Supporting Information

Anti-*Acanthamoeba* activity of brominated sesquiterpenes from *Laurencia johnstonii*

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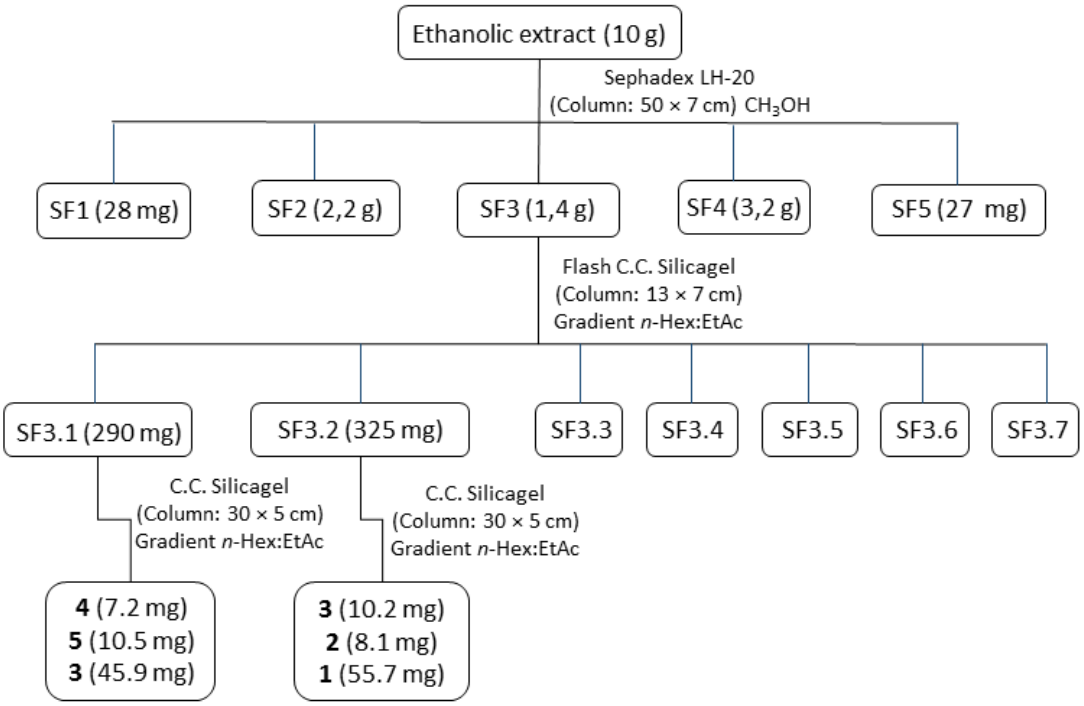
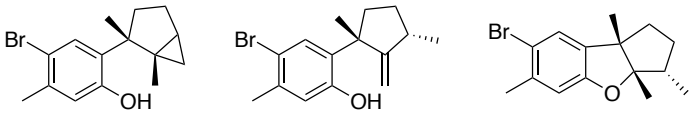
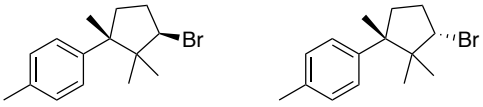
Scheme S1. Isolation process of sesquiterpenes **1**-**5** from *Laurencia johnstonii*





laurinterol (**1**) isolaurinterol (**2**) aplysin (**3**)



α-bromocuparane (**4**) α-isobromocuparane (**5**)

Figure S1. ^{1}H-NMR spectrum for laurinterol (**1**) (500 MHz, $CDCl_3$).

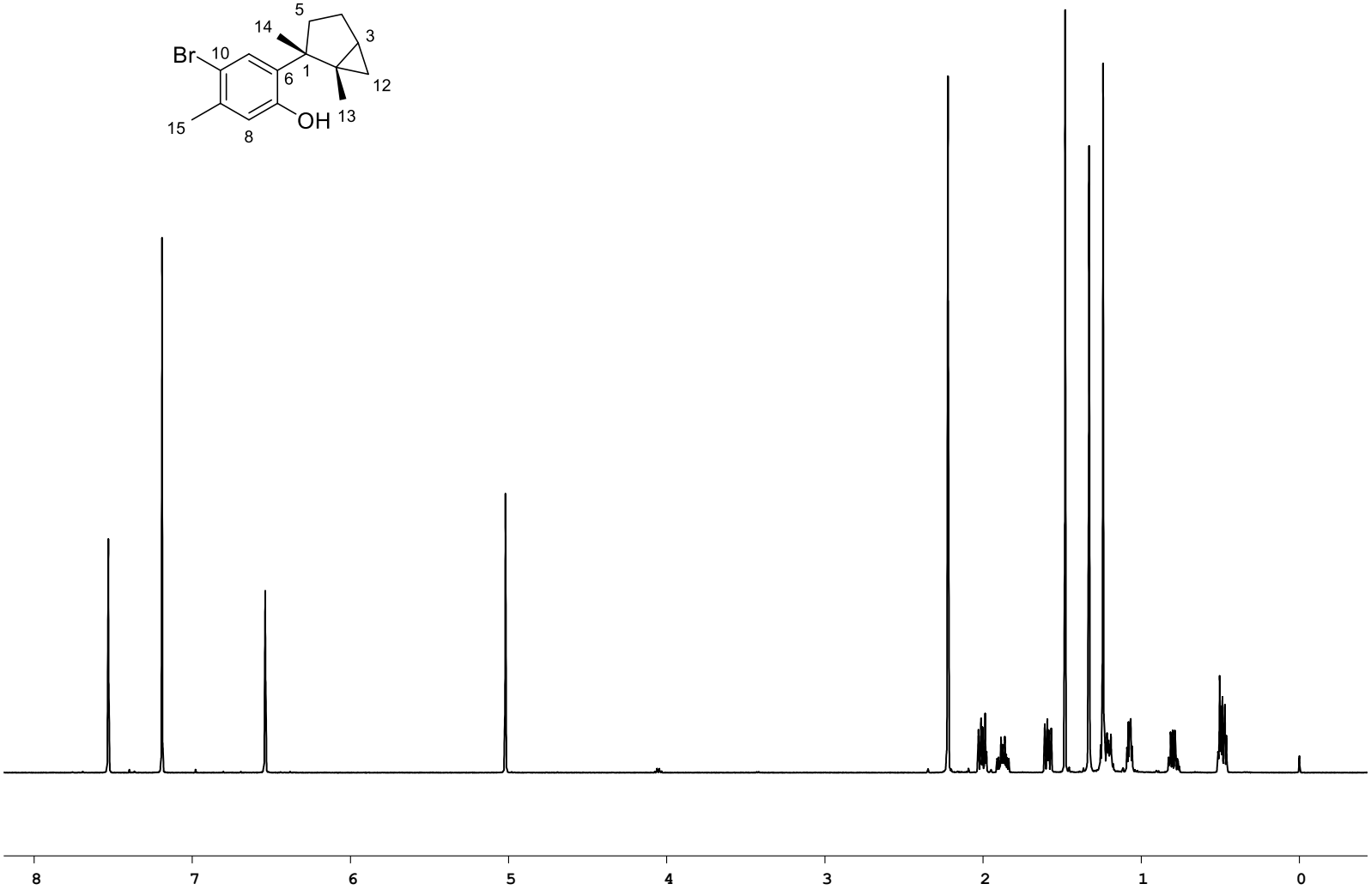


Figure S2. ^{1}H-NMR spectrum for isolaurinterol (**2**) (500 MHz, $CDCl_3$).

