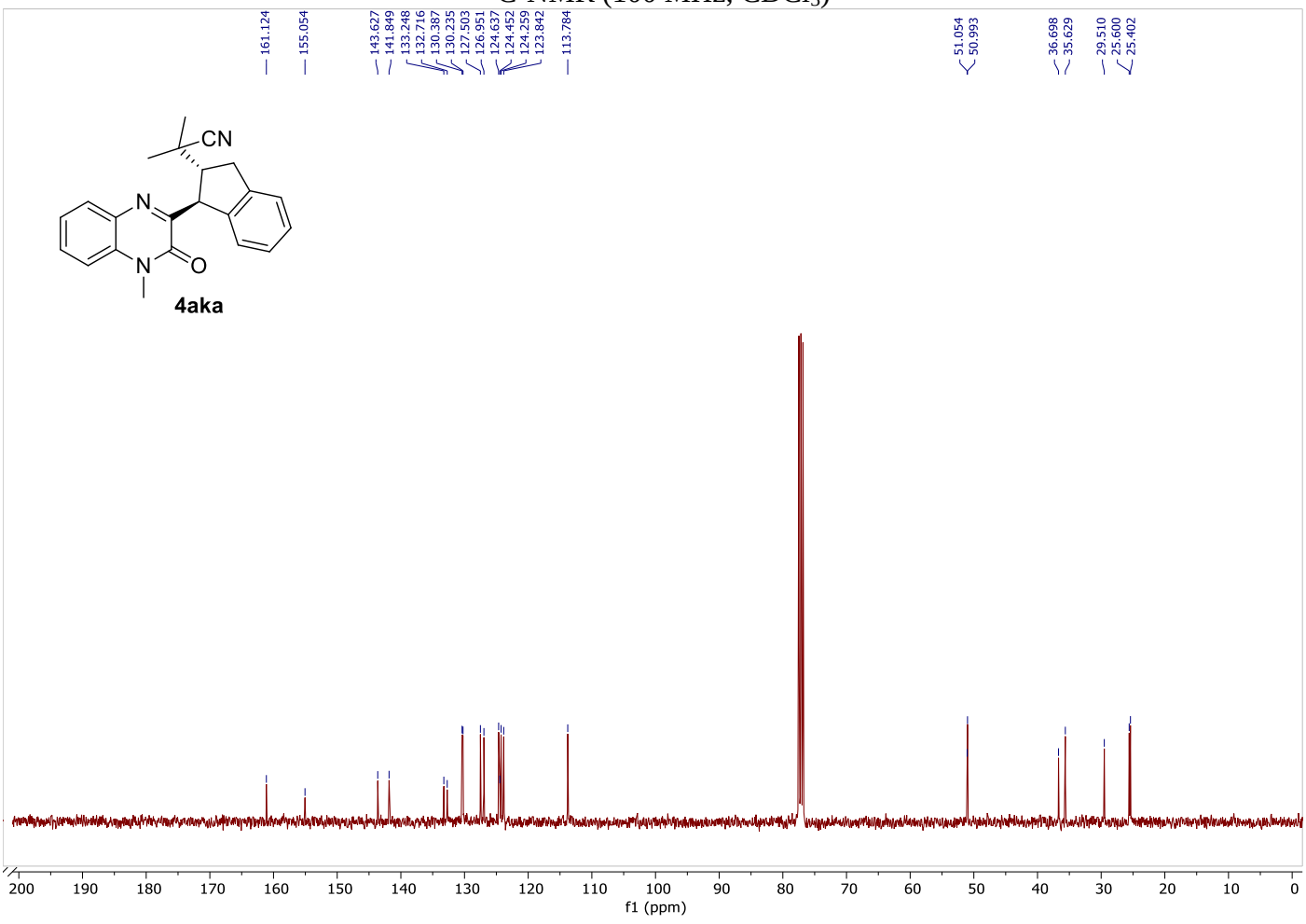

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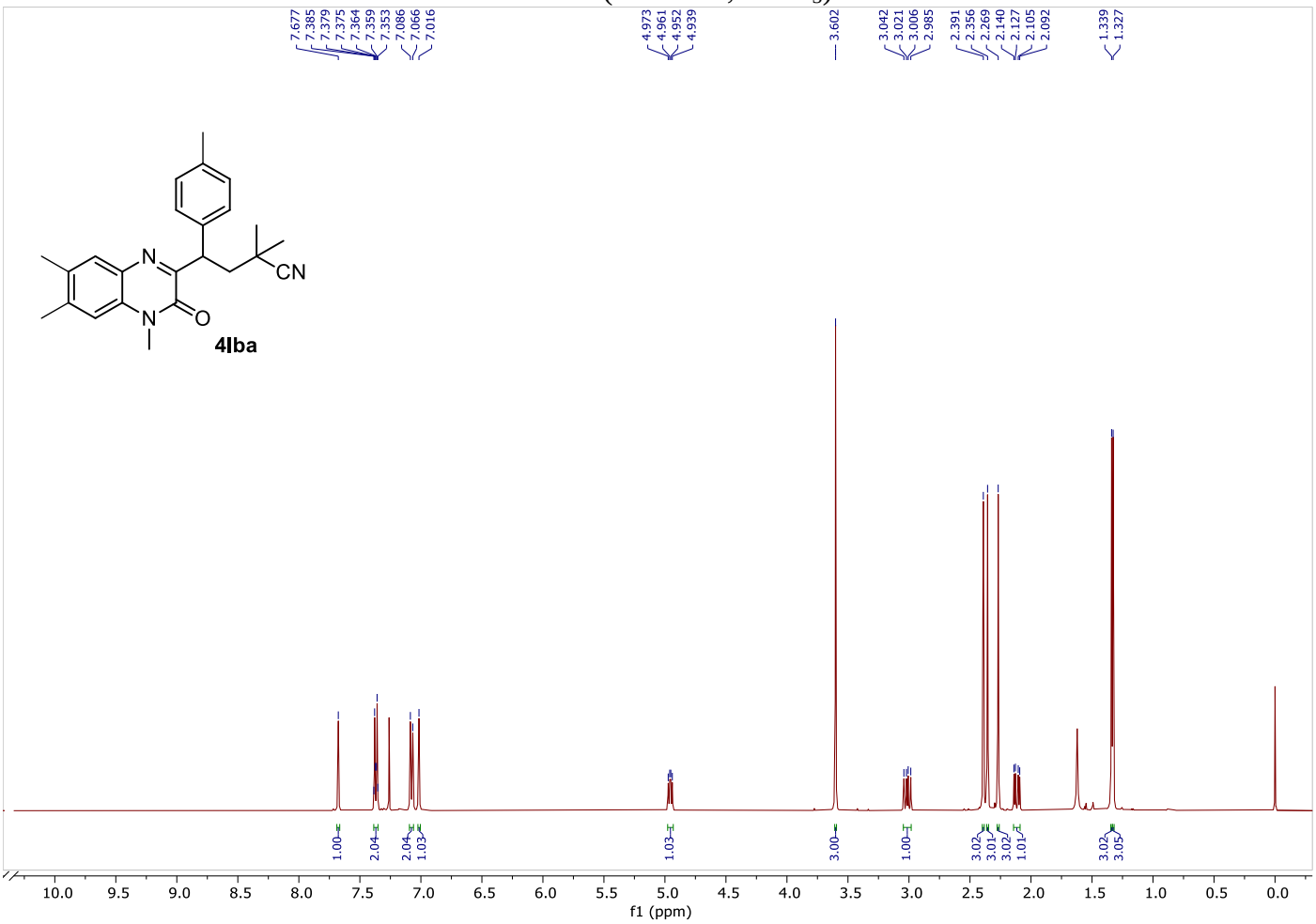

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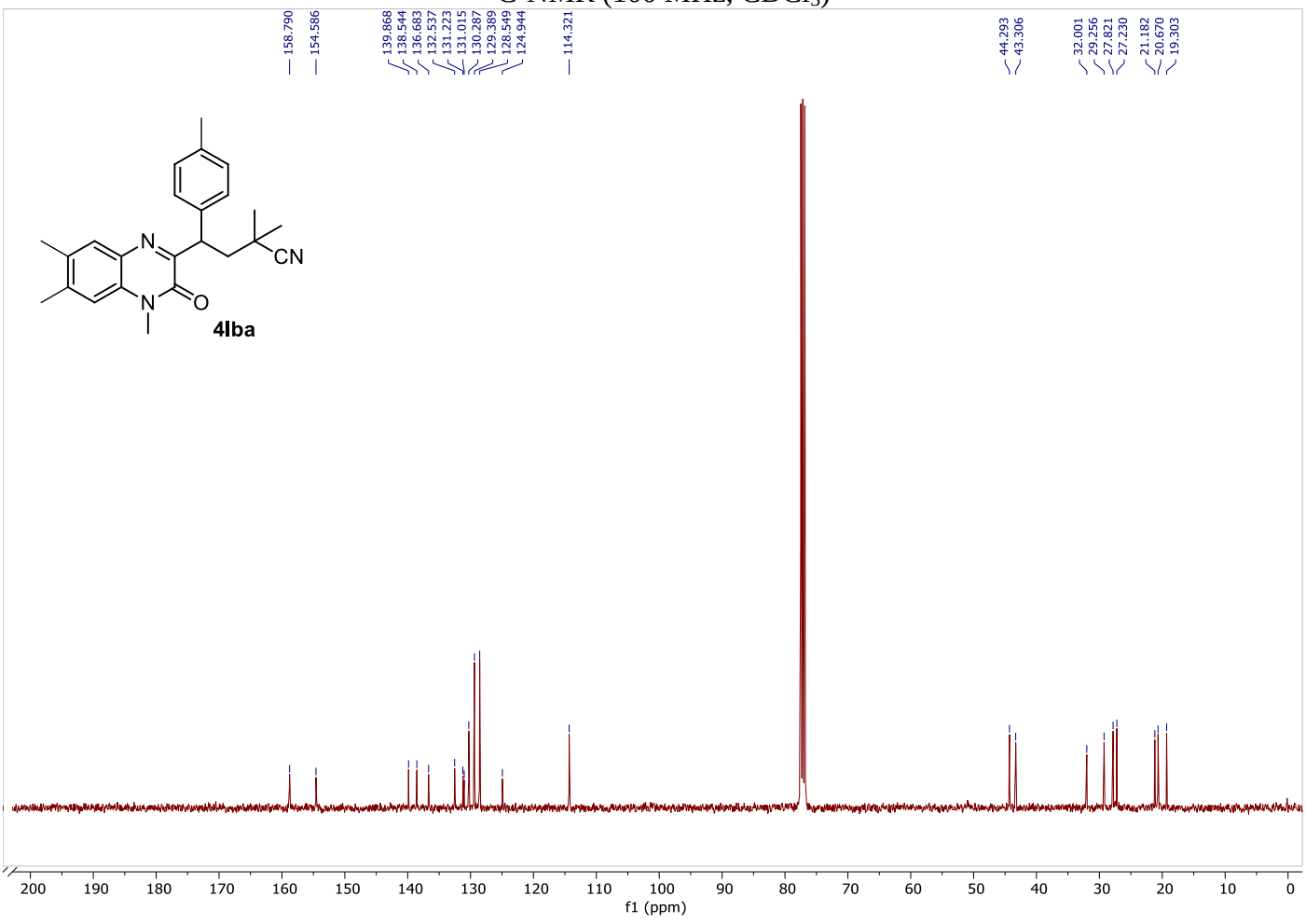
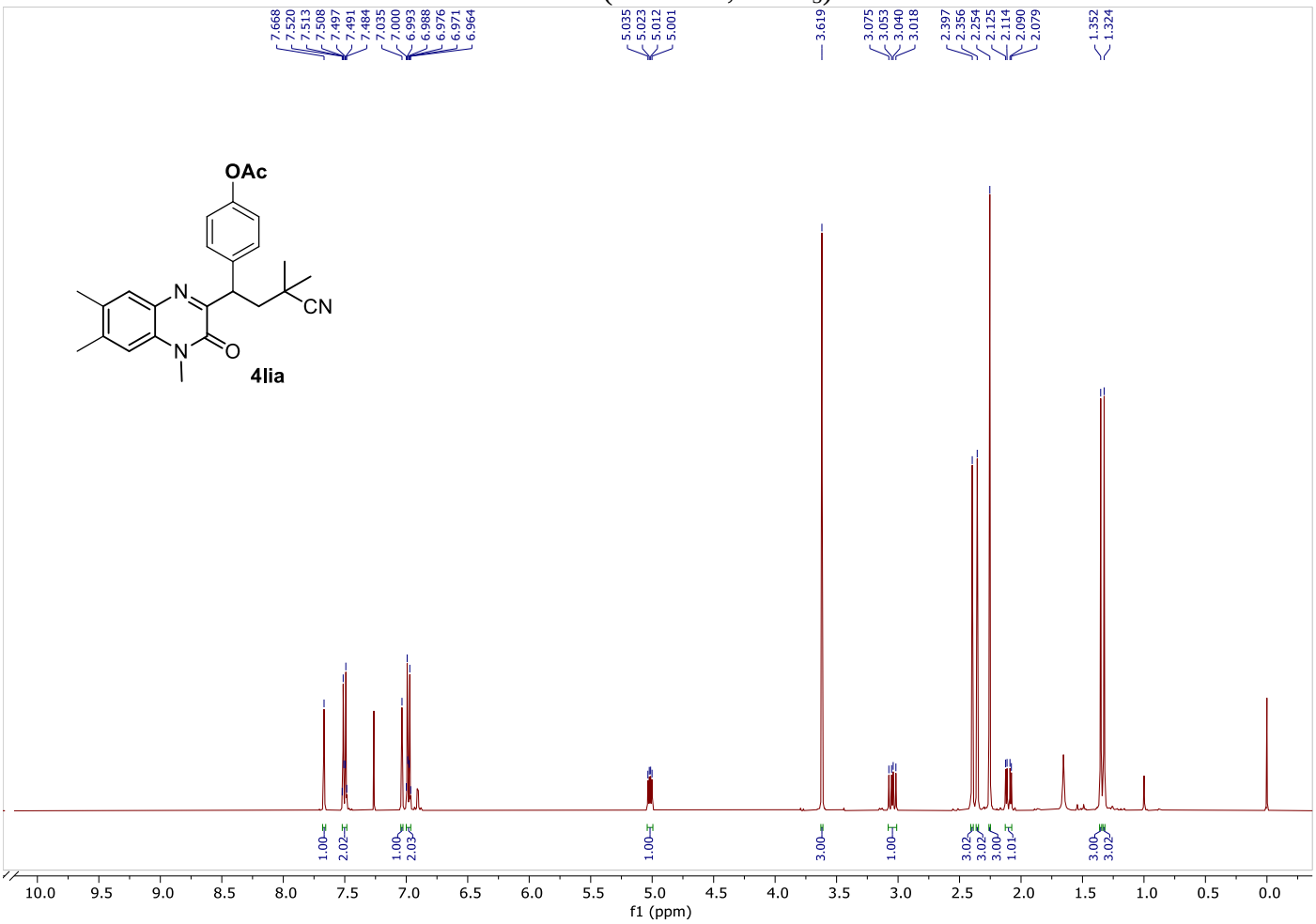
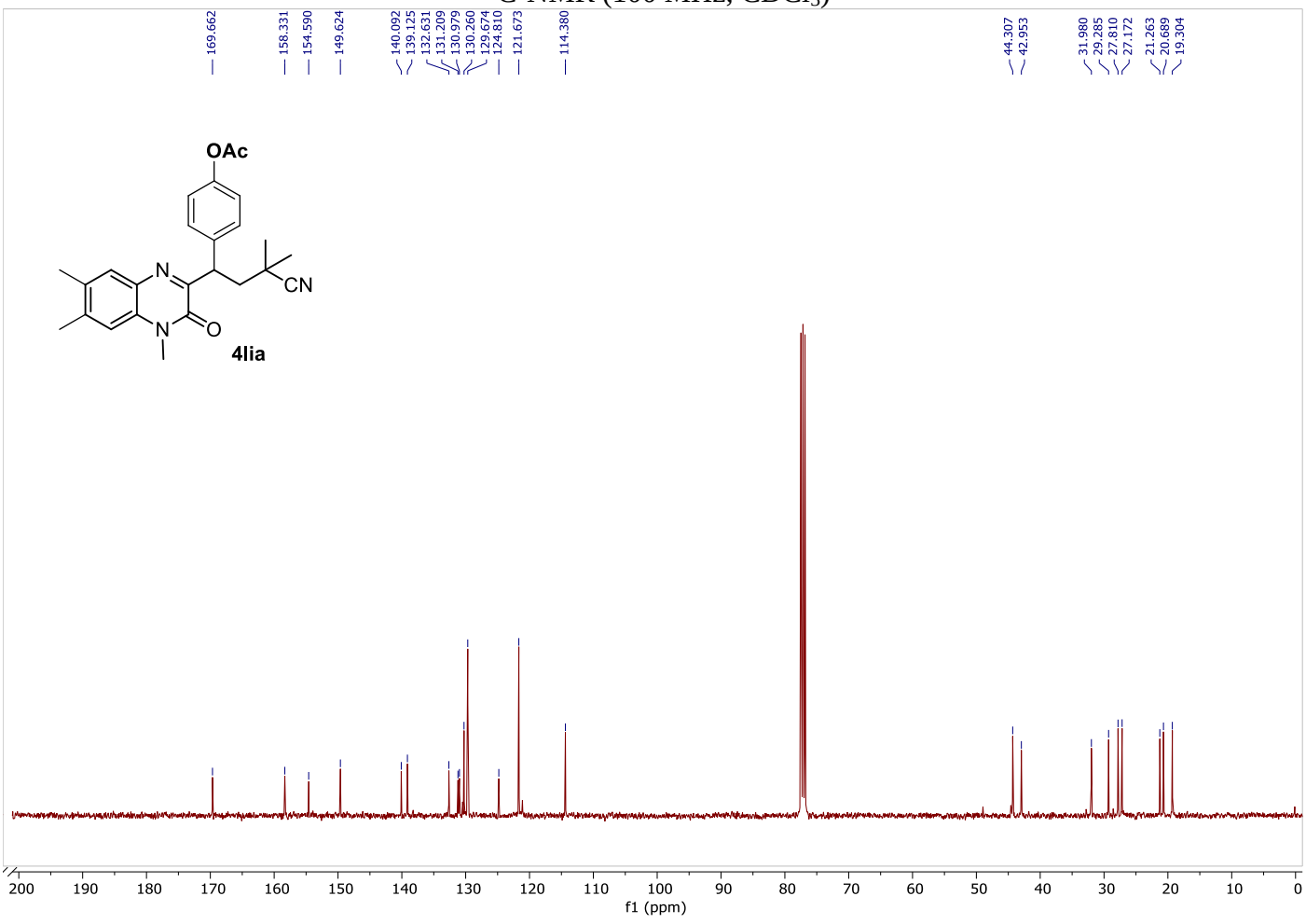


