

## SUPPLEMENTARY MATERIALS

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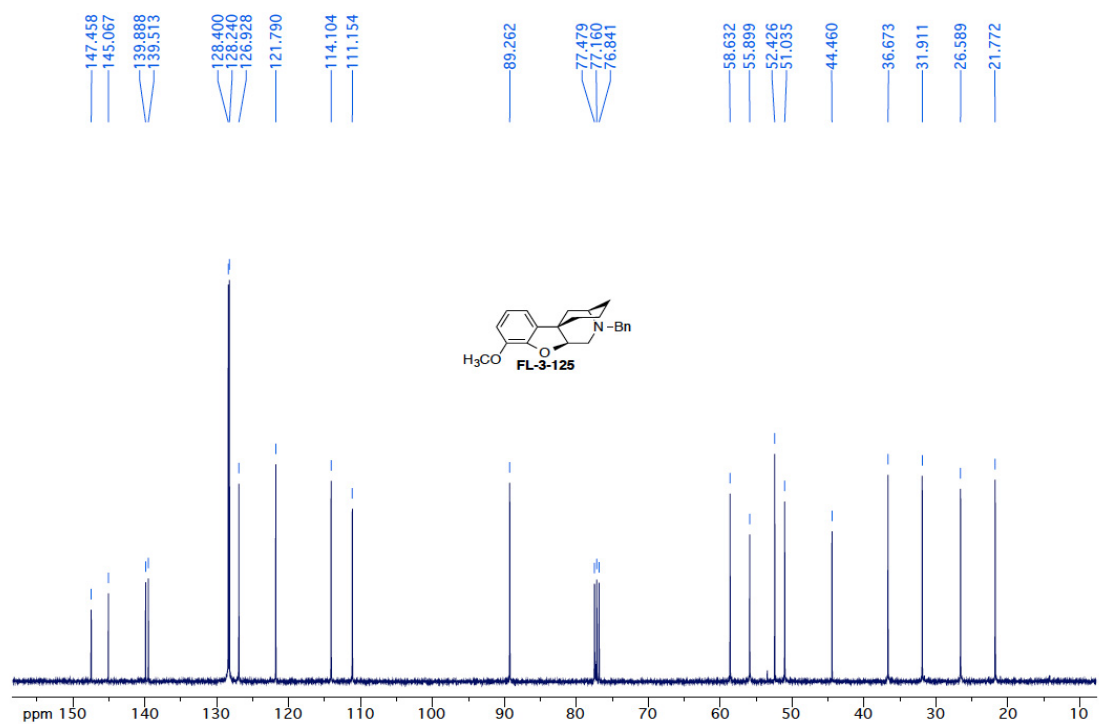
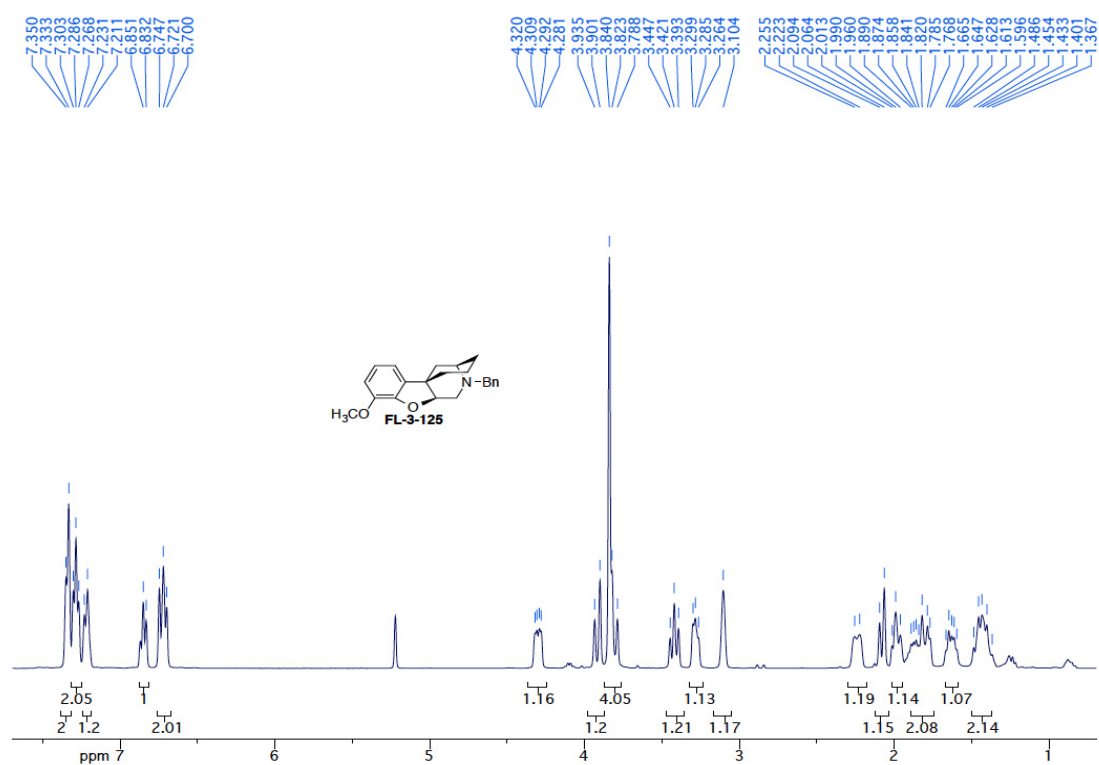
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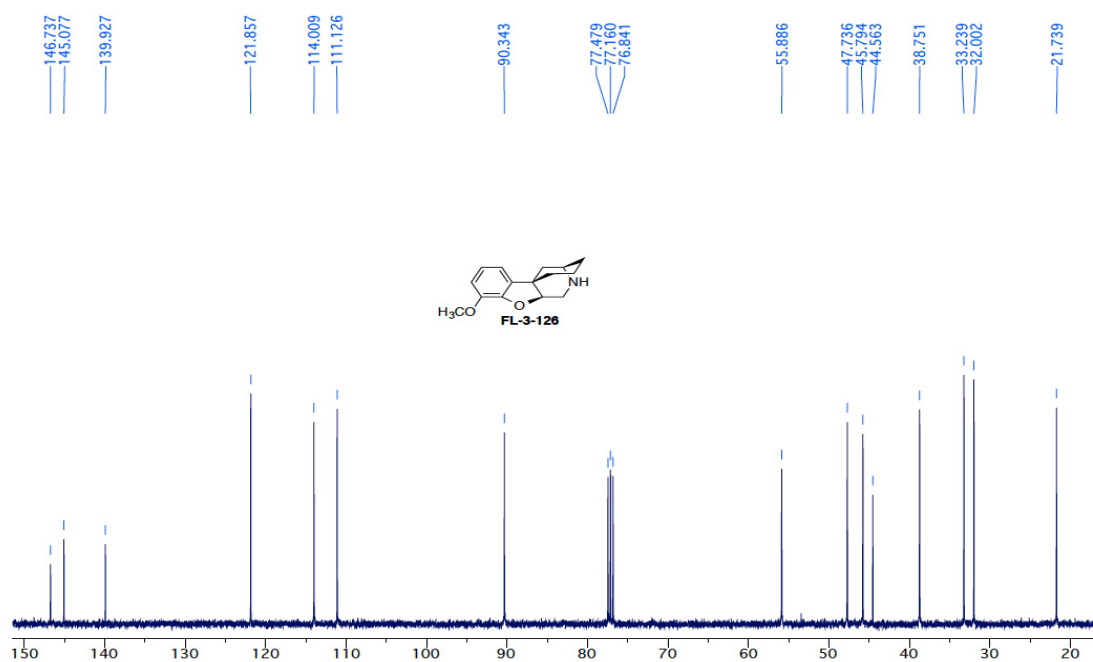
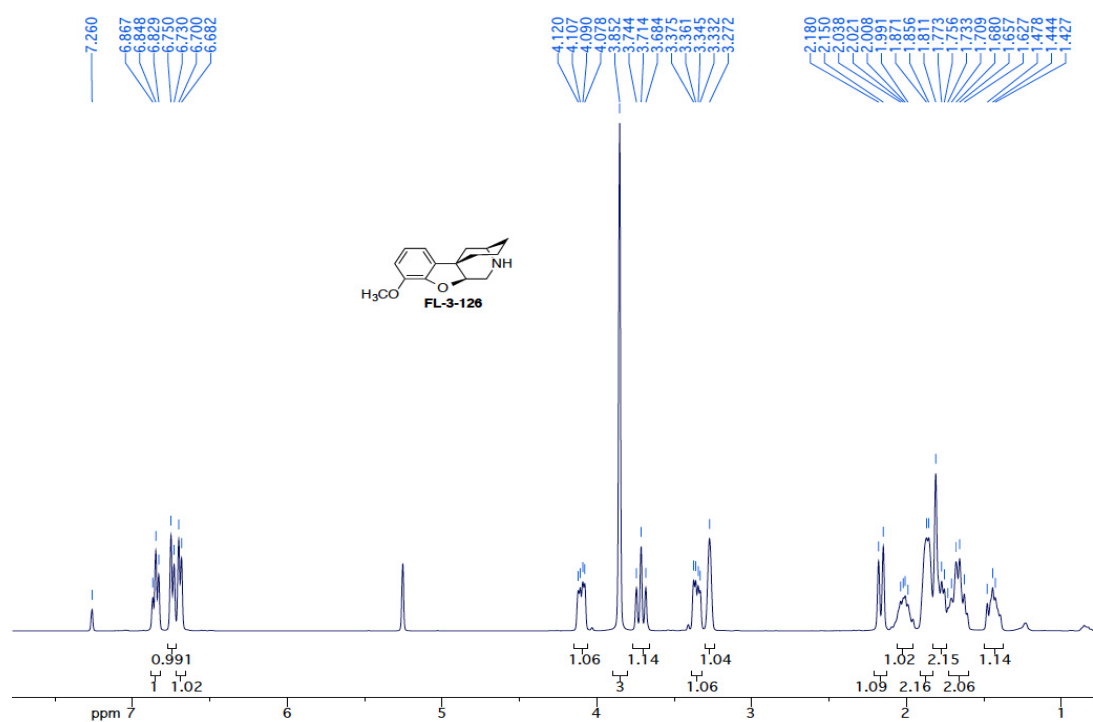
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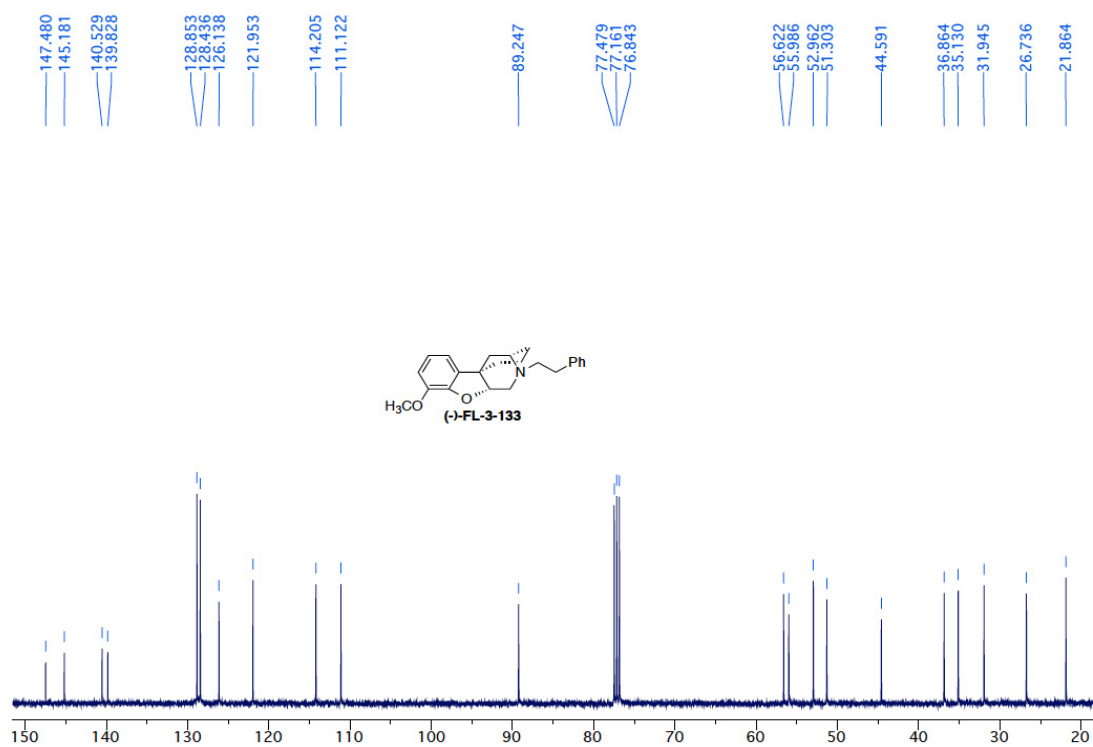
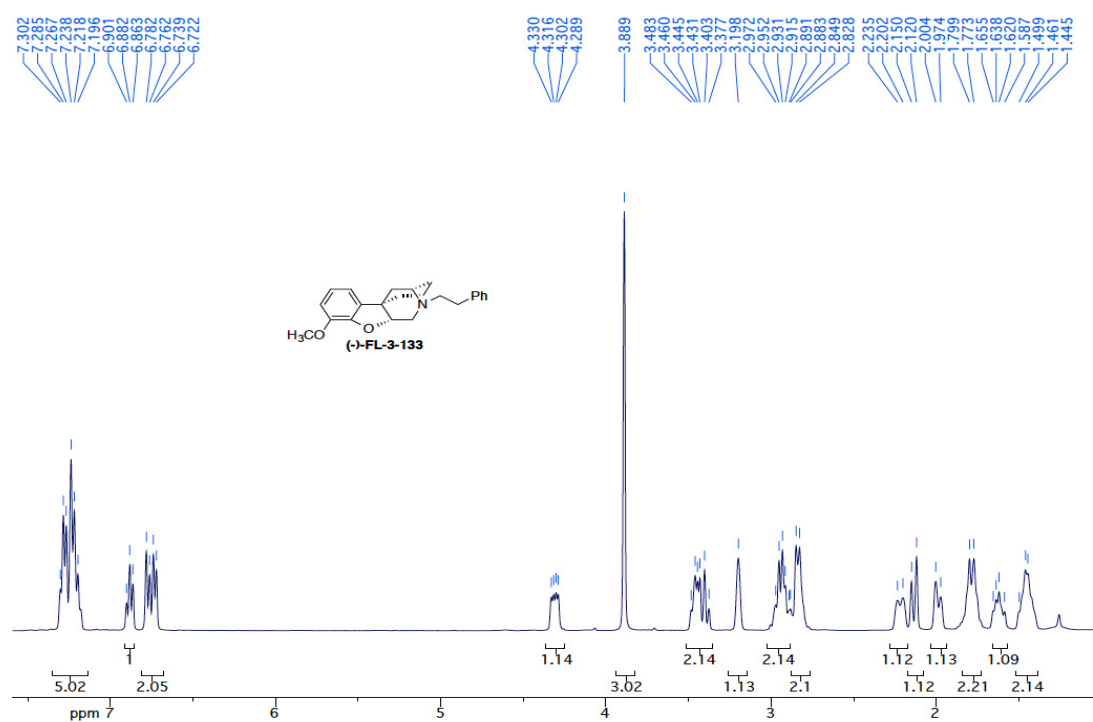
