

Supporting Information

**Asymmetric Synthesis of (-)-Renieramycin T**

Junhao Jia, Ruijiao Chen, Hao Liu, Xiong Li, Yuanliang Jia and Xiaochuan Chen\*

*Key Laboratory of Green Chemistry & Technology of Ministry of Education, College of*

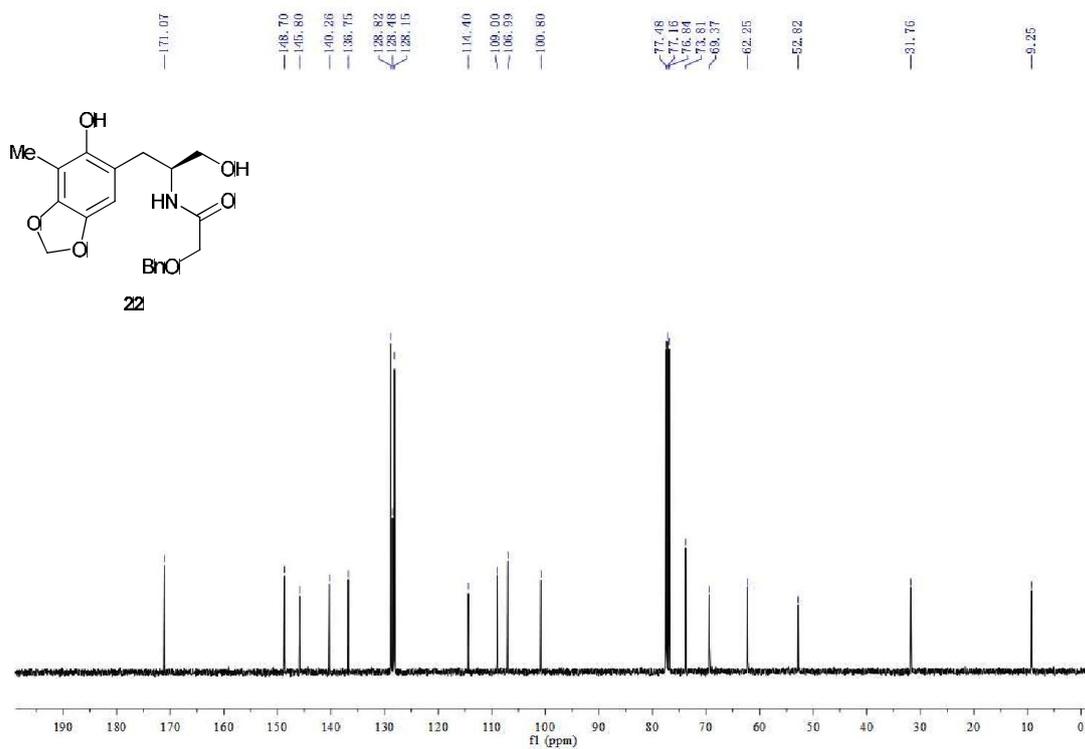
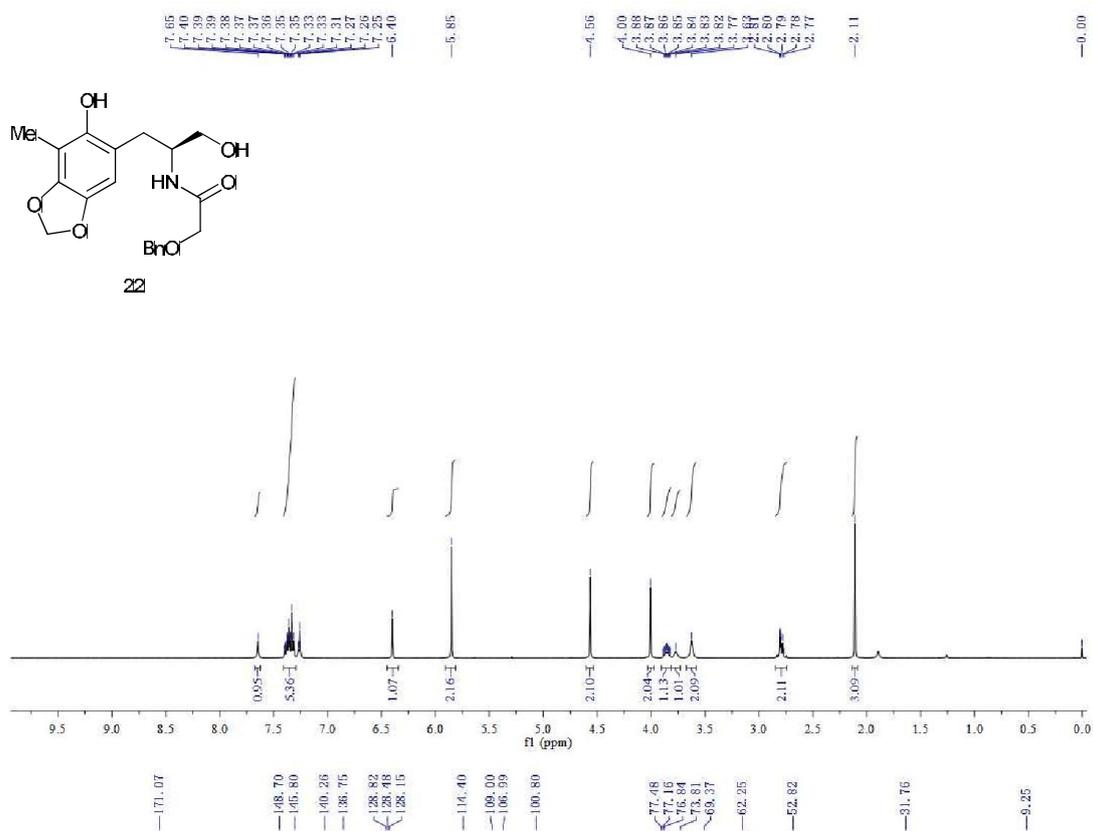
*Chemistry, Sichuan University, Chengdu 610064, PR China*

*E-mail: [chenxc@scu.edu.cn](mailto:chenxc@scu.edu.cn)*

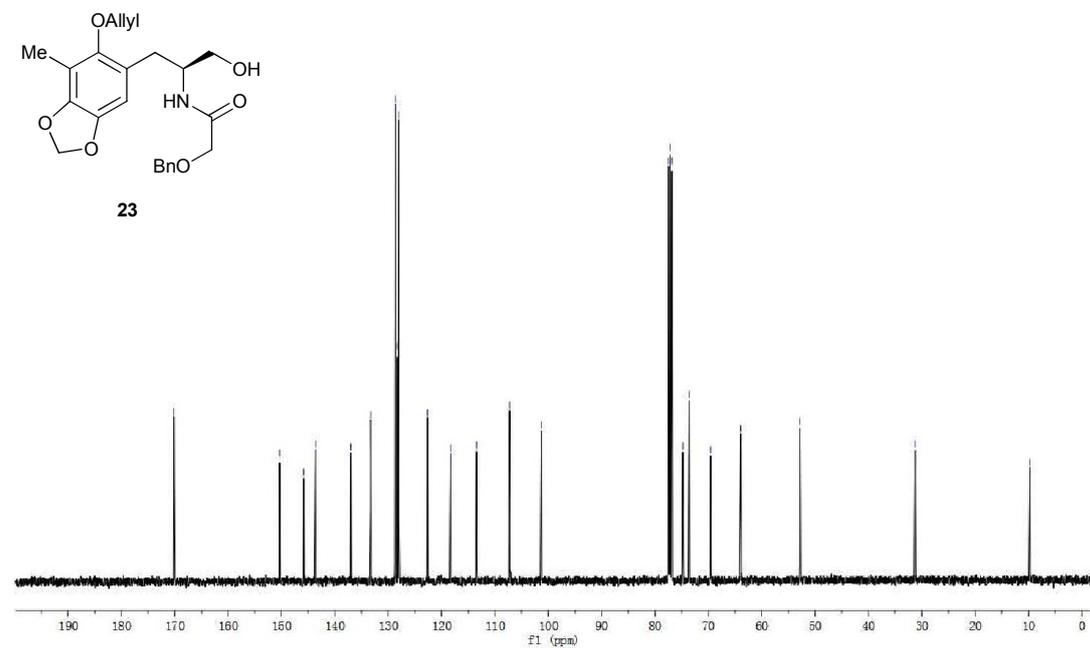
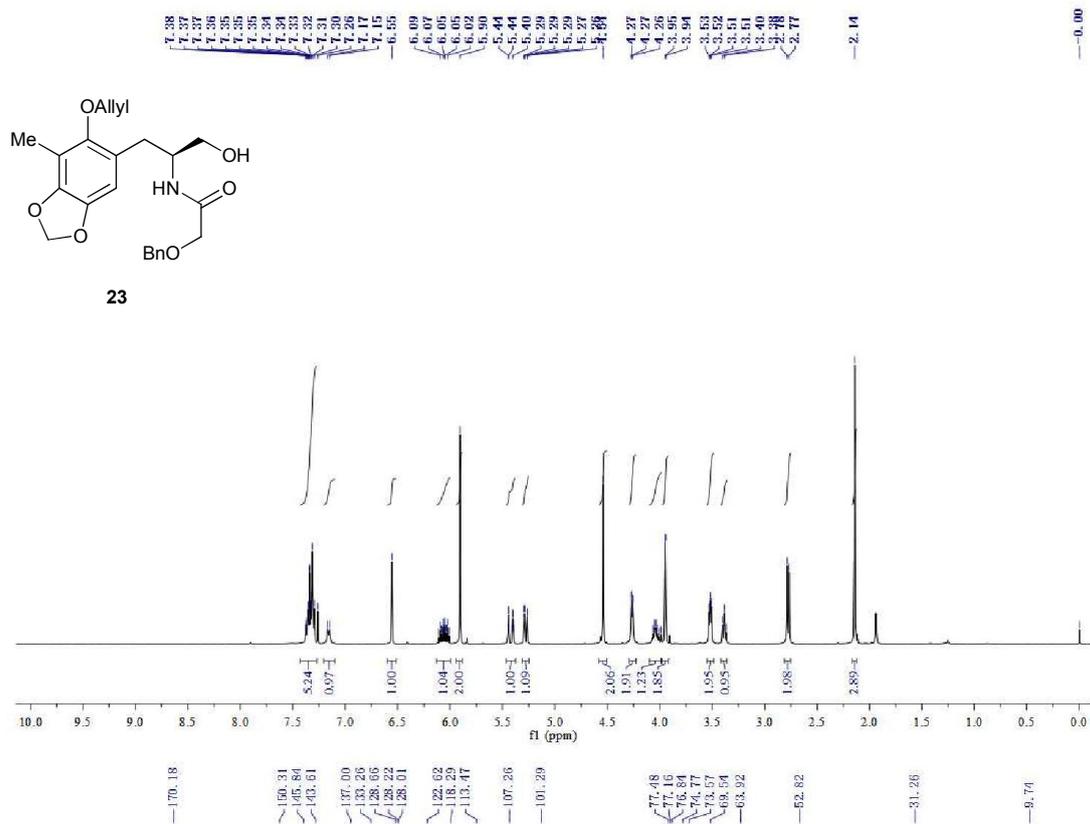
## Table of contents

- A. Spectra for compounds.....S3
- B. Tables S1 and S2 (NMR comparison between synthetic and natural samples) ..S23

