

Supplementary Information

Flavonoid Glycosides from the Aerial Parts of *Polygonatum odoratum* (Mill.) Druce Growing in Mongolia

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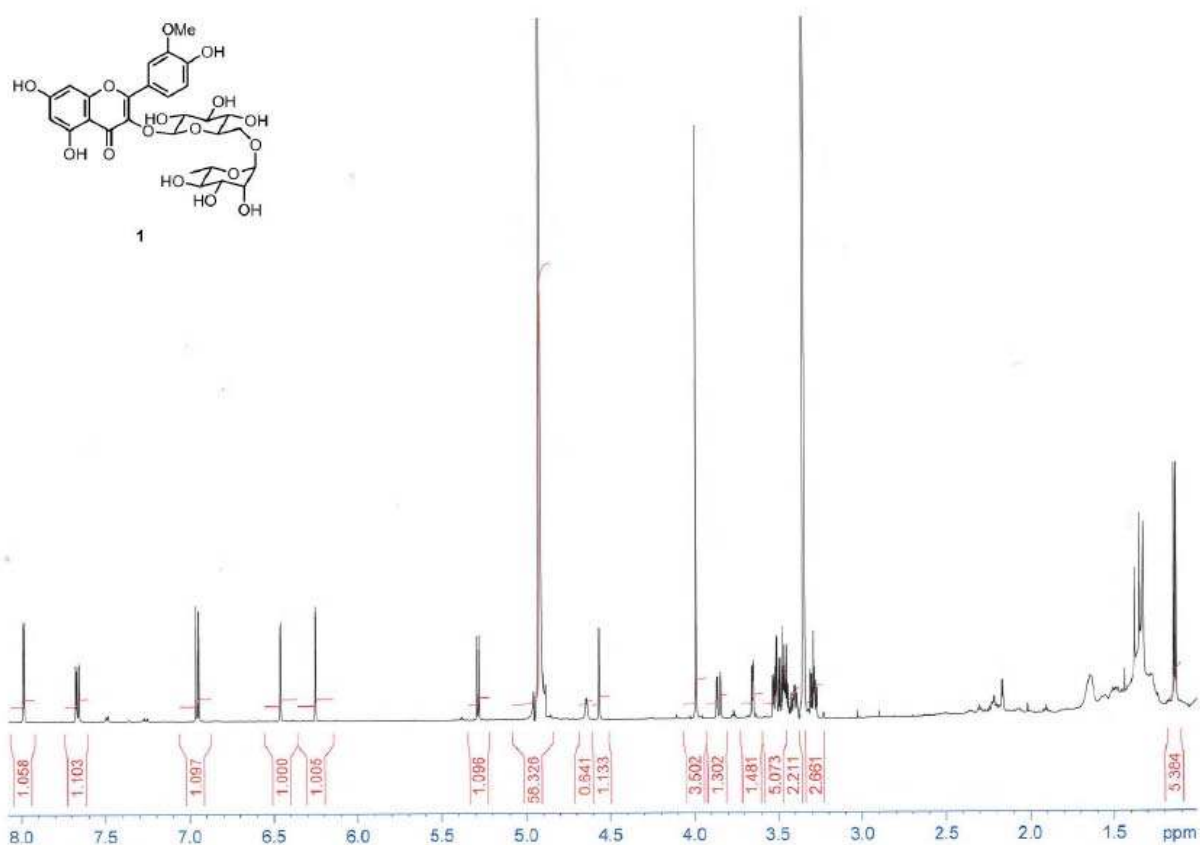
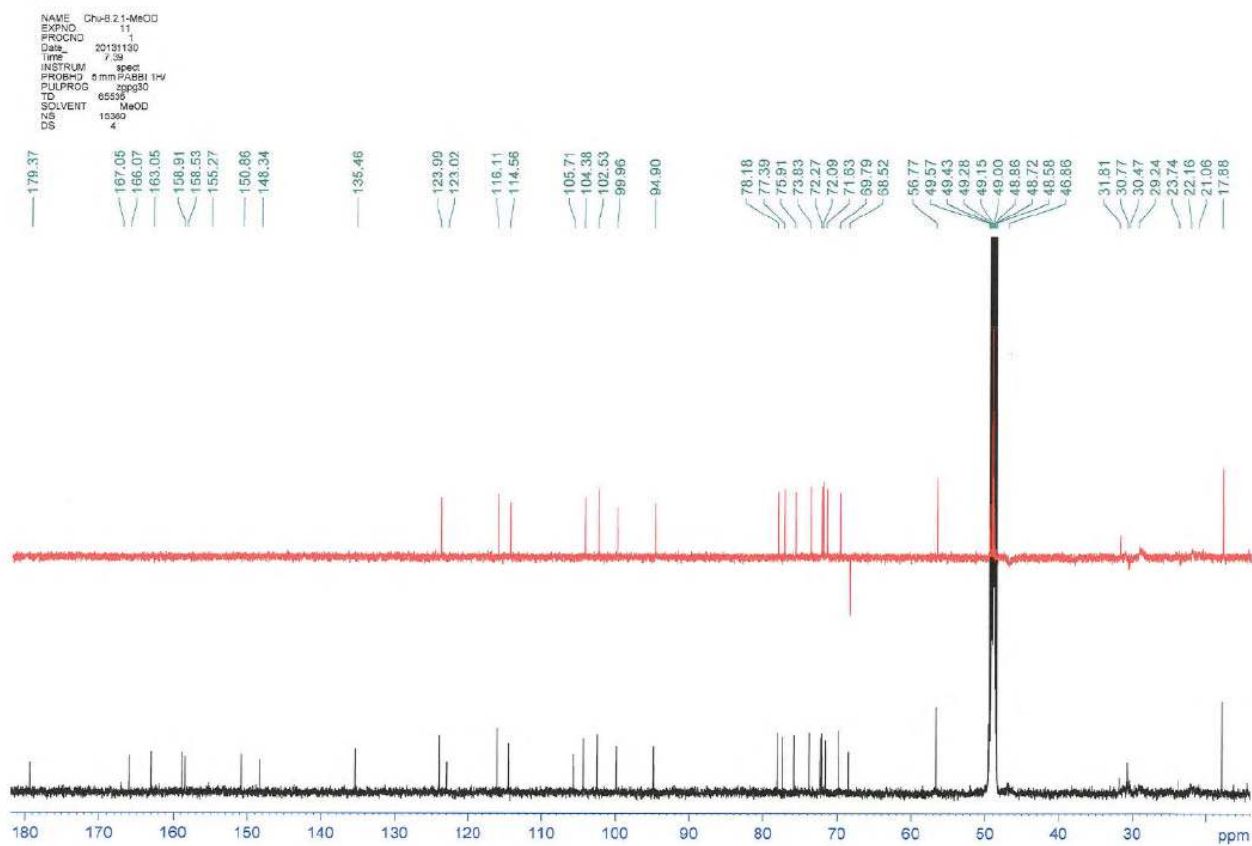


Figure SI. ¹H NMR Spectrum of Compound 1 in Methanol-*d*₄ (600 MHz)

Figure S2. ^{13}C NMR Spectrum of Compound 1 in Methanol- d_4 (150 MHz)

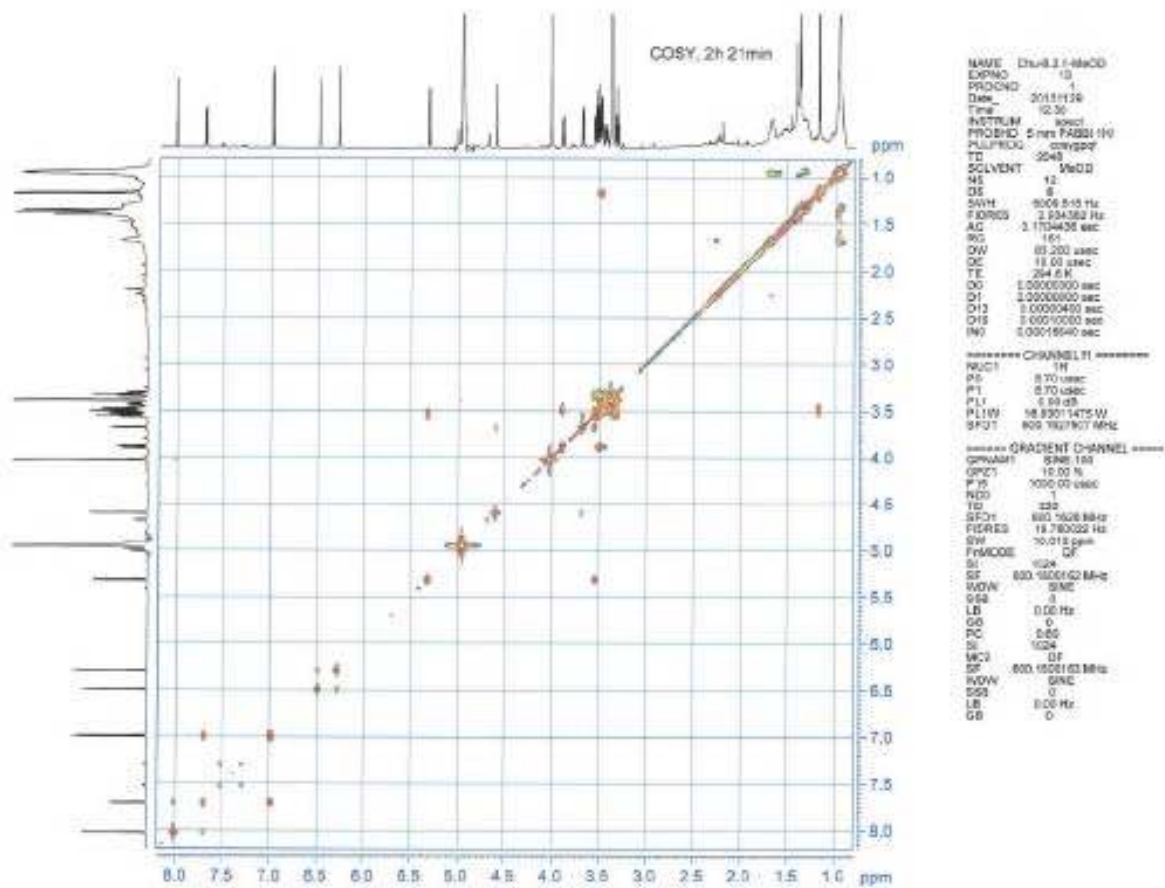
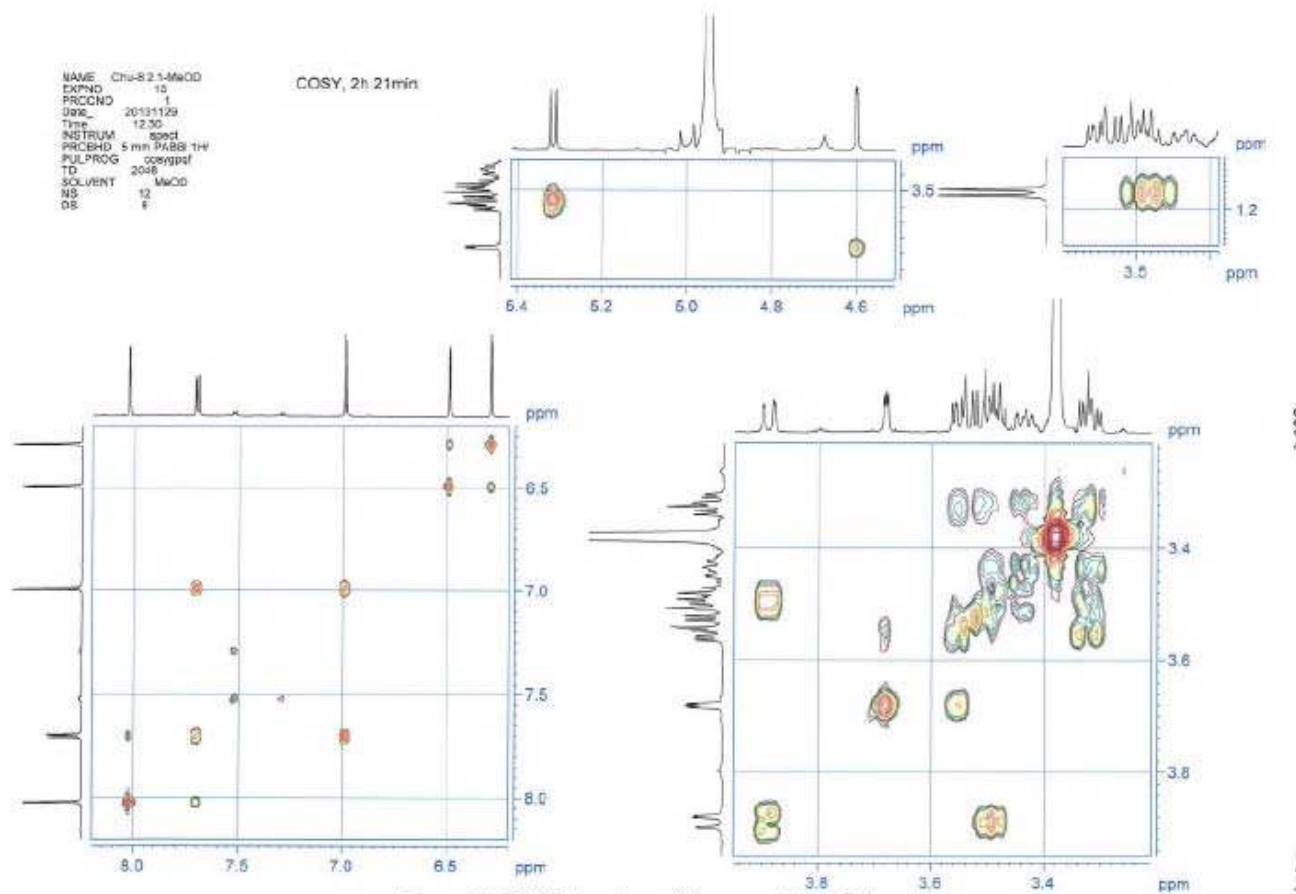


Figure S3. COSY Spectrum of Compound I in Methanol-*d*₄

Figure S4. COSY Spectrum of Compound 1 in Methanol- d_4

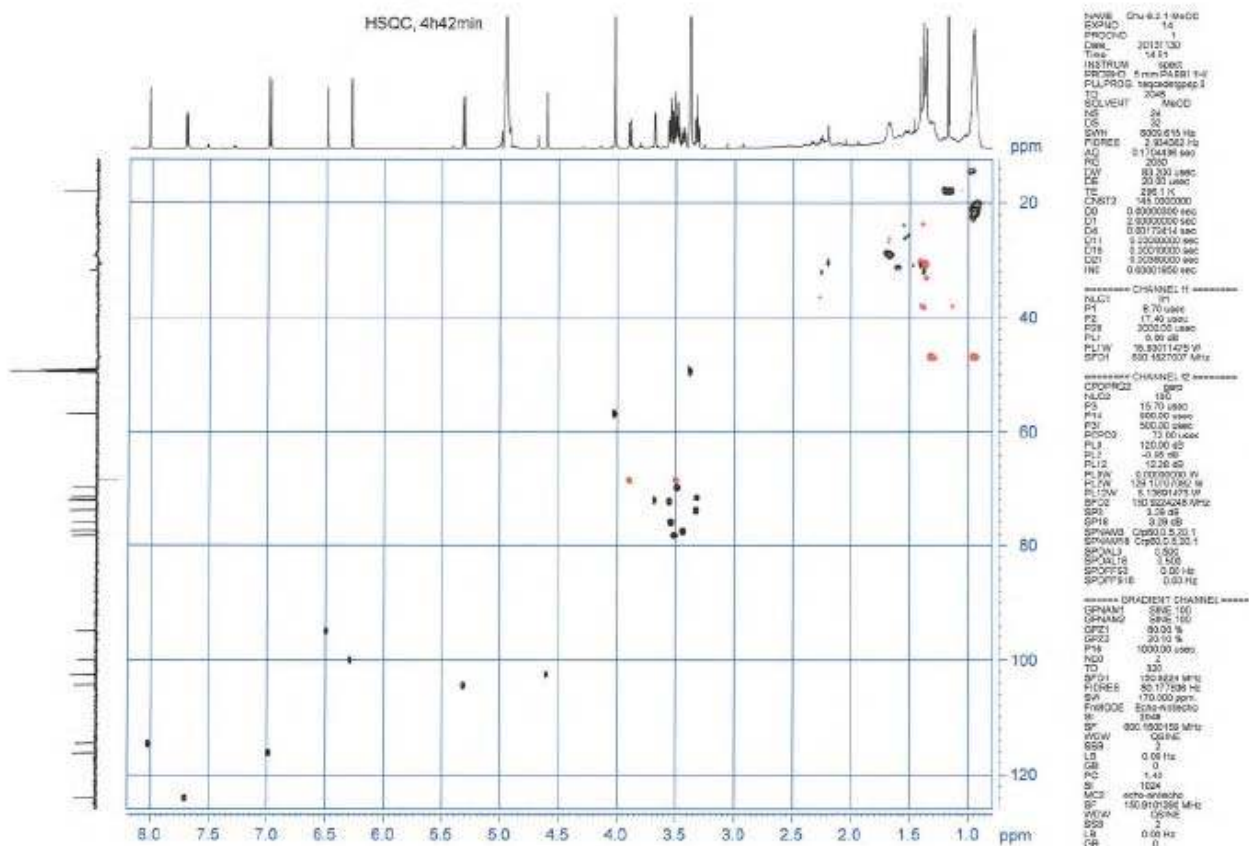
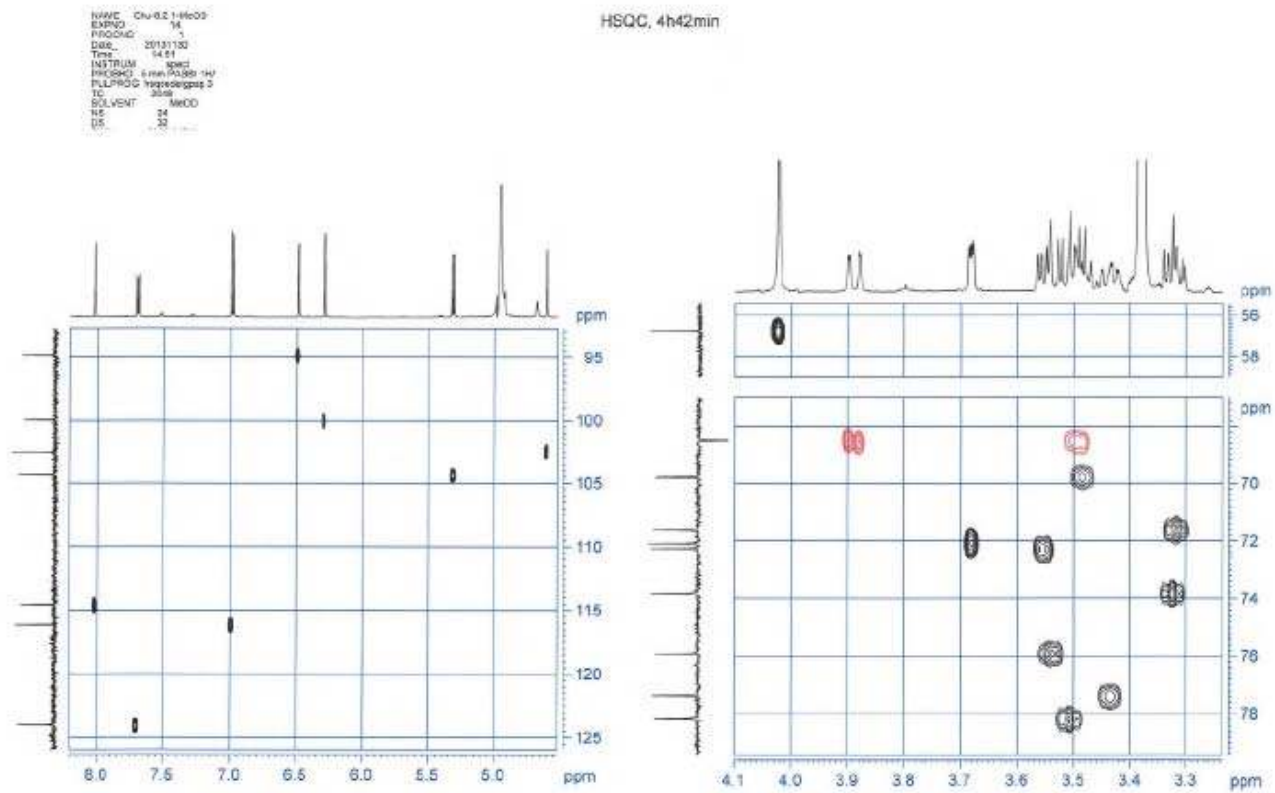