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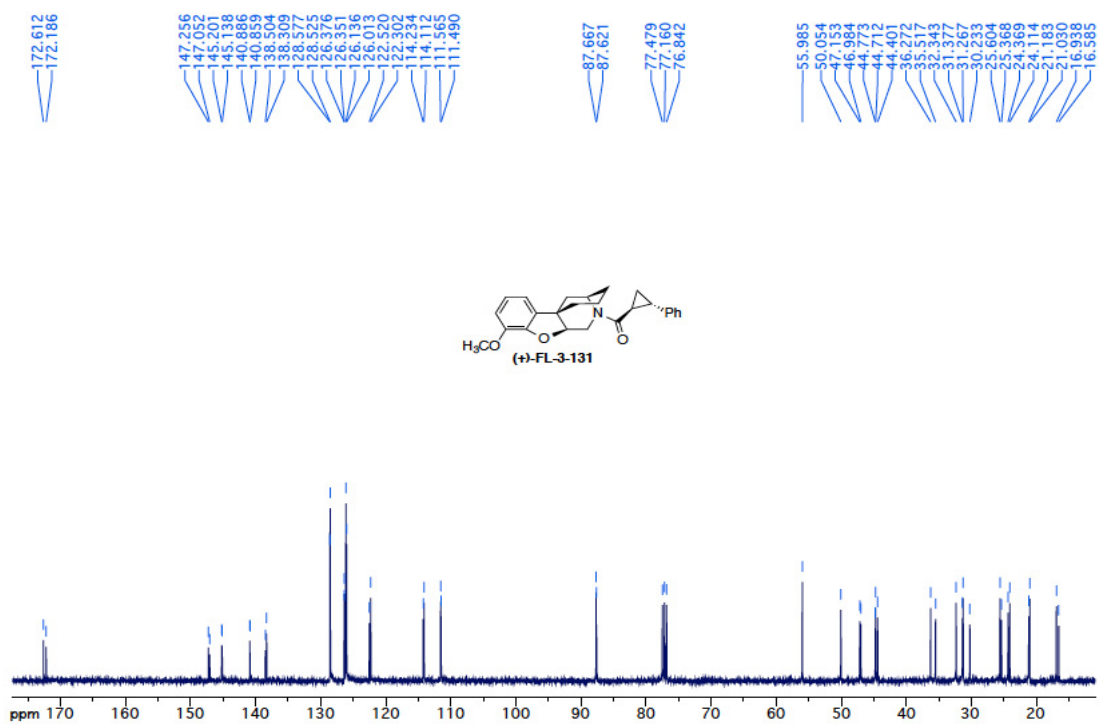
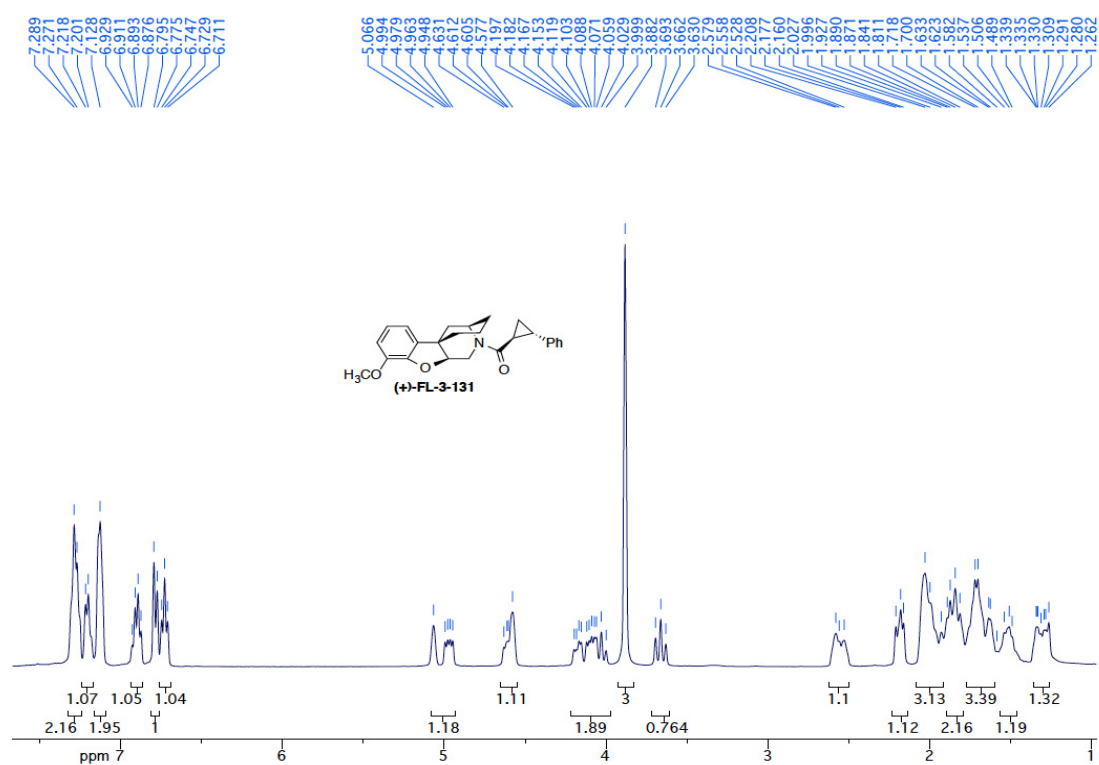
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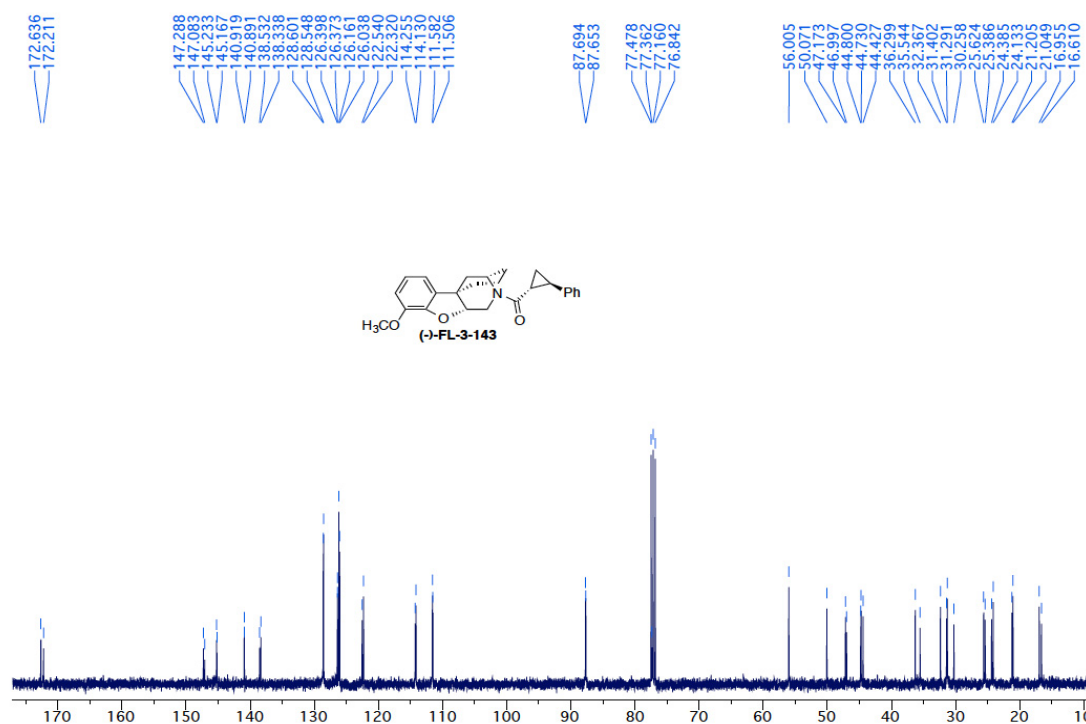
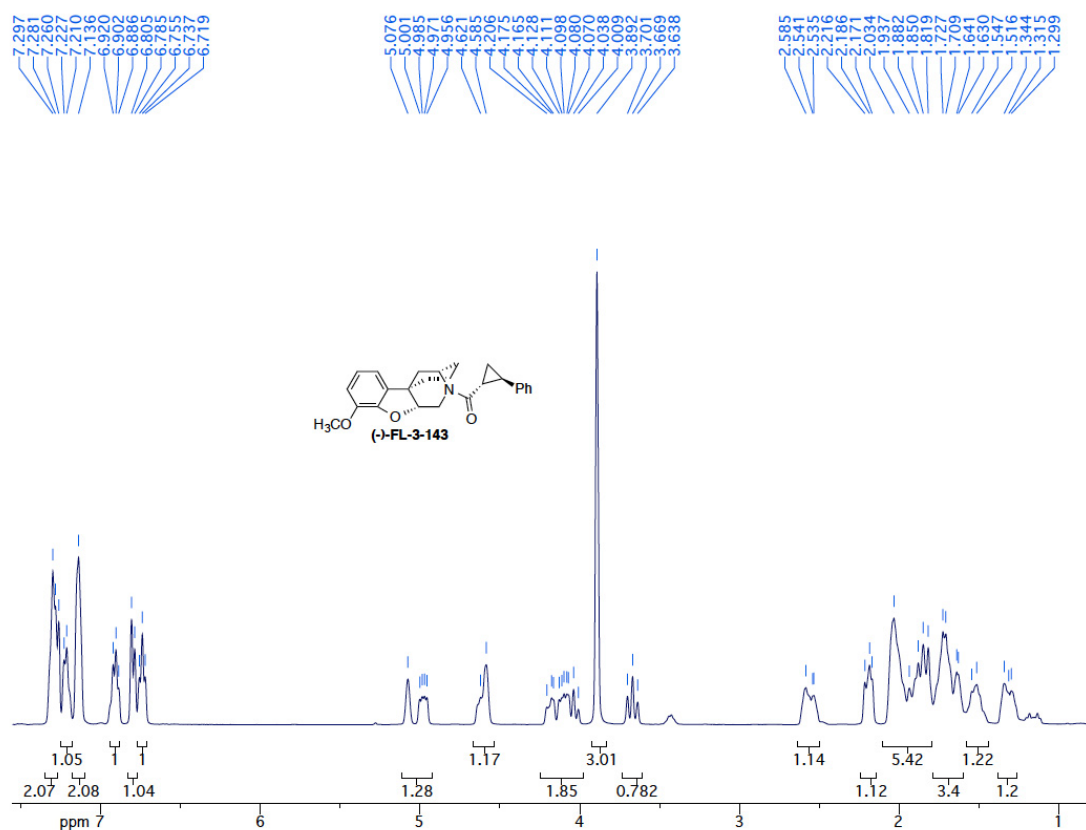
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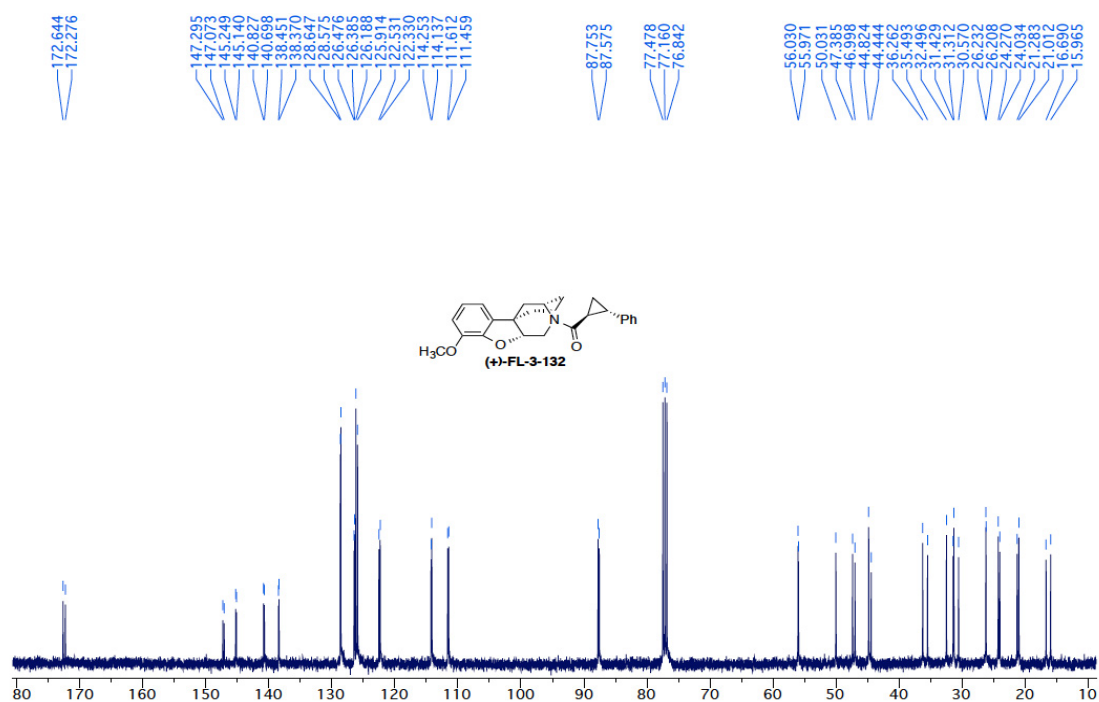
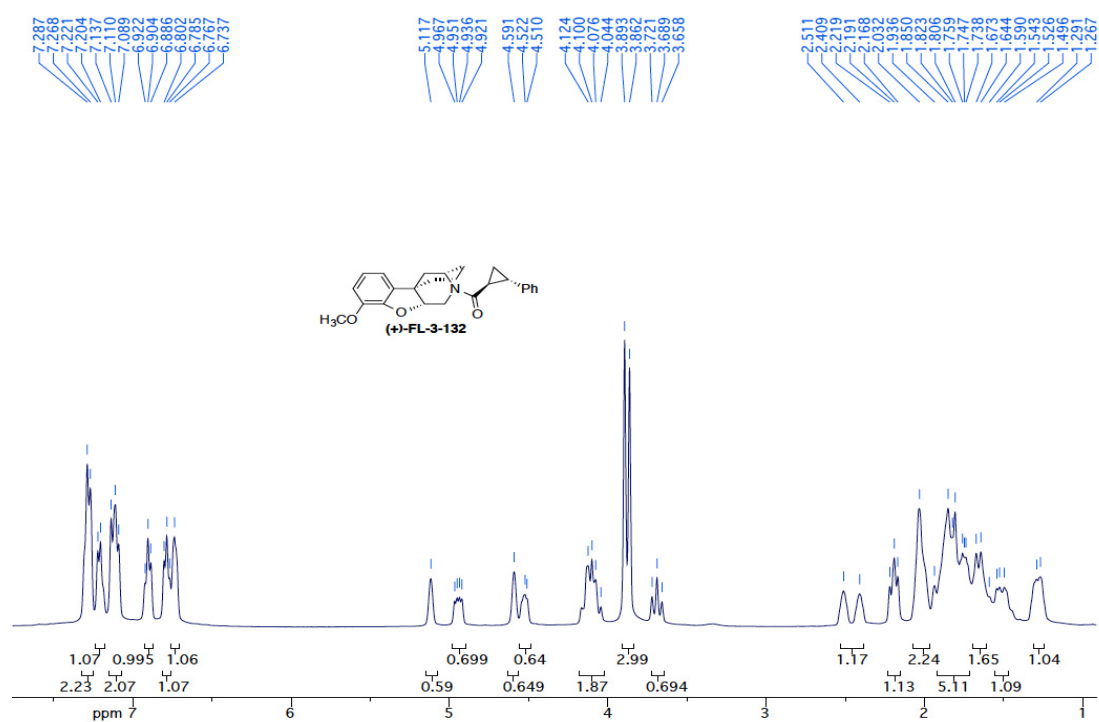
# Compound (+)-8



