

Supplementary Information

Novel Spirocyclic Tranylcpromine Derivatives as LSD1 Inhibitors

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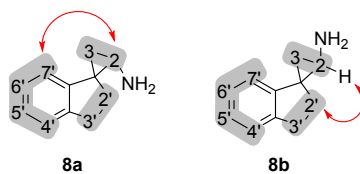
Contents

Table 1

¹H NMR, ¹³C NMR spectrum for 8a, 8b,13a-25a,13b-25b,28a-32a,28b-30b

¹H-¹H COESY and ¹H-¹H NOESY spectrum for 8a,8b

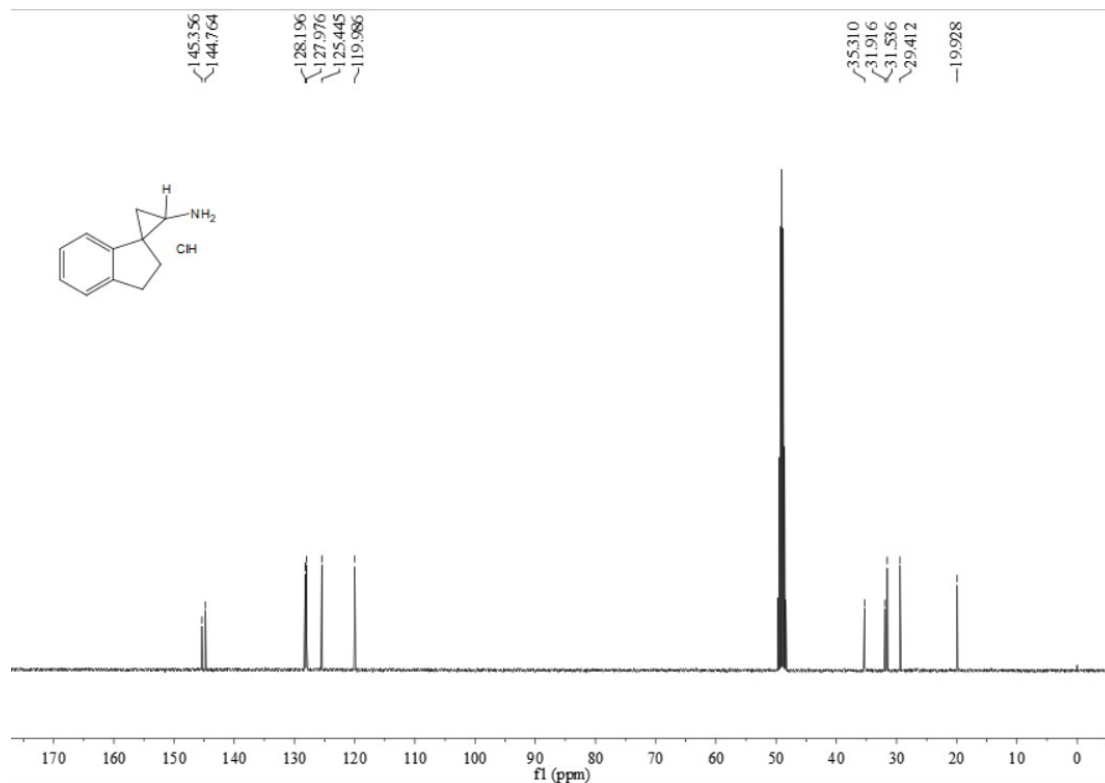
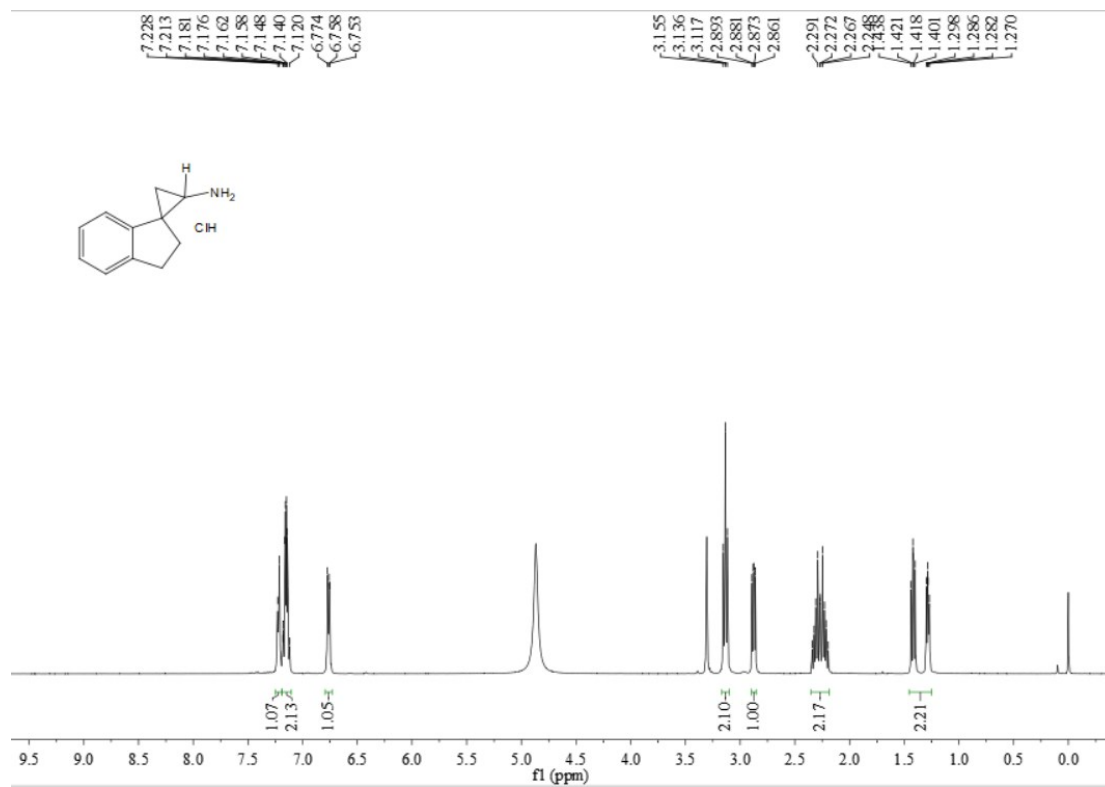
Table 1. NMR Data of **8a** and **8b** in CD₃OD (400 MHz).



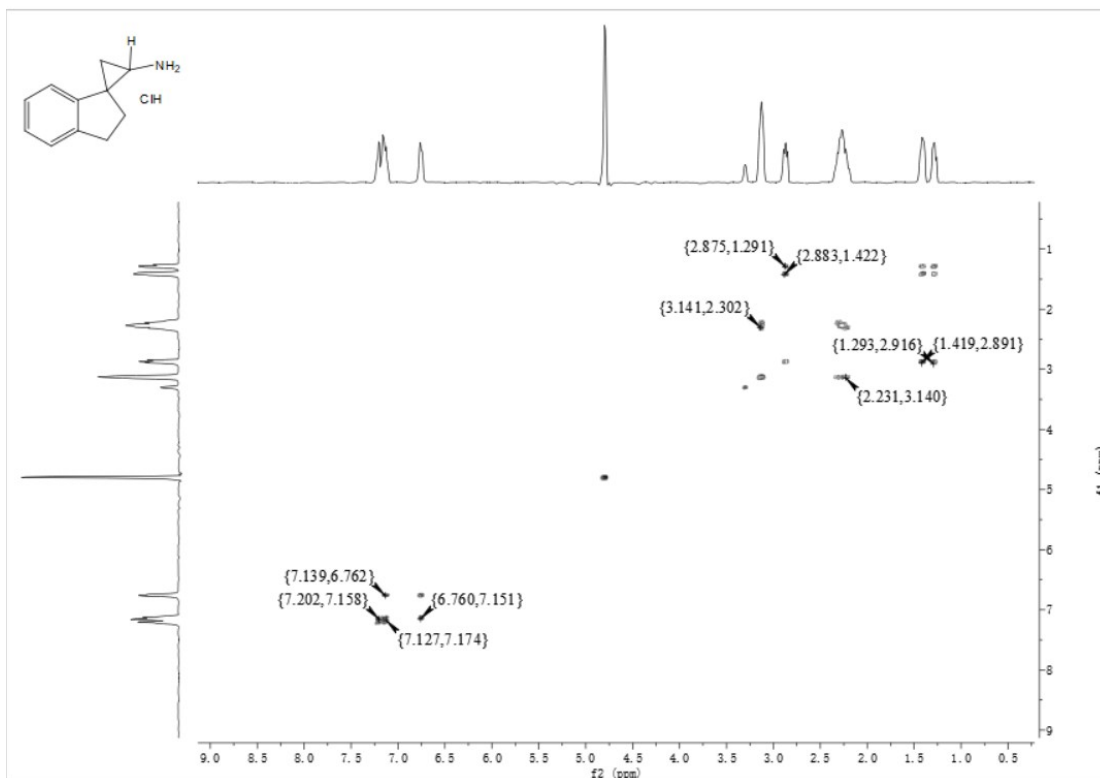
(Gray Zones ¹H, ¹H COSY; Red Arrows ¹H, ¹H NOESY).

Cmpd	Pos.	Type	δ_{H}	m (J in Hz)	COSY	NOESY
8a	2'	CH ₂	2.35–2.20	m	3'	3'
	3'	CH ₂	3.14	t (7.6)	2'	2', 4'
	4'	CH	7.22	d (6.4)	5'	3', 5'
	5'	CH	7.18–7.12	m	4', 6'	4'
	6'	CH	7.18–7.12	m	5', 7'	7'
	7'	CH	6.76	d (6.4)	6'	2, 3, 6,
	2	CH	2.88	dd (7.2, 4.8)	3	3, 7'
	3	CH ₂ (H, H)	1.42, 1.29	t (7.2), t (5.4)	2	2, 7'
8b	2'	CH ₂ (H, H)	2.38–2.30, 1.97	m, dd (12.6, 7.8)	3'	2, 3'
	3'	CH ₂ (H, H)	3.18–3.10, 2.97	m, dd (15.6, 8.8)	2'	2'
	4'	CH	7.32	d (5.2)	5'	5'
	5'	CH	7.26–7.21	m	4', 6'	4'
	6'	CH	7.26–7.21	m	5', 7'	7'
	7'	CH	7.08–7.06	m	6'	3, 6'
	2	CH	2.88	dd (7.8, 4.6)	3	2', 3
	3	CH ₂ (H, H)	1.51, 1.43	dd (6.8, 4.8), t (7.4)	2	2, 7'

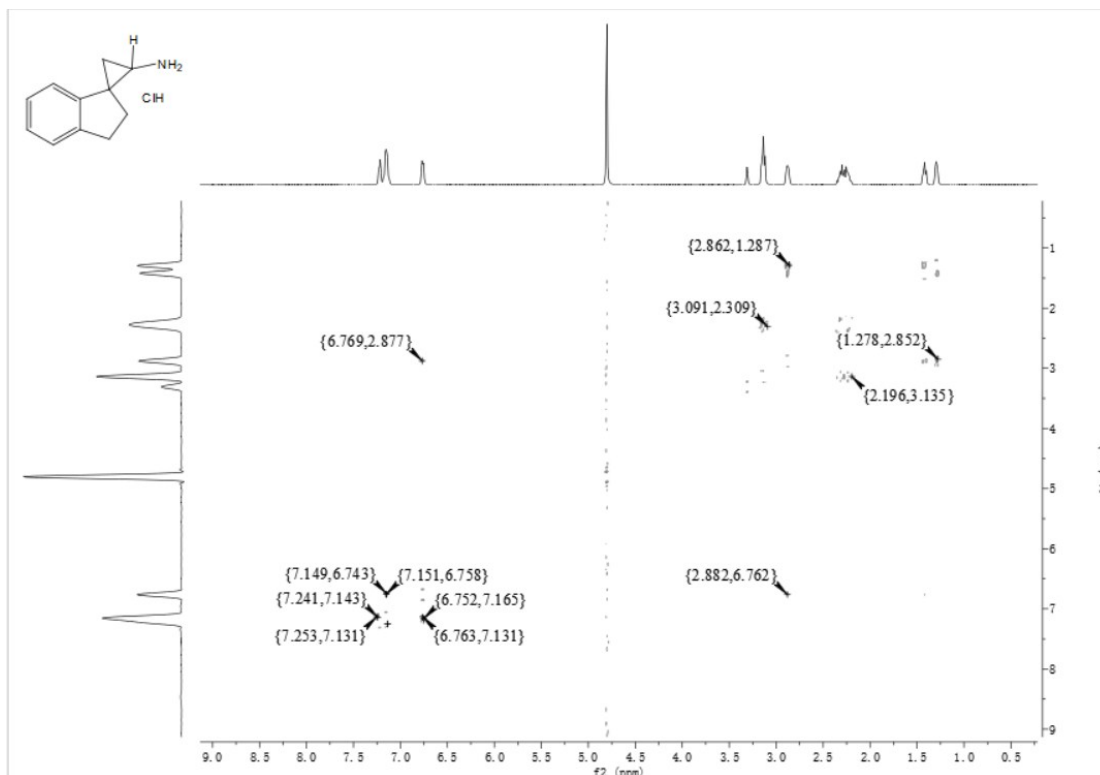
¹H NMR (400 MHz, CD₃OD) and ¹³C NMR (101MHz, CD₃OD) spectrum for **8a**



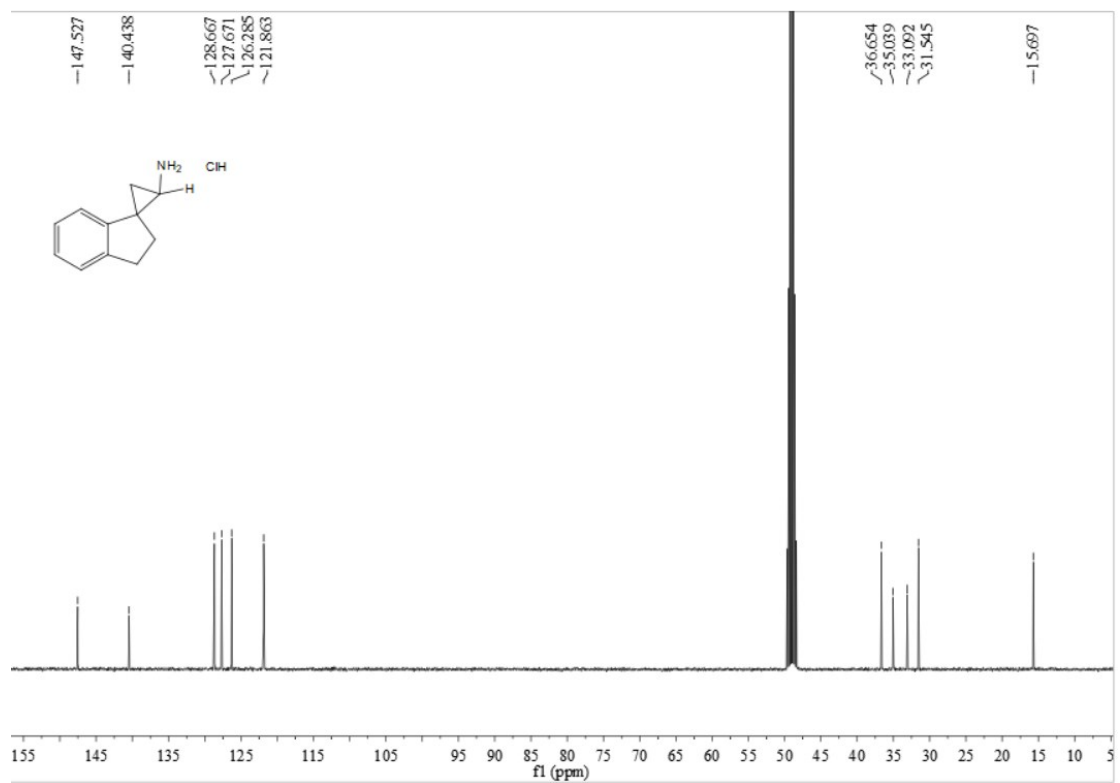
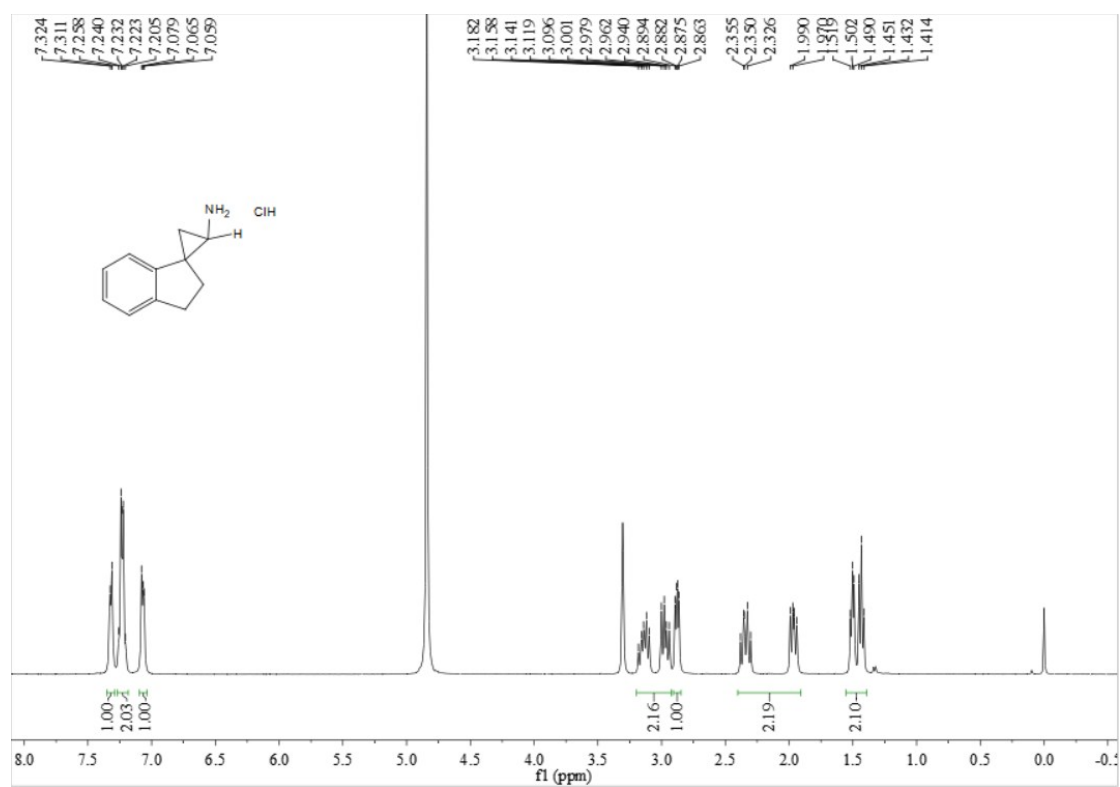
¹H-¹H COESY (CD₃OD) spectrum for 8a



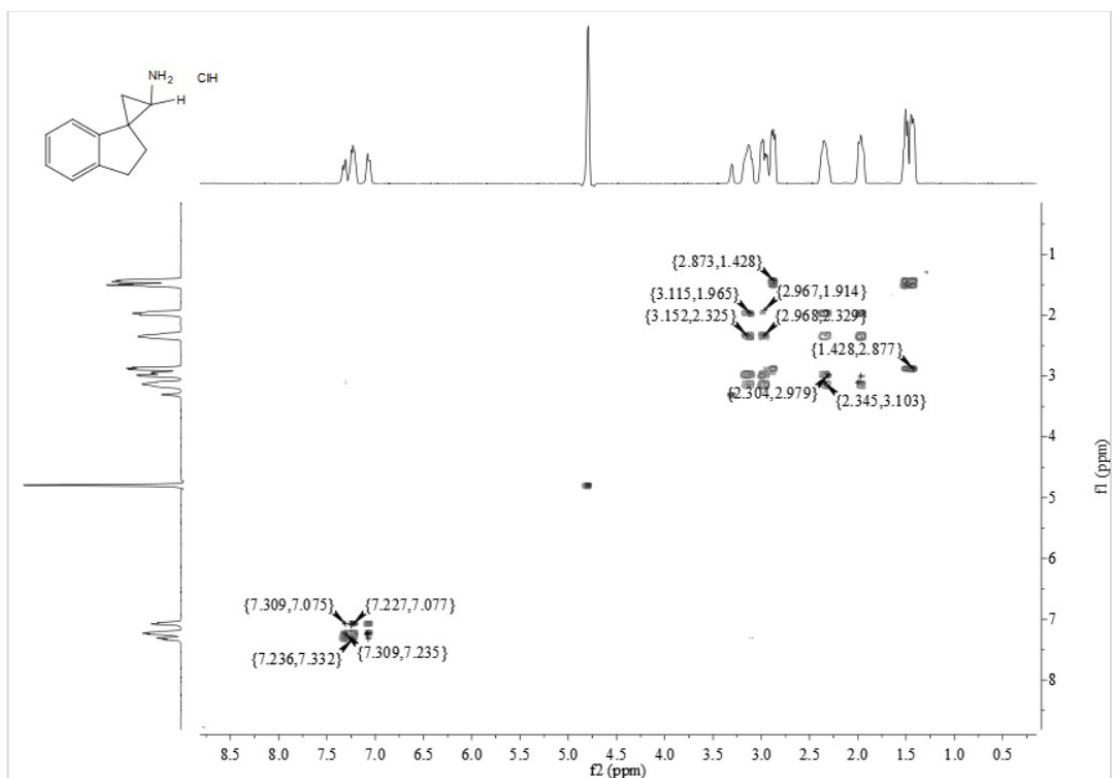
^1H - ^1H NOESY (CD_3OD) spectrum for 8a



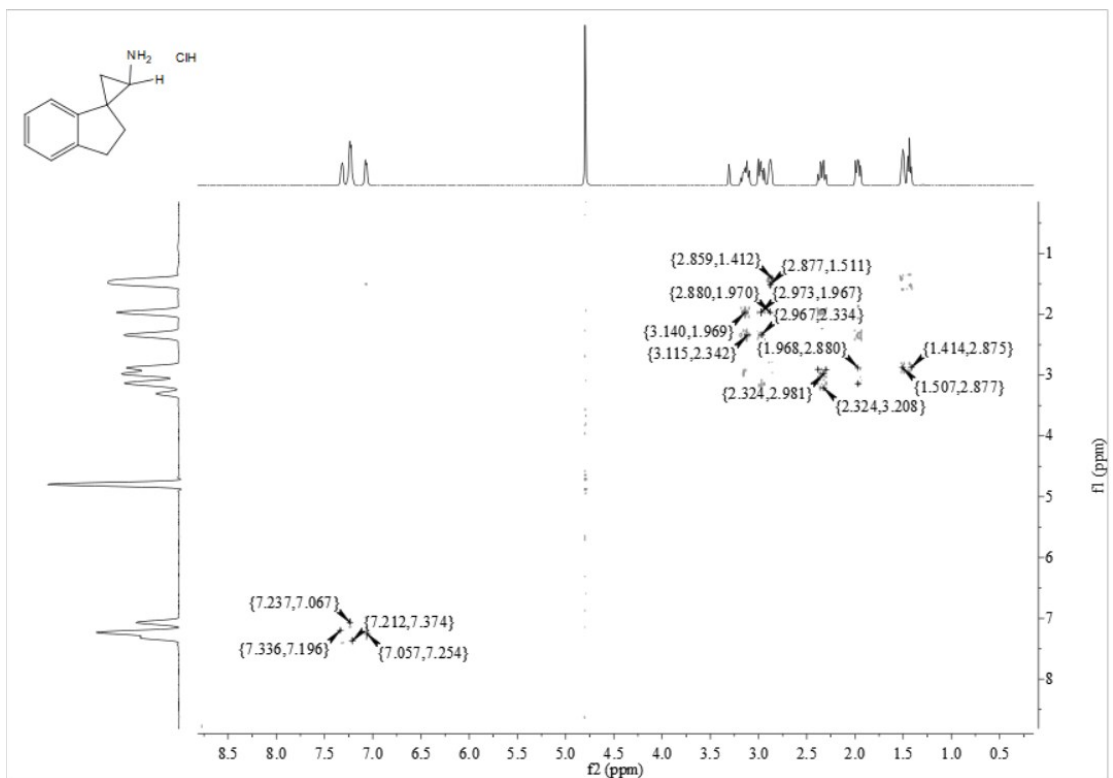
^1H NMR (400 MHz, CD_3OD) and ^{13}C NMR (101MHz, CD_3OD) spectrum for 8b