Figure S5. HSQC Spectrum of Compound 1 in Methanol-d₄

Figure S6. HSQC Spectrum of Compound 1 in Methanol- d_4

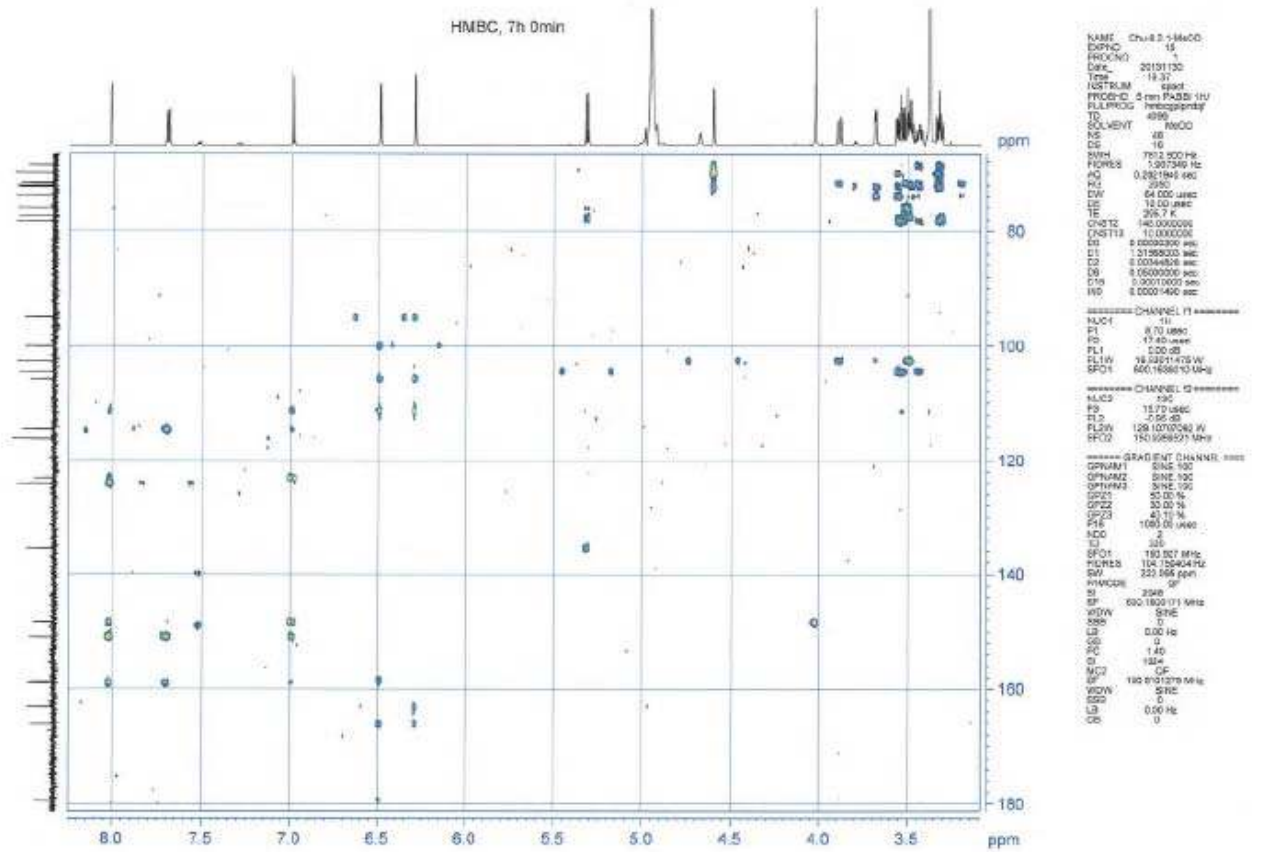


Figure S7. HMBC Spectrum of Compound 1 in Methanol-d₄

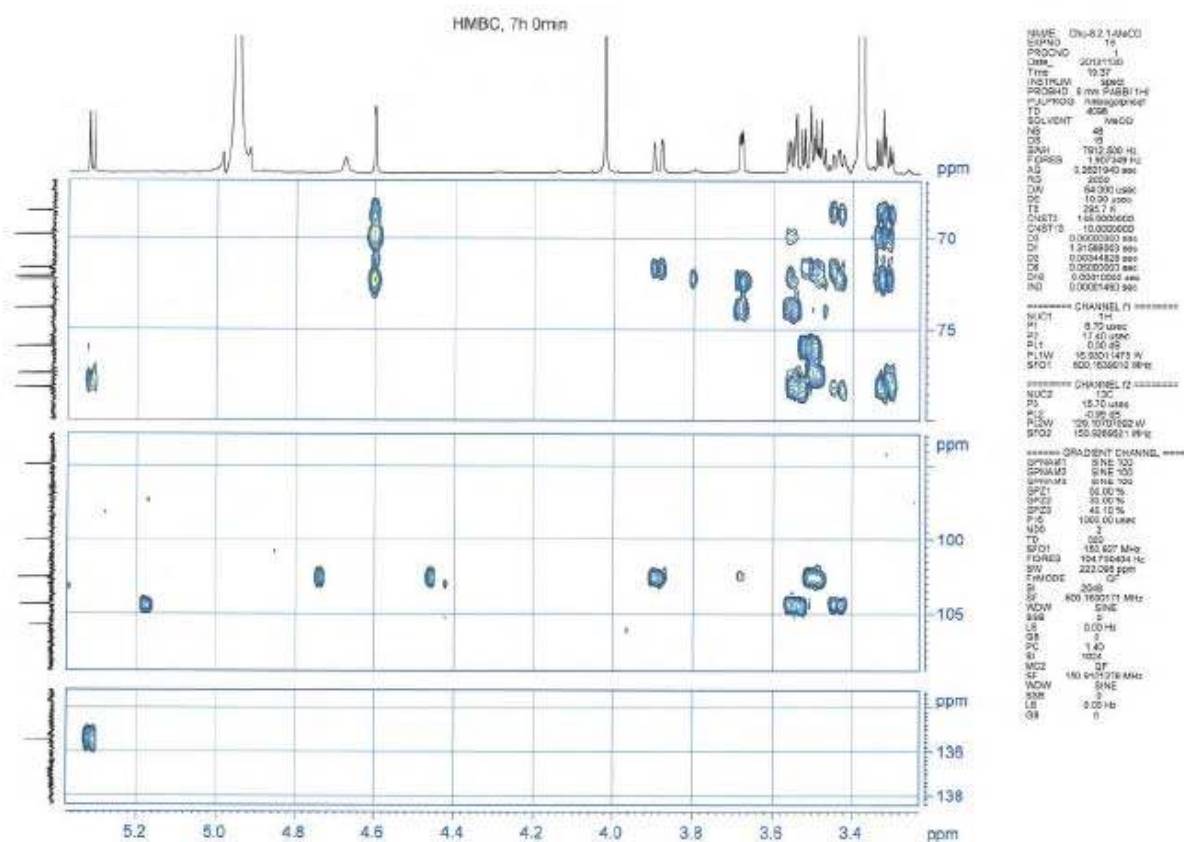


Figure S8. HMBC Spectrum of Compound 1 in Methanol-d₄

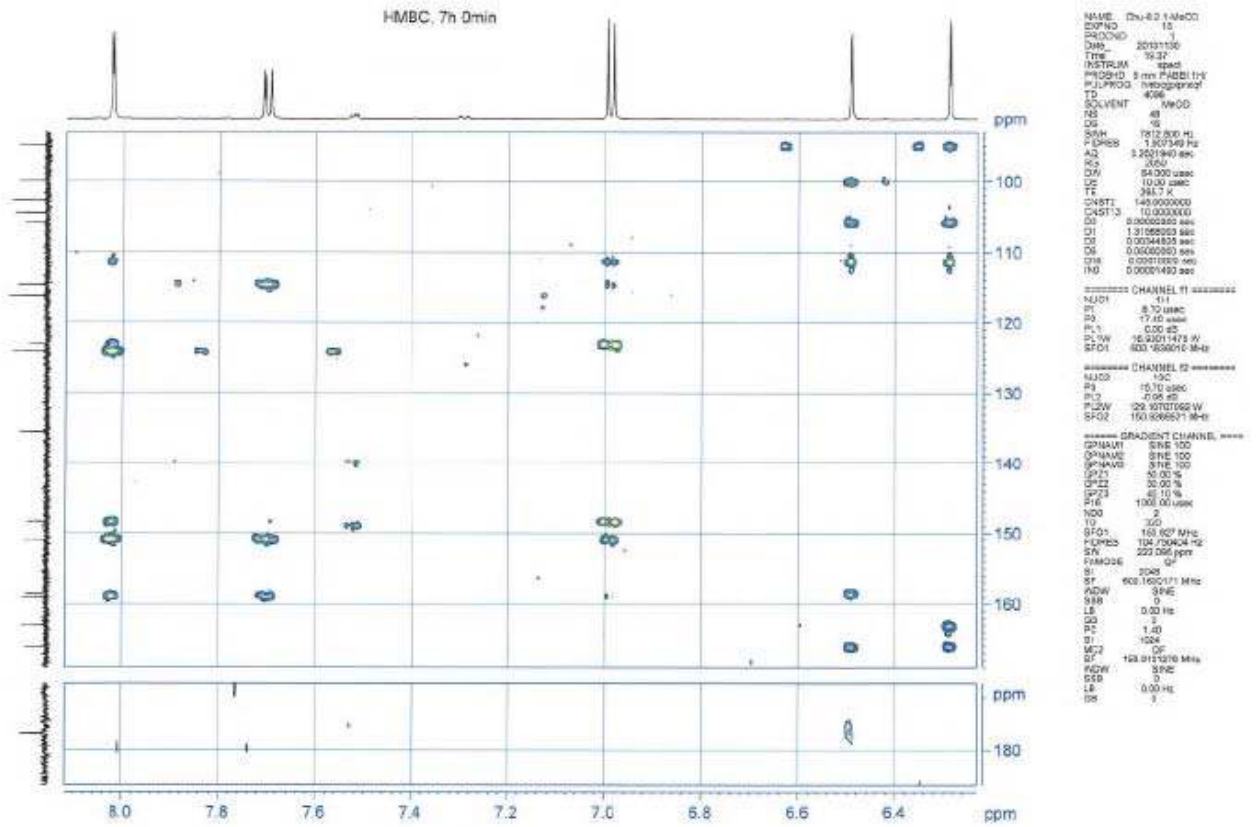


Figure S9. HMBC Spectrum of Compound 1 in Methanol-*d*₄

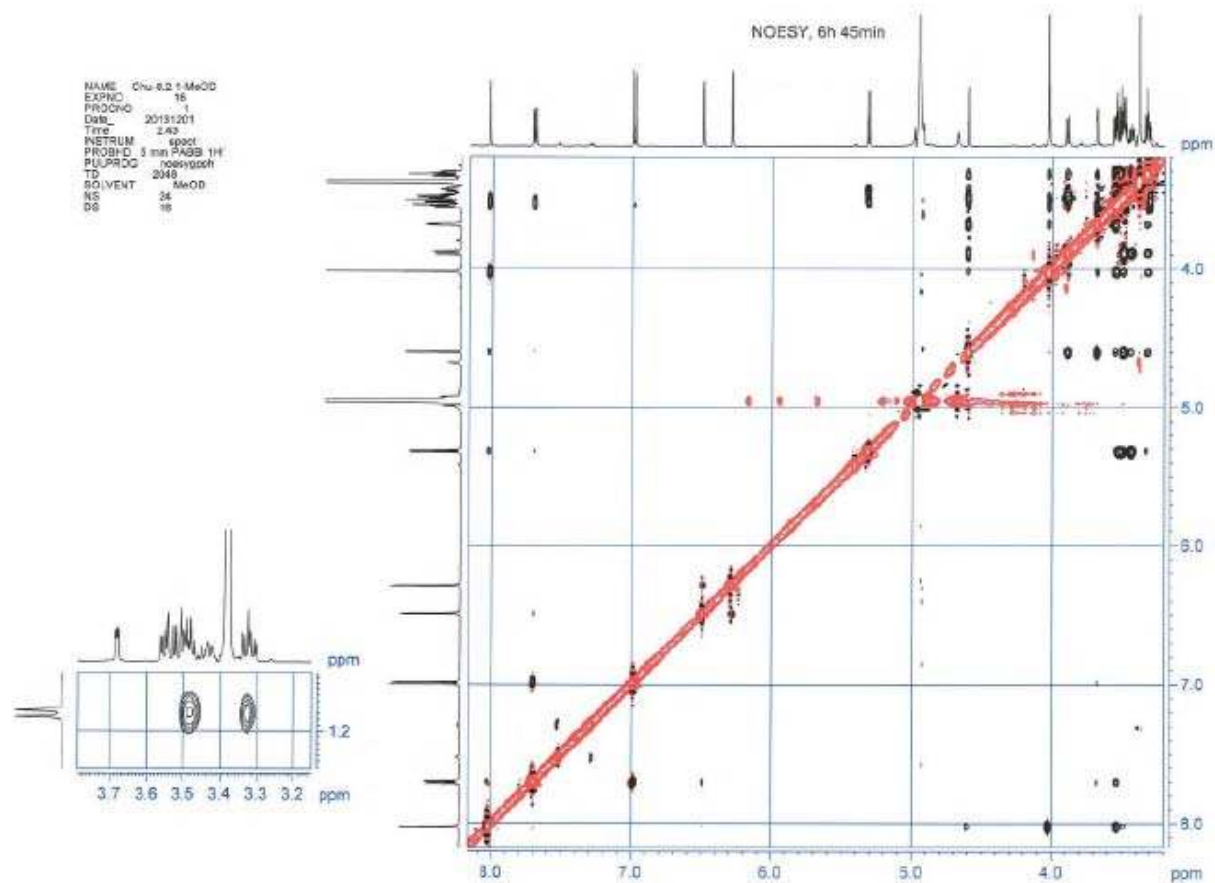
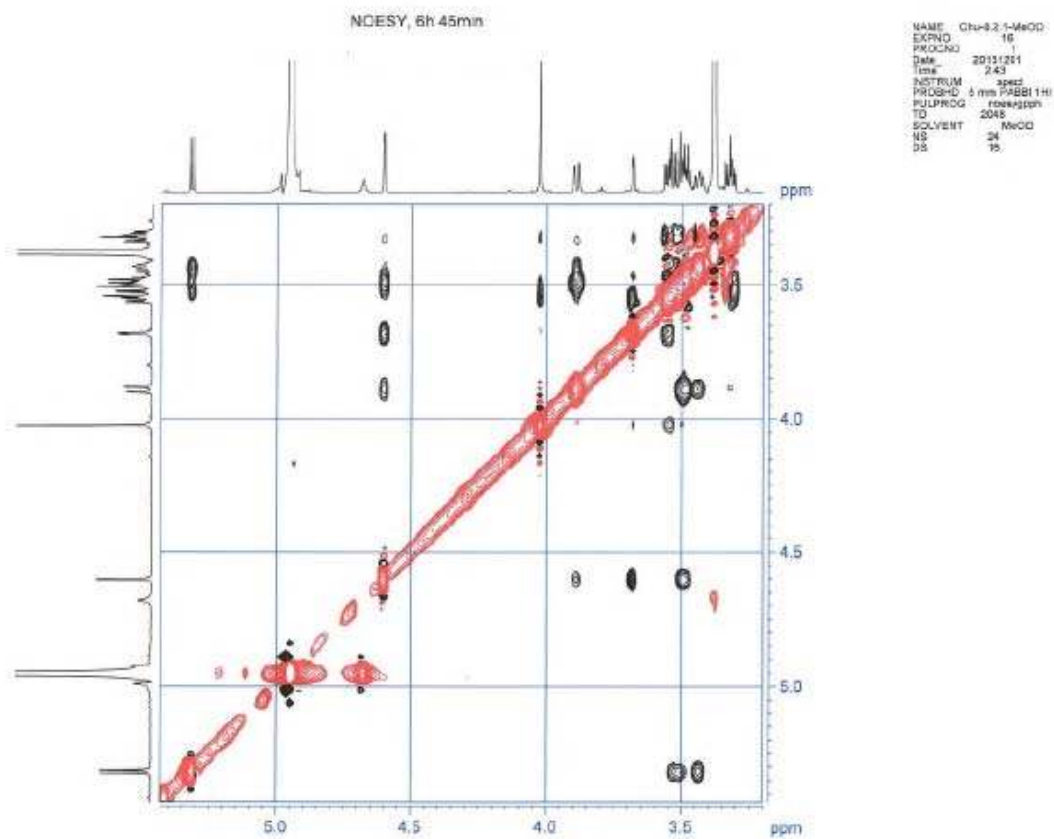
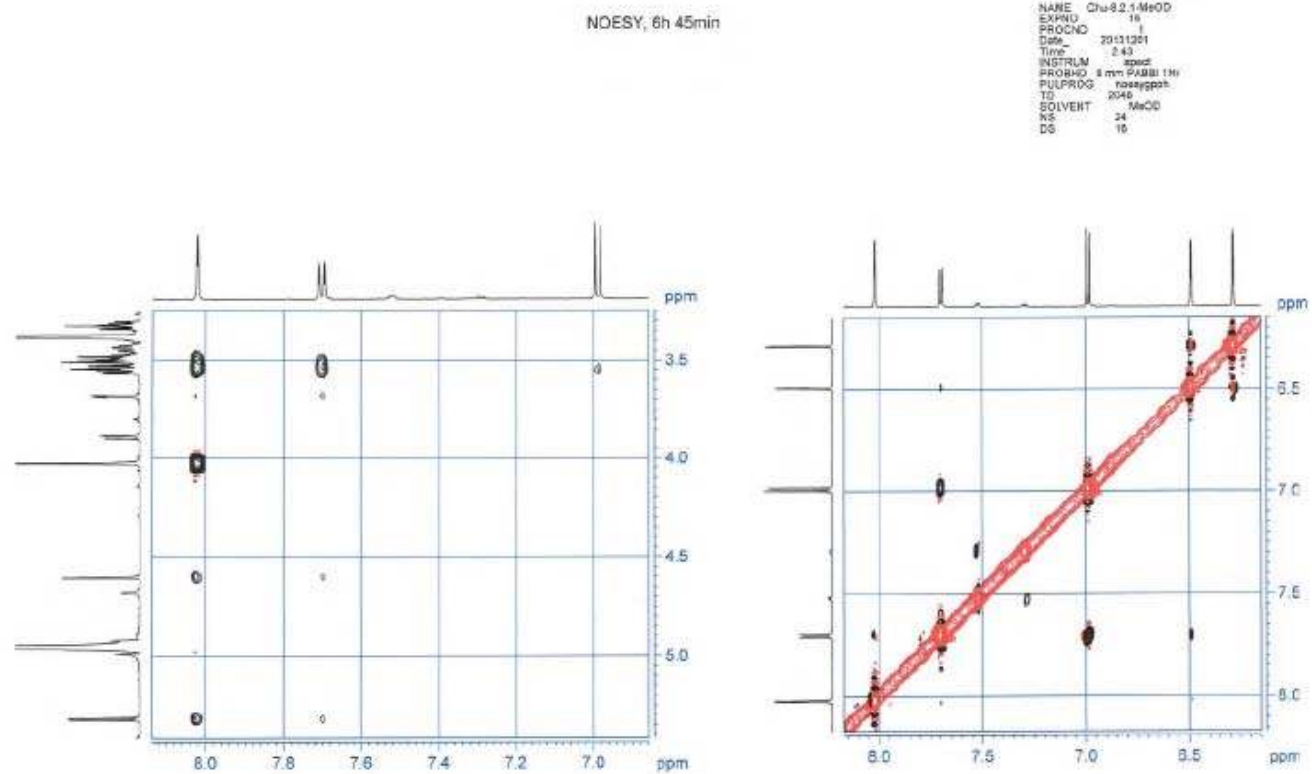
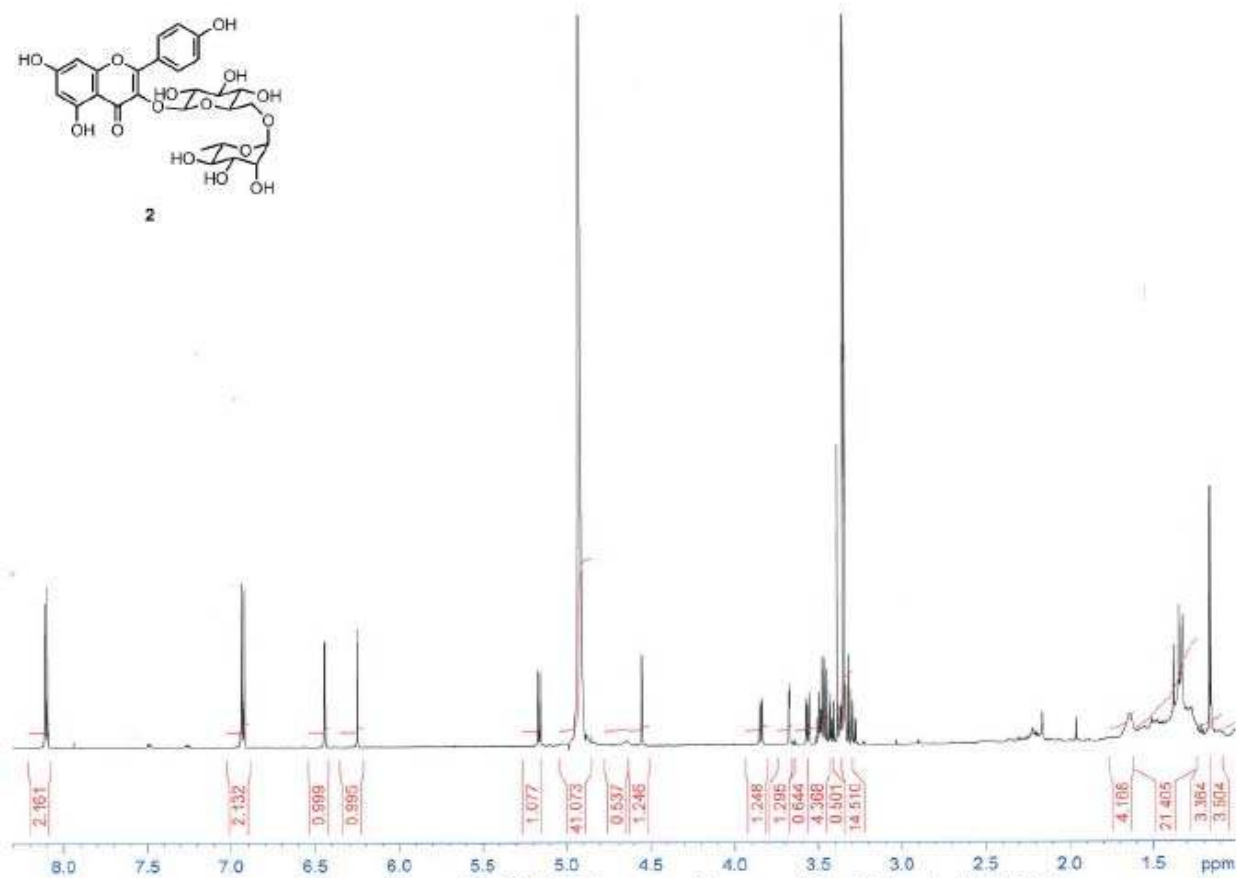
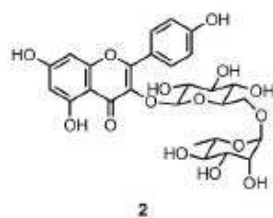
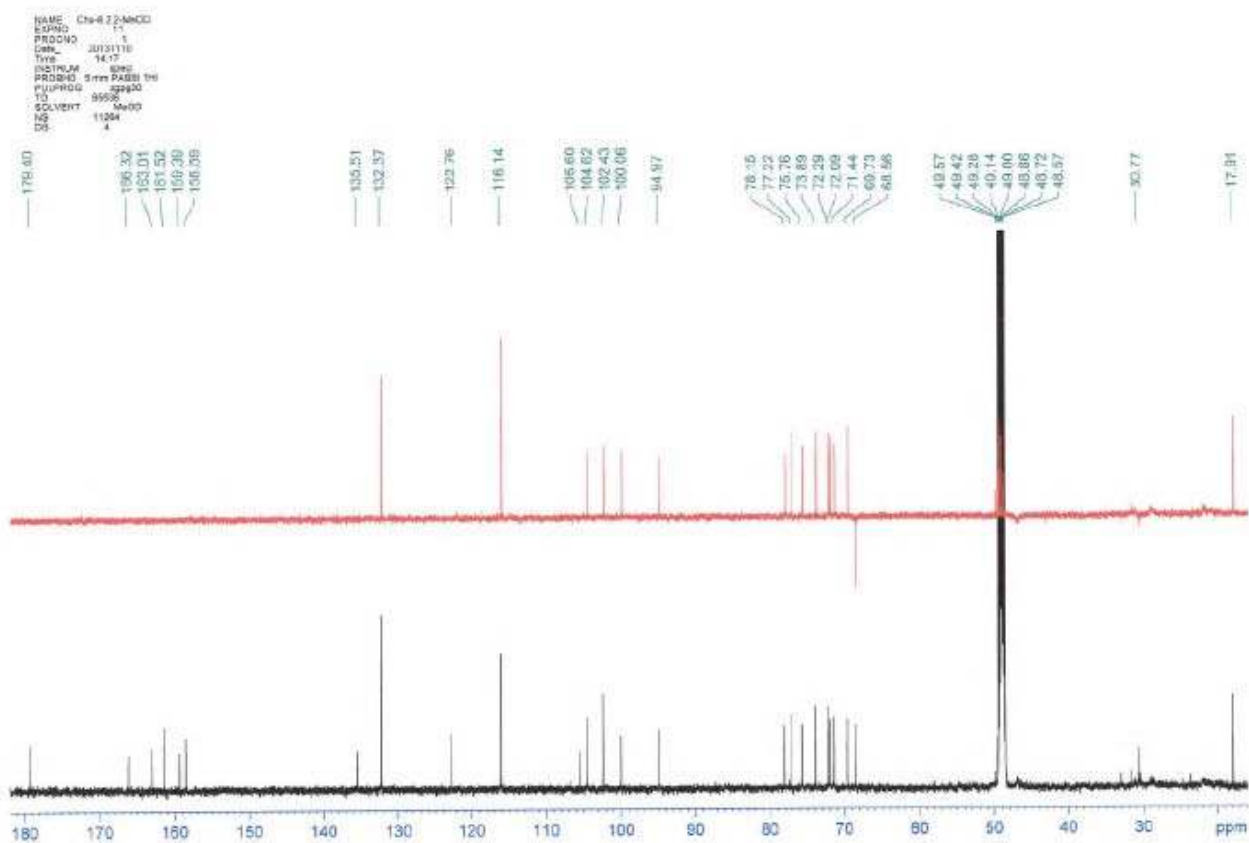


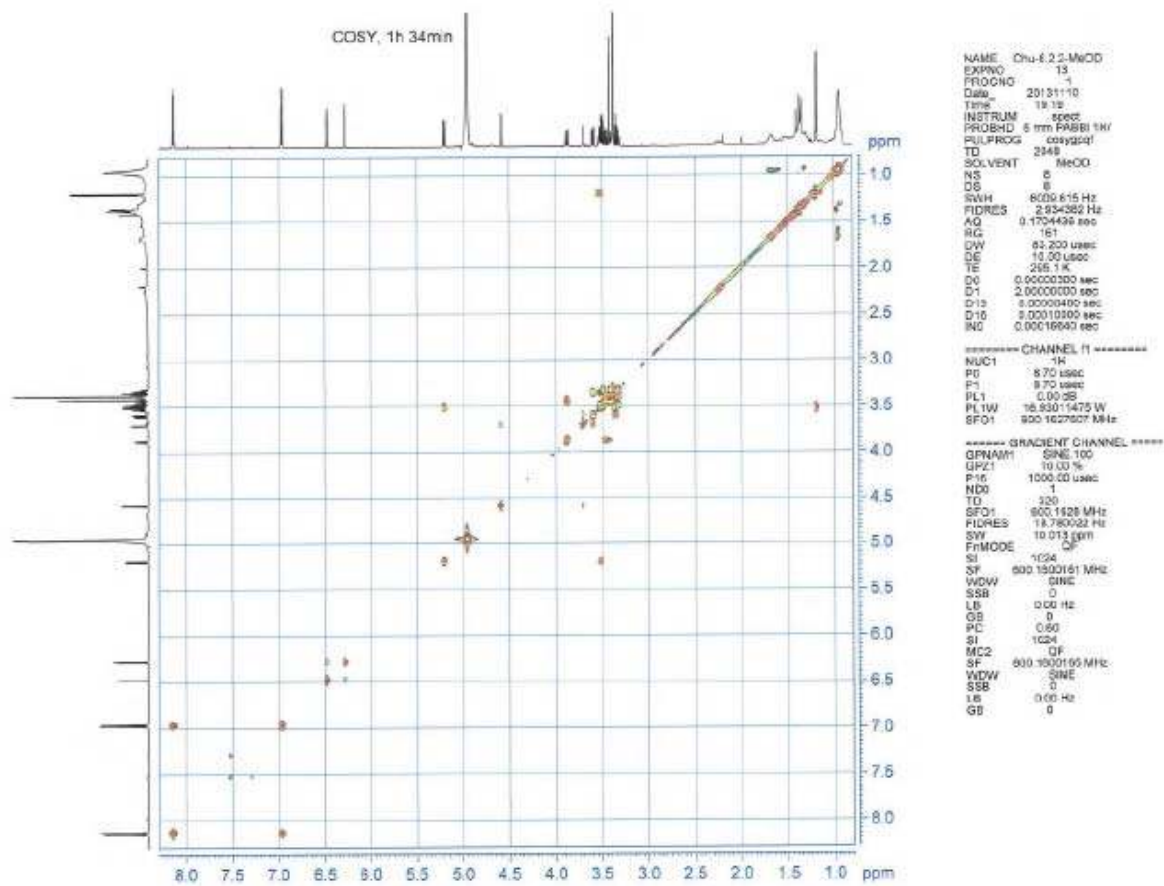
Figure S10. NOESY Spectrum of Compound **1** in Methanol- d_4

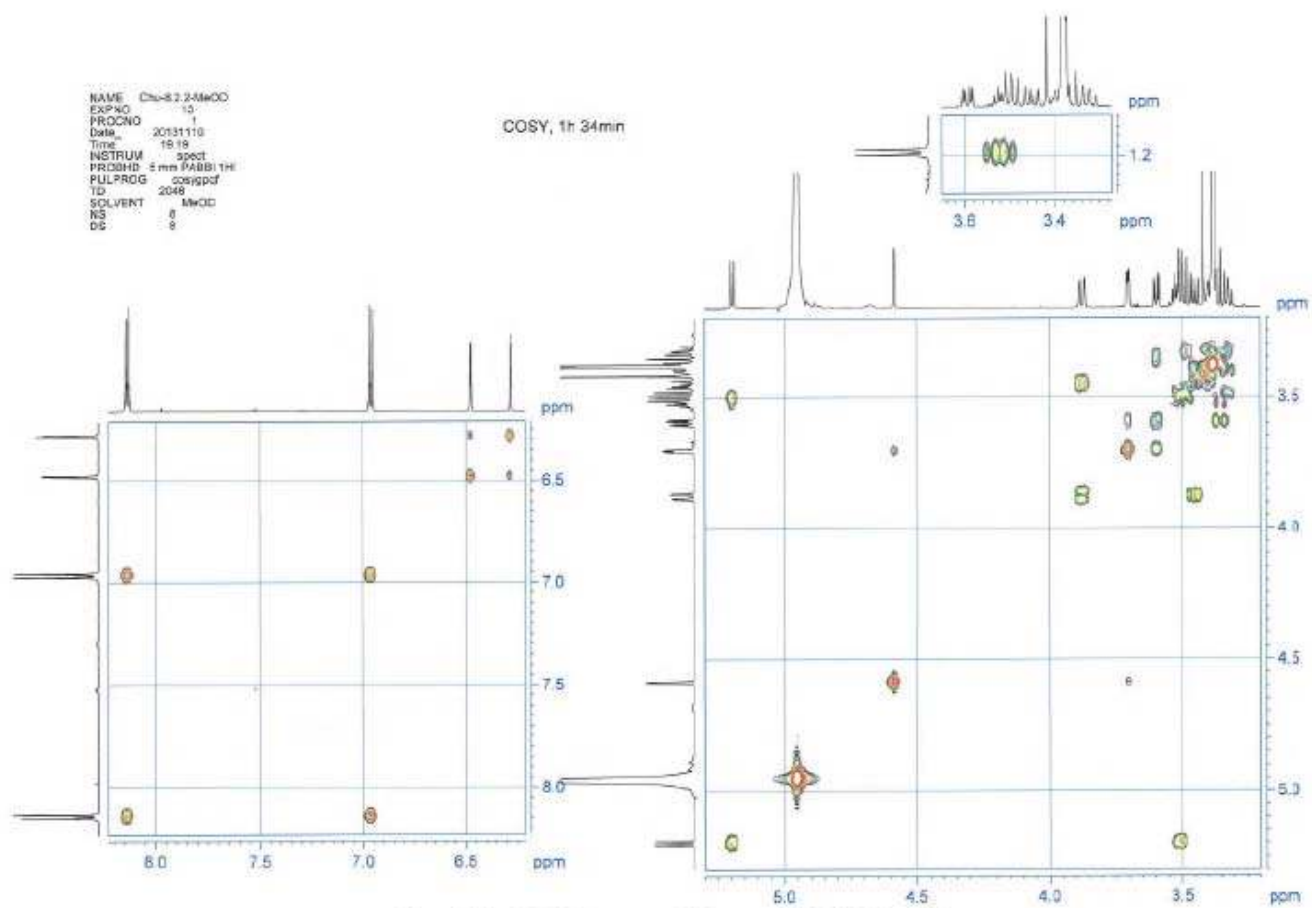
Figure S11. NOESY Spectrum of Compound **1** in Methanol- d_4

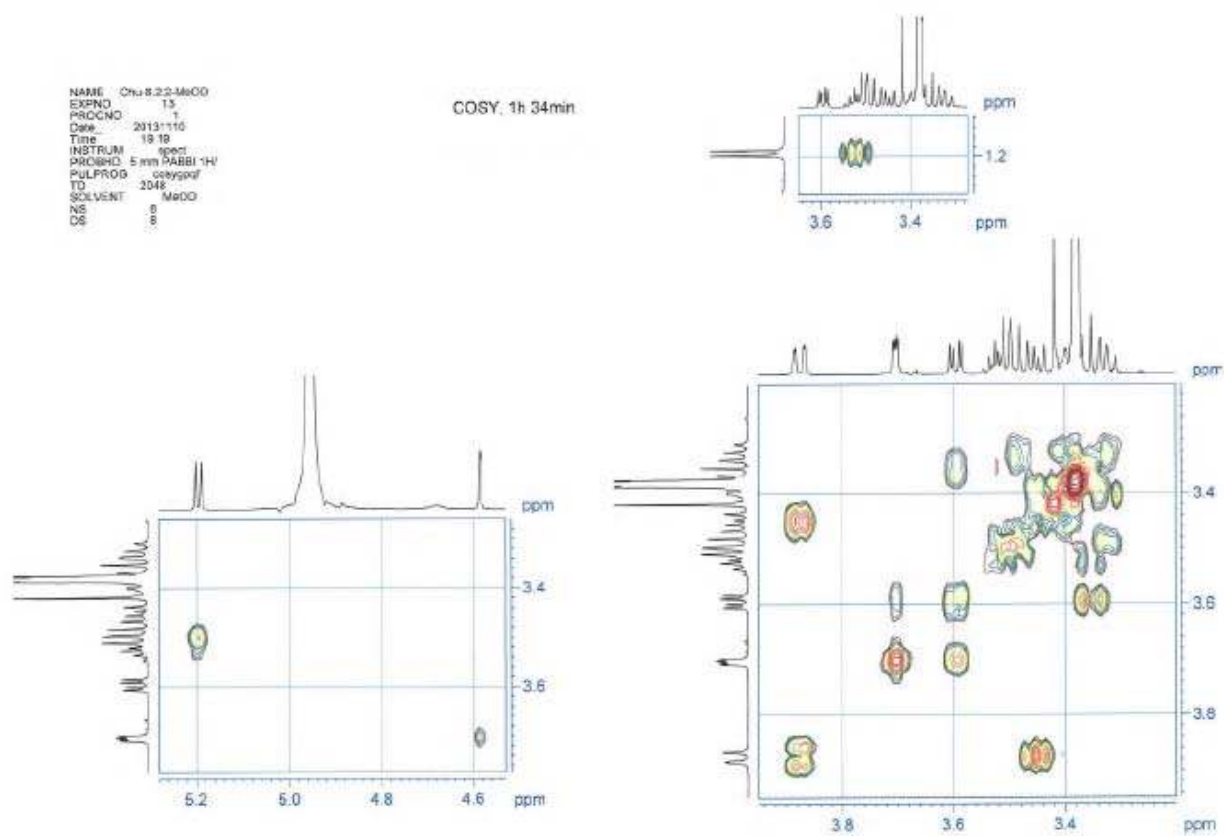
Figure S12. NOESY Spectrum of Compound **1** in Methanol- d_4

Figure S13. ¹H NMR Spectrum of Compound **2** in Methanol-*d*₄ (600 MHz)

Figure S14. ^{13}C NMR Spectrum of Compound 2 in Methanol- d_4 (150 MHz)

Figure S15. COSY Spectrum of Compound 2 in Methanol- d_4

Figure S16. COSY Spectrum of Compound 2 in Methanol- d_4

Figure S17. COSY Spectrum of Compound 2 in Methanol- d_4

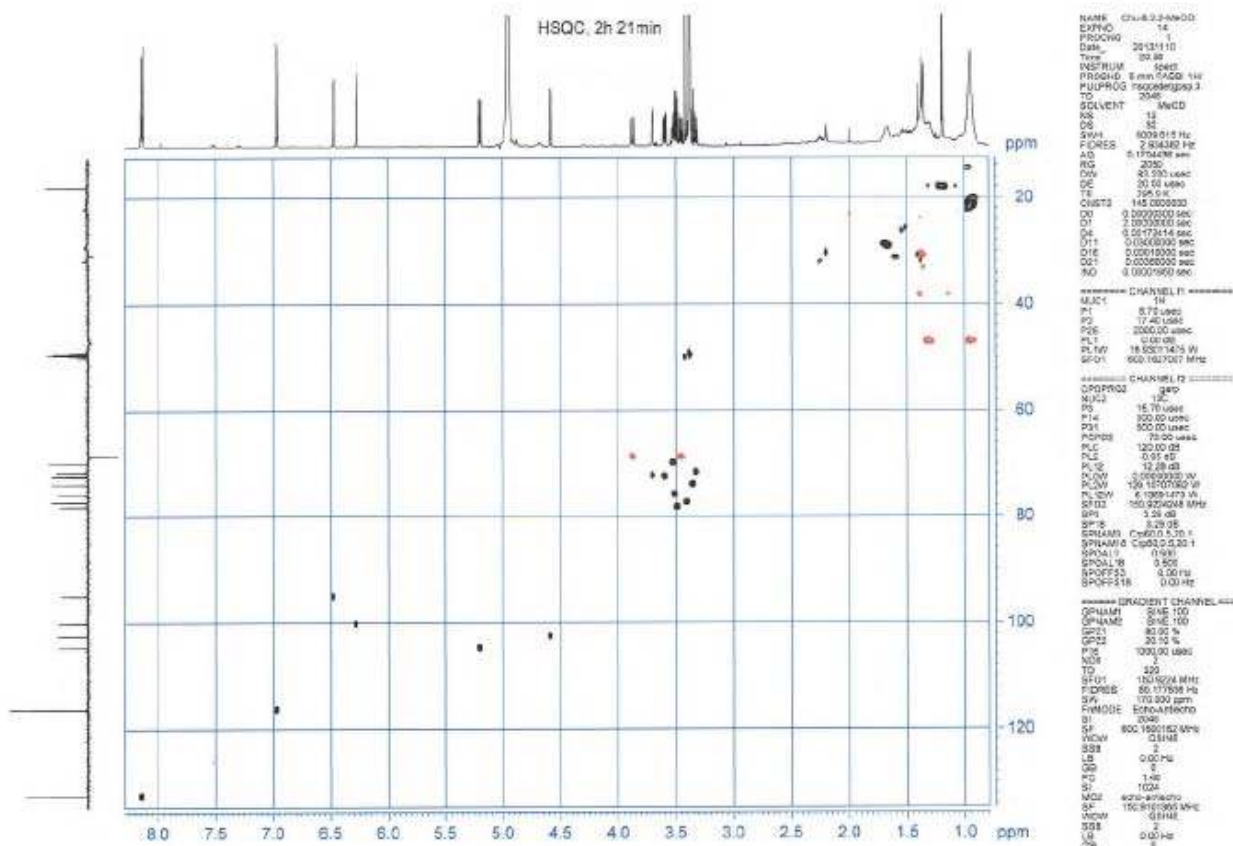
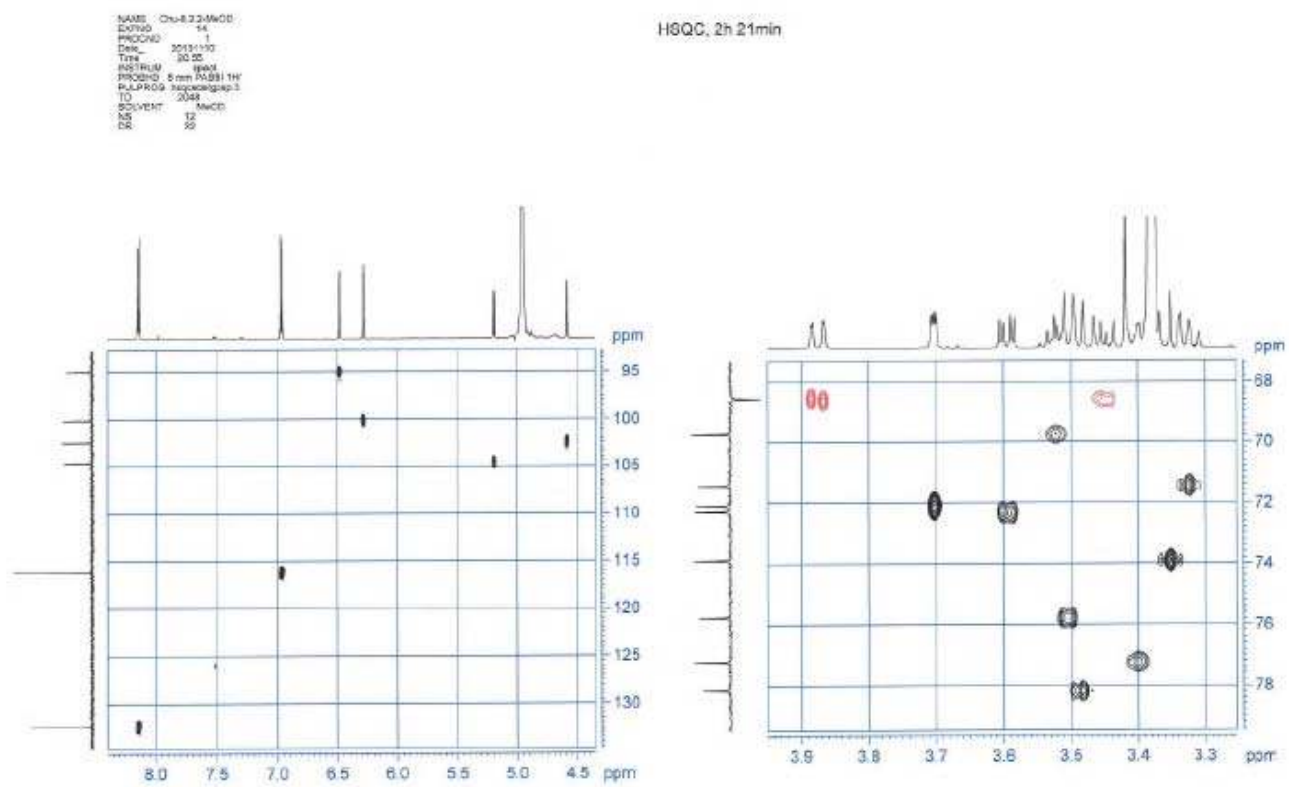
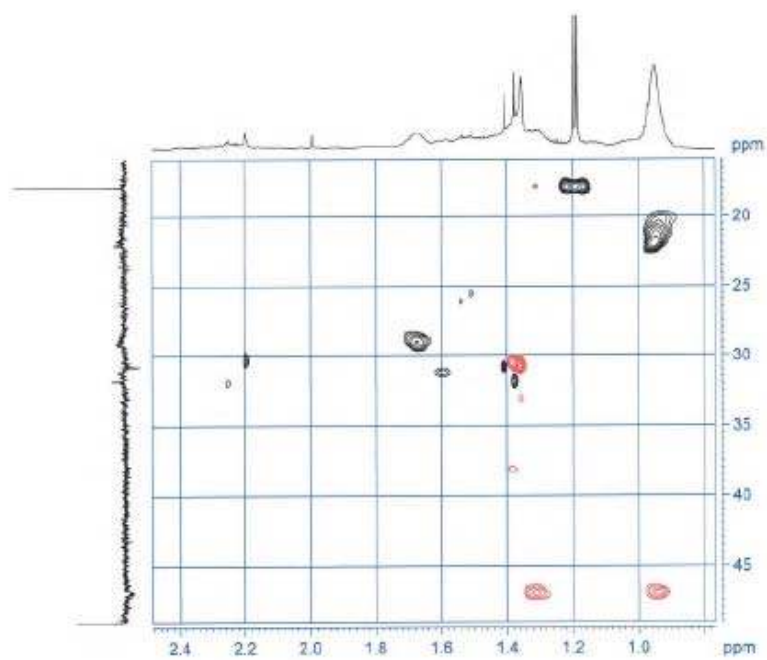


Figure S18. HSQC Spectrum of Compound 2 in Methanol-*d*₄

Figure S19. HSQC Spectrum of Compound **2** in Methanol- d_4

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PROCNO 1
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TIME 01.56
INSTRUM spect
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PULPROG zgpg30
TD 65536
SOLVENT MeOD
NS 1280
DS 4

