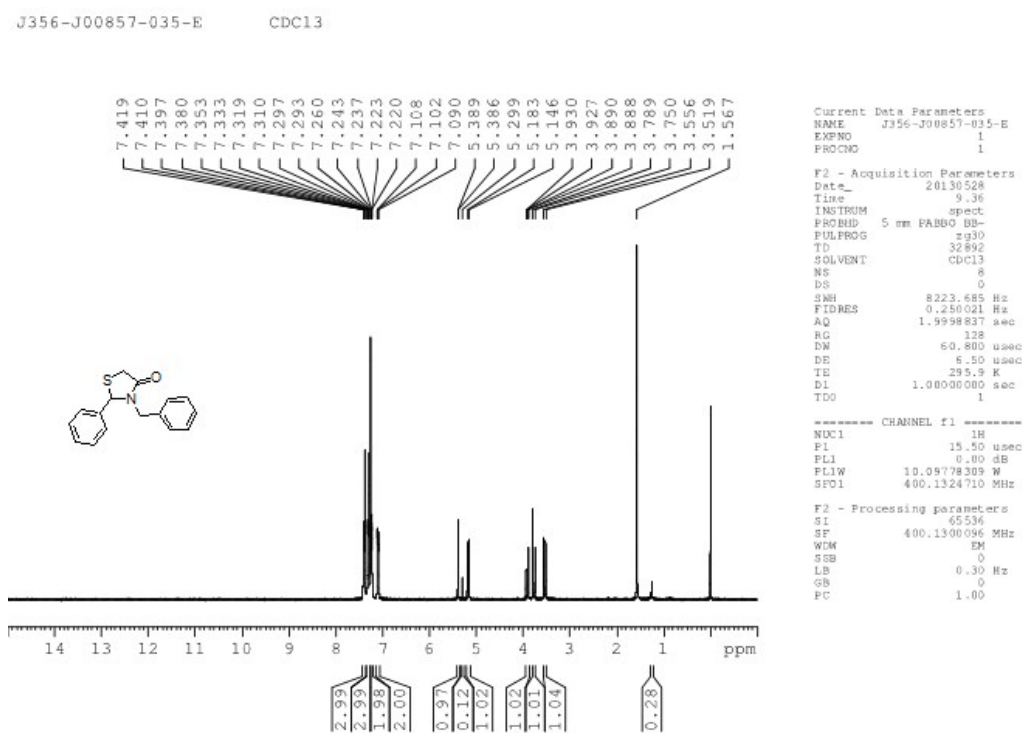


Catalyst-free and environment friendly synthesis of 2-aryl-3-substituted-4-thiazolidinones in water

Manoj P. Thakare,^a Rahimullah Shaikh*^a and Dipak Tayade^a

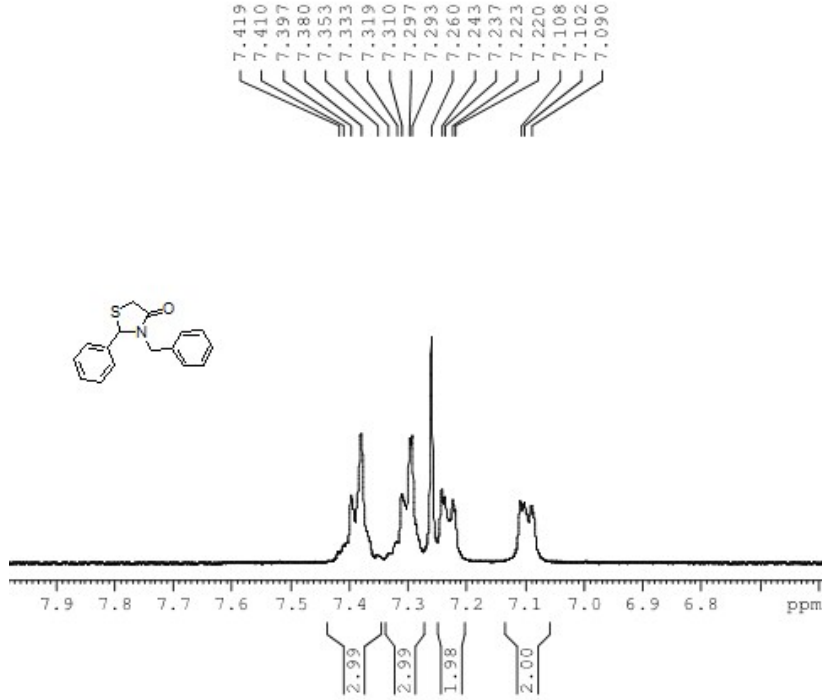
Analytical data for **4a-j**:

1) Entry 1 (**4a**):



J356-J00857-035-E

CDC13



Current Data Parameters
 NAME J356-J00857-035-E
 EXPNO 1
 PROCNO 1

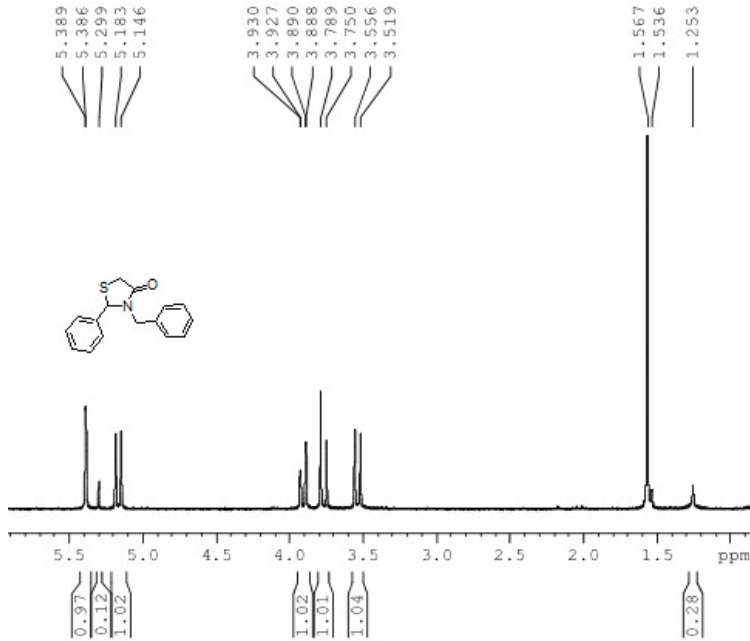
F2 - Acquisition Parameters
 Date_ 20130528
 Time 9.36
 INSTRUM spect
 PROBRD 5 mm PABBO BB-
 PULPROG zg30
 TD 32892
 SOLVENT CDC13
 NS 8
 DS 0
 SMH 822.685 Hz
 FIDRES 0.250021 Hz
 AQ 1.999837 sec
 RG 128
 DM 60.800 usec
 DE 8.50 usec
 TE 295.9 K
 D1 1.0000000 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 1H
 P1 15.50 usec
 PL1 0.00 dB
 PL1W 10.0978309 W
 SFO1 400.1324710 MHz

F2 - Processing parameters
 SI 65536
 SF 400.130096 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-035-E

CDC13



Current Data Parameters
 NAME J356-J00857-035-E
 EXPNO 1
 PROCNO 1

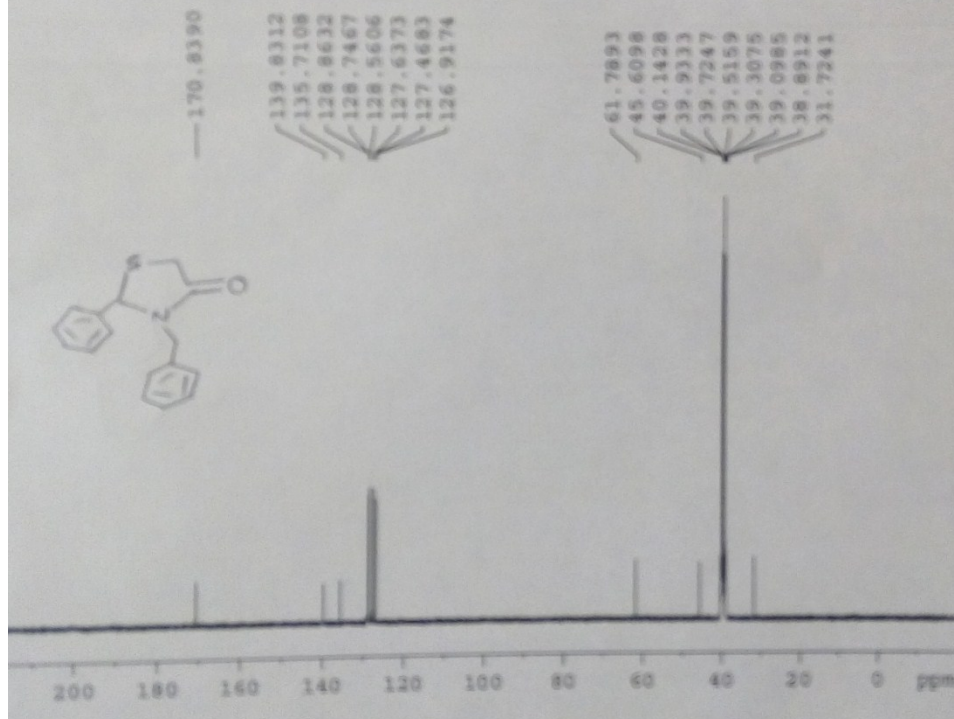
F2 - Acquisition Parameters
 Date_ 20130528
 Time 9.36
 INSTRUM spect
 PROBRD 5 mm PABBO BB-
 PULPROG zg30
 TD 32892
 SOLVENT CDC13
 NS 8
 DS 0
 SMH 822.685 Hz
 FIDRES 0.250021 Hz
 AQ 1.999837 sec
 RG 128
 DM 60.800 usec
 DE 8.50 usec
 TE 295.9 K
 D1 1.0000000 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 1H
 P1 15.50 usec
 PL1 0.00 dB
 PL1W 10.0978309 W
 SFO1 400.1324710 MHz

F2 - Processing parameters
 SI 65536
 SF 400.130096 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J410-J01908-001

DMSO



```

NAME      J410-J01908-001
EXPNO    2
PROCNO   1
DATE_    20160224
TIME     11.01
INSTRUM  spect
PROBHD   5 mm DUX 13C-1
PULPROG  zgpg30
TD       65536
SOLVENT  DMSO
NS       650
DS       4
SWH      24018.461 Hz
FIDRES   0.364798 Hz
AQ       1.361388 sec
RG       650
DW       10.800 usec
DE       6.50 usec
TE       300.0 K
D1       1.0000000 sec
D11      0.0100000 sec
VDS      1

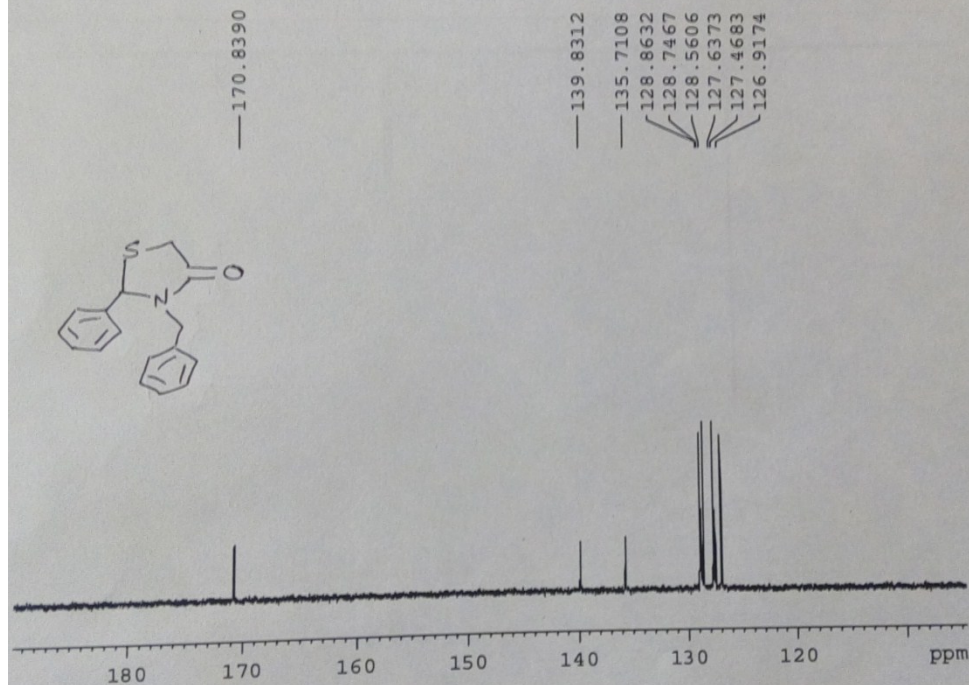
===== CHANNEL f1 =====
NUC1     13C
P1       8.00 usec
PL1      -2.00 dB
PL12     27.22743073 Hz
RF1      100.6255214 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      -2.00 dB
PL12     14.61 dB
PL13     19.00 dB
PL2M     20.58130513 Hz
PL12M    0.38946550 Hz
PL13M    0.13597794 Hz
RF2      400.1418010 MHz
SI       32768
SF       100.6255084 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40

```

J410-J01908-001

DMSO



```

NAME      J410-J01908-001
EXPNO    2
PROCNO   1
DATE_    20160224
TIME     11.01
INSTRUM  spect
PROBHD   5 mm DUX 13C-1
PULPROG  zgpg30
TD       65536
SOLVENT  DMSO
NS       650
DS       4
SWH      24018.461 Hz
FIDRES   0.364798 Hz
AQ       1.361388 sec
RG       650
DW       10.800 usec
DE       6.50 usec
TE       300.0 K
D1       1.0000000 sec
D11      0.0100000 sec
VDS      1

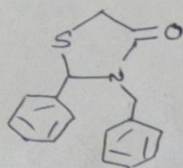
===== CHANNEL f1 =====
NUC1     13C
P1       8.00 usec
PL1      -2.00 dB
PL12     27.22743073 Hz
RF1      100.6255214 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      -2.00 dB
PL12     14.61 dB
PL13     19.00 dB
PL2M     20.58130513 Hz
PL12M    0.38946550 Hz
PL13M    0.13597794 Hz
RF2      400.1418010 MHz
SI       32768
SF       100.6255084 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40

```

J410-J01908-001

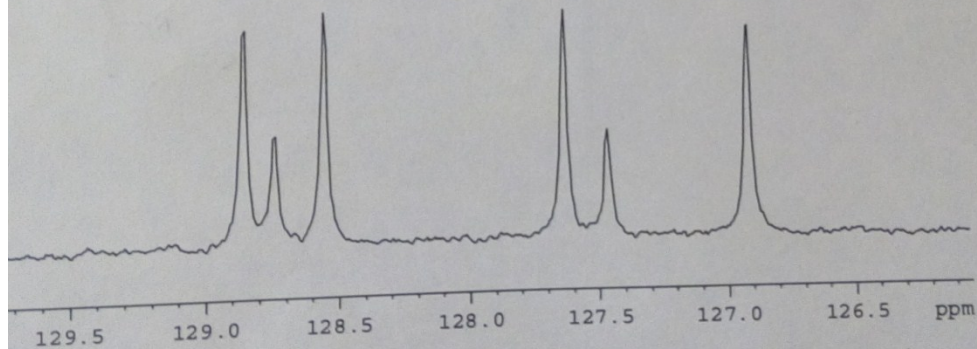
DMSO



—128.8632
—128.7467
—128.5606

—127.6373
—127.4683

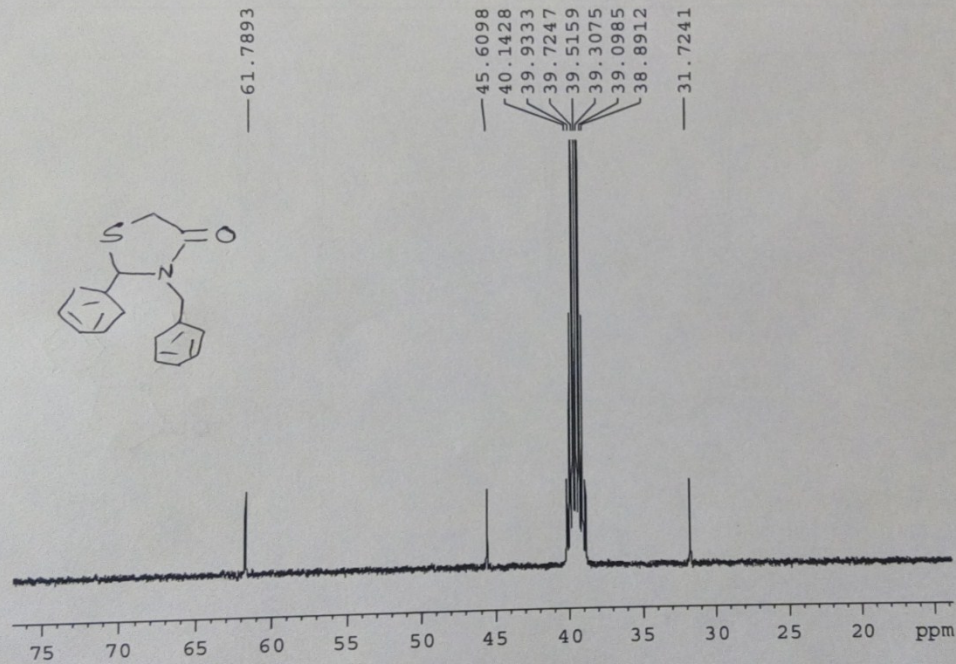
—126.9174



```
NAME      J410-J01908-001
EXPNO     2
PROCNO    1
Date_     20160226
TIME      11.01
INSTRUM   spect
PULPROG   zgpg30
RG         409.00
TD         65536
SOLVENT   DMSO
NS         630
DS         4
SWH        24028.461 Hz
FIDRES    0.166798 Hz
AQ         1.361898 sec
RG         2050
DSW        20.800 umsec
DE         4.50 umsec
TE         300.2 K
D1         1.0000000 sec
D11        0.4000000 sec
TDO        1
----- CHANNEL F1 -----
NUC1       13C
P1         8.00 umsec
PL1        -2.00 dB
PL12       07.23782073 W
SFO1       100.6283616 MHz
----- CHANNEL F2 -----
CFREQ02    wa1414
NUC2       1H
P2         80.00 umsec
PL2        -2.00 dB
PL12       14.43 dB
PL13       19.00 dB
PL14       20.5810283 W
PL15       0.3894502 W
PL16       0.13597794 W
SFO2       400.2618251 MHz
SI         32768
SF         100.6450894 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
```


J410-J01908-001

DMSO



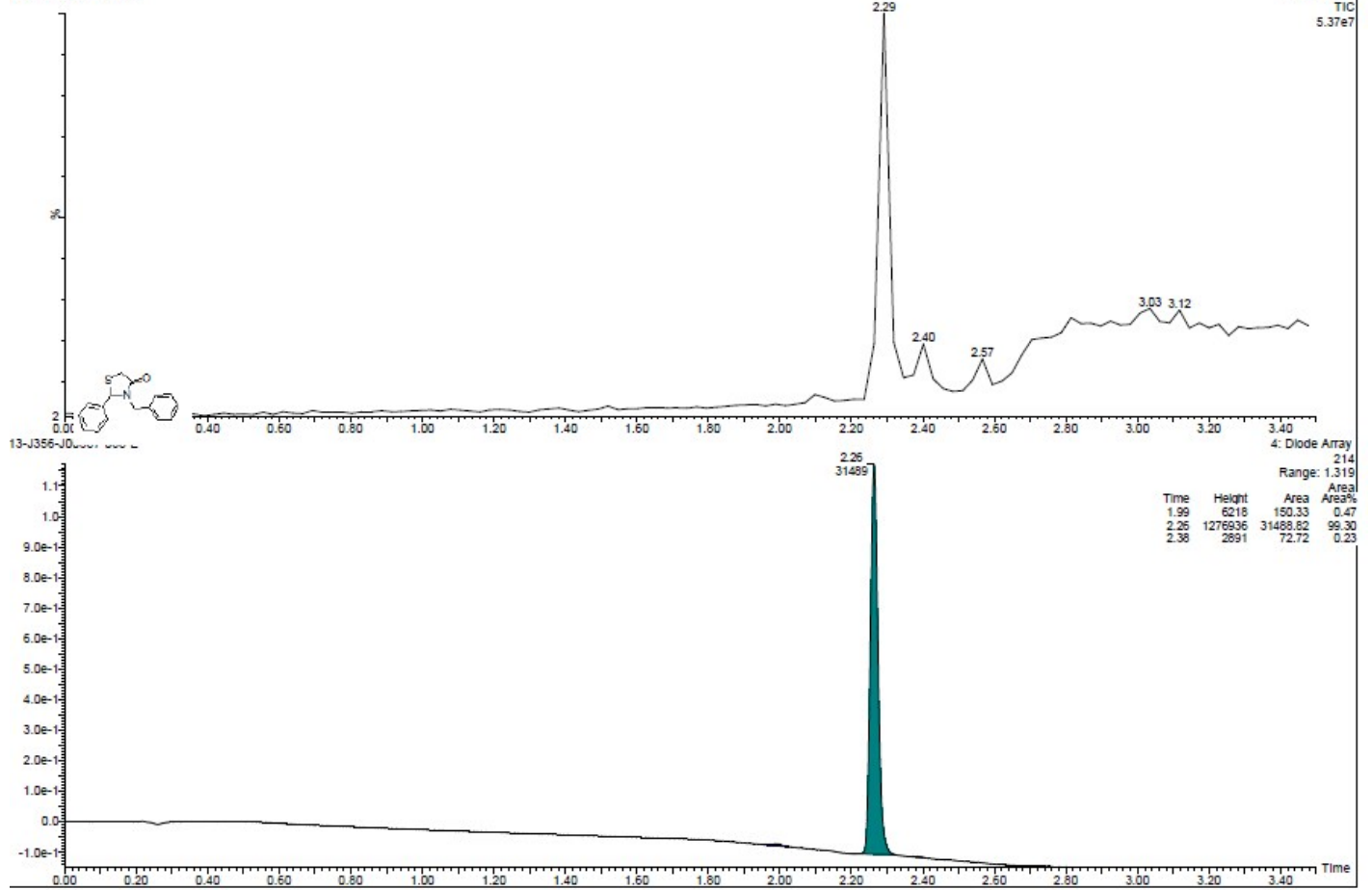
```
NAME J410-J01908-001
EXPNO 2
PROCNO 1
Date_ 20160224
Time 11.01
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 4
DS 4
SWH 24039.461 Hz
FIDRES 0.146798 Hz
AQ 1.3431888 sec
RG 2050
DM 20.800 usec
DE 6.50 usec
TE 300.2 K
D1 1.0000000 sec
D11 0.0200000 sec
TD0 1
----- CHANNEL f1 -----
NUC1 13C
P1 8.00 usec
PL1 -2.00 dB
PLW 37.32743073 W
SFO1 100.6255214 MHz
----- CHANNEL f2 -----
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -2.80 dB
PL12 14.41 dB
PL13 19.00 dB
PLW 20.58100083 W
PL12W 0.38940000 W
PL13W 0.13597794 W
SFO2 400.1418010 MHz
SI 32768
SF 100.6453084 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
```

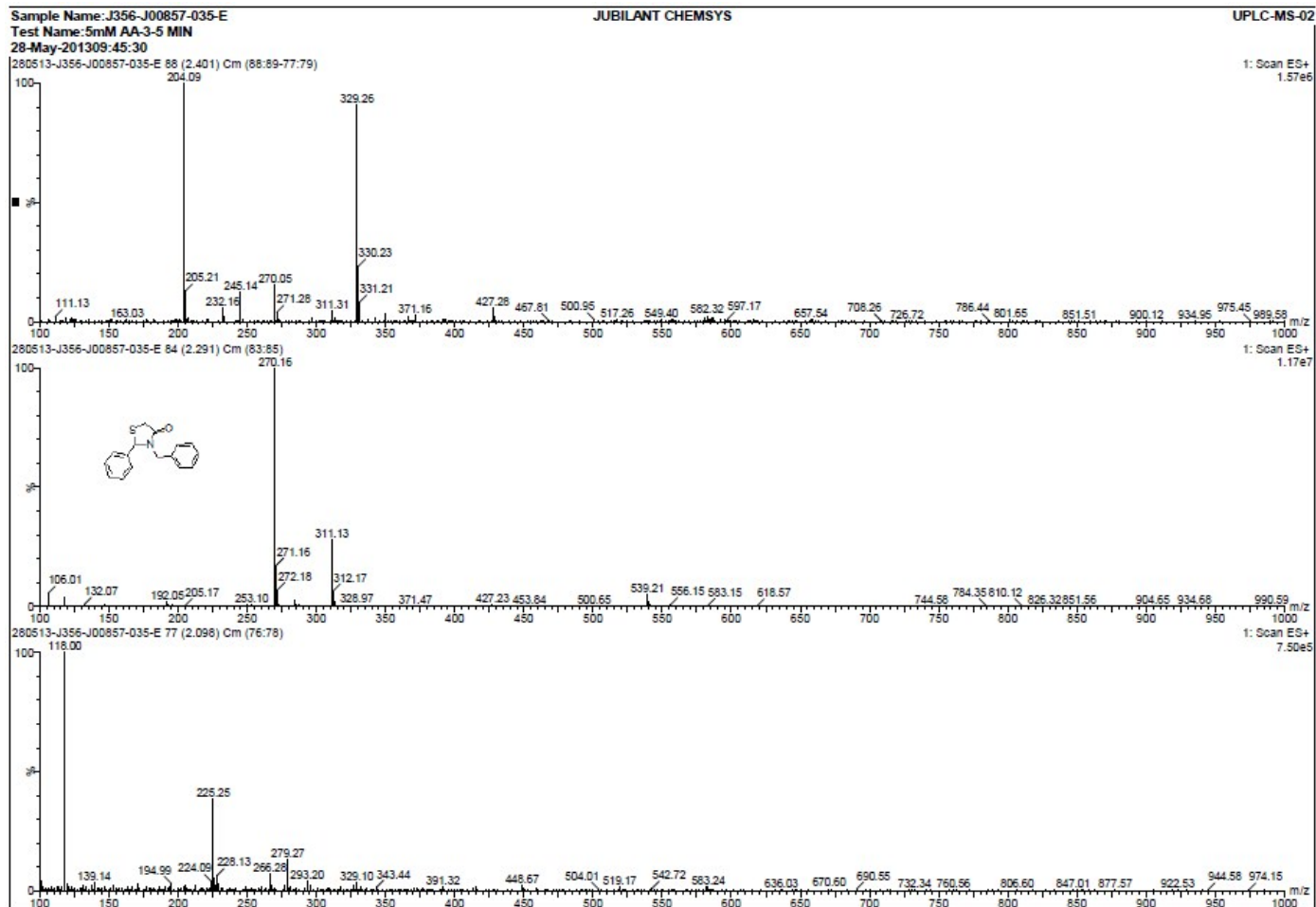
File Name: J356-J00857-035-E
Name: 5mM AA-3-5 MIN
Inj-201309:45:30
13-J356-J00857-035-E

JUBILANT CHEMSYS

UPLC-MS-02

1: Scan ES+
TIC
5.37e7

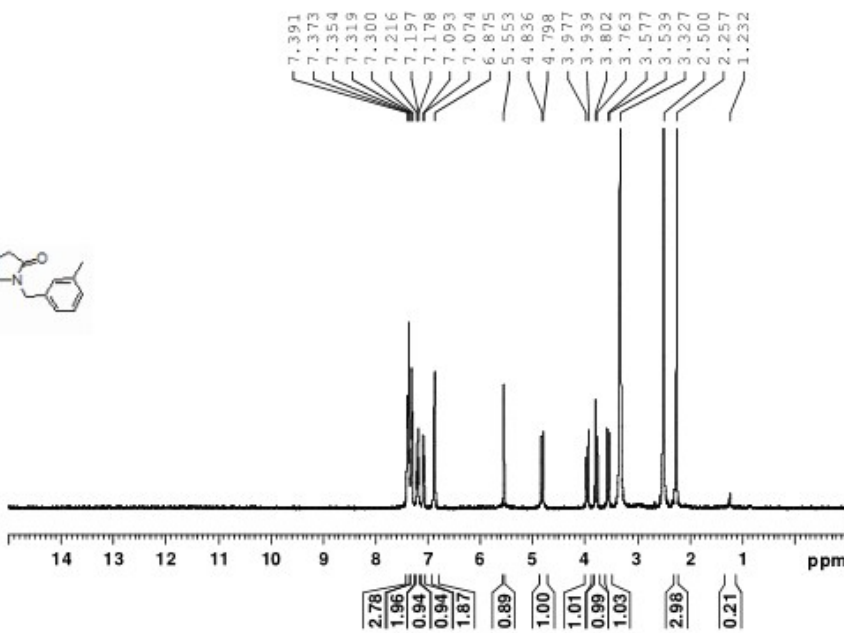
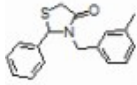