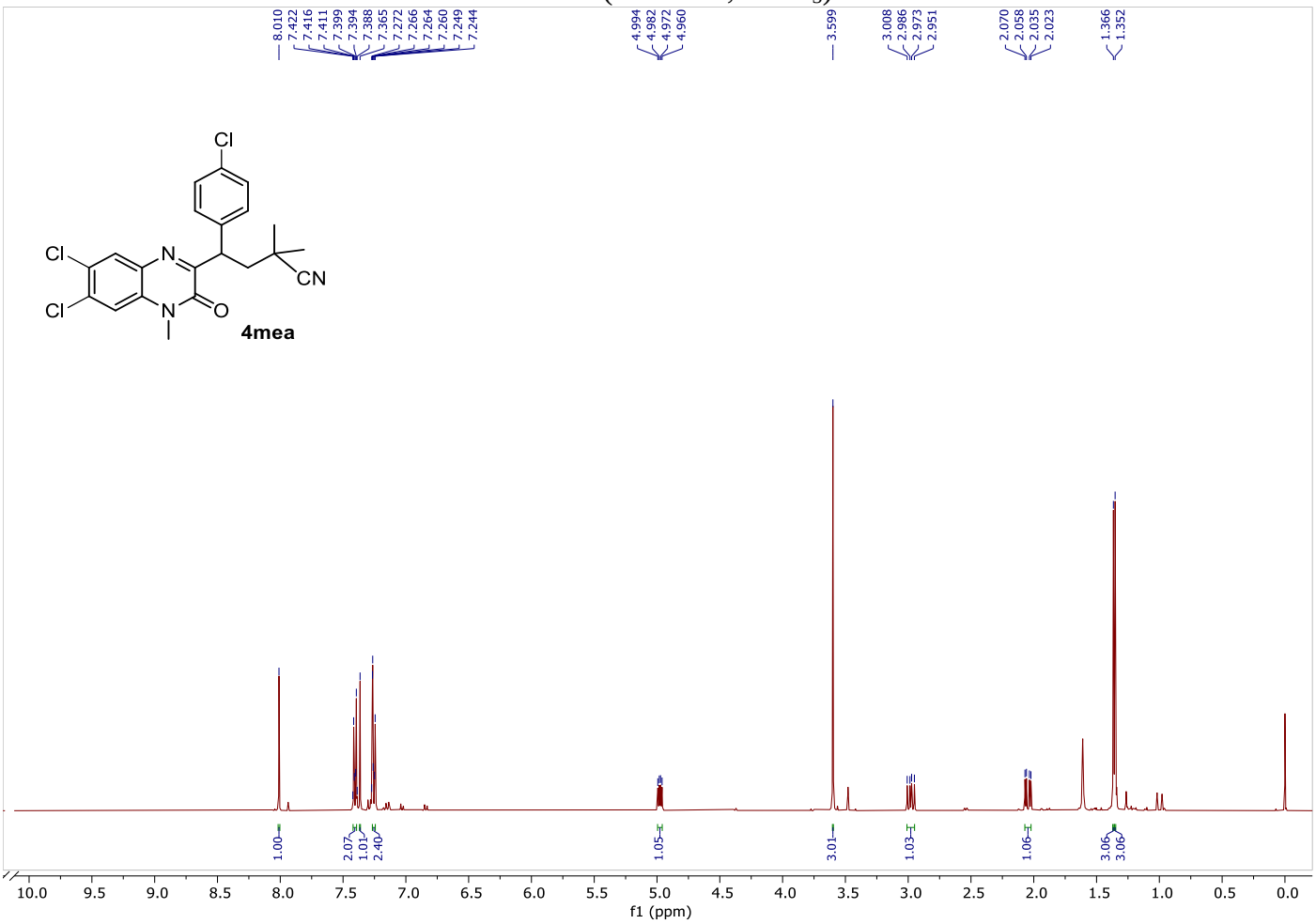
^{1}H-NMR (400 MHz, $CDCl_3$)



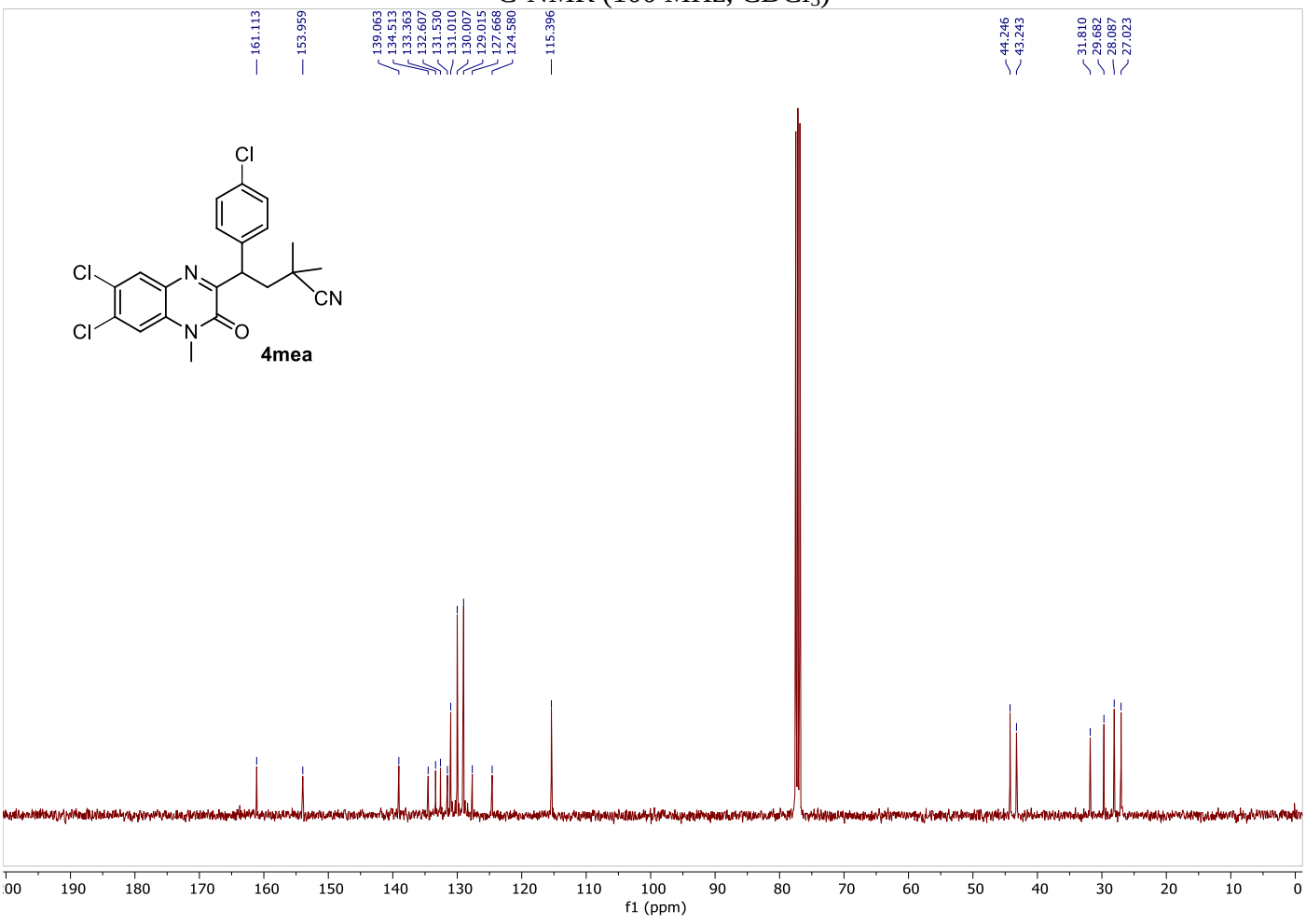
^{13}C-NMR (100 MHz, $CDCl_3$)