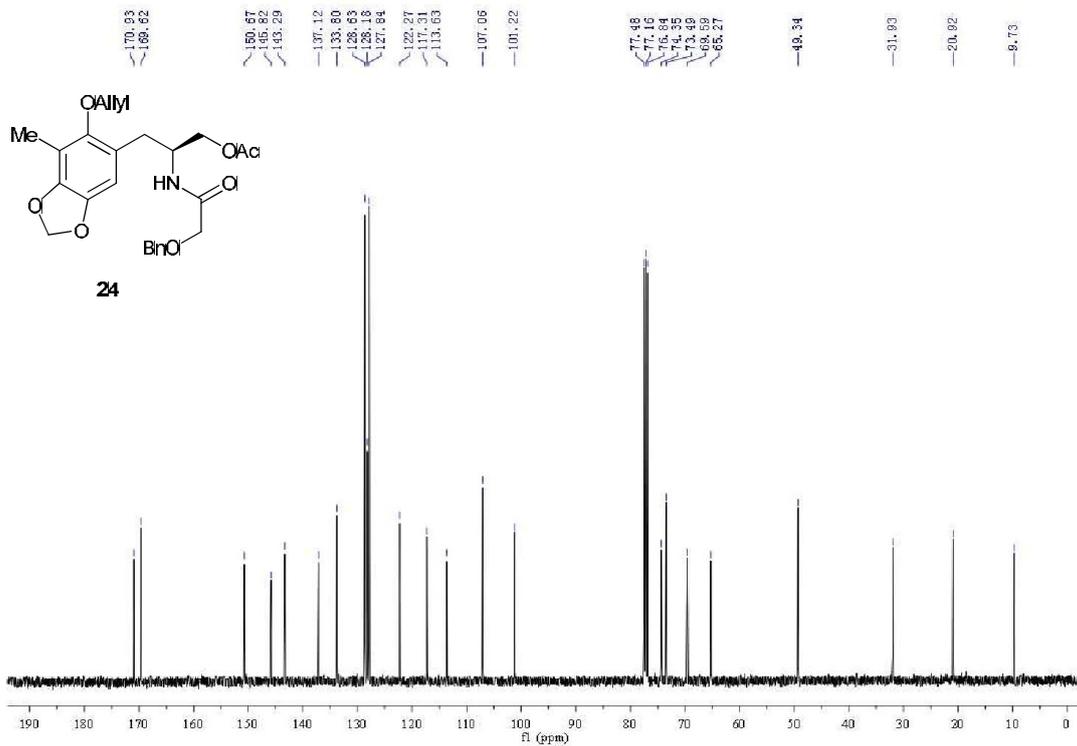
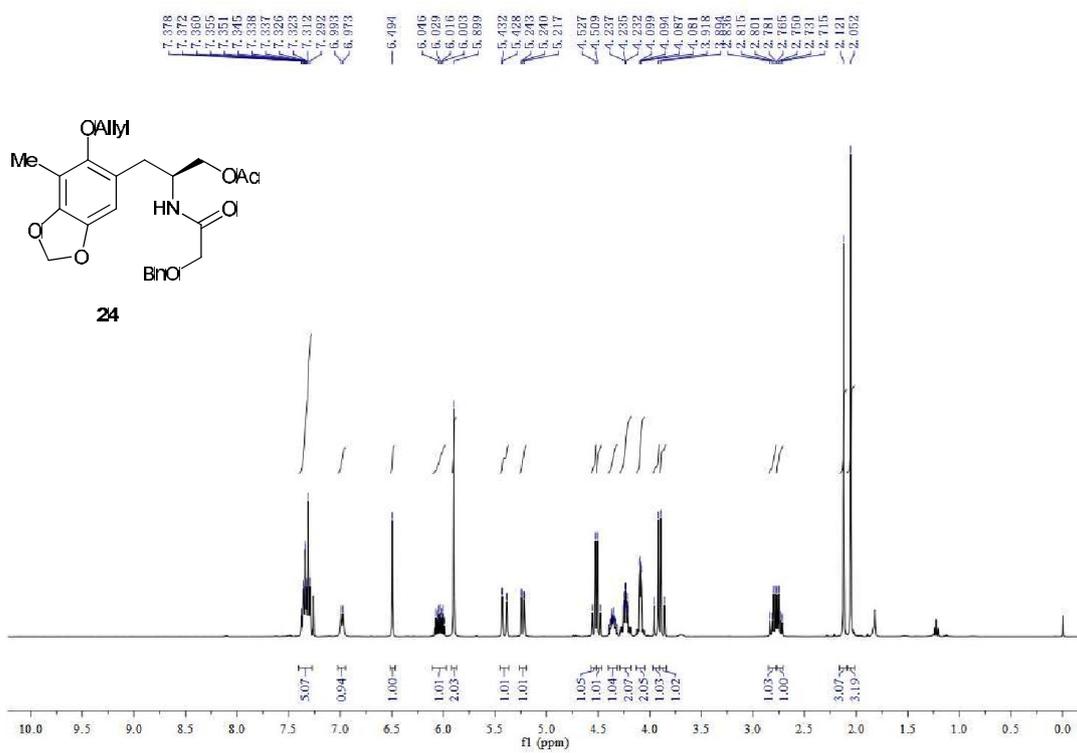
$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **22**



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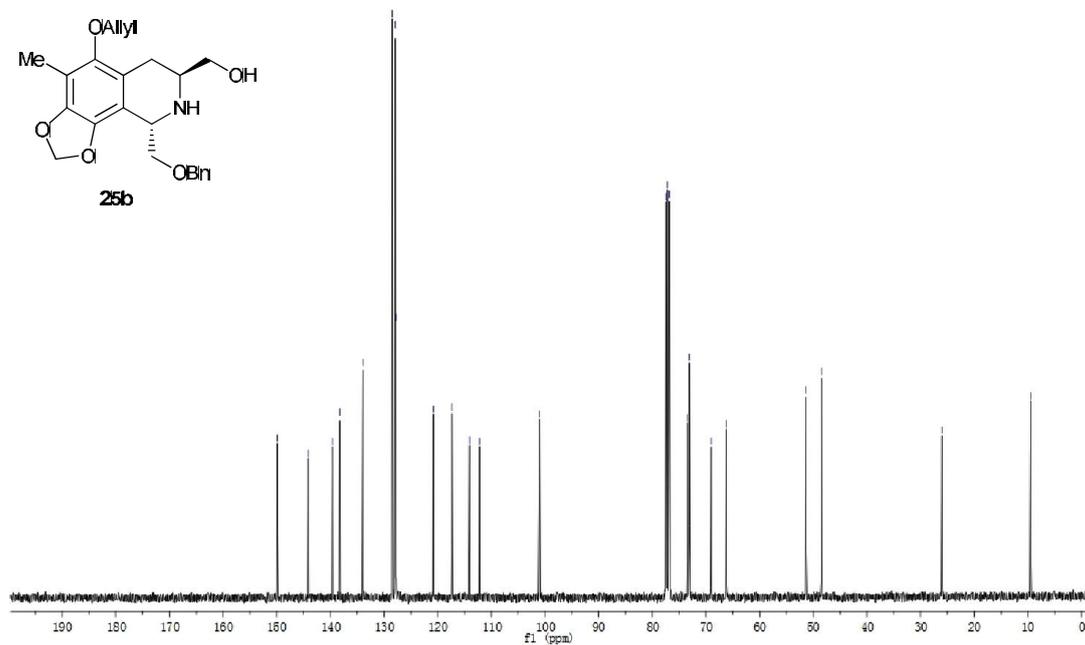
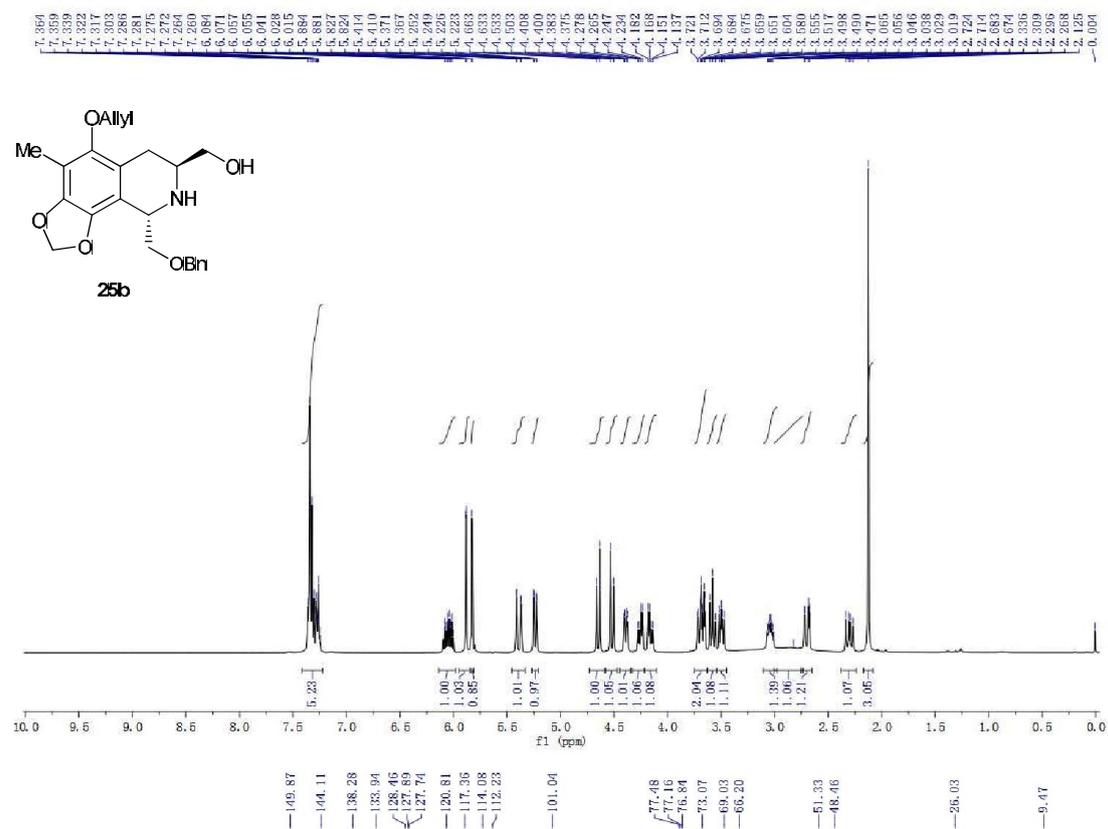