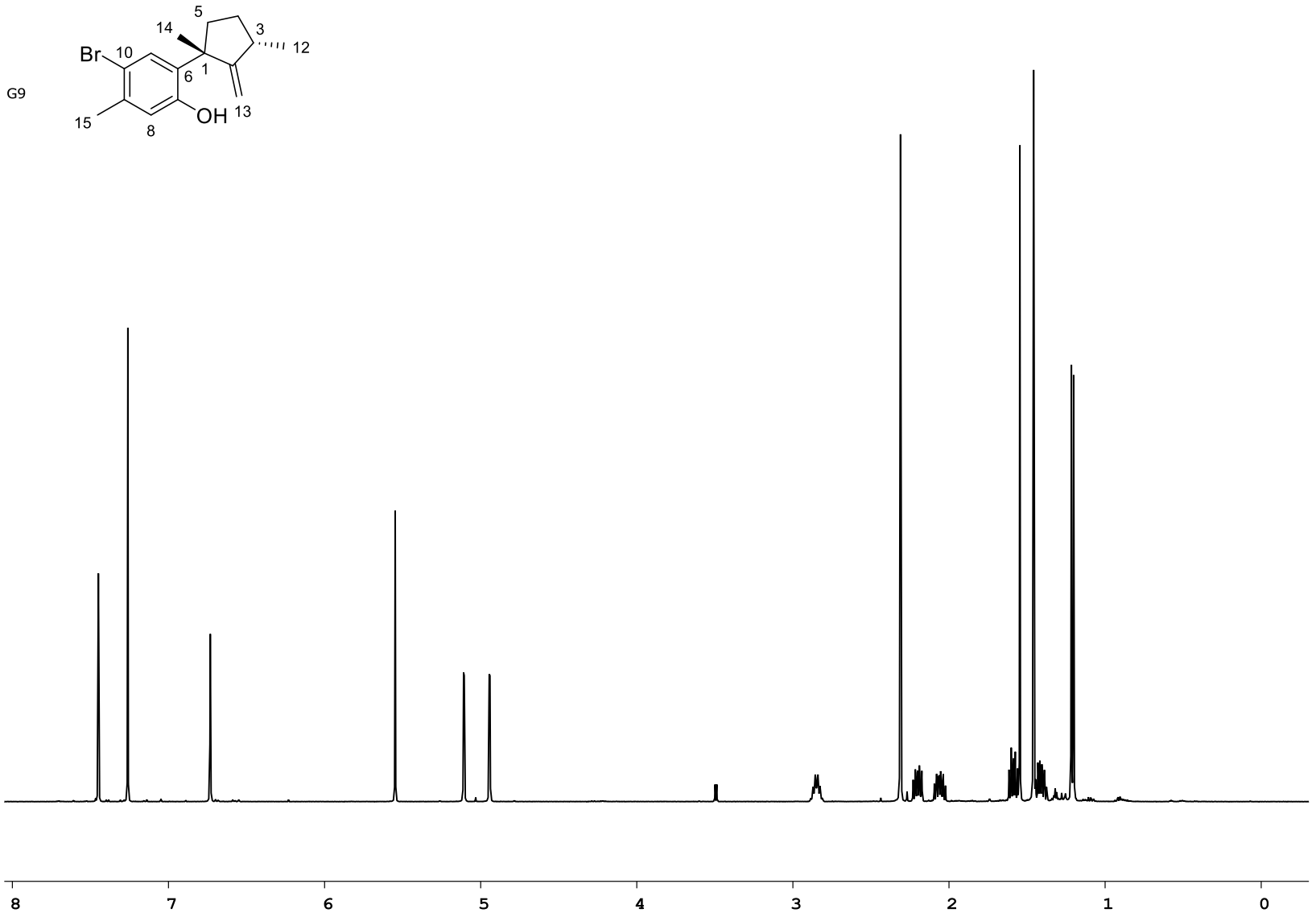


Figure S3. ^{1}H-NMR spectrum for aplysin (**3**) (500 MHz, $CDCl_3$).

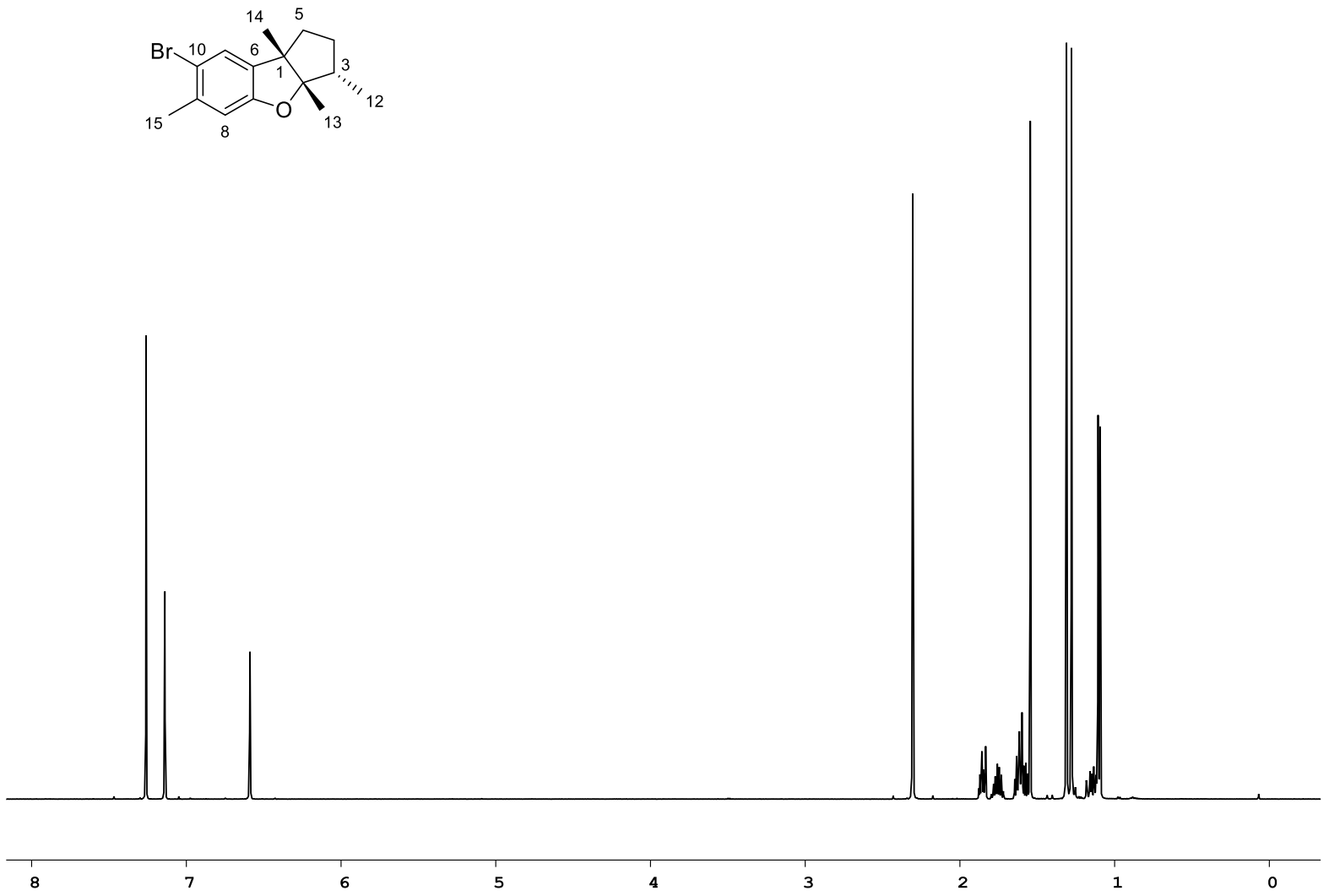


Figure S4. ^{1}H-NMR spectrum for α-bromocuparane (**4**) (500 MHz, $CDCl_3$).

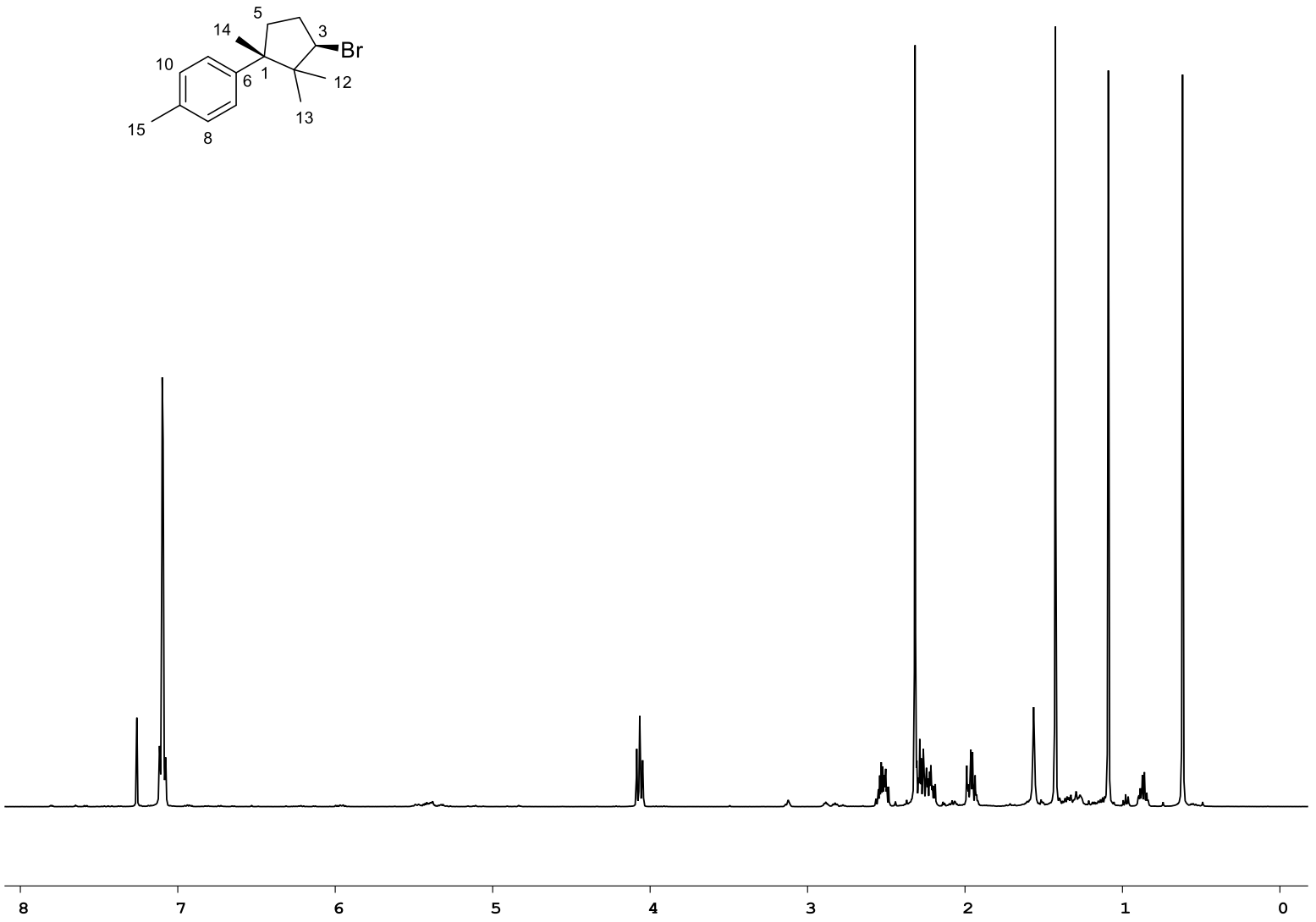
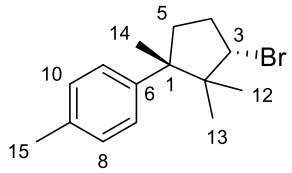