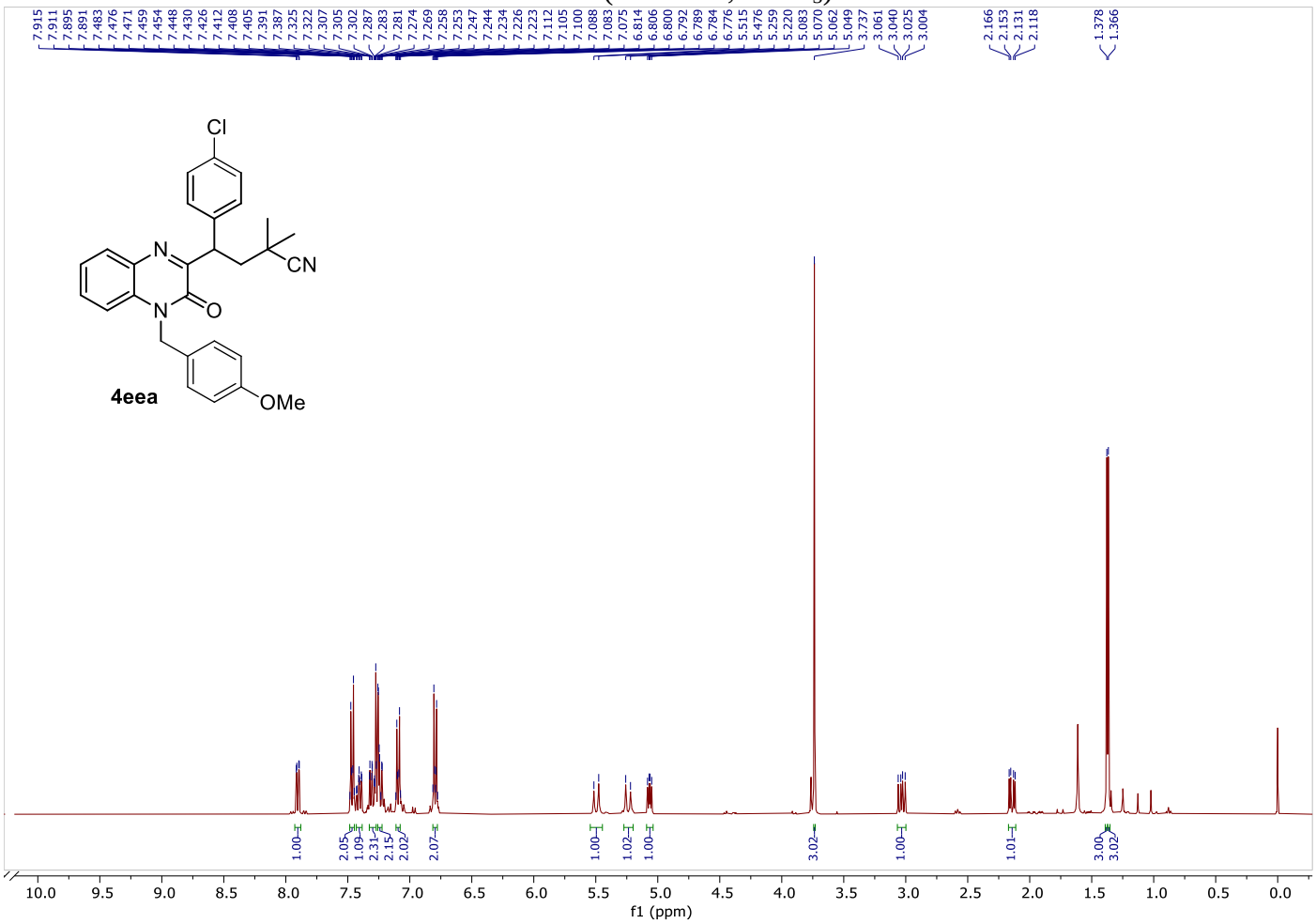
^{1}H-NMR (400 MHz, $CDCl_3$)



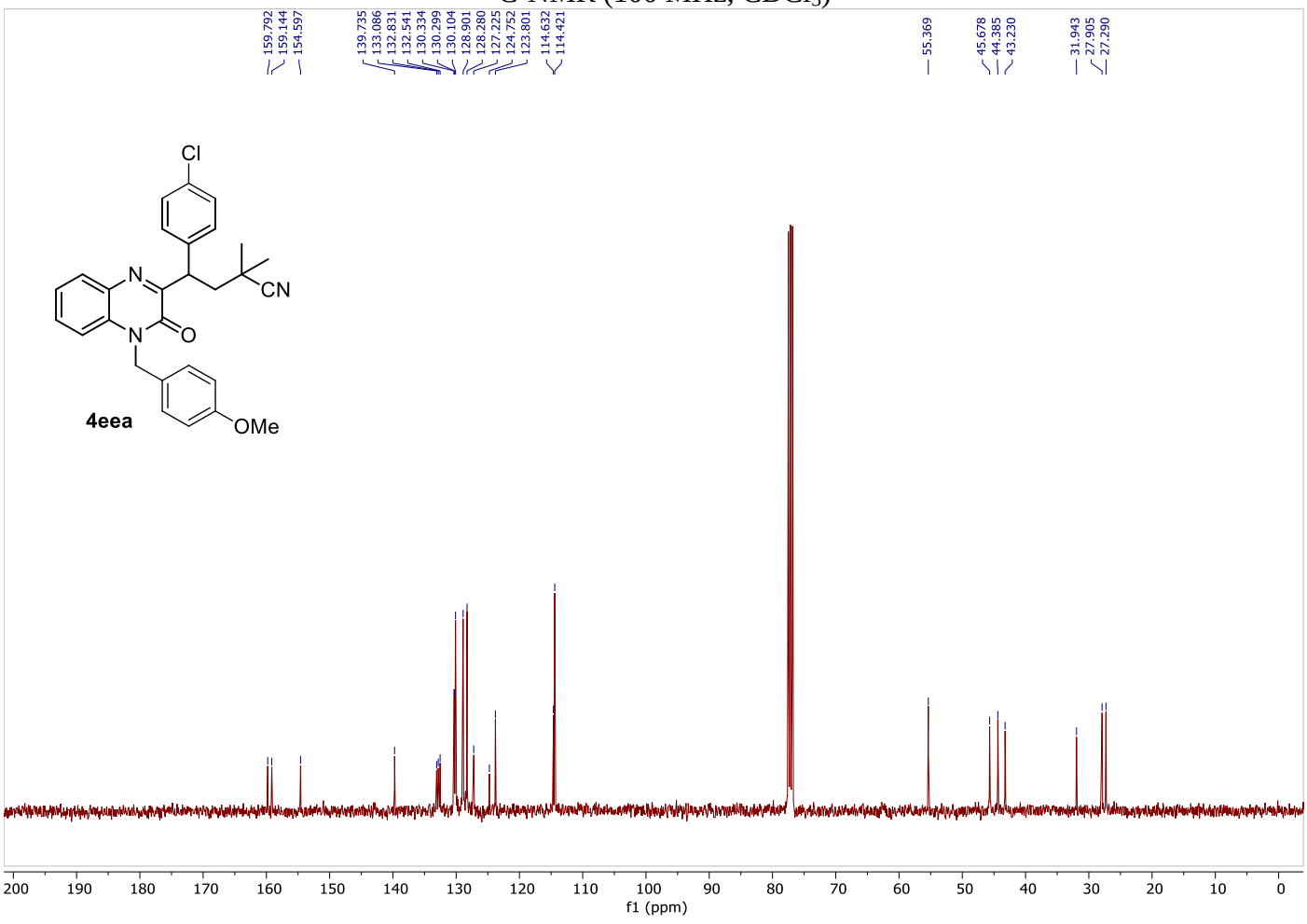
^{13}C-NMR (100 MHz, $CDCl_3$)



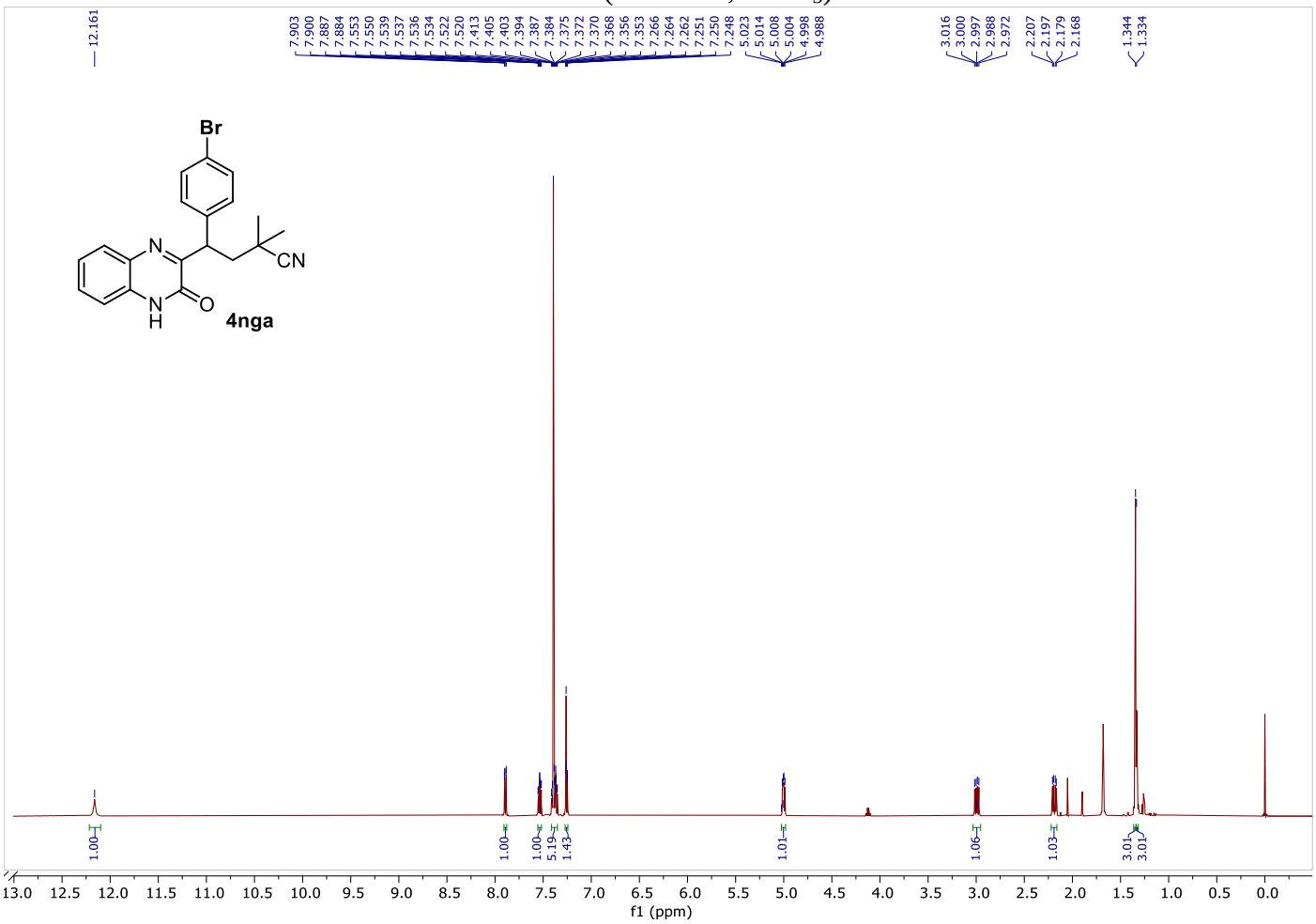
^{1}H-NMR (400 MHz, $CDCl_3$)



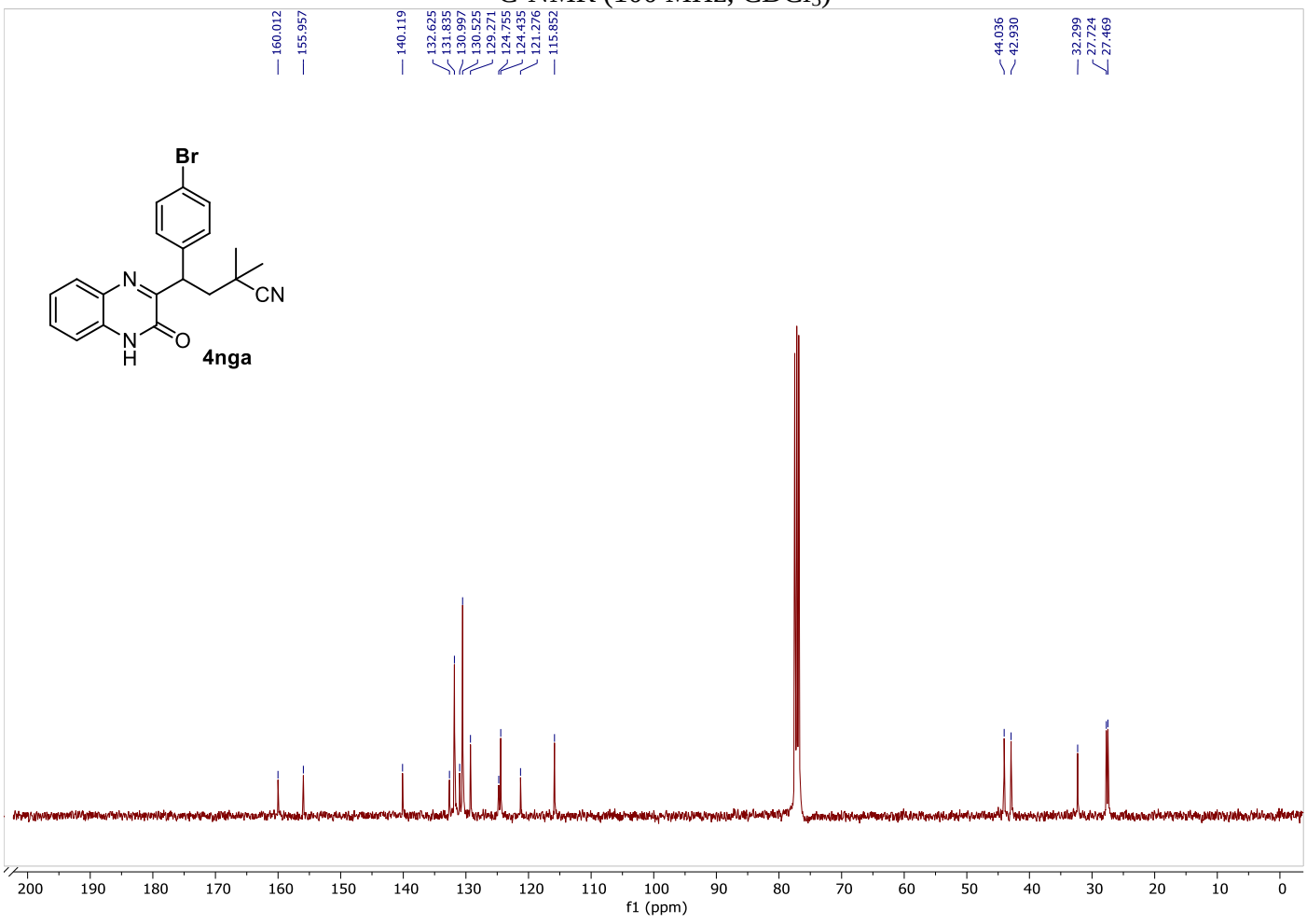
^{13}C-NMR (100 MHz, $CDCl_3$)