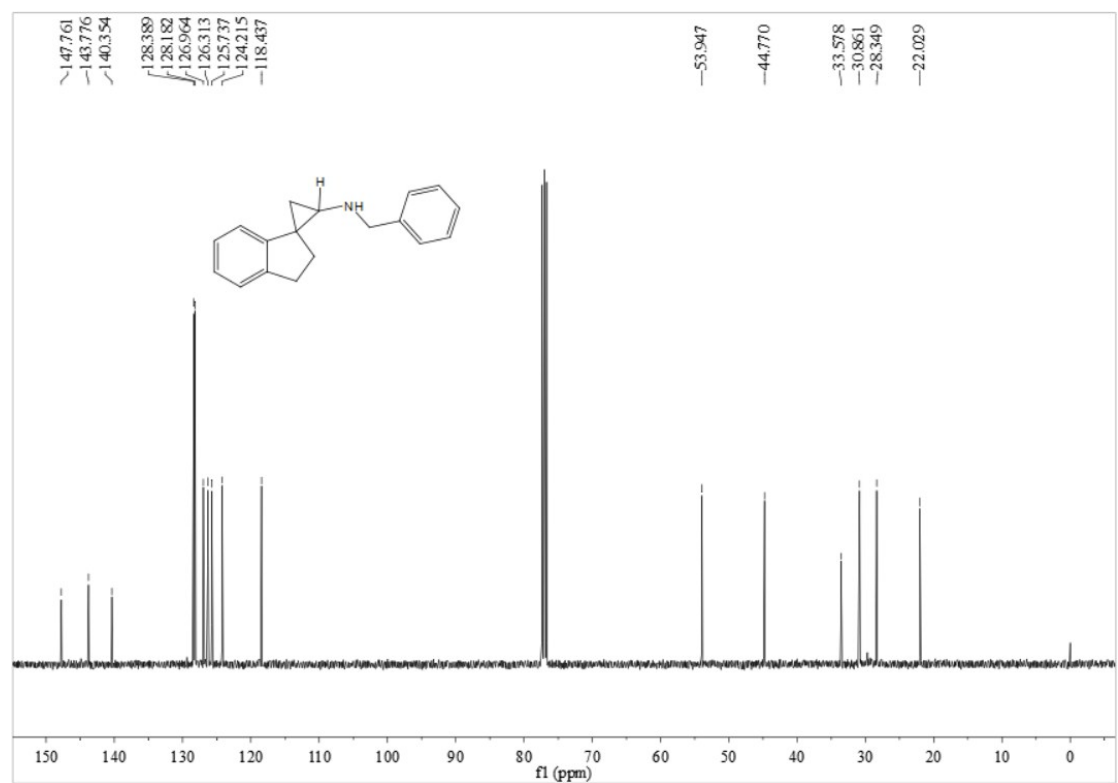
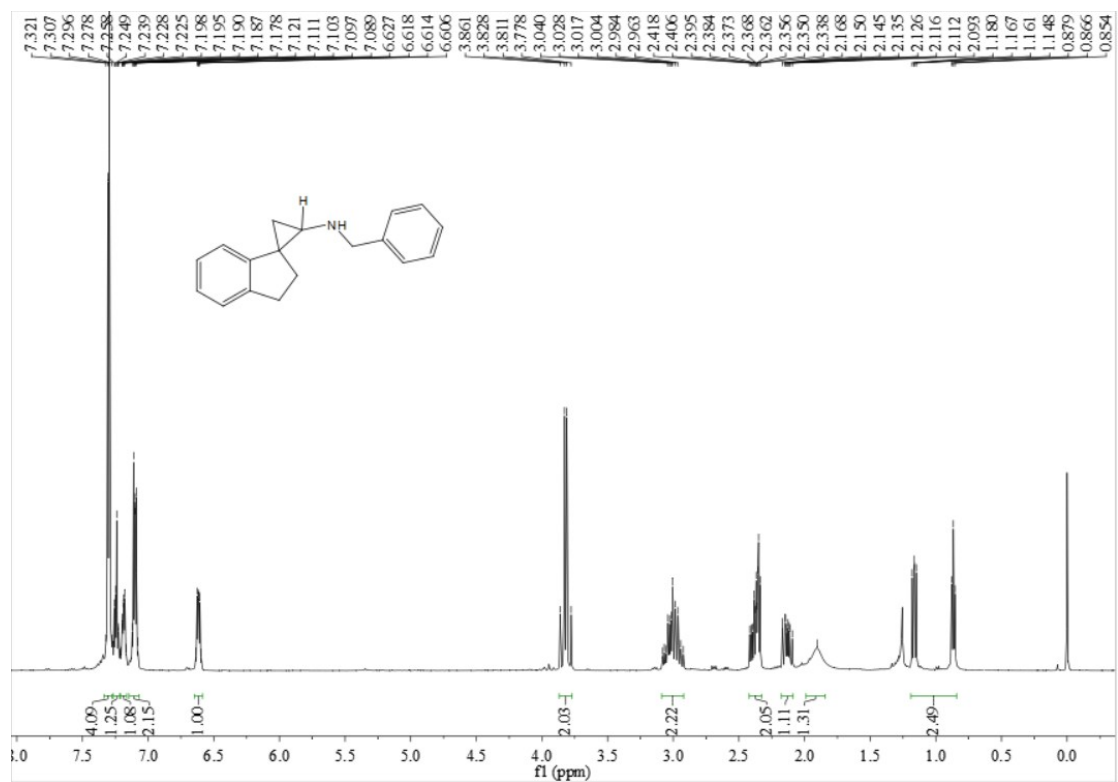
¹H-¹H COESY (CD₃OD) spectrum for 8b



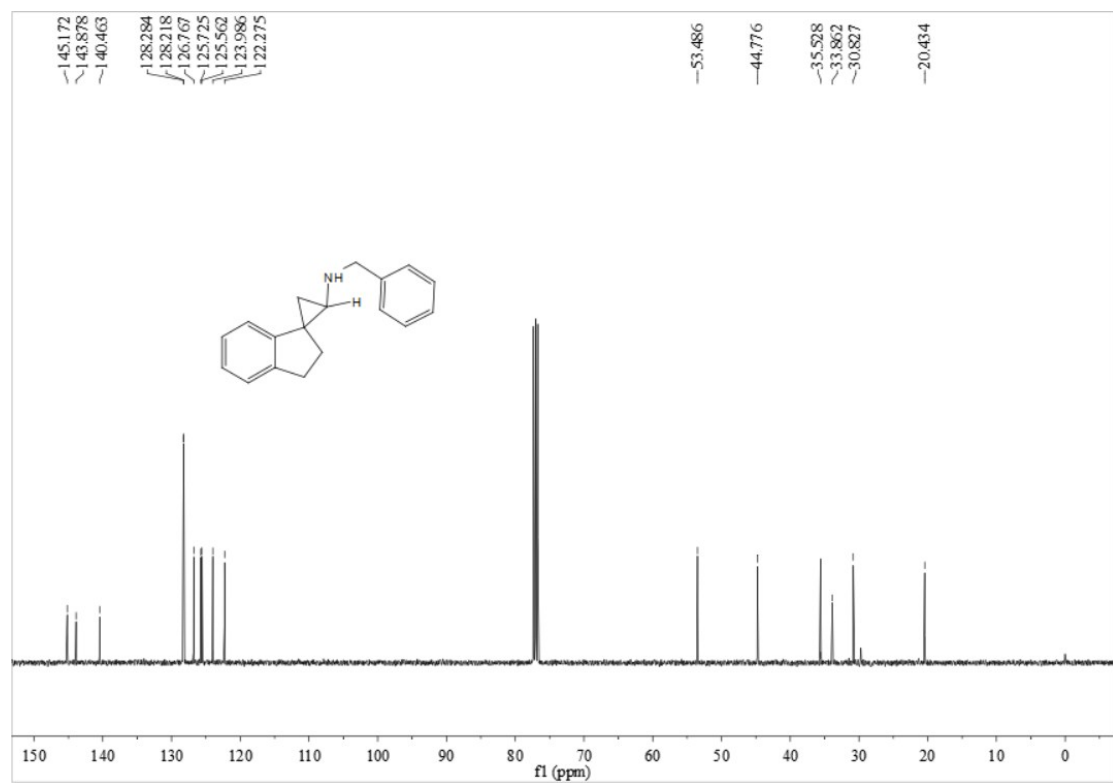
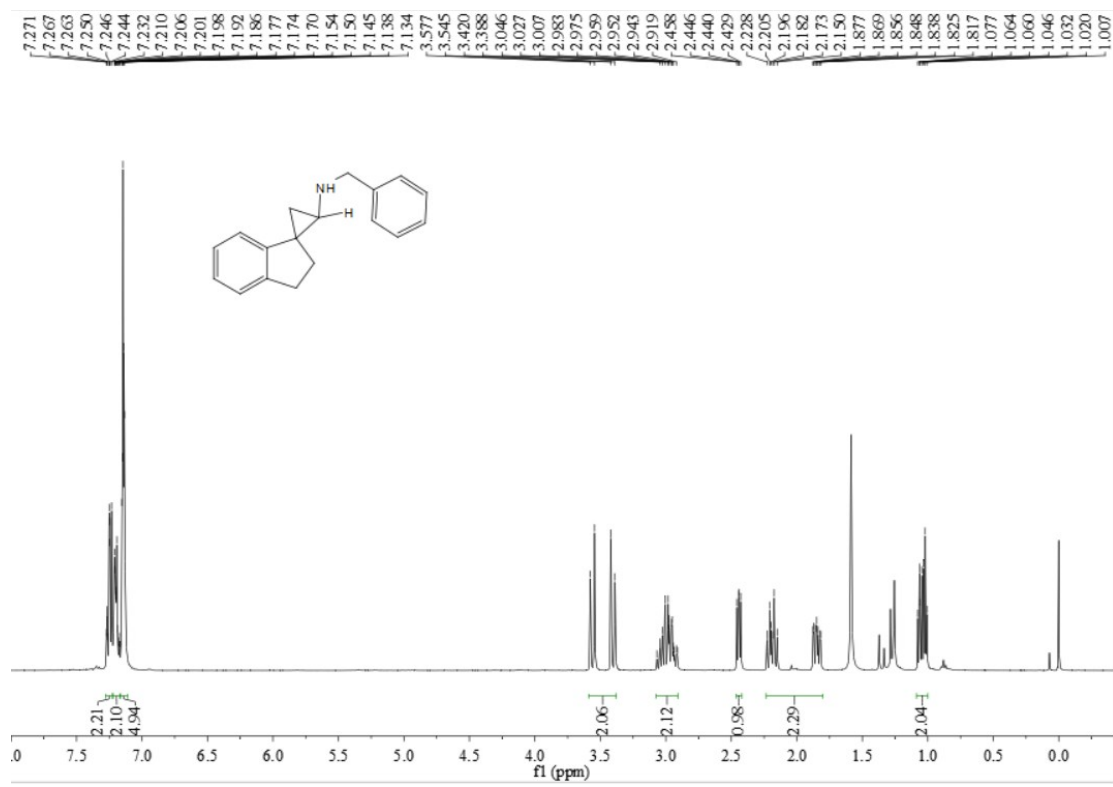
¹H-¹H NOESY (CD₃OD) spectrum for 8b



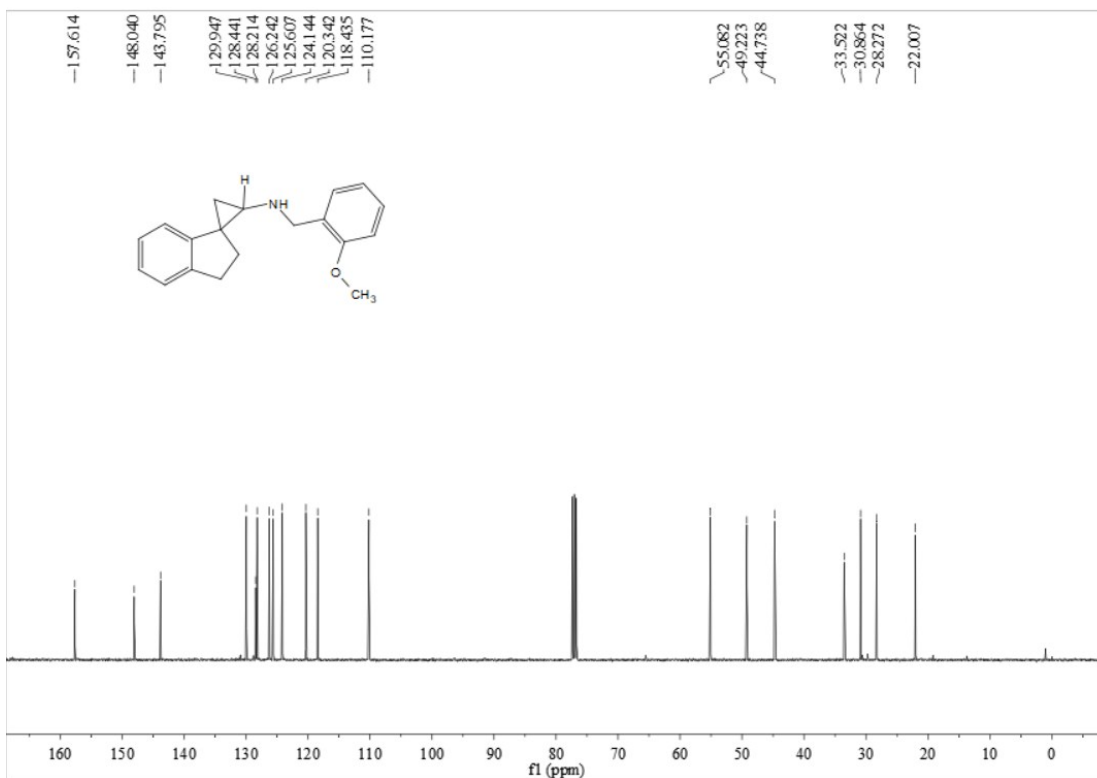
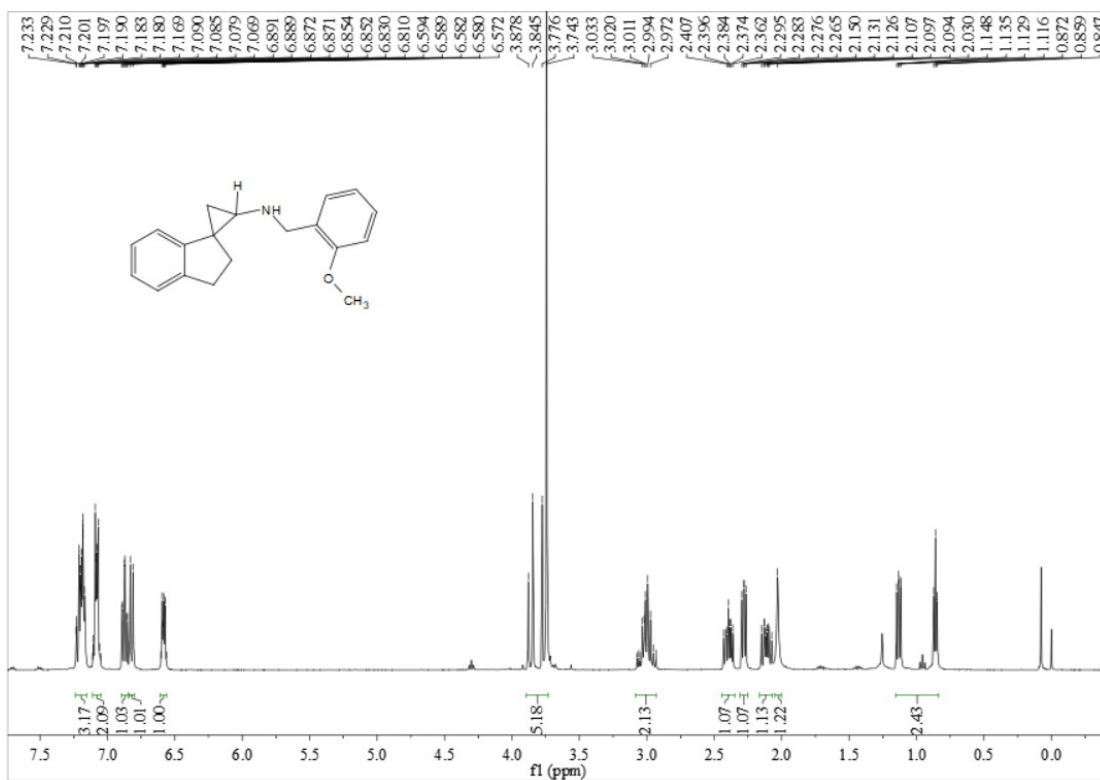
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101MHz, CDCl₃) spectrum for 13a



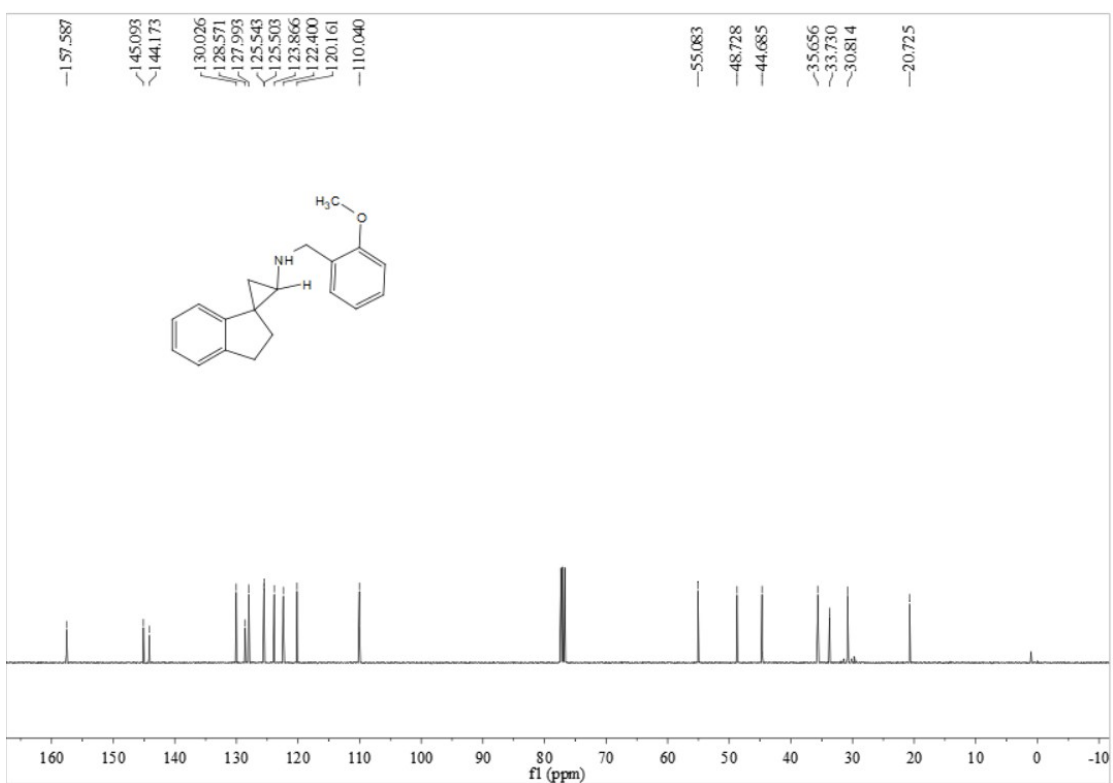
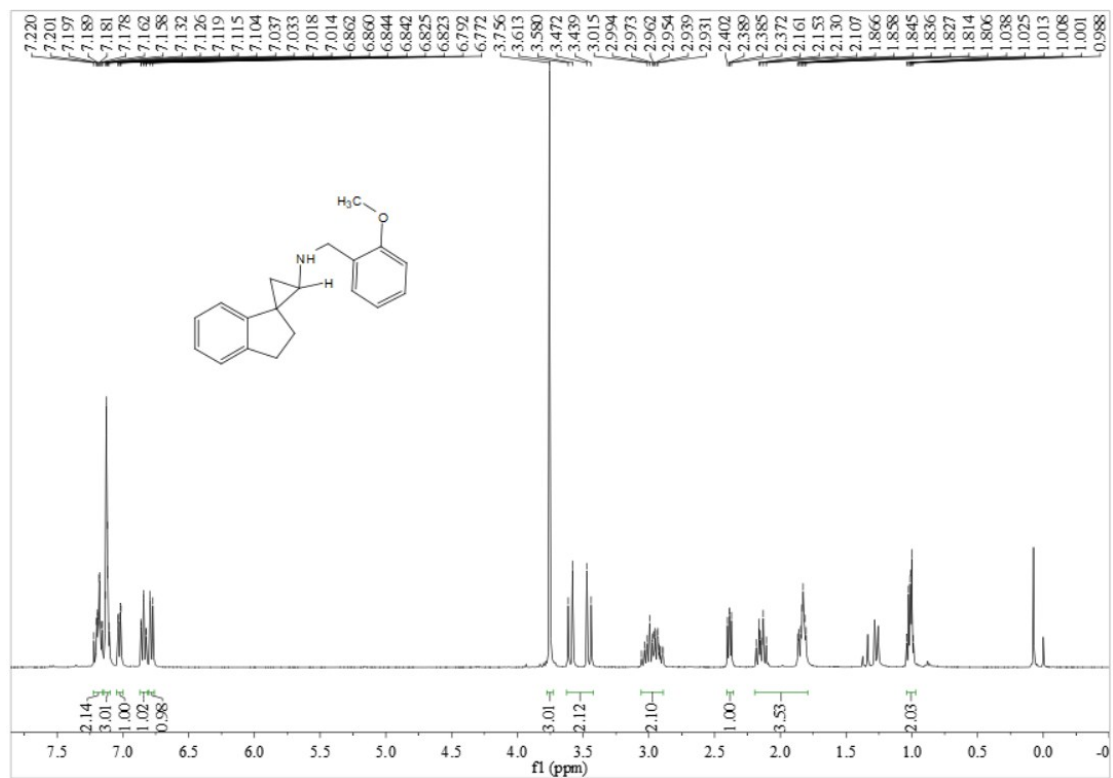
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101MHz, CDCl₃) spectrum for 13b



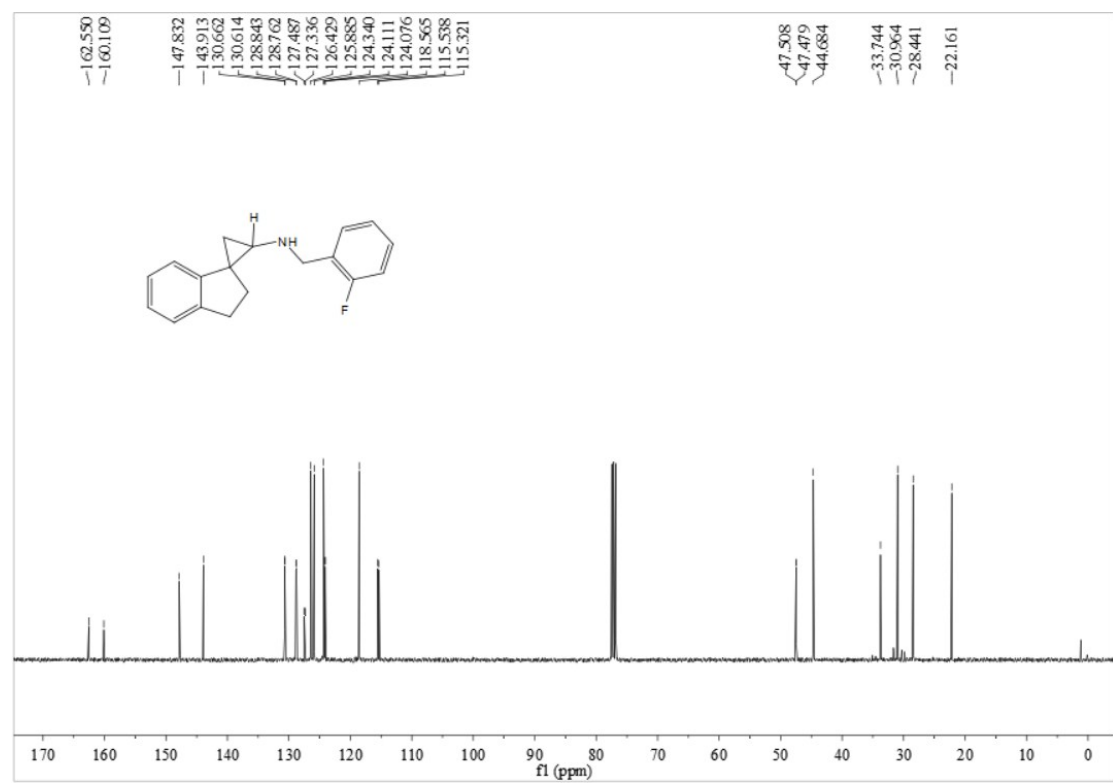
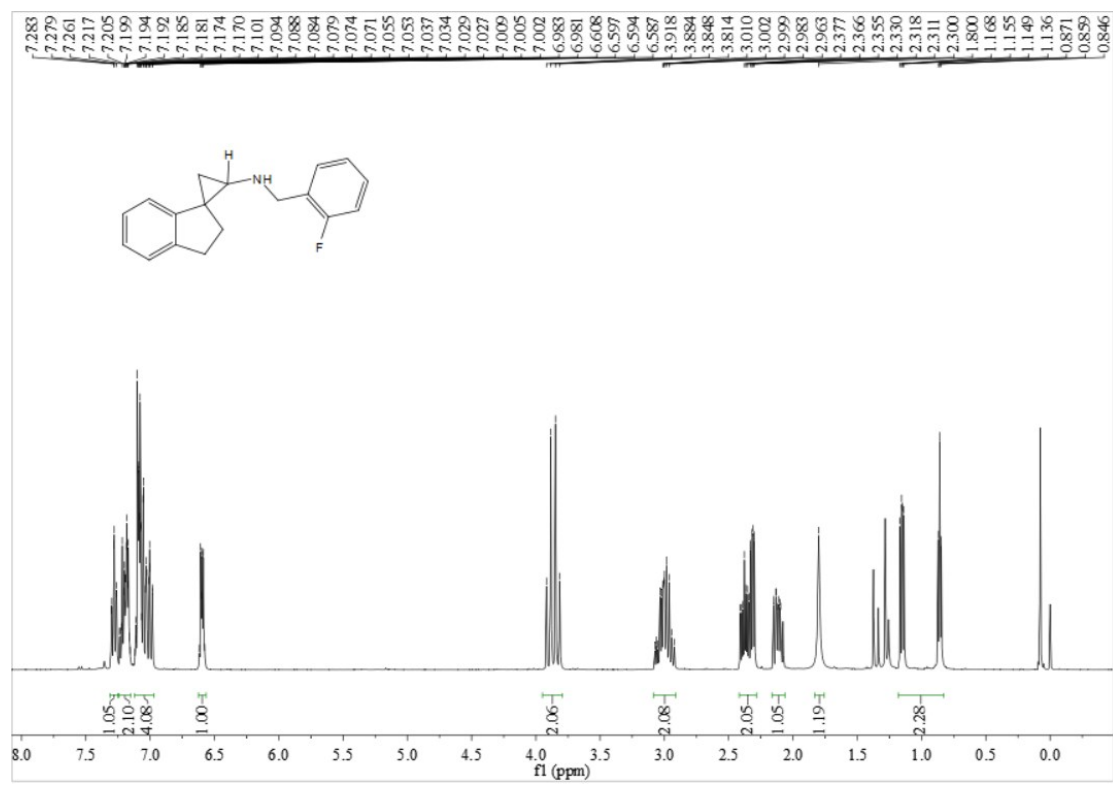
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 14a