Figure S5. ^{1}H-NMR spectrum of α-isobromocuparane (**5**) (500 MHz, $CDCl_3$).



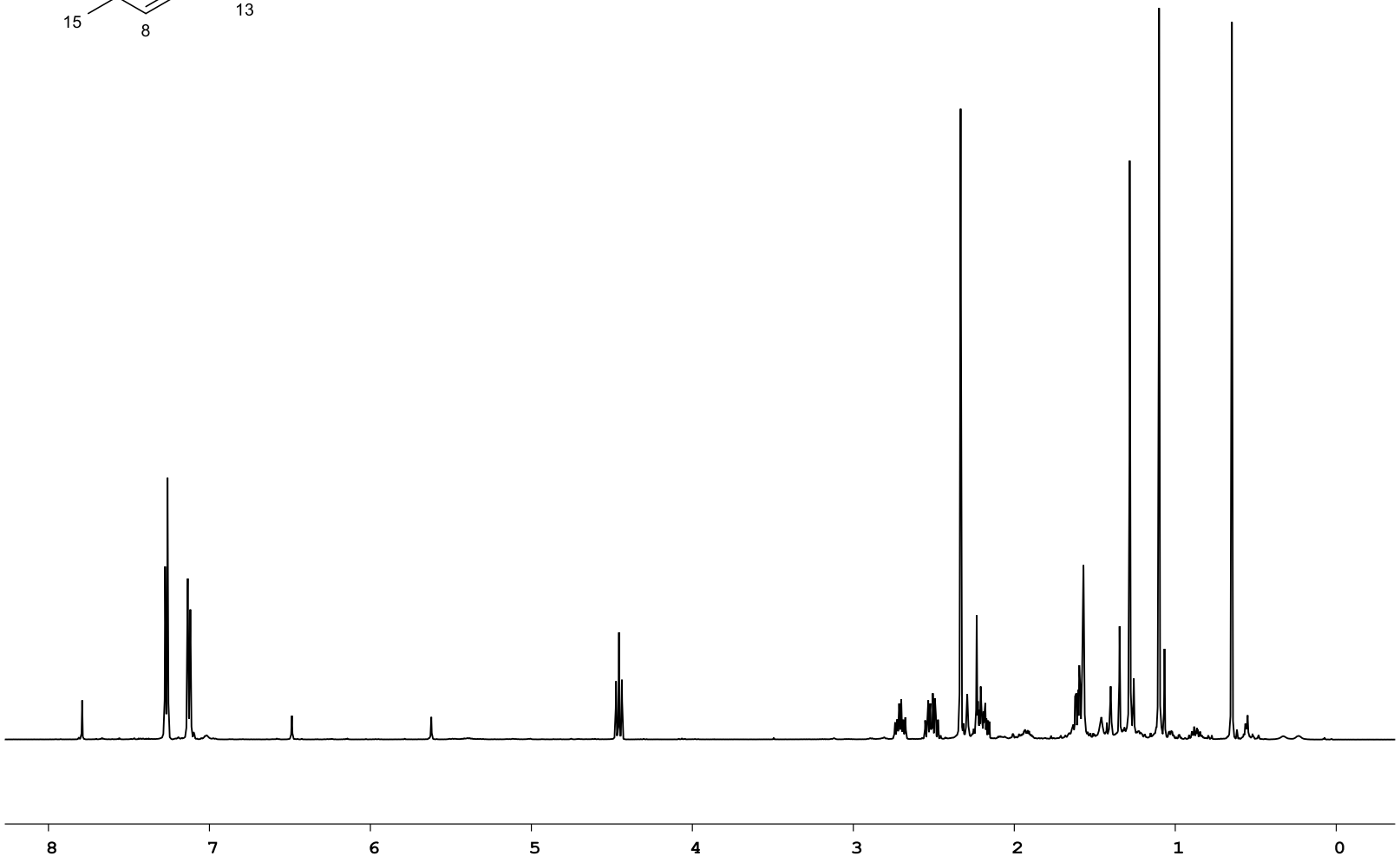
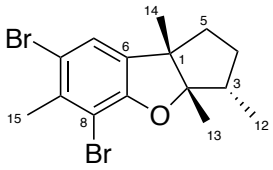
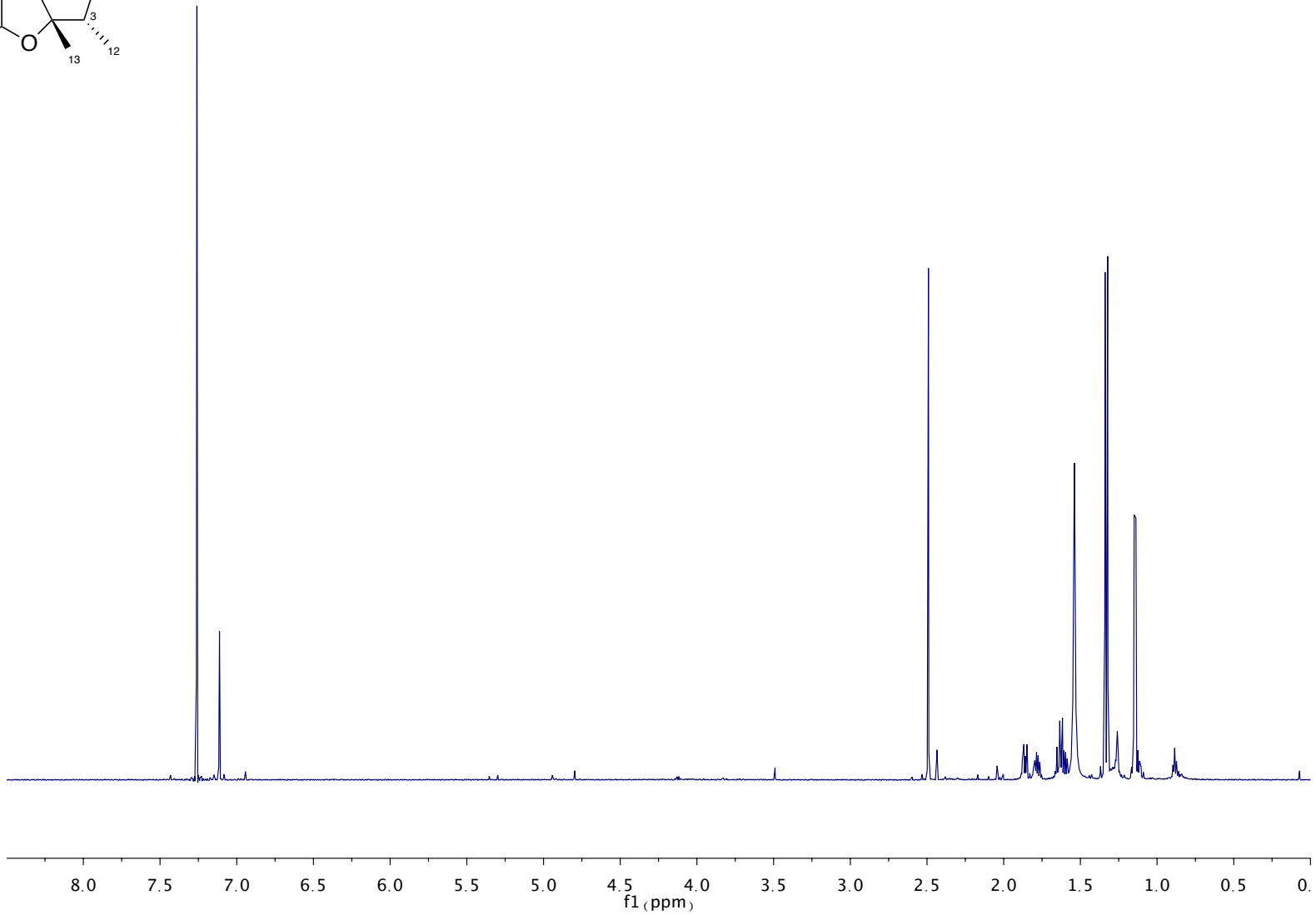


Figure S6. ^{1}H-NMR spectrum of 8-bromoaplysin (**6**) (600 MHz, $CDCl_3$).