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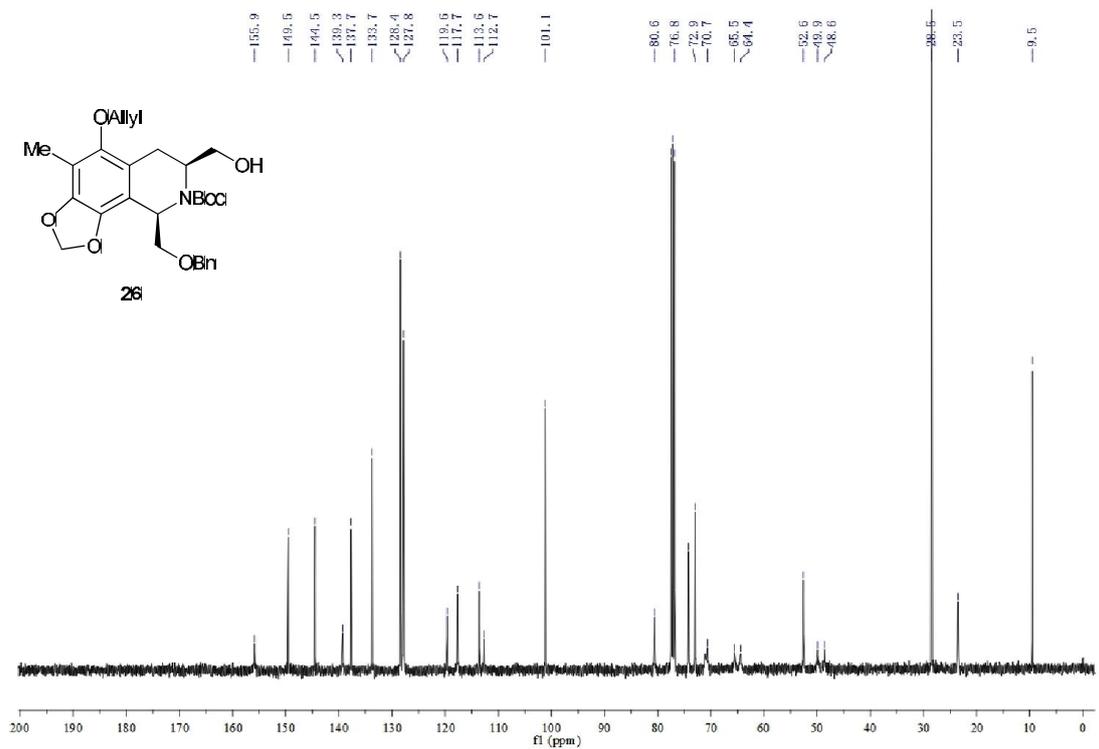
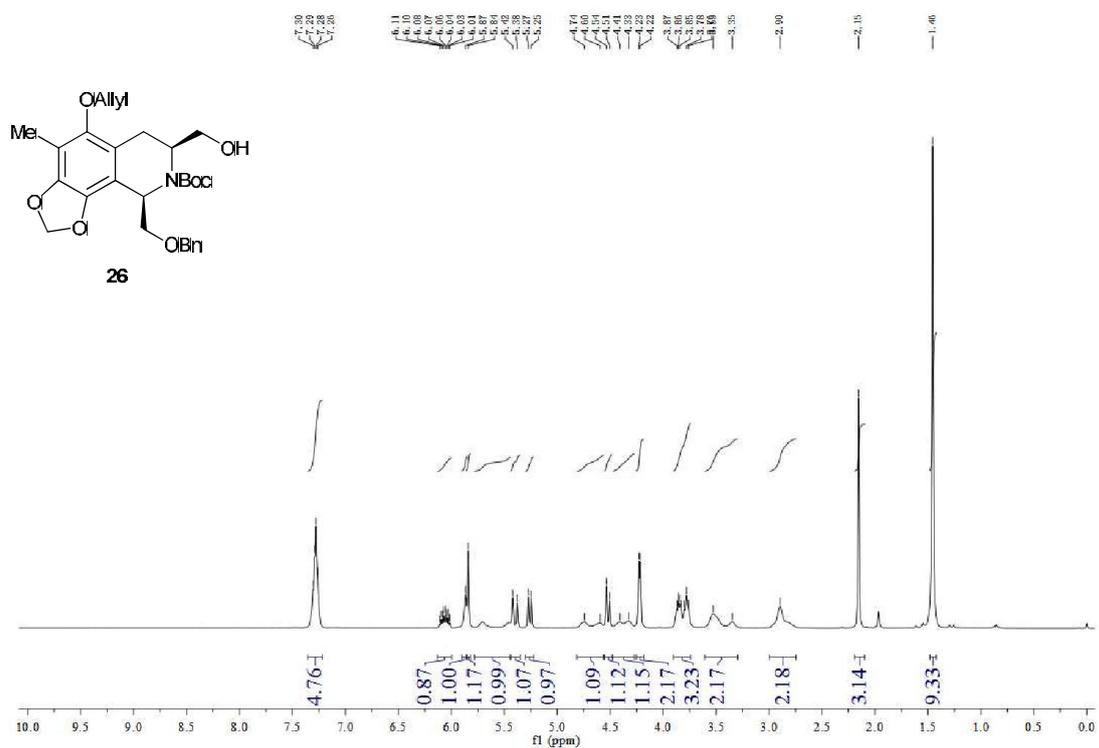




