

Hansforesters A-M, polyesters from the sponge-associated fungus

***Hansfordia sinuosae* with antibacterial activities**

Supporting Information

List of Supporting Information

Compound 1.....	5
Figure S1-1. HRESIMS Spectrum of Compound 1.....	5
Figure S1-2. IR Spectrum of Compound 1.....	5
Figure S1-3. ^1H-NMR Spectrum of Compound 1.....	6
Figure S1-4. ^{13}C-NMR Spectrum of Compound 1.....	6
Figure S1-5. COSY Spectrum of Compound 1.....	7
Figure S1-6. HSQC Spectrum of Compound 1.....	7
Figure S1-7. HMBC Spectrum of Compound 1.....	8
Figure S1-8. ROESY Spectrum of Compound 1.....	8
For compound 2.....	9
Figure S2-1. HRESIMS Spectrum of Compound 2.....	9
Figure S2-2. IR Spectrum of Compound 2.....	9
Figure S2-3. ^1H-NMR Spectrum of Compound 2.....	10
Figure S2-4. APT Spectrum of Compound 2.....	10
Figure S2-5. COSY Spectrum of Compound 2.....	11
Figure S2-6. HSQC Spectrum of Compound 2.....	11
Figure S2-7. HMBC Spectrum of Compound 2.....	12
Figure S2-8. NOESY Spectrum of Compound 2.....	12
For compound 3.....	13
Figure S3-1. HRESIMS Spectrum of Compound 3.....	13
Figure S3-2. IR Spectrum of Compound 3.....	13
Figure S3-3. ^1H-NMR Spectrum of Compound 3.....	14
Figure S3-4. ^{13}C-NMR Spectrum of Compound 3.....	14
Figure S3-5. COSY Spectrum of Compound 3.....	15
Figure S3-6. HSQC Spectrum of Compound 3.....	15
Figure S3-7. HMBC Spectrum of Compound 3.....	16
Figure S3-8. ROESY Spectrum of Compound 3.....	16
For compound 4.....	17
Figure S4-1. HRESIMS Spectrum of Compound 4.....	17
Figure S4-2. IR Spectrum of Compound 4.....	17
Figure S4-3. ^1H-NMR Spectrum of Compound 4.....	18
Figure S4-4. ^{13}C-NMR Spectrum of Compound 4.....	18
Figure S4-5. COSY Spectrum of Compound 4.....	19
Figure S4-6. HSQC Spectrum of Compound 4.....	19
Figure S4-7. HMBC Spectrum of Compound 4.....	20
For compound 5.....	20
Figure S5-1. HRESIMS Spectrum of Compound 5.....	20
Figure S5-2. IR Spectrum of Compound 5.....	21

Figure S5-3. ^1H -NMR Spectrum of Compound 5.....	21
Figure S5-4. ^{13}C -NMR Spectrum of Compound 5.....	22
Figure S5-5. COSY Spectrum of Compound 5.....	22
Figure S5-6. HSQC Spectrum of Compound 5.....	23
Figure S5-7. HMBC Spectrum of Compound 5.....	23
For compound 6.....	24
Figure S6-1. HRESIMS Spectrum of Compound 6.....	24
Figure S6-2. IR Spectrum of Compound 6.....	24
Figure S6-3. ^1H -NMR Spectrum of Compound 6.....	25
Figure S6-4. ^{13}C -NMR Spectrum of Compound 6.....	25
Figure S6-5. COSY Spectrum of Compound 6.....	26
Figure S6-6. HSQC Spectrum of Compound 6.....	26
Figure S6-7. HMBC Spectrum of Compound 6.....	27
For compound 7.....	27
Figure S7-1. HRESIMS Spectrum of Compound 7.....	27
Figure S7-2. IR Spectrum of Compound 7.....	28
Figure S7-3. ^1H-NMR Spectrum of Compound 7.....	28
Figure S7-4. ^{13}C-NMR Spectrum of Compound 7.....	29
Figure S7-5. COSY Spectrum of Compound 7.....	29
Figure S7-6. HSQC Spectrum of Compound 7.....	30
Figure S7-7. HMBC Spectrum of Compound 7.....	30
For compound 8.....	31
Figure S8-1. HRESIMS Spectrum of Compound 8.....	31
Figure S8-2. IR Spectrum of Compound 8.....	31
Figure S8-3. ^1H-NMR Spectrum of Compound 8.....	32
Figure S8-4. ^{13}C-NMR Spectrum of Compound 8.....	32
Figure S8-5. COSY Spectrum of Compound 8.....	33
Figure S8-6. HSQC Spectrum of Compound 8.....	33
Figure S8-7. HMBC Spectrum of Compound 8.....	34
Figure S8-8. NOESY Spectrum of Compound 8.....	34
For compound 9.....	35
Figure S9-1. HRESIMS Spectrum of Compound 9.....	35
Figure S9-2. IR Spectrum of Compound 9.....	35
Figure S9-3. ^1H-NMR Spectrum of Compound 9.....	36
Figure S9-4. ^{13}C-NMR Spectrum of Compound 9.....	36
Figure S9-5. COSY Spectrum of Compound 9.....	37
Figure S9-6. HSQC Spectrum of Compound 9.....	37
Figure S9-7. HMBC Spectrum of Compound 9.....	38

For compound 10.....	38
Figure S10-1. HRESIMS Spectrum of Compound 10.....	38
Figure S10-2. IR Spectrum of Compound 10.....	39
Figure S10-3. ^1H -NMR Spectrum of Compound 10.....	39
Figure S10-4. ^{13}C -NMR Spectrum of Compound 10.....	40
Figure S10-5. COSY Spectrum of Compound 10.....	40
Figure S10-6. HSQC Spectrum of Compound 10.....	41
Figure S10-7. HMBC Spectrum of Compound 10.....	41
For compound 11.....	42
Figure S11-1. HRESIMS Spectrum of Compound 11.....	42
Figure S11-2. IR Spectrum of Compound 11.....	42
Figure S11-3. ^1H -NMR Spectrum of Compound 11.....	43
Figure S11-4. ^{13}C -NMR Spectrum of Compound 11.....	43
Figure S11-5. COSY Spectrum of Compound 11.....	44
Figure S11-6. HSQC Spectrum of Compound 11.....	44
Figure S11-7. HMBC Spectrum of Compound 11.....	45
For compound 12.....	45
Figure S12-1. HRESIMS Spectrum of Compound 12.....	45
Figure S12-2. IR Spectrum of Compound 12.....	46
Figure S12-3. ^1H -NMR Spectrum of Compound 12.....	46
Figure S12-4. ^{13}C -NMR Spectrum of Compound 12.....	47
Figure S12-5. COSY Spectrum of Compound 12.....	47
Figure S12-6. HSQC Spectrum of Compound 12.....	48
Figure S12-7. HMBC Spectrum of Compound 12.....	48
Figure S12-8. NOESY Spectrum of Compound 14.....	49
For compound 13.....	49
Figure S13-1. HRESIMS Spectrum of Compound 13.....	49
Figure S13-2. IR Spectrum of Compound 13.....	50
Figure S13-3. ^1H -NMR Spectrum of Compound 13.....	50
Figure S13-4. ^{13}C -NMR Spectrum of Compound 13.....	51
Figure S13-5. COSY Spectrum of Compound 13.....	51
Figure S13-6. HSQC Spectrum of Compound 13.....	52
Figure S13-7. HMBC Spectrum of Compound 13.....	52
For compound b.....	53
Figure Sb-1. ^1H -NMR Spectrum of 1d	53
Figure Sb-2. ^1H -NMR Spectrum of (S)MPA ester of 1d	53
Figure Sb-3. ^1H -NMR Spectrum of (R)MPA ester of 1d	54