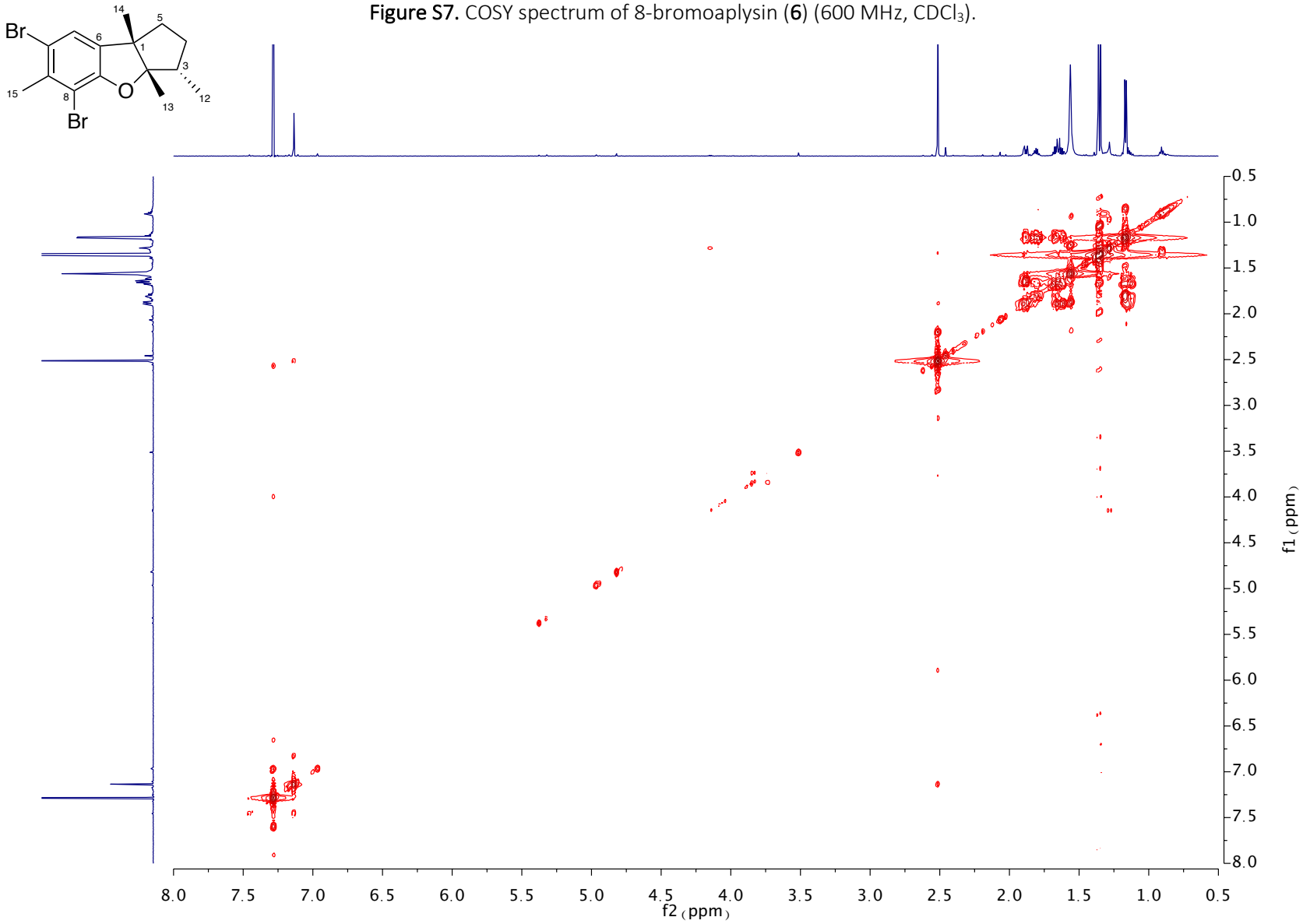


Figure S7. COSY spectrum of 8-bromoaplysin (**6**) (600 MHz, $CDCl_3$).

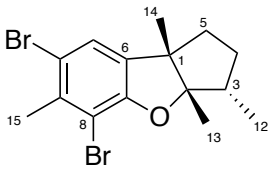


Figure S8. HSQC-ed spectrum of 8-bromoaplysin (**6**) (600 MHz, $CDCl_3$).

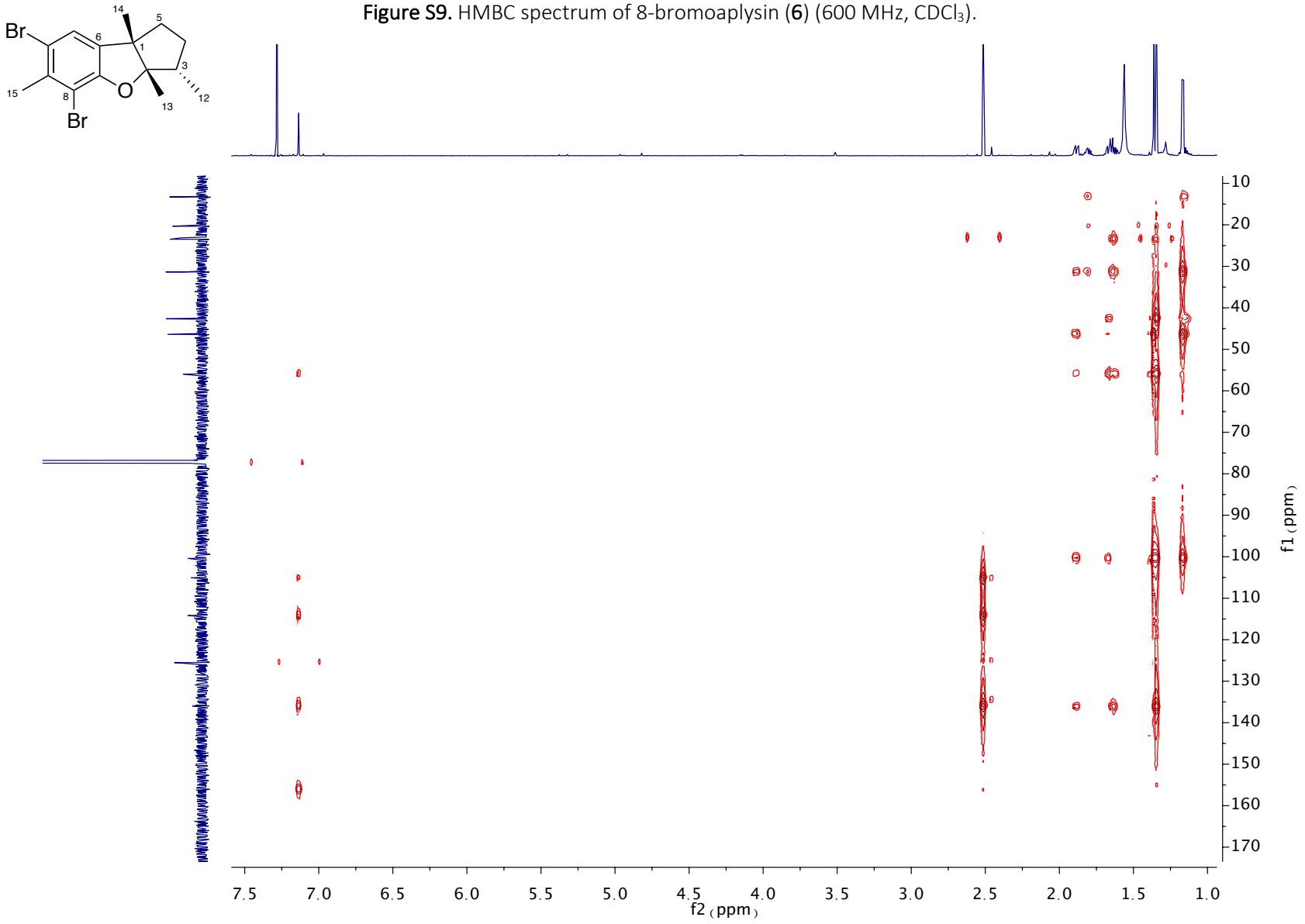


Figure S9. HMBC spectrum of 8-bromoaplysin (**6**) (600 MHz, $CDCl_3$).

