

Supplementary Data: Constituents of the roots of *Dichapetalum pallidum* and their anti-proliferative activity

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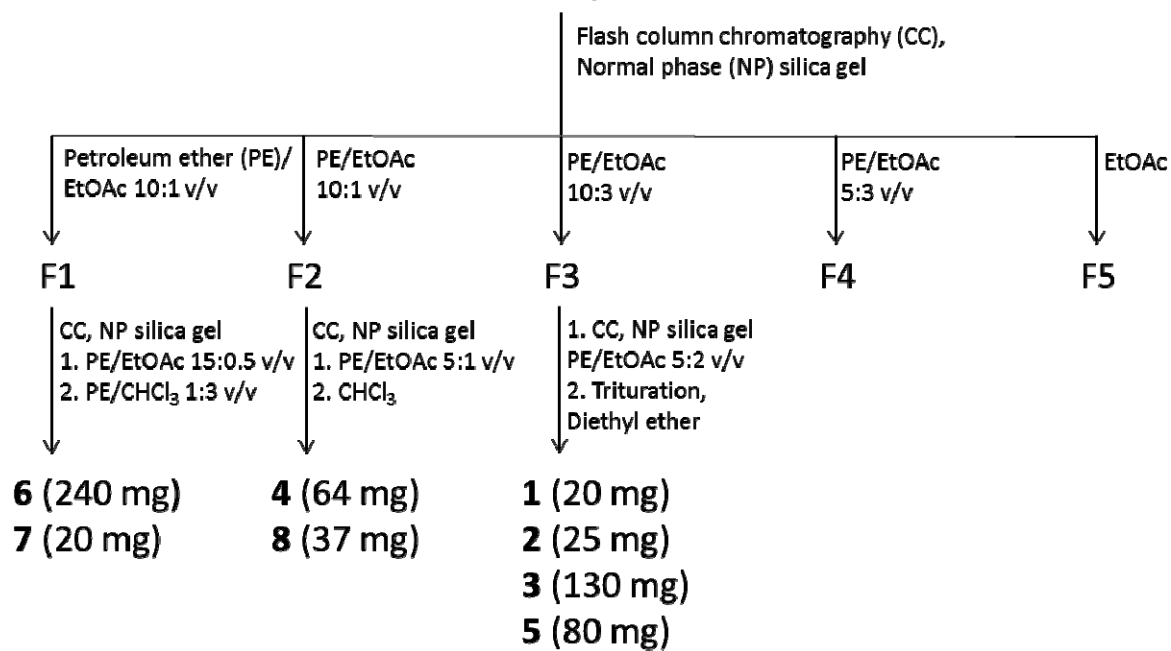
Figure S11. IR spectrum of compound **1**

