

**Phenolics from *Barleria cristata* var. alba as Carcinogenesis Blockers;  
Emphasis on Quinone Reductase Induction and Protection Against  
Menadione Cytotoxicity**

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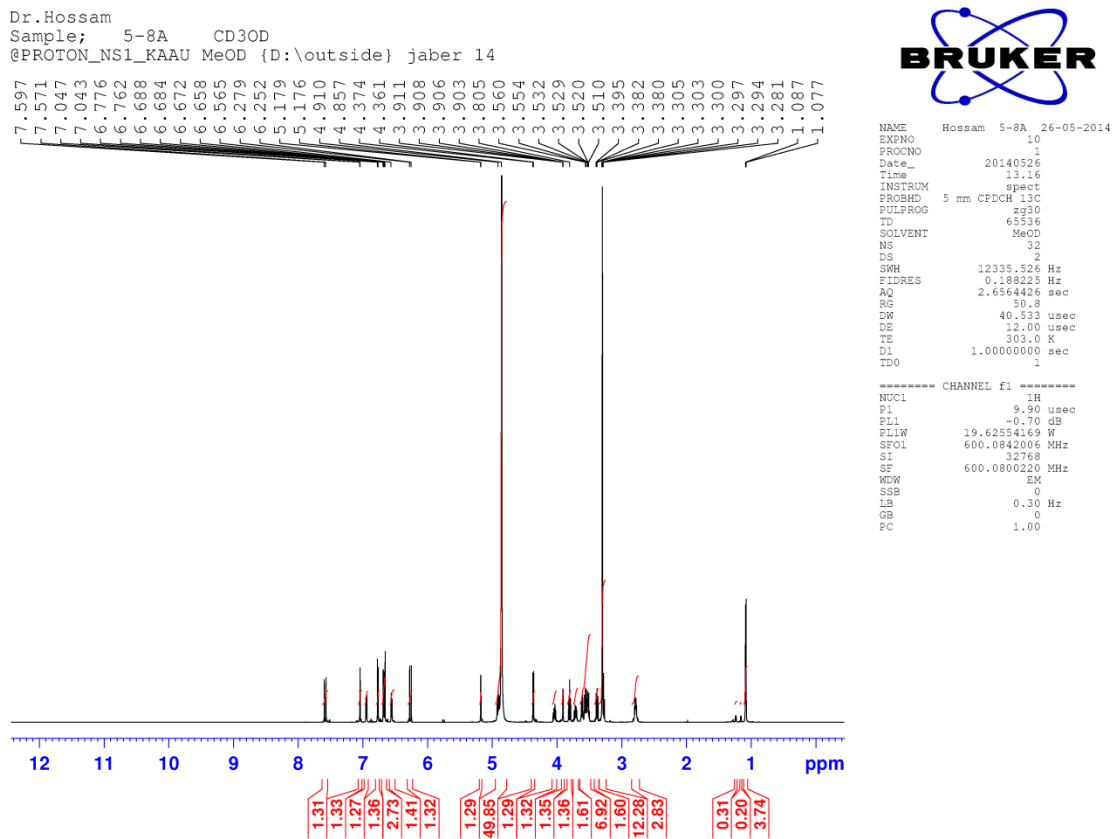
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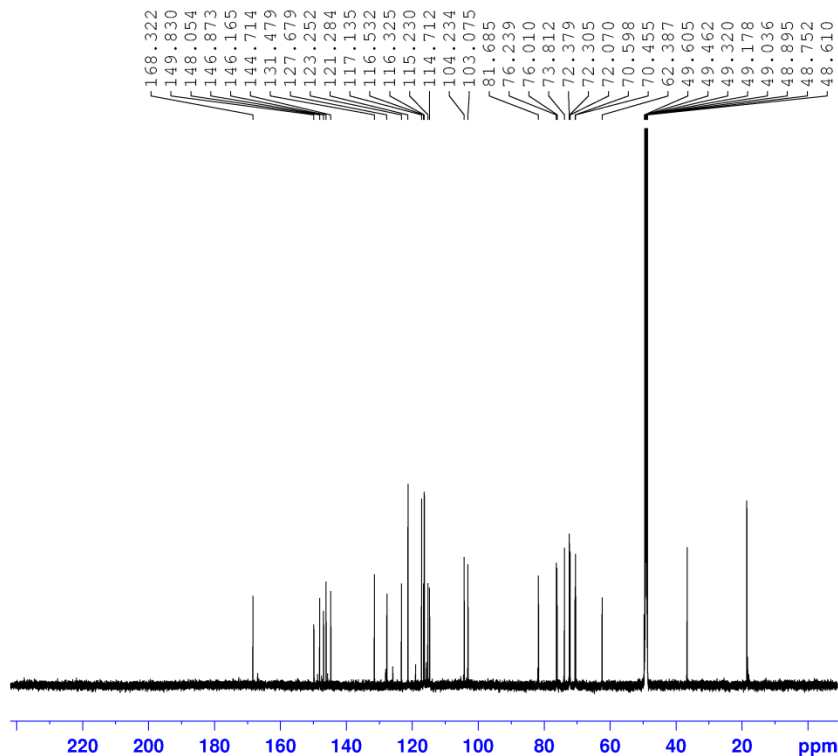
E-mail address: [hmafifi2013@gmail.com](mailto:hmafifi2013@gmail.com)

