#### **Supplementary Information**

**Figure S1.** <sup>1</sup>H NMR spectrum of compound **11**. Figure S2. HRMS spectrum of compound 11. Figure S3. <sup>1</sup>H NMR spectrum of compound 12. Figure S4. HRMS spectrum of compound 12. Figure S5. <sup>1</sup>H NMR spectrum of compound 13. Figure S6. HRMS spectrum of compound 13. Figure S7. <sup>1</sup>H NMR spectrum of compound 14. Figure S8. HRMS spectrum of compound 14. Figure S9. <sup>1</sup>H NMR spectrum of compound 15. Figure S10. HRMS spectrum of compound 15. Figure S11. <sup>1</sup>H NMR spectrum of compound 16. Figure S12. HRMS spectrum of compound 16. Figure S13. <sup>1</sup>H NMR spectrum of compound 17. Figure S14. HRMS spectrum of compound 17. Figure S15. <sup>1</sup>H NMR spectrum of compound 18. Figure S16. HRMS spectrum of compound 18. Figure S17. <sup>1</sup>H NMR spectrum of compound 19. Figure S18. HRMS spectrum of compound 19. **Figure S19.** <sup>1</sup>H NMR spectrum of compound **20**. Figure S20. HRMS spectrum of compound 20. Figure S21. <sup>1</sup>H NMR spectrum of compound 21. Figure S22. HRMS spectrum of compound 21. Figure S23. <sup>1</sup>H NMR spectrum of compound 22. Figure S24. HRMS spectrum of compound 22. Figure S25. <sup>1</sup>H NMR spectrum of compound 23. Figure S26. HRMS spectrum of compound 23. Figure S27. <sup>1</sup>H NMR spectrum of compound 24. Figure S28. HRMS spectrum of compound 24. Figure S29. <sup>1</sup>H NMR spectrum of compound 25. Figure S30. HRMS spectrum of compound 25. Figure S31. <sup>1</sup>H NMR spectrum of compound 26. Figure S32. HRMS spectrum of compound 26. Figure S33. <sup>1</sup>H NMR spectrum of compound 27. Figure S34. HRMS spectrum of compound 27. Figure S35. <sup>1</sup>H NMR spectrum of compound 28. Figure S36. HRMS spectrum of compound 28. Figure S37. <sup>1</sup>H NMR spectrum of compound 29. Figure S38. HRMS spectrum of compound 29. Figure S39. <sup>1</sup>H NMR spectrum of compound 30. Figure S40. HRMS spectrum of compound 30. Figure S41. <sup>1</sup>H NMR spectrum of compound 31.

Figure S42. HRMS spectrum of compound 31. Figure S43. <sup>1</sup>H NMR spectrum of compound 32. Figure S44. HRMS spectrum of compound 32. Figure S45. <sup>1</sup>H NMR spectrum of compound 33. Figure S46. HRMS spectrum of compound 33. Figure S47. <sup>1</sup>H NMR spectrum of compound 34. Figure S48. HRMS spectrum of compound 34. Figure S49. <sup>1</sup>H NMR spectrum of compound 35. Figure S50. HRMS spectrum of compound 35. Figure S51. <sup>1</sup>H NMR spectrum of compound 37. **Figure S52.** <sup>1</sup>H NMR spectrum of compound **38a**. Figure S53. <sup>1</sup>H NMR spectrum of compound 38b. **Figure S54.** <sup>1</sup>H NMR spectrum of compound **38c**. Figure S55. <sup>1</sup>H NMR spectrum of compound 38d. Figure S56. <sup>1</sup>H NMR spectrum of compound **39a**. Figure S57. TIC and MS spectrum of compound 39a. Figure S58. <sup>1</sup>H NMR spectrum of compound 39b. Figure S59. TIC and MS spectrum of compound 39b. Figure S60. <sup>1</sup>H NMR spectrum of compound **39c**. Figure S61. TIC and MS spectrum of compound 39c. Figure S62. <sup>1</sup>H NMR spectrum of compound 39d. Figure S63. TIC and MS spectrum of compound 39d. Figure S64. <sup>1</sup>H NMR spectrum of compound 41. Figure S65. TIC and MS spectrum of compound 41. Figure S66. <sup>1</sup>H NMR spectrum of compound 44a. Figure S67. TIC and MS spectrum of compound 44a. Figure S68. <sup>1</sup>H NMR spectrum of compound 44b. Figure S69. TIC and MS spectrum of compound 44b. **Figure S70.** <sup>1</sup>H NMR spectrum of compound **44c**. Figure S71. TIC and MS spectrum of compound 44c. Figure S72. <sup>1</sup>H NMR spectrum of compound 44d. Figure S73. TIC and MS spectrum of compound 44d.

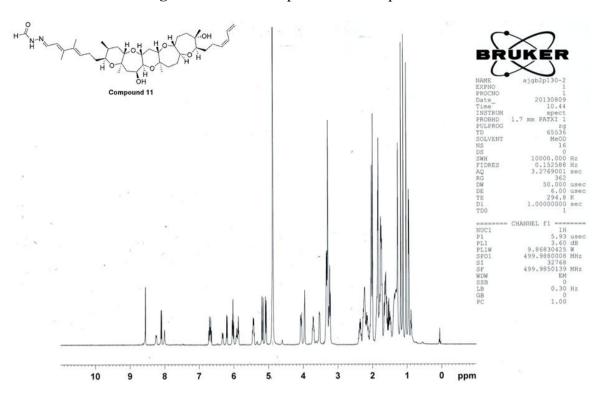
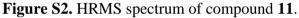
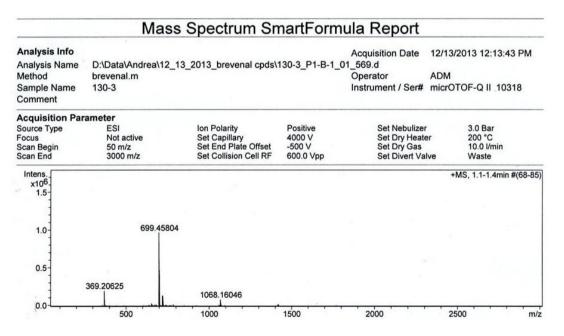


Figure S1. <sup>1</sup>H NMR spectrum of compound 11.





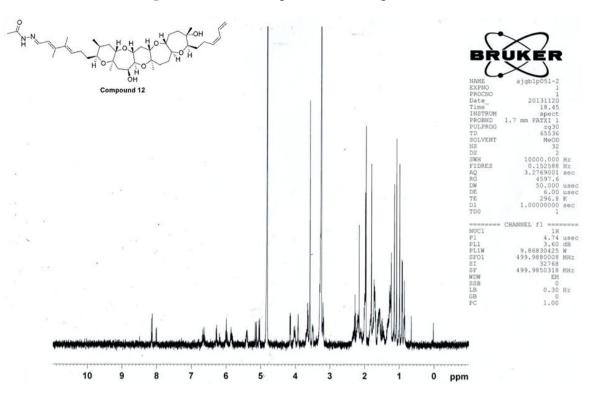
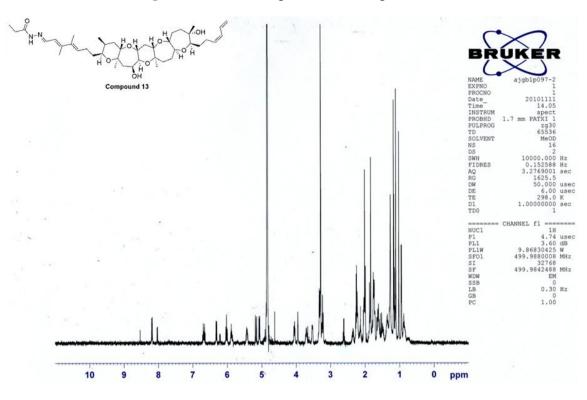


Figure S3. <sup>1</sup>H NMR spectrum of compound 12.

Figure S4. HRMS spectrum of compound 12.