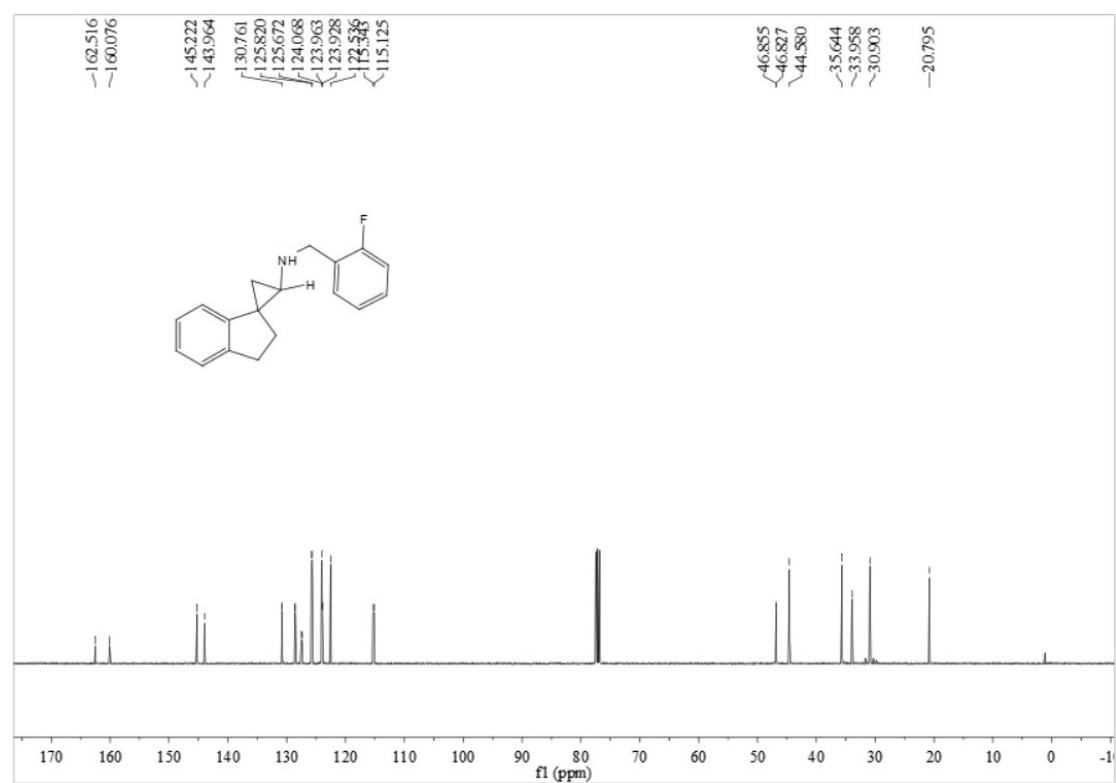
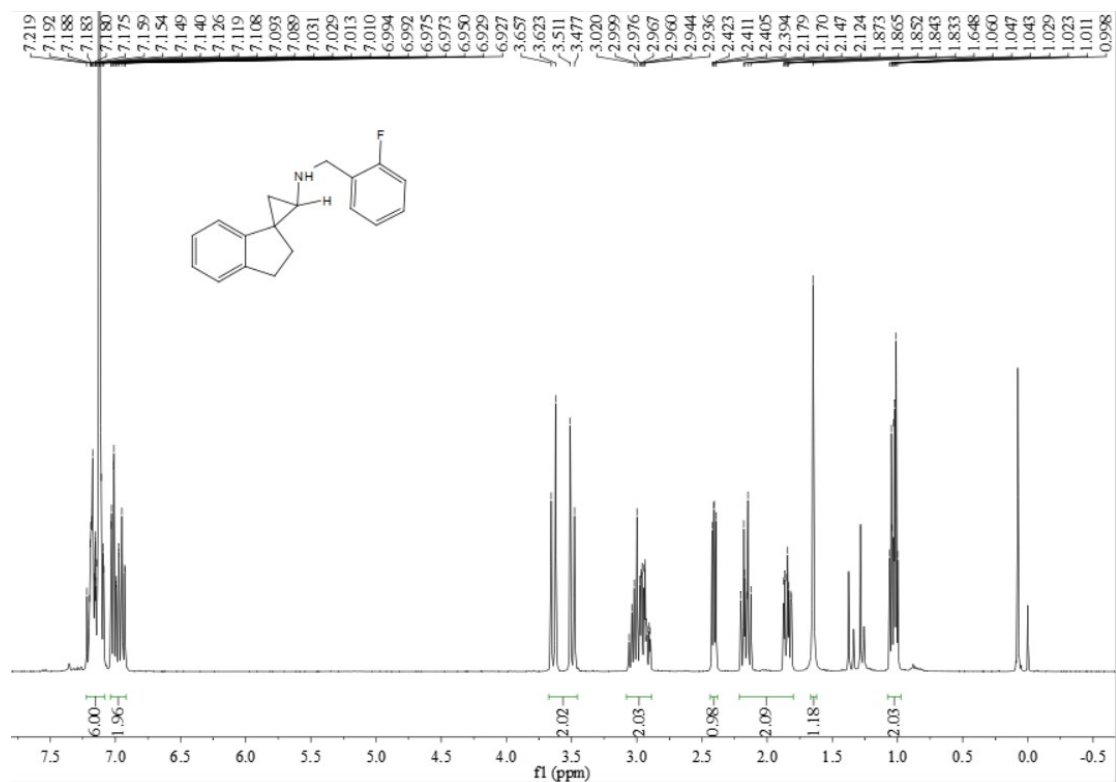
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 14b



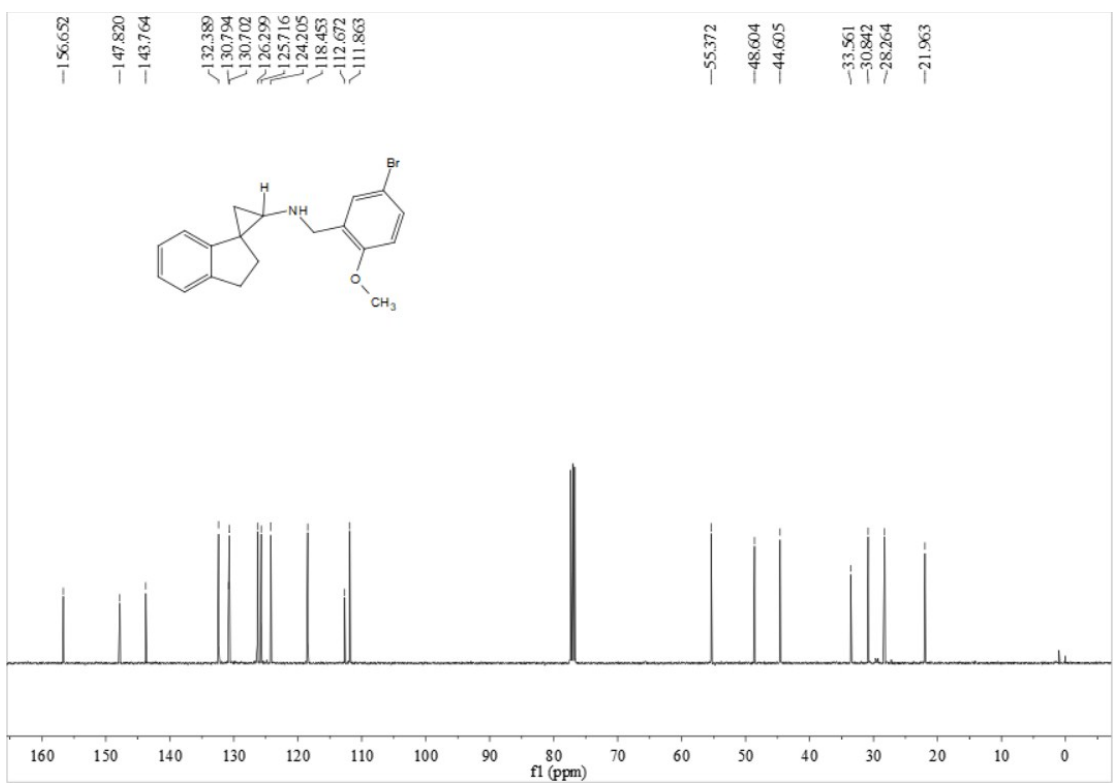
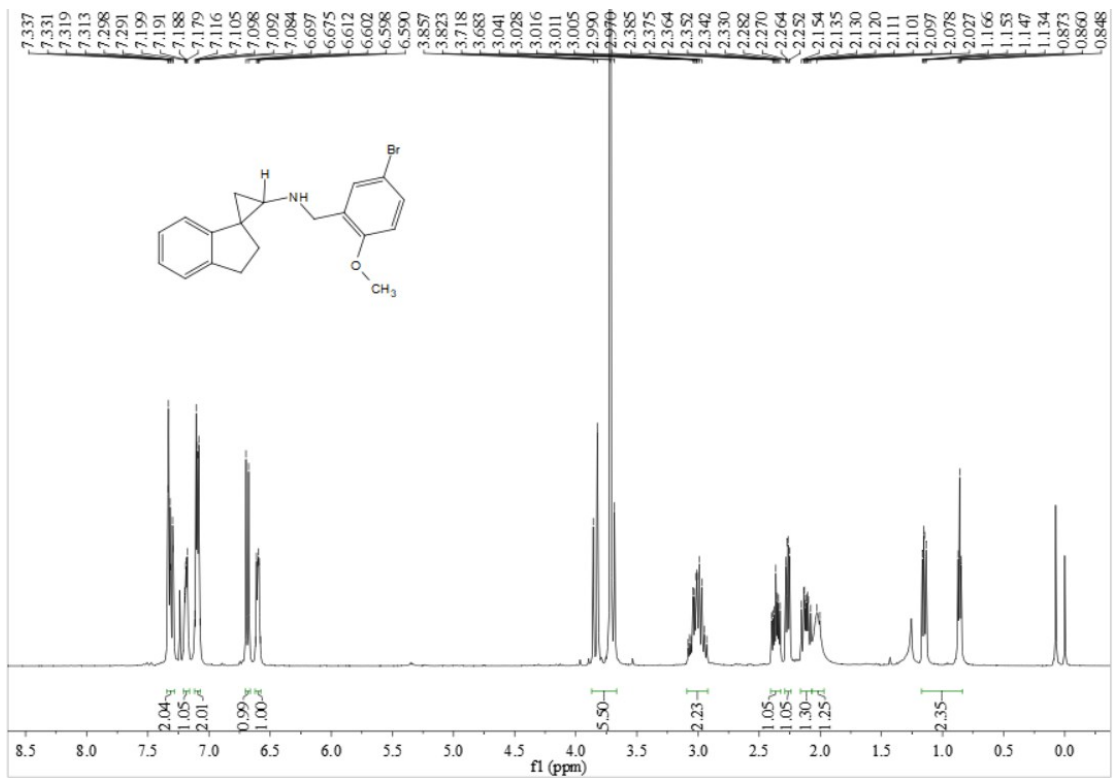
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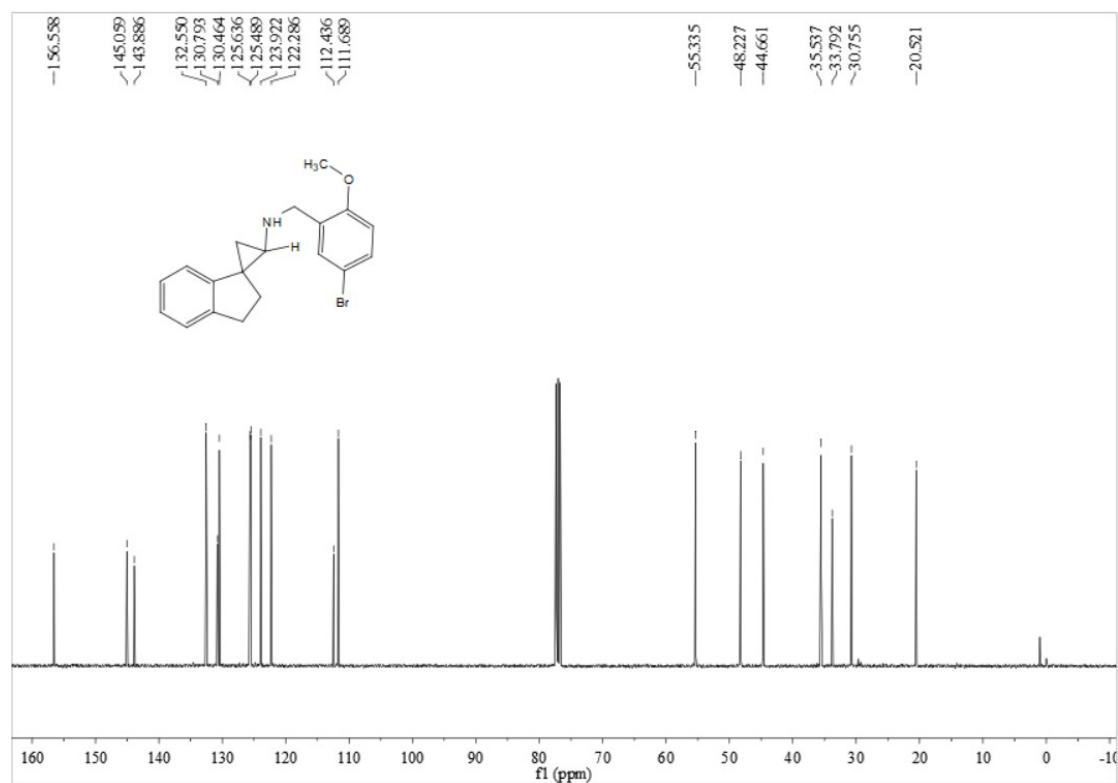
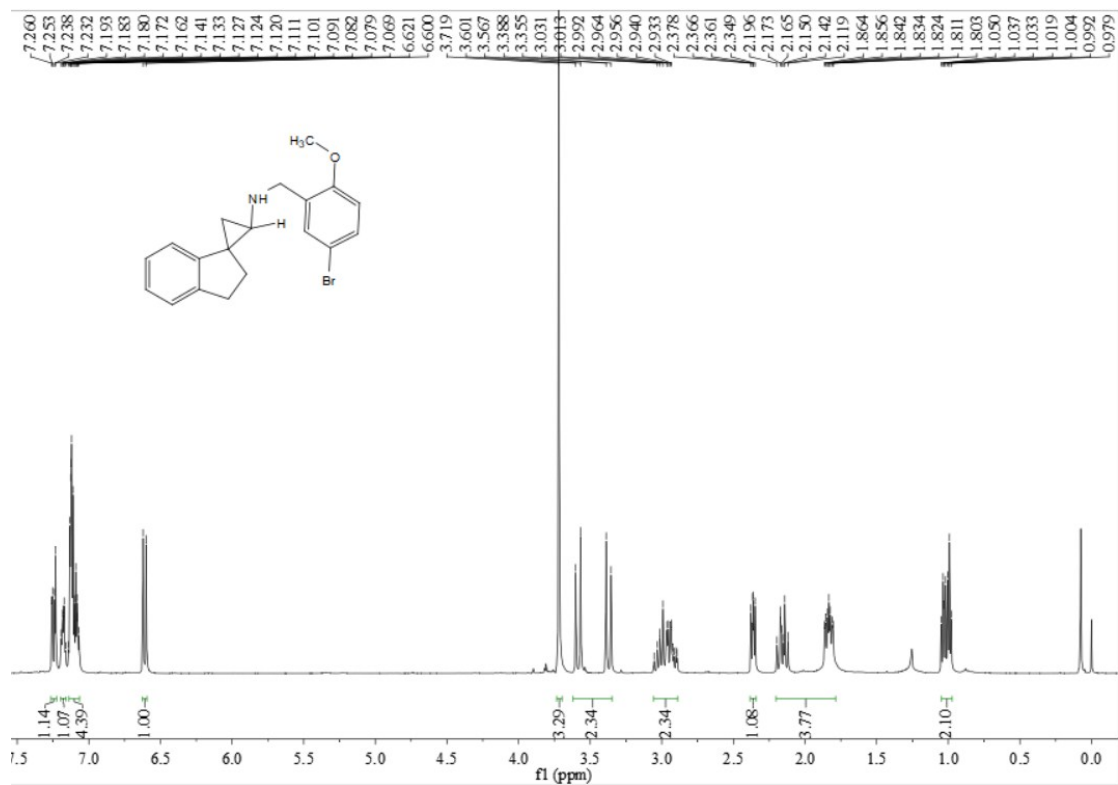
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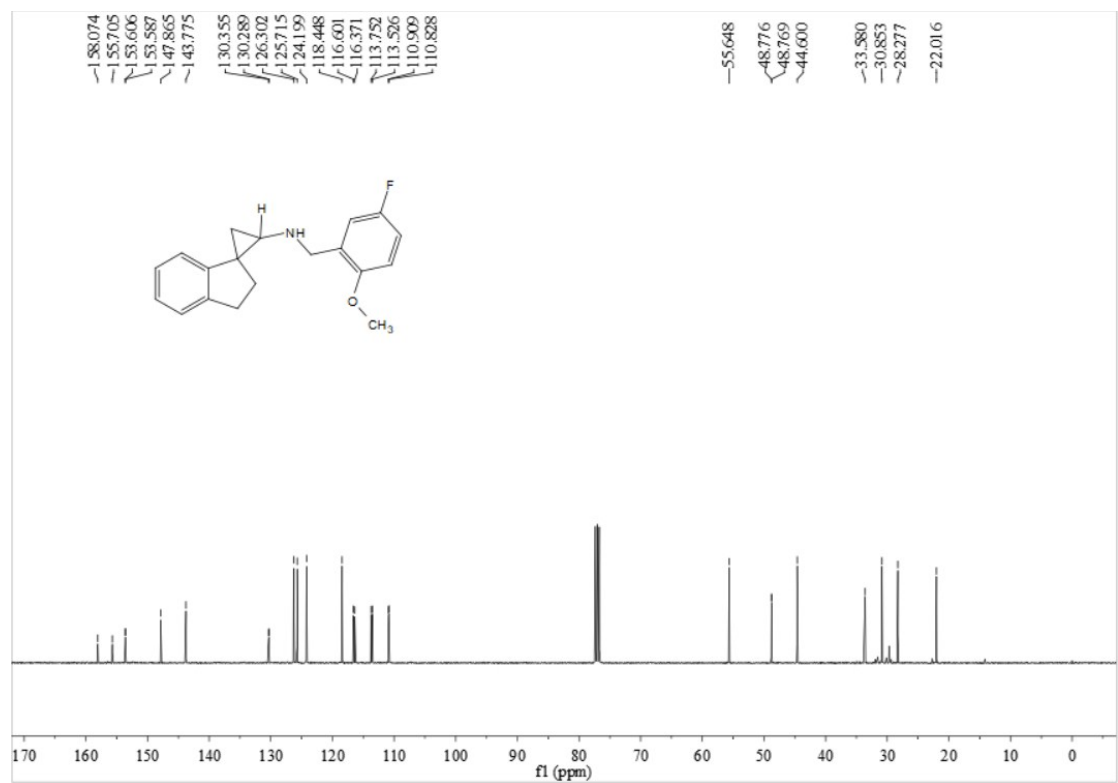
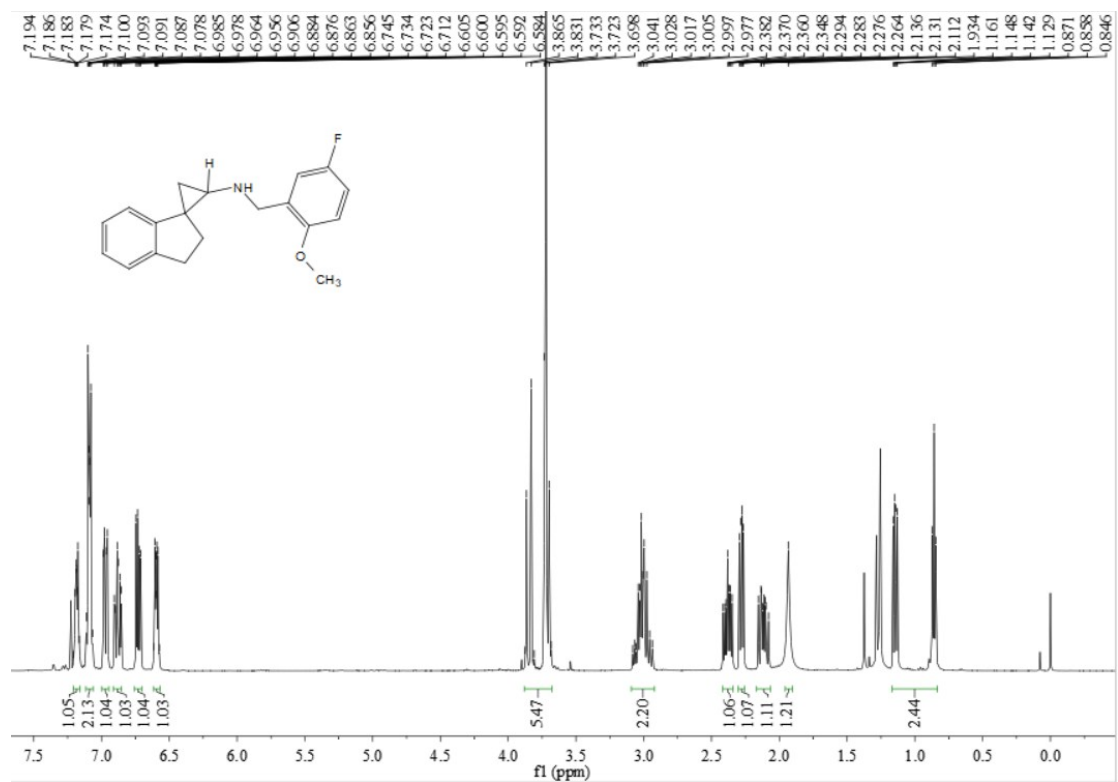
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 16a



