

**Alkaloids and lignans with acetylcholinesterase inhibitory
activity from the flower buds of *Magnolia biondii* Pamp**

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Supplementary Information

Contents

Figure S1. ^1H NMR spectrum (500MHz, CD_3OD) of 1
Figure S2. ^{13}C NMR spectrum (125MHz, CD_3OD) of 1
Figure S3. DEPT135 spectrum of 1
Figure S4. HSQC spectrum of 1
Figure S5. ^1H - ^1H COSY spectrum of 1
Figure S6. HMBC spectrum of 1
Figure S7. HR-ESI-MS spectrum of 1
Figure S8. UV spectrum of 1
Figure S9. IR spectrum of 1
Figure S10. ^1H NMR spectrum (500MHz, CD_3OD) of 2
Figure S11. ^{13}C NMR spectrum (125MHz, CD_3OD) of 2
Figure S12. DEPT135 spectrum of 2
Figure S13. HSQC spectrum of 2
Figure S14. ^1H - ^1H COSY spectrum of 2
Figure S15. HMBC spectrum of 2
Figure S16. HR-ESI-MS spectrum of 2
Figure S17. UV spectrum of 2
Figure S18. IR spectrum of 2
Figure S19. ^1H NMR spectrum (500MHz, CD_3OD) of 3
Figure S20. ^{13}C NMR spectrum (125MHz, CD_3OD) of 3
Figure S21. DEPT135 spectrum of 3
Figure S22. HSQC spectrum of 3
Figure S23. ^1H - ^1H COSY spectrum of 3
Figure S24. HMBC spectrum of 3
Figure S25. NOESY spectrum of 3
Figure S26. HR-ESI-MS spectrum of 3
Figure S27. UV spectrum of 3
Figure S28. IR spectrum of 3
Figure S29. ^1H NMR spectrum (500MHz, CD_3OD) of 4
Figure S30. ^{13}C NMR spectrum (125MHz, CD_3OD) of 4
Figure S31. DEPT135 spectrum of 4
Figure S32. HSQC spectrum of 4
Figure S33. ^1H - ^1H COSY spectrum of 4
Figure S34. HMBC spectrum of 4
Figure S35. NOESY spectrum of 4
Figure S36. HR-ESI-MS spectrum of 4
Figure S37. UV spectrum of 4
Figure S38. IR spectrum of 4
Figure S39. ^1H NMR spectrum (500MHz, CD_3OD) of 5
Figure S40. ^{13}C NMR spectrum (125MHz, CD_3OD) of 5
Figure S41. DEPT135 spectrum of 5
Figure S42. HSQC spectrum of 5

Figure S43. ^1H - ^1H COSY spectrum of **5**

Figure S44. ^1H MBC spectrum of **5**

Figure S45. NOESY spectrum of **5**

Figure S46. HR-ESI-MS spectrum of **5**

Figure S47. UV spectrum of **5**

Figure S48. IR spectrum of **5**

Figure S49. ^1H NMR spectrum (500MHz, CD_3OD) of **6**

Figure S50. ^{13}C NMR spectrum (125MHz, CD_3OD) of **6**

Figure S51. ^1H NMR spectrum (500MHz, CD_3OD) of **7**

Figure S52. ^{13}C NMR spectrum (125MHz, CD_3OD) of **7**

Figure S53. ^1H NMR spectrum (500MHz, CD_3OD) of **8**

Figure S54. ^{13}C NMR spectrum (125MHz, CD_3OD) of **8**

Figure S55. ^1H NMR spectrum (500MHz, CD_3OD) of **9**

Figure S56. ^{13}C NMR spectrum (125MHz, CD_3OD) of **9**

Figure S57. ^1H NMR spectrum (500MHz, CD_3OD) of **10**

Figure S58. ^{13}C NMR spectrum (125MHz, CD_3OD) of **10**

Figure S59. ^1H NMR spectrum (500MHz, CD_3OD) of **11**

Figure S60. ^{13}C NMR spectrum (125MHz, CD_3OD) of **11**

Figure S61. ^1H NMR spectrum (500MHz, CD_3OD) of **12**

Figure S62. ^{13}C NMR spectrum (125MHz, CD_3OD) of **12**

Figure S63. ^1H NMR spectrum (500MHz, CD_3OD) of **13**

Figure S64. ^{13}C NMR spectrum (125MHz, CD_3OD) of **13**

Figure S65. ^1H NMR spectrum (500MHz, CD_3OD) of **14**

Figure S66. ^{13}C NMR spectrum (125MHz, CD_3OD) of **14**

Figure S67. ^1H NMR spectrum (500MHz, CD_3OD) of **15**

Figure S68. ^{13}C NMR spectrum (125MHz, CD_3OD) of **15**

Figure S69. ^1H NMR spectrum (500MHz, CD_3OD) of **16**

Figure S70. ^{13}C NMR spectrum (125MHz, CD_3OD) of **16**

Figure S71 Chiral-HPLC profiles from acid hydrolysis of **2**, **4**, and **5** compared to D-glucose and L-glucose