Analysis Info Analysis Name Method Sample Name Comment	D:\Data\Andrea\12_20_ brevenal.m brevenal acet	2013_brevenal cpds	2\brevenal ace	Operator	ADM micrOTOF-Q II 10318
Acquisition Par Source Type Focus Scan Begin Scan End	ameter ESI Not active 50 m/z 3000 m/z	Ion Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Val	er 200 °C 10.0 l/min
Intens x10 <sup>6</sup>					+MS, 1.1-1.2min #(66-74
0.8- - 0.6-	713.47293				
0.4-					
0.2-	376.21405				
0.0-	<u>, l, , , , ll.,</u>	1000	1500	2000	2500 m/a



# Figure S5. <sup>1</sup>H NMR spectrum of compound 13.

Figure S6. HRMS spectrum of compound 13.

Analysis Info				Acquisition Date	12/20/2013 10:43:35 AM
Analysis Name	D:\Data\Andrea\12_20_	2013_brevenal cpds	2\97-2-3_P1-B-8	_01_590.d Operator	ADM
Method Sample Name	brevenal.m 97-2-3				micrOTOF-Q II 10318
Comment	51-2-5				
Acquisition Par	ameter				100
Source Type	ESI	Ion Polarity	Positive 4000 V	Set Nebulizer Set Dry Heat	
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	-500 V	Set Dry Gas	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	lve Waste
Intens x10 <sup>5</sup> - 3-					+MS, 1.2-1.4min #(74-8
2	727.48850				
1					
1	383.22229				

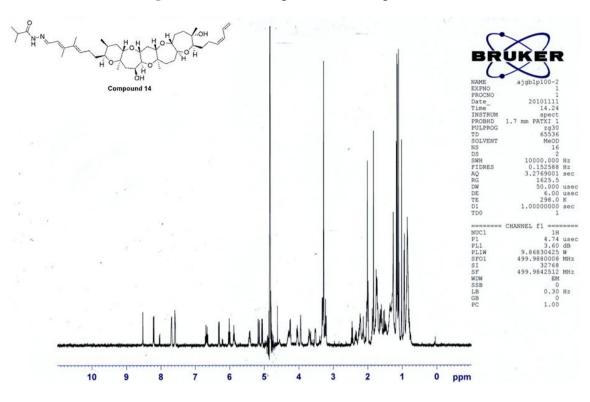


Figure S7. <sup>1</sup>H NMR spectrum of compound 14.

Figure S8. HRMS spectrum of compound 14.

	Mass	Spectrum Sn	antrorm	iula Report	
Analysis Info				Acquisition Date	12/13/2013 12:09:03 PM
Analysis Name	D:\Data\Andrea\12_13_	2013_brevenal cpds\1	41-2_P1-A-9_		
Method	brevenal.m			Operator	ADM
Sample Name	141-2			Instrument / Ser#	micrOTOF-Q II 10318
Comment					
Acquisition Par	ameter				
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF		Set Divert Va	
Intens			· .		+MS, 1.6-2.0min #(96-1
×106					110, 1.0 2.0000 (00 1
1.25					
1					
1.00					
0.75	741.50559	•			
0.75					
0.50		·			
1	£				
0.25	390.22912				
: 1		1131.22785			
0.00	<u> </u>	1000	1500	2000	2500

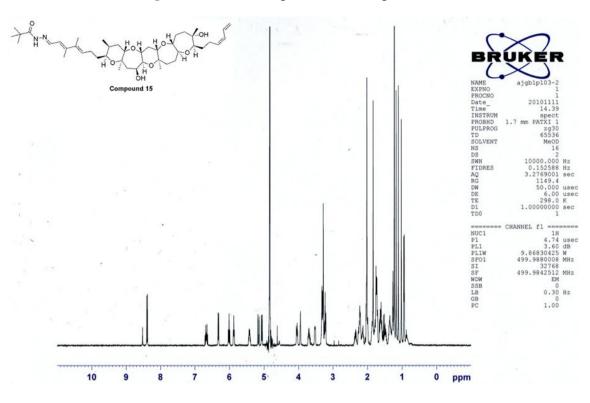
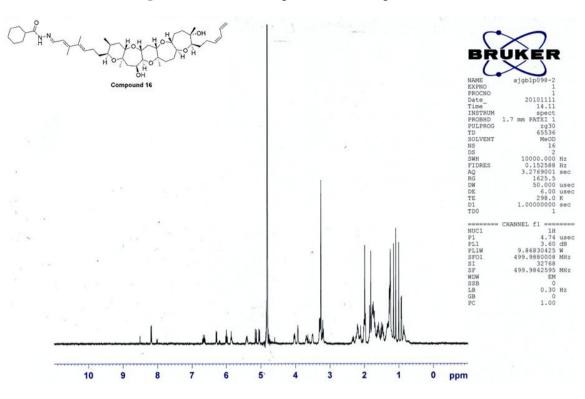


Figure S9. <sup>1</sup>H NMR spectrum of compound 15.

Figure S10. HRMS spectrum of compound 15.

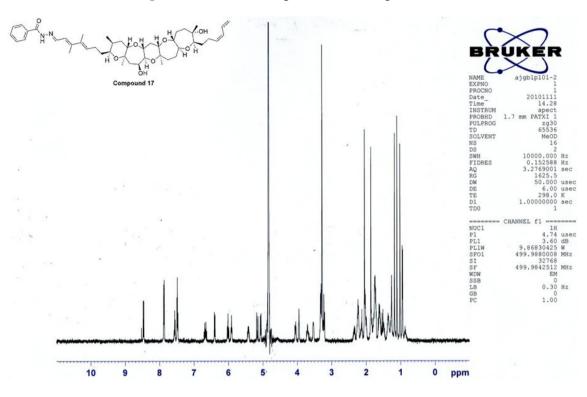
Analysis Info				Acquisition Date	12/20/2013 10:01:33 AM
Analysis Name	D:\Data\Andrea\12_	20_2013_brevenal cpds 2	2\103-2-5_P1-/	A-8_01_581.d	
Method	brevenal.m			Operator	ADM
Sample Name	103-2-5			Instrument / Ser#	micrOTOF-Q II 10318
Comment					
Acquisition Par	ameter				Same and the second second
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus	Not active	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	er 200 °C 10.0 l/min
Scan Begin Scan End	50 m/z 3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	
Intens.					+MS, 1.3-1.4min #(78-8
×106					
1.5-					
1	755.52	2258			
1.0					
0.5					
1	397.23731	1152.25326			
0.0-	500	1000	1500	2000	2500 n



# **Figure S11.** <sup>1</sup>H NMR spectrum of compound **16**.

Figure S12. HRMS spectrum of compound 16.

Analysis Info Analysis Name	D:\Data\Andrea\	12 20 2013 brevenal cpd	s 2\98-2-4 P1-A-	Acquisition Date 7 01 580.d	12/20/2013 9:56:50 AM
Method	brevenal.m			Operator	ADM
Sample Name Comment	98-2-4			Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par	ameter	C. C.F. 1990 March 1990	Sector Sector		
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	lon Polarity Set Capillary Set End Plate Offset Set Collision Cell RF		Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Va	er 200 °C 10.0 l/min
Intens. x10 <sup>5</sup> 2.5					+MS, 2.0-2.3min #(119-13
2.0	7	81.53602			
1.5					
1.0 0.5	410.24575				
		1191,27906			



# Figure S13. <sup>1</sup>H NMR spectrum of compound 17.

Figure S14. HRMS spectrum of compound 17.