HSQC, 2h 21min

Figure S20. HSQC Spectrum of Compound 2 in Methanol- d_4

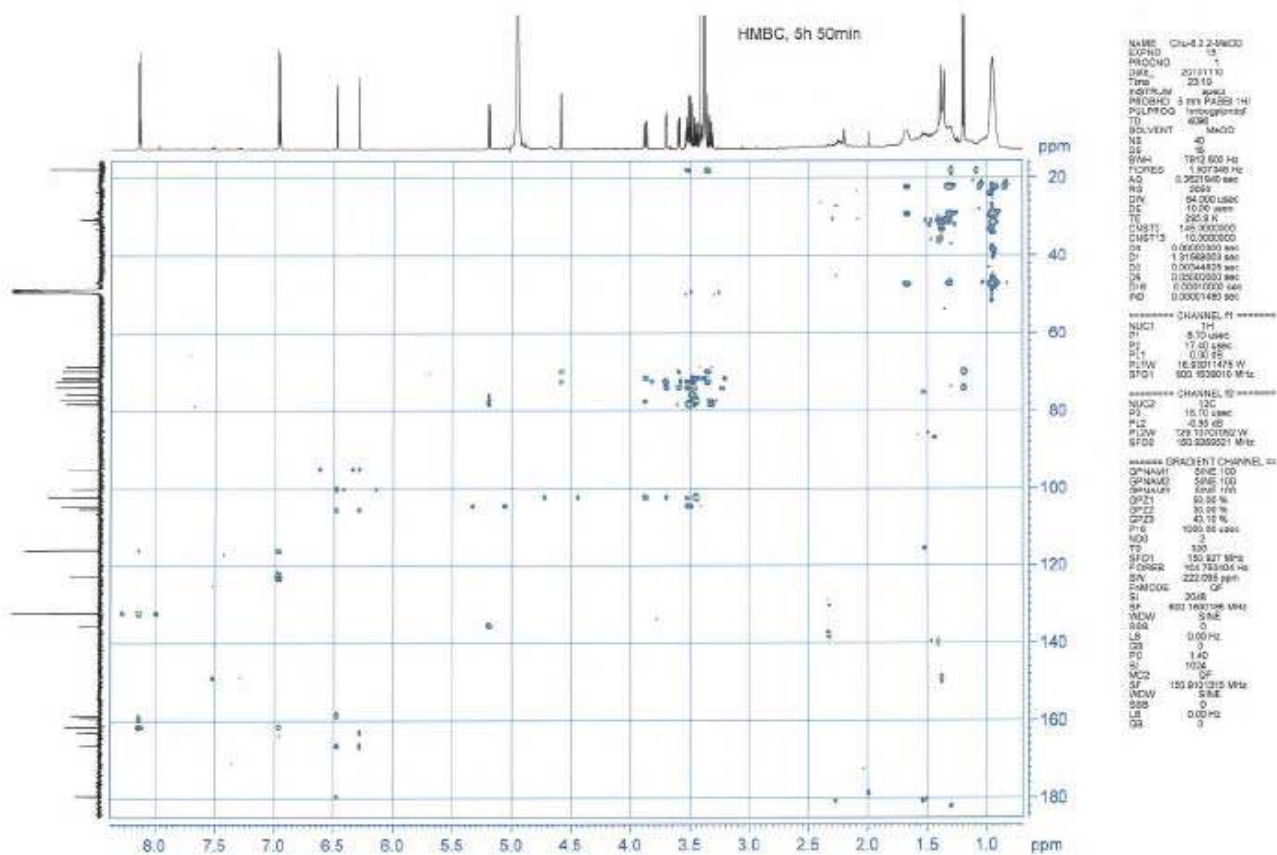
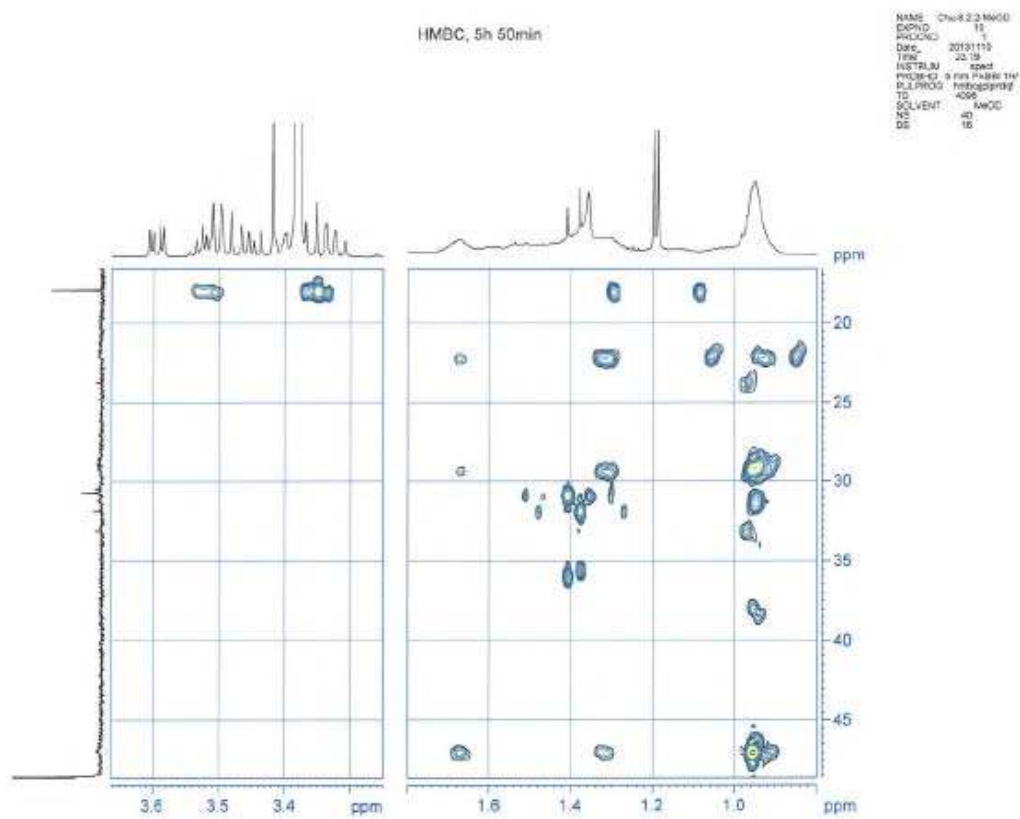
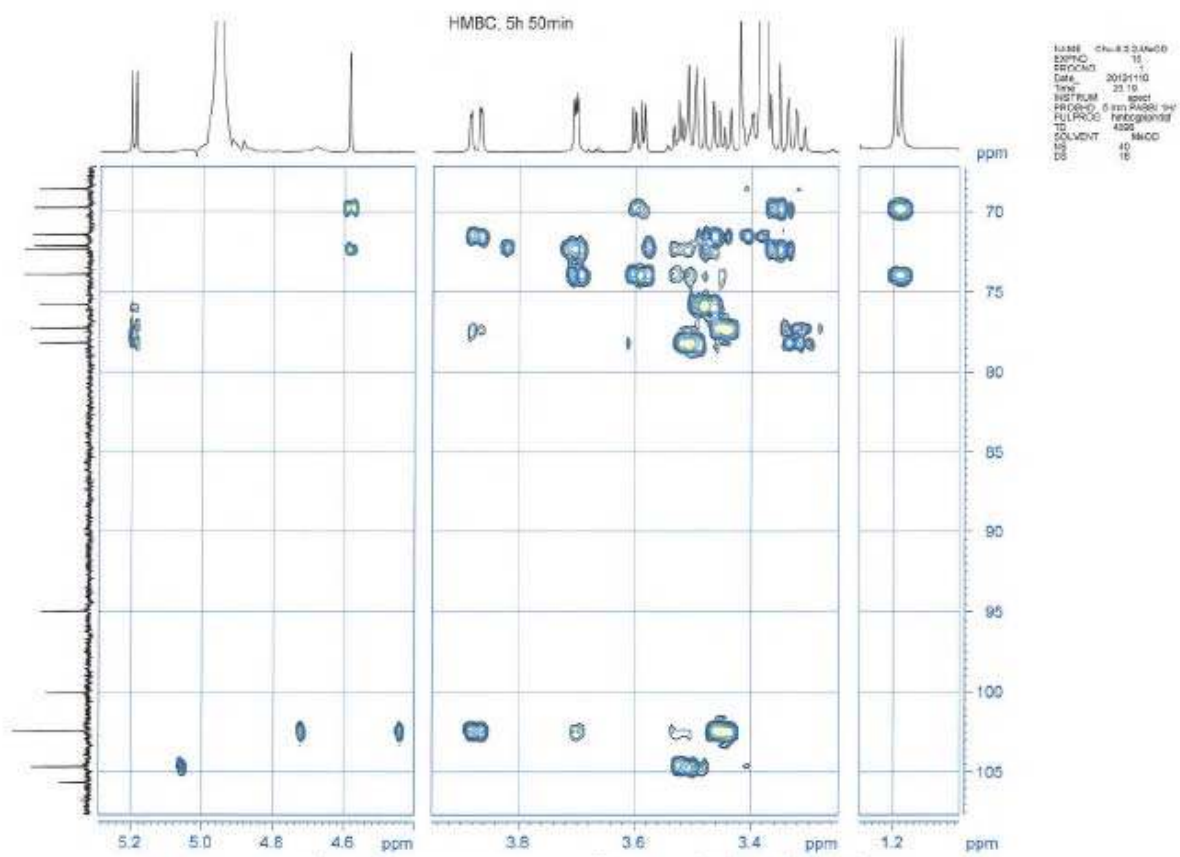
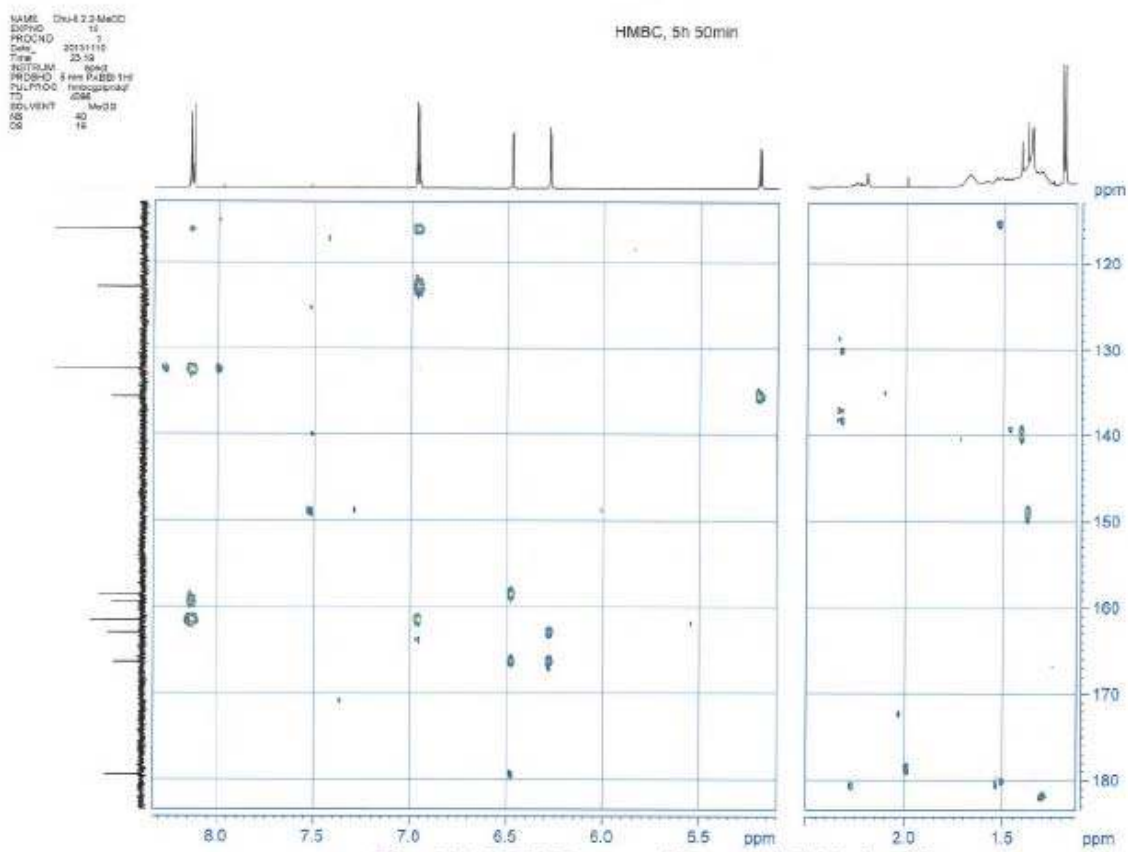
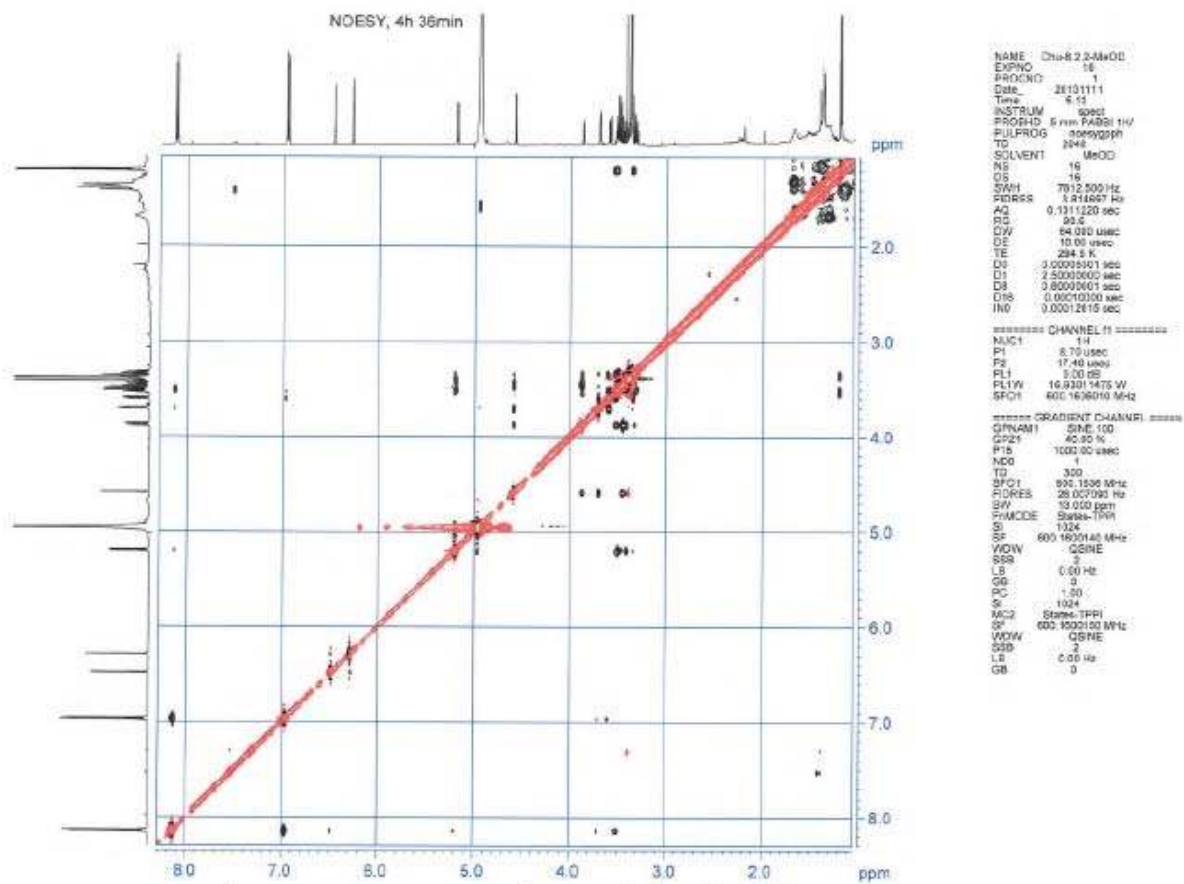


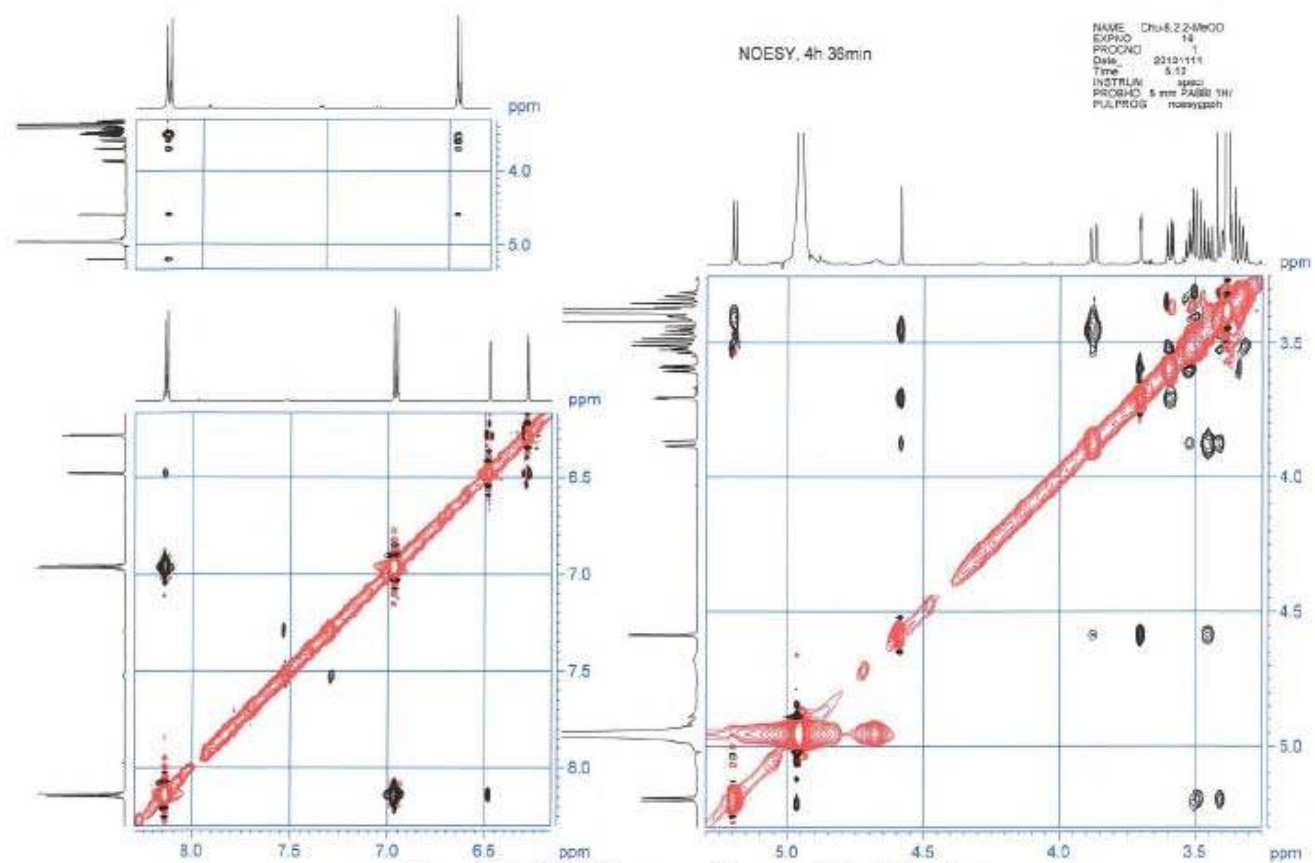
Figure S21. HMBC Spectrum of Compound 2 in Methanol-d₄

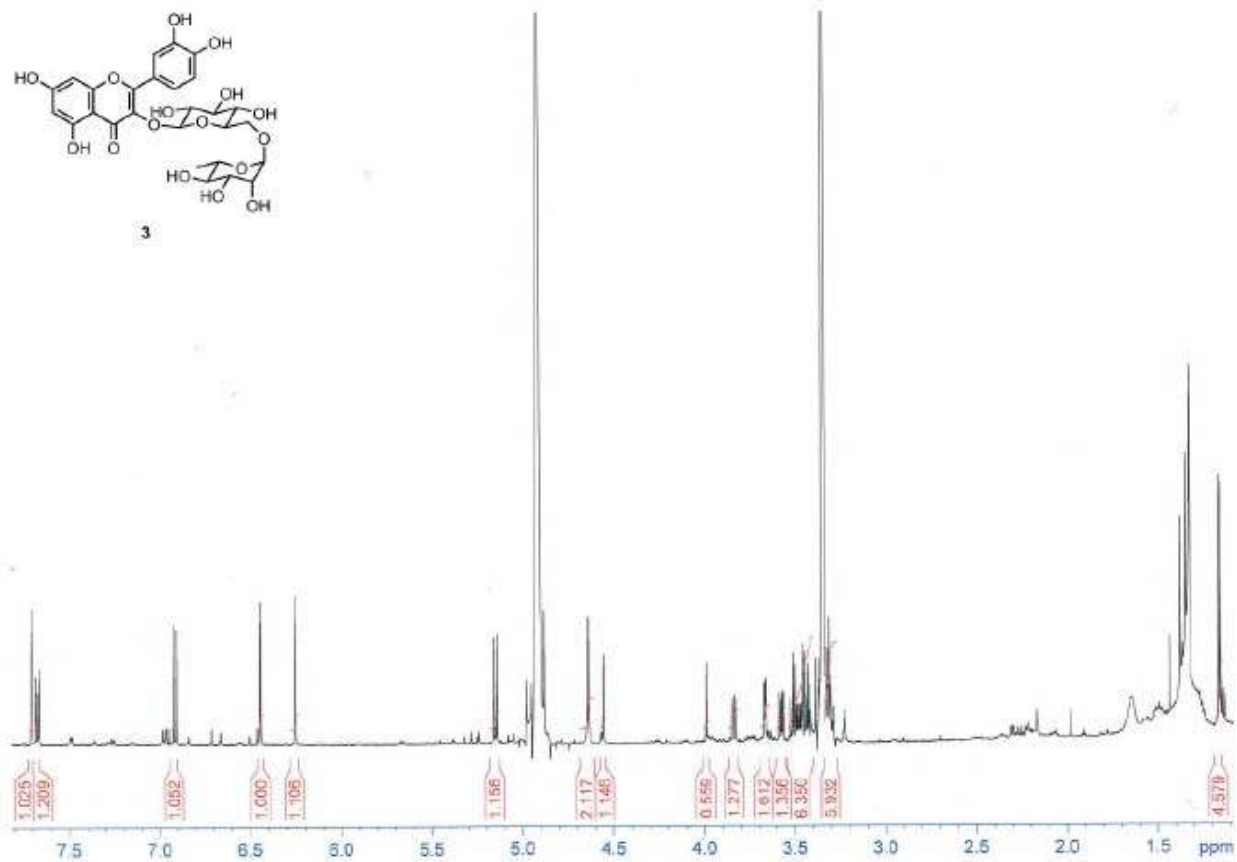
Figure S22. HMBC Spectrum of Compound 2 in Methanol- d_4

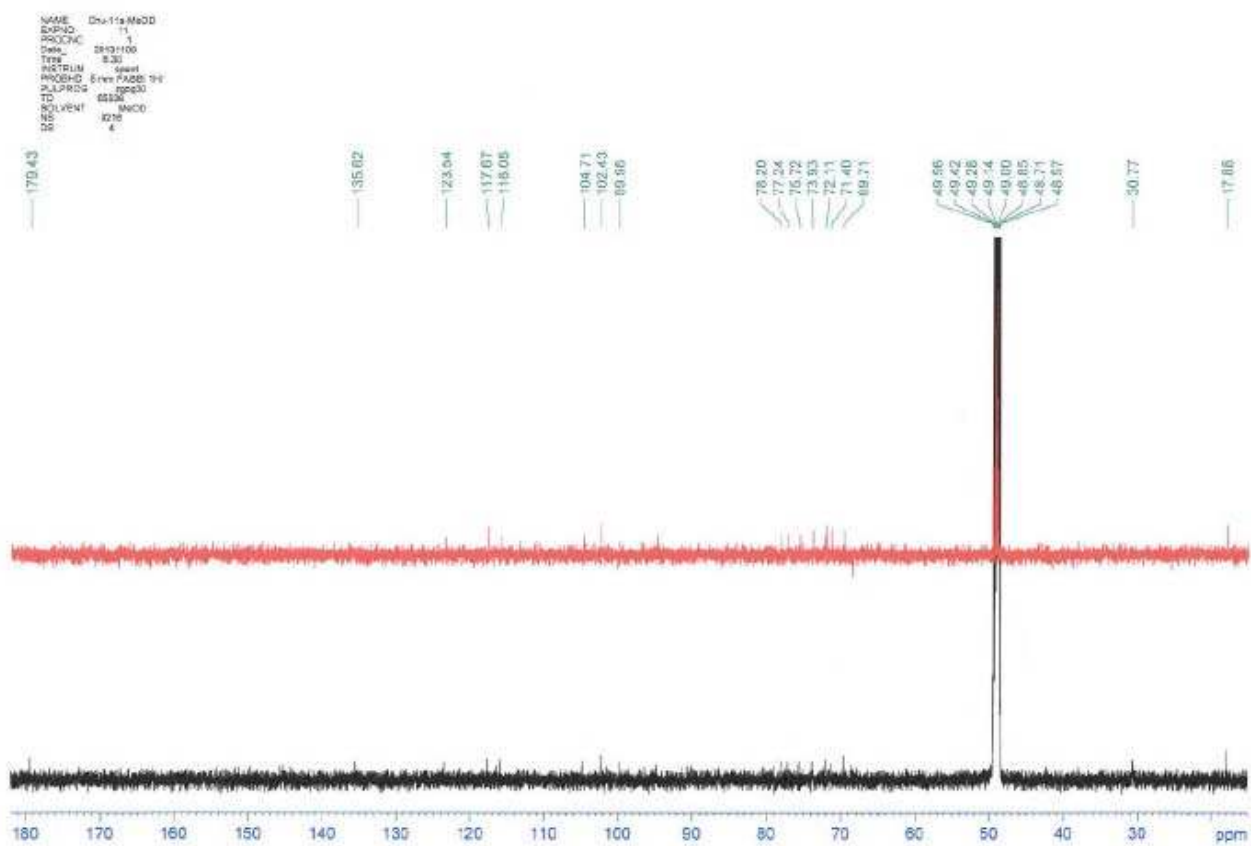
Figure S23. HMBC Spectrum of Compound 2 in Methanol- d_4

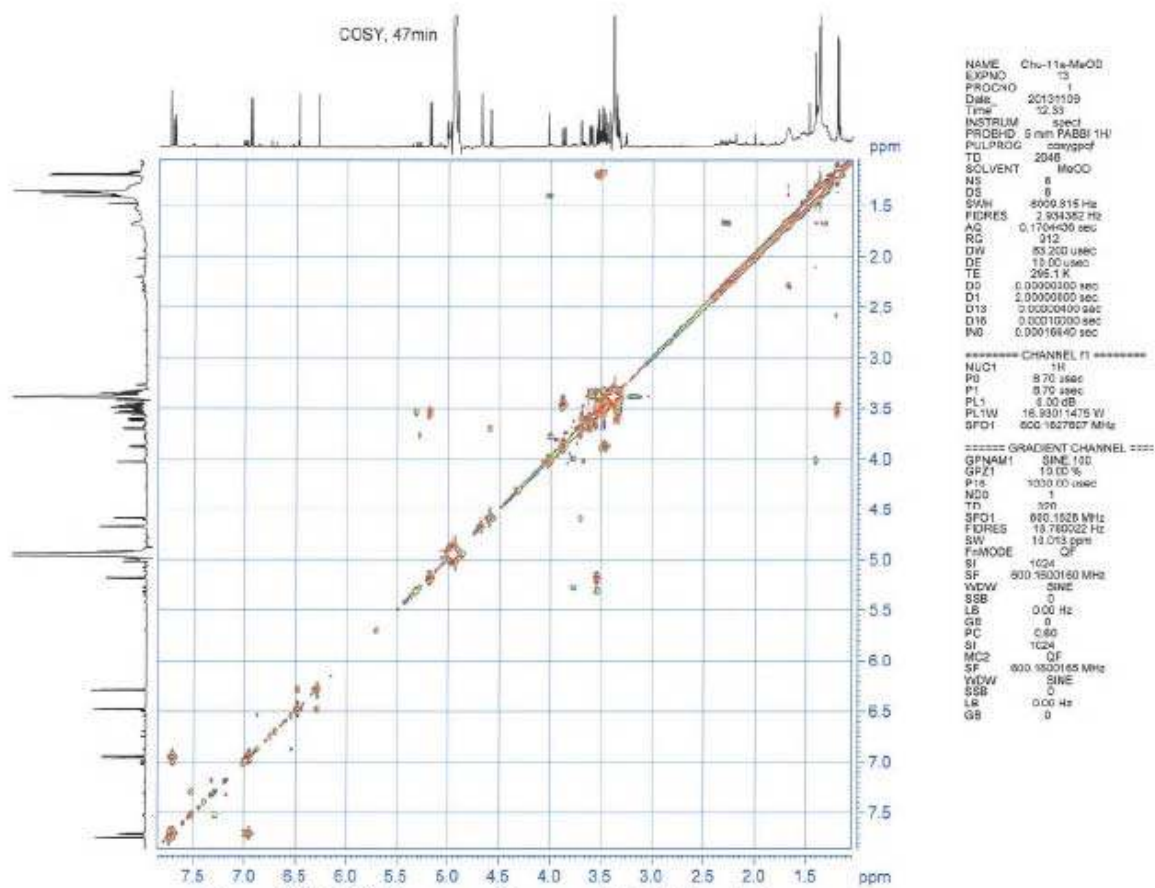
Figure S24. HMBC Spectrum of Compound **2** in Methanol-*d*₄

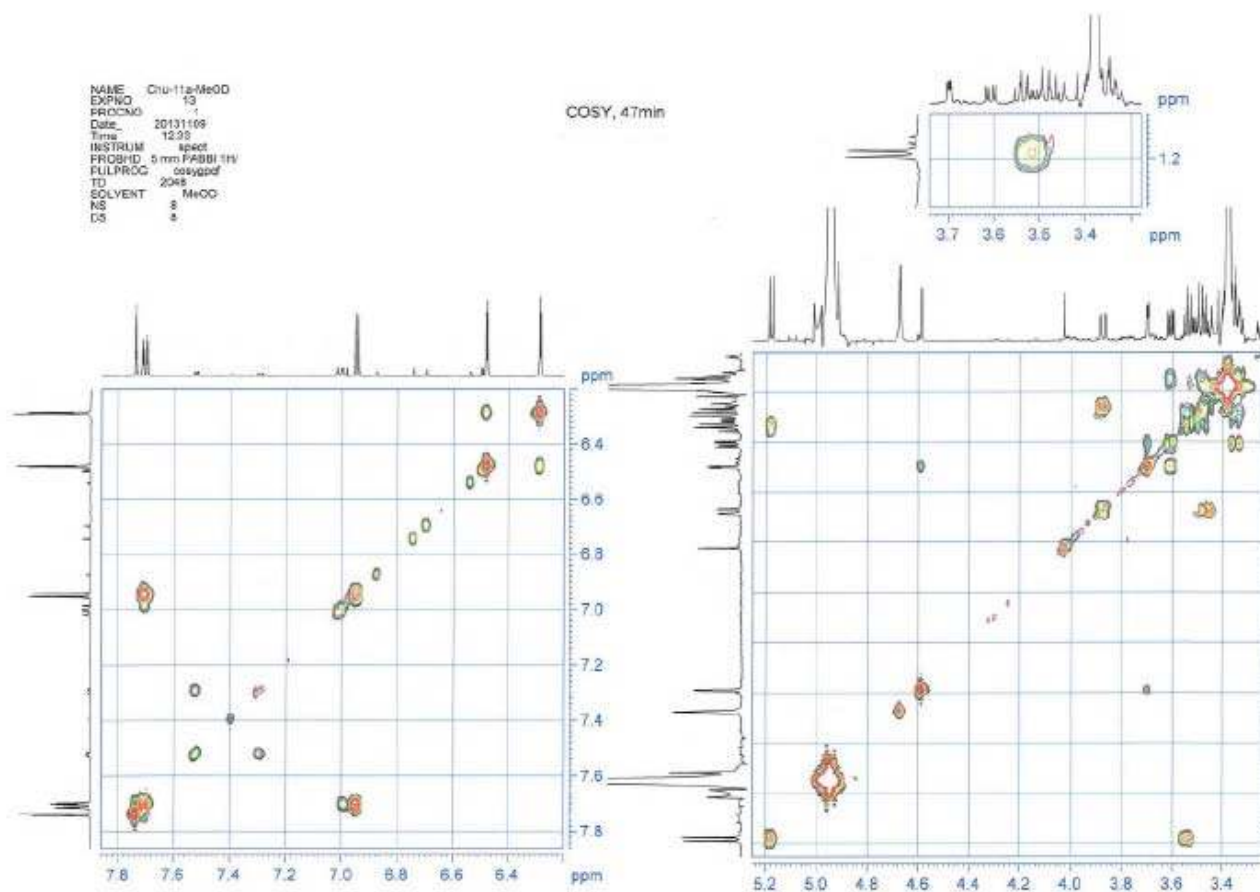
Figure S25. NOESY Spectrum of Compound **2** in Methanol-*d*₄

Figure S26. NOESY Spectrum of Compound 2 in Methanol- d_4

Figure S27. ¹H NMR Spectrum of Compound 3 in Methanol-d₄ (600 MHz)

Figure S28. ^{13}C NMR Spectrum of Compound **3** in Methanol- d_4 (150 MHz)