Figure S1. ^1H NMR spectrum (500 MHz, CD_3OD) of **1**

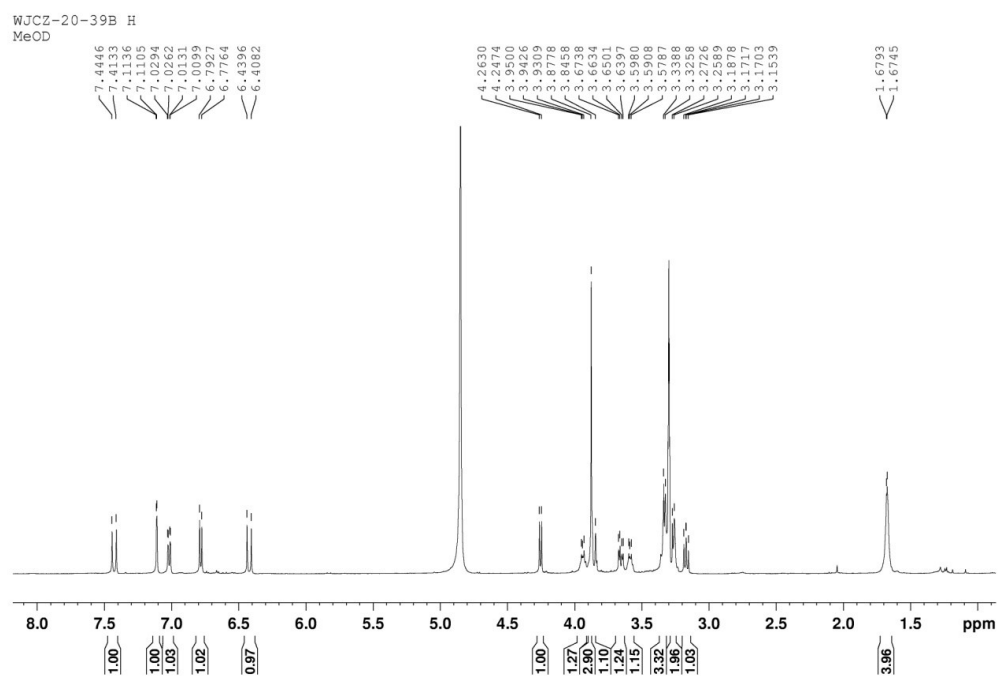


Figure S2. ^{13}C NMR spectrum (125 MHz, CD_3OD) of **1**

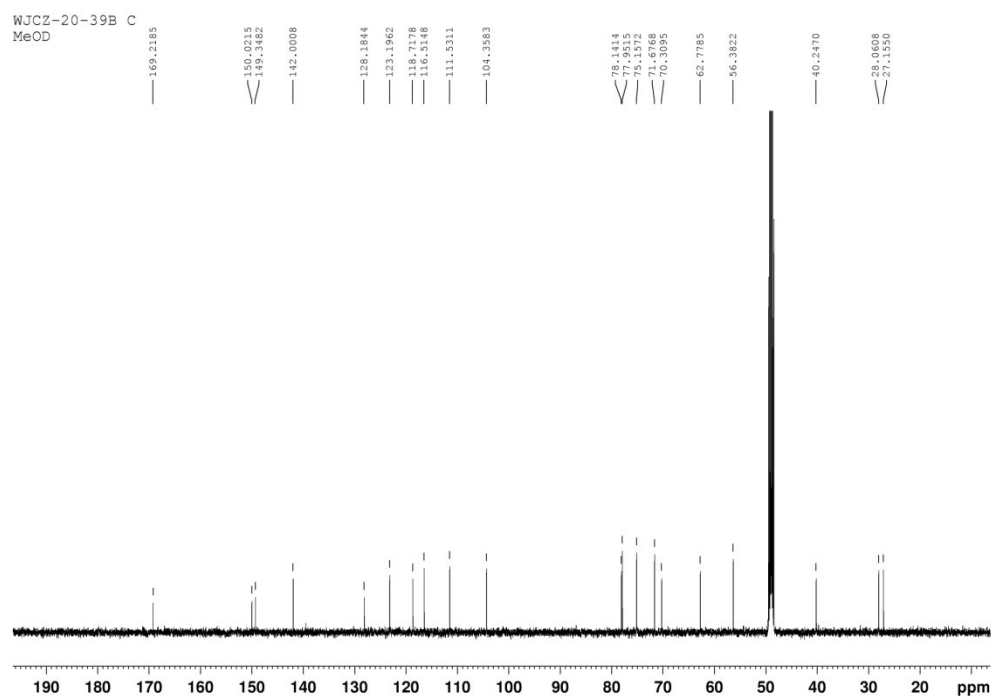


Figure S3. DEPT135 spectrum of **1**

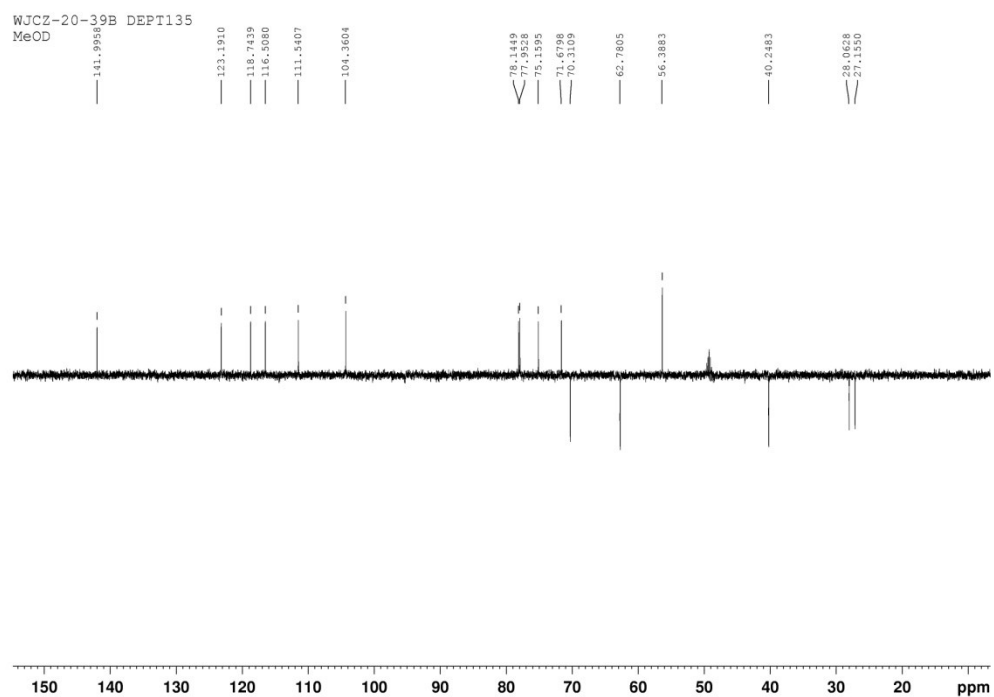


Figure S4. HSQC spectrum of **1**

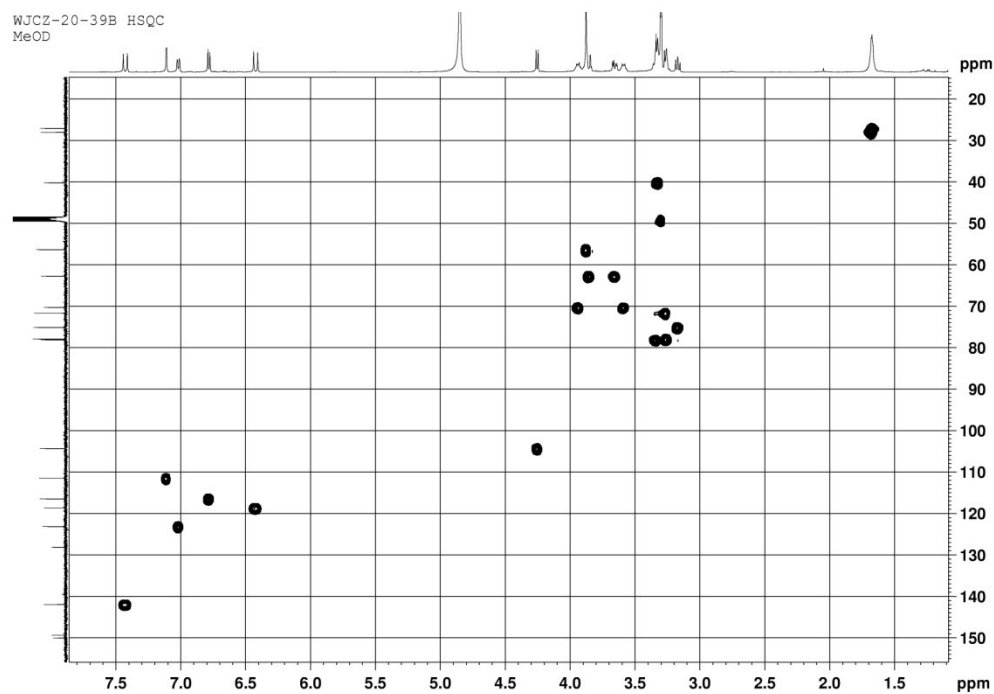


Figure S5. ^1H - ^1H COSY spectrum of **1**

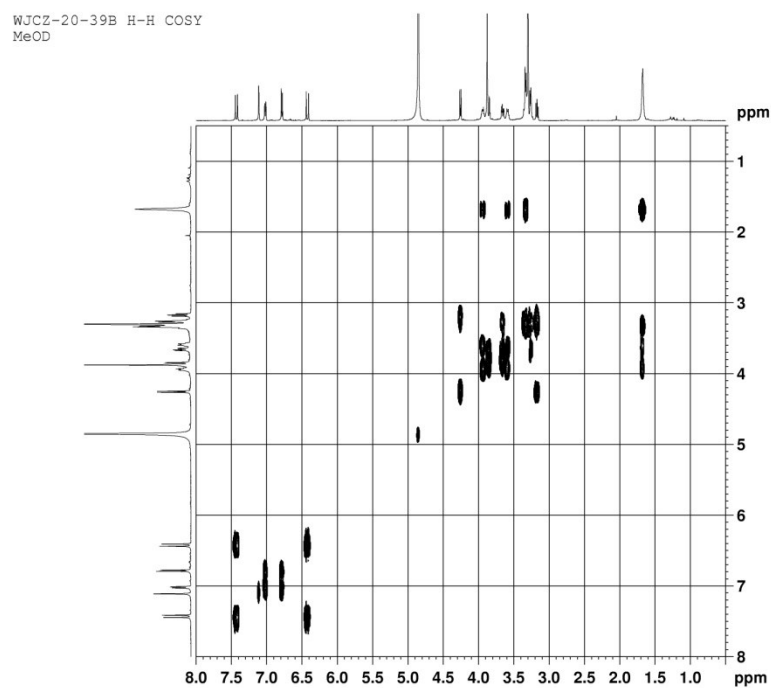


Figure S6. HMBC spectrum of **1**

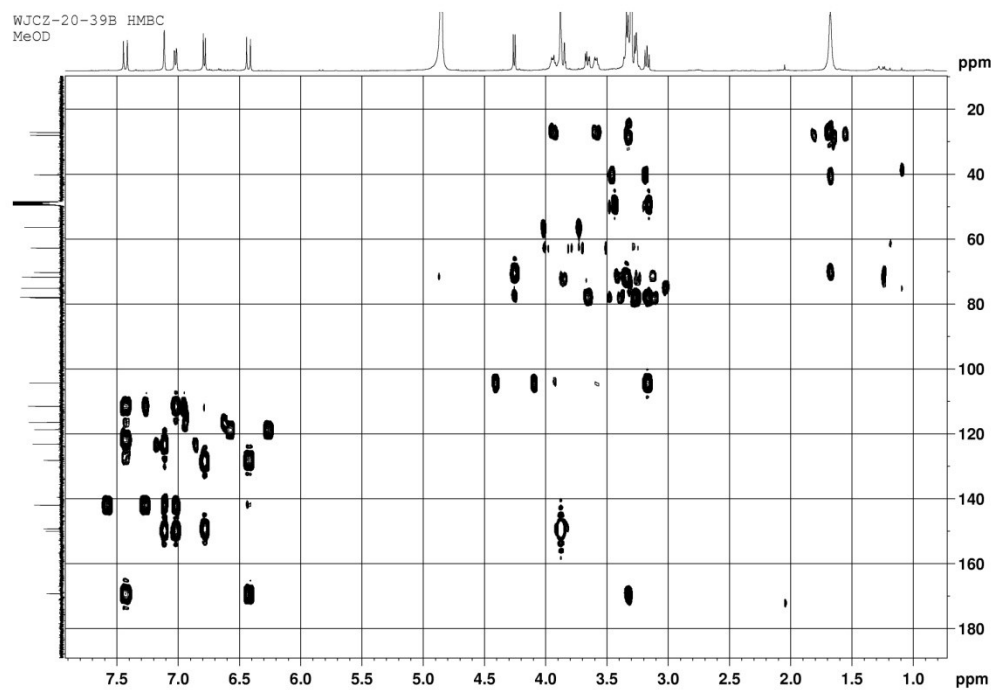


Figure S7. HR-ESI-MS spectrum of **1**

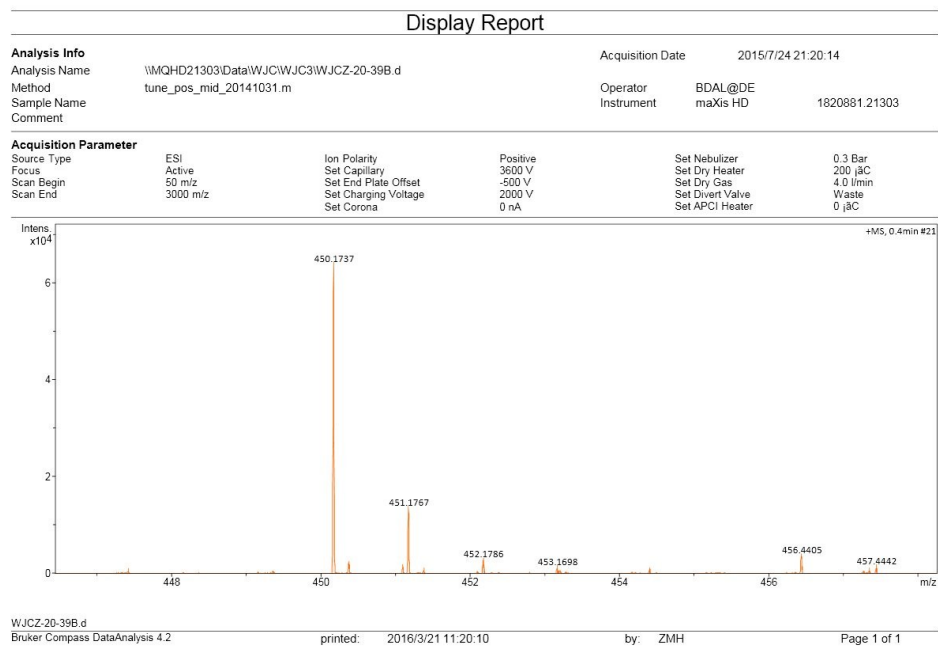


Figure S8. IR spectrum of **1**

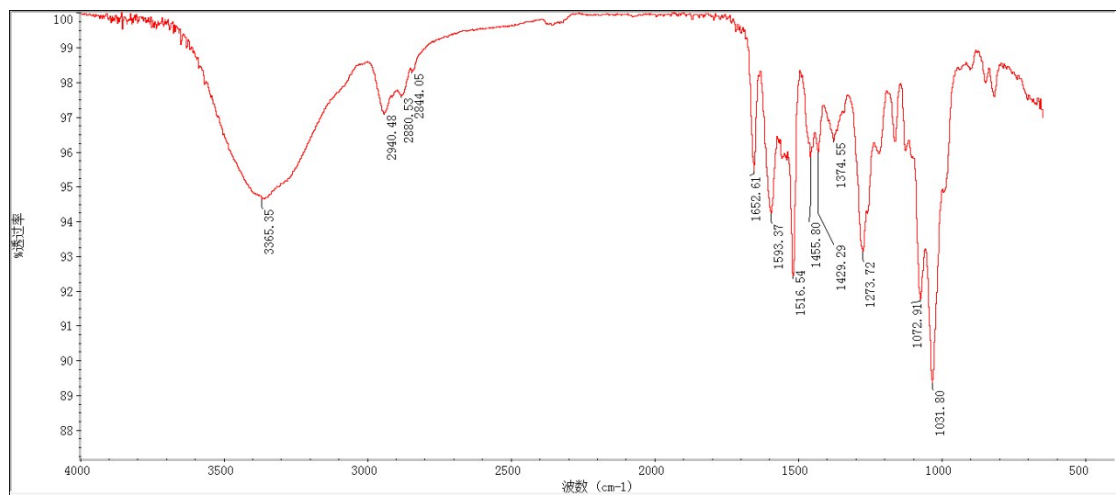


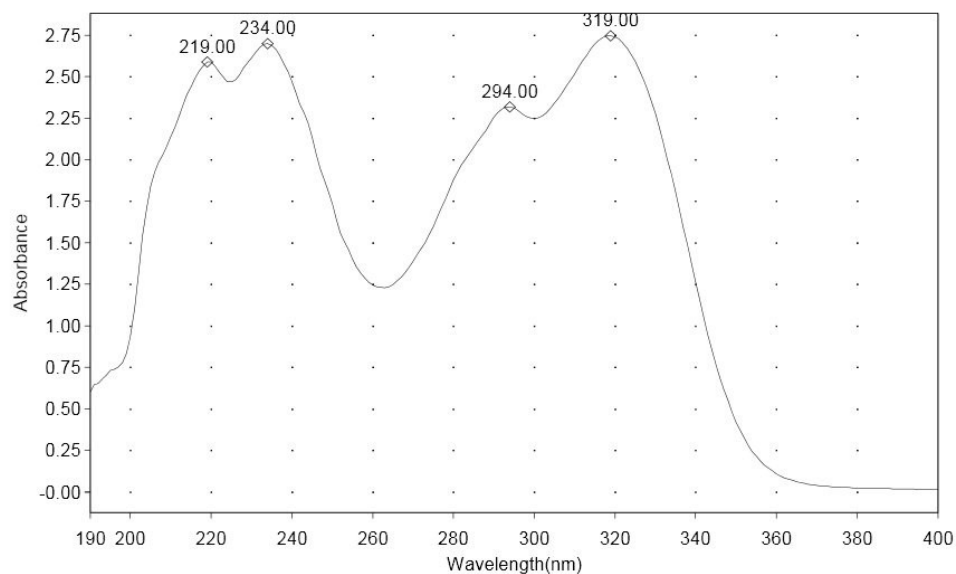
Figure S9. UV spectrum of **1**

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Operator Name (None Entered)
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 Information (None Entered)

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Scan Graph



Results Table - WJCZ-20-39B.sre,WJCZ-20-39B,Cycle01

nm	A	Peak Pick Method
219.00	2.588	Find 4 Peaks Above -3.0000 A
234.00	2.700	Start Wavelength190.00 nm
294.00	2.319	Stop Wavelength400.00 nm
319.00	2.746	Sort By Wavelength
Sensitivity	Very High	