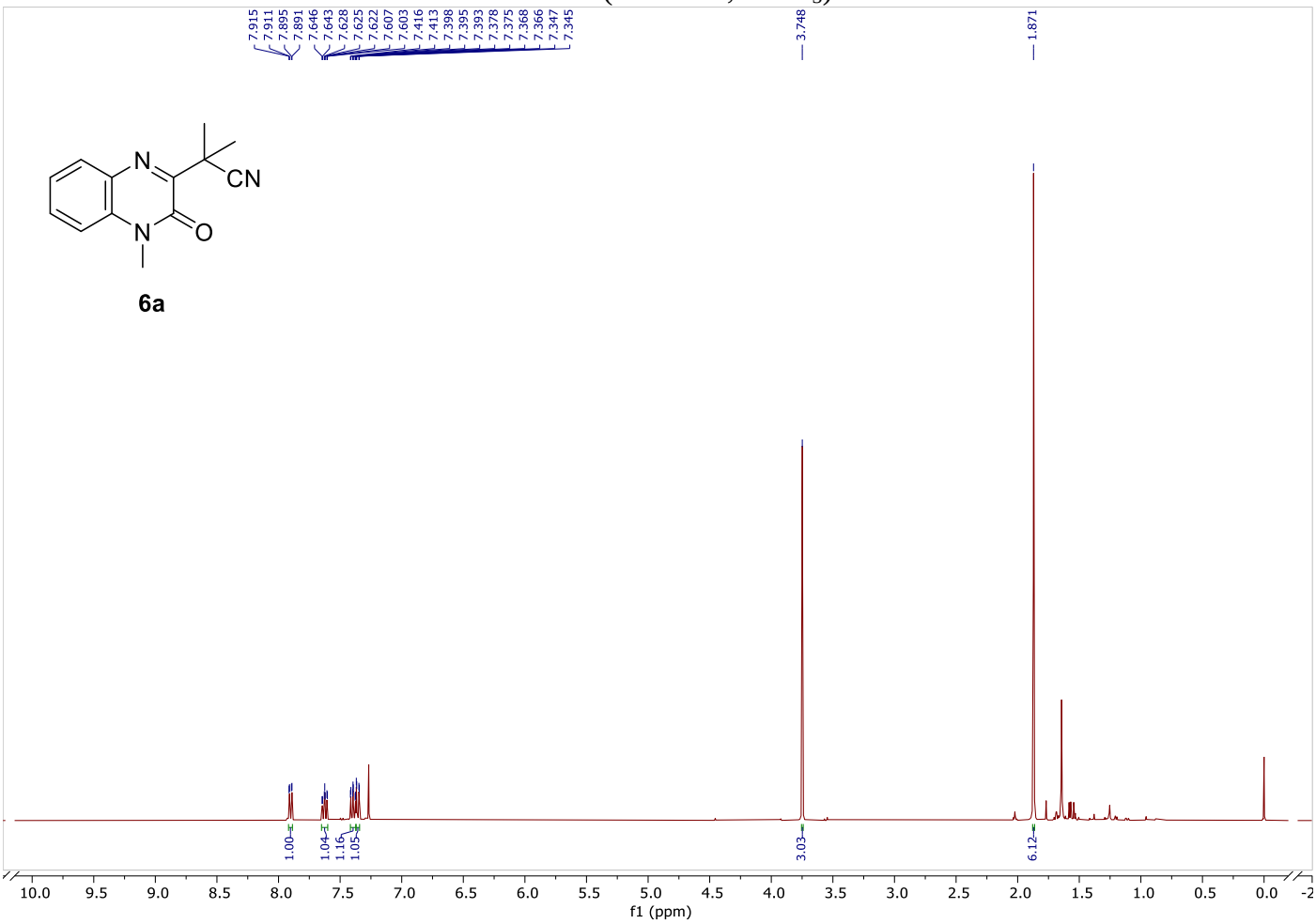
^{1}H-NMR (500 MHz, $CDCl_3$)



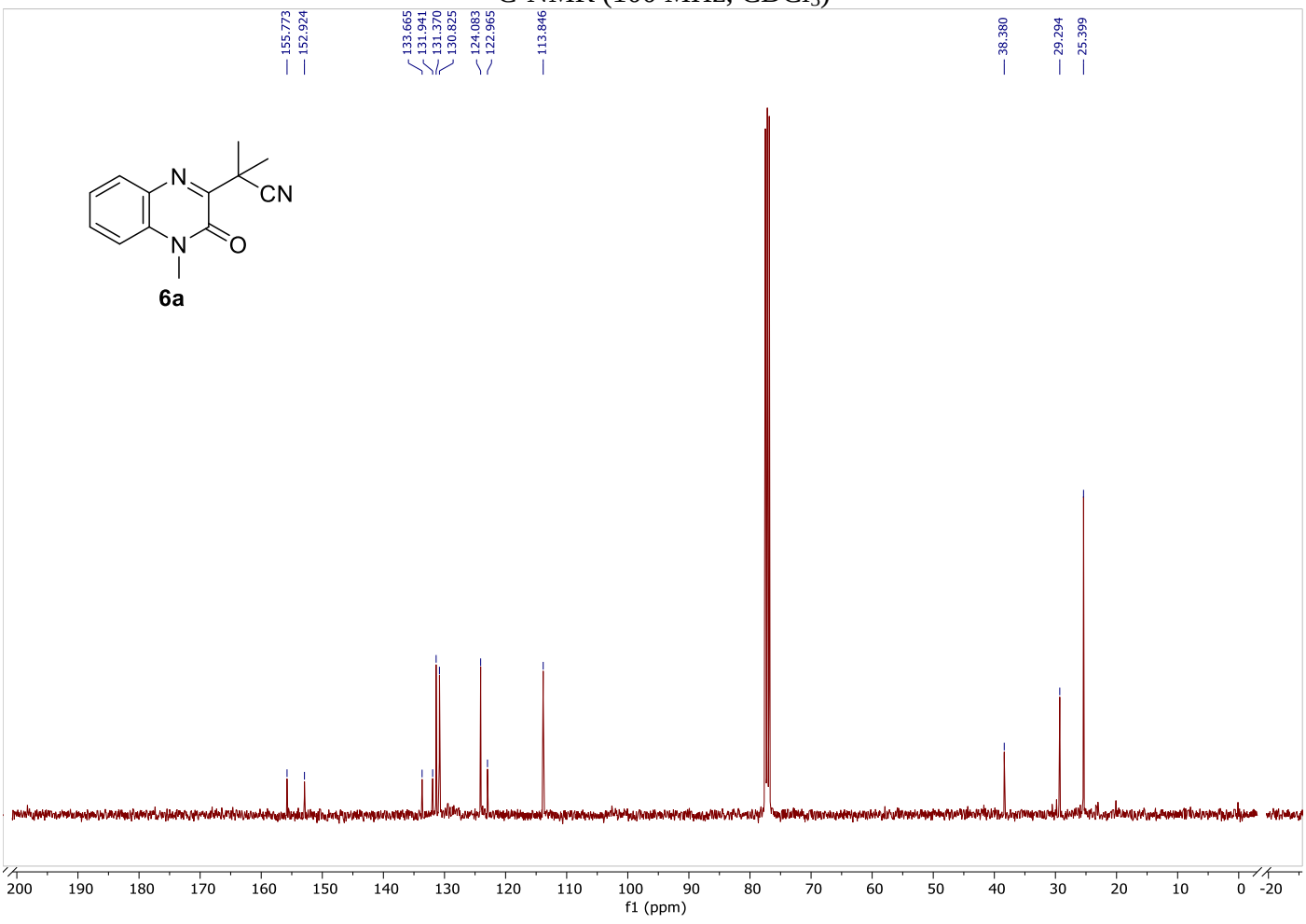
^{13}C-NMR (100 MHz, $CDCl_3$)



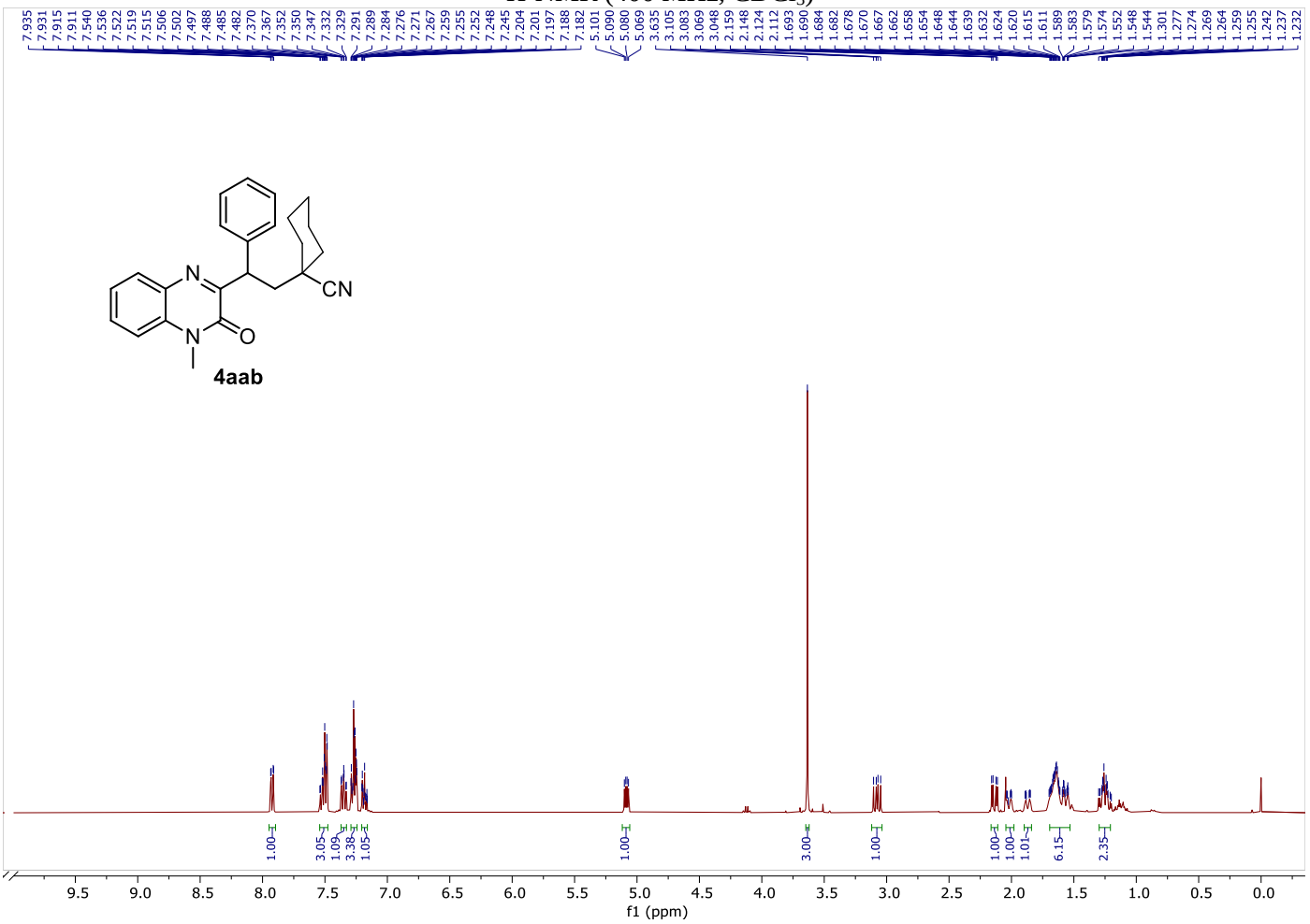
^{1}H-NMR (400 MHz, $CDCl_3$)



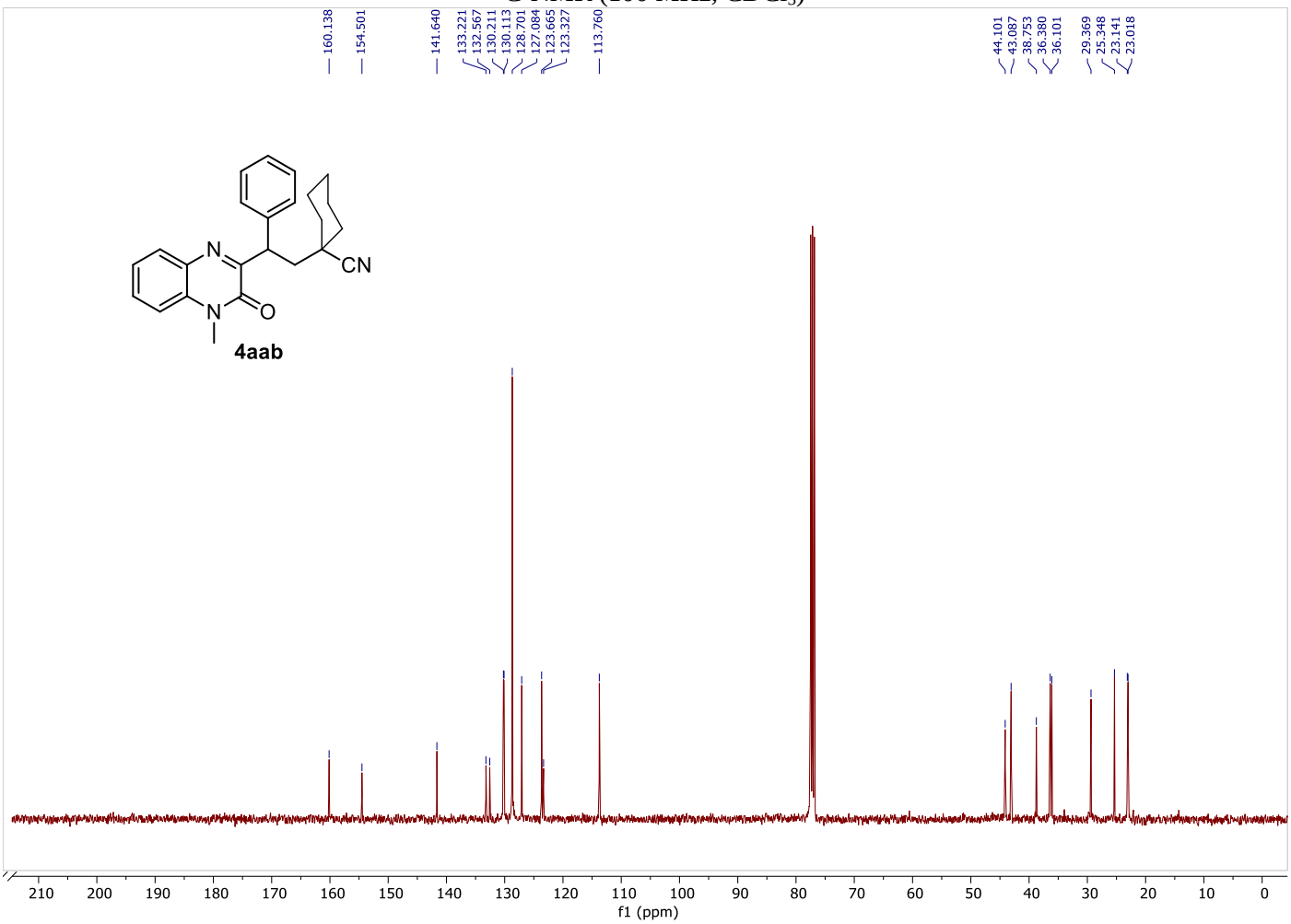
^{13}C-NMR (100 MHz, $CDCl_3$)



