

Supplementary Materials:

Debromooscillatoxins G and I from the cyanobacterium

Moorea producens

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Figure S1. ESI-HRMS spectrum of debromooscillatoxin G in positive ion mode

Figure S2. ^1H NMR spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S3. ^{13}C NMR spectrum of debromooscillatoxin G in acetone- d_6

Figure S4. ^1H - ^1H COSY NMR spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S5. ^1H - ^{13}C HSQC spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S6. ^1H - ^{13}C HMBC spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S7. NOESY spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S8. TOCSY spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

Figure S9. ESI-HRMS spectrum of debromooscillatoxin I in positive ion mode

Figure S10. ^1H NMR spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Figure S11. ^{13}C NMR spectrum of debromooscillatoxin I in acetone- d_6 (150 MHz)

Figure S12. ^1H - ^1H COSY NMR spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Figure S13. ^1H - ^{13}C HSQC spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Figure S14. ^1H - ^{13}C HMBC spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Figure S15. NOESY spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Figure S16. TOCSY spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Table S1. NMR assign table for oscillatoxin G and oscillatoxin I (δ_{H} 2.05 (600 MHz) and δ_{C} 206.26 (150 MHz) for acetone- d_6)

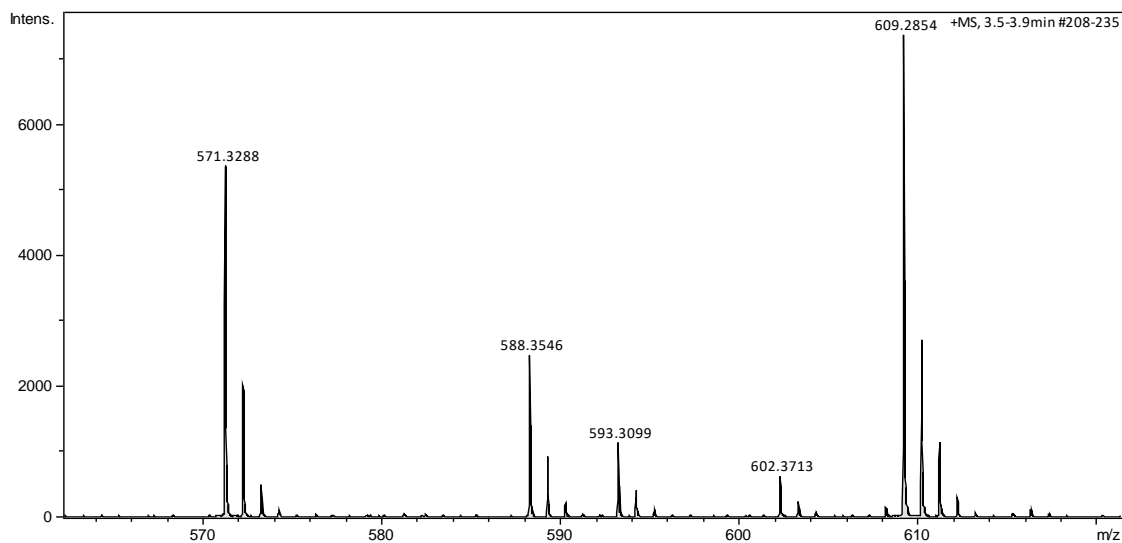


Figure S1. ESI-HRMS spectrum of debromooscillatoxin G in positive ion mode

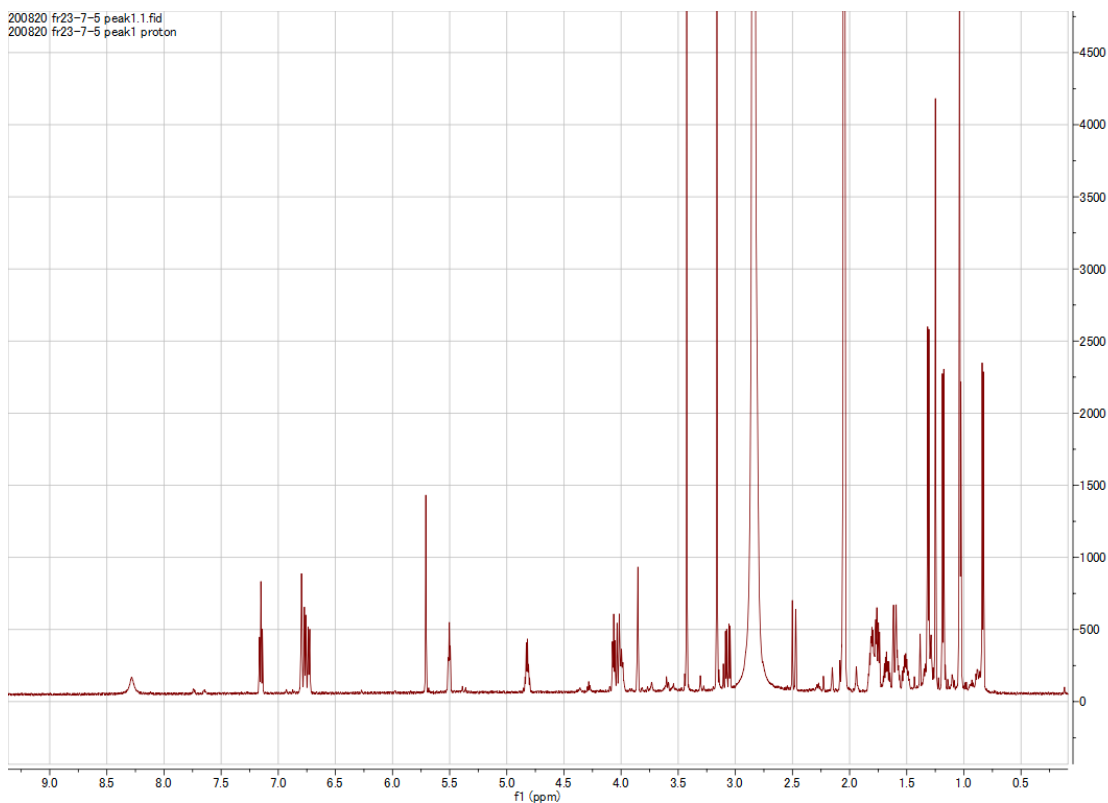


Figure S2. ¹H NMR spectrum of debromooscillatoxin G in acetone-*d*₆ (600 MHz)