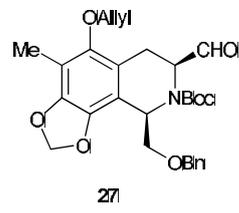
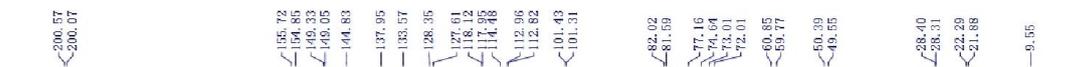
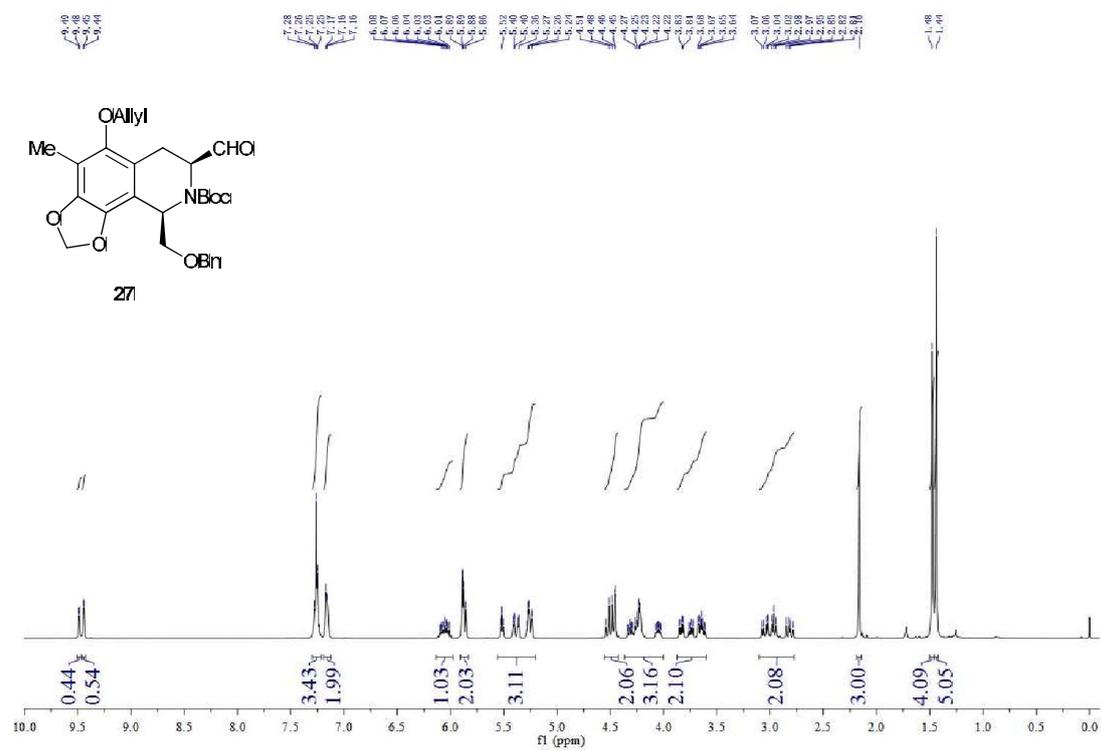
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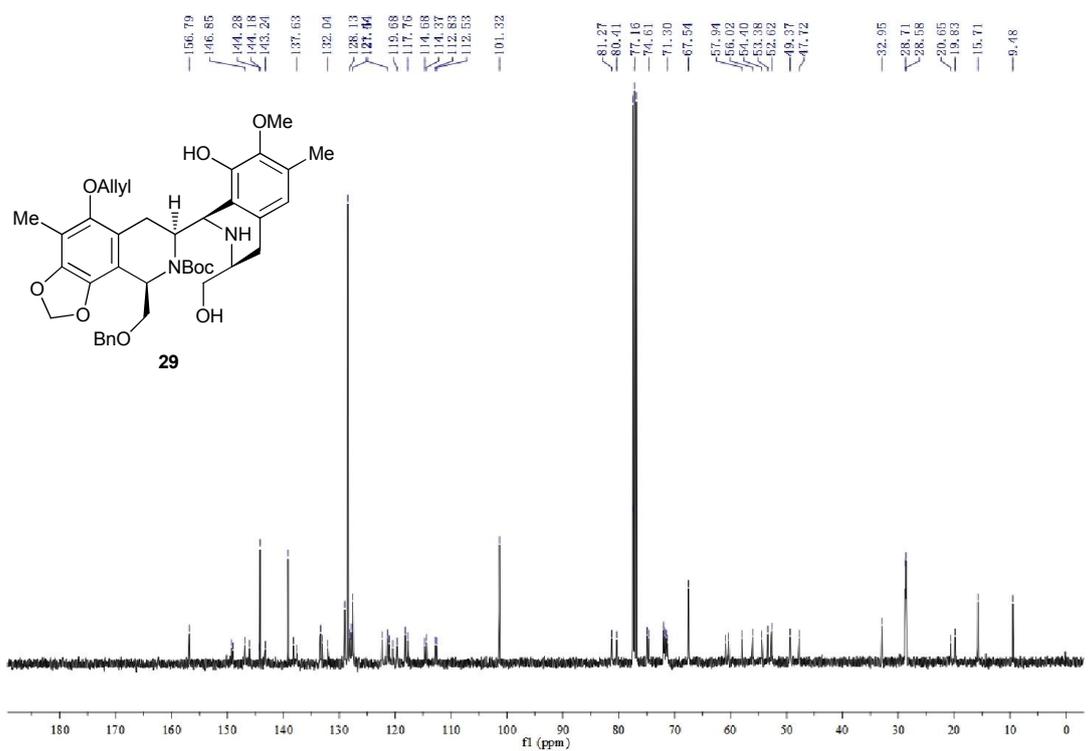
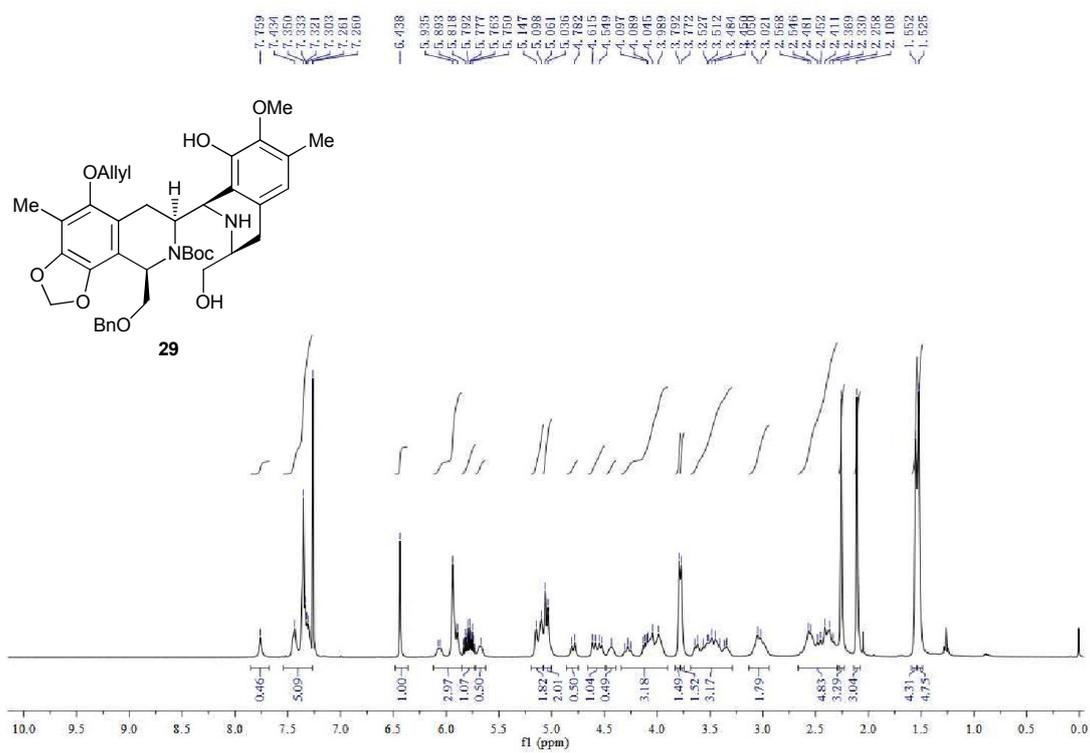
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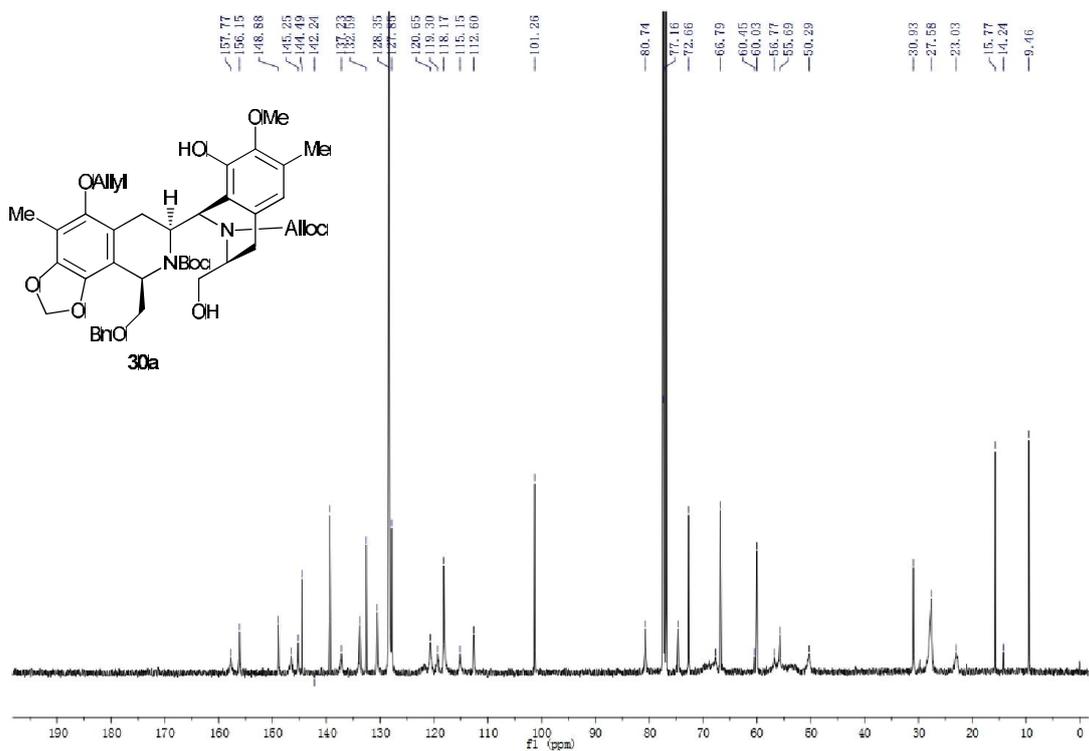
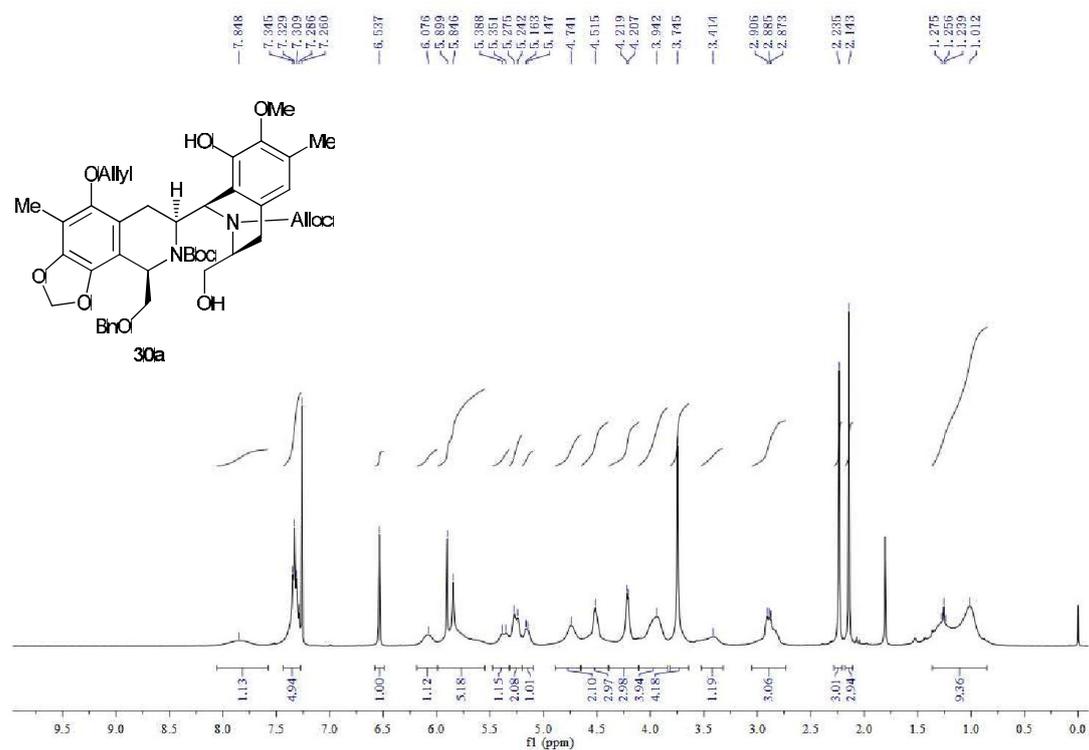
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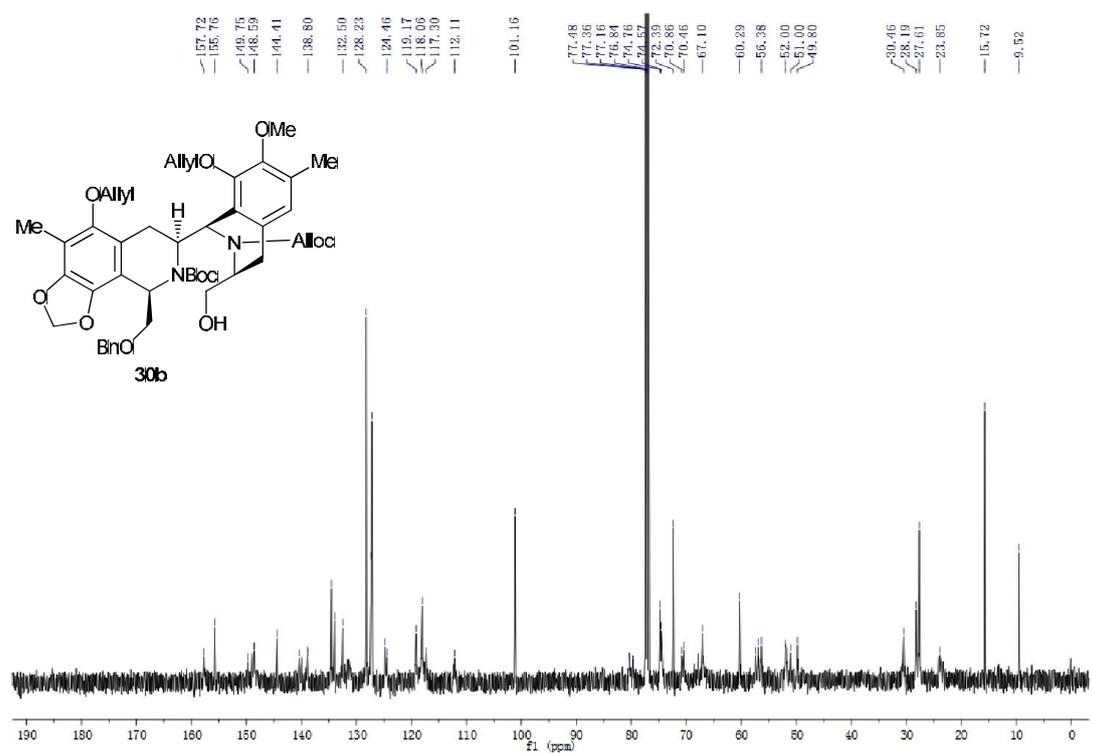
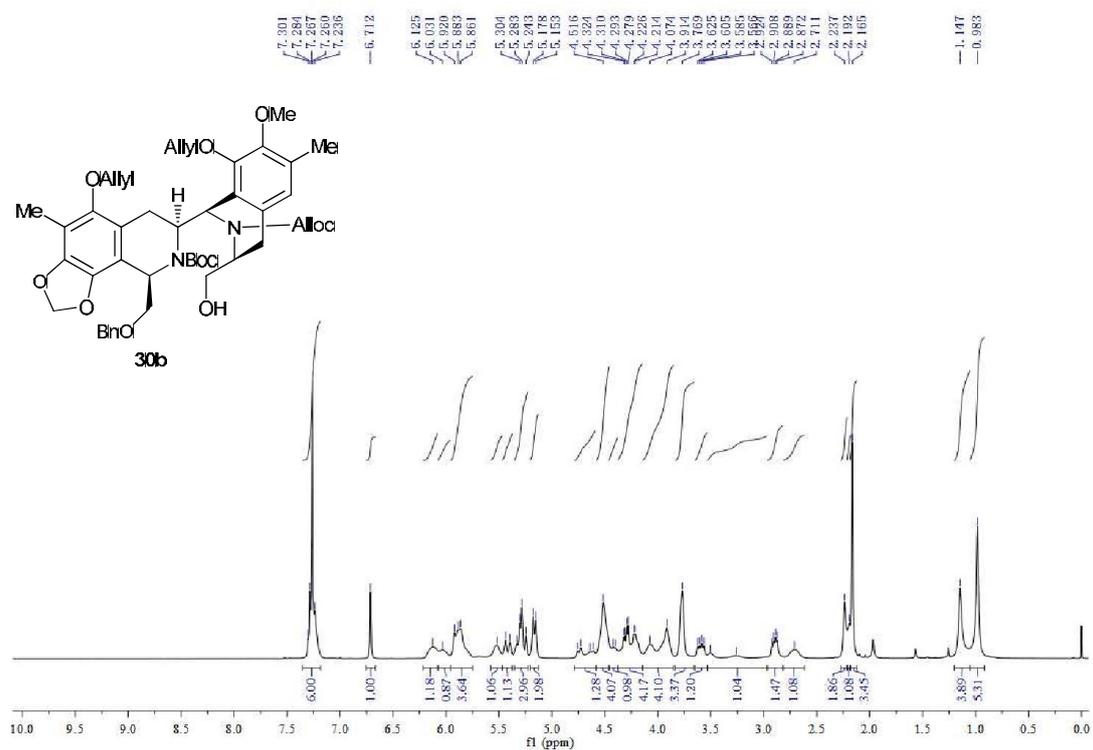
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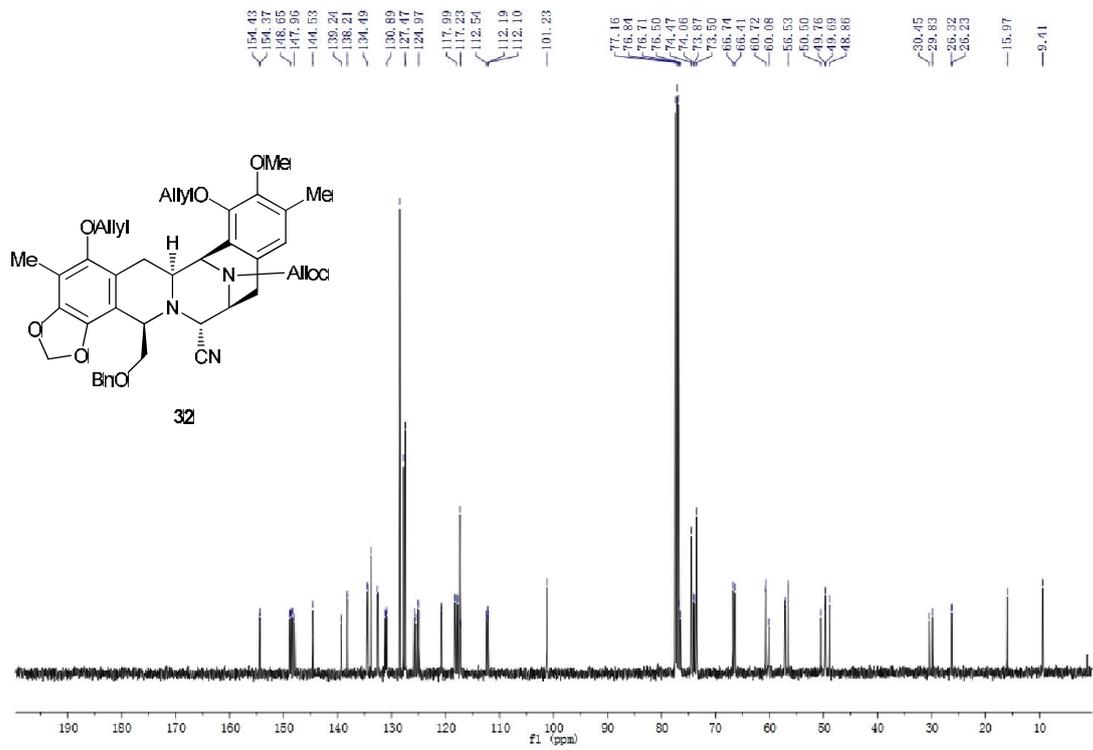
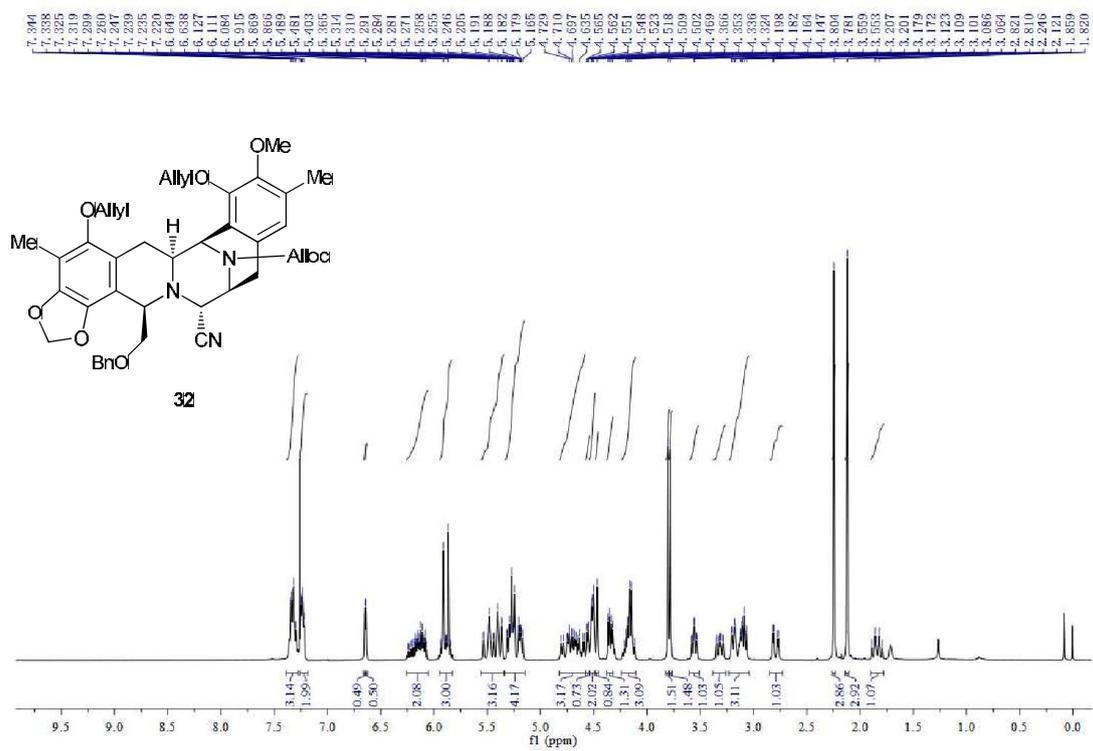