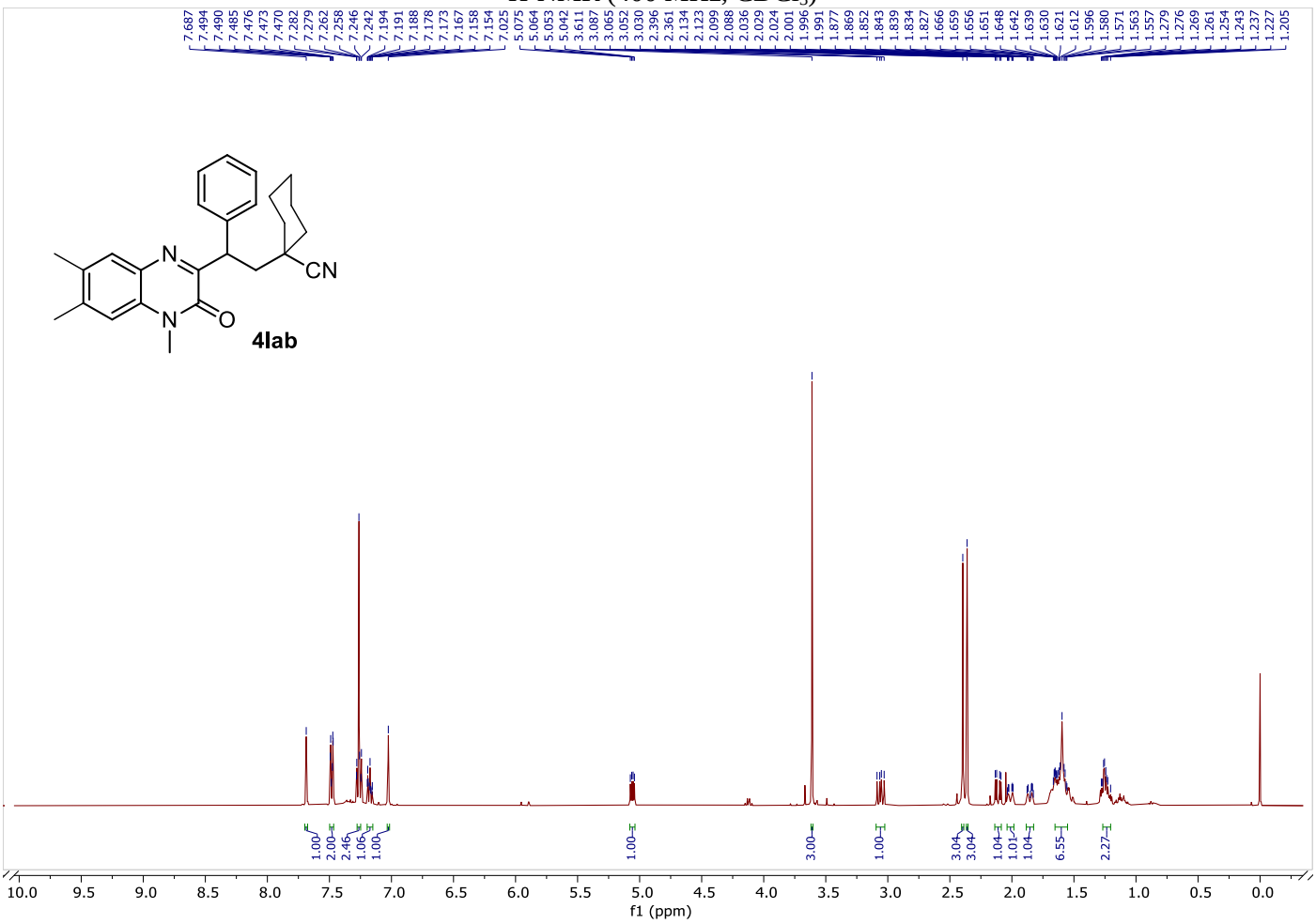
^{1}H-NMR (400 MHz, $CDCl_3$)



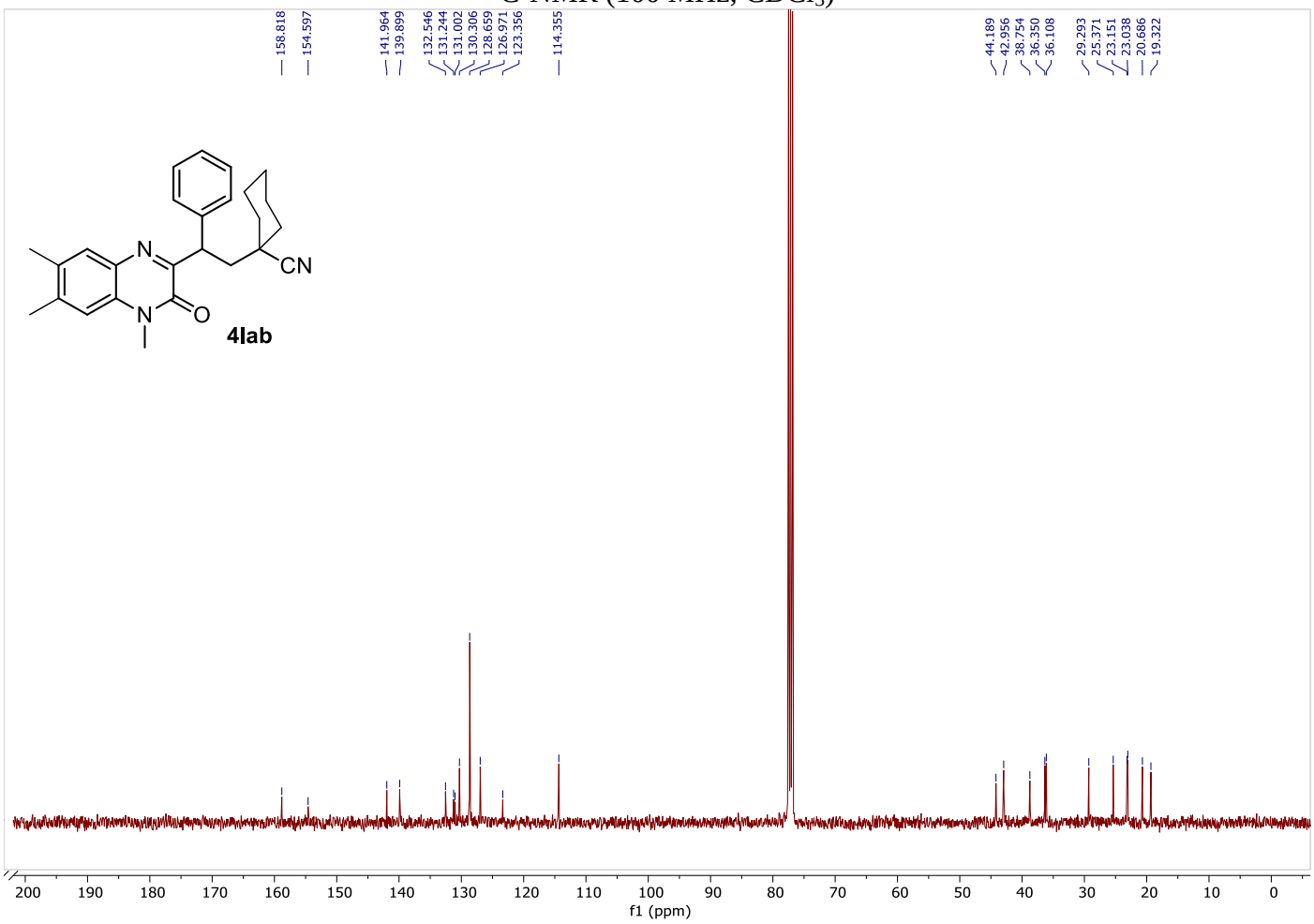
^{13}C-NMR (100 MHz, $CDCl_3$)



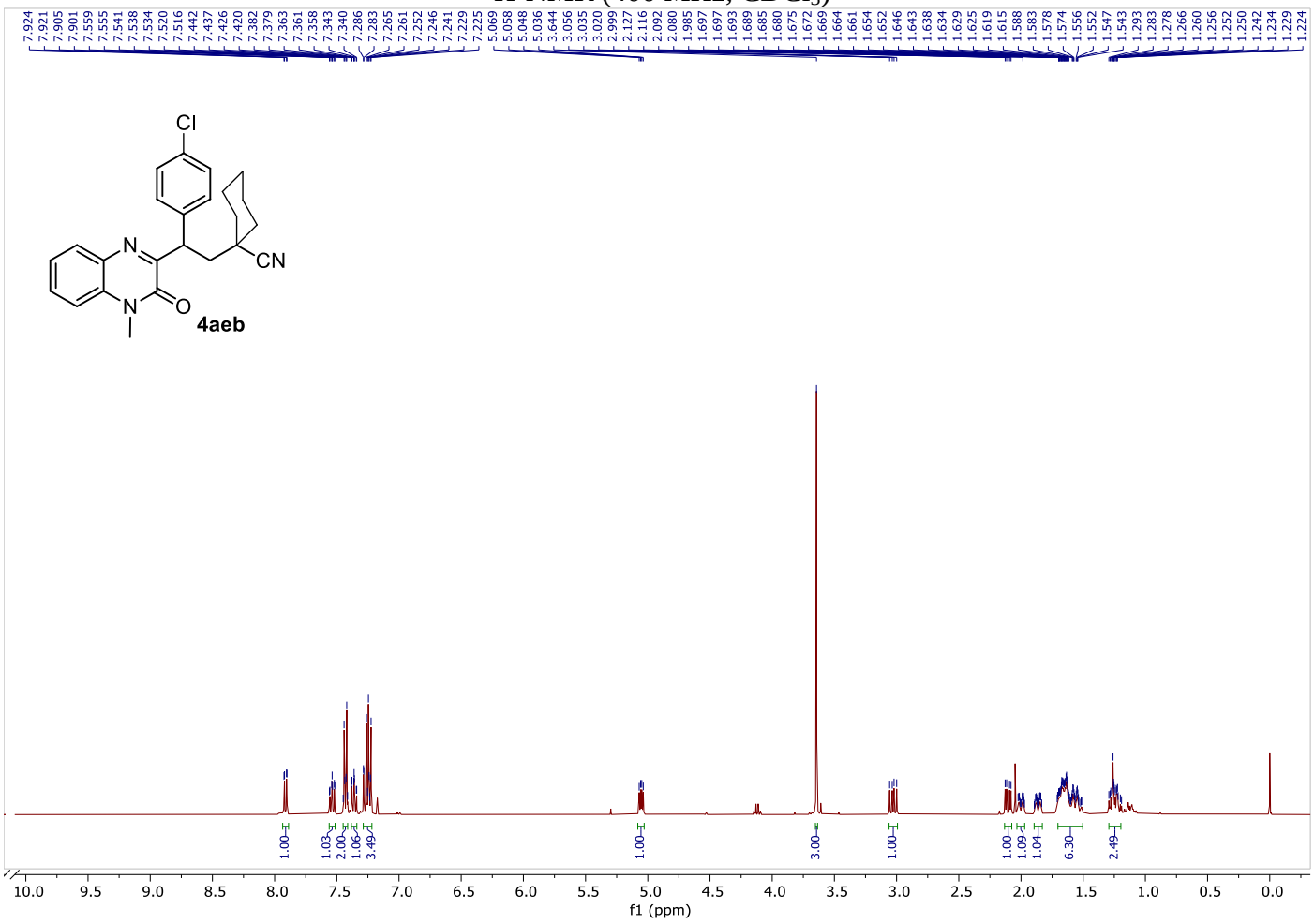
^{1}H-NMR (400 MHz, $CDCl_3$)