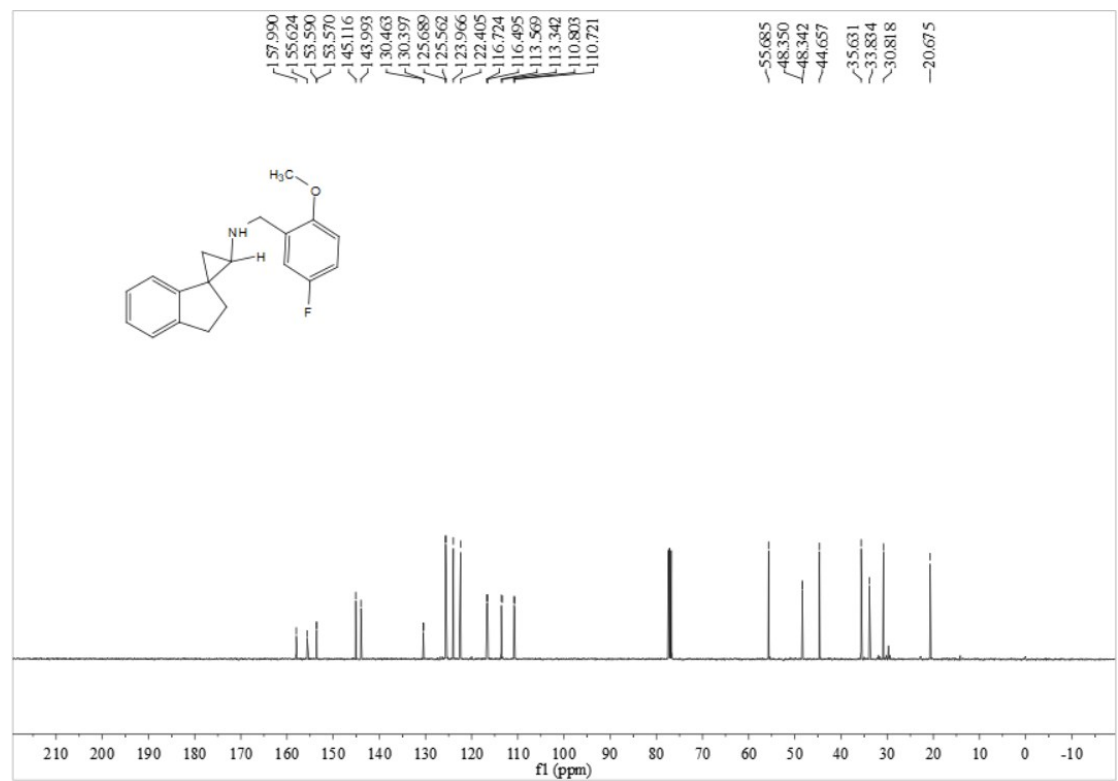
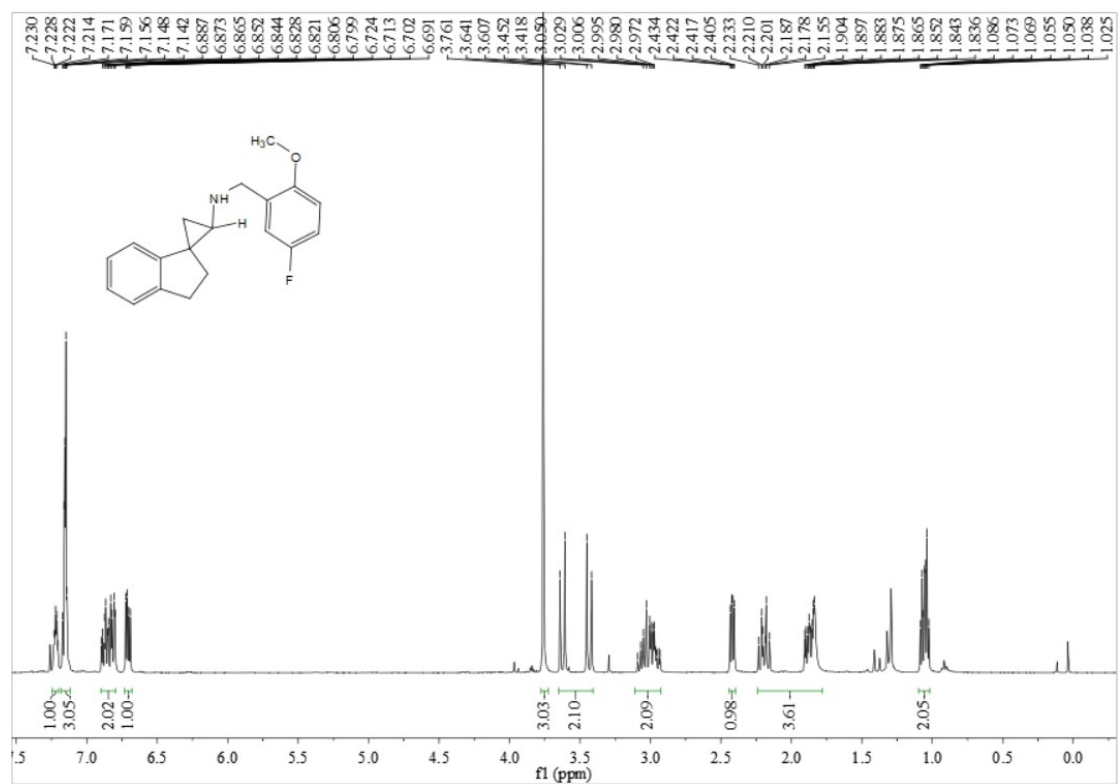
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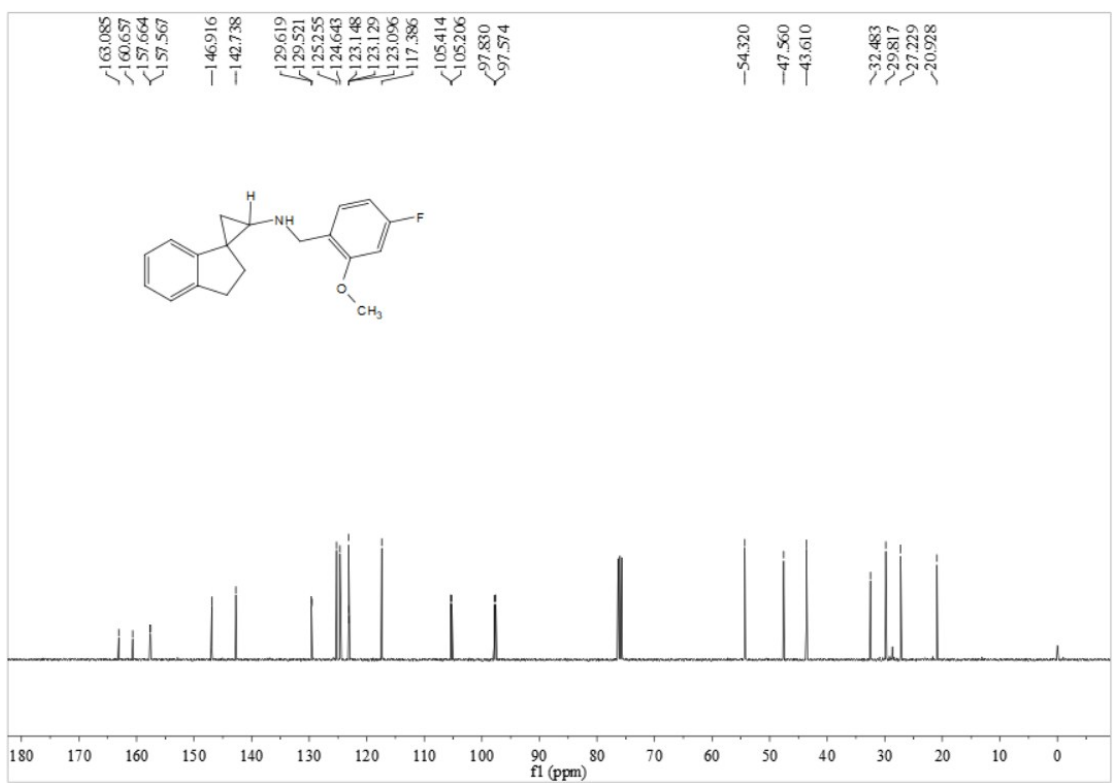
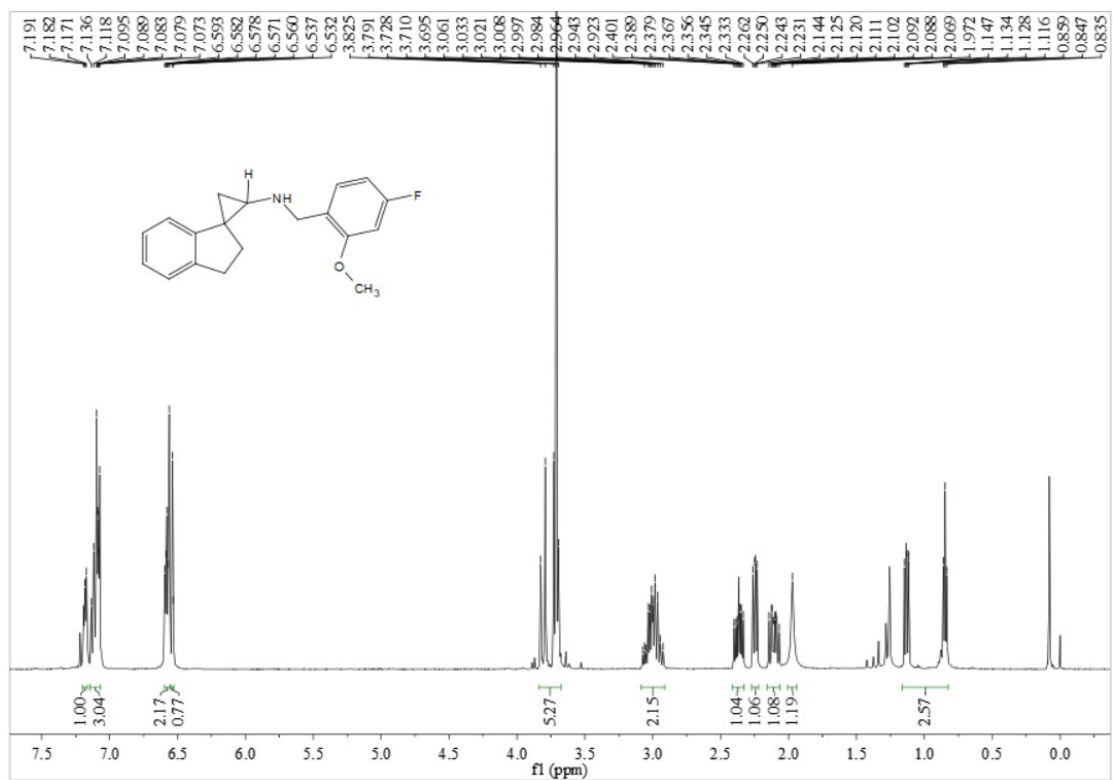
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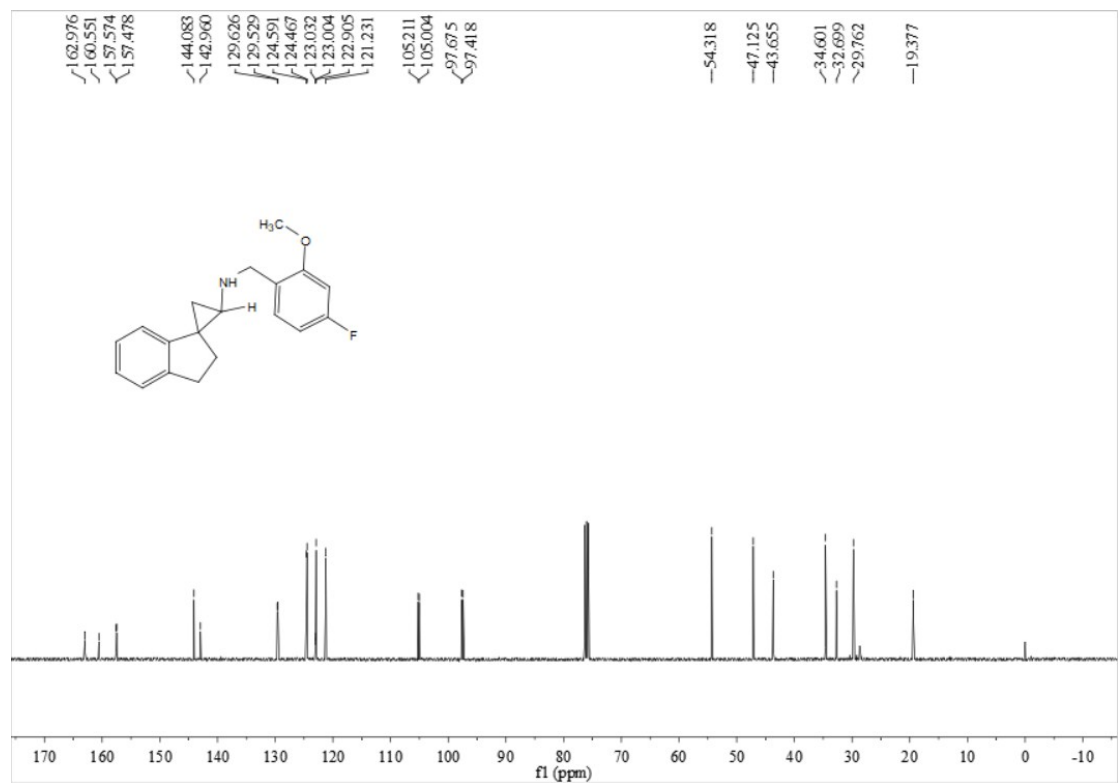
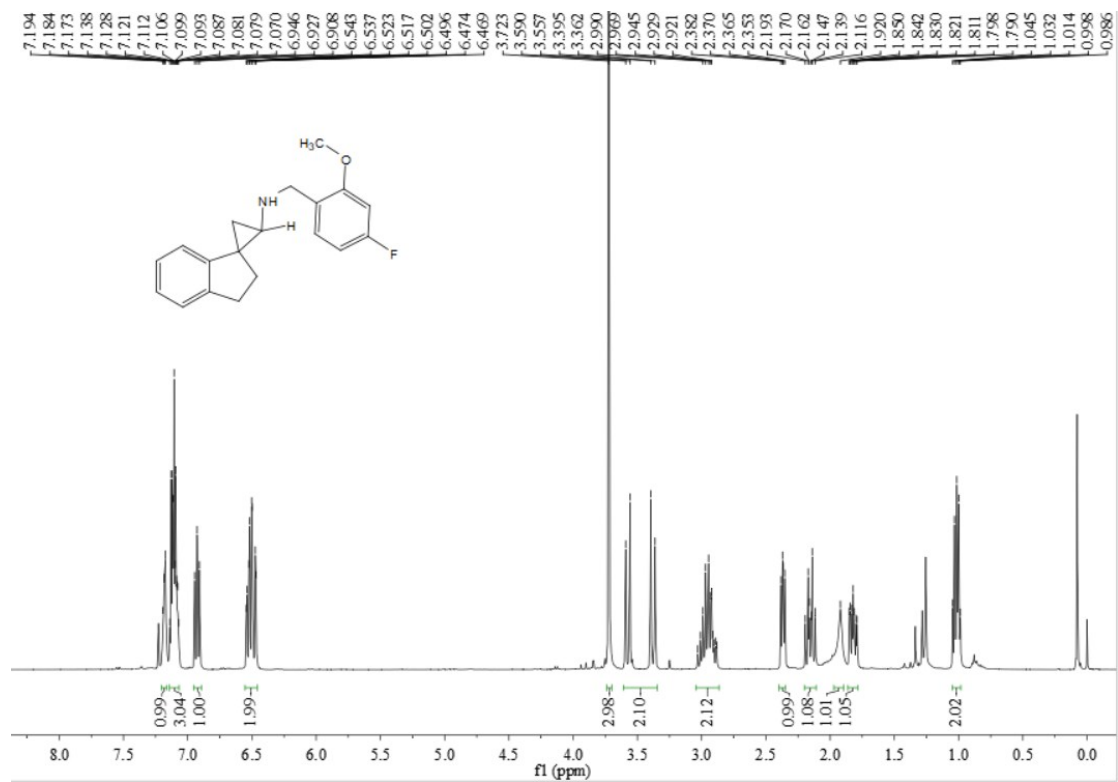
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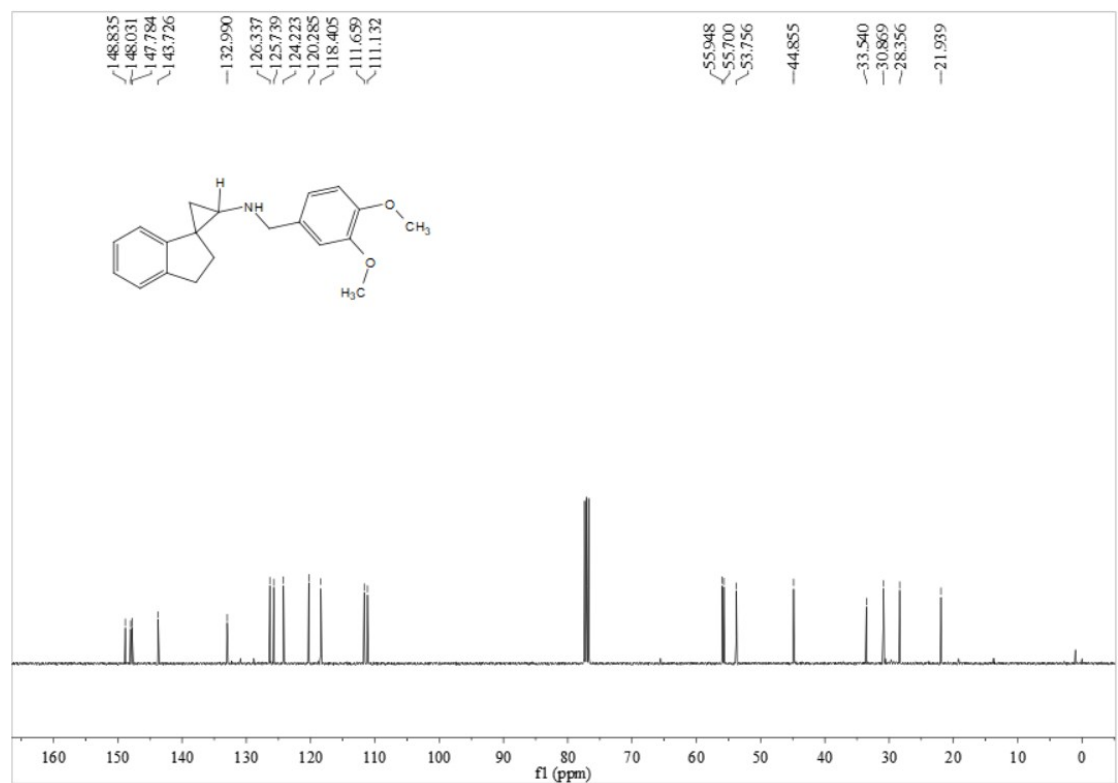
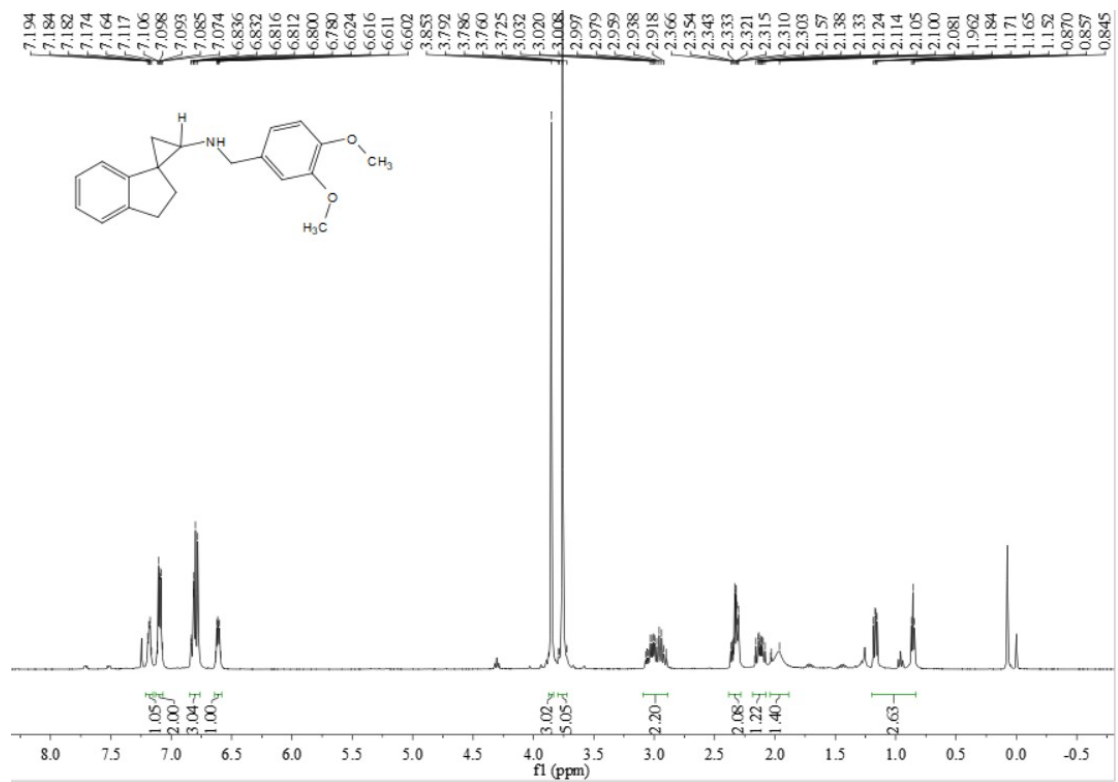
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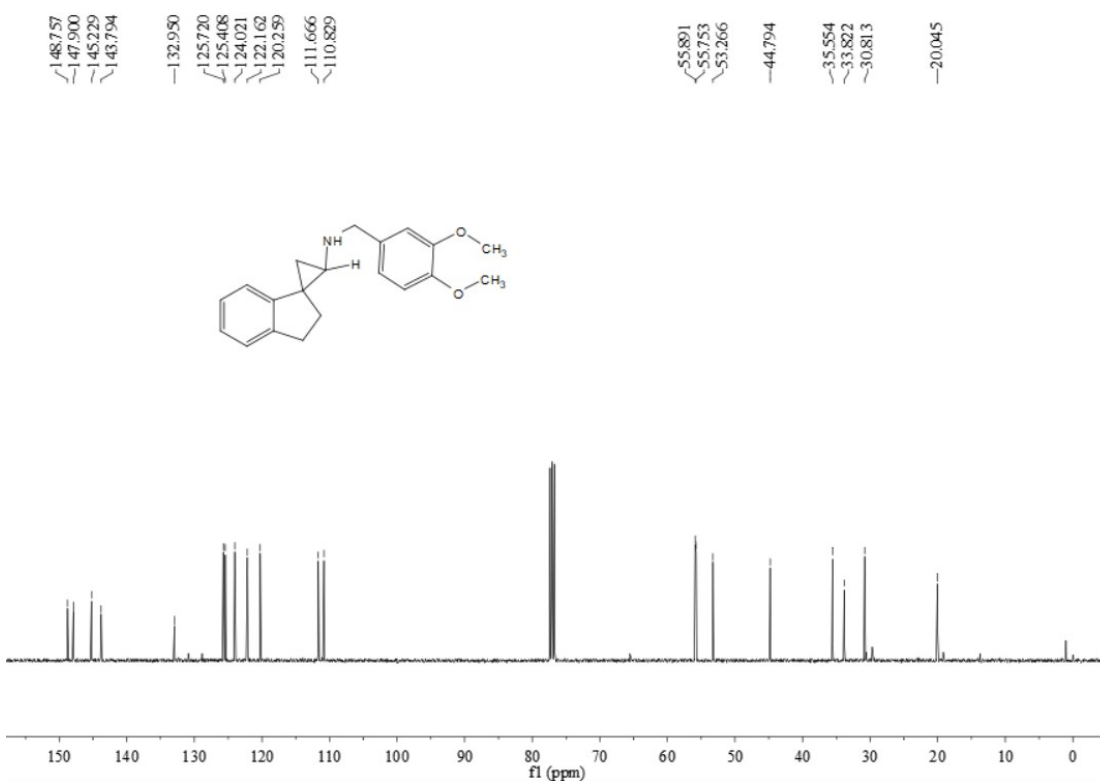
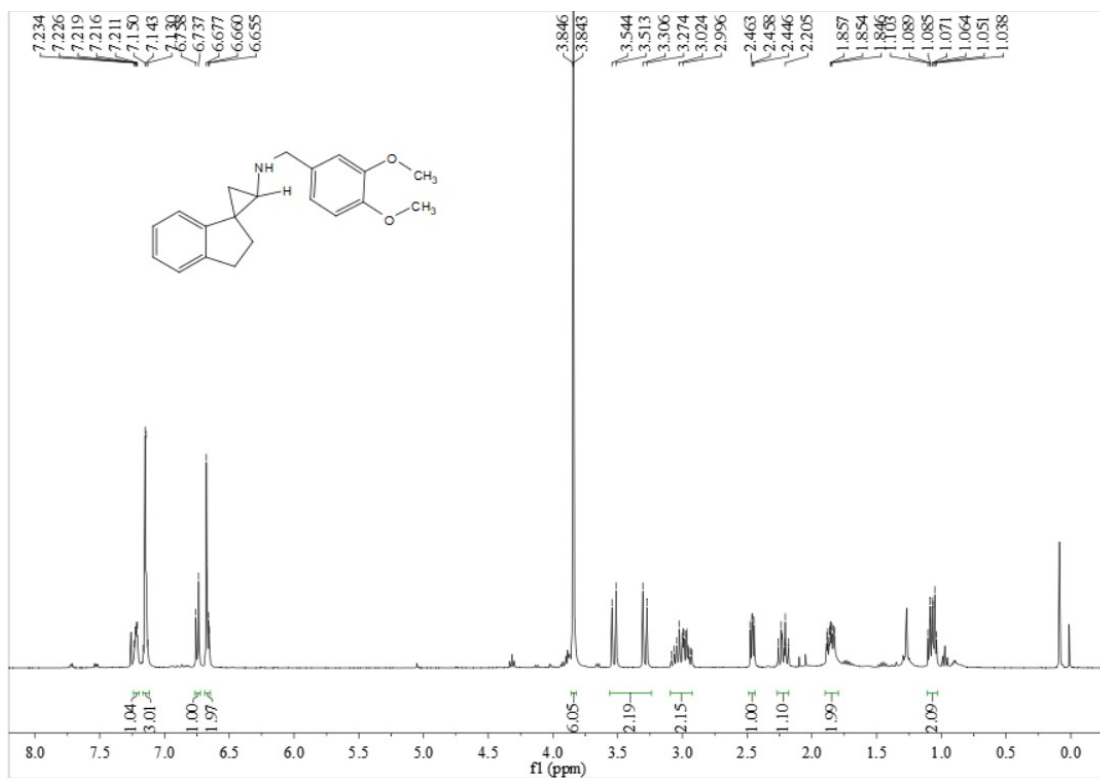
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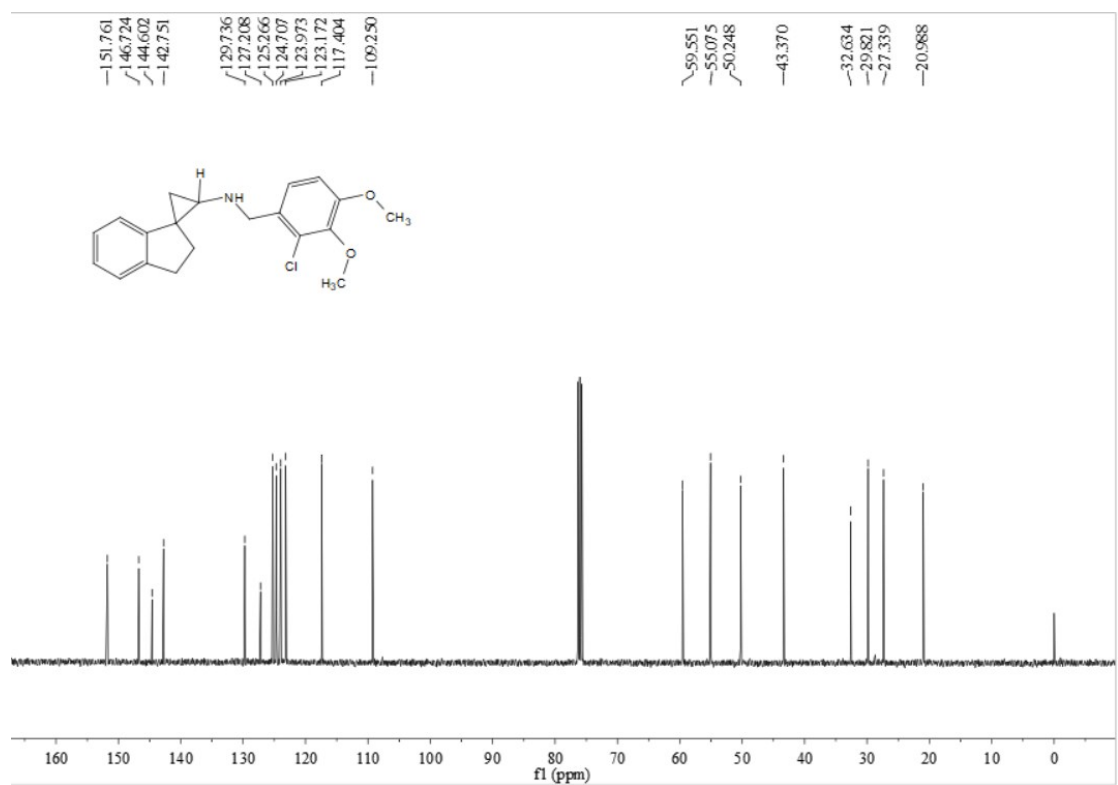
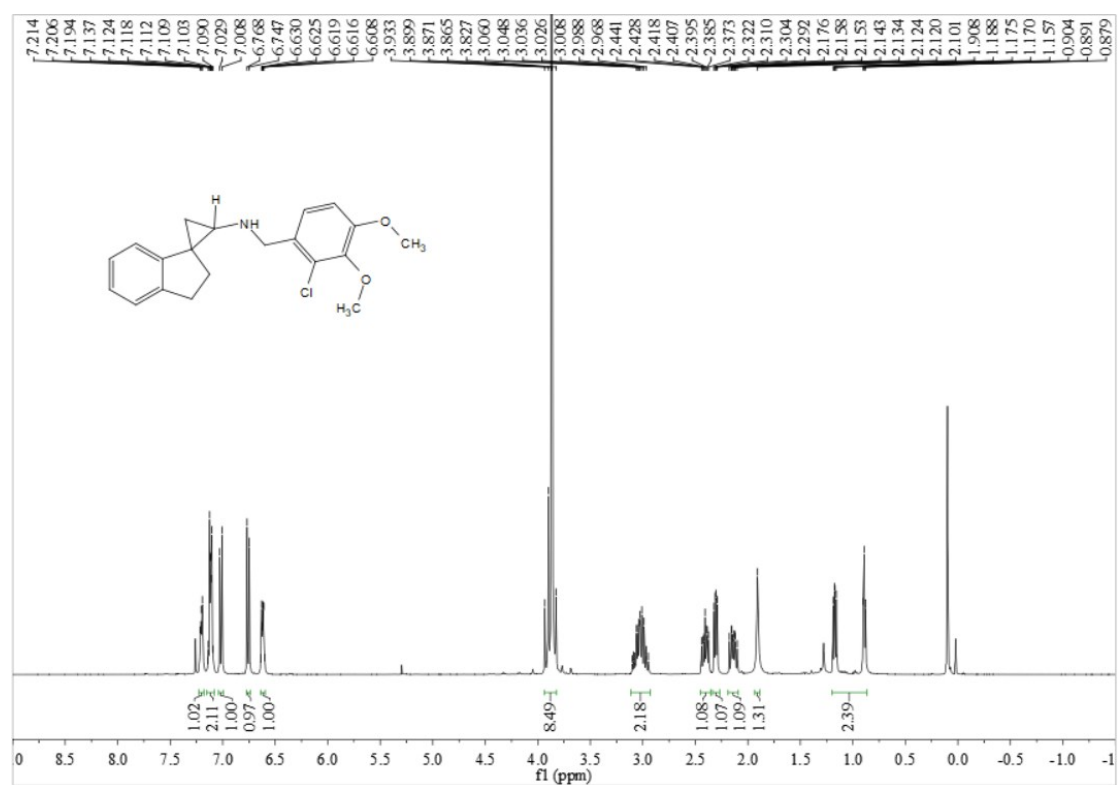
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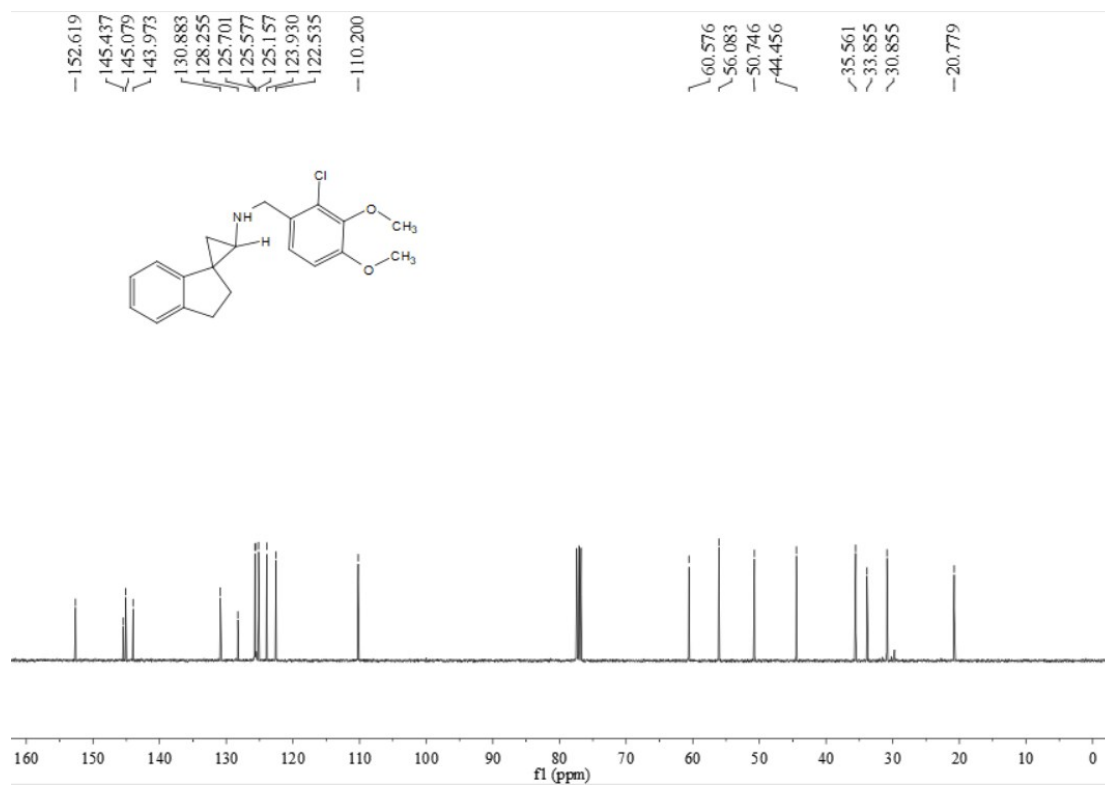
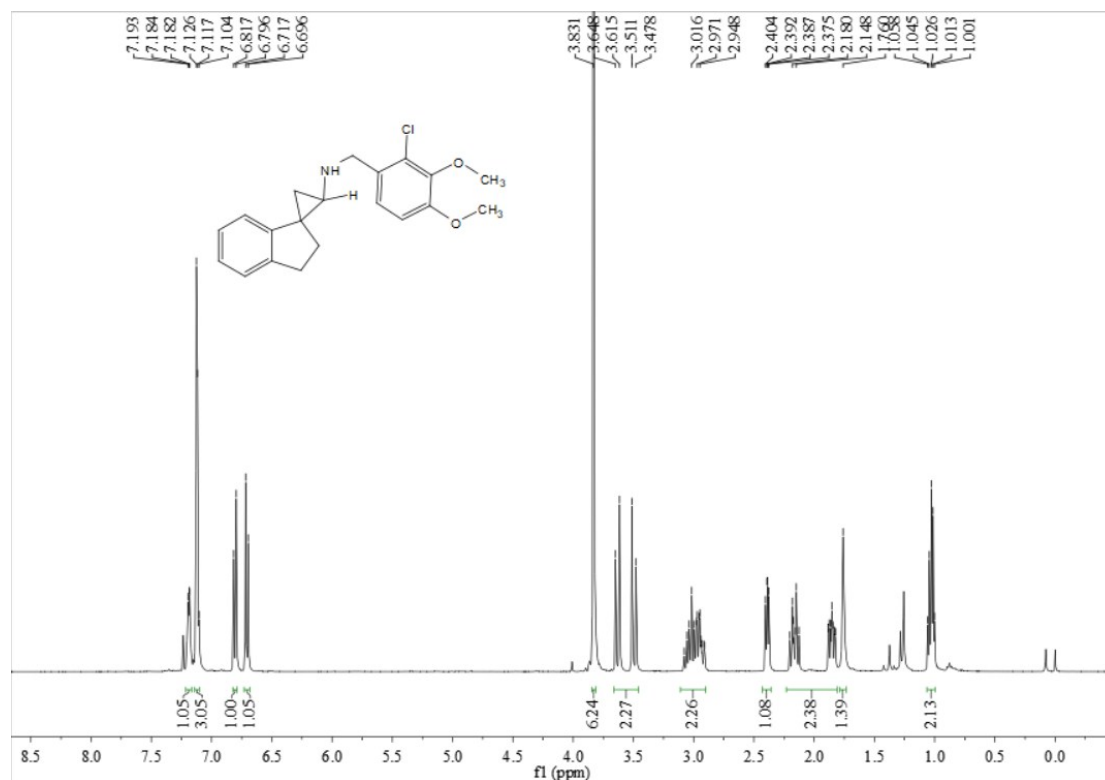
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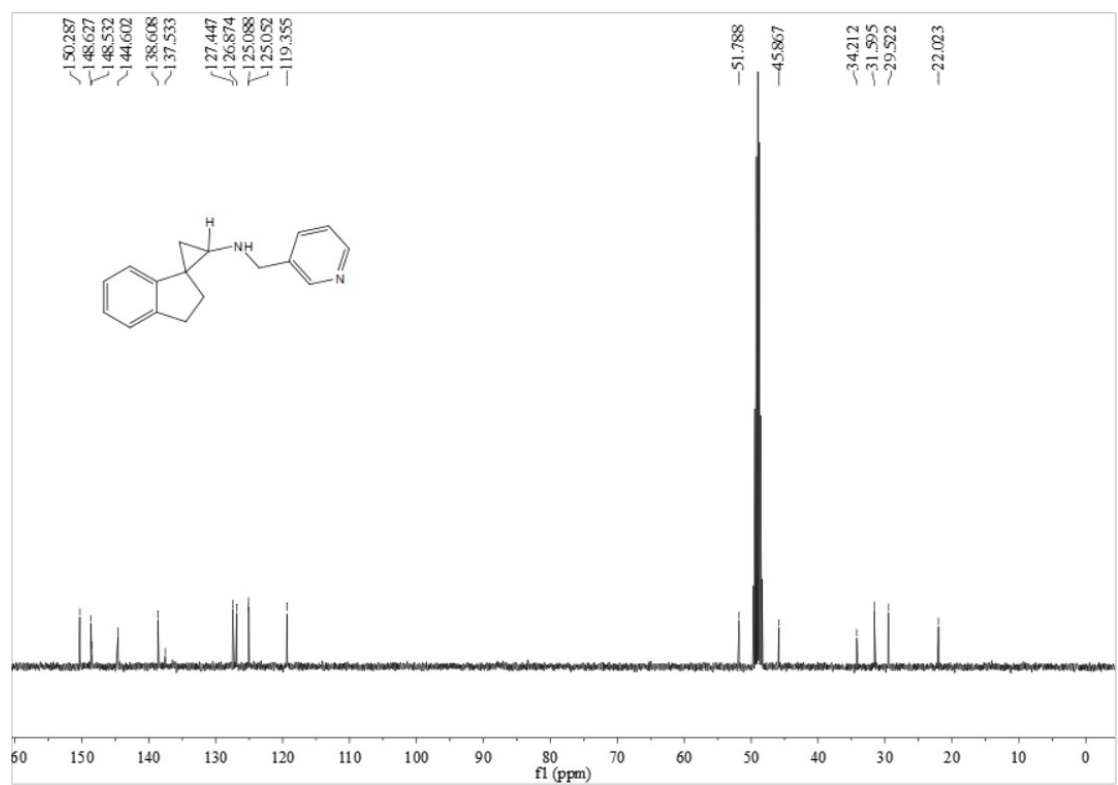
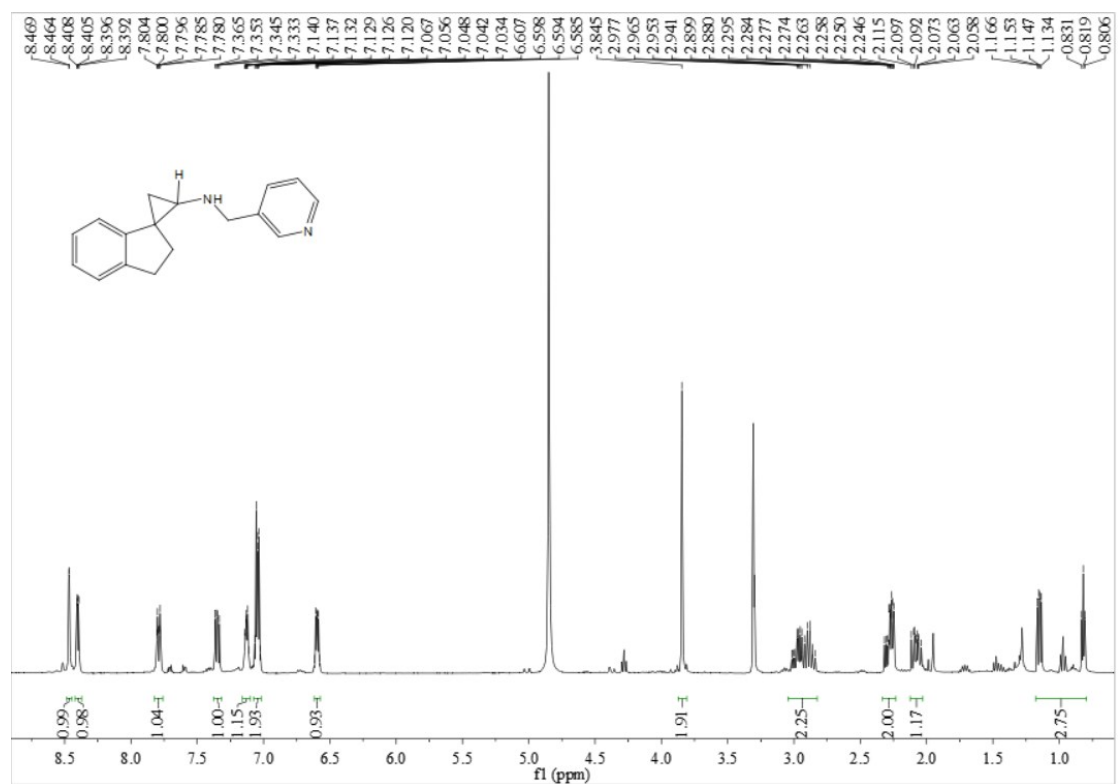
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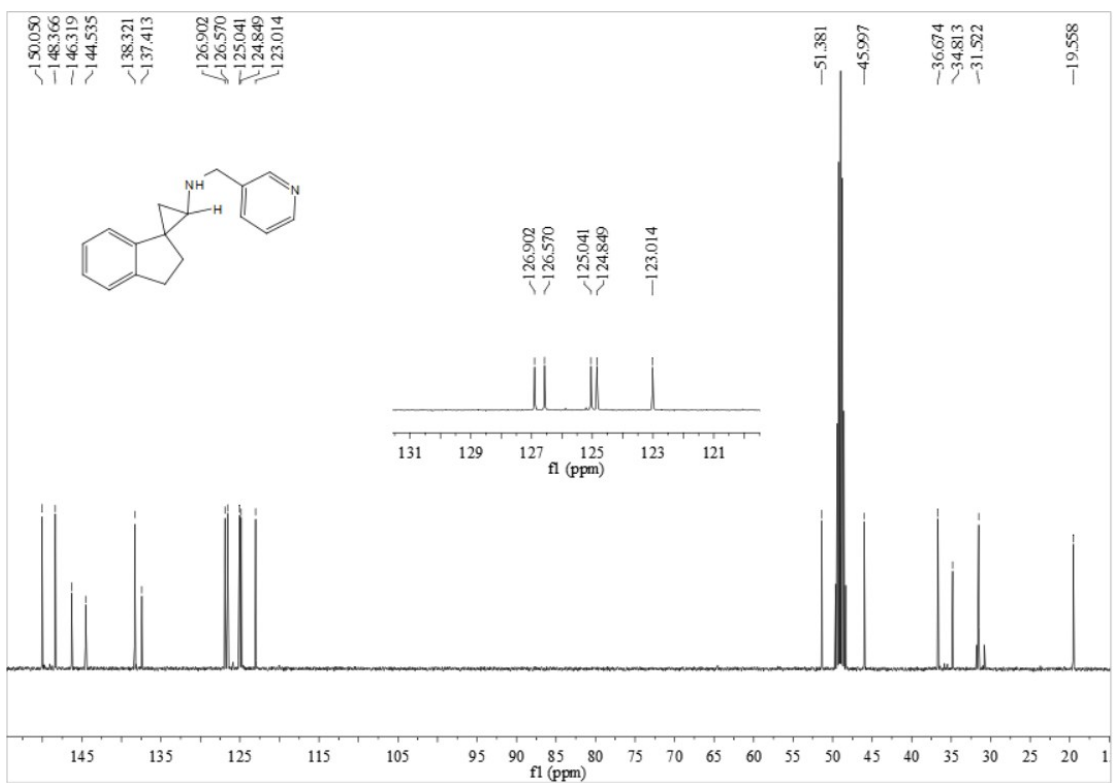
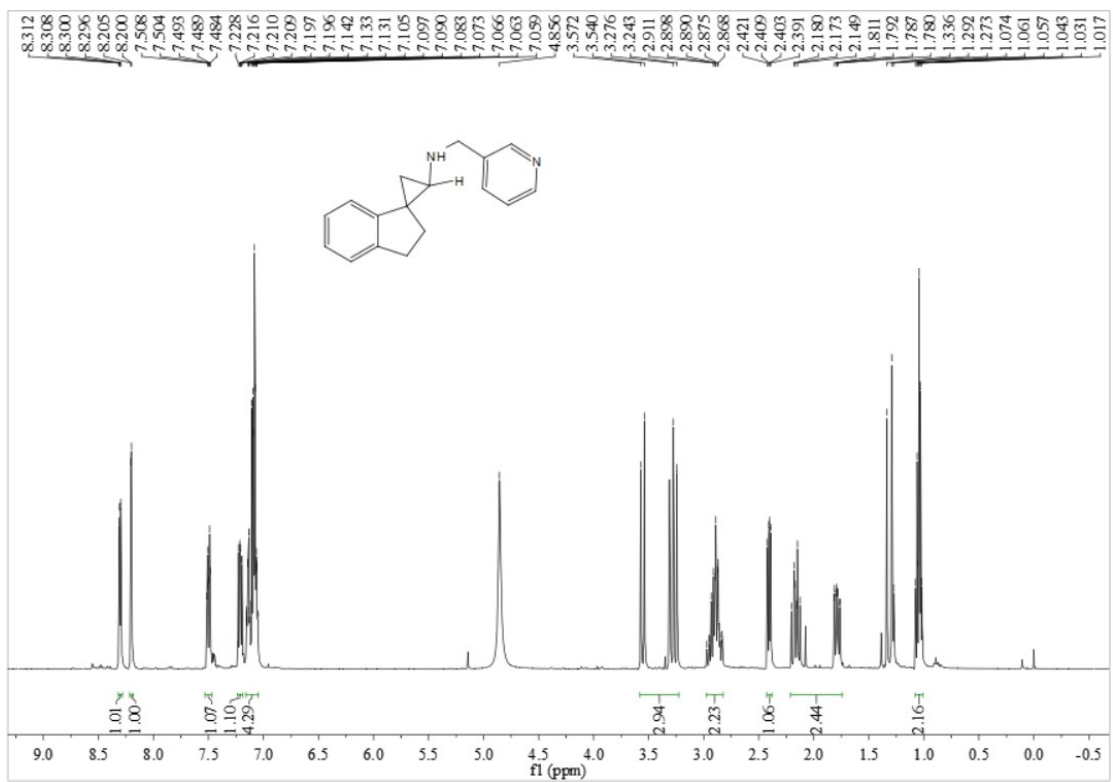
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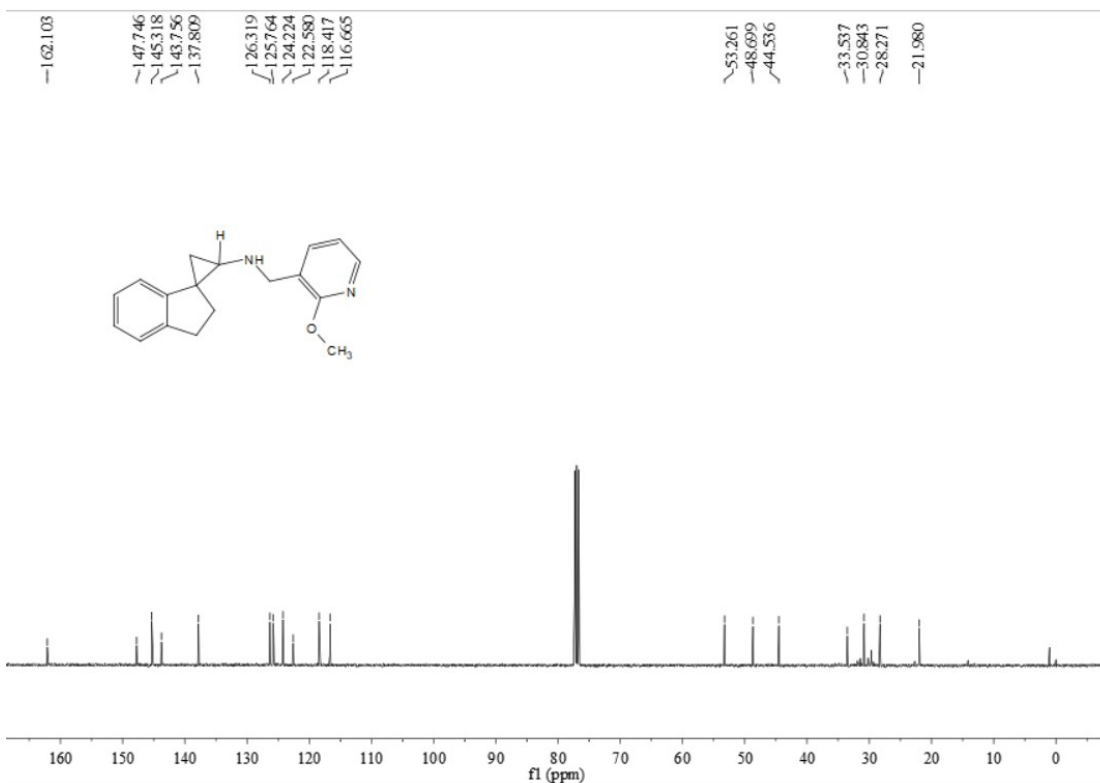
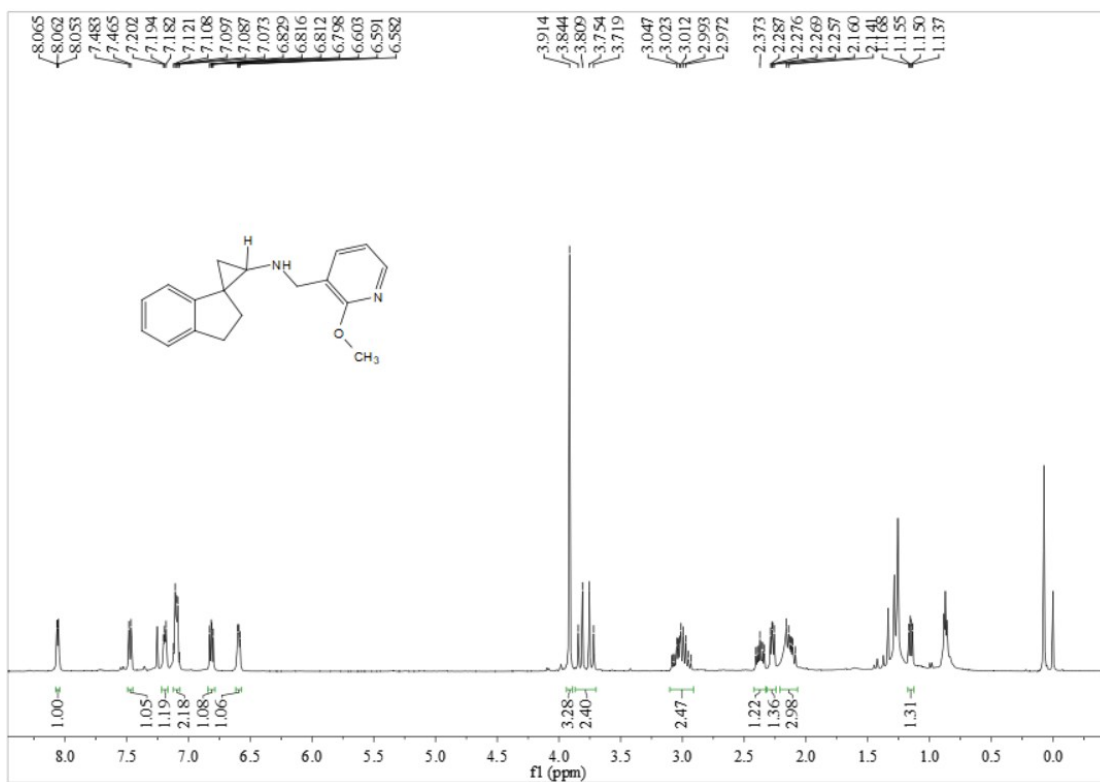
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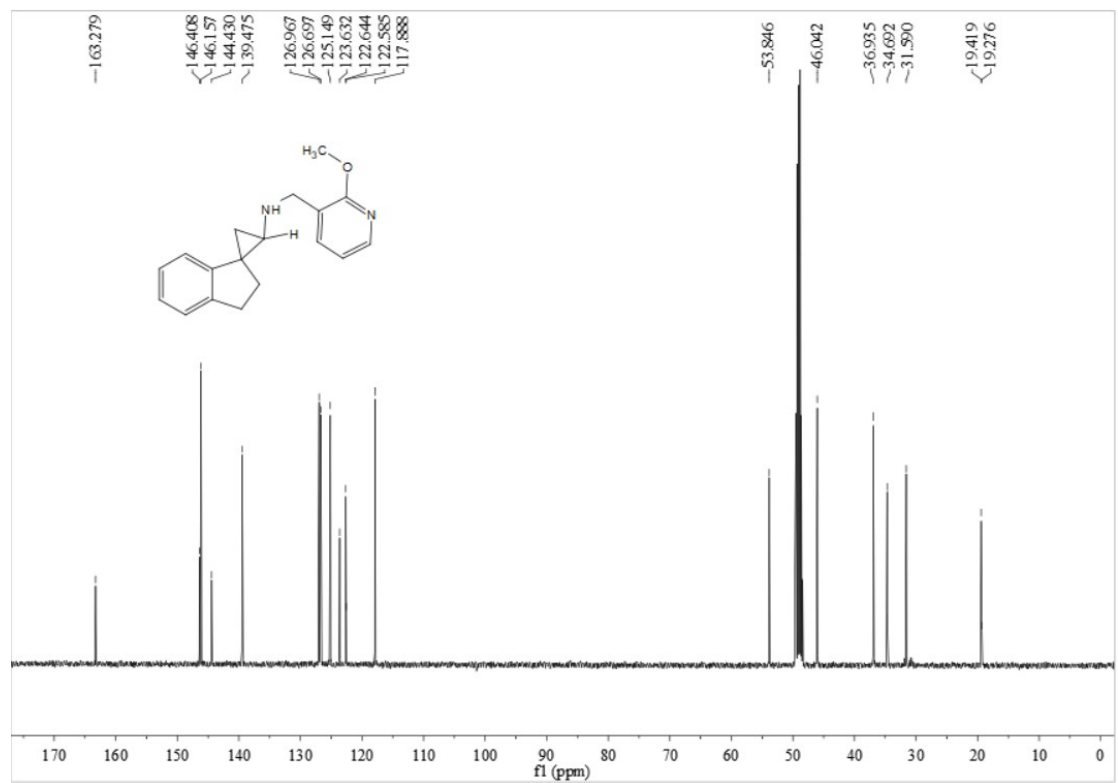
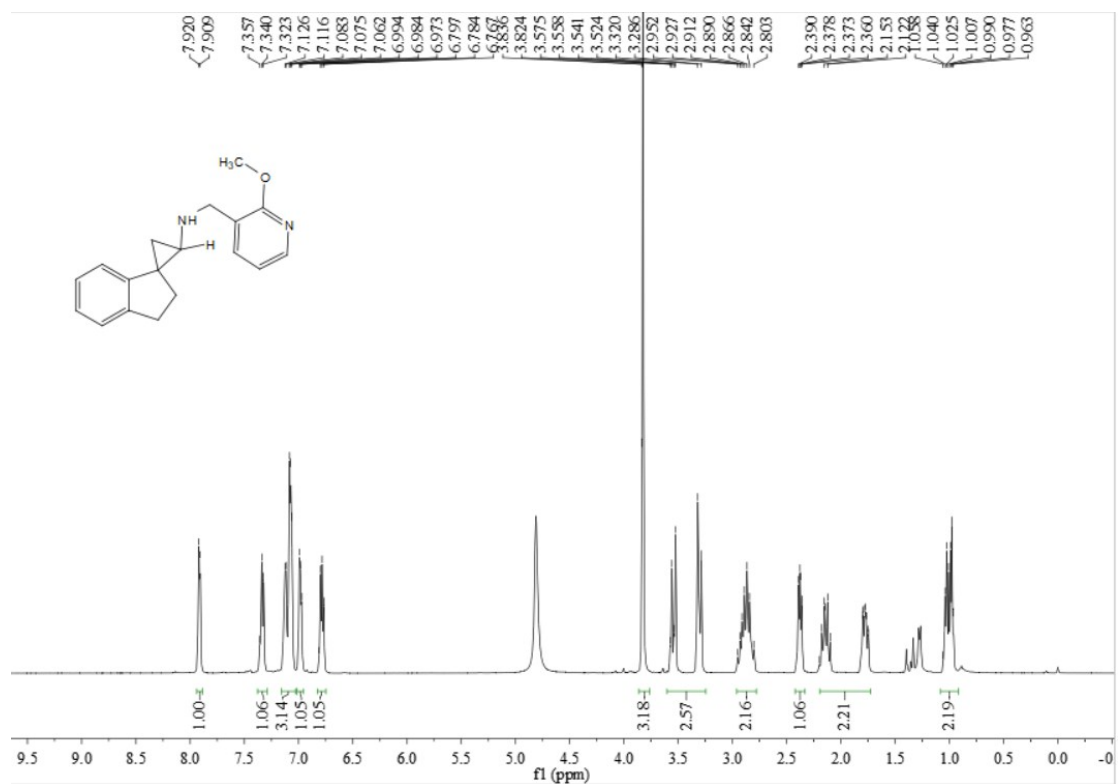
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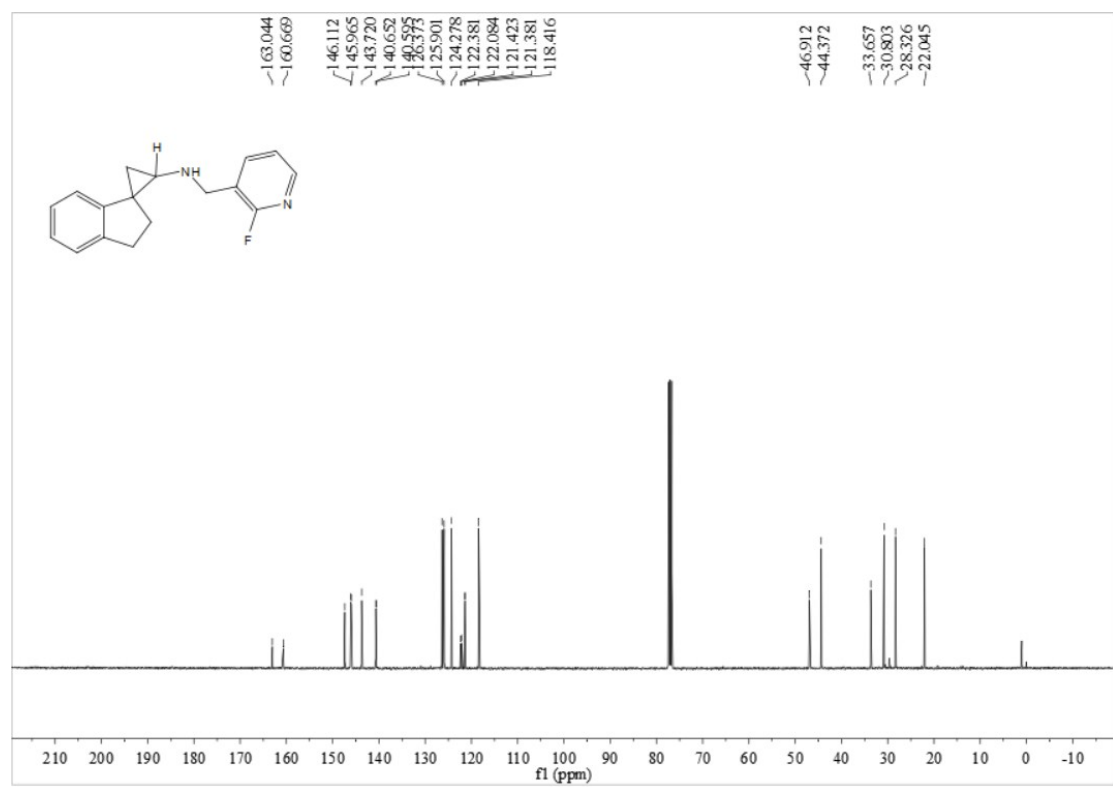
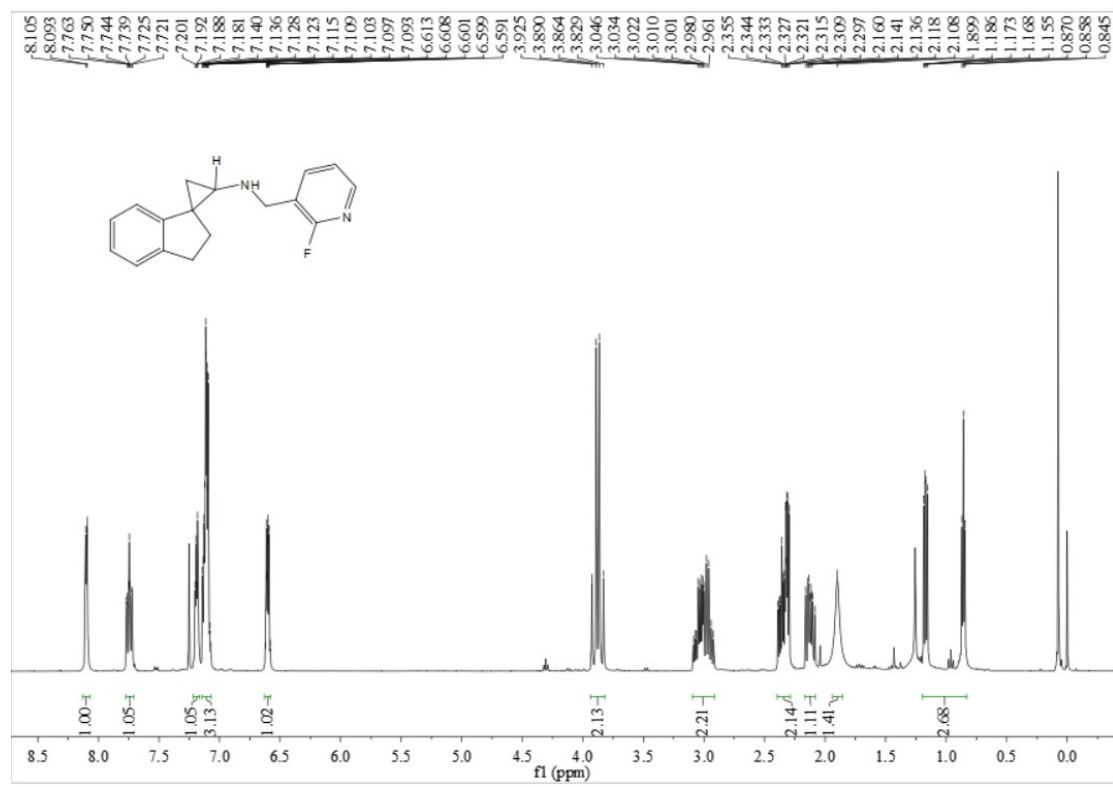
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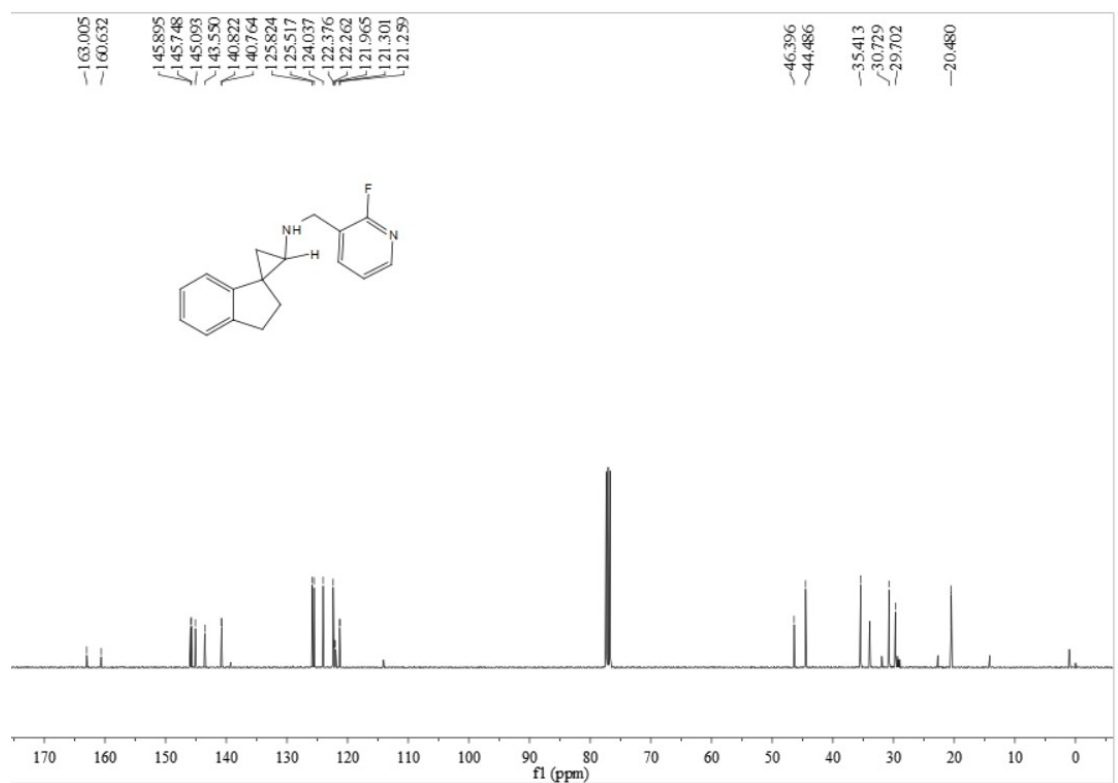
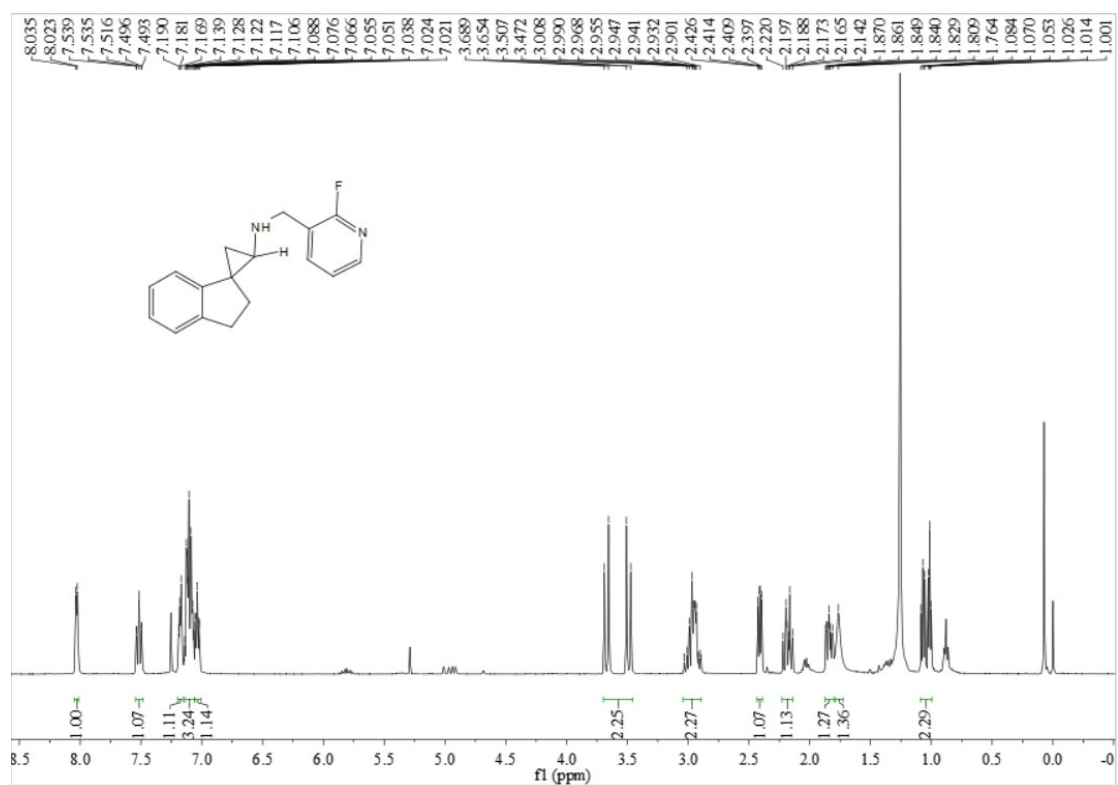
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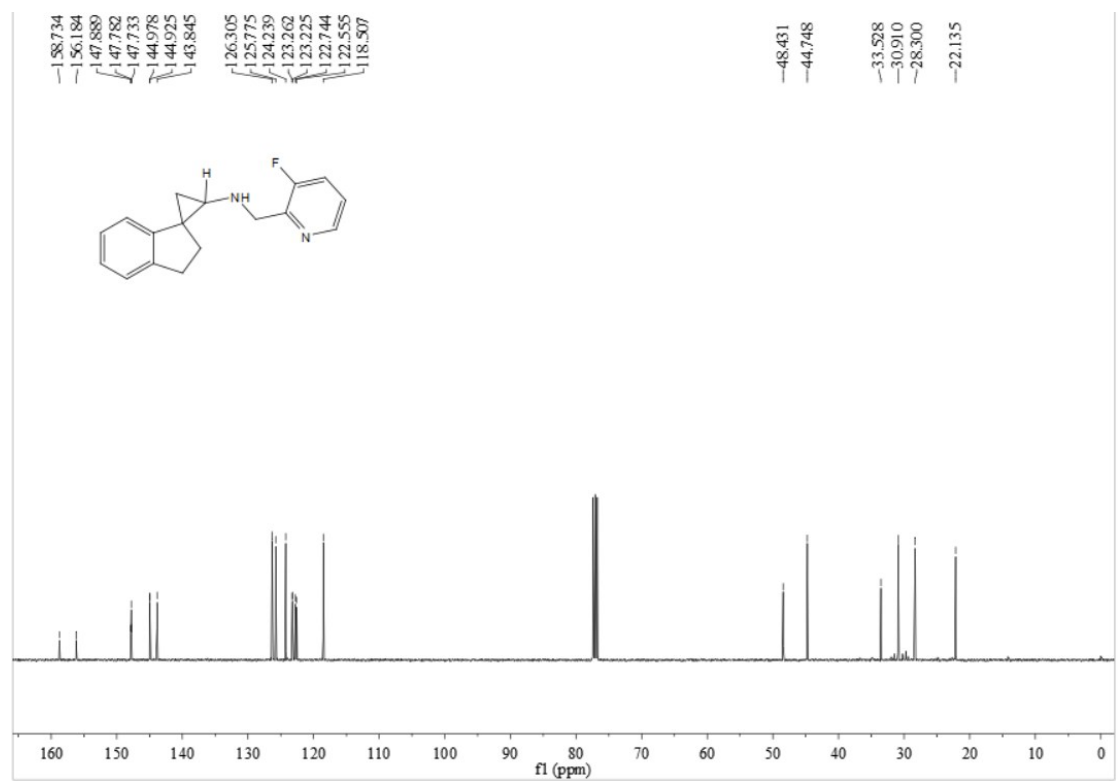
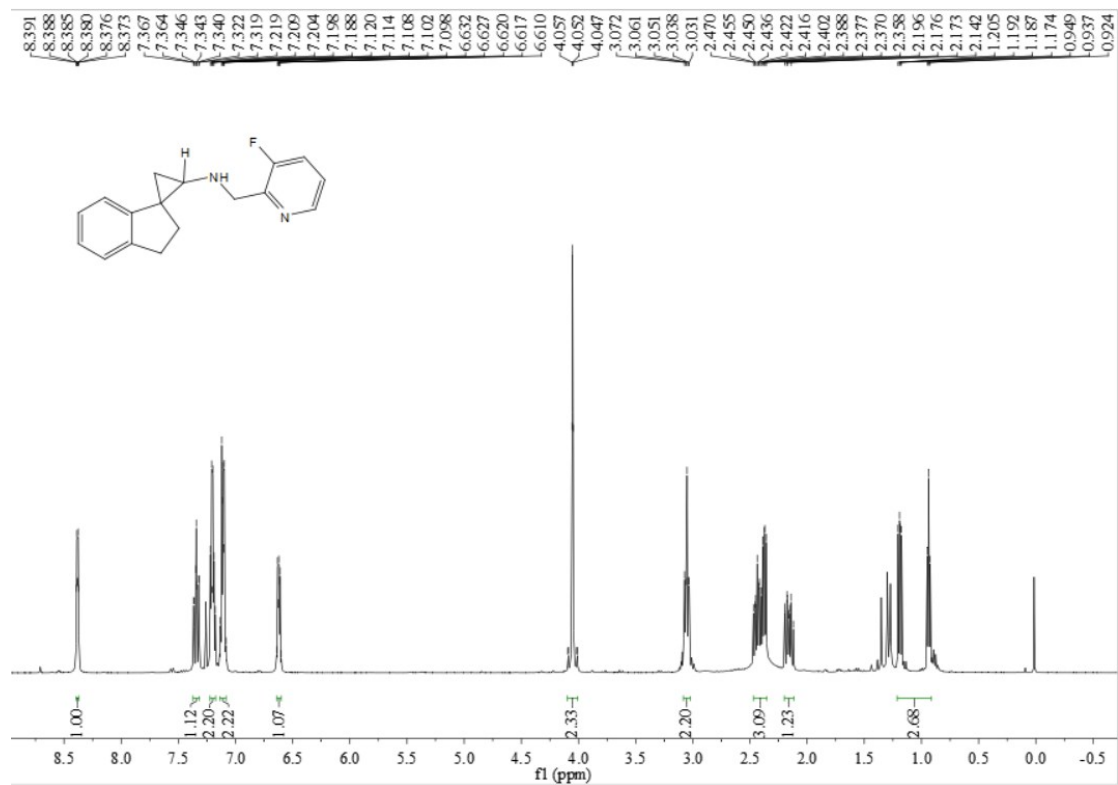
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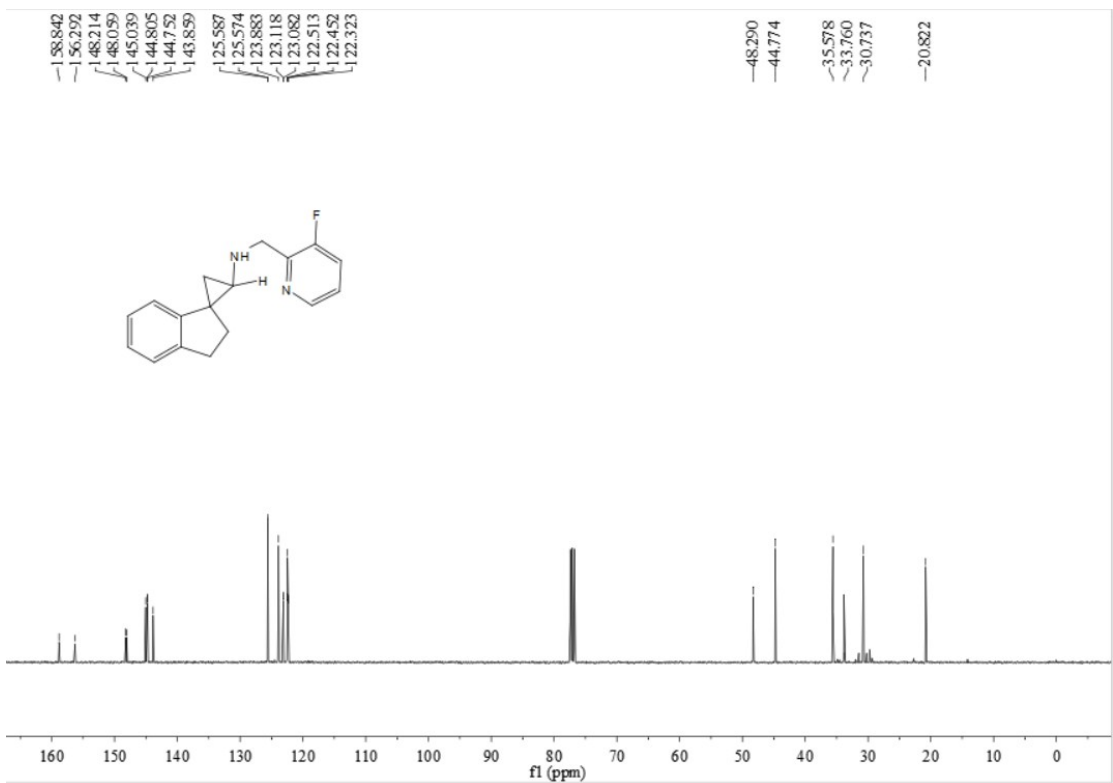
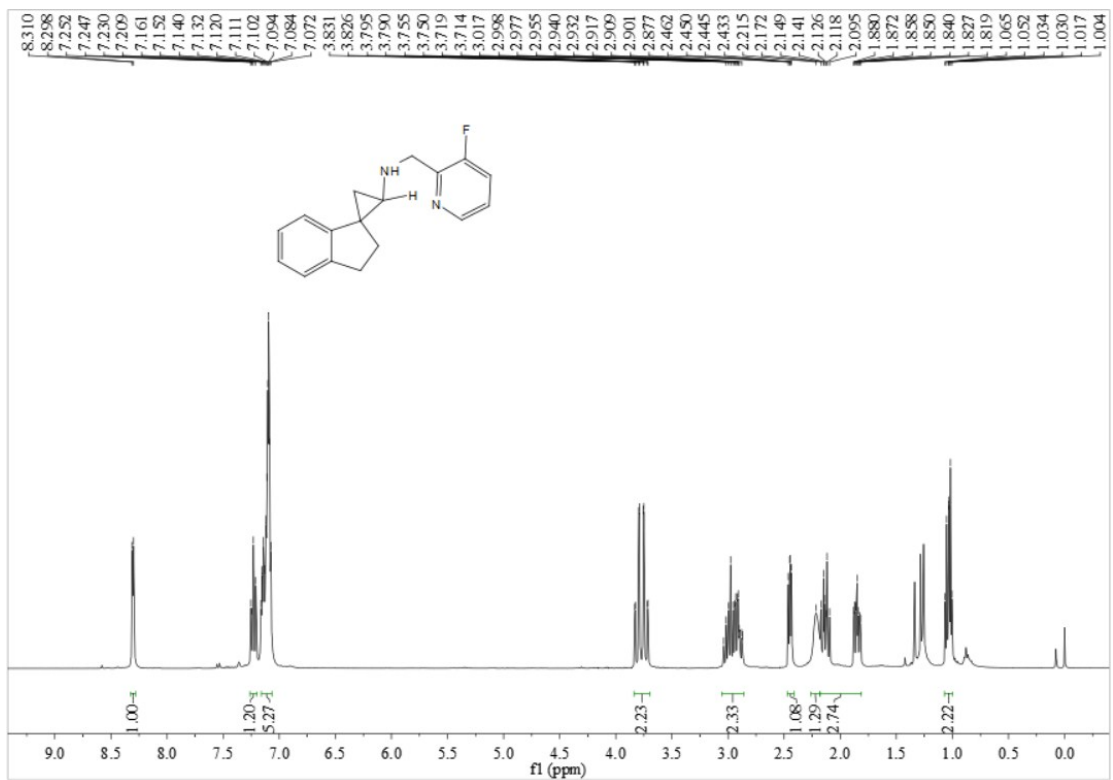
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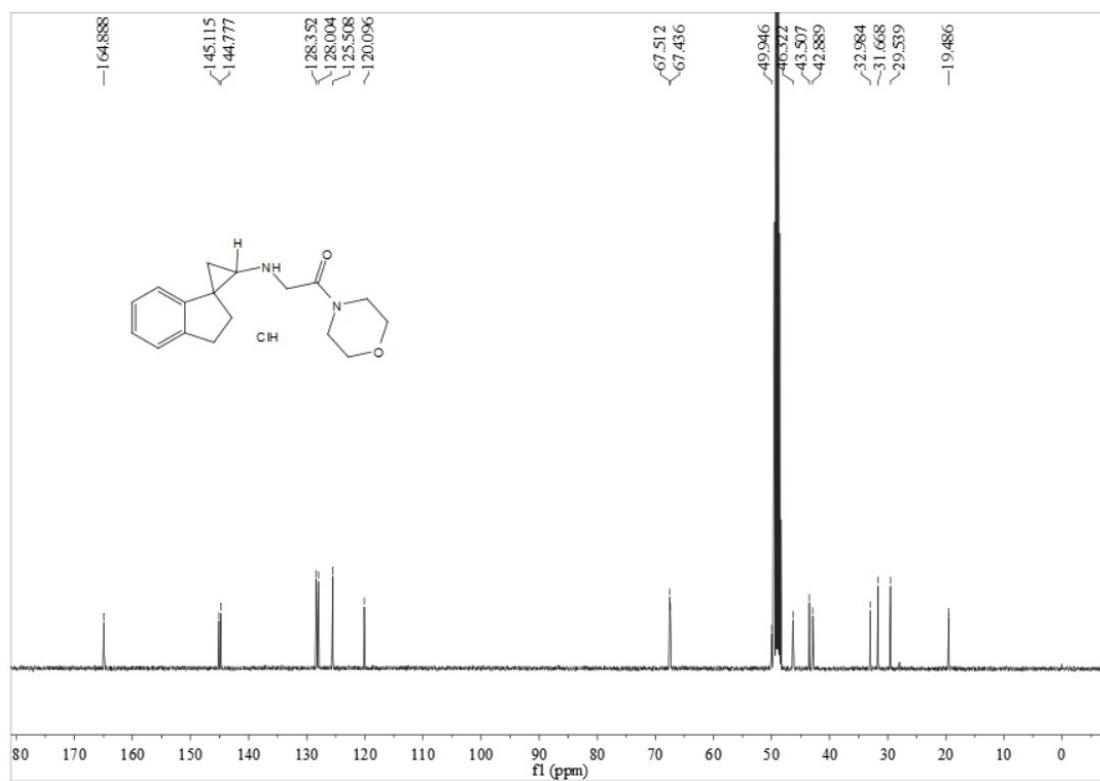
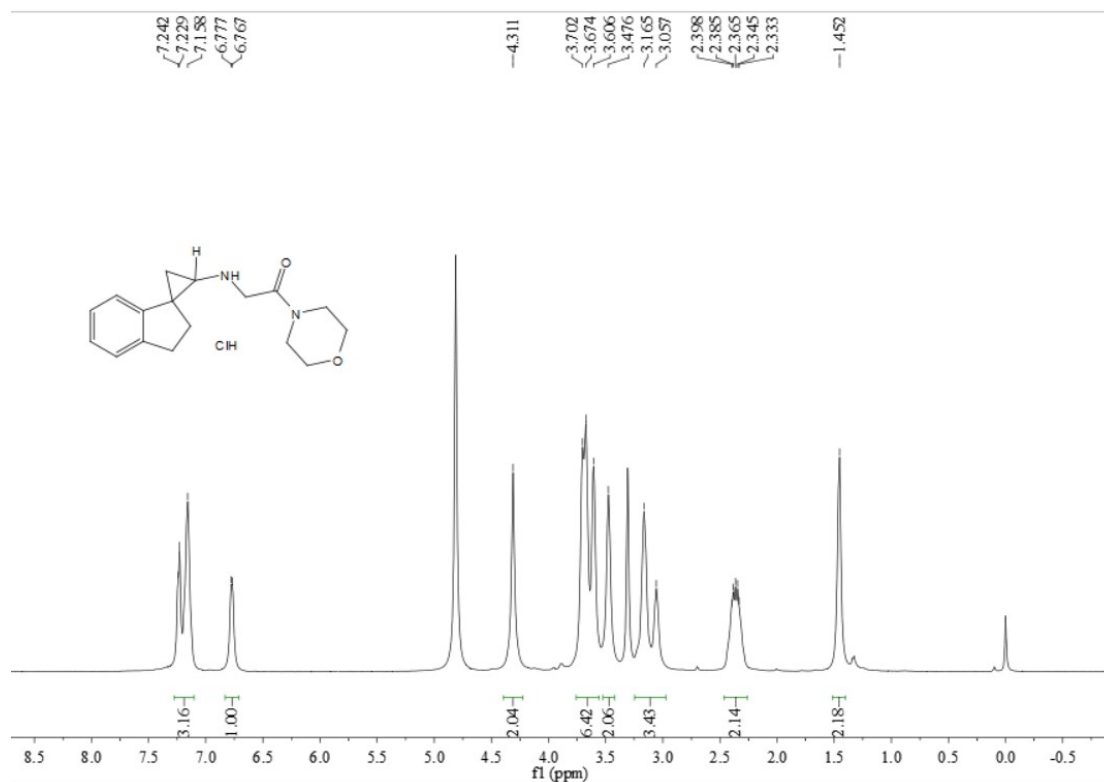
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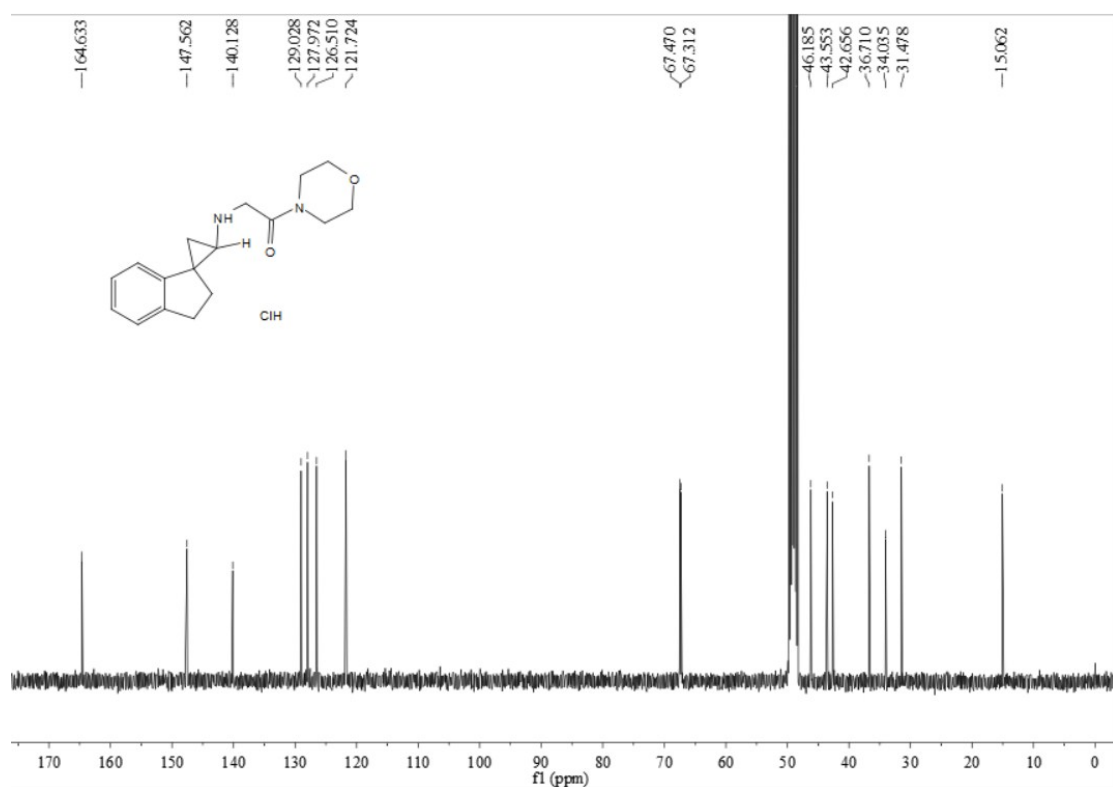
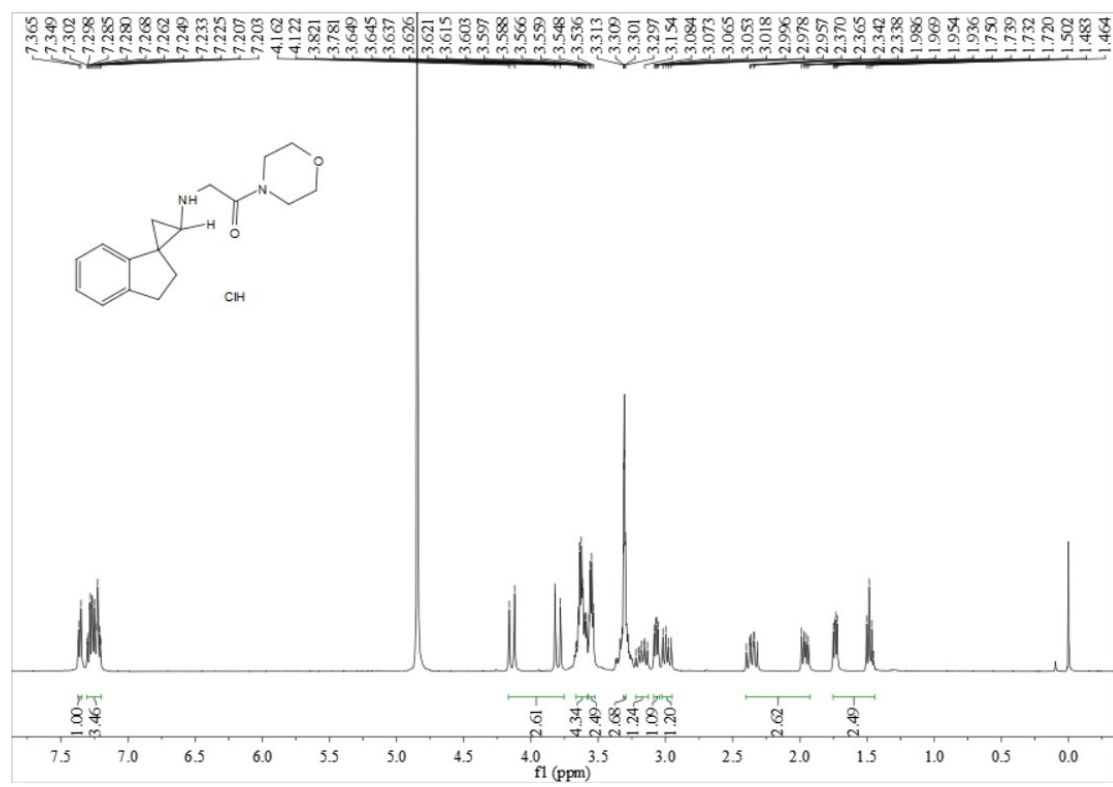
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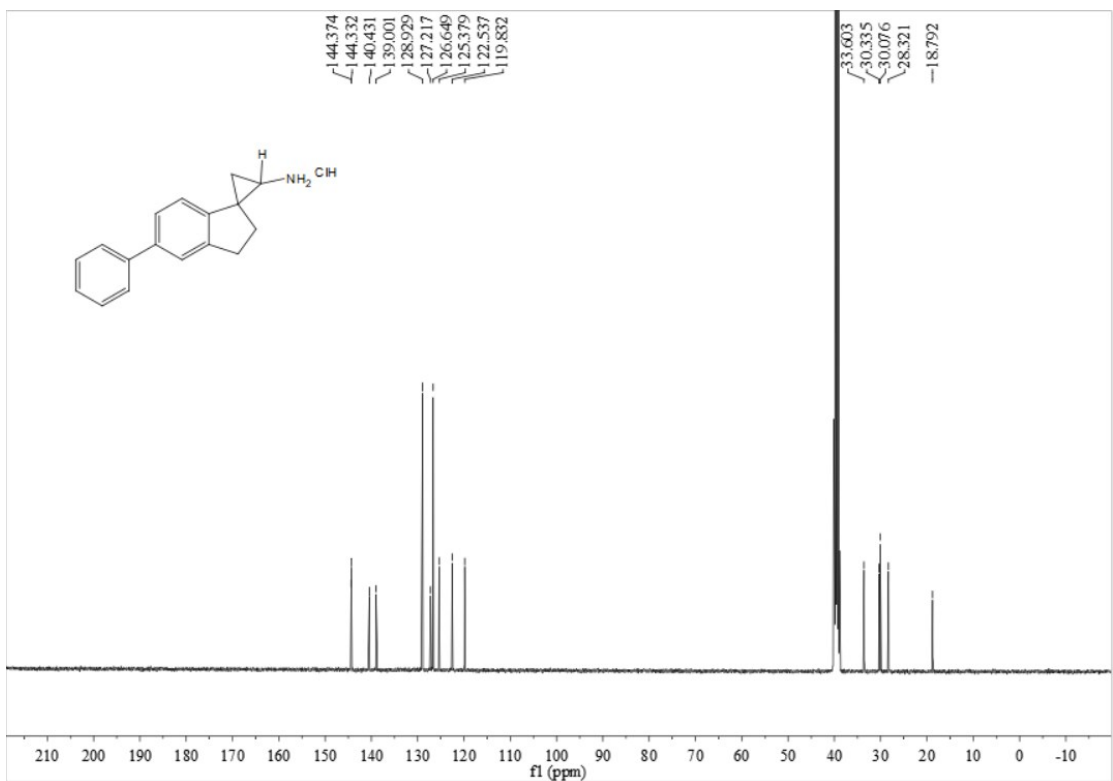
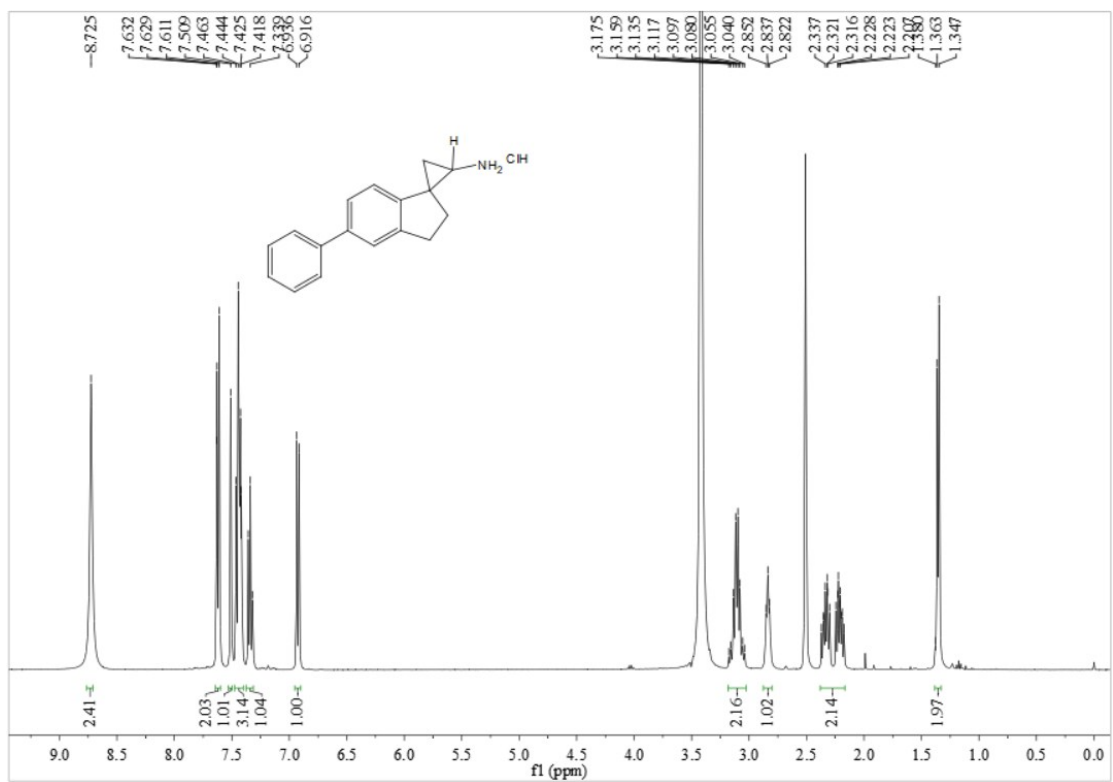
¹H NMR (400 MHz, CD₃OD) and ¹³C NMR (101 MHz, CD₃OD) spectrum for 25a