# Compound (-)-8

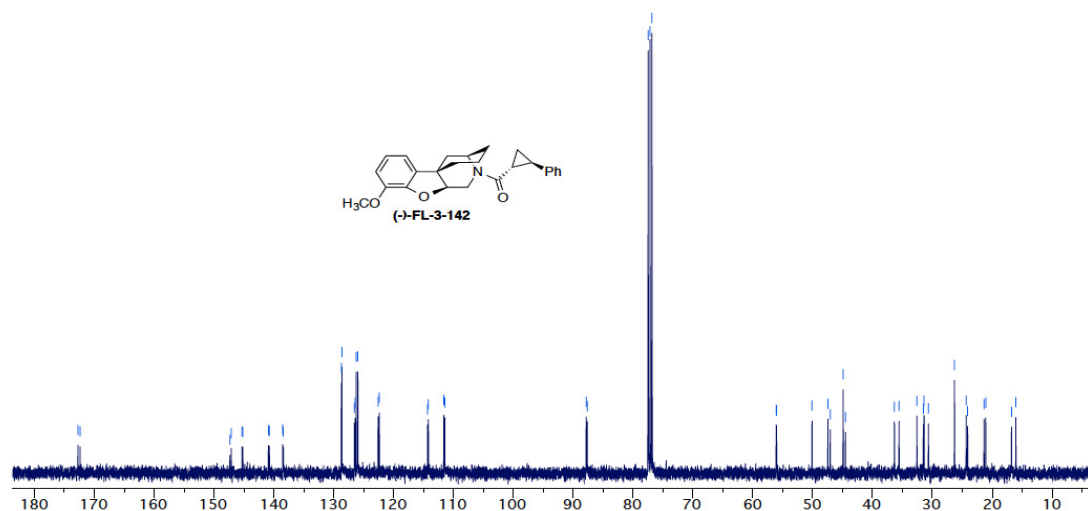
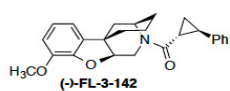
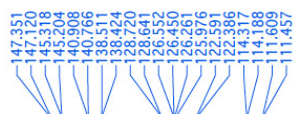
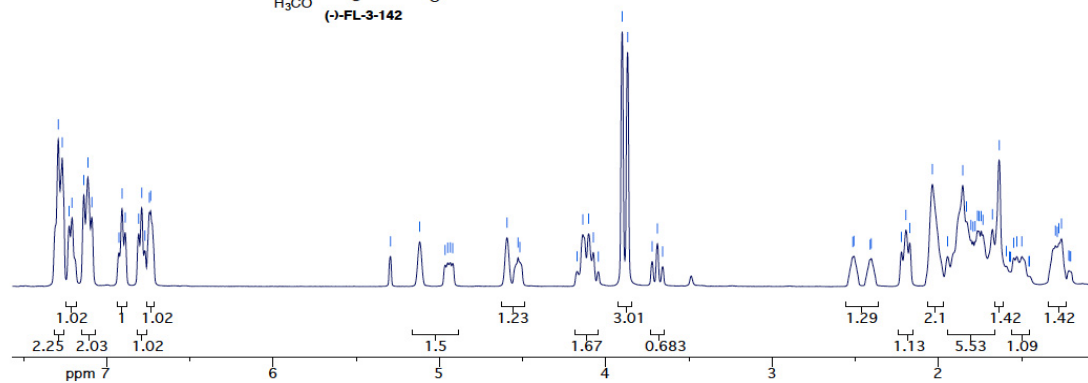
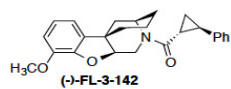


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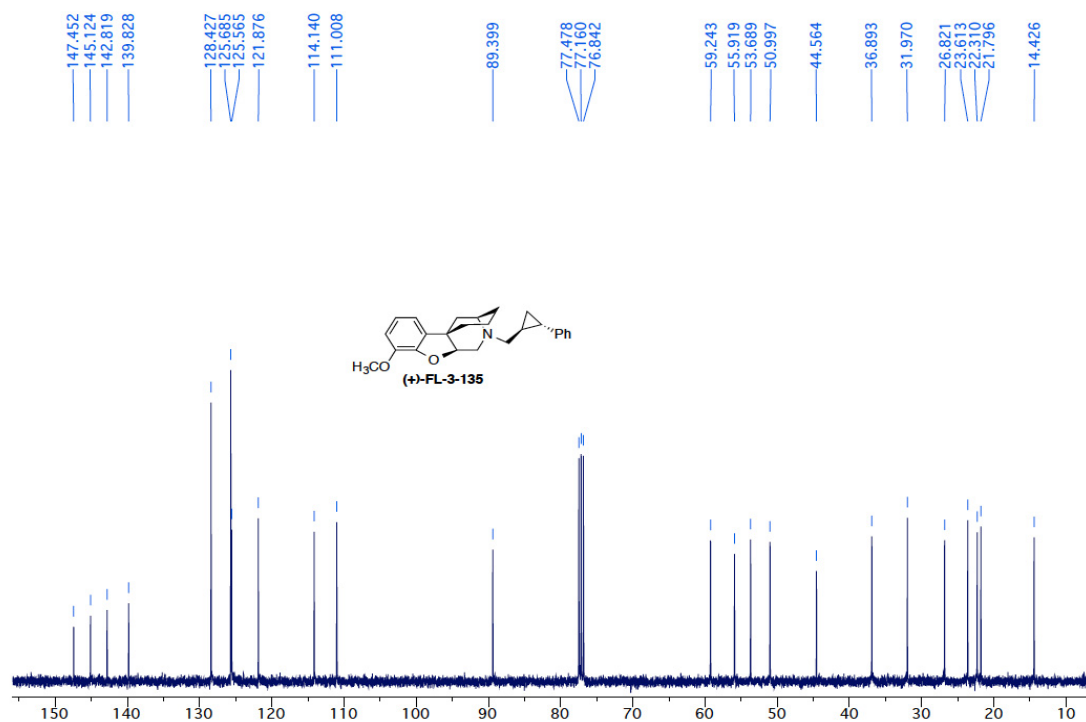
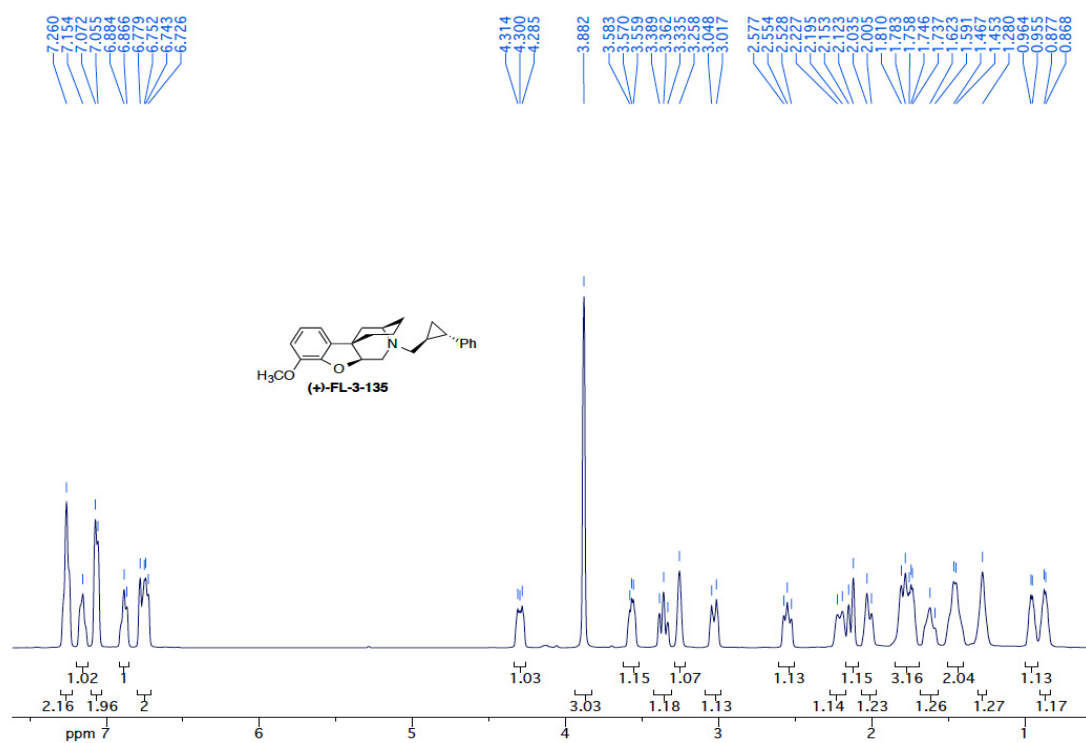