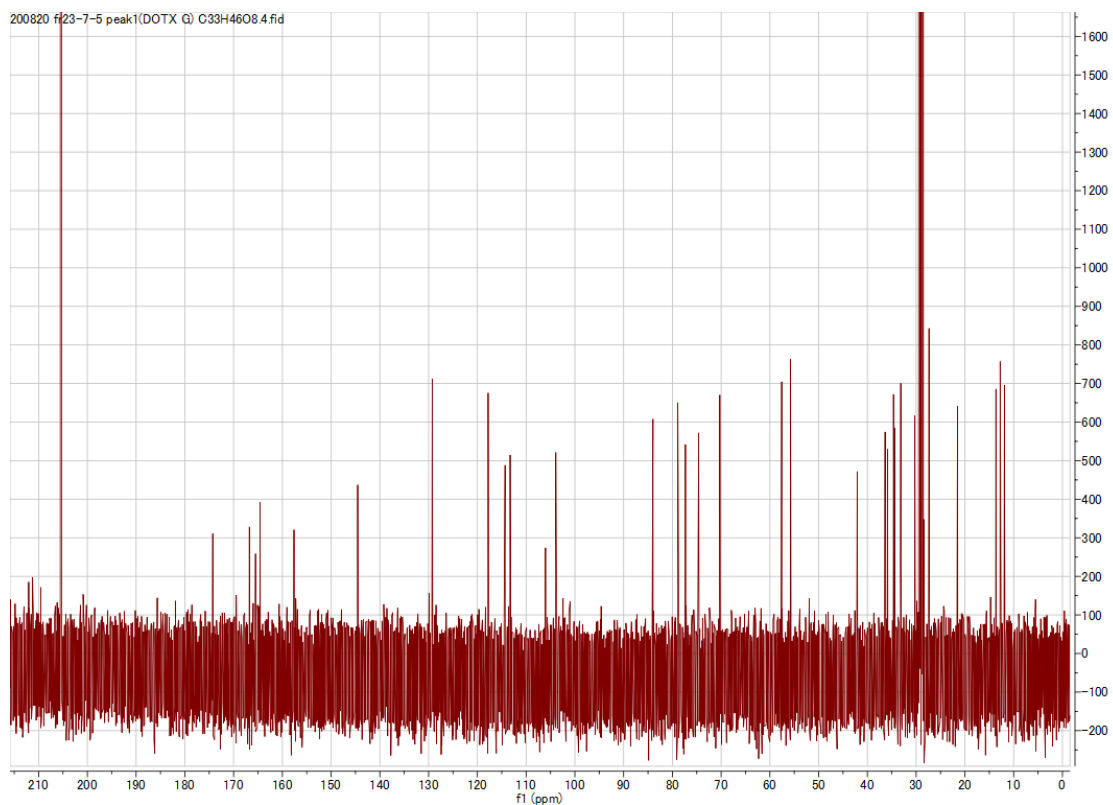


Figure S3. ^{13}C NMR spectrum of debromooscillatoxin G in acetone- d_6 (150 MHz)

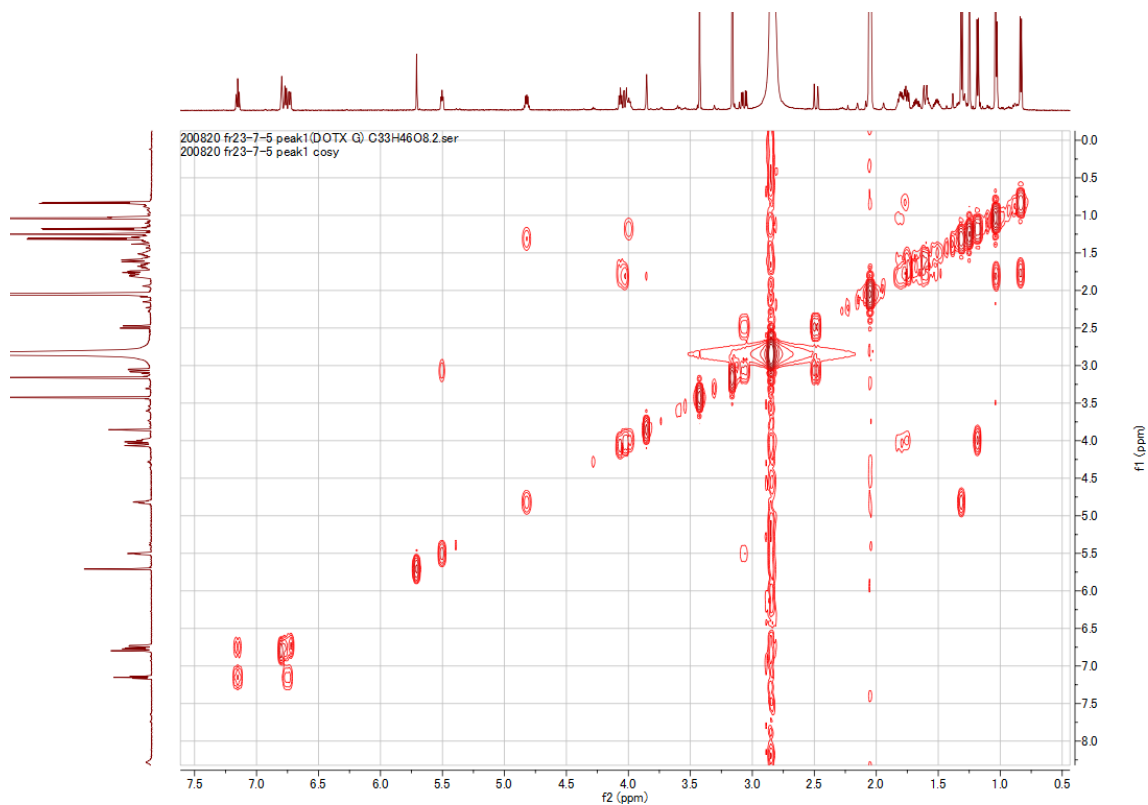


Figure S4. ^1H - ^1H COSY NMR spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