2) Entry 2 (4b):

J356-J00857-005-C

DMSO



Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

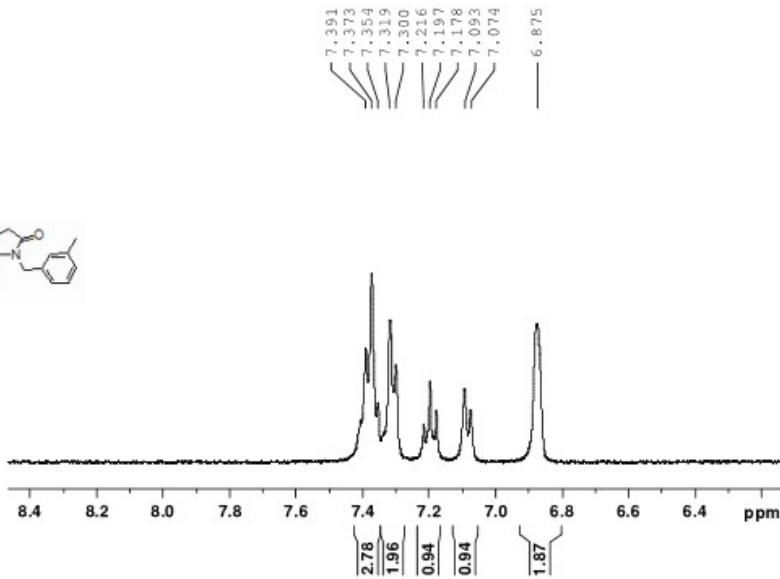
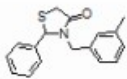
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.08
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.0000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SFO1 400.2624718 MHz

F2 - Processing parameters
 S1 65536
 SF 400.2600045 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-C

DMSO



Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

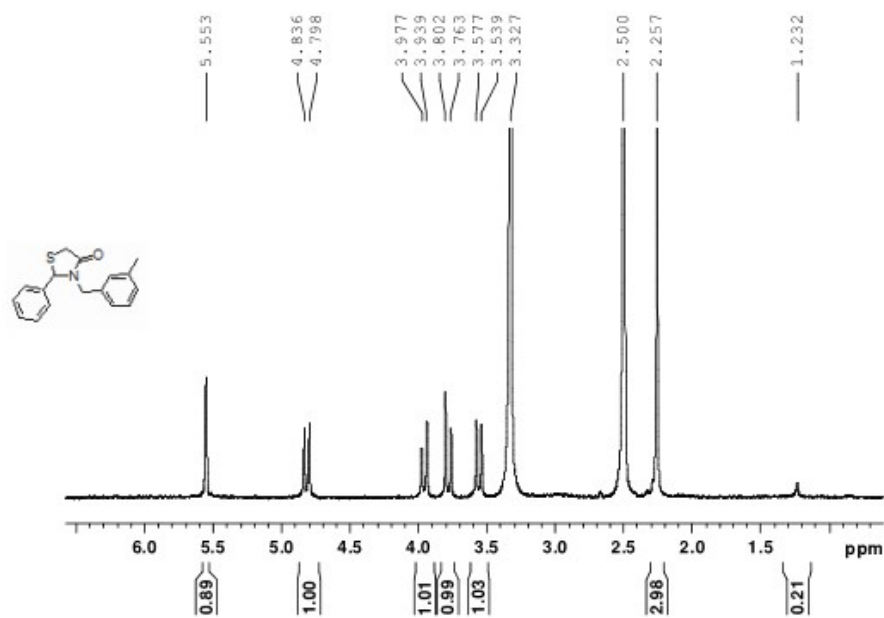
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.08
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.0000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SFO1 400.2624718 MHz

F2 - Processing parameters
 S1 65536
 SF 400.2600045 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-C

DMSO



Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

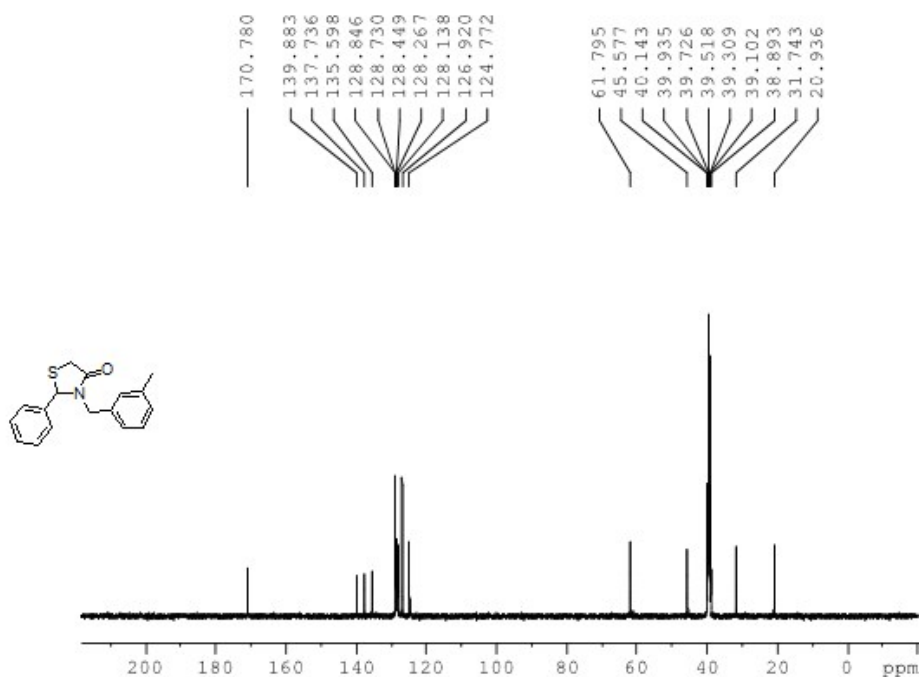
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.08
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SF01 400.2624718 MHz

F2 - Processing parameters
 SI 65536
 SF 400.2600045 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-C

DMSO



Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

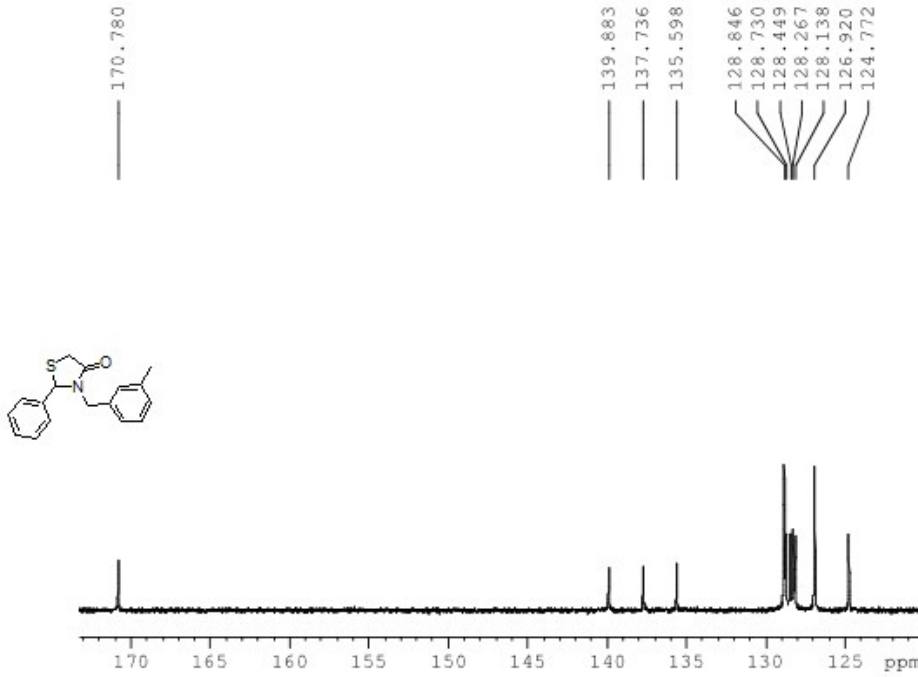
F2 - Acquisition Parameters
 Date_ 20130812
 Time 18.29
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 484
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DM 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SF01 100.6255216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W

J356-J00857-005-C

DMSO

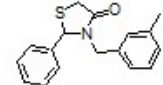


Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130812
 Time 18.29
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 484
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

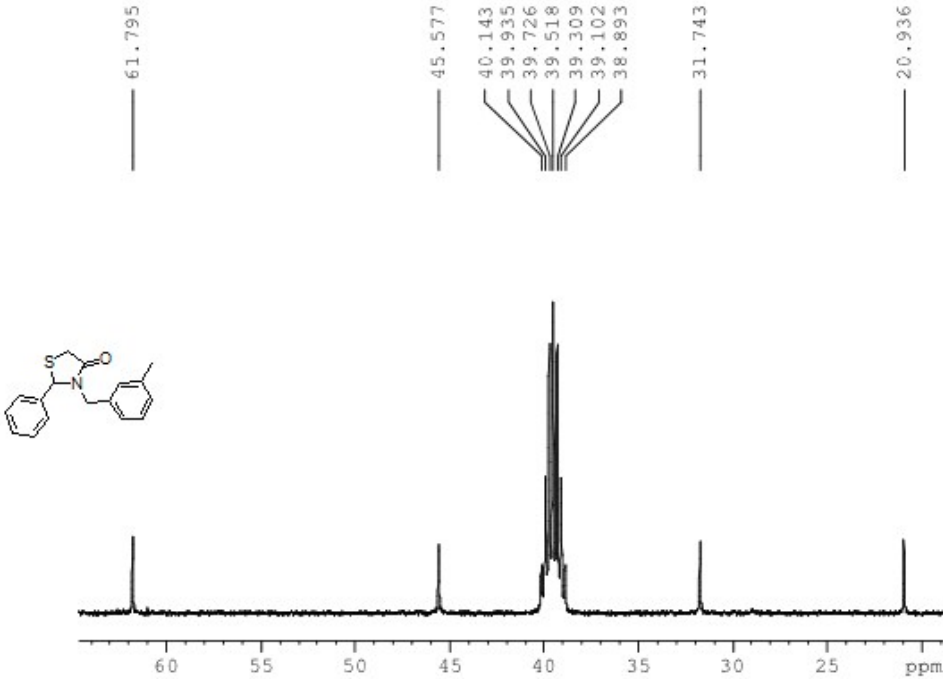
===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SFO1 100.6555216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W



J356-J00857-005-C

DMSO

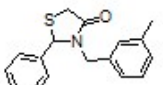


Current Data Parameters
 NAME J356-J00857-005-C
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130812
 Time 18.29
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 484
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SFO1 100.6555216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W



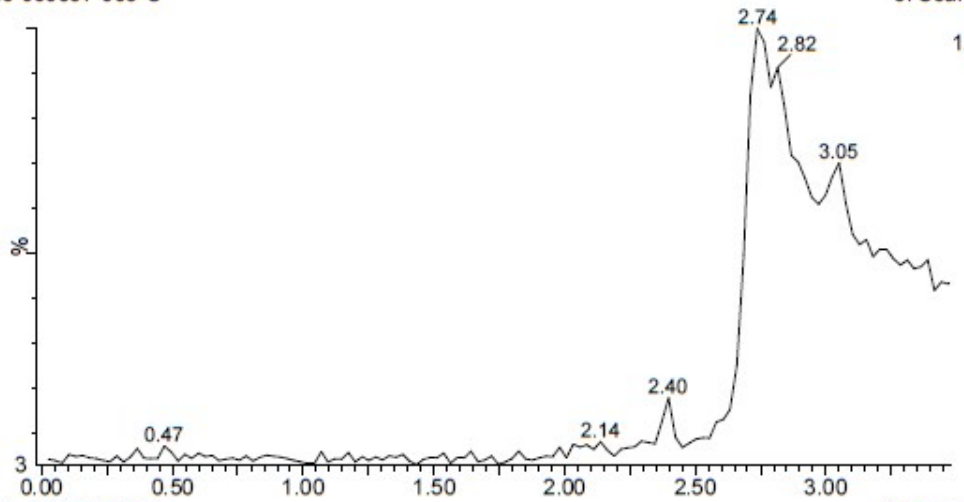
Sample Name: J356-J00857-005-C JUBILANT CHEMSYS LTD

UPLC-MS-05

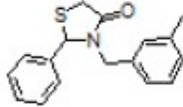
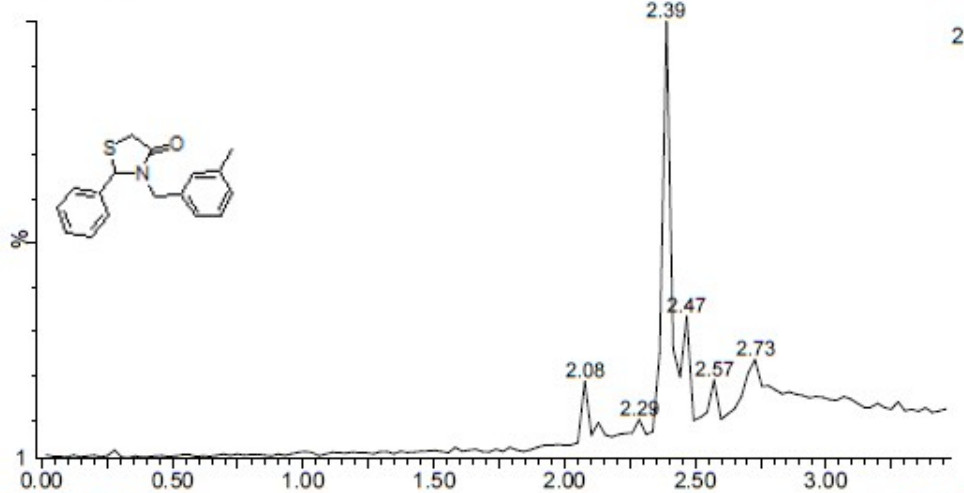
Test Name: 5mM AA-3-5 MIN

07-Aug-2013 11:13:16

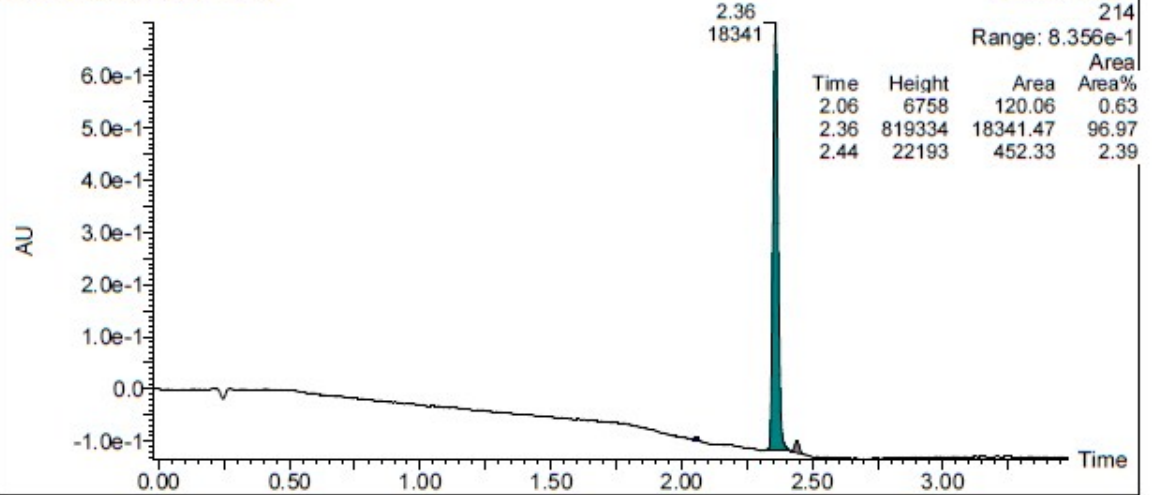
070813-J356-J00857-005-C



070813-J356-J00857-005-C



070813-J356-J00857-005-C



Sample Name: J356-J00857-005-C JUBILANT CHEMSYS LTD

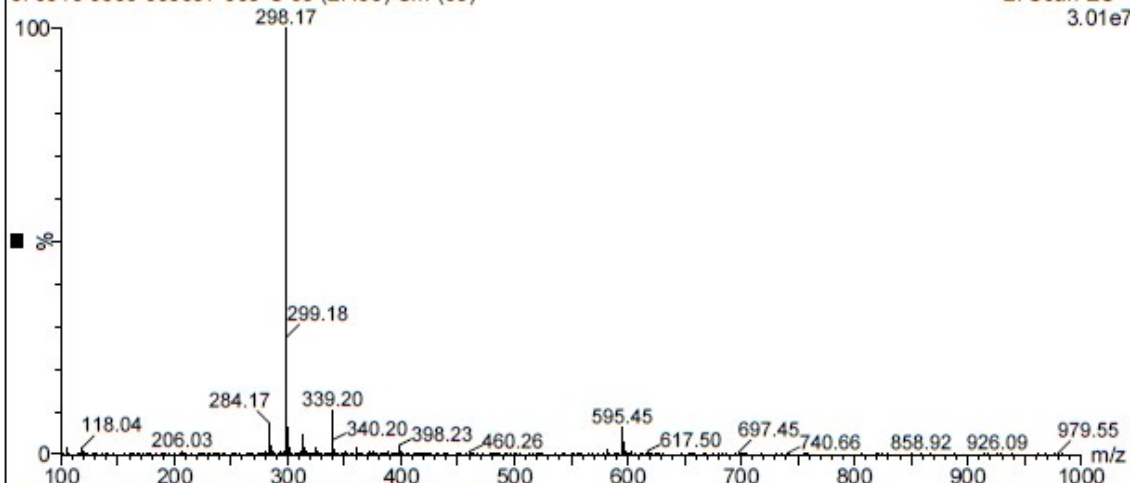
UPLC-MS-05

Test Name: 5mM AA-3-5 MIN

07-Aug-2013 11:13:16

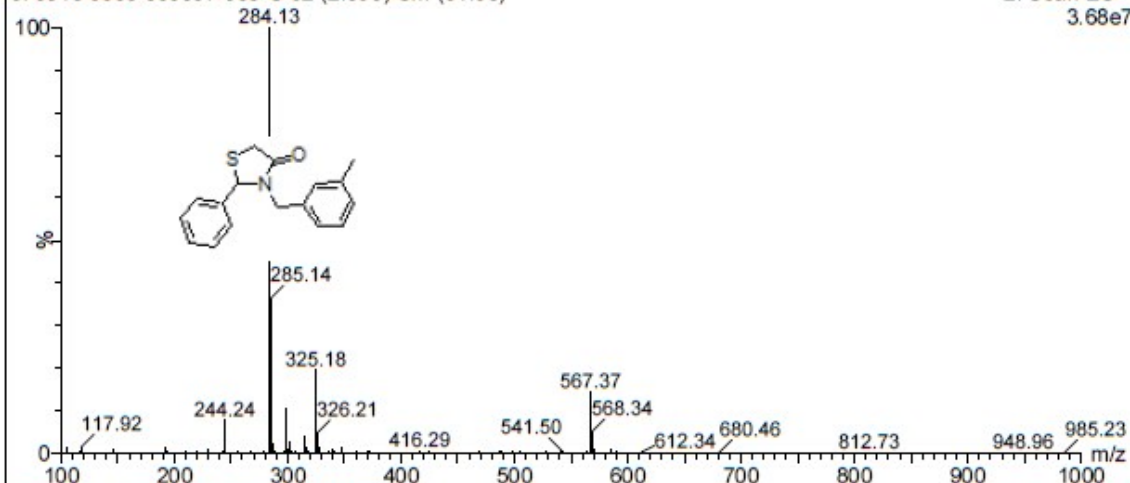
070813-J356-J00857-005-C 95 (2.468) Cm (95)

2: Scan ES+
3.01e7



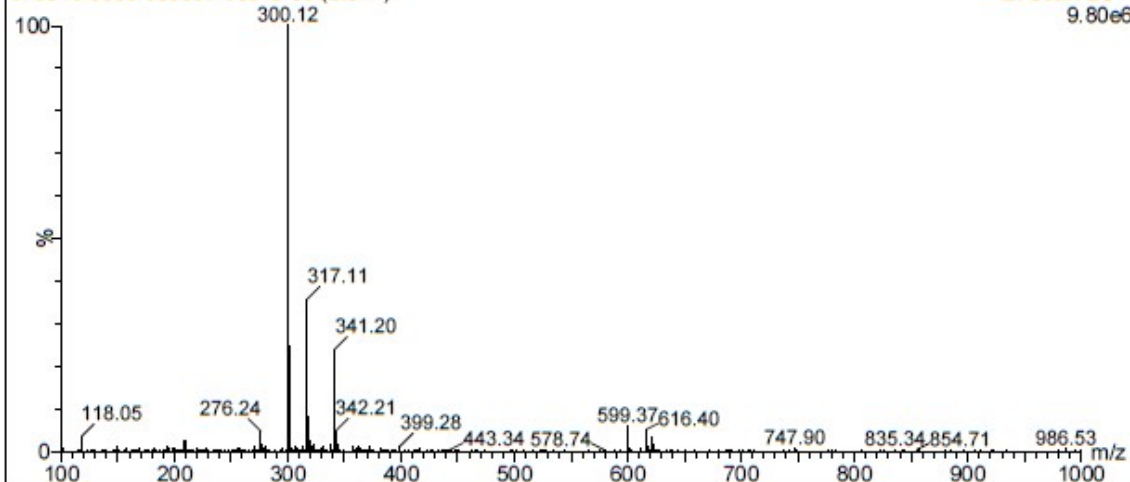
070813-J356-J00857-005-C 92 (2.390) Cm (91:93)

2: Scan ES+
3.68e7



070813-J356-J00857-005-C 80 (2.077)

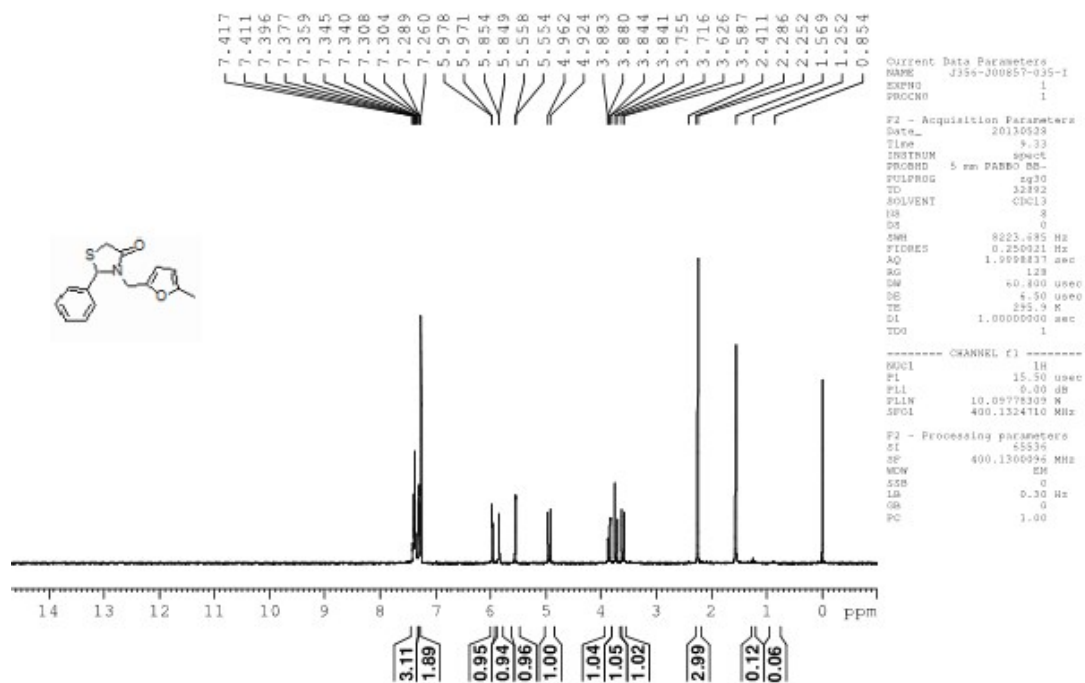
2: Scan ES+
9.80e6



3) Entry 3 (4c):

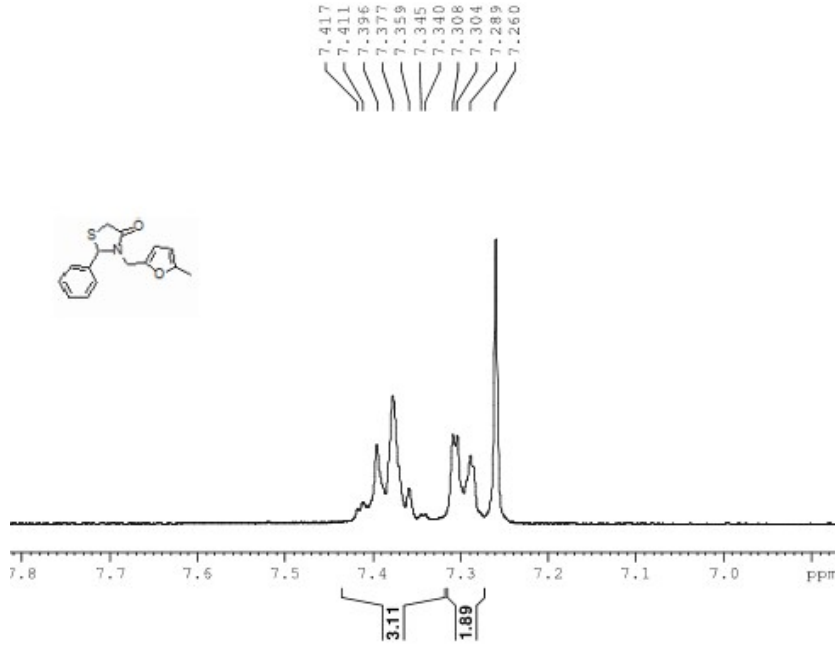
J356-J09857-035-I

CDC13



J356-J00857-035-I

CDC13



```

Current Data Parameters
NAME      J356-J00857-035-I
EXPNO    1
PROCNO   1

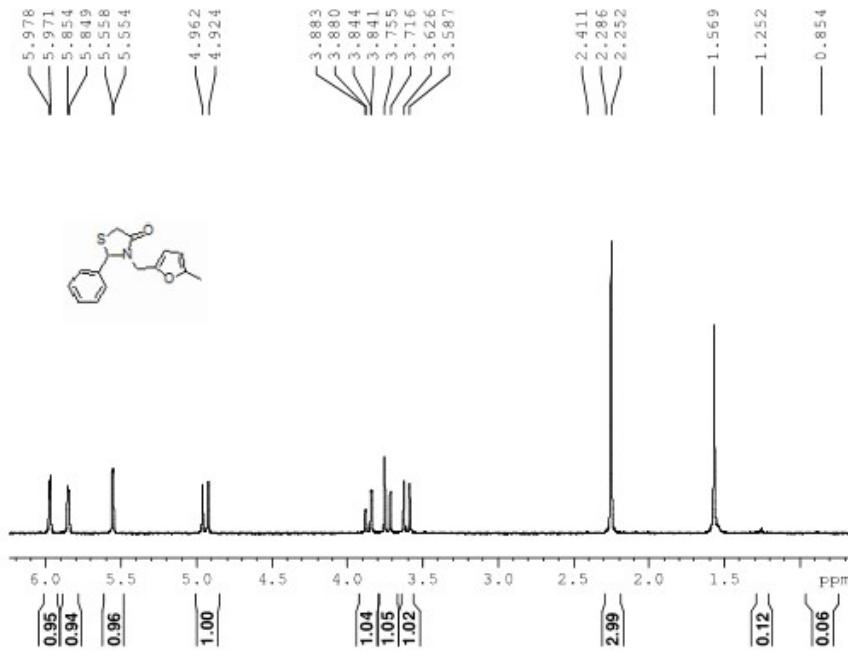
F2 - Acquisition Parameters
Date_    20130530
Time     9.33
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        32792
SOLVENT  CDCl3
NS        8
DS        0
SWH       8223.495 Hz
FIDRES   0.250021 Hz
AQ        1.9998837 sec
RG        128
SM        60.400 usec
DE        4.50 usec
TE        295.2 K
D1        1.00000000 sec
TD0       1

----- CHANNEL f1 -----
NUC1      1H
P1        15.50 usec
PL1       0.00 dB
PL1N     10.09778309 N
SFO1     400.1324710 MHz

F2 - Processing parameters
SI        65535
SF        400.1300994 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
  