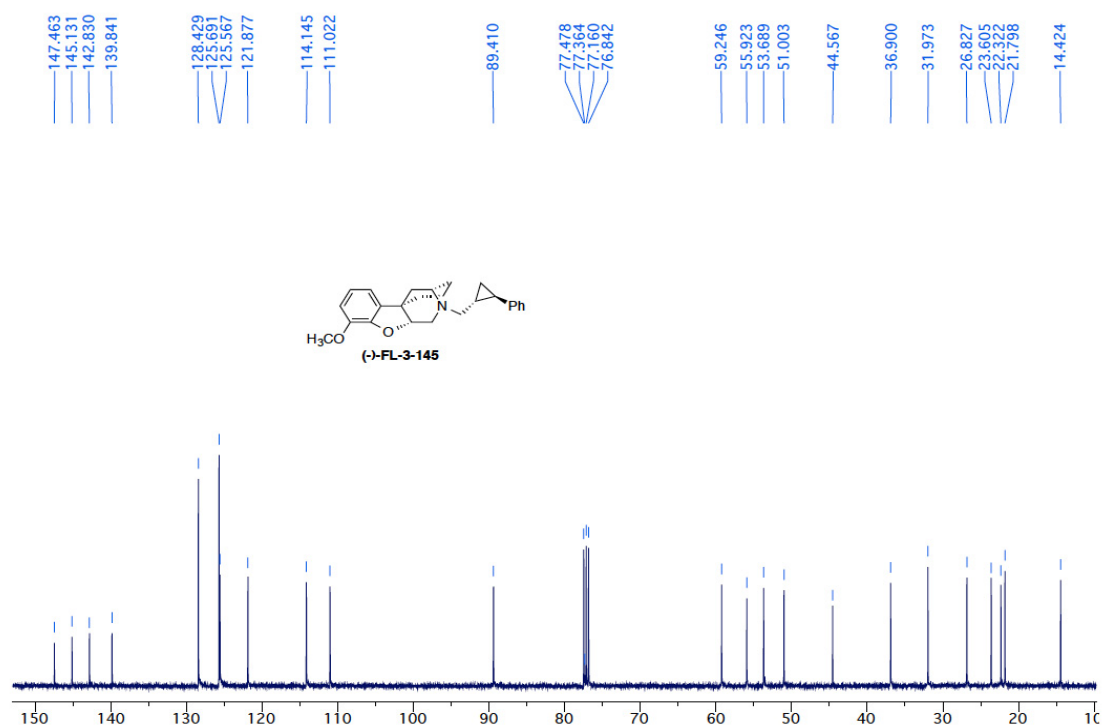
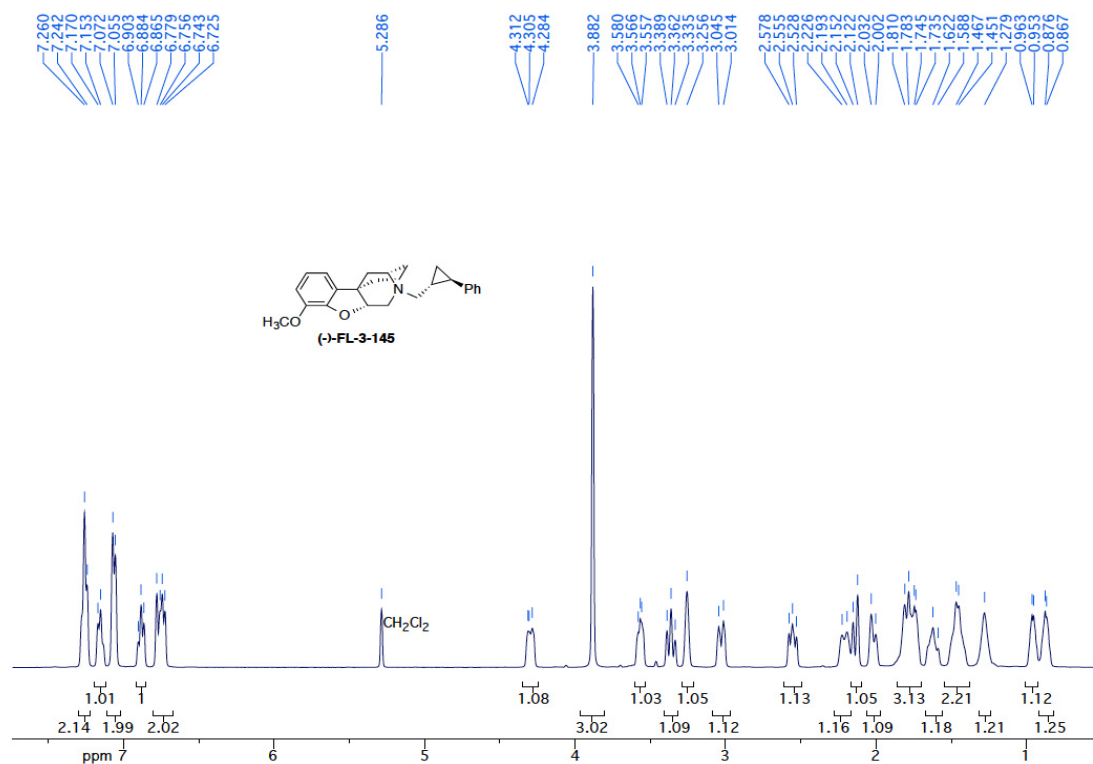
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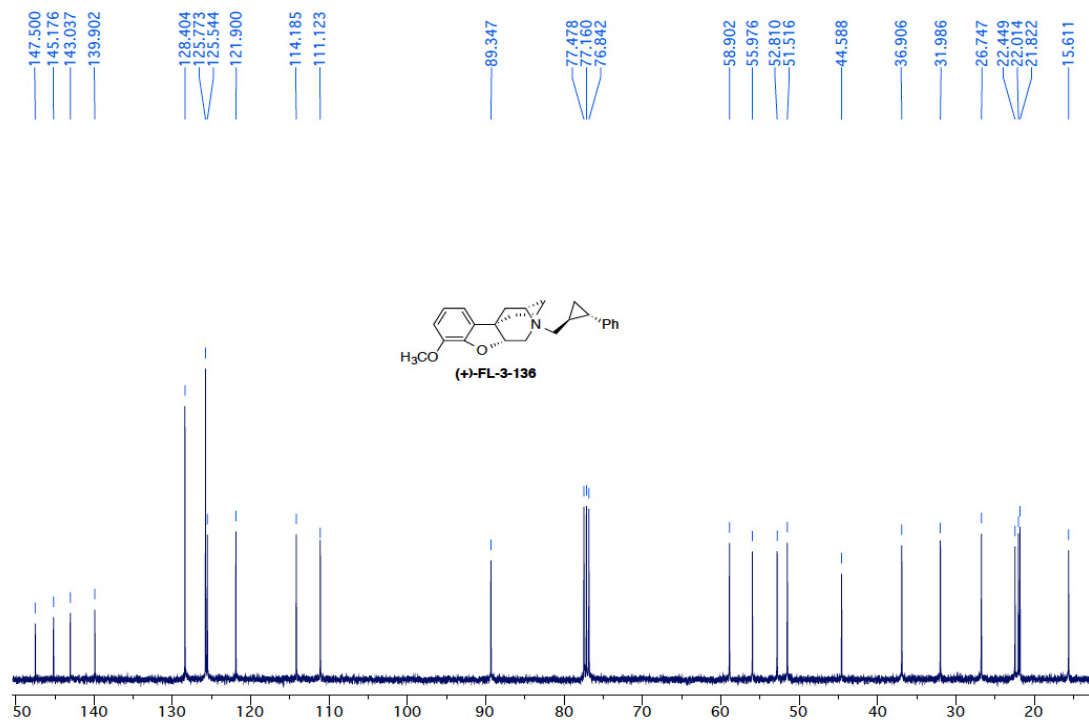
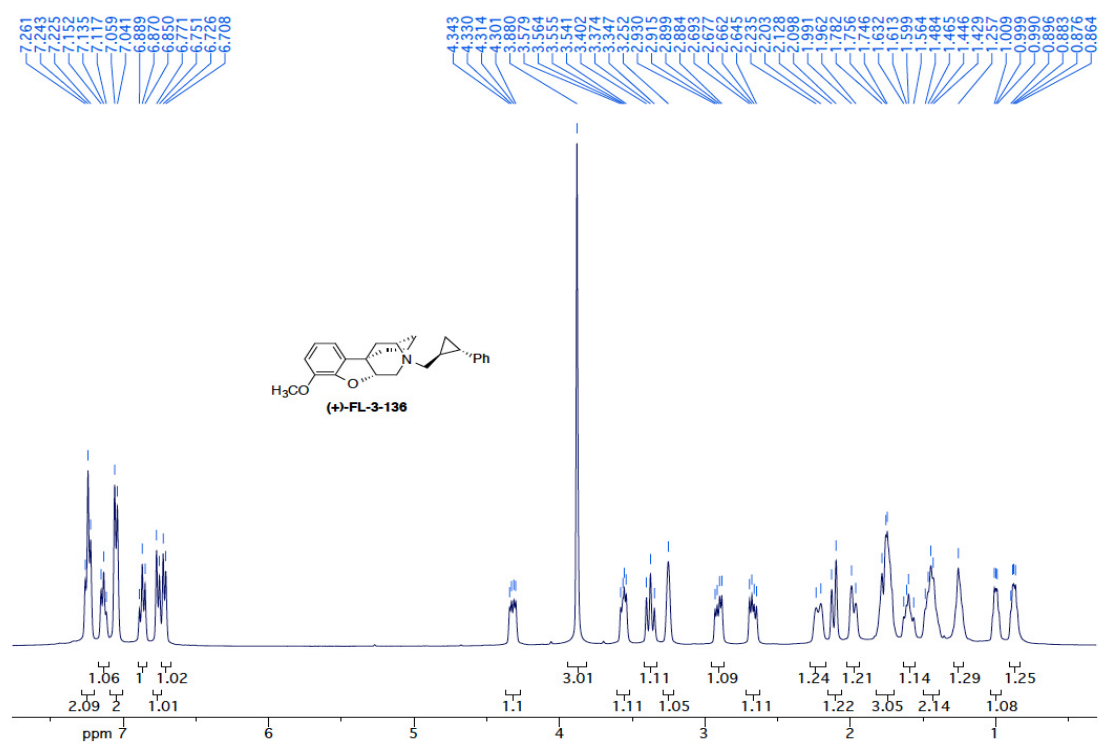
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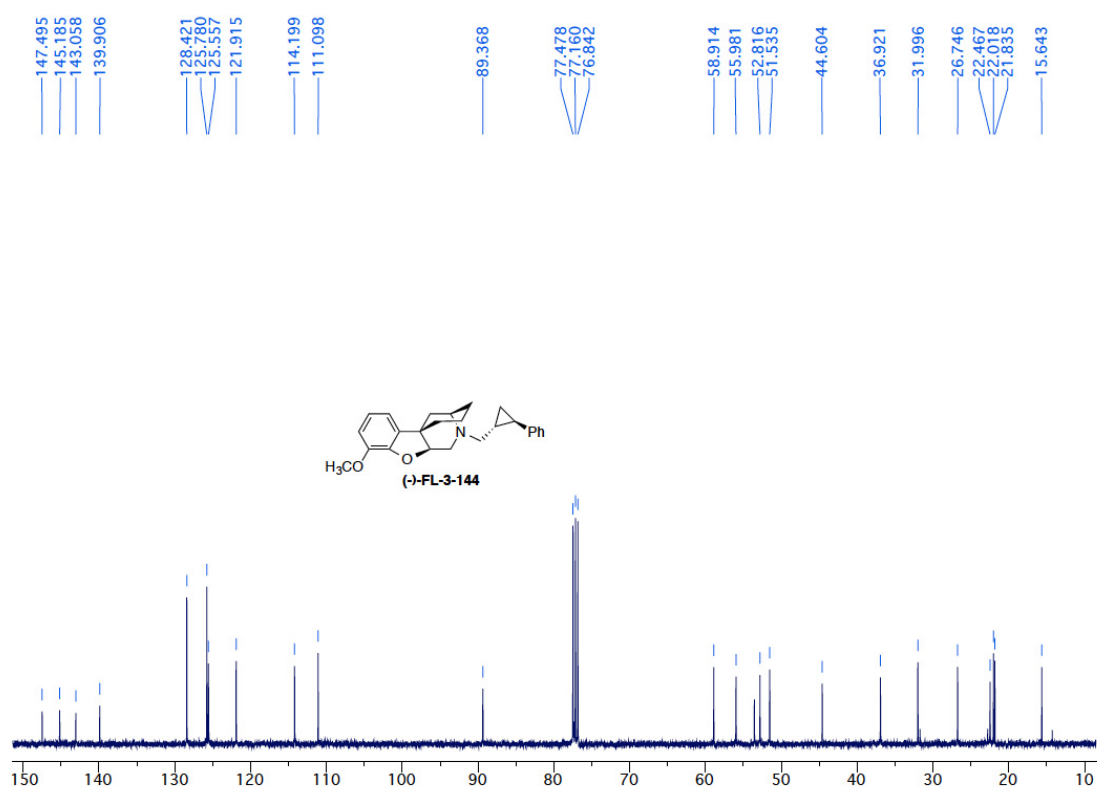
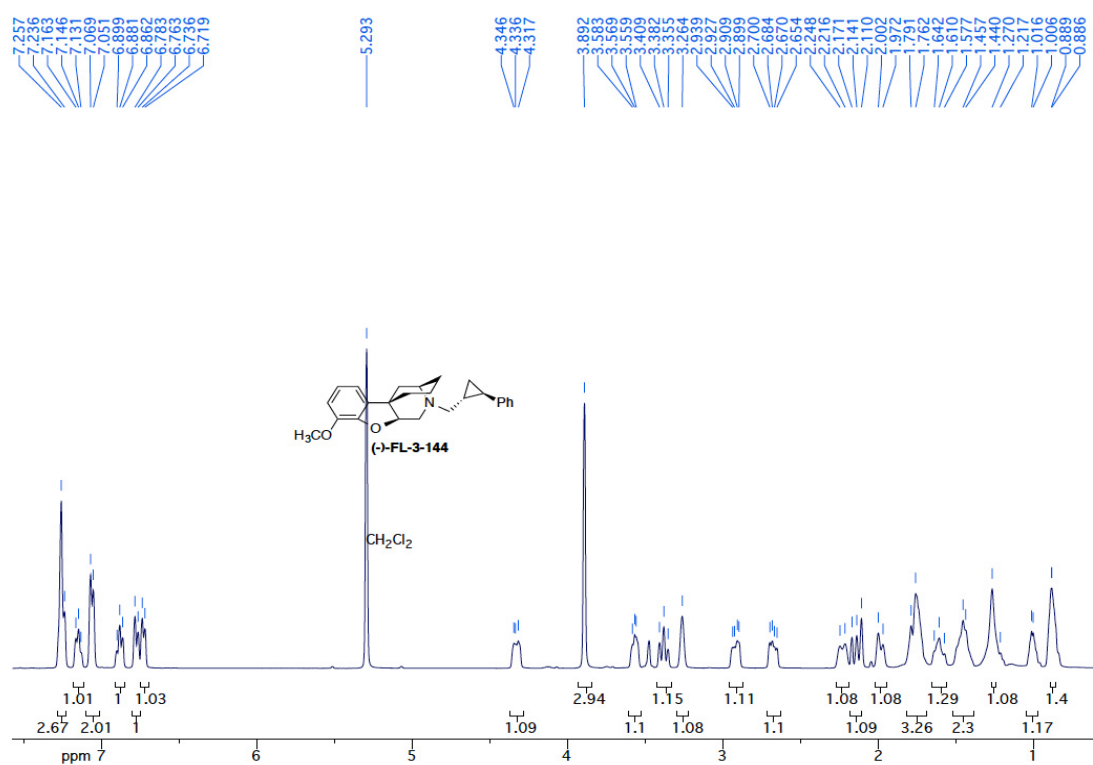