Compound 1

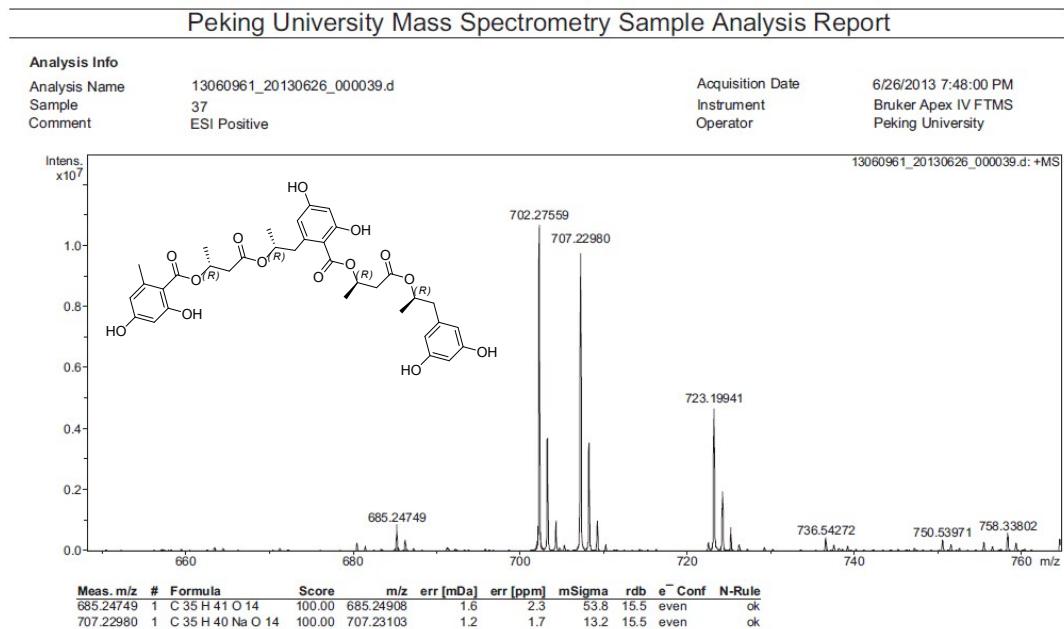


Figure S1-1. HRESIMS Spectrum of Compound 1

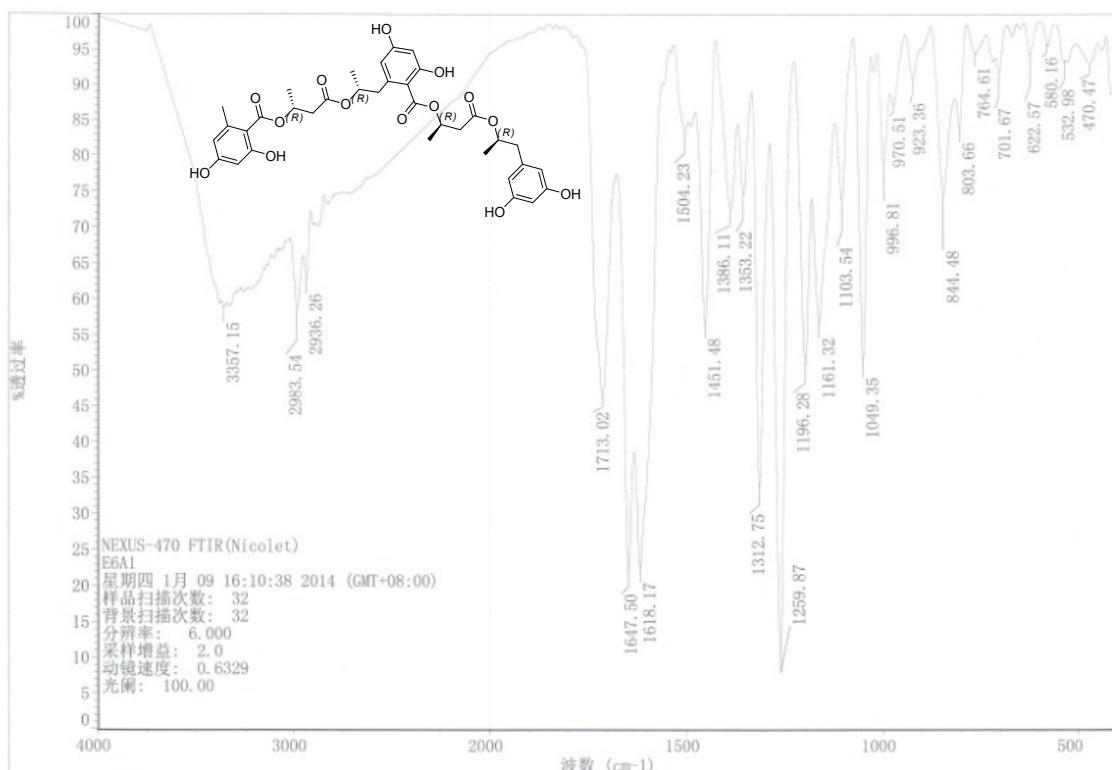


Figure S1-2. IR Spectrum of Compound 1

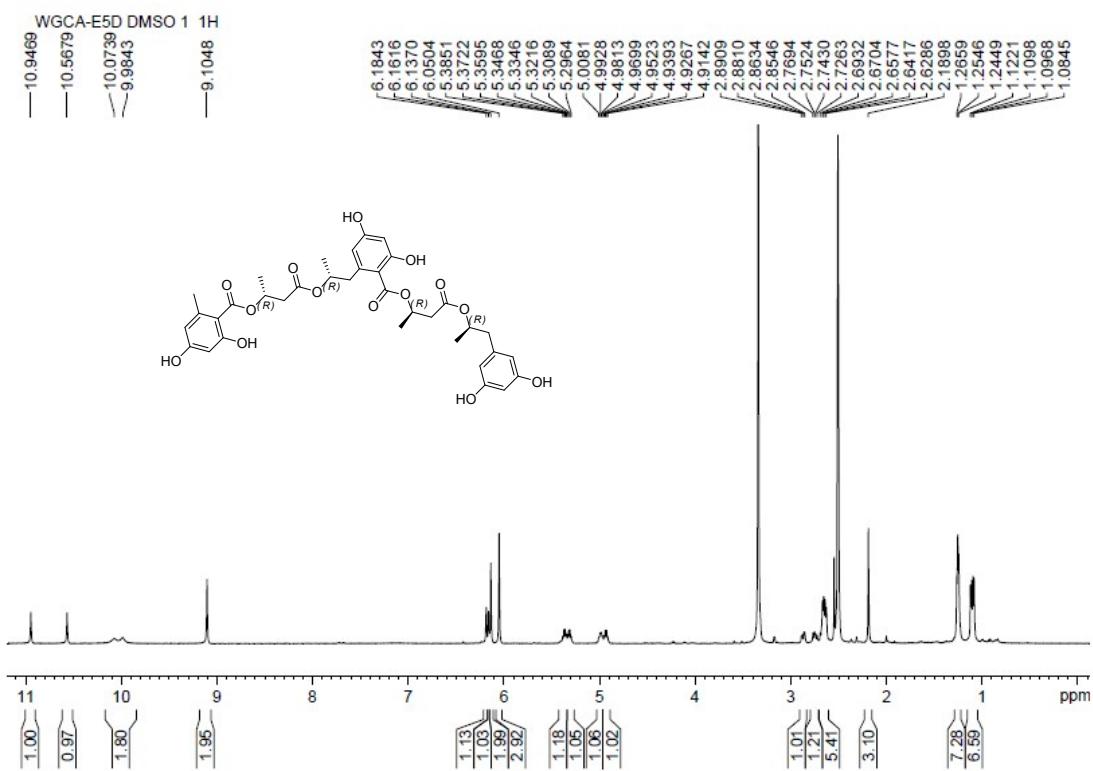


Figure S1-3. ^1H -NMR Spectrum of Compound 1

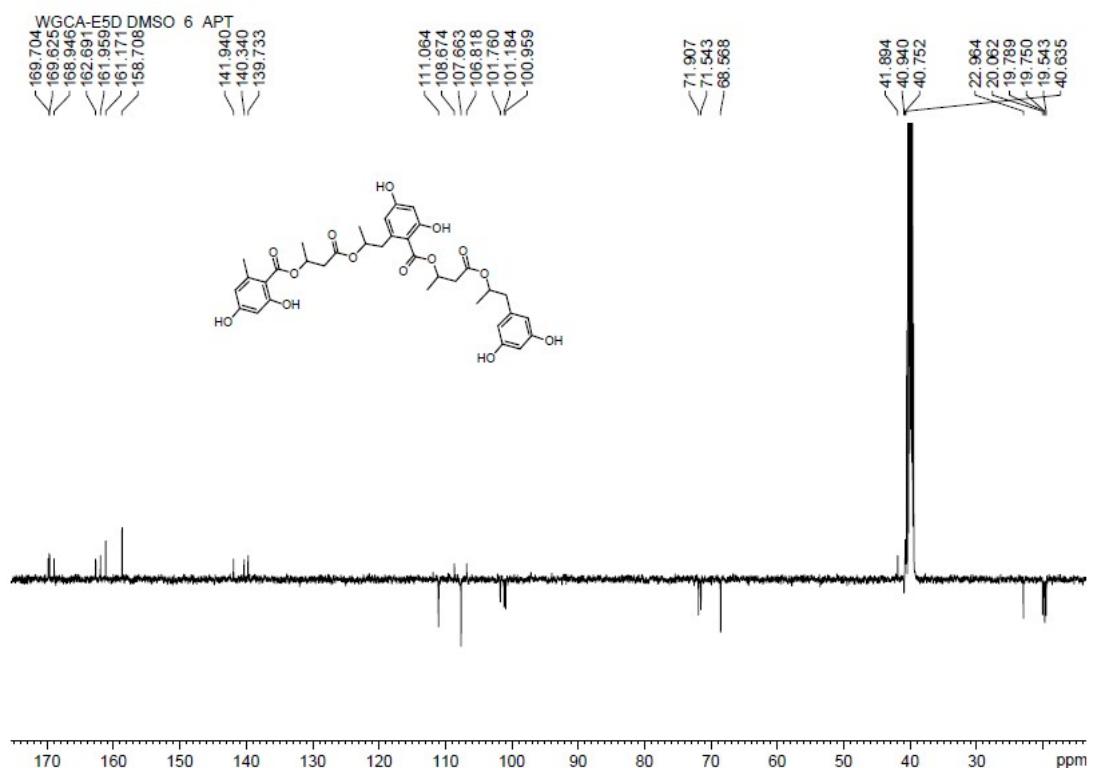


Figure S1-4. APT Spectrum of Compound 1

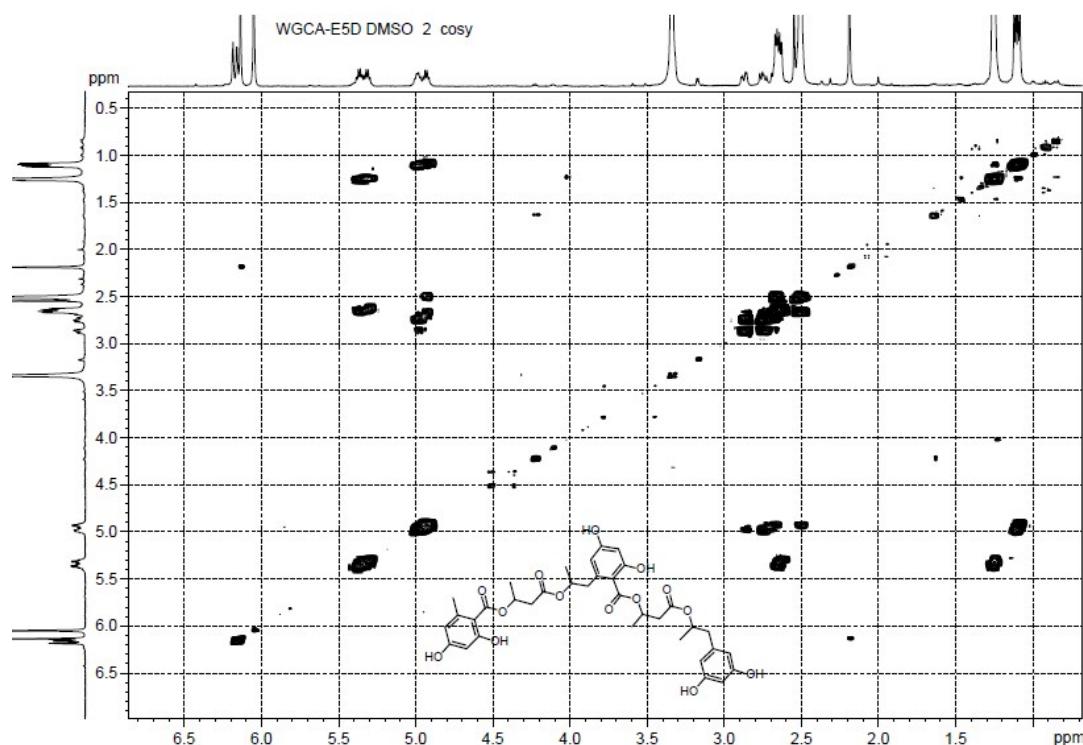


Figure S1-5. COSY Spectrum of Compound 1

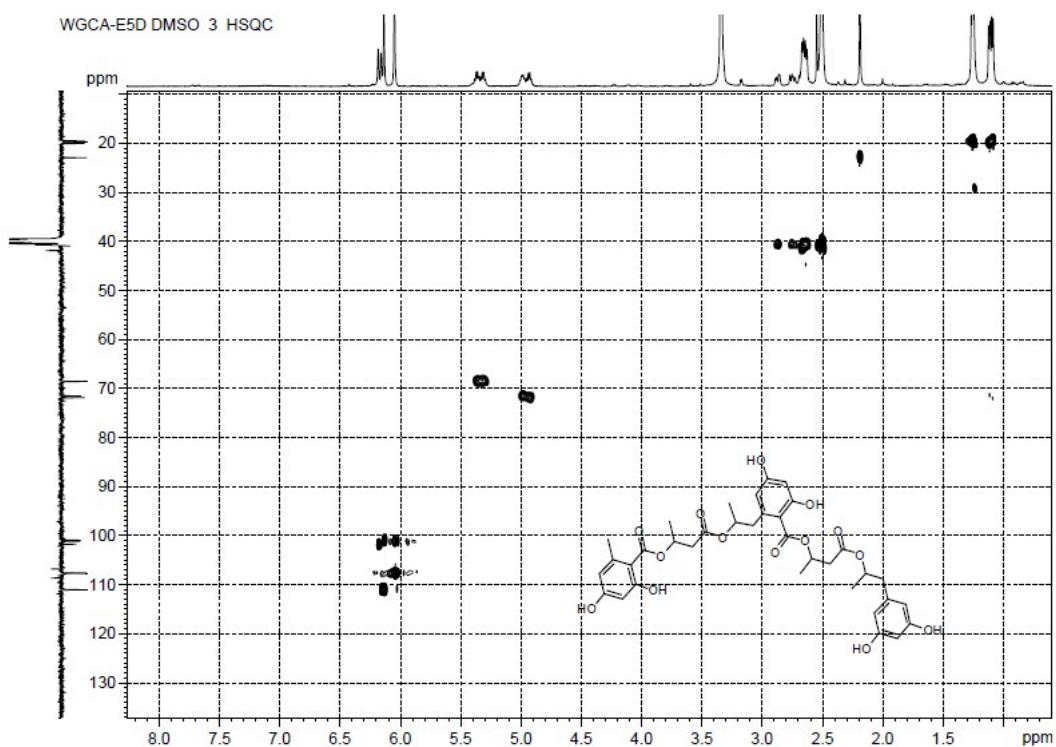


Figure S1-6. HSQC Spectrum of Compound 1

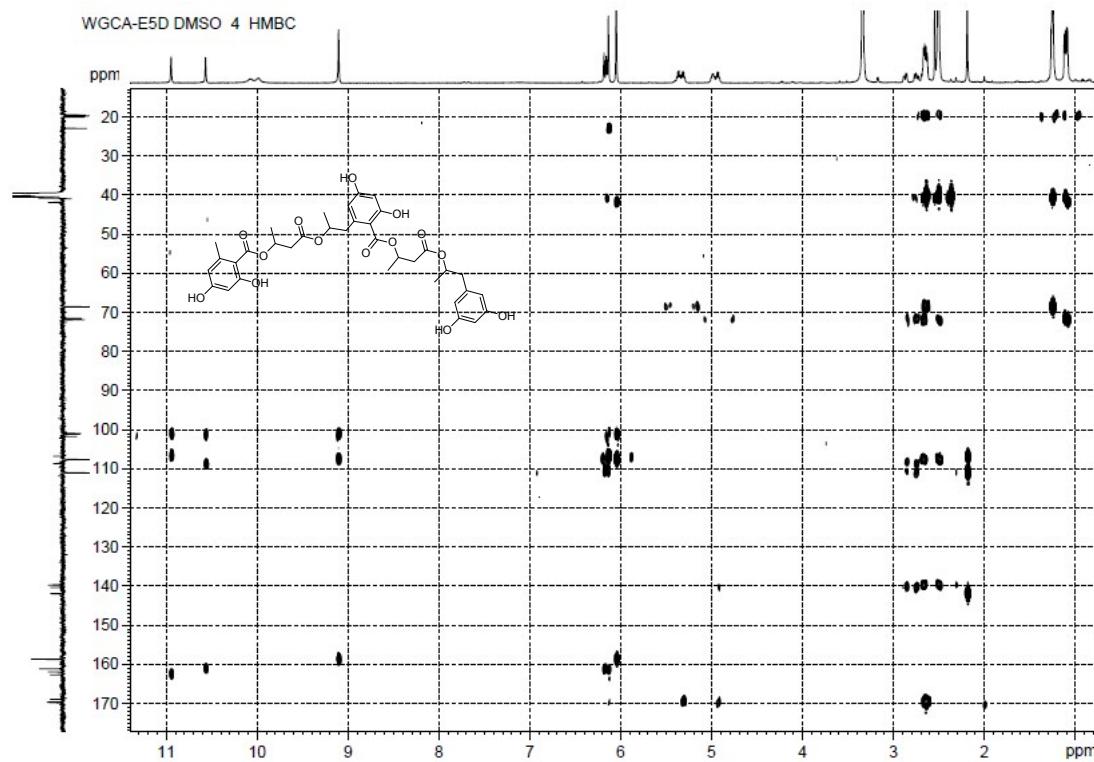


Figure S1-7. HMBC Spectrum of Compound 1

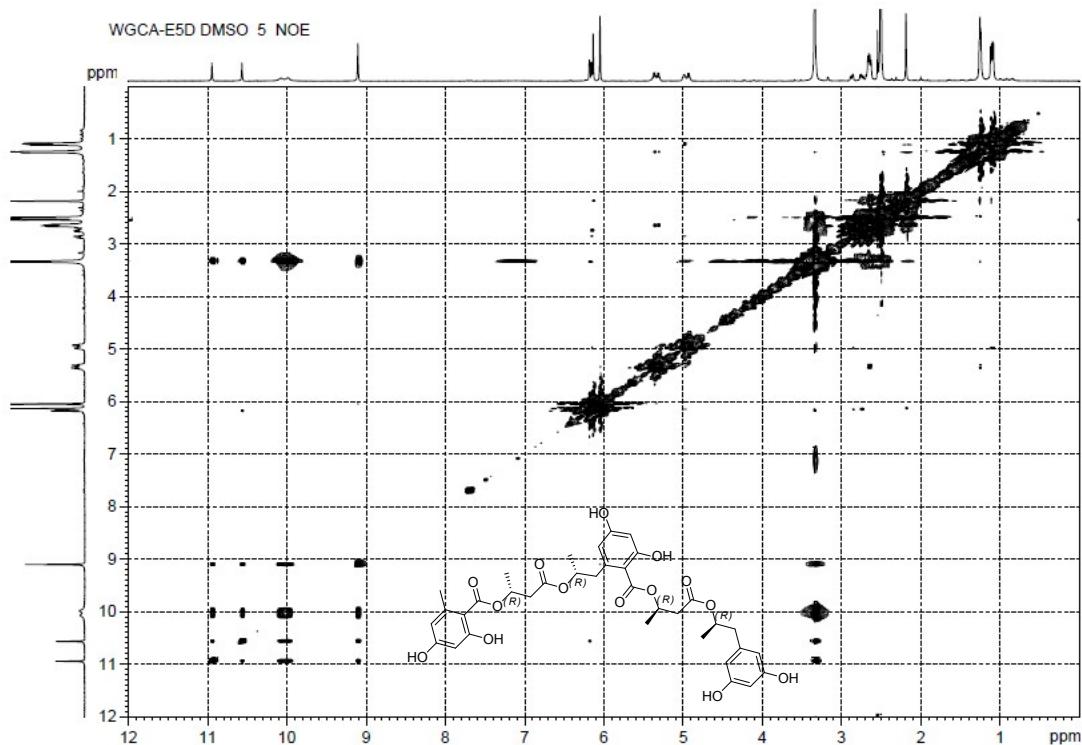


Figure S1-8. NOESY Spectrum of Compound 1

Compound 2

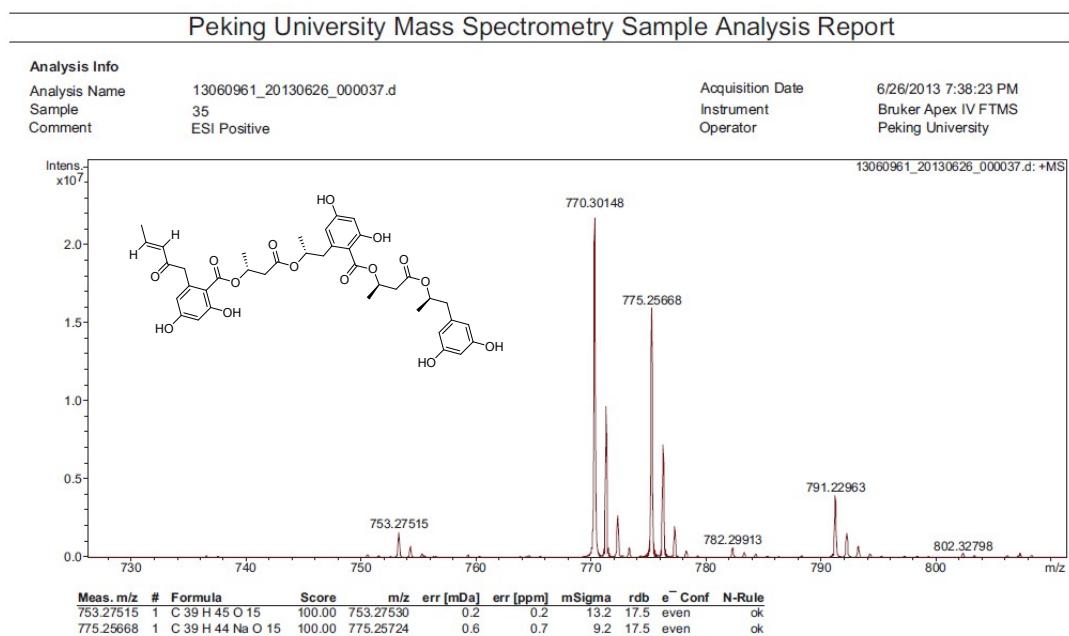


Figure S2-1. HRESIMS Spectrum of Compound 2

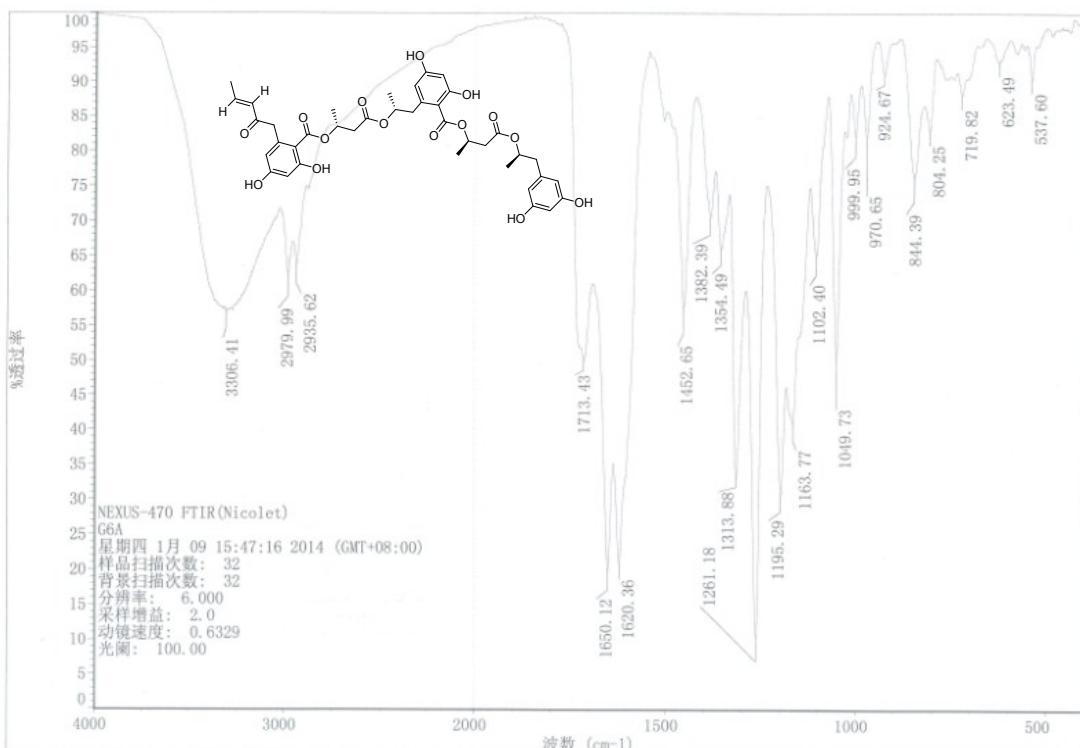


Figure S2-2. IR Spectrum of Compound 2

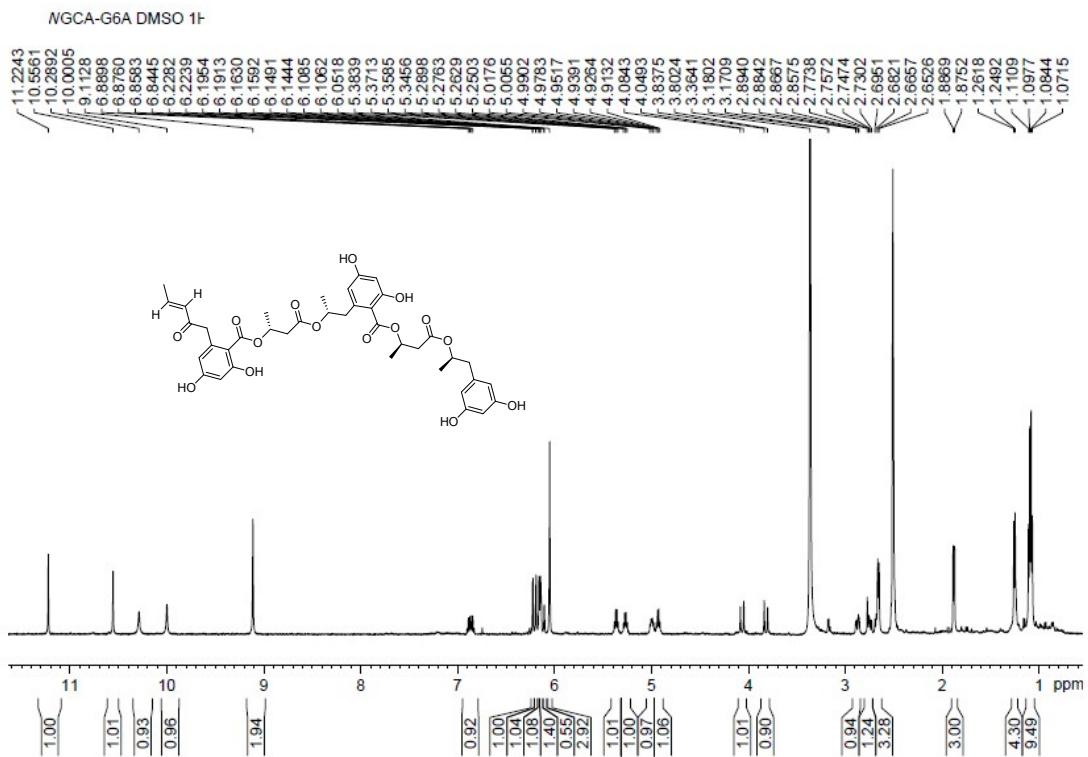


Figure S2-3. ¹H-NMR Spectrum of Compound 2

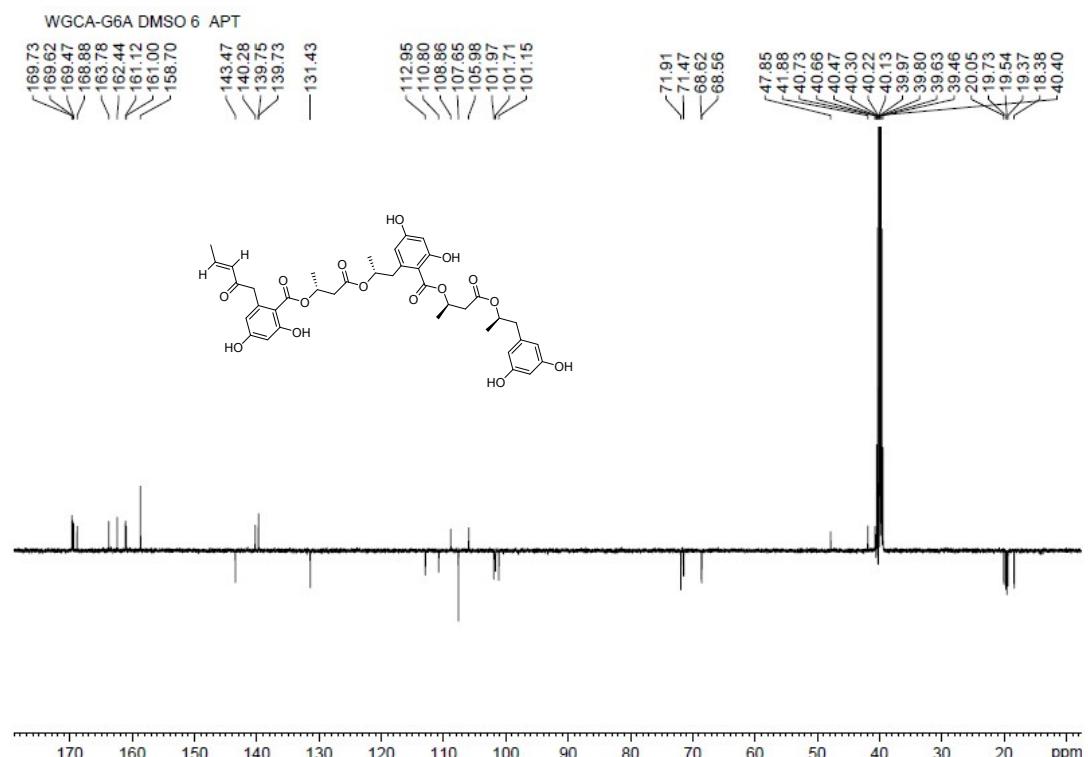


Figure S2-4. ¹³C-NMR Spectrum of Compound 2

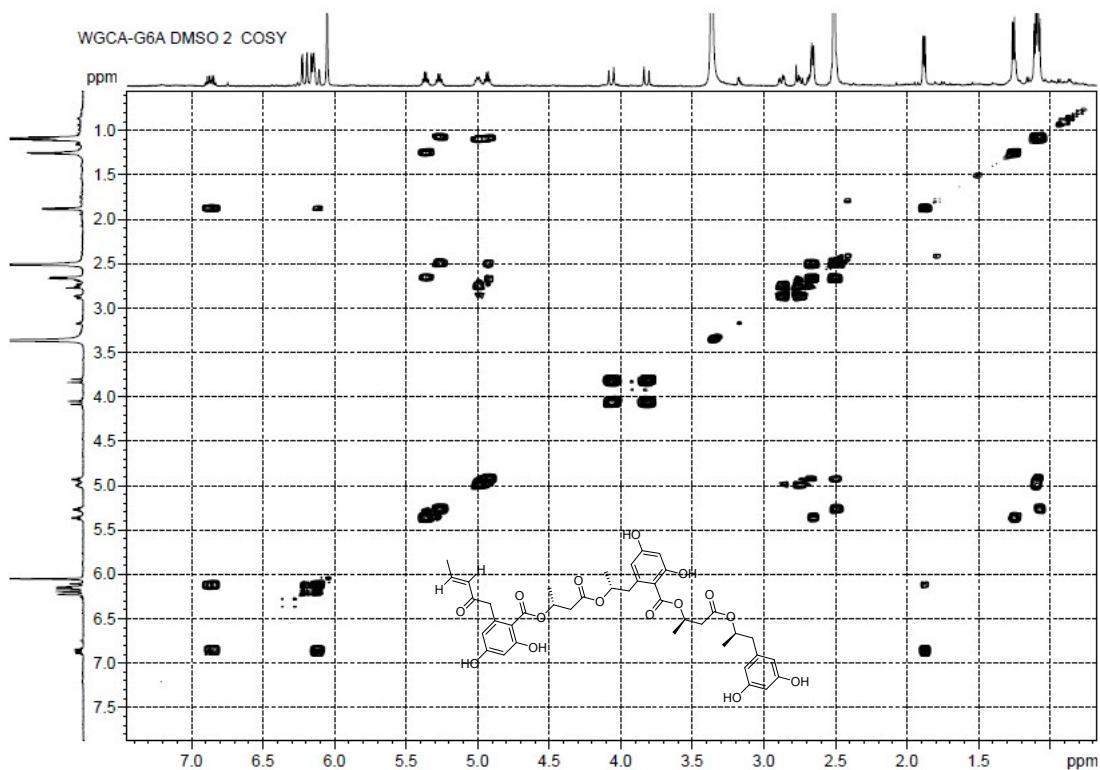


Figure S2-5. COSY Spectrum of Compound 2

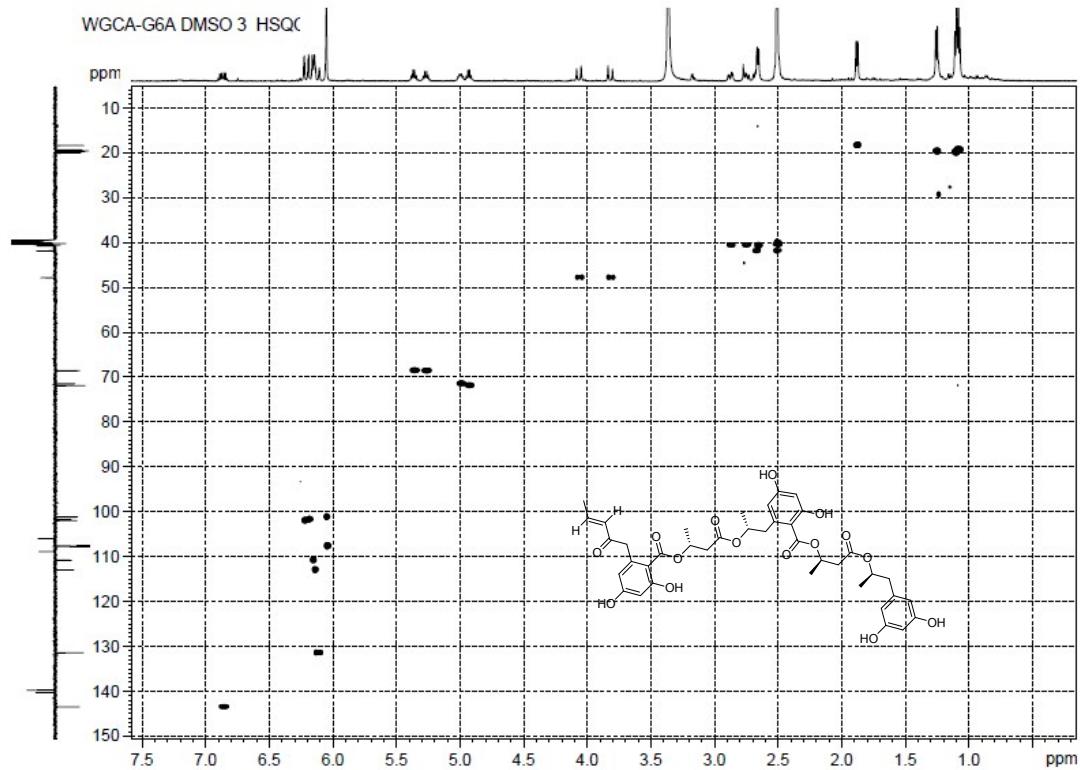


Figure S2-6. HSQC Spectrum of Compound 2

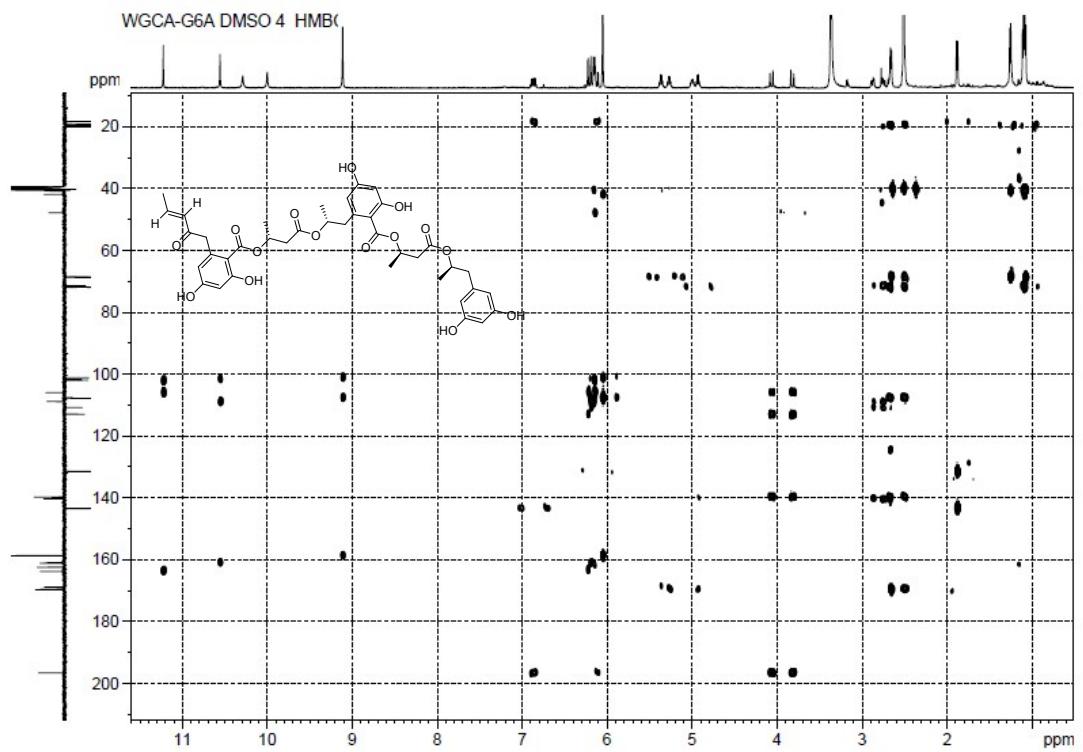