	Mas	ss Spectrum Sn	nartForm	nula Report	
Analysis Info				Acquisition Date	12/20/2013 10:48:14 AM
Analysis Name	D:\Data\Andrea\12	2_20_2013_brevenal cpds 2	2\101-2-6_P1-I		
Method	brevenal.m			Operator	ADM
Sample Name	101-2-6			Instrument / Ser#	micrOTOF-Q II 10318
Comment					
Acquisition Par	ameter		20-20-20-20-20-20-20-20-20-20-20-20-20-2		
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus	Not active	Set Capillary	4000 V	Set Dry Heate Set Dry Gas	er 200 °C 10.0 l/min
Scan Begin	50 m/z	Set End Plate Offset Set Collision Cell RF	-500 V 600.0 Vpp	Set Divert Va	
Scan End	3000 m/z	Set Collision Cell Kr	000.0 vpp	Oet Divert va	ine music
Intens. x10 <sup>5</sup> - 0.8-					+MS, 1.3-1.4min #(76-83
0.6-	775	.48919 			
0.4-					
	407.22193				
0.2-					
0.0-	500	1000	1500	2000	2500 m/

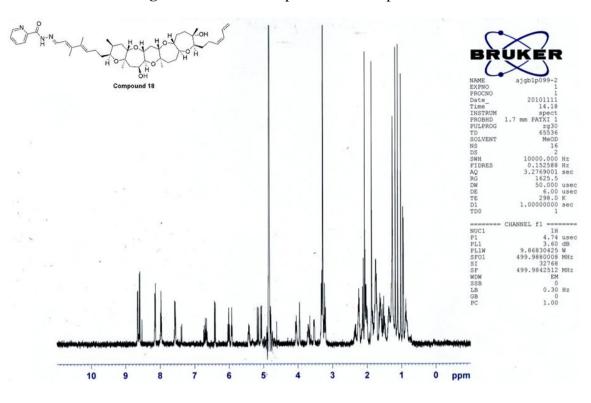
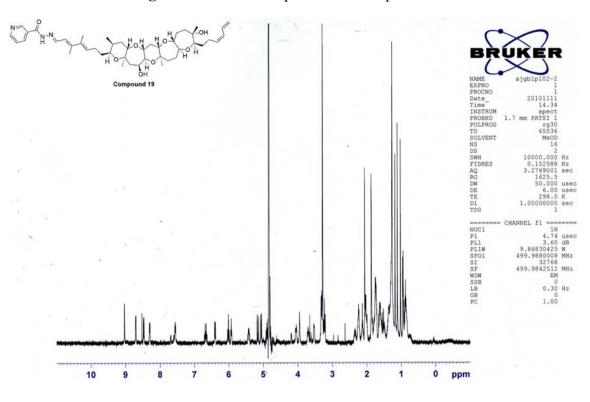


Figure S15. <sup>1</sup>H NMR spectrum of compound 18.

Figure S16. HRMS spectrum of compound 18.

Analysis Name D:\Data\Andrea\12_20_2013_brevenal cpds 2\pico-3_P1-B-5_01_587.d Method brevenal.m Operator ADM Sample Name pico-3 Instrument / Ser# micrOTOF-Q II 103 Comment Acquisition Parameter Source Type ESI Ion Polarity Positive Set Nebulizer 3.0 Bar Focus Not active Set Capillary 4000 V Set Dry Heater 200 °C Scan Begin 50 m/z Set End Plate Offset -500 V Set Dry Gas 10.0 l/min Scan End 3000 m/z Set Collision Cell RF 600.0 Vpp Set Divert Valve Waste Intens. x105- 3- 407.71861	Analysis Info				Acquisition Date 12/20	/2013 10:29:33 AM
Sample Name pico-3 Comment  Acquisition Parameter Source Type ESI Ion Polarity Positive Set Nebulizer 3.0 Bar Scan Begin 50 m/z Set Capillary 4000 V Set Dry Heater 200 °C Scan Begin 50 m/z Set Collision Cell RF 600.0 Vpp Set Divert Valve Waste  Intens. x105 3 4 776.48300	Analysis Name	D:\Data\Andrea\12_	20_2013_brevenal cpds :	2\pico-3_P1-B-		
Acquisition Parameter Source Type ESI Ion Polarity Positive Set Nebulizer 3.0 Bar Focus Not active Set Capillary 4000 V Set Dry Heater 200 °C Scan Begin 50 m/z Set End Plate Offset -500 V Set Dry Gas 10.0 l/min Scan End 3000 m/z Set Collision Cell RF 600.0 Vpp Set Divert Valve Waste Intens. x105 3 1 1						
Source Type ESI Ion Polarity Positive Set Nebulizer 3.0 Bar Focus Not active Set Capiliary 4000 V Set Dry Heater 200 °C Scan Begin 50 m/z Set Callision Cell RF 600.0 Vpp Set Dry Gas 10.0 l/min Scan End 3000 m/z Set Collision Cell RF 600.0 Vpp Set Divert Valve Waste +MS, 1.4-1.5min x10 <sup>5</sup> - 3- 2- 1-		pico-3			Instrument / Ser# micr0	DTOF-Q II 10318
Double Type     Not active     Set Capillary     4000 V     Set Dry Heater     200 °C       Scan Begin     50 m/z     Set End Plate Offset     -500 V     Set Dry Gas     10.0 l/min       Scan End     3000 m/z     Set Collision Cell RF     600.0 Vpp     Set Divert Valve     Waste	Acquisition Par	ameter	and the second second	cert Hos		
Scan Begin Scan End Scan End Scan End Scan End Scan End Source Set End Plate Offset Set Collision Cell RF 600.0 Vpp Set Divert Valve Waste +MS, 1.4-1.5min 776.48300						
Scan End         3000 m/z         Set Collision Cell RF         600.0 Vpp         Set Divert Valve         Waste           Intens.         +MS, 1.4-1.5min         +MS, 1.4-1.5min						
x105- 3- 2- 1- 1- 776.48300			Set Collision Cell RF	600.0 Vpp	Set Divert Valve	Waste
	x105-					+MS, 1.4-1.5min #(86-9
	2	776.4	8300			
	1	407.71861				
0	0		h			2500 m



# Figure S17. <sup>1</sup>H NMR spectrum of compound 19.

Figure S18. HRMS spectrum of compound 19.

Analysis Info Analysis Name	D:\Data\Andrea\	12_20_2013_brevenal cpds 3	2\142-2-4 P1-8	Acquisition Date 3-1 01 583.d	12/20/2013 10:10:51 AM
Method	brevenal.m		_	Operator	ADM
Sample Name	142-2-4			Instrument / Ser#	micrOTOF-Q II 10318
Comment					
Acquisition Par	ameter			1	
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus	Not active 50 m/z	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	10.0 l/min
Scan Begin Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	lve Waste
Intens x10 <sup>6</sup> 1.5-					+MS, 1.0-1.1min #(57-6
1.0	7	76.48485			
0.5					
	407.71925				
0.0-	500	1000	1500	2000	2500 n

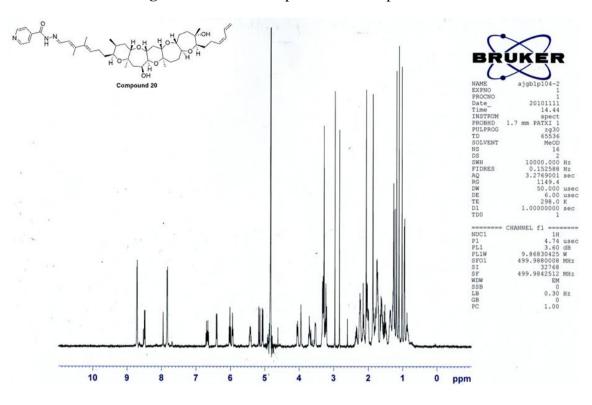
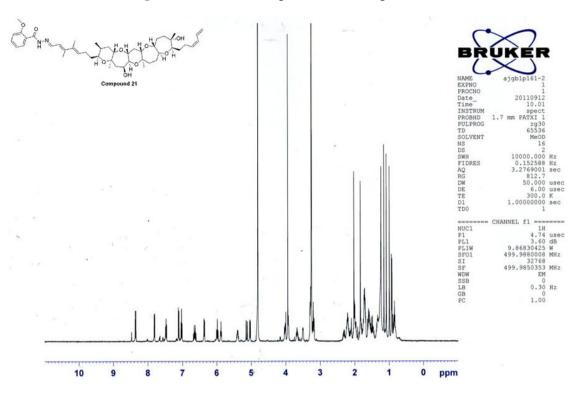


Figure S19. <sup>1</sup>H NMR spectrum of compound 20.