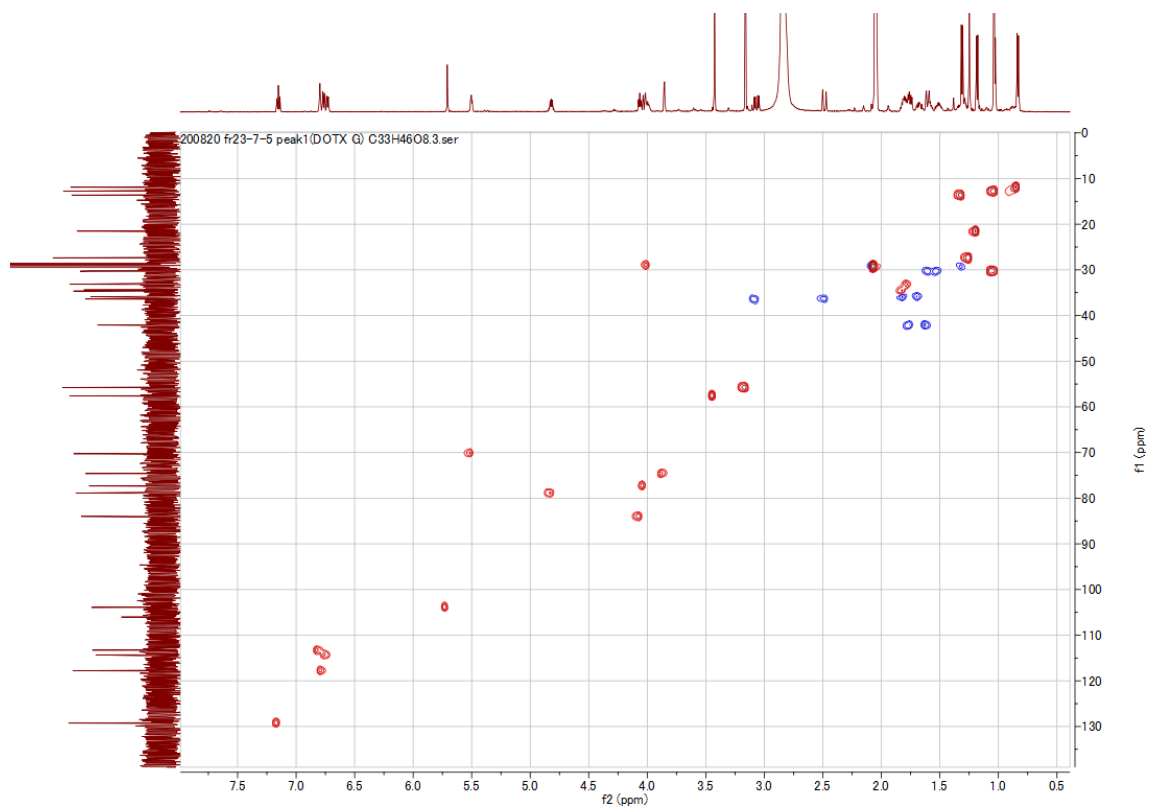


Figure S5. ^1H - ^{13}C HSQC spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

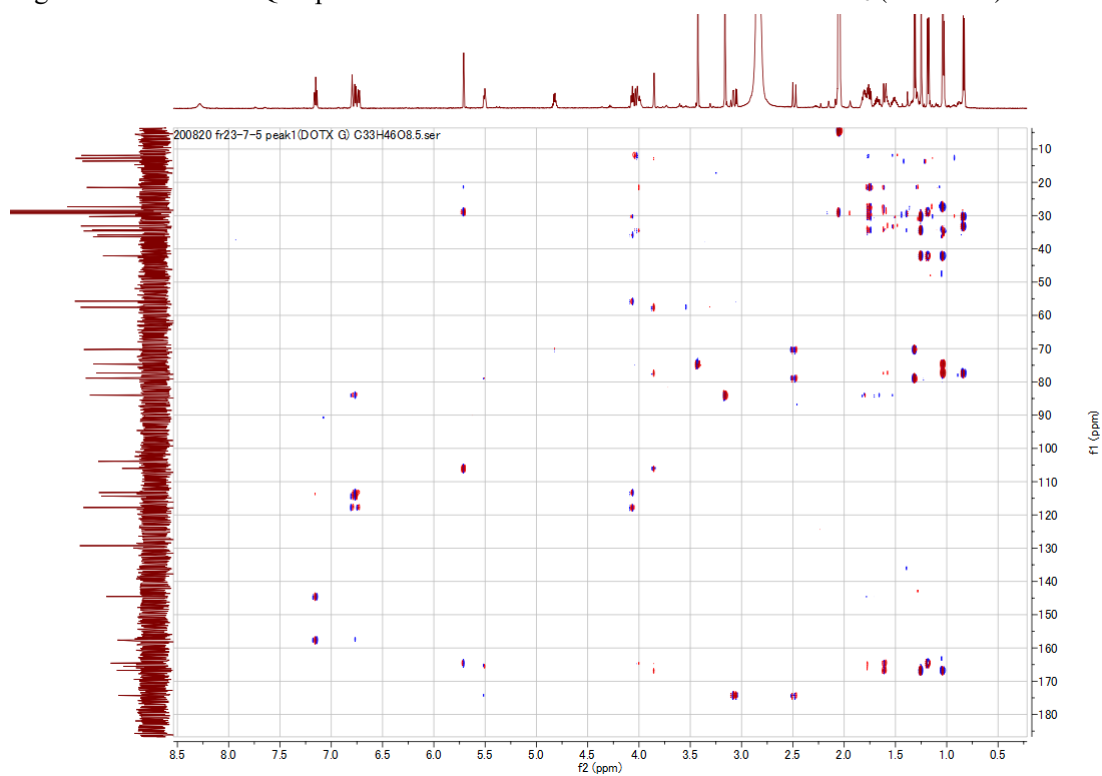


Figure S6. ^1H - ^{13}C HMBC spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