Figure S2-7. HMBC Spectrum of Compound 2

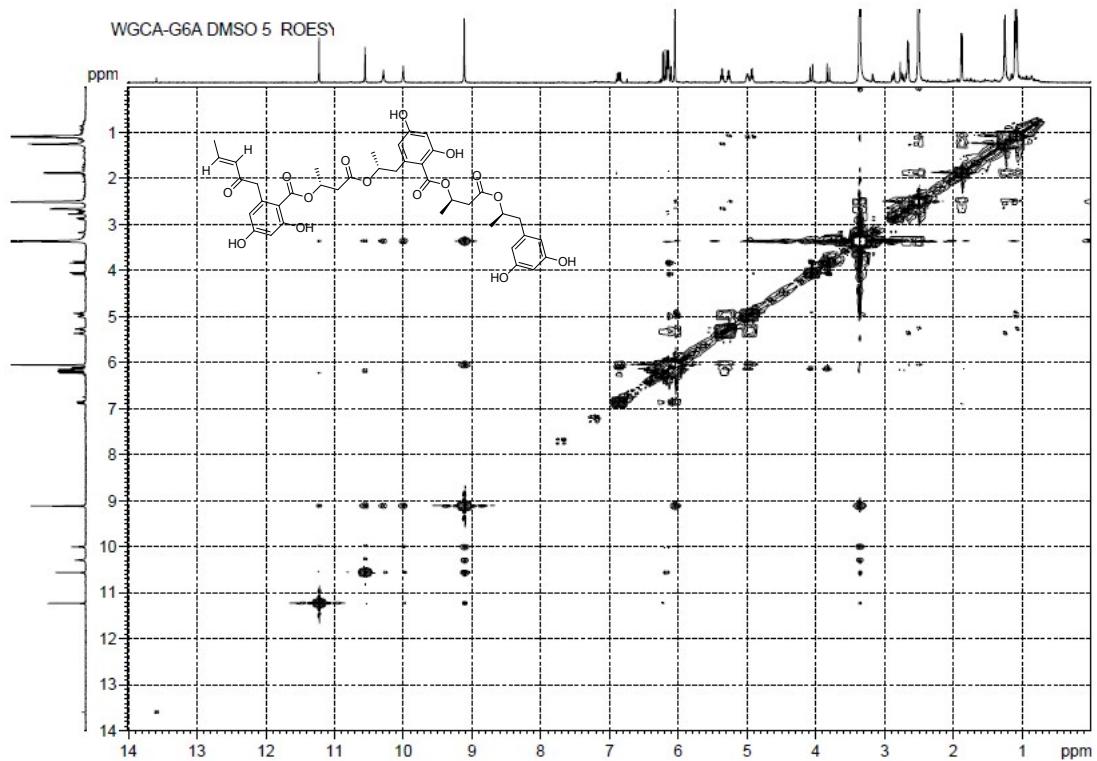


Figure S2-8. ROESY Spectrum of Compound 2

Compound 3

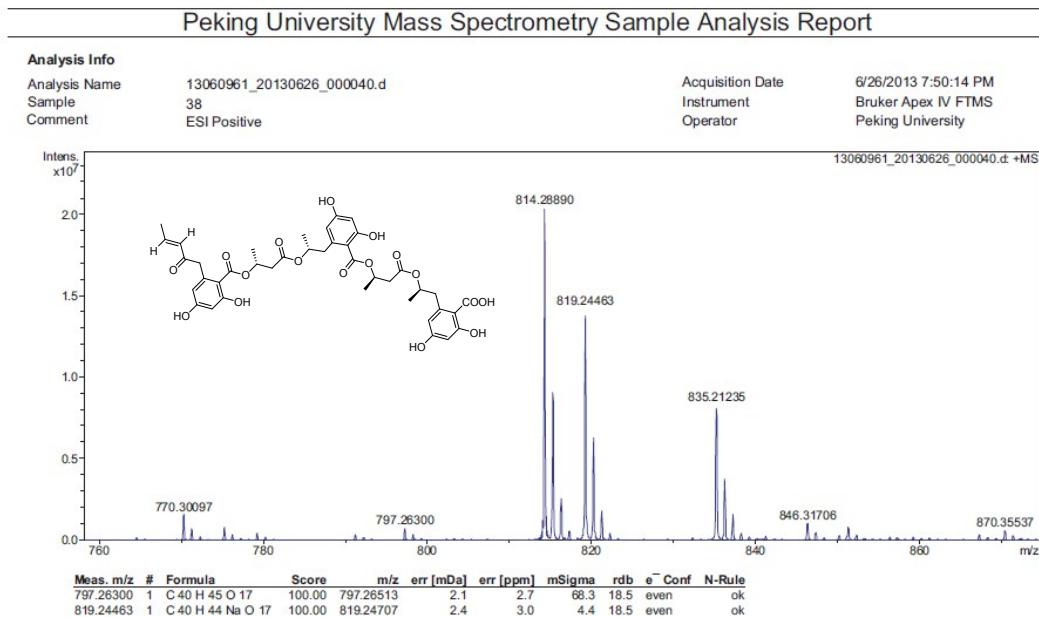


Figure S3-1. HRESIMS Spectrum of Compound 3

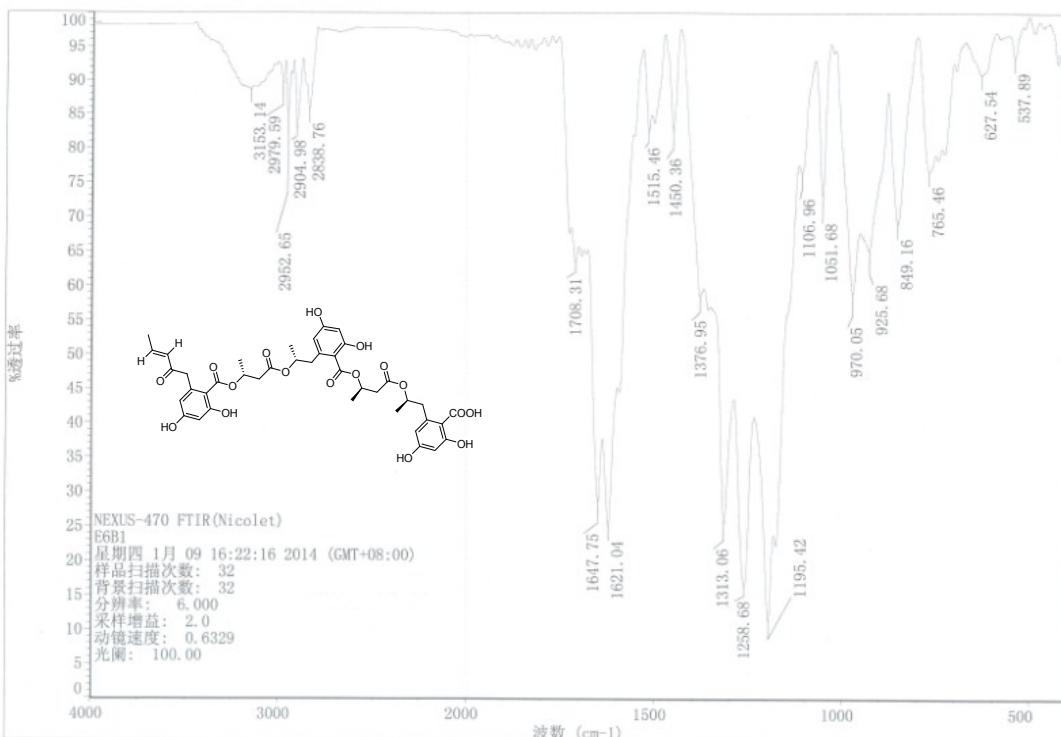


Figure S3-2. IR Spectrum of Compound 3

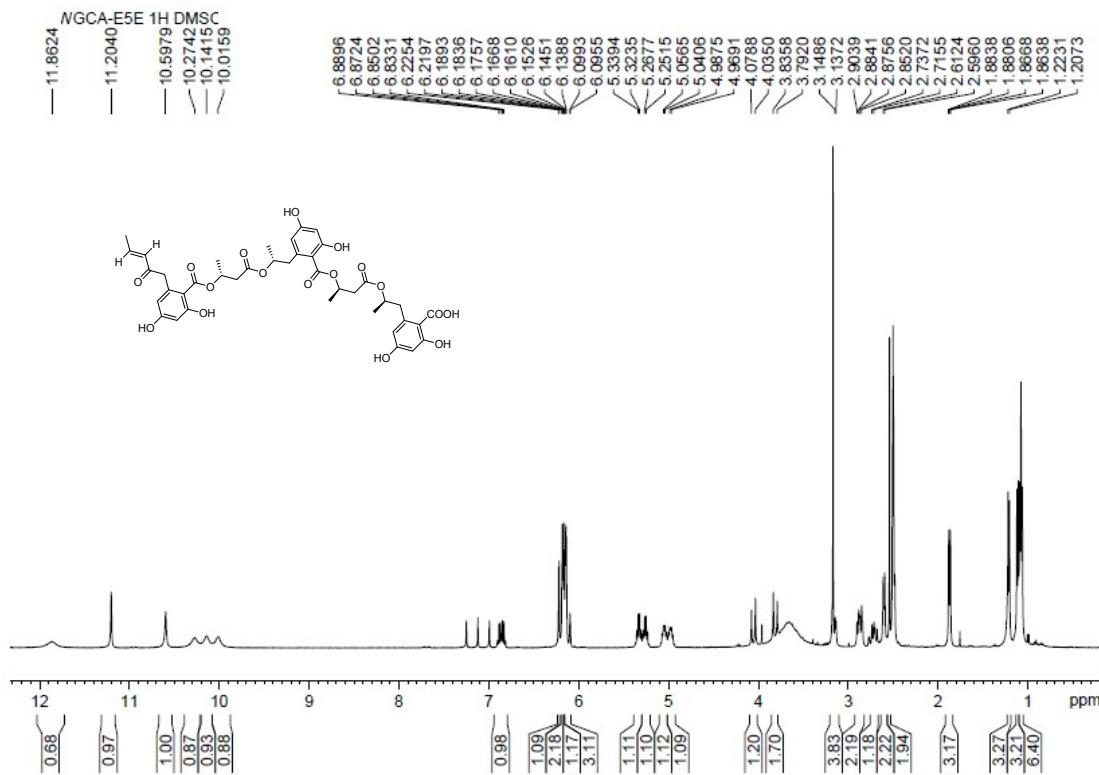


Figure S3-3. ¹H-NMR Spectrum of Compound 3

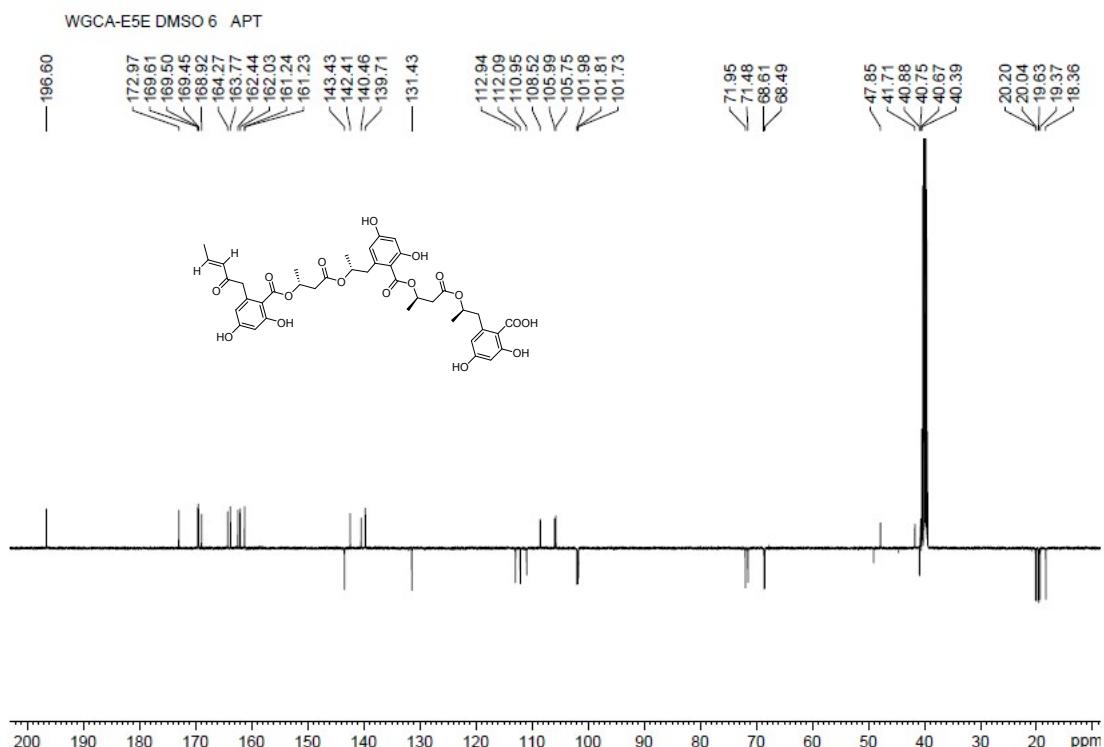


Figure S3-4. ¹³C-NMR Spectrum of Compound 3

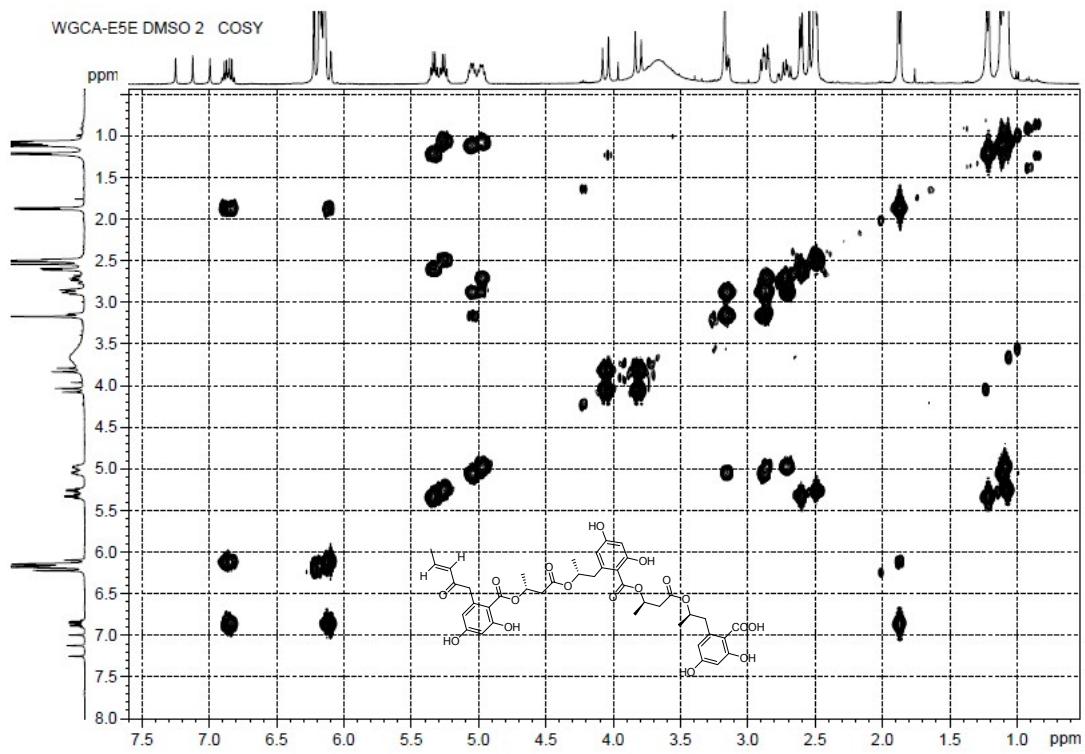


Figure S3-5. COSY Spectrum of Compound 3

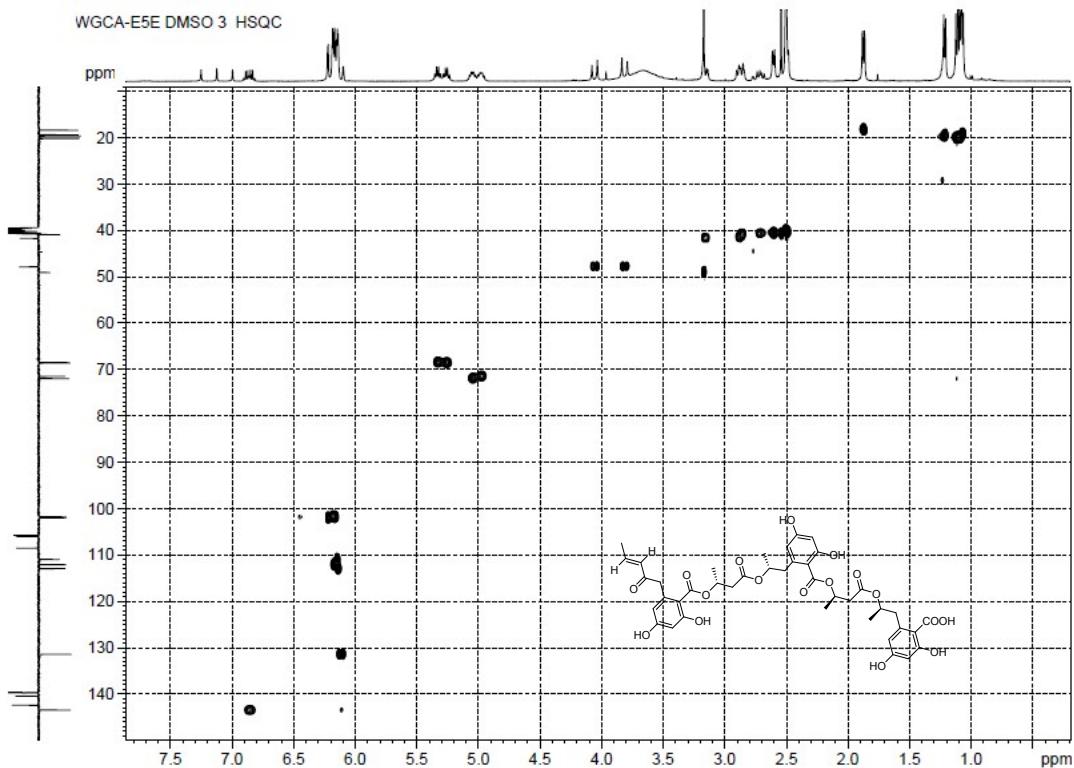


Figure S3-6. HSQC Spectrum of Compound 3

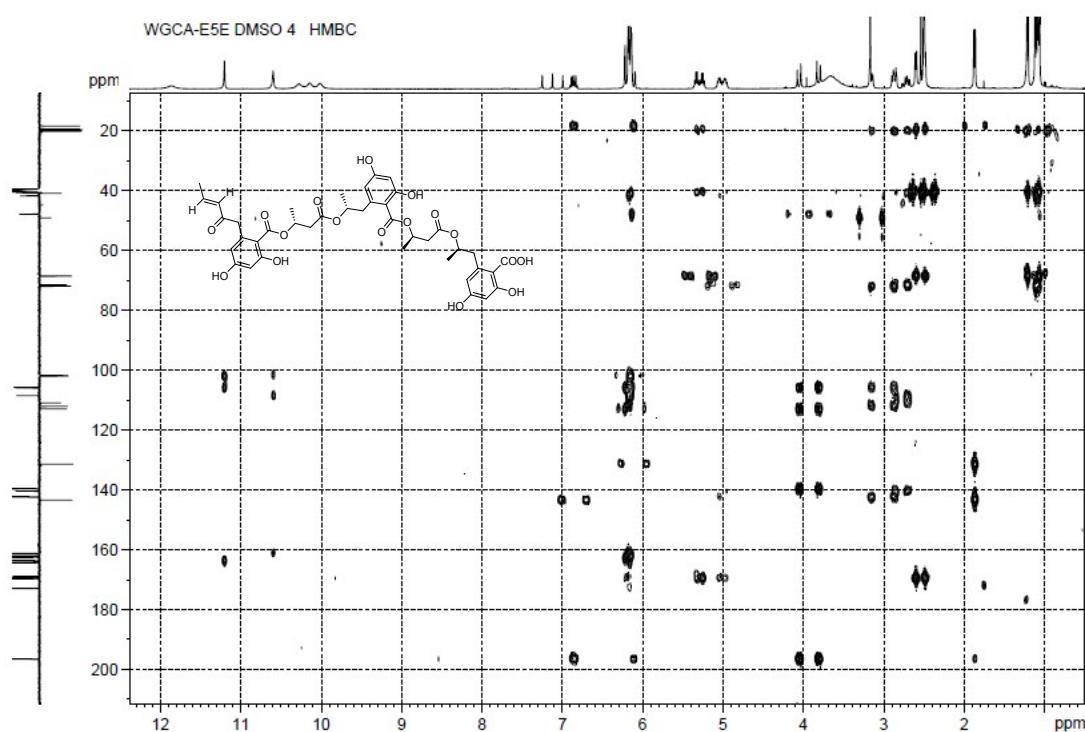


Figure S3-7. HMBC Spectrum of Compound 3

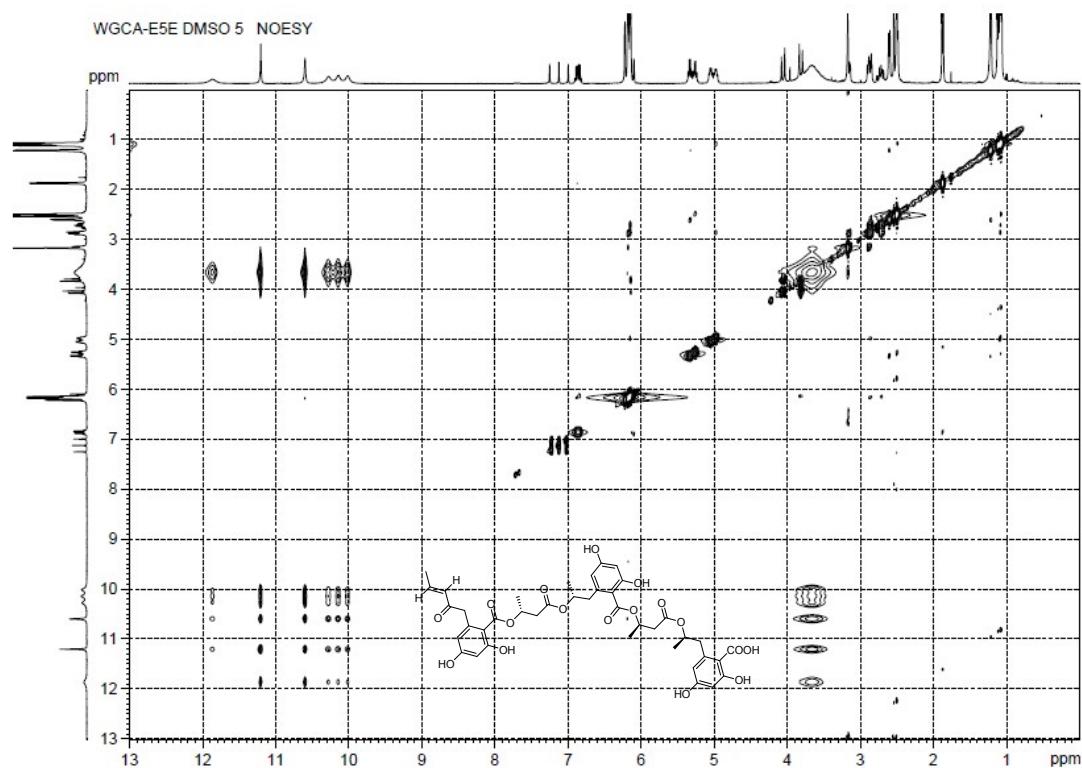


Figure S3-8. ROESY Spectrum of Compound 3

Compound 4



Table 'GenFormulaResults' could not be found in this analysis

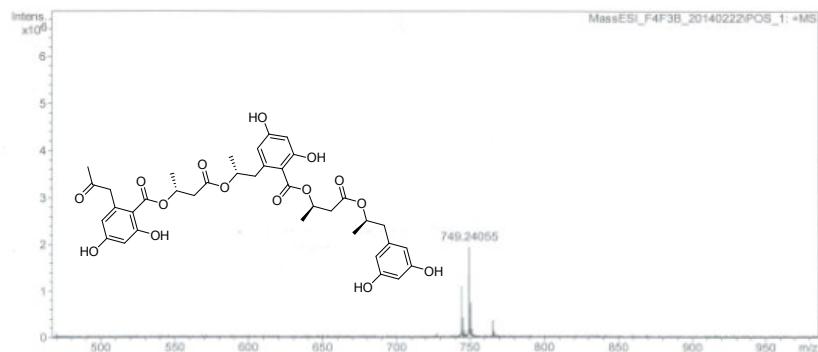


Figure S4-1. HRESIMS Spectrum of Compound 4

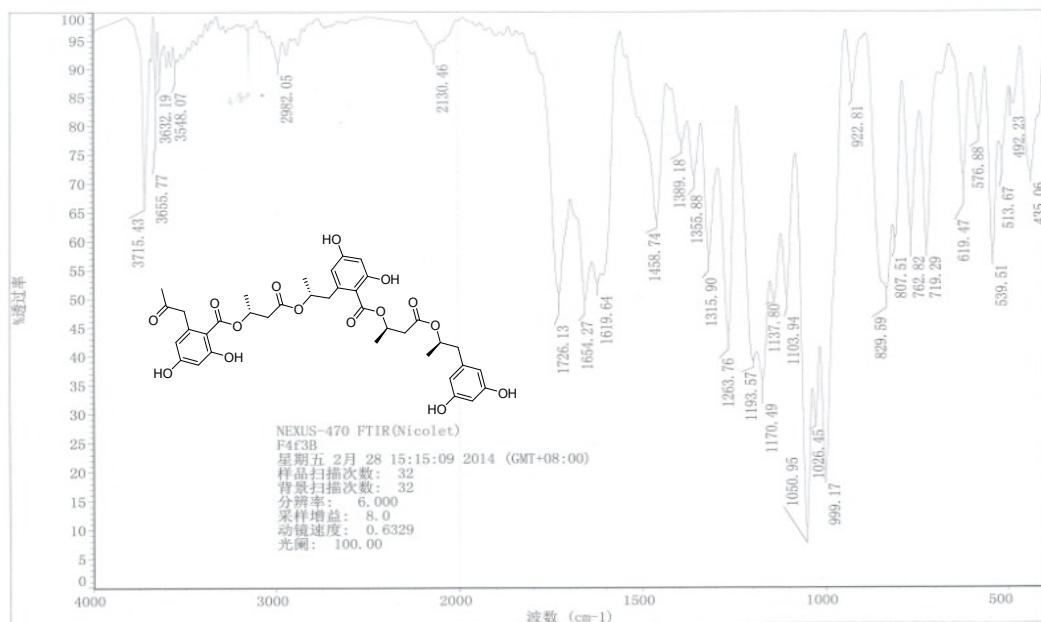


Figure S4-2. IR Spectrum of Compound 4

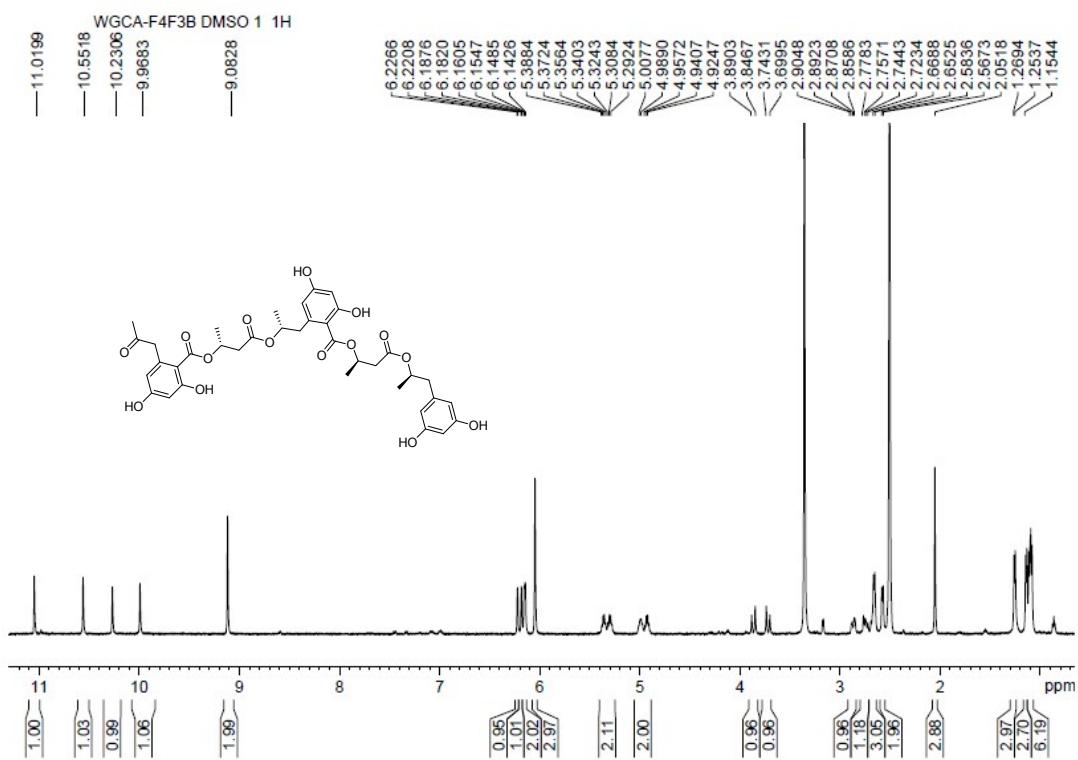


Figure S4-3. ¹H-NMR Spectrum of Compound 4

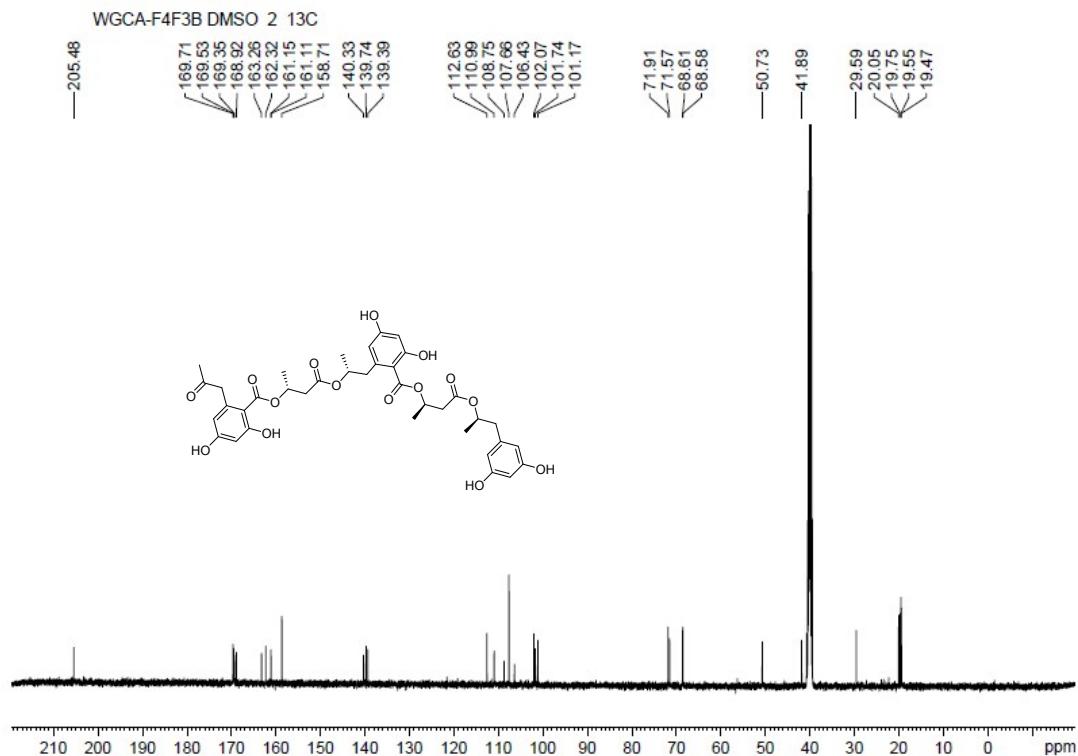


Figure S4-4. ¹³C-NMR Spectrum of Compound 4