# Supporting information



Supplementary Figure 1: <sup>1</sup>H NMR of compound 1

Dr.Hossam  
Sample: 5-8A CD3OD  
@C13\_NS256\_KAAU MeOD (D:\outside) jaber 8



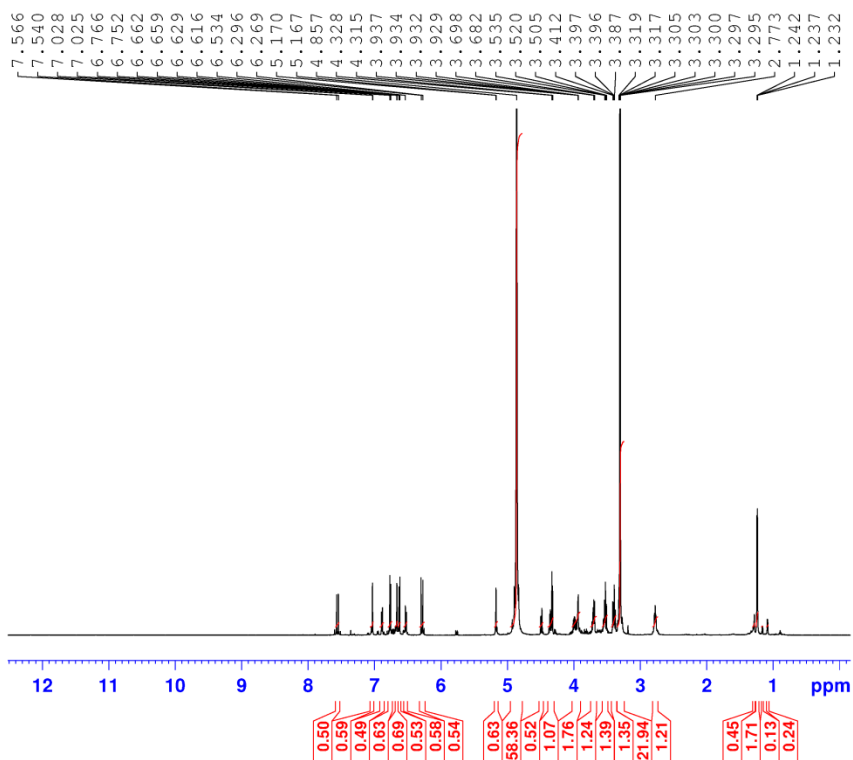
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NAME      Hossam 5-8A 08-06-2014
EXPNO     10
PROCNO    1
Date_     20140608
Time      11.19
INSTRUM   spect
PROBHD    5 mm CPDCH 13C
PULPROG   zgpg30
TD        131072
SOLVENT   MeOD
NS        290
DS        4
SWH        37878.789 Hz
FIDRES    0.288992 Hz
AQ        1.7302004 sec
RG        203
DW        13.200 usec
DE        71.32 usec
TE        303.0 K
D1        1.5000000 sec
D11       0.0300000 sec
TDO       1