Figure S10. ^1H NMR spectrum (500 MHz, CD_3OD) of **2**

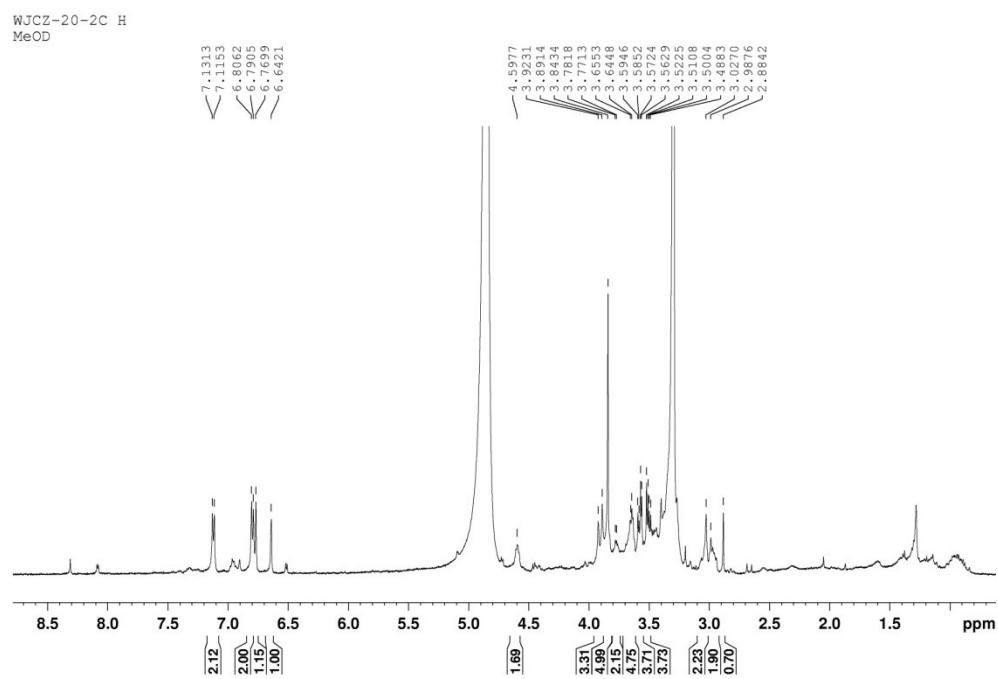


Figure S11. ^{13}C NMR spectrum (125 MHz, CD_3OD) of **2**

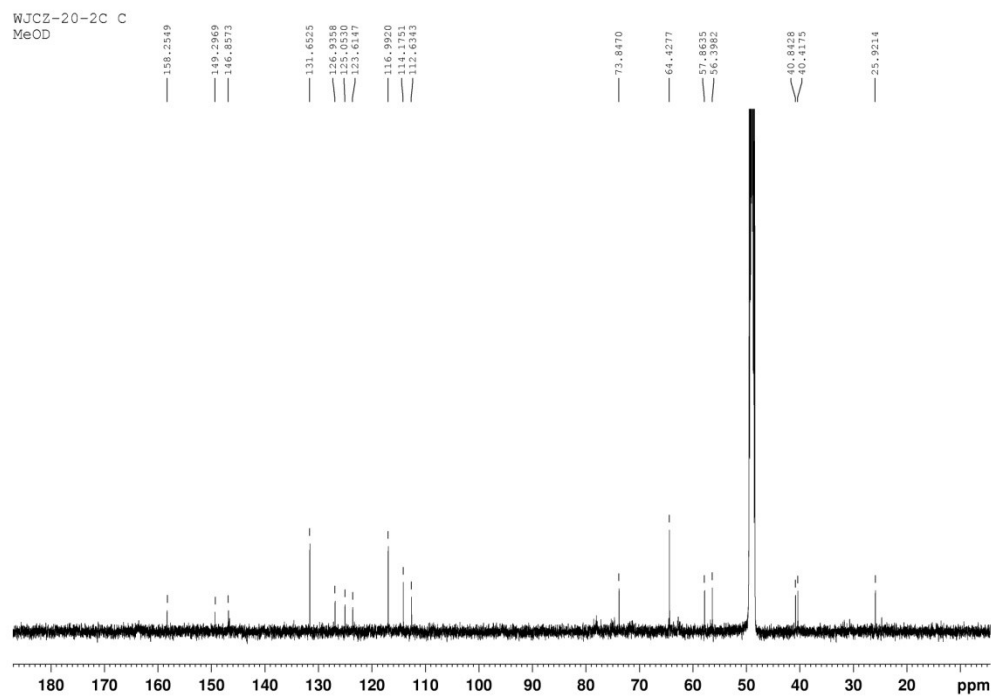


Figure S12. DEPT135 spectrum of **2**

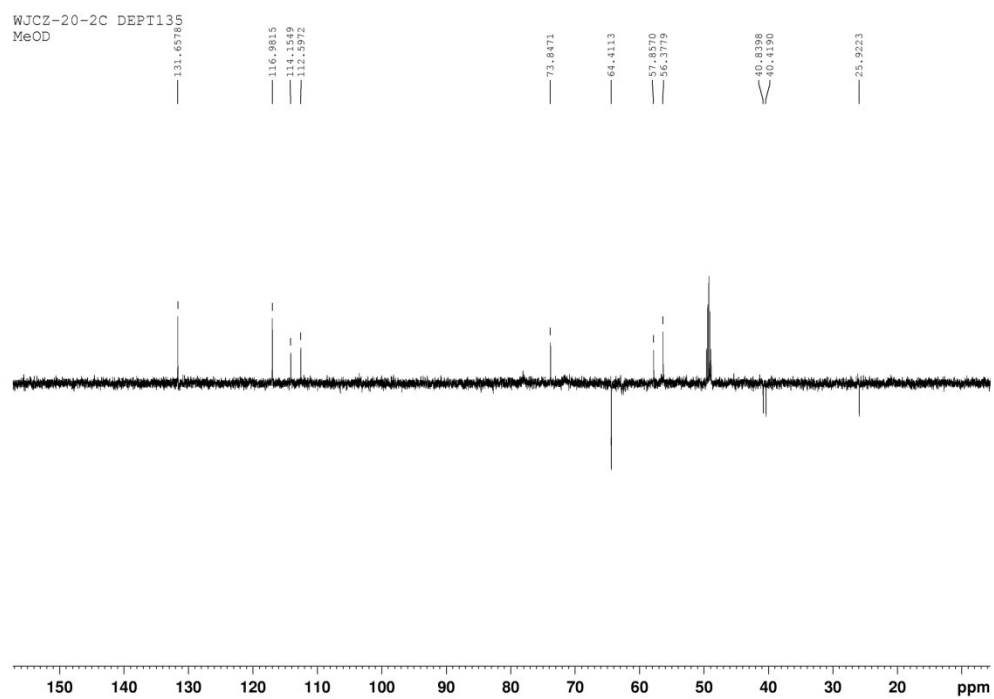


Figure S13. HSQC spectrum of **2**

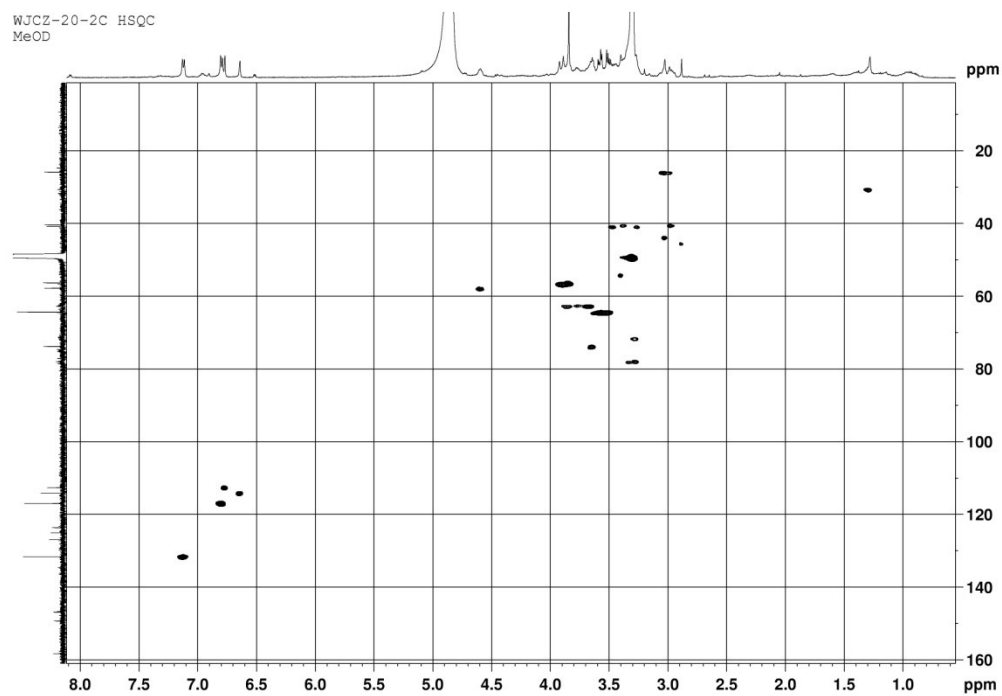


Figure S14. ^1H - ^1H COSY spectrum of **2**

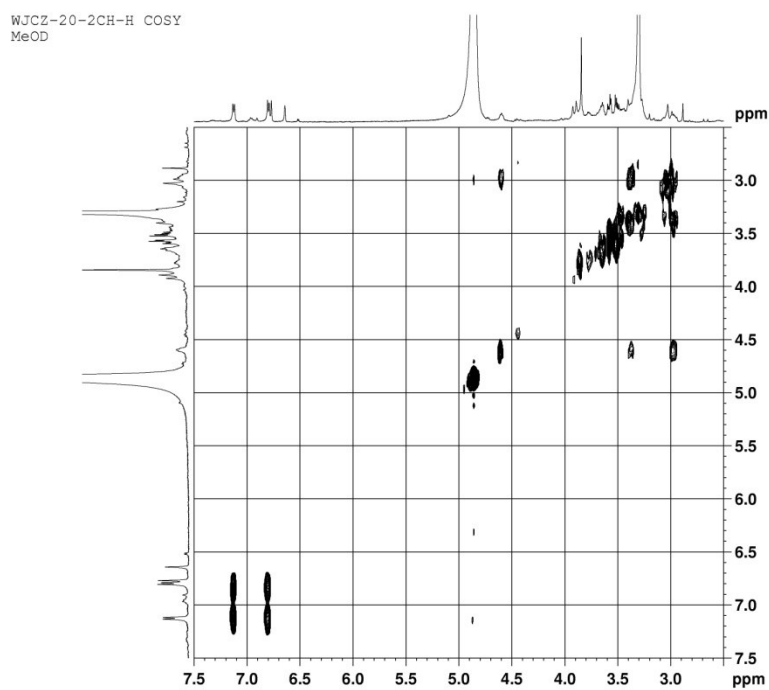


Figure S15 HMBC spectrum of **2**

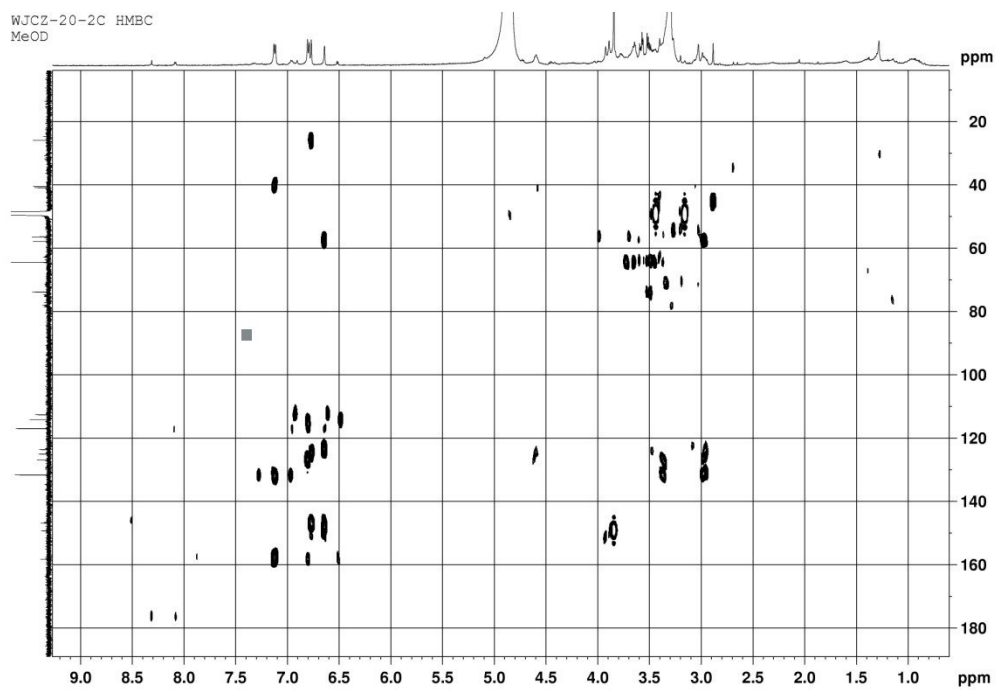


Figure S16. HR-ESI-MS spectrum of **2**

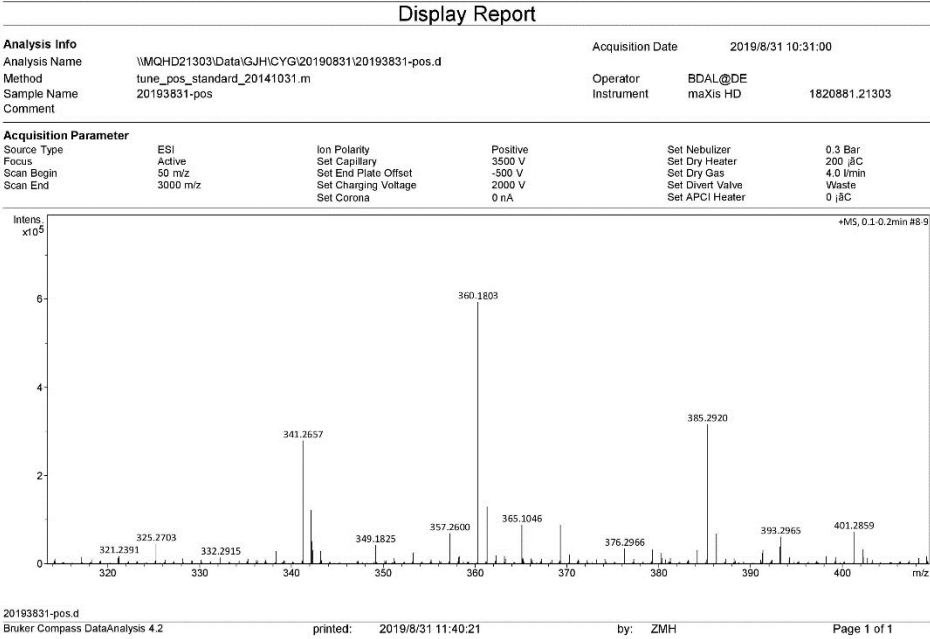


Figure S17. IR spectrum of **2**

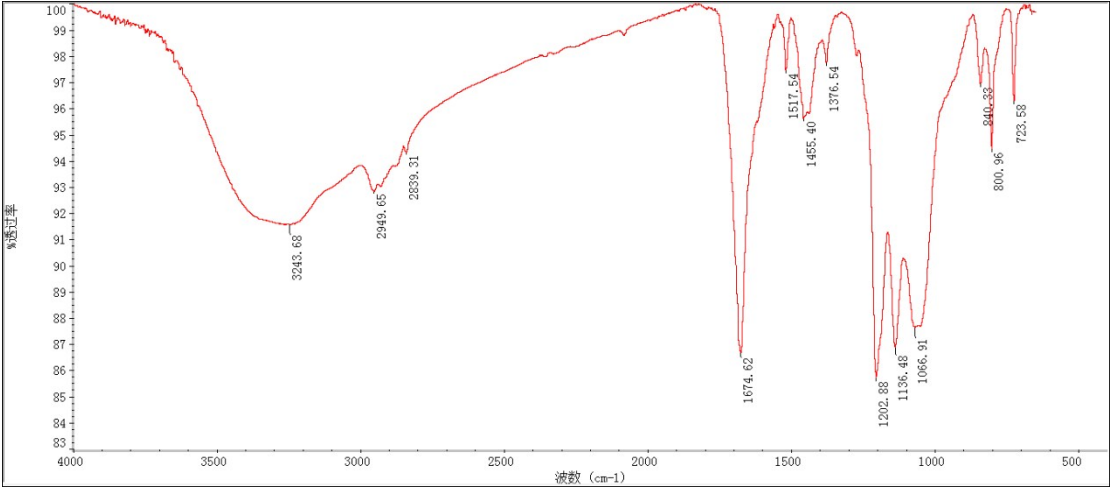


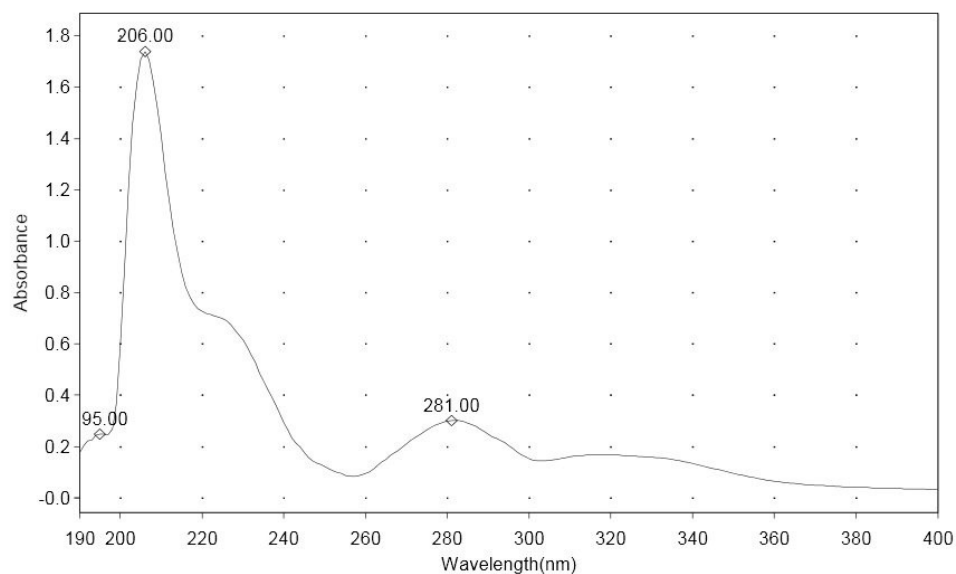
Figure S18. UV spectrum of 2

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Operator Name (None Entered)
 Department (None Entered)
 Organization (None Entered)
 Information (None Entered)

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Scan Graph



Results Table - scan002,WJCZ-20-2C,Cycle01

nm	A	Peak Pick Method
195.00	.249	Find 3 Peaks Above -3.0000 A
206.00	1.739	Start Wavelength190.00 nm
281.00	.302	Stop Wavelength400.00 nm
		Sort By Wavelength
Sensitivity	Very High	