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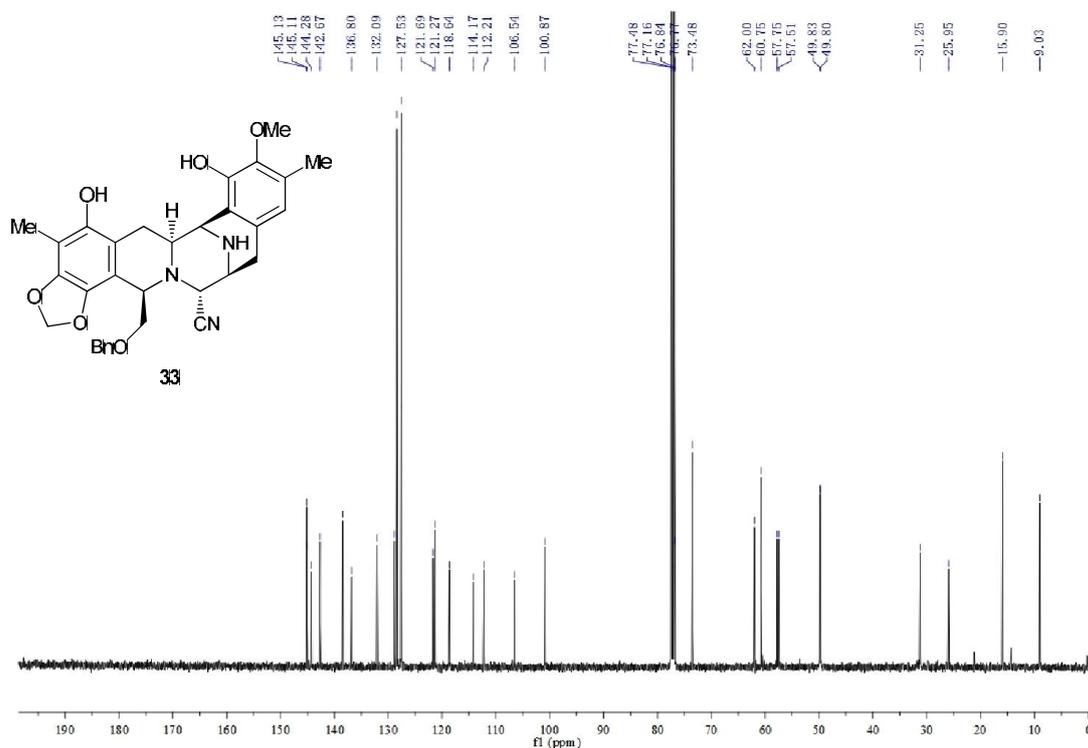
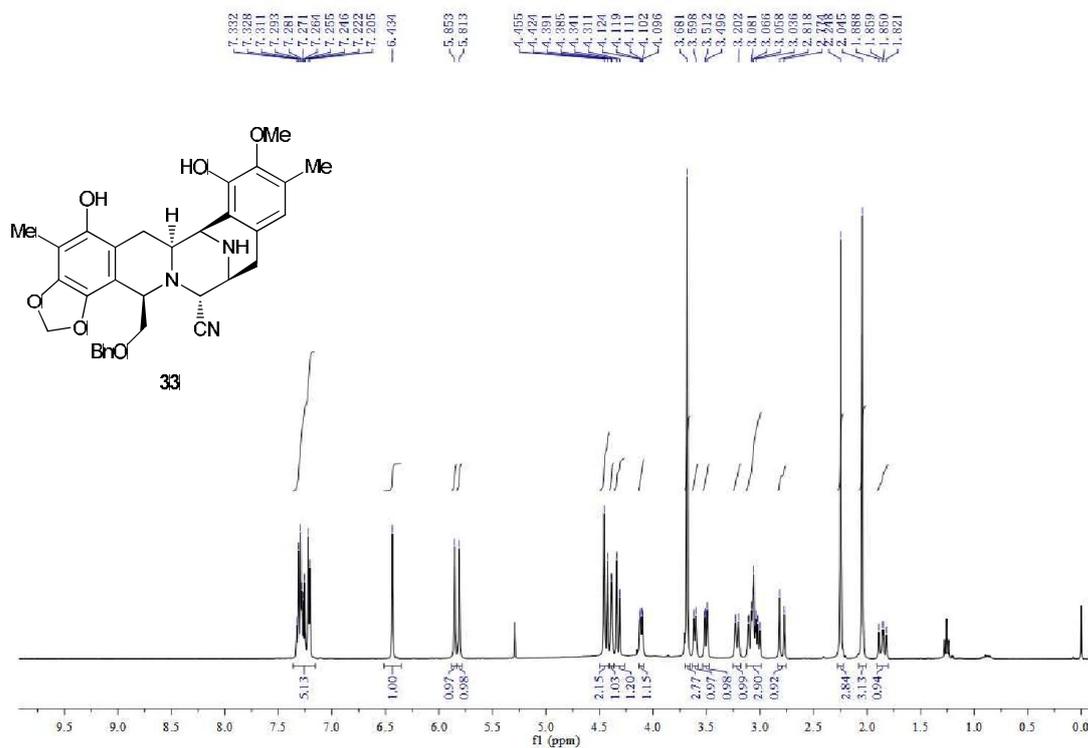