Figure S20. HRMS spectrum of compound 20.

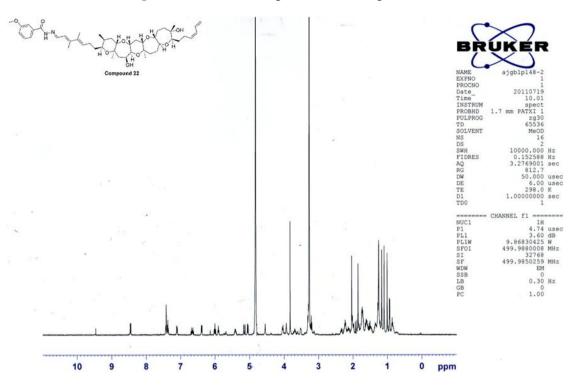
Analysis Name Method Sample Name Comment Acquisition Par Source Type Focus	brevenal.m 152-2	13_2013_brevenal cpds\	152-2_P1-A-3_	Operator	ADM micrOTOF-Q II 10318	
Sample Name Comment Acquisition Par Source Type Focus	152-2 ameter ESI	Ion Polarity				
Comment Acquisition Par Source Type Focus	ameter ESI	Ion Polarity		Instrument / Ser#	micrOTOF-Q II 10318	
Acquisition Par Source Type Focus	ESI	Ion Polarity				
Source Type Focus	ESI	Ion Polarity				
Focus		Ion Polarity				
	Not active		Positive	Set Nebulizer		
		Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	10.0 l/min	
Scan Begin Scan End	50 m/z 3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va		
Interne Comment					+MS, 1.0mi	n #6'
Intens. x10 <sup>6</sup>					100, 1.000	11 11 01
2.0						
1						
1.5-						
3	776.4	8393				
1.0-						
3						
0.5						
1						
0.0			1500	2000	2500	' m/



# **Figure S21.** <sup>1</sup>H NMR spectrum of compound **21**.

Figure S22. HRMS spectrum of compound 21.

	Mas	ss Spectrum Sr	nartForn	nula Report	
Analysis Info Analysis Name	D:\Data\Andrea\12	13 2013 brevenal cpds\	161-2 P1-A-2	Acquisition Date 01 561.d	12/13/2013 11:36:05 AM
Method Sample Name Comment	brevenal.m 161-2		_	Operator	ADM micrOTOF-Q II 10318
Acquisition Par	ameter				
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	Ion Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heat Set Dry Gas Set Divert Va	er 200 °C 10.0 l/min
Intens. x10 <sup>6</sup>					+MS, 1.8-2.0min #(105-11
1.5	80	5.50249			
1.0	÷ 2				
0.5					
0.0	422.22764				
0.0	500	1000	1500	2000	2500 m

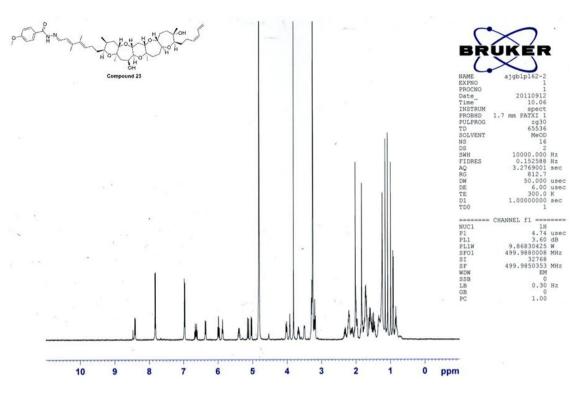


# **Figure S23.** <sup>1</sup>H NMR spectrum of compound **22**.

Figure S24. HRMS spectrum of compound 22.

Analysis Info				Acquisition Date	1/7/2014 10:36:13 AM
Analysis Name		\01_07_2014_brevenal cpds 3	3\148-2_P1-A-		4014
Method	brevenal.m			Operator	ADM
Sample Name Comment	148-2			Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par	ameter				35.354
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus	Not active	Set Capillary	4000 V	Set Dry Heate	er 200 °C 10.0 l/min
Scan Begin Scan End	50 m/z 3000 m/z	Set End Plate Offset Set Collision Cell RF	-500 V 600.0 Vpp	Set Dry Gas Set Divert Va	
Scan End	3000 11/2	Set Comsion Cen Rr	000.0 vpp		ite tradie
Intens x10 <sup>6</sup>					+MS, 1.2-1.4min #(71-
1.00					
0.75		805.50066			
0.50					
1	422.22672				
0.25					
0.25		1227.22460			

Mass Spectrum SmartFormula Report



# **Figure S25.** <sup>1</sup>H NMR spectrum of compound **23**.

Figure S26. HRMS spectrum of compound 23.

	Ma	ss Spectrum Sn	nartForm	nula Report	
Analysis Info Analysis Name Method	D:\Data\Andrea\1 brevenal.m	2_13_2013_brevenal cpds\'	162-2_P1-A-4_	Acquisition Date _01_563.d Operator	12/13/2013 11:45:29 AM ADM
Sample Name Comment	162-2			Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par			_	Ostblabular	3.0 Bar
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	Ion Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Va	er 200 °C 10.0 l/min
Intens. x10 <sup>6</sup>					+MS, 1.4-1.6min #(85-96)
1.5	8	05.50089			
1.0					
0.5					
1	422.22670	1227.22204			
0.0-	500	1000	1500	2000	2500 m/z

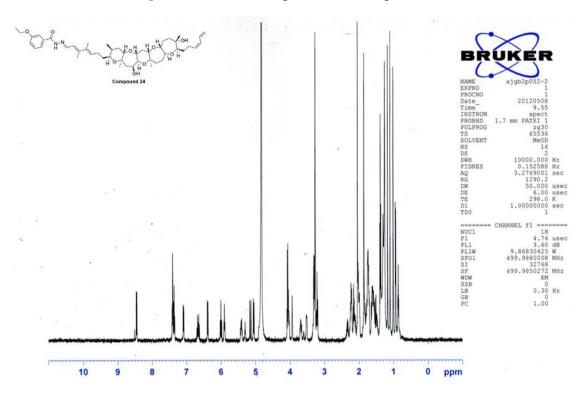
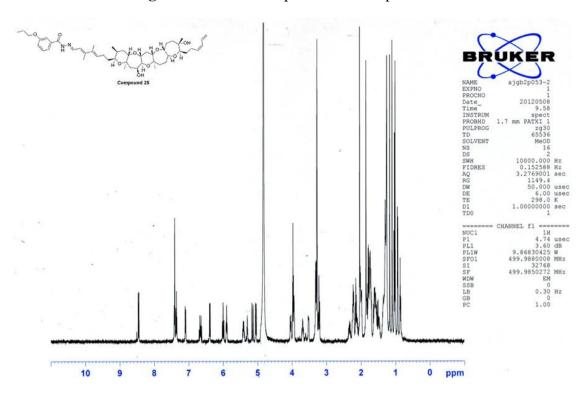


Figure S27. <sup>1</sup>H NMR spectrum of compound 24.

Figure S28. HRMS spectrum of compound 24.

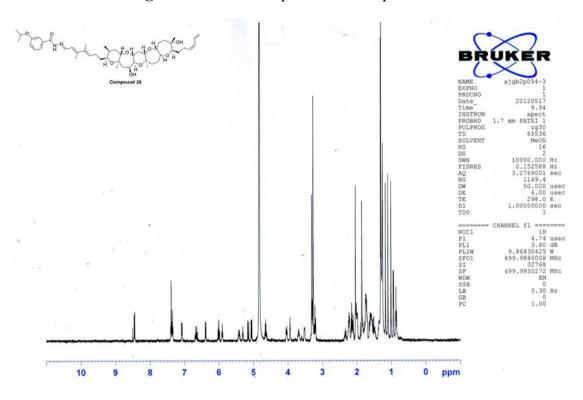
	Ma	ass Spectrum Sn	nartForm	ula Report	
Analysis Info				Acquisition Date	12/13/2013 11:54:54 AM
Analysis Name		12_13_2013_brevenal cpds\	52-2_P1-A-6_01		4514
Method	brevenal.m			Operator	ADM
Sample Name Comment	52-2			Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par	ameter				
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heat Set Dry Gas	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	lve Waste
Intens. x10 <sup>6</sup> 1.5-					+MS, 1.9-2.1min #(113-124
1					
1.0		819.51587			
0.5					
0.0	429.23567	1248.24690			
0.0	500	1000	1500	2000	2500 m/:



**Figure S29.** <sup>1</sup>H NMR spectrum of compound **25**.

Figure S30. HRMS spectrum of compound 25.