Figure S19. ^1H NMR spectrum (500 MHz, CD_3OD) of **3**

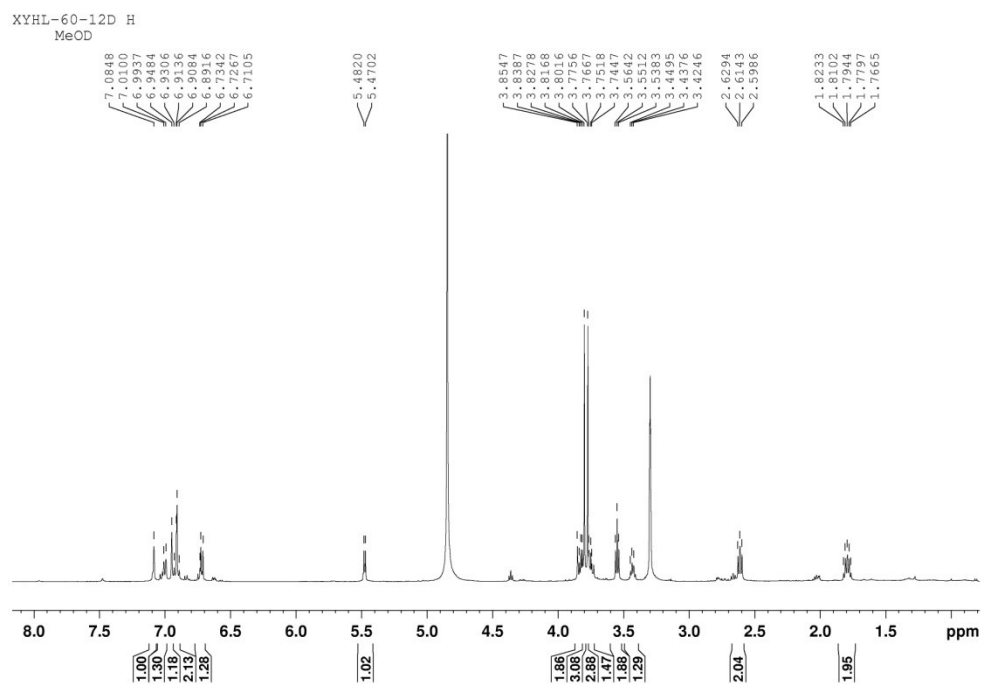


Figure S20. ^{13}C NMR spectrum (125 MHz, CD_3OD) of **3**

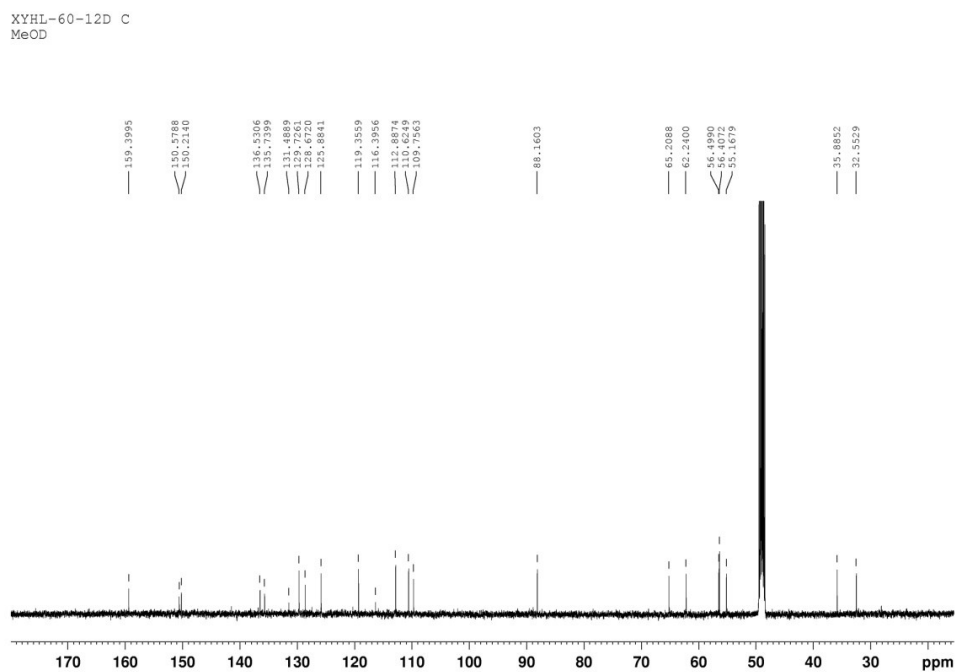


Figure S21. DEPT135 spectrum of **3**

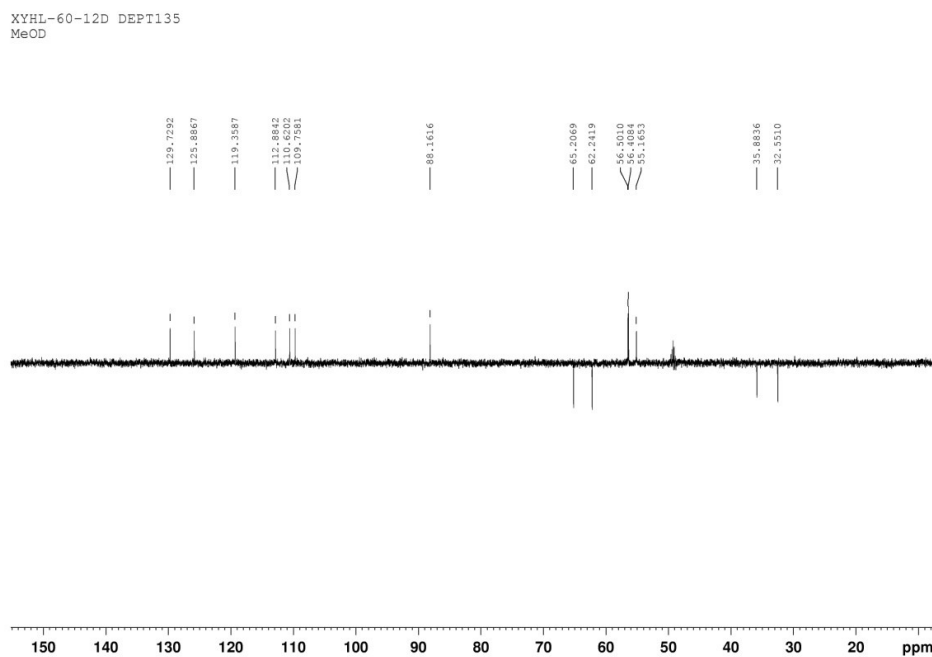


Figure S22. HSQC spectrum of **3**

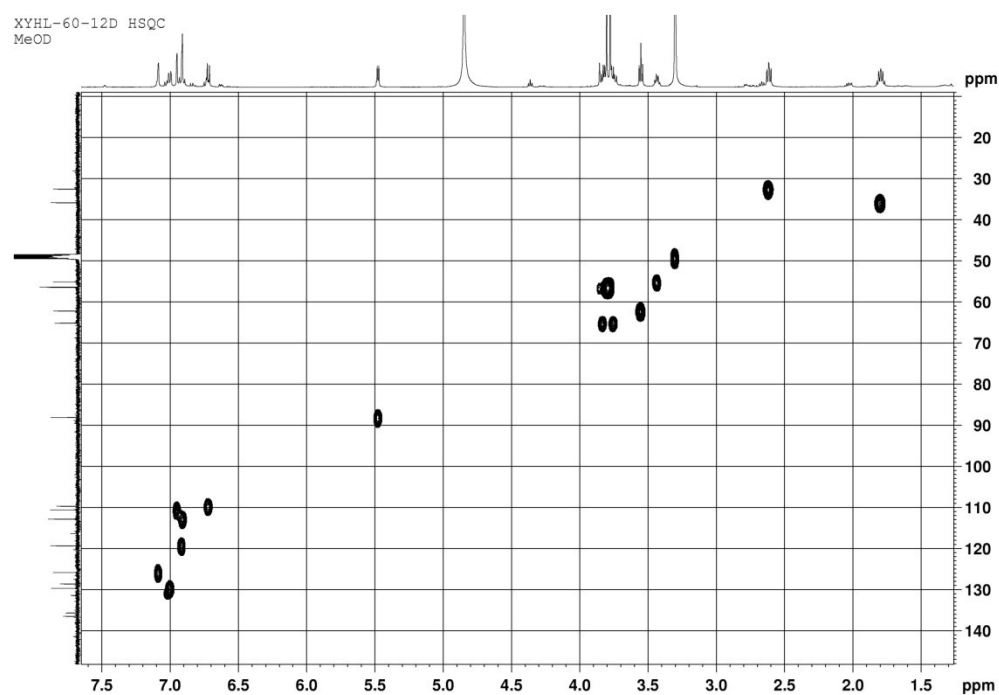


Figure S23. ^1H - ^1H COSY spectrum of **3**

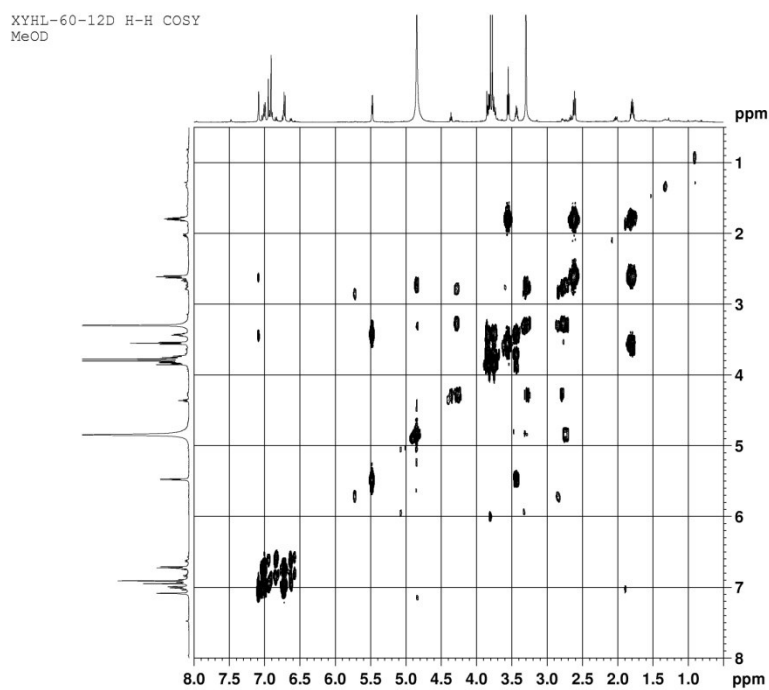


Figure S24. HMBC spectrum of **3**

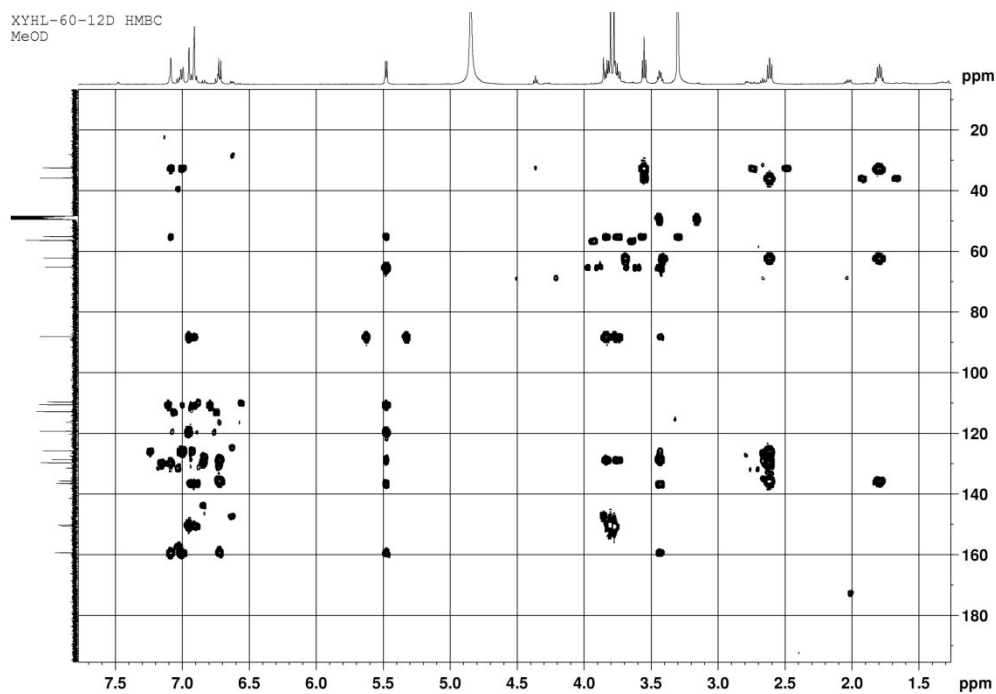


Figure S25. NOESY spectrum of **3**

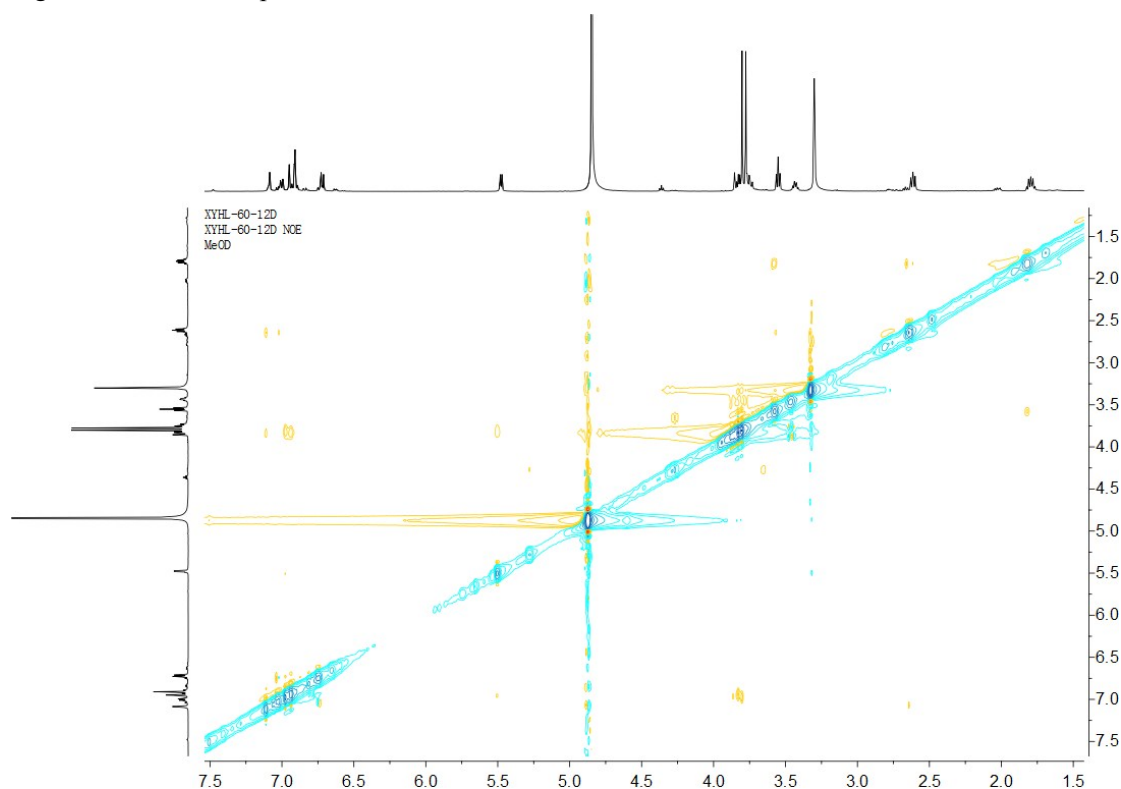


Figure S26. HR-ESI-MS spectrum of **3**

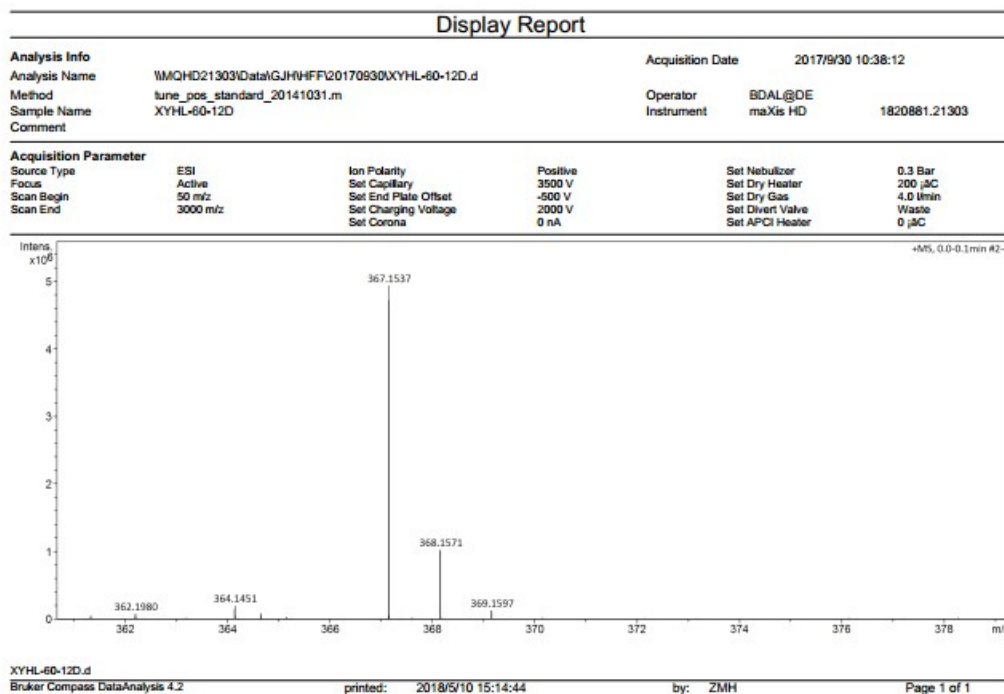


Figure S27. IR spectrum of **3**

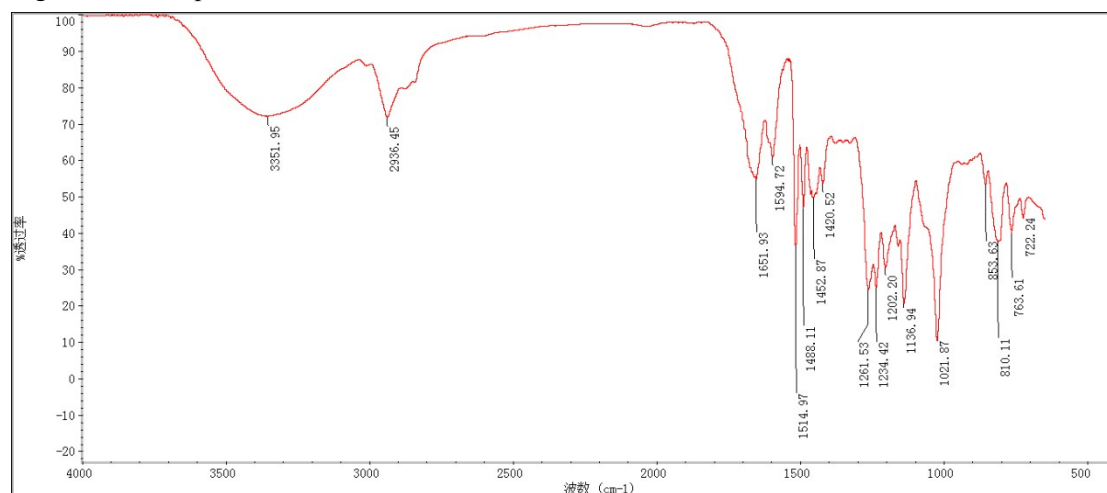
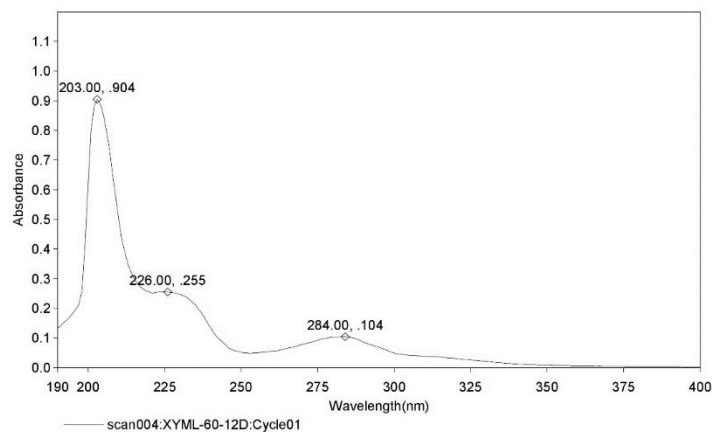


Figure S28. UV spectrum of **3**

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 Department (None Entered) Time of Report 17:40:06 下午
 Organization (None Entered)
 Information (None Entered)

Scan Graph



Results Table - XYML-60-12D.sre,XYML-60-12D,Cycle01

nm	A	Peak Pick Method
203.00	.904	Find 8 Peaks Above -3.0000 A
226.00	.255	Start Wavelength190.00 nm
284.00	.104	Stop Wavelength400.00 nm
		Sort By Wavelength