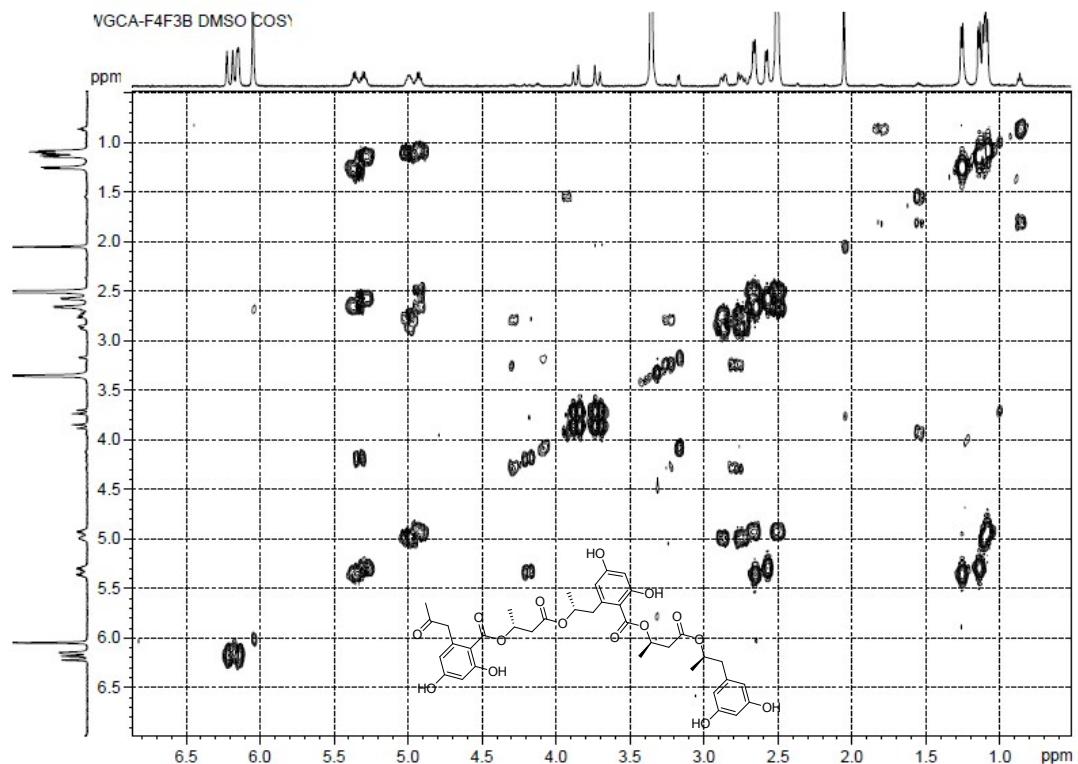


Figure S4-5. COSY Spectrum of Compound 4

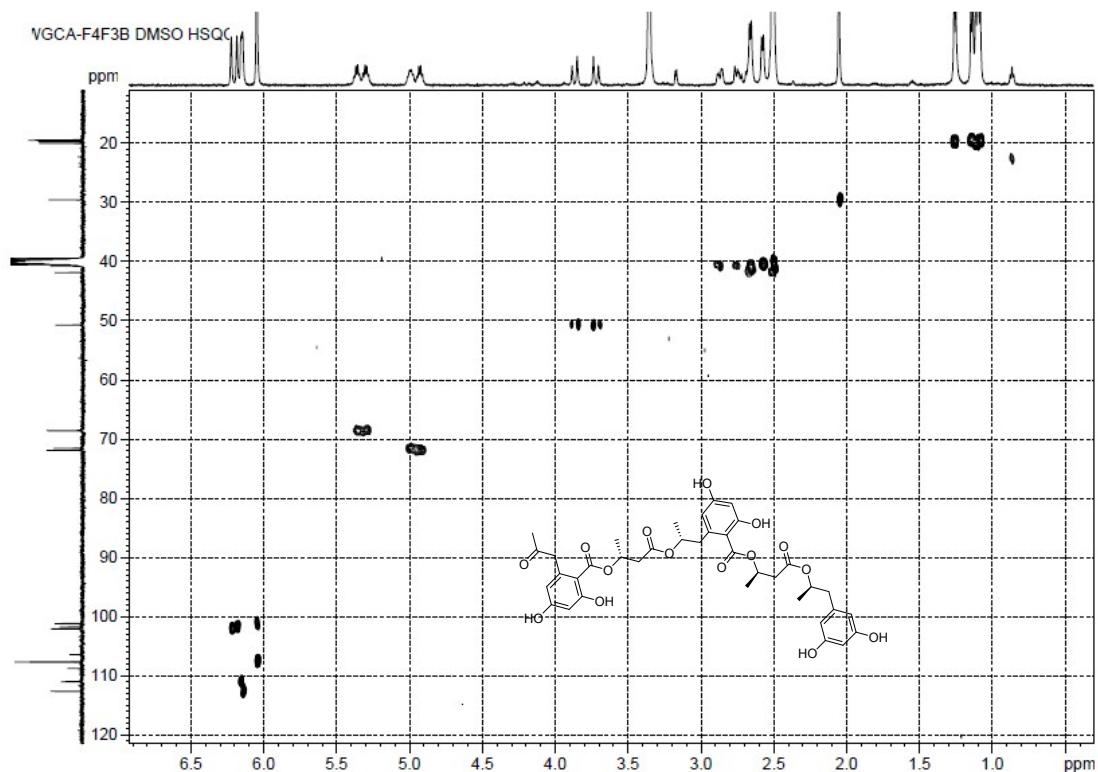


Figure S4-6. HSQC Spectrum of Compound 4

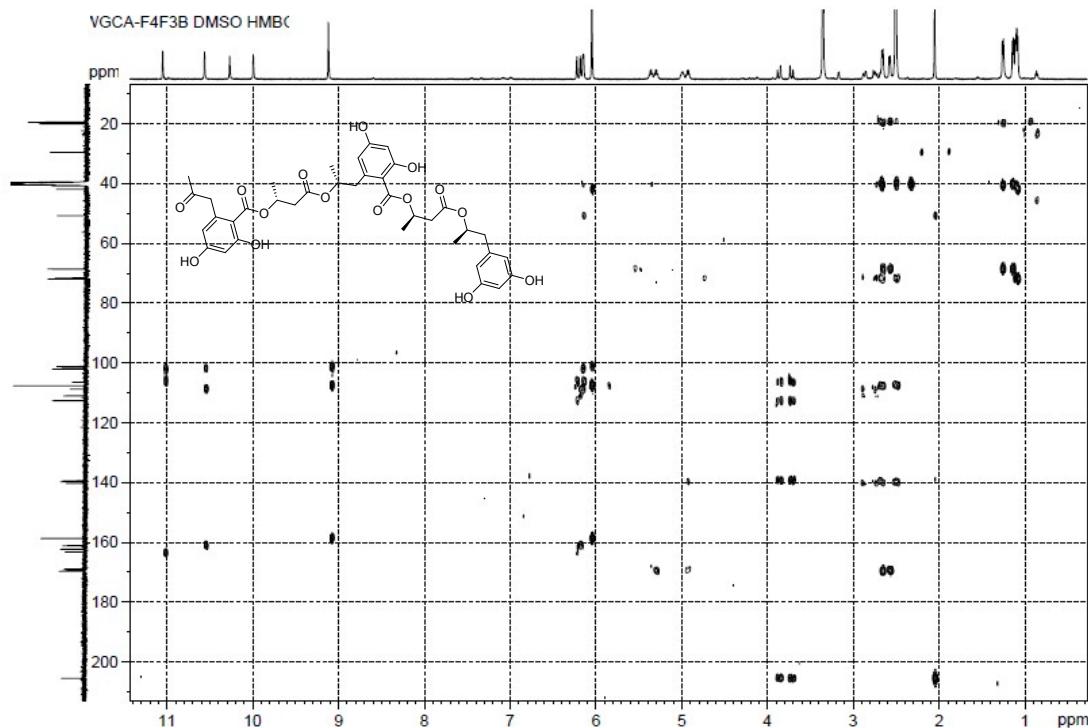


Figure S4-7. HMBC Spectrum of Compound 4

Compound 5

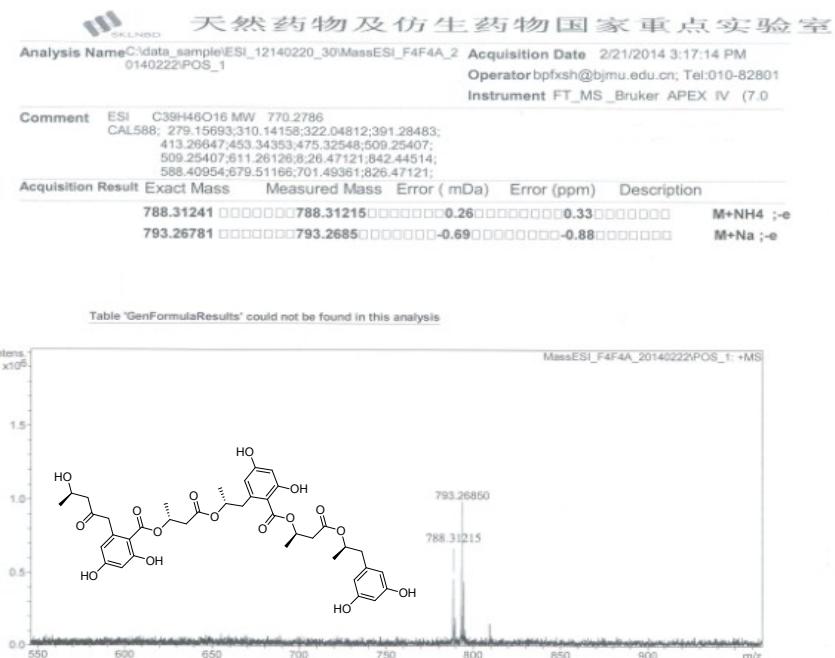


Figure S5-1. HRESIMS Spectrum of Compound 5

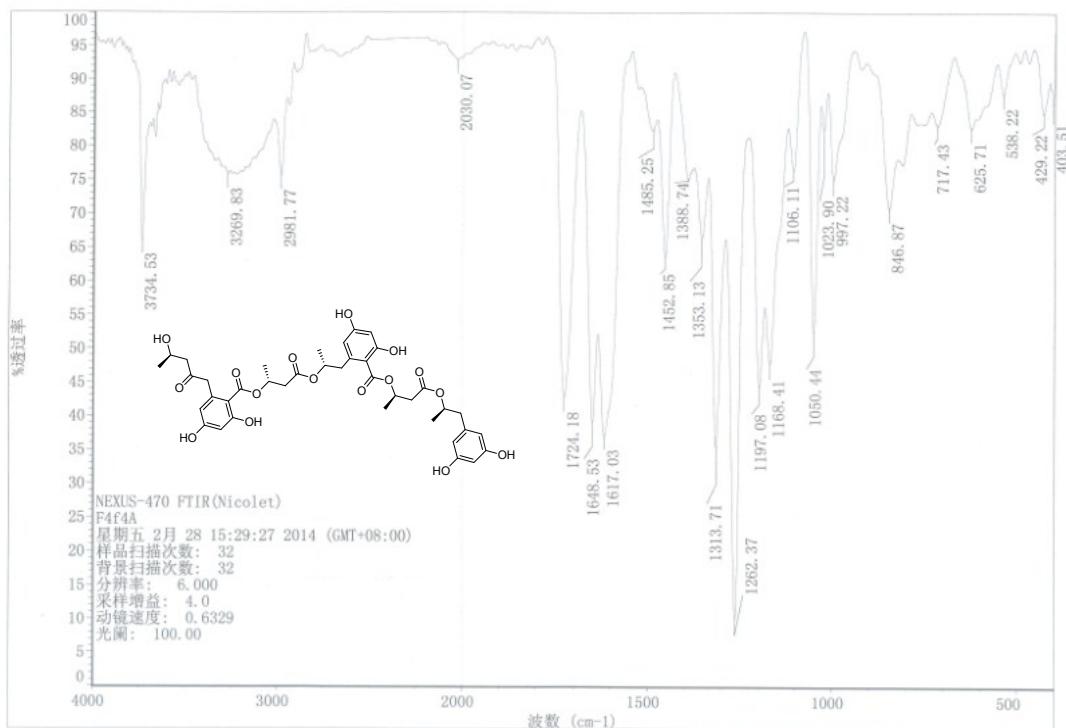


Figure S5-2. IR Spectrum of Compound 5

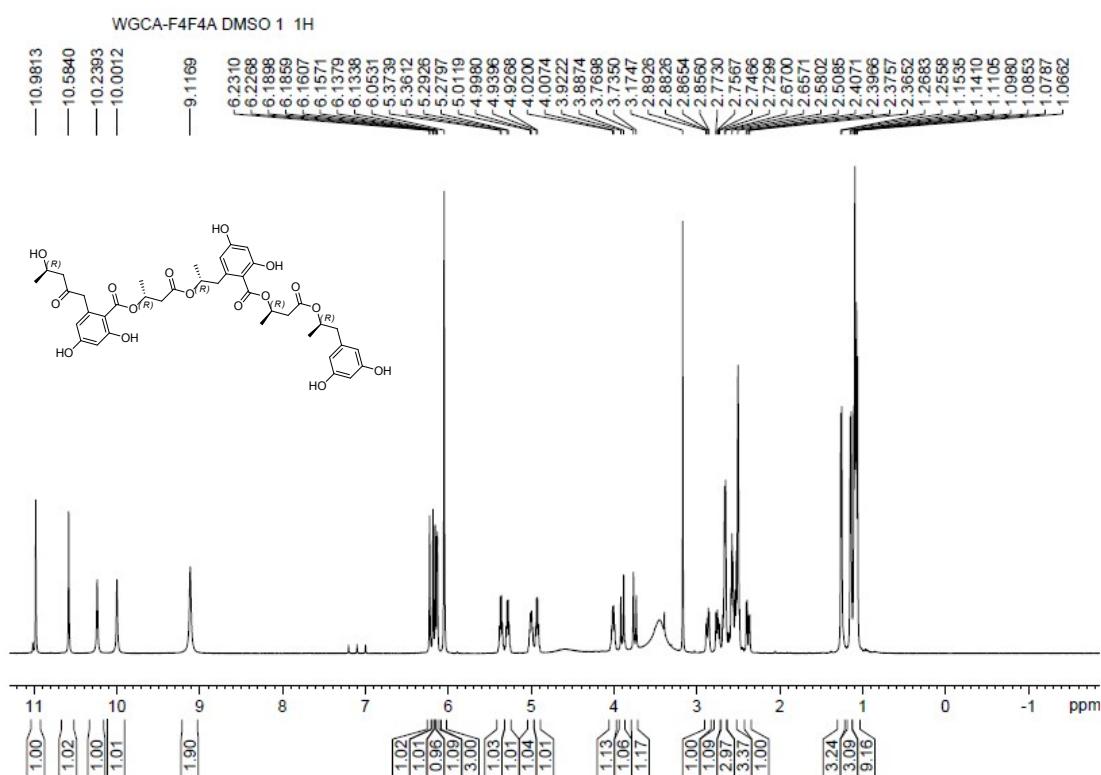


Figure S5-3. ¹H-NMR Spectrum of Compound 5

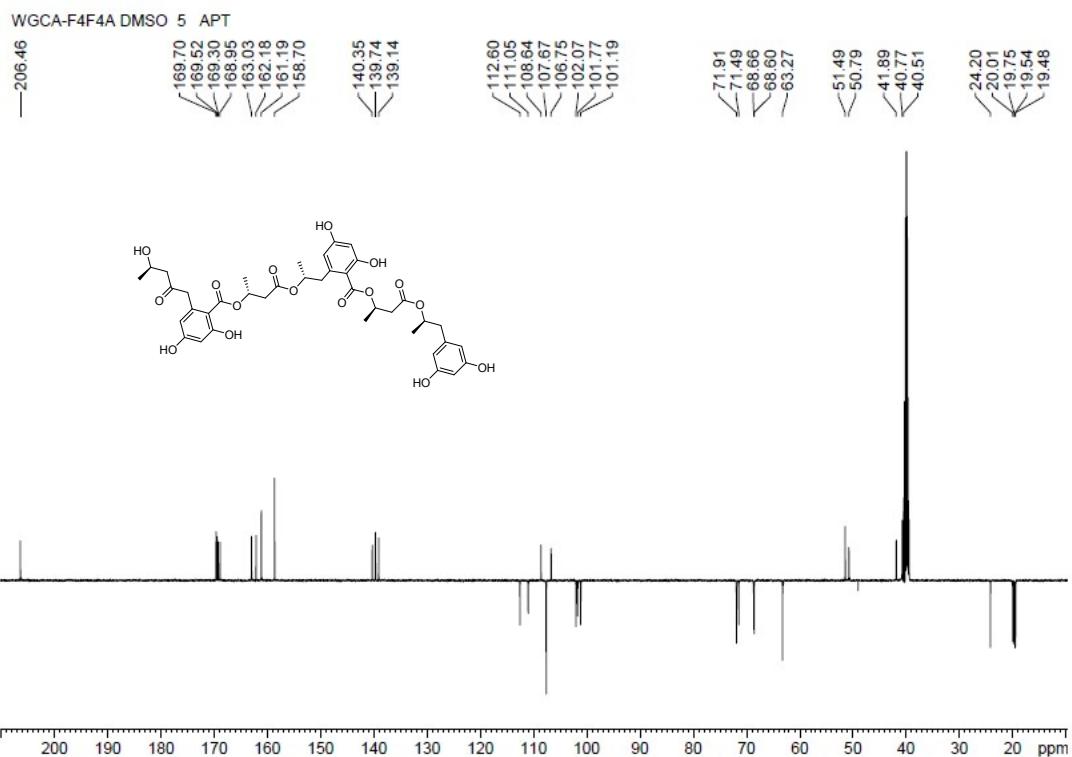


Figure S5-4. APT Spectrum of Compound 5

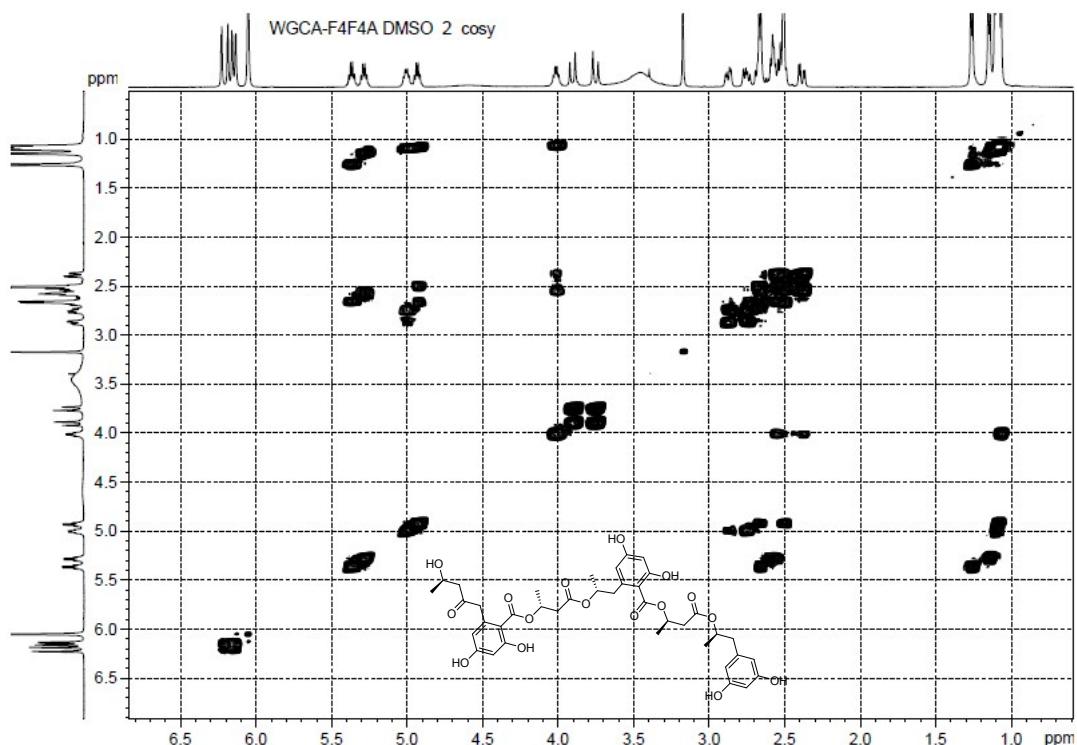


Figure S5-5. COSY Spectrum of Compound 5

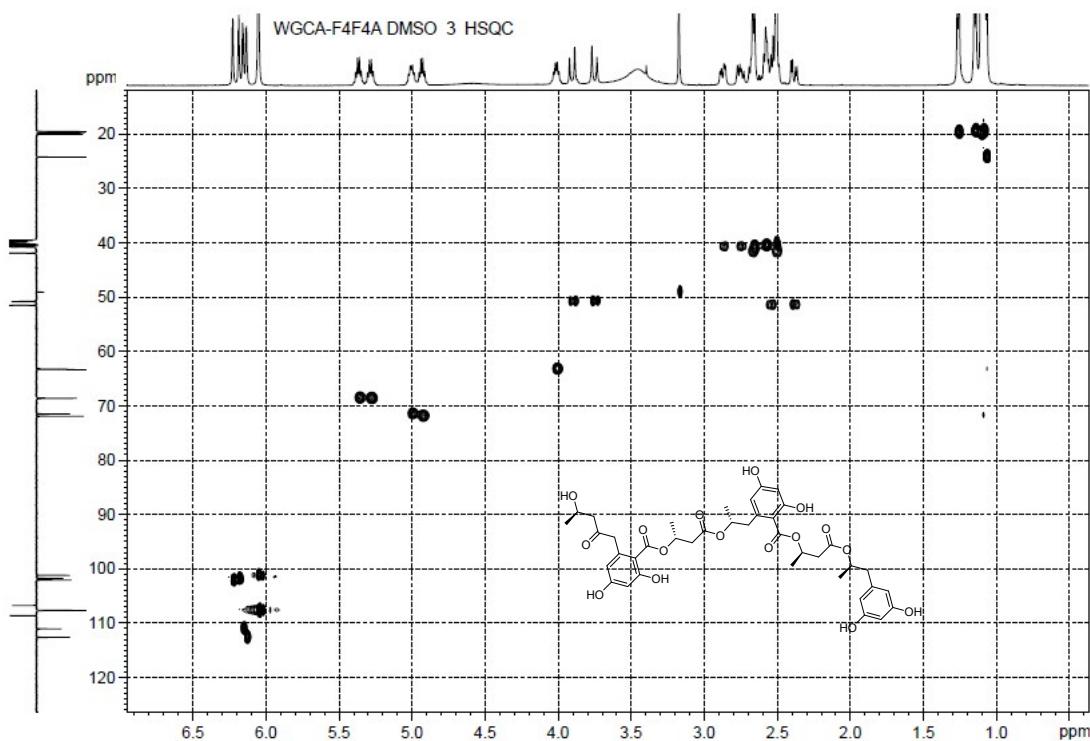


Figure S5-6. HSQC Spectrum of Compound 5

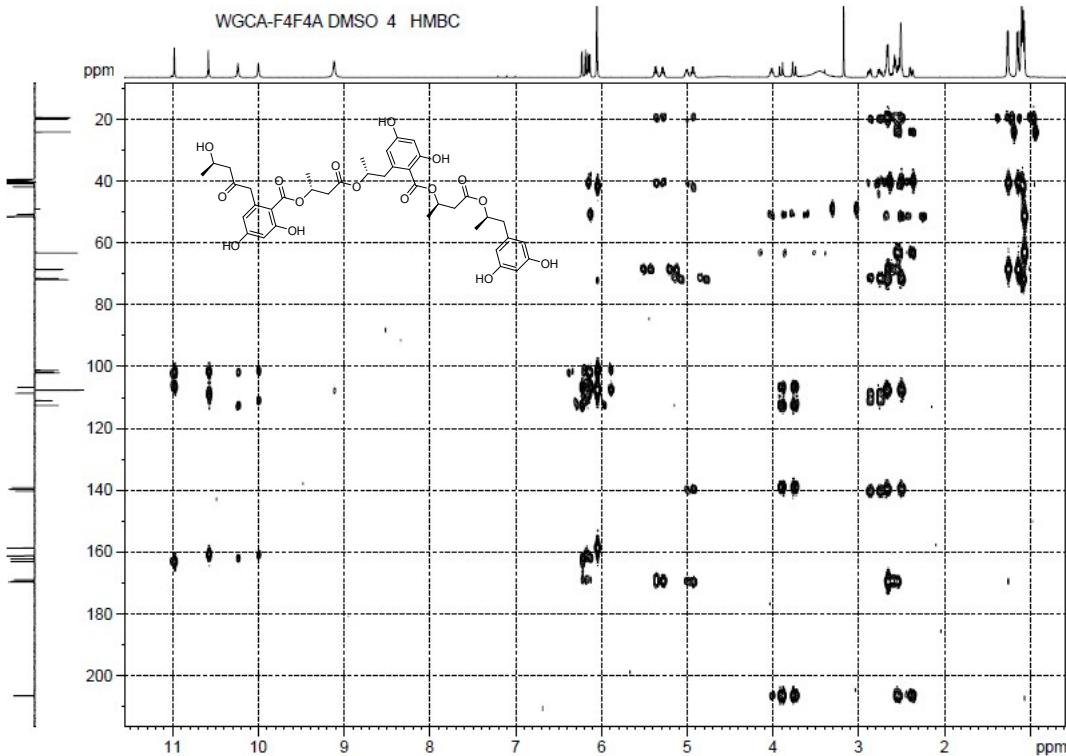


Figure S5-7. HMBC Spectrum of Compound 5

Compound 6



Table 'GenFormulaResults' could not be found in this analysis

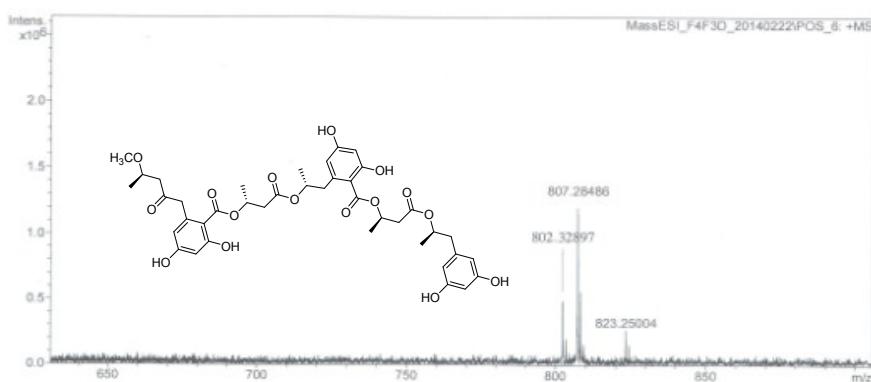


Figure S6-1. HRESIMS Spectrum of Compound 6

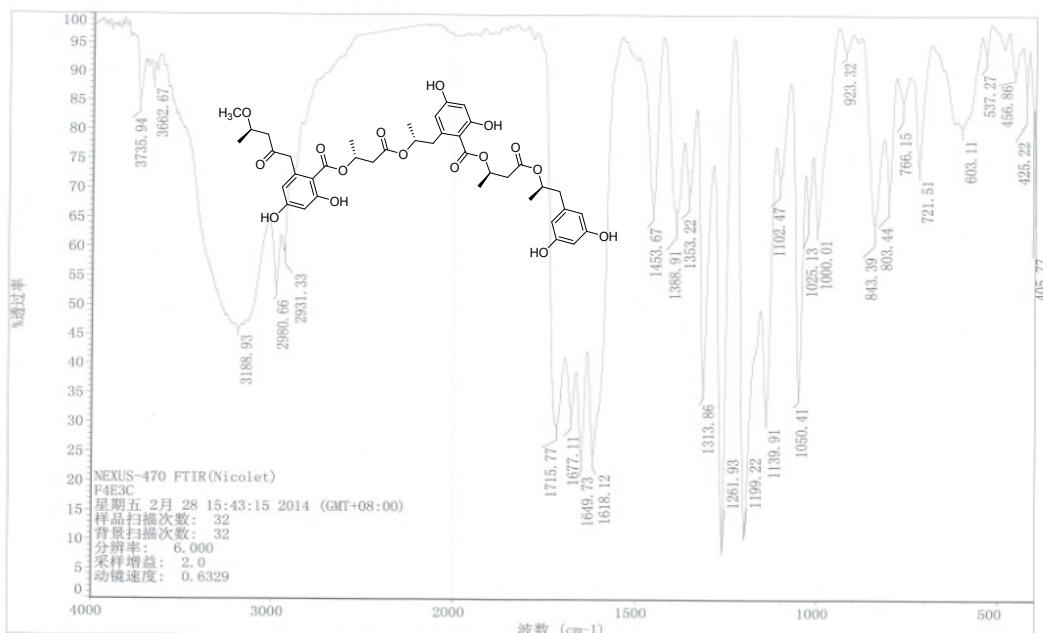


Figure S6-2. IR Spectrum of Compound 6

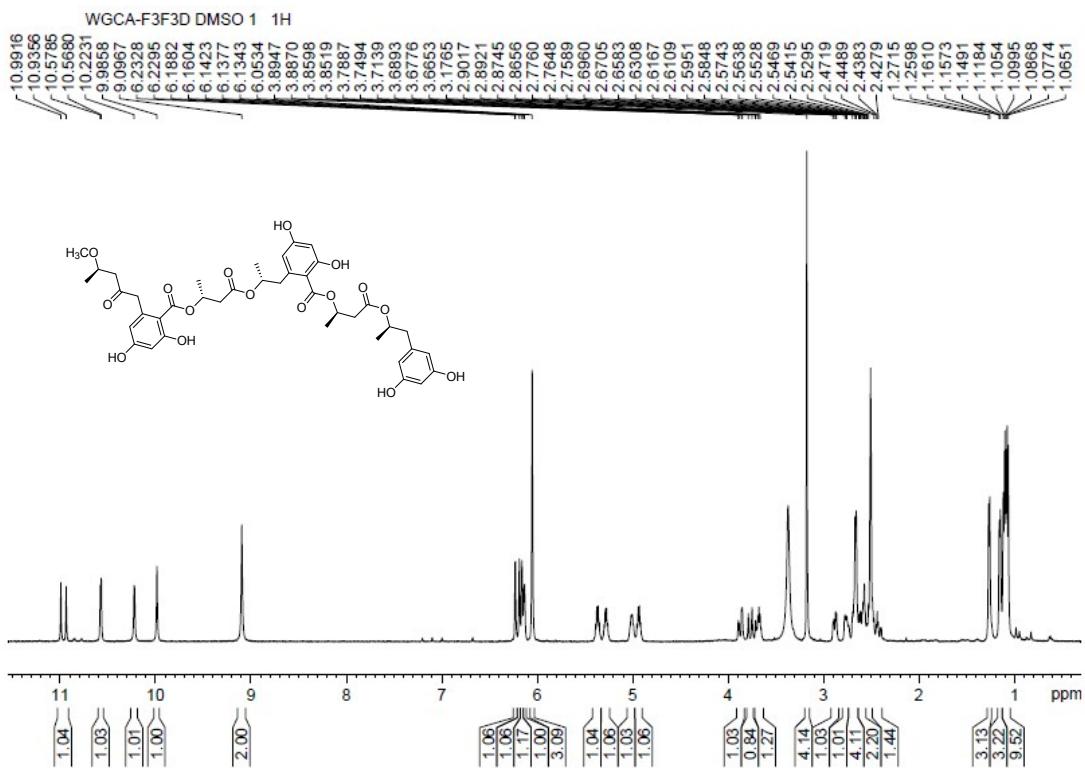


Figure S6-3. ¹H-NMR Spectrum of Compound 6

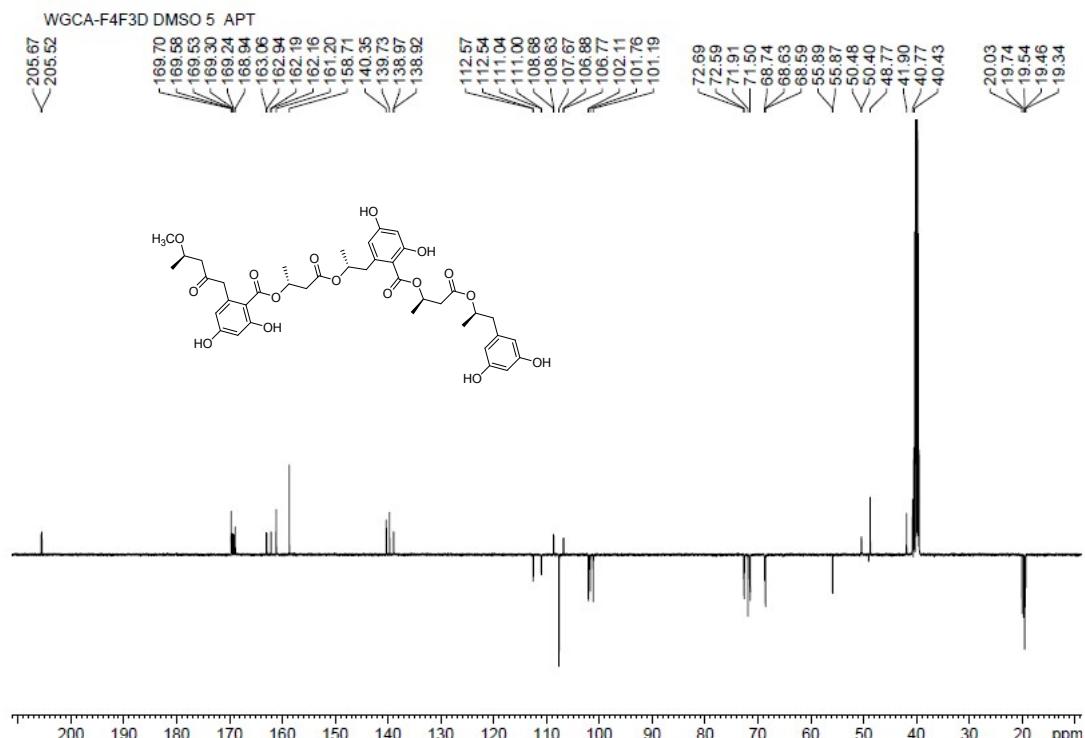


Figure S6-4. APT Spectrum of Compound 6