Table S1. Jurkat cell viability assay data for compounds **1 - 3**

Table S2. HL-60 cell viability assay data for compounds **1 – 3**

Table S3. CEM cell viability assay data for compounds **1 – 3**

D. pallidum EtOAc extract
(38.7g)



Scheme S1. Isolation of compounds 1 – 8

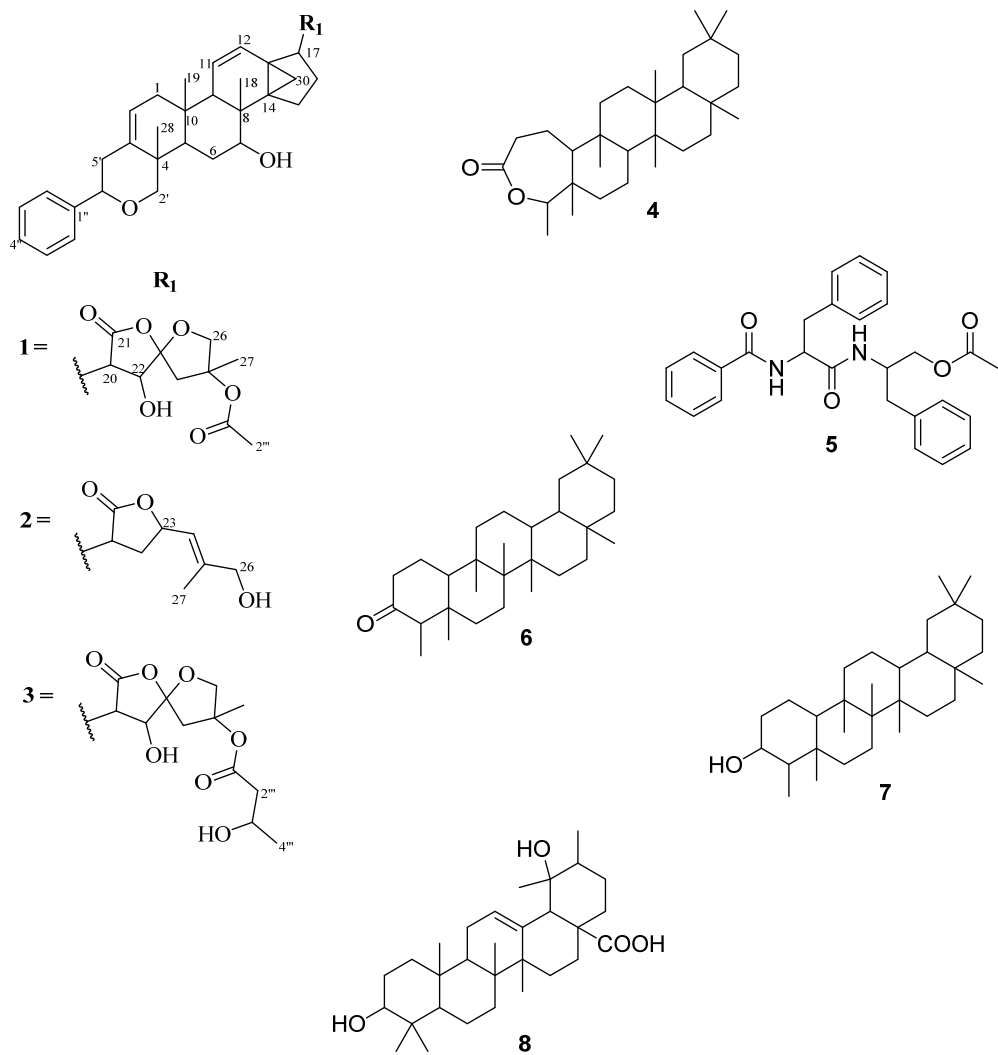
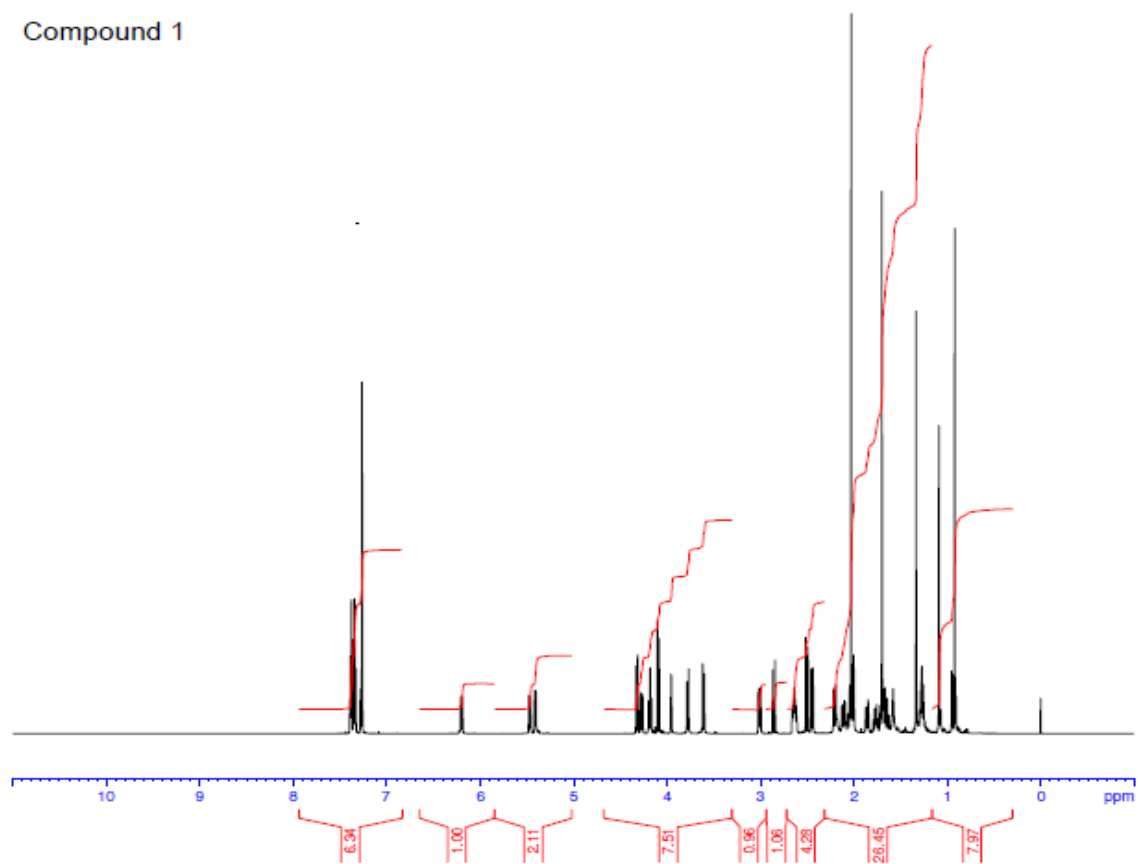


Figure S1. The structures of compounds 1 – 8

F3-S3 in CDCl₃, 1H

Compound 1



Current Data Parameters
NAME Jun05-2014_160_1
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date 20140605
Time 16.35
INSTRUM spect
PROBHD 5 mm PATXI 1H/
PULPROG zg30
TD 65536
SOLVENT CDCl₃
NS 64
DS 0
SWH 12376.237 Hz
FIDRES 0.188846 Hz
AQ 2.6476543 sec
RG 80.6
DW 40.400 usec
DE 6.50 usec
TE 300.0 K
D1 1.0000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 7.55 usec
PL1 4.00 dB
SFO1 600.1337060 MHz

F2 - Processing parameters
SI 32768
SF 600.1300113 MHz
WDW no
SSB 0
LB 0 Hz
GB 0
PC 1.00