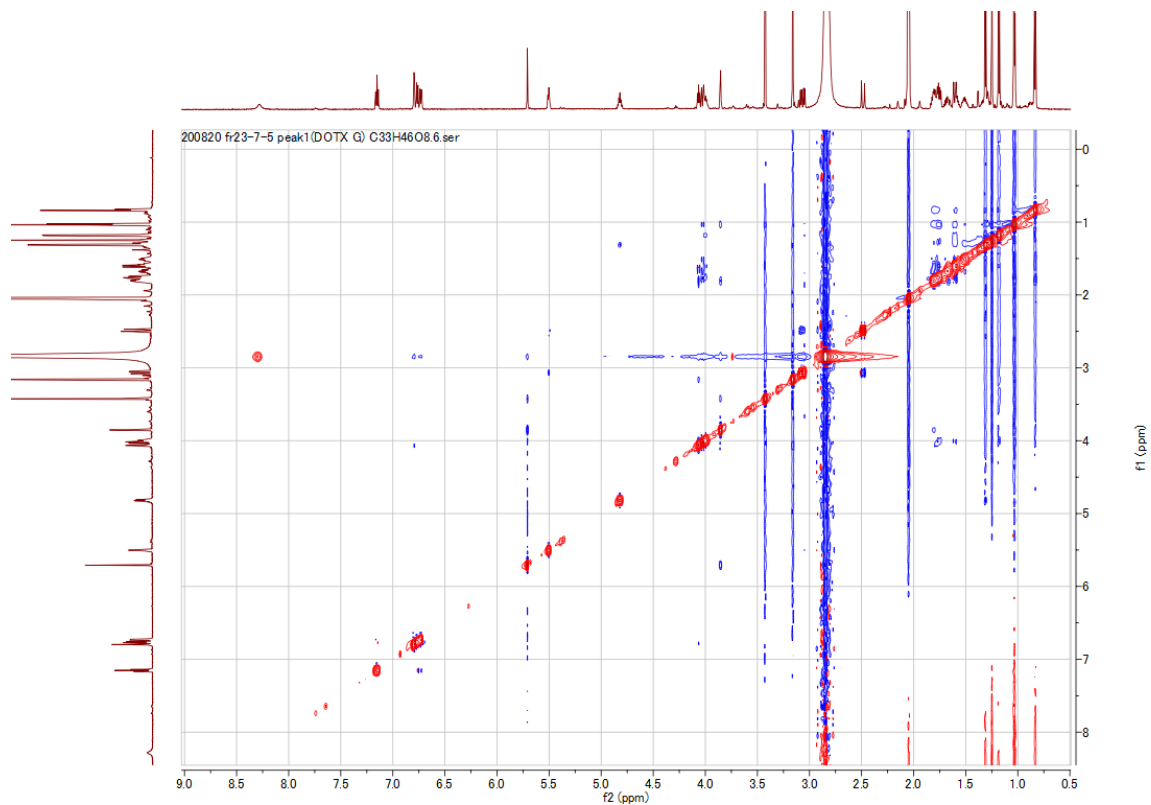


Figure S7. NOESY spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

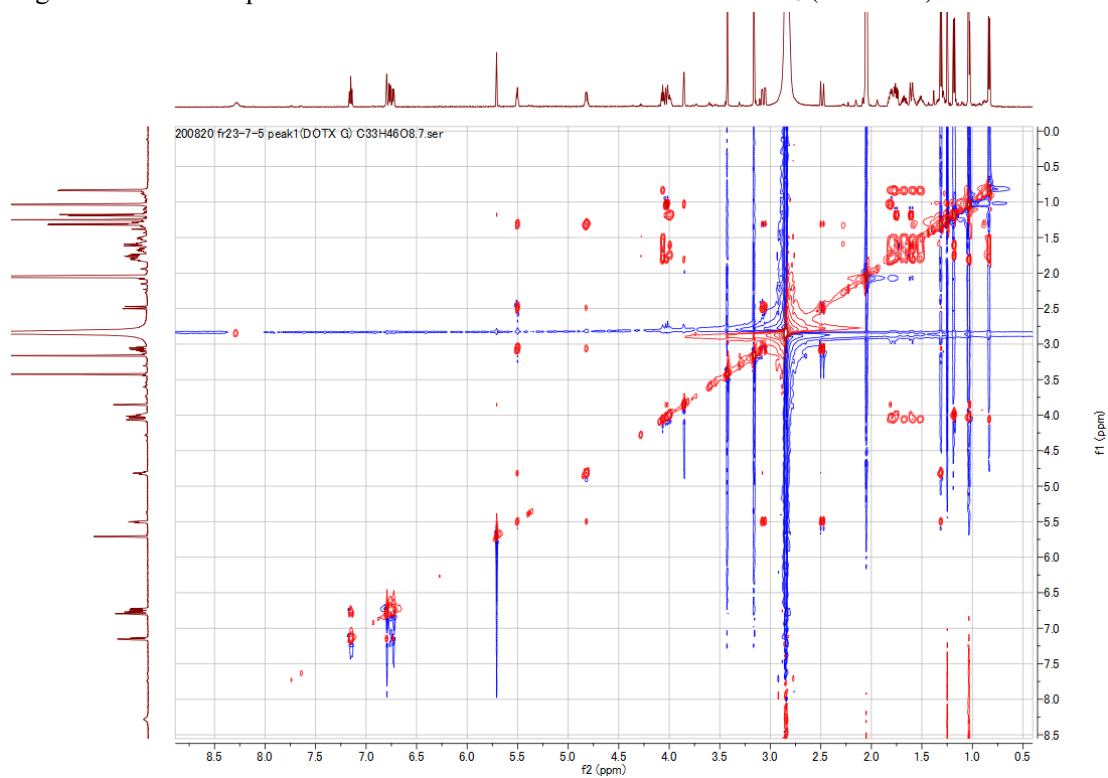


Figure S8. TOCSY spectrum of debromooscillatoxin G in acetone- d_6 (600 MHz)