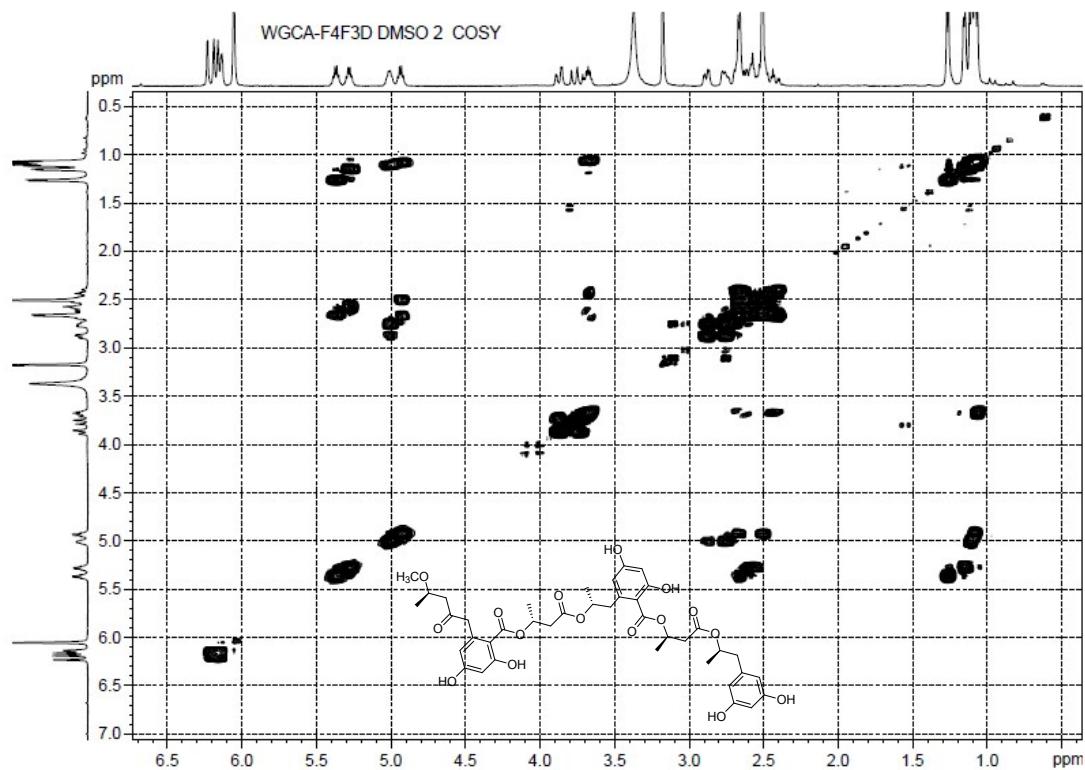


Figure S6-5. COSY Spectrum of Compound 6

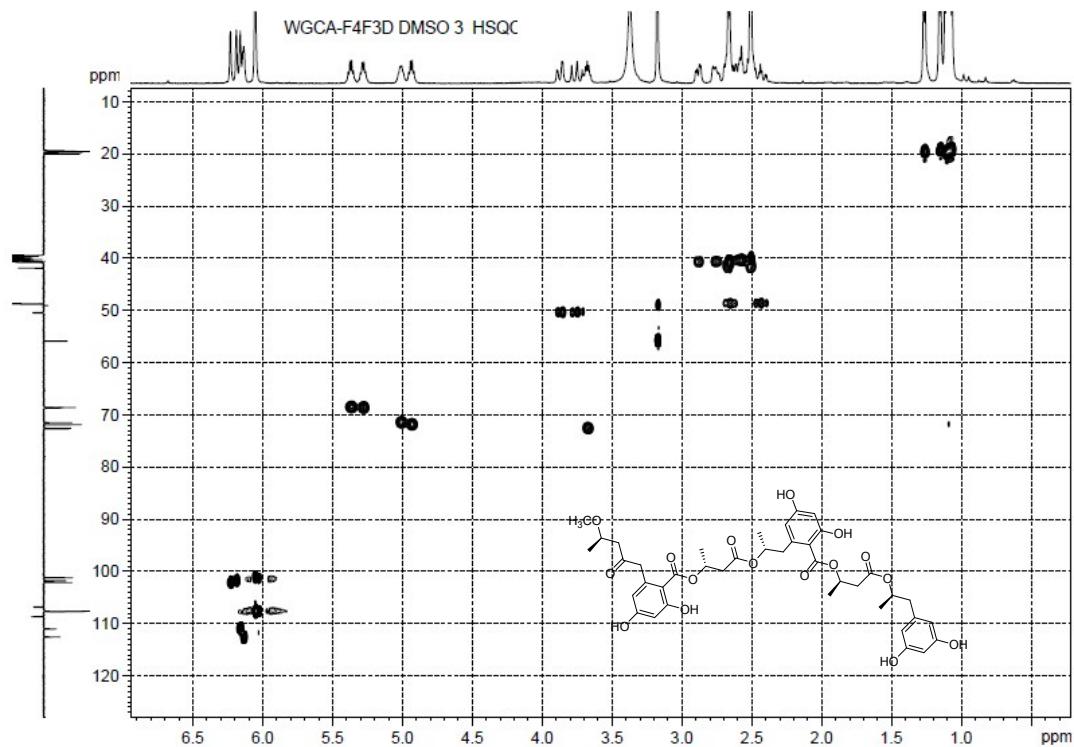


Figure S6-6. HSQC Spectrum of Compound 6

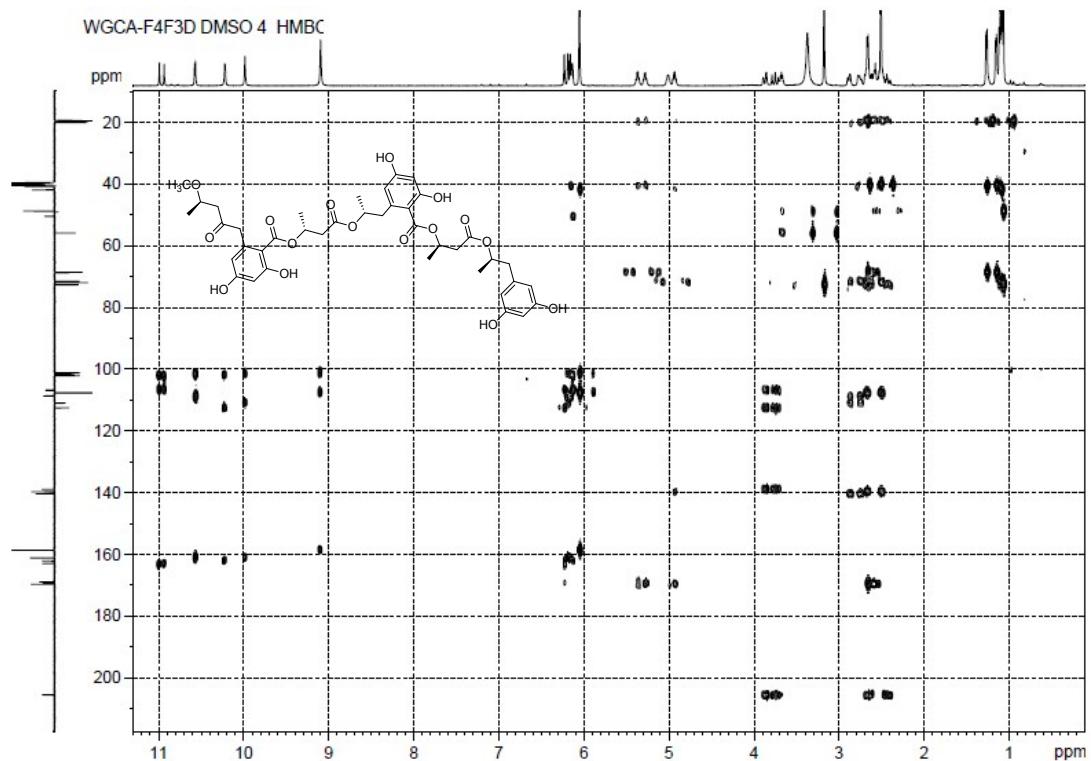


Figure S6-7. HMBC Spectrum of Compound 6

Compound 7

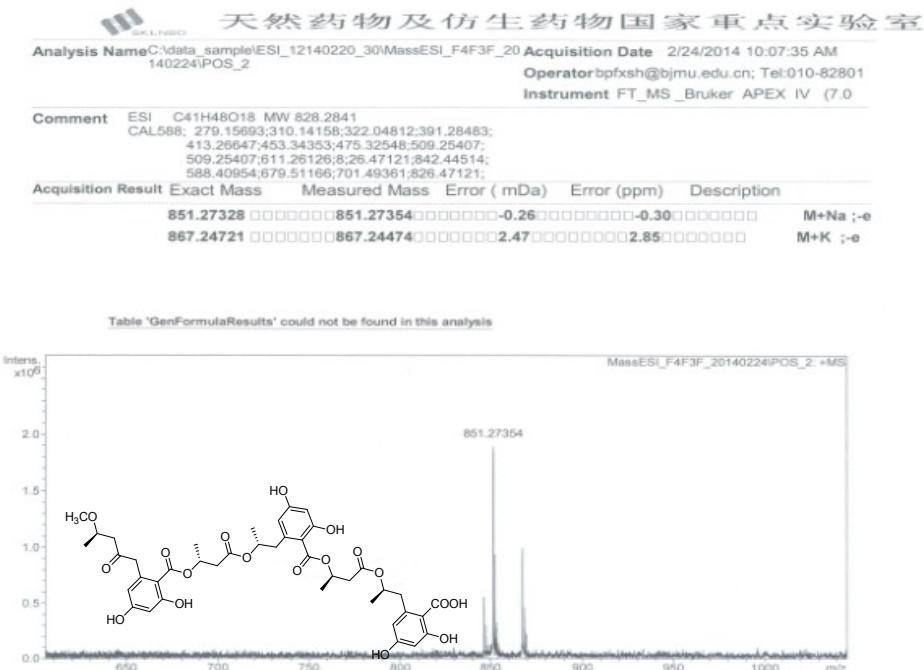


Figure S7-1. HRESIMS Spectrum of Compound 7

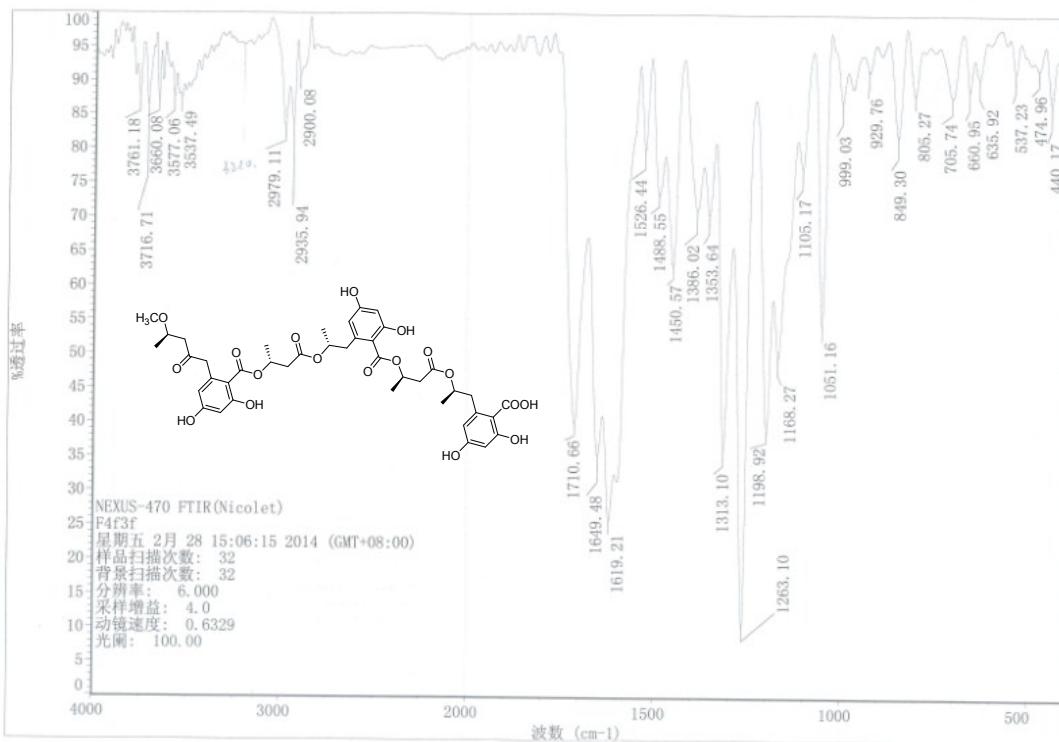


Figure S7-2. IR Spectrum of Compound 7

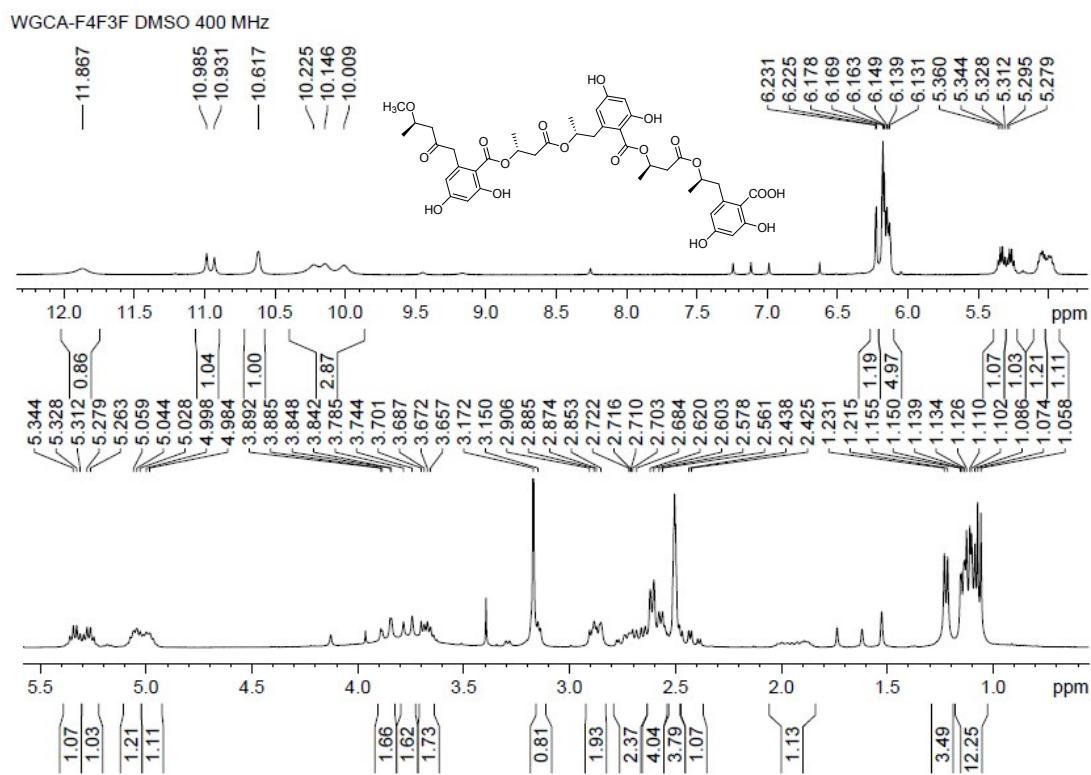


Figure S7-3. ¹H-NMR Spectrum of Compound 7

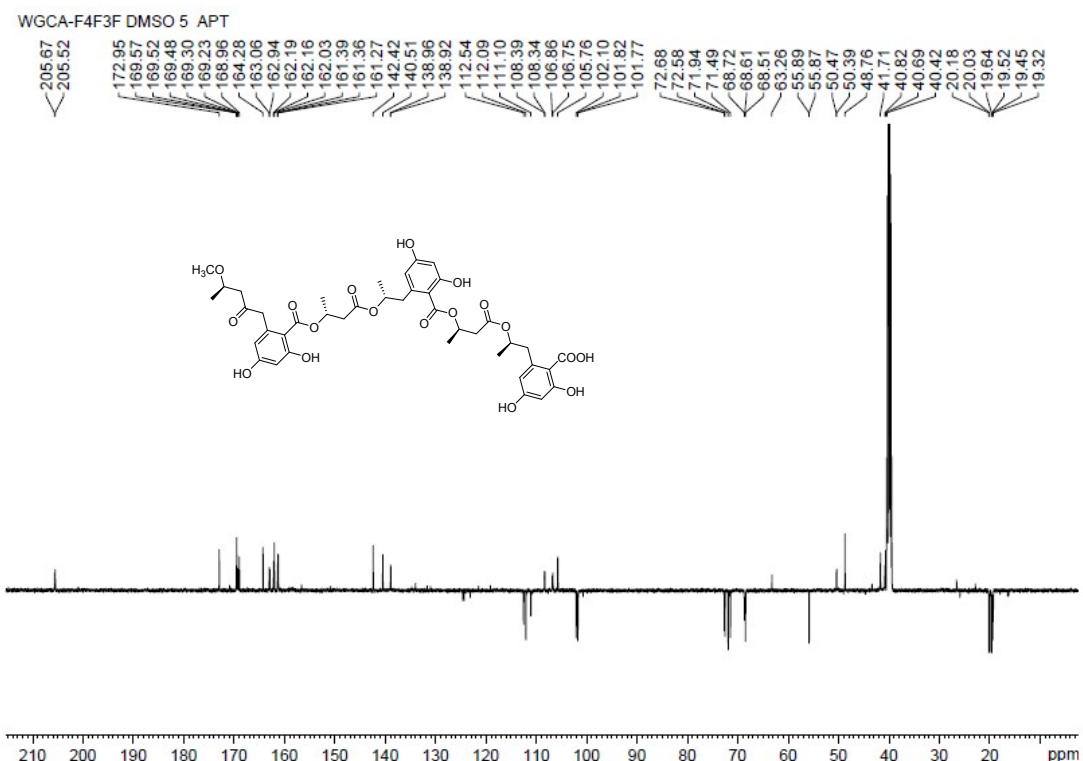


Figure S7-4. APT Spectrum of Compound 7

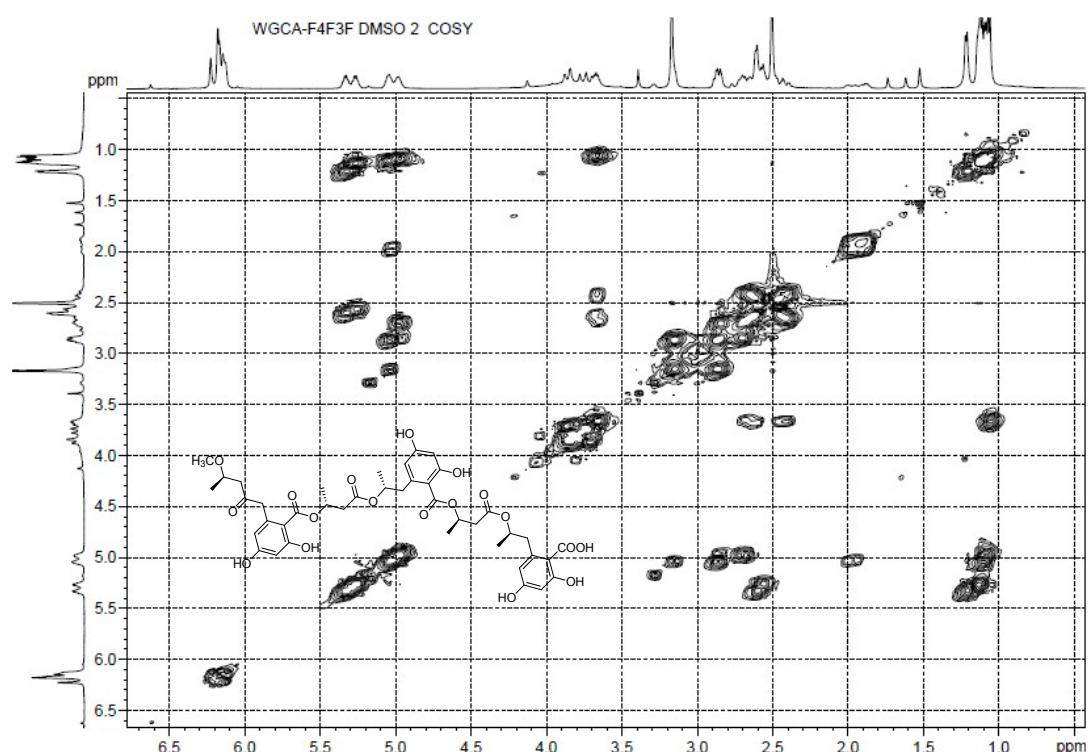


Figure S7-5. COSY Spectrum of Compound 7

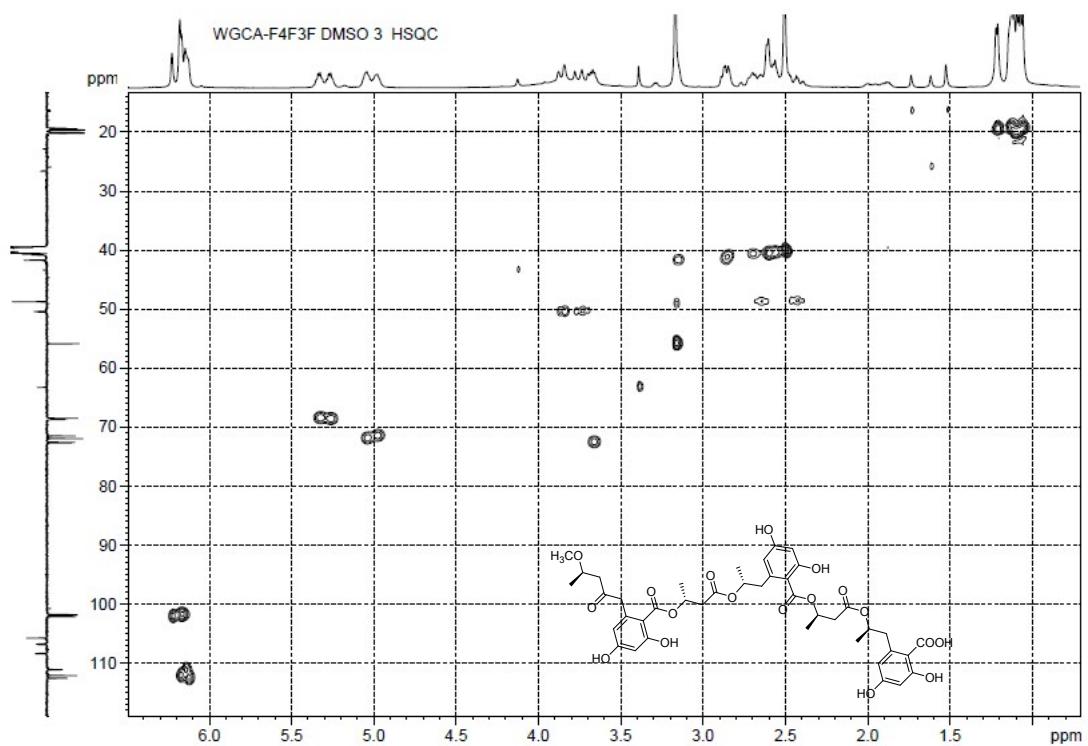


Figure S7-6. HSQC Spectrum of Compound 7

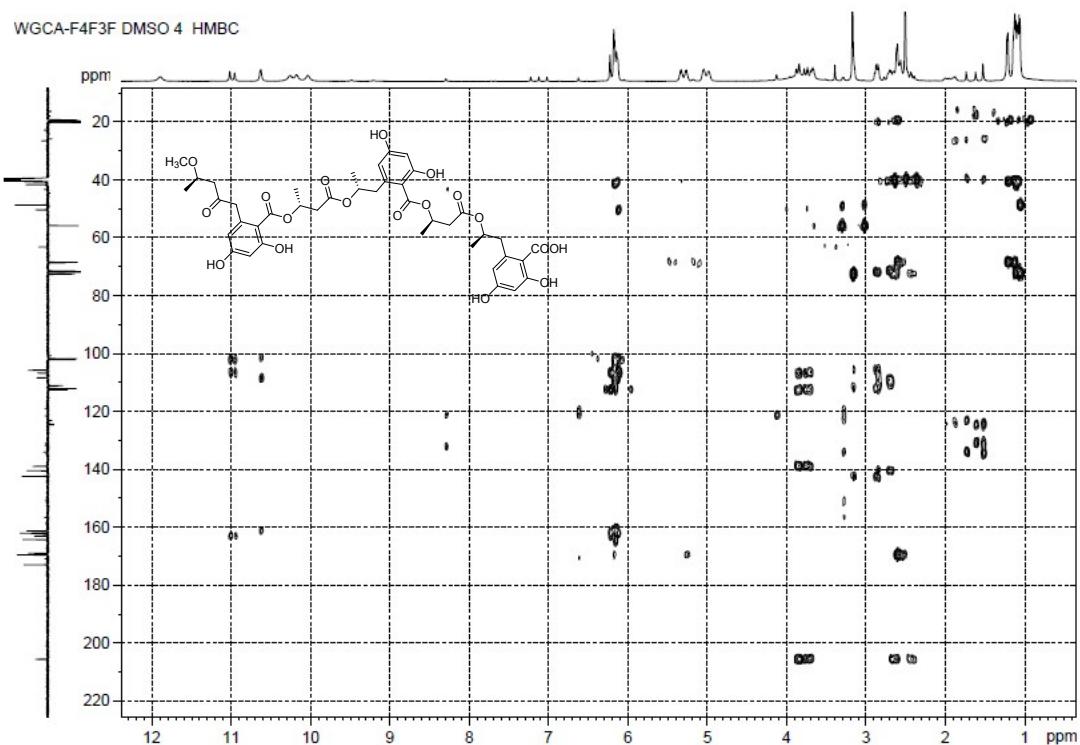


Figure S7-7. HMBC Spectrum of Compound 7

Compound 8

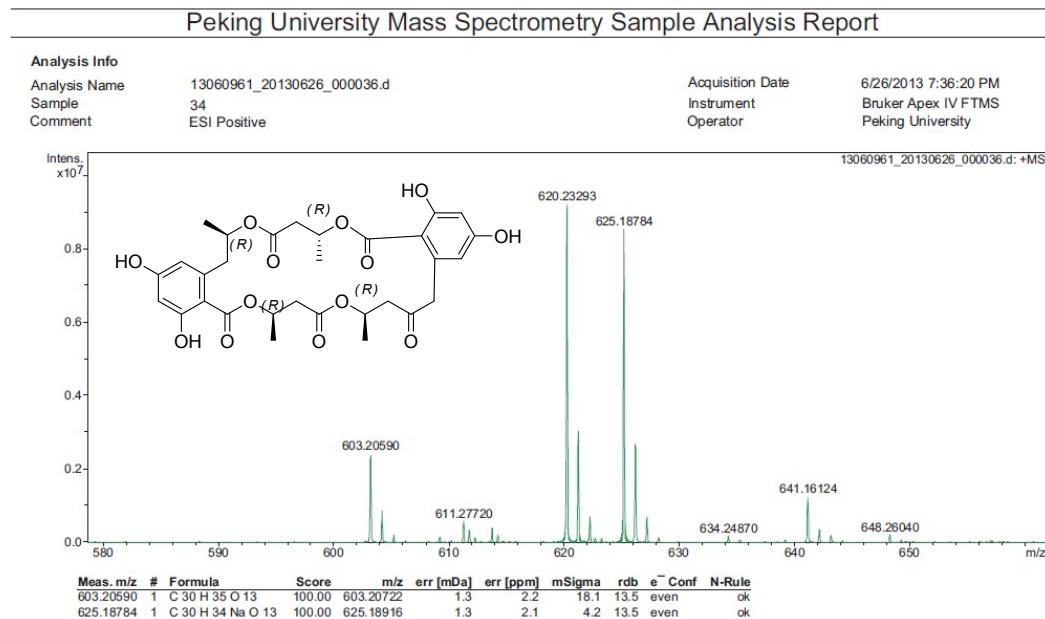


Figure S8-1. HRESIMS Spectrum of Compound 8

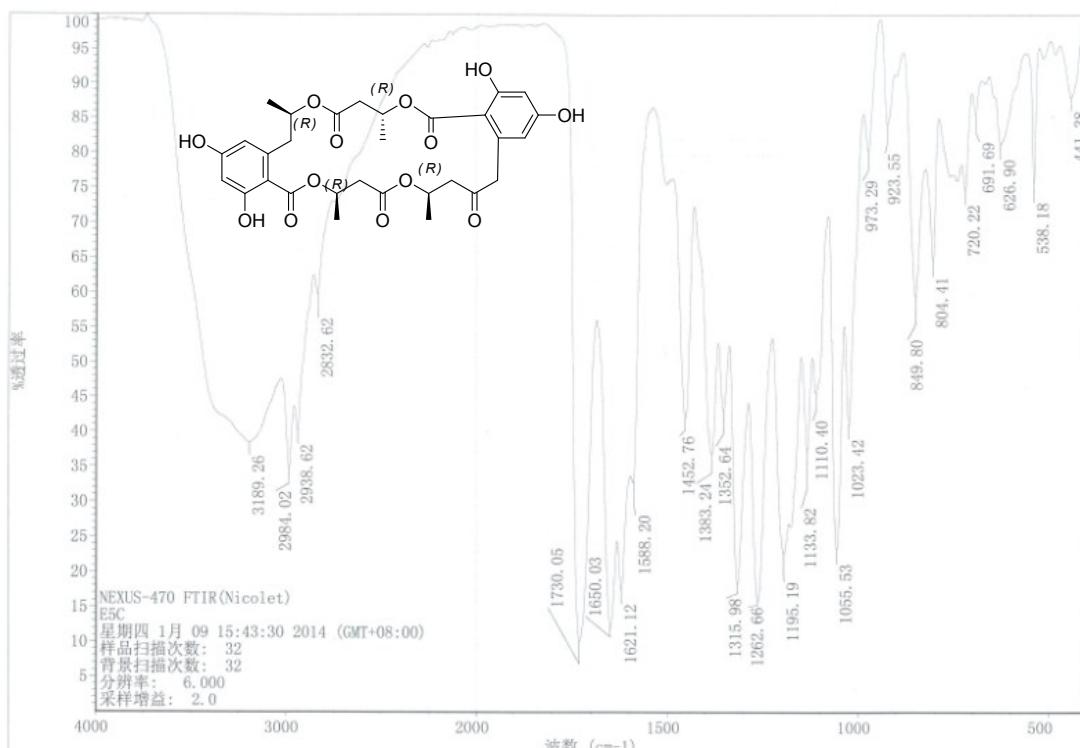


Figure S8-2. IR Spectrum of Compound 8

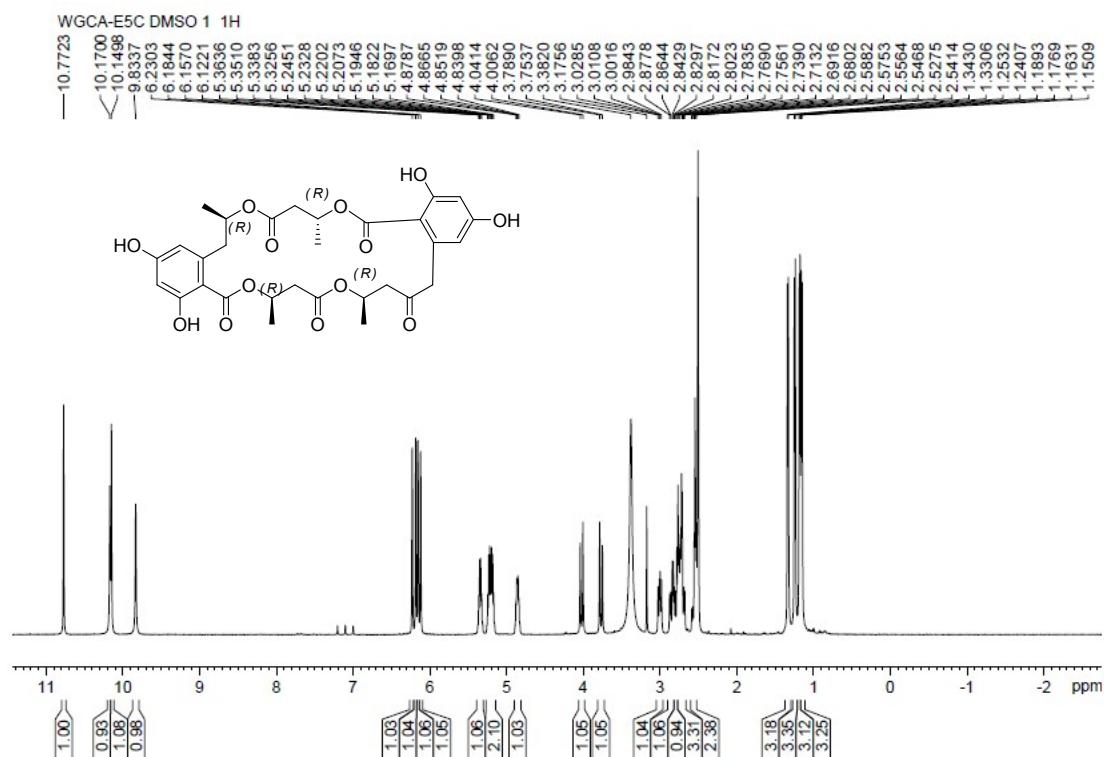


Figure S8-3. ^1H -NMR Spectrum of Compound 8

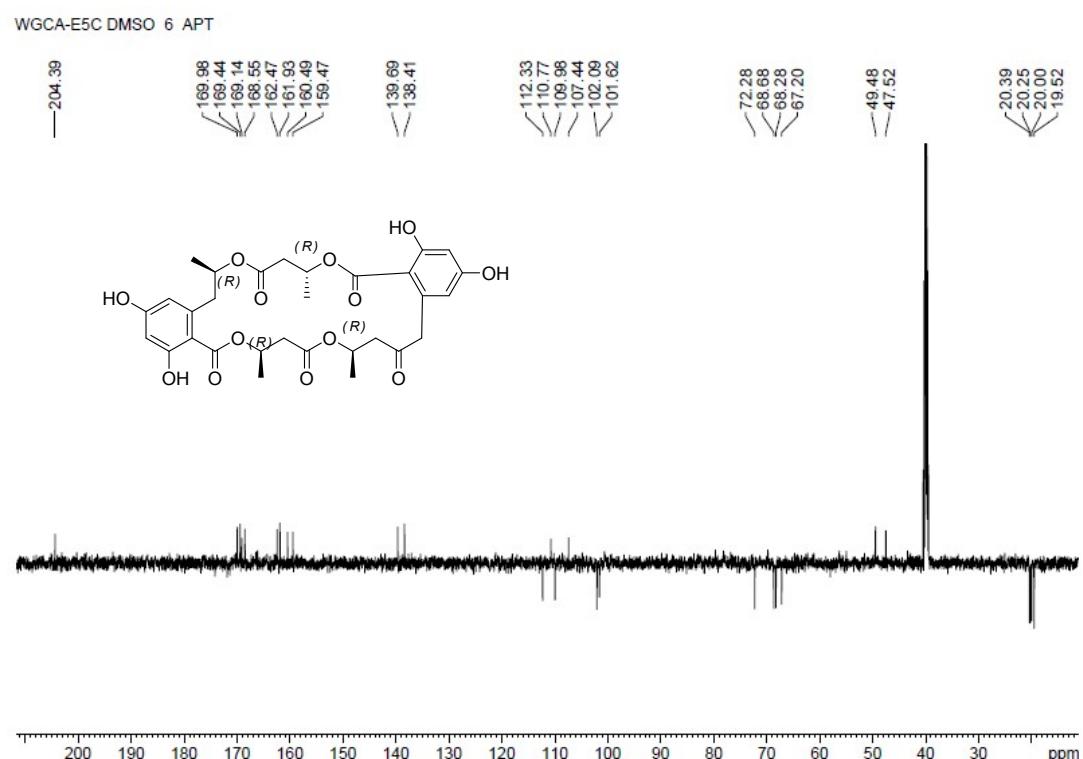


Figure S8-4. APT Spectrum of Compound 8

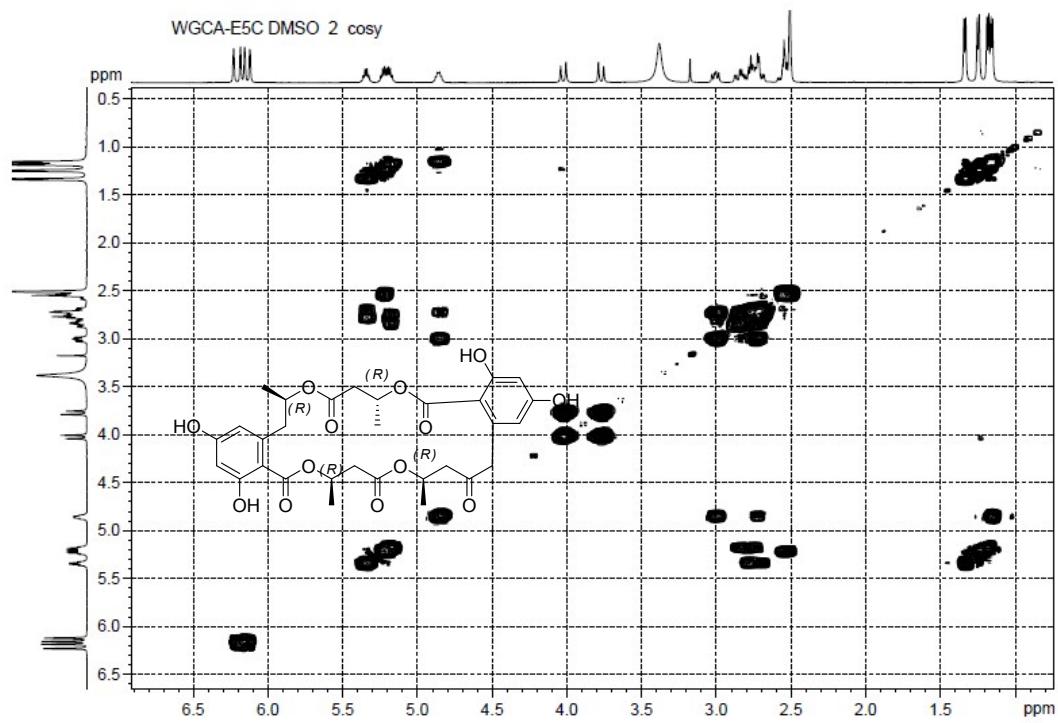