Figure S29. COSY Spectrum of Compound **3** in Methanol- d_4

Figure S30. COSY Spectrum of Compound 3 in Methanol- d_4

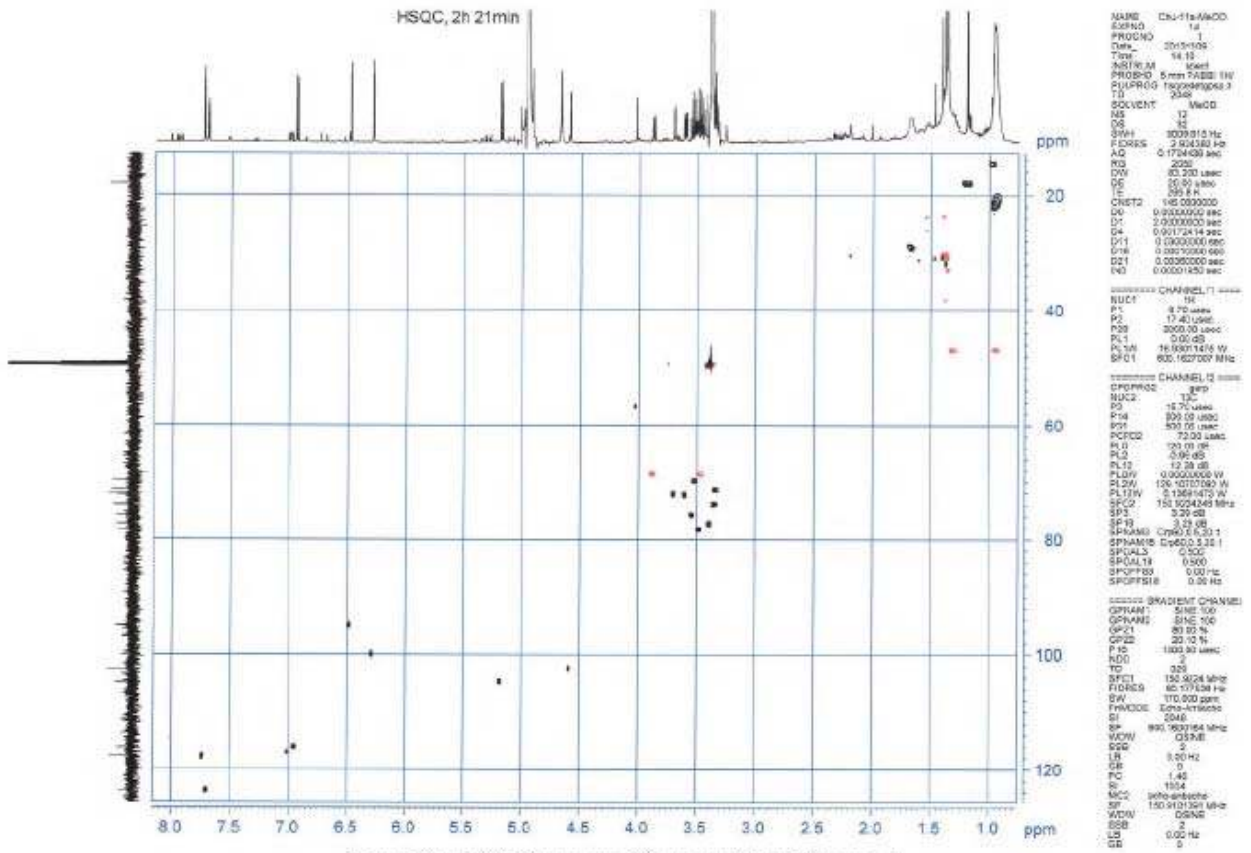
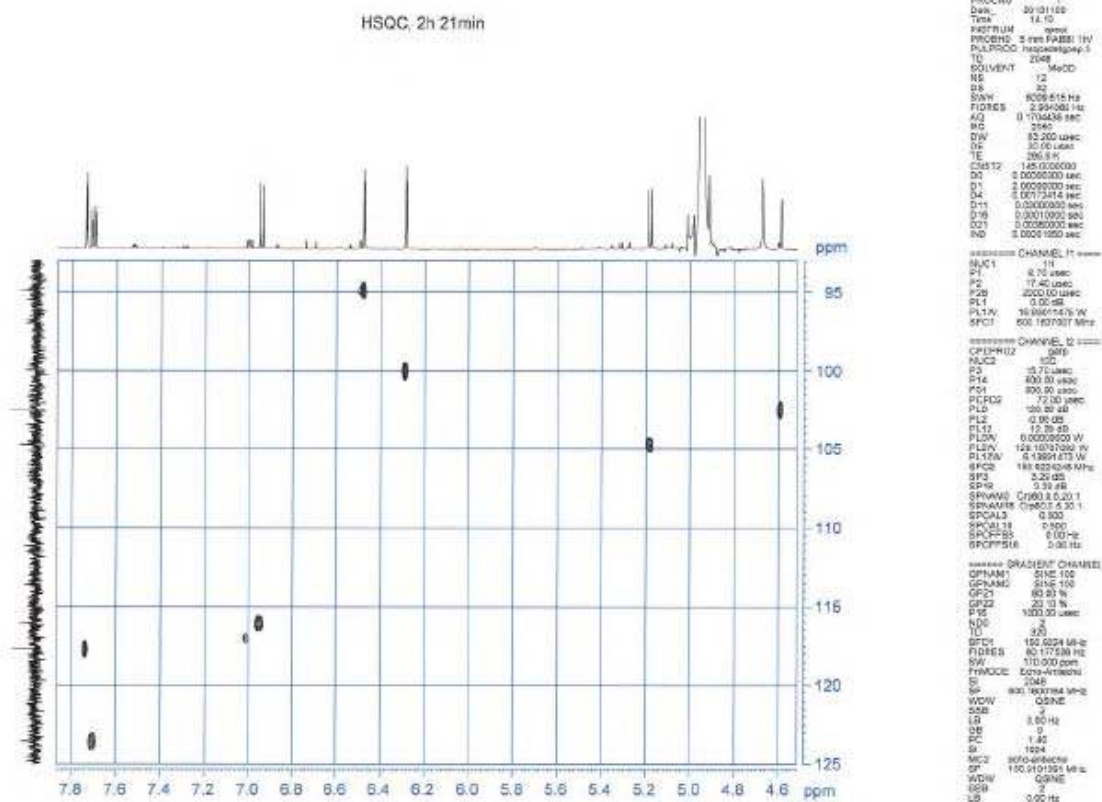
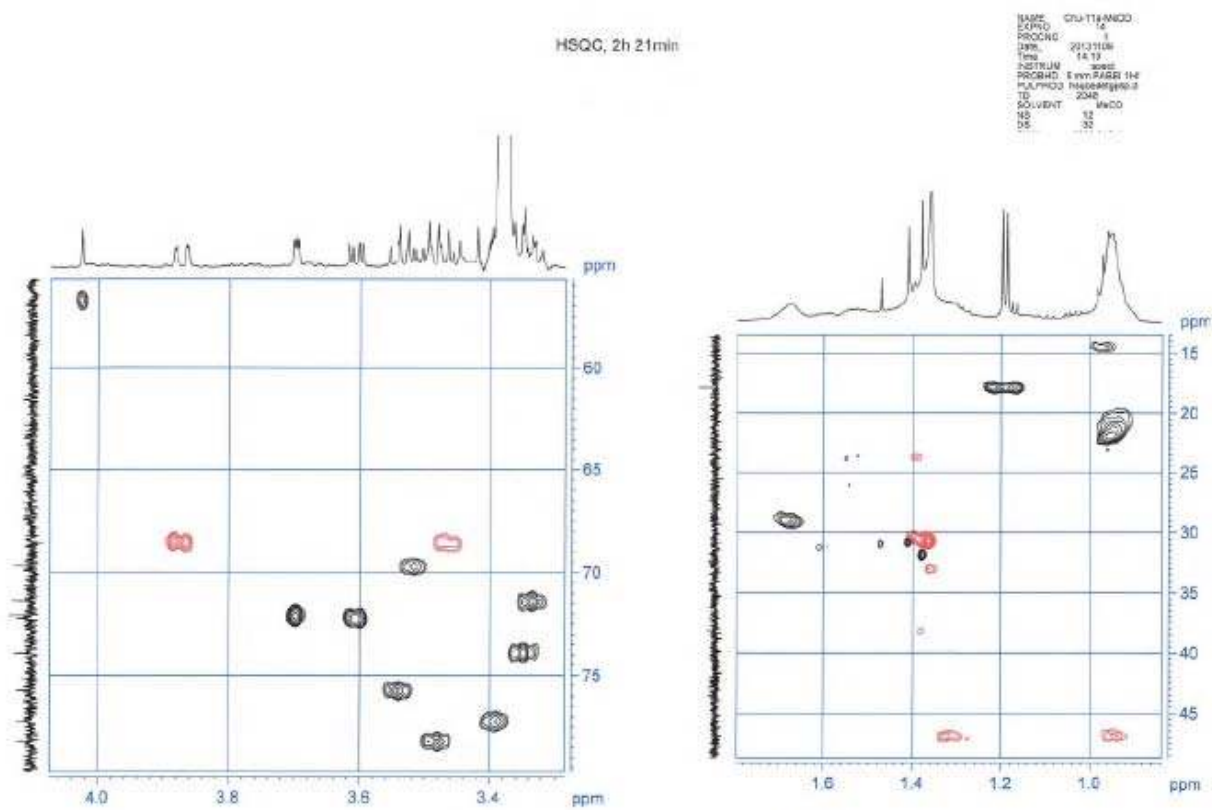
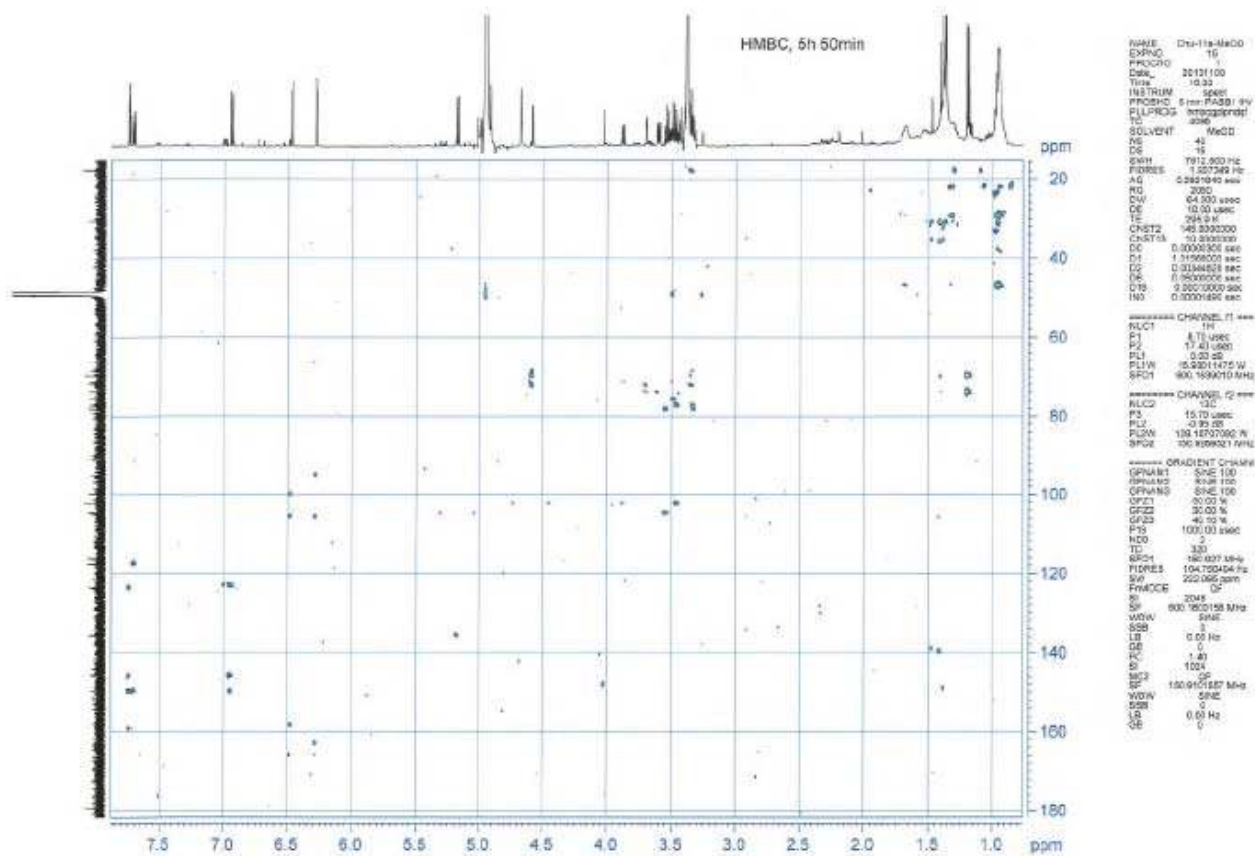


Figure S31. HSQC Spectrum of Compound 3 in Methanol-d4





Figure S34. HMBC Spectrum of Compound 3 in Methanol- d_4

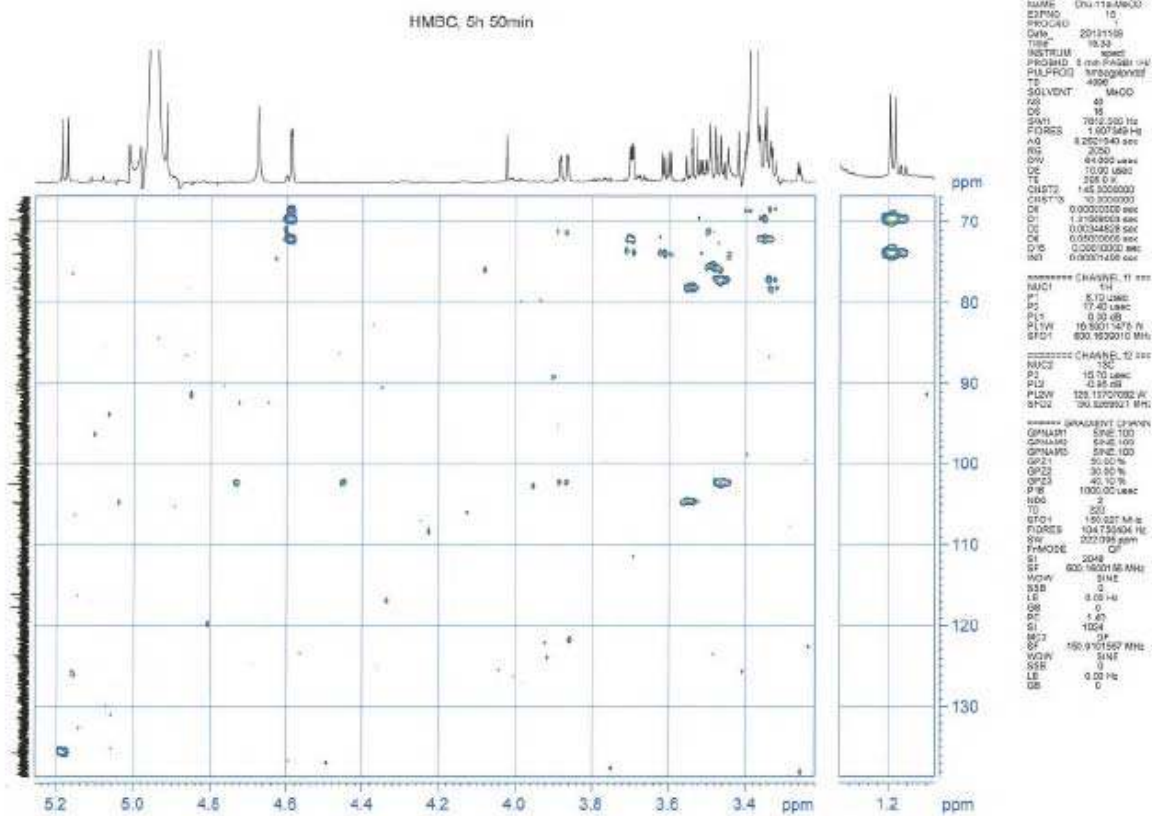


Figure S35. HMBC Spectrum of Compound 3 in Methanol-d₄

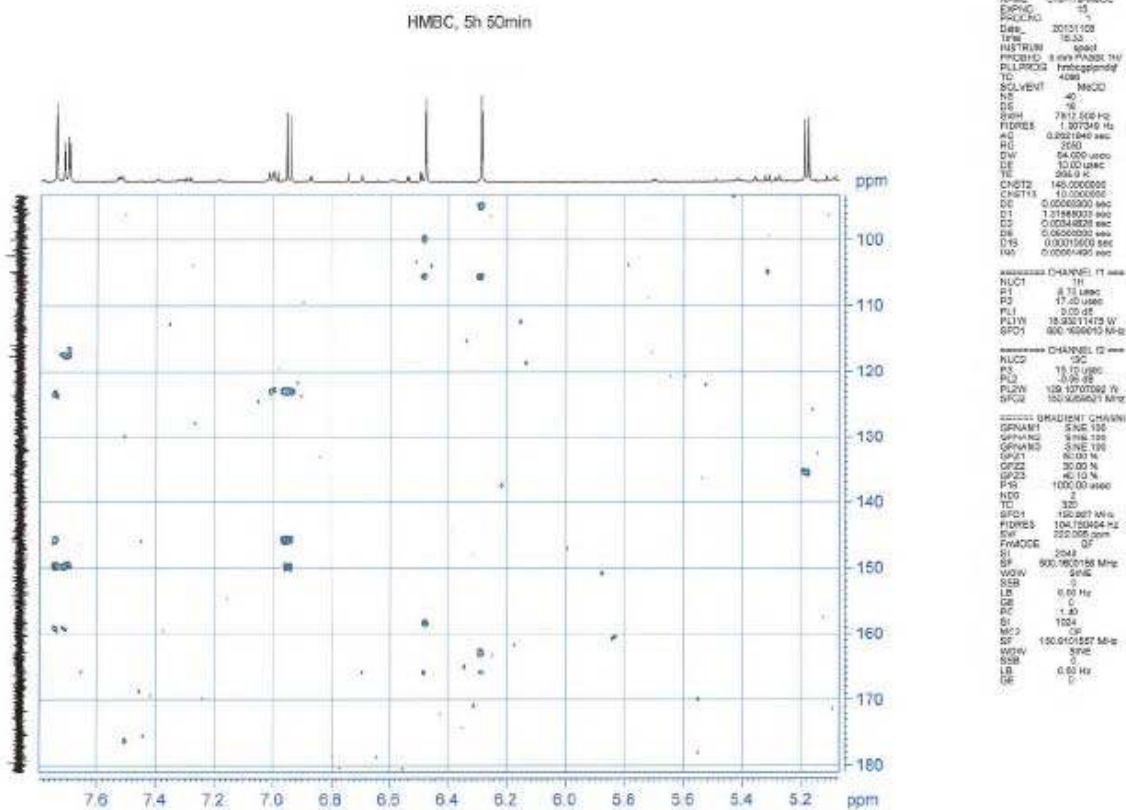
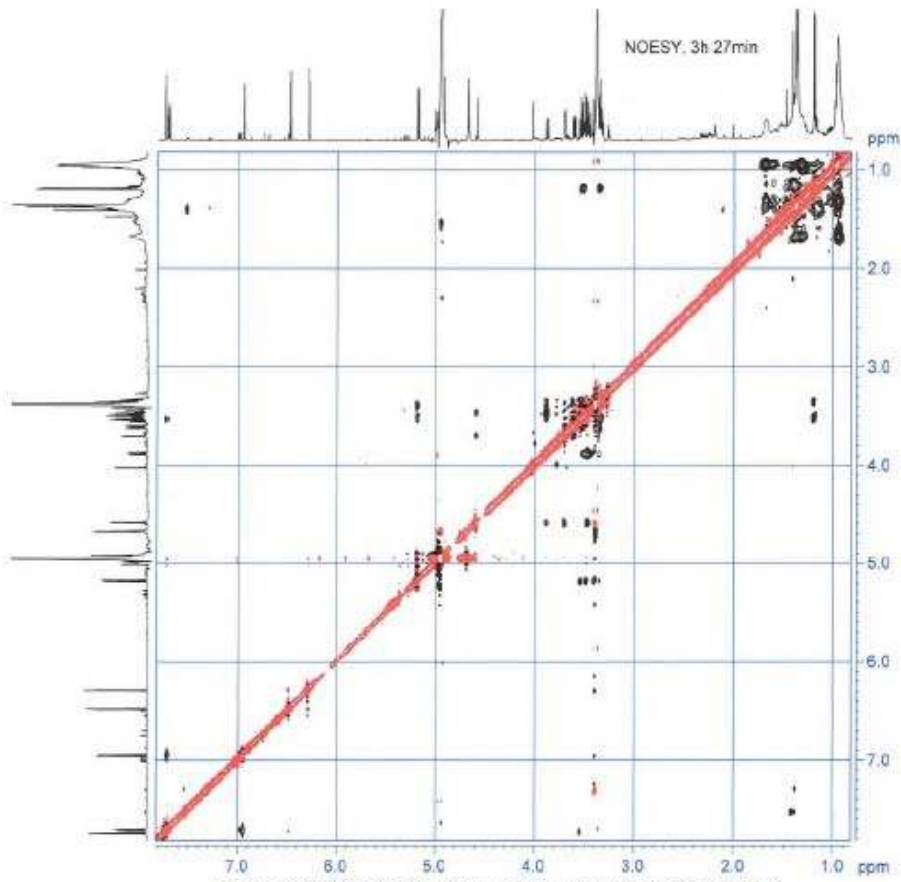


Figure S36. HMBC Spectrum of Compound 3 in Methanol-*d*₄

Figure S37. NOESY Spectrum of Compound **3** in Methanol- d_4

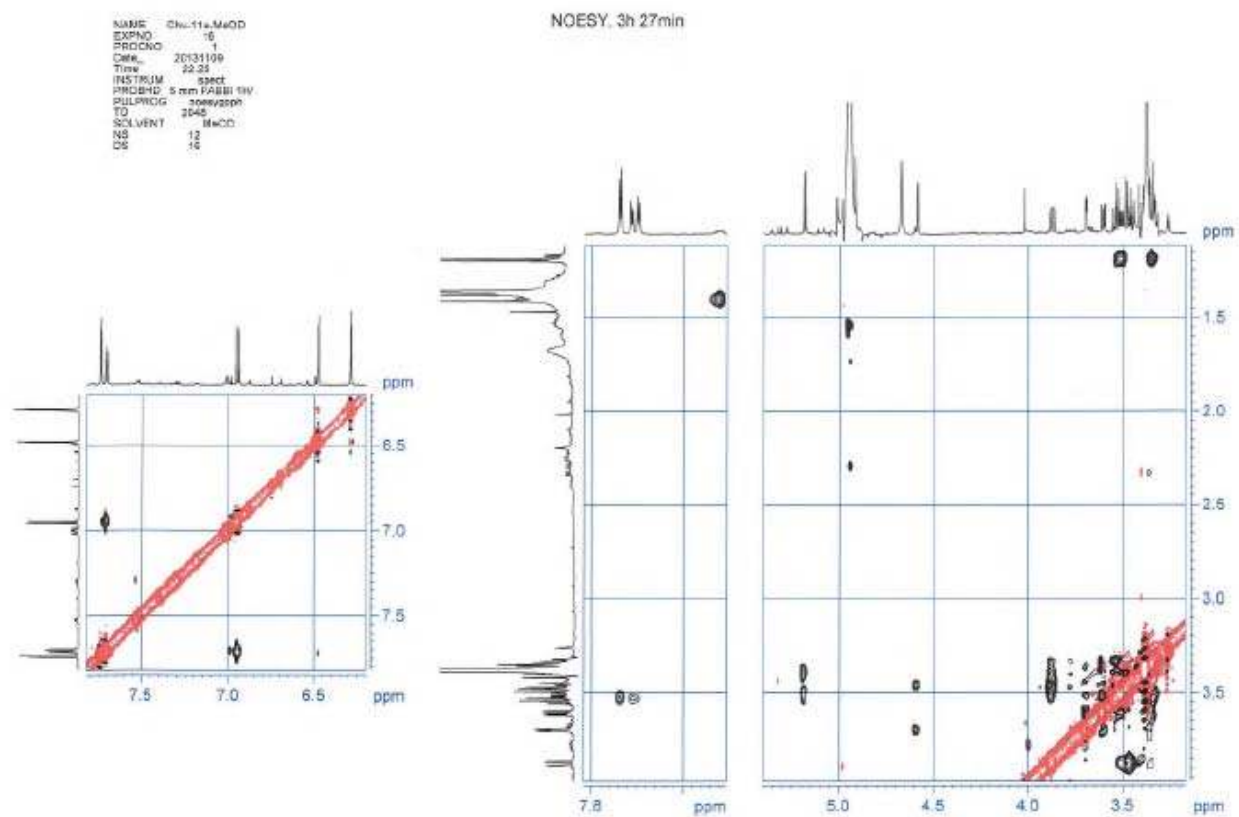
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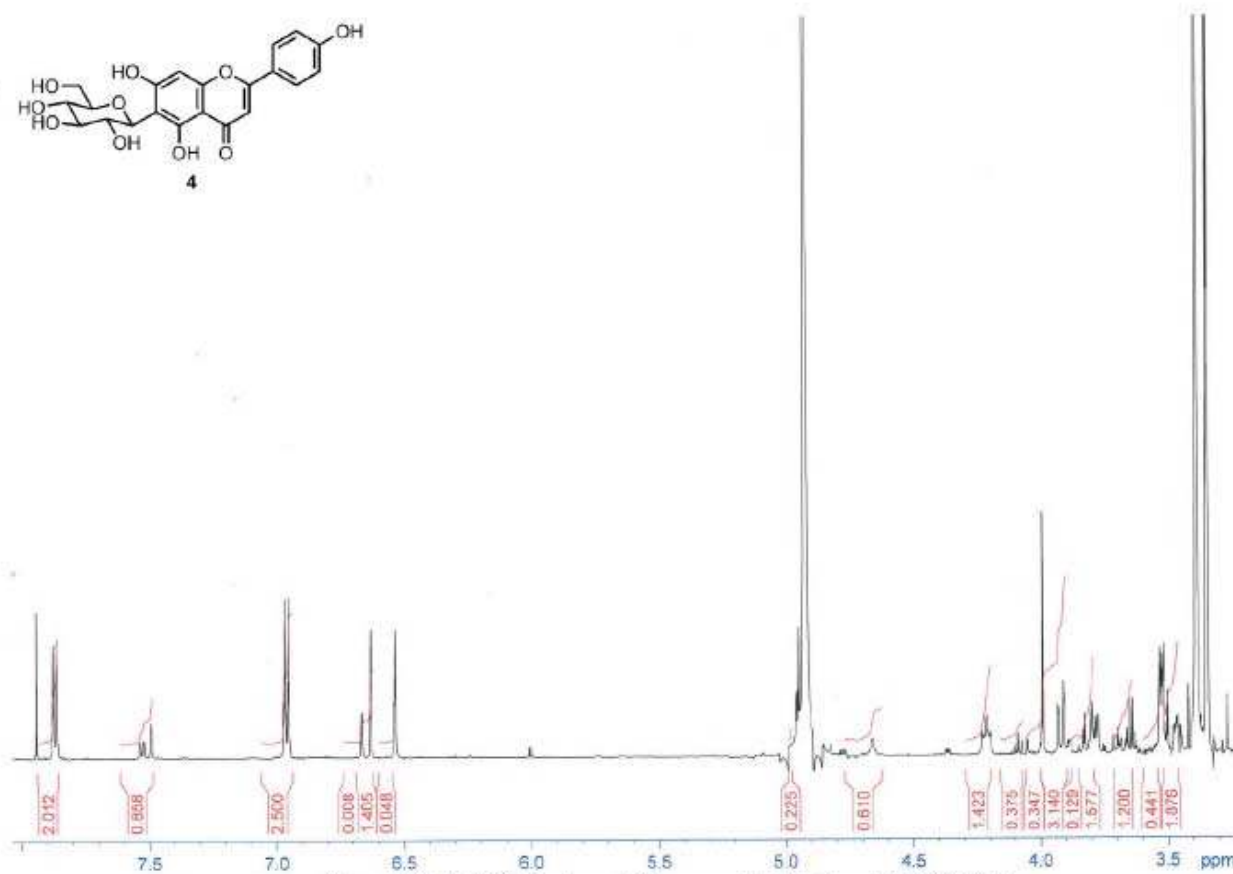
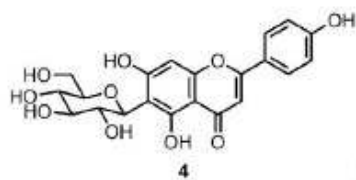
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RG         80
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DE        15.00 usec
TE        294.2 K
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D1        2.5000000 sec
D8        0.0000000 sec
D18       0.00010300 sec
RE        0.00412810 sec

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P1        0.70 usec
PO        17.40 usec
PL1       6.00 dB
PL1W      16.850+14.75 W
SFO1      600.100013 MHz

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P16       1000.00 usec
NUC2      13C
TD        300
SFO2      600.10038 MHz
F2RES     23.207050 Hz
SFO       600.130000 MHz
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SSB       2
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Figure S38. NOESY Spectrum of Compound **3** in Methanol- d_4

Figure S39. ¹H NMR Spectrum of Compound 4 in Methanol-d₄ (600 MHz)

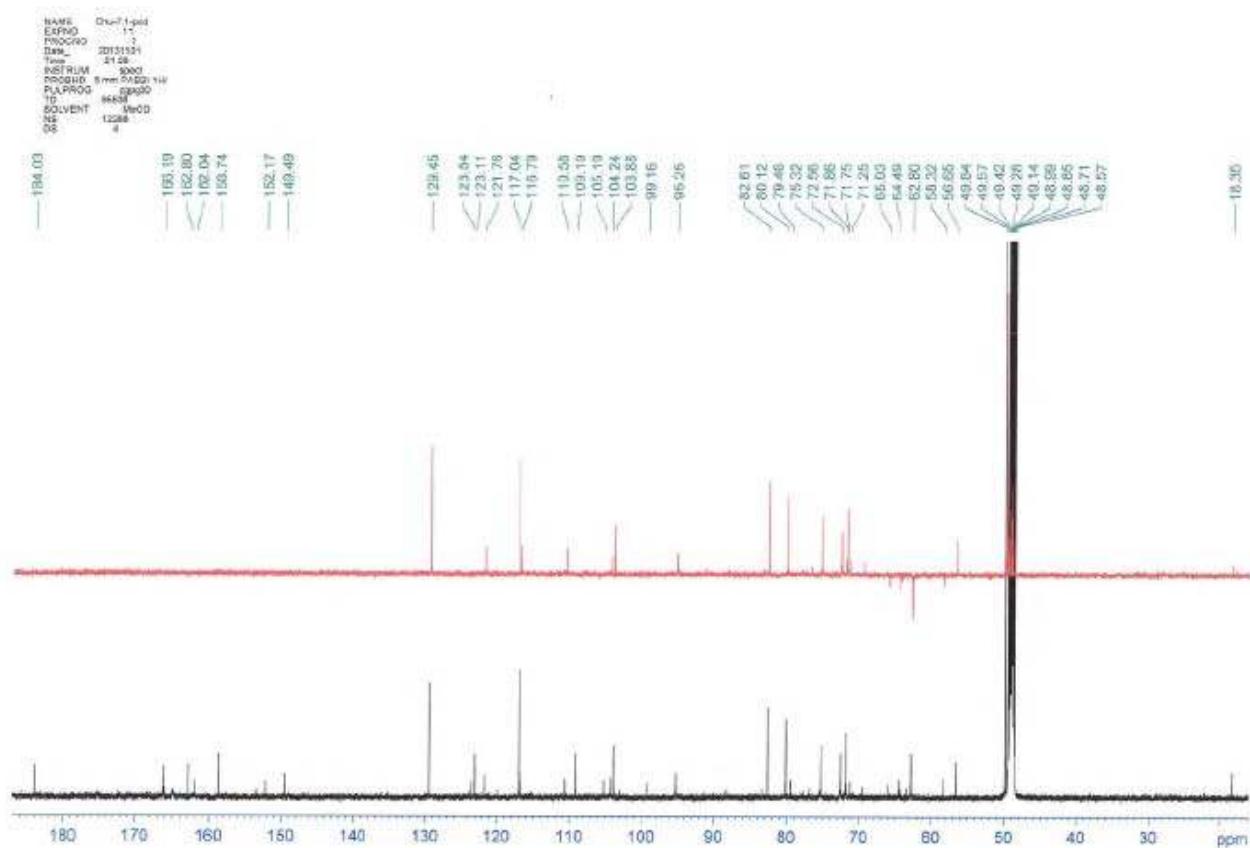
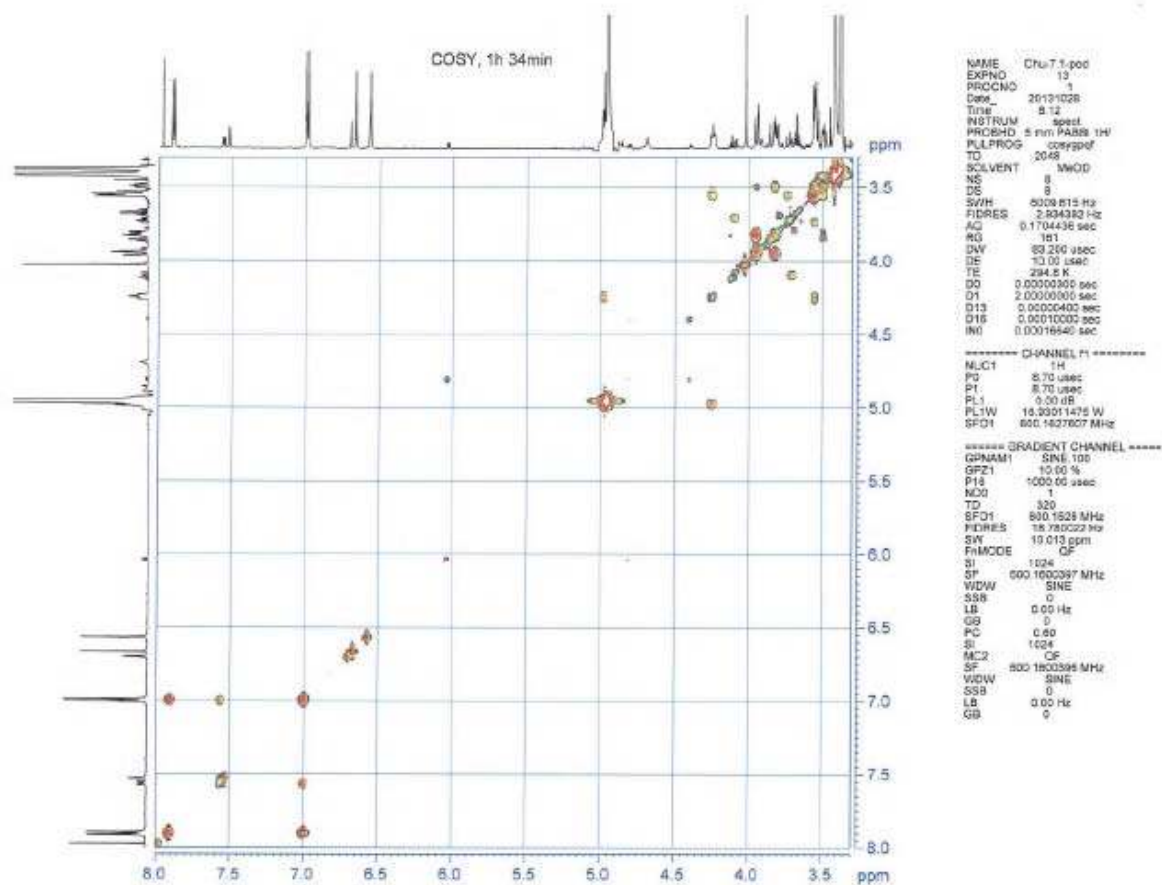
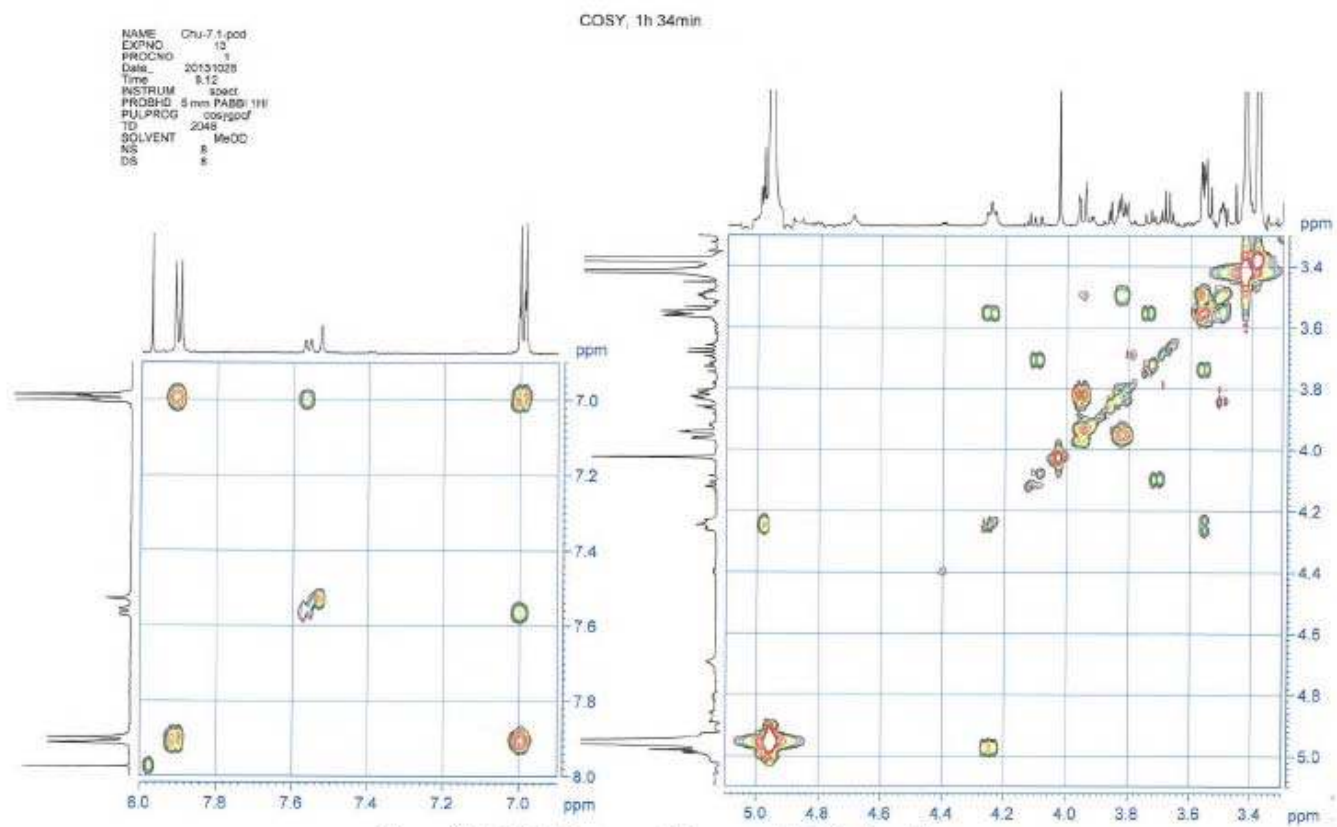