Figure S10. ^{13}C NMR spectrum of 8-bromoaplysin (**6**) (150 MHz, $CDCl_3$).

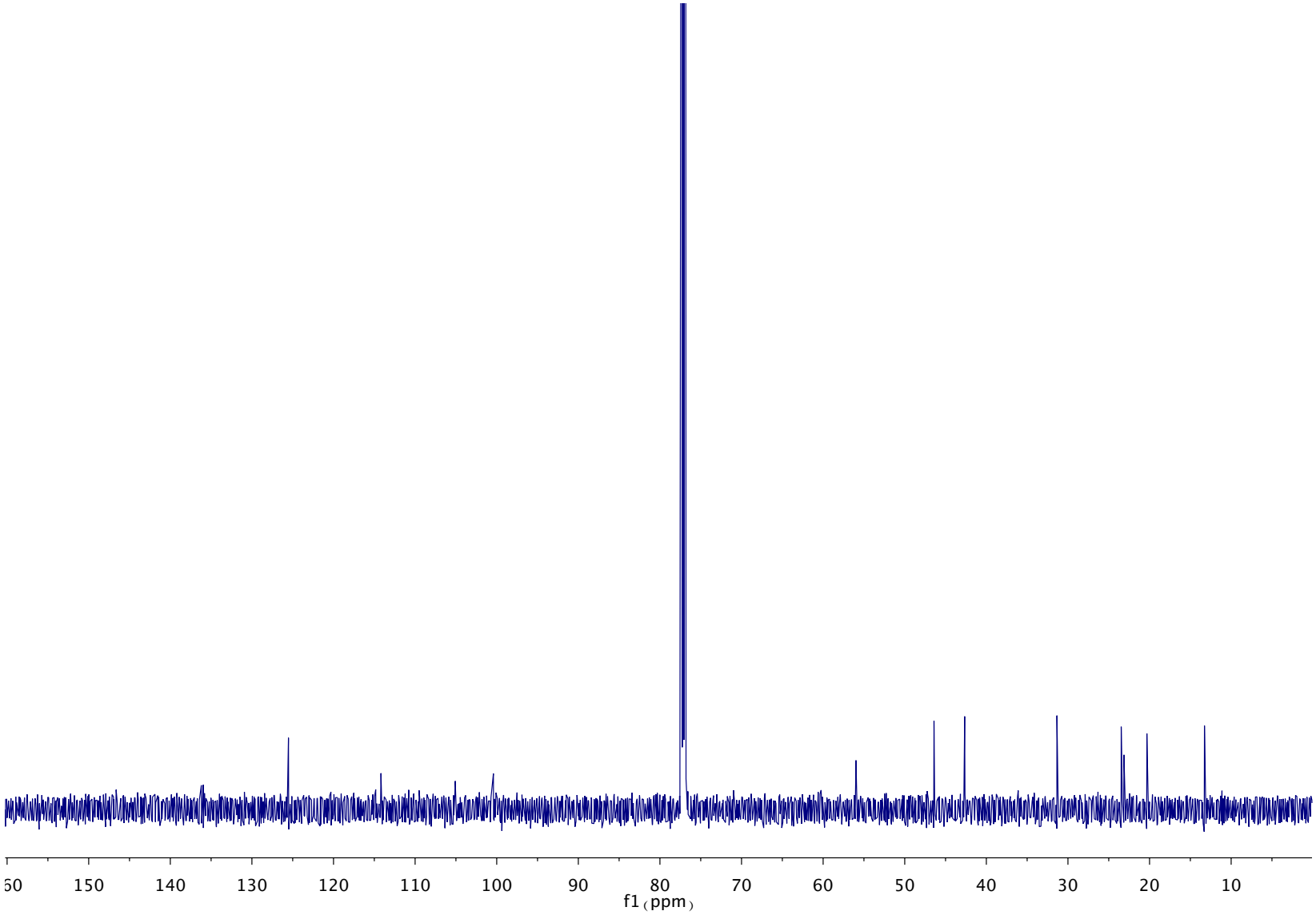


Figure S11. HREIMS spectrum of 8-bromoaplysin (**6**).

Elemental Composition Report Page

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Selected filters: None

Monoisotopic Mass, Odd and Even Electron Ions
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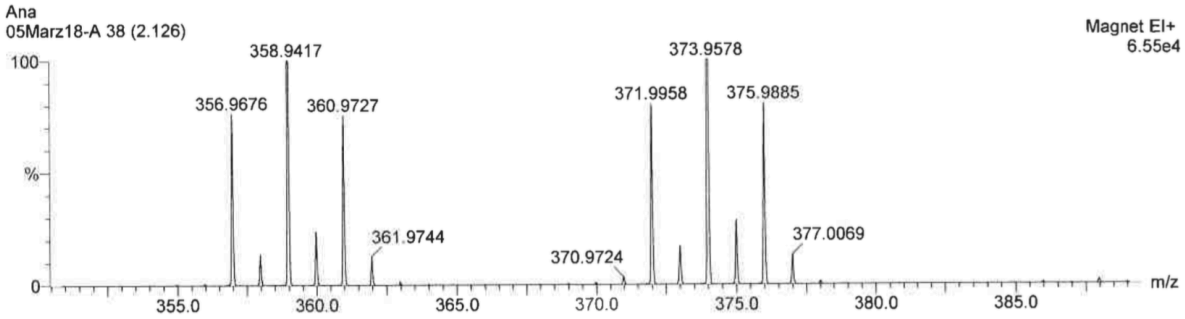

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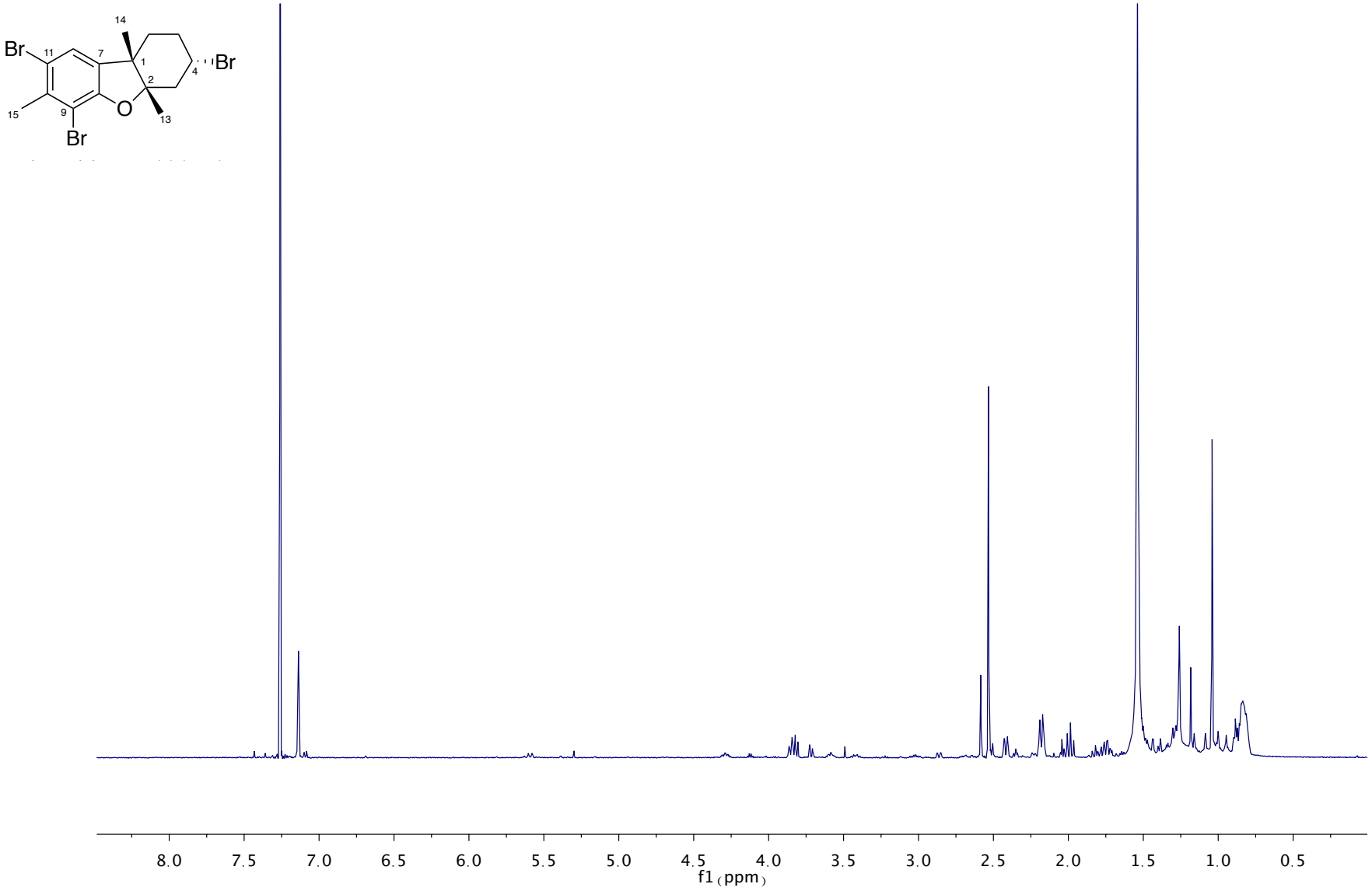
375.9677	47.91	375.9683	-0.6	-1.6	6.0	C15 H18 O 81Br2
375.9656	42.16	375.9683	-2.7	-7.2	6.0	C15 H18 O 81Br2
373.9723	100.00	373.9704	1.9	5.1	6.0	C15 H18 O 79Br 81Br
373.9702	100.00	373.9704	-0.2	-0.5	6.0	C15 H18 O 79Br 81Br
373.9682	100.00	373.9704	-2.2	-5.9	6.0	C15 H18 O 79Br 81Br
371.9752	57.29	371.9724	2.8	7.5	6.0	C15 H18 O 79Br2
371.9732	54.26	371.9724	0.8	2.2	6.0	C15 H18 O 79Br2
371.9711	49.60	371.9724	-1.3	-3.5	6.0	C15 H18 O 79Br2
371.9690	44.63	371.9724	-3.4	-9.1	6.0	C15 H18 O 79Br2
359.9757	22.43	359.9734	2.3	6.4	6.0	C15 H18 81Br2
359.9737	22.78	359.9734	0.3	0.8	6.0	C15 H18 81Br2
359.9716	23.04	359.9734	-1.8	-5.0	6.0	C15 H18 81Br2
357.9781	13.21	357.9755	2.6	7.3	6.0	C15 H18 79Br 81Br
357.9761	13.42	357.9755	0.6	1.7	6.0	C15 H18 79Br 81Br
357.9742	13.53	357.9755	-1.3	-3.6	6.0	C15 H18 79Br 81Br
357.9721	13.42	357.9755	-3.4	-9.5	6.0	C15 H18 79Br 81Br
355.9798	0.42	355.9775	2.3	6.5	6.0	C15 H18 79Br2
355.9778	0.43	355.9775	0.3	0.8	6.0	C15 H18 79Br2
355.9759	0.50	355.9775	-1.6	-4.5	6.0	C15 H18 79Br2