Sensitivity Medium

Figure S29. ^1H NMR spectrum (500 MHz, CD_3OD) of **4**

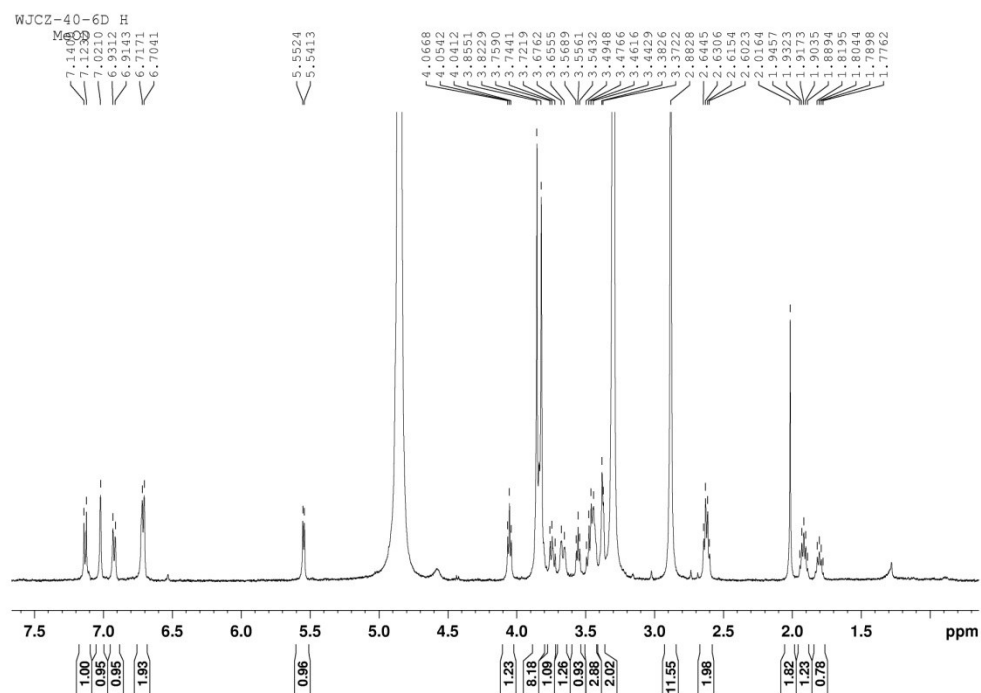


Figure S30. ^{13}C NMR spectrum (125 MHz, CD_3OD) of **4**

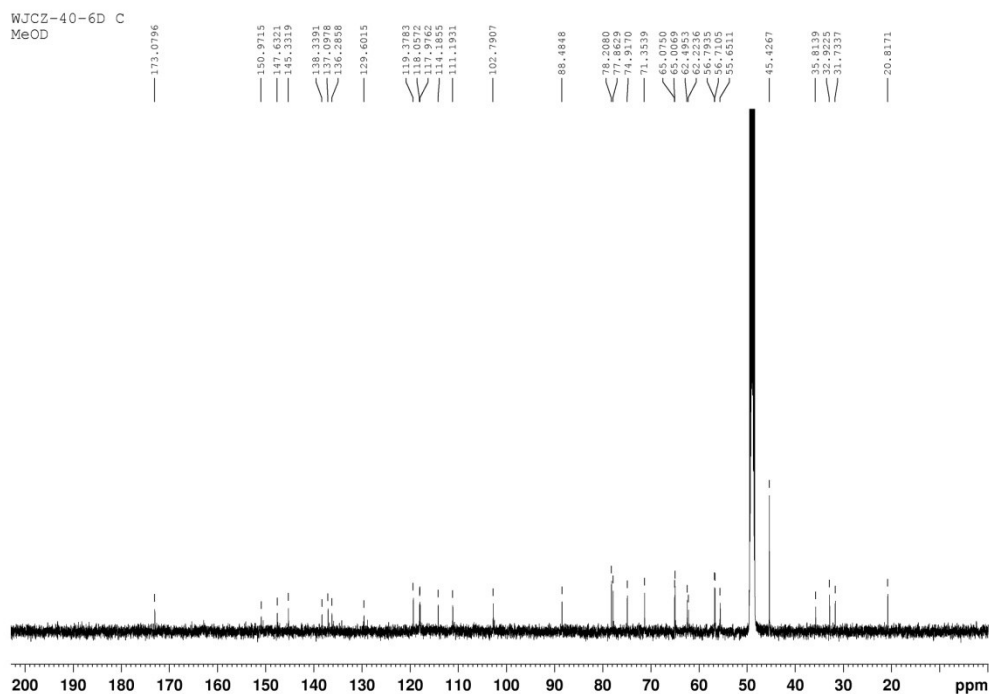


Figure S31. DEPT135 spectrum of **4**

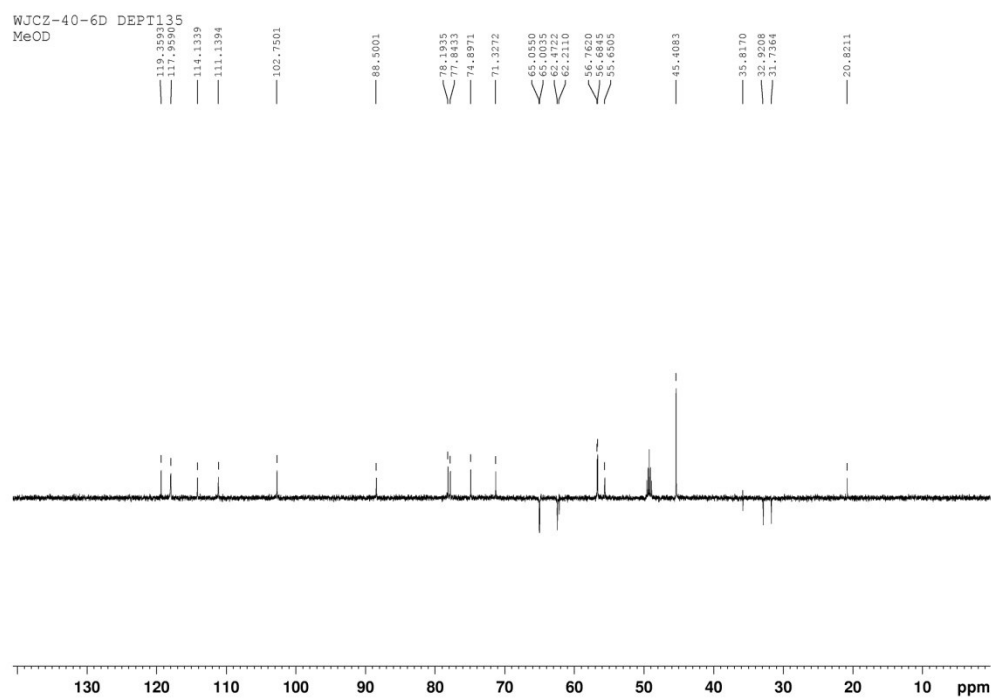


Figure S32. HSQC spectrum of **4**

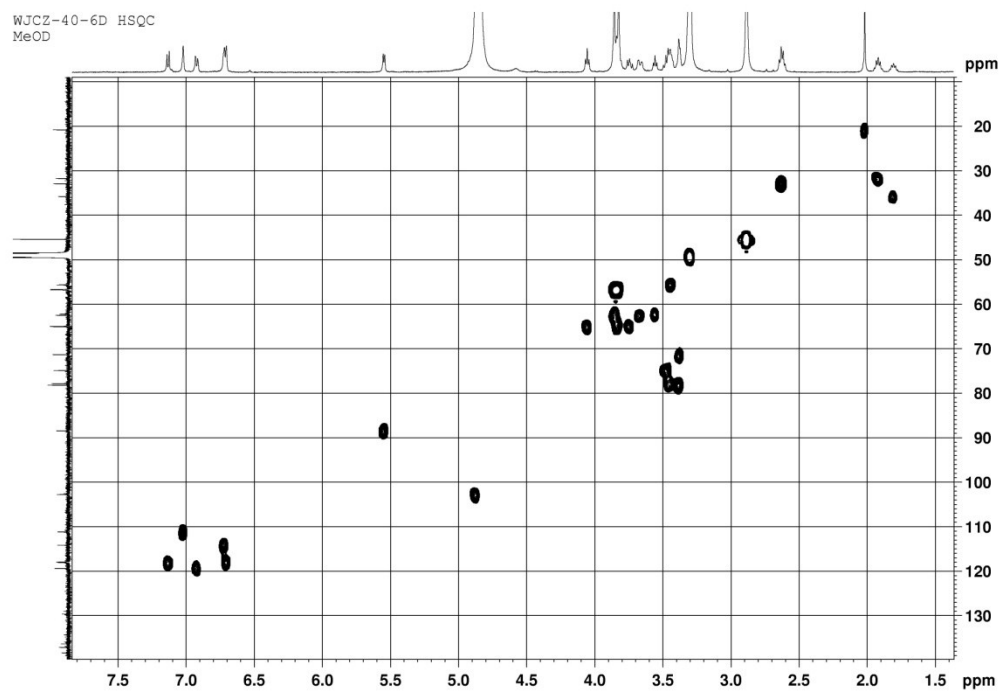


Figure S33. ^1H - ^1H COSY spectrum of **4**

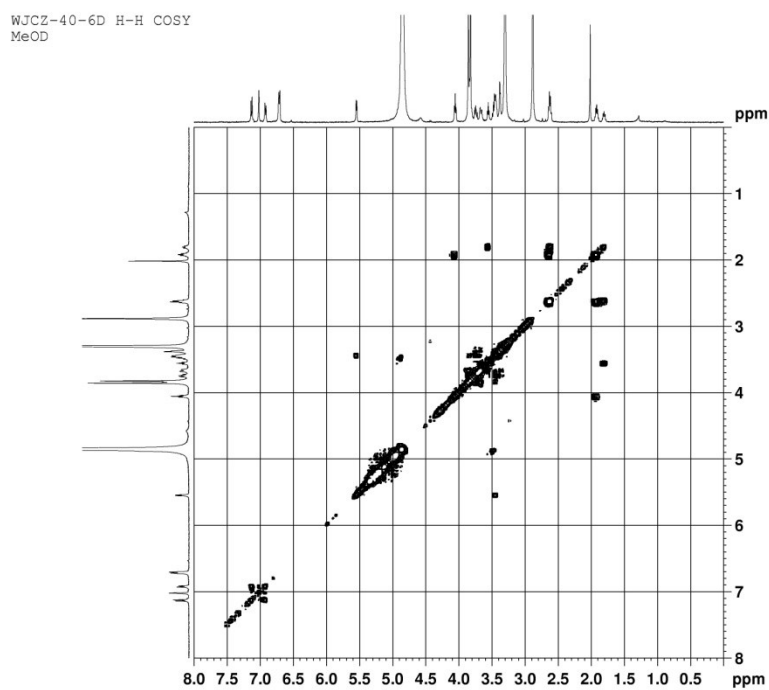


Figure S34. HMBC spectrum of **4**

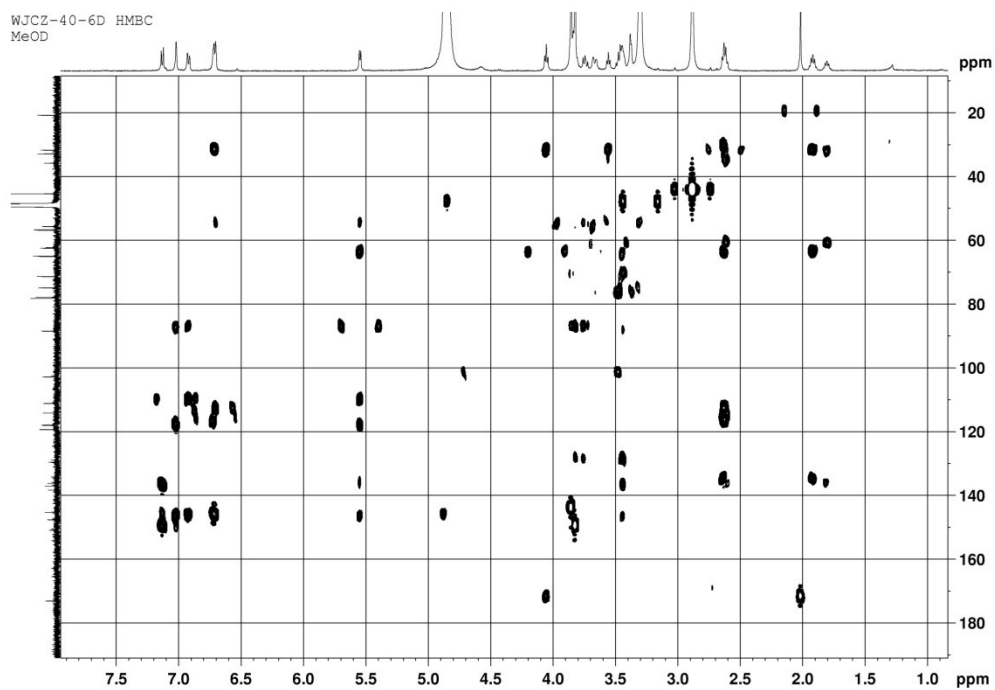


Figure S35. NOESY spectrum of **4**

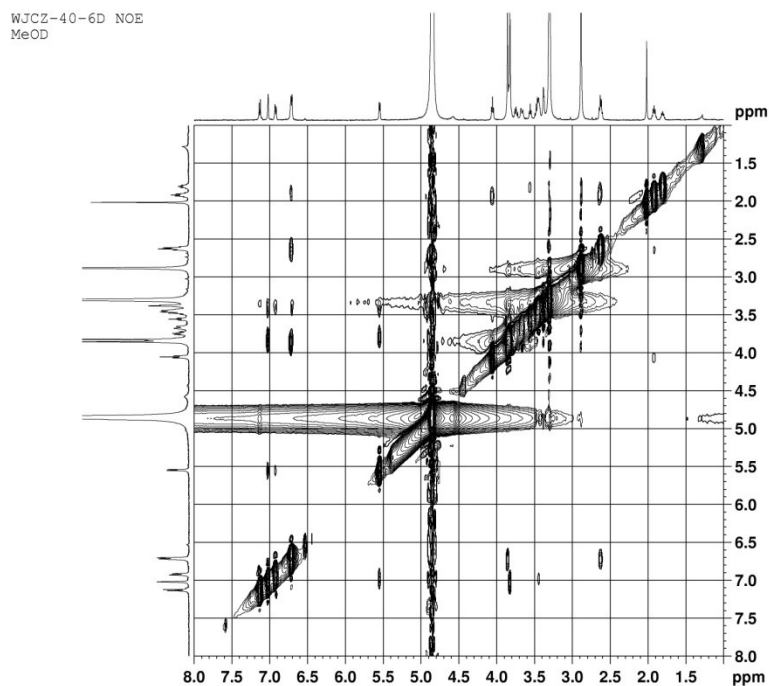


Figure S36. HR-ESI-MS spectrum of **4**

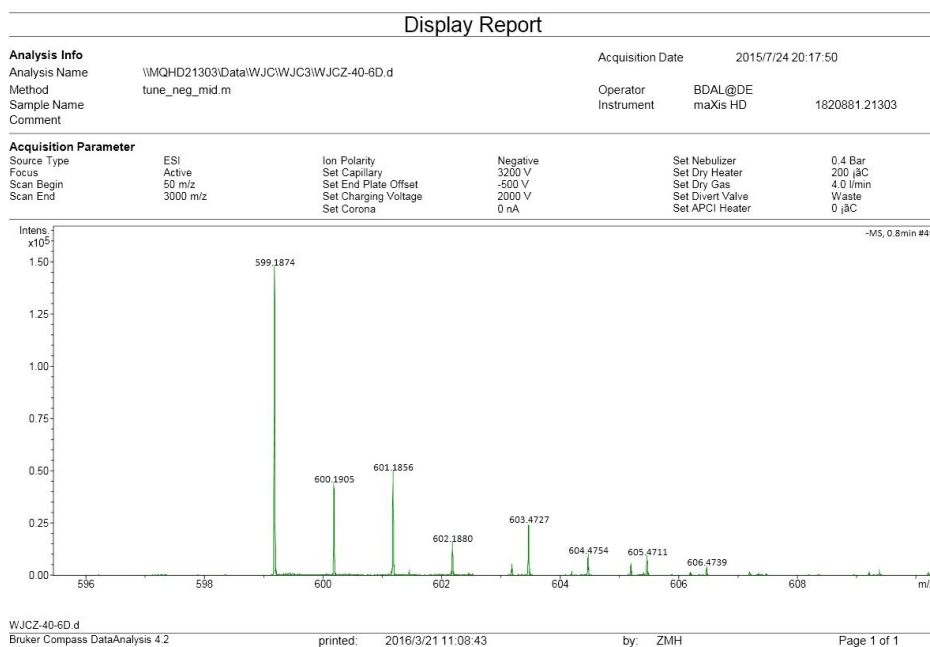


Figure S37. IR spectrum of 4

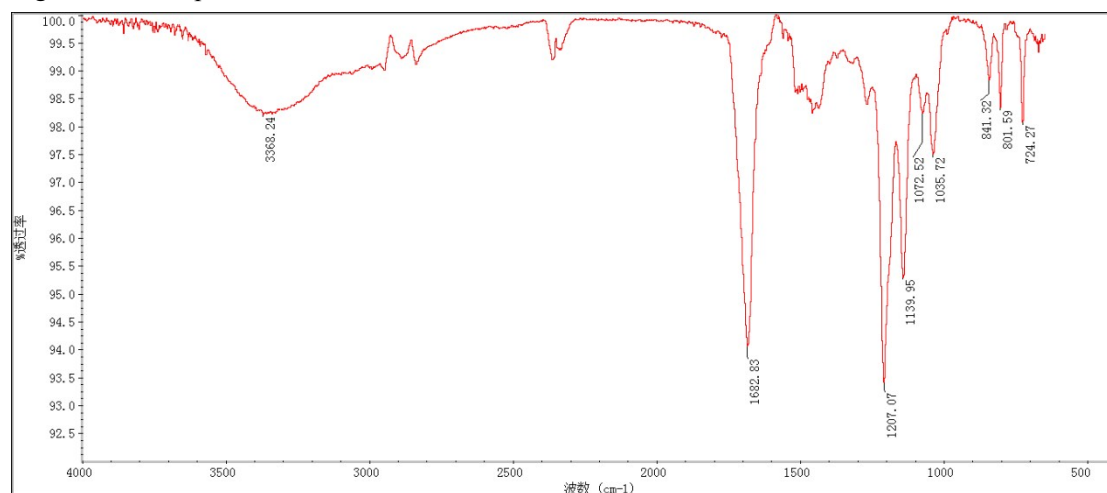
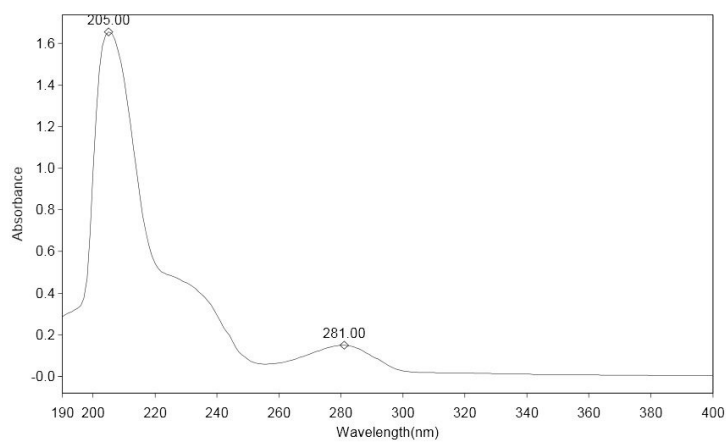


Figure S38. UV spectrum of 4

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Department	(None Entered)	Time of Report	19:55:19下午
Organization	(None Entered)		
Information	(None Entered)		

Scan Graph



Results Table - WJCZ-40-6D.sre,WJCZ-40-6D,Cycle01

nm	A	Peak Pick Method
205.00	1.654	Find 2 Peaks Above -3.0000 A
281.00	.150	Start Wavelength190.00 nm
		Stop Wavelength400.00 nm
		Sort By Wavelength