Figure S40. ^{13}C NMR Spectrum of Compound 4 in Methanol- d_4 (150 MHz)

Figure S41. COSY Spectrum of Compound 4 in Methanol-*d*₄

Figure S42. COSY Spectrum of Compound **4** in Methanol- d_4

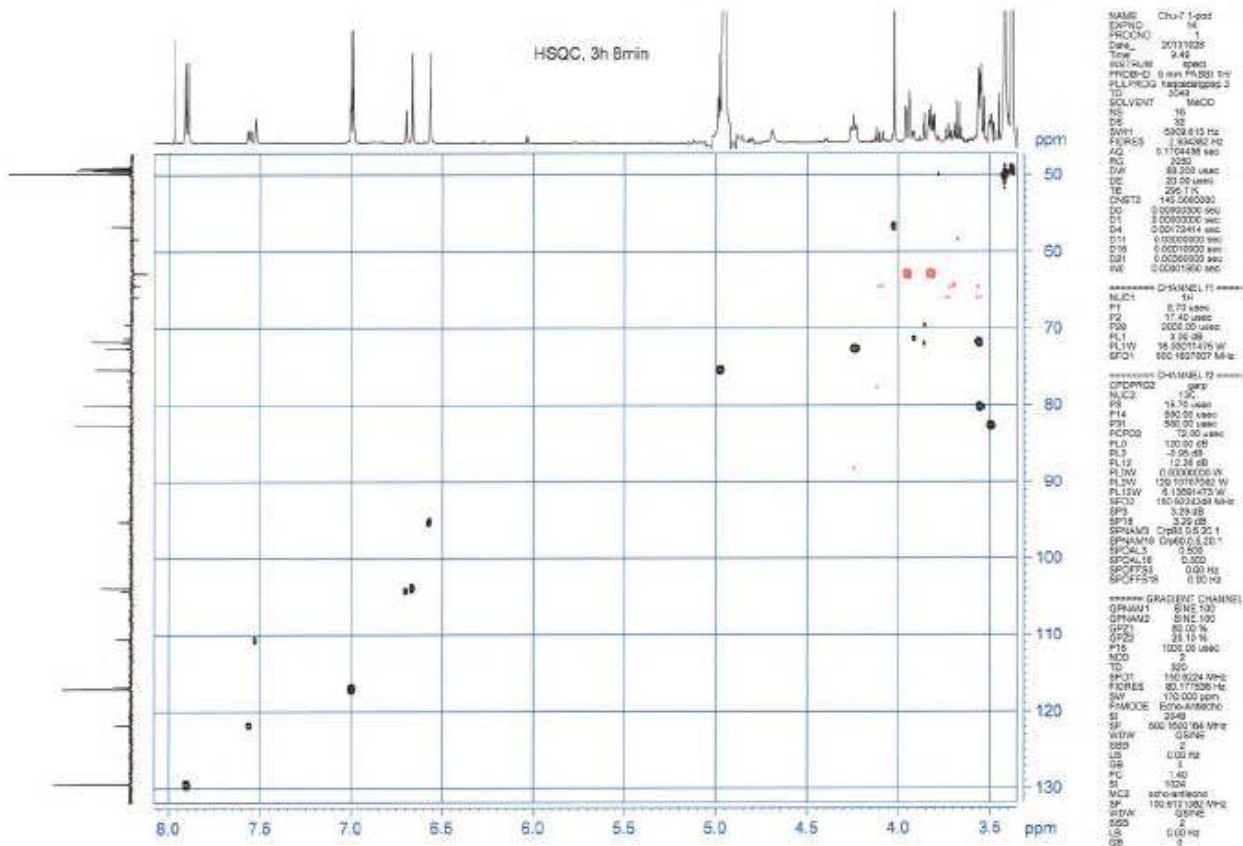


Figure S43. HSQC Spectrum of Compound 4 in Methanol-*d*₄

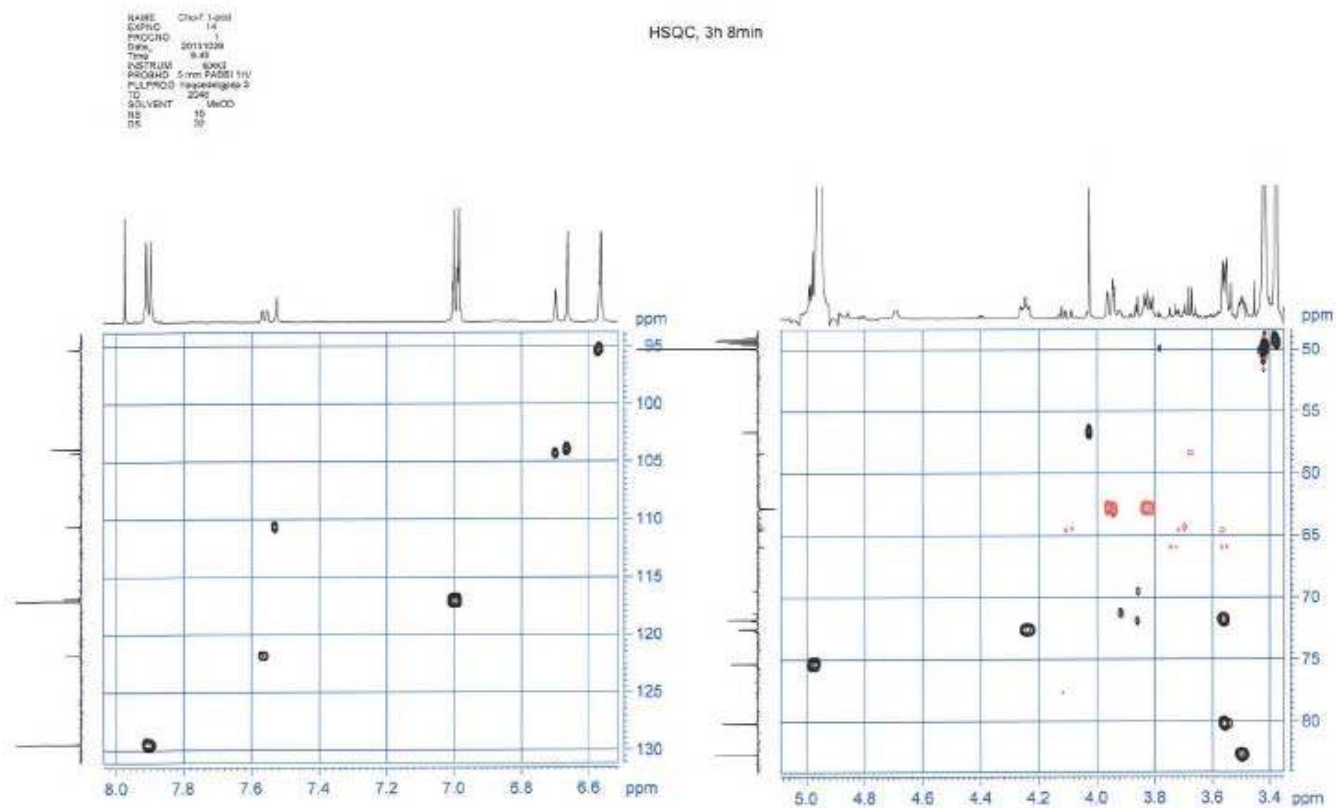


Figure S44. HSQC Spectrum of Compound **4** in Methanol- d_4

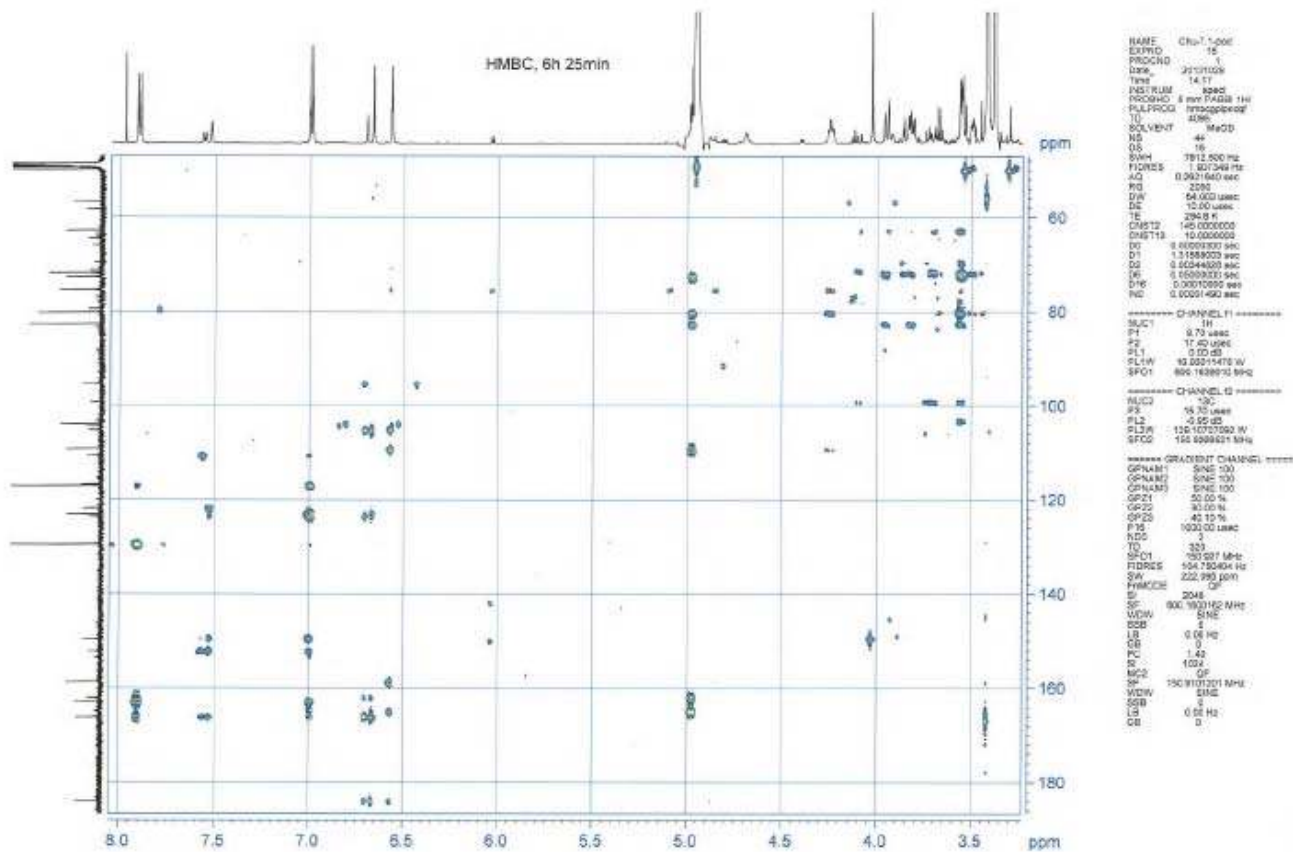


Figure S45. HMBC Spectrum of Compound 4 in Methanol-d₄

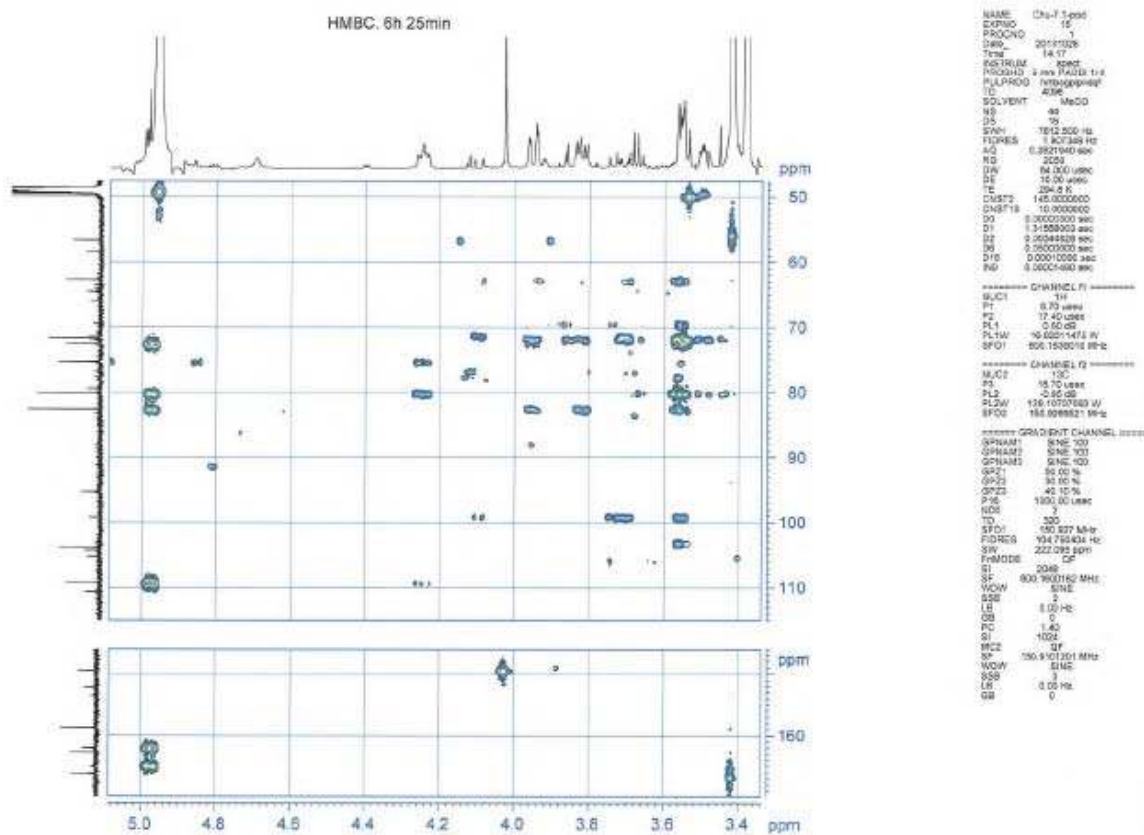
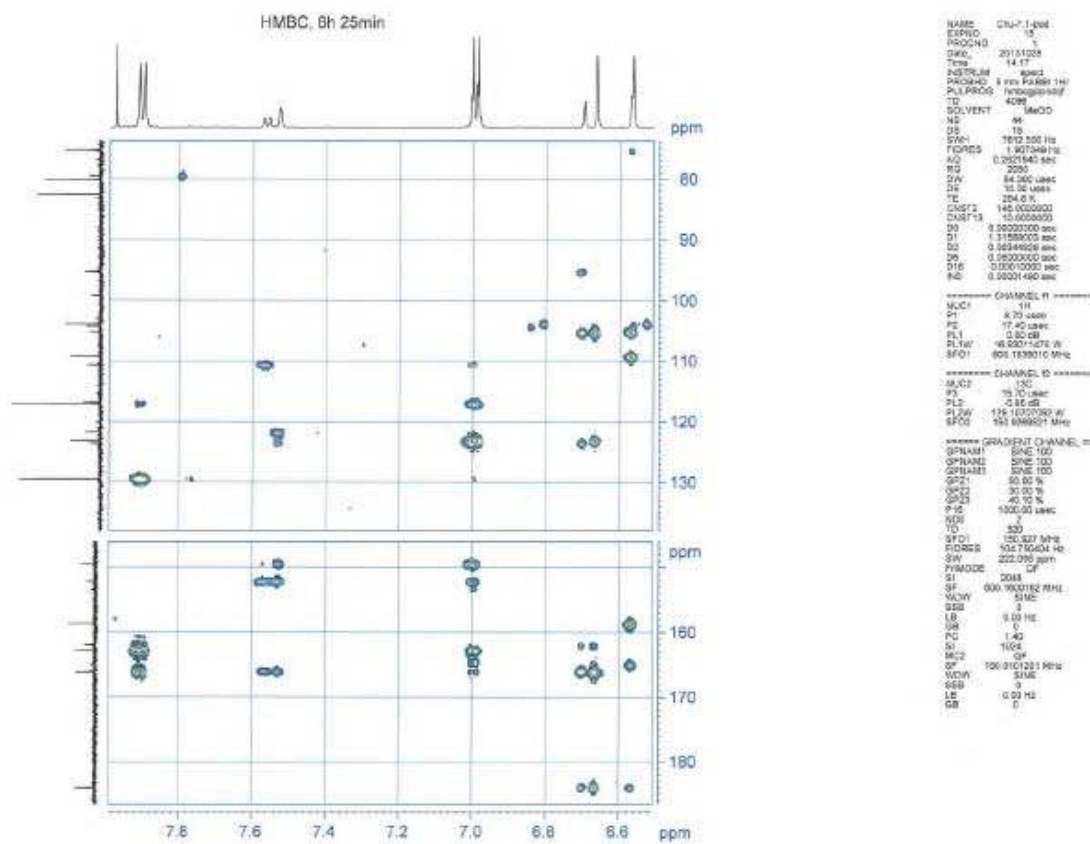


Figure S46. HMBC Spectrum of Compound 4 in Methanol-*d*₄

Figure S47. HMBC Spectrum of Compound 4 in Methanol- d_4

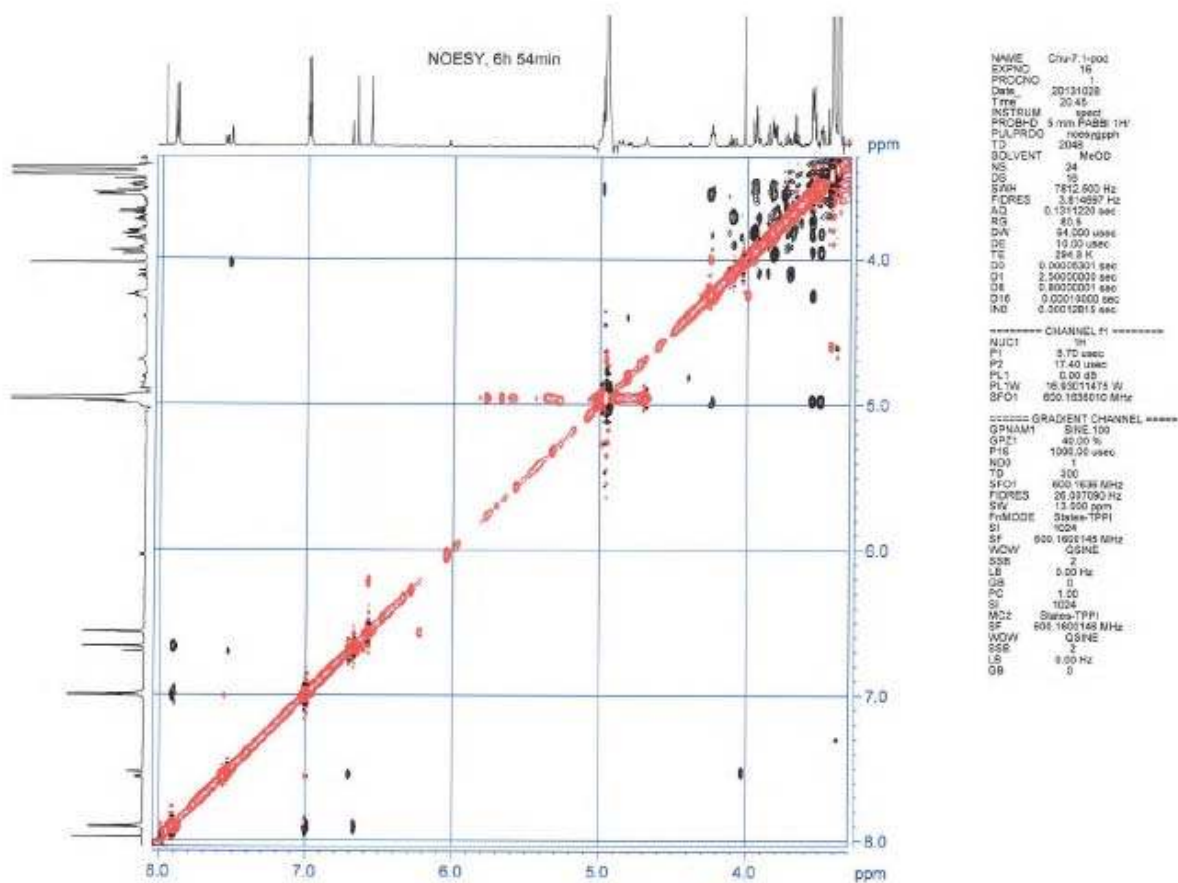
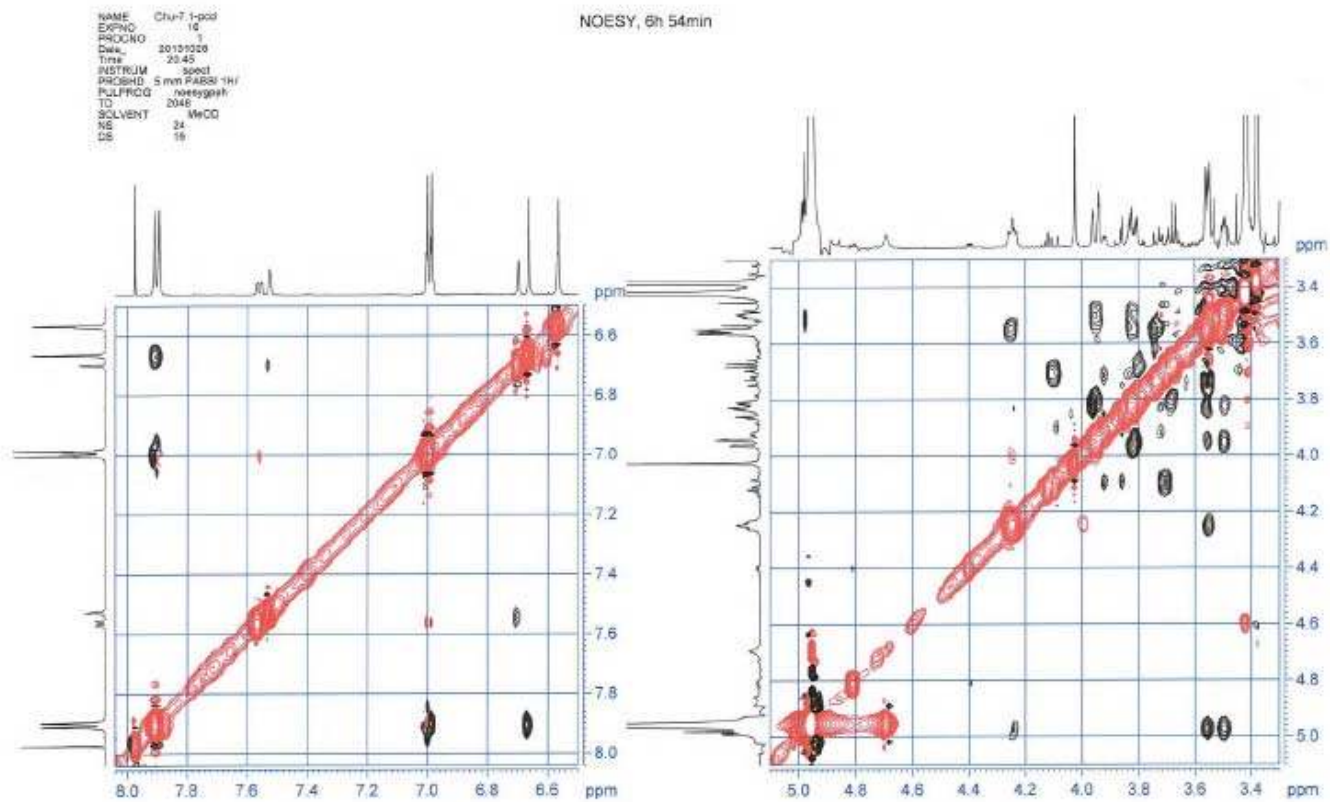


Figure S48. NOESY Spectrum of Compound **4** in Methanol-*d*₄

Figure S49. NOESY Spectrum of Compound **4** in Methanol- d_4

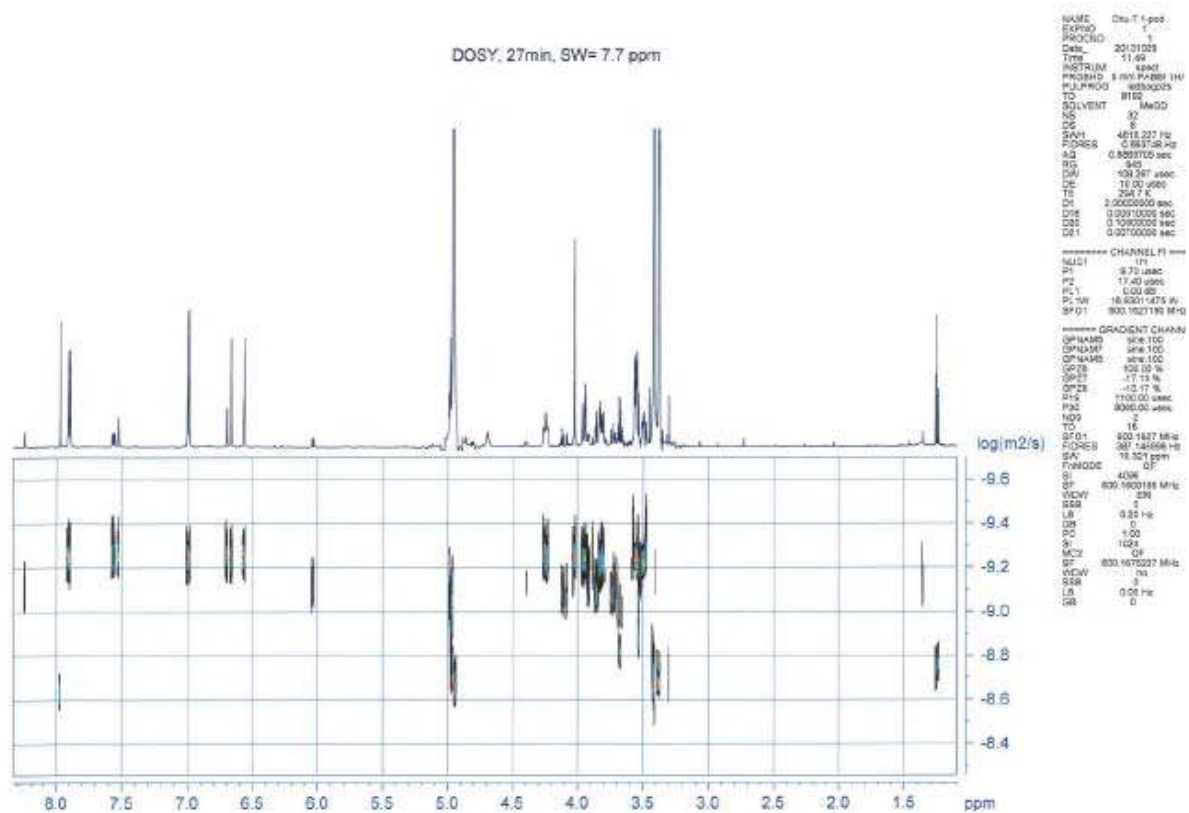
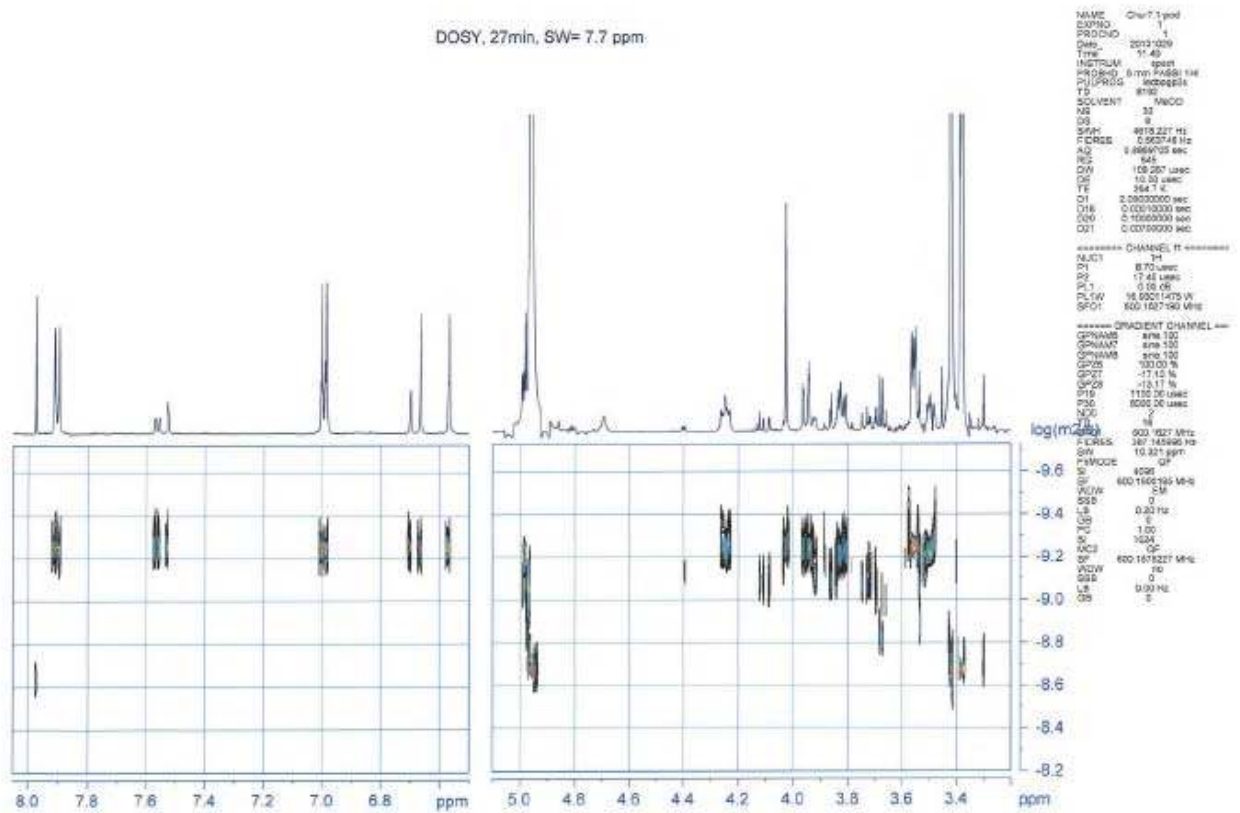