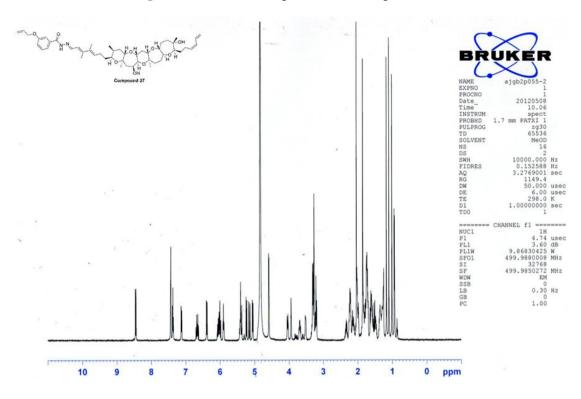
	Ma	ass Spectrum Sr	martForm	ula Report	
Analysis Info Analysis Name	D:\Data\Andrea\	12_13_2013_brevenal cpds	53-2 P1-B-2 01	Acquisition Date	12/13/2013 12:18:26 PM
Method Sample Name Comment	brevenal.m 53-2			Operator Instrument / Ser#	ADM micrOTOF-Q II 10318
Acquisition Par	ameter				
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	lon Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Va	er 200 °C 10.0 l/min
Intens. x10 <sup>6</sup>					+MS, 2.5-2.7min #(151-16)
0.8-					
0.6-		833.53215			
0.4-					
0.2-	436.24315	1269.27131	1686.03426		
0.0-	500	1000	1500	2000	2500 m/



# **Figure S31.** <sup>1</sup>H NMR spectrum of compound **26**.

Figure S32. HRMS spectrum of compound 26.

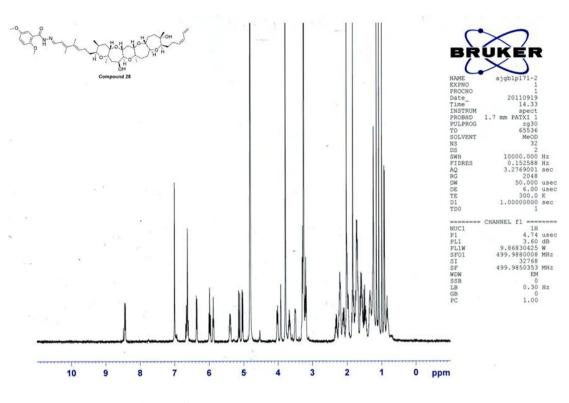
Analysis Info	D. D. J. M. J 140	00.0010 housed and a		Acquisition Date	12/20/2013 11:02:16 AM
Analysis Name Method	D:\Data\Andrea\12 brevenal.m	_20_2013_brevenal cpds 2	2\54-2-3_P1-C	Operator	ADM
Sample Name	54-2-3			Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par	ameter				
Source Type Focus Scan Begin	ESI Not active 50 m/z	Ion Polarity Set Capillary Set End Plate Offset	Positive 4000 V -500 V	Set Nebulizer Set Dry Heate Set Dry Gas	er 200 °C 10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Val	ve Waste
Intens. x10 <sup>5</sup> 2.0-					+MS, 1.8-1.9min #(109-11
1.5	436.24309	33.52942			
1.0					
0.5		1269,26683			



# **Figure S33.** <sup>1</sup>H NMR spectrum of compound **27**.

Figure S34. HRMS spectrum of compound 27.

	Mas	s Spectrum Sm	nartFormu	ula Report	
Analysis Info Analysis Name Method Sample Name Comment		2_13_2013_brevenal cpds\5		Acquisition Date _564.d Operator	12/13/2013 11:50:12 AM ADM micrOTOF-Q II 10318
Acquisition Par Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	lon Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulize Set Dry Heat Set Dry Gas Set Divert Va	er 200 °C 10.0 l/min alve Waste
Intens. x10 <sup>6</sup> 1.5					+MS, 2.0-2.2min #(121-132
1.0		331.51691			
0.0	435.23590	1266.24859	1500	2000 -	2500 m



# Figure S35. <sup>1</sup>H NMR spectrum of compound 28.

Figure S36. HRMS spectrum of compound 28.

Analysis Info				Acquisition Date	12/13/2	013 11:16:07 AM
Analysis Name		2_13_2013_brevenal cpds\	171.2 B3 P1.	e - Se - 이번 물건이 있는 것같이 잘 안 된 것 같이 가지 않는 것이 하나요. ? ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	12/10/2	015 11.10.07 AW
Method	brevenal.m	_15_2015_bievenal cpust	17 1-2_00_1 1-7	Operator	ADM	
Sample Name	171-2_B3			Instrument / Ser#	micrOT	OF-Q II 10318
Comment						
Acquisition Par	ameter					
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer		3.0 Bar 200 °C
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	er	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	lve	Waste
Intens.					+MS	5, 1.6-1.8min #(96-10
x10 <sup>6</sup>						
1.25						
1.00	8	35.51092				
0.75						
0.50						
0.25						
	437.23112					
0.001	500	1000	1500	2000	250	00 n

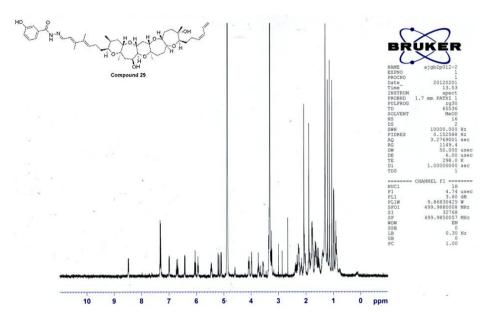
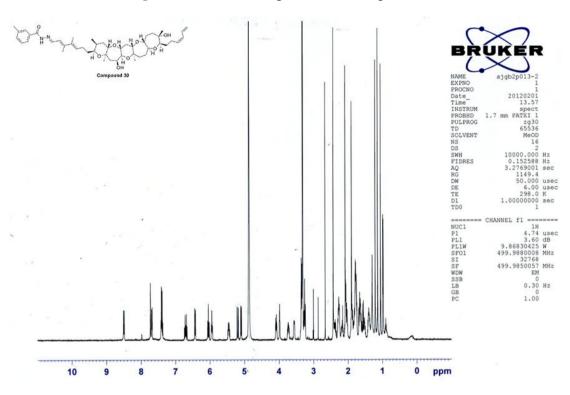


Figure S37. <sup>1</sup>H NMR spectrum of compound 29.

Figure S38. HRMS spectrum of compound 29.

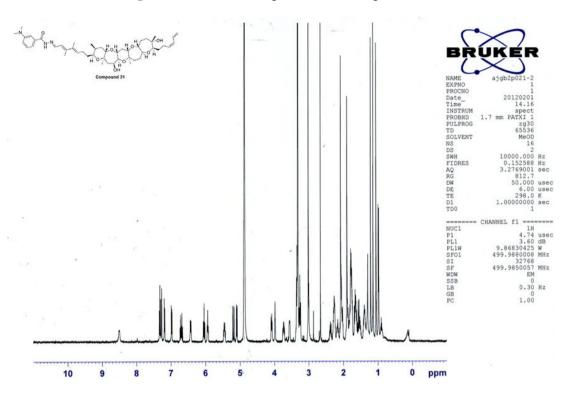
Analysis Info				Acquisition Date	12/20/2013 9:42:47 AM
Analysis Name Method Sample Name Comment	D:\Data\Andrea\12_ brevenal.m 12-2	20_2013_brevenal cpds 3	2\12-2_P1-A-4	Operator	ADM micrOTOF-Q.II 10318
Acquisition Par	ameter		San Section		ion section in
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	Ion Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Val	er 200 °C 10.0 l/min
Intens. x10 <sup>4</sup>					+MS, 1.0-1.1min #(60-66
3	791.4	8188			
2	415.21864				
1		, 1221.98932			



**Figure S39.** <sup>1</sup>H NMR spectrum of compound **30**.

Figure S40. HRMS spectrum of compound 30.