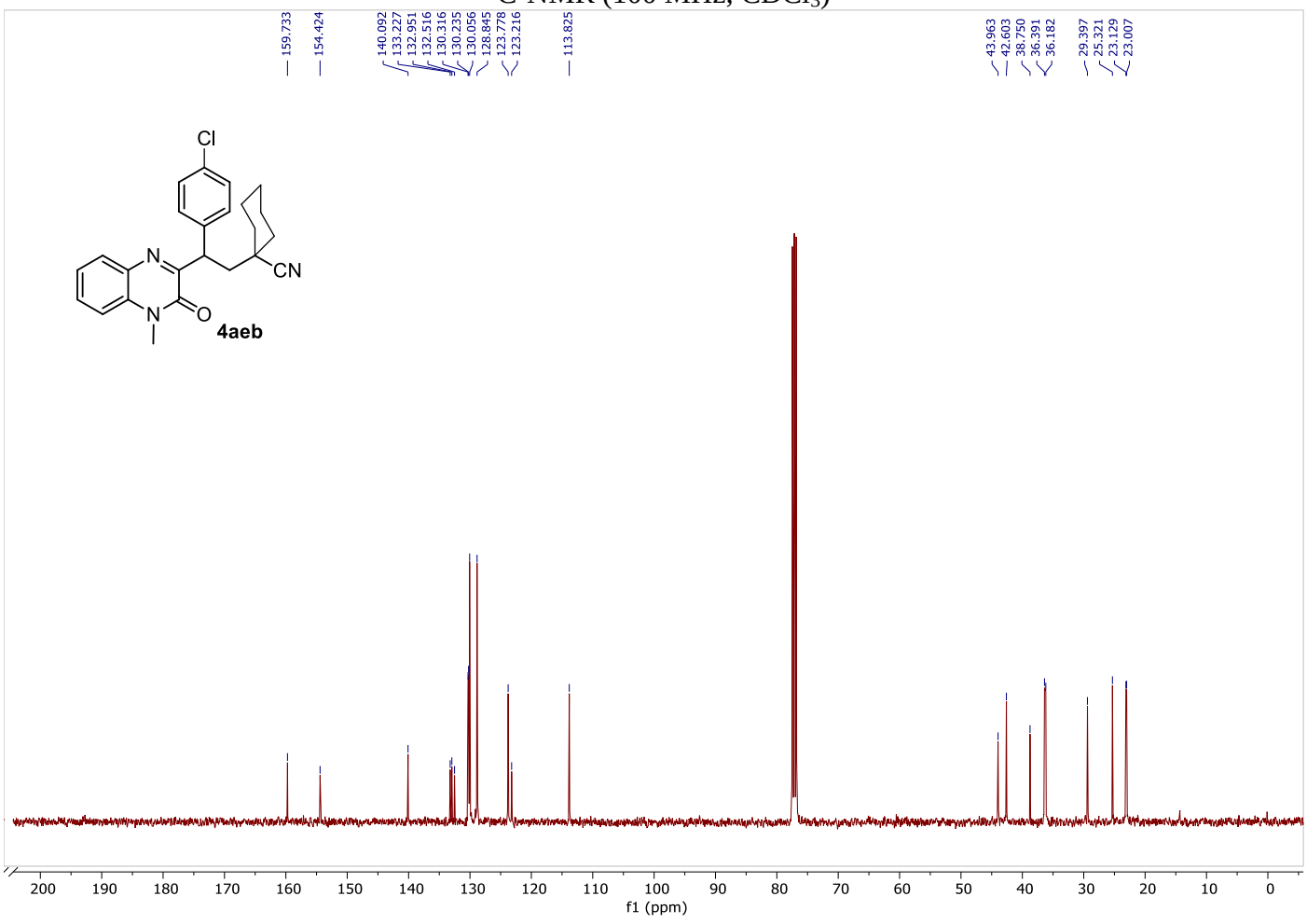
^{13}C-NMR (100 MHz, $CDCl_3$)



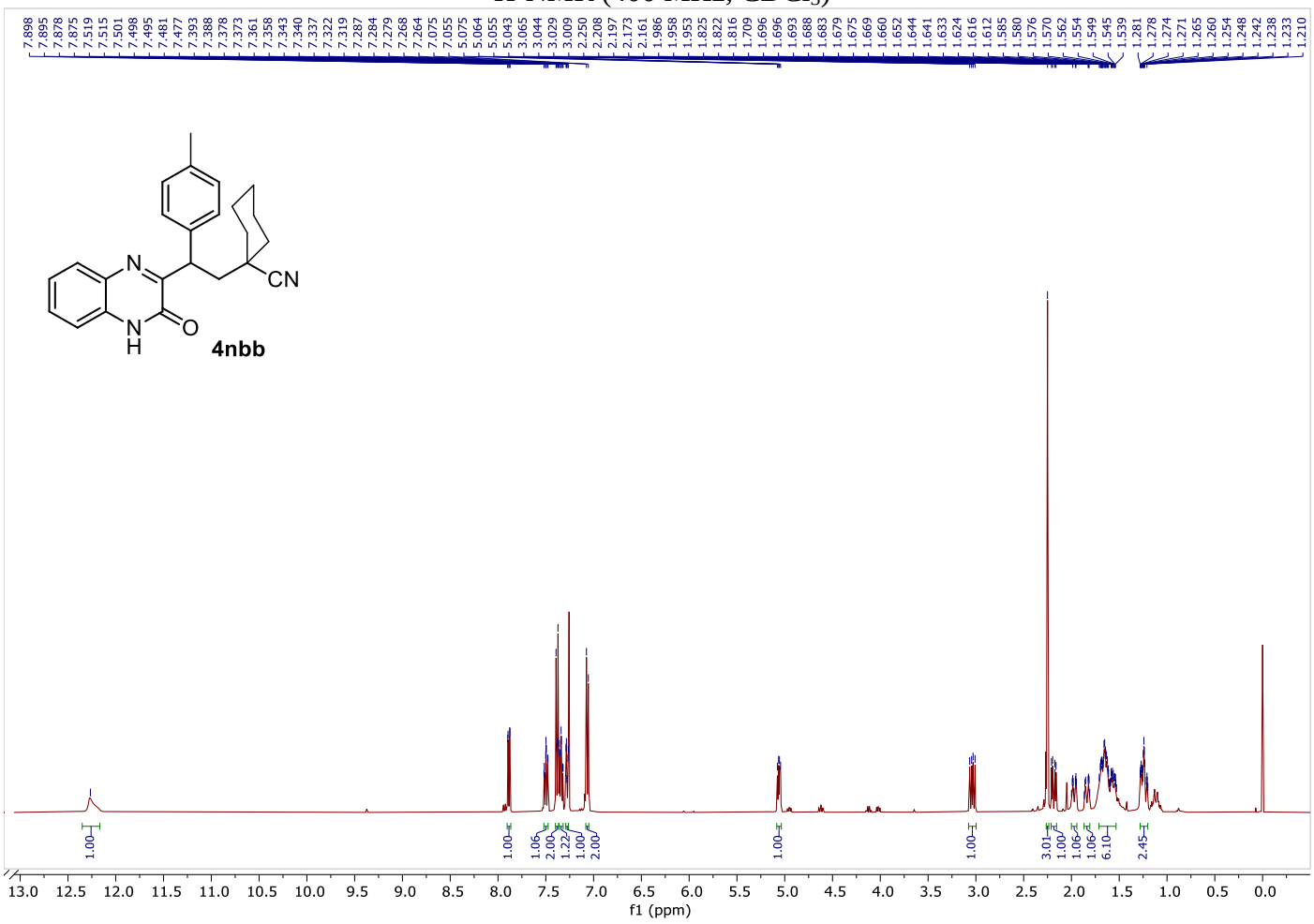
^{1}H-NMR (400 MHz, $CDCl_3$)



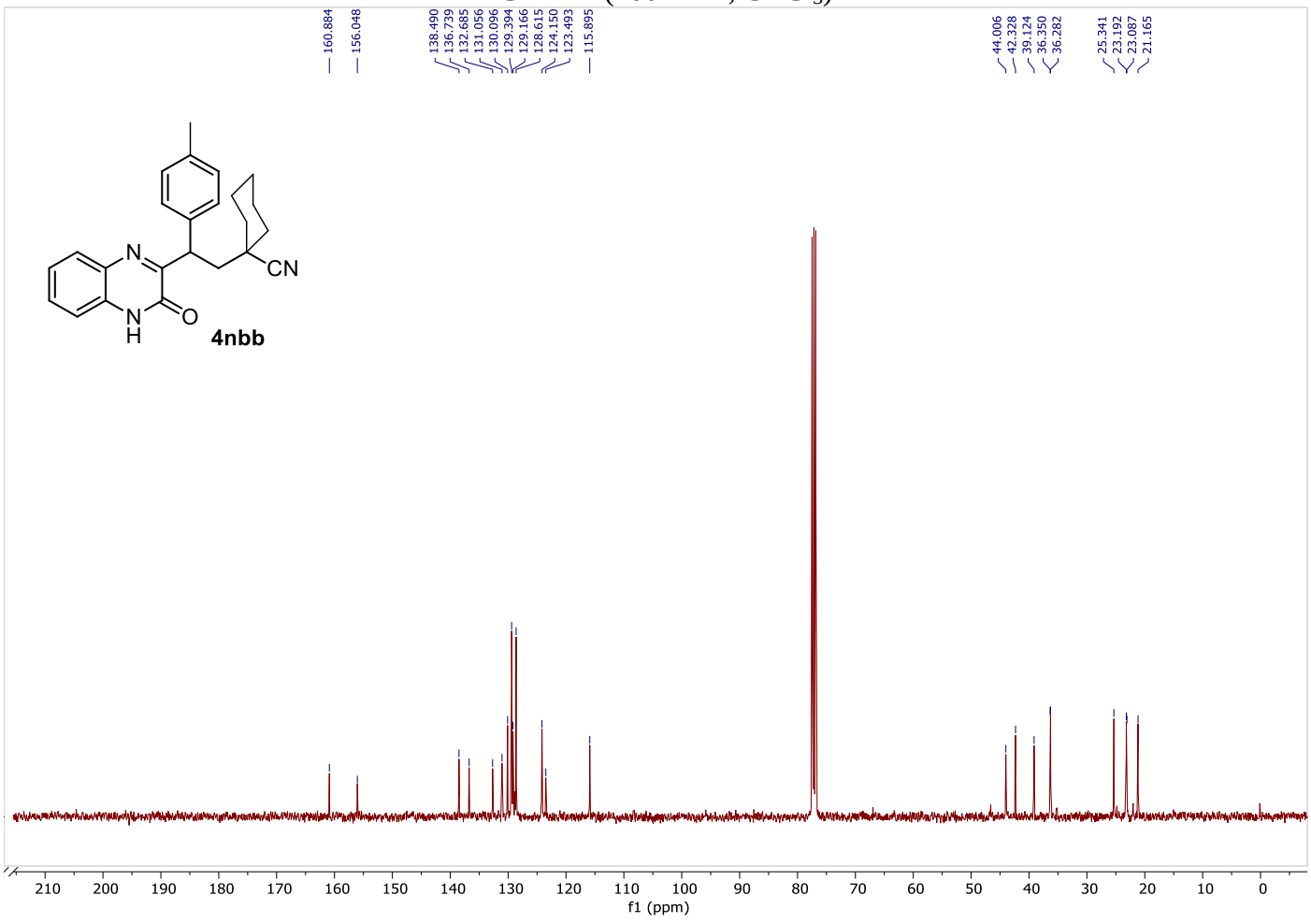
^{13}C-NMR (100 MHz, $CDCl_3$)



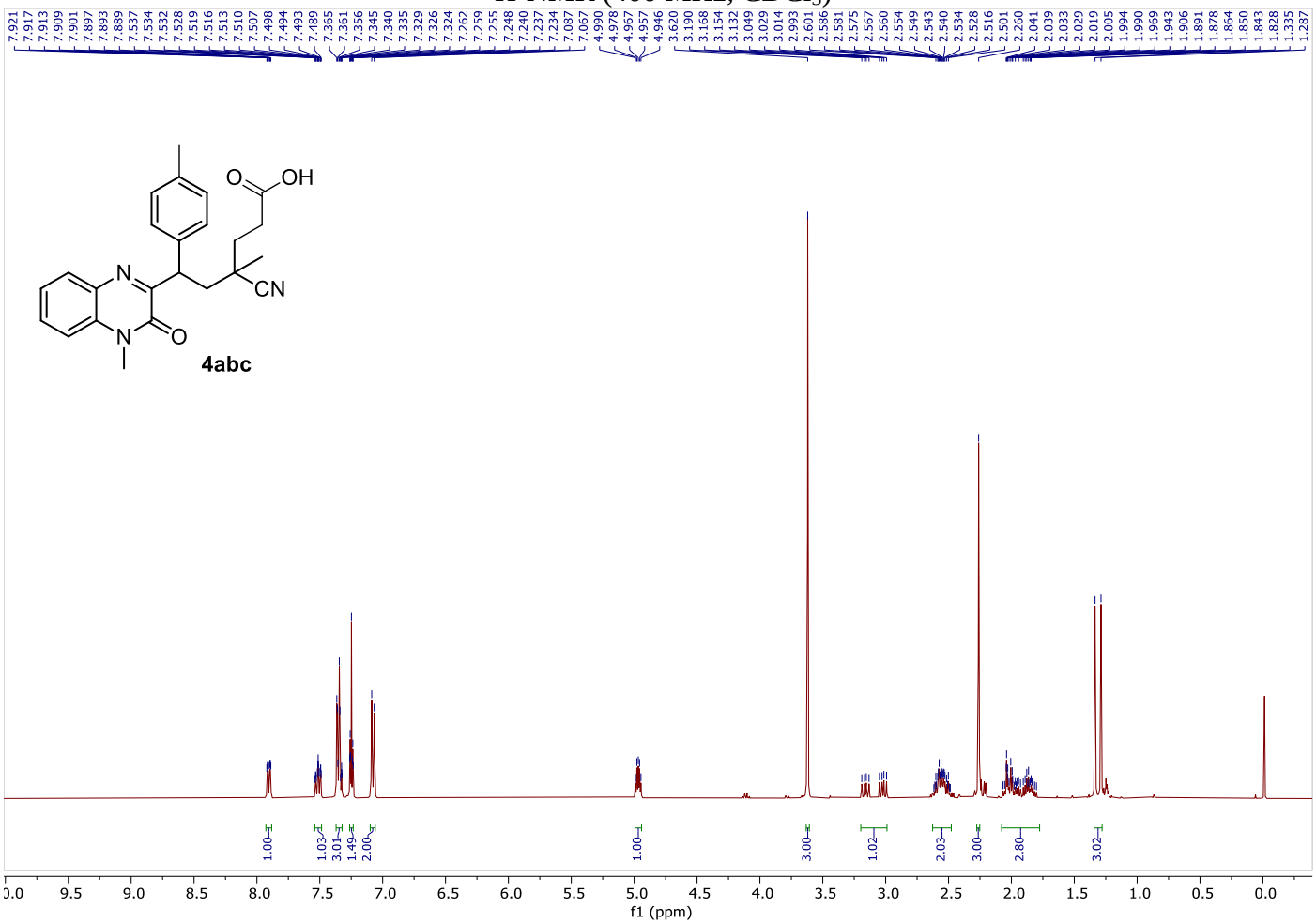
^{1}H-NMR (400 MHz, $CDCl_3$)