Figure S8-5. COSY Spectrum of Compound 8

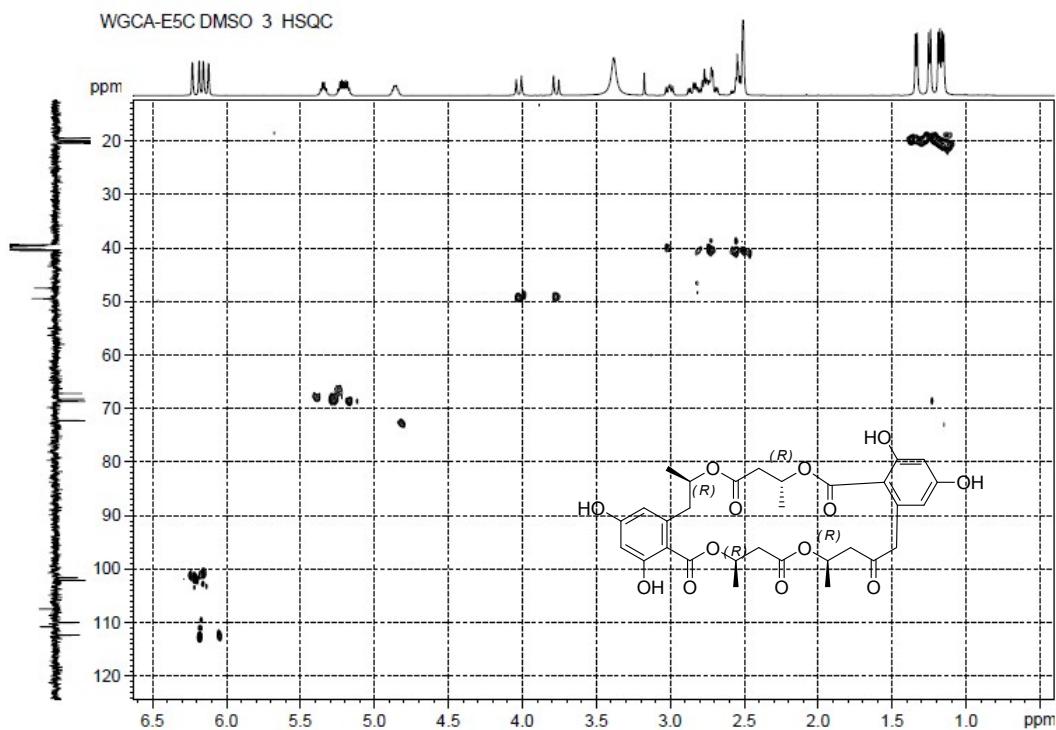


Figure S8-6. HSQC Spectrum of Compound 8

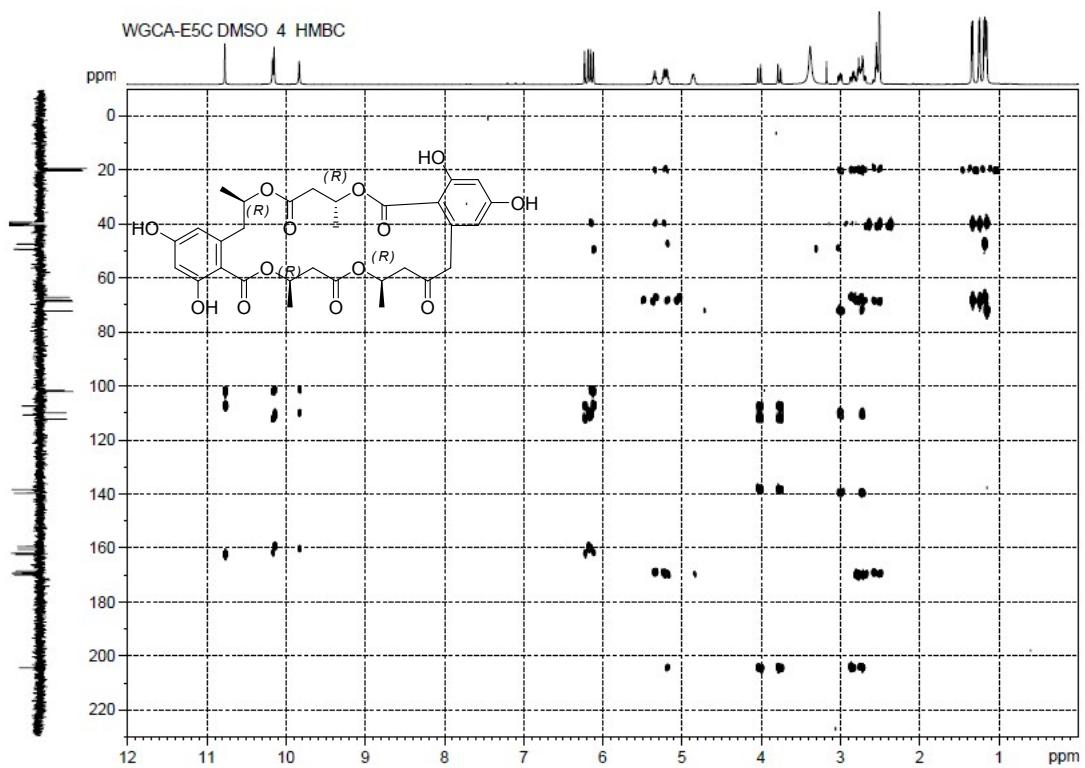


Figure S8-7. HMBC Spectrum of Compound 8

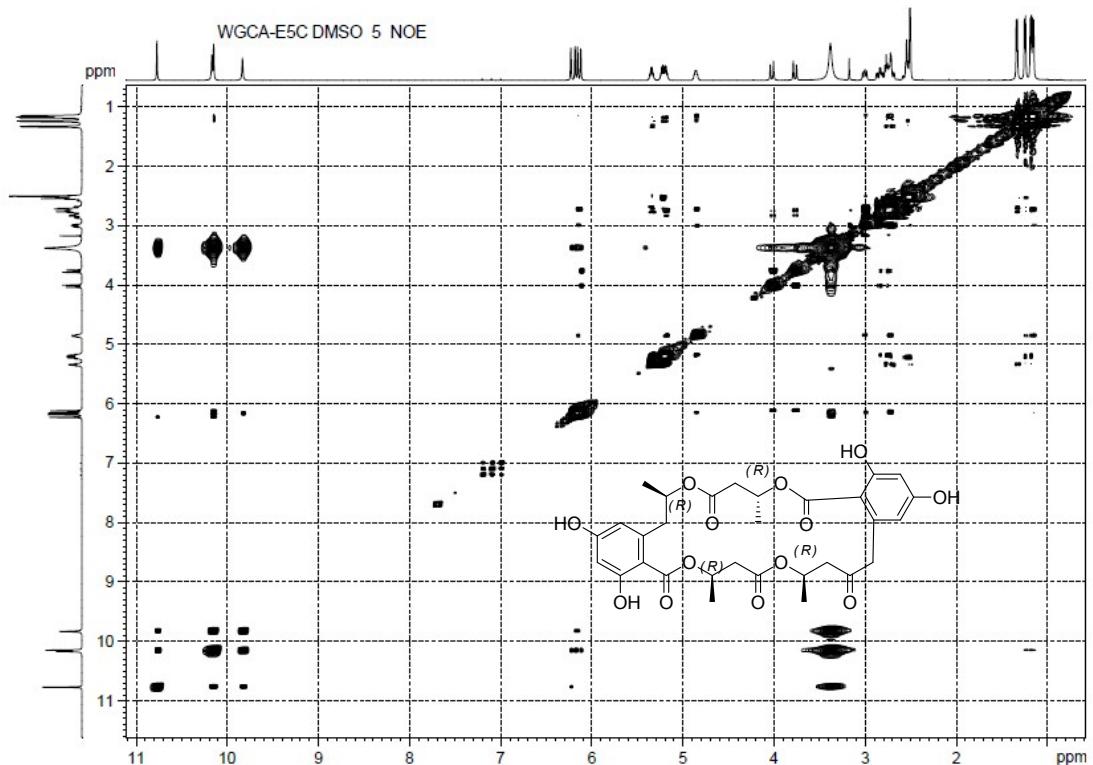


Figure S8-8. NOESY Spectrum of Compound 8

Compound 9

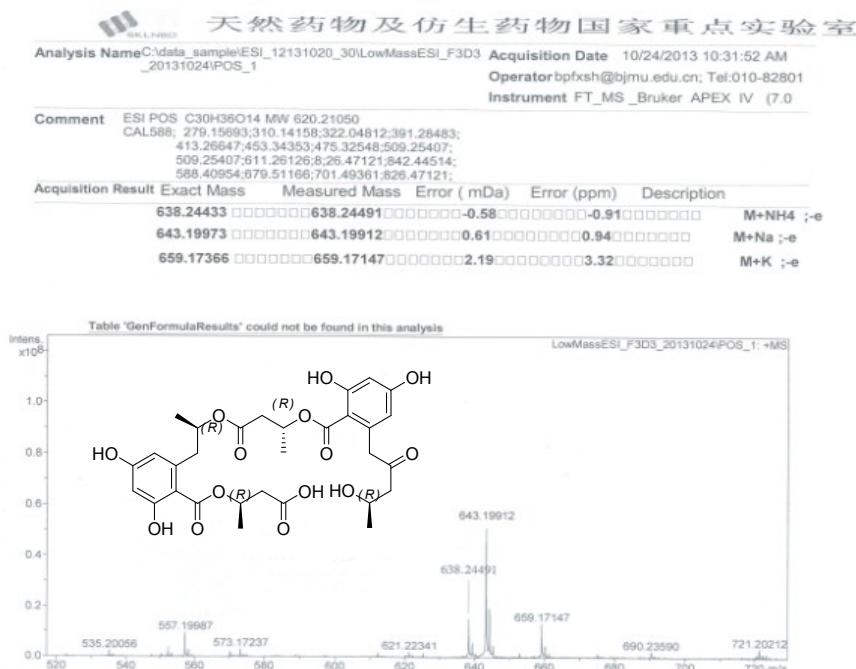


Figure S9-1. HRESIMS Spectrum of Compound 9

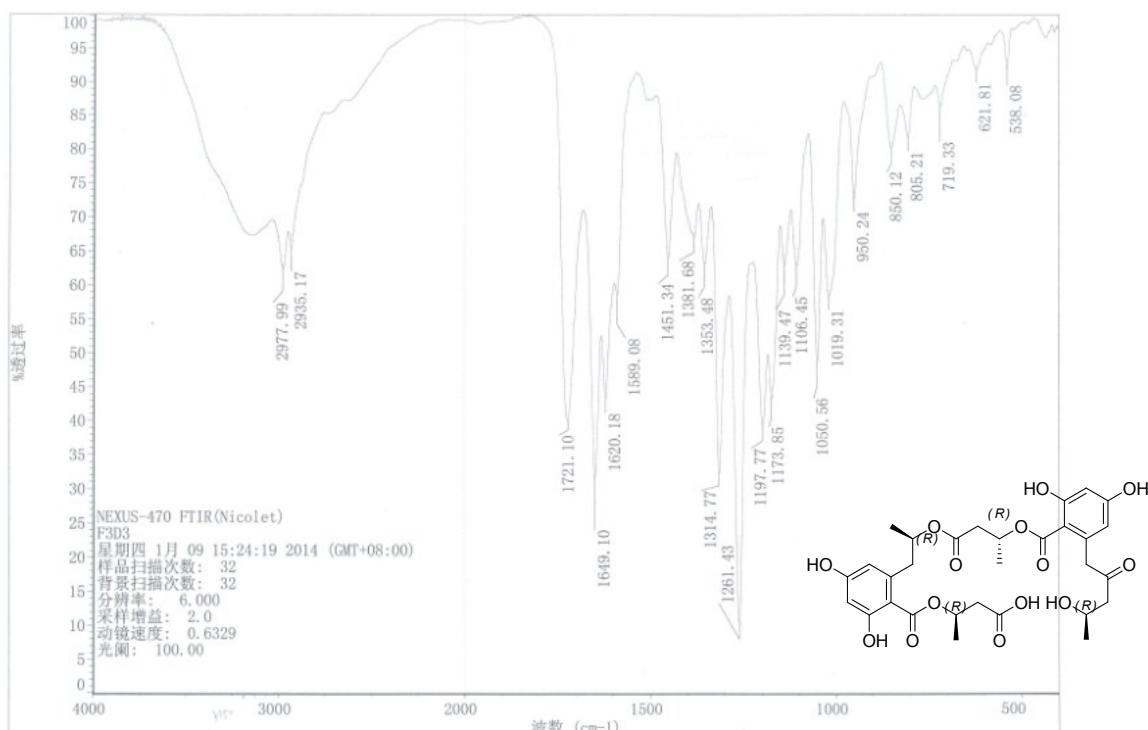


Figure S9-2. IR Spectrum of Compound 9

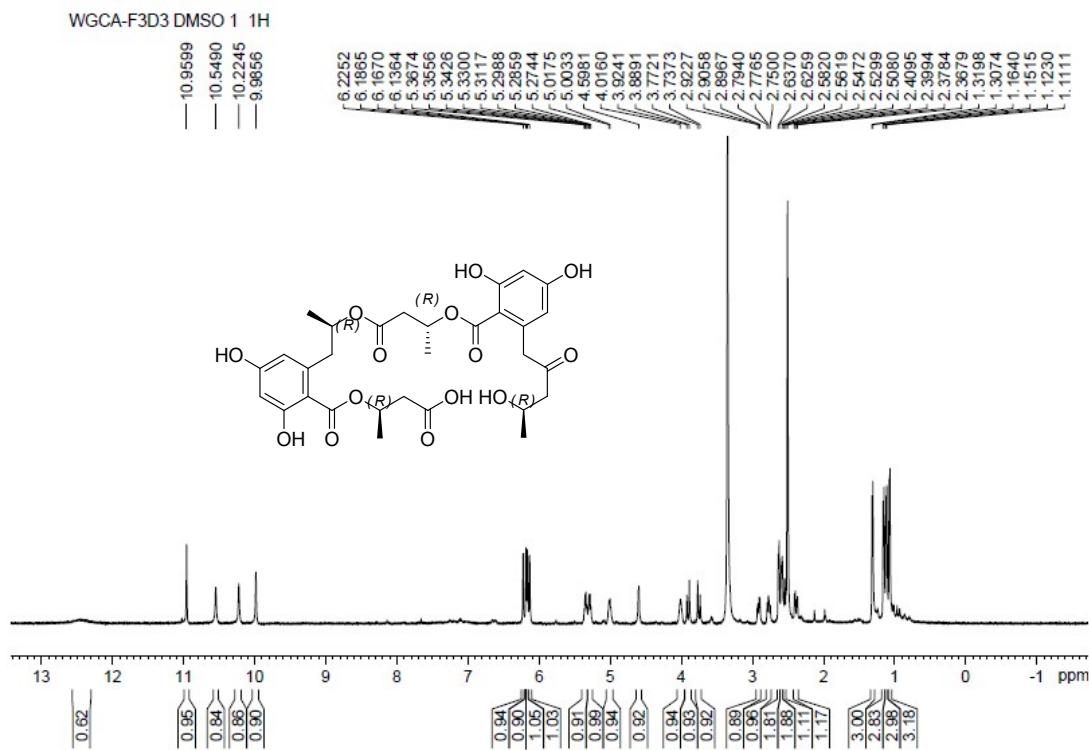


Figure S9-3. ¹H-NMR Spectrum of Compound 9

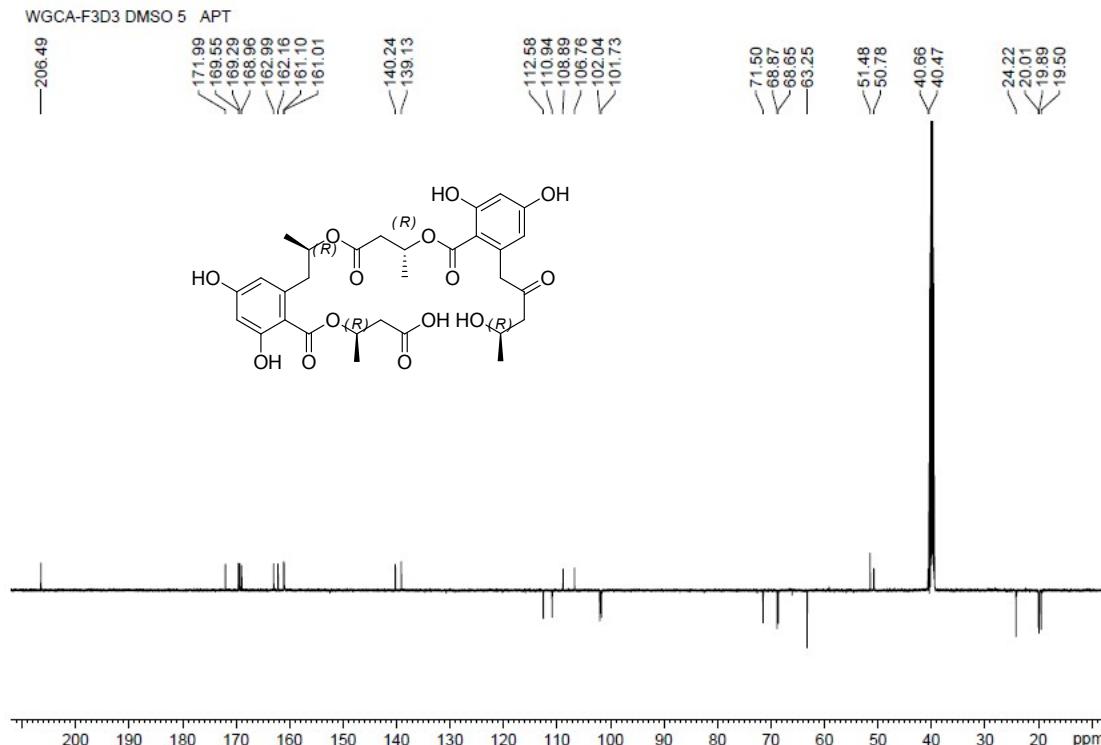


Figure S9-4. APT Spectrum of Compound 9

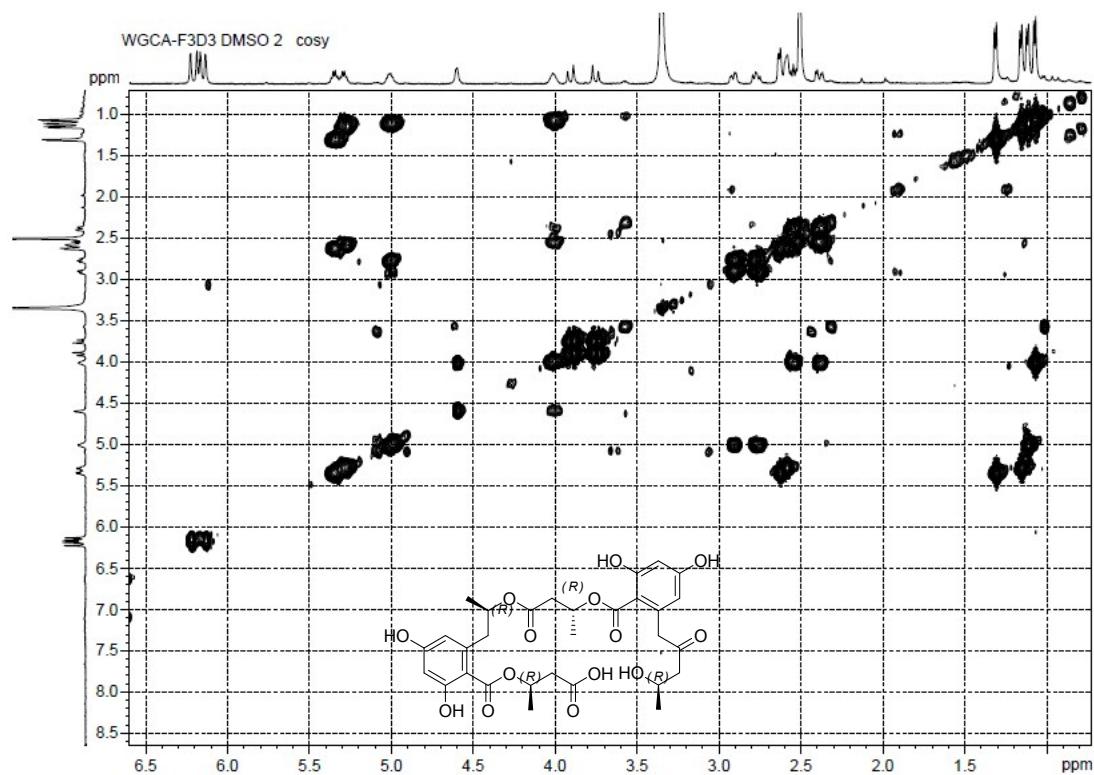


Figure S9-5. COSY Spectrum of Compound 9

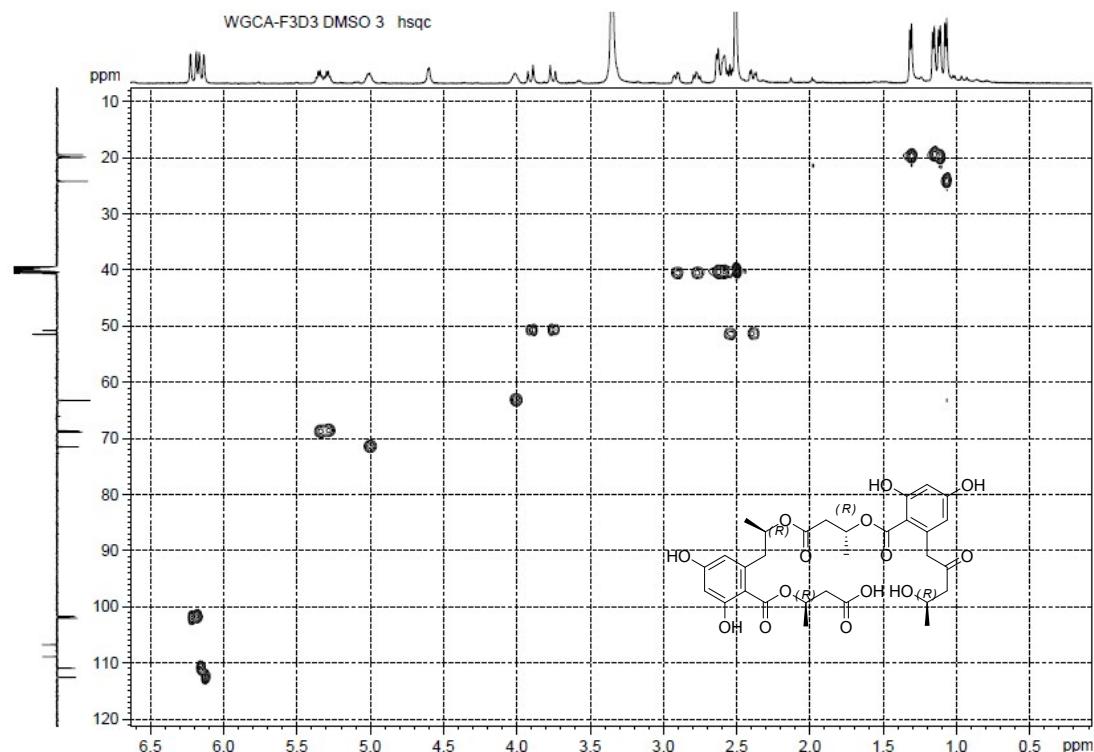


Figure S9-6. HSQC Spectrum of Compound 9

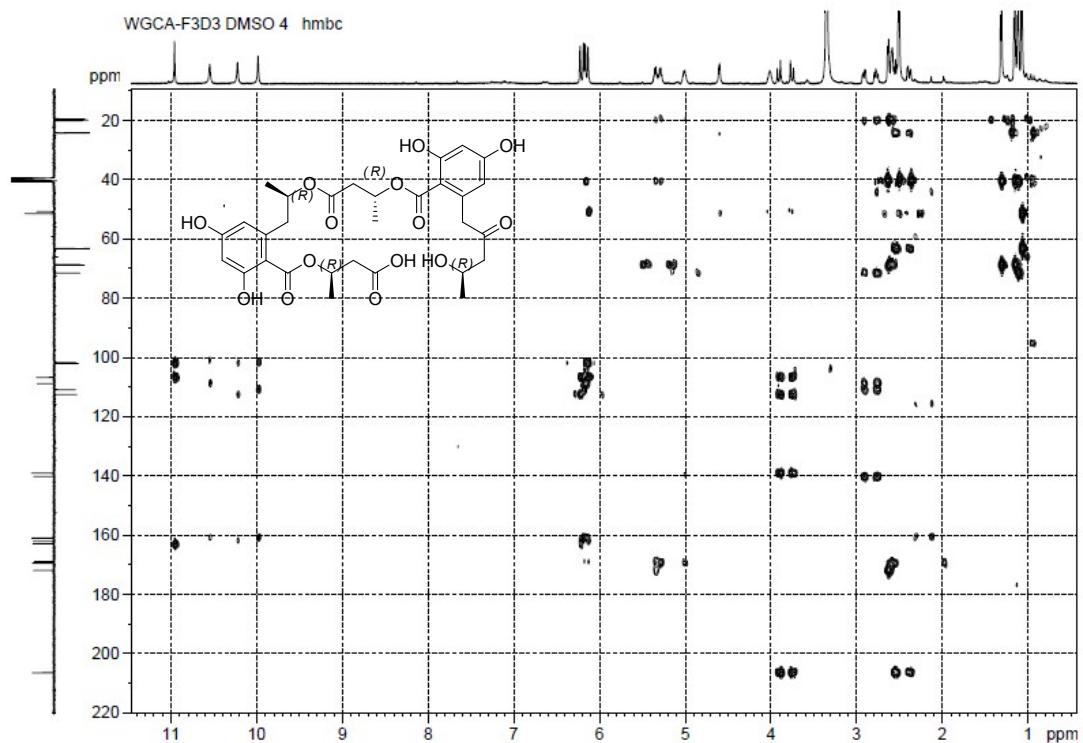


Figure S9-7. HMBC Spectrum of Compound 9

Compound 10

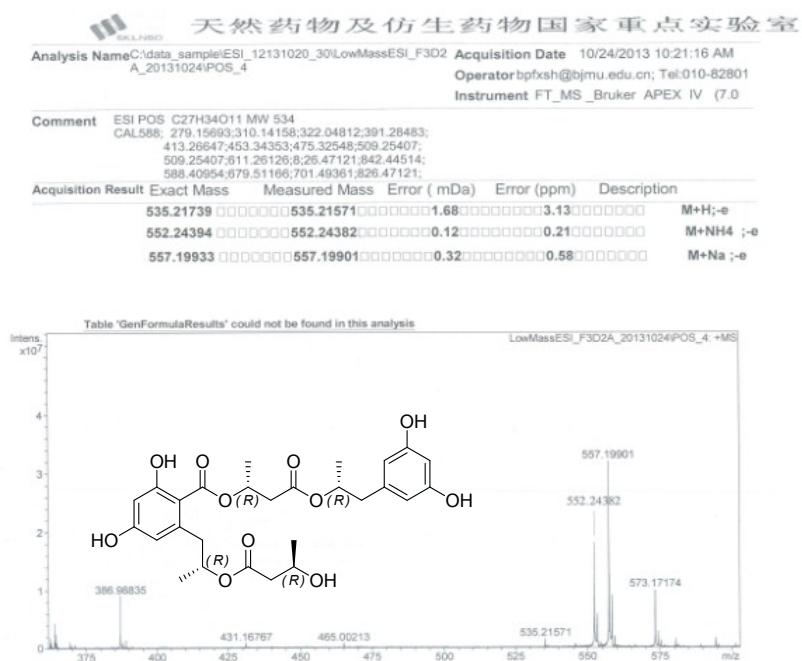


Figure S10-1. HRESIMS Spectrum of Compound 10

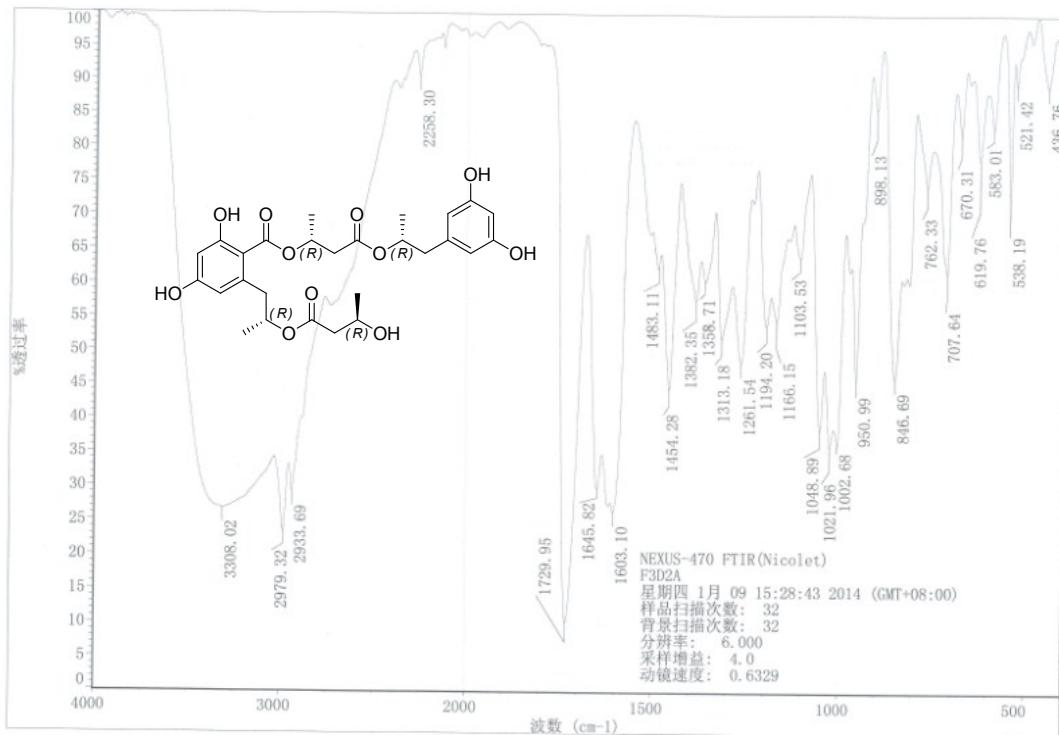


Figure S10-2. IR Spectrum of Compound 10

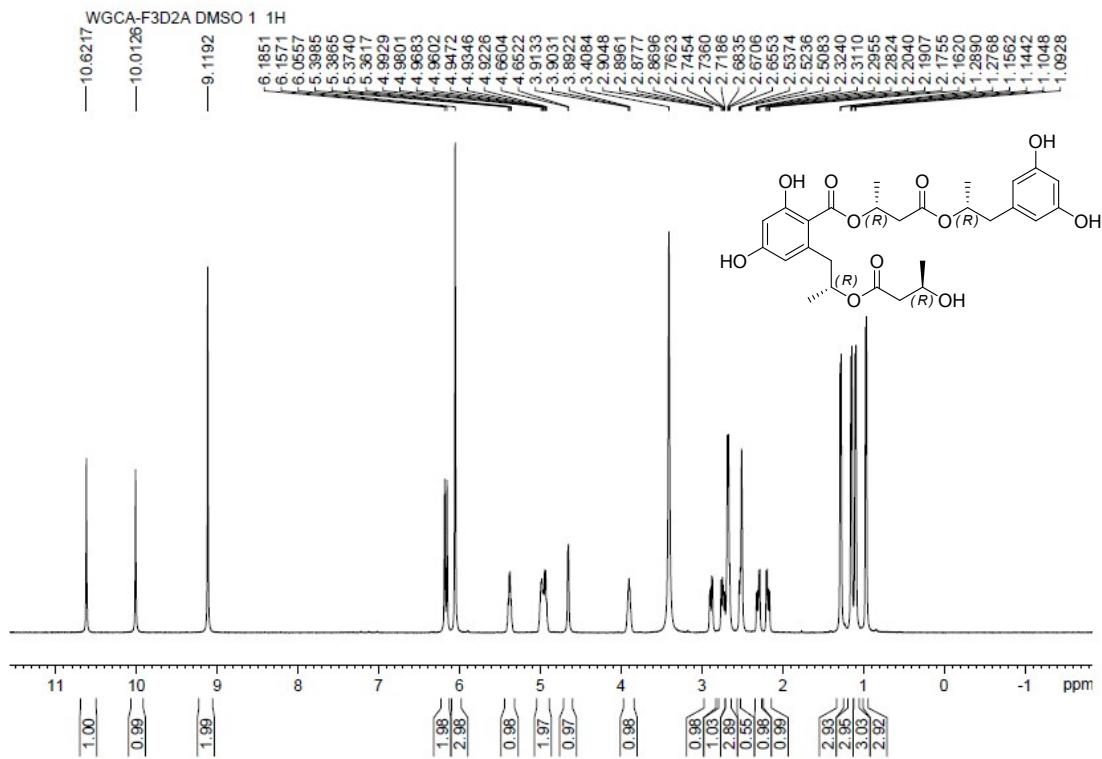


Figure S10-3. ¹H-NMR Spectrum of Compound 10

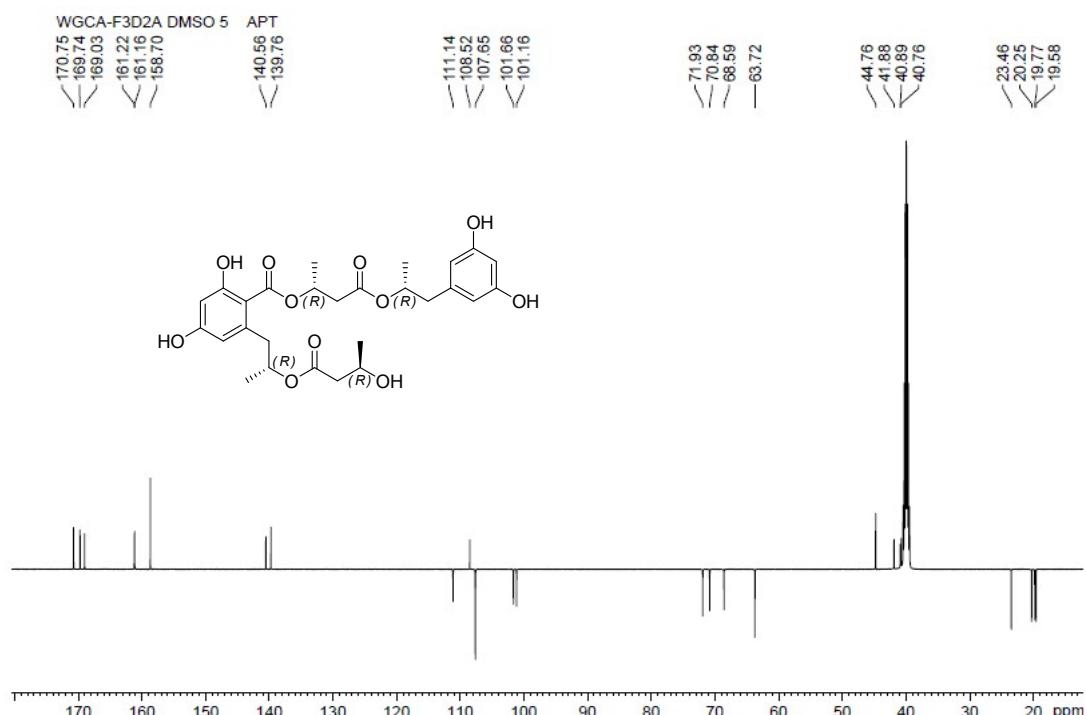


Figure S10-4. APT Spectrum of Compound 10