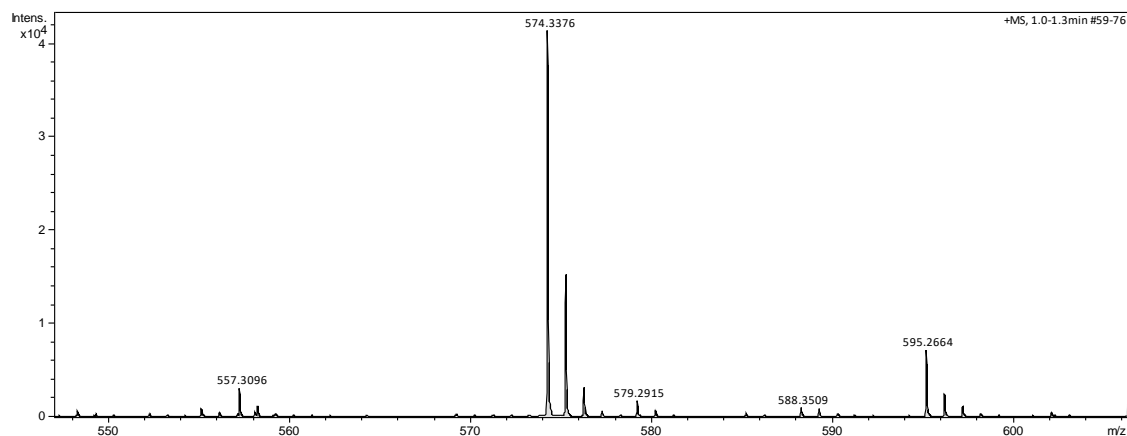


Figure S9. ESI-HRMS spectrum of debromooscillatoxin I in positive ion mode

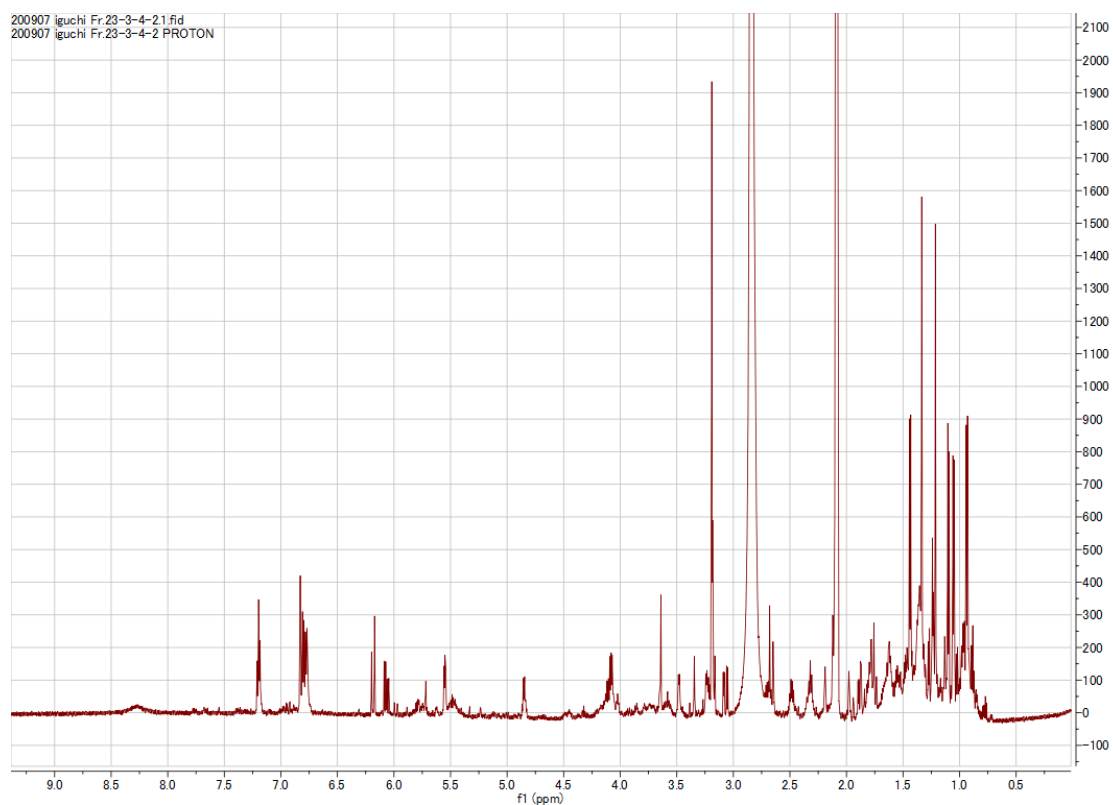


Figure S10. ¹H NMR spectrum of debromooscillatoxin I in acetone-*d*₆ (600 MHz)

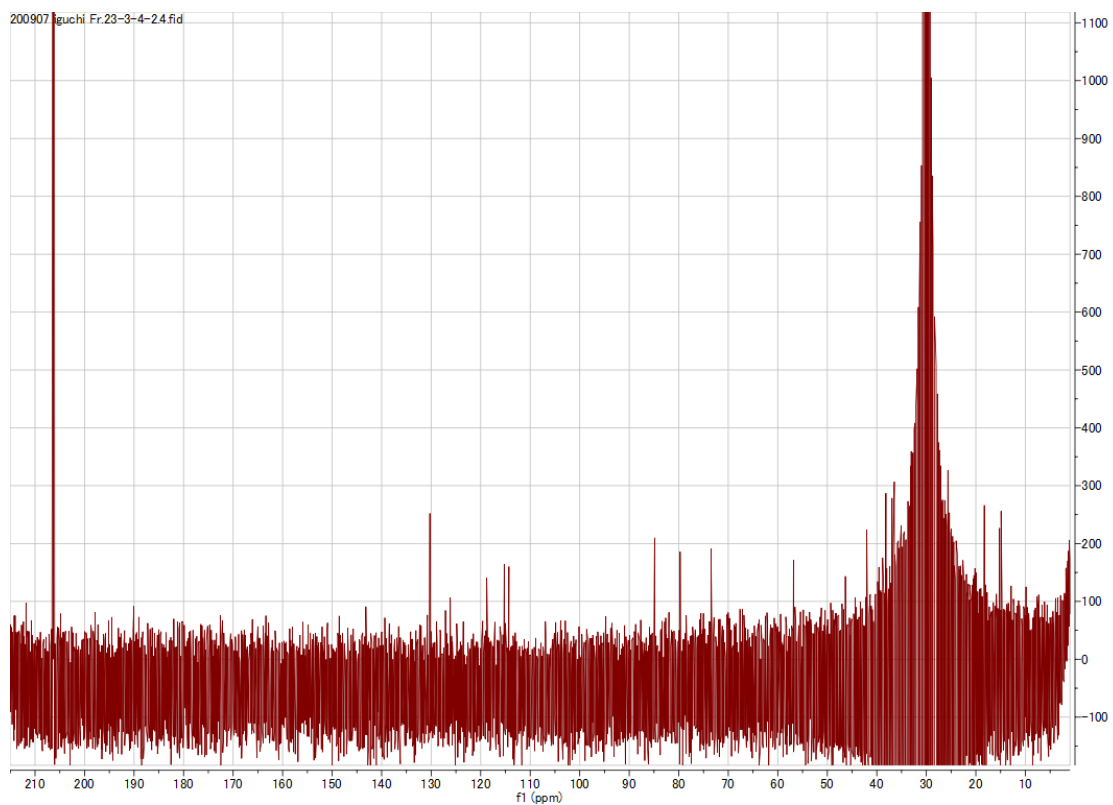


Figure S11. ^{13}C NMR spectrum of debromooscillatoxin I in acetone- d_6 (150 MHz)