Figure S2. ¹H-NMR spectrum (600MHz, CDCl₃, 303K) of compound 1

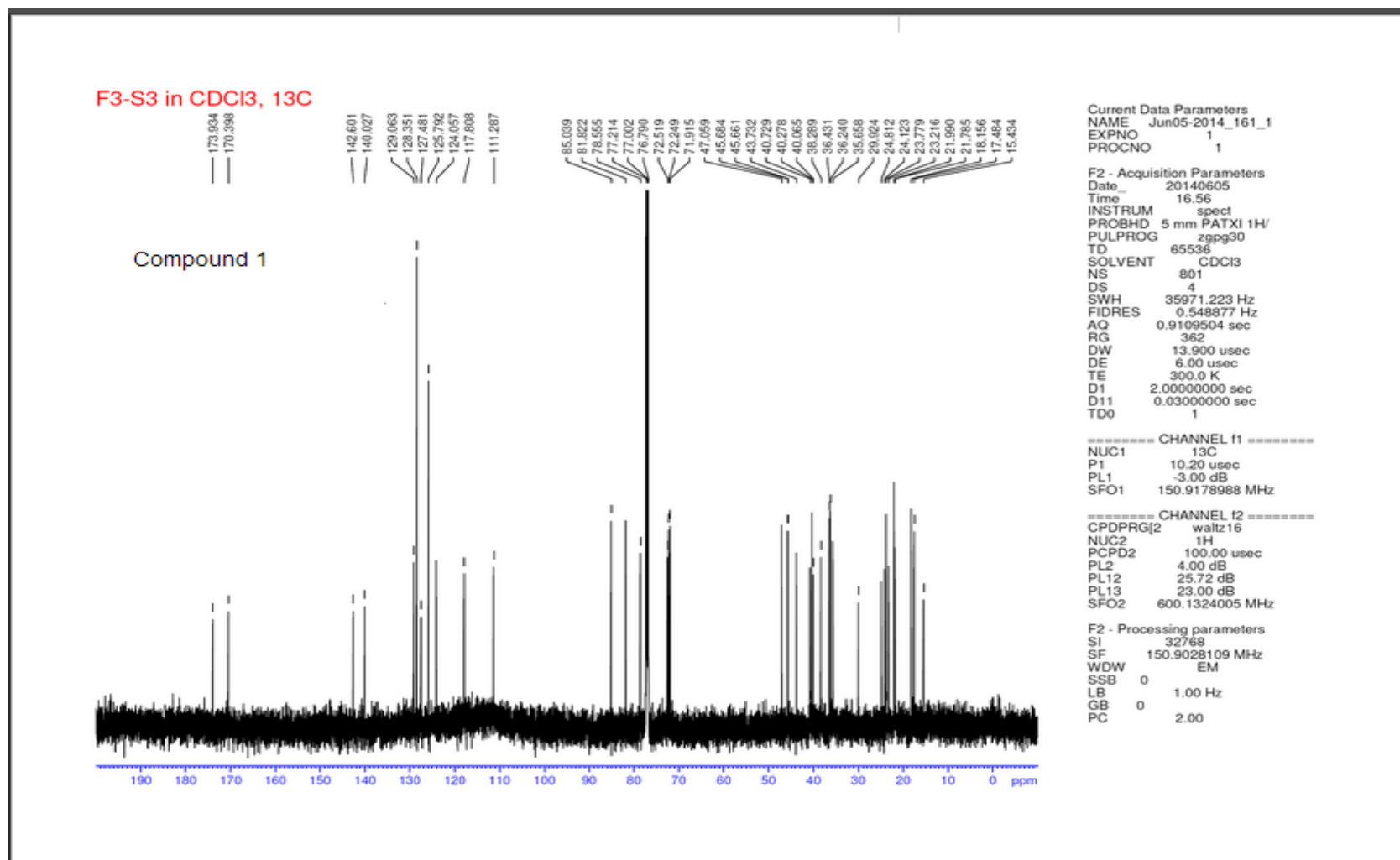


Figure S3. ¹³C-NMR spectrum (150MHz, CDCl₃, 303K) of compound 1

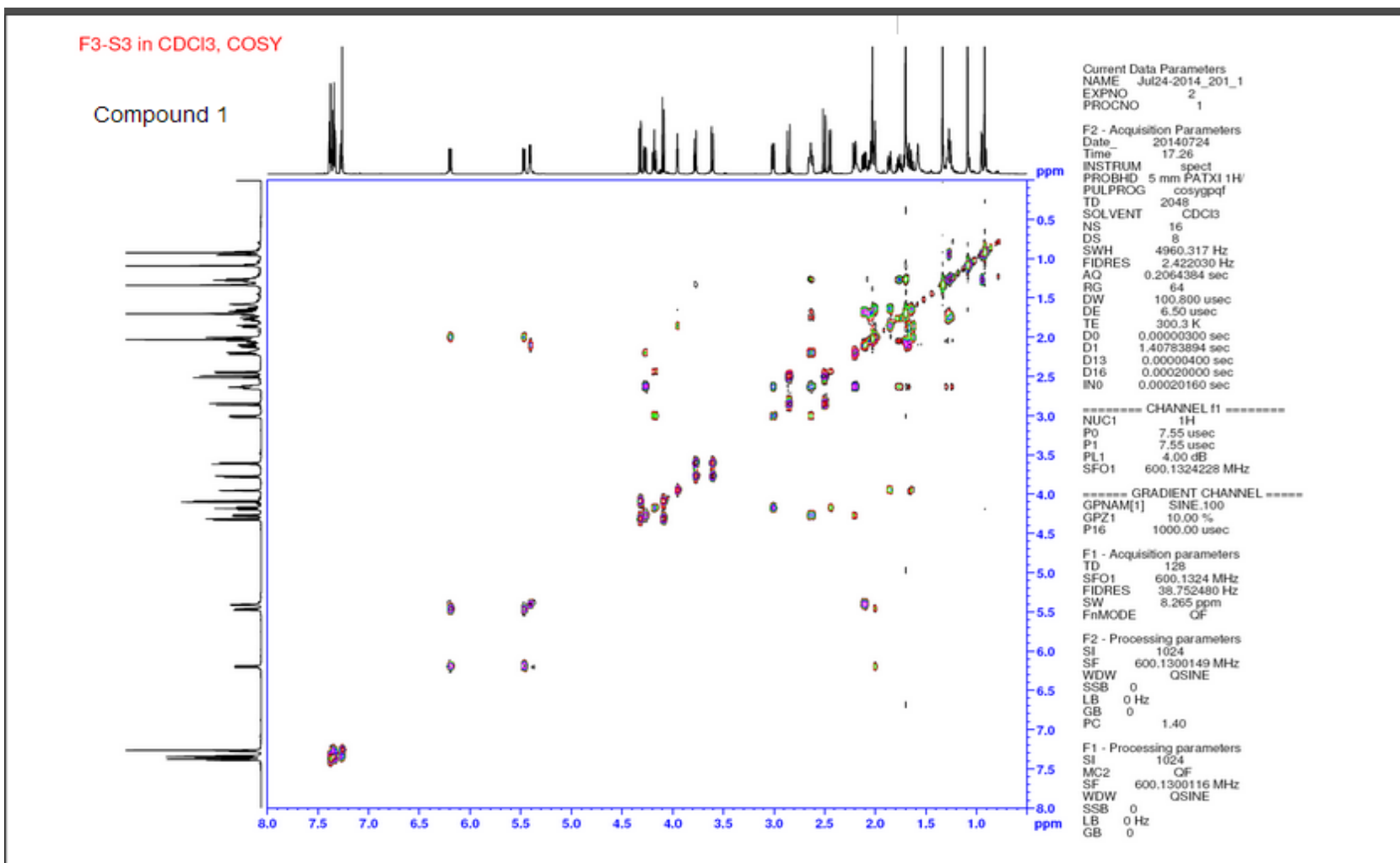


Figure S4. COSY spectrum (600MHz, CDCl₃, 303K) of compound 1

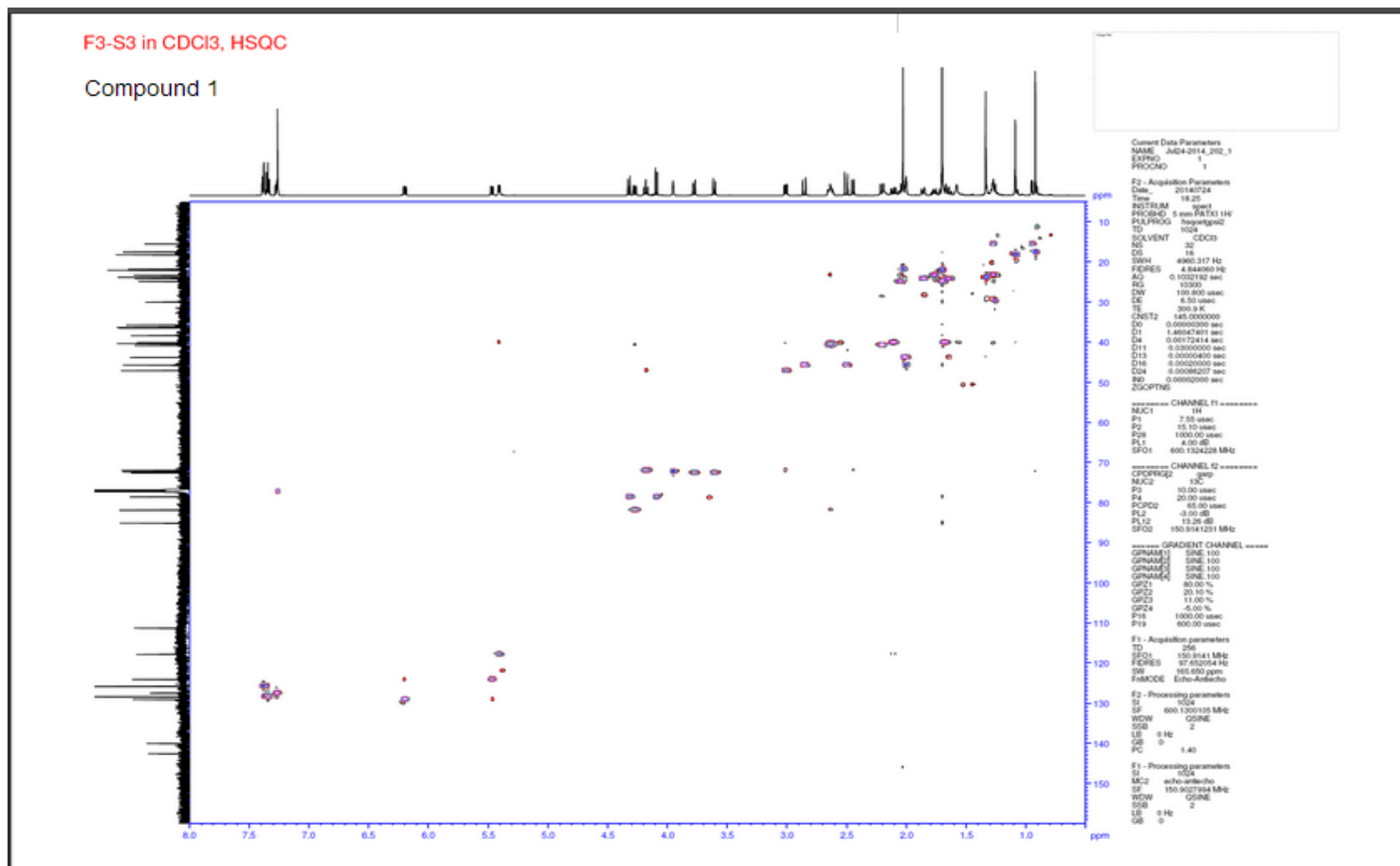


Figure S5. HSQC NMR spectrum (600MHz, CDCl₃, 303K) of compound 1

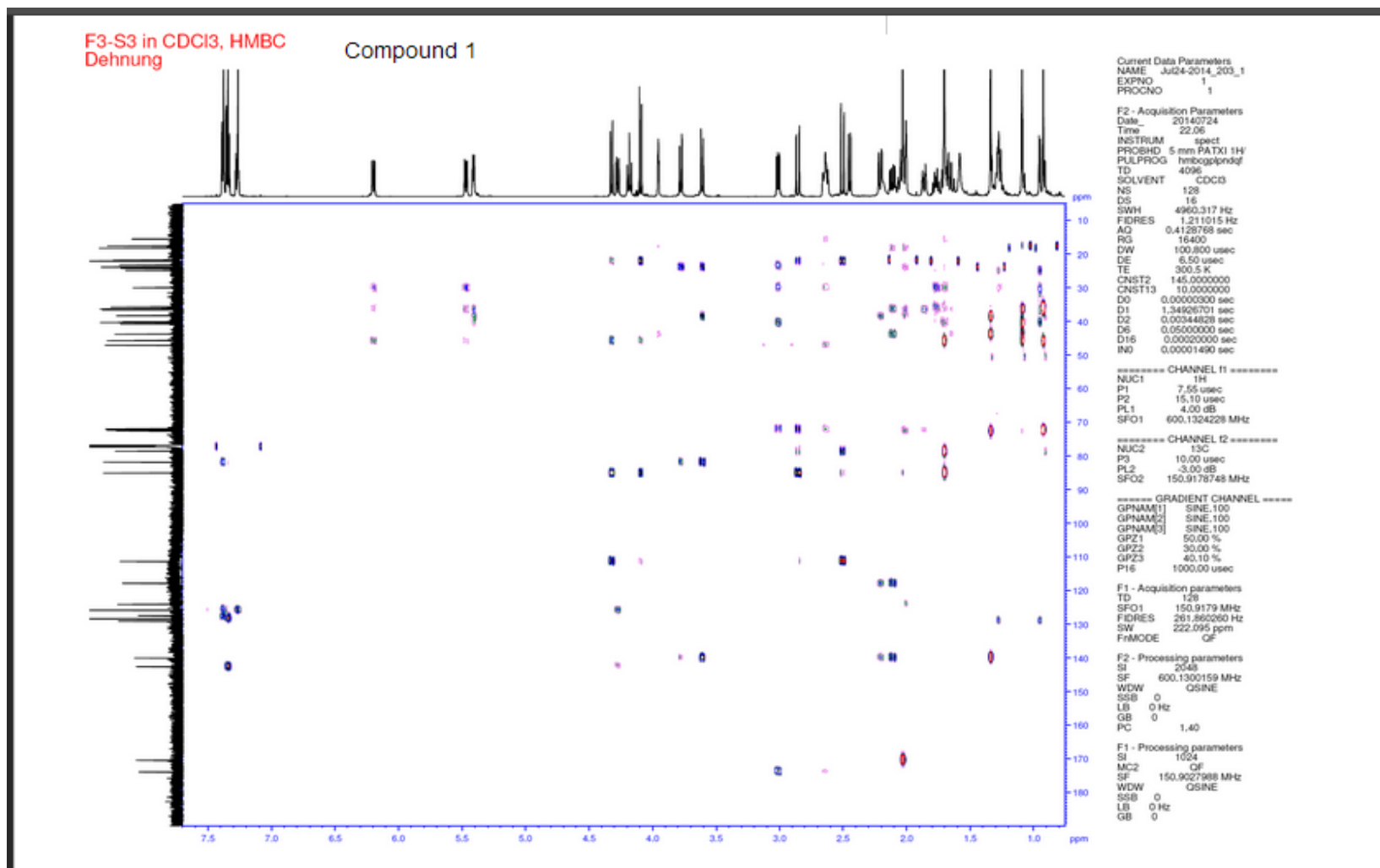