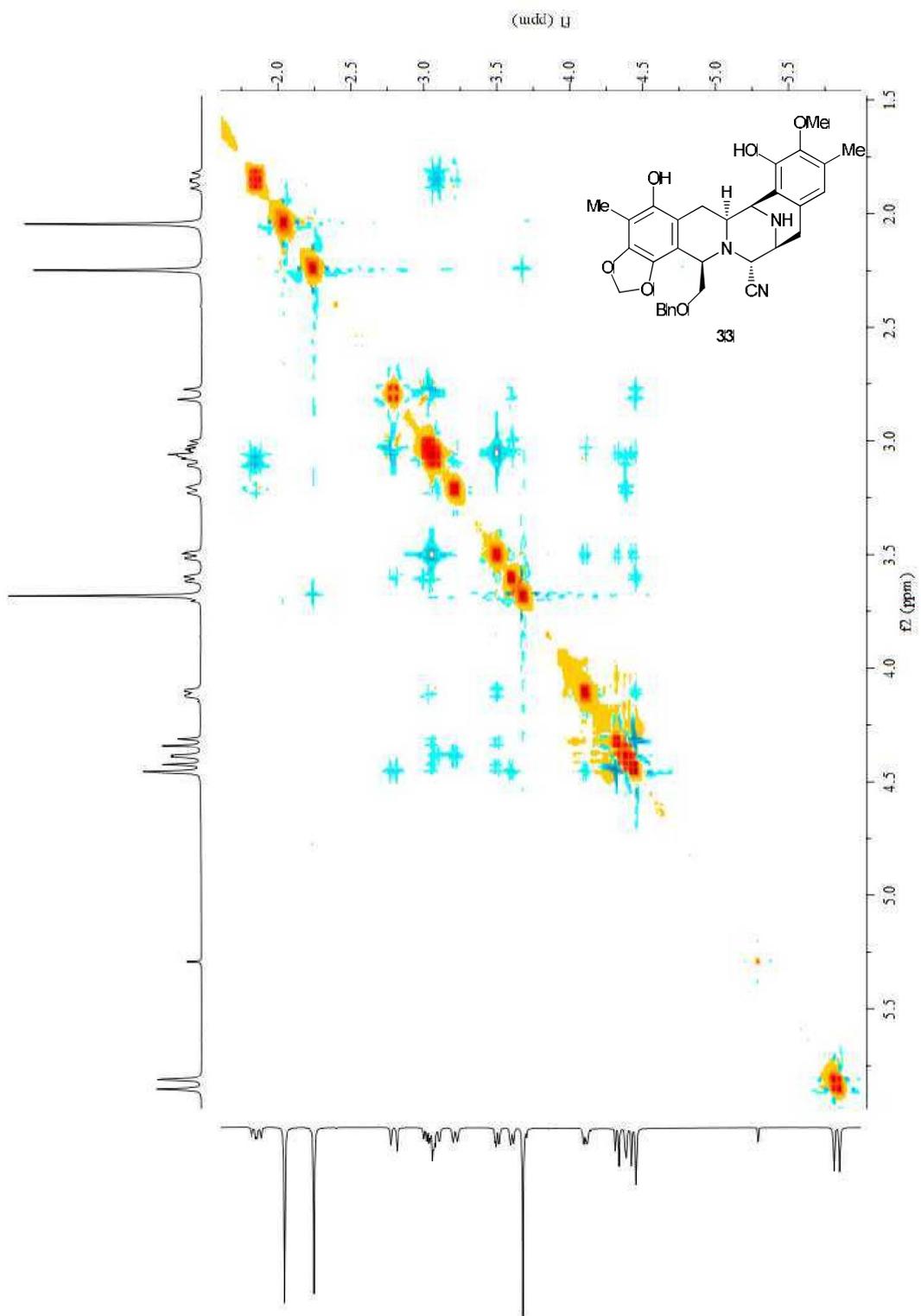


$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **32**

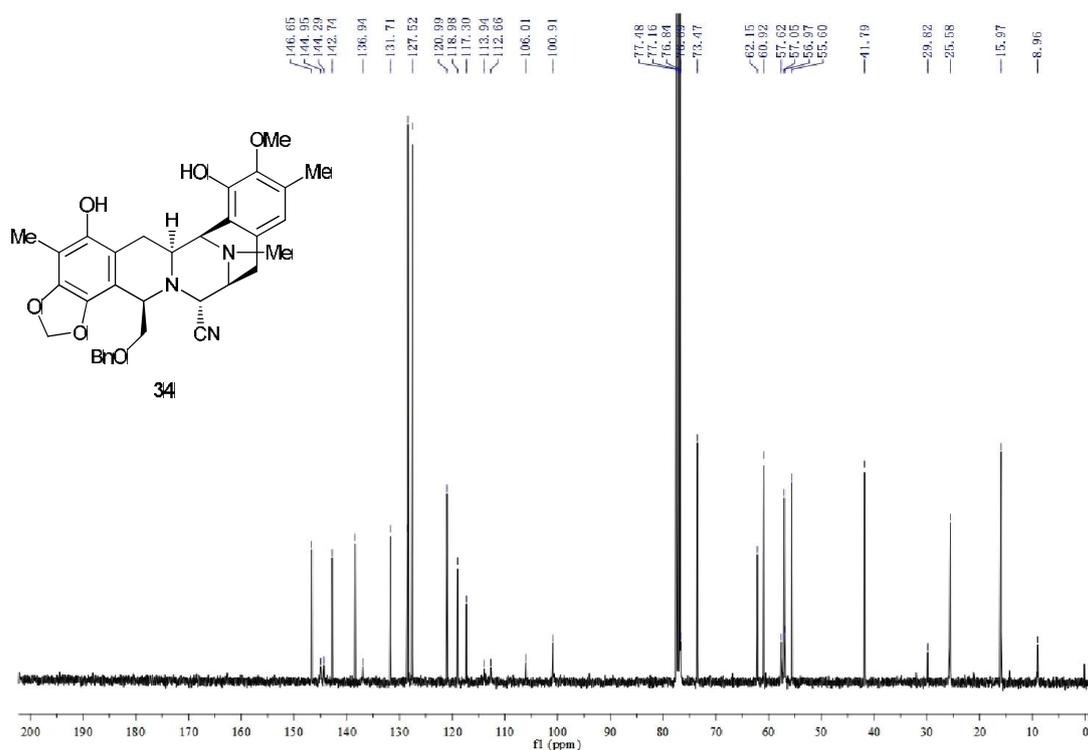
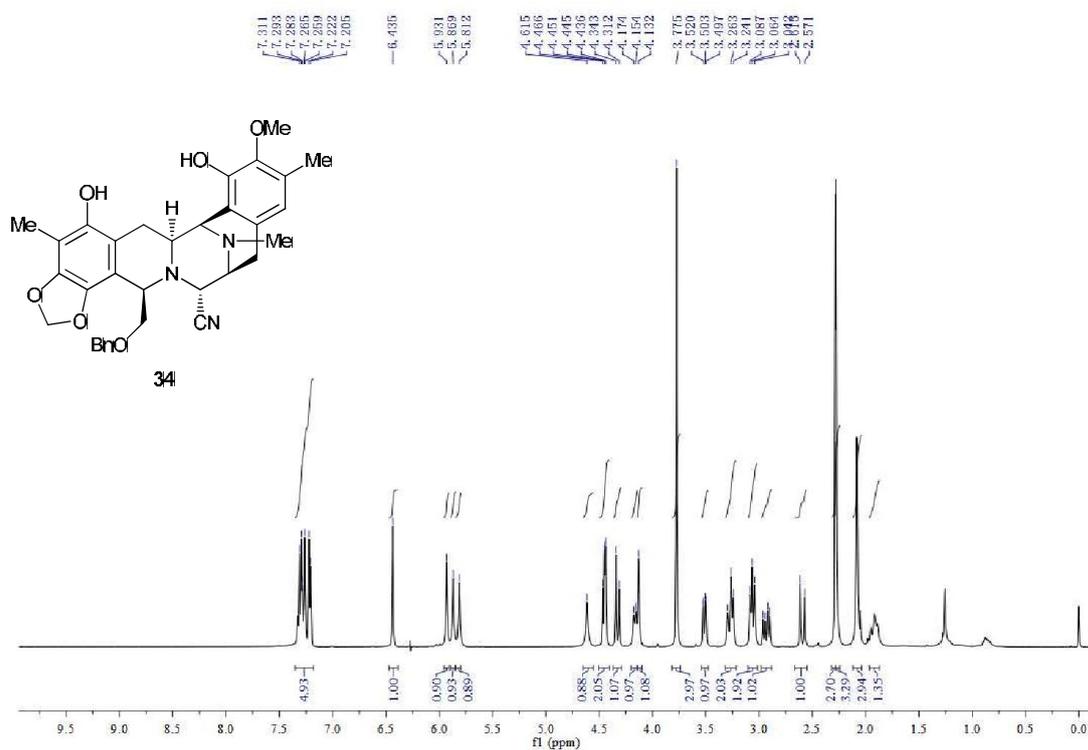


$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ),  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) and NOESY of compound **33**

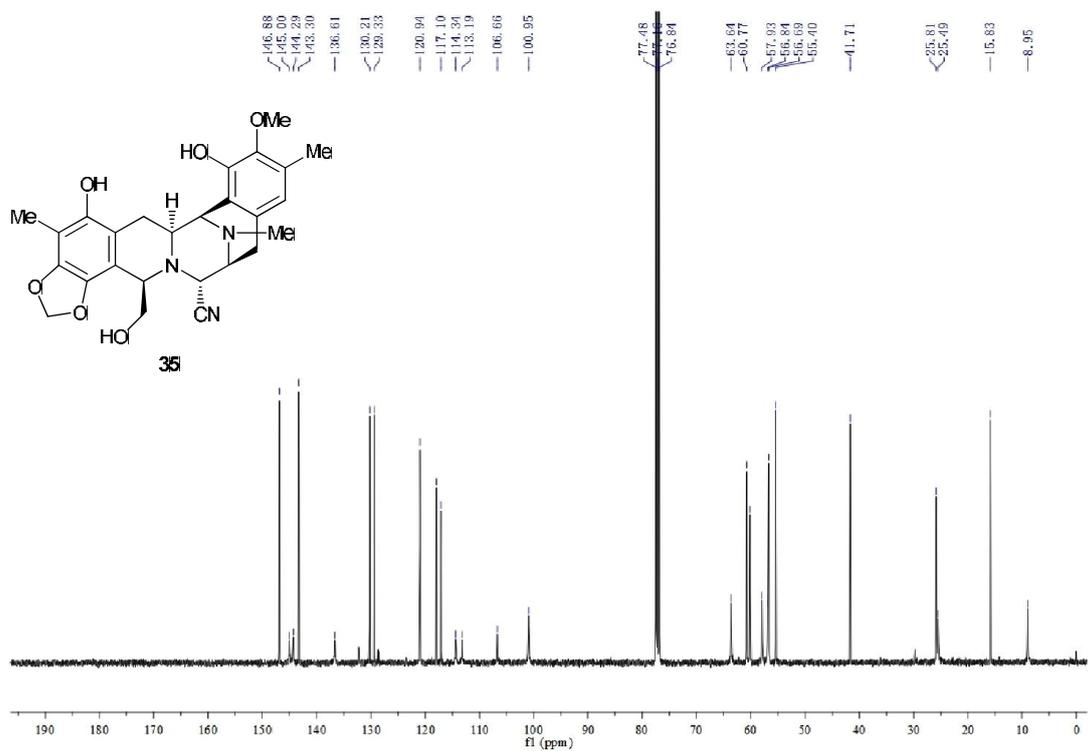
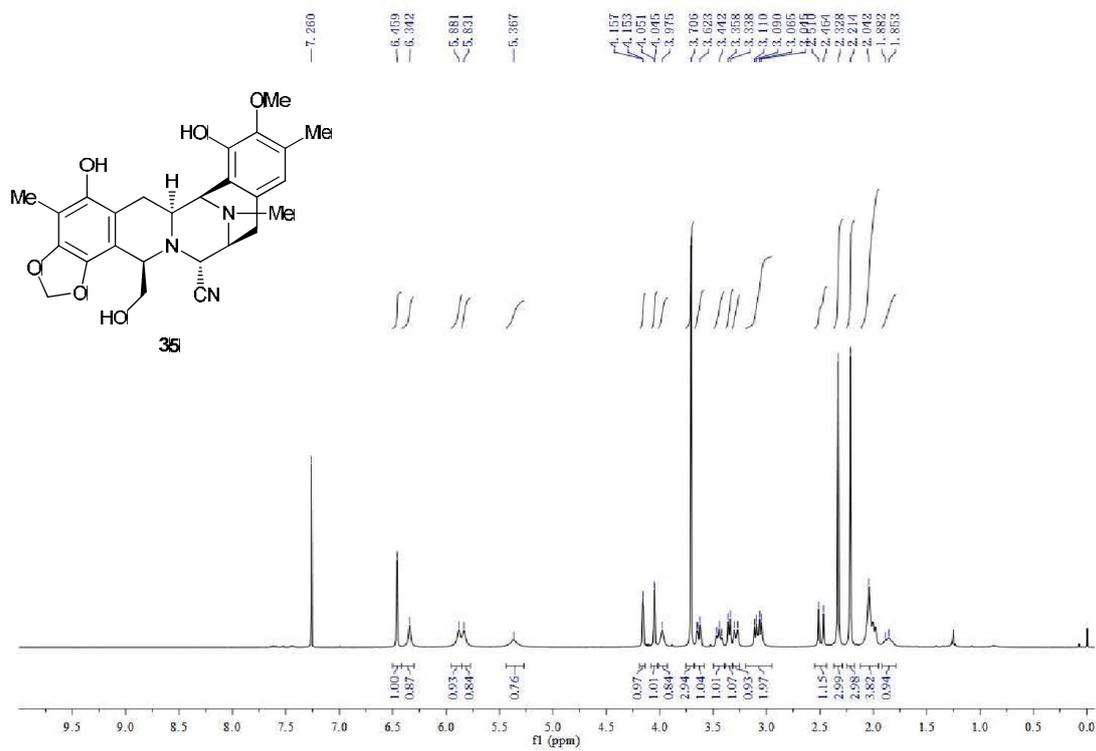