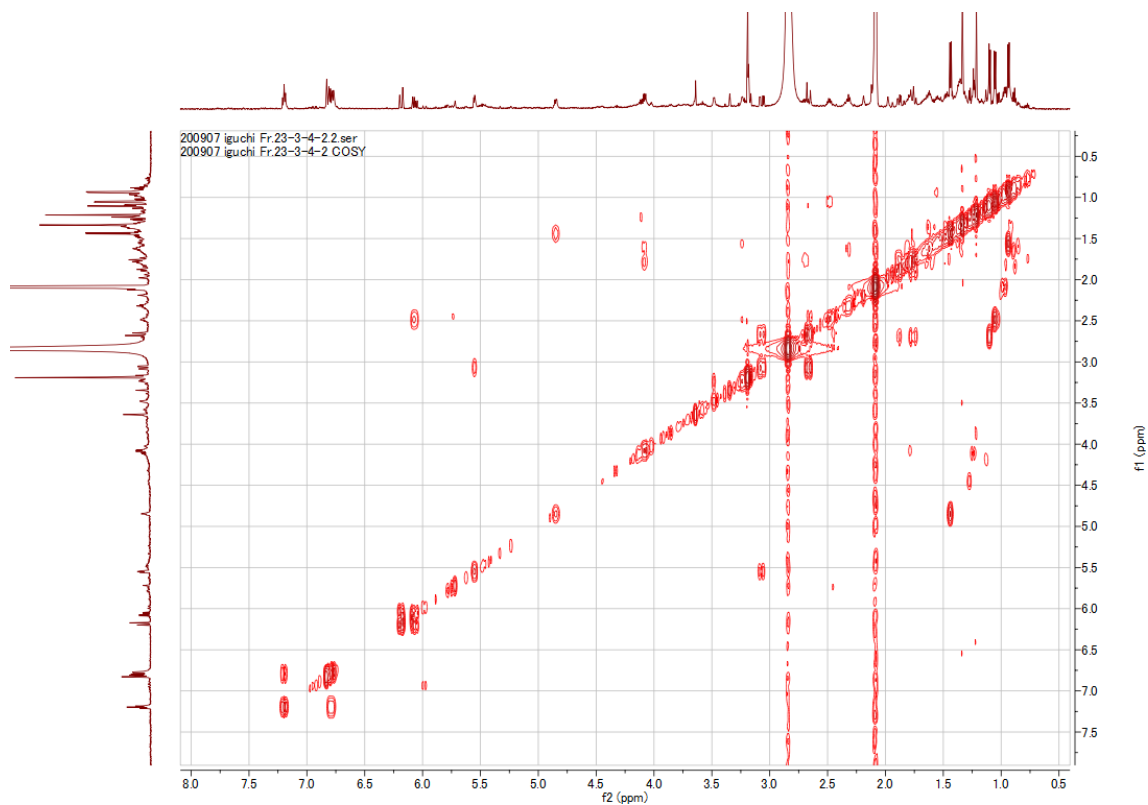


Figure S12. ^1H - ^1H COSY NMR spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

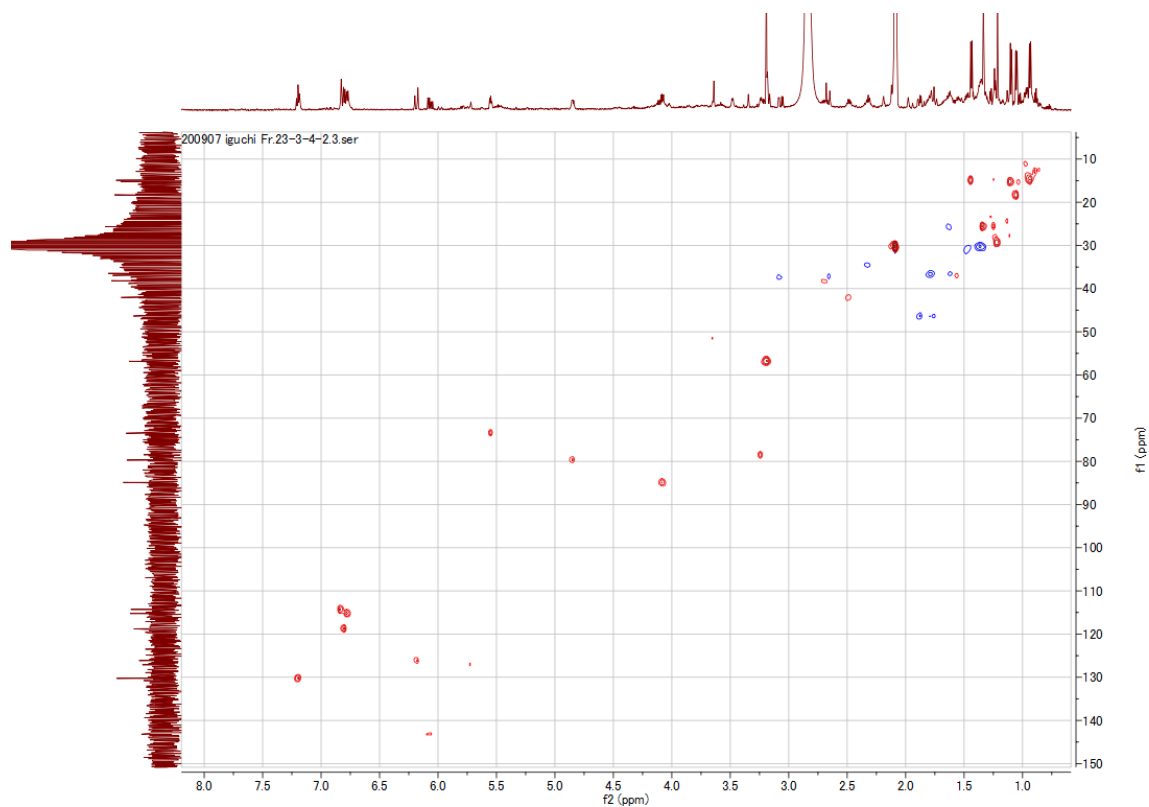


Figure S13. ^1H - ^{13}C HSQC spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