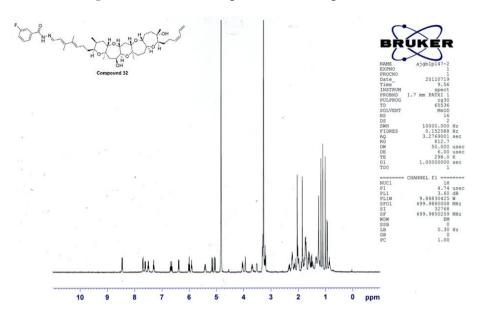
Analysis Info Analysis Name		12_13_2013_brevenal cpds\	13-2_P1-B-3_0			2:23:07 PM
Method Sample Name	brevenal.m 13-2			Operator Instrument / Ser#	ADM micrOTOF-Q	1 10318
Comment						
Acquisition Par	ameter			· 7		
Source Type	ESI	Ion Polarity	Positive 4000 V	Set Nebulizer Set Dry Heat		
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	-500 V	Set Dry Gas	10.0	
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Va	lve Wast	e
Intens. x10 <sup>6</sup>					+MS, 1,8-2.0	)min #(107-118)
1.5-					;	
1				• • • •		
1.0	3	789.50653				
0.5						
	414.22914	1203.23177	1597.97872			
0.0-	500	1000	1500	2000	2500	m/2



# **Figure S41.** <sup>1</sup>H NMR spectrum of compound **31**.

Figure S42. HRMS spectrum of compound 31.

Analysis Info				Acquisition Date	12/13/20	13 11:59:38 AM
Analysis Name	D:\Data\Andrea\	12_13_2013_brevenal cpds	21-2_P1-A-7_0		A STREET	
Method	brevenal.m			Operator	ADM	
Sample Name Comment	21-2			Instrument / Ser#	micrOTO	F-Q II 10318
Acquisition Par	ameter					
Source Type	ESI	Ion Polarity	Positive 4000 V	Set Nebulizer Set Dry Heate		3.0 Bar 200 °C
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	-500 V	Set Dry Gas		10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Val	lve	Waste
Intens x10 <sup>6</sup>					+MS, 1	.7-1.8min #(100-10
1.5						
1		818.53339				
1.0						
0.5						
0.0	428.74340					
0.0 -1 1	500	1000	1500	2000	2500	



**Figure S43.** <sup>1</sup>H NMR spectrum of compound **32**.

Figure S44. HRMS spectrum of compound 32.

Analysis Info				Acquisition Date	12/13/2013 12:04:20 PM
Analysis Name		2_13_2013_brevenal cpds\	147-2_P1-A-8_		
Method	brevenal.m			Operator	ADM
Sample Name Comment	147-2		100	Instrument / Ser#	micrOTOF-Q II 10318
Acquisition Par	ameter	an a case and a	1110-1110-11		
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	
Focus Scan Begin	Not active 50 m/z	Set Capillary Set End Plate Offset	4000 V -500 V	Set Dry Heate Set Dry Gas	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Val	
Intens.					+MS, 1.6-1.8min #(97-107
x10 <sup>6</sup>					
1.5-					
3	-	3.48069		1.	
1.0-	/5	13.48069			
-					
0.5		C. Carlos and			
1	416.21725				
1		1209.19339			
0.0-	500	1000 · · · · ·	1500	2000	2500 m

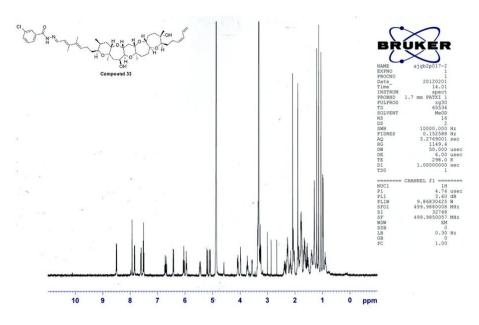
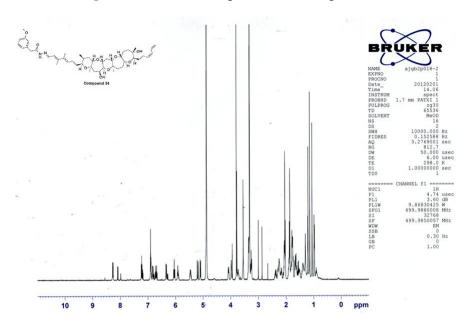


Figure S45. <sup>1</sup>H NMR spectrum of compound 33.

Figure S46. HRMS spectrum of compound 33.

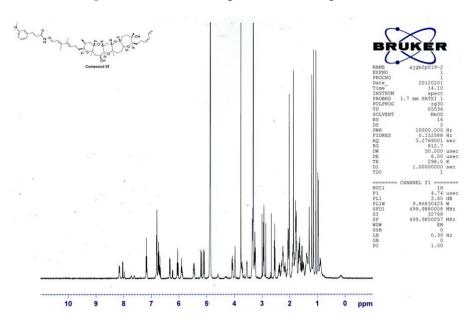
Analysis Info Analysis Name	D:\Data\Andrea\1	2_20_2013_brevenal cpds 3	2\P124-2 P1-E	Acquisition Date 3-6 01 588.d	12/20/2013 10:34:14 AM
Method Sample Name Comment	brevenal.m			Operator	ADM micrOTOF-Q II 10318
Acquisition Par	ameter				
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	Ion Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Val	er 200 °C 10.0 l/min
Intens. x10 <sup>5</sup>					+MS, 1.7-1.8min #(102-10)
2.5	8	09.44968			
1.5 1.0	424.20241				
0.5		1233.64826			
0.0	500	1000	1500	2000	2500 m



# **Figure S47.** <sup>1</sup>H NMR spectrum of compound **34**.

Figure S48. HRMS spectrum of compound 34.

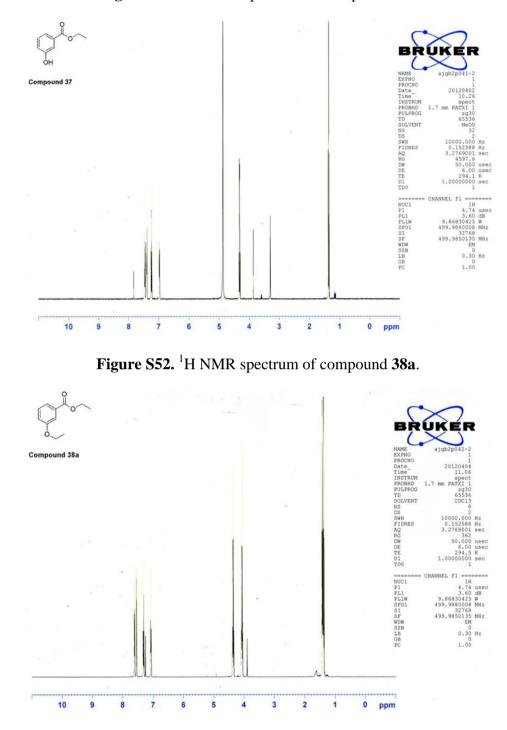
Analysis Info				Acquisition Date	12/20/20	13 10:06:12 AM
Analysis Name Method Sample Name Comment	D:\Data\Andrea\12_ brevenal.m 18-2-5-2	20_2013_brevenal cpds 2	2\18-2-5-2_P1-	Operator	ADM micrOTC	F-Q II 10318
Acquisition Par	ameter					
Source Type Focus Scan Begin Scan End	ESI Not active 50 m/z 3000 m/z	lon Polarity Set Capillary Set End Plate Offset Set Collision Cell RF	Positive 4000 V -500 V 600.0 Vpp	Set Nebulizer Set Dry Heate Set Dry Gas Set Divert Val	er	3.0 Bar 200 °C 10.0 l/min Waste
Intens x10 <sup>4</sup> 8-					+MS,	1.6-1.8min #(93-110)
6-	429.23479					
4-	81	9.51400				
2-	(*)					
1						



# **Figure S49.** <sup>1</sup>H NMR spectrum of compound **35**.

Figure S50. HRMS spectrum of compound 35.