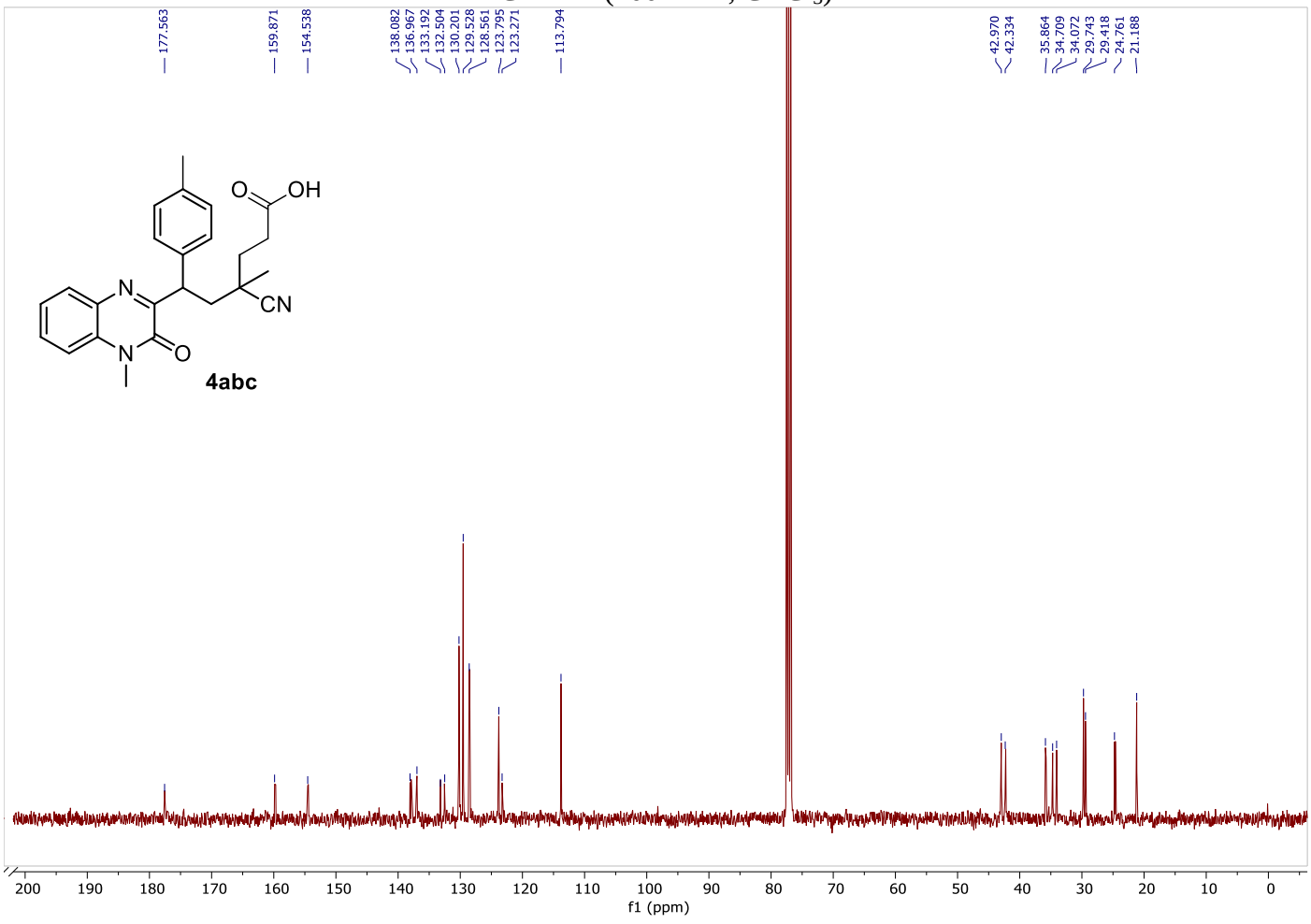
^{13}C-NMR (100 MHz, $CDCl_3$)



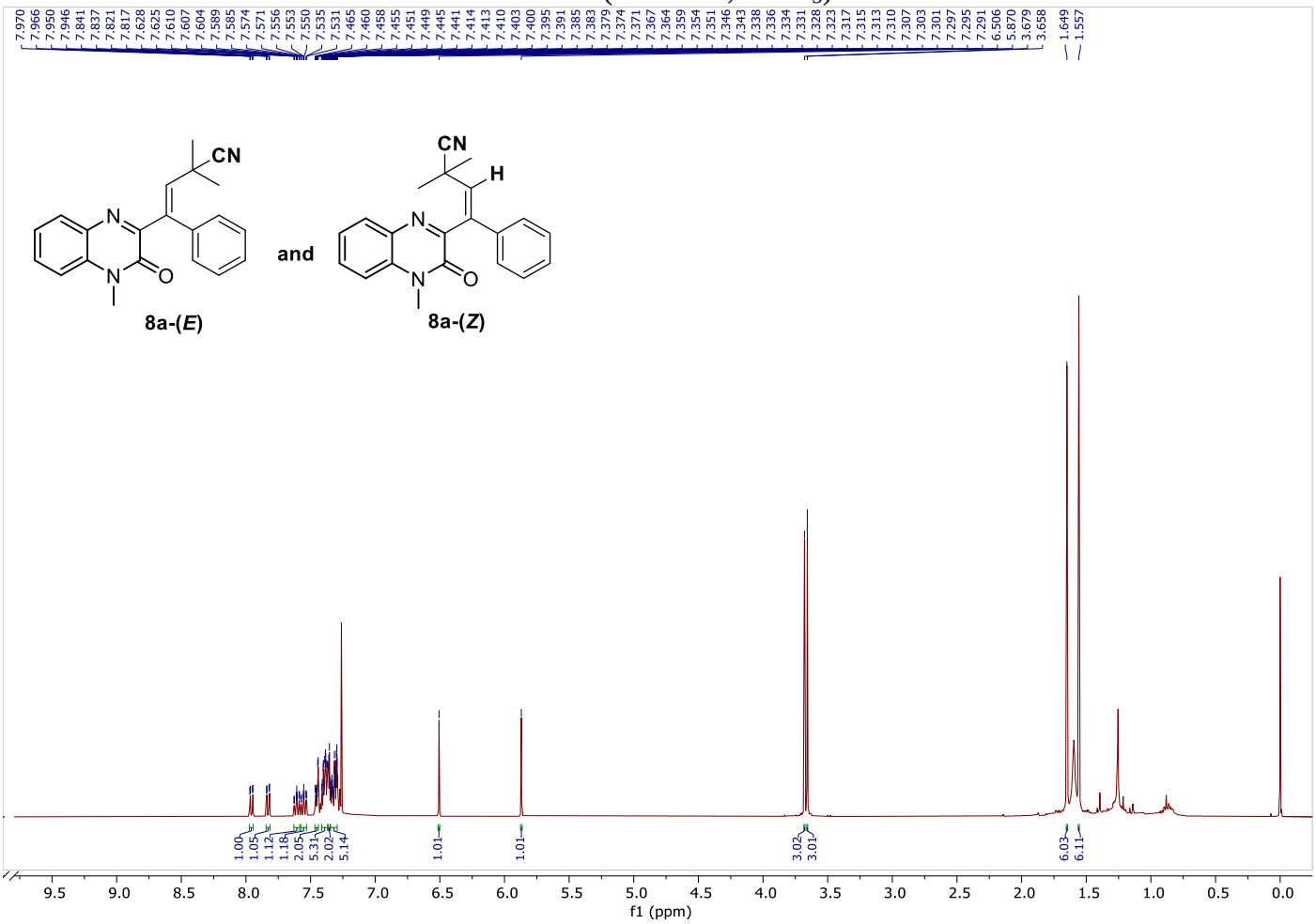
^{1}H-NMR (400 MHz, $CDCl_3$)



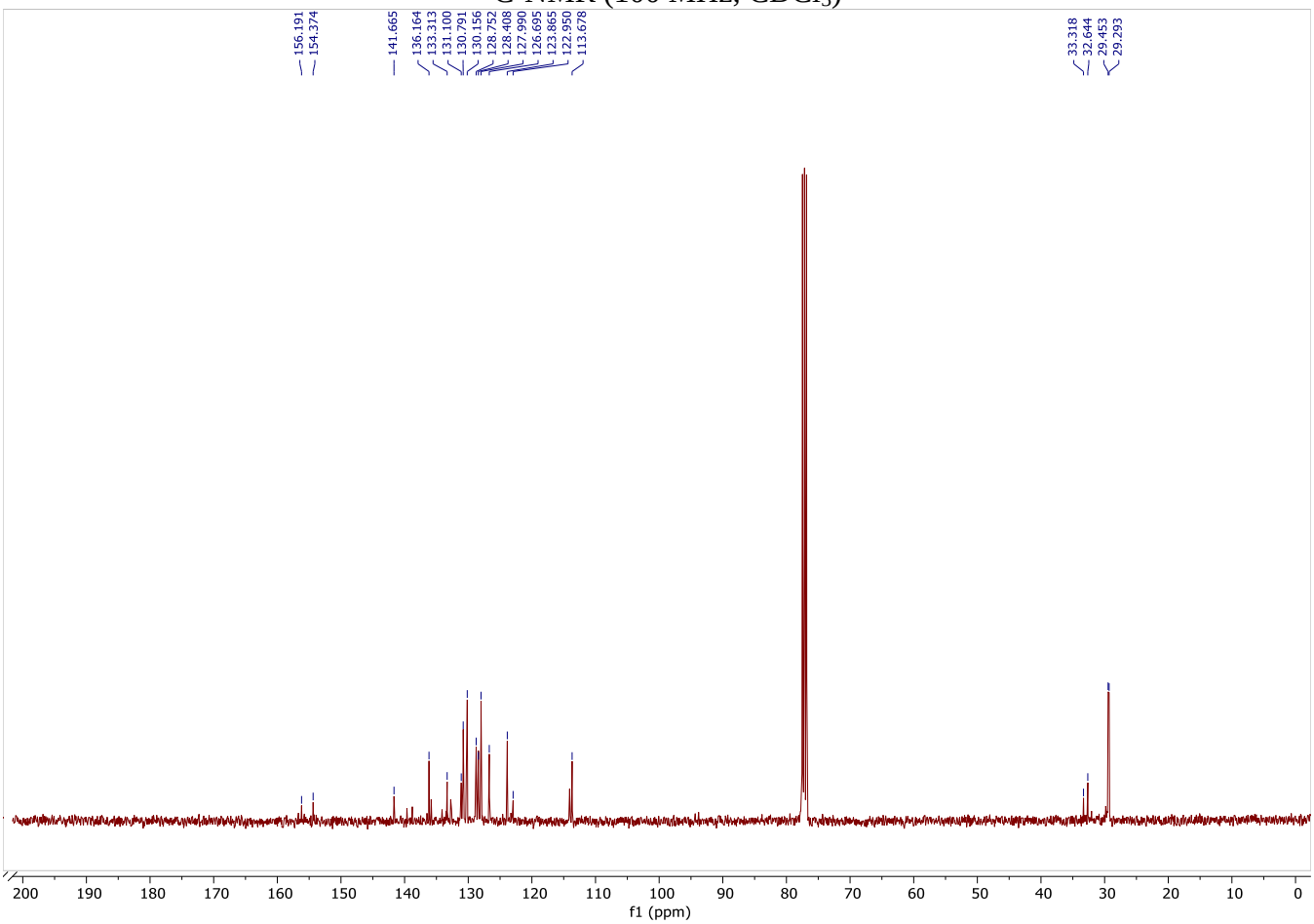
^{13}C-NMR (100 MHz, $CDCl_3$)