----- CHANNEL f1 -----
NUC1      13C
P1        9.90 usec
PL1       2.80 dB
PL1W      37.96579361 W
SFO1      150.9075884 MHz

----- CHANNEL f2 -----
CPDPRG2   waltz16
NUC2      1H
PCPD2     70.00 usec
PL2       -0.70 dB
PL12      16.29 dB
PL13      19.29 dB
PL2W      19.62554169 W
PL12W     0.39248362 W
PL13W     0.19670779 W
SFO2      600.0824003 MHz
SI        131072
SF        150.8900217 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        2.00
```

Supplementary Figure 2:  $^{13}\text{C}$ NMR of compound 1

Dr.Hossam  
 Sample; 5-8-B1 CD3OD  
 @PROTON\_NS1\_KAAU MeOD {D:\outside} jaber 15



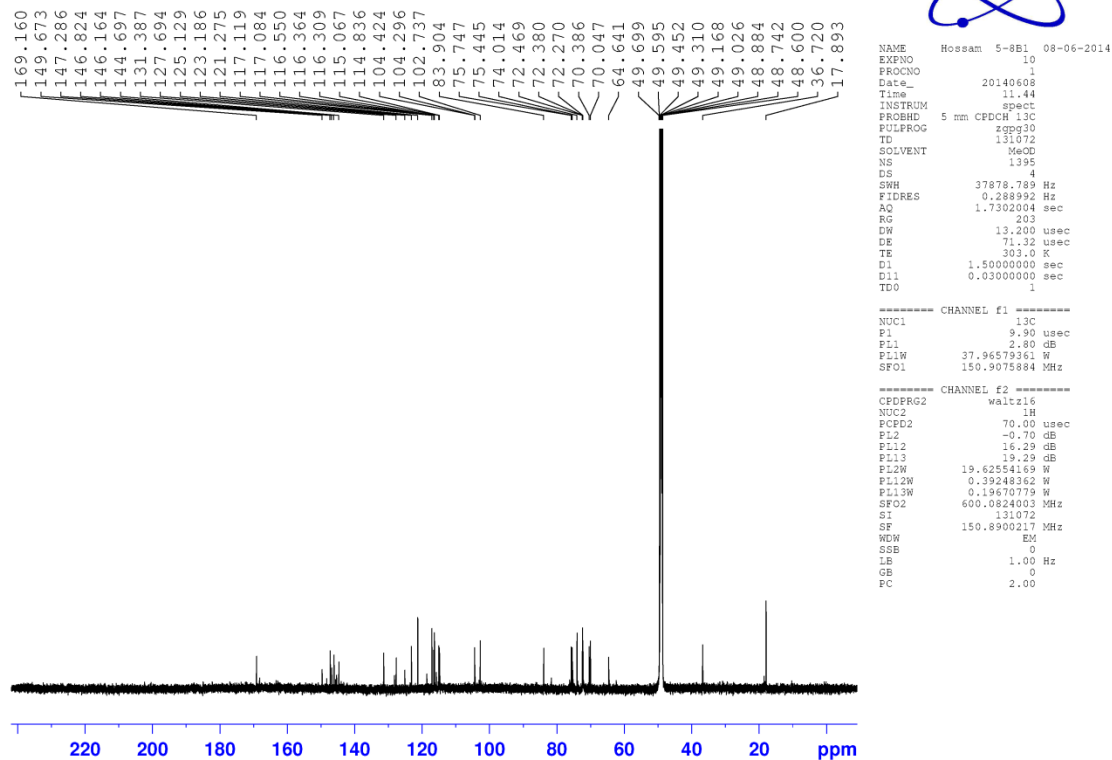
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NAME      Hossam 5-8-B1 26-05-2014
EXPNO    10
PROCNO   1
Date_    20140526
Time     13.21
INSTRUM  spect
PROBHD   5 mm CPDCH 13C
PULPROG  zg30
TD        65536
SOLVENT  MeOD
NS        32
DS        2
SMH      12335.526 Hz
FIDRES   0.188225 Hz
AQ        2.6564426 sec
RG        57
DW        40.533 usec
DE        12.00 usec
TE        303.0 K
D1        1.00000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      1H
P1        9.90 usec
PL1       -0.70 dB
PL1W      19.62554169 W
SFO1      600.0842006 MHz
SI        32768
SF        600.0800220 MHz
MCHW      EM
SFB        0
LB        0.30 Hz
GB        0
PC        1.00
  