Figure S6. HMBC NMR spectrum (600MHz, CDCl₃, 303K) of compound 1

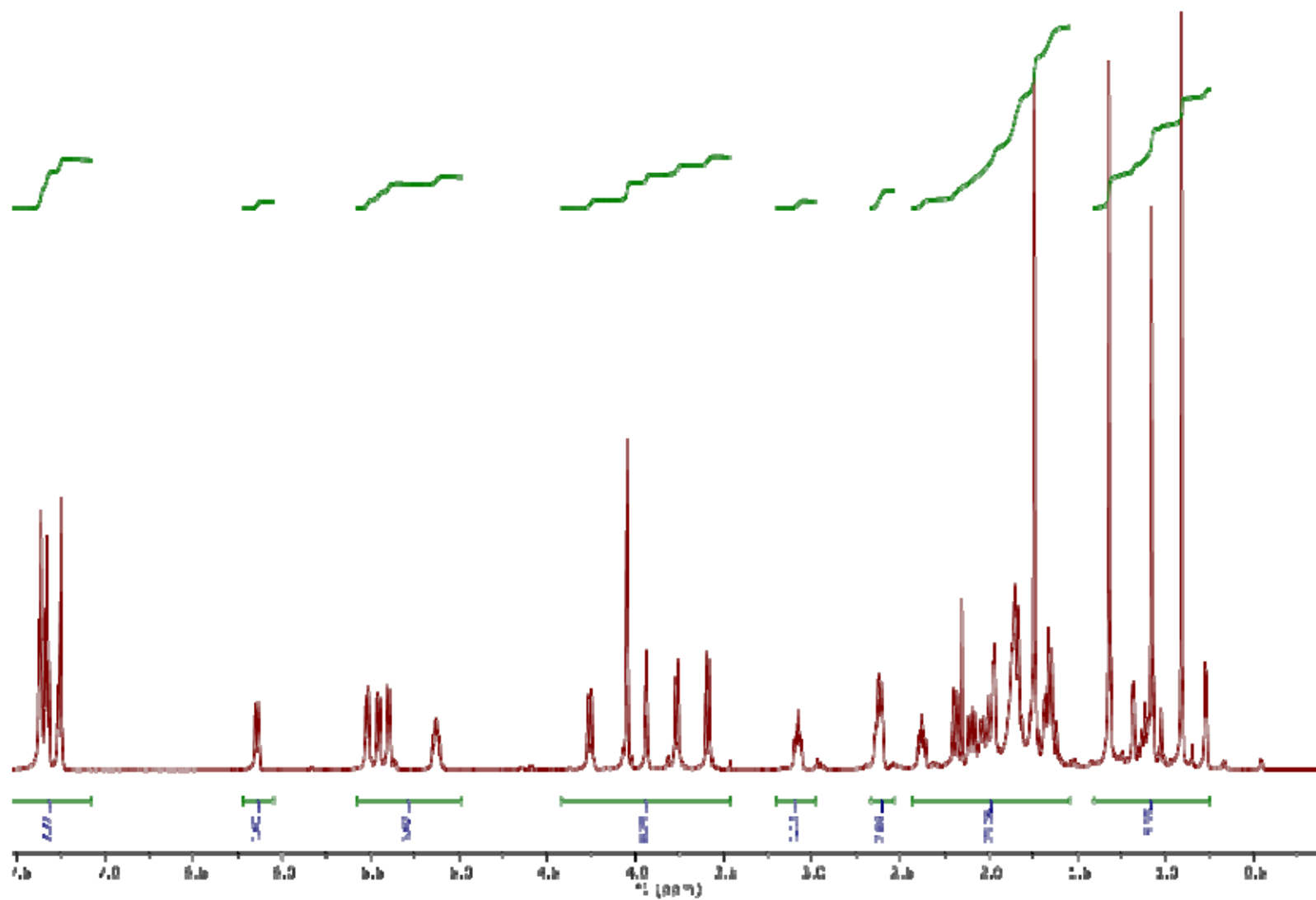


Figure S7. ^1H NMR spectrum (600MHz, CDCl_3 , 303K) of compound 2

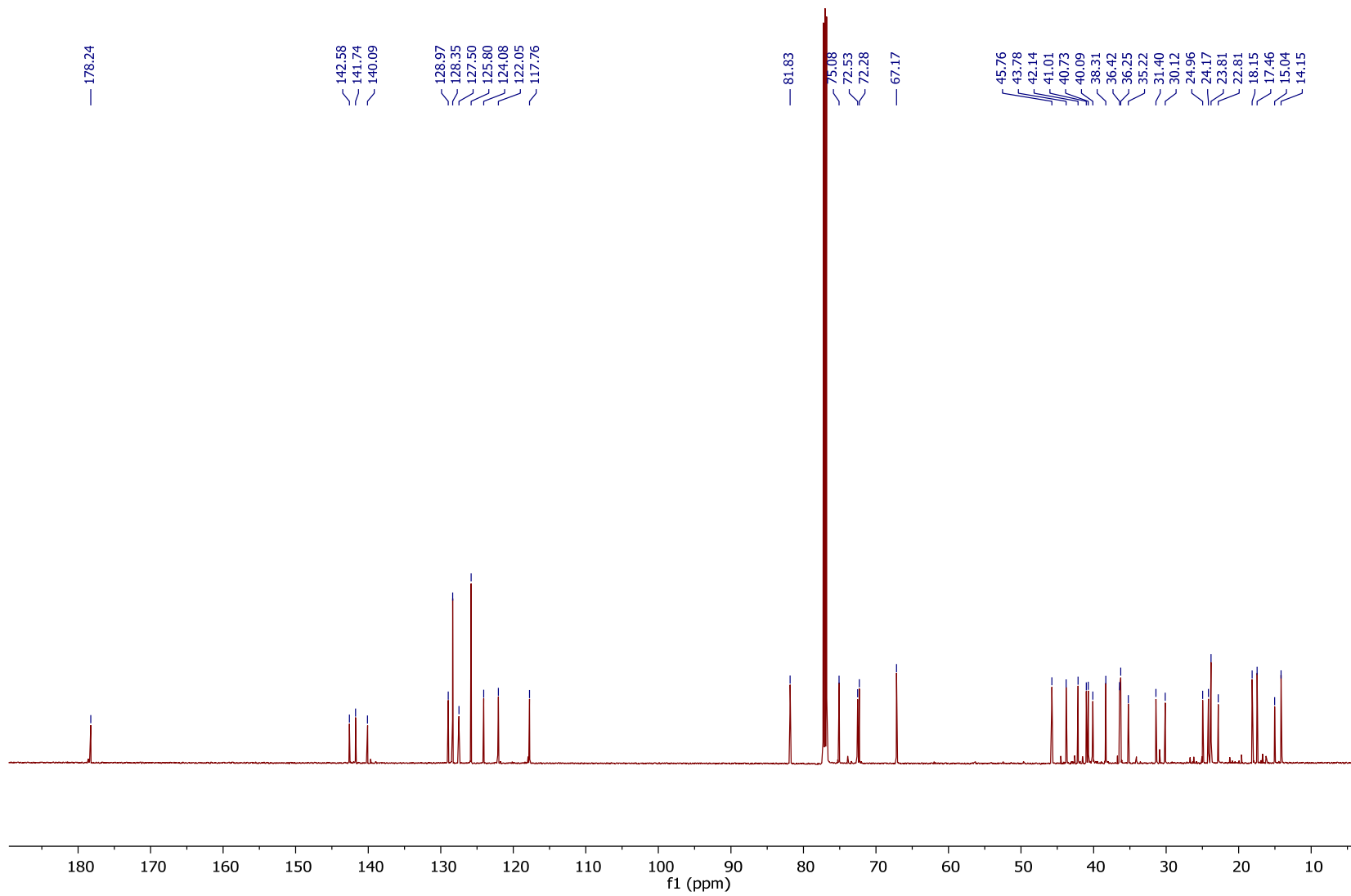


Figure S8. ¹³C-NMR spectrum (150MHz, CDCl₃, 303K) of compound 2

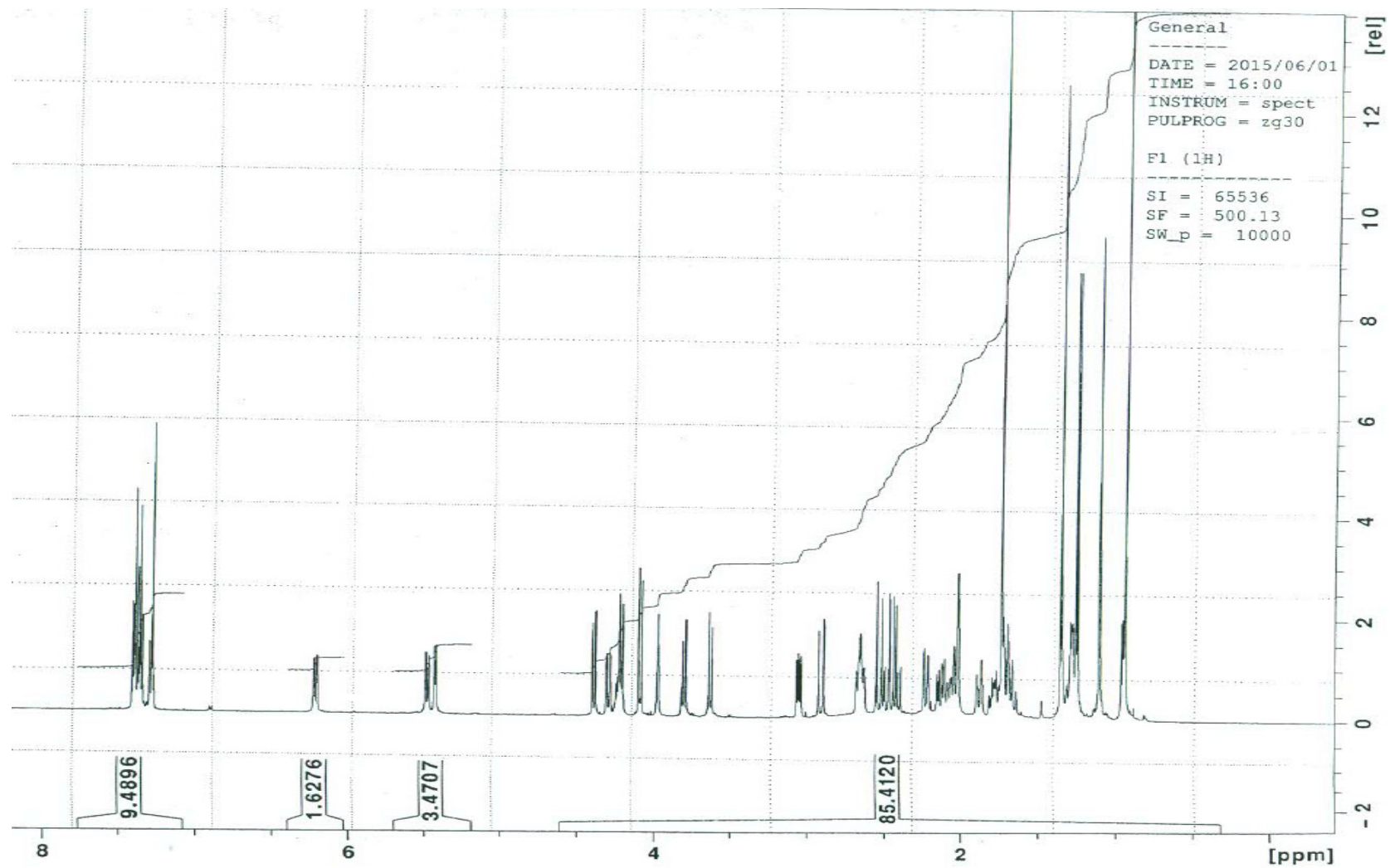


Figure S9. ^1H NMR spectrum (600MHz, CDCl_3 , 303K) of compound 3

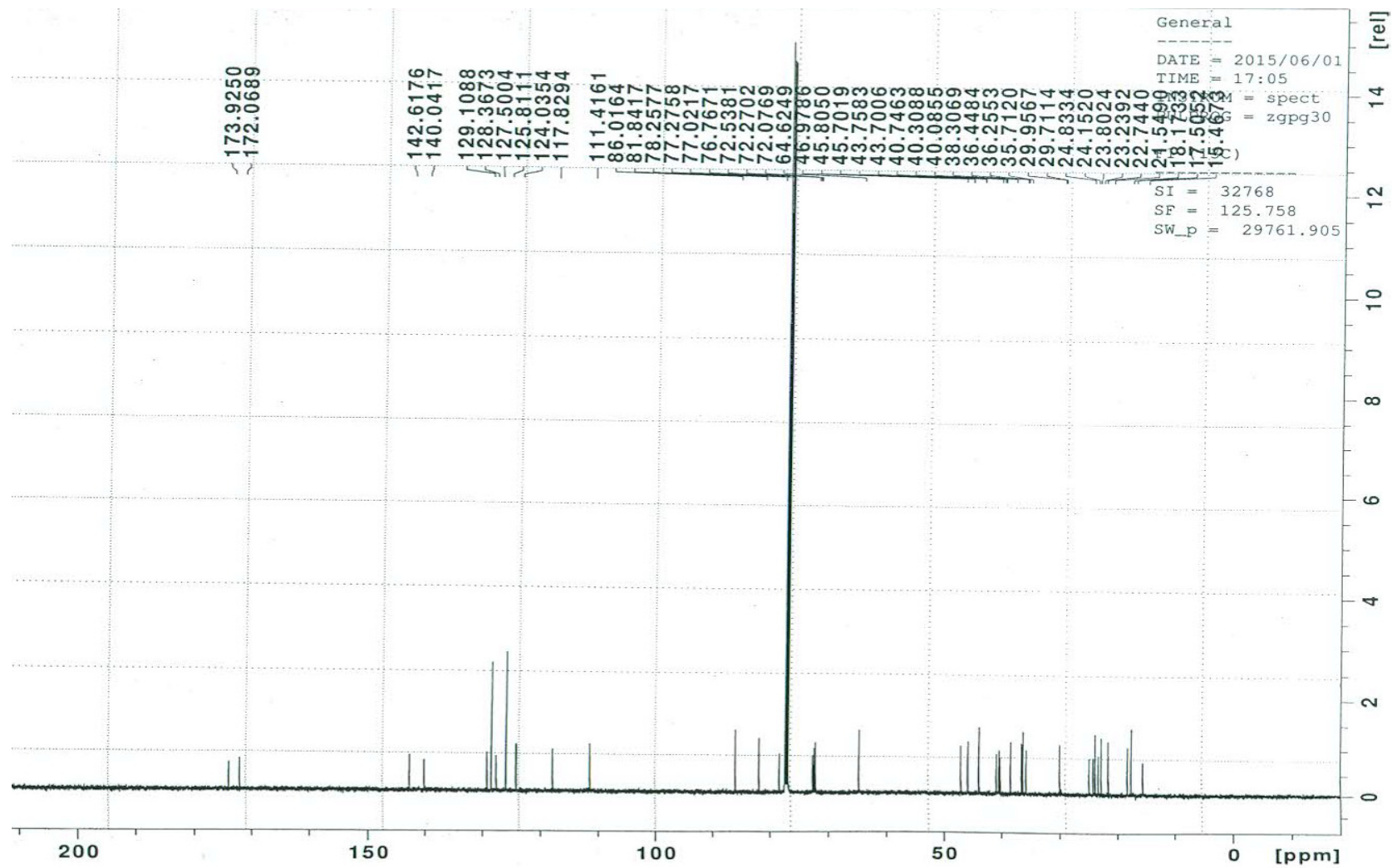