```

J356-J00857-035-I

CDC13



```

Current Data Parameters
NAME      J356-J00857-035-I
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20130530
Time     9.33
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        32792
SOLVENT  CDCl3
NS        8
DS        0
SWH       8223.495 Hz
FIDRES   0.250021 Hz
AQ        1.9998837 sec
RG        128
SM        60.400 usec
DE        4.50 usec
TE        295.2 K
D1        1.00000000 sec
TD0       1

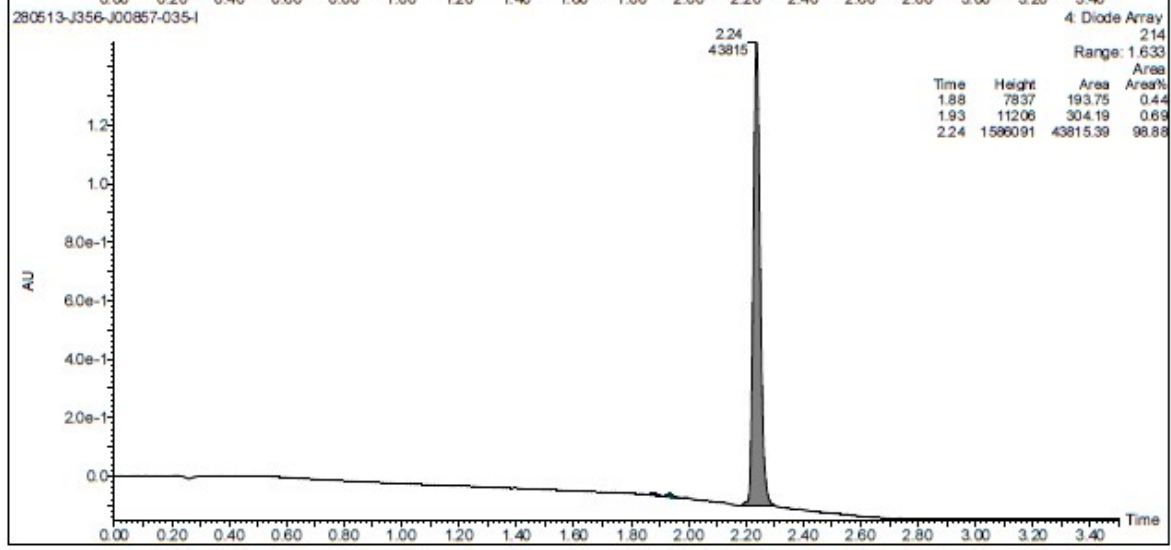
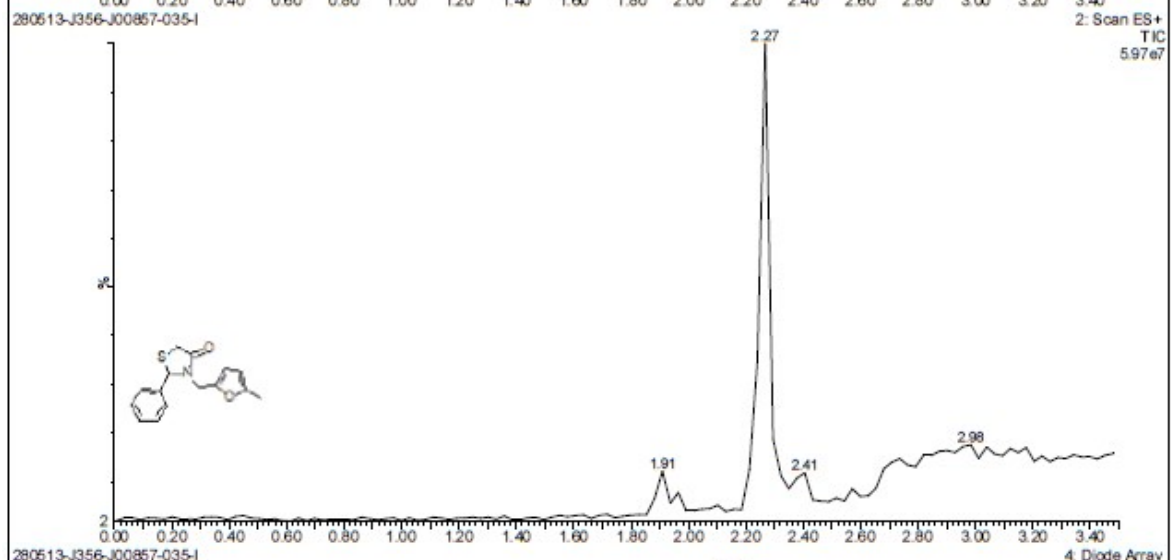
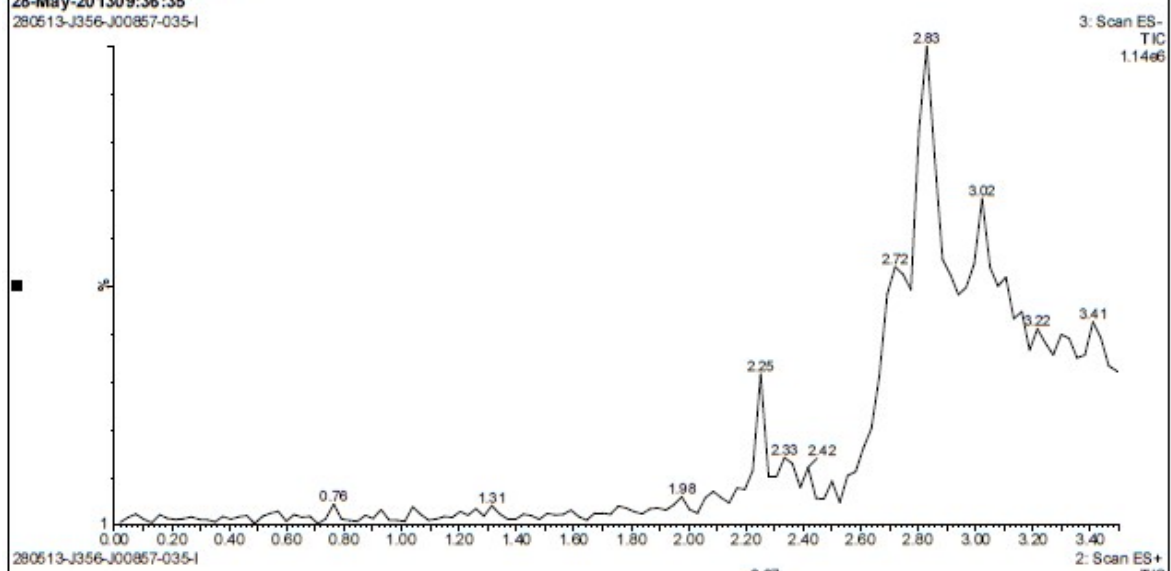
----- CHANNEL f1 -----
NUC1      1H
P1        15.50 usec
PL1       0.00 dB
PL1N     10.09778309 N
SFO1     400.1324710 MHz

F2 - Processing parameters
SI        65535
SF        400.1300994 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
  
```

Sample Name: J356-J00857-035-I
Test Name: 5mM AA-3-5 MIN
28-May-20 13:09:36 :35
280513-J356-J00857-035-I

JUBILANT CHEMSYS

UPLC-MS-02



Sample Name: J356-J00857-035-4

JUBILANT CHEMSYS

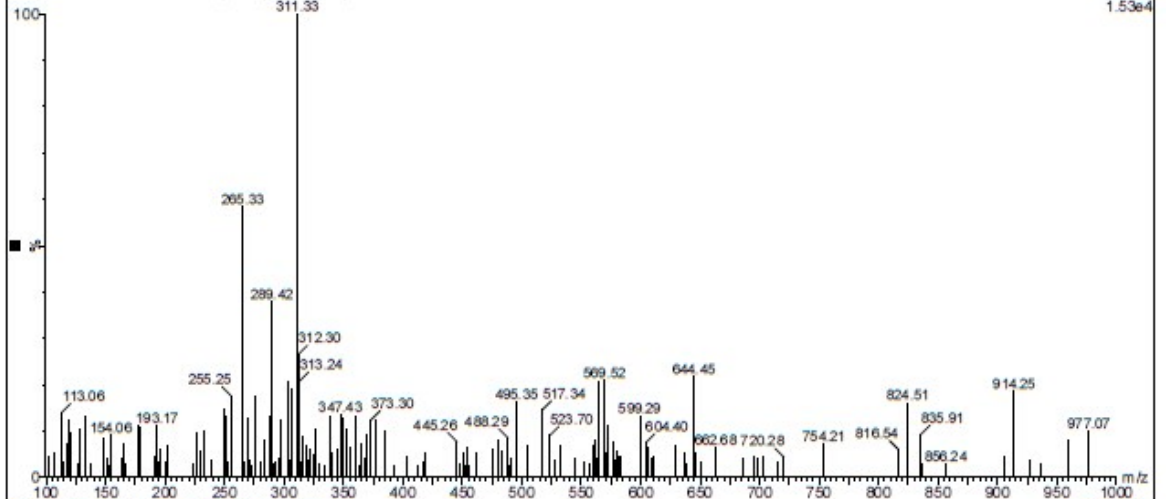
UPLC-MS-02

Test Name: 5mM AA-3-5 MIN

28-May-20 13:09:36:35

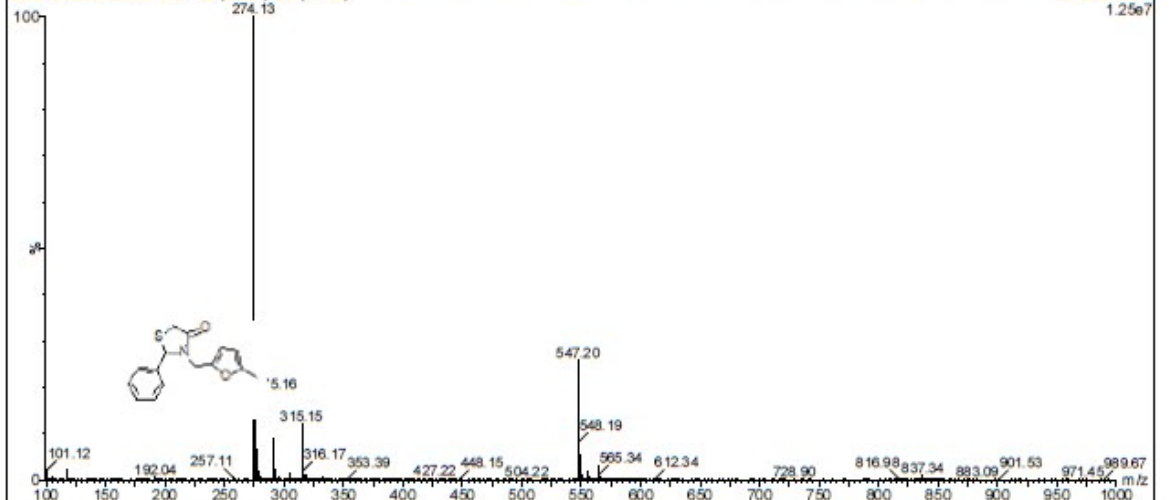
280513-J356-J00857-035-1 82 (2.252) Cm (81:83)

3: Scan ES-
1.53e4



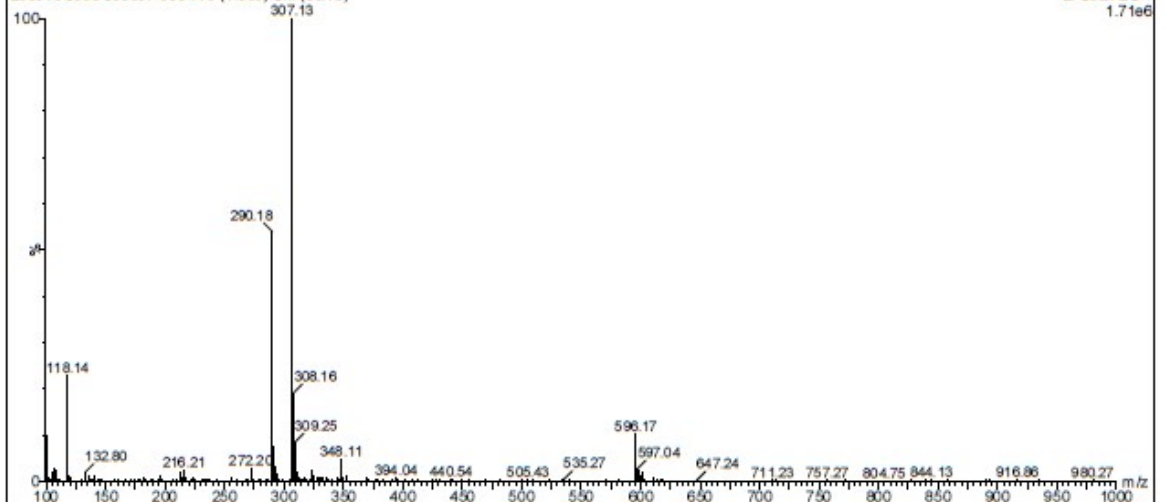
280513-J356-J00857-035-1 83 (2.267) Cm (81:83)

2: Scan ES+
1.25e7

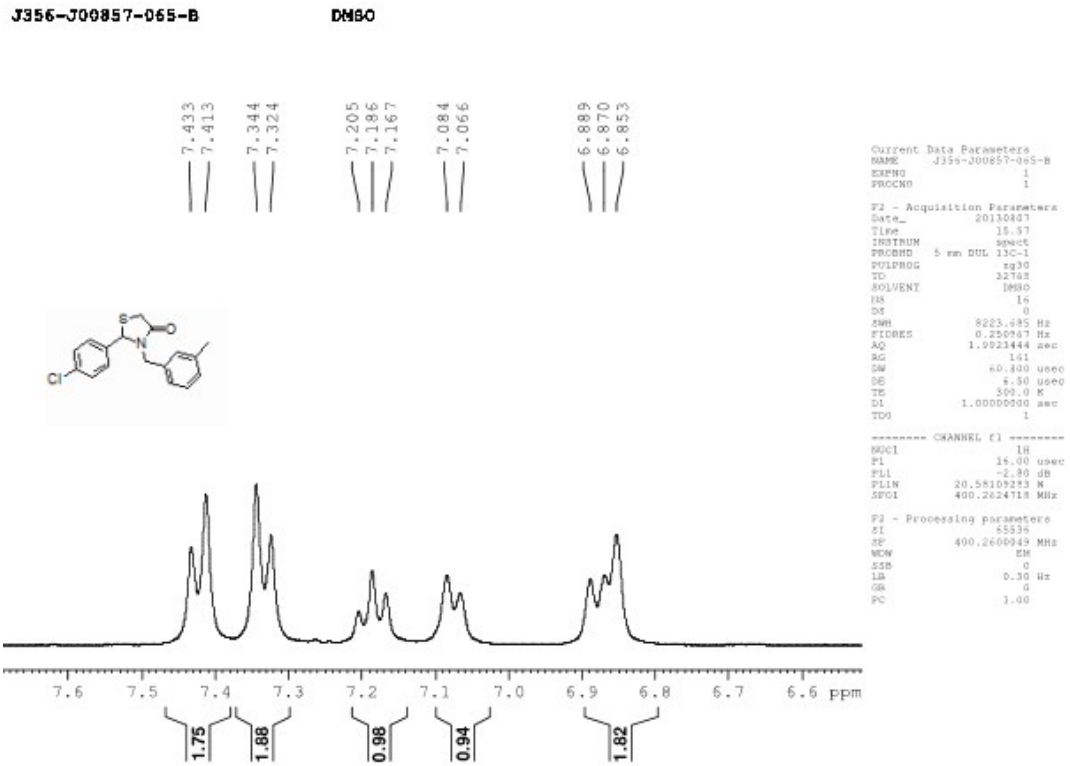
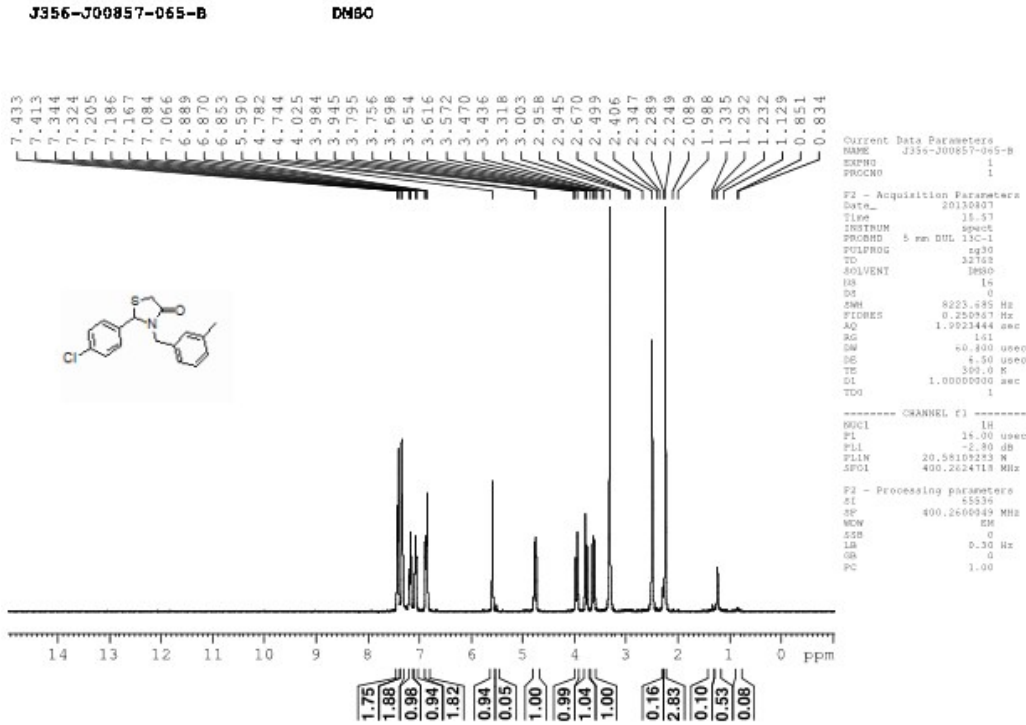


280513-J356-J00857-035-1 70 (1.909) Cm (69:70)

2: Scan ES+
1.71e6

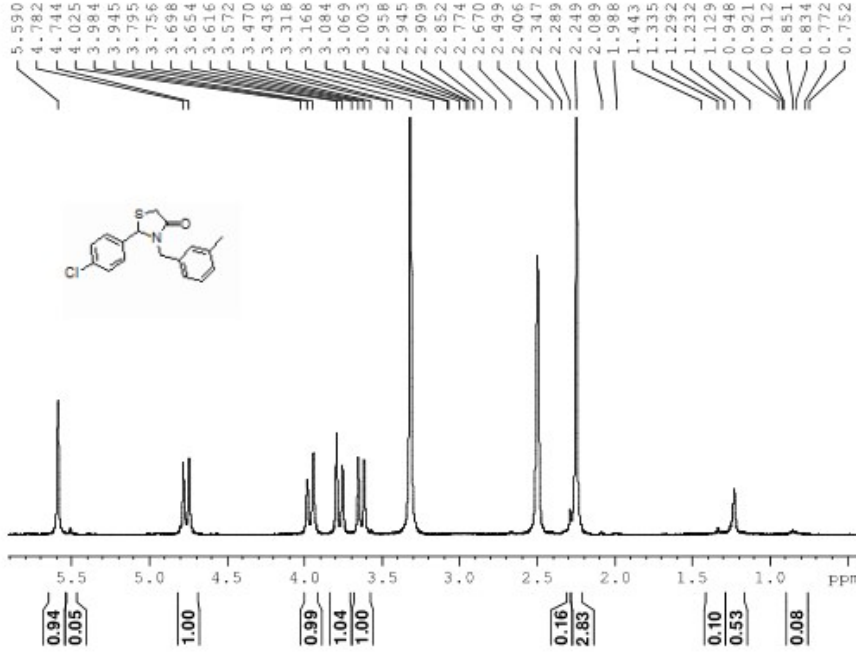


4) Entry 4 (4d):



J356-J00857-065-B

DM80



Current Data Parameters
NAME J356-J00857-065-B
EXPNO 1
PROCNO 1

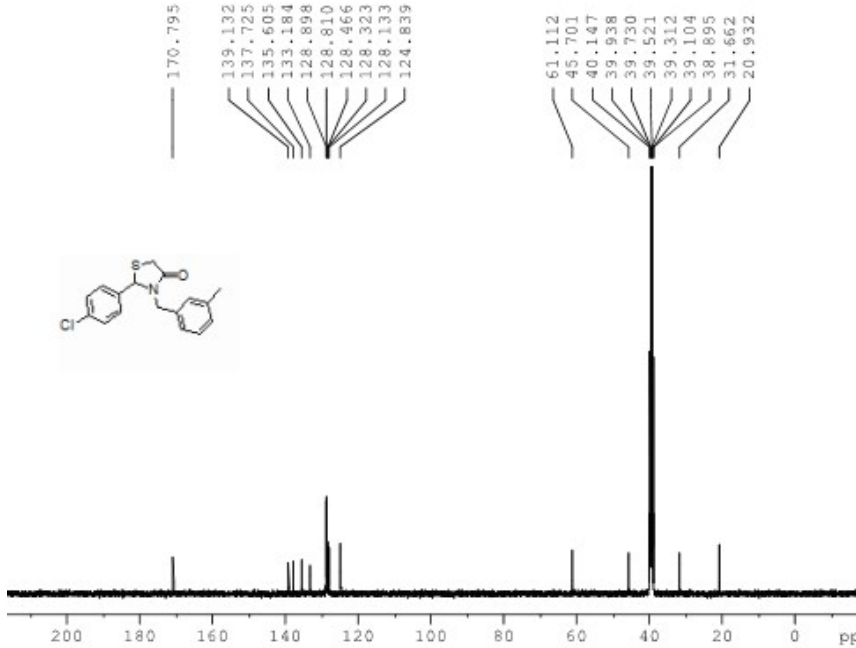
F2 - Acquisition Parameters
Date_ 20110407
Time 15:57
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT DM80
DS 0
SWH 8225.585 Hz
FIDRES 0.250907 Hz
AQ 1.0923444 sec
RG 161
SM 60.400 usec
SE 4.50 usec
TE 300.0 K
D1 1.0000000 sec
TD0 1

----- CHANNEL f1 -----
NUC1 1H
P1 15.00 usec
PL1 -2.00 dB
PL1N 20.58109233 M
SFO1 400.2624113 MHz

F2 - Processing parameters
SI 65536
SF 400.2600449 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

J356-J00857-065-B

DM80



Current Data Parameters
NAME J356-J00857-065-B
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110412
Time 17:25
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT DM80
DS 4
SWH 24031.411 Hz
FIDRES 0.464709 Hz
AQ 1.3932920 sec
RG 654
SM 29.900 usec
SE 4.50 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

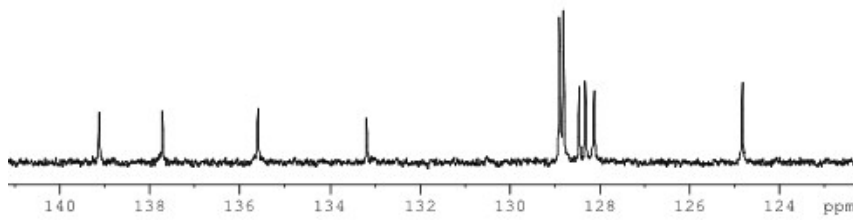
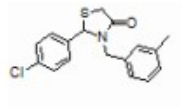
----- CHANNEL f1 -----
NUC1 13C
P1 8.00 usec
PL1 -2.00 dB
PL1N 57.32748770 N
SFO1 100.6261216 MHz

----- CHANNEL f2 -----
CPDPRG2 waltz16
NUC2 1H
P2P2G2 88.00 usec
PL2 -2.00 dB
PL12 15.35 dB
PL13 18.00 dB
PL14 18.00 dB
PL15 18.00 dB
PL16 18.00 dB
PL17 18.00 dB
PL18 18.00 dB
PL19 18.00 dB
PL20 18.00 dB
PL21 18.00 dB
PL22 18.00 dB
PL23 18.00 dB
PL24 18.00 dB
PL25 18.00 dB
PL26 18.00 dB
PL27 18.00 dB
PL28 18.00 dB
PL29 18.00 dB
PL30 18.00 dB
PL31 18.00 dB
PL32 18.00 dB
PL33 18.00 dB
PL34 18.00 dB
PL35 18.00 dB
PL36 18.00 dB
PL37 18.00 dB
PL38 18.00 dB
PL39 18.00 dB
PL40 18.00 dB
PL41 18.00 dB
PL42 18.00 dB
PL43 18.00 dB
PL44 18.00 dB
PL45 18.00 dB
PL46 18.00 dB
PL47 18.00 dB
PL48 18.00 dB
PL49 18.00 dB
PL50 18.00 dB
PL51 18.00 dB
PL52 18.00 dB
PL53 18.00 dB
PL54 18.00 dB
PL55 18.00 dB
PL56 18.00 dB
PL57 18.00 dB
PL58 18.00 dB
PL59 18.00 dB
PL60 18.00 dB
PL61 18.00 dB
PL62 18.00 dB
PL63 18.00 dB
PL64 18.00 dB
PL65 18.00 dB
PL66 18.00 dB
PL67 18.00 dB
PL68 18.00 dB
PL69 18.00 dB
PL70 18.00 dB
PL71 18.00 dB
PL72 18.00 dB
PL73 18.00 dB
PL74 18.00 dB
PL75 18.00 dB
PL76 18.00 dB
PL77 18.00 dB
PL78 18.00 dB
PL79 18.00 dB
PL80 18.00 dB
PL81 18.00 dB
PL82 18.00 dB
PL83 18.00 dB
PL84 18.00 dB
PL85 18.00 dB
PL86 18.00 dB
PL87 18.00 dB
PL88 18.00 dB
PL89 18.00 dB
PL90 18.00 dB
PL91 18.00 dB
PL92 18.00 dB
PL93 18.00 dB
PL94 18.00 dB
PL95 18.00 dB
PL96 18.00 dB
PL97 18.00 dB
PL98 18.00 dB
PL99 18.00 dB
PL100 18.00 dB

F2 - Processing parameters
SI 32768
SF 100.6261216 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00

J356-J00857-065-B

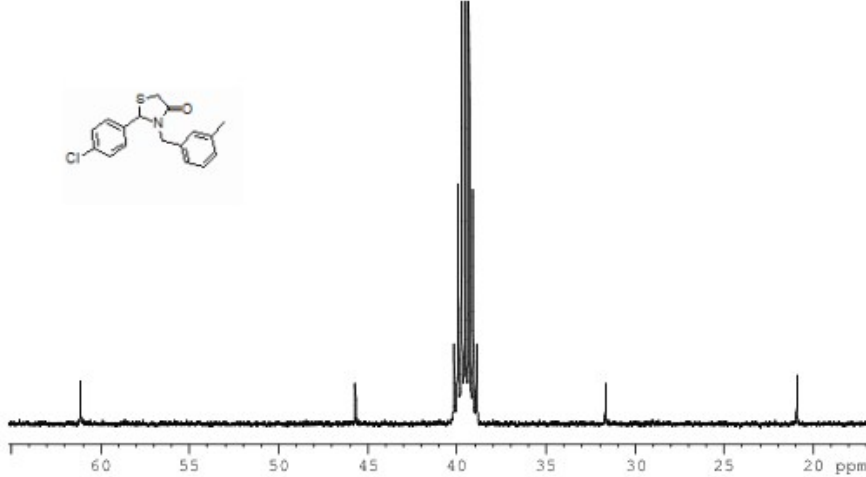
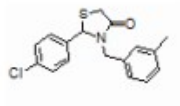
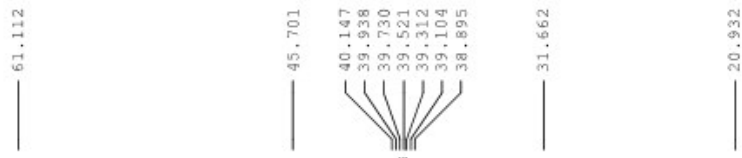
DMSO



```
Current Data Parameters
NAME J356-J00857-065-B
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20130813
Time 17.22
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 812
DS 4
SWH 20035.401 Hz
FIDRES 0.444794 Hz
AQ 1.333295 sec
RG 656
AQ 1.333295 sec
DE 29.800 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
D10 1
===== CHANNEL f1 =====
NUC1 13C
P1 130
PL1 -2.00 dB
PL1M 57.32743073 N
RFU1 100.6554216 MHz
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 86.00 usec
PL2 -2.00 dB
PL12 15.35 dB
PL13 15.00 dB
PL1M 20.58192283 N
PL12M 0.31511455 N
PL13M 0.13517798 N
RFU2 400.2614010 MHz
F2 - Processing parameters
SI 32768
SF 100.625001 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.60
```

