

Supporting Information for

**Bioactive Bromophycolides R-U from the Fijian Red Alga *Callophycus
serratus***

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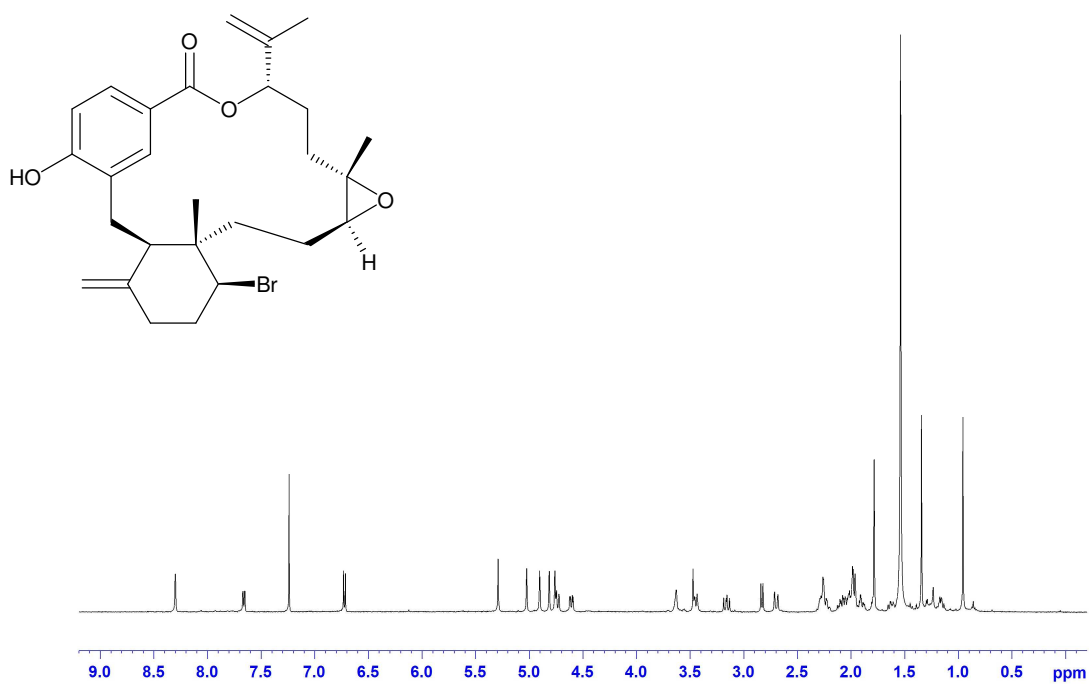


Figure S1. ¹H NMR spectrum of bromophycolide R (**1**) (500 MHz; CDCl₃)