```

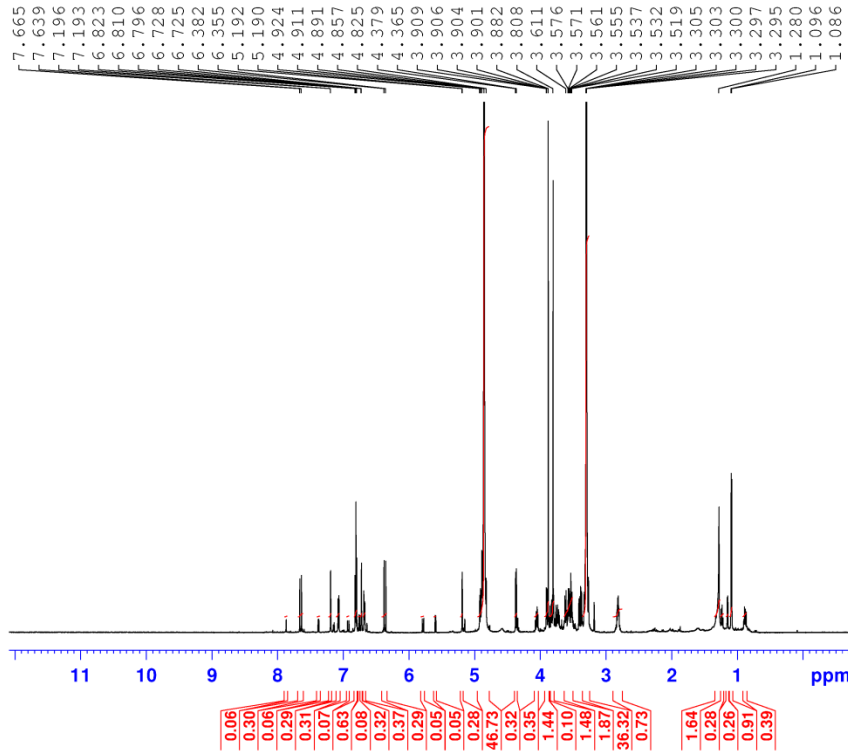
Supplementary Figure 3: <sup>1</sup>H NMR of compound 2