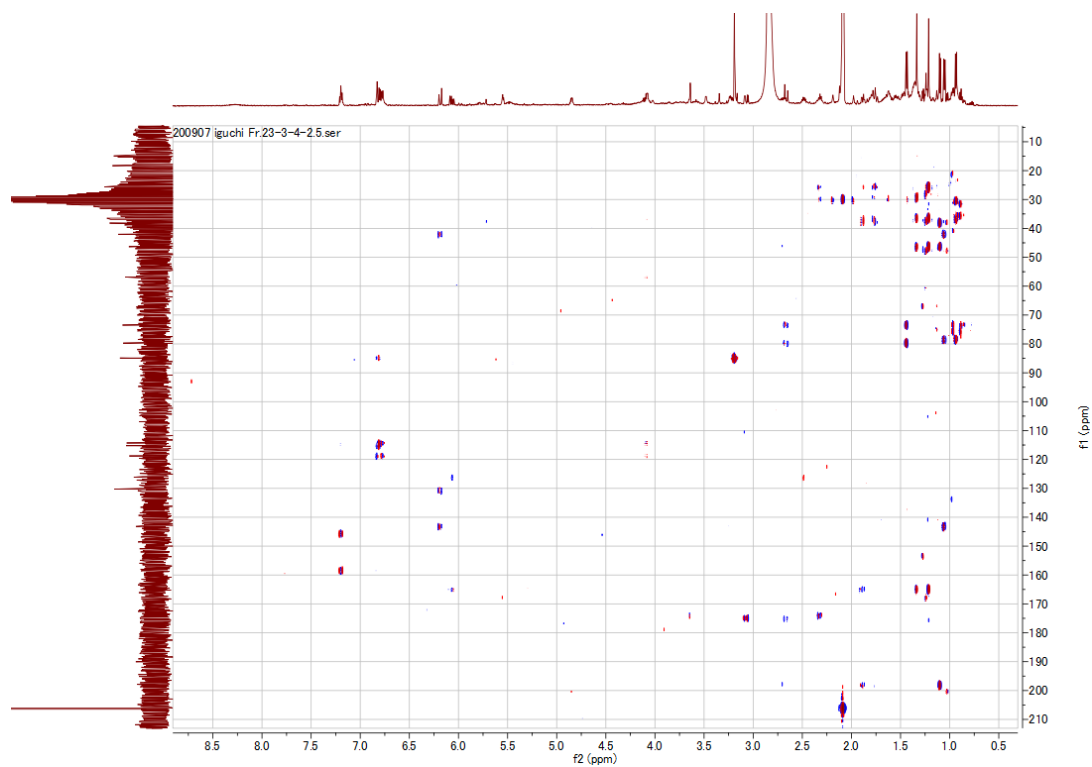


Figure S14. ^1H - ^{13}C HMBC spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