Sensitivity Very High

Figure S39. ^1H NMR spectrum (500MHz, CD_3OD) of **5**

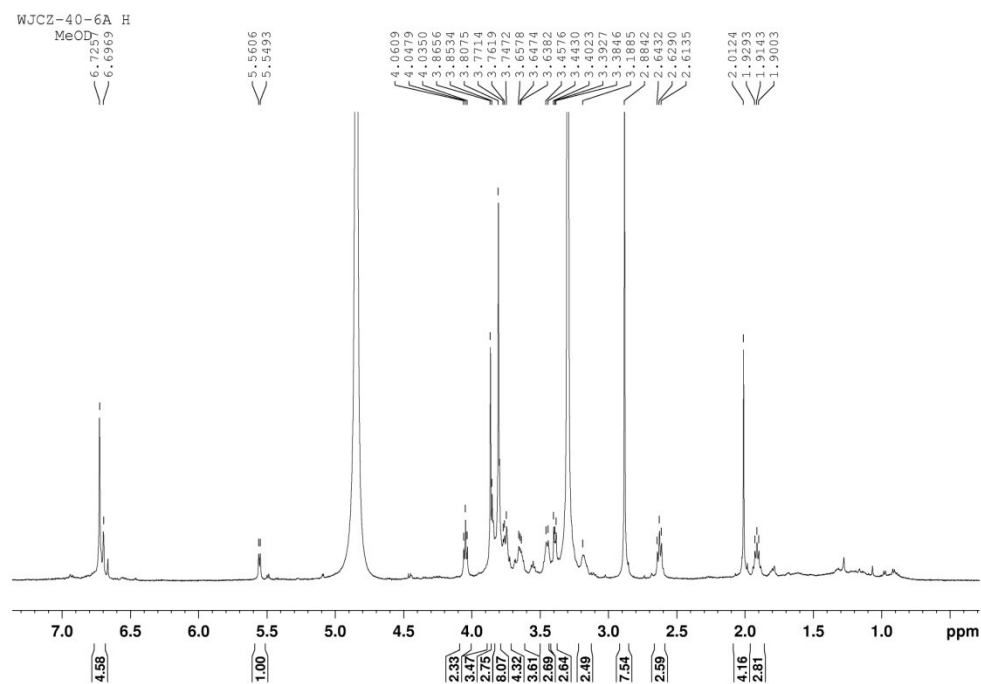


Figure S40. ^{13}C NMR spectrum (125MHz, CD_3OD) of **5**

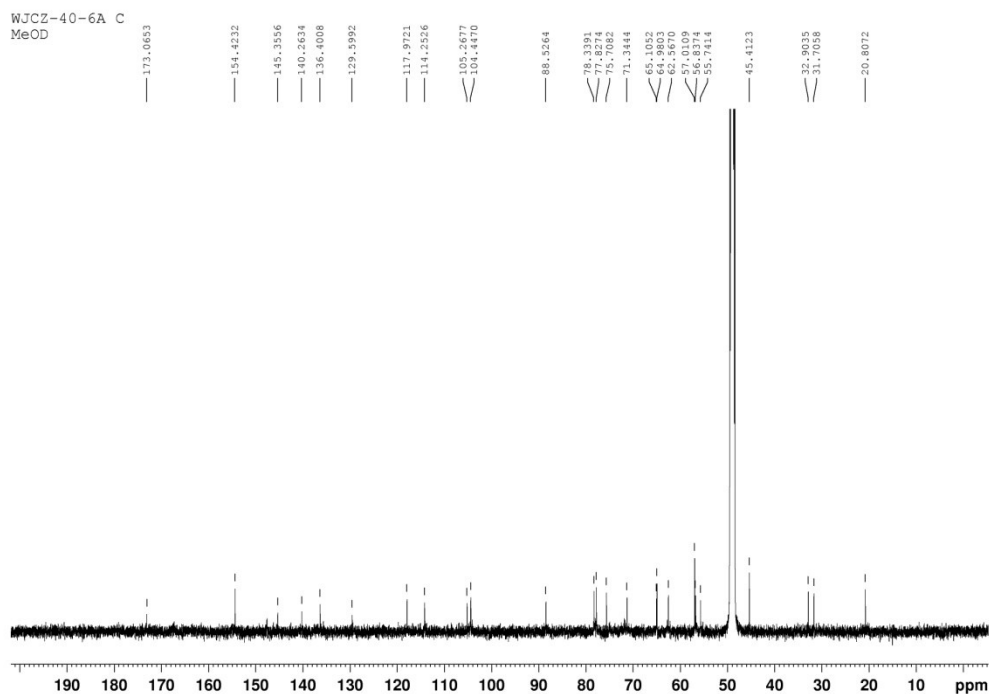


Figure S41. DEPT135 spectrum of **5**

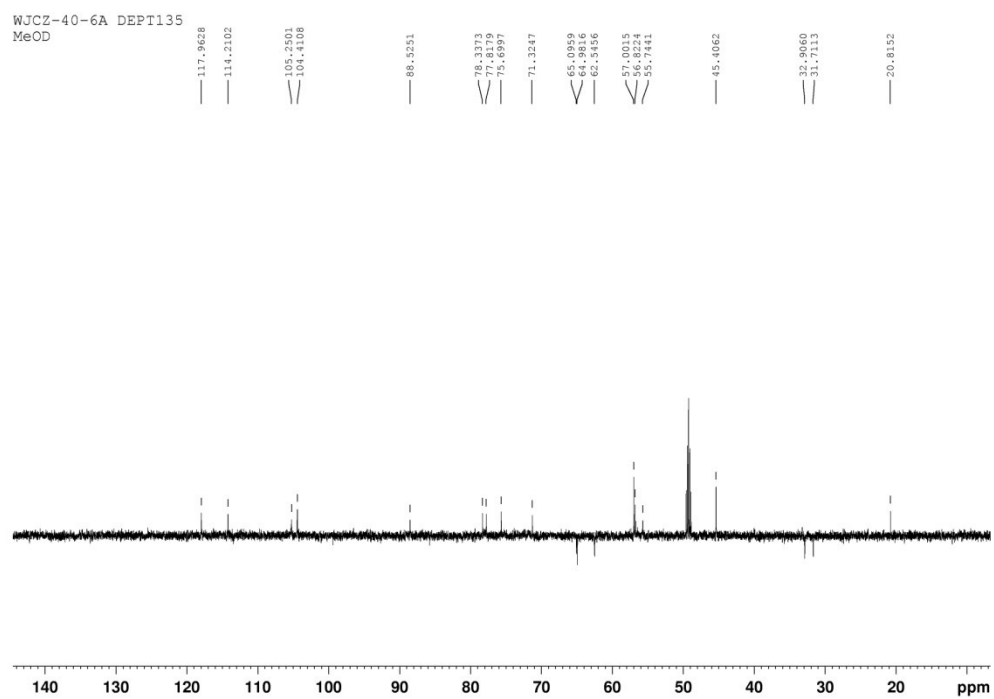


Figure S42. HSQC spectrum of **5**

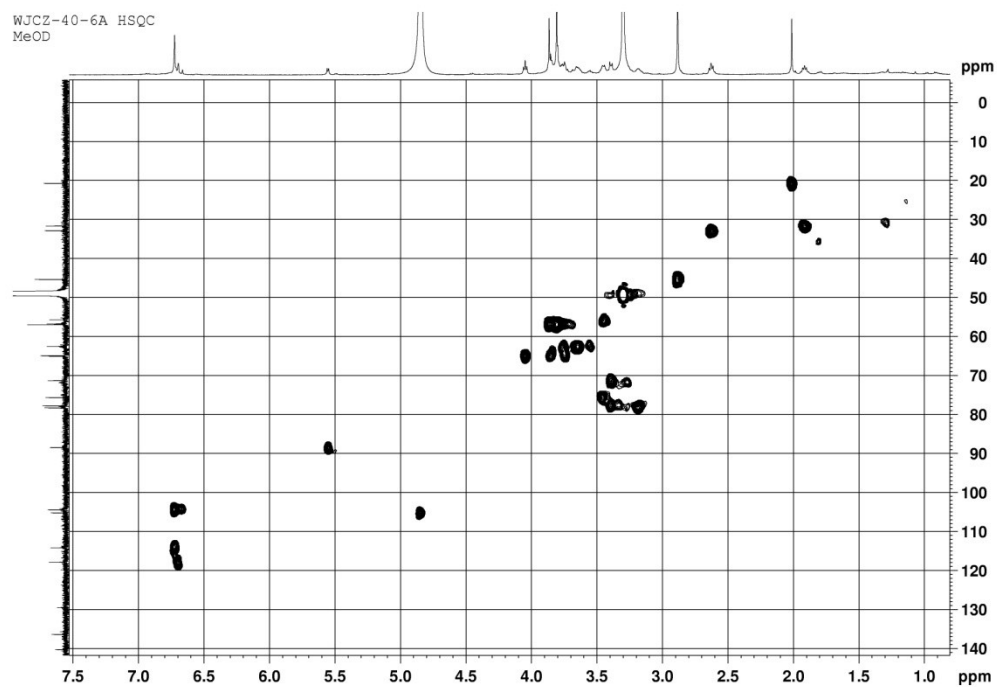


Figure S43. ^1H - ^1H COSY spectrum of **5**

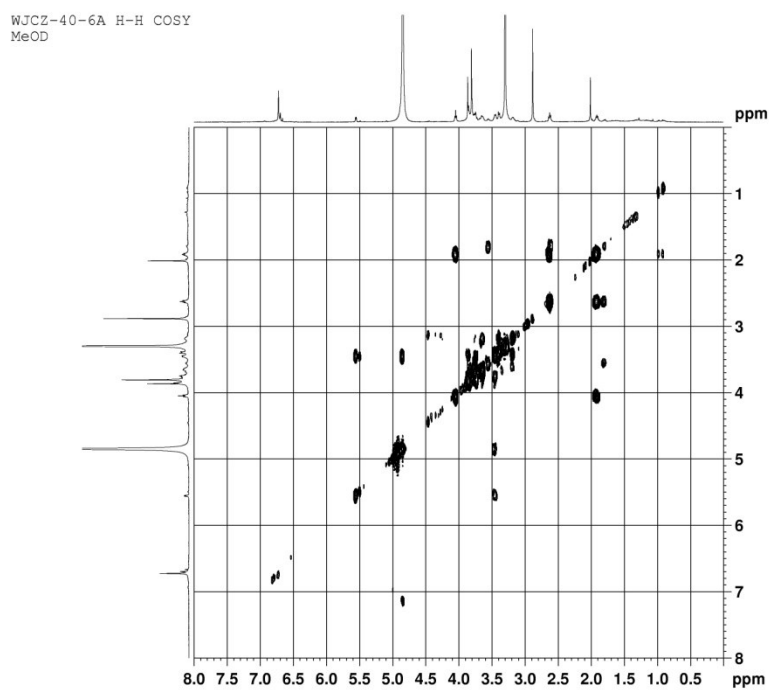


Figure S44 ^1H HMBC spectrum of **5**

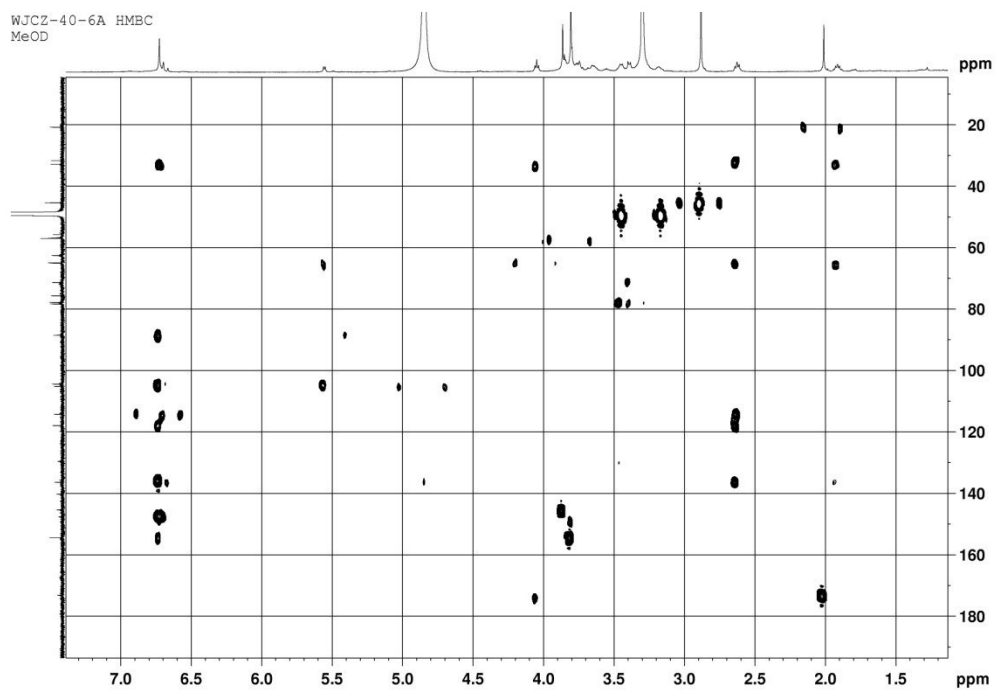


Figure S45. NOESY spectrum of **5**

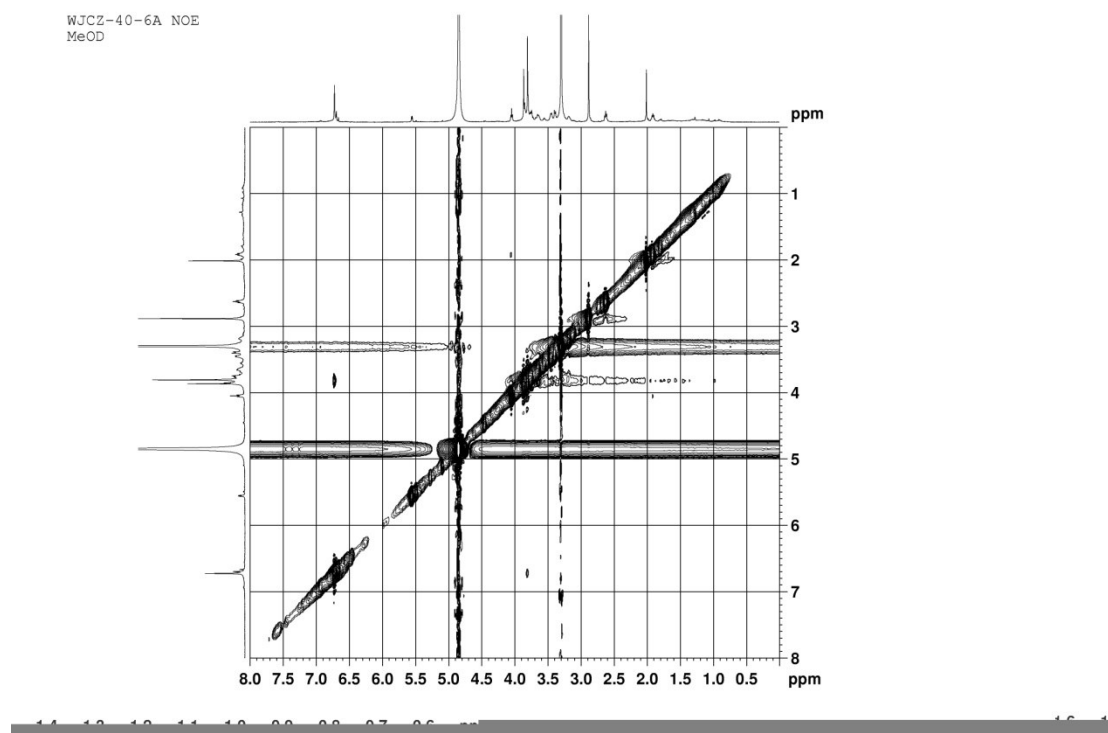


Figure S46. HR-ESI-MS spectrum of **5**

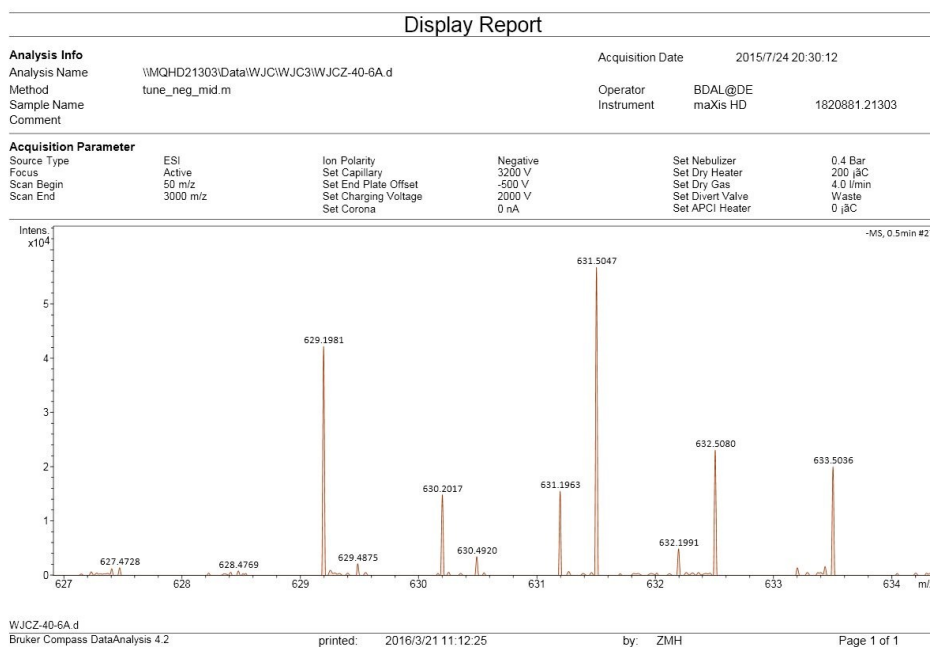


Figure S47. IR spectrum of **5**

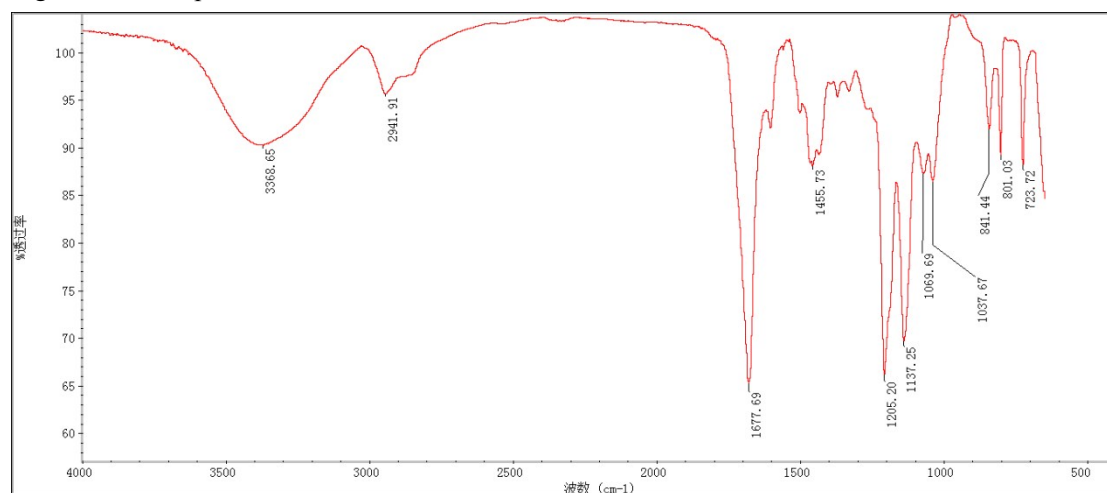
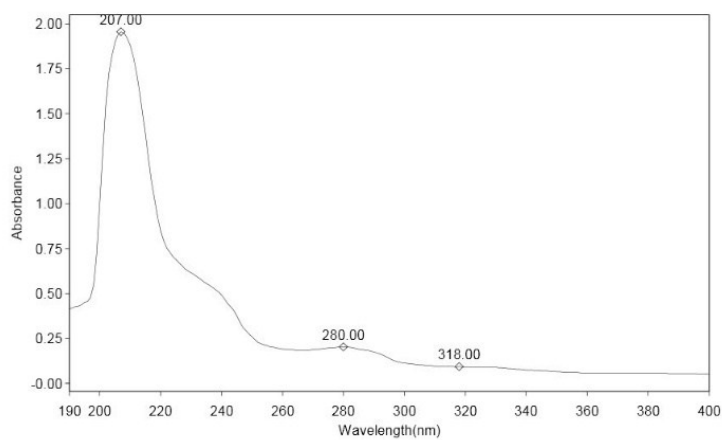


Figure S48. UV spectrum of **5**

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Operator Name	(None Entered)	Date of Report	2016/3/15
Department	(None Entered)	Time of Report	11:04:05上午
Organization	(None Entered)		
Information	(None Entered)		

Scan Graph



Results Table - WJCZ-40-6A.sre,WJCZ-40-6A,Cycle01

nm	A	Peak Pick Method
207.00	1.956	Find 3 Peaks Above -3.0000 A
280.00	.204	Start Wavelength190.00 nm
318.00	.094	Stop Wavelength400.00 nm
		Sort By Wavelength