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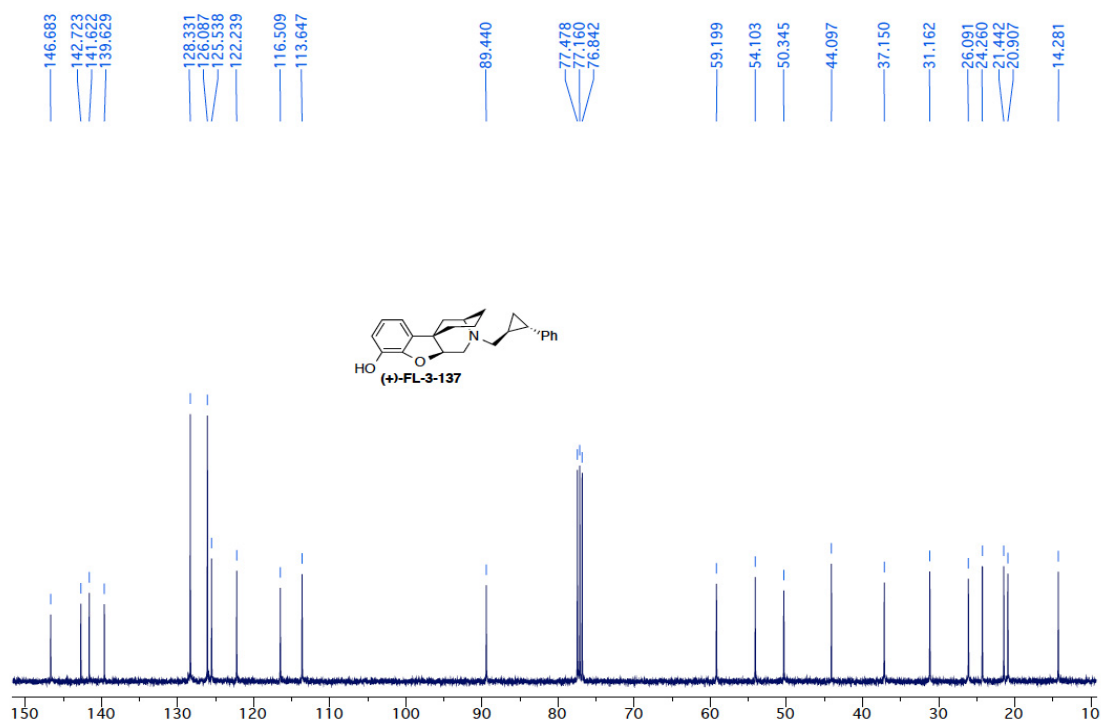
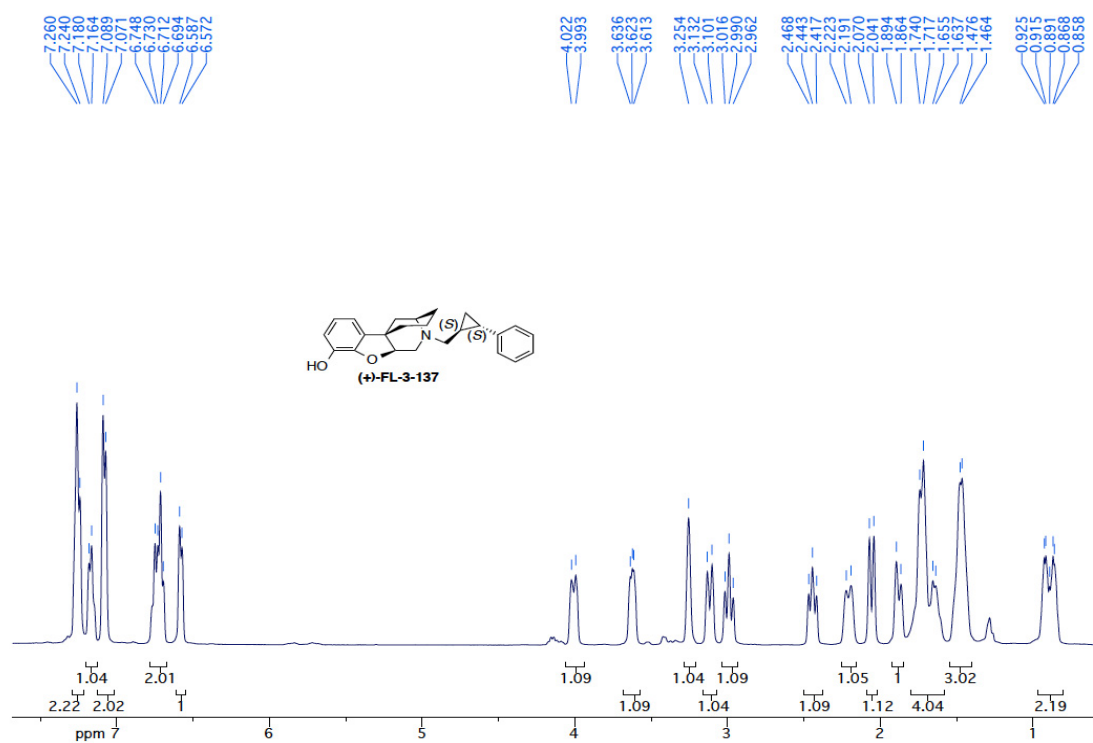
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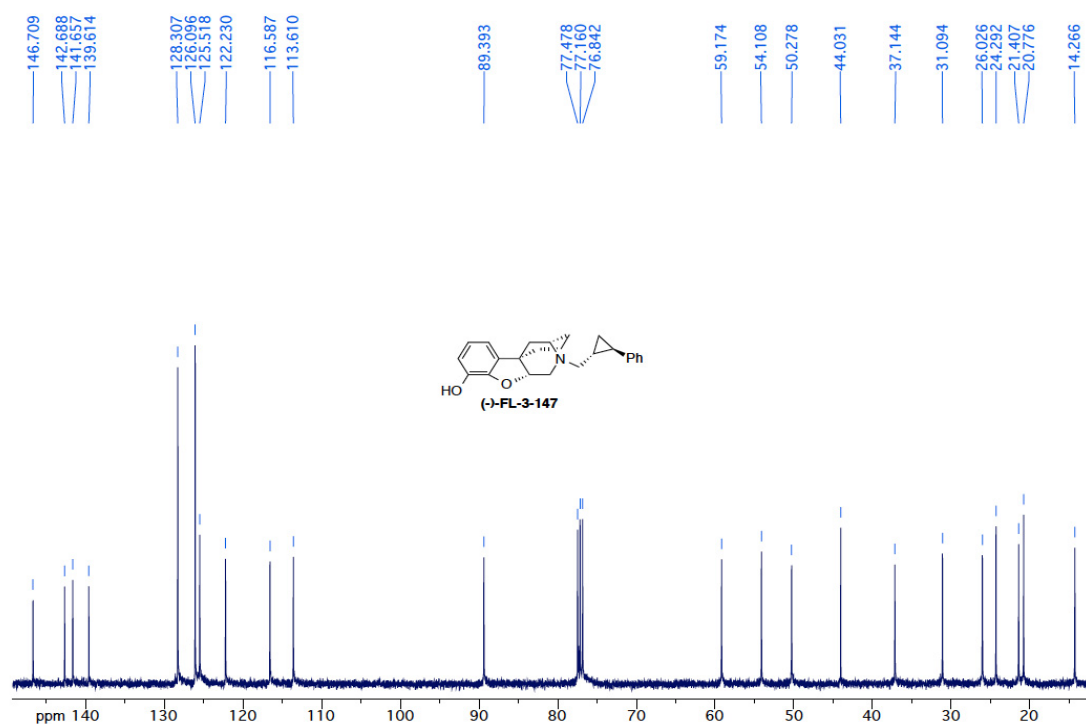
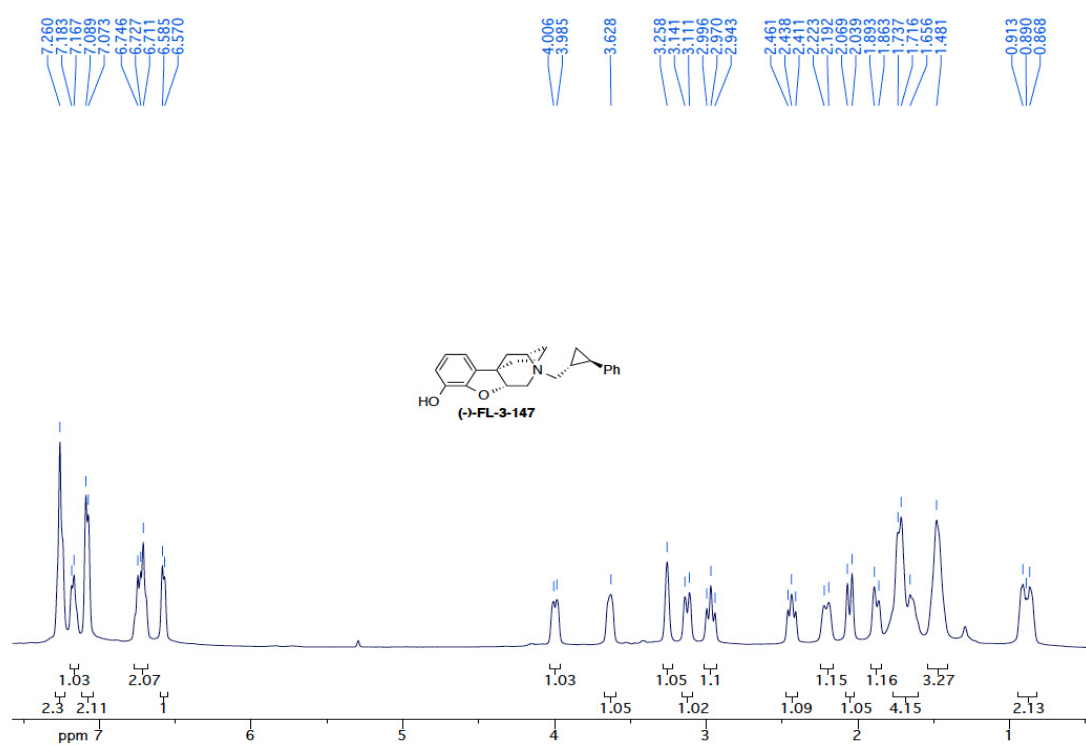
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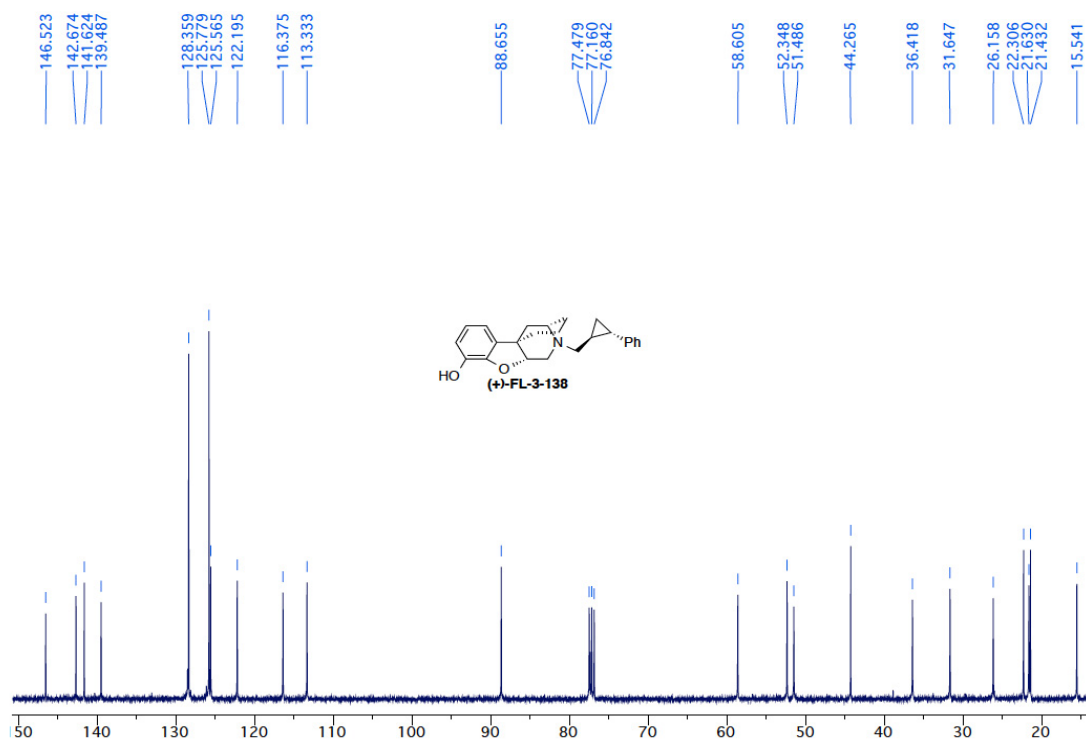
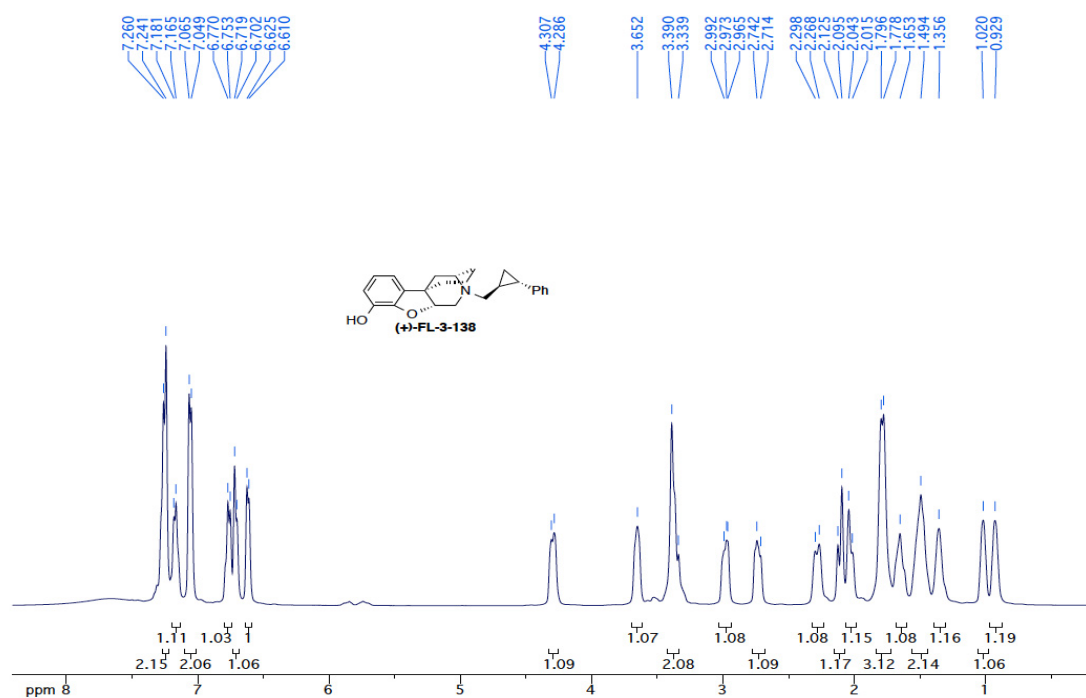
# Compound (+)-16