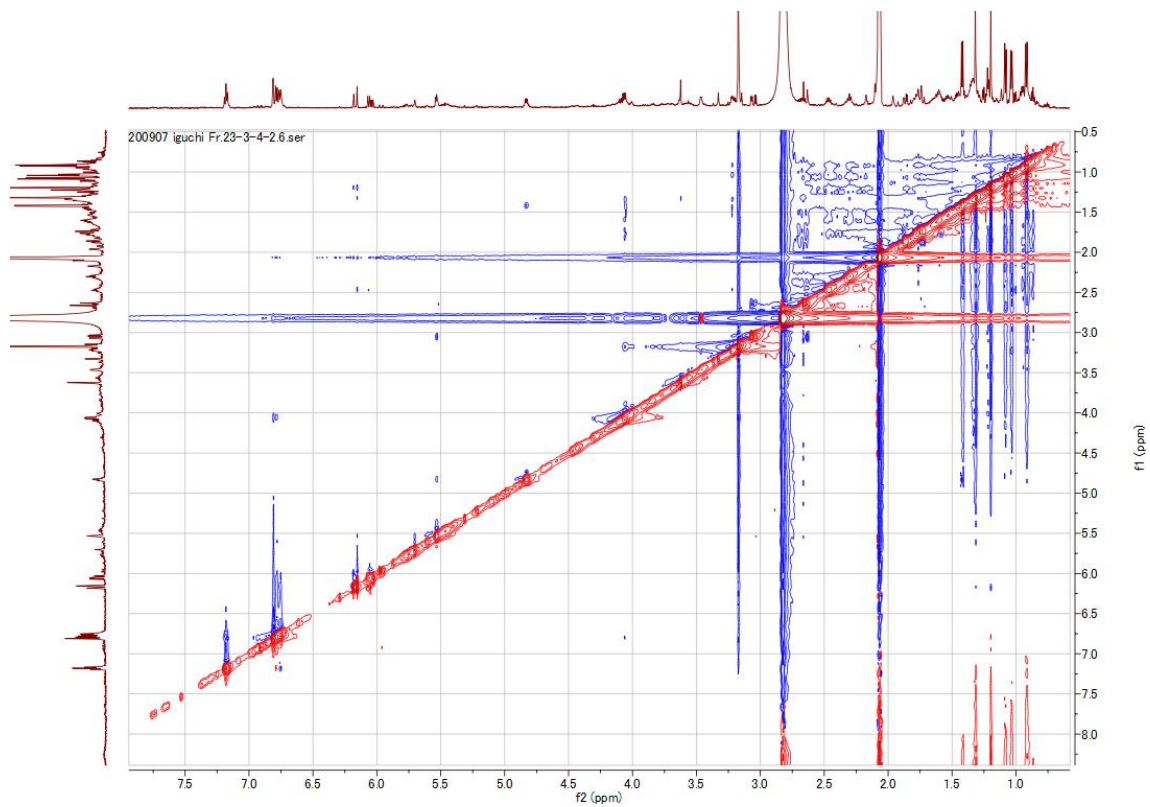


Figure S15. NOESY spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

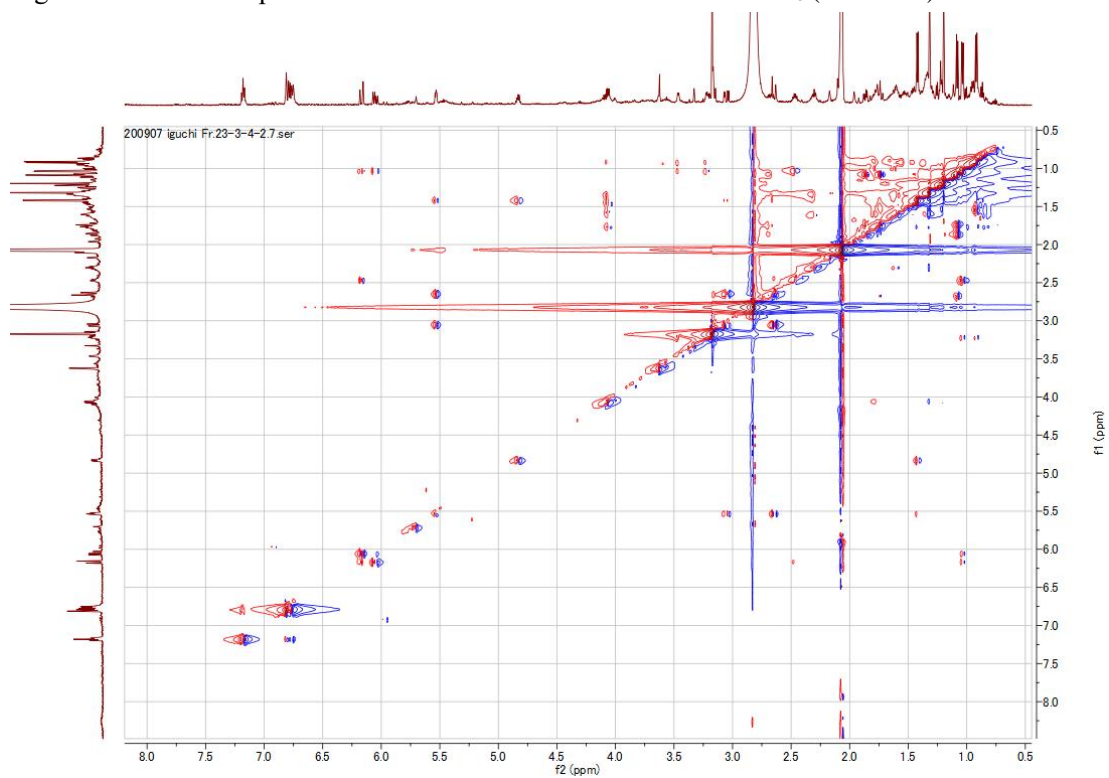


Figure S16. TOCSY spectrum of debromooscillatoxin I in acetone- d_6 (600 MHz)

Table S1. NMR assign table for oscillatoxin G and oscillatoxin I. (δ_{H} 2.05 (600 MHz) and δ_{C} 206.26 (150 MHz) for acetone-*d*6)

No.	oscillatoxin G (2)		oscillatoxin I (4)	
	δ_{H} multip. (<i>J</i> in Hz)	δ_{C}	δ_{H} multip. (<i>J</i> in Hz)	δ_{C}
1		166.4, C		167.5, C
2	5.71 (s)	104.8, CH		130.7, C
3		165.4, C		198.2, C
4	4.01 m (3.6, 7.2)	29.8, CH	2.64 m	38.1, CH
5a	1.62 m (3.6, 14.1)	43.0, CH ₂	1.71 dd (13.7, 13.7)	46.4, CH ₂
5b	1.76 m (3.6, 14.1)		1.84 dd (4.8, 13.4)	
6		35.3, C		36.5, C
7		167.6, C		164.9, C
8		106.9, C	6.17 dd (0.8, 16.0)	126.2, CH
9	3.87 d (2.6)	75.5, CH	6.05 dd (8.6, 16.0)	*143.1, CH
10	1.84 m (2.6, 11.4, 7.1)	35.5, CH	2.47 m	42.1, CH
11	4.07 dd (11.4, 1.8)	78.2, CH	3.22 dd (1.2, 11.3)	78.6, CH
12	1.82 m (1.8, 6.7)	32.0, CH	1.57 m	*36.8, CH
13a	1.66 m	31.0, CH ₂	*1.37 m	*30.3, CH ₂
13b	1.70 m		*1.54 m	
14a	1.66 m	35.7, CH ₂	1.63 m	*35.2, CH ₂
14b	1.75 m		1.63 m	
15	4.49 m	83.1, CH	4.44 dd (4.5, 7.5)	83.2, CH
16		143.7, C		143.9, C
17		112.3, C		112.7, C
18	7.36 d (8.6)	134.1, CH	7.37 d (8.6)	134.3, CH
19	6.72 dd (8.6, 3.1)	117.3, CH	6.72 dd (3.1, 8.6)	117.4, CH
20		158.4, C		158.6, C
21	6.96 d (3.1)	115.1, CH	6.95 d (3.0)	115.3, CH
22	0.87 d (7.0)	12.8, CH ₃	0.92 d (6.6)	14.8, CH ₃
23	1.05 d (7.0)	13.7, CH ₃	1.03 d (6.9)	18.4, CH ₃
24	1.28 s	*28.2, CH ₃	1.19 s	29.3, CH ₃
25	1.09 s	*31.2, CH ₃	1.31 s	25.4, CH ₃
26	1.19 d (7.2)	22.4, CH ₃	1.06 d (6.6)	15.2, CH ₃
27		175.1, C		175.0, C
28a	2.49 dd (0.7, 17.9)	37.2, CH ₂	2.64 dd (1.1, 18.1)	36.8, CH ₂

28b	3.06 dd (6.1, 17.9)		3.05 dd (6.0, 18.1)	
29	5.51 ddd (0.7, 4.0, 6.0)	71.1, CH	5.52 m	73.5, CH
30	4.82 m	79.8, CH	4.81 m	79.7, CH
31	1.32 d (6.4)	14.5, CH ₃	1.41 d (6.6)	14.9, CH ₃
32	3.21 s	57.1, CH ₃	3.20 s	57.4, CH ₃
33	3.43 s	58.5, CH ₃	-	-
11-OH	-	-	3.48 d (5.7)	-
20-OH	8.58 s	-	8.54 s	-

*denotes the revised assignments of the original literatures.^{11,12}

11 H. Nagai, M. Watanabe, S. Sato, M. Kawaguchi, Y. Y. Xiao, K. Hayashi, R. Watanabe, H. Uchida, and M. Satake, *Tetrahedron* 2019, **75**, 2486.

12 H. Nagai, S. Sato, K. Iida, K. Hayashi, M. Kawaguchi, H. Uchida, and M. Satake, *Toxins* 2019, **11**, 366.