J356-J00857-065-B

DMSO



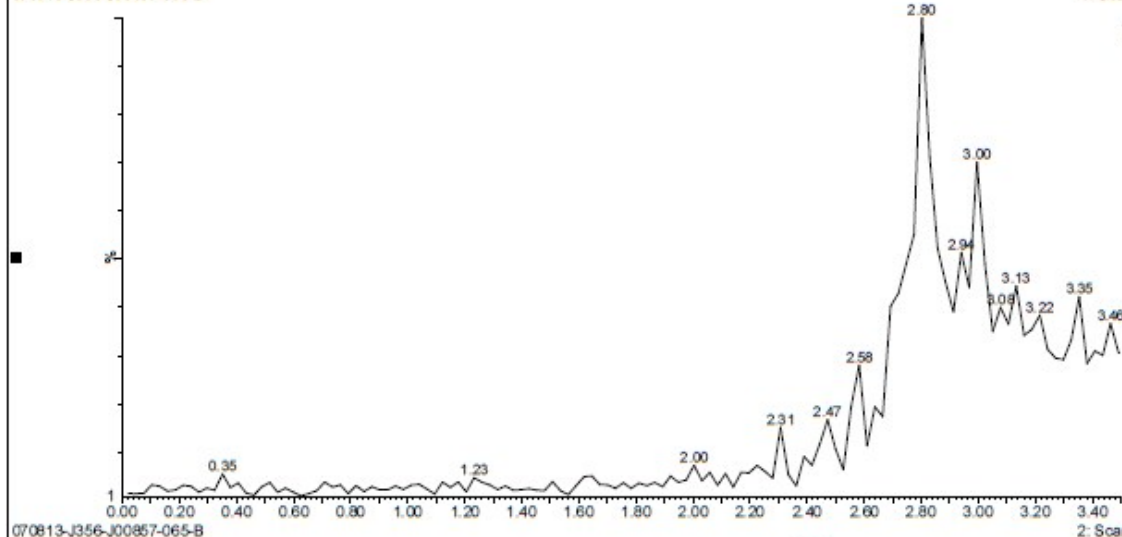
```
Current Data Parameters
NAME J356-J00857-065-B
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20130813
Time 17.22
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 812
DS 4
SWH 20035.401 Hz
FIDRES 0.444794 Hz
AQ 1.333295 sec
RG 656
AQ 1.333295 sec
DE 29.800 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
D10 1
===== CHANNEL f1 =====
NUC1 1H
P1 130
PL1 -2.00 dB
PL1M 57.32743073 N
RFU1 100.6554216 MHz
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 86.00 usec
PL2 -2.00 dB
PL12 15.35 dB
PL13 15.00 dB
PL1M 20.58192283 N
PL12M 0.31511455 N
PL13M 0.13517798 N
RFU2 400.2614010 MHz
F2 - Processing parameters
SI 32768
SF 100.625001 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.60
```

Sample Name: J356-J00857-065-B
 Test Name: 5mM AA-3-5 MIN
 07-Aug-2013 13:58:57
 070813-J356-J00857-065-B

JUBILANT CHEMSYS

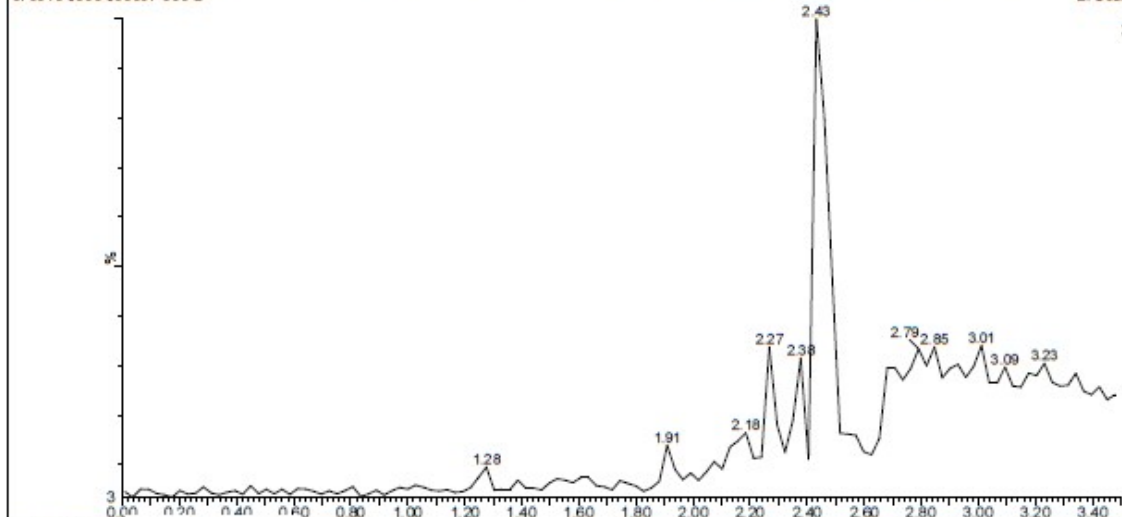
UPLC-MS-02

3: Scan ES-
TIC
1.05e6

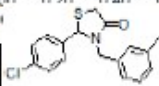


070813-J356-J00857-065-B

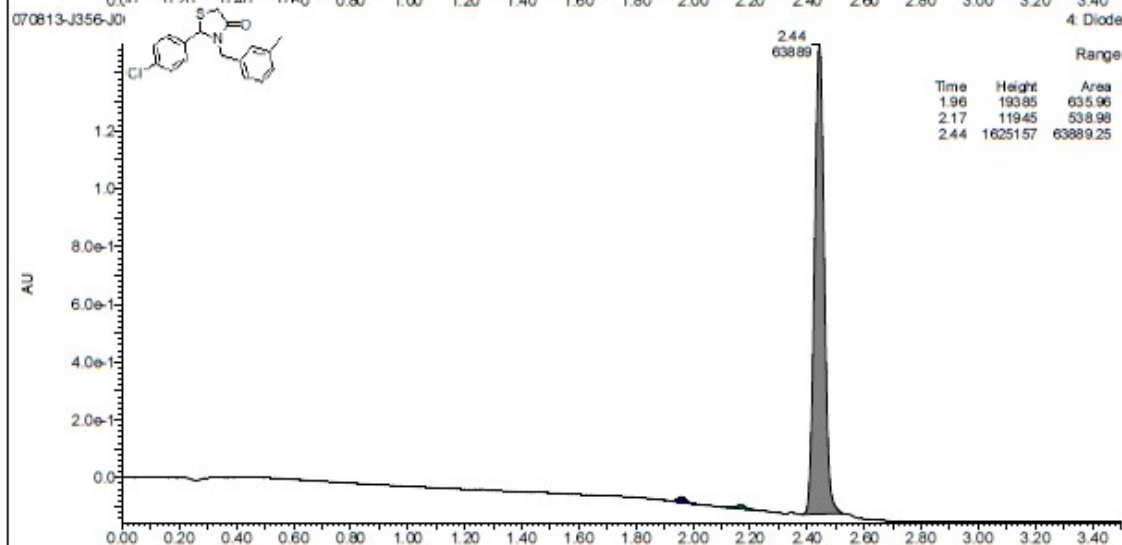
2: Scan ES+
TIC
2.51e7



070813-J356-J0



4: Diode Array
214
Range: 1.654



Sample Name: J356-J00857-065-B

JUBILANT CHEMSYS

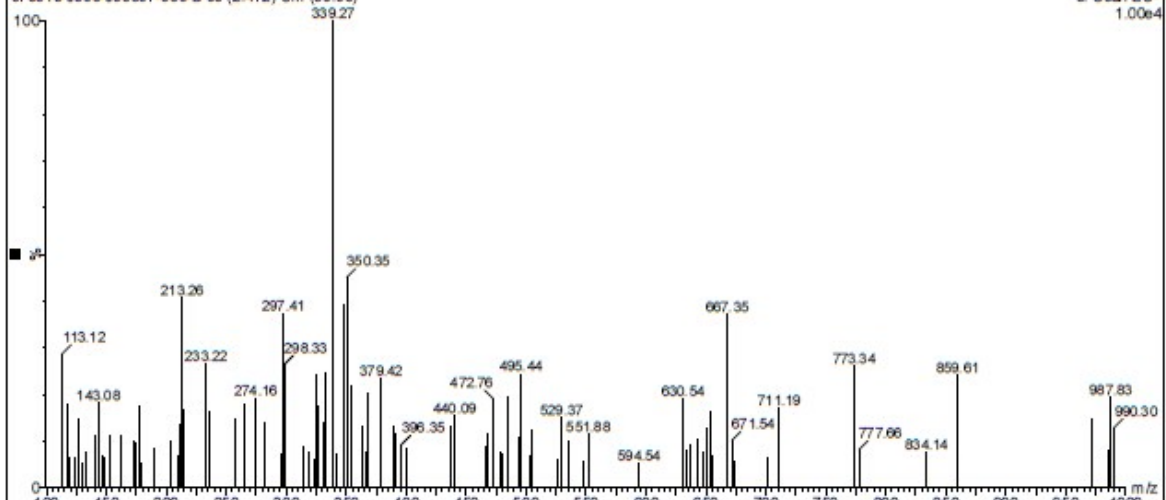
UPLC-MS-02

Test Name: 5mM AA-3-5 MIN

07-Aug-2013 13:58:57

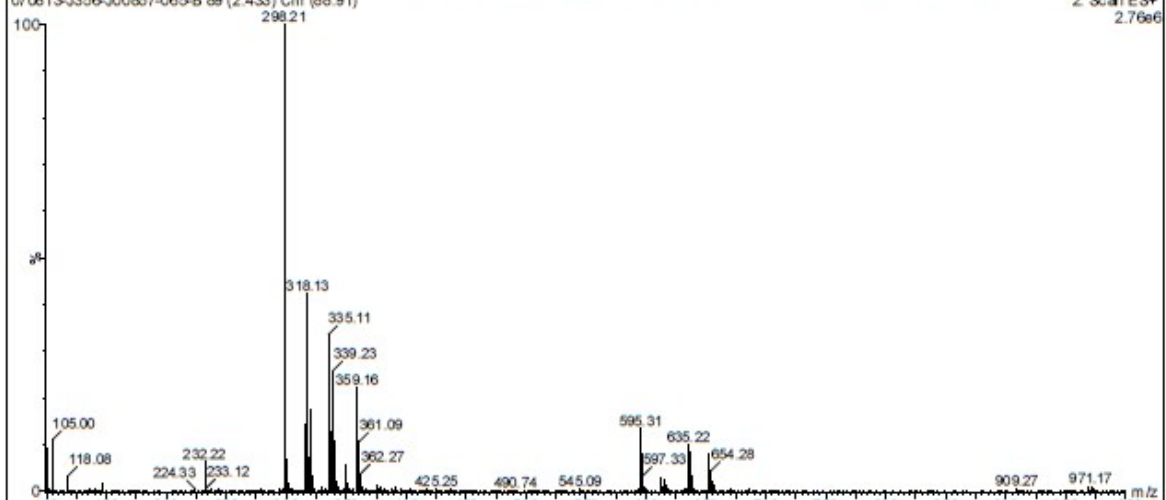
070813-J356-J00857-065-B 90 (2.472) Cm (89.90)

3. Scan ES-
1.00e4



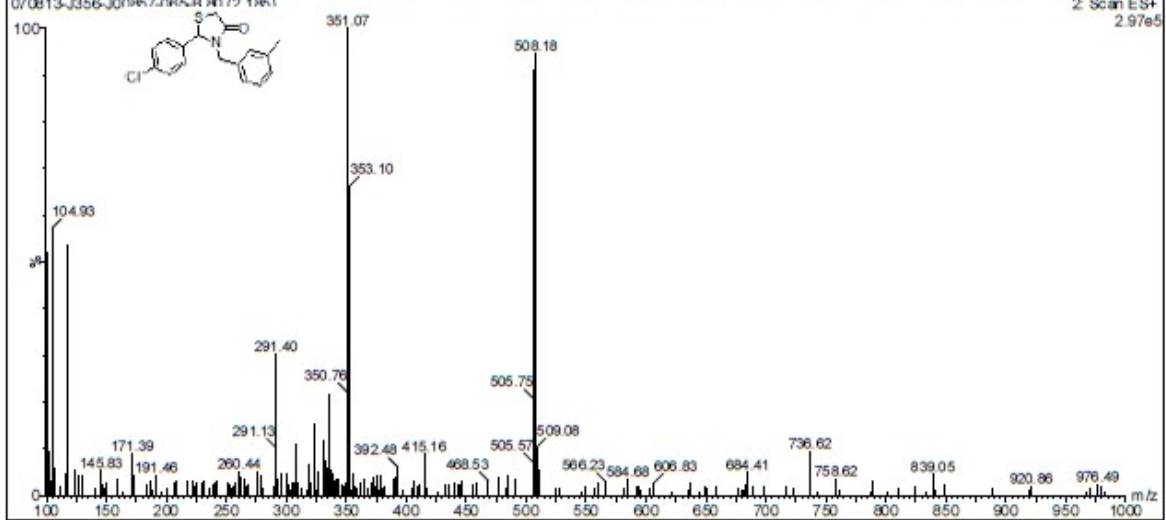
070813-J356-J00857-065-B 89 (2.433) Cm (88.91)

2. Scan ES+
2.76e5



070813-J356-J00857-065-B 88 (2.433) Cm (88.91)

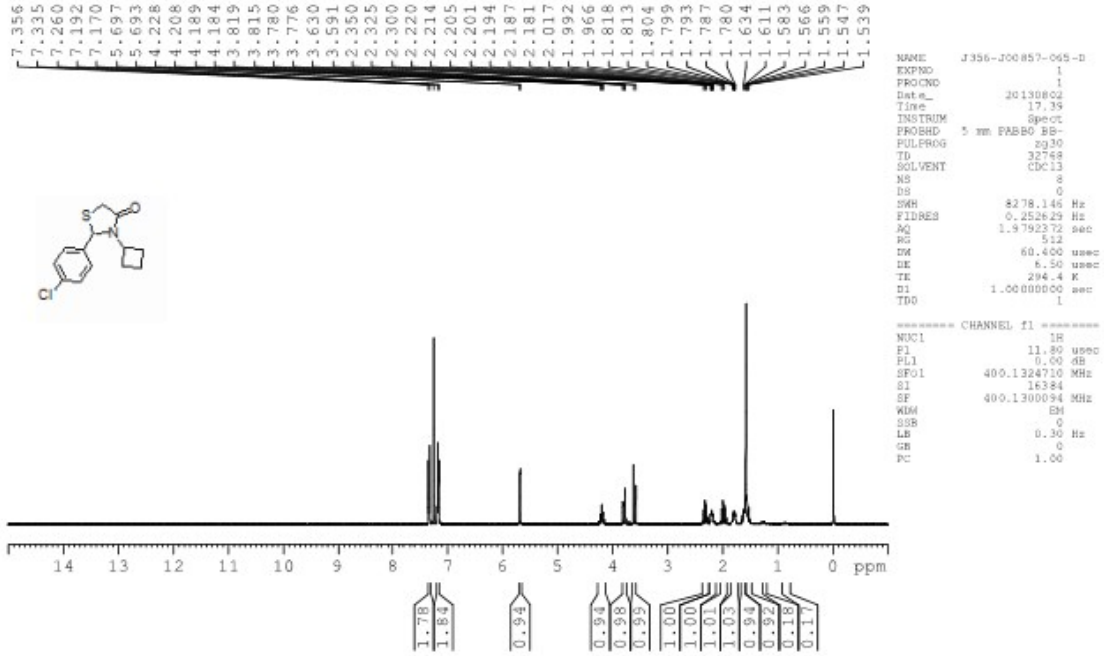
2. Scan ES+
2.97e5



5) Entry 5 (4e):

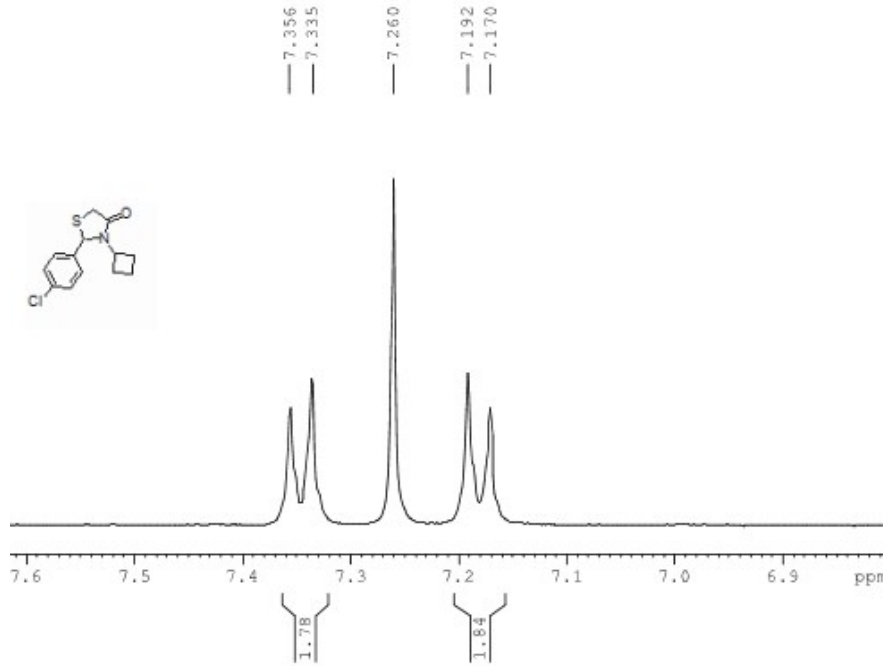
J356-J00857-065-D

CDC13



J356-J00857-065-D

CDC13



```

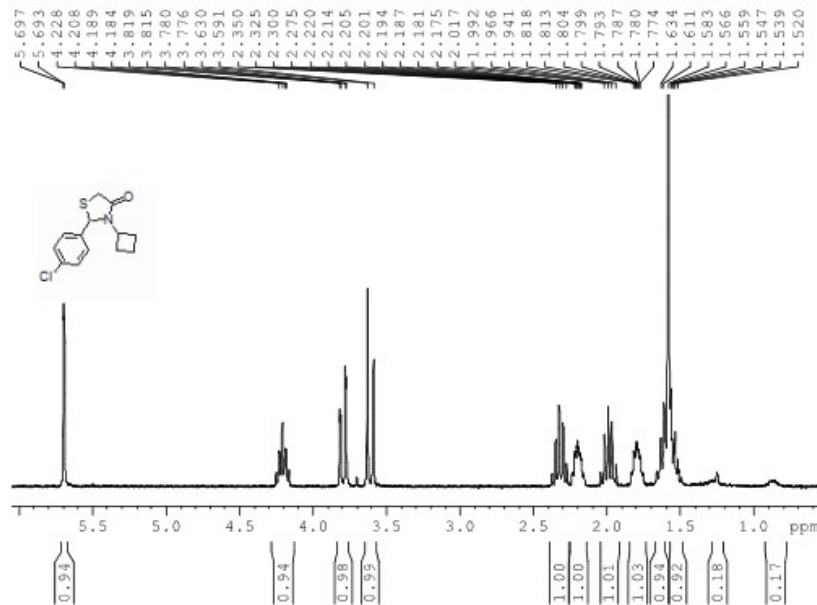
NAME      J356-J00857-065-D
EXPNO     1
PROCNO    1
Date_     20130802
Time      17.39
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         32768
SOLVENT   CDC13
NS         8
DS         0
SWH        8278.146 Hz
FIDRES     0.252629 Hz
AQ         1.9792372 sec
RG         512
DM         60.400 usec
DE         8.50 usec
TE         294.4 K
D1         1.00000000 sec
TD0        1
  
```

```

===== CHANNEL f1 =====
NUC1      1H
P1        11.80 usec
PL1       0.00 dB
SFO1      400.1324710 MHz
SI        16384
SF        400.1300094 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB         0
PC         1.00
  
```

J356-J00857-065-D

CDC13



```

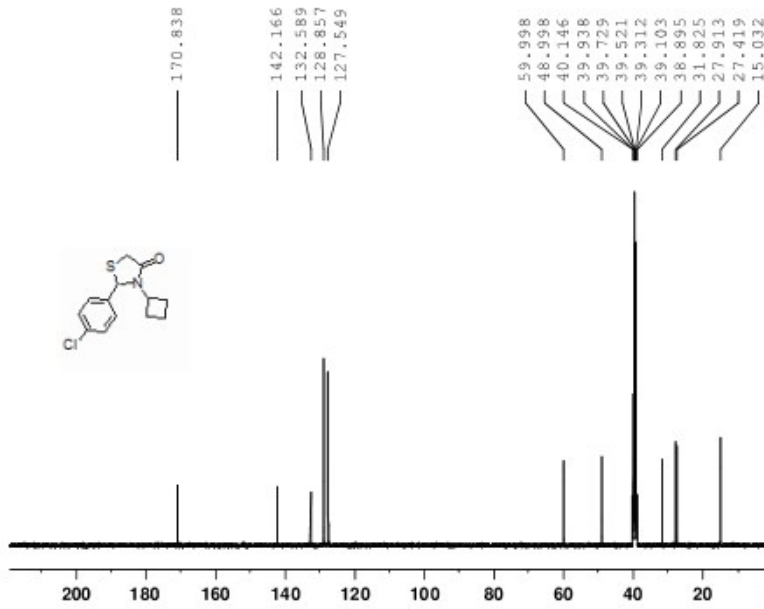
NAME      J356-J00857-065-D
EXPNO     1
PROCNO    1
Date_     20130802
Time      17.39
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zg30
TD         32768
SOLVENT   CDC13
NS         8
DS         0
SWH        8278.146 Hz
FIDRES     0.252629 Hz
AQ         1.9792372 sec
RG         512
DM         60.400 usec
DE         8.50 usec
TE         294.4 K
D1         1.00000000 sec
TD0        1
  
```

```

===== CHANNEL f1 =====
NUC1      1H
P1        11.80 usec
PL1       0.00 dB
SFO1      400.1324710 MHz
SI        16384
SF        400.1300094 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB         0
PC         1.00
  
```


J356-J00857-065-D

DMSO



```

Current Data Parameters
NAME      J356-J00857-065-D
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20130813
Time     17.55
INSTRUM  spect
PROBHD   5 mm DUL 13C-1
PULPROG  zgpg30
TD        65536
SOLVENT  DMSO
NS        512
DS        4
SWH       24038.461 Hz
FIDRES   0.344798 Hz
AQ        1.3631988 sec
RG        2050
DM        20.900 usec
DE        6.50 usec
TE        300.0 K
D1        2.0000000 sec
D11       0.0300000 sec
TD0       1

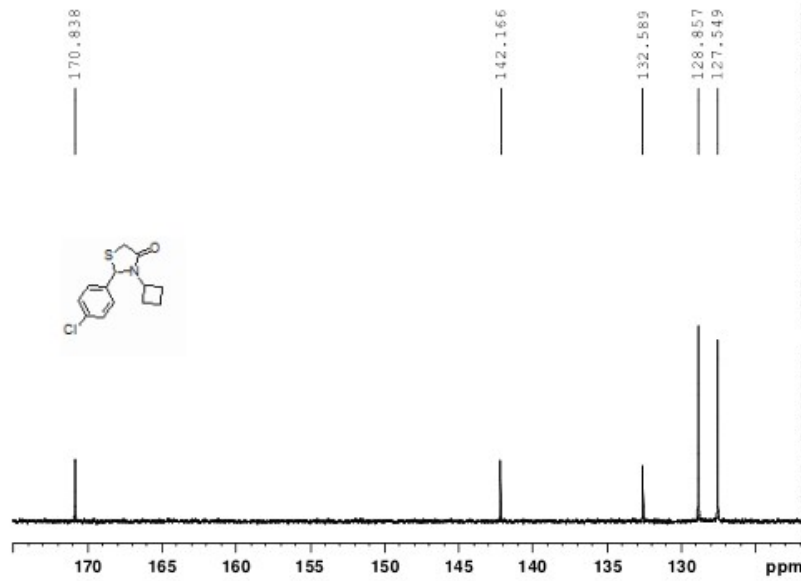
----- CHANNEL f1 -----
NUC1      13C
P1         8.00 usec
PL1       -2.00 dB
PL1W      57.32743073 W
SFO1     100.6253216 MHz

----- CHANNEL f2 -----
CHOPRG2  waltz16
NUC2      1H
PCPD2     80.00 usec
PL2       -2.80 dB
PL12      13.35 dB
PL13      19.00 dB
PL1W      20.58199283 W
PL12W     0.31511453 W
PL13W     0.13597794 W
SFO2     400.2614010 MHz

F2 - Processing parameters
SI         32768
SF        100.6253066 MHz
WDW        EM
SSB        0
GB         0
PC         1.40
  
```

J356-J00857-065-D

DMSO



```

Current Data Parameters
NAME      J356-J00857-065-D
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20130813
Time     17.55
INSTRUM  spect
PROBHD   5 mm DUL 13C-1
PULPROG  zgpg30
TD        65536
SOLVENT  DMSO
NS        512
DS        4
SWH       24038.461 Hz
FIDRES   0.344798 Hz
AQ        1.3631988 sec
RG        2050
DM        20.900 usec
DE        6.50 usec
TE        300.0 K
D1        2.0000000 sec
D11       0.0300000 sec
TD0       1

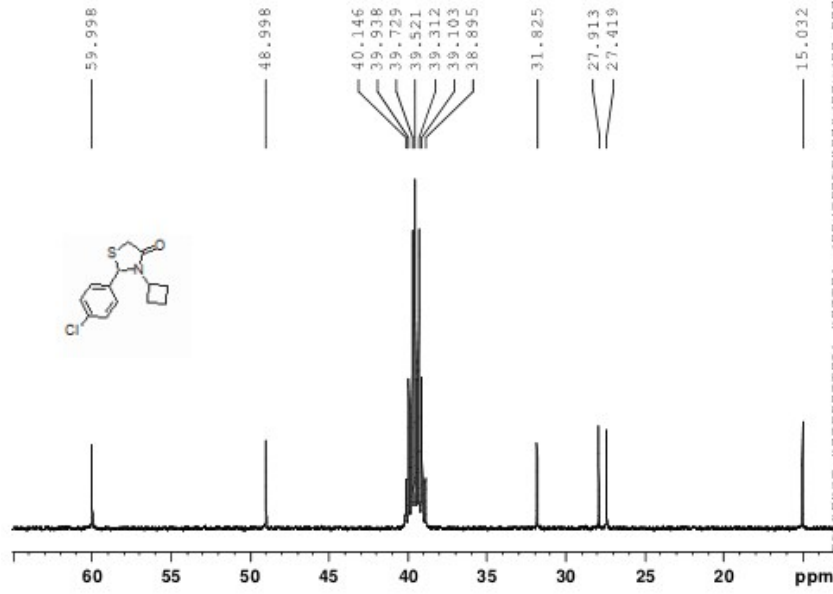
----- CHANNEL f1 -----
NUC1      13C
P1         8.00 usec
PL1       -2.00 dB
PL1W      57.32743073 W
SFO1     100.6253216 MHz

----- CHANNEL f2 -----
CHOPRG2  waltz16
NUC2      1H
PCPD2     80.00 usec
PL2       -2.80 dB
PL12      13.35 dB
PL13      19.00 dB
PL1W      20.58199283 W
PL12W     0.31511453 W
PL13W     0.13597794 W
SFO2     400.2614010 MHz

F2 - Processing parameters
SI         32768
SF        100.6253066 MHz
WDW        EM
SSB        0
GB         0
PC         1.40
  
```

J356-J00857-065-D

DMSO



```
Current Data Parameters
NAME      J356-J00857-065-D
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    2010113
Time     17.55
INSTRUM  spect
PROBHD   5 mm BBO-13C-1
PULPROG  zgpg30
TD        65536
SOLVENT  DMSO
NS        512
DS        4
SWH       24038.461 Hz
FIDRES    0.366788 Hz
AQ        1.3631688 sec
RG         200
DM        20.800 usec
DE         4.50 usec
TE        300.0 K
D1        2.0000000 sec
d11       0.0300000 sec
TDO       1

===== CHANNEL f1 =====
NUC1      13C
P1        3.00 usec
PL1       -2.00 dB
PL1M      59.32183073 W
SFO1      100.6255214 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       1H
P2P2      80.00 usec
PL2       -2.80 dB
PL12      13.35 dB
PL13      19.00 dB
PL1M      20.58109283 W
PL12M     0.31511452 W
PL13M     0.32581784 W
SFO2      400.2616010 MHz

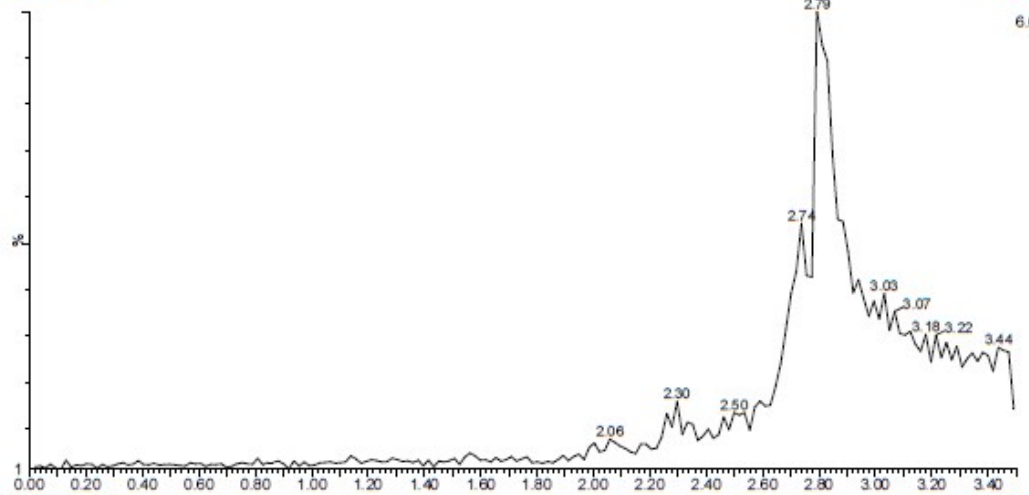
F2 - Processing parameters
SI         32768
SF        100.6455060 MHz
WDW        EM
SSB        0
GB         1.00 Hz
GC         0
PC         1.40
```