# Compound (-)-16

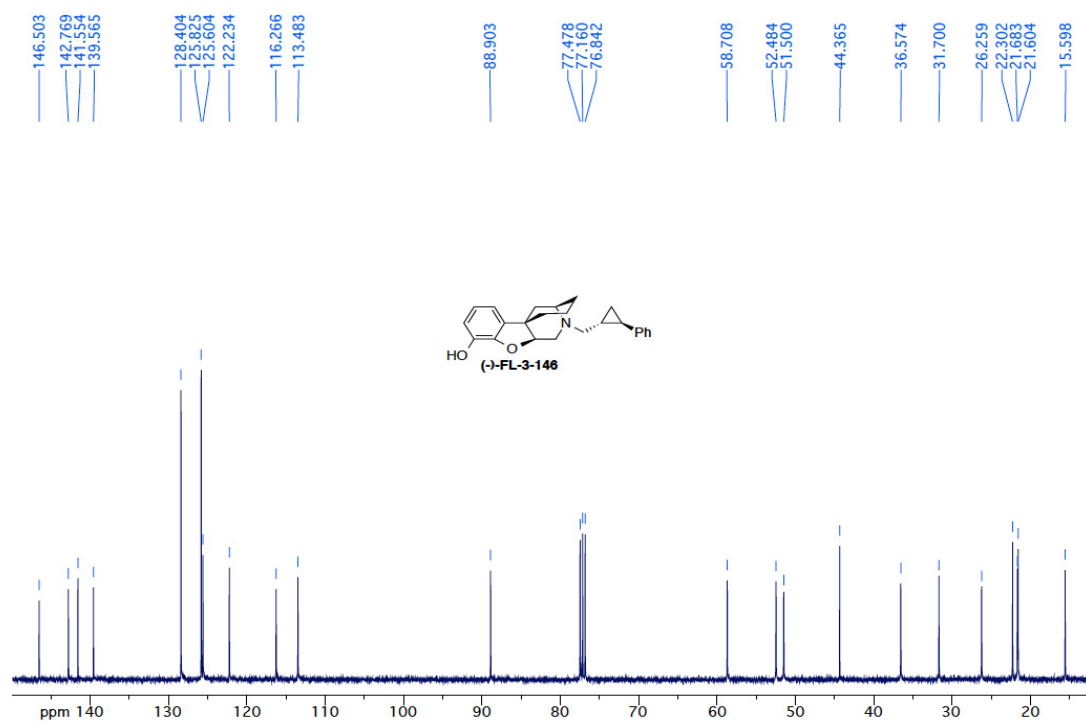
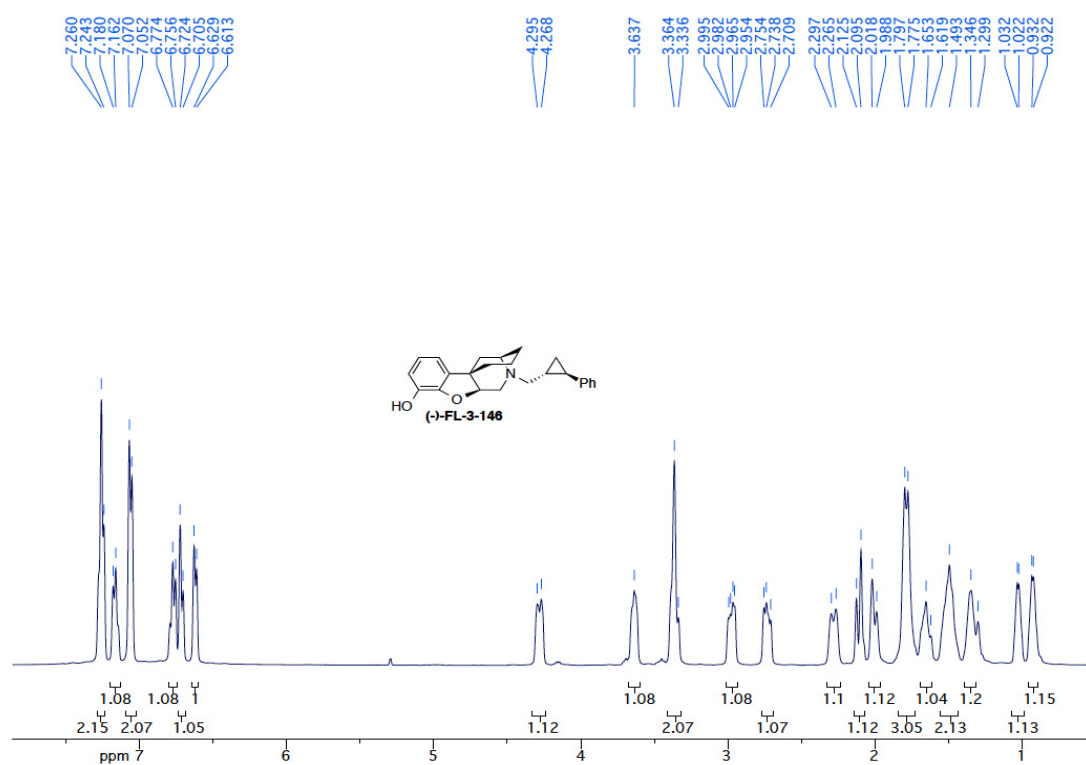