Analysis Info Analysis Name	D:\Data\Andre	a\12_20_2013_brevenal cpds 3	2\19-2-4-1 P1-	Acquisition Date B-3 01 585.d	12/20/2013 10:20:13 AM
Method	brevenal.m			Operator	ADM
Sample Name	19-2-4-1			Instrument / Ser#	micrOTOF-Q II 10318
Comment					
Acquisition Par	ameter			and the	
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	3.0 Bar
Focus	Not active	Set Capillary	4000 V	Set Dry Heate	
Scan Begin	50 m/z	Set End Plate Offset	-500 V	Set Dry Gas	10.0 l/min
Scan End	3000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Val	ve Waste
1.00 0.75	436.24189 	833.52898			+MS, 1.8-2.0min #(106-12)
0.50					
0.25		1			
0.00					



**Figure S51.** <sup>1</sup>H NMR spectrum of compound **37**.

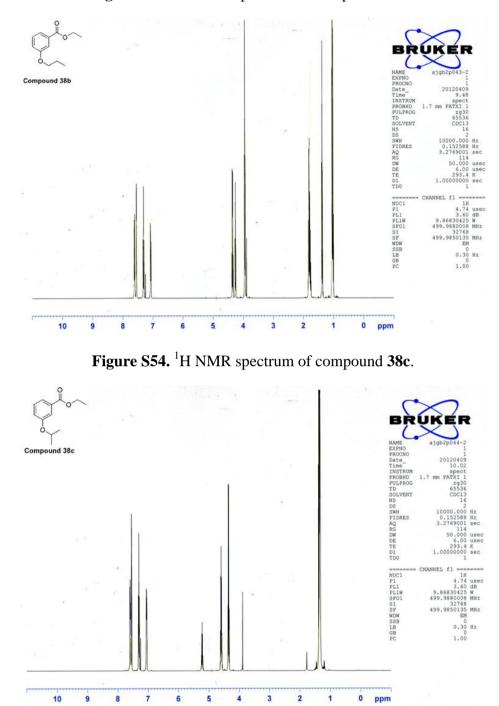


Figure S53. <sup>1</sup>H NMR spectrum of compound 38b.

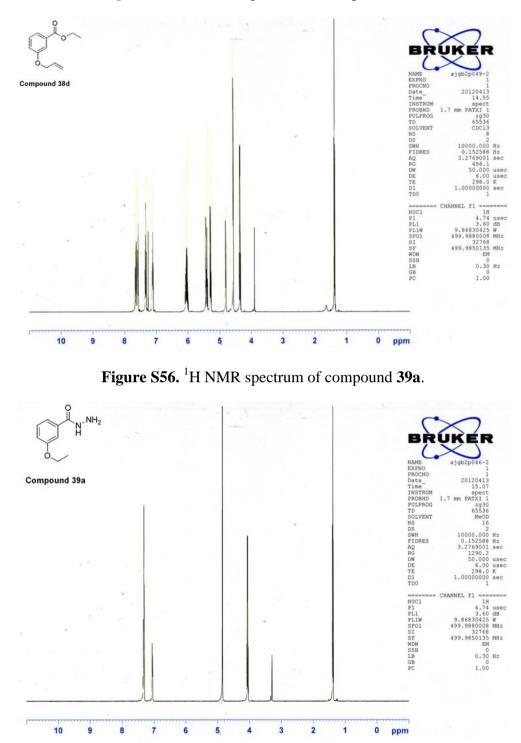
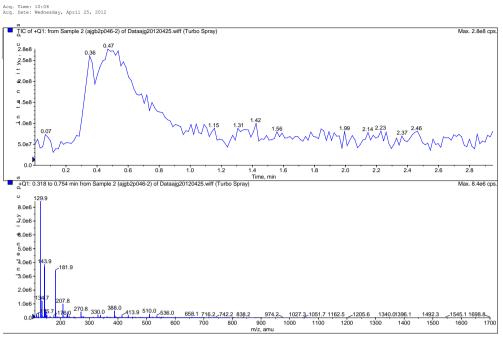
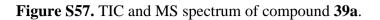


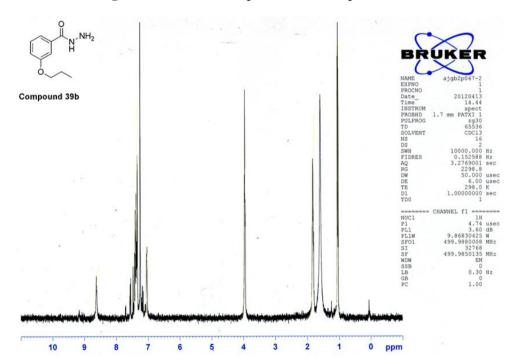
Figure S55. <sup>1</sup>H NMR spectrum of compound 38d.





\*Post-PM

Figure S58. <sup>1</sup>H NMR spectrum of compound 39b.



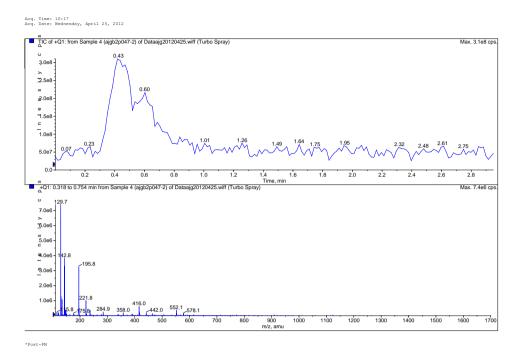
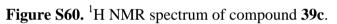
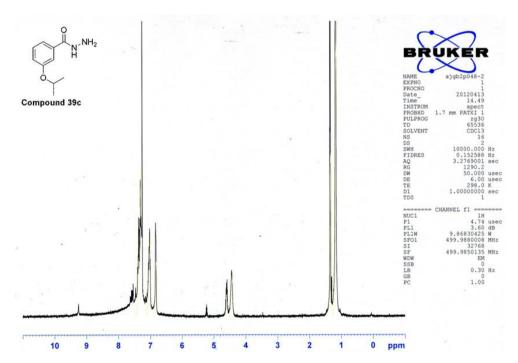
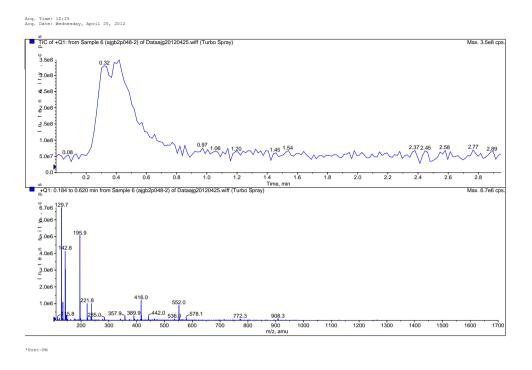


Figure S59. TIC and MS spectrum of compound 39b.