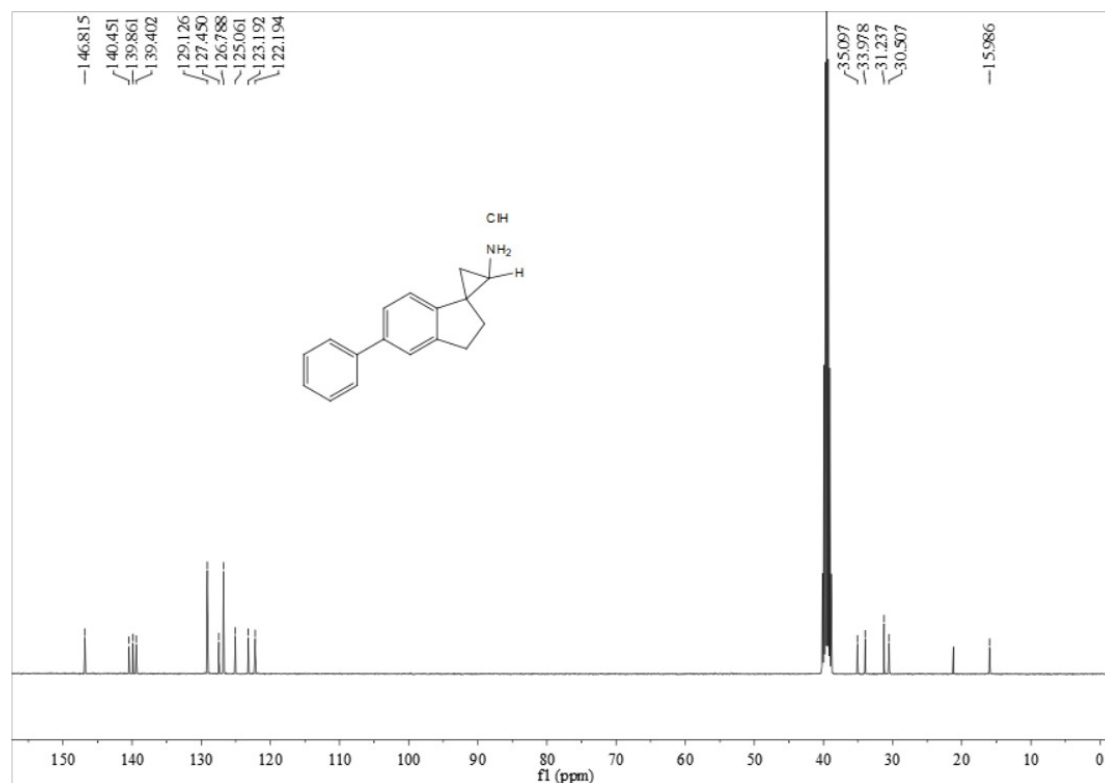
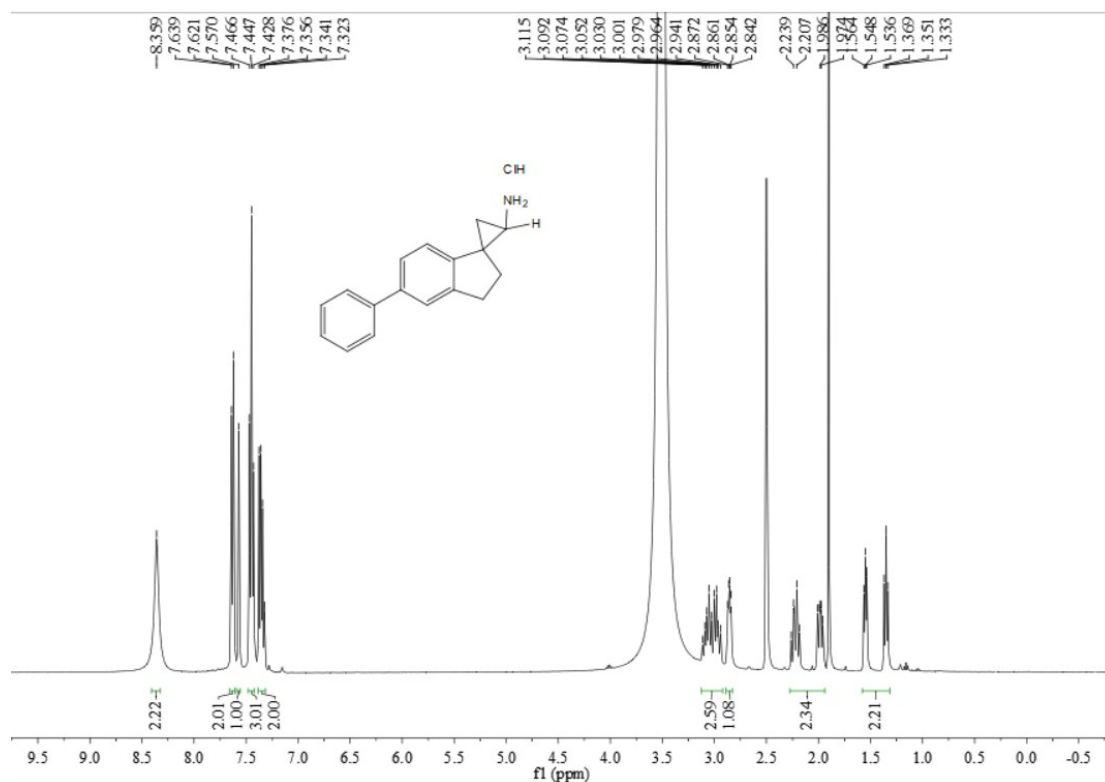
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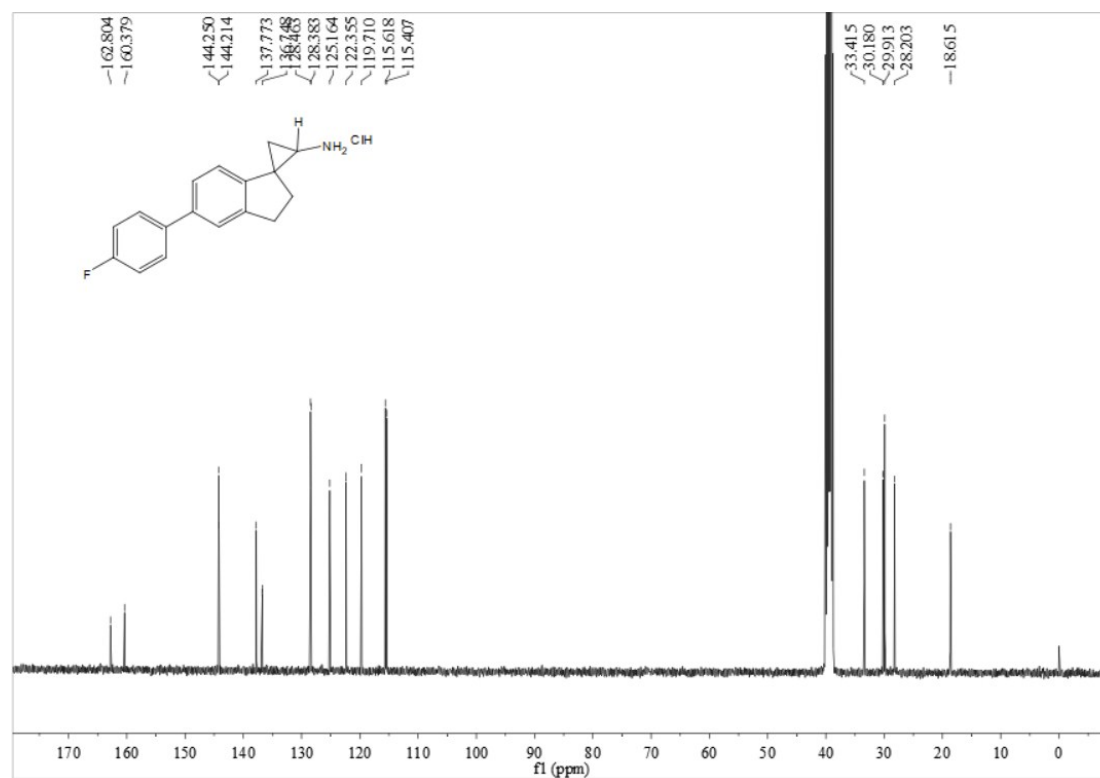
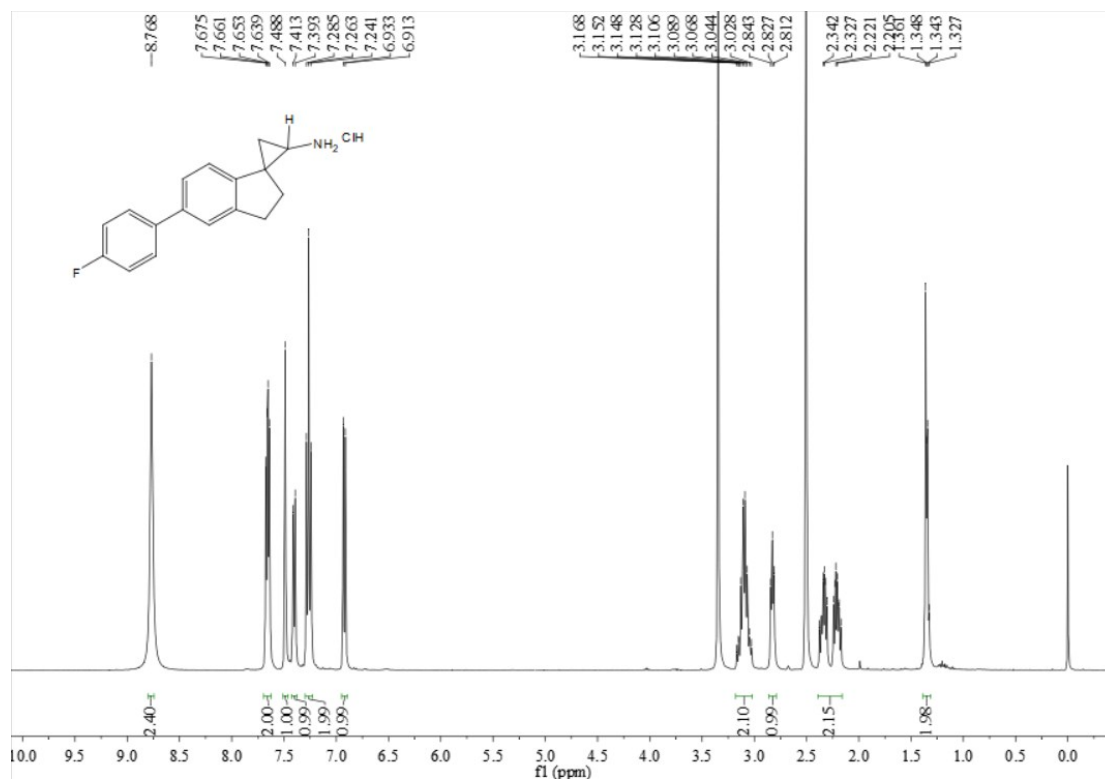
¹H NMR (400 MHz, DMSO-*d*₆) and ¹³C NMR (101 MHz, DMSO-*d*₆) spectrum for 28a