Sensitivity Very High

Figure S49. ^1H NMR spectrum (500 MHz, CD_3OD) of **6**

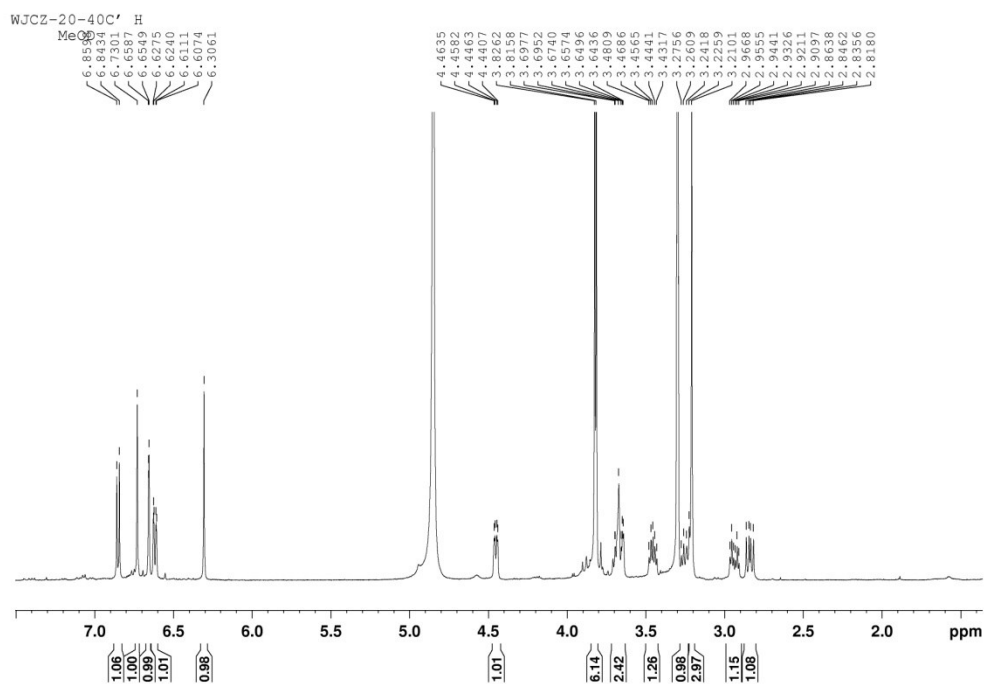


Figure S50. ^{13}C NMR spectrum (125 MHz, CD_3OD) of **6**

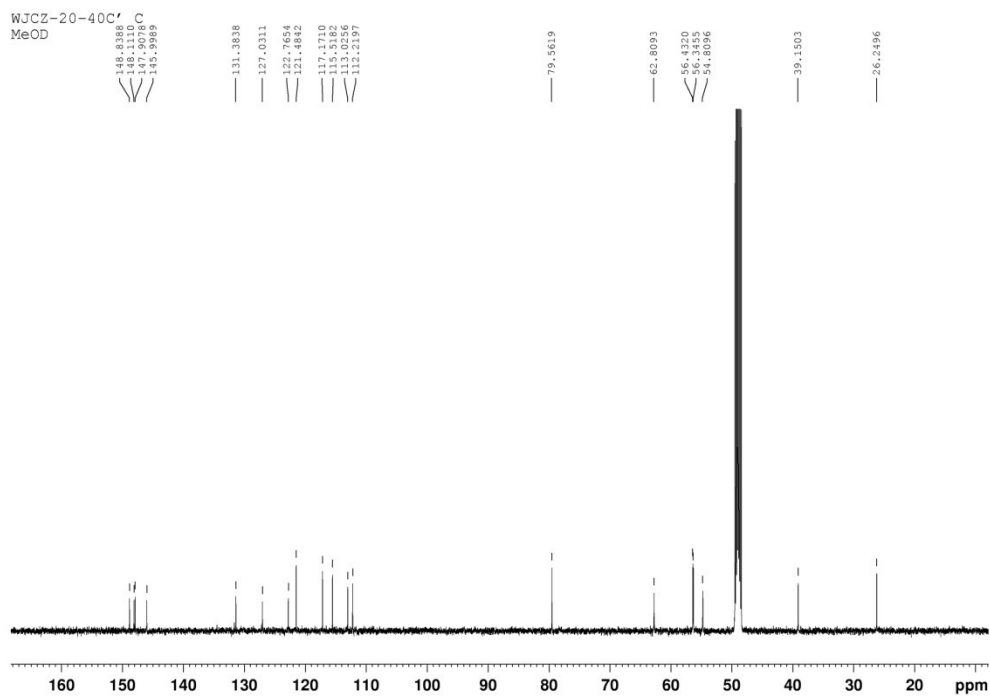


Figure S51. ^1H NMR spectrum (500MHz, CD_3OD) of **7**

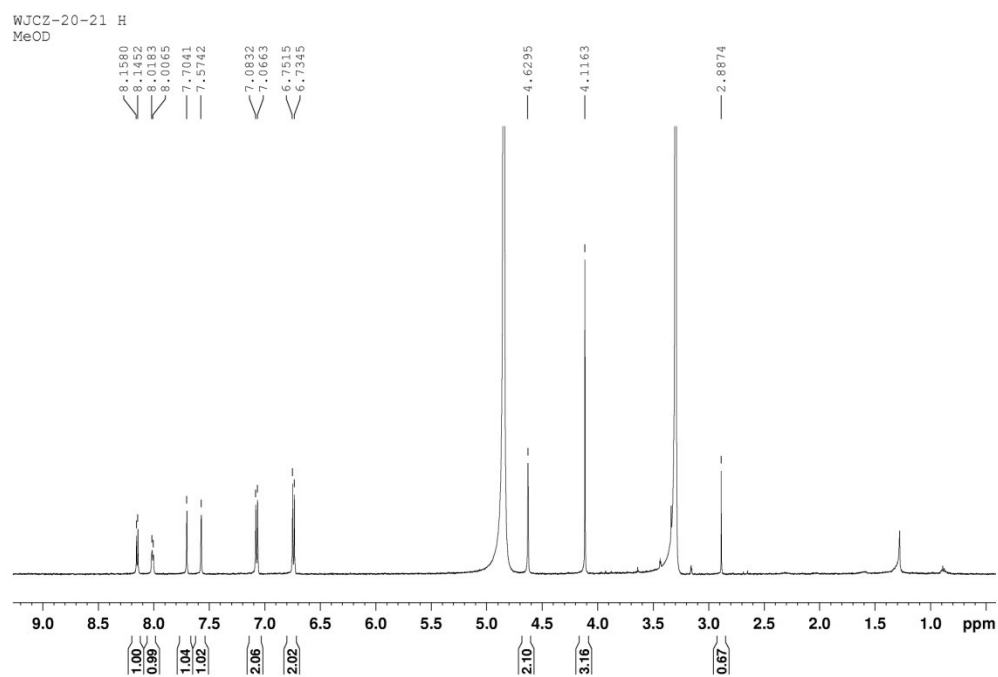


Figure S52. ^{13}C NMR spectrum (125MHz, CD_3OD) of **7**

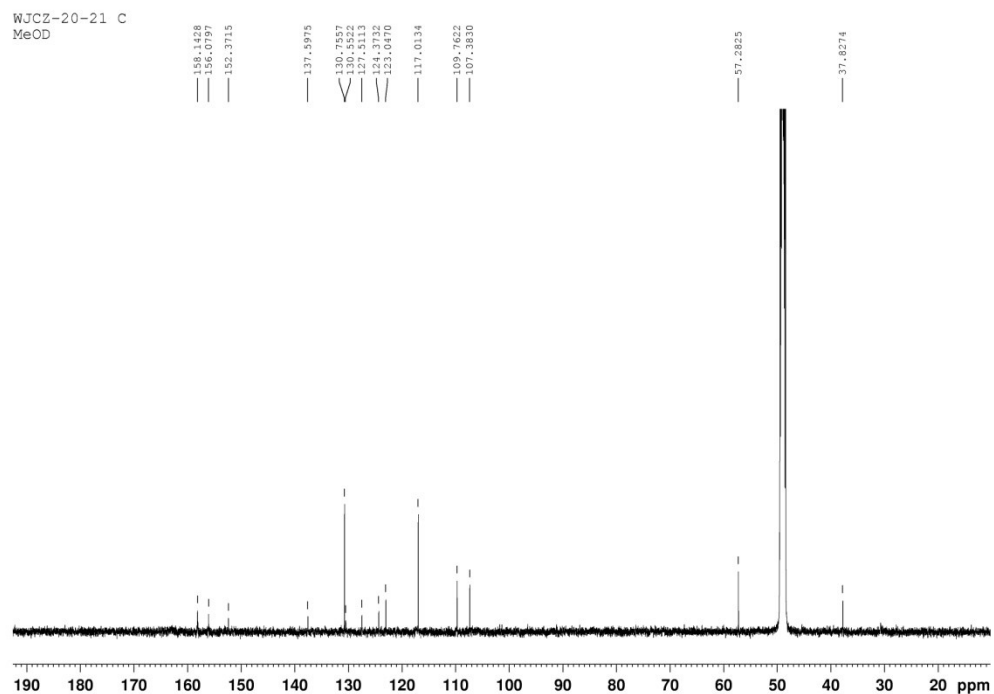


Figure S53. ^1H NMR spectrum (500MHz, CD_3OD) of **8**

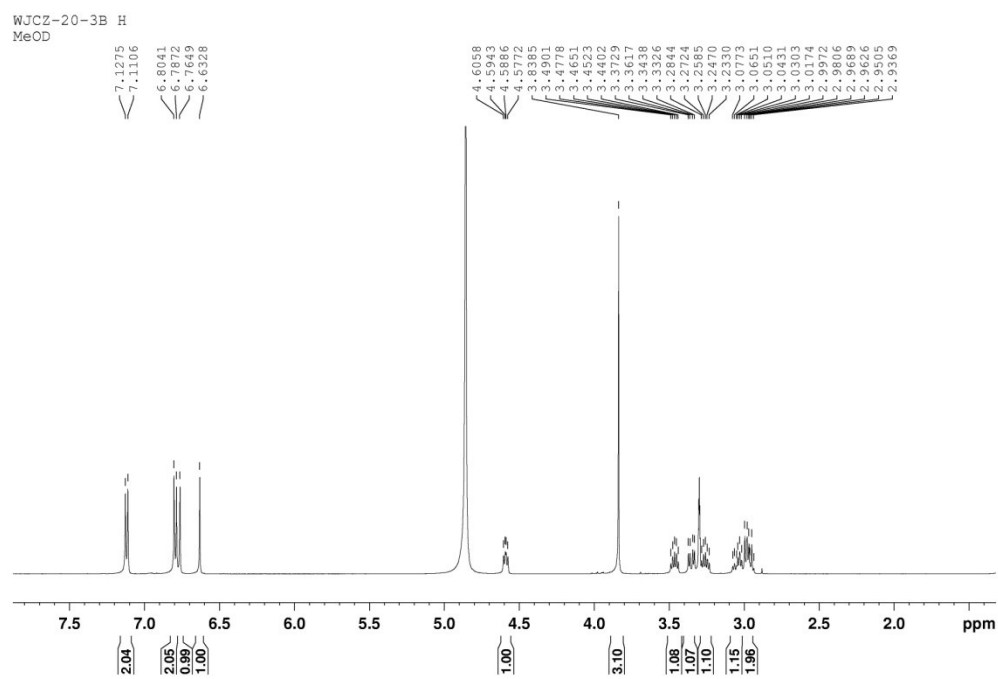


Figure S54. ^{13}C NMR spectrum (125MHz, CD_3OD) of **8**

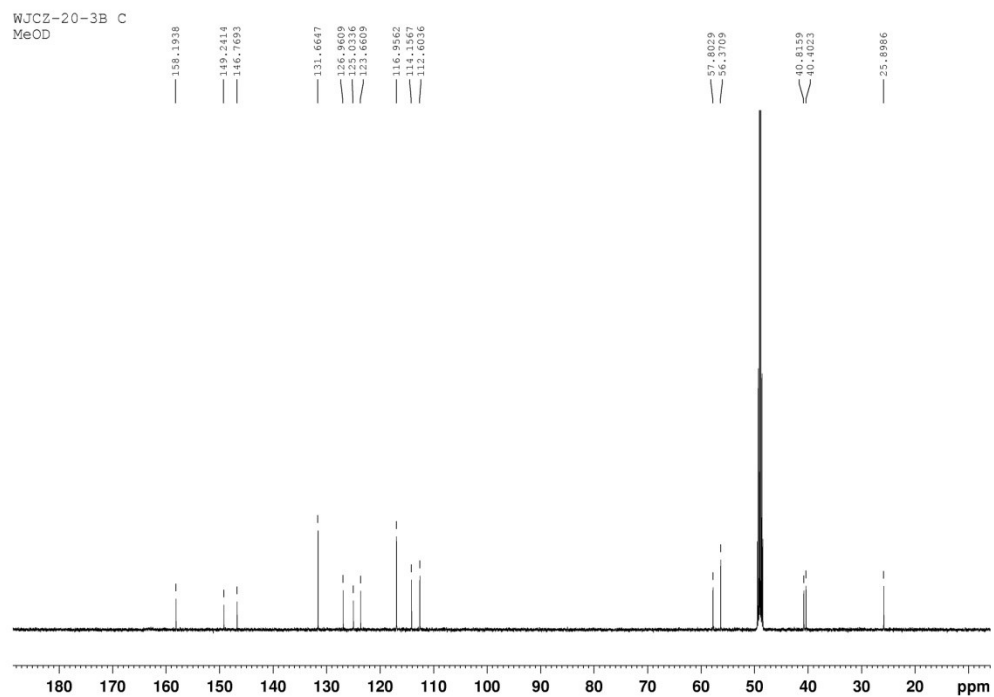


Figure S55. ^1H NMR spectrum (500MHz, CD_3OD) of **9**

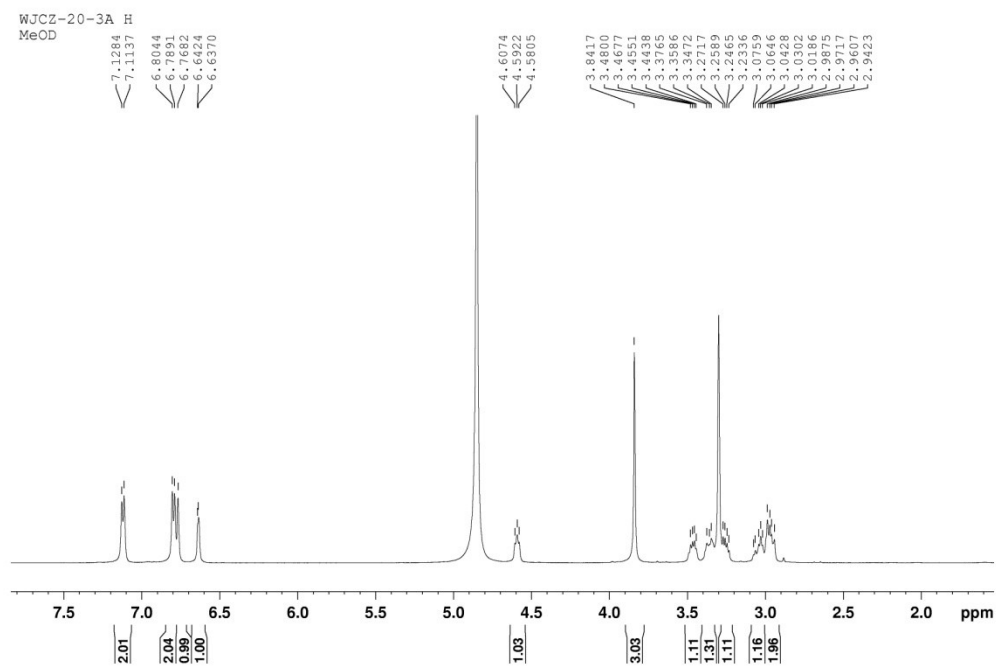


Figure S56. ^{13}C NMR spectrum (125MHz, CD_3OD) of **9**

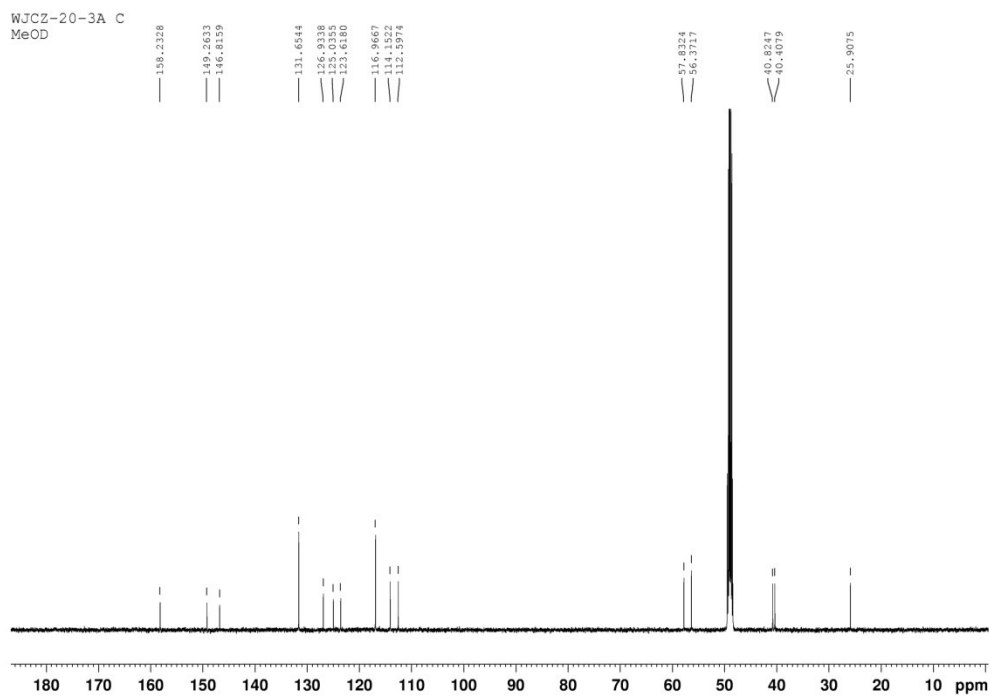


Figure S57. ^1H NMR spectrum (500MHz, CD_3OD) of **10**

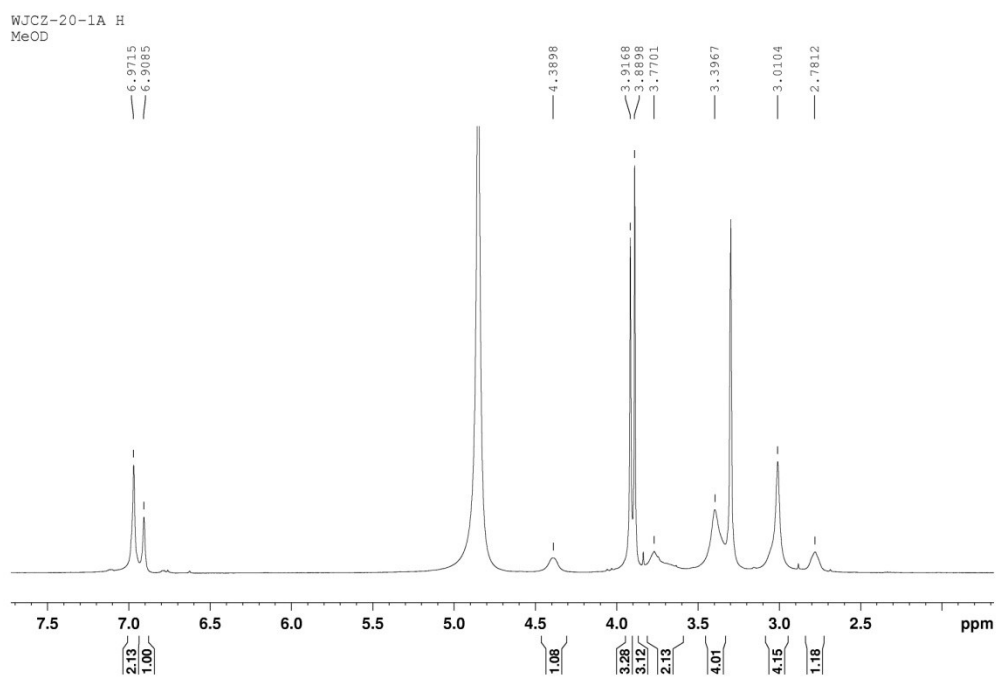


Figure S58. ^{13}C NMR spectrum (125MHz, CD_3OD) of **10**

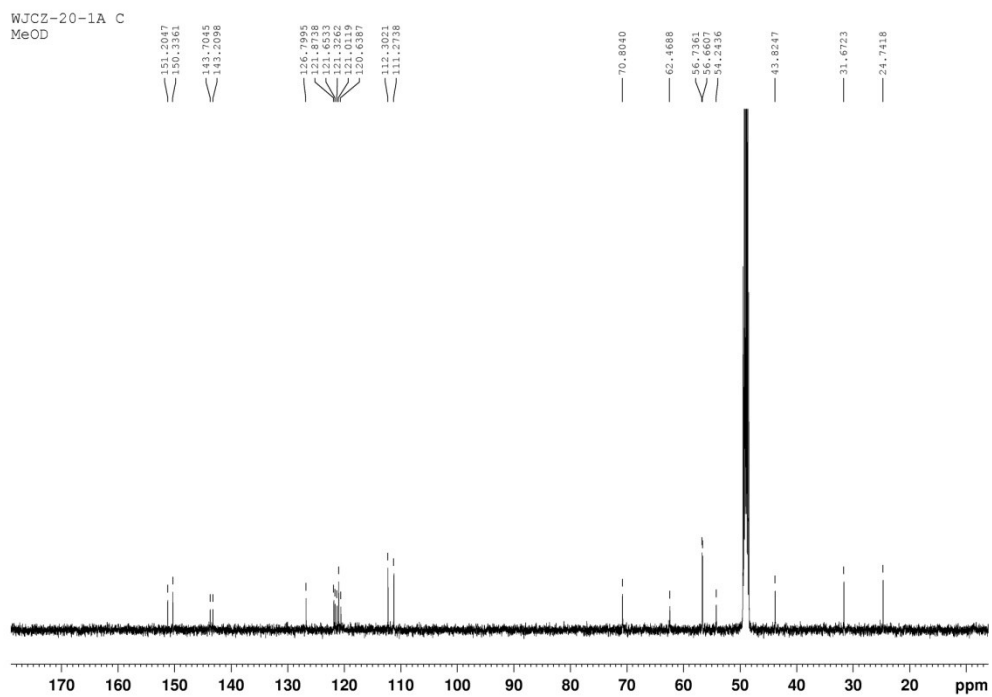


Figure S59. ^1H NMR spectrum (500MHz, CD_3OD) of **11**

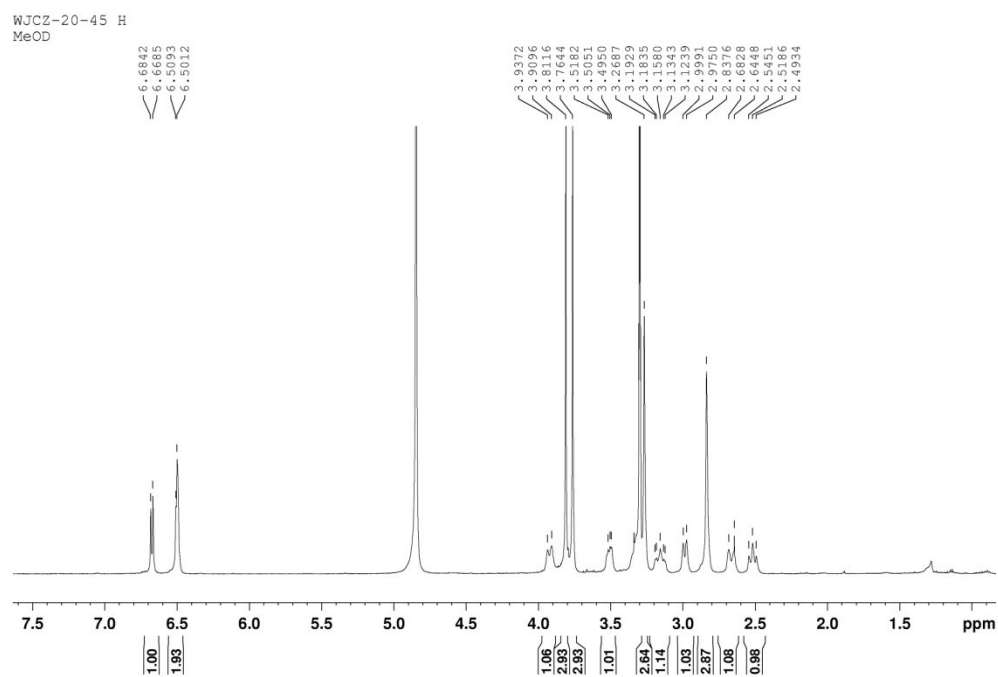


Figure S60. ^{13}C NMR spectrum (125MHz, CD_3OD) of **11**