Figure S12. ^{1}H NMR spectrum of 3α-bromojohnstane (**7**) (600 MHz, $CDCl_3$).



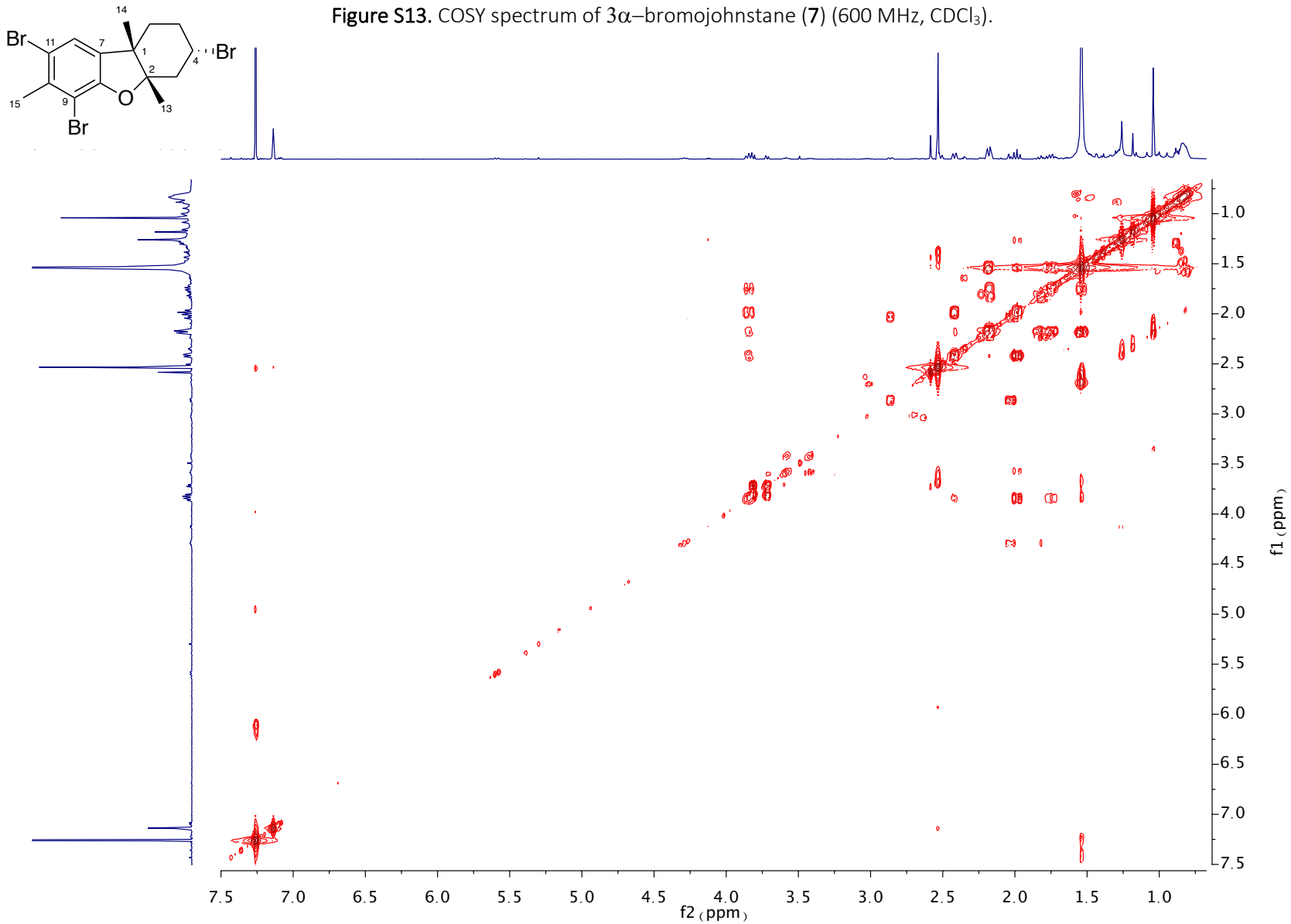


Figure S13. COSY spectrum of 3α–bromojohnstane (**7**) (600 MHz, $CDCl_3$).