Figure S50. DOSY Spectrum of Compound 4 in Methanol-*d*₄

Figure S51. DOSY Spectrum of Compound 4 in Methanol- d_4

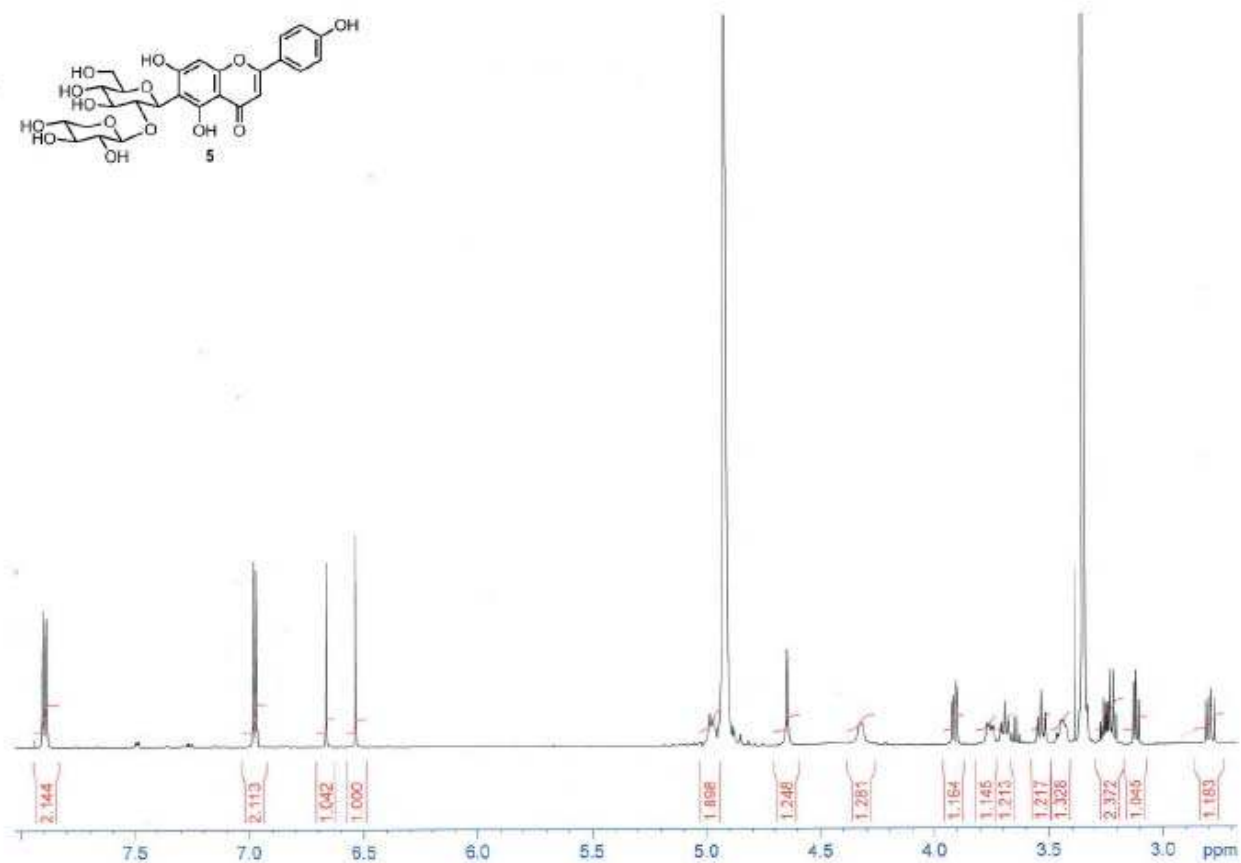
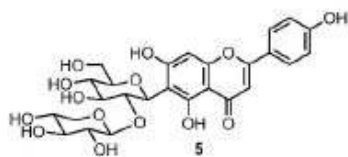
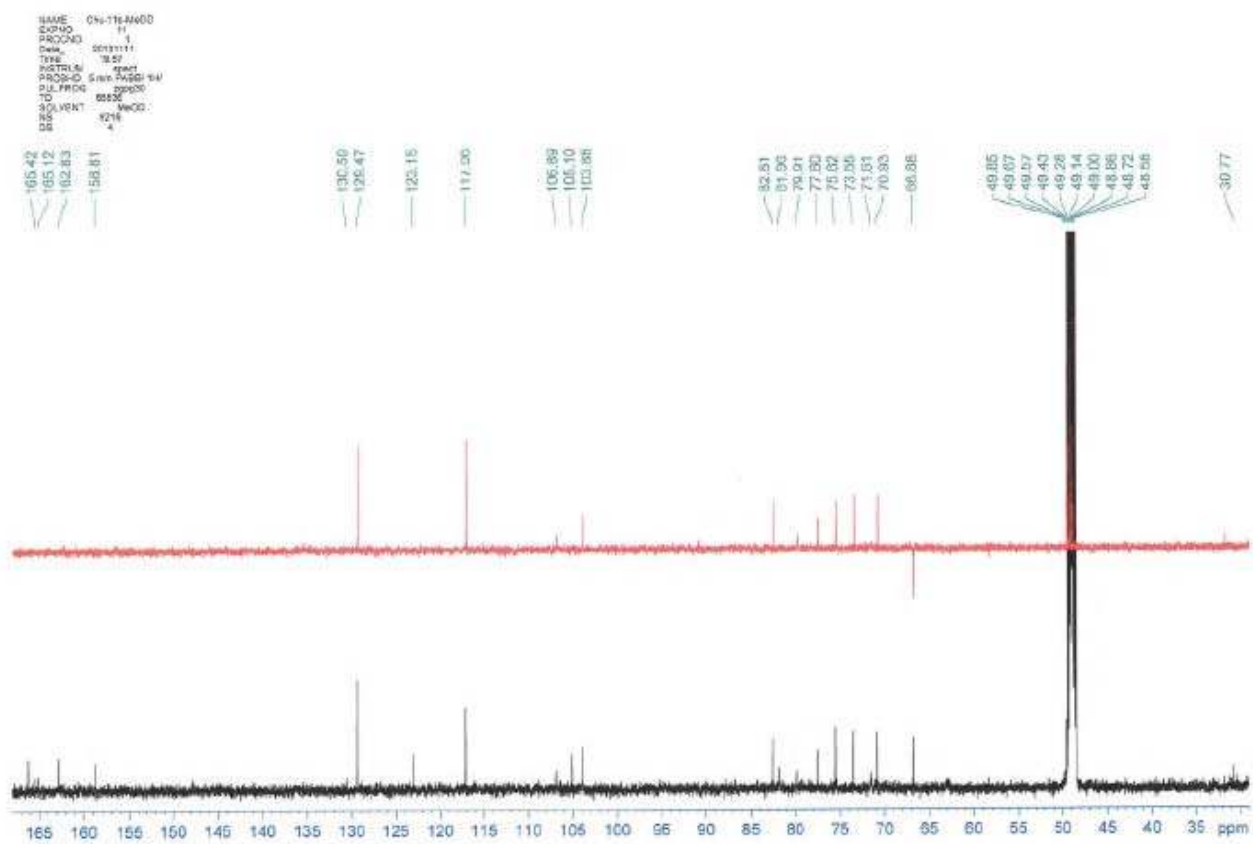


Figure S52. ^1H NMR Spectrum of Compound **5** in Methanol- d_4 (600 MHz)

Figure S53. ^{13}C NMR Spectrum of Compound 5 in Methanol- d_4 (150 MHz)

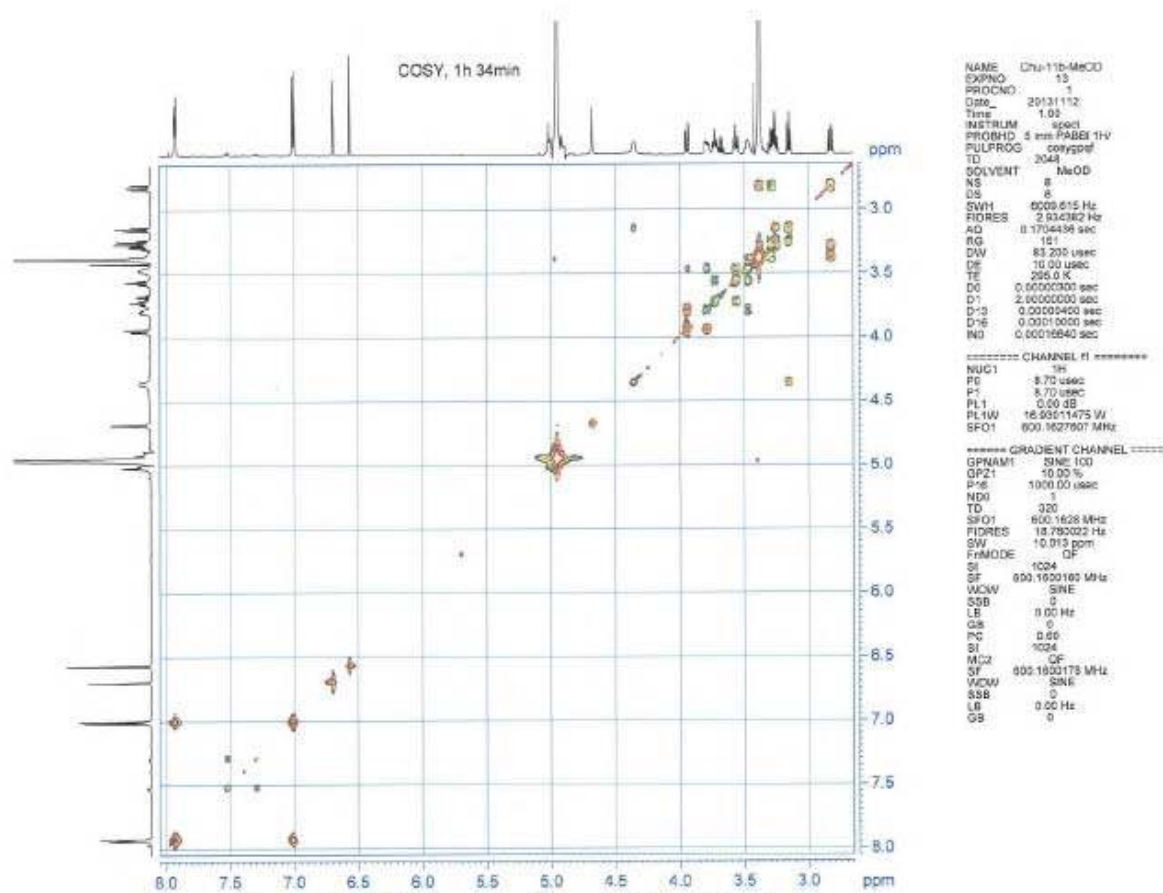
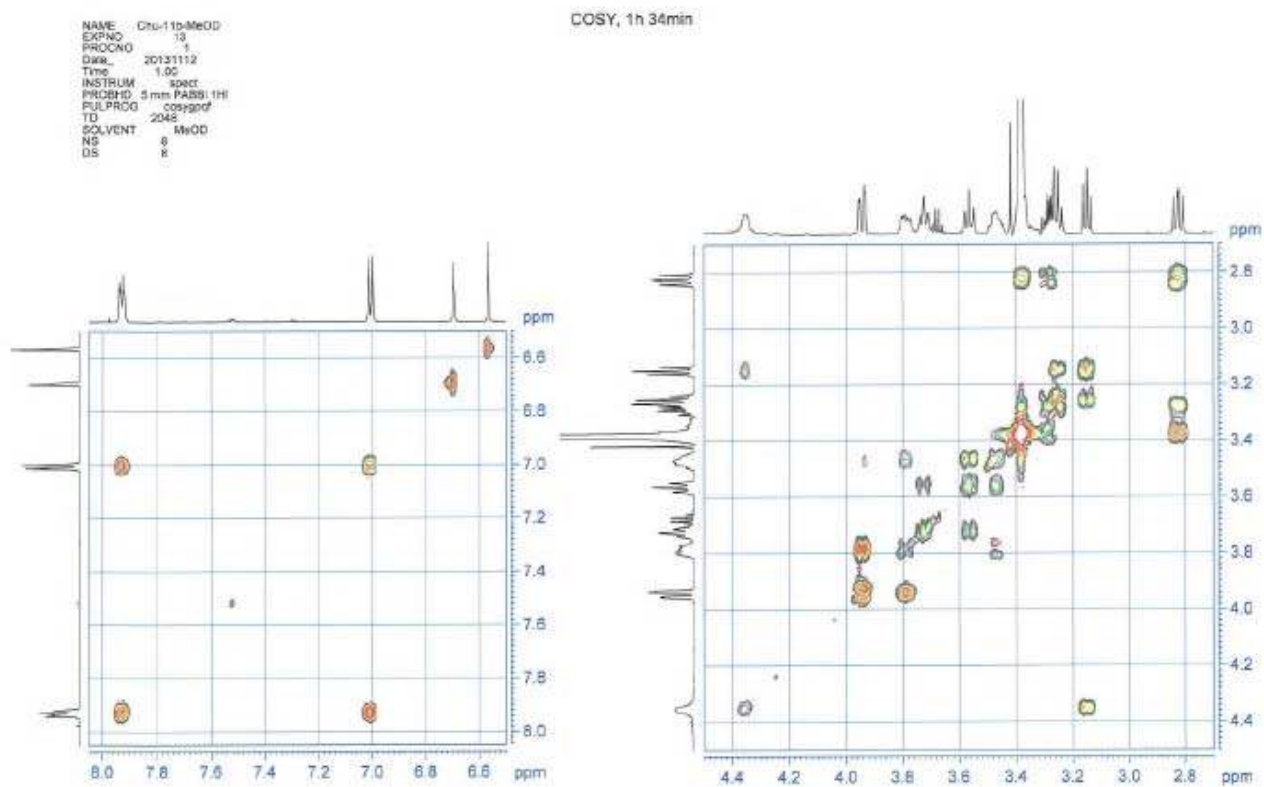


Figure S54. COSY Spectrum of Compound 5 in Methanol-*d*₄

Figure S55. COSY Spectrum of Compound **5** in Methanol- d_4

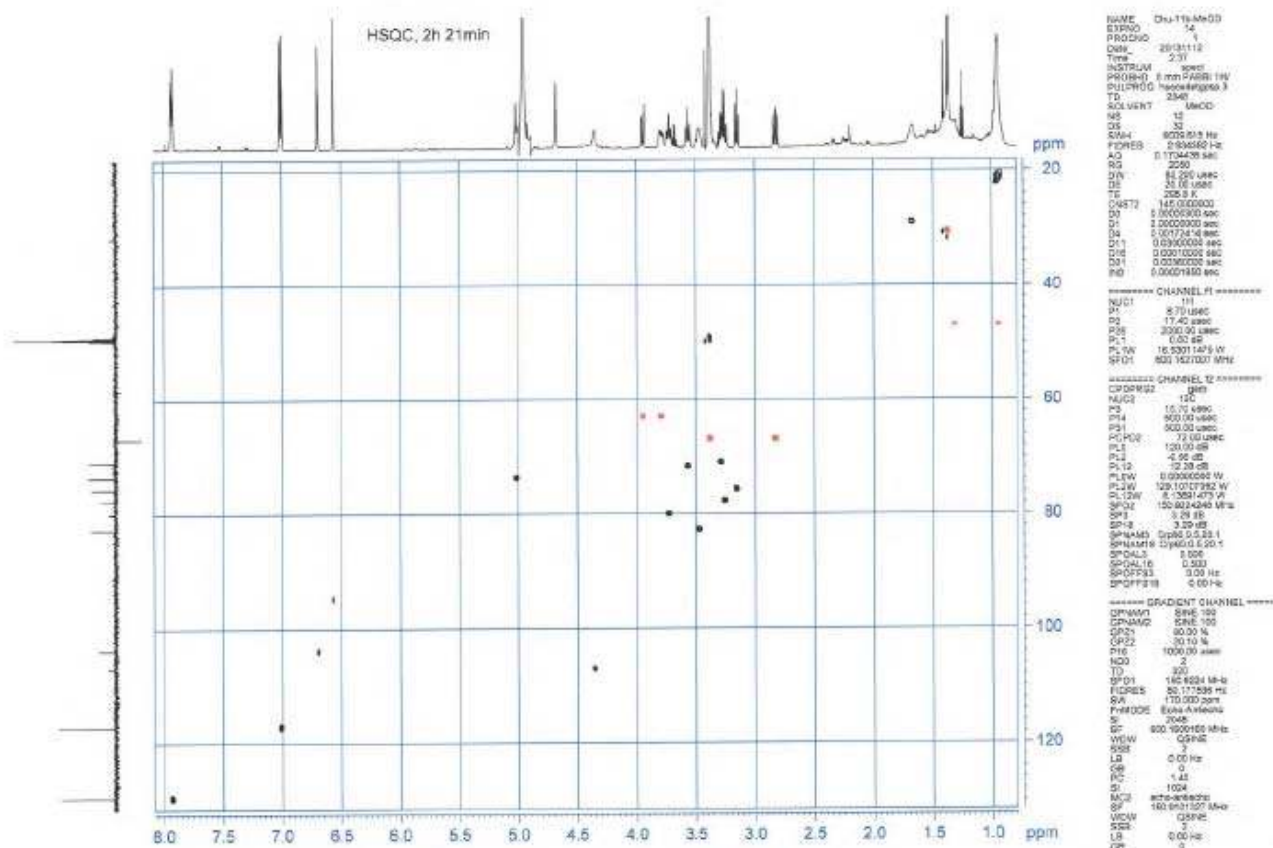
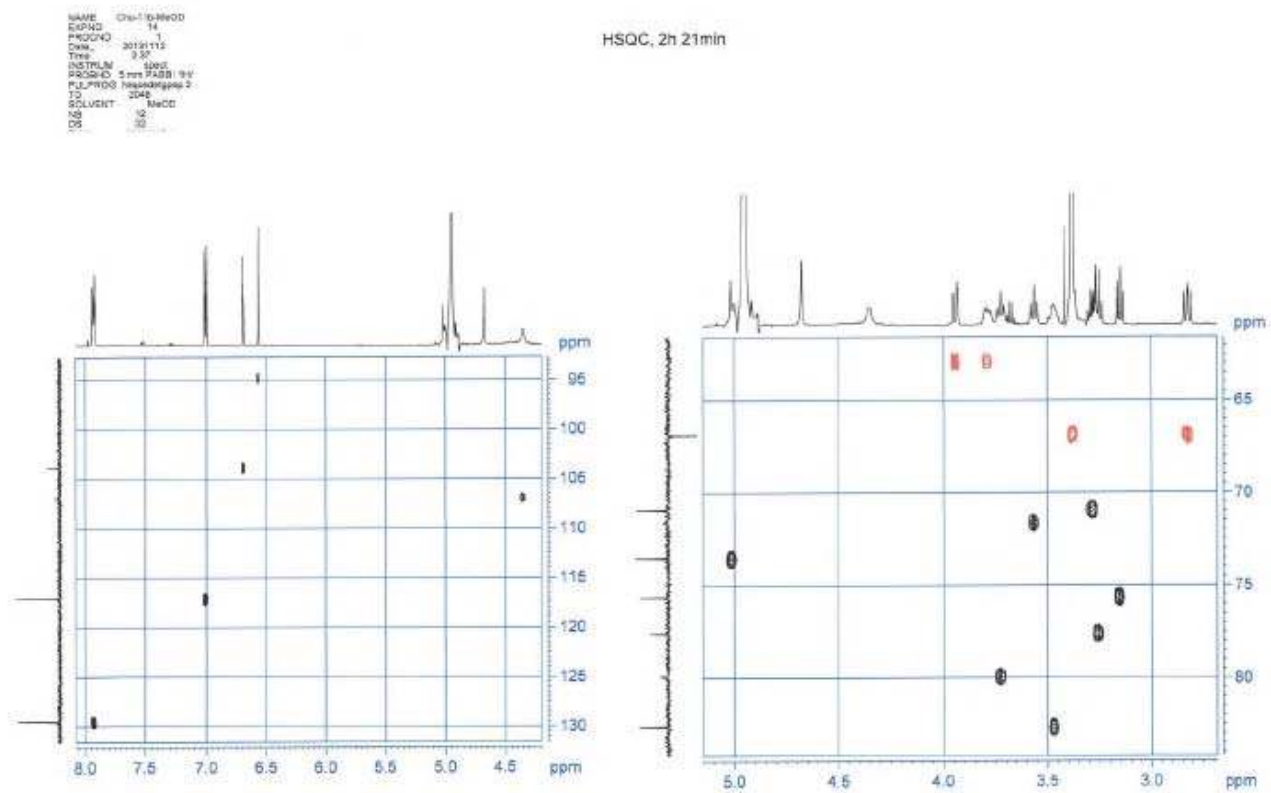
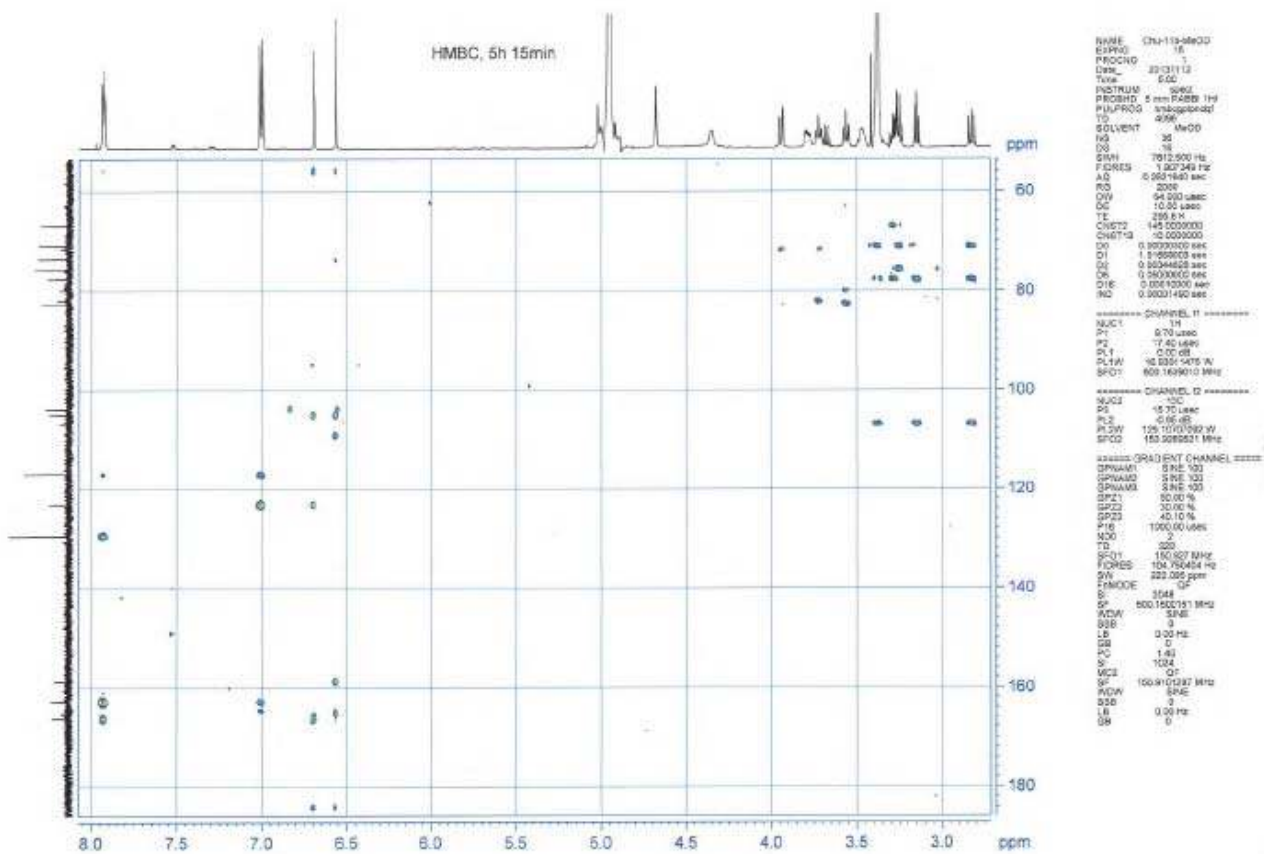
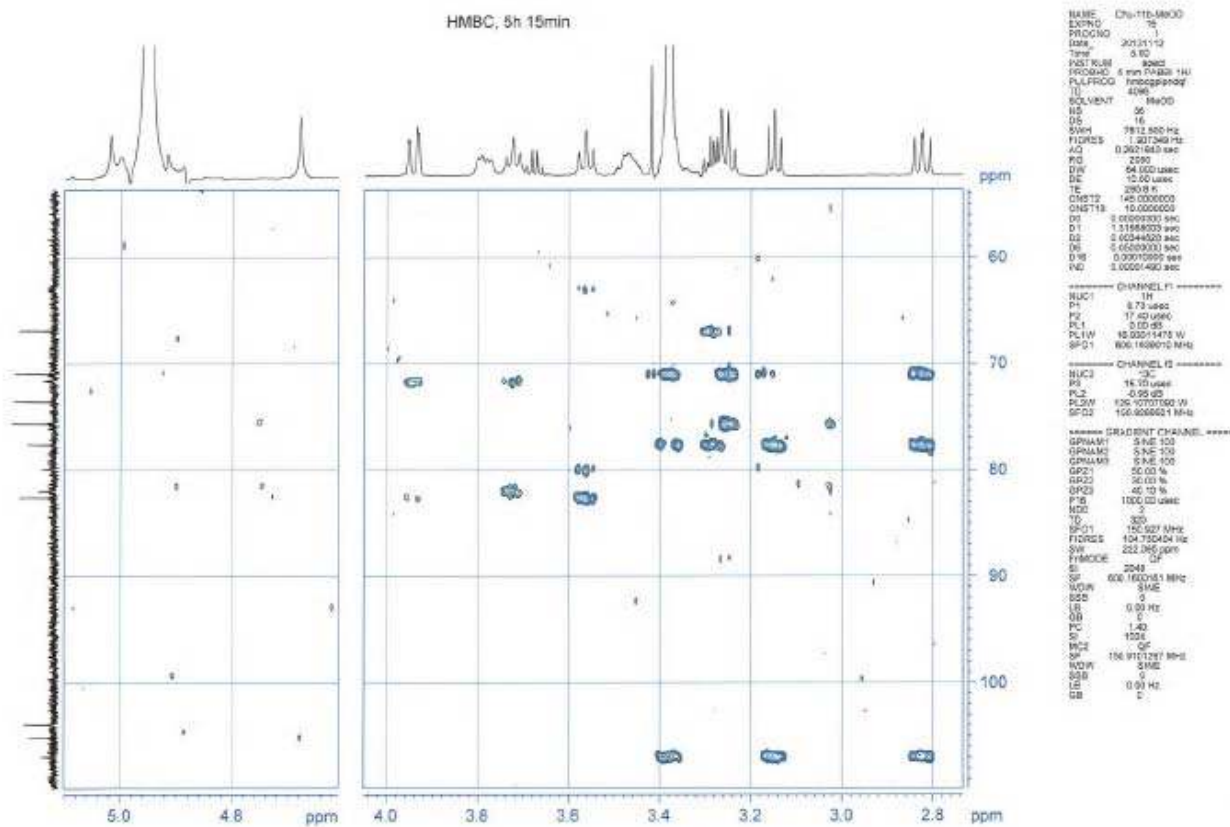


Figure S56. HSQC Spectrum of Compound 5 in Methanol-d₄



Figure S59. HMBC Spectrum of Compound 5 in Methanol- d_4



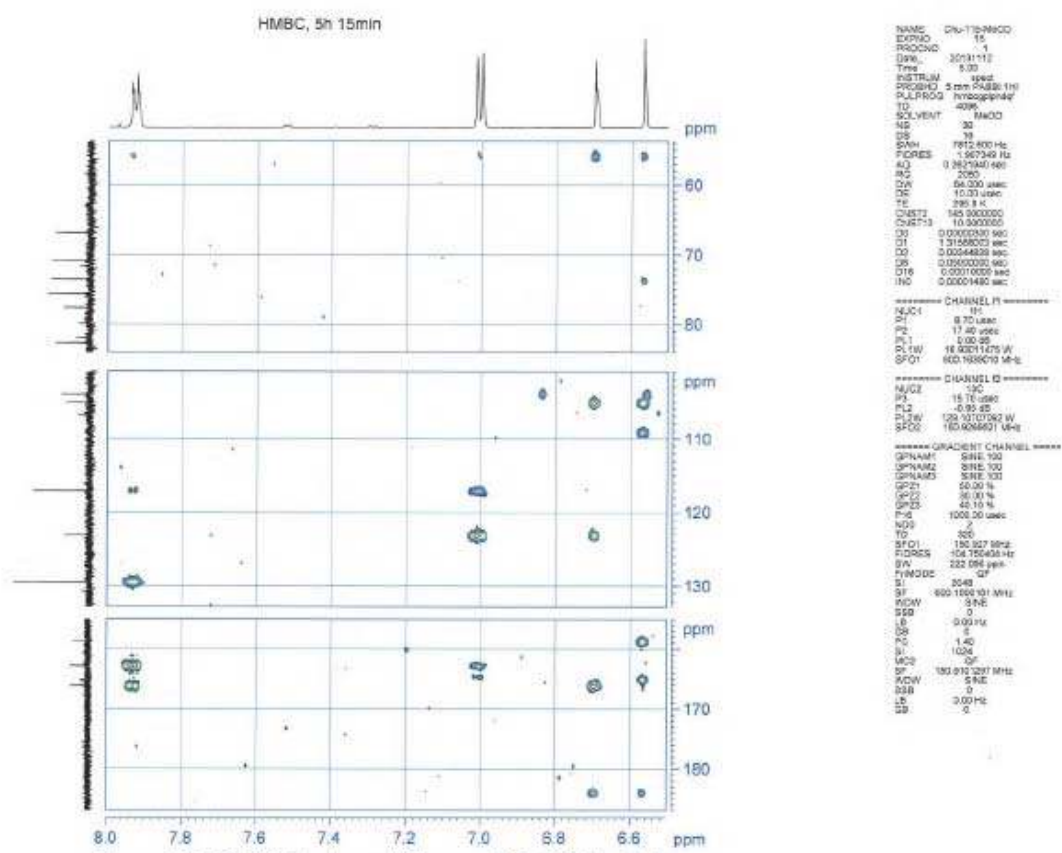
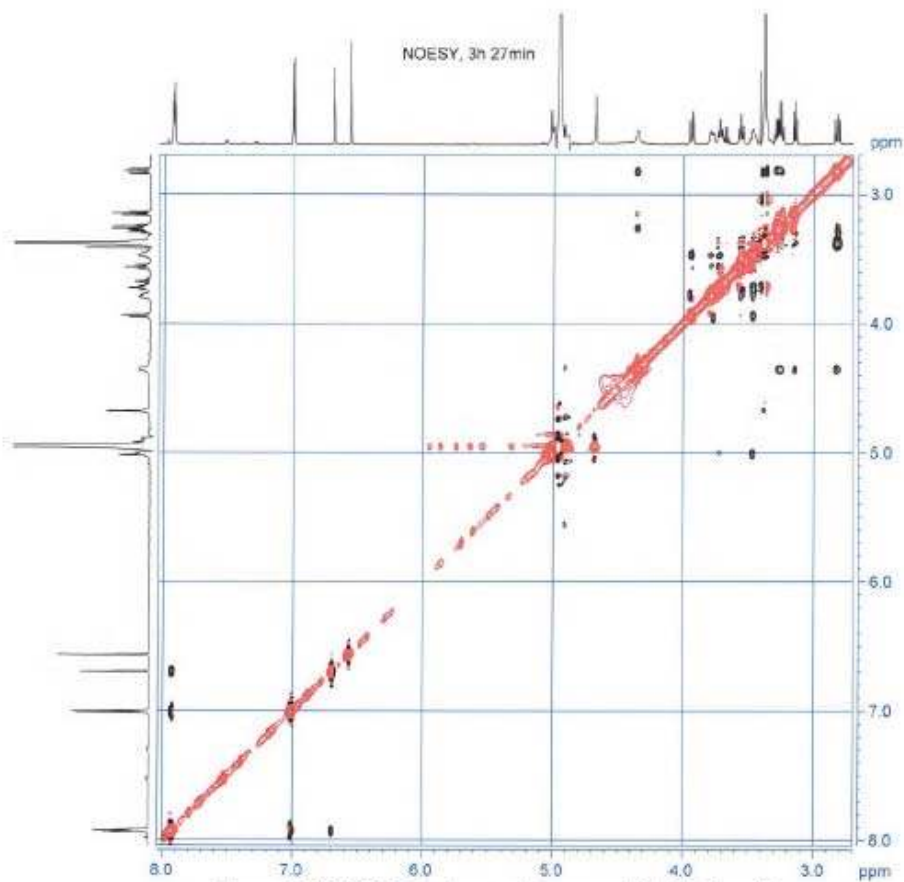


Figure S61. HMBC Spectrum of Compound 5 in Methanol-*d*₄



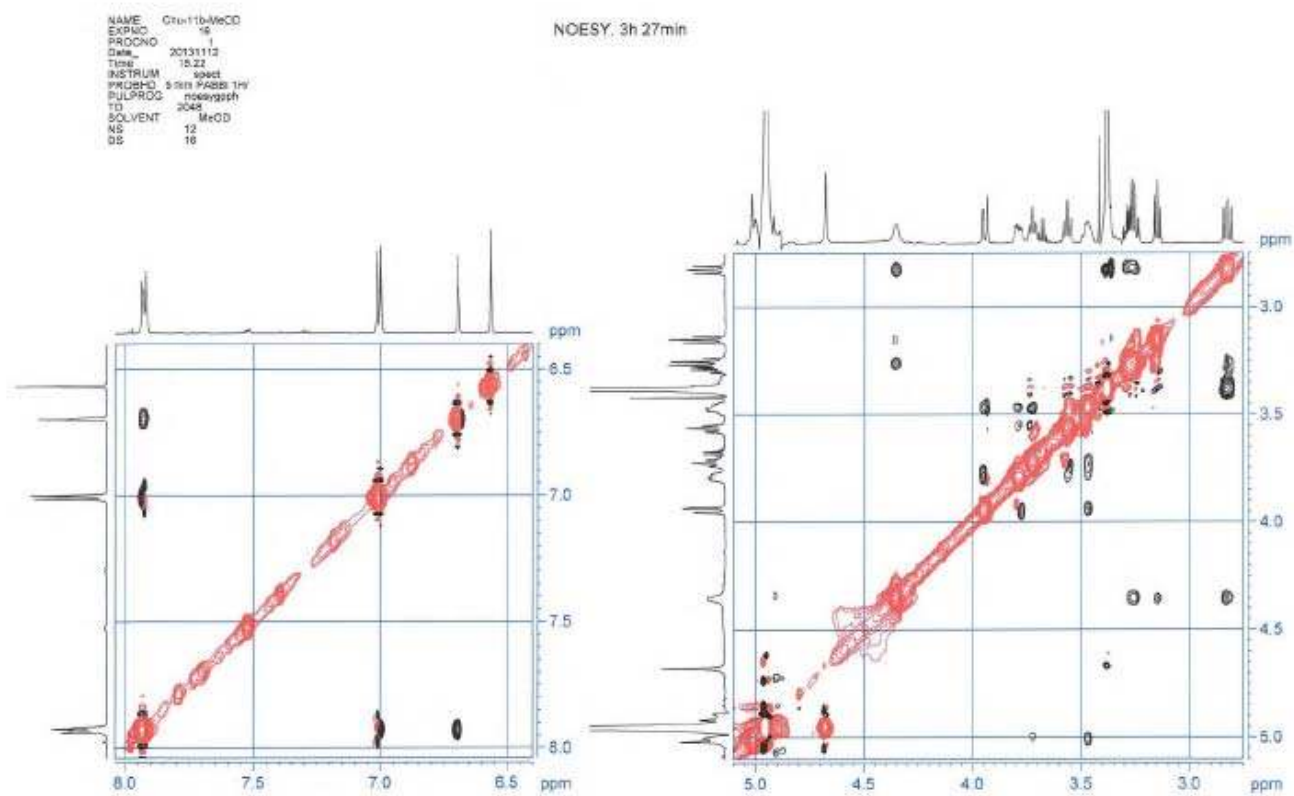
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RG 32.0
CW 64.000 usec
DE 10.00 usec
TE 294.2 K
CO 0.0000000 sec
CI 2.8200000 sec
CR 0.0000001 sec
CIS 0.0010000 sec
IC 0.0012815 sec