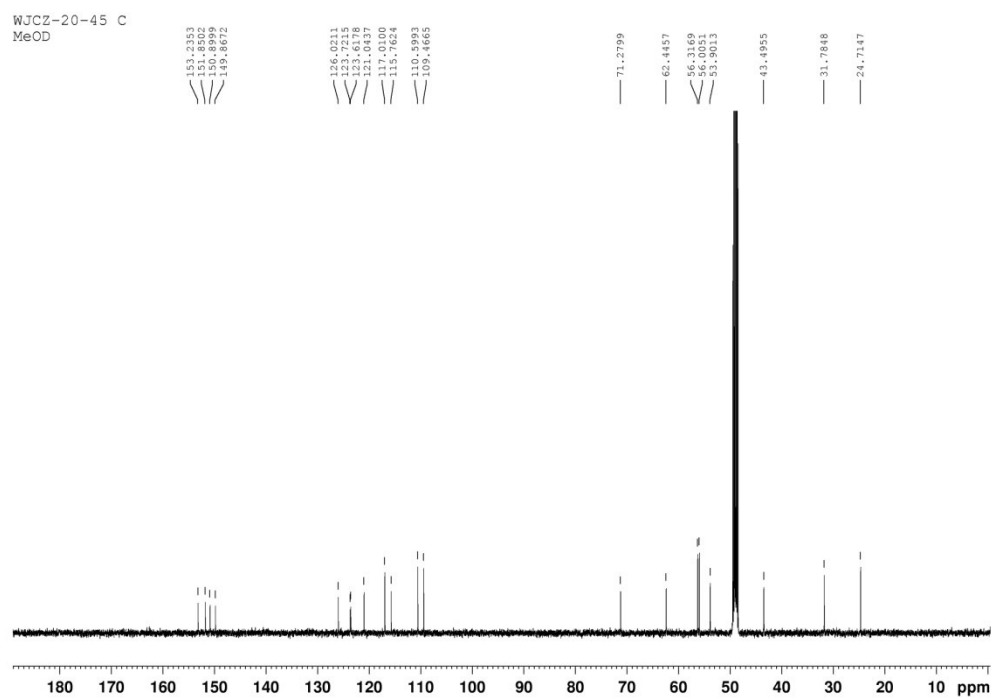


Figure S61. ^1H NMR spectrum (500MHz, CD_3OD) of **12**

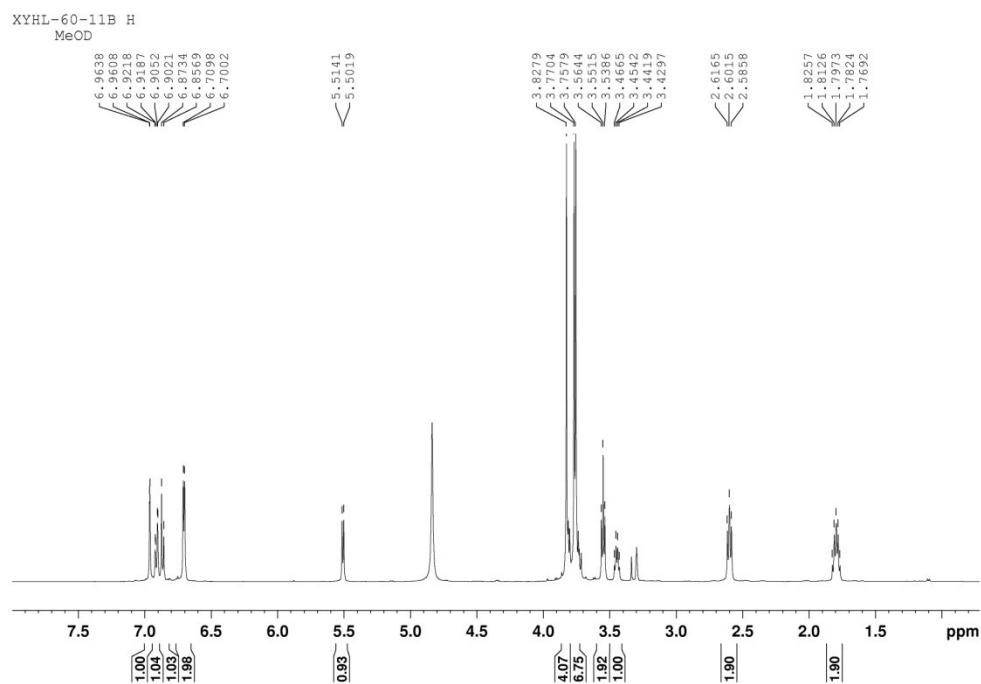


Figure S62. ^{13}C NMR spectrum (125MHz, CD_3OD) of **12**

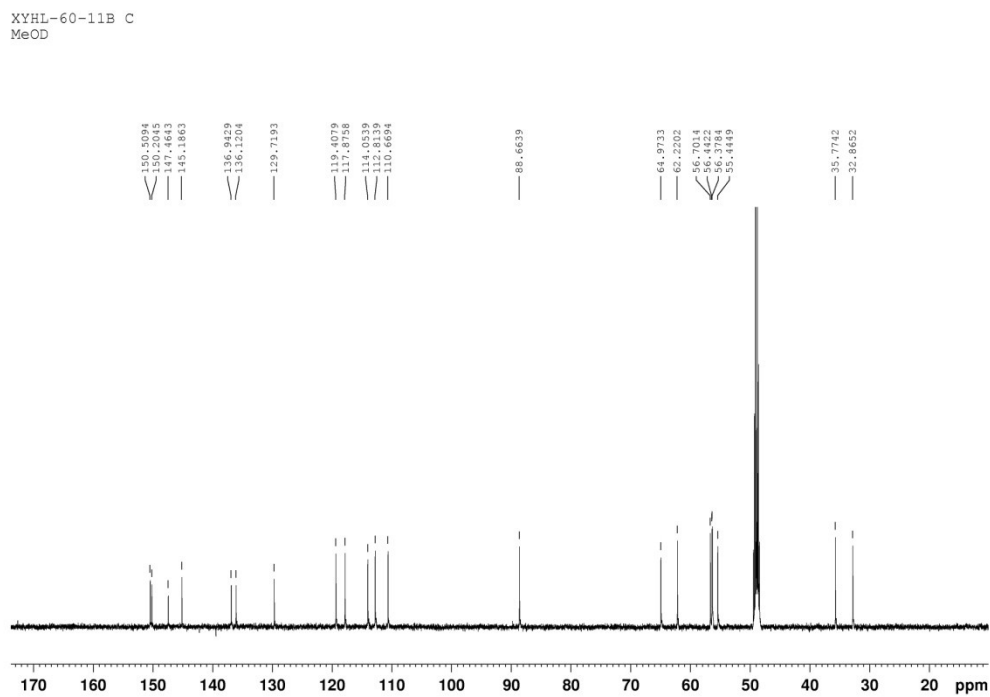


Figure S63. ^1H NMR spectrum (500MHz, CD_3OD) of **13**

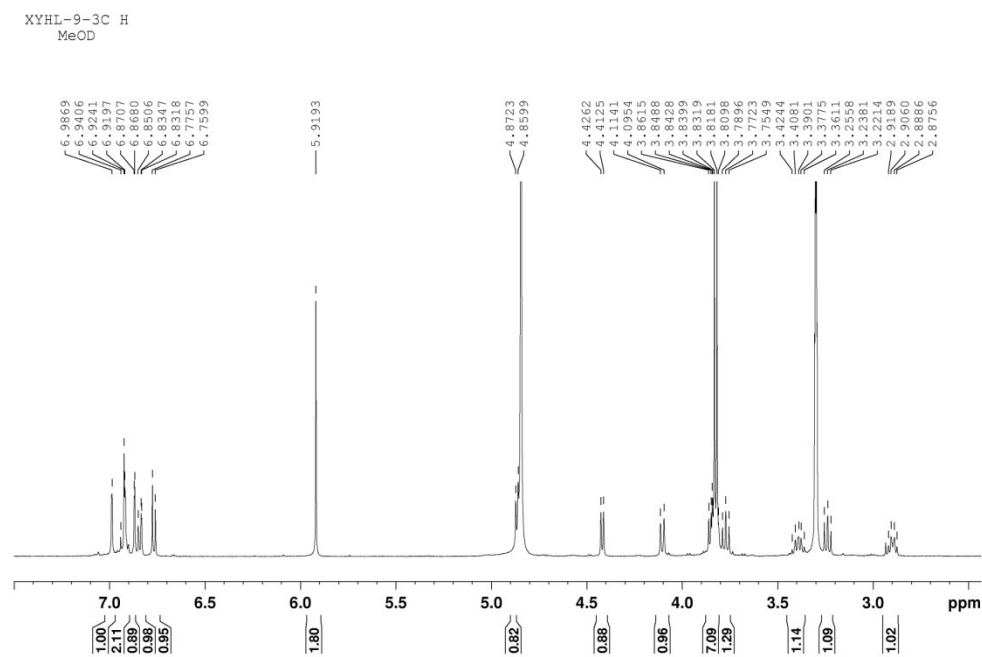


Figure S64. ^{13}C NMR spectrum (125MHz, CD_3OD) of **13**

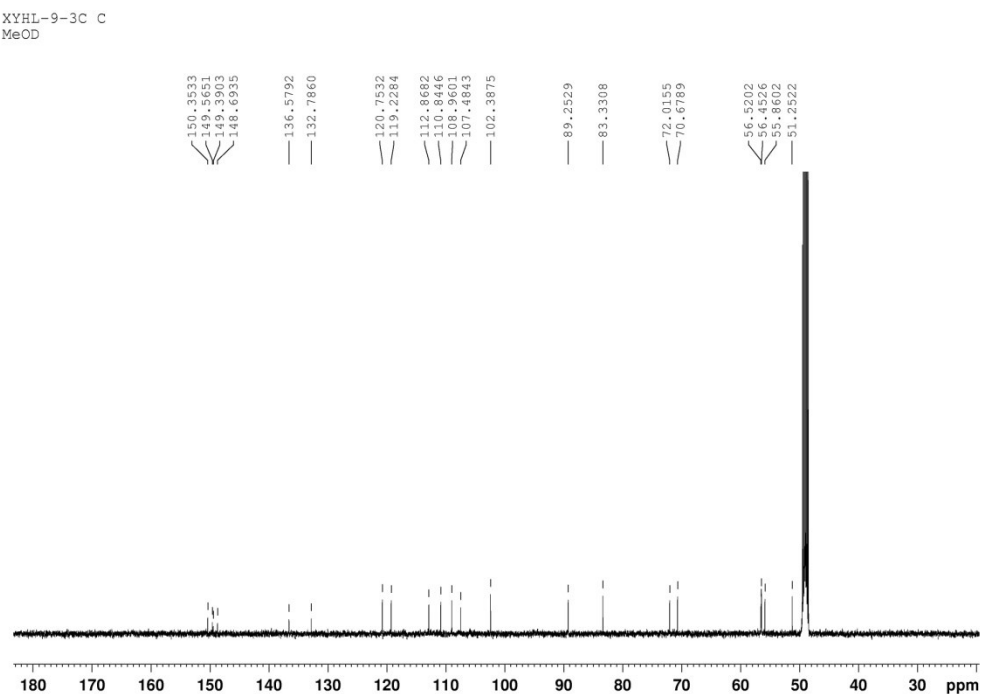


Figure S65. ^1H NMR spectrum (500MHz, CD_3OD) of **14**

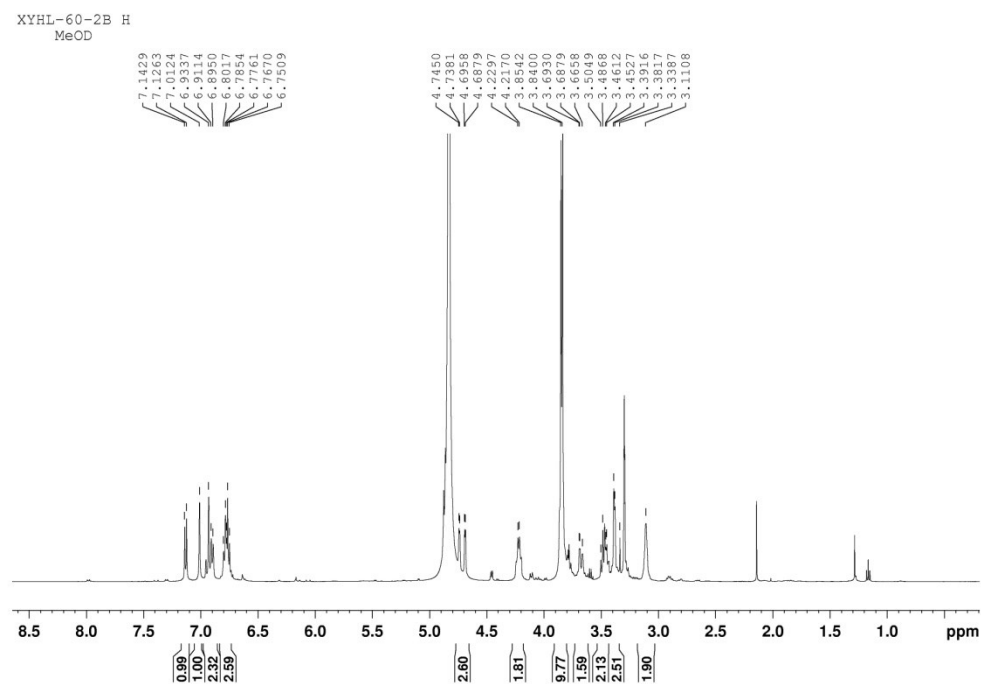


Figure S66. ^{13}C NMR spectrum (125MHz, CD_3OD) of **14**

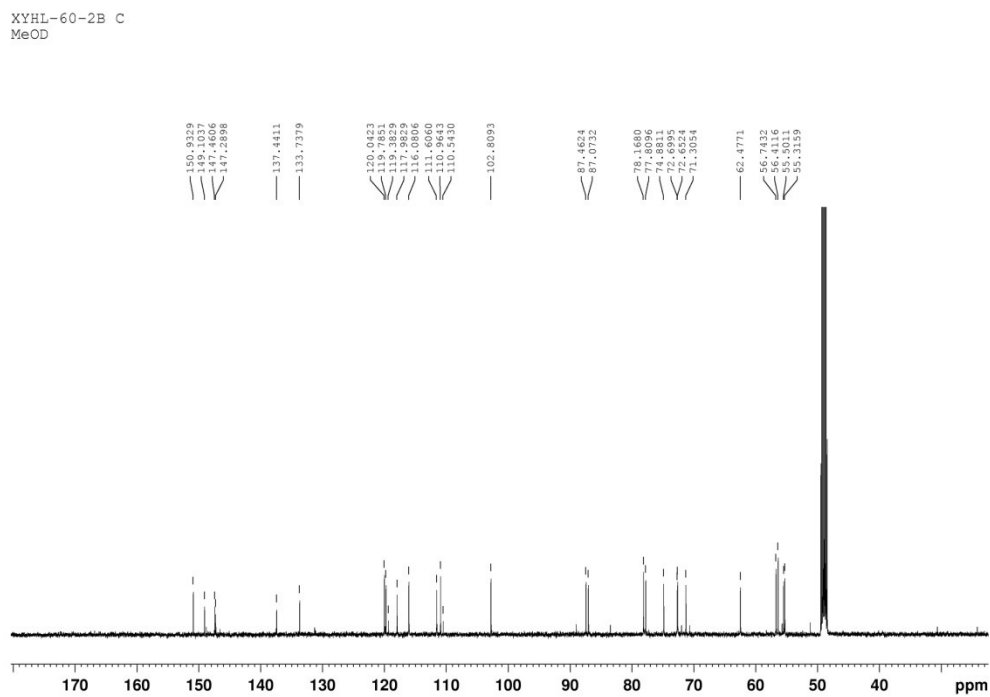


Figure S67. ^1H NMR spectrum (500MHz, CD_3OD) of **15**

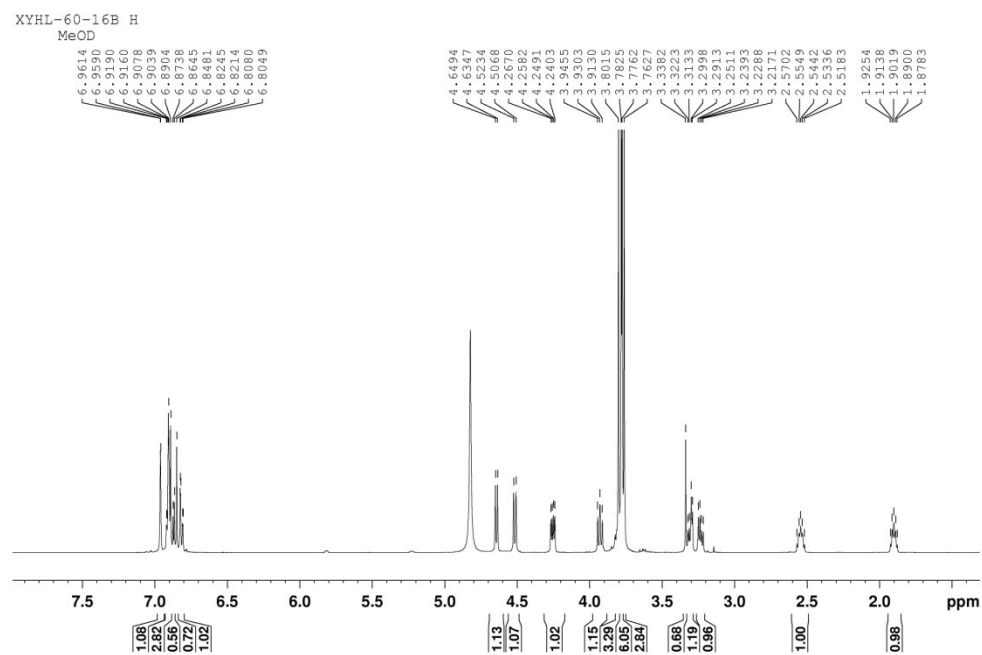


Figure S68. ^{13}C NMR spectrum (125MHz, CD_3OD) of **15**

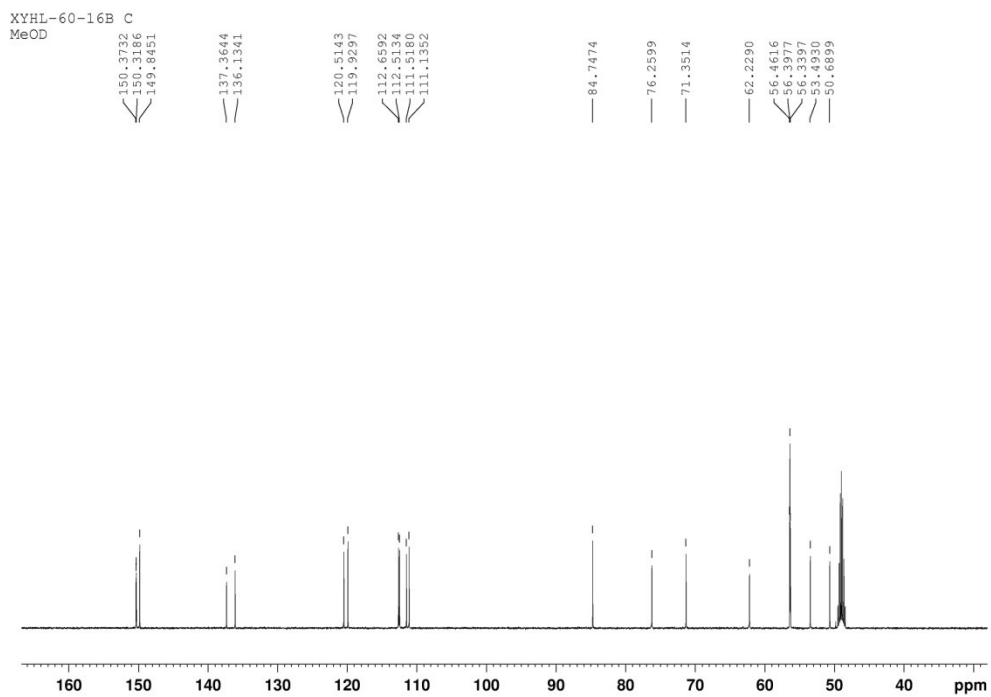


Figure S69. ^1H NMR spectrum (500MHz, CD_3OD) of **16**

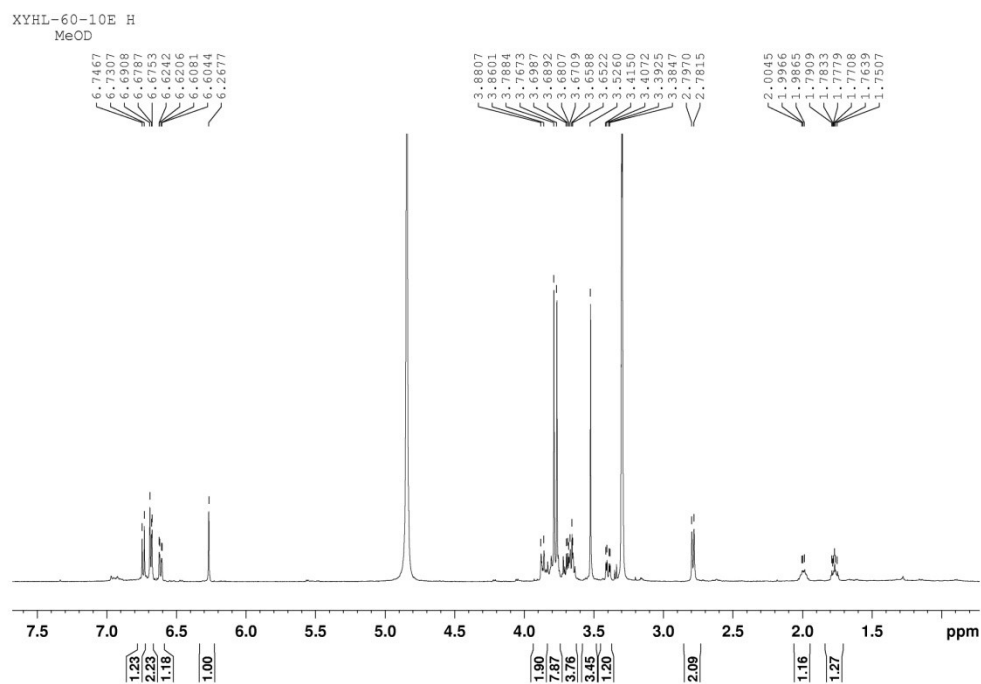


Figure S70. ^{13}C NMR spectrum (125MHz, CD_3OD) of **16**

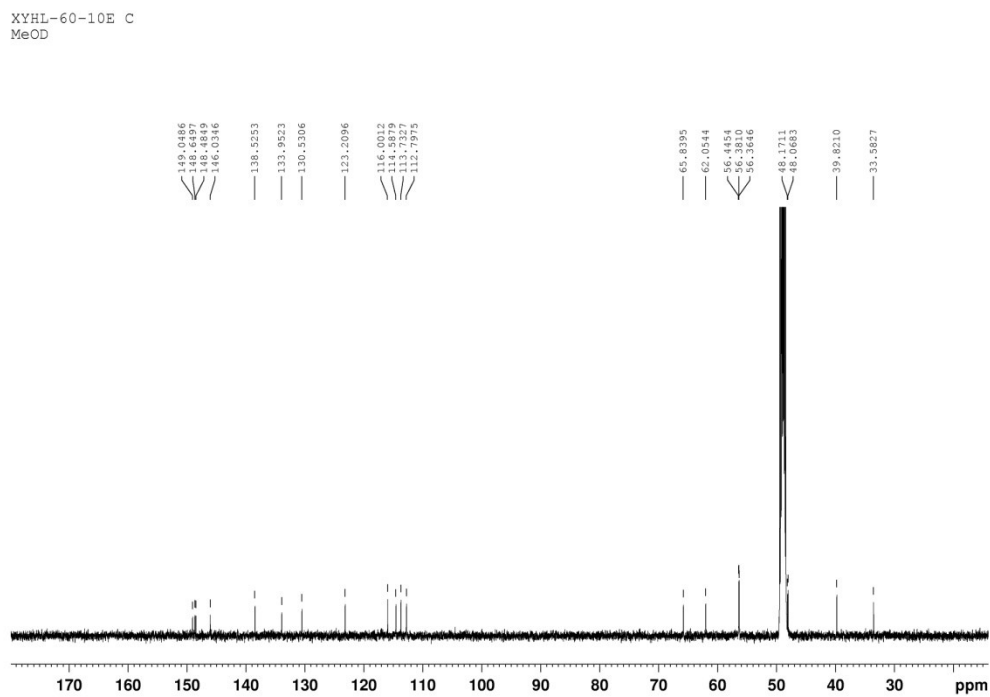


Figure S71 Chiral-HPLC profiles from acid hydrolysis of **2** (red), **4** (blue), and **5** (green) compared to D-glucose (black) and L-glucose (pink)