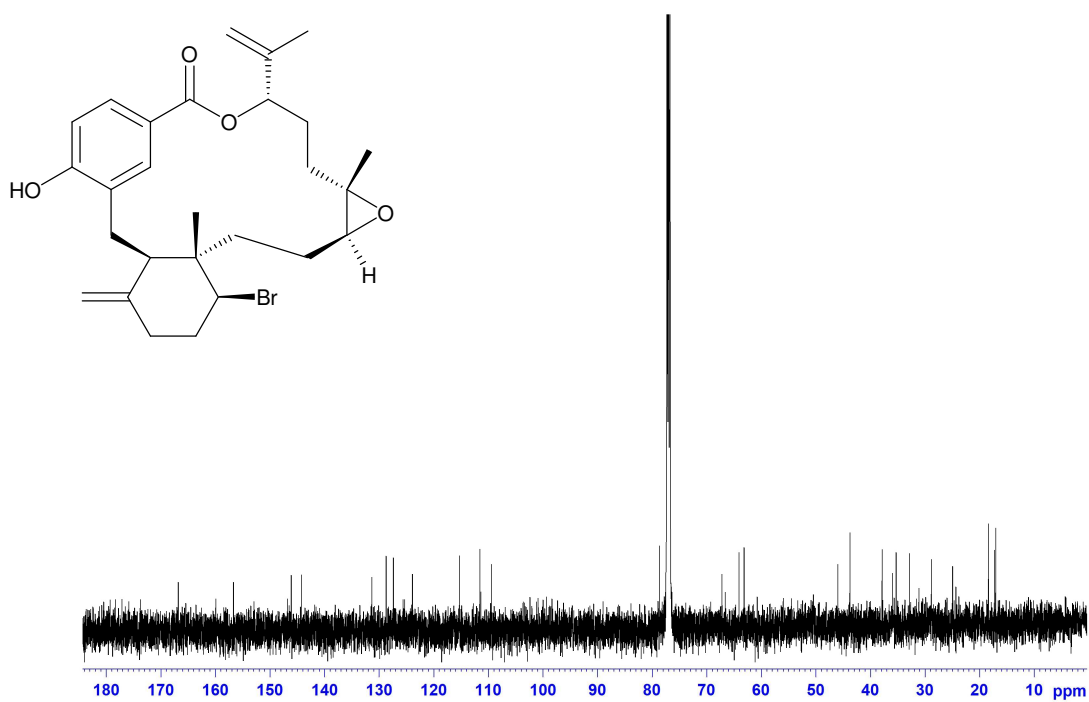


Figure S2. ¹³C NMR spectrum of bromophycolide R (**1**) (125 MHz; CDCl₃)

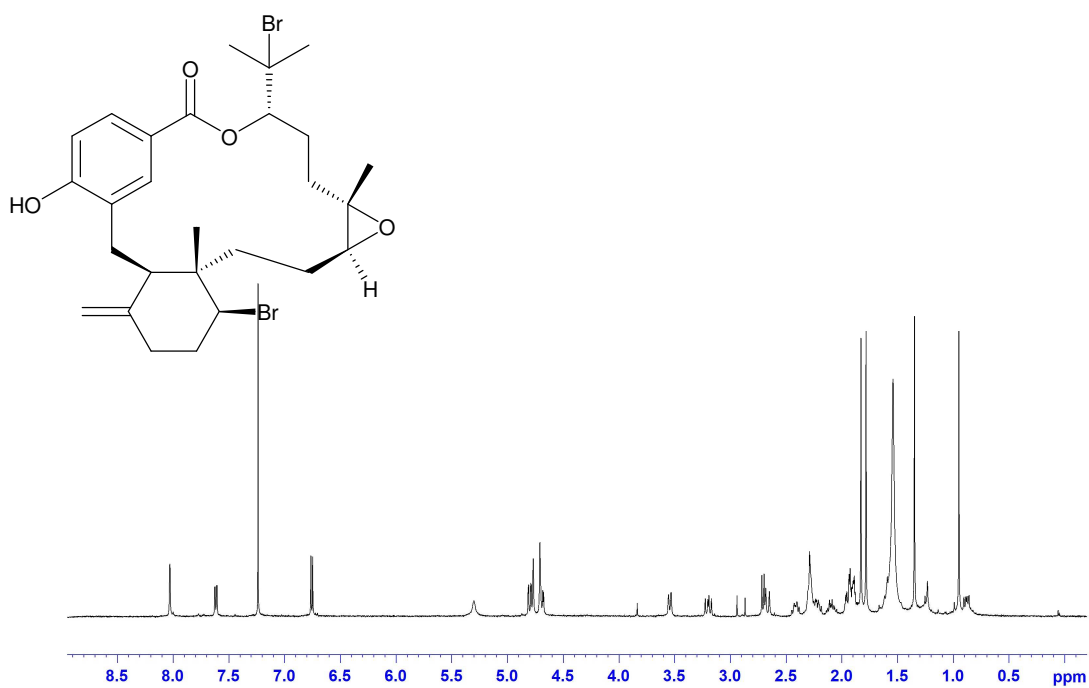


Figure S3. ¹H NMR spectrum of bromophycolide S (**2**) (500 MHz; CDCl₃)