Dr.Hossam  
 Sample: 5-8-B1 CD3OD  
 @C13\_NS256\_KAAU MeOD (D:\outside) jaber 9



Supplementary Figure 4: <sup>13</sup>CNMR of compound 2

Dr.Hossam  
 Sample: 9-1A CD3OD  
 @PROTON\_NS1\_KAAU MeOD (D:\outside) jaber 7



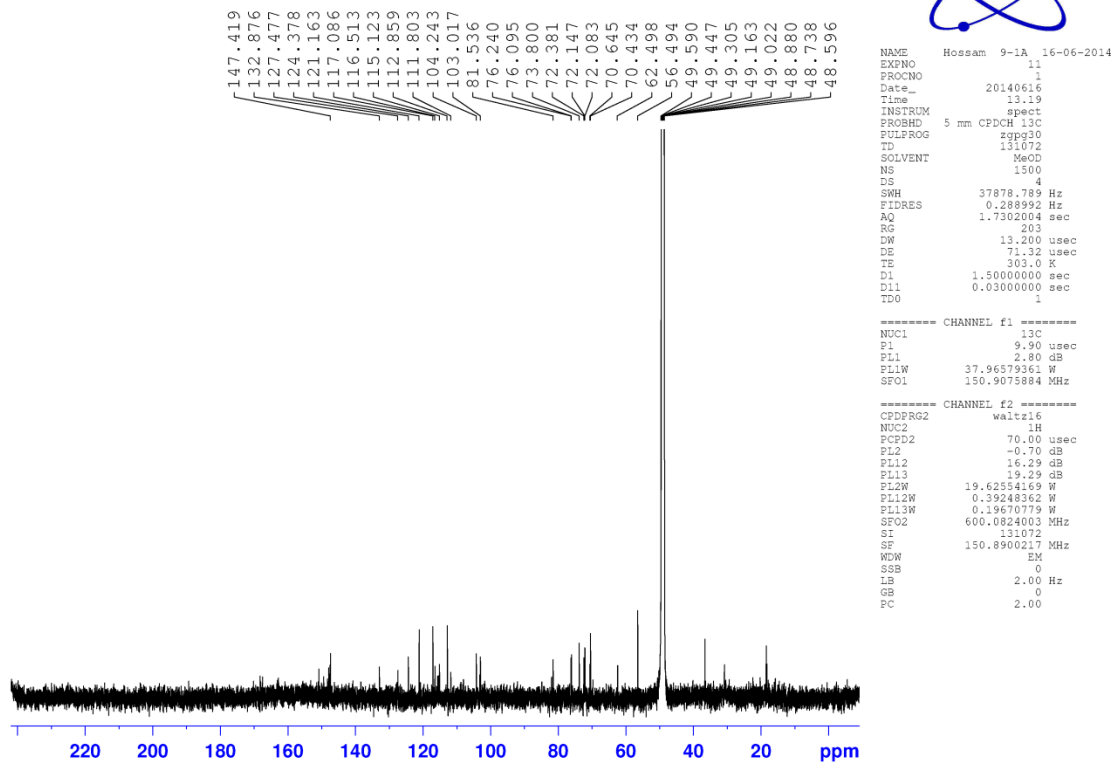
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NAME      Hossam 9-1A 08-06-2014
EXPNO    10
PROCNO   1
Date_    20140608
Time     11.14
INSTRUM  spect
PROBHD   5 mm CPDCH 13C
PULPROG  zg30
TD        65536
SOLVENT  MeOD
NS        32
DS        2
SWH       12335.526 Hz
FIDRES   0.188225 Hz
AQ        2.6564426 sec
RG        64
DW        40.533 usec
DE        12.00 usec
TE        303.0 K
D1        1.0000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      1H
P1        9.90 usec
PL1       -0.70 dB
PL1W      19.62554169 W
SFO1      600.0842006 MHz
SF        32768
SF        600.0800219 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        2.00
  
```

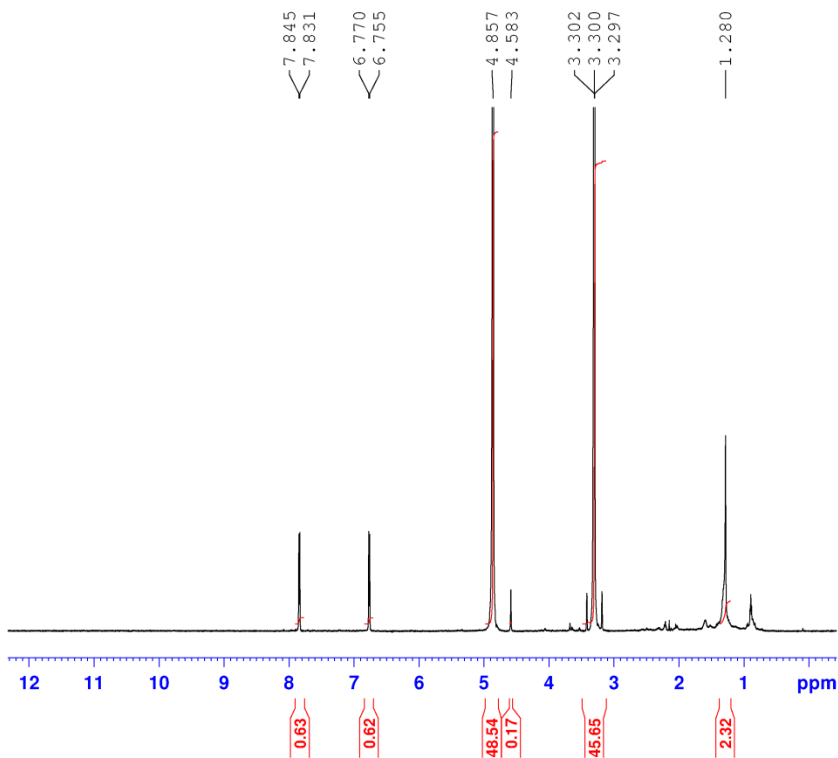