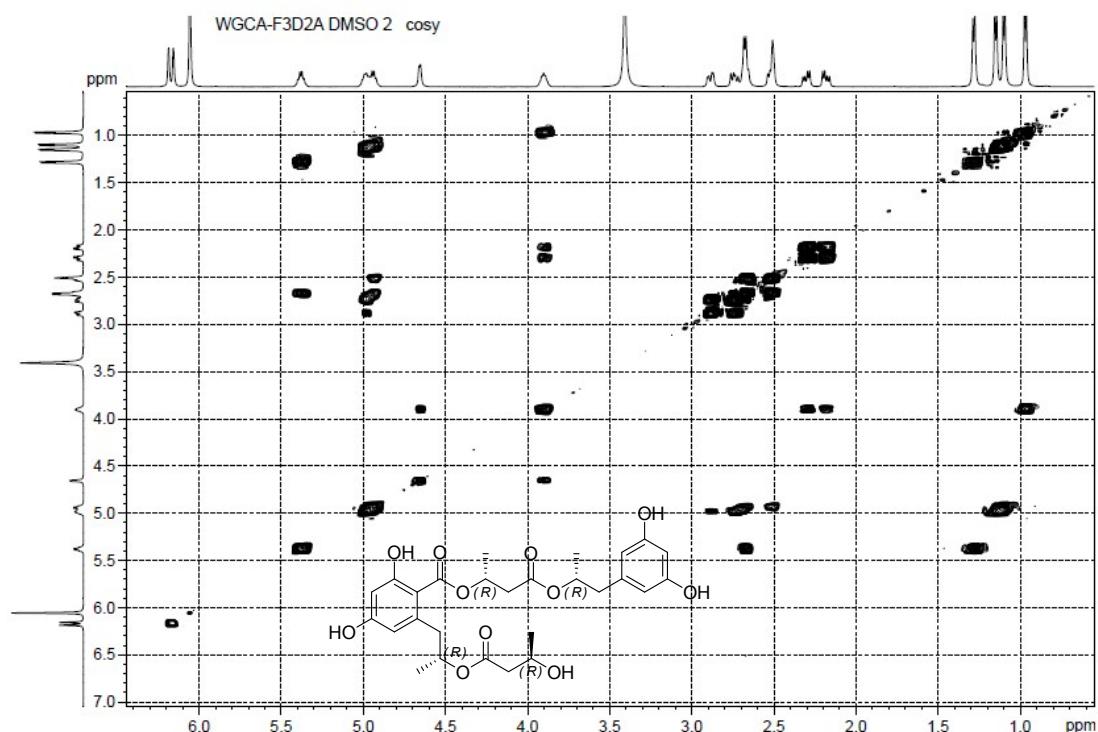


Figure S10-5. COSY Spectrum of Compound 10

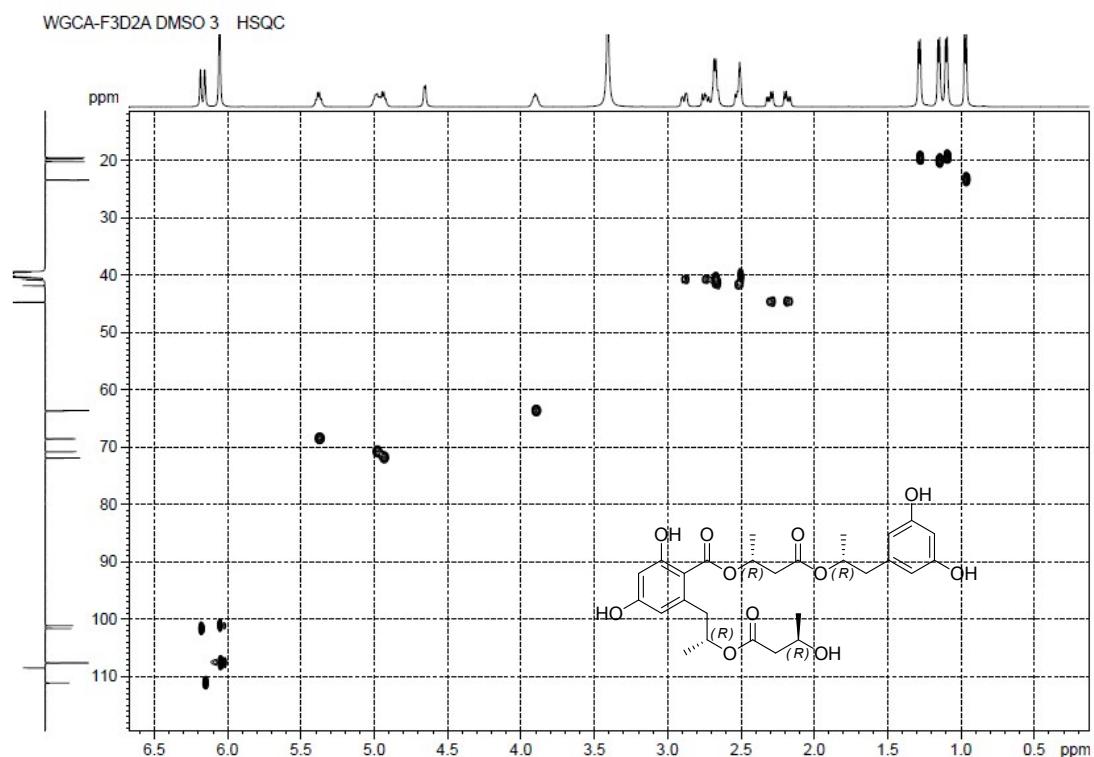


Figure S10-6. HSQC Spectrum of Compound 10

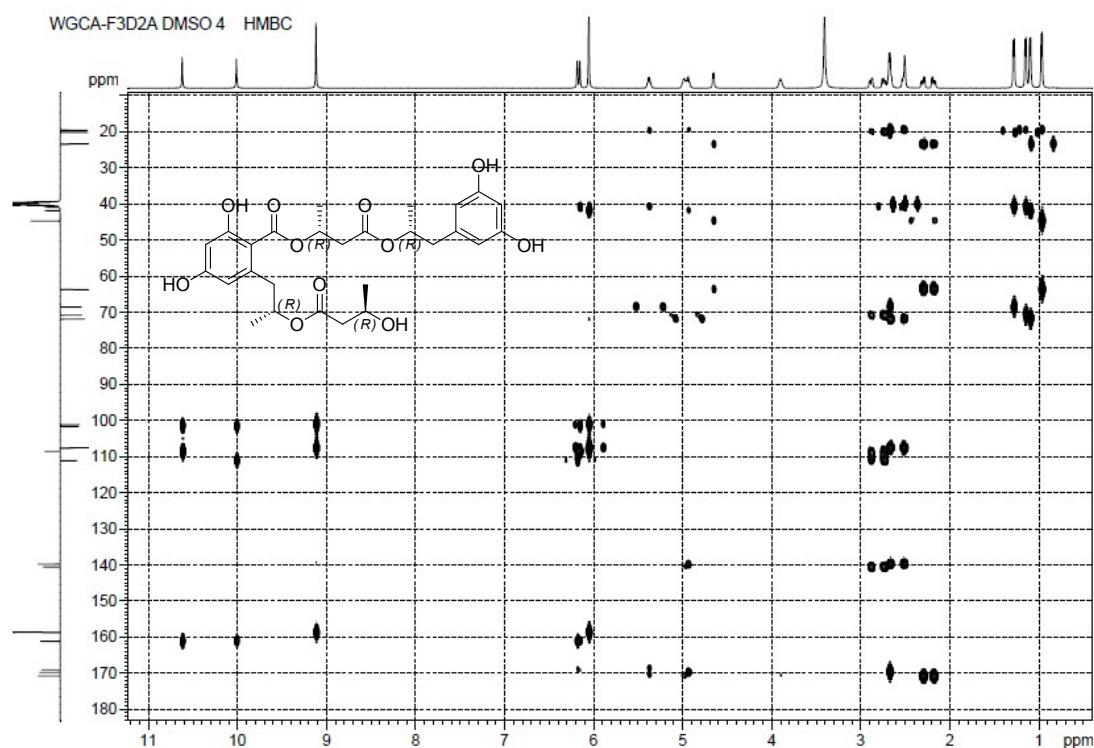


Figure S10-7. HMBC Spectrum of Compound 10

Compound 11

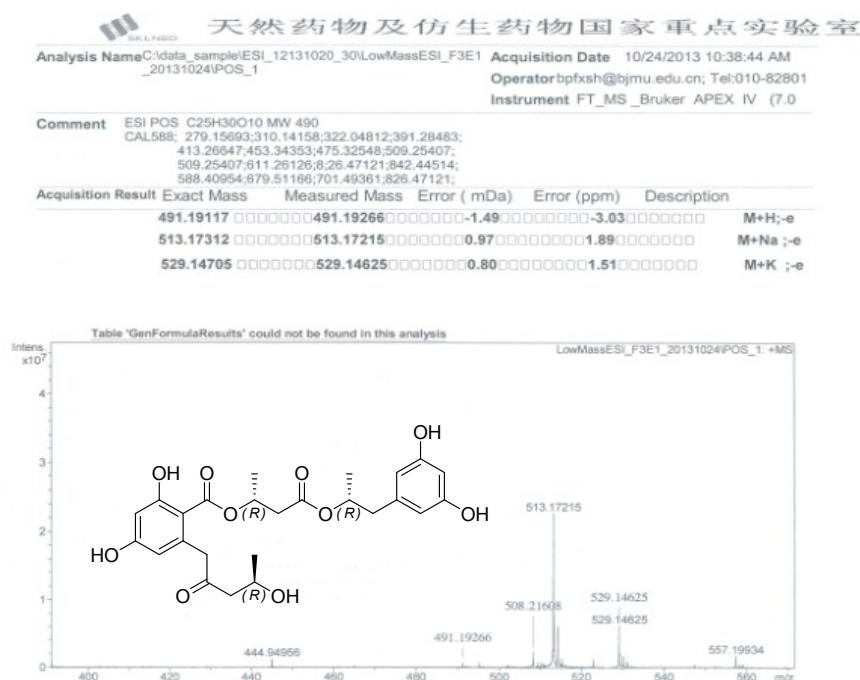


Figure S11-1. HRESIMS Spectrum of Compound 11

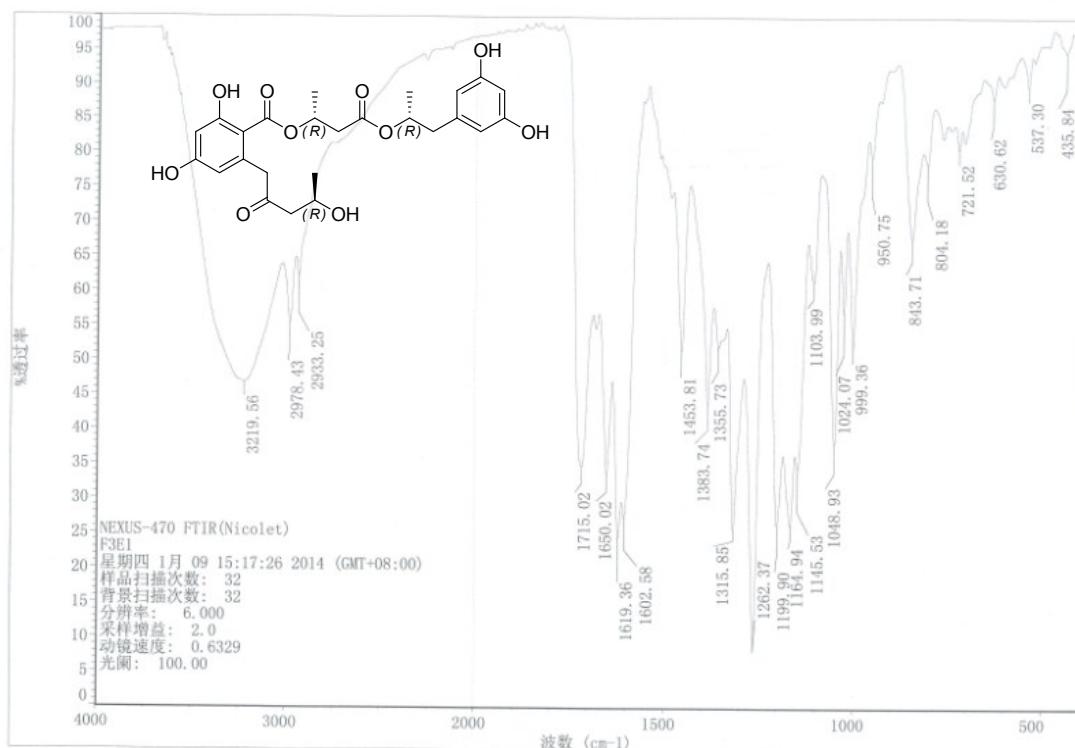


Figure S11-2. IR Spectrum of Compound 11

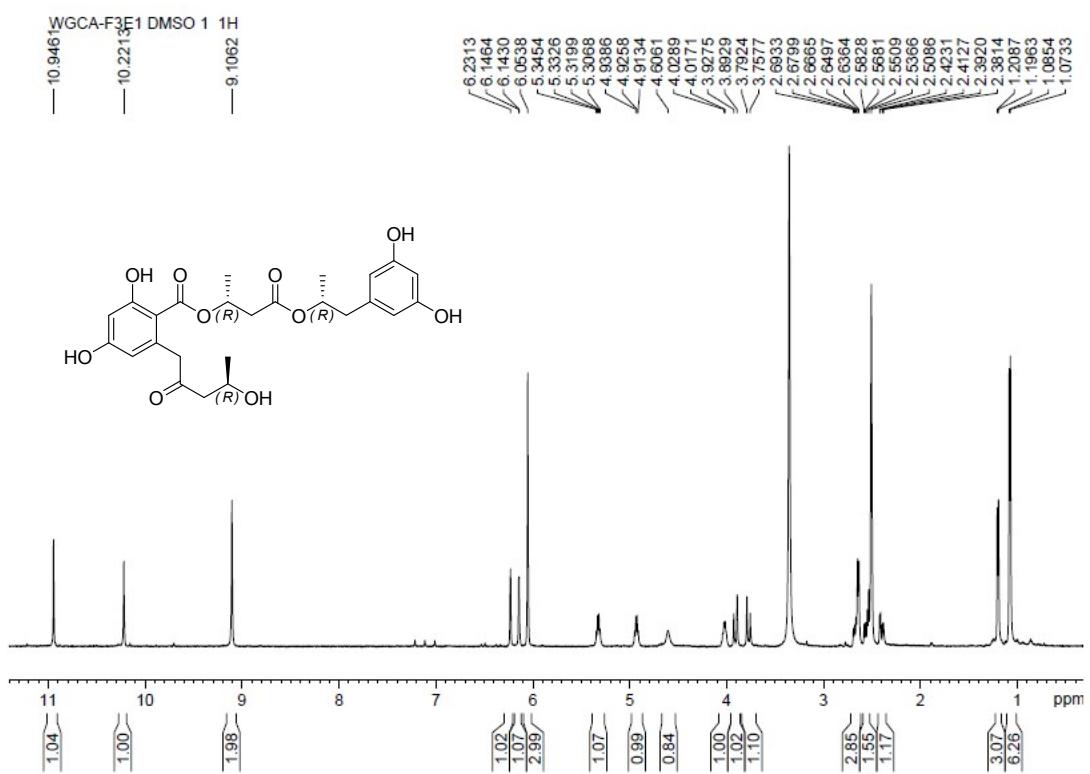


Figure S11-3. ¹H-NMR Spectrum of Compound 11

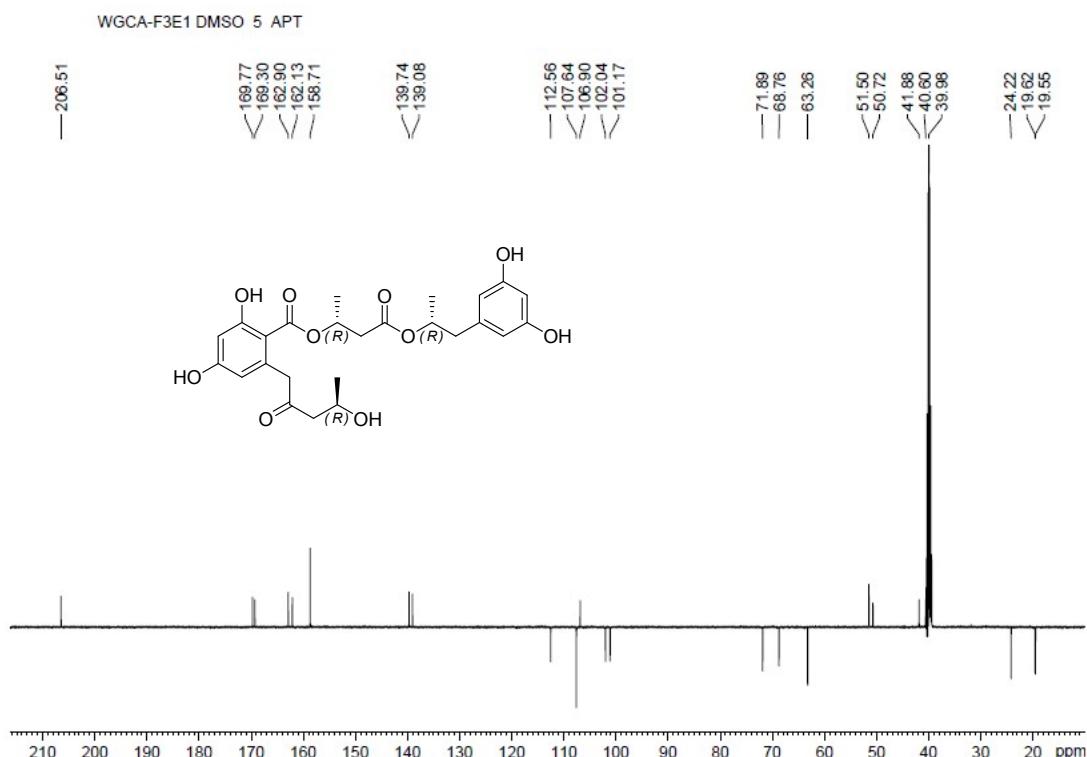


Figure S11-4. ¹³C-NMR Spectrum of Compound 11

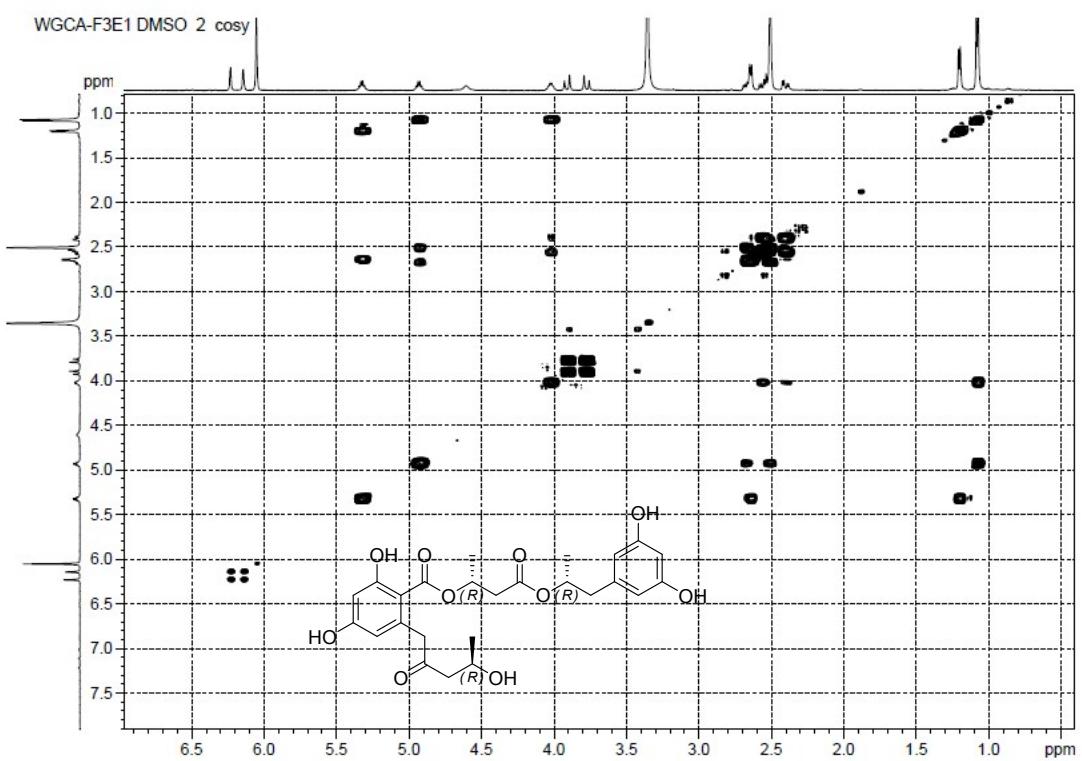


Figure S11-5. COSY Spectrum of Compound 11

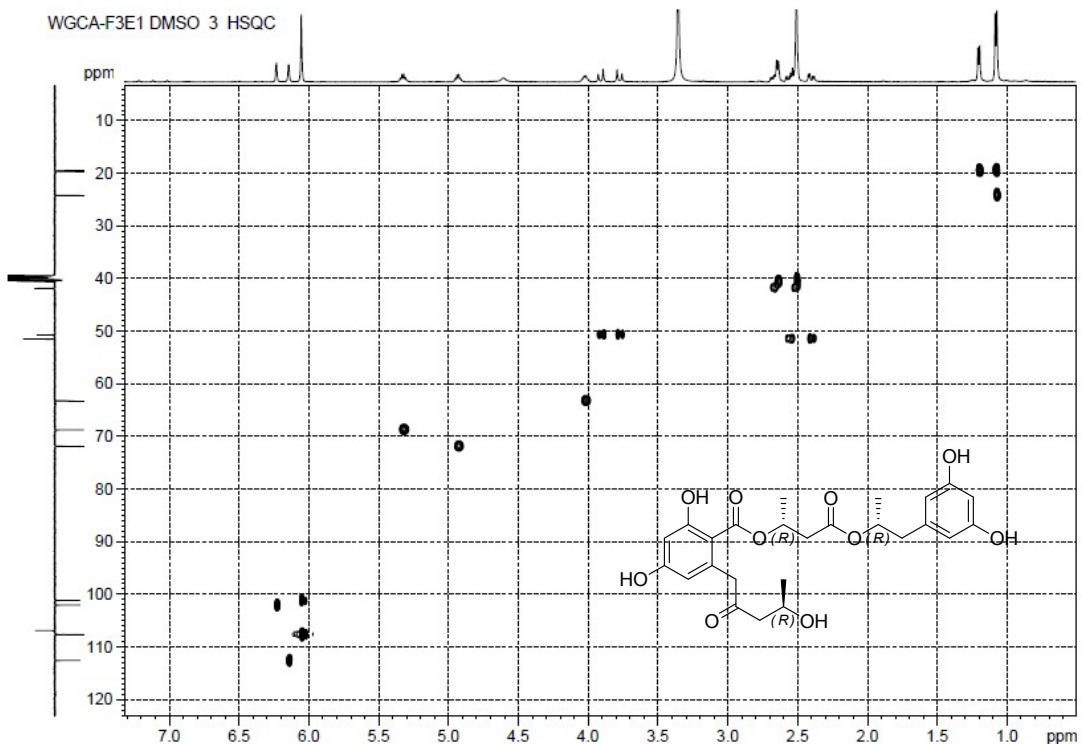


Figure S11-6. HSQC Spectrum of Compound 11

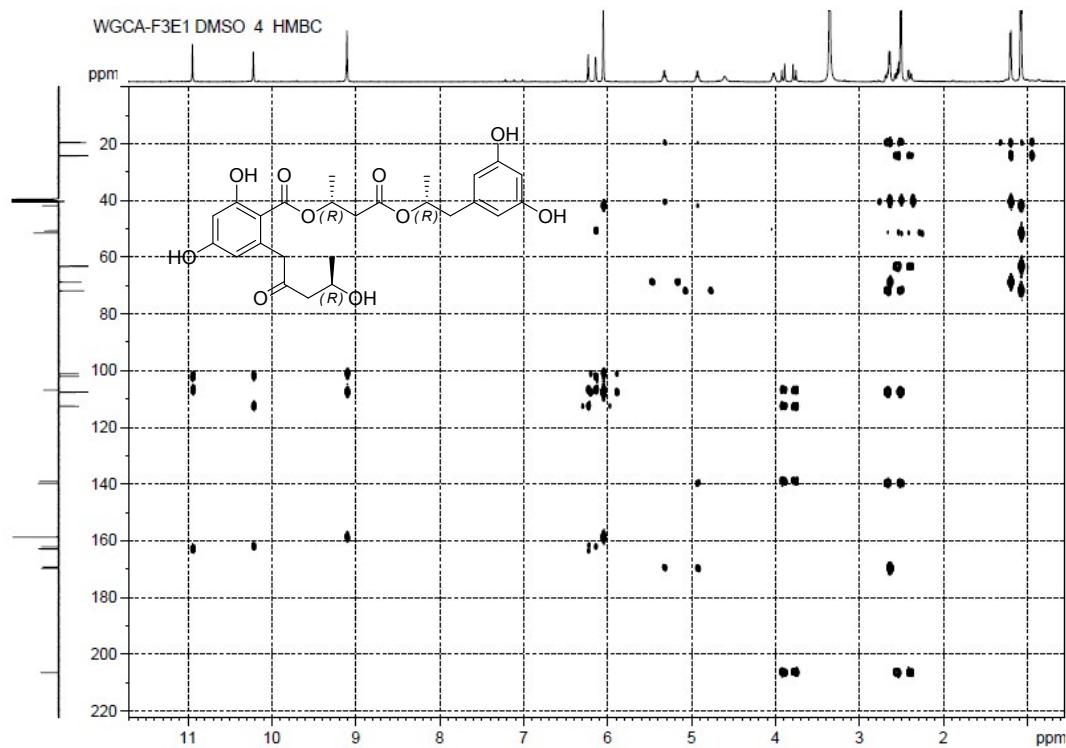


Figure S11-7. HMBC Spectrum of Compound 11

Compound 12

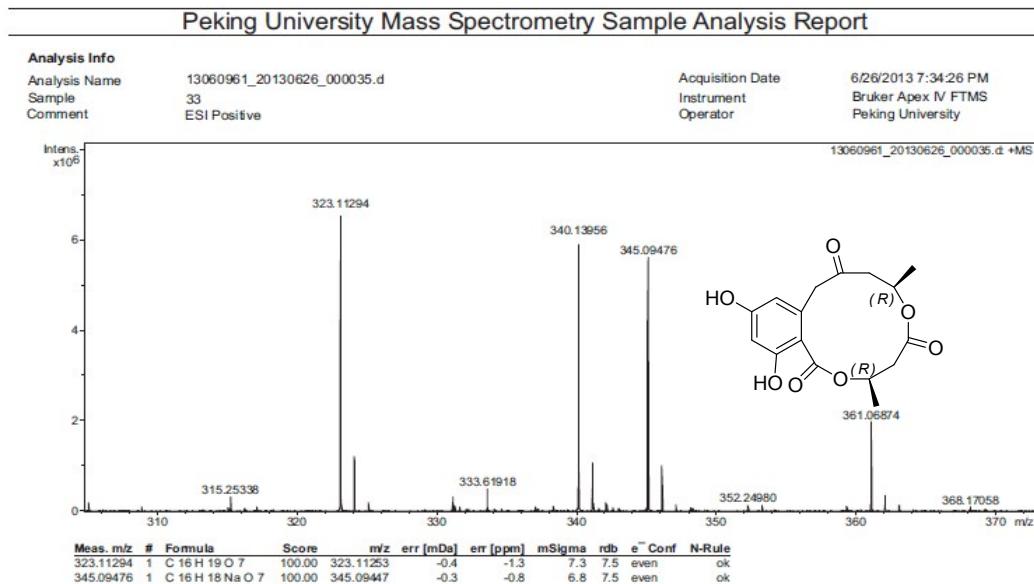


Figure S12-1. HRESIMS Spectrum of Compound 12

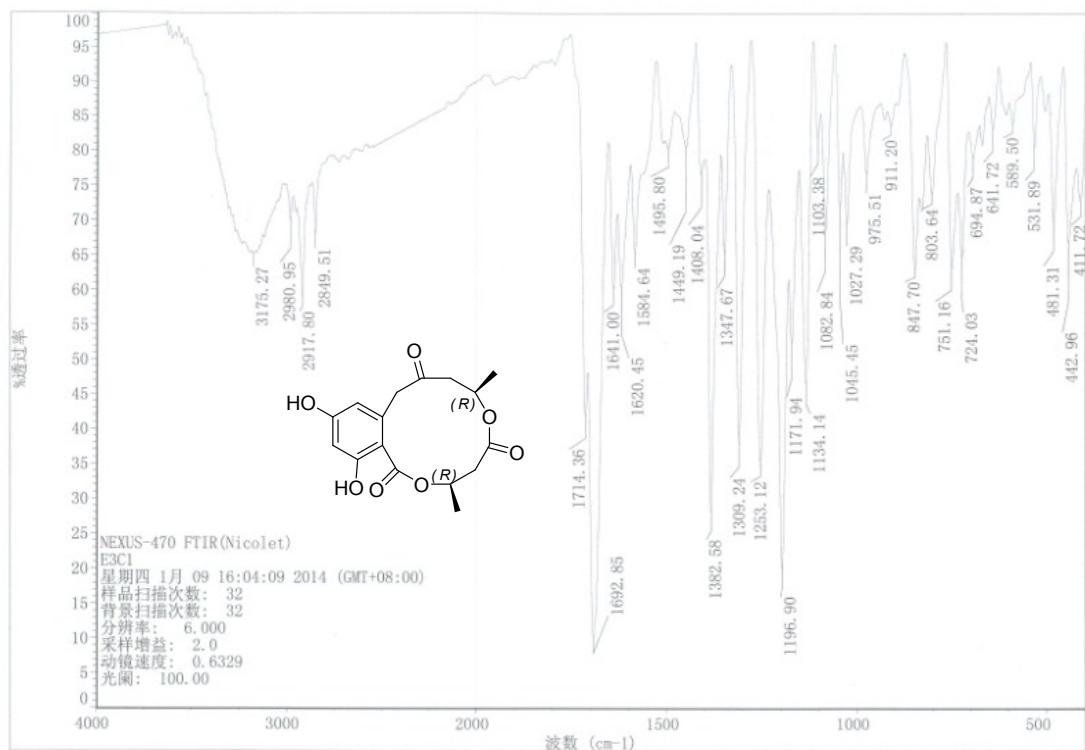


Figure S12-2. IR Spectrum of Compound 12

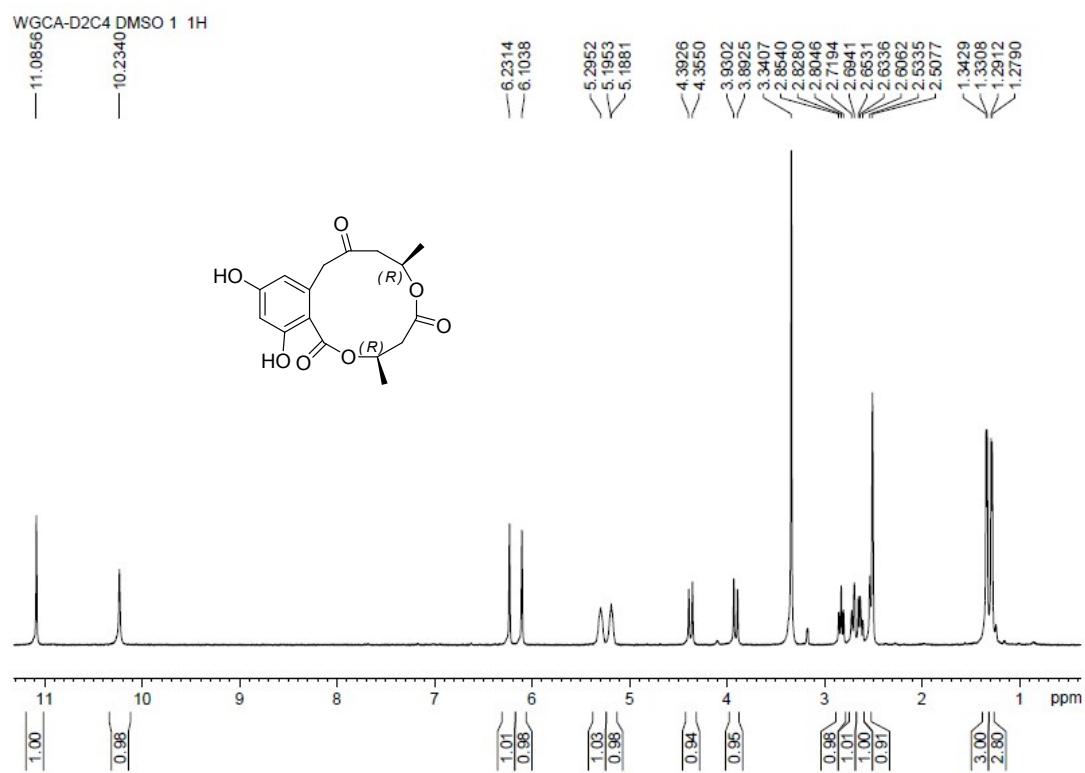


Figure S12-3. ¹H-NMR Spectrum of Compound 12

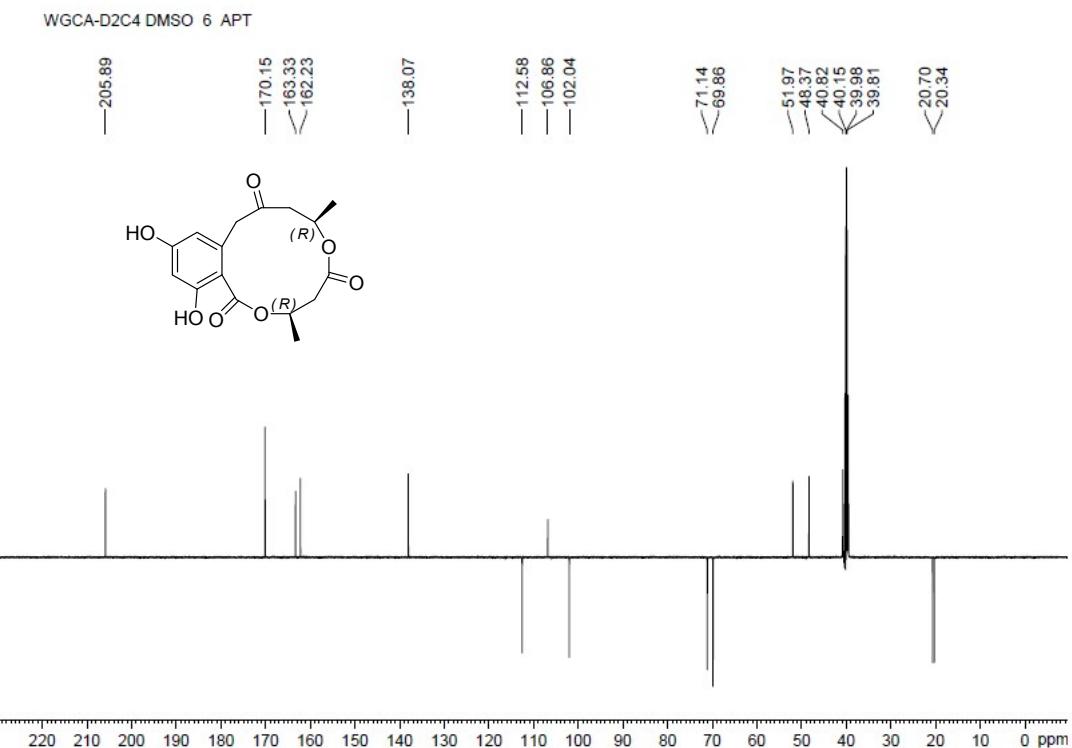


Figure S12-4. APT Spectrum of Compound 12