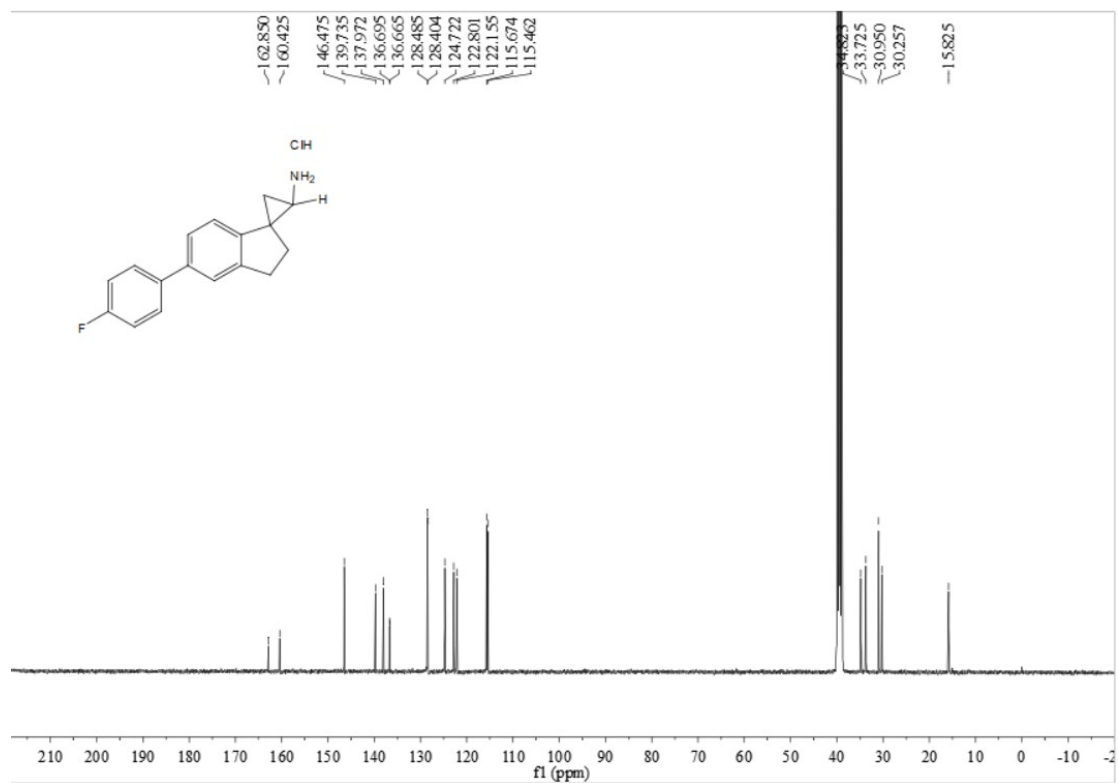
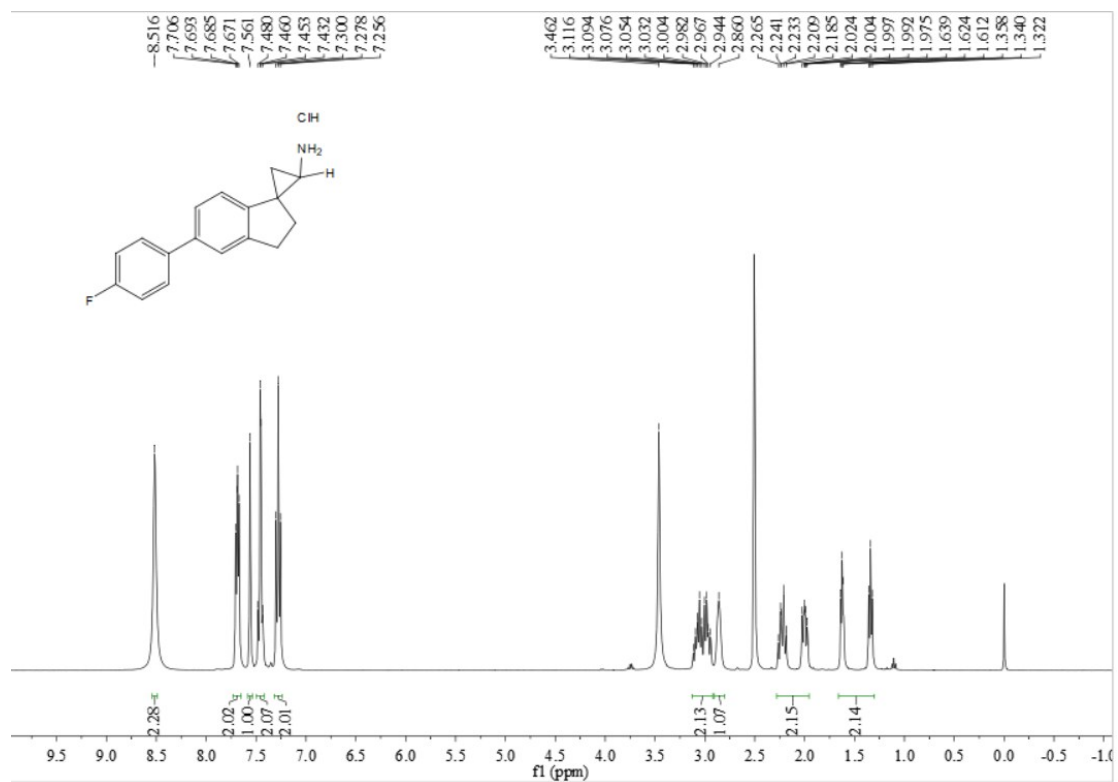
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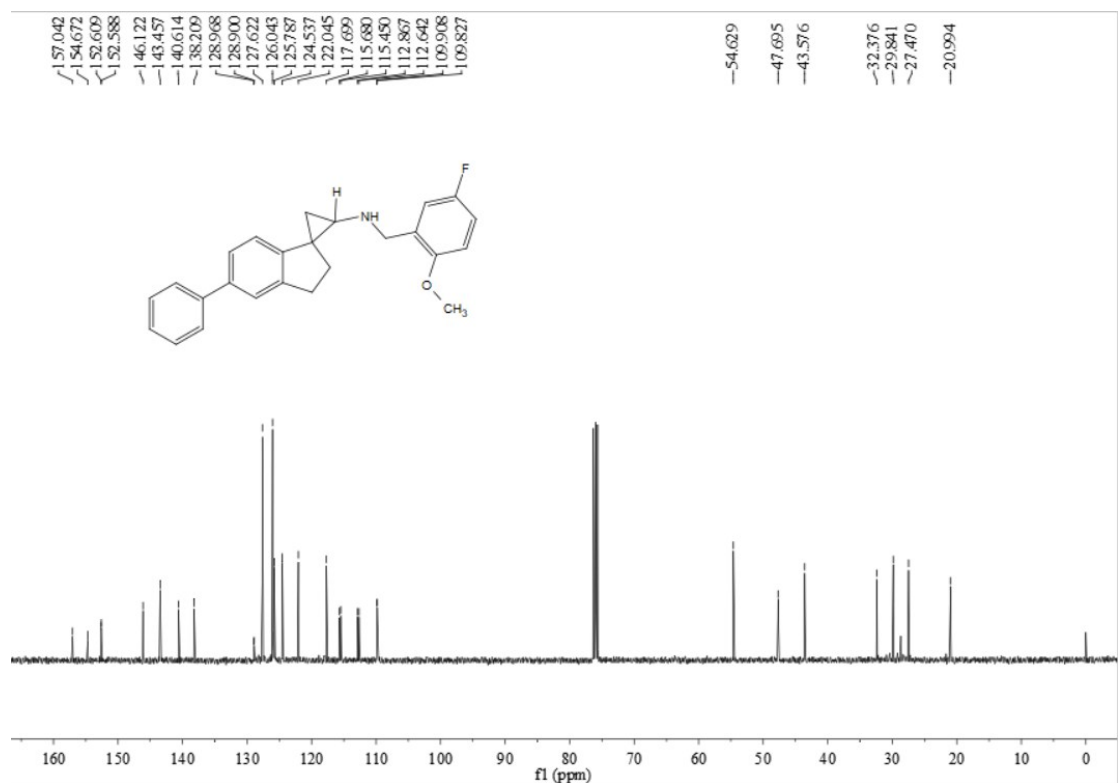
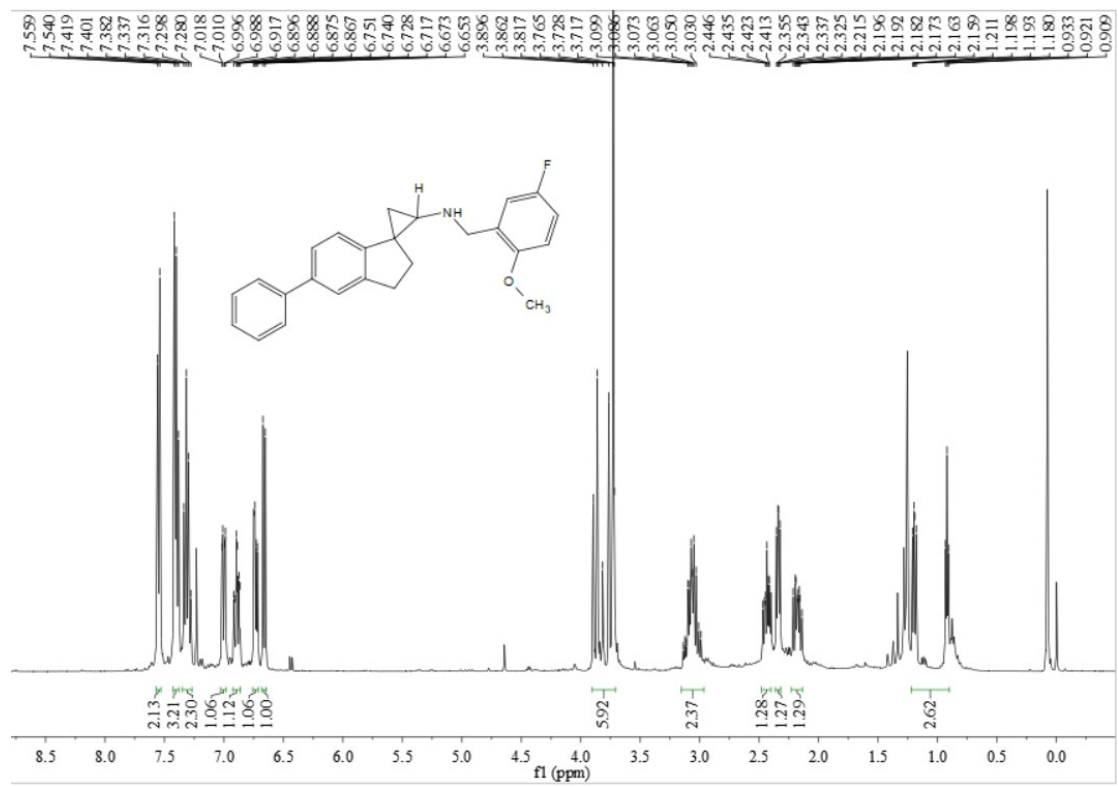
¹H NMR (400 MHz, DMSO-*d*₆) and ¹³C NMR (101 MHz, DMSO-*d*₆) spectrum for 29a