Figure S10. ^{13}C NMR spectrum (150MHz, CDCl_3 , 303K) of compound 3

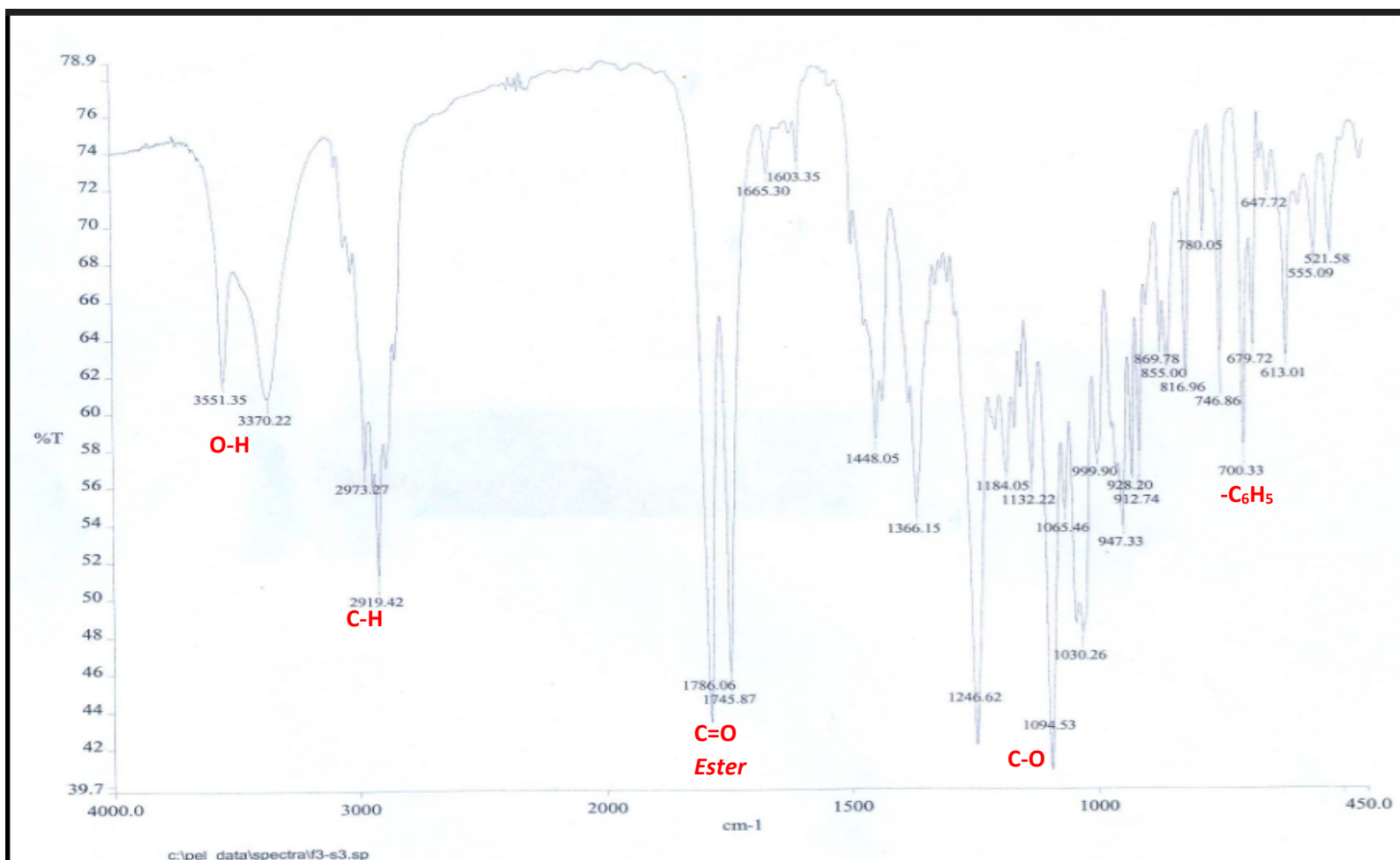


Figure S11. IR spectrum of compound 1

Table S1. Jurkat cell viability assay data for compounds **1 - 3**

| Concentration (μ M) | 7-hydroxy dichapetalin P (1) | Dichapetalin A (2) | Dichapetalin X (3) | Curcumin |
|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|--------------------|