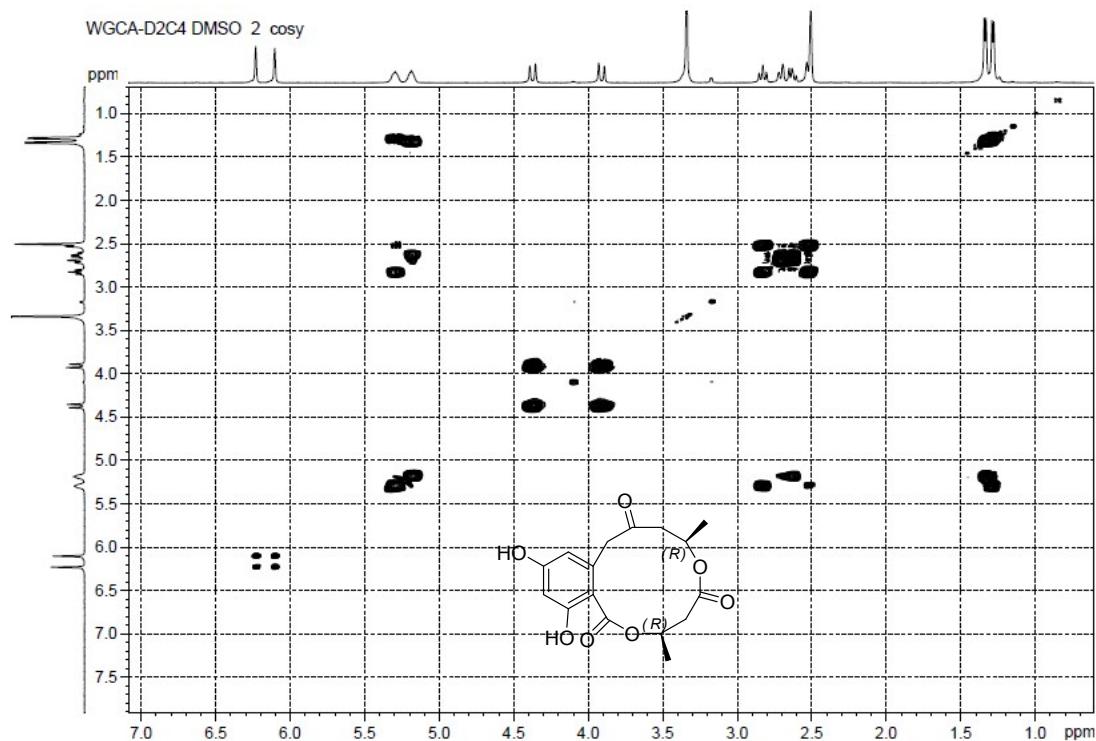


Figure S12-5. COSY Spectrum of Compound 12

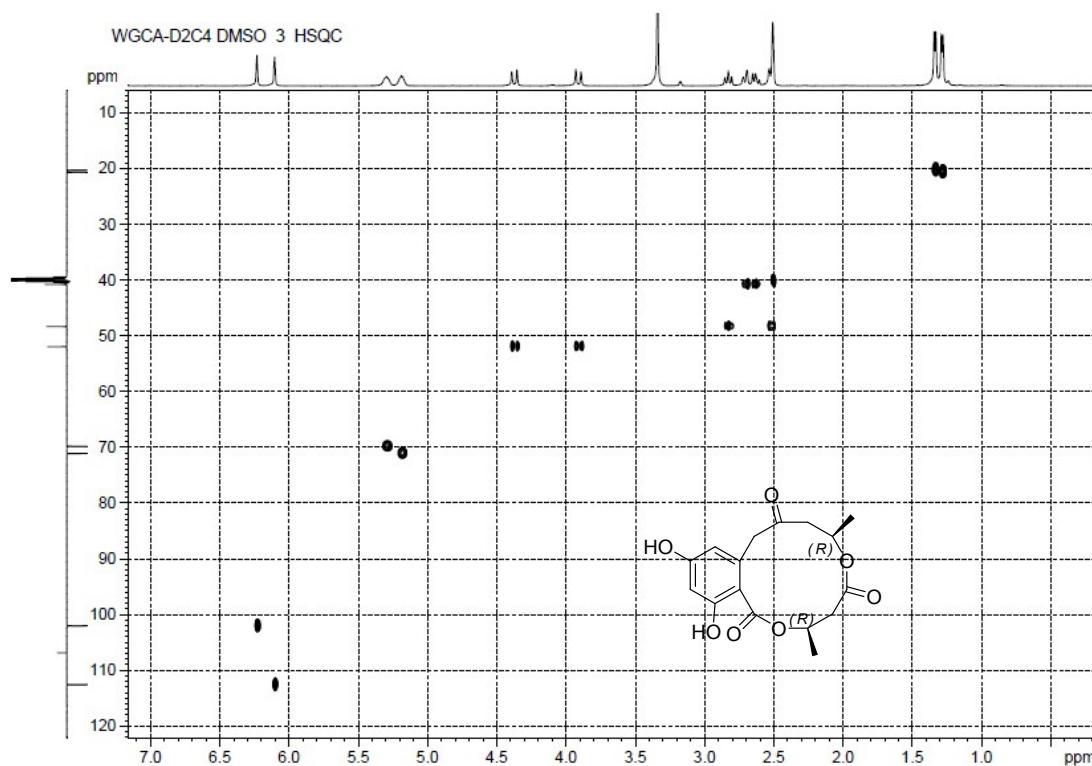


Figure S12-6. HSQC Spectrum of Compound 12

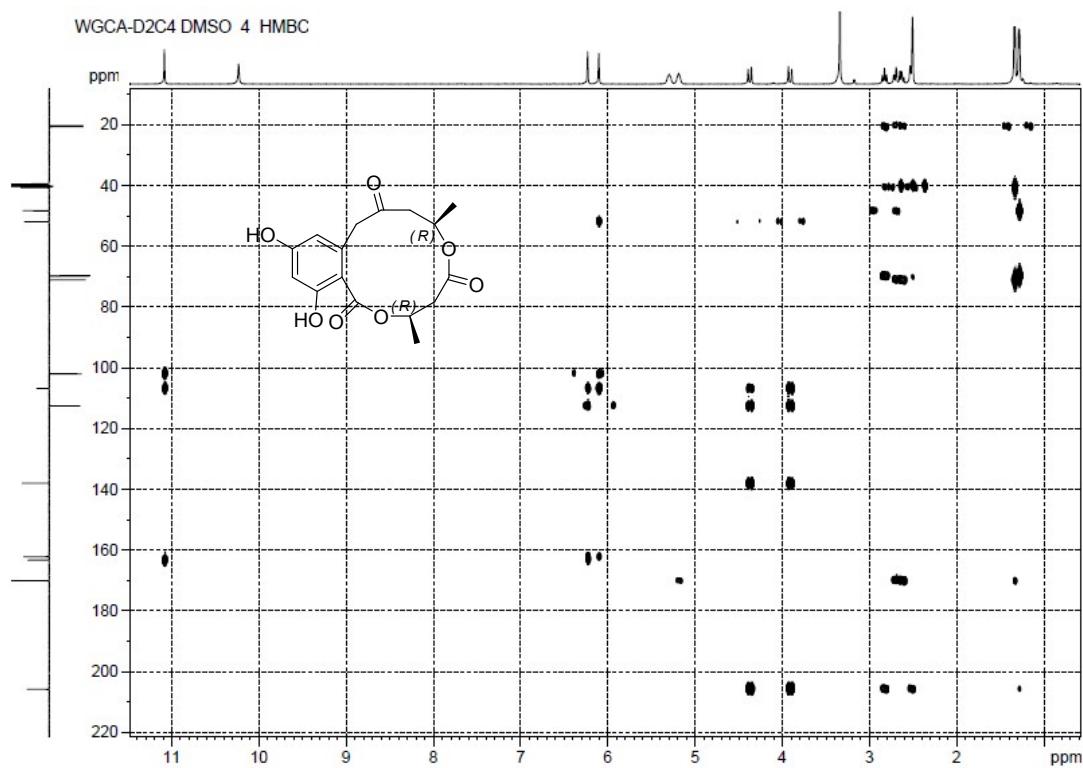


Figure S12-7. HMBC Spectrum of Compound 12

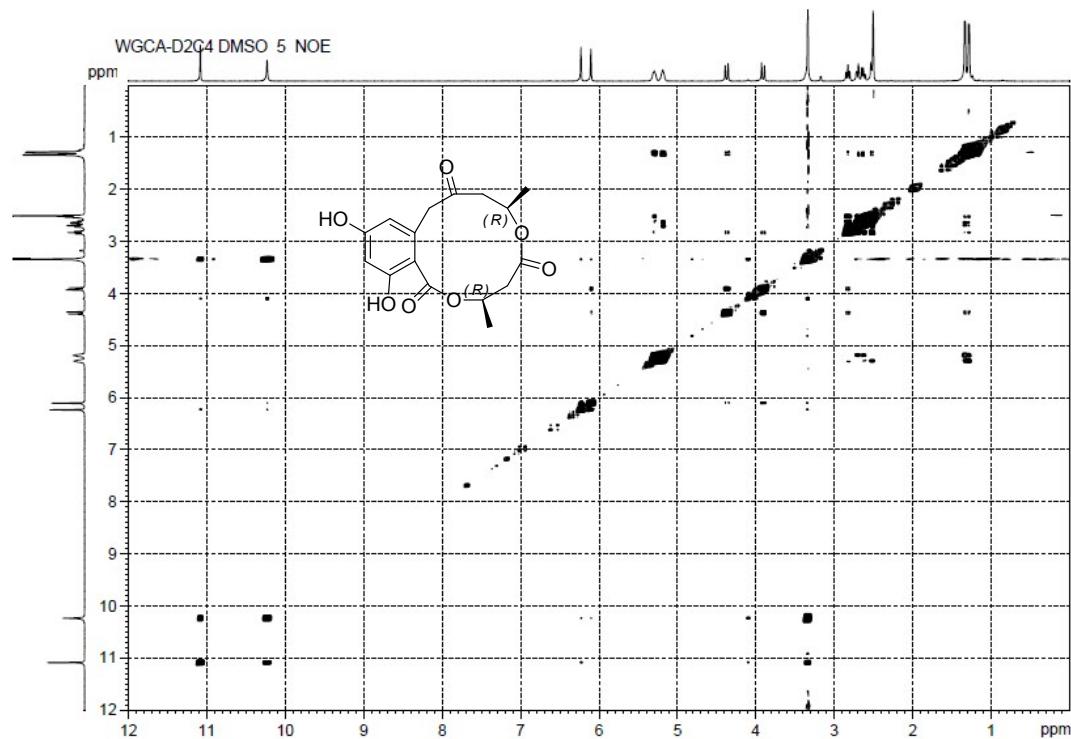


Figure S12-8. NOESY Spectrum of Compound 14

Compound 13

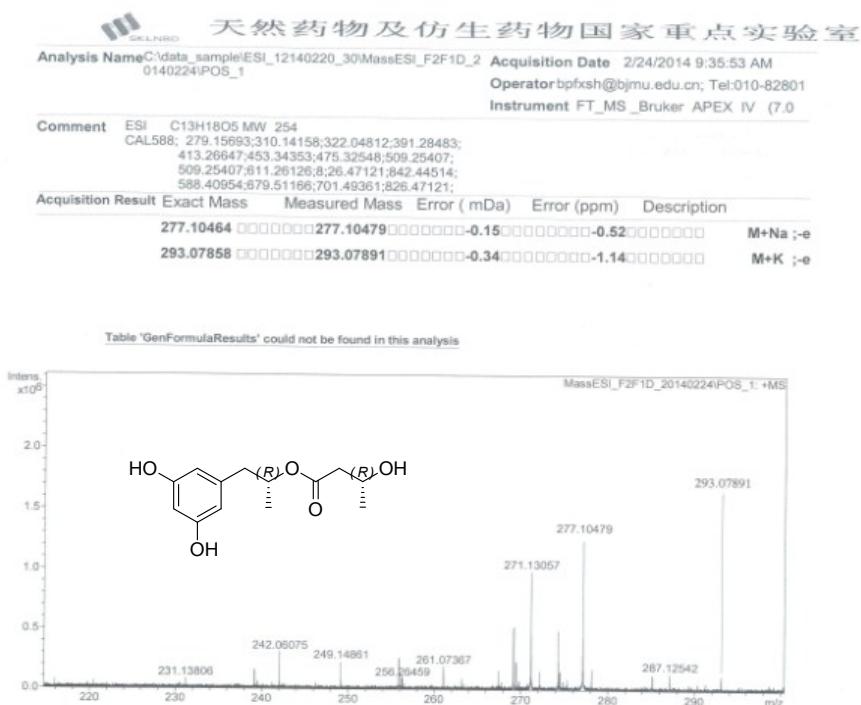


Figure S13-1. HRESIMS Spectrum of Compound 13

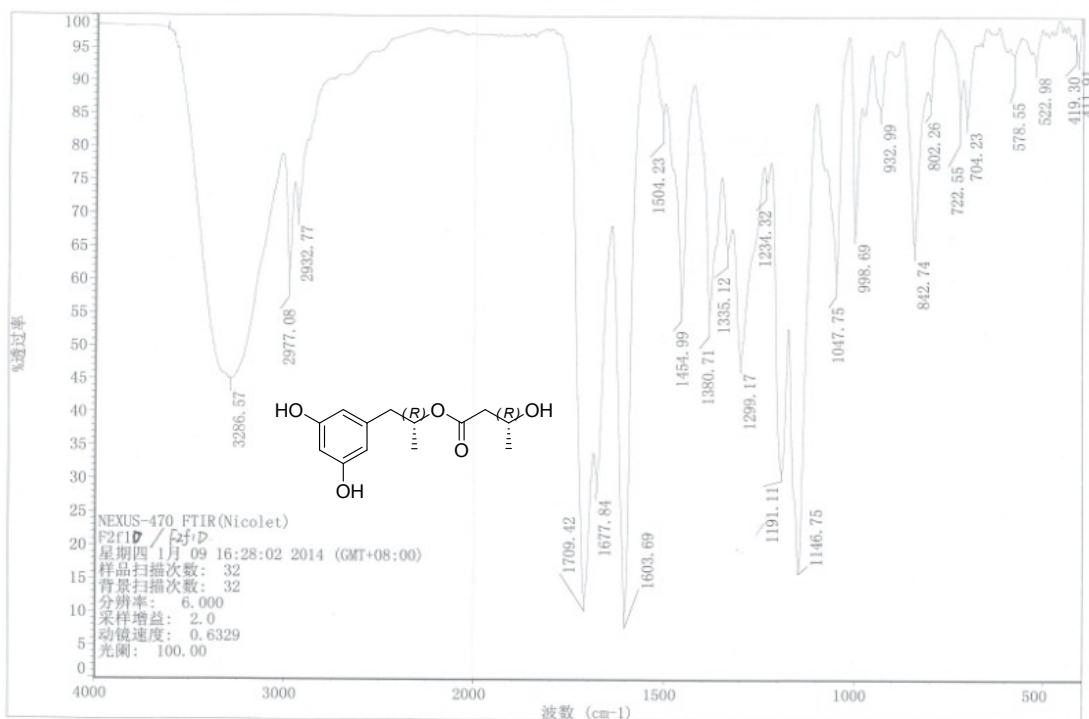


Figure S13-2. IR Spectrum of Compound 13

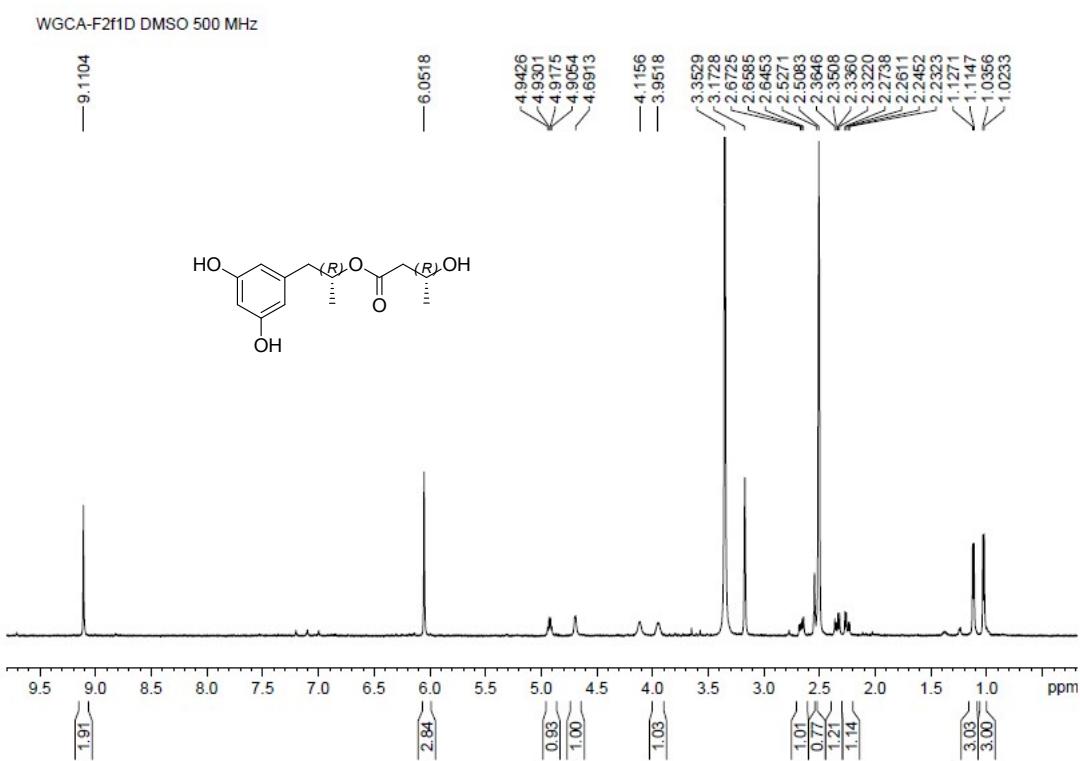


Figure S13-3. ¹H-NMR Spectrum of Compound 13

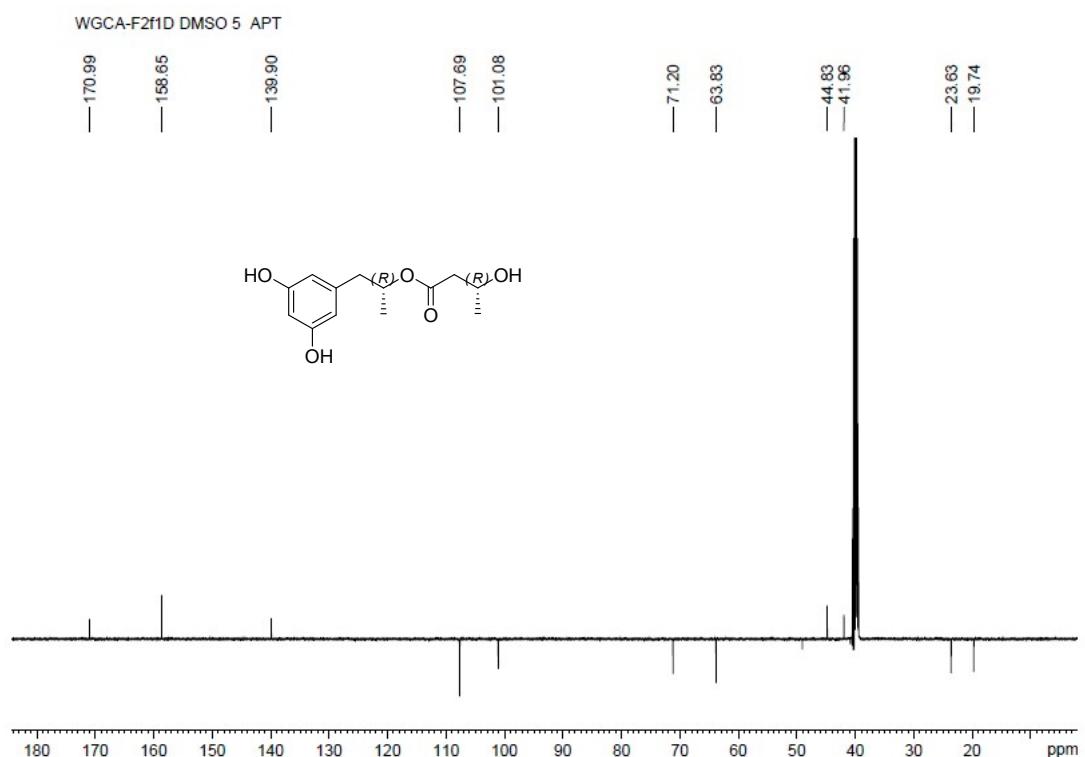


Figure S13-4. APT Spectrum of Compound 13

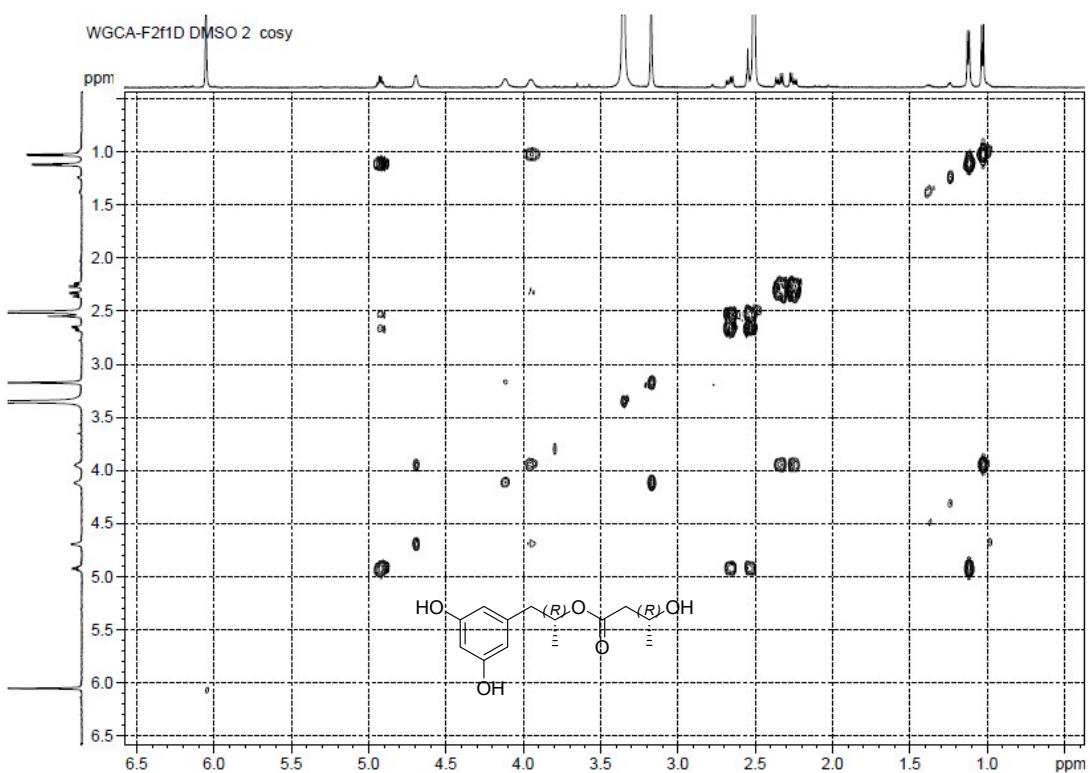


Figure S13-5. COSY Spectrum of Compound 13

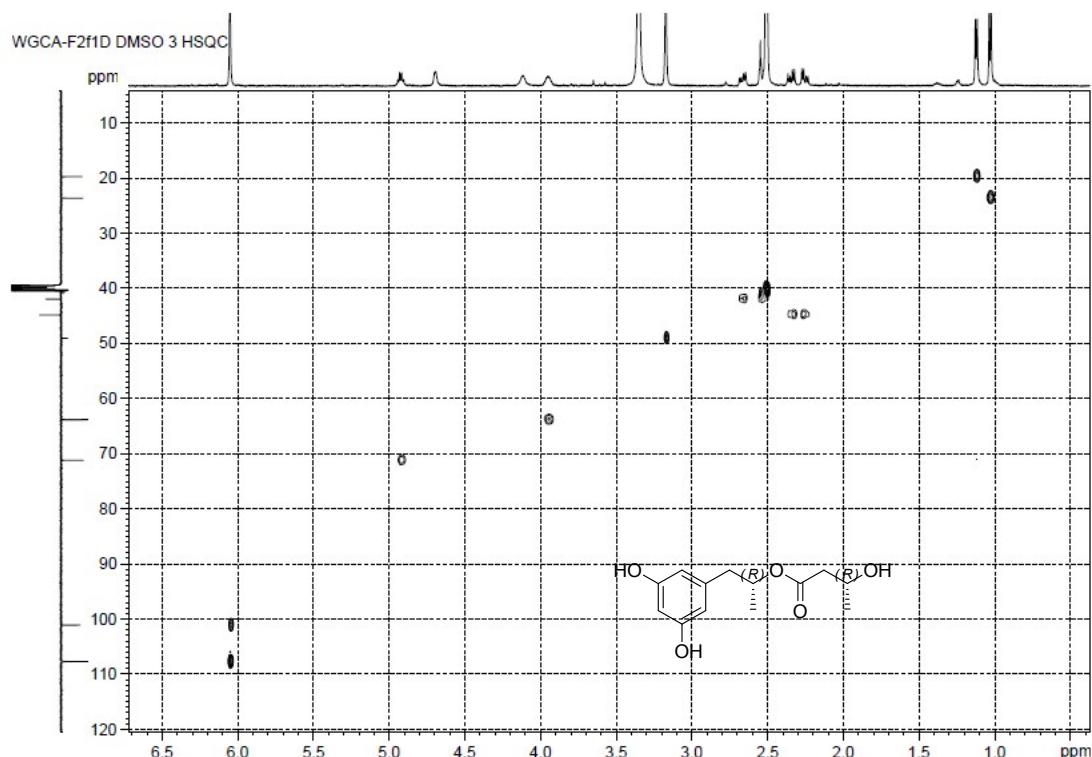


Figure S13-6. HSQC Spectrum of Compound 13

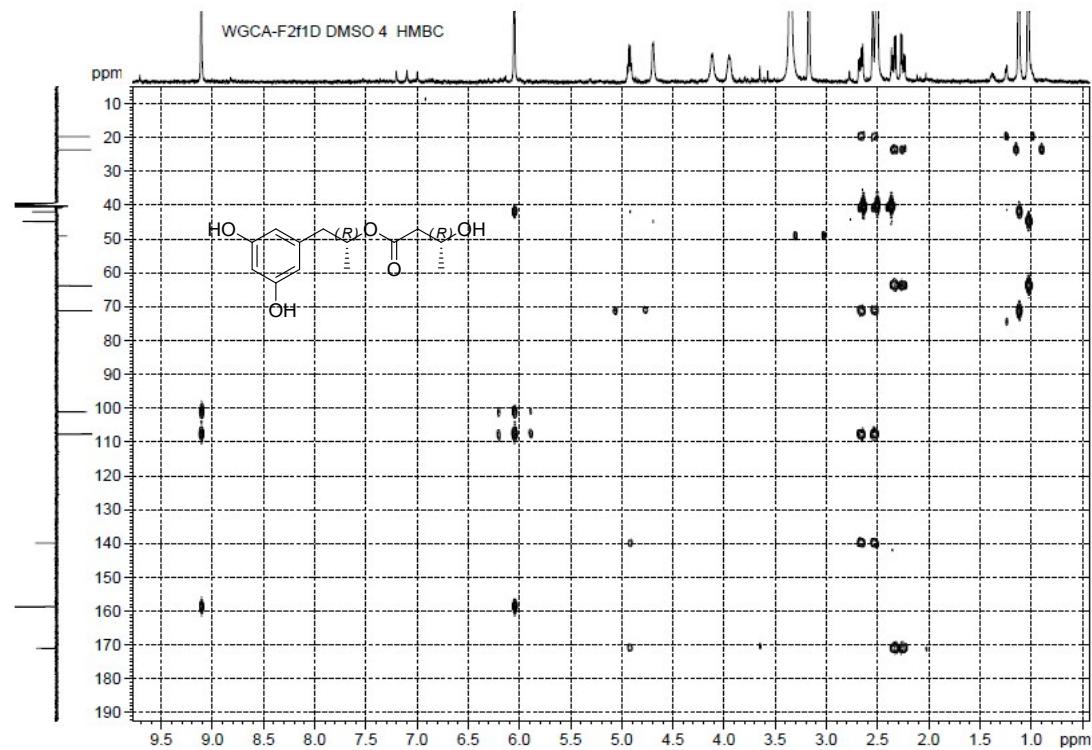


Figure S13-7. HMBC Spectrum of Compound 13

Compound 1d

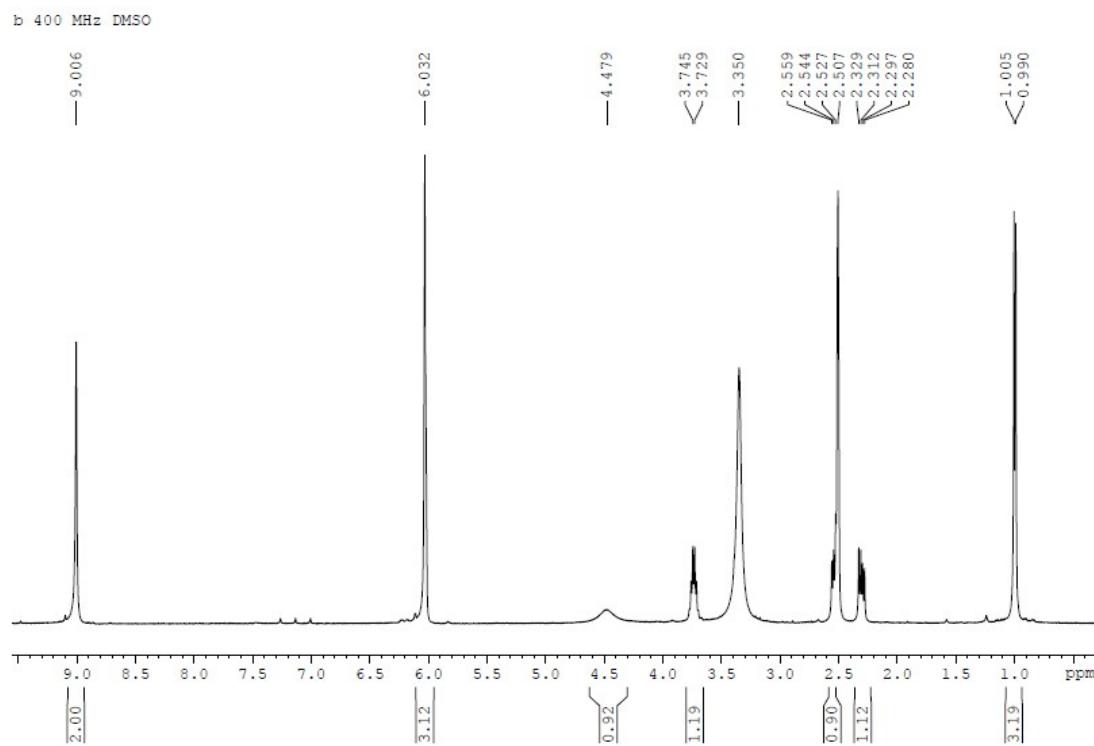


Figure Sb-1. ^1H -NMR Spectrum of **1d**

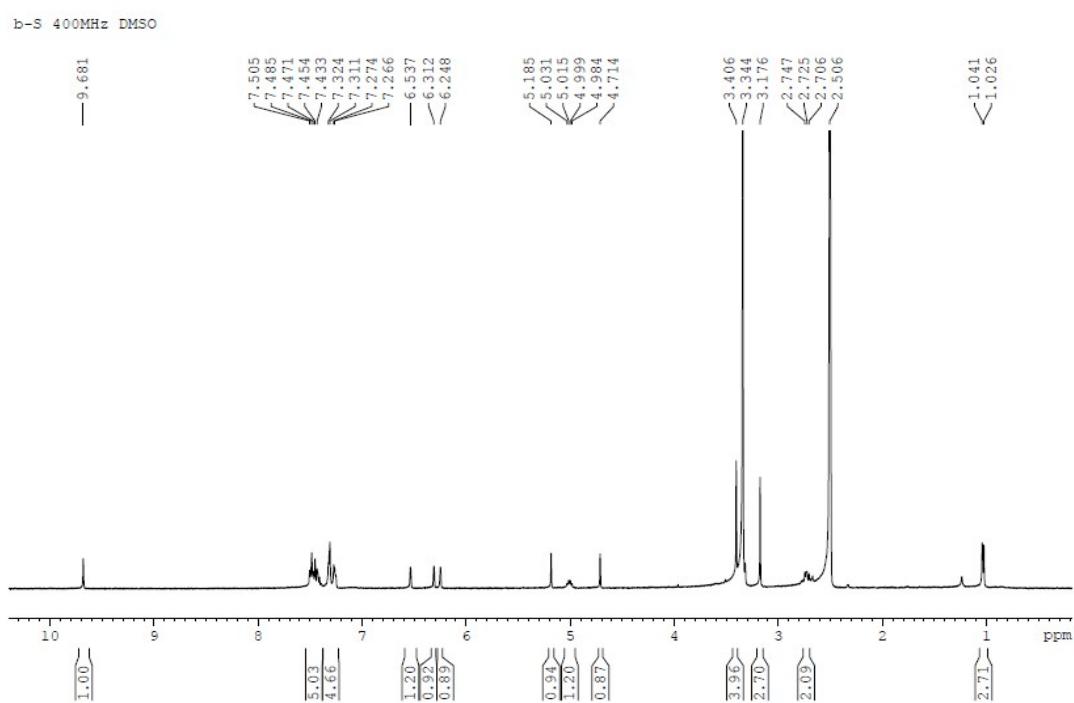


Figure Sb-2. ^1H -NMR Spectrum of (S)MPA ester of **1d**

bR 400MHz DMSO

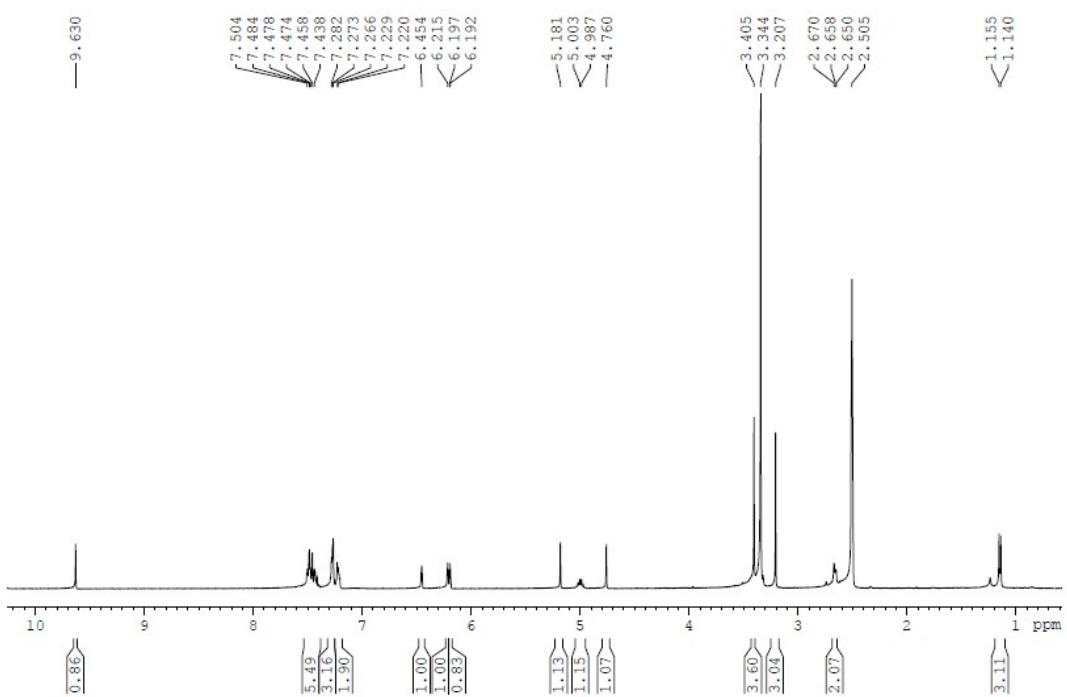


Figure Sb-3. ¹H-NMR Spectrum of (R)MPA ester of **1d**