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NUC1 1H
P1 6.70 usec
P2 17.40 usec
PL1 0.00 dB
PL1W 16.92011473 W
SFO1 600.160010 MHz

***** GRADIENT CHANNEL *****
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CPI1 40.00 %
PIE 1000.00 usec
TD 300
SFO1 600.1600 MHz
FIDRES 0.007098 Hz
SW 13.000 ppm
FwMOCDE States-TPI
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Figure S62. NOESY Spectrum of Compound 5 in Methanol-*d*₄

Figure S63. NOESY Spectrum of Compound 5 in Methanol- d_4

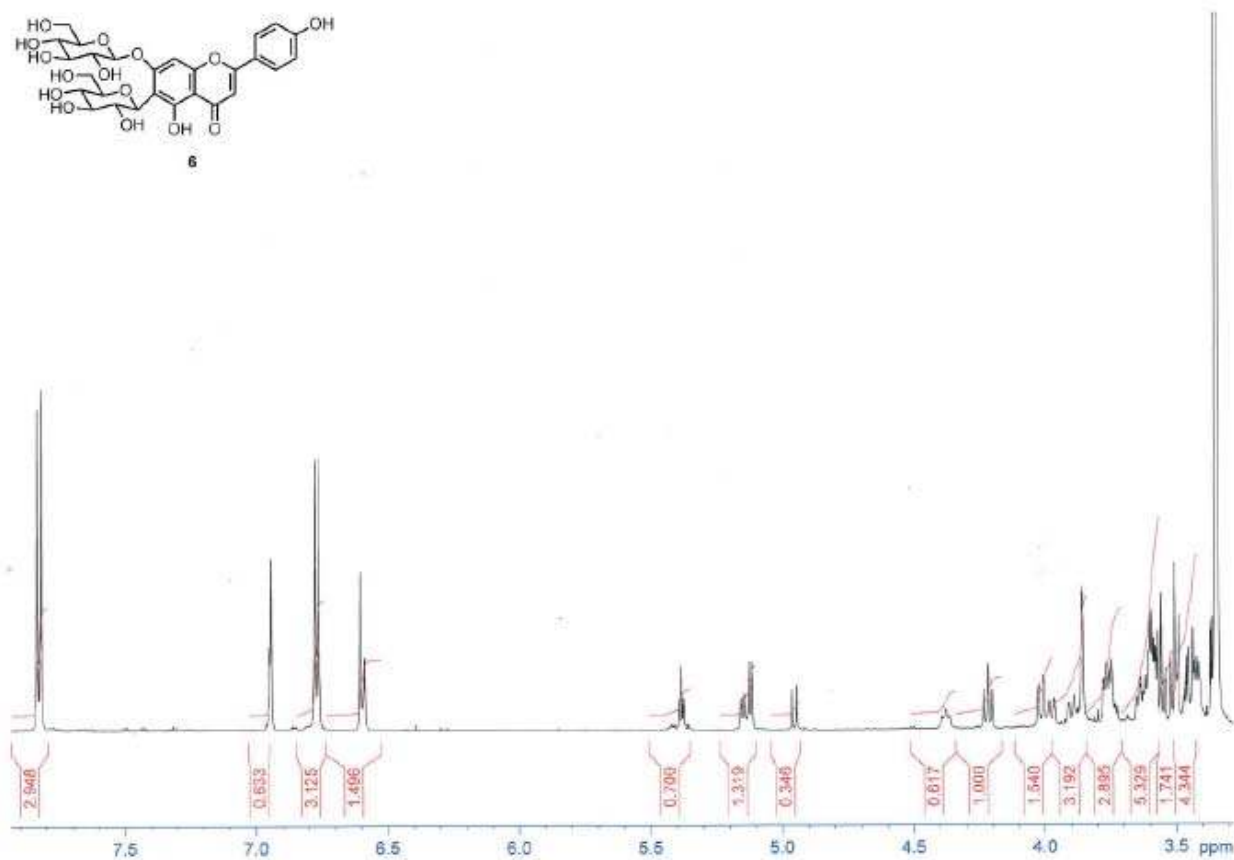
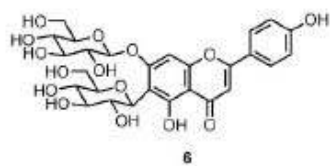
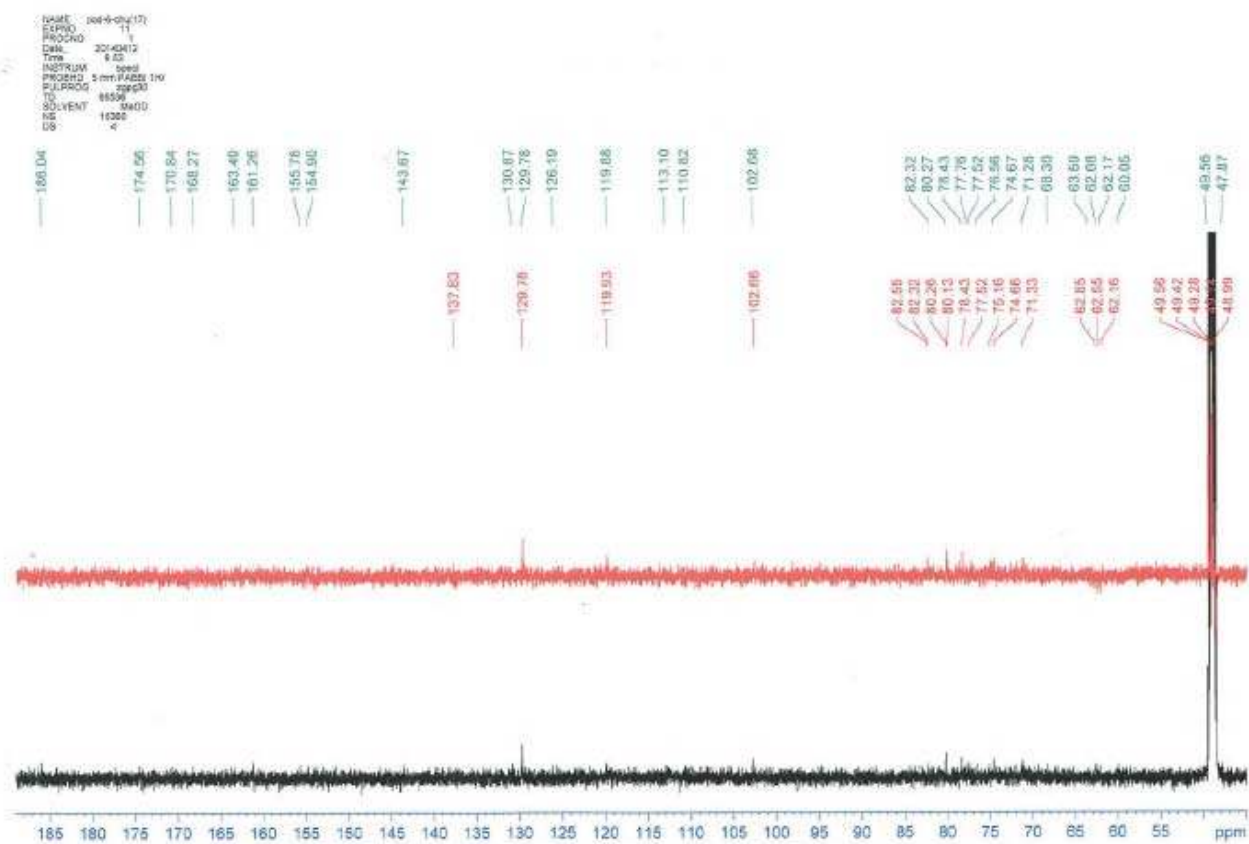


Figure S64. ¹H NMR Spectrum of Compound 6 in Methanol-*d*₄ (600 MHz)

Figure S65. ^{13}C NMR Spectrum of Compound 6 in Methanol- d_4 (150 MHz)

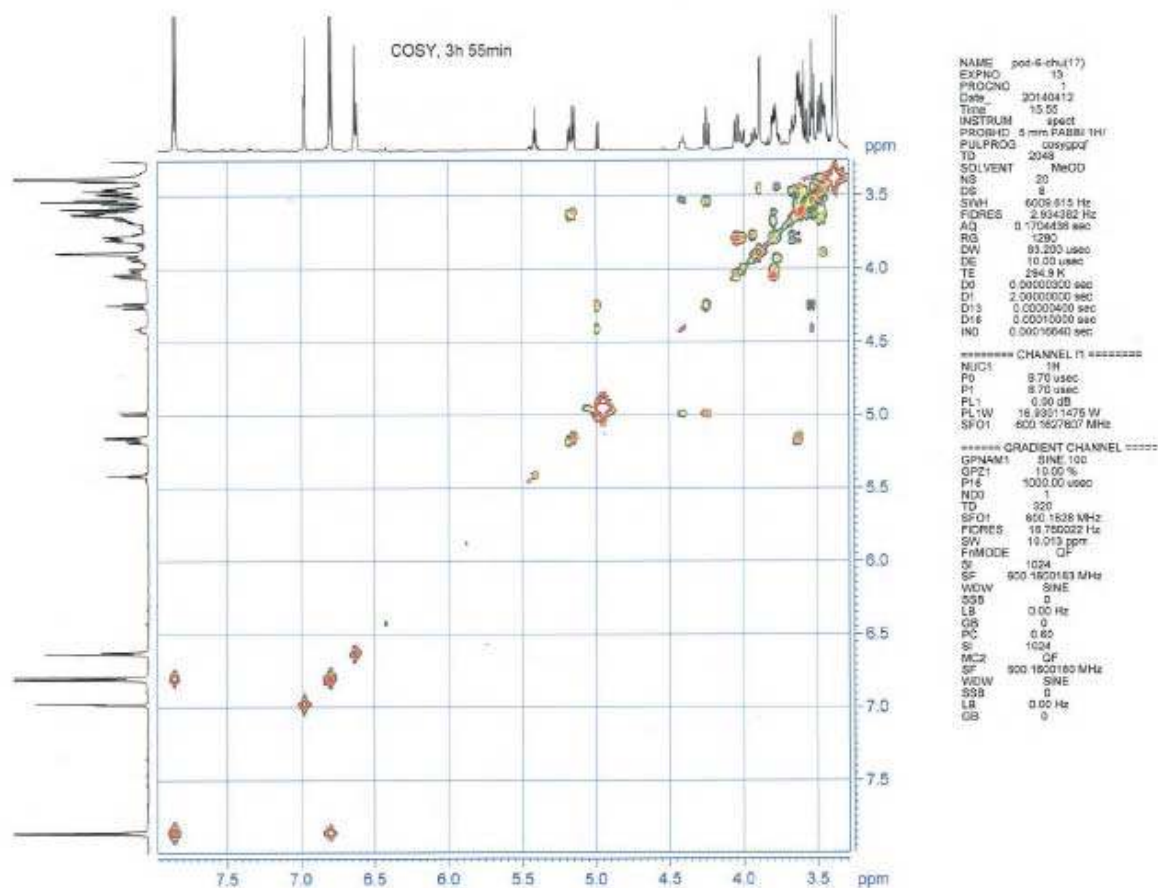
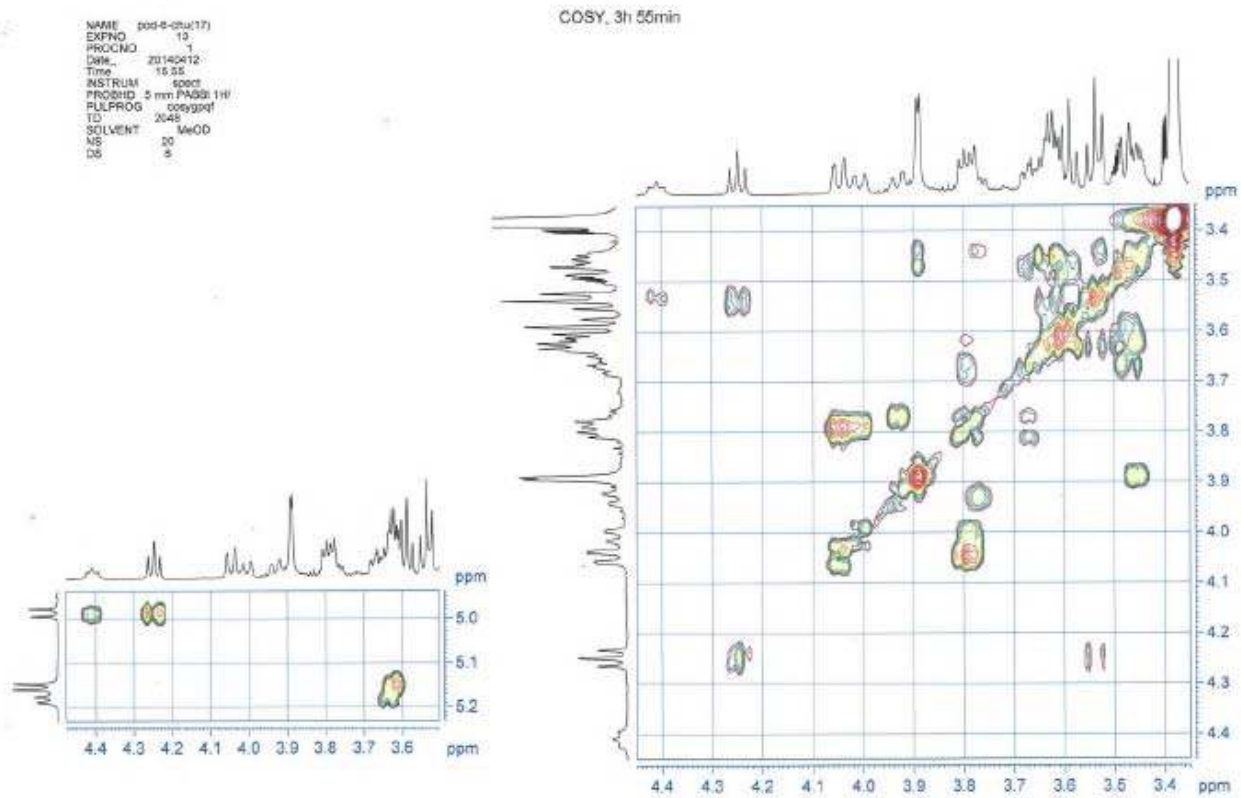


Figure S66. COSY Spectrum of Compound **6** in Methanol-*d*₄

Figure S67. COSY Spectrum of Compound 6 in Methanol- d_4

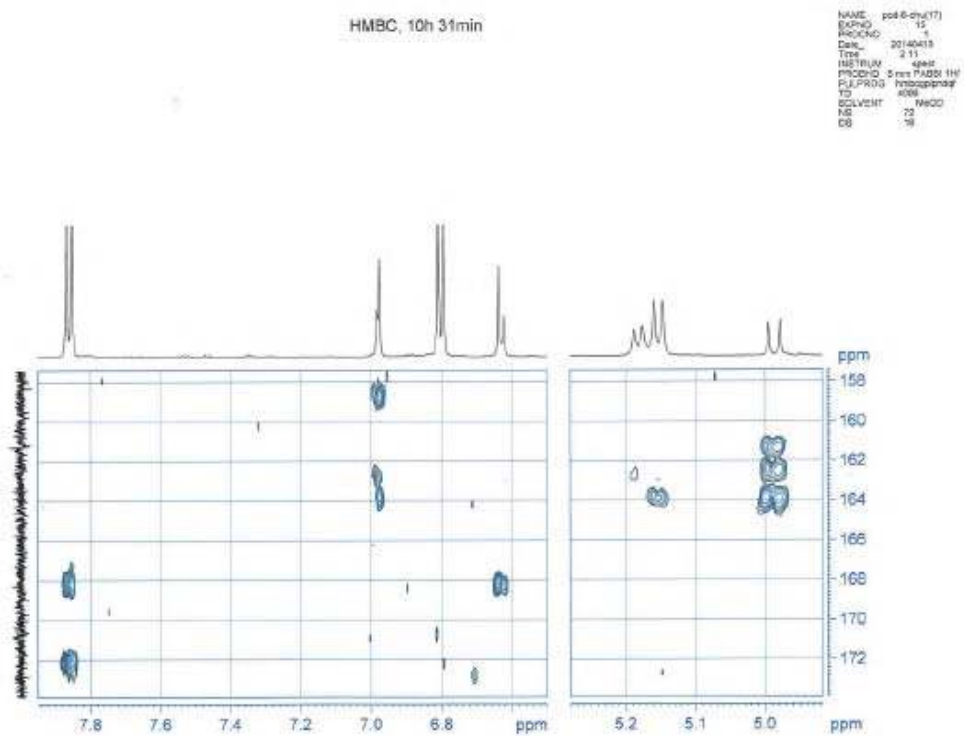


Figure S72. HMBC Spectrum of Compound 6 in Methanol-*d*₄

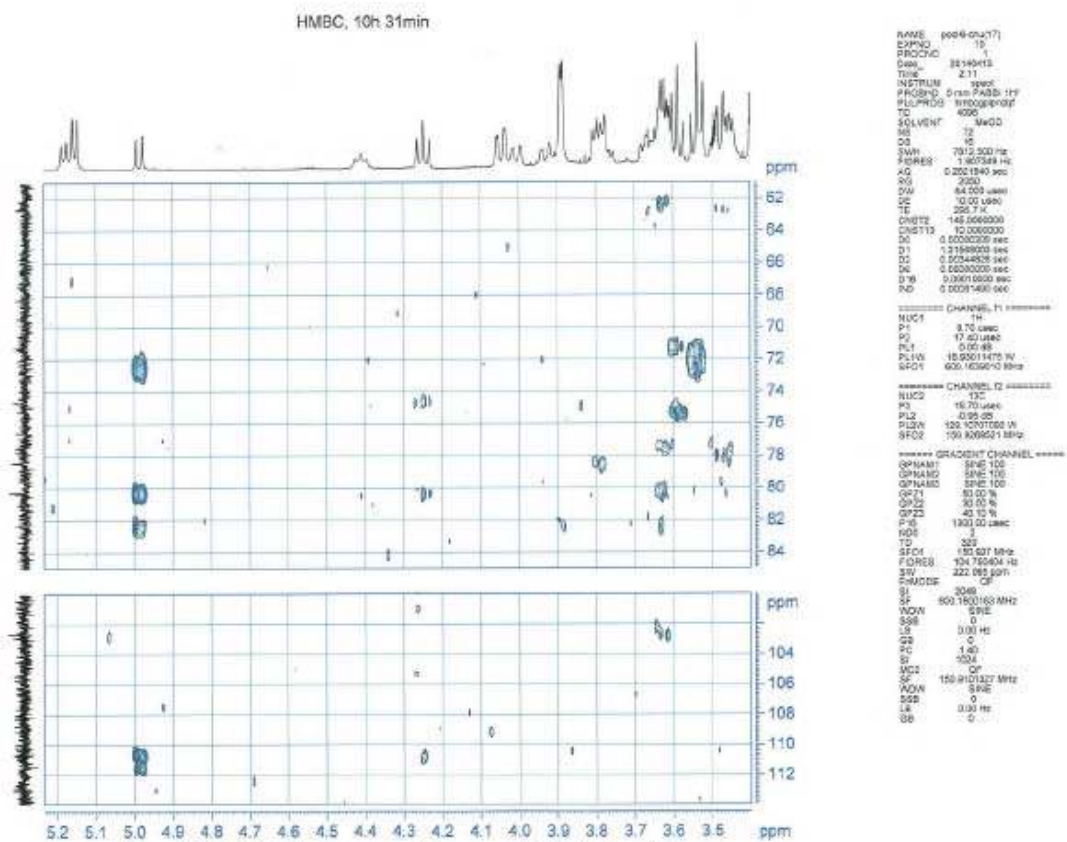


Figure S73. HMBC Spectrum of Compound 6 in Methanol-*d*₄

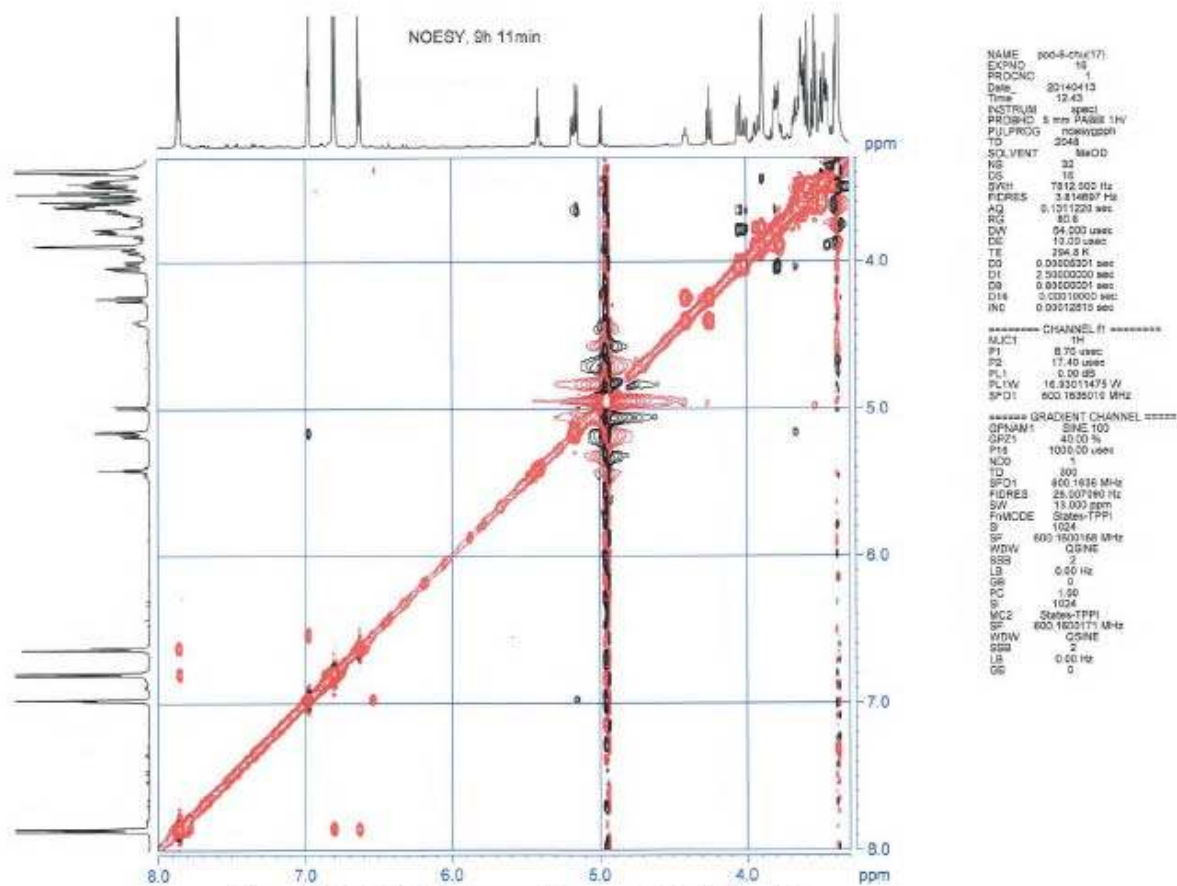
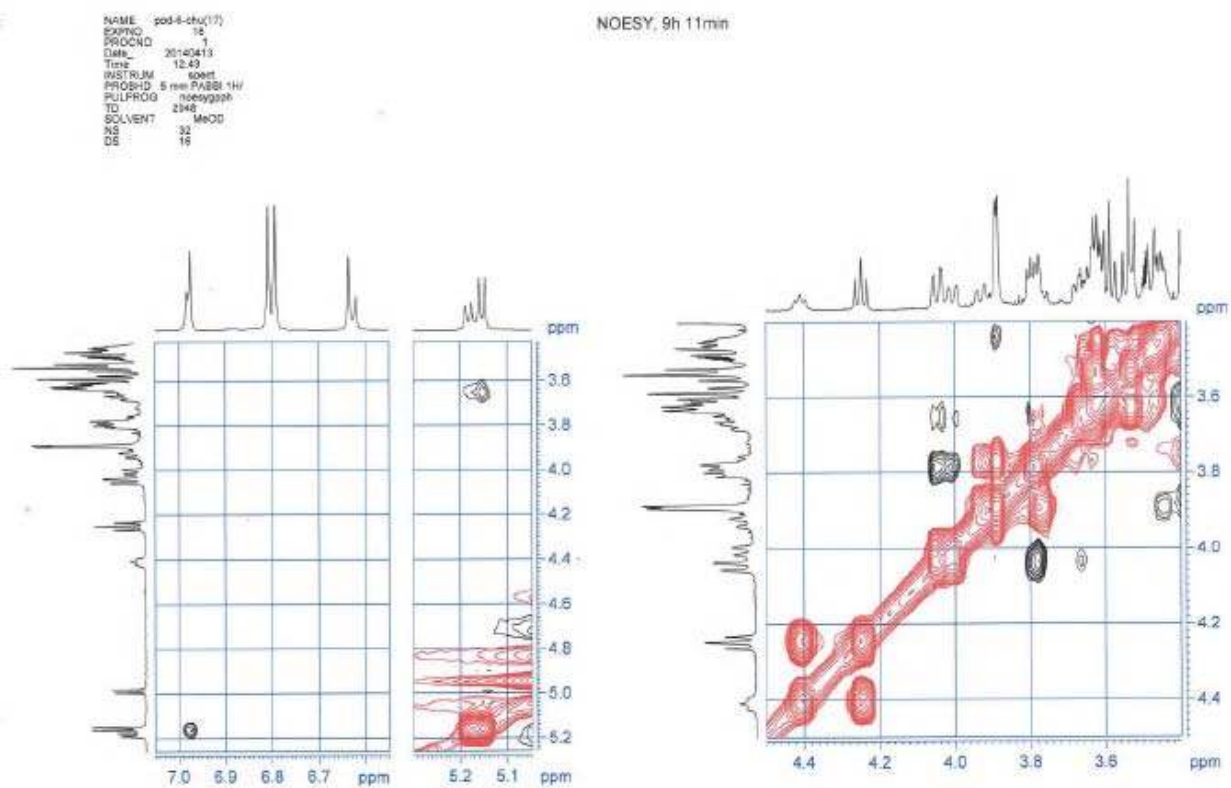


Figure S74. NOESY Spectrum of Compound 6 in Methanol-*d*₄

Figure S75. NOESY Spectrum of Compound 6 in Methanol- d_4

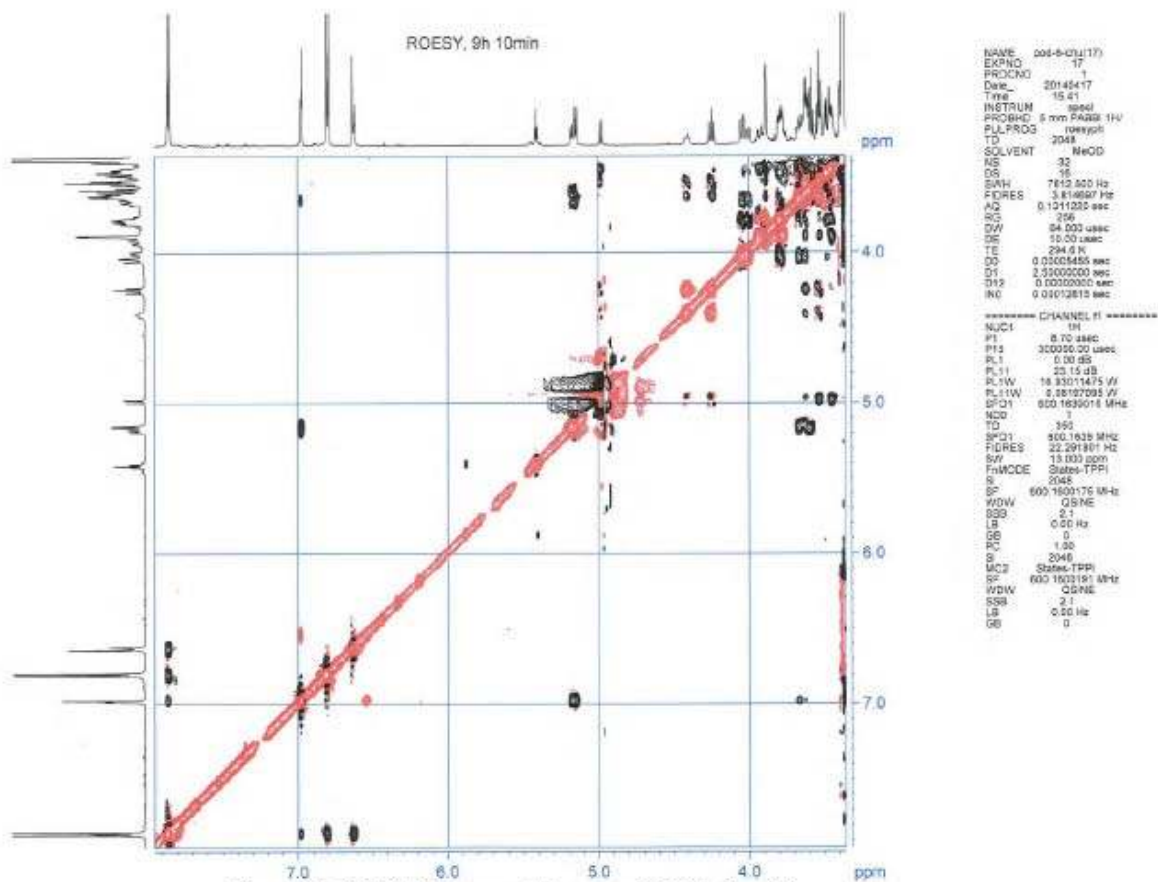
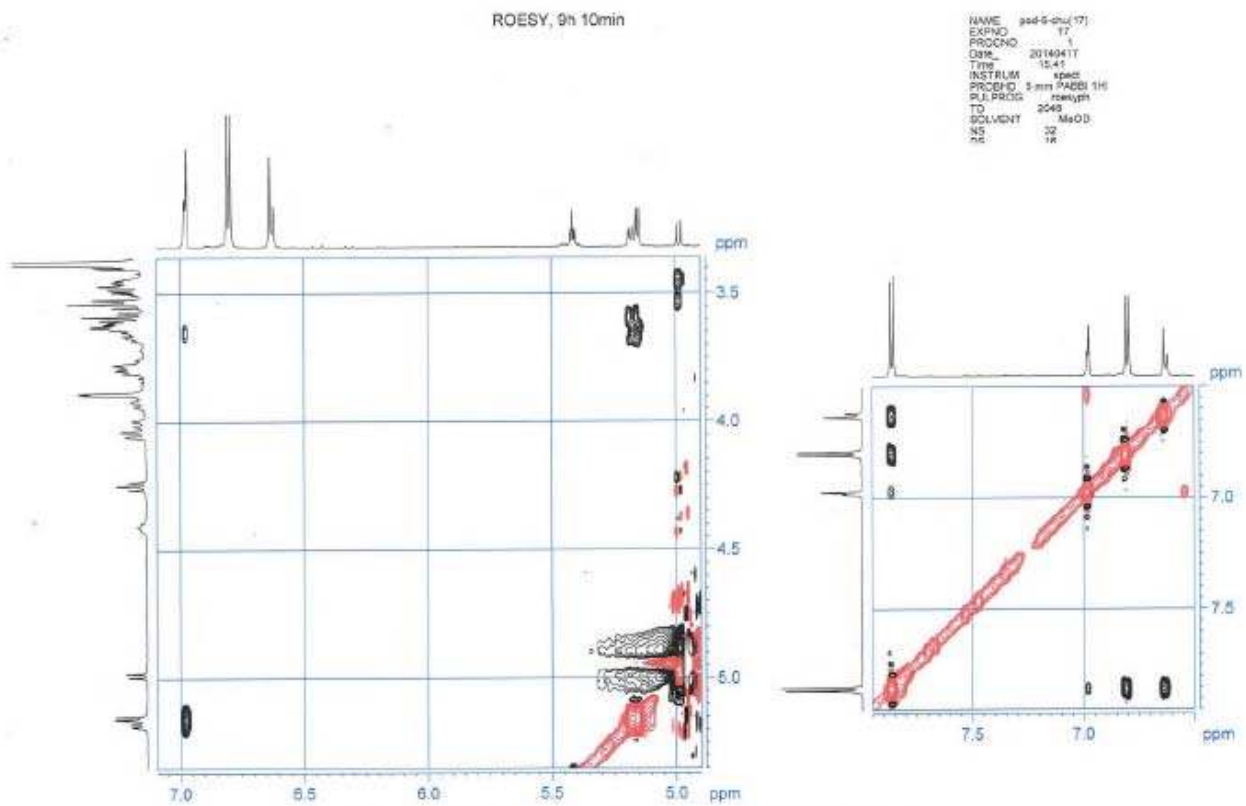