| | Cell viability (%) | Cell viability (%) | Cell viability (%) | Cell viability (%) |
| 3.125 | 58.1 | 64.0 | 46.5 | 65.6 |
| 6.25 | 60.5 | 35.2 | 24.9 | 47.5 |
| 12.5 | 62.5 | 25.5 | 4.5 | 37.8 |
| 25 | 48.8 | 14.4 | 2.0 | 11.3 |
| 50 | 0.0 | 0.0 | 0.0 | 0.0 |

Table S2. HL-60 cell viability assay data for compounds **1 - 3**

| Concentration (μ M) | 7-hydroxy dichapetalin P (1) | Dichapetalin A (2) | Dichapetalin X (3) | Curcumin |
|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|--------------------|
| | Cell viability (%) | Cell viability (%) | Cell viability (%) | Cell viability (%) |
| 3.125 | 78.4 | 74.8 | 77.5 | 97.9 |
| 6.25 | 71.3 | 67.4 | 55.0 | 92.5 |
| 12.5 | 72.4 | 46.0 | 4.0 | 67.9 |
| 25 | 59.5 | 16.0 | 1.7 | 25.9 |
| 50 | 9.2 | 0.0 | 2.2 | 0.0 |

Table S3. CEM cell viability assay data for compounds **1 - 3**

| Concentration (μ M) | 7-hydroxy dichapetalin P (1) | Dichapetalin A (2) | Dichapetalin X (3) | Curcumin |
|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|--------------------|
| | Cell viability (%) | Cell viability (%) | Cell viability (%) | Cell viability (%) |
| 3.125 | 69.0 | 66.4 | 58.5 | 87.7 |
| 6.25 | 60.6 | 58.7 | 31.2 | 85.8 |
| 12.5 | 63.8 | 43.1 | 3.8 | 74.8 |
| 25 | 48.7 | 15.5 | 4.5 | 35.6 |
| 50 | 5.6 | 0.0 | 0.0 | 0.0 |