Sample Name: J356-J00857-065-D
 Test Type: MC-LCMS
 Test Name: 5mM AA-3-5 MIN
 Submitter: JUBILANT CHEMSYS
 Run Date: 02-Aug-2013 09:58:40

Instrument ID: UPLC-MS-03

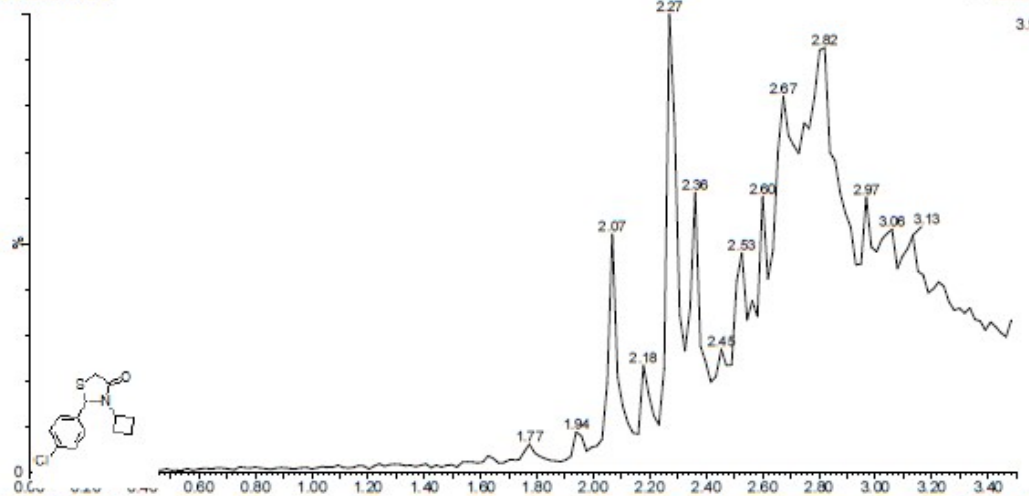
020813-J356-J00857-065-D

2: Scan ES+
TIC
6.69e6



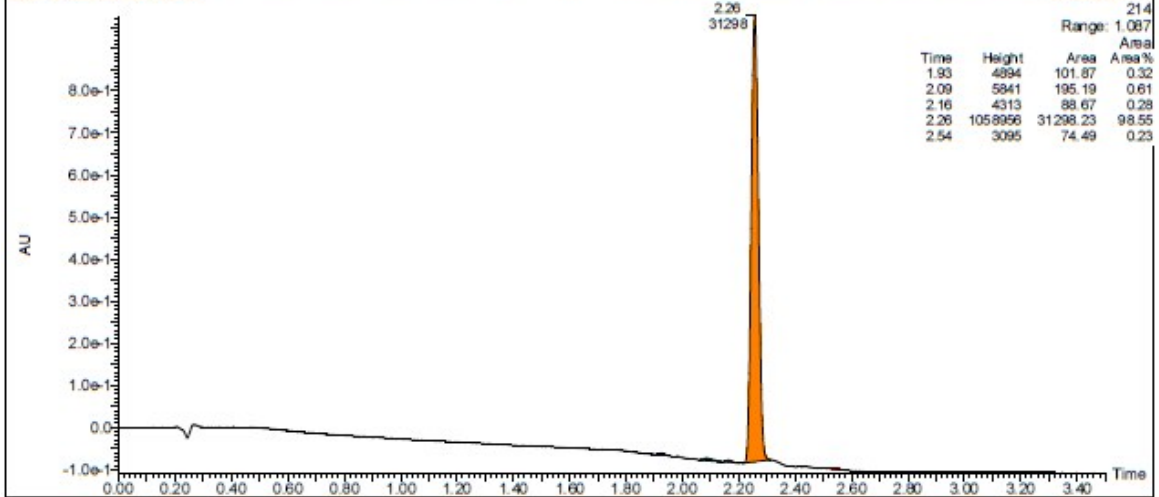
020813-J356-J00857-065-D

1: Scan ES+
TIC
3.93e7



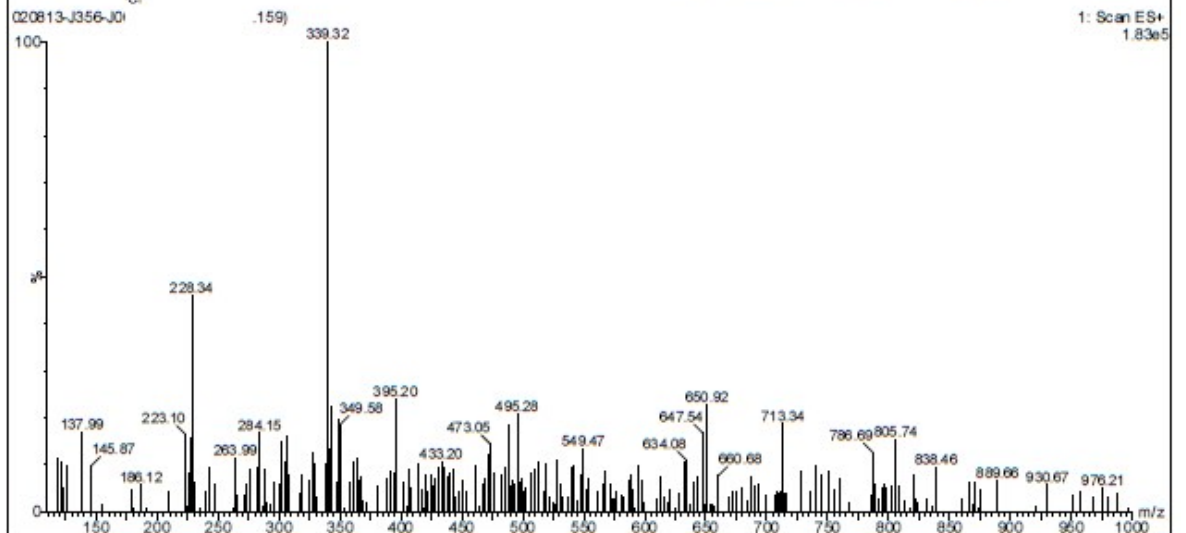
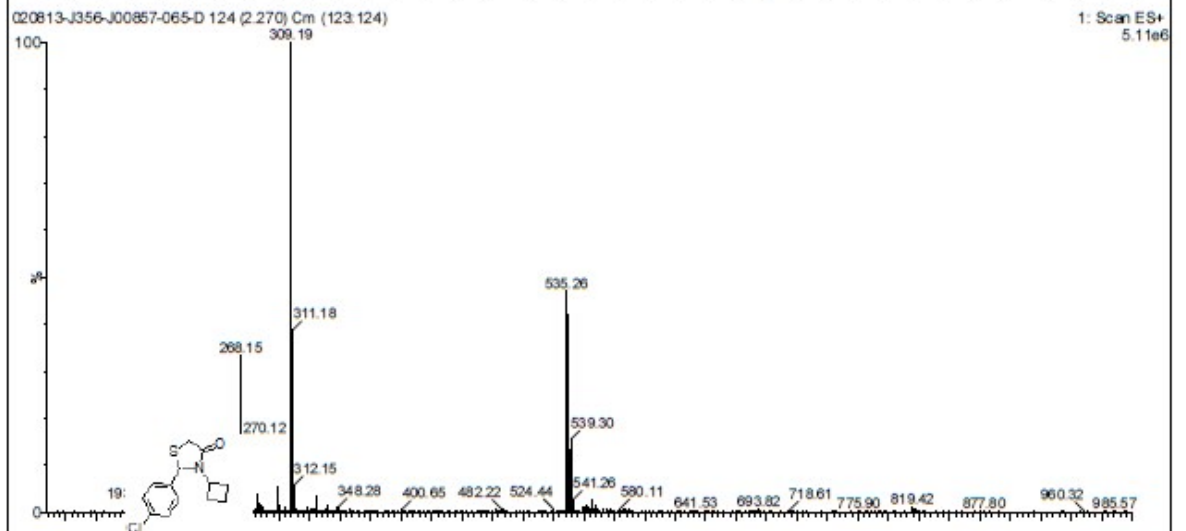
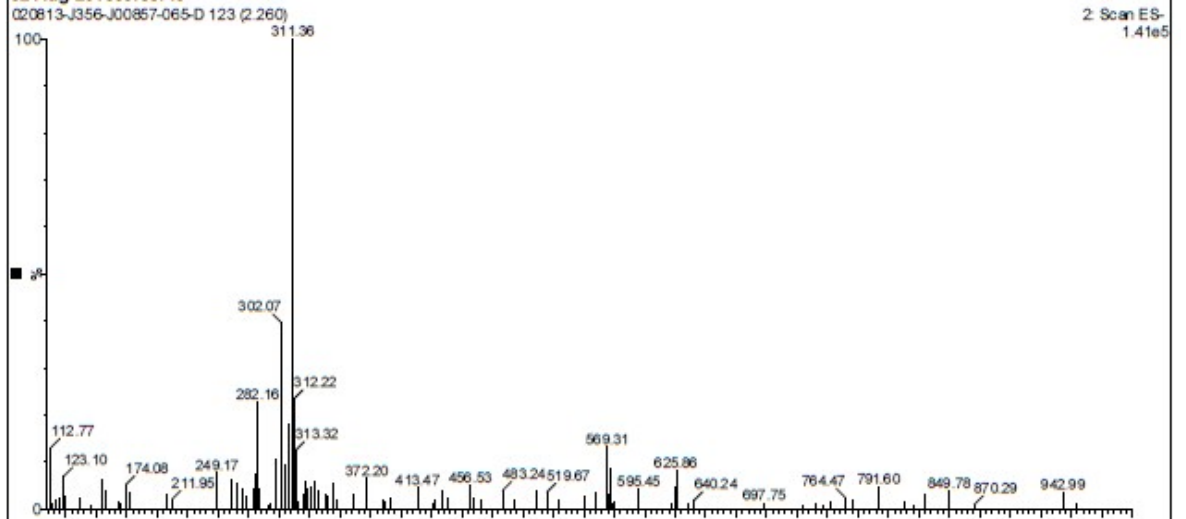
020813-J356-J00857-065-D

3: Diode Array
214
Range: 1.087



J356-J00857-065-D
5mM AA-3-5 MIN
02-Aug-2013 09:58:40

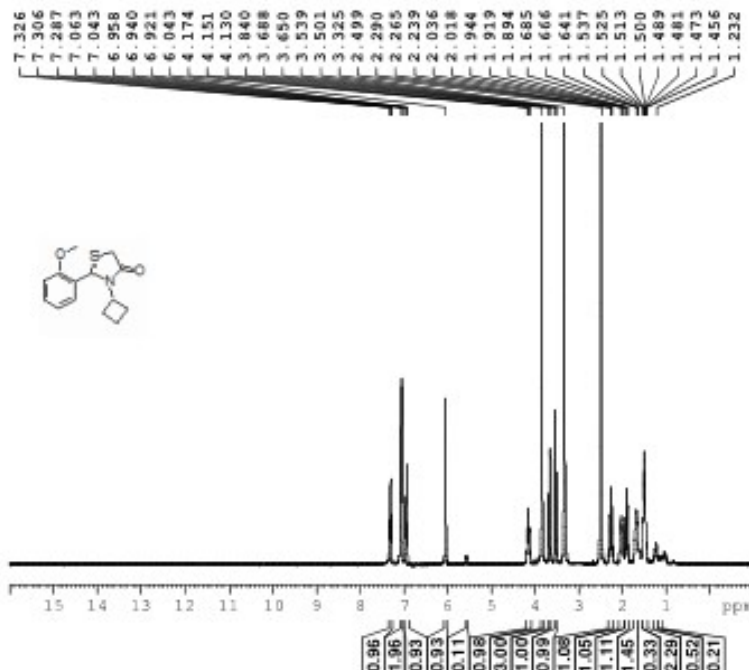
Instrument ID:UPLC-MS-03



6) Entry 6 (4f):

J356-J00857-065-1

DMSO

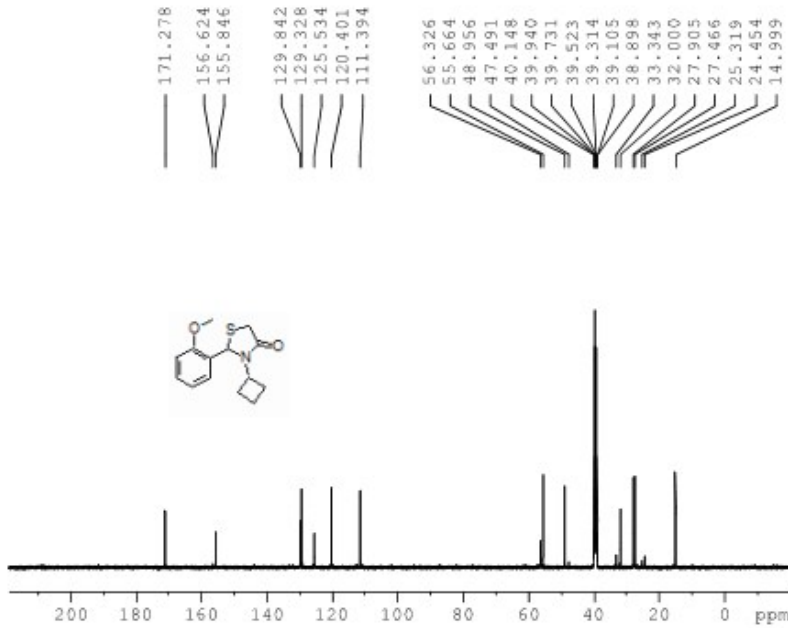


```

===== Data Parameters =====
NAME: J356-J00857-065-1
EXPNO: 1
PROCNO: 1
F2 - Acquisition Parameters
Date_ 20150826
Time 11.17
INSTRUM spect
PROBHD 5 mm BBO 1H-1
PULPROG zgpg30
TD 32768
SOLVENT DMSO
NS 2
DS 4
AQ 823.640 sec
RG 656.000
AQ 0.28000 sec
FIDRES 1.7142648 Hz
SS 241
SB 89.870 MHz
GB 0.10000000
TE 300.2 K
T2 1.09600000 sec
T2R1 1
----- CHANNEL f1 -----
NUC1 1H
PC 16.0000000
VC1 -1.0000000
SFO1 500.1362900 MHz
===== Processing parameters =====
SI 32768
SF 500.1362900 MHz
WDW EM
SSB 0
LB 0.10000000
GB 0
PC 1.00
  
```


J356-J00857-065-I

DMSO



Current Data Parameters
 NAME J356-J00857-065-I
 EXPNO 2
 PROCNO 1

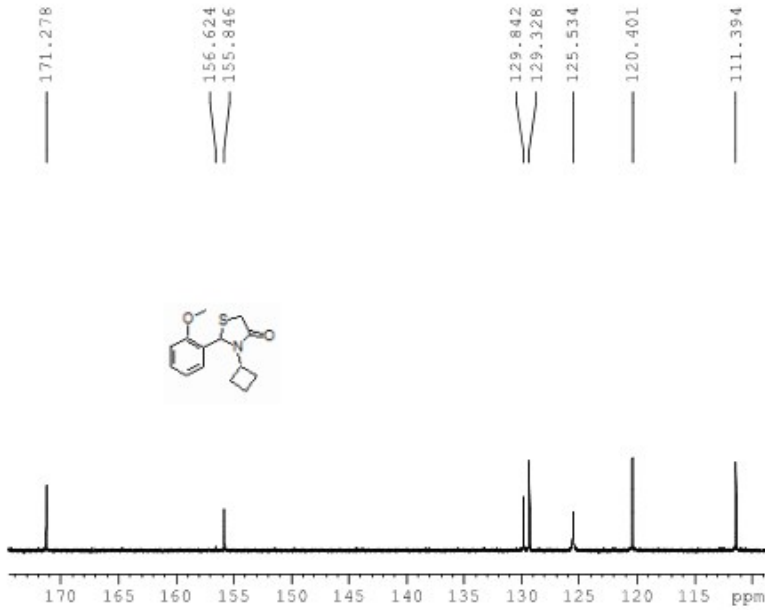
F2 - Acquisition Parameters
 Date_ 20130814
 Time 18.56
 INSTRUM spect
 PROBHD 5 mm CUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 512
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.364798 Hz
 AQ 1.3631588 sec
 RG 128
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

----- CHANNEL f1 -----
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1M 57.32743073 M
 SFO1 100.6555216 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2M 20.58109293 M

J356-J00857-065-I

DMSO



Current Data Parameters
 NAME J356-J00857-065-I
 EXPNO 2
 PROCNO 1

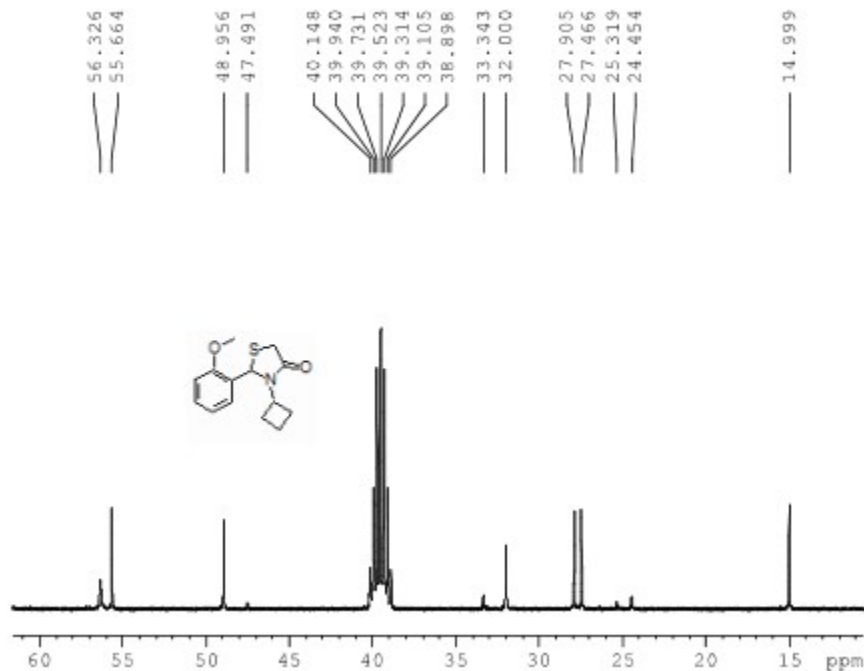
F2 - Acquisition Parameters
 Date_ 20130814
 Time 18.56
 INSTRUM spect
 PROBHD 5 mm CUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 512
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.364798 Hz
 AQ 1.3631588 sec
 RG 128
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

----- CHANNEL f1 -----
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1M 57.32743073 M
 SFO1 100.6555216 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2M 20.58109293 M

J356-J00857-065-1

DMSO



Current Data Parameters
NAME J356-J00857-065-1
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130814
Time 18.56
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 512
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 128
DW 20.800 usec
DE 6.50 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

----- CHANNEL f1 -----
NUC1 13C
P1 8.00 usec
PL1 -2.00 dB
PL1H 57.32743073 M
SFO1 100.625126 MHz

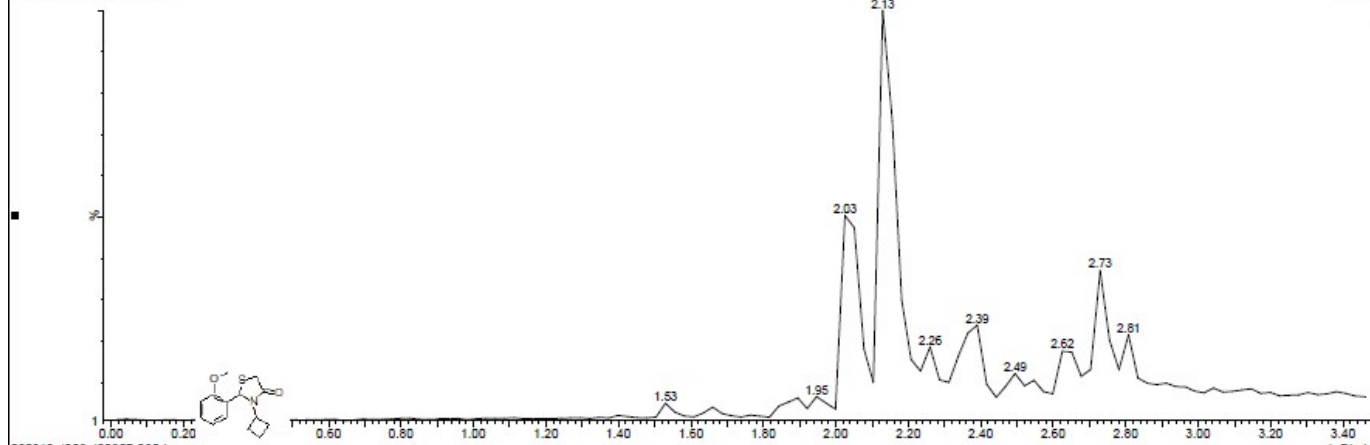
----- CHANNEL f2 -----
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -2.80 dB
PL12 15.35 dB
PL13 19.00 dB
PL2H 20.59109283 M

Sample Name: J356-J00857-065-I
Test Name: 5mM AA-3-5 MIN
02-Aug-2013 11:02:38
020813-J356-J00857-065-I

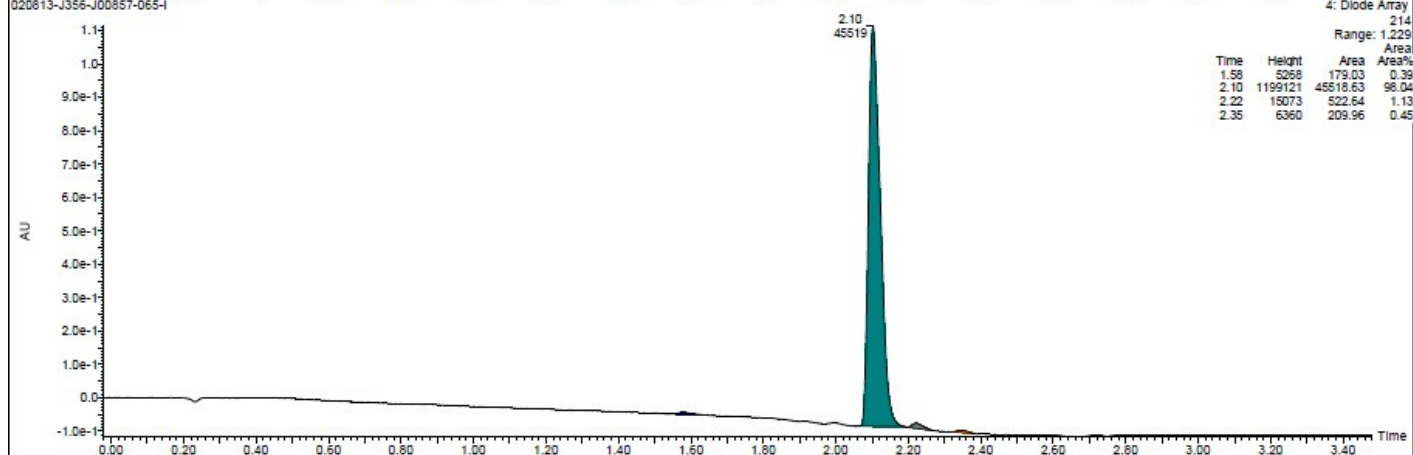
JUBILANT CHEMSYS LTD

UPLC-MS-05

2: Scan ES+
TIC
3.68e8



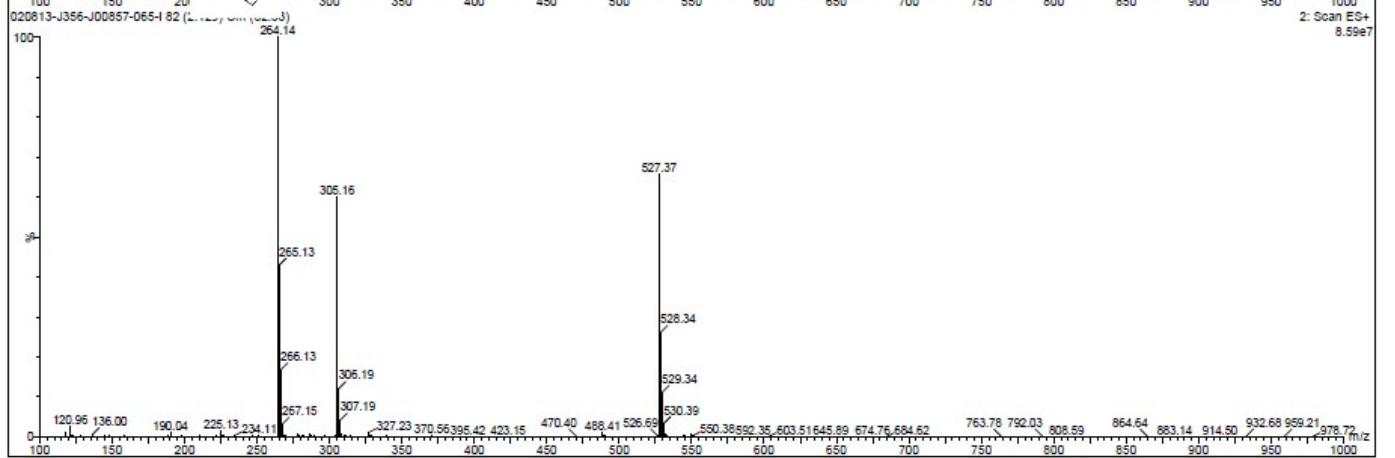
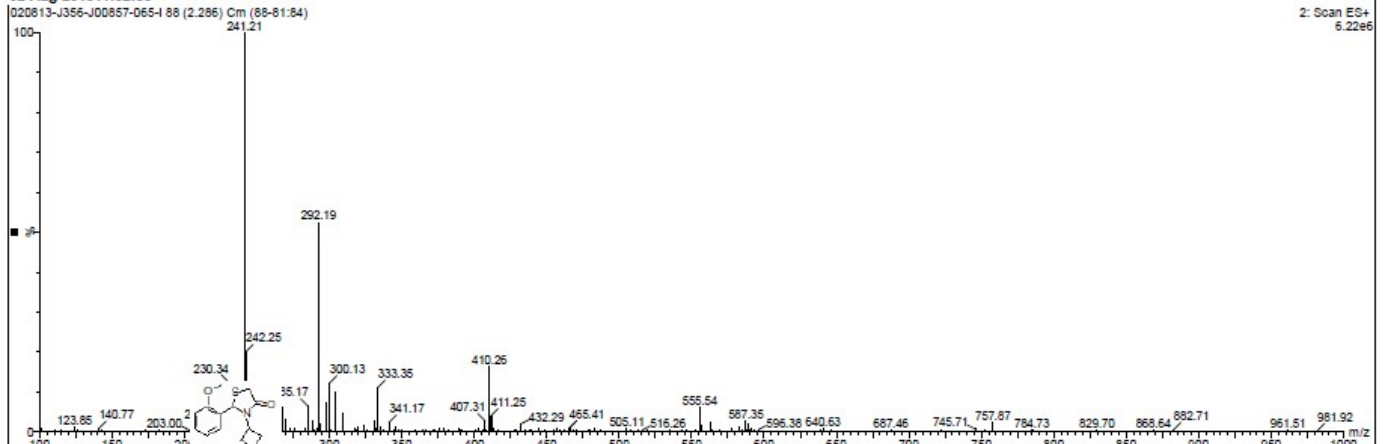
4: Diode Array