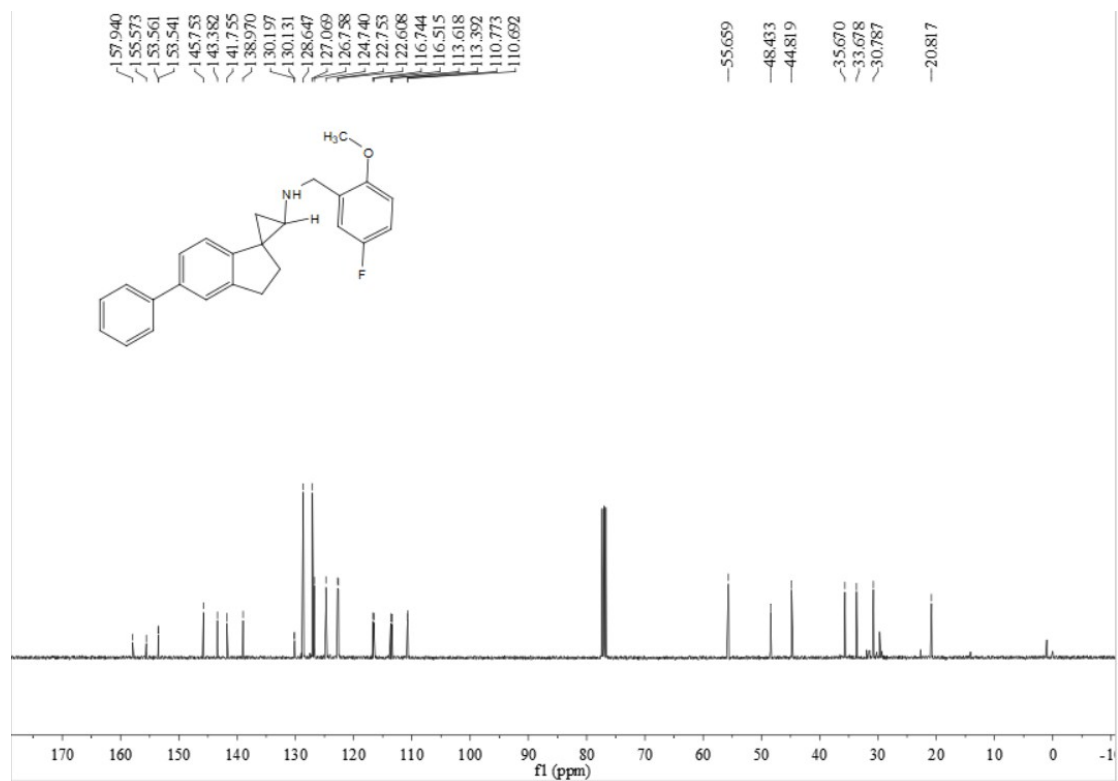
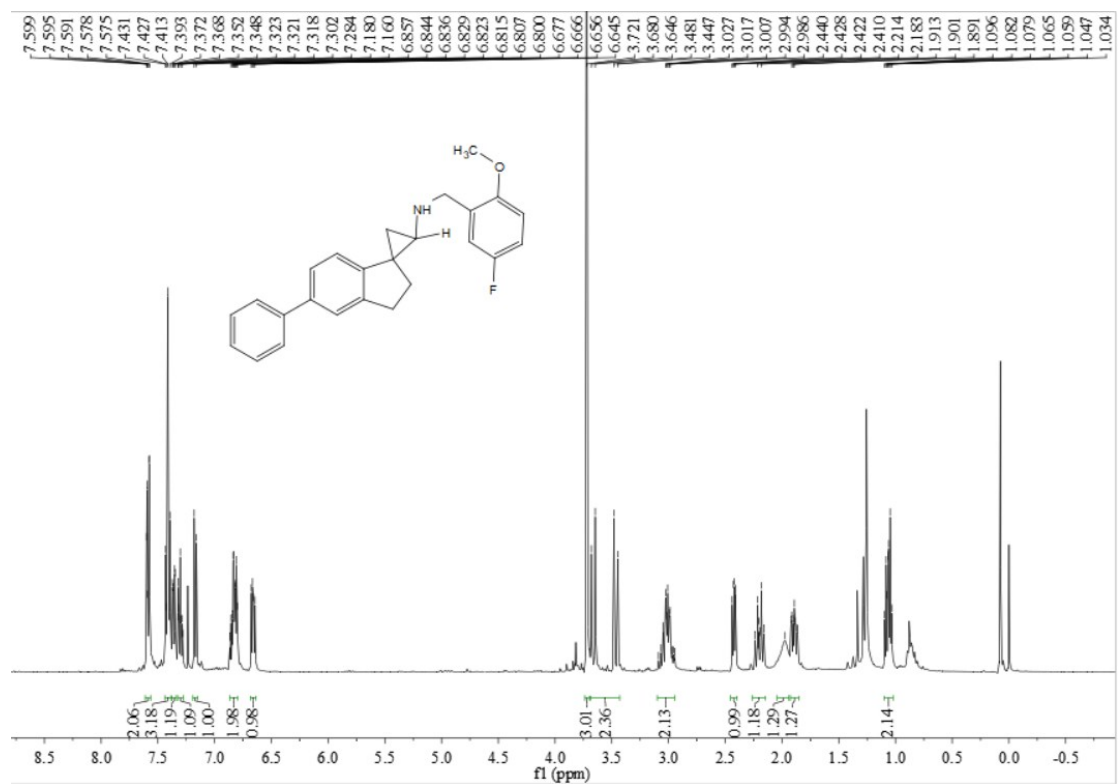
¹H NMR (400 MHz, DMSO-*d*₆) and ¹³C NMR (101 MHz, DMSO-*d*₆) spectrum for 29b