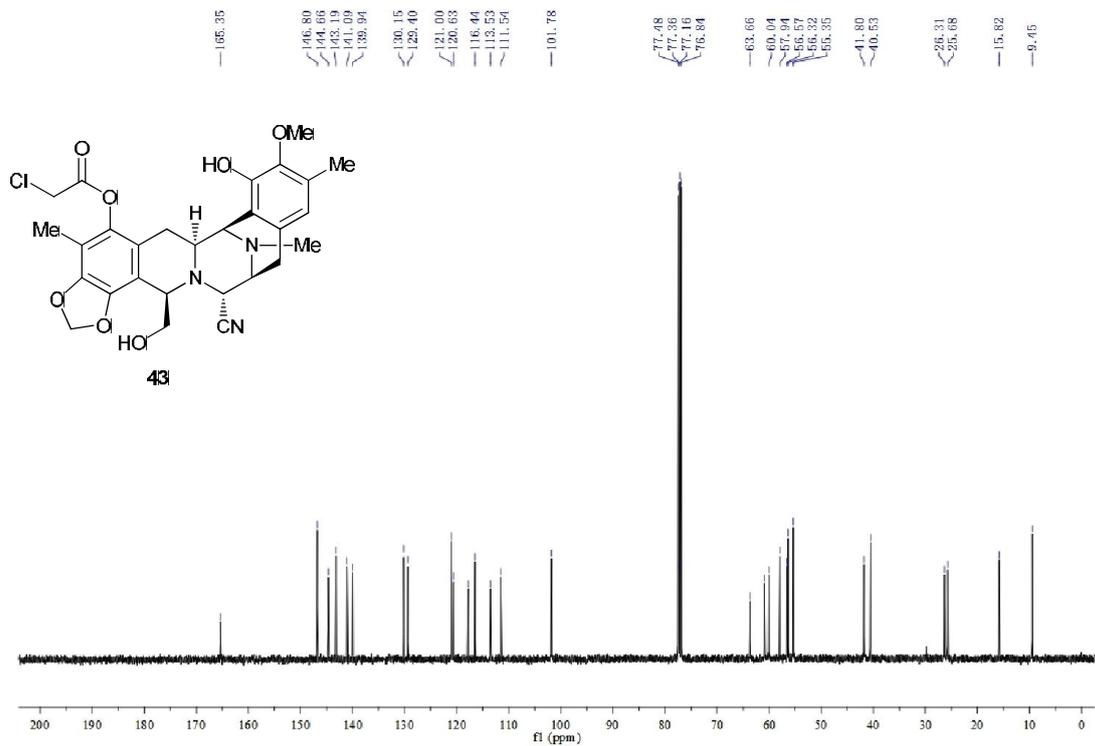
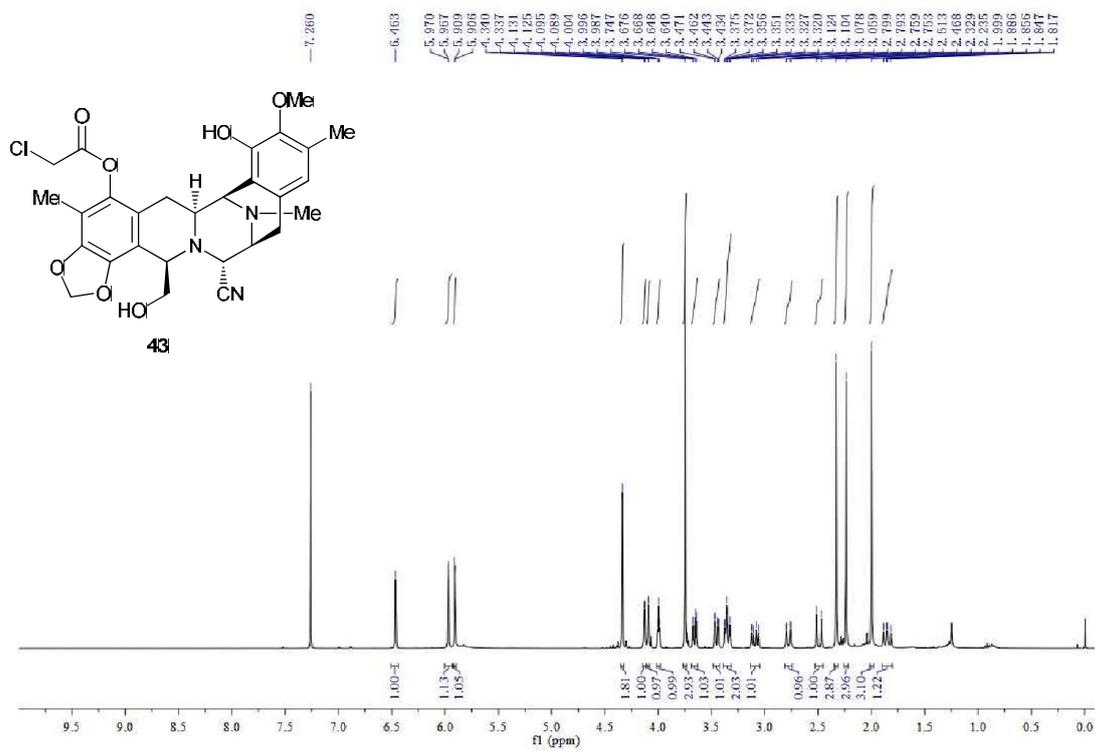
$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **34**



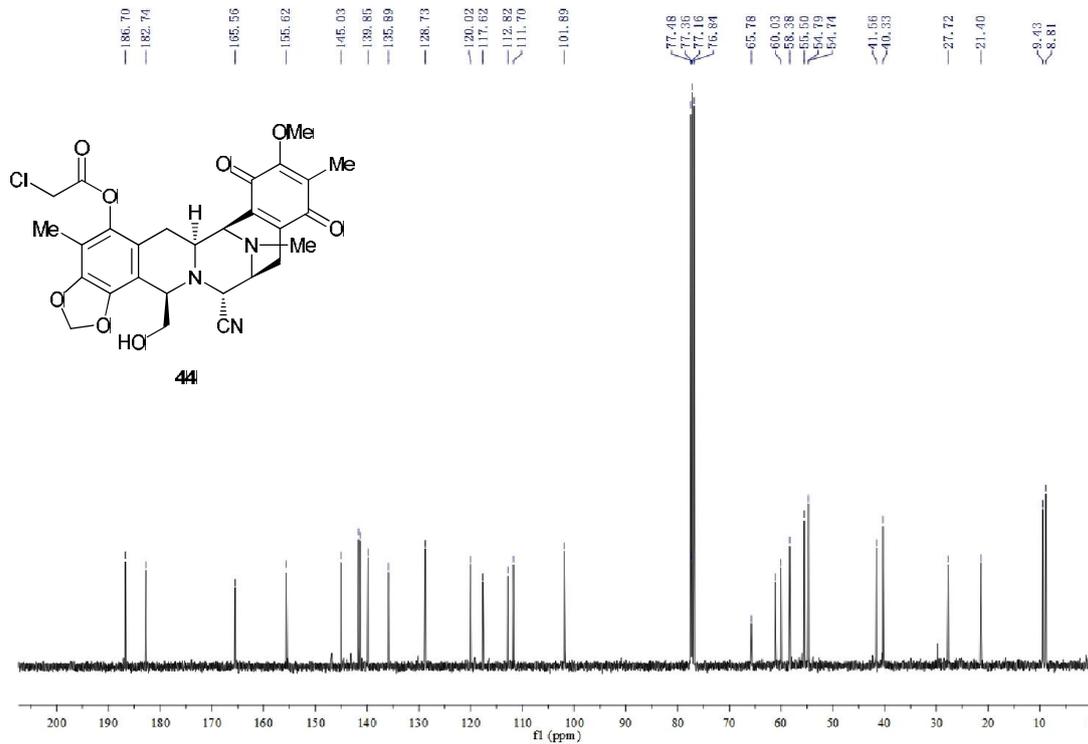
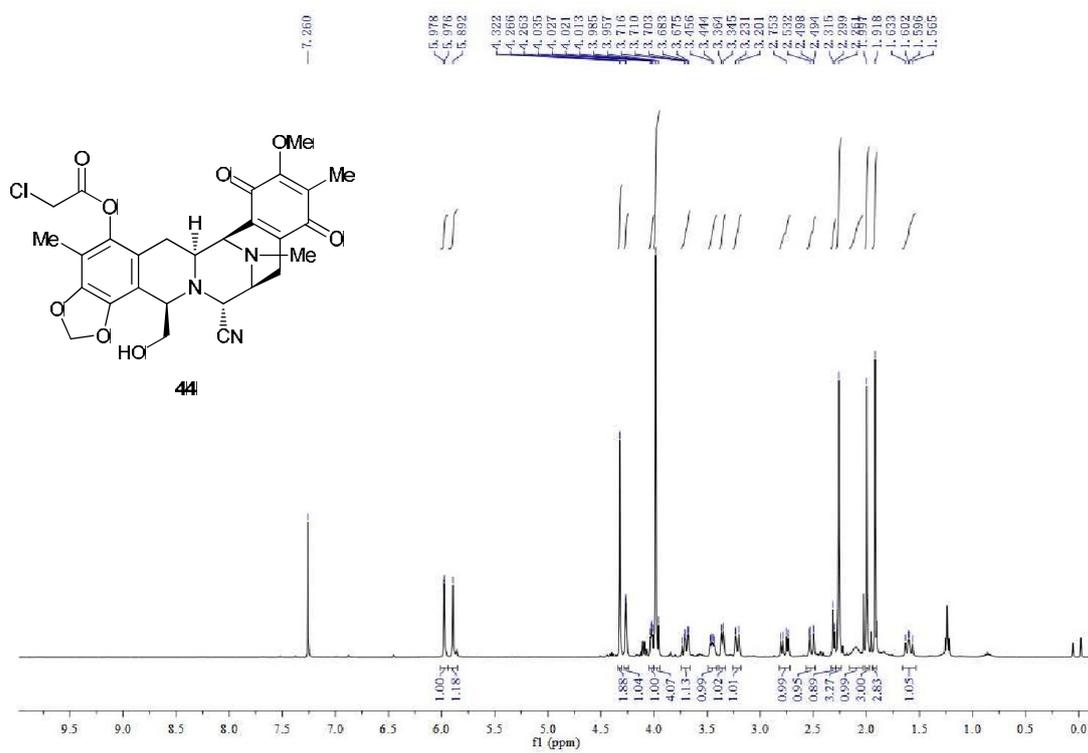
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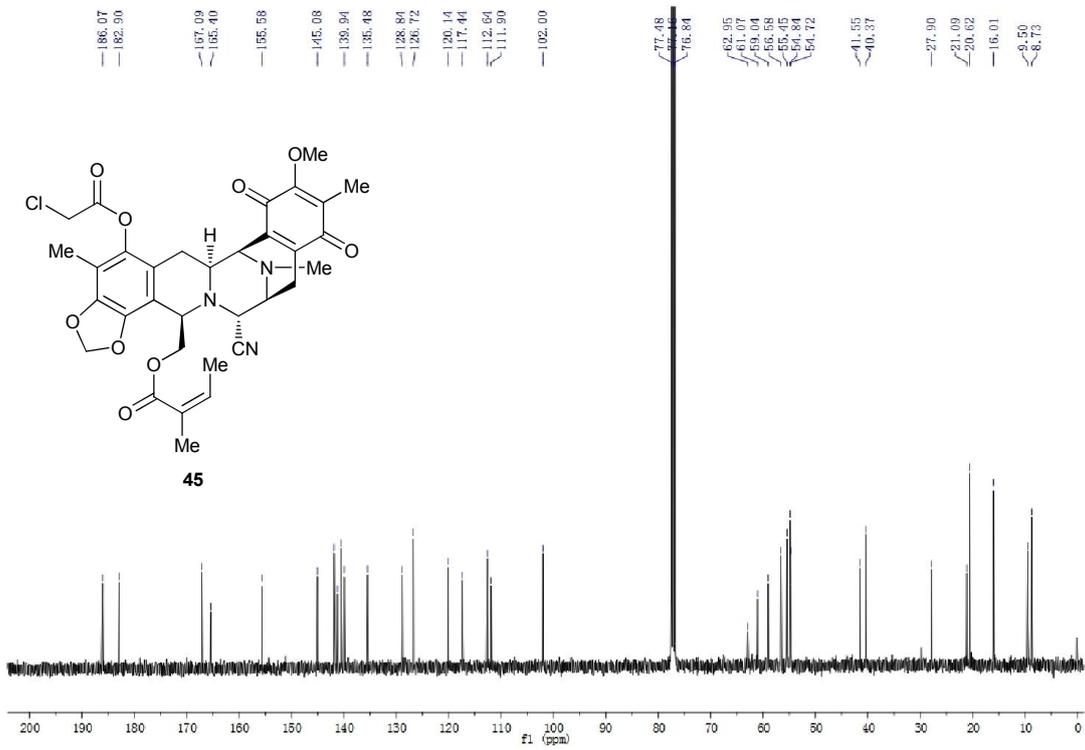
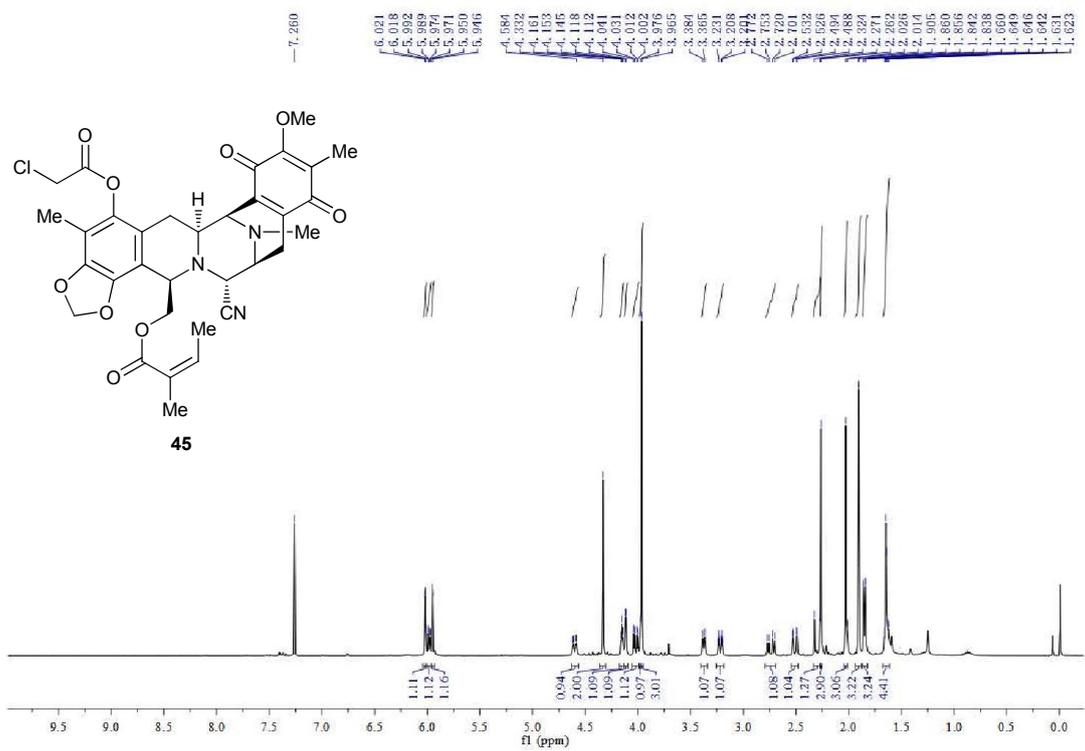
$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **43**