Sample Name: J356-J00857-065-I
Test Name: 5mM AA-3-5 MIN
02-Aug-2013 11:02:38

JUBILANT CHEMSYS LTD

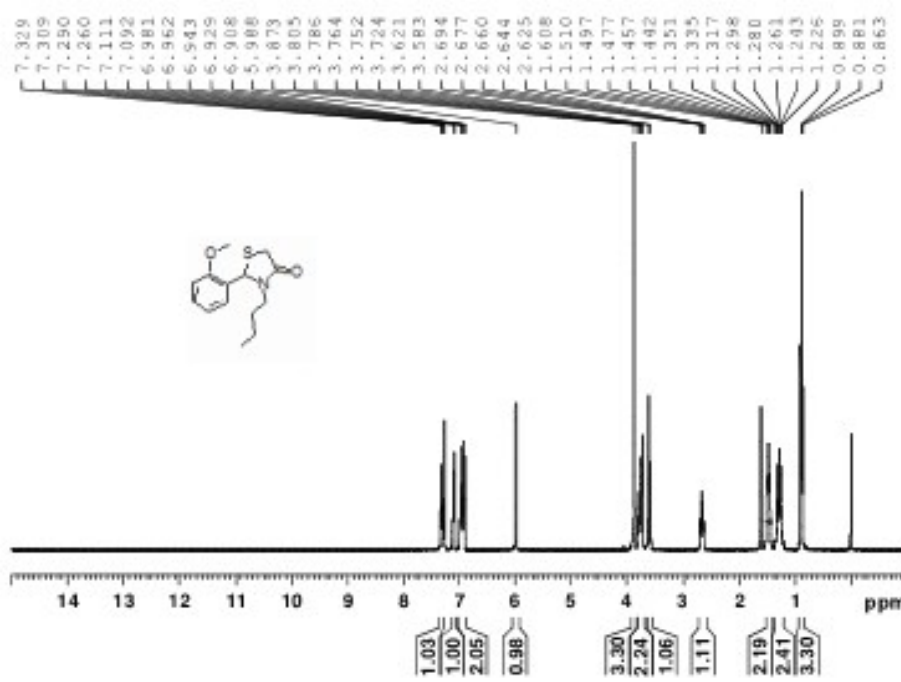
UPLC-MS-05



7) Entry 7 (4g):

J356-J00857-065-J

CDCl3



Current Data Parameters
NAME J356-J00857-065-J
EXPNO 1
PROCNO 1

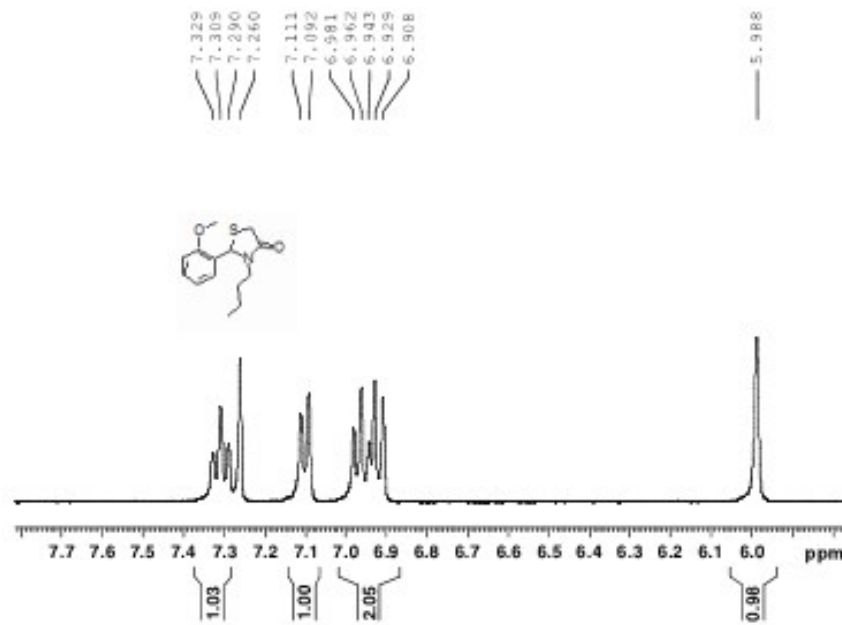
F2 - Acquisition Parameters
Date_ 20130805
Time 12.32
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT cdcl3
NS 1
DS 8
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9923444 sec
RG 128
DW 60.800 usec
DE 6.50 usec
TE 303.2 K
D1 1.0000000 sec
YAG 1

----- CHANNEL f1 -----
NUC1 13
P1 16.00 usec
PL1 -2.00 dB
PL1W 20.58100283 W
SFO1 400.2624718 MHz

F2 - Processing parameters
SI 65536
SF 400.2600118 MHz
WDW EM
SSB 0
LR 0.30 Hz
GB 0
PC 1.00

J356-J00857-065-J

CDCl3

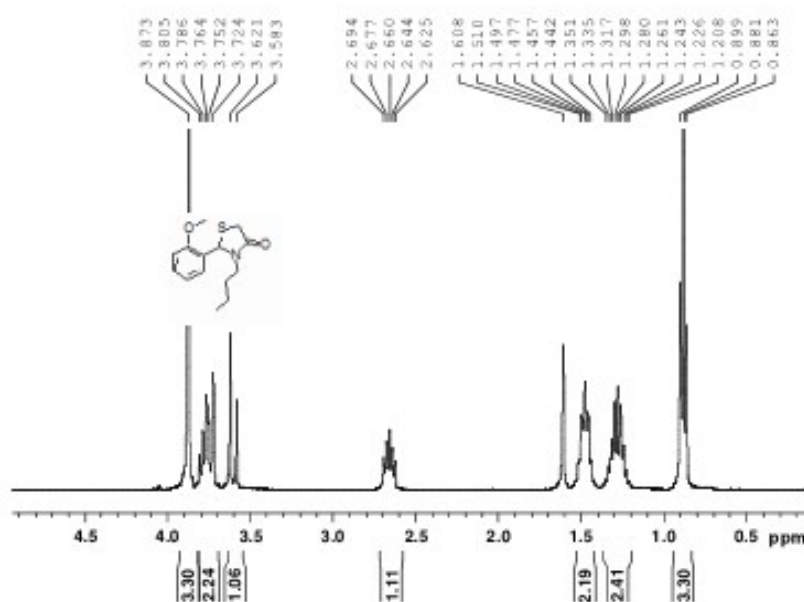


Current Data Parameters
NAME J356-J00857-065-J
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130805
Time 12.32
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT cdcl3
NS 1
DS 8
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9923444 sec
RG 128
DW 60.800 usec
DE 6.50 usec
TE 303.2 K
D1 1.0000000 sec
YAG 1

----- CHANNEL f1 -----
NUC1 13
P1 16.00 usec
PL1 -2.00 dB
PL1W 20.58100283 W
SFO1 400.2624718 MHz

F2 - Processing parameters
SI 65536
SF 400.2600118 MHz
WDW EM
SSB 0
LR 0.30 Hz
GB 0
PC 1.00



Current Data Parameters
 NAME J356-J00857-065-J
 EXPNO 1
 PROCNO 1

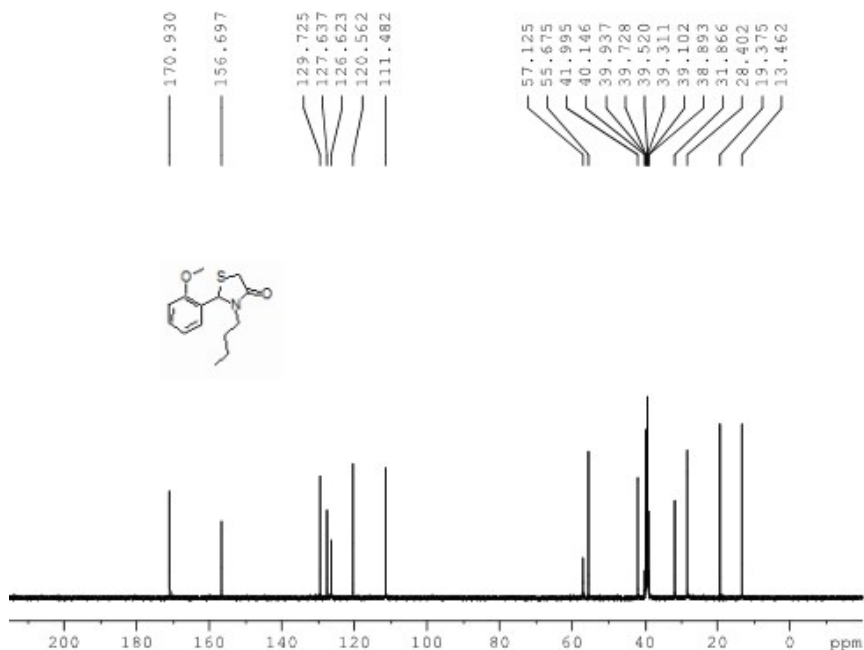
F2 - Acquisition Parameters
 Date_ 20130405
 Time 12.32
 INSTRUM spect
 PROBRD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 4
 DS 4
 SWH 8223.685 Hz
 FIDMHz 0.250961 Hz
 AQ 1.5923444 sec
 RG 128
 DW 49.808 usec
 DE 6.58 usec
 TE 300.2 K
 D1 1.0000000 sec
 TDO 1

----- CHANNEL f1 -----
 NUC1 13
 P1 16.00 usec
 PL1 -2.25 dB
 PL1W 20.58100283 W
 SFO1 400.2624118 MHz

F2 - Processing parameters
 SI 65539
 SF 400.2600118 MHz
 NTW 819
 SFR 0
 GB 0.30 Hz
 CB 0
 PC 1.08

J356-J00857-065-J

DMSO



Current Data Parameters
 NAME J356-J00857-065-J
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130422
 Time 18.15
 INSTRUM spect
 PROBRD 5 mm DMSO 13C
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 4
 DS 4
 SWH 24931.461 Hz
 FIDMHz 0.261704 Hz
 AQ 1.3933958 sec
 RG 2560
 DW 28.000 usec
 DE 4.50 usec
 TE 300.2 K
 D1 2.0000000 sec
 TDO 0.0388000 sec

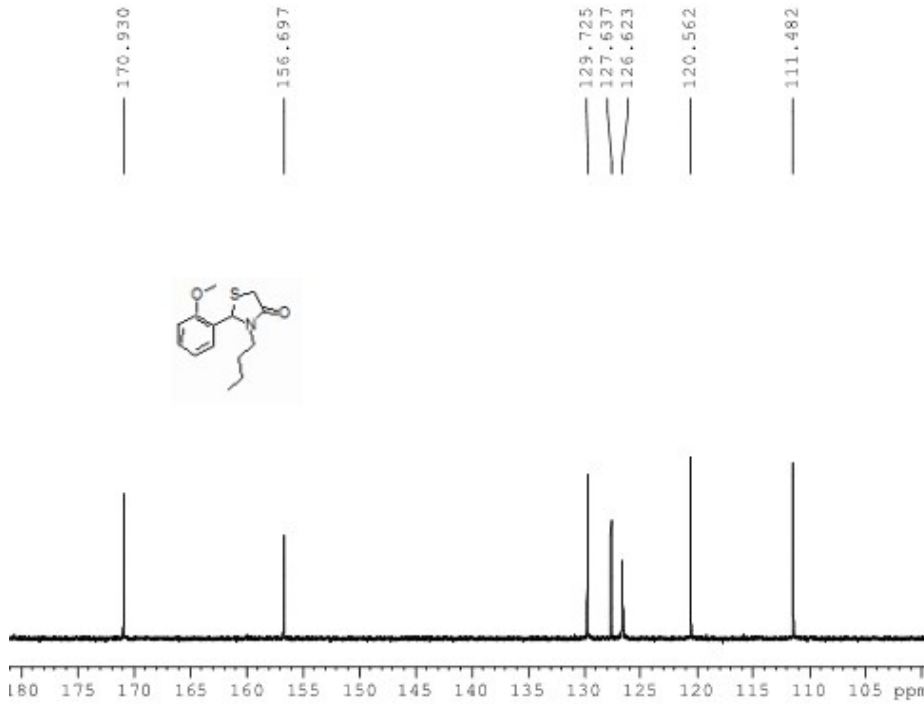
----- CHANNEL f1 -----
 NUC1 13C
 P1 7.50 usec
 PL1 -3.00 dB
 PL1W 71.16828473 W
 SFO1 100.6283698 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NS2 16
 DS2 4
 PL2 6.00 dB
 PL2W 14.25 dB
 PL3 18.00 dB
 PL3W 10.0172509 W
 SFO2 0.7853611 MHz
 SFO3 0.1012500 MHz
 SFO4 400.1434000 MHz

F2 - Processing parameters
 SI 32768
 SF 100.618165 MHz
 WDW EM
 SFR 1.00 Hz
 GB 0
 PC 1.40

J356-J00857-065-J

DMSO



```

Current Data Parameters
NAME J356-J00857-065-J
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160220
Time 18.12
INSTRUM spect
PROBHD 5 mm DMSO E
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 328
DS 4
SWH 28031.401 Hz
FIDRES 0.444796 Hz
AQ 1.3331955 sec
RG 2050
SQ 29.800 usec
RG 1.250 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
D10 1

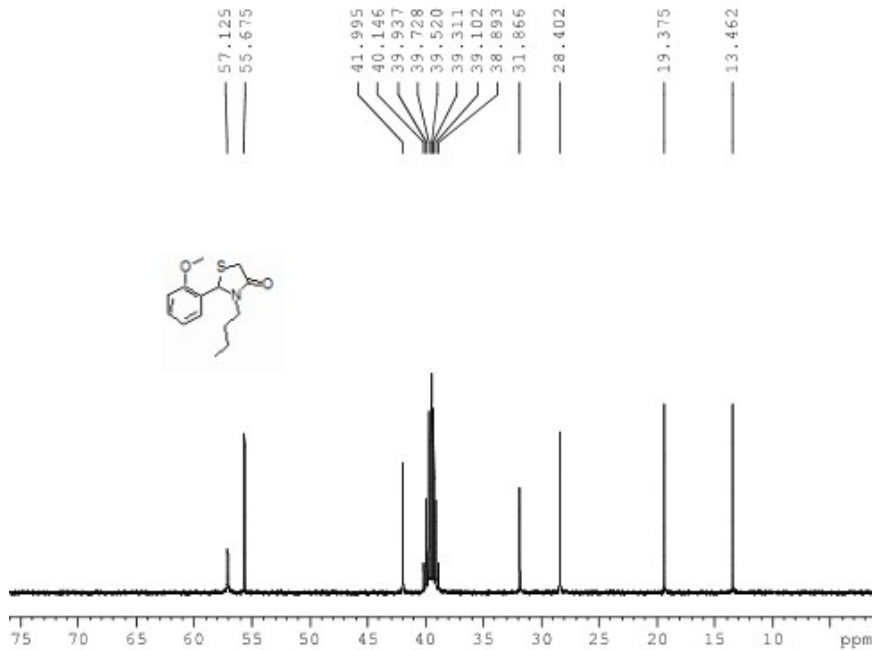
===== CHANNEL f1 =====
NUC1 13C
P1 1.00 usec
PL1 -1.00 dB
PL12 71.1635272 N
PL13 100.0222296 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
P2P22 88.00 usec
PL2 8.00 dB
PL12 14.20 dB
PL13 18.00 dB
PL14 10.03772309 N
PL15 0.37823861 N
PL16 0.10332705 N
PL17 400.1314005 MHz

F2 - Processing parameters
SI 32768
SF 100.613125 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00
  
```

J356-J00857-065-J

DMSO



```

Current Data Parameters
NAME J356-J00857-065-J
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20160220
Time 18.12
INSTRUM spect
PROBHD 5 mm DMSO E
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 328
DS 4
SWH 28031.401 Hz
FIDRES 0.444796 Hz
AQ 1.3331955 sec
RG 2050
SQ 29.800 usec
RG 1.250 usec
TE 294.2 K
D1 2.00000000 sec
D11 0.03000000 sec
D10 1

===== CHANNEL f1 =====
NUC1 1H
P1 1.00 usec
PL1 -1.00 dB
PL12 71.1635272 N
PL13 100.0222296 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
P2P22 88.00 usec
PL2 8.00 dB
PL12 14.20 dB
PL13 18.00 dB
PL14 10.03772309 N
PL15 0.37823861 N
PL16 0.10332705 N
PL17 400.1314005 MHz

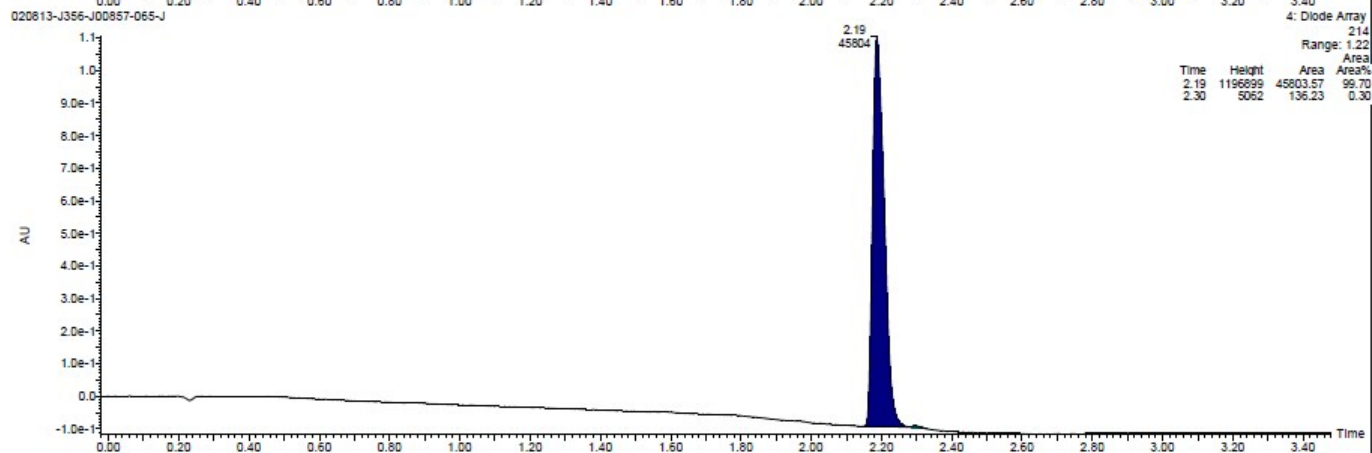
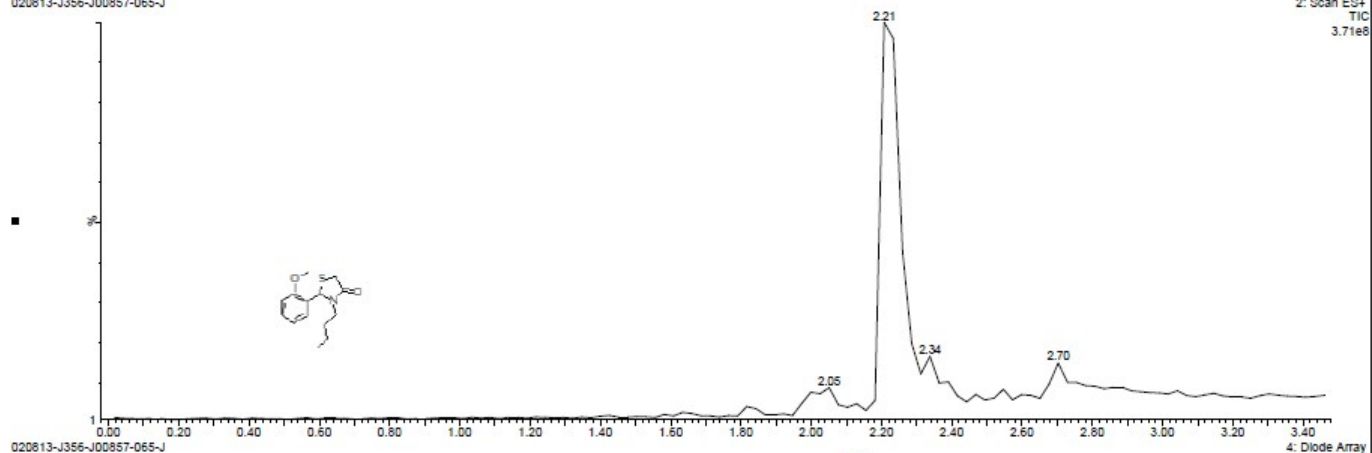
F2 - Processing parameters
SI 32768
SF 100.613125 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00
  
```

Sample Name: J356-J00857-065-J
Test Name: 5mM AA-3-5 MIN
02-Aug-2013 10:58:09
020813-J356-J00857-065-J

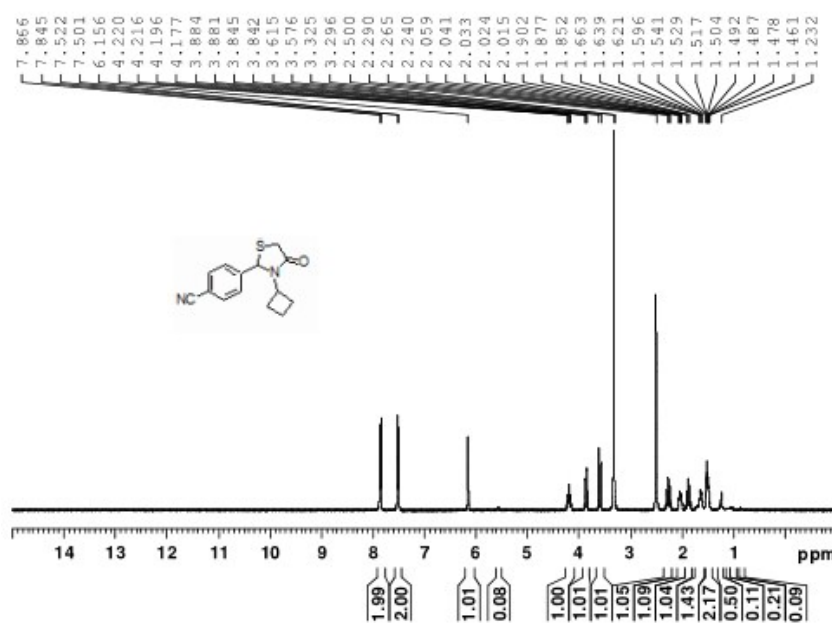
JUBILANT CHEMSYS LTD

UPLC-MS-05

2: Scan ES+
TIC
3.71e8



J356-J00857-073-C DMSO



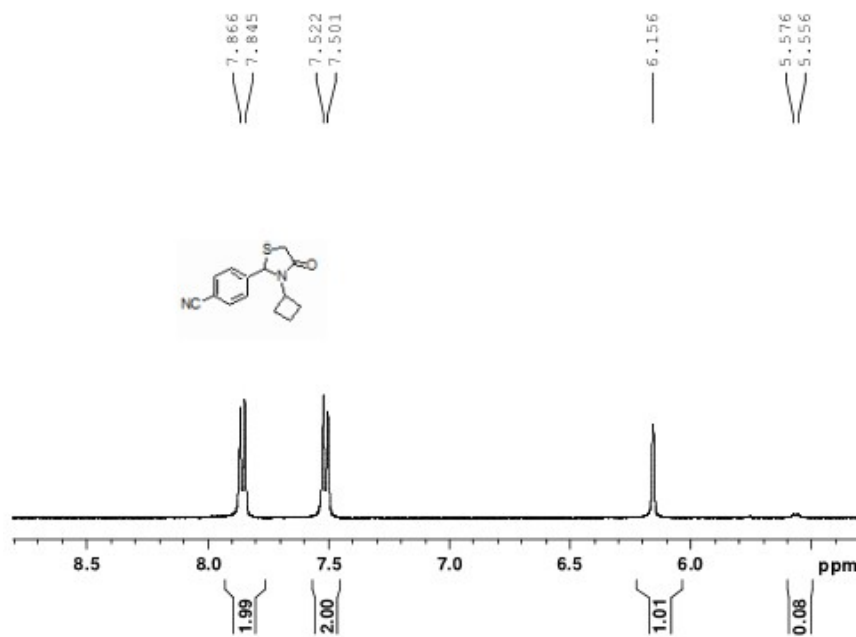
Current Data Parameters
NAME J356-J00857-073-C
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130822
Time 17.12
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT DMSO
NS 8
DS 0
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9923444 sec
RG 128
DM 60.800 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
TDO 1

***** CHANNEL f1 *****
NUC1 1H
P1 9.90 usec
PL1 -2.80 dB
PL1W 20.58109283 M
SFO1 400.2624718 MHz

F2 - Processing parameters
S1 65536
SF 400.2600044 MHz
WEM EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

J356-J00857-073-C DMSO

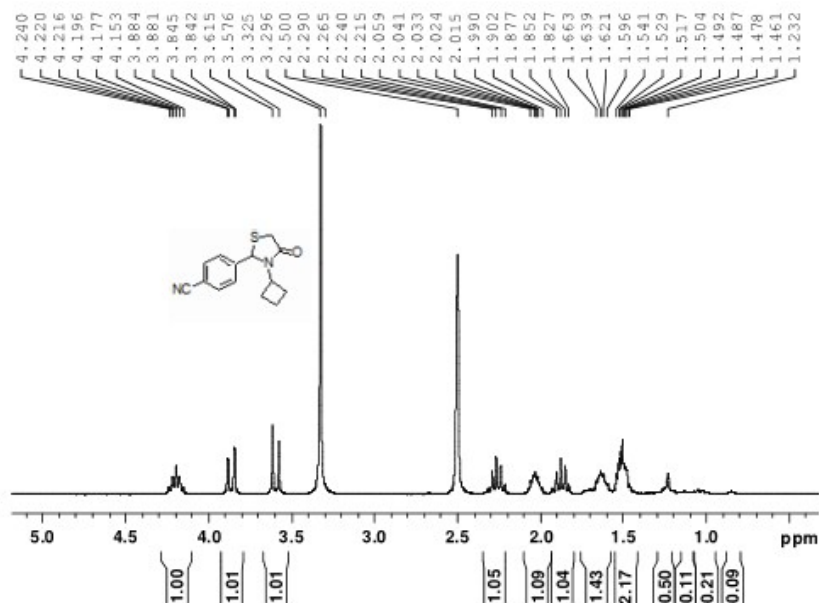


Current Data Parameters
NAME J356-J00857-073-C
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130822
Time 17.12
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT DMSO
NS 8
DS 0
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9923444 sec
RG 128
DM 60.800 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
TDO 1

***** CHANNEL f1 *****
NUC1 1H
P1 9.90 usec
PL1 -2.80 dB
PL1W 20.58109283 M
SFO1 400.2624718 MHz

F2 - Processing parameters
S1 65536
SF 400.2600044 MHz
WEM EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

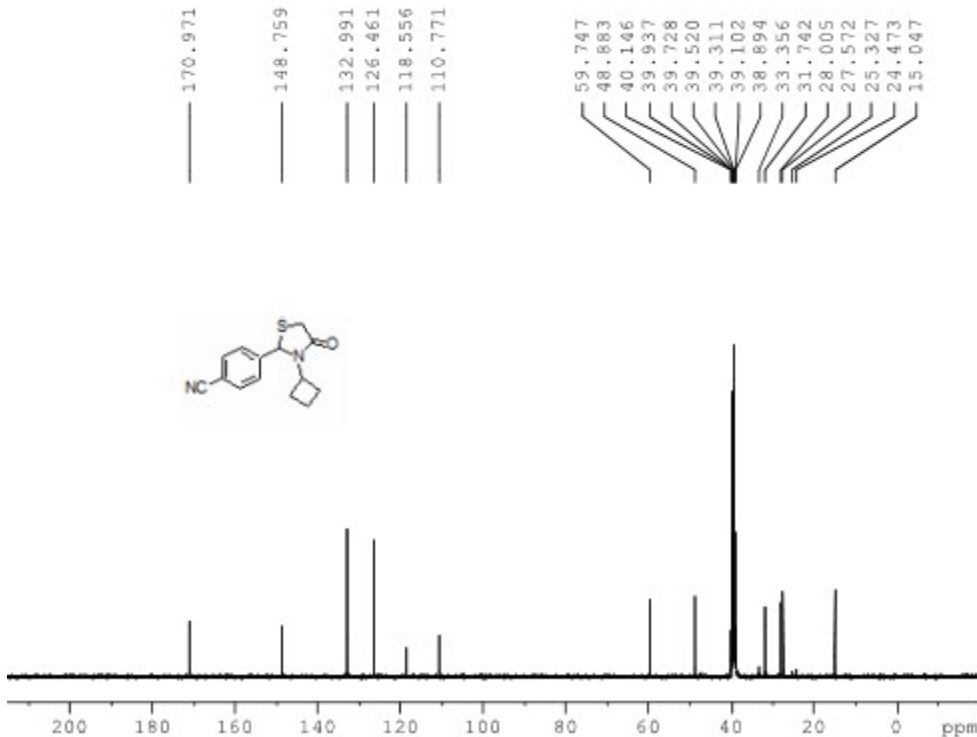


Current Data Parameters
 NAME J356-J00857-073-C
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 2013022
 Time 17.12
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SMH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 128
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.0000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 9.90 usec
 PL1 -2.80 dB
 PL1W 20.58109283 M
 SFO1 400.2624718 MHz