# Compound (+)-17





# Compound (-)-17



**Table S1.** Crystal data and structure refinement for (-)-6

Identification code	knih103	
Empirical formula	C <sub>24</sub> H <sub>31</sub> NO <sub>6</sub>	
Formula weight	429.50	
Temperature	293(2) K	
Wavelength	1.54178 Å	
Crystal system	Orthorhombic	
Space group	P2 <sub>1</sub> 2 <sub>1</sub> 2 <sub>1</sub>	
Unit cell dimensions	a = 6.7324(6) Å	∠ = 90°.
	b = 9.4370(6) Å	∠ = 90°.
	c = 34.612(4) Å	∠ = 90°.
Volume	2199.0(3) Å <sup>3</sup>	
Z	4	
Density (20°C)	1.297 Mg/m <sup>3</sup>	
Absorption coefficient	0.759 mm <sup>-1</sup>	
F(000)	920	
Crystal size	0.211 x 0.102 x 0.040 mm <sup>3</sup>	
Theta range for data collection	2.553 to 74.508°.	
Index ranges	-6 ≤ h ≤ 8, -11 ≤ k ≤ 10, -40 ≤ l ≤ 42	
Reflections collected	16601	
Independent reflections	4436 [R <sub>int</sub> = 0.0558]	
Completeness to theta = 25.000°	98.8 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.7538 and 0.5283	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	4436 / 3 / 291	
Goodness-of-fit on F <sup>2</sup>	1.091	
Final R indices [I > 2σ(I)]	R <sub>1</sub> = 0.0466, wR <sub>2</sub> = 0.1120	
R indices (all data)	R <sub>1</sub> = 0.0480, wR <sub>2</sub> = 0.1137	
Absolute structure parameter	0.10(8)	
Largest diff. peak and hole	0.298 and -0.388 e.Å <sup>-3</sup>	

**Table S2.** Atomic coordinates ( $\times 10^4$ ) and equivalent isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for (-)-**6**. U(eq) is defined as one third of the trace of the orthogonalized  $U_{ij}$  tensor.

	x	y	z	U(eq)
C(1)	3200(3)	4745(2)	3486(1)	35(1)
N(2)	3254(3)	5165(2)	3067(1)	35(1)
C(3)	3074(3)	6735(2)	2972(1)	38(1)
C(3A)	4569(3)	7609(2)	3206(1)	37(1)
C(4)	966(4)	7266(3)	3039(1)	48(1)
C(5)	362(3)	7318(3)	3464(1)	49(1)
C(6)	2024(3)	7758(2)	3739(1)	38(1)
C(6A)	4167(3)	7304(2)	3631(1)	29(1)
C(6B)	5542(3)	7847(2)	3946(1)	32(1)
C(7)	6423(3)	9149(2)	4017(1)	41(1)
C(8)	7506(4)	9301(3)	4354(1)	48(1)
C(9)	7648(3)	8205(3)	4623(1)	46(1)
C(10)	6713(3)	6909(2)	4559(1)	36(1)
O(10)	6645(3)	5783(2)	4807(1)	46(1)
C(10A)	7629(5)	5932(4)	5167(1)	70(1)
C(11)	5708(3)	6754(2)	4211(1)	31(1)
O(11)	4768(2)	5518(2)	4097(1)	35(1)
C(11A)	4616(3)	5733(2)	3685(1)	29(1)
C(1')	-1562(3)	3347(2)	2951(1)	31(1)
O(1')	200(2)	3430(2)	2839(1)	39(1)
O(1'')	-2911(3)	4195(2)	2871(1)	47(1)
C(2')	-2045(3)	2040(2)	3210(1)	37(1)
O(2')	-4099(3)	1862(2)	3280(1)	49(1)
C(3')	-991(3)	2215(2)	3594(1)	34(1)
C(4')	886(3)	1654(2)	3659(1)	39(1)
C(5')	1885(4)	1908(2)	4002(1)	44(1)
C(6')	1054(4)	2736(3)	4291(1)	45(1)
C(7')	-850(4)	3260(3)	4230(1)	47(1)
C(8')	-1859(4)	3002(2)	3889(1)	42(1)
C(9')	2176(6)	3086(4)	4655(1)	71(1)
O(1S)	3135(3)	1293(3)	2704(1)	62(1)

**Table S3.** Bond lengths [Å] and angles [°] for (-)-6

C(1)-C(11A)	1.501(3)	C(1)-N(2)	1.507(3)
C(1)-H(1A)	0.9700	C(1)-H(1B)	0.9700
N(2)-C(3)	1.522(3)	N(2)-H(2A)	0.8900
N(2)-H(2B)	0.8900	C(3)-C(4)	1.523(3)
C(3)-C(3A)	1.533(3)	C(3)-H(3)	0.9800
C(3A)-C(6A)	1.523(3)	C(3A)-H(3A)	0.9700
C(3A)-H(3B)	0.9700	C(4)-C(5)	1.526(4)
C(4)-H(4A)	0.9700	C(4)-H(4B)	0.9700
C(5)-C(6)	1.528(3)	C(5)-H(5A)	0.9700
C(5)-H(5B)	0.9700	C(6)-C(6A)	1.551(3)
C(6)-H(6A)	0.9700	C(6)-H(6B)	0.9700
C(6A)-C(6B)	1.518(3)	C(6A)-C(11A)	1.525(3)
C(6B)-C(7)	1.386(3)	C(6B)-C(11)	1.386(3)
C(7)-C(8)	1.385(4)	C(7)-H(7)	0.9300
C(8)-C(9)	1.395(4)	C(8)-H(8)	0.9300
C(9)-C(10)	1.393(3)	C(9)-H(9)	0.9300
C(10)-O(10)	1.367(3)	C(10)-C(11)	1.390(3)
O(10)-C(10A)	1.419(3)	C(10A)-H(10A)	0.9600
C(10A)-H(10B)	0.9600	C(10A)-H(10C)	0.9600
C(11)-O(11)	1.384(2)	O(11)-C(11A)	1.443(2)
C(11A)-H(11A)	0.9800	C(1')-O(1'')	1.242(3)
C(1')-O(1')	1.251(3)	C(1')-C(2')	1.558(3)
C(2')-O(2')	1.414(3)	C(2')-C(3')	1.517(3)
C(2')-H(2')	0.9800	O(2')-H(2C)	0.85(4)
C(3')-C(4')	1.388(3)	C(3')-C(8')	1.392(3)
C(4')-C(5')	1.386(3)	C(4')-H(4')	0.9300
C(5')-C(6')	1.387(4)	C(5')-H(5')	0.9300
C(6')-C(7')	1.390(4)	C(6')-C(9')	1.508(4)
C(7')-C(8')	1.383(4)	C(7')-H(7')	0.9300
C(8')-H(8')	0.9300	C(9')-H(9D)	0.9600
C(9')-H(9E)	0.9600	C(9')-H(9F)	0.9600
O(1S)-H(1S)	0.8199(14)	O(1S)-H(2S)	0.8201(14)
C(11A)-C(1)-N(2)	105.32(17)	C(11A)-C(1)-H(1A)	110.7
N(2)-C(1)-H(1A)	110.7	C(11A)-C(1)-H(1B)	110.7
N(2)-C(1)-H(1B)	110.7	H(1A)-C(1)-H(1B)	108.8
C(1)-N(2)-C(3)	117.49(16)	C(1)-N(2)-H(2A)	107.9
C(3)-N(2)-H(2A)	107.9	C(1)-N(2)-H(2B)	107.9
C(3)-N(2)-H(2B)	107.9	H(2A)-N(2)-H(2B)	107.2
N(2)-C(3)-C(4)	111.2(2)	N(2)-C(3)-C(3A)	110.98(17)
C(4)-C(3)-C(3A)	110.75(19)	N(2)-C(3)-H(3)	107.9
C(4)-C(3)-H(3)	107.9	C(3A)-C(3)-H(3)	107.9
C(6A)-C(3A)-C(3)	106.95(17)	C(6A)-C(3A)-H(3A)	110.3
C(3)-C(3A)-H(3A)	110.3	C(6A)-C(3A)-H(3B)	110.3

**Table S3.** (continued).

C(3)-C(3A)-H(3B)	110.3	H(3A)-C(3A)-H(3B)	108.6
C(3)-C(4)-C(5)	113.90(19)	C(3)-C(4)-H(4A)	108.8
C(5)-C(4)-H(4A)	108.8	C(3)-C(4)-H(4B)	108.8
C(5)-C(4)-H(4B)	108.8	H(4A)-C(4)-H(4B)	107.7
C(4)-C(5)-C(6)	114.5(2)	C(4)-C(5)-H(5A)	108.6
C(6)-C(5)-H(5A)	108.6	C(4)-C(5)-H(5B)	108.6
C(6)-C(5)-H(5B)	108.6	H(5A)-C(5)-H(5B)	107.6
C(5)-C(6)-C(6A)	117.08(18)	C(5)-C(6)-H(6A)	108.0
C(6A)-C(6)-H(6A)	108.0	C(5)-C(6)-H(6B)	108.0
C(6A)-C(6)-H(6B)	108.0	H(6A)-C(6)-H(6B)	107.3
C(6B)-C(6A)-C(3A)	121.34(17)	C(6B)-C(6A)-C(11A)	96.83(15)
C(3A)-C(6A)-C(11A)	105.57(17)	C(6B)-C(6A)-C(6)	107.49(16)
C(3A)-C(6A)-C(6)	110.25(17)	C(11A)-C(6A)-C(6)	115.05(17)
C(7)-C(6B)-C(11)	120.5(2)	C(7)-C(6B)-C(6A)	133.5(2)
C(11)-C(6B)-C(6A)	105.86(17)	C(8)-C(7)-C(6B)	117.9(2)
C(8)-C(7)-H(7)	121.1	C(6B)-C(7)-H(7)	121.1
C(7)-C(8)-C(9)	121.5(2)	C(7)-C(8)-H(8)	119.3
C(9)-C(8)-H(8)	119.3	C(10)-C(9)-C(8)	120.9(2)
C(10)-C(9)-H(9)	119.5	C(8)-C(9)-H(9)	119.5
O(10)-C(10)-C(11)	116.51(18)	O(10)-C(10)-C(9)	126.7(2)
C(11)-C(10)-C(9)	116.8(2)	C(10)-O(10)-C(10A)	117.3(2)
O(10)-C(10A)-H(10A)	109.5	O(10)-C(10A)-H(10B)	109.5
H(10A)-C(10A)-H(10B)	109.5	O(10)-C(10A)-H(10C)	109.5
H(10A)-C(10A)-H(10C)	109.5	H(10B)-C(10A)-H(10C)	
O(11)-C(11)-C(6B)	113.68(17)	O(11)-C(11)-C(10)	123.91(18)
C(6B)-C(11)-C(10)	122.40(19)	C(11)-O(11)-C(11A)	101.25(15)
O(11)-C(11A)-C(1)	114.29(16)	O(11)-C(11A)-C(6A)	105.82(15)
C(1)-C(11A)-C(6A)	114.90(17)	O(11)-C(11A)-H(11A)	107.1
C(1)-C(11A)-H(11A)	107.1	C(6A)-C(11A)-H(11A)	107.1
O(1'')-C(1')-O(1')	125.7(2)	O(1'')-C(1')-C(2')	119.09(18)
O(1')-C(1')-C(2')	115.23(19)	O(2')-C(2')-C(3')	108.64(19)
O(2')-C(2')-C(1')	113.41(18)	C(3')-C(2')-C(1')	108.72(16)
O(2')-C(2')-H(2')	108.7	C(3')-C(2')-H(2')	108.7
C(1')-C(2')-H(2')	108.7	C(2')-O(2')-H(2C)	107(3)
C(4')-C(3')-C(8')	117.9(2)	C(4')-C(3')-C(2')	121.7(2)
C(8')-C(3')-C(2')	120.4(2)	C(5')-C(4')-C(3')	120.9(2)
C(5')-C(4')-H(4')	119.5	C(3')-C(4')-H(4')	119.5
C(4')-C(5')-C(6')	121.3(2)	C(4')-C(5')-H(5')	119.4
C(6')-C(5')-H(5')	119.4	C(5')-C(6')-C(7')	117.7(2)
C(5')-C(6')-C(9')	121.7(3)	C(7')-C(6')-C(9')	120.6(3)
C(8')-C(7')-C(6')	121.2(2)	C(8')-C(7')-H(7')	119.4
C(6')-C(7')-H(7')	119.4	C(7')-C(8')-C(3')	120.9(2)
C(7')-C(8')-H(8')	119.5	C(3')-C(8')-H(8')	119.5