Figure S76. ROESY Spectrum of Compound 6 in Methanol-*d*₄

Figure S77. ROESY Spectrum of Compound 6 in Methanol- d_4

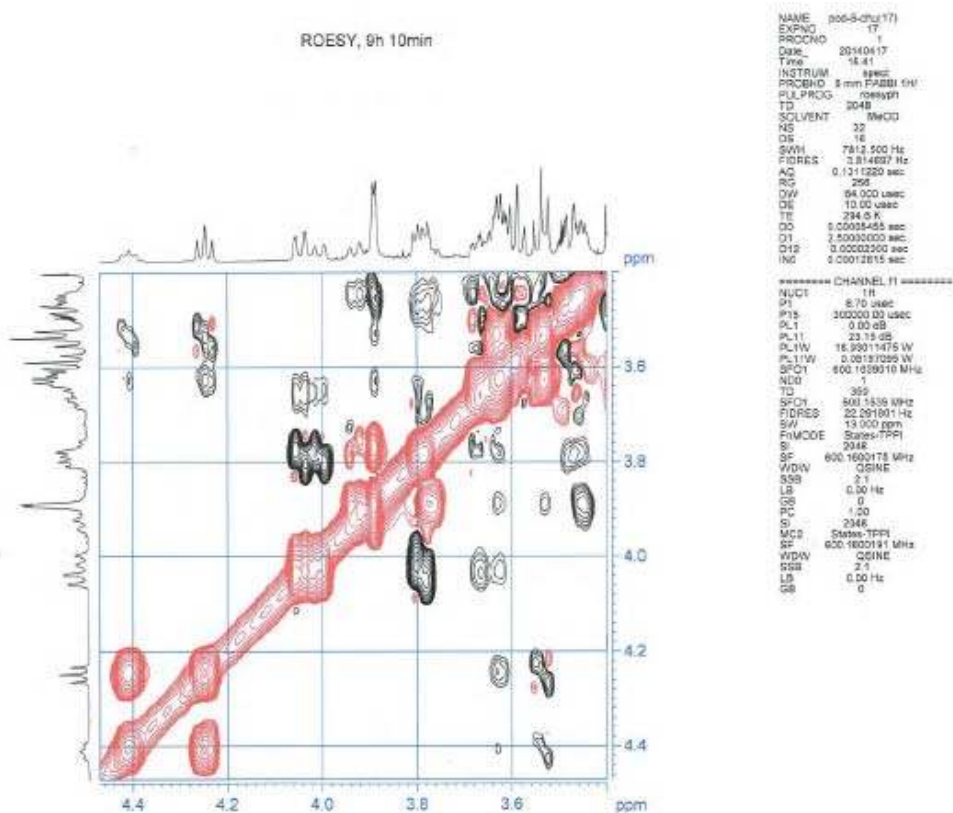
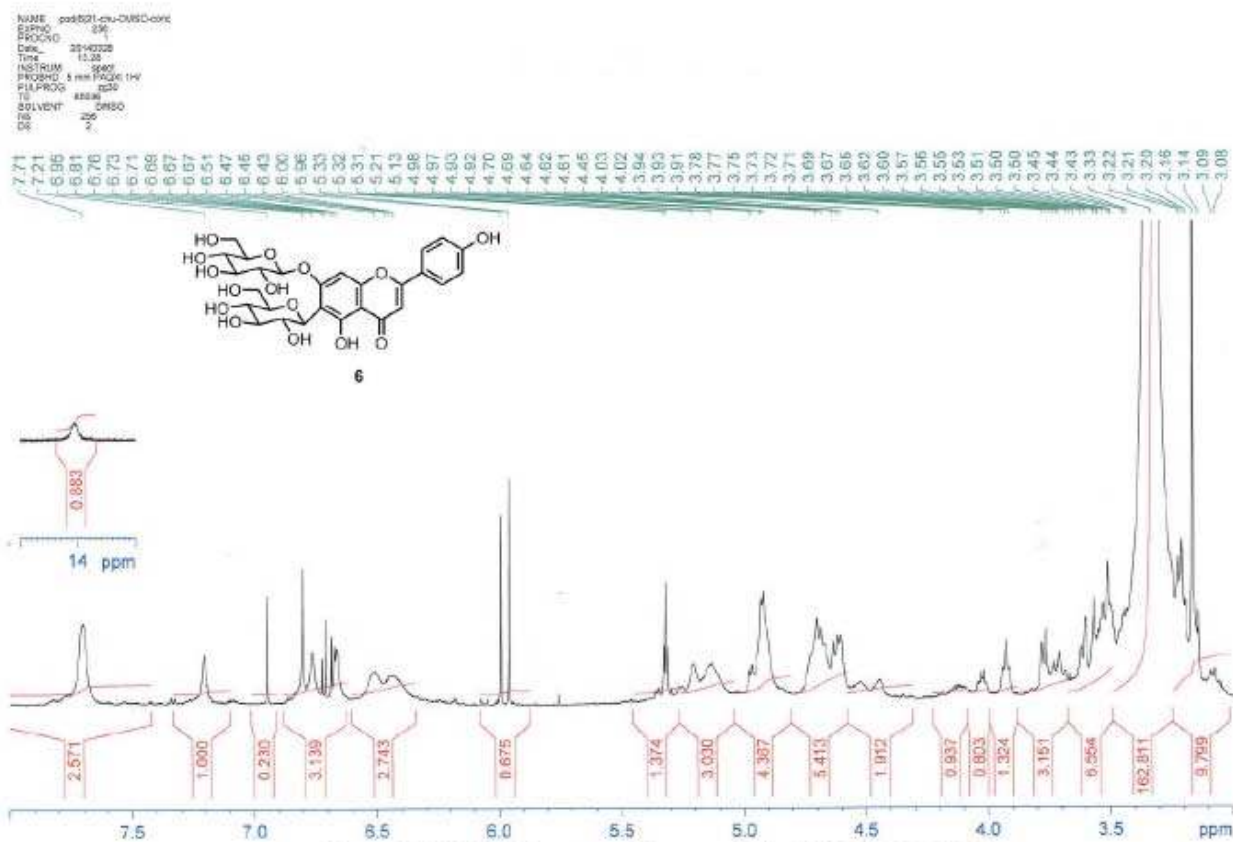


Figure S78. ROESY Spectrum of Compound 6 in Methanol-*d*₄

Figure S79. ^1H NMR Spectrum of Compound 6 in $\text{DMSO}-d_6$ (600 MHz)

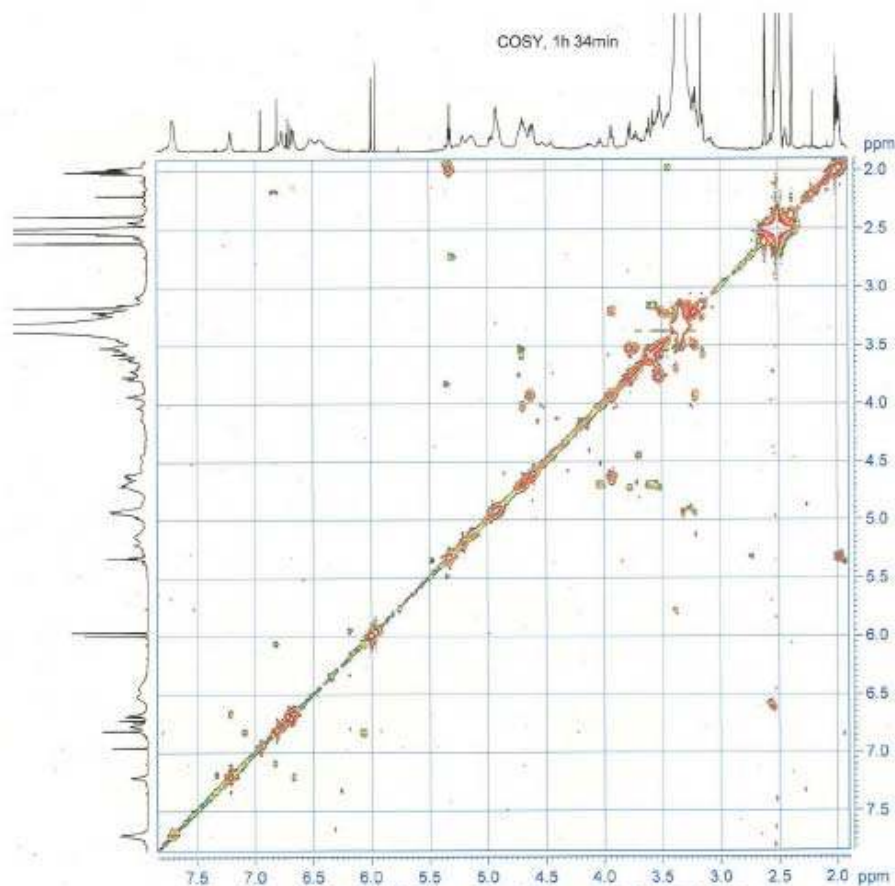


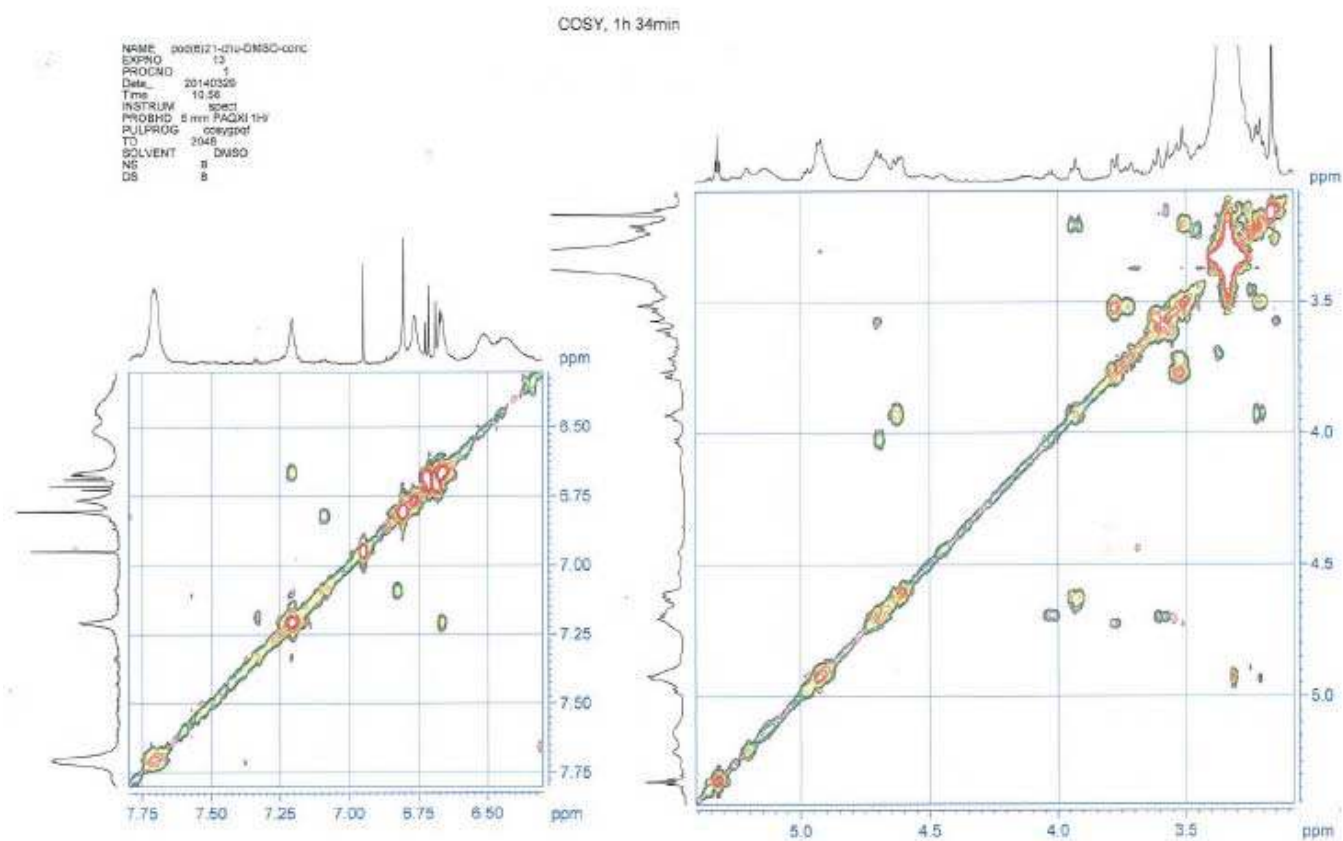
Figure S80. COSY Spectrum of Compound 6 in DMSO-*d*₆

```

NAME pod1521-cha-DMSO-core
EXPNO 13
PROCNO 1
Date_ 20140229
Time 10.55
INSTRUM spect
PROBHD 5 mm PAZ20 1H1
PULPROG cosygpgp1
TD 2048
SOLVENT DMSO
NS 8
DS 8
SWH 8000.818 Hz
FIDRES 2.904302 Hz
AQ 0.1704436 sec
RG 612
DW 83.250 usec
DE 10.00 usec
TE 295.0 K
Dc 0.0000000 sec
DT 2.0000000 sec
D13 0.03000400 sec
D16 0.0020000 sec
NS 0.0019940 sec

----- CHANNEL f1 -----
NUC1 1H
PC 8.40 usec
P1 8.40 usec
PL1 0.00 dB
PL1W 10.00011475 W
SFO1 600.1627507 MHz

----- GRADIENT CHANNEL -----
GRNAM1 SINE 100
SPZ1 10.00 %
P16 1900.00 usec
NU0 1
TD 330
SFO1 600.1628 MHz
FIDRES 18.780022 Hz
SN 18.013 ppm
F-MODE OF
SI 1024
SF 600.1600000 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
PC 0.80
SI 1024
MC2 OF
SF 600.1600001 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
    
```


Figure S81. COSY Spectrum of Compound 6 in DMSO- d_6

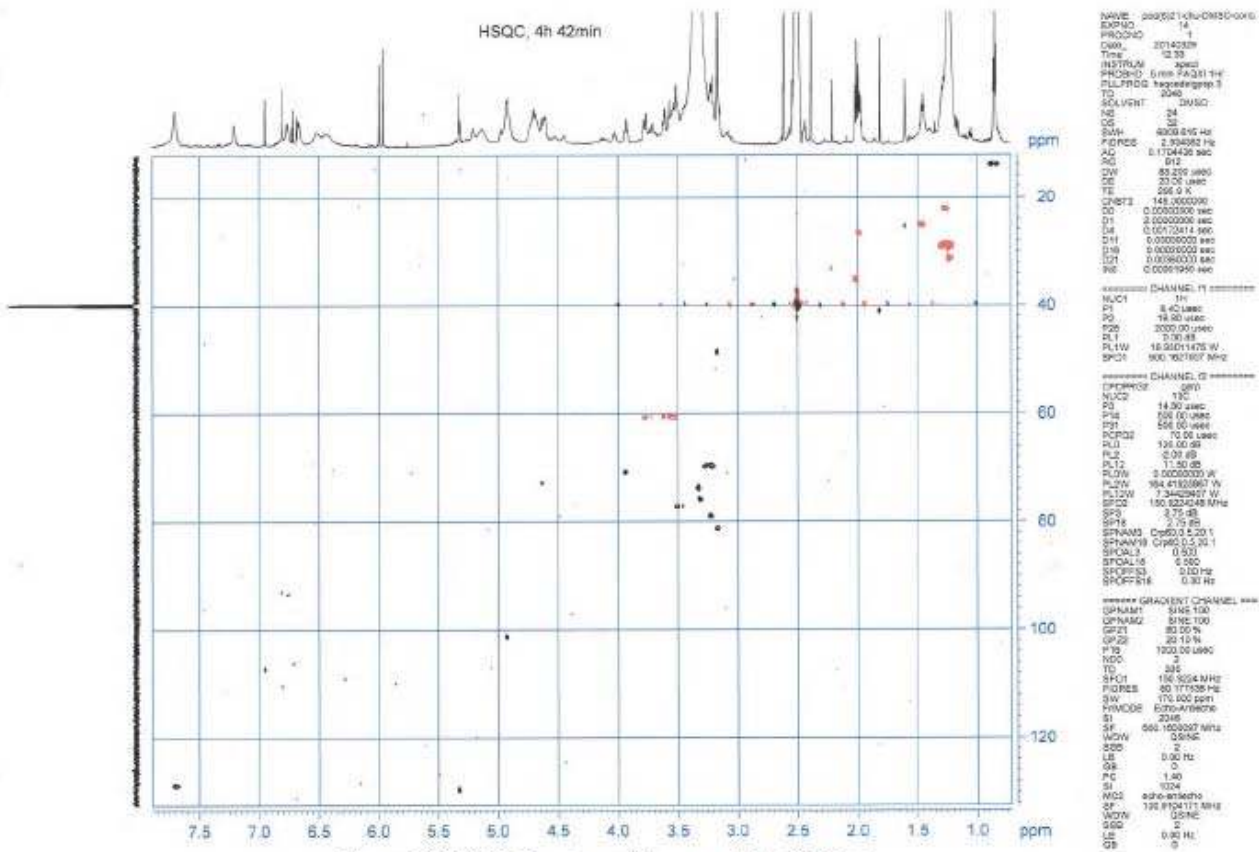


Figure S82. HSQC Spectrum of Compound 6 in DMSO-*d*₆

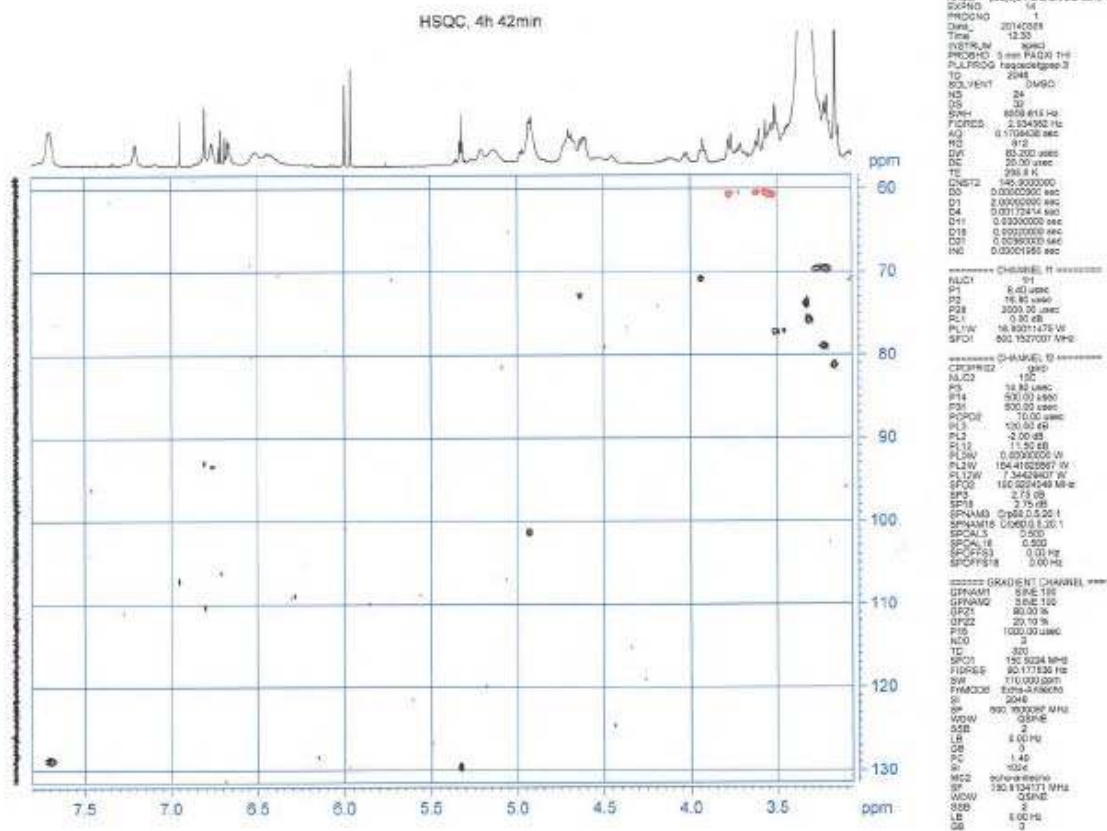


Figure S83. HSQC Spectrum of Compound 6 in DMSO-*d*₆

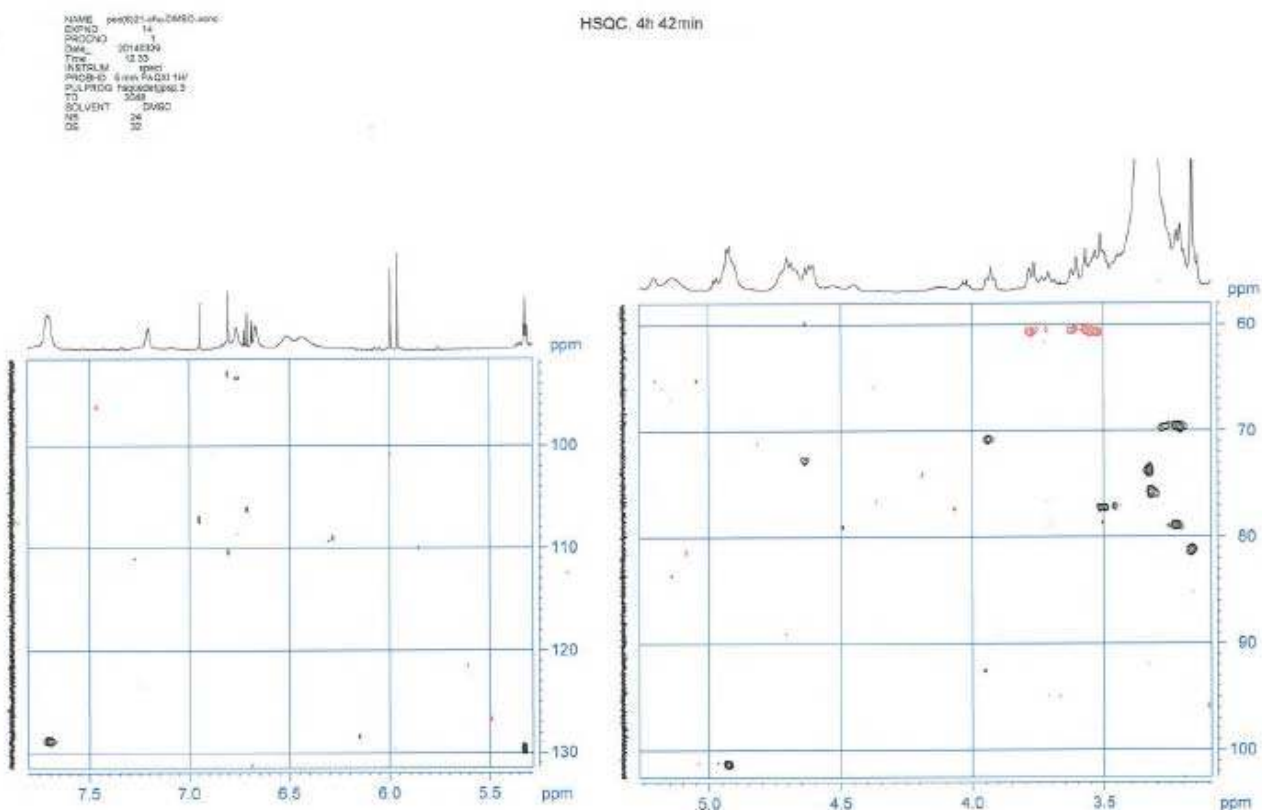
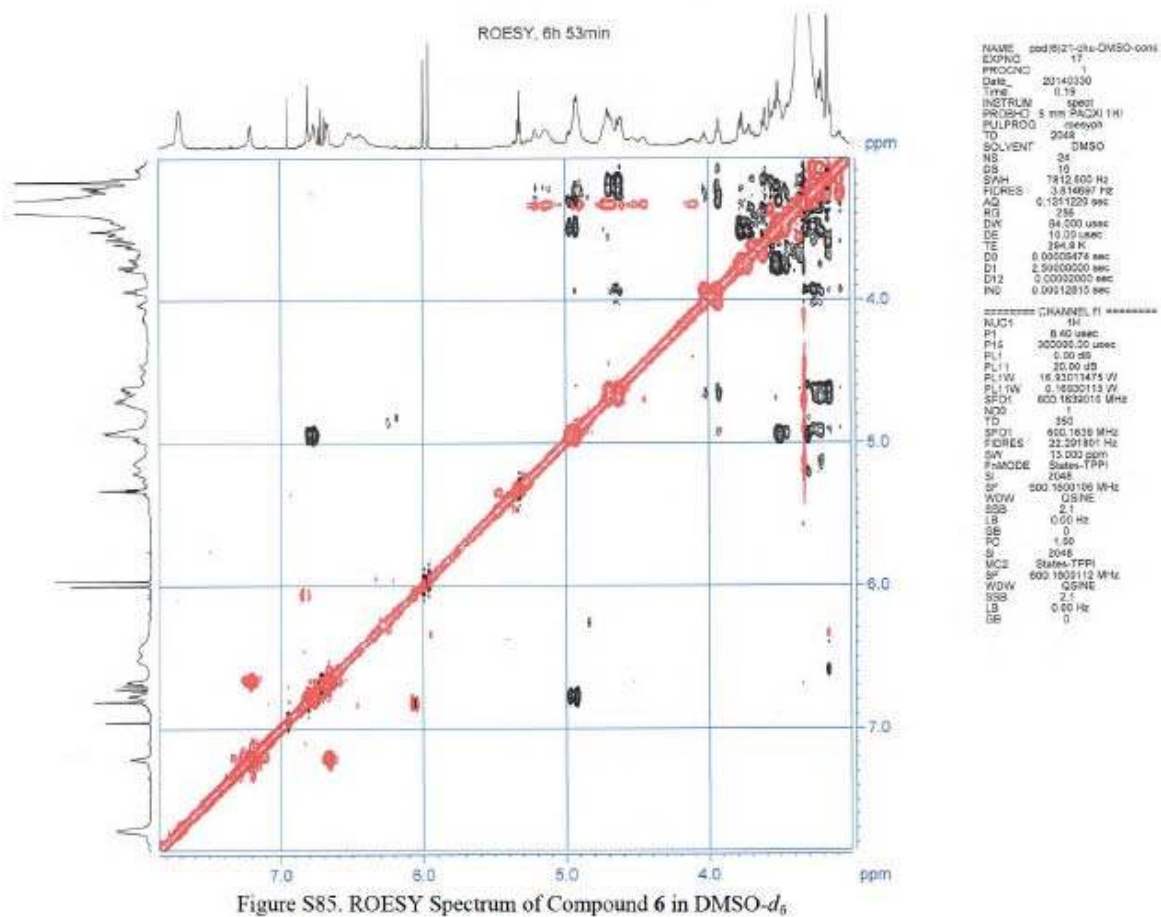


Figure S84. HSQC Spectrum of Compound 6 in DMSO-*d*₆



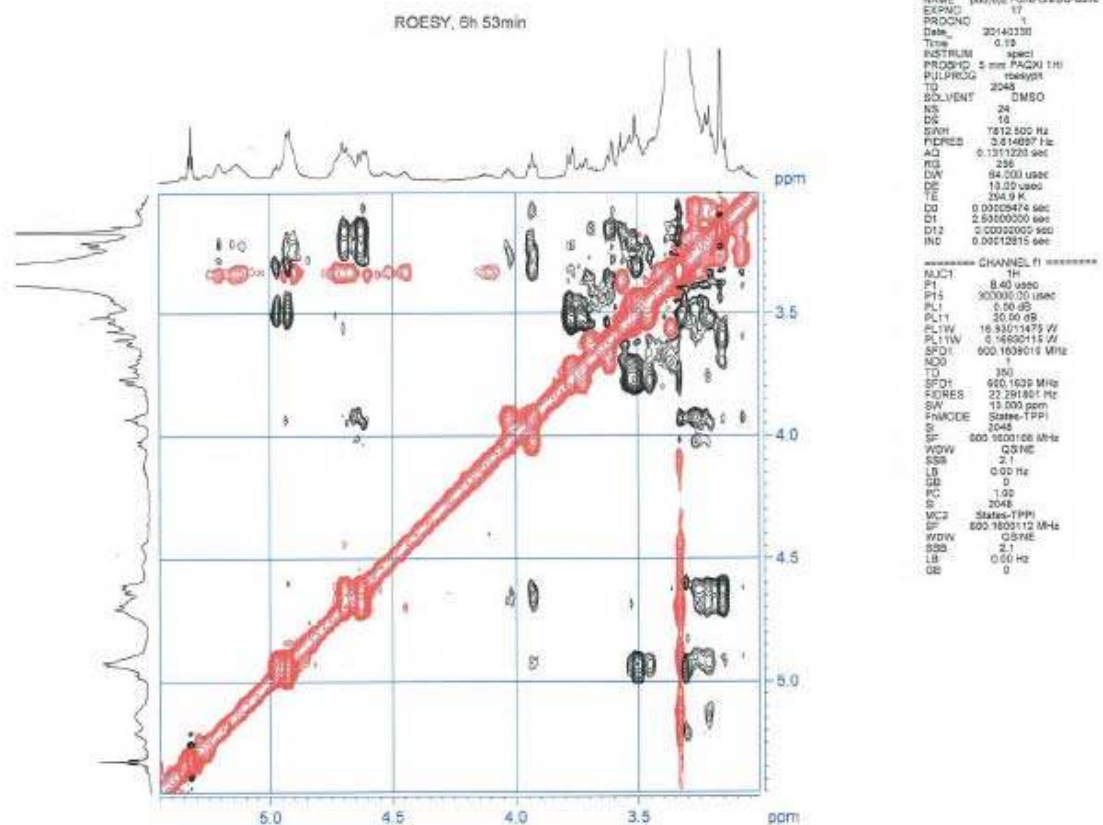
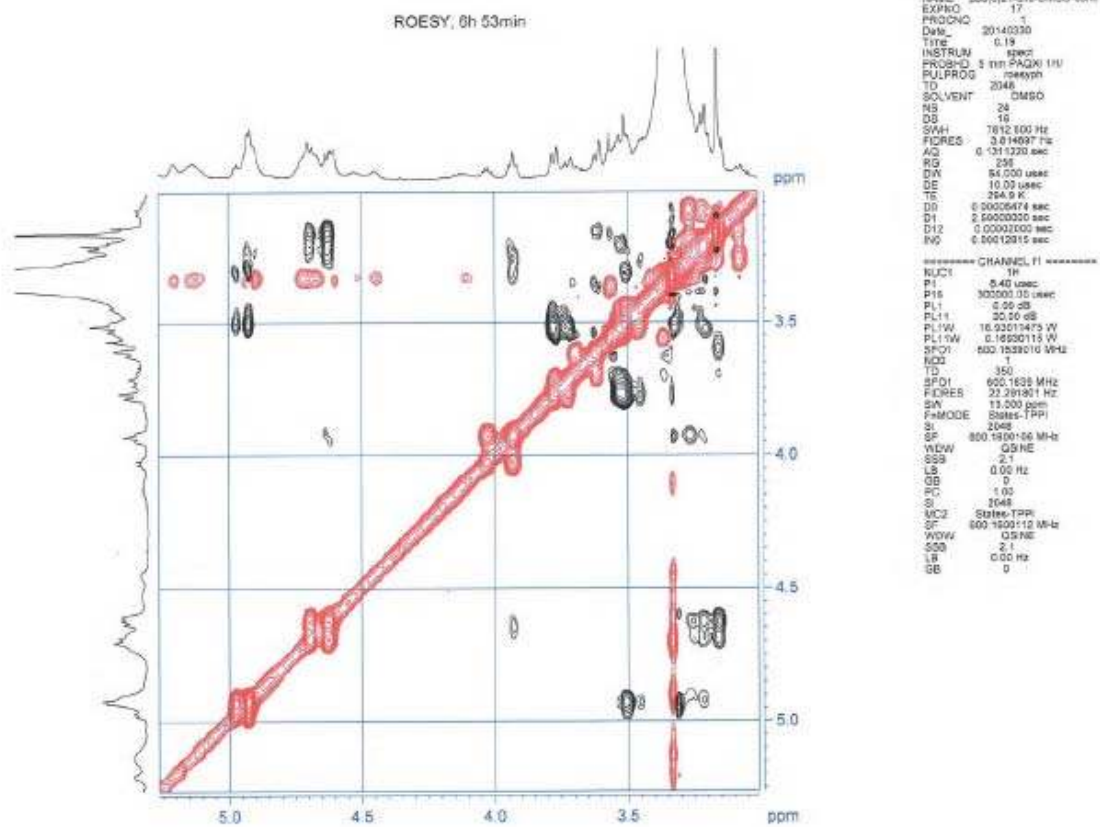


Figure S86. ROESY Spectrum of Compound 6 in DMSO-*d*₆

Figure S87. ROESY Spectrum of Compound **6** in DMSO- d_6

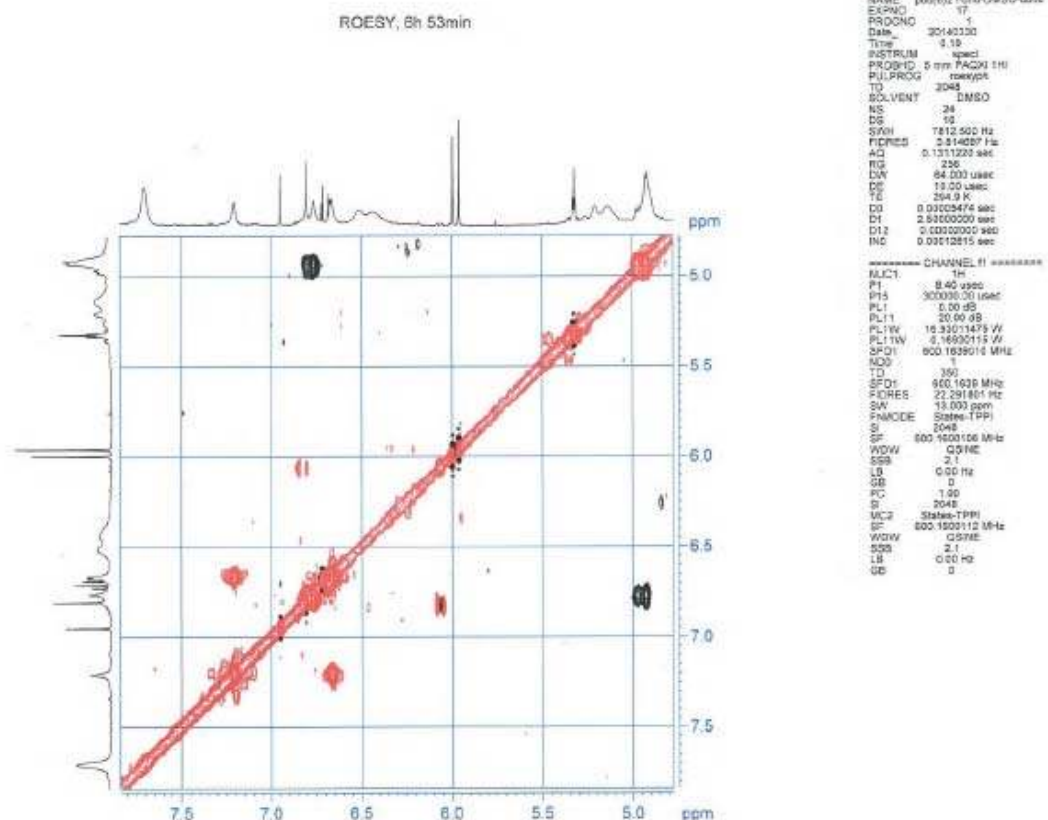


Figure S88. ROESY Spectrum of Compound 6 in DMSO-*d*₆