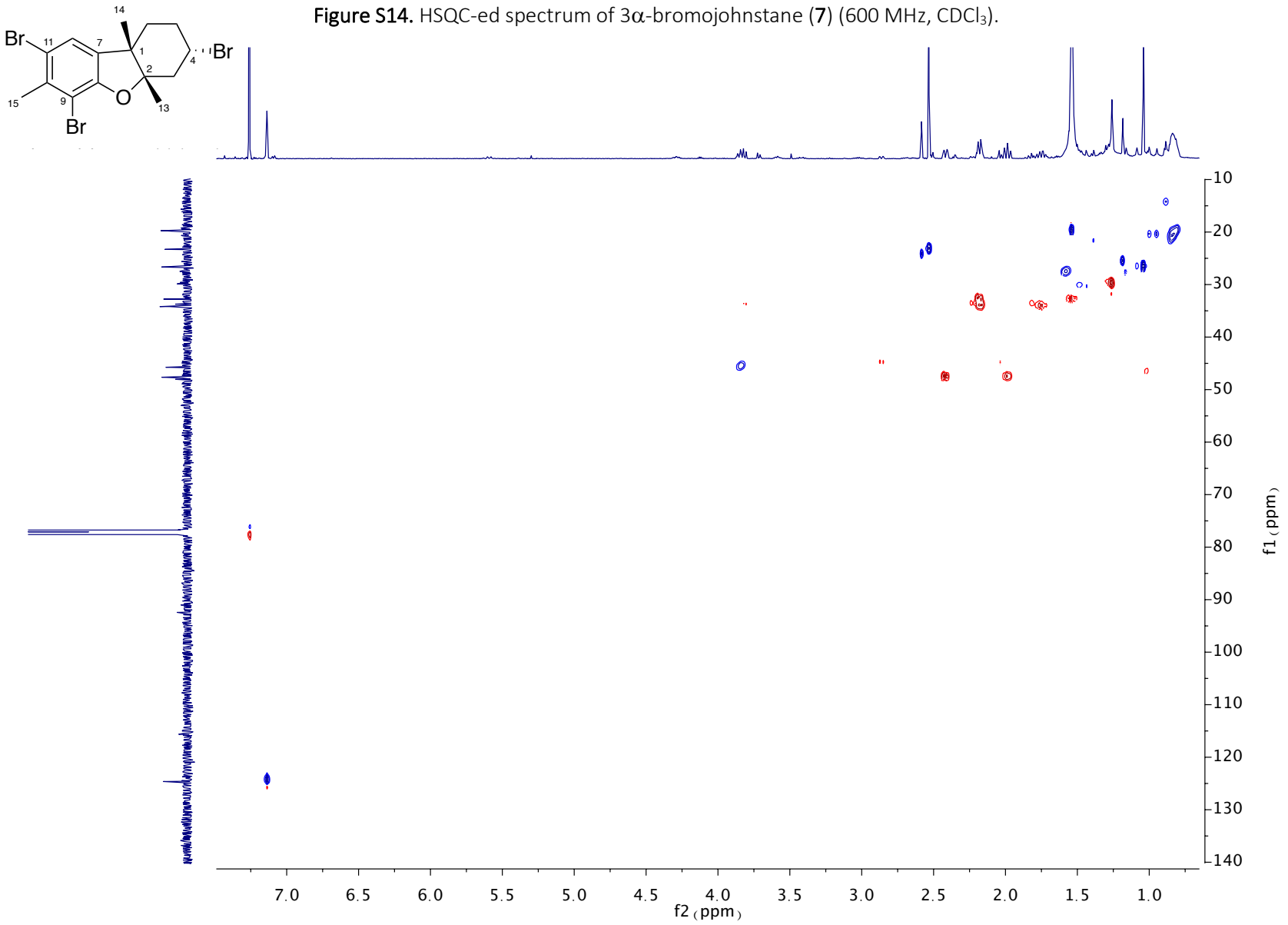


Figure S14. HSQC-ed spectrum of 3α-bromojohnstane (**7**) (600 MHz, $CDCl_3$).

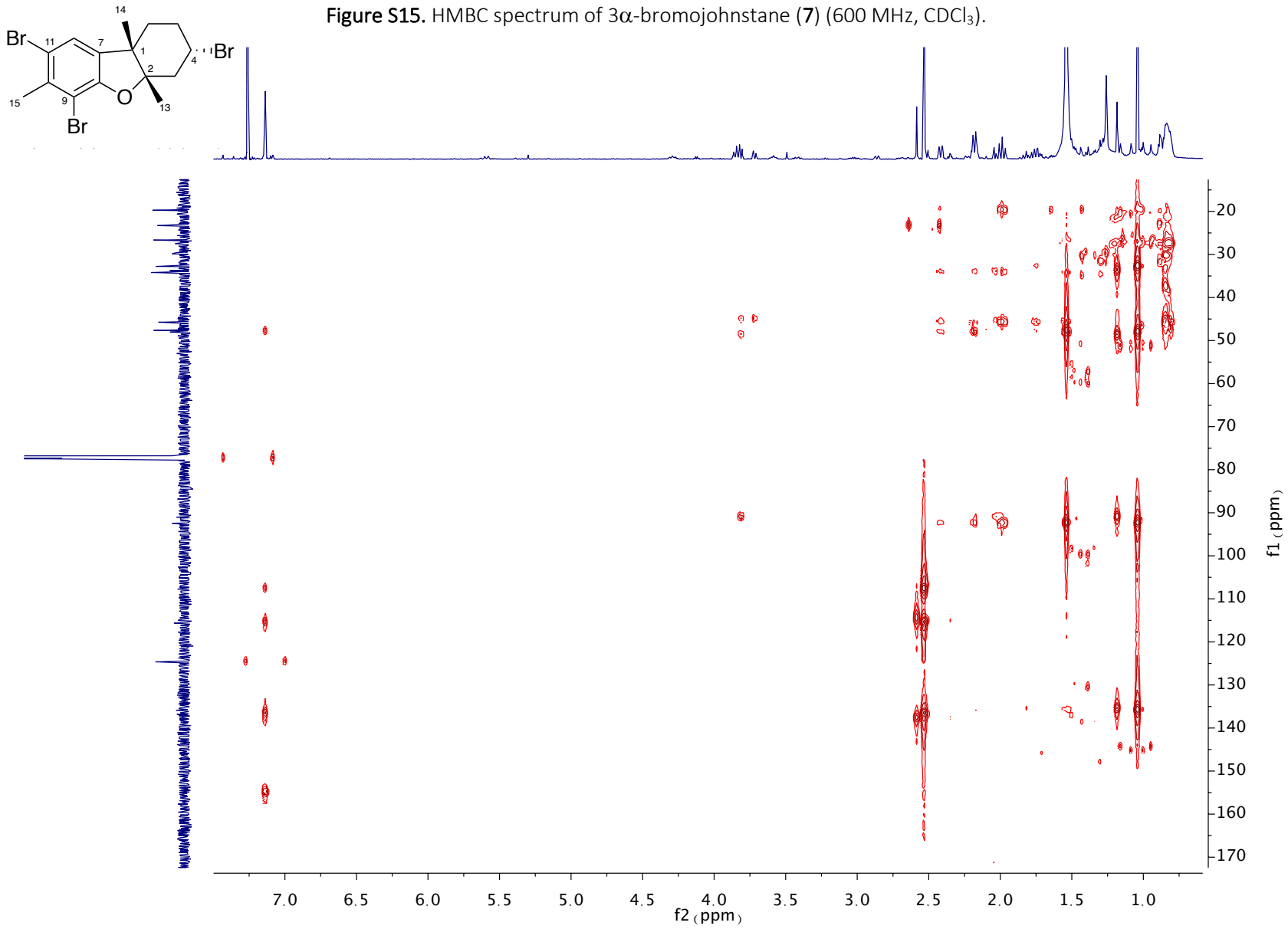


Figure S15. HMBC spectrum of 3α-bromojohnstane (**7**) (600 MHz, $CDCl_3$).

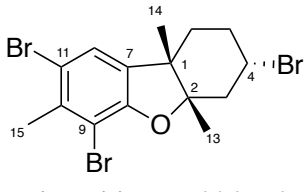


Figure S16. ^{13}C NMR spectrum of 3α-bromojohnstane (**7**) (150 MHz, $CDCl_3$).

Figure S17. 1D-NOE experiments of 3α-bromojohnstane (**7**) (600 MHz, $CDCl_3$).