Supplementary Figure 5: <sup>13</sup>CNMR of compound 3

Dr.Hossam  
Sample: 9-1A CD3OD  
@C13\_NS256\_KAAU MeOD {D:\outside) jaber 11



Supplementary Figure 6:  $^{13}\text{C}$ NMR of compound 3

Dr. Hossam  
Sample: BA-4-6 CD3OD  
@PROTON\_NS1\_KAAU MeOD {D:\outside} jaber 7



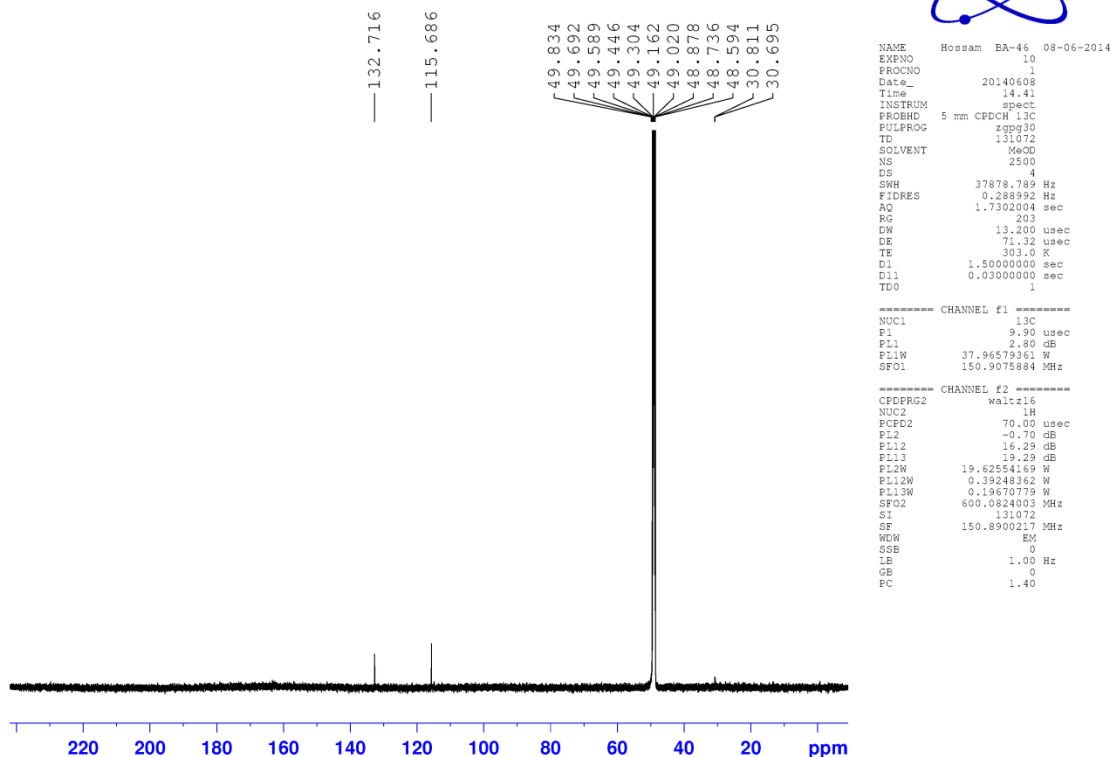
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NAME      Hossam BA-46  02-06-2014
EXPNO     10
PROCNO    1
Date_     20140602
Time      12.09
INSTRUM   spect
PROBHD    5 mm CPDCH 13C
PULPROG   zg30
TD         65536
SOLVENT   MeOD
NS         32
DS         2
SMH       12335.526 Hz
FIDRES    0.188225 Hz
AQ         2.6564426 sec
RG         64
DW         40.533 usec
DE         12.00 usec
TE         303.0 K
D1         1.00000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1      1H
P1        9.90 usec
P1L       -0.70 dB
PL1W      19.62554169 W
SFO1      600.0842006 MHz
SI        32768
SF        600.0800220 MHz
MCHW      EM
SFB        0
LB         0.30 Hz
GB         0
PC         1.00
```