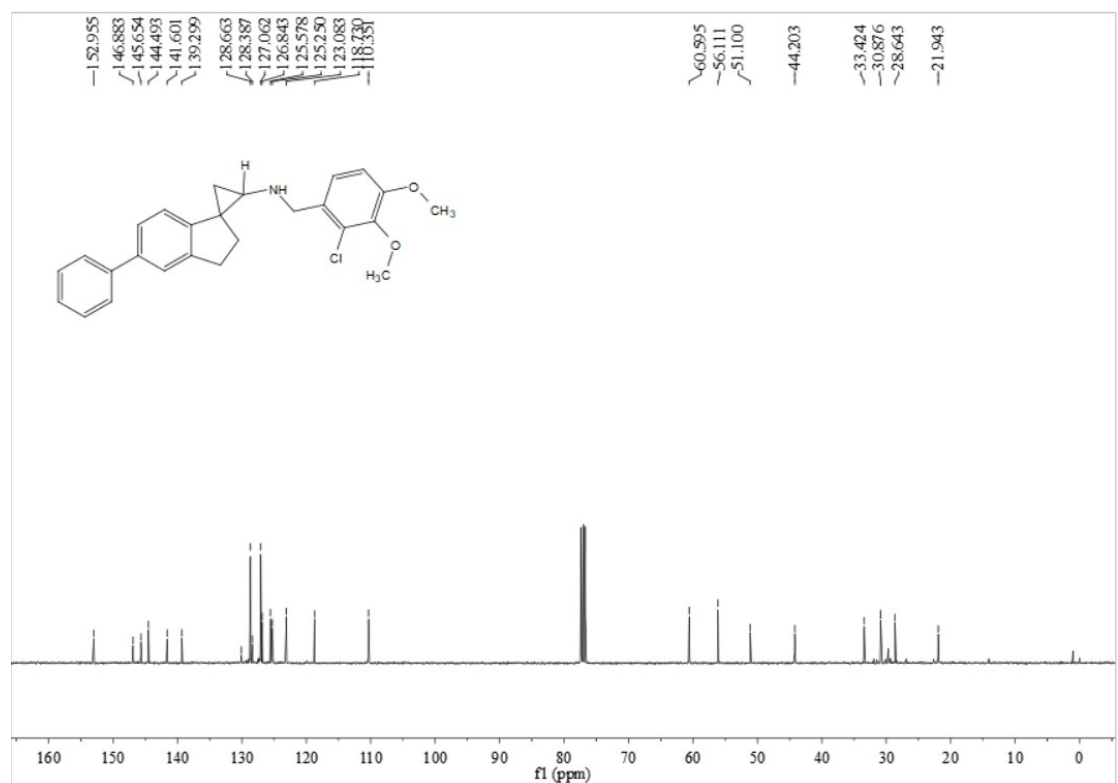
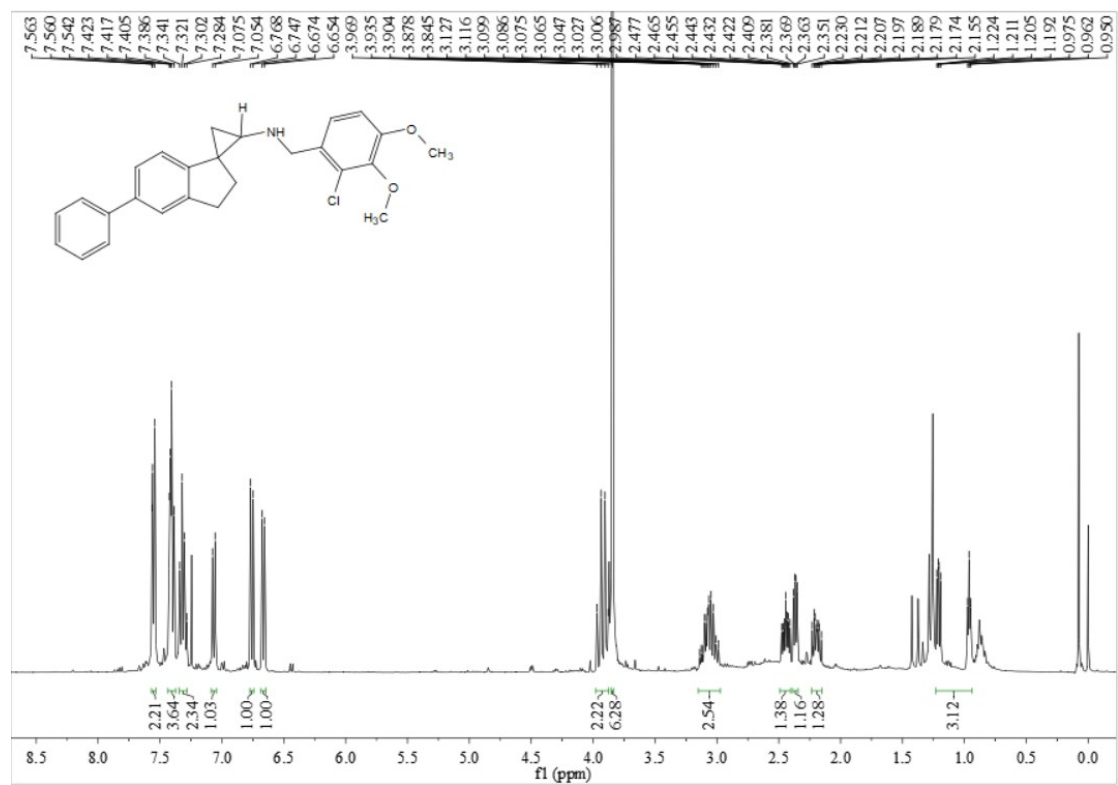
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 30a



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 30b



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 31a



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (101 MHz, CDCl₃) spectrum for 32a