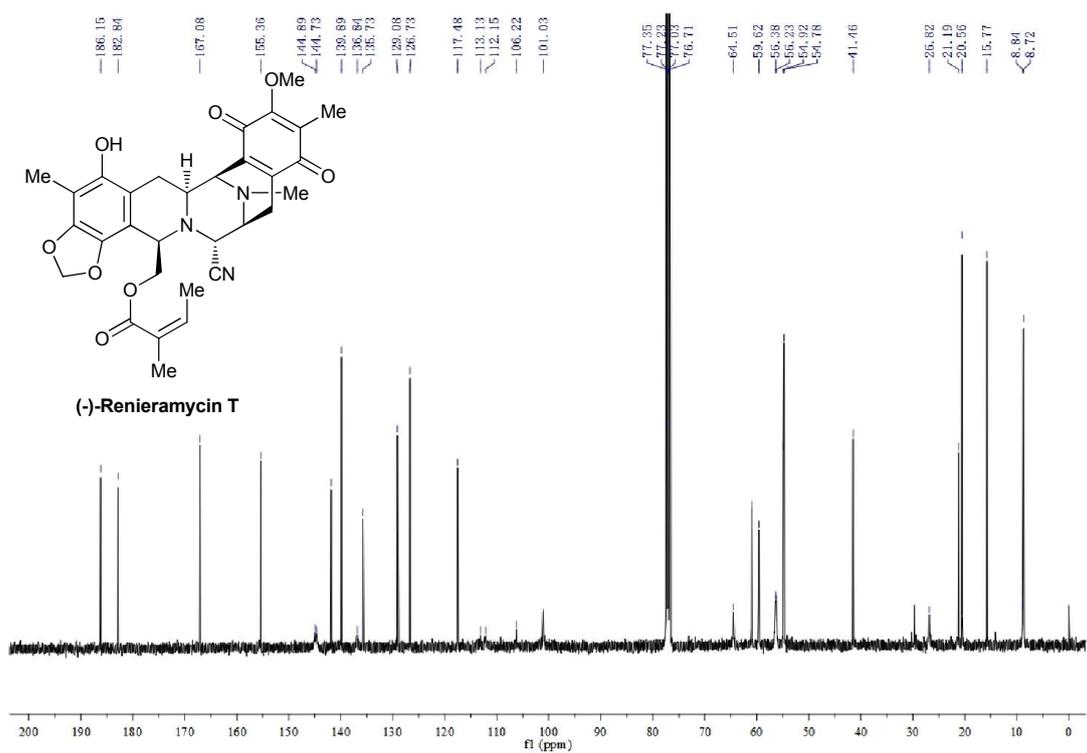
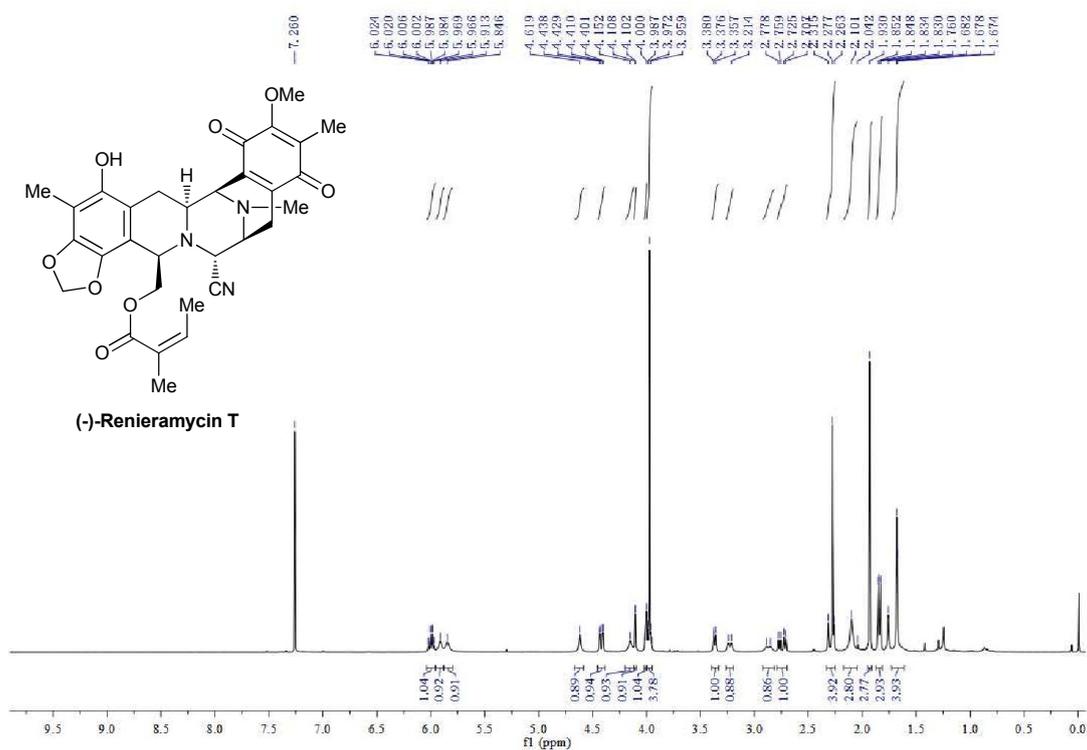
$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **44**



$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **45**



$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of (-)-Renieramycin T



**Tables S1.** Comparison of <sup>1</sup>H NMR data for natural **7** with those of synthetic **7**<sup>1</sup>

Atom No.	Natural (500 MHz, CDCl <sub>3</sub> )	Synthetic (400 MHz, CDCl <sub>3</sub> )	Δδ(ppm)
1	4.16 (dd, 4.9, 3.7)	4.15 (m)	-0.01
3	3.24 (ddd, 11.9, 2.7, 2.4)	3.23 (br d, 11.7)	-0.01
4	α 2.87 (dd, 15.0, 2.4)	2.87 (br d, 14.1)	0.00
	β 1.67 (dd, 15.0, 11.9)	1.67 (dd, 15.0, 11.9)	0.00
11	4.00 (dd, 2.7, 0.5)	4.00 (m)	0.00
13	3.37 (ddd, 7.3, 2.4, 0.5)	3.37 (br d, 7.6)	0.00
14	α 2.75 (dd, 20.8, 7.3)	2.74 (dd, 20.8, 7.6)	-0.01
	β 2.30 (d, 20.8)	2.30 (d, 20.8)	0.00
21	4.11 (d, 2.4)	4.11 (d, 2.4)	0.00
22	a 3.99 (dd, 11.3, 4.9)	3.99 (dd, 11.2, 5.2)	0.00
	b 4.41 (dd, 11.3, 3.7)	4.42 (dd, 11.3, 3.6)	0.01
26	6.00 (qq, 7.3, 1.5)	5.99 (qq, 7.2, 1.4)	-0.01
27	1.85 (dq, 7.3, 1.5)	1.84 (dq, 7.3, 1.5)	-0.01
28	1.69 (dq, 1.5, 1.5)	1.69 (dq, 1.5, 1.5)	0.00
6 -CH <sub>3</sub>	2.11 (s)	2.10 (s)	-0.01
16 -CH <sub>3</sub>	1.94 (s)	1.94 (s)	0.00
17 -OCH <sub>3</sub>	3.98 (s)	3.97 (s)	-0.01
N -CH <sub>3</sub>	2.29 (s)	2.28 (s)	-0.01
OCH <sub>2</sub> O	a 5.85 (d, 1.5)	5.85 (br s)	0.00
	b 5.92 (d, 1.5)	5.91 (br s)	-0.01

**Tables S2.** Comparison of  $^{13}\text{C}$  NMR data for natural **7** with those of synthetic **7**<sup>1</sup>

Atom No.	Natural (125 MHz, $\text{CDCl}_3$ )	Synthetic (100 MHz, $\text{CDCl}_3$ )	$\Delta\delta(\text{ppm})$
1	56.4	56.4	0.00
3	56.2	56.2	0.00
4	26.8	26.8	0.00
5	144.7	144.7	0.00
6	106.2	106.2	0.00
7	144.9	144.9	0.00
8	136.8	136.8	0.00
9	112.1	112.1	0.00
10	113.1	113.1	0.00
11	54.9	54.9	0.00
13	54.8	54.8	0.00
14	21.2	21.2	0.00
15	186.1	186.2	0.01
16	129.0	129.1	0.01
17	155.4	155.4	0.00
18	182.8	182.8	0.00
19	135.7	135.7	0.00
20	141.8	141.8	0.00
21	59.6	59.6	0.00
22	64.6	64.5	-0.01
24	167.1	167.1	0.00
25	126.8	126.7	-0.01
26	139.7	139.9	0.02
27	15.7	15.8	0.01
28	20.5	20.6	0.01
6 - $\text{CH}_3$	8.8	8.8	0.00
16 - $\text{CH}_3$	8.7	8.7	0.00
17 - $\text{OCH}_3$	60.9	61.0	0.01
N - $\text{CH}_3$	41.4	41.5	0.01

OCH <sub>2</sub> O	101.1	101.0	-0.01
CN	117.4	117.5	0.01

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References:

1. N. Daikuhara, Y. Tada, S. Yamaki, K. Charupant, S. Amnuoypol, K. Suwanborirux, N. Saito, *Tetrahedron Lett*, 2009, **50**, 4276.