Supplementary Figure 7: <sup>1</sup>H NMR of compound 4

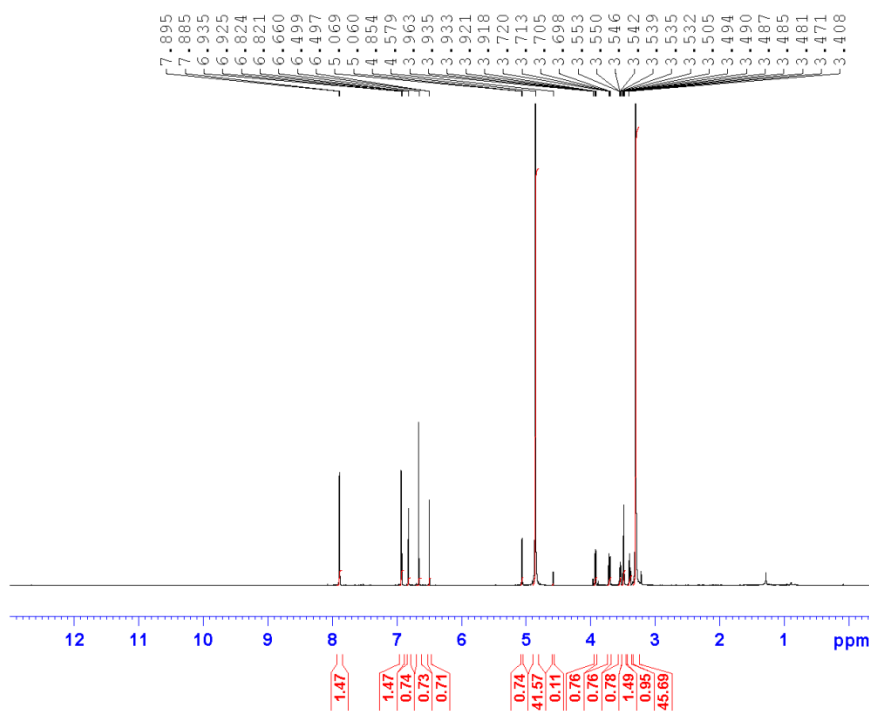


Dr.Hossam  
Sample: BA-4-6 CD3OD  
@C13\_NS256\_KAAU MeOD {D:\outside} jaber 12



Supplementary Figure 8:  $^{13}\text{C}$ NMR of compound 4

Dr. Hossam  
Sample : BAR-2-240 CD3OD



```
Current Data Parameters
NAME      HOSSAM  BAR-2240  13-03-2017
EXPNO     20
PROCNO    1

F2 - Acquisition Parameters
Date_     20170313
Time      9.59
INSTRUM   spect
PROBHD    5 mm CPQCI 1H-
PULPROG   zg30
TD         65536
SOLVENT   MeOD
NS         64
DS         2
SWH        17006.803 Hz
FIDRES     0.239503 Hz
AQ         1.3287584 sec
RG         14.28
DW         28.400 usec
DE         10.00 usec
TE         298.0 K
D1         1.0000000 Sec
TD0        1

----- CHANNEL f1 -----
SFO1      850.153200 MHz
NUC1      1H
P1         0.00 usec
PLW1      15.30000019 W

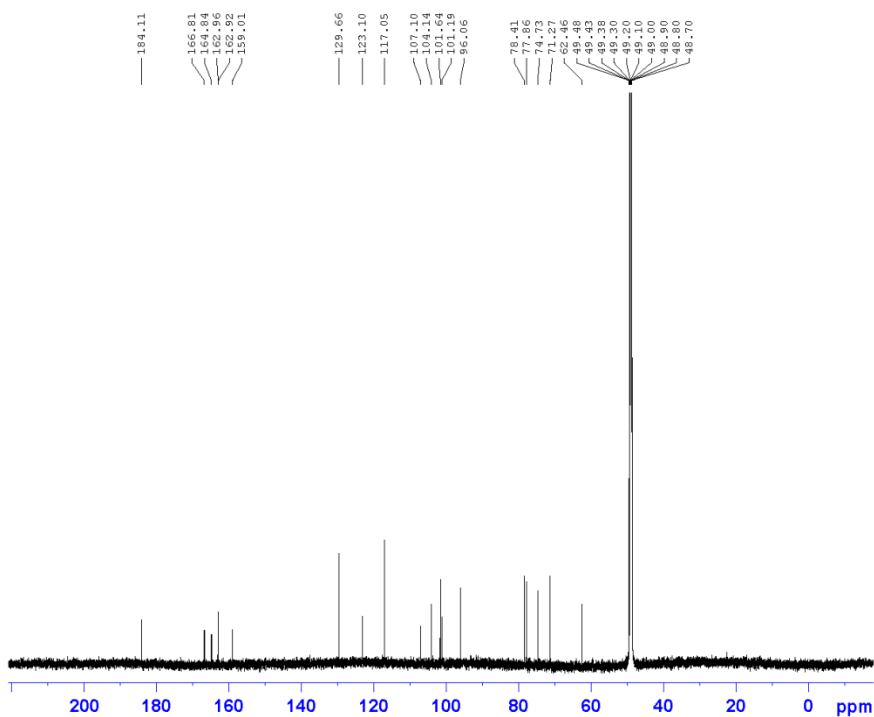
F2 - Processing parameters
SI         65536
SF         850.1500000 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         2.00
```

Supplementary Figure 9: <sup>1</sup>H NMR of compound 5

Dr. Hossam  
Sample :

BAR-2-240

CD3OD



```
Current Data Parameters
NAME HOSAR BAR-2-240 13-03-2017
EXPNO 21
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170311
Time 11:37
INSTRUM spect
PROBHD 5 mm CPQCI 1H-
PULPROG zgpg30
TD 65536
SOLVENT MeOD
NS 4111
DS 4
SWH 51020.406 Hz
FIDRES 0.778810 Hz
AQ 0.6422528 sec
RG 186.93
DW 9.000 usec
DE 18.000 usec
TE 298.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

----- CHANNEL f1 -----
SFO1 213.7817436 MHz
NUC1 13C
P1 12.000 usec
PLW1 130.00000000 W

----- CHANNEL f2 -----
SFO2 850.1534006 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.000 usec
PLW2 13.80000019 W
PLW12 0.13800000 W
PLW13 0.08832000 W

F2 - Processing parameters
SI 32768
SF 213.7700062 MHz
WDW EM
SSB 0
LB 1.50 Hz
GB 0
PC 2.00
```

Supplementary Figure 10: <sup>13</sup>CNMR of compound 5