F2 - Processing parameters
 SI 65536
 SF 400.2600044 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



Current Data Parameters
 NAME J356-J00857-073-C
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 2013022
 Time 18.20
 INSTRUM spect
 PROBHD 5 mm DMSO 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 8
 DS 4
 SMH 24335.461 Hz
 FIDRES 0.344794 Hz
 AQ 1.9931955 sec
 RG 128
 DM 28.800 usec
 DE 4.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

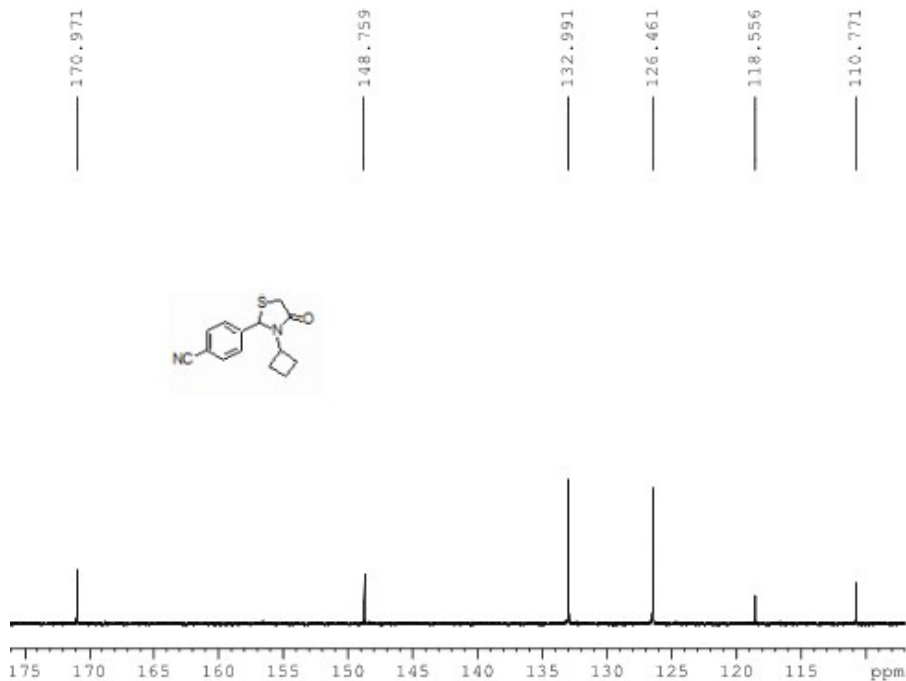
***** CHANNEL f1 *****
 NUC1 13C
 P1 7.50 usec
 PL1 -1.00 dB
 PL1W 71.16818473 M
 SFO1 100.6228298 MHz

***** CHANNEL f2 *****
 CPDPRG2 waltz16
 NUC2 1H
 P2P22 80.00 usec
 PL2 6.00 dB
 PL2W 14.25 dB
 PL2W 14.25 dB
 PL2W 10.03772309 M
 PL12K 0.3794261 N
 PL12W 0.100333505 M
 SFO2 400.1112005 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6112125 MHz
 WDM EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00

J356-J00857-073-C

DMSO



```

Current Data Parameters
NAME      J356-J00857-073-C
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20130822
Time     18.20
INSTRUM  spect
PROBHD   5 mm EASY 50
PULPROG  zgpg30
TD        65536
SOLVENT  DMSO
NS        512
DS        4
SWH       24035.401 Hz
FIDRES    0.466796 Hz
AQ        1.3931958 sec
RG        656
SR        29.500 usec
TE        296.2 K
DE        8.50 usec
TE        296.2 K
D1        2.0000000 sec
D11       0.0300000 sec
D10       1

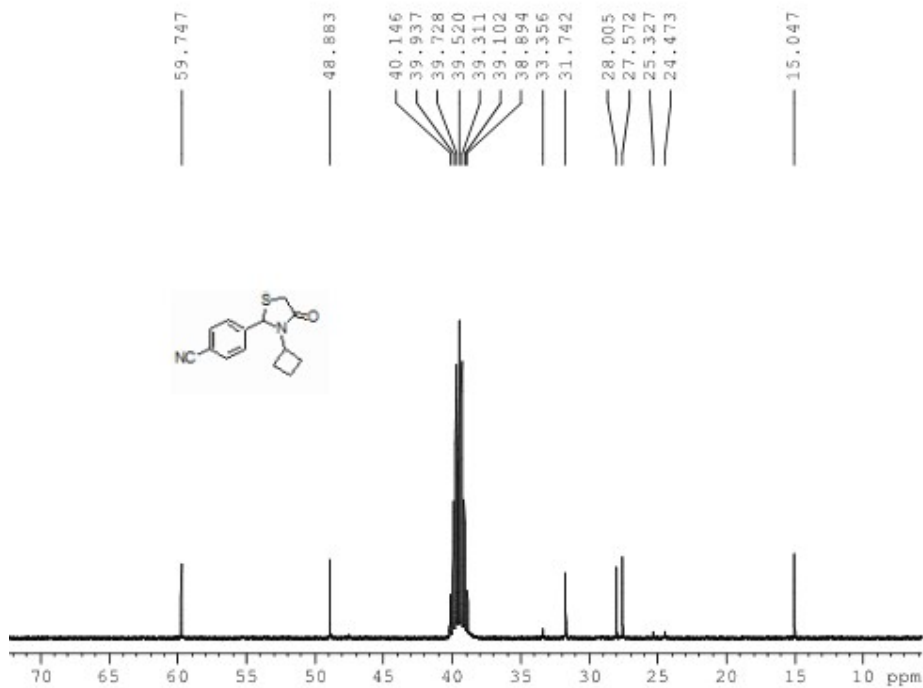
===== CHANNEL f1 =====
NUC1      13C
P1        12.00 usec
PL1       -1.00 dB
PL12      71.1635173 N
PL13      100.6228286 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      1H
PCPD2     80.00 usec
PL2       0.00 dB
PL12      14.20 dB
PL13      14.00 dB
PL14      10.0771209 N
PL15      0.3781261 N
PL16      0.10321708 N
PL17      400.1114005 MHz

F2 - Processing parameters
SI        32768
SF        100.6228255 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
  
```

J356-J00857-073-C

DMSO



```

Current Data Parameters
NAME      J356-J00857-073-C
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20130822
Time     18.20
INSTRUM  spect
PROBHD   5 mm EASY 50
PULPROG  zgpg30
TD        65536
SOLVENT  DMSO
NS        512
DS        4
SWH       24035.401 Hz
FIDRES    0.466796 Hz
AQ        1.3931958 sec
RG        656
SR        29.500 usec
TE        296.2 K
DE        8.50 usec
TE        296.2 K
D1        2.0000000 sec
D11       0.0300000 sec
D10       1

===== CHANNEL f1 =====
NUC1      1H
P1        12.00 usec
PL1       -1.00 dB
PL12      71.1635173 N
PL13      100.6228286 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      13C
PCPD2     80.00 usec
PL2       0.00 dB
PL12      14.20 dB
PL13      14.00 dB
PL14      10.0771209 N
PL15      0.3781261 N
PL16      0.10321708 N
PL17      400.1114005 MHz

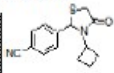
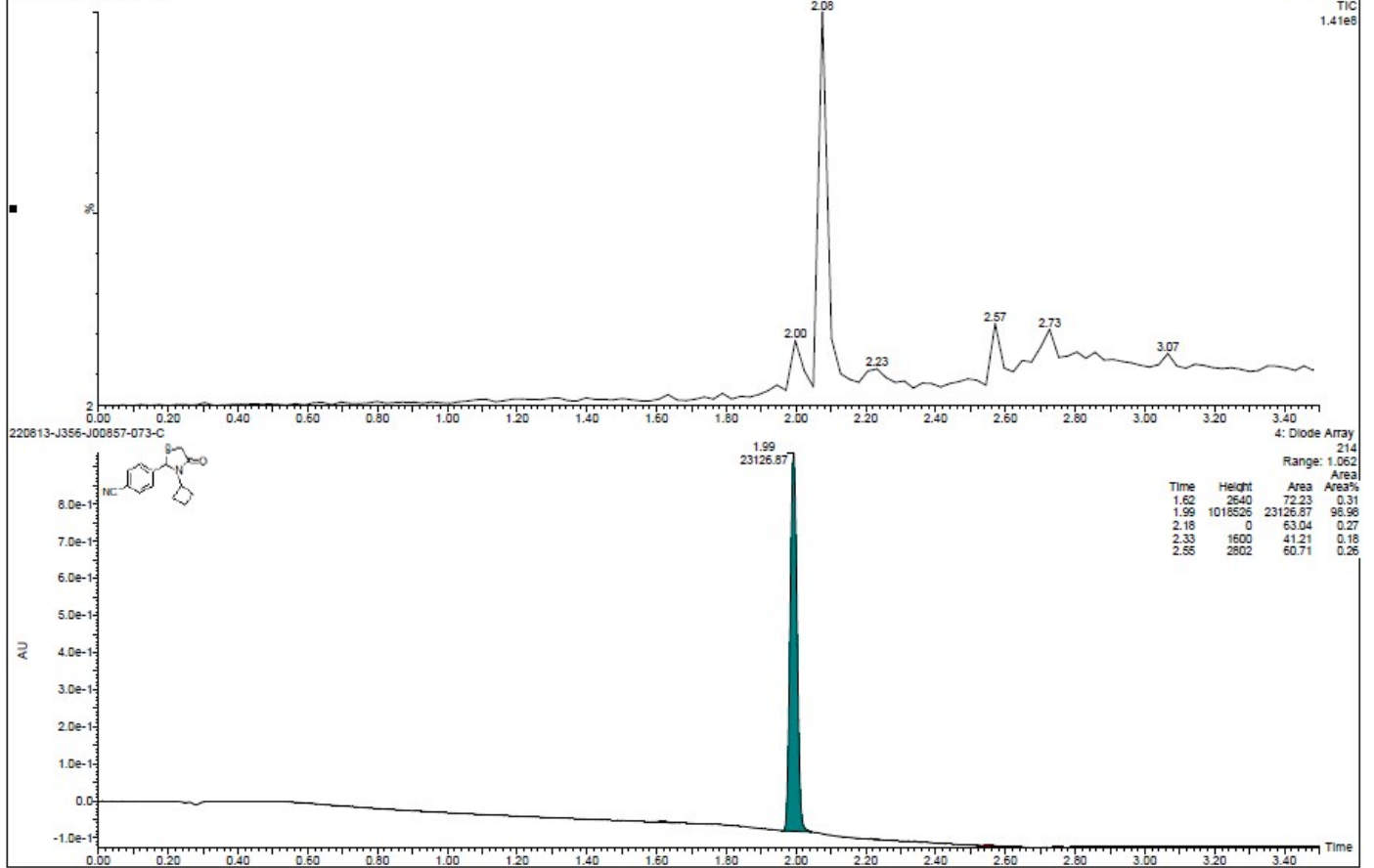
F2 - Processing parameters
SI        32768
SF        100.6228255 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
  
```

Sample Name: J356-J00857-073-C
Test Name : 5mMAA-3-5-MIN
22-Aug-2013 16:33:18
220813-J356-J00857-073-C

JUBILANT CHEMSYS

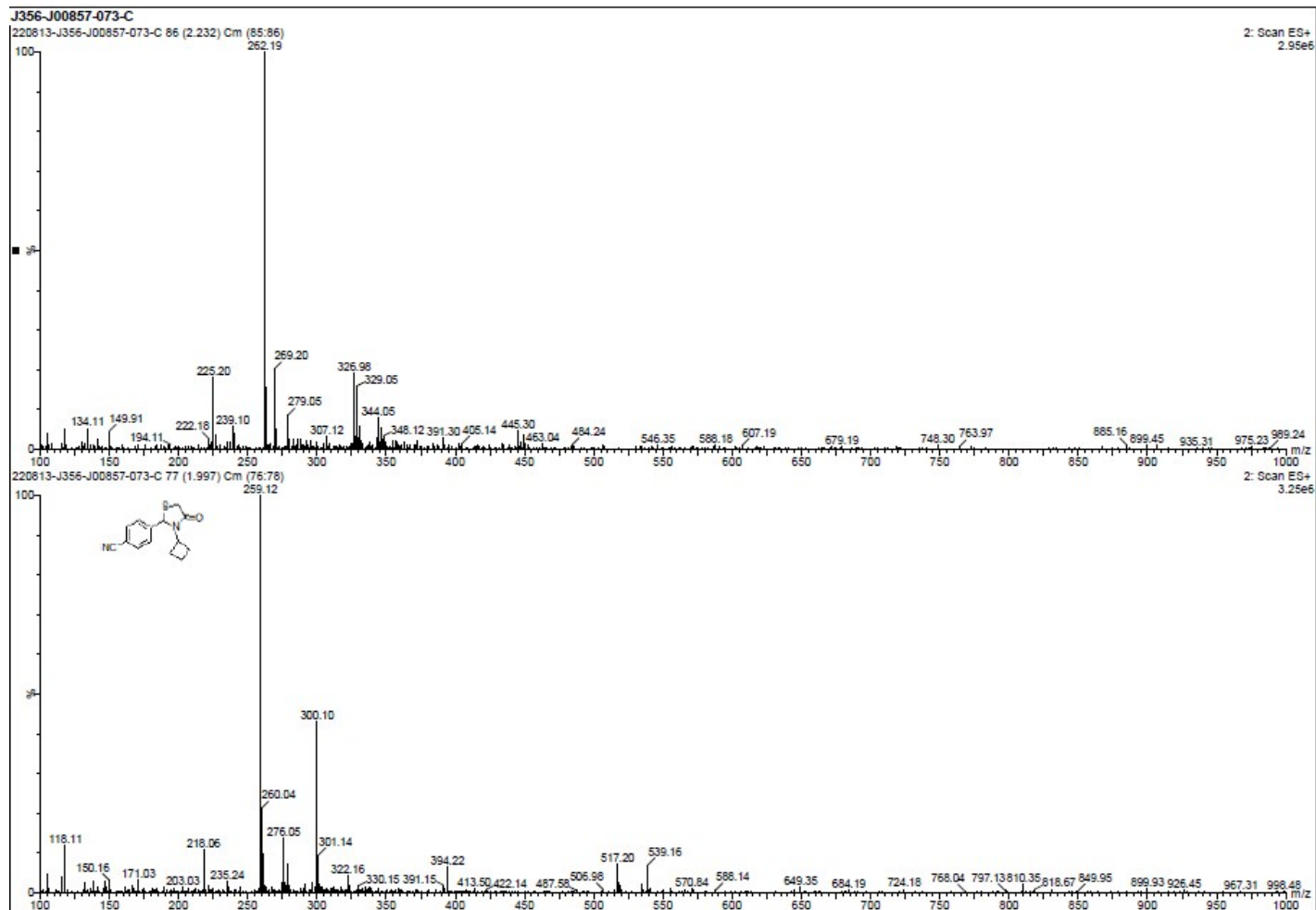
UPLC-MS-04

2: Scan ES+
TIC
1.41e8



4: Diode Array
214

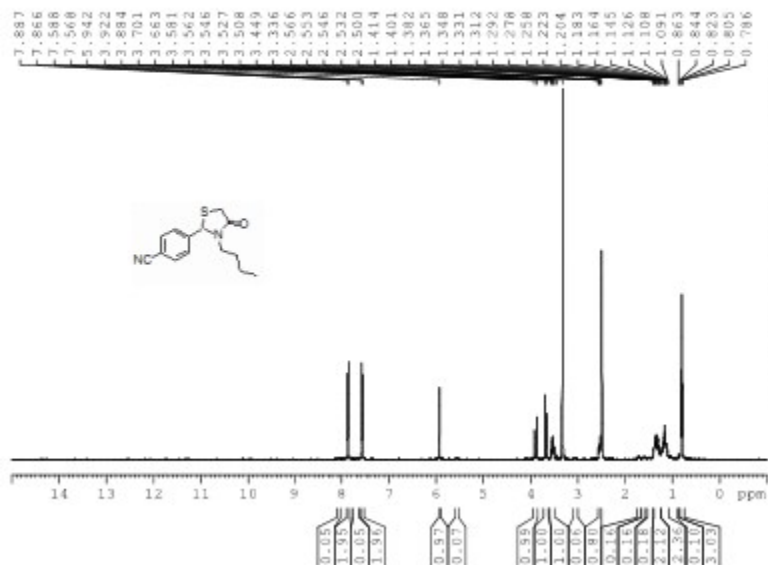
Range: 1.062
Area



9) Entry 9 (4i):

J356-J00857-073-B

DMSO

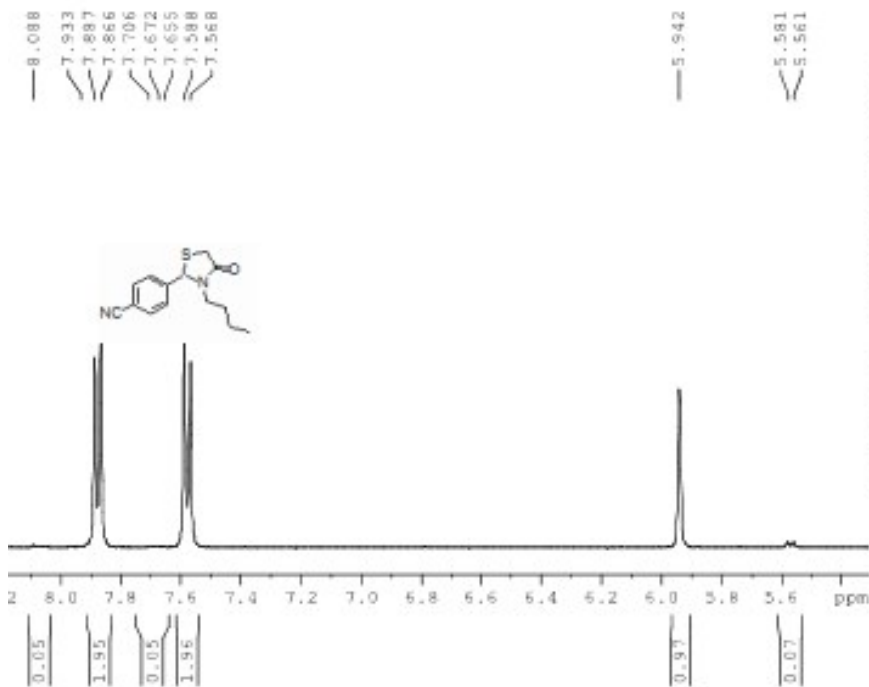


```

NAME      J356-J00857-073-B
EXPNO    1
PROCNO   1
Date_    20130913
Time     11.13
INSTRUM  spect
PROBHD   5 mm QNP6B0 BB-
PULPROG  zg30
TD        32768
SOLVENT  DMSO
NS        12
DS        0
SWH       5278.140 Hz
FIDRES    0.252629 Hz
AQ        1.9152772 sec
RG         656.1
OR        88.400 umov
DE        6.50 umov
TE        312.2 K
D1        1.00000000 sec
TD0       1
===== CHANNEL f1 =====
NUC1      1H
P1        11.80 umov
PL1       0.00 dB
SFO1      400.1326710 MHz
SI        16384
SF        400.1399011 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```

J356-J00857-073-B

DMSO

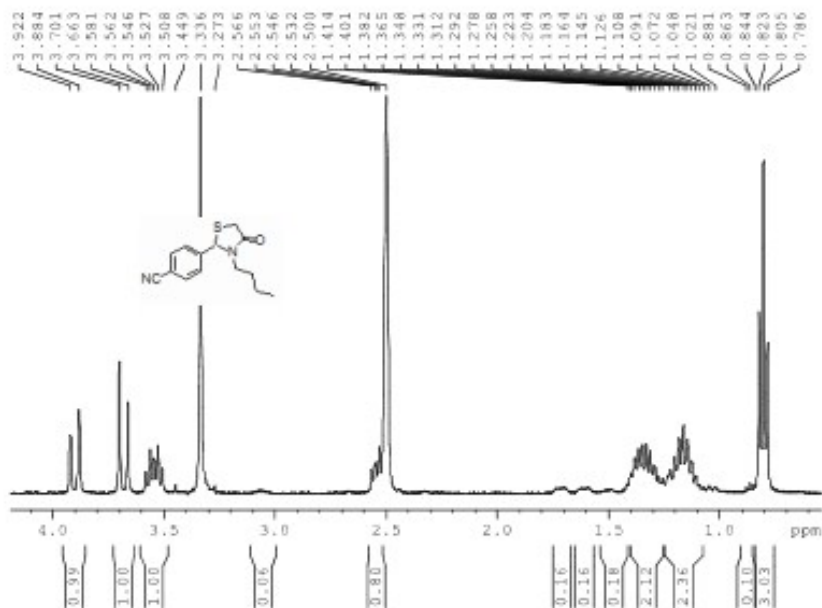


```

NAME      J356-J00857-073-B
EXPNO    1
PROCNO   1
Date_    20130913
Time     11.13
INSTRUM  spect
PROBHD   5 mm QNP6B0 BB-
PULPROG  zg30
TD        32768
SOLVENT  DMSO
NS        12
DS        0
SWH       5278.140 Hz
FIDRES    0.252629 Hz
AQ        1.9152772 sec
RG         656.1
OR        88.400 umov
DE        6.50 umov
TE        312.2 K
D1        1.00000000 sec
TD0       1
===== CHANNEL f1 =====
NUC1      1H
P1        11.80 umov
PL1       0.00 dB
SFO1      400.1326710 MHz
SI        16384
SF        400.1399011 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```


J356-J00857-073-E

DMSO



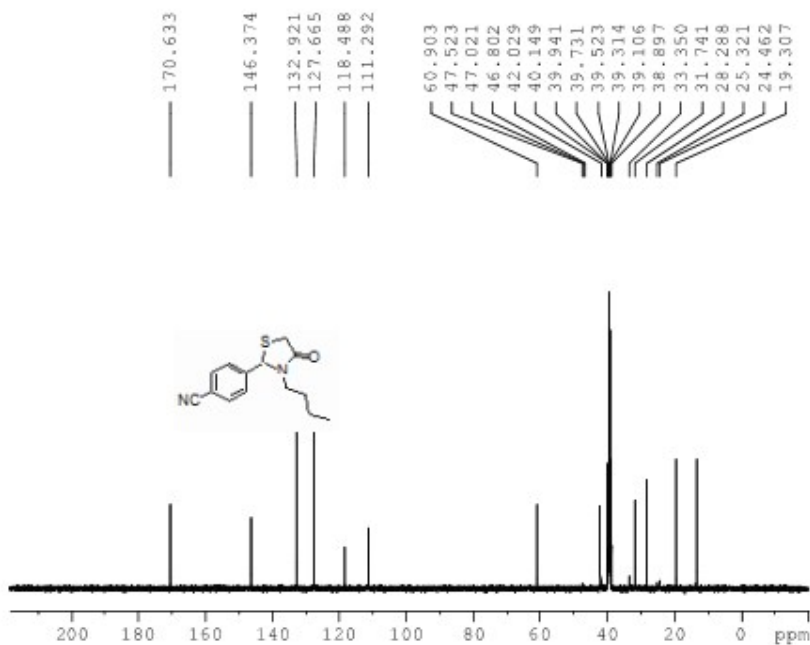
```

NAME: J356-J00857-073-E
EXPNO: 1
PROCNO: 1
Date_ : 20130821
Time: 11.13
INSTRUM: spect
PROBHD: 5 mm TMS-1
PULPROG: zgpg30
TD: 22528
SOLVENT: DMSO
NS: 12
DS: 0
SWH: 5275.142 Hz
FIDRES: 0.252629 Hz
AQ: 1.9782172 sec
RG: 456.1
DW: 89.800 usec
DE: 6.50 usec
TE: 300.2 K
D1: 2.0000000 sec
D11: 0.0300000 sec
TD0: 1

===== CHANNEL f1 =====
NUC1: 1H
P1: 11.80 usec
PL1: 0.00 dB
SFO1: 400.1324710 MHz
SI: 1024
SF: 400.1300011 MHz
WDW: EM
GB: 0
LP: 0.30 Hz
QB: 0
DC: 1.00
    
```

J356-J00857-073-E

DMSO



```

Current Data Parameters
NAME: J356-J00857-073-E
EXPNO: 1
PROCNO: 1

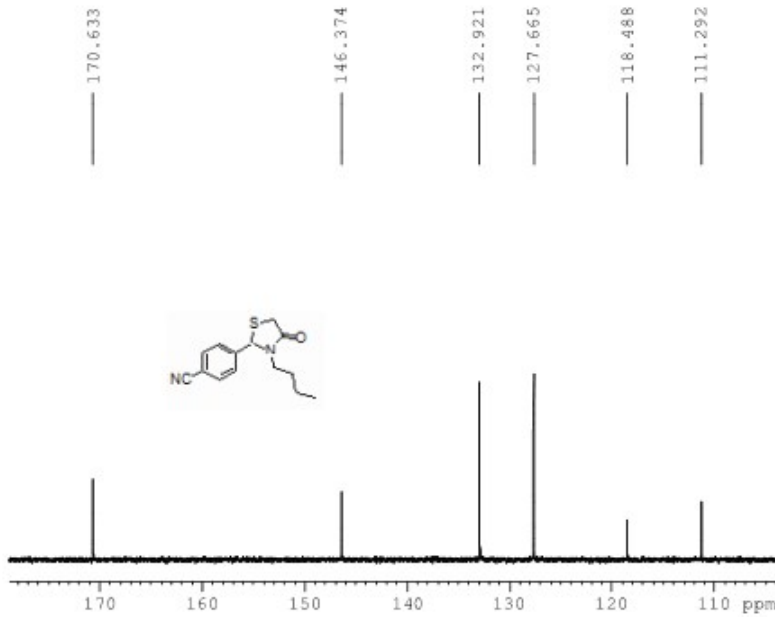
F2 - Acquisition Parameters
Date_ : 20130821
Time: 17.36
INSTRUM: spect
PROBHD: 5 mm DUL 13C-1
PULPROG: zgpg30
TD: 65536
SOLVENT: DMSO
NS: 128
DS: 4
SWH: 24058.461 Hz
FIDRES: 0.364798 Hz
AQ: 1.3631988 sec
RG: 2050
DW: 20.800 usec
DE: 6.50 usec
TE: 300.0 K
D1: 2.0000000 sec
D11: 0.0300000 sec
TD0: 1

===== CHANNEL f1 =====
NUC1: 13C
P1: 8.00 usec
PL1: -2.00 dB
PL1M: 57.32743073 M
SFO1: 100.6255216 MHz

===== CHANNEL f2 =====
CPDPRG2: waltz16
NUC2: 1H
PCPD2: 80.00 usec
PL2: -2.80 dB
PL12: 15.35 dB
PL13: 19.00 dB
PL2M: 20.58109283 M
    
```

J356-J00857-073-E

DMSO



Current Data Parameters
 NAME J356-J00857-073-E
 EXPNO 1
 PROCNO 1

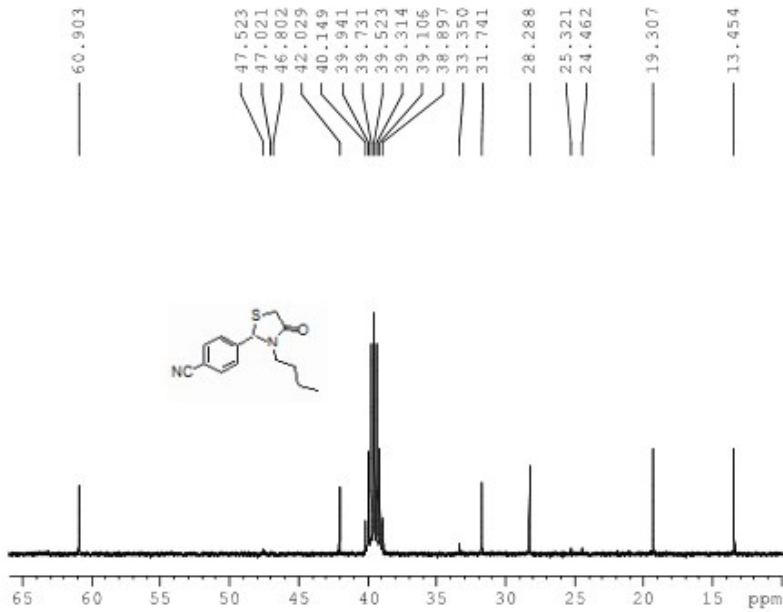
F2 - Acquisition Parameters
 Date_ 20130821
 Time 17.36
 INSTRUM spect
 PROBHD 5 mm DOL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 128
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.364798 Hz
 AQ 1.3631988 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

----- CHANNEL f1 -----
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1M 57.32743073 M
 SFO1 100.625126 MHz

----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.00 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2M 20.58109283 M