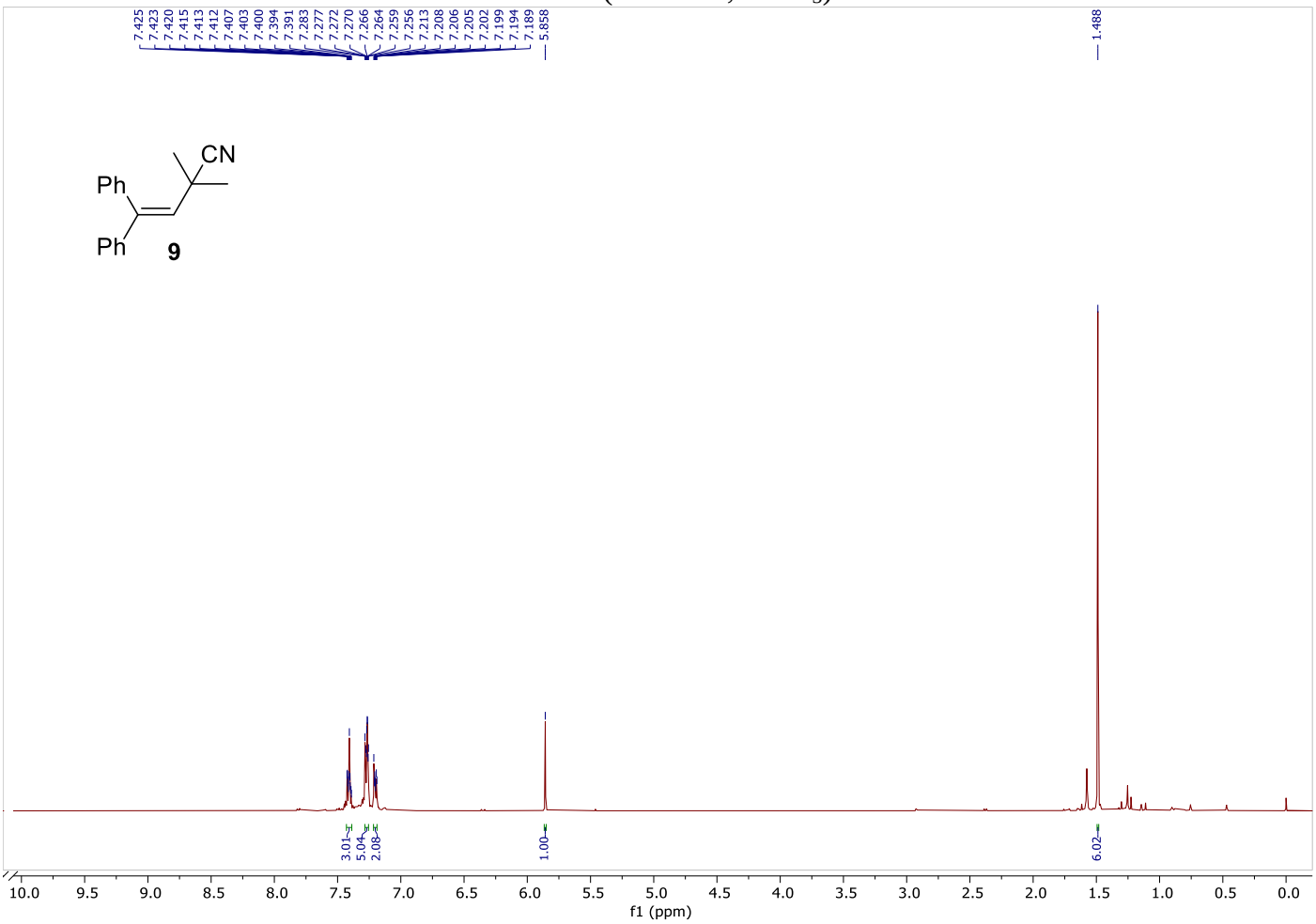
^{1}H-NMR (400 MHz, $CDCl_3$)



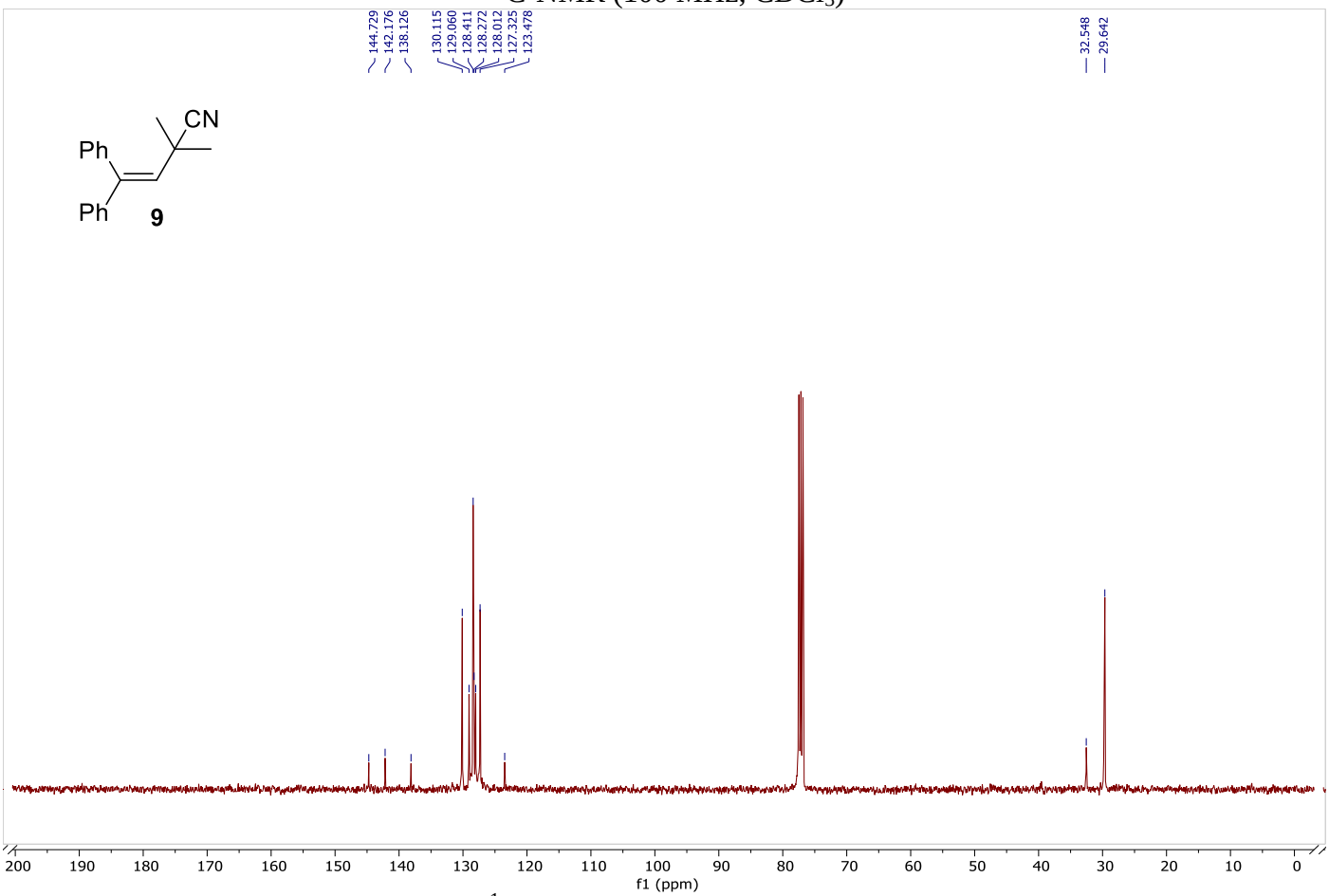
^{13}C-NMR (100 MHz, $CDCl_3$)



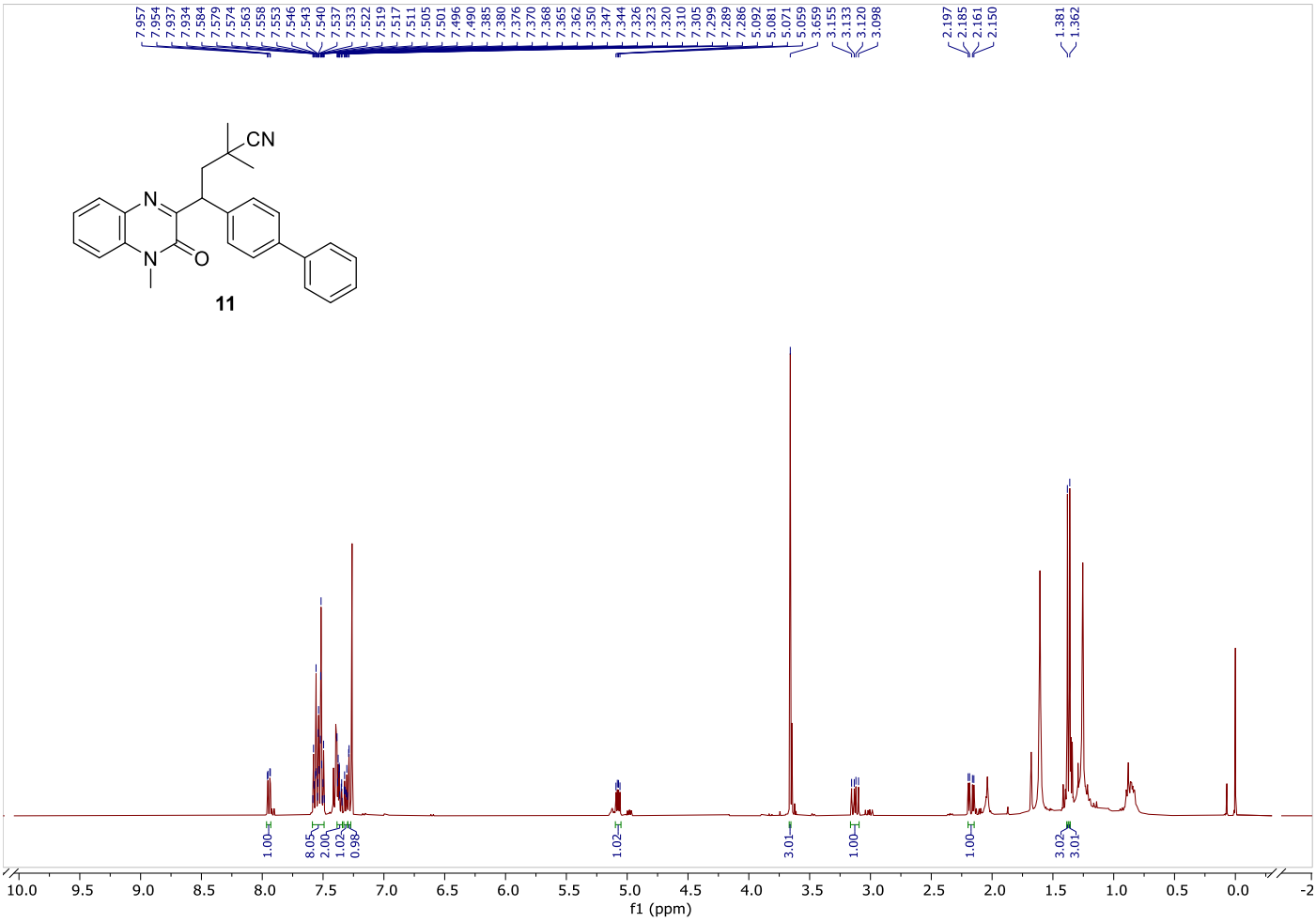
^{1}H-NMR (400 MHz, $CDCl_3$)



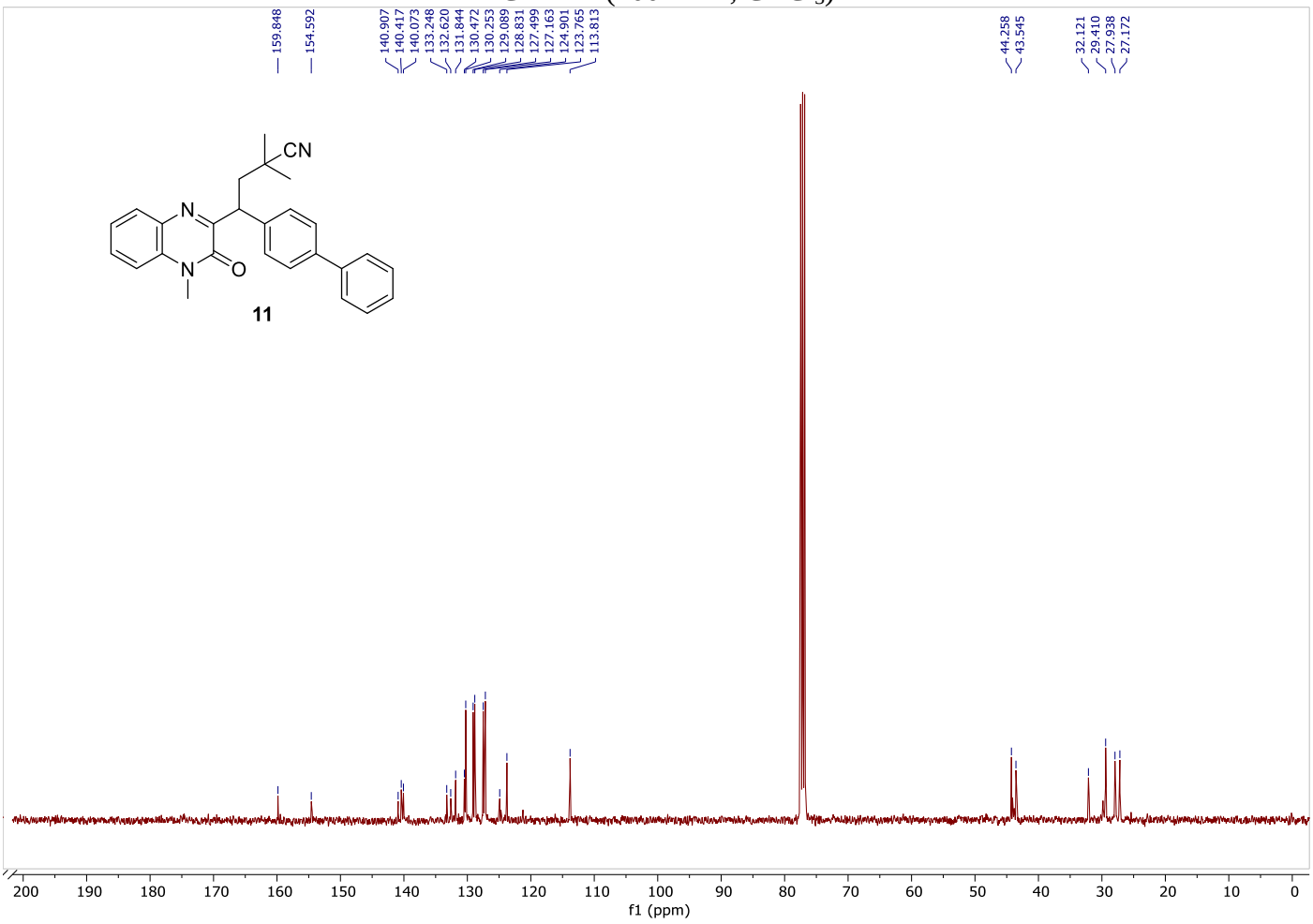
^{13}C-NMR (100 MHz, $CDCl_3$)



^{1}H-NMR (400 MHz, $CDCl_3$)



^{13}C-NMR (100 MHz, $CDCl_3$)



- NOESY- **4aka**: No NOE observed between H_a and H_b.