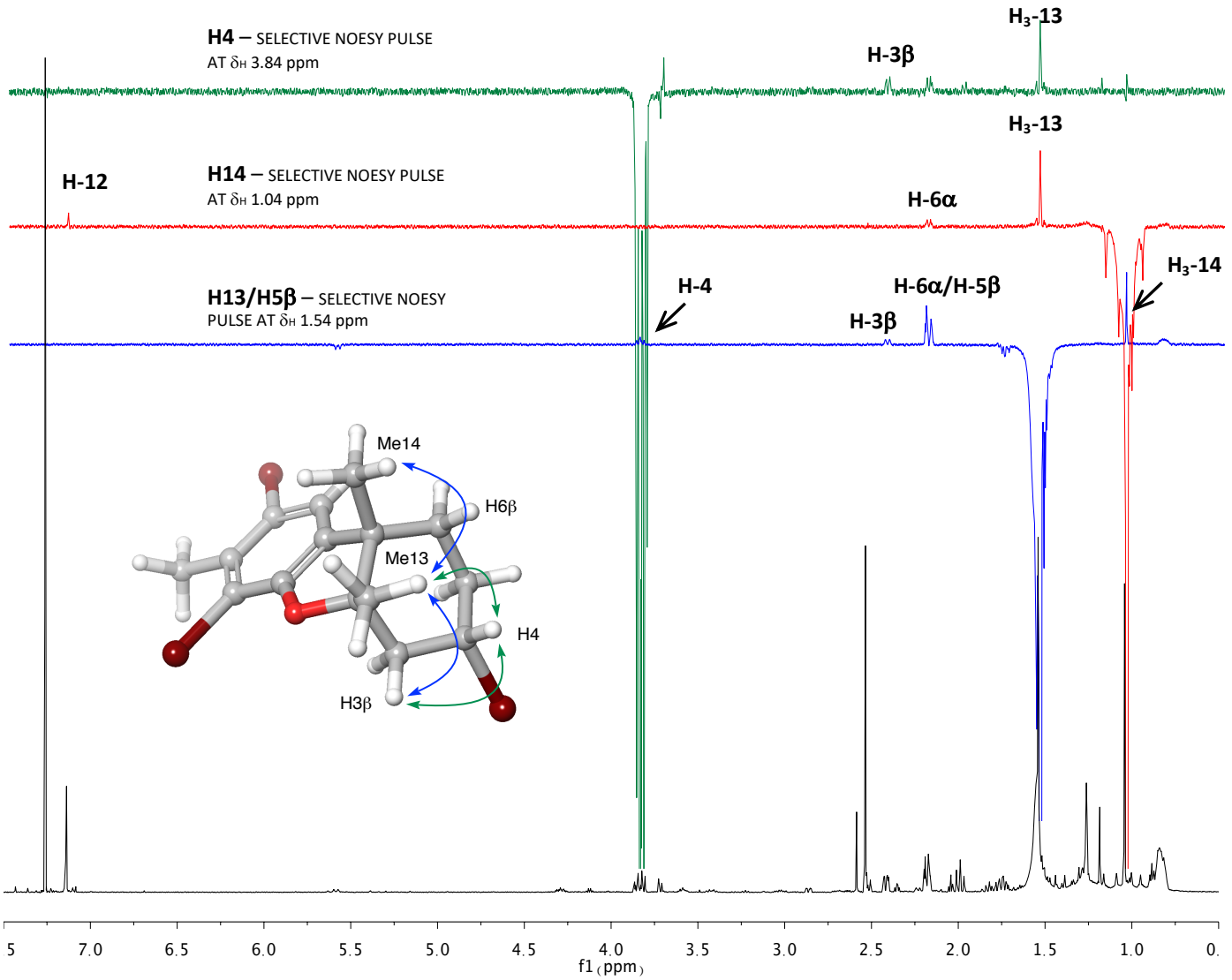


Figure S18. HREIMS spectrum of 3α-bromojohnstane (**7**).

Elemental Composition Report Page 1 of

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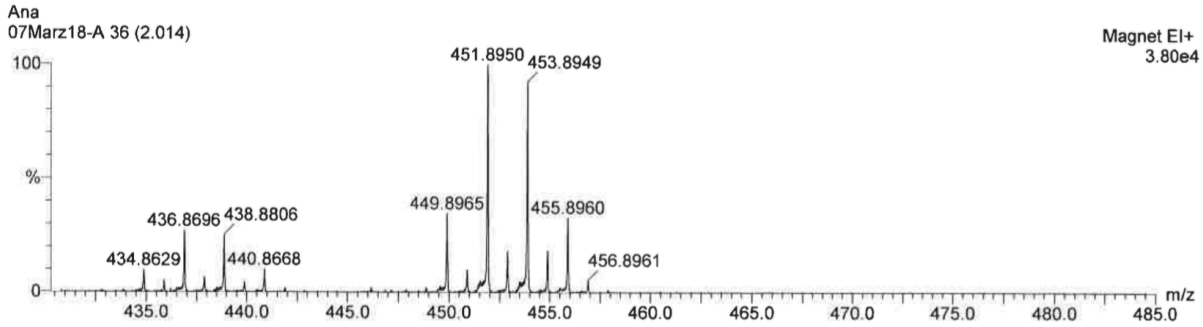
Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0
Selected filters: None

Monoisotopic Mass, Odd and Even Electron Ions
48456 formula(e) evaluated with 16 results within limits (all results (up to 1000) for each mass)
Elements Used:
C: 15-15 H: 17-17 O: 1-1 79Br: 0-3 81Br: 0-3



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455.8784	24.88	455.8768	1.6	3.5	6.0	C15	H17	O	81Br3	
455.8758	25.80	455.8768	-1.0	-2.2	6.0	C15	H17	O	81Br3	
455.8733	24.42	455.8768	-3.5	-7.7	6.0	C15	H17	O	81Br3	
453.8823	74.42	453.8789	3.4	7.5	6.0	C15	H17	O	79Br	81Br2
453.8798	67.41	453.8789	0.9	2.0	6.0	C15	H17	O	79Br	81Br2
453.8773	61.33	453.8789	-1.6	-3.5	6.0	C15	H17	O	79Br	81Br2
453.8748	55.32	453.8789	-4.1	-9.0	6.0	C15	H17	O	79Br	81Br2
451.8850	80.74	451.8809	4.1	9.1	6.0	C15	H17	O	79Br2	81Br
451.8824	80.48	451.8809	1.5	3.3	6.0	C15	H17	O	79Br2	81Br
451.8800	78.16	451.8809	-0.9	-2.0	6.0	C15	H17	O	79Br2	81Br
451.8775	72.34	451.8809	-3.4	-7.5	6.0	C15	H17	O	79Br2	81Br
449.8865	28.64	449.8829	3.6	8.0	6.0	C15	H17	O	79Br3	
449.8840	26.22	449.8829	1.1	2.4	6.0	C15	H17	O	79Br3	
449.8816	23.43	449.8829	-1.3	-2.9	6.0	C15	H17	O	79Br3	
449.8791	21.91	449.8829	-3.8	-8.4	6.0	C15	H17	O	79Br3	

Figure S19. ^{1}H NMR spectrum of 8,10-dibromoisoaplysin (**8**) (500 MHz, $CDCl_3$).

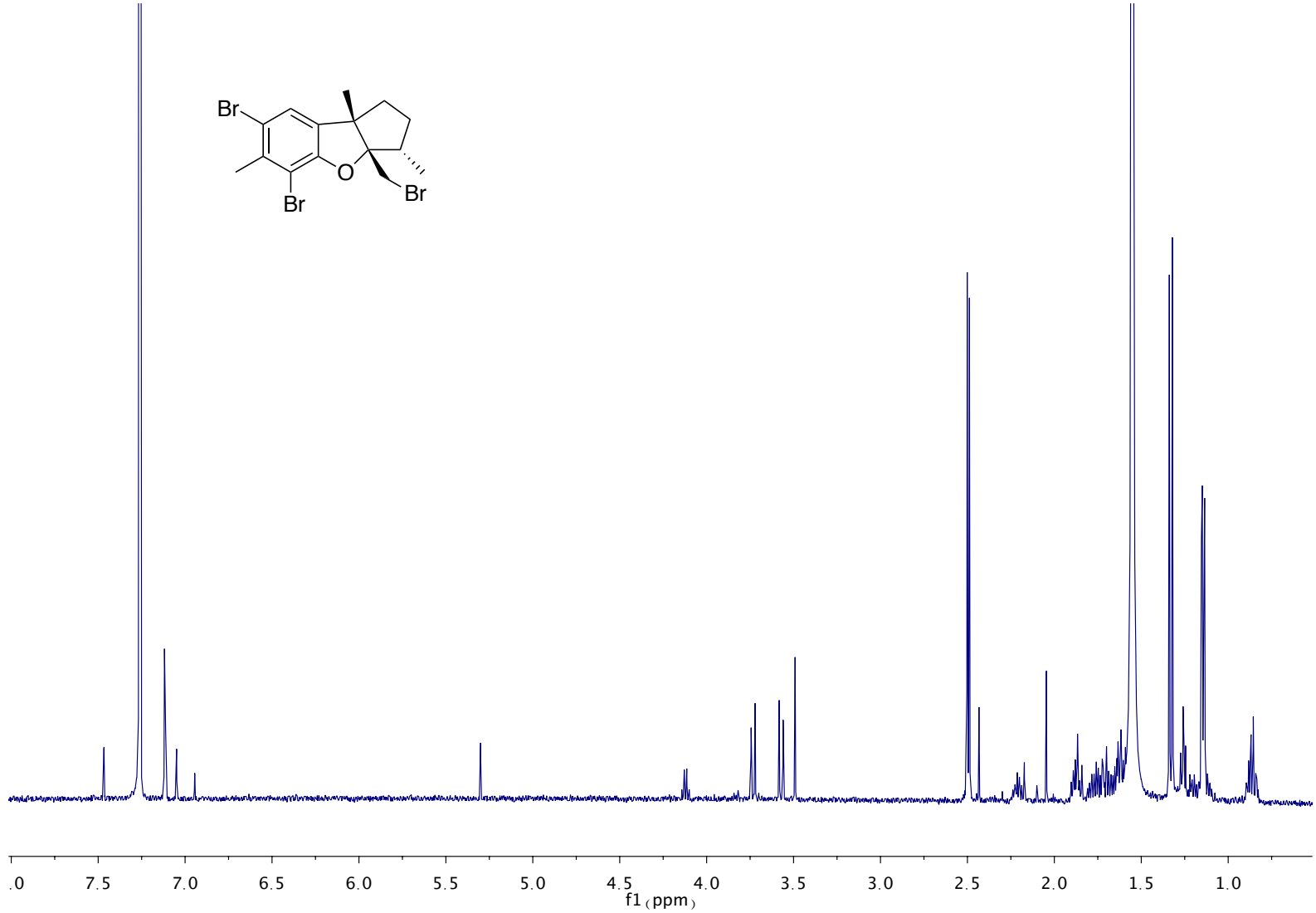

Figure S20. ^{1}H NMR spectrum of 8,10-dibromoaplysinol (**9**) (500 MHz, $CDCl_3$).