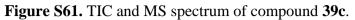
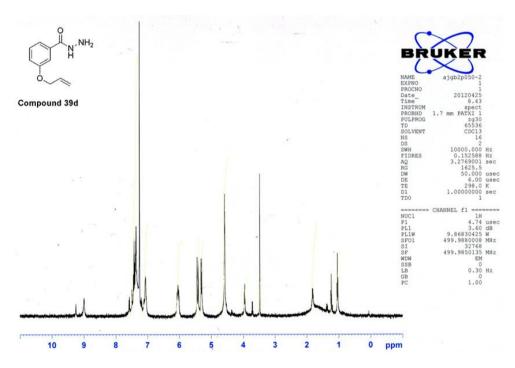
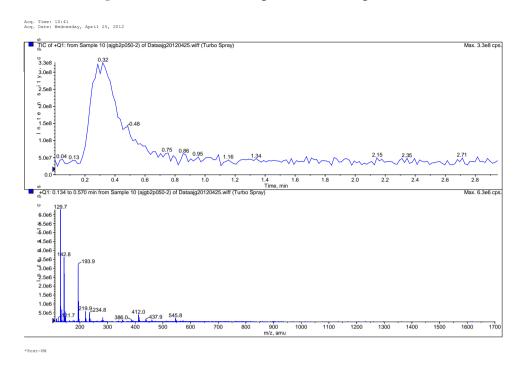


Figure S62. <sup>1</sup>H NMR spectrum of compound 39d.





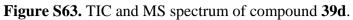
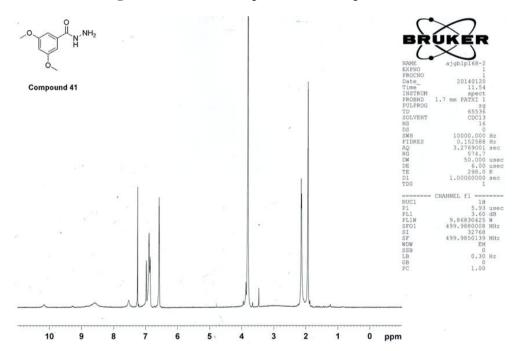


Figure S64. <sup>1</sup>H NMR spectrum of compound 41.



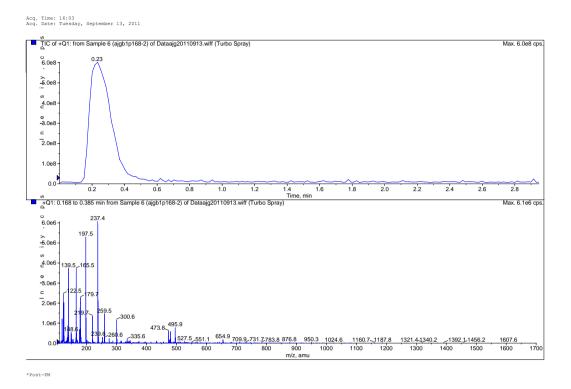
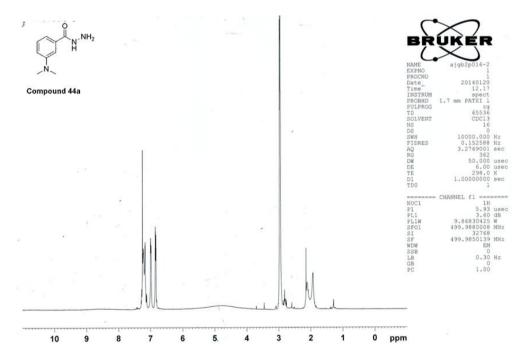
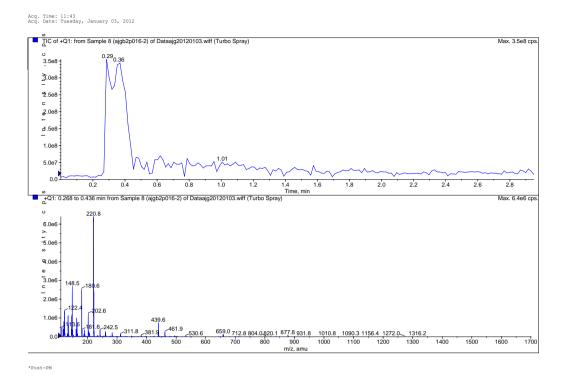


Figure S65. TIC and MS spectrum of compound 41.

Figure S66. <sup>1</sup>H NMR spectrum of compound 44a.





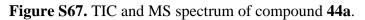
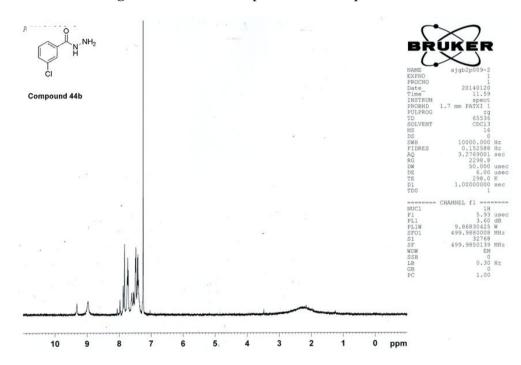
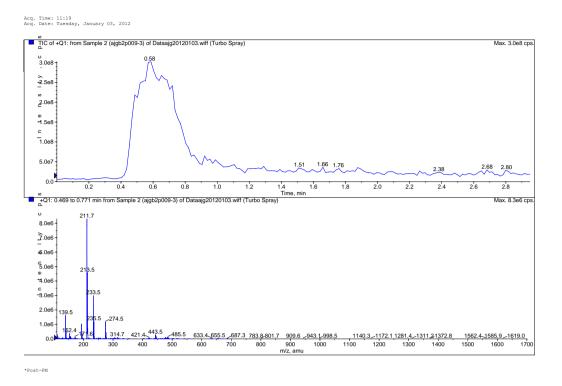


Figure S68. <sup>1</sup>H NMR spectrum of compound 44b.





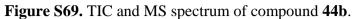
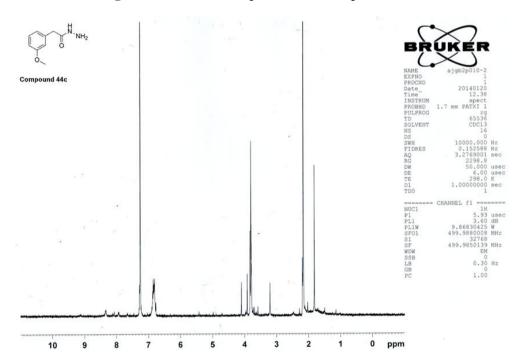
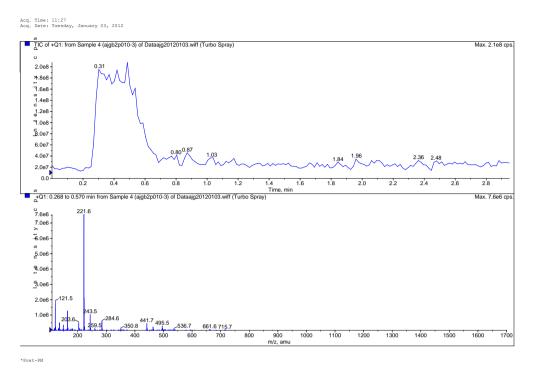


Figure S70. <sup>1</sup>H NMR spectrum of compound 44c.





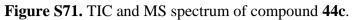
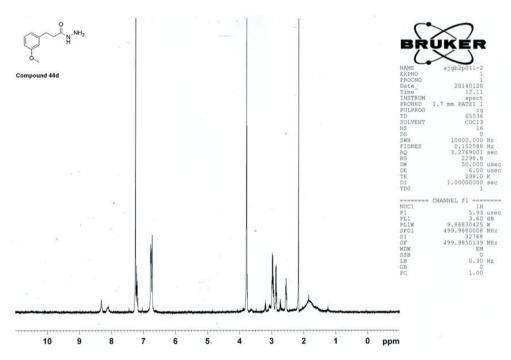


Figure S72. <sup>1</sup>H NMR spectrum of compound 44d.



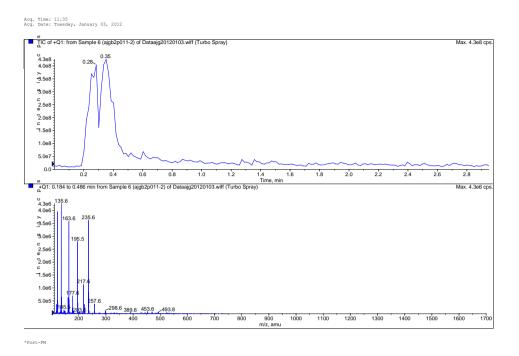


Figure S73. TIC and MS spectrum of compound 44d.

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