J356-J00857-073-E

DMSO



Current Data Parameters
 NAME J356-J00857-073-E
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130821
 Time 17.36
 INSTRUM spect
 PROBHD 5 mm DOL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 128
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.364798 Hz
 AQ 1.3631988 sec
 RG 2050
 DW 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TD0 1

----- CHANNEL f1 -----
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1M 57.32743073 M
 SFO1 100.625126 MHz

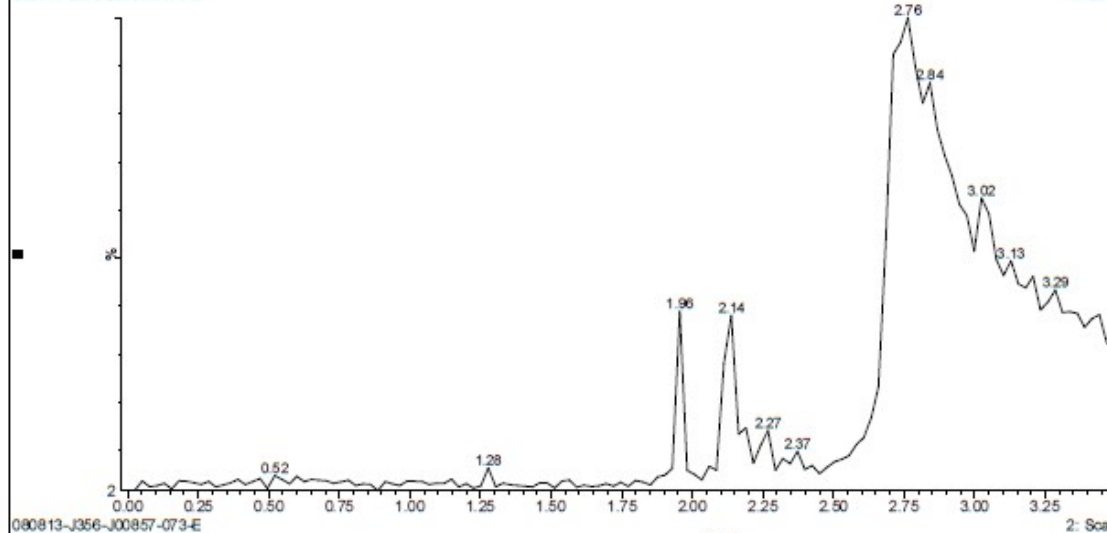
----- CHANNEL f2 -----
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.00 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2M 20.58109283 M

Sample Name: J356-J00857-073-E
Test Name: 5mM AA-3-5 MIN
08-Aug-2013 15:33:17
080813-J356-J00857-073-E

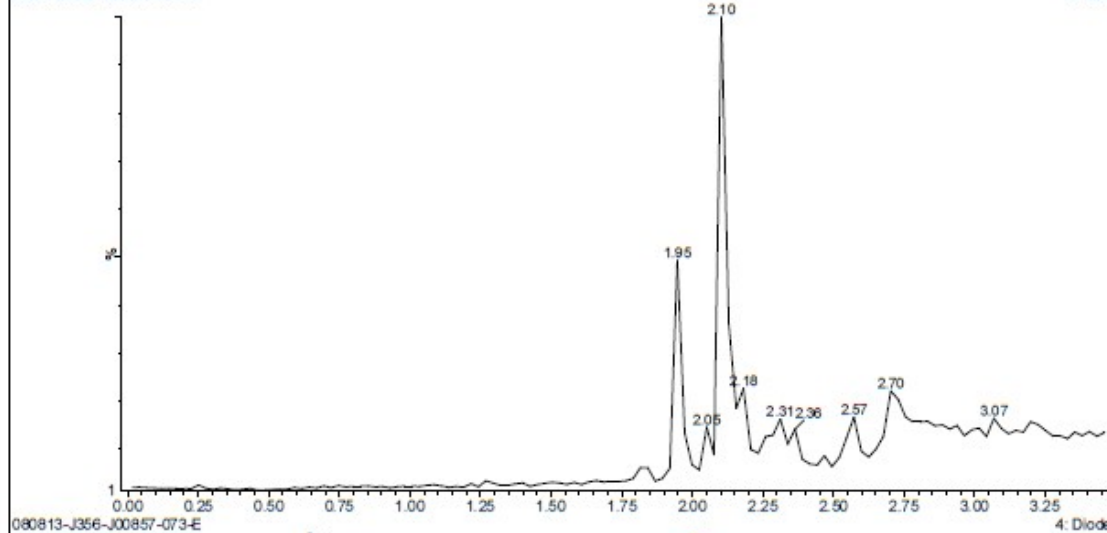
JUBILANT CHEMSYS LTD

UPLC-MS-05

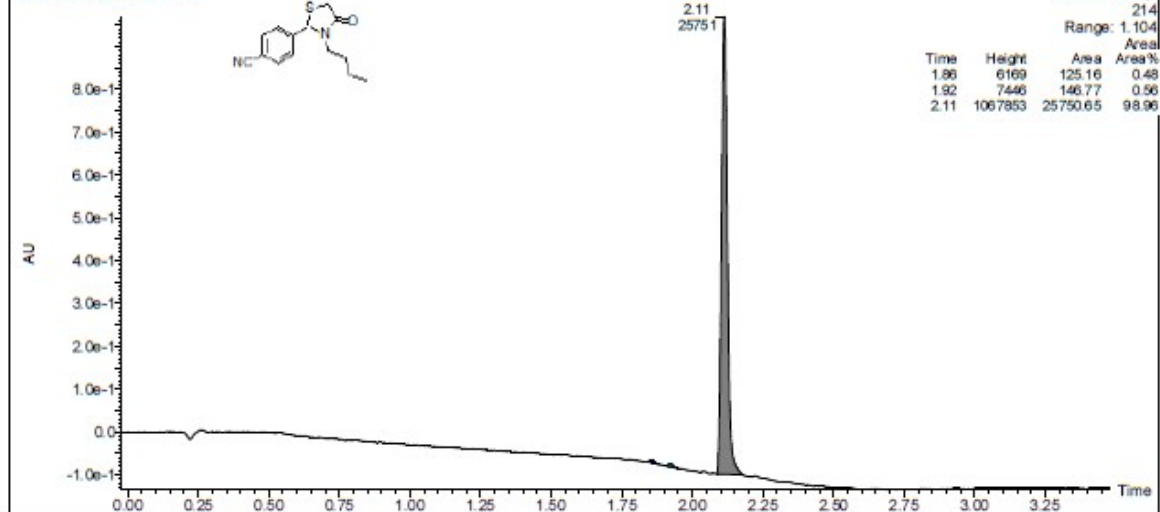
3: Scan ES-
TIC
1.96e7



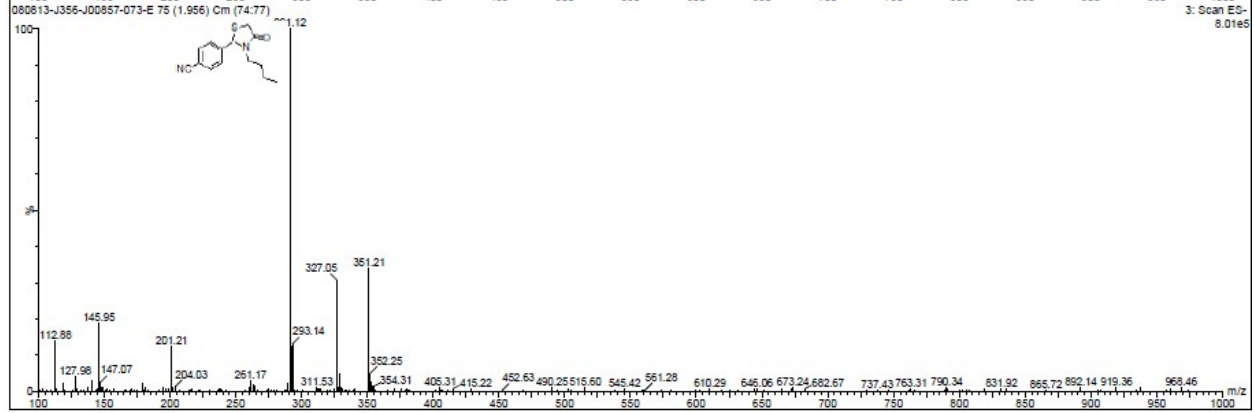
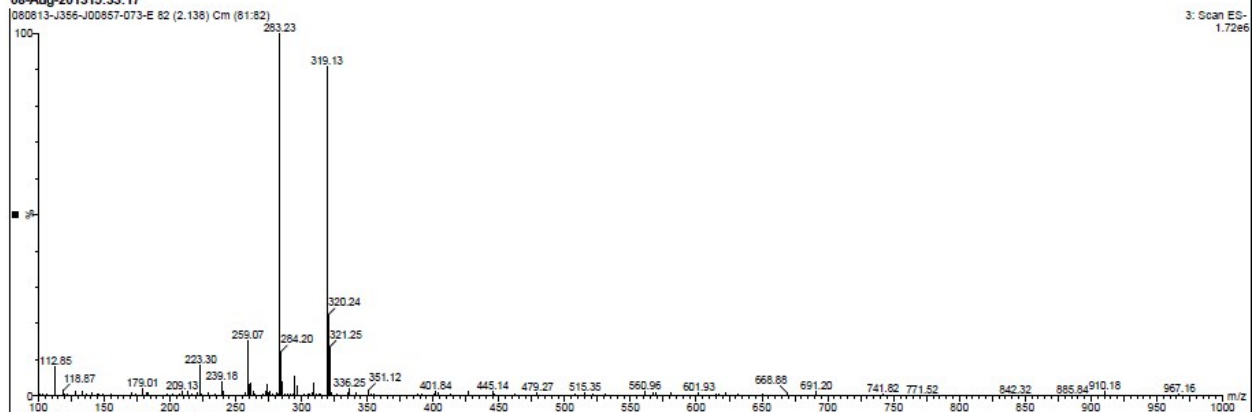
2: Scan ES+
TIC
2.34e8



4: Diode Array
214



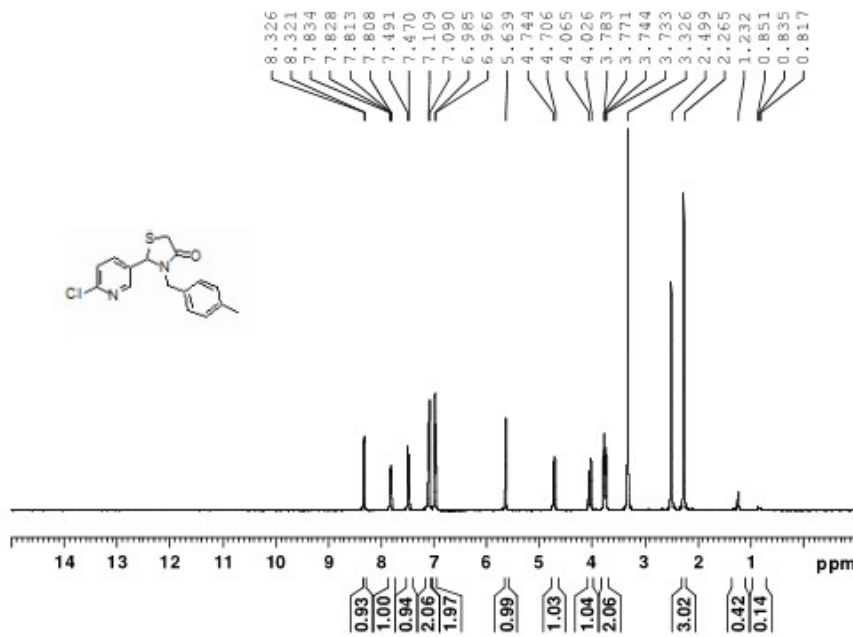
Test Name: 5mM AA-3-5 MIN
08-Aug-2013 15:33:17



10) Entry 10 (4j):

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 1
 PROCNO 1

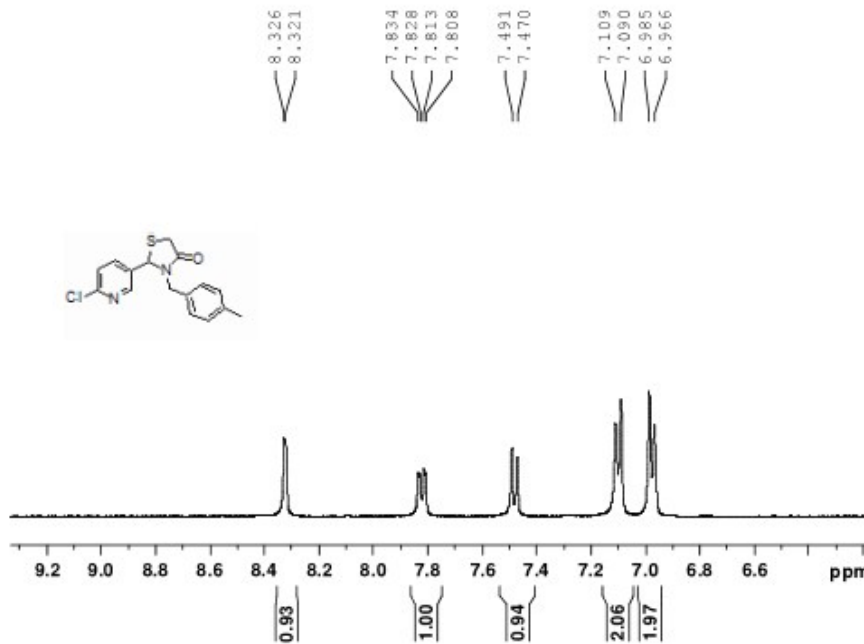
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.10
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SFO1 400.2624718 MHz

F2 - Processing parameters
 SI 65536
 SF 400.2600048 MHz
 WDN EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 1
 PROCNO 1

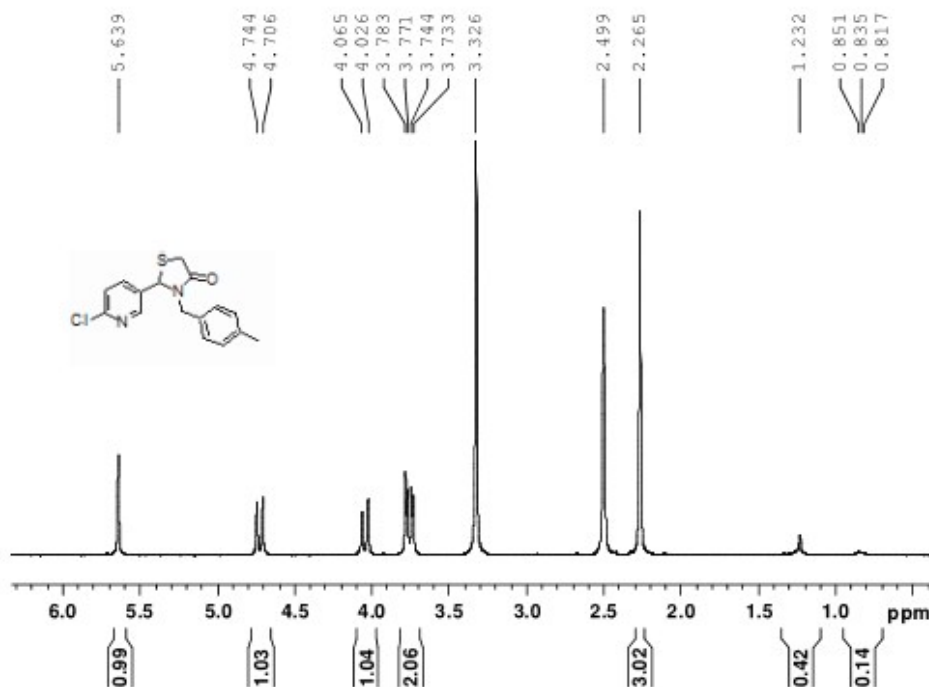
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.10
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SFO1 400.2624718 MHz

F2 - Processing parameters
 SI 65536
 SF 400.2600048 MHz
 WDN EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 1
 PROCNO 1

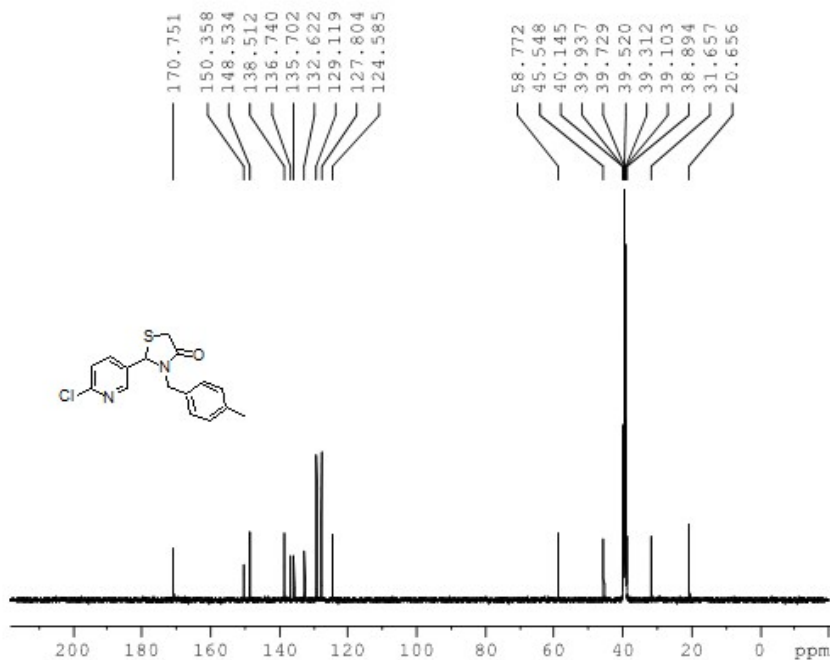
F2 - Acquisition Parameters
 Date_ 20130807
 Time 10.10
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 144
 DM 60.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.00 usec
 PL1 -2.80 dB
 PL1W 20.58109283 W
 SF01 400.2624718 MHz

F2 - Processing parameters
 S1 65536
 SF 400.2600048 MHz
 WDM EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 2
 PROCNO 1

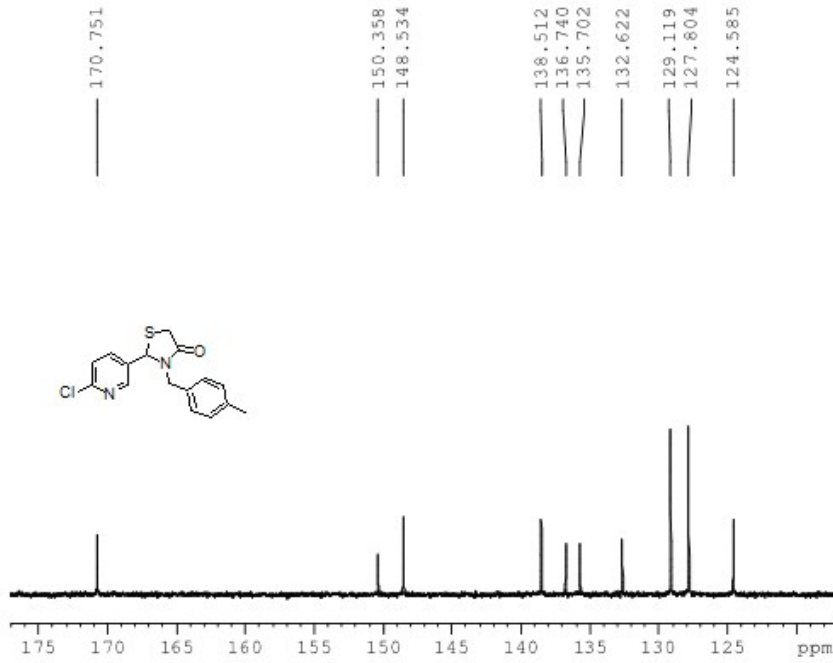
F2 - Acquisition Parameters
 Date_ 20130812
 Time 17.58
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 512
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DM 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.00000000 sec
 D1.1 0.03000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SF01 100.6555216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 2
 PROCNO 1

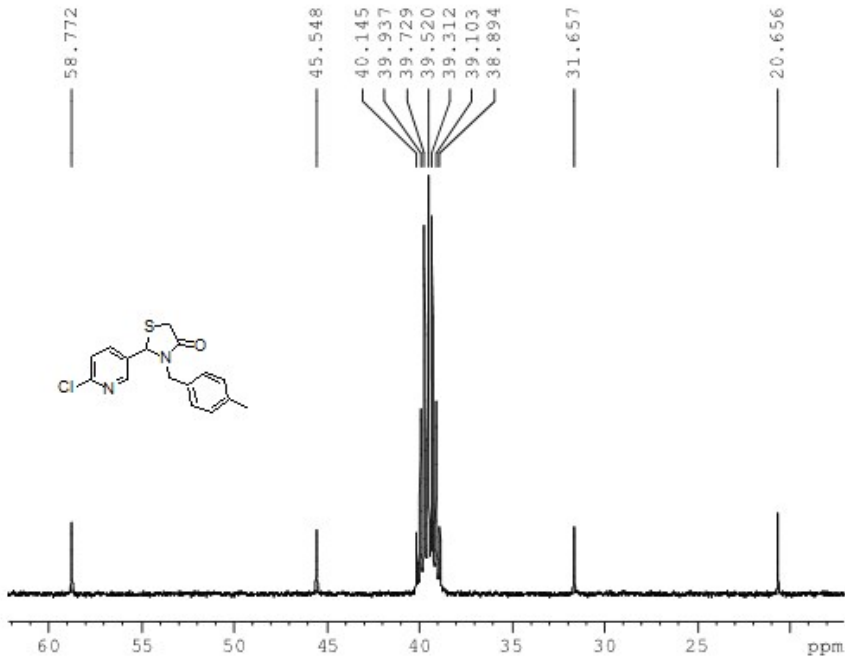
F2 - Acquisition Parameters
 Date_ 20130812
 Time 17.58
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 512
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DM 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SFO1 100.6555216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W

J356-J00857-005-B

DMSO



Current Data Parameters
 NAME J356-J00857-005-B
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130812
 Time 17.58
 INSTRUM spect
 PROBHD 5 mm DUL 13C-1
 PULPROG zgpg30
 TD 65536
 SOLVENT DMSO
 NS 512
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.366798 Hz
 AQ 1.3631988 sec
 RG 2050
 DM 20.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.0000000 sec
 D11 0.0300000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.00 usec
 PL1 -2.00 dB
 PL1W 57.32743073 W
 SFO1 100.6555216 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -2.80 dB
 PL12 15.35 dB
 PL13 19.00 dB
 PL2W 20.58109283 W

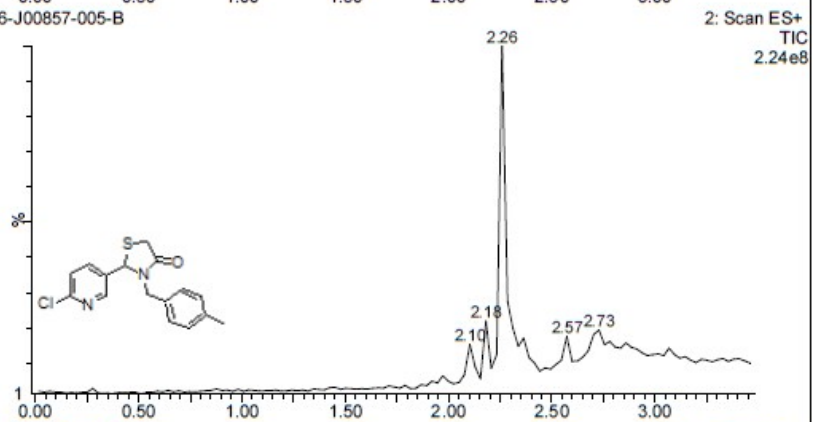
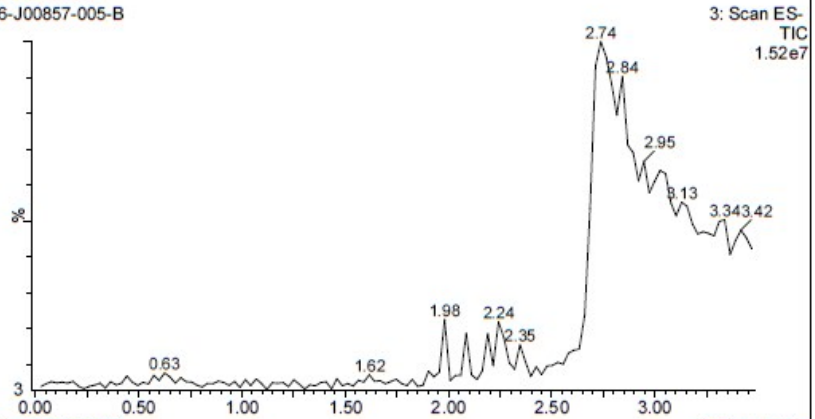
Sample Name: J356-J00857-005-B JUBILANT CHEMSYS LTD

UPLC-MS-05

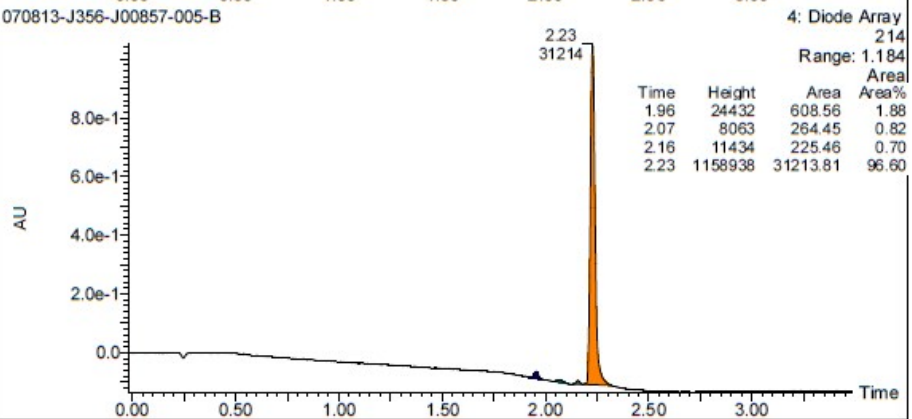
Test Name: 5mM AA-3-5 MIN

07-Aug-2013 11:17:45

070813-J356-J00857-005-B



070813-J356-J00857-005-B



Sample Name: J356-J00857-005-B JUBILANT CHEMSYS LTD

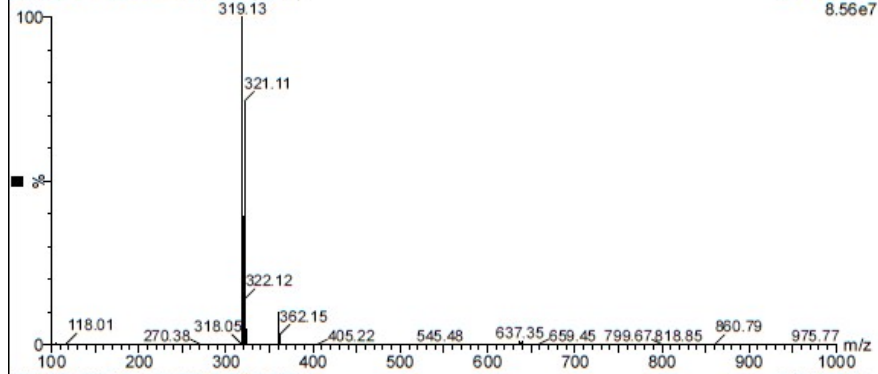
UPLC-MS-05

Test Name: 5mM AA-3-5 MIN

07-Aug-2013 11:17:45

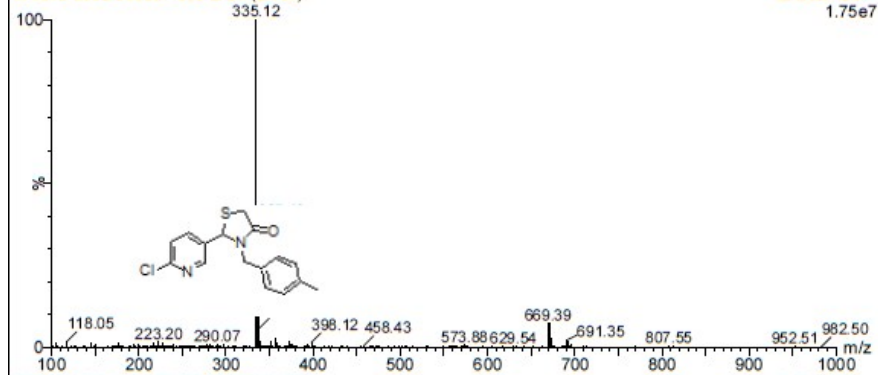
070813-J356-J00857-005-B 87 (2.260)

2: Scan ES+
8.56e7



070813-J356-J00857-005-B 84 (2.181)

2: Scan ES+
1.75e7



070813-J356-J00857-005-B 81 (2.103)

2: Scan ES+
6.88e6