**Table S3.** (continued).

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C(6')-C(9')-H(9D)	109.5	C(6')-C(9')-H(9E)	109.5
H(9D)-C(9')-H(9E)	109.5	C(6')-C(9')-H(9F)	109.5
H(9D)-C(9')-H(9F)	109.5	H(9E)-C(9')-H(9F)	109.5
H(1S)-O(1S)-H(2S)	104.5(2)		

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**Table S4.** Anisotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **(-)-6**. The anisotropic displacement factor exponent takes the form:  $-2 \pi^2 [h^2 a^{*2} U^{11} + \dots + 2 h k a^* b^* U^{12}]$

	U <sup>11</sup>	U <sup>22</sup>	U <sup>33</sup>	U <sup>23</sup>	U <sup>13</sup>	U <sup>12</sup>
C(1)	38(1)	32(1)	37(1)	-1(1)	-6(1)	-4(1)
N(2)	29(1)	43(1)	34(1)	-7(1)	-1(1)	-1(1)
C(3)	39(1)	45(1)	31(1)	5(1)	0(1)	-1(1)
C(3A)	39(1)	37(1)	36(1)	7(1)	4(1)	-4(1)
C(4)	43(1)	56(1)	45(1)	4(1)	-12(1)	11(1)
C(5)	31(1)	64(2)	52(1)	-3(1)	-2(1)	13(1)
C(6)	36(1)	38(1)	42(1)	-3(1)	2(1)	7(1)
C(6A)	29(1)	26(1)	33(1)	2(1)	1(1)	-1(1)
C(6B)	30(1)	29(1)	37(1)	-3(1)	2(1)	-1(1)
C(7)	39(1)	31(1)	52(1)	-3(1)	6(1)	-7(1)
C(8)	41(1)	41(1)	63(2)	-13(1)	1(1)	-14(1)
C(9)	38(1)	51(1)	49(1)	-15(1)	-6(1)	-6(1)
C(10)	32(1)	41(1)	35(1)	-5(1)	-2(1)	1(1)
O(10)	53(1)	50(1)	36(1)	1(1)	-10(1)	0(1)
C(10A)	74(2)	82(2)	53(2)	10(2)	-28(2)	-6(2)
C(11)	28(1)	31(1)	35(1)	-4(1)	-1(1)	-2(1)
O(11)	43(1)	28(1)	32(1)	2(1)	-7(1)	-4(1)
C(11A)	31(1)	26(1)	32(1)	0(1)	-1(1)	1(1)
C(1')	31(1)	34(1)	29(1)	-4(1)	-3(1)	-2(1)
O(1')	34(1)	46(1)	38(1)	-4(1)	0(1)	-3(1)
O(1'')	41(1)	49(1)	51(1)	15(1)	7(1)	10(1)
C(2')	40(1)	32(1)	39(1)	-1(1)	-4(1)	-3(1)
O(2')	42(1)	60(1)	45(1)	5(1)	-7(1)	-18(1)
C(3')	39(1)	27(1)	37(1)	4(1)	-3(1)	-1(1)
C(4')	40(1)	35(1)	41(1)	5(1)	0(1)	4(1)
C(5')	39(1)	44(1)	48(1)	13(1)	-6(1)	3(1)
C(6')	55(1)	40(1)	39(1)	9(1)	-10(1)	-7(1)
C(7')	61(2)	42(1)	39(1)	-3(1)	-4(1)	6(1)
C(8')	44(1)	39(1)	43(1)	0(1)	-4(1)	11(1)
C(9')	84(2)	77(2)	50(2)	8(1)	-25(2)	-15(2)
O(1S)	43(1)	83(1)	62(1)	-31(1)	-15(1)	14(1)

**Table S5.** Hydrogen coordinates ( $\times 10^4$ ) and isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for (-)-**6**.

	x	y	z	U(eq)
H(1A)	1870	4849	3590	42
H(1B)	3619	3769	3518	42
H(2A)	2274	4712	2946	42
H(2B)	4390	4852	2967	42
H(3)	3385	6858	2697	46
H(3A)	5917	7341	3139	45
H(3B)	4401	8611	3153	45
H(4A)	50	6653	2901	57
H(4B)	845	8209	2930	57
H(5A)	-115	6388	3539	58
H(5B)	-733	7978	3492	58
H(6A)	1722	7374	3992	46
H(6B)	2001	8782	3762	46
H(7)	6291	9896	3843	49
H(8)	8153	10153	4403	58
H(9)	8376	8342	4849	55
H(10A)	9034	6015	5125	104
H(10B)	7367	5116	5325	104
H(10C)	7154	6767	5296	104
H(11A)	5936	5559	3576	35
H(2')	-1538	1186	3083	44
H(2C)	-4640(60)	1690(40)	3062(12)	74
H(4')	1480	1100	3469	46
H(5')	3138	1516	4039	52
H(7')	-1456	3795	4423	57
H(8')	-3136	3359	3857	50
H(9D)	2006	4072	4715	106
H(9E)	3562	2888	4619	106
H(9F)	1675	2522	4864	106
H(1S)	2710(50)	650(20)	2569(9)	94
H(2S)	2220(30)	1860(20)	2717(12)	94



**Table S6.** Torsion angles [°] for (-)-6.

C(11A)-C(1)-N(2)-C(3)	-47.6(2)	C(1)-N(2)-C(3)-C(4)	-72.5(2)
C(1)-N(2)-C(3)-C(3A)	51.3(3)	N(2)-C(3)-C(3A)-C(6A)	-57.3(2)
C(4)-C(3)-C(3A)-C(6A)	66.7(2)	N(2)-C(3)-C(4)-C(5)	69.3(3)
C(3A)-C(3)-C(4)-C(5)	-54.6(3)	C(3)-C(4)-C(5)-C(6)	36.8(3)
C(4)-C(5)-C(6)-C(6A)	-33.1(3)	C(3)-C(3A)-C(6A)-C(6B)	172.16(18)
C(3)-C(3A)-C(6A)-C(11A)	63.9(2)	C(3)-C(3A)-C(6A)-C(6)	-61.0(2)
C(5)-C(6)-C(6A)-C(6B)	-179.6(2)	C(5)-C(6)-C(6A)-C(3A)	46.1(3)
C(5)-C(6)-C(6A)-C(11A)	-73.1(3)	C(3A)-C(6A)-C(6B)-C(7)	46.1(3)
C(11A)-C(6A)-C(6B)-C(7)	159.0(2)	C(6)-C(6A)-C(6B)-C(7)	-82.0(3)
C(3A)-C(6A)-C(6B)-C(11)	-139.50(19)	C(11A)-C(6A)-C(6B)-C(11)	-26.59(19)
C(6)-C(6A)-C(6B)-C(11)	92.42(19)	C(11)-C(6B)-C(7)-C(8)	1.7(3)
C(6A)-C(6B)-C(7)-C(8)	175.4(2)	C(6B)-C(7)-C(8)-C(9)	-2.6(4)
C(7)-C(8)-C(9)-C(10)	0.5(4)	C(8)-C(9)-C(10)-O(10)	-176.2(2)
C(8)-C(9)-C(10)-C(11)	2.3(3)	C(11)-C(10)-O(10)-C(10A)	-178.8(2)
C(9)-C(10)-O(10)-C(10A)	-0.3(4)	C(7)-C(6B)-C(11)-O(11)	-179.36(19)
C(6A)-C(6B)-C(11)-O(11)	5.4(2)	C(7)-C(6B)-C(11)-C(10)	1.3(3)
C(6A)-C(6B)-C(11)-C(10)	-174.00(19)	O(10)-C(10)-C(11)-O(11)	-3.9(3)
C(9)-C(10)-C(11)-O(11)	177.47(19)	O(10)-C(10)-C(11)-C(6B)	175.42(19)
C(9)-C(10)-C(11)-C(6B)	-3.2(3)	C(6B)-C(11)-O(11)-C(11A)	20.1(2)
C(10)-C(11)-O(11)-C(11A)	-160.52(19)	C(11)-O(11)-C(11A)-C(1)	-165.13(17)
C(11)-O(11)-C(11A)-C(6A)	-37.68(19)	N(2)-C(1)-C(11A)-O(11)	179.24(16)
N(2)-C(1)-C(11A)-C(6A)	56.6(2)	C(6B)-C(6A)-C(11A)-O(11)	39.56(18)
C(3A)-C(6A)-C(11A)-O(11)	164.81(16)	C(6)-C(6A)-C(11A)-O(11)	-73.4(2)
C(6B)-C(6A)-C(11A)-C(1)	166.64(17)	C(3A)-C(6A)-C(11A)-C(1)	-68.1(2)
C(6)-C(6A)-C(11A)-C(1)	53.7(2)	O(1'')-C(1')-C(2')-O(2')	8.8(3)
O(1')-C(1')-C(2')-O(2')	-170.61(19)	O(1'')-C(1')-C(2')-C(3')	-112.2(2)
O(1')-C(1')-C(2')-C(3')	68.4(2)	O(2')-C(2')-C(3')-C(4')	143.6(2)
C(1')-C(2')-C(3')-C(4')	-92.5(2)	O(2')-C(2')-C(3')-C(8')	-39.1(3)
C(1')-C(2')-C(3')-C(8')	84.8(2)	C(8')-C(3')-C(4')-C(5')	-2.0(3)
C(2')-C(3')-C(4')-C(5')	175.4(2)	C(3')-C(4')-C(5')-C(6')	-0.4(3)
C(4')-C(5')-C(6')-C(7')	2.3(3)	C(4')-C(5')-C(6')-C(9')	-176.5(2)
C(5')-C(6')-C(7')-C(8')	-1.9(4)	C(9')-C(6')-C(7')-C(8')	176.9(3)
C(6')-C(7')-C(8')-C(3')	-0.5(4)	C(4')-C(3')-C(8')-C(7')	2.4(3)
C(2')-C(3')-C(8')-C(7')	-175.0(2)		

**Table S7.** Hydrogen bonds for **(-)-6** [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
C(1)-H(1B)...O(2')#1	0.97	2.51	3.349(3)	145.4
N(2)-H(2A)...O(1')	0.89	1.88	2.744(2)	161.8
N(2)-H(2B)...O(1'')#1	0.89	1.95	2.822(2)	166.8
C(9)-H(9)...O(10)#2	0.93	2.63	3.469(3)	149.6
O(2')-H(2C)...O(1S)#3	0.85(4)	1.98(4)	2.781(3)	156(4)
O(1S)-H(1S)...O(1'')#4	0.8199(14)	2.052(17)	2.810(3)	154(4)
O(1S)-H(2S)...O(1')	0.8201(14)	2.053(7)	2.862(3)	169(3)

Symmetry transformations used to generate equivalent atoms:

#1  $x+1, y, z$  #2  $x+1/2, -y+3/2, -z+1$  #3  $x-1, y, z$

#4  $-x, y-1/2, -z+1/2$