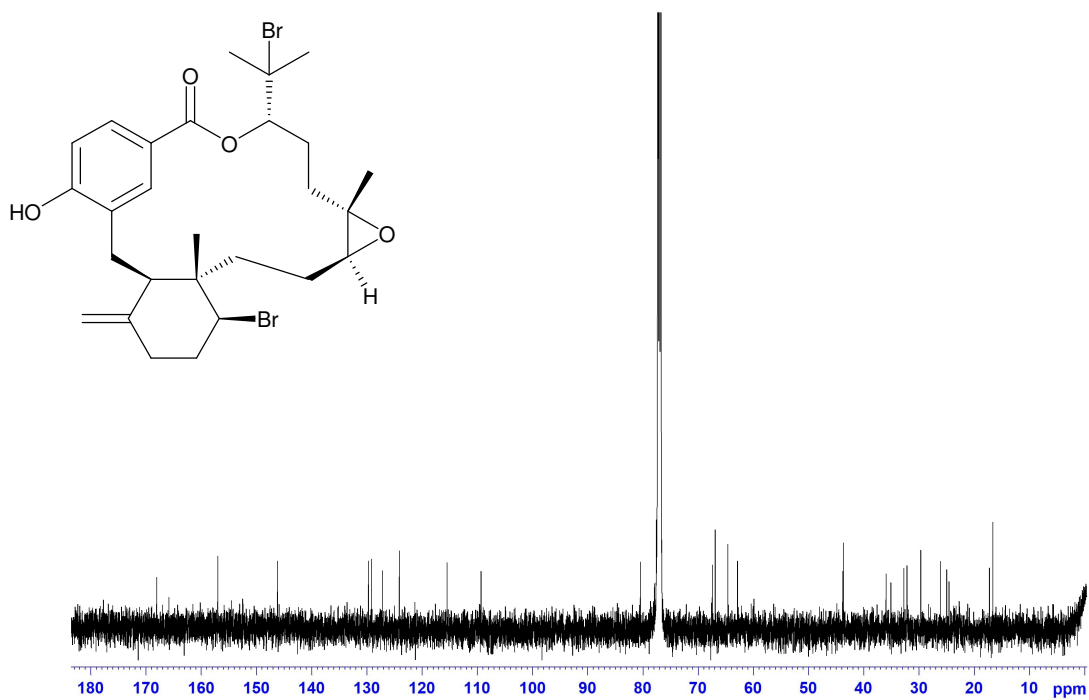


Figure S4. ¹³C NMR spectrum of bromophycolide S (**2**) (125 MHz; CDCl₃)

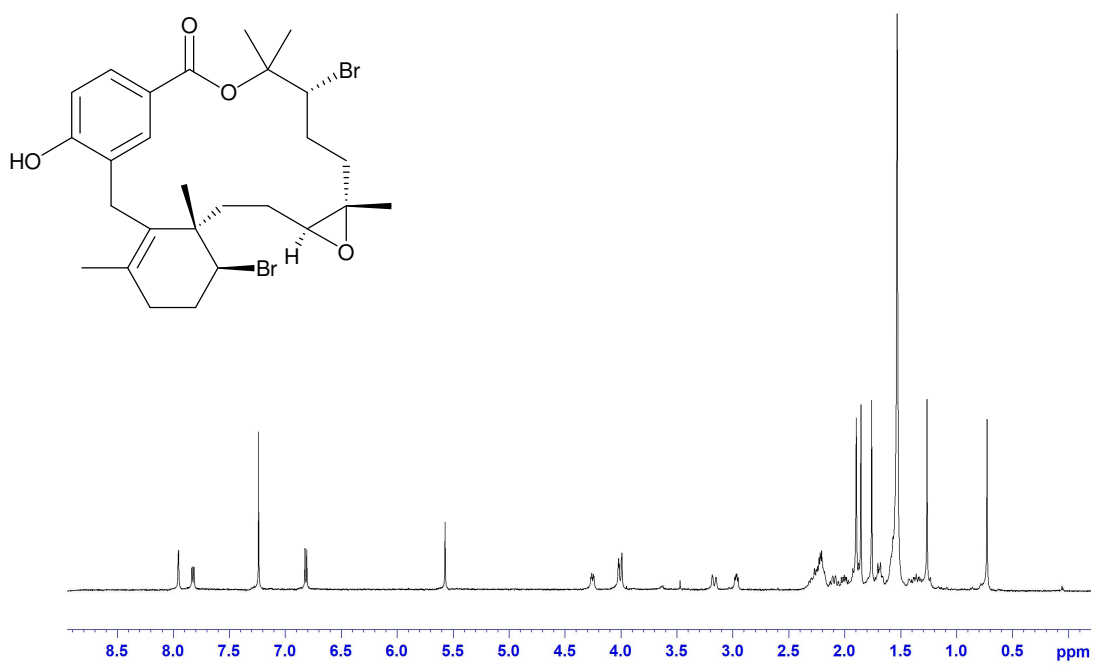


Figure S5. ¹H NMR spectrum of bromophycolide T (**3**) (500 MHz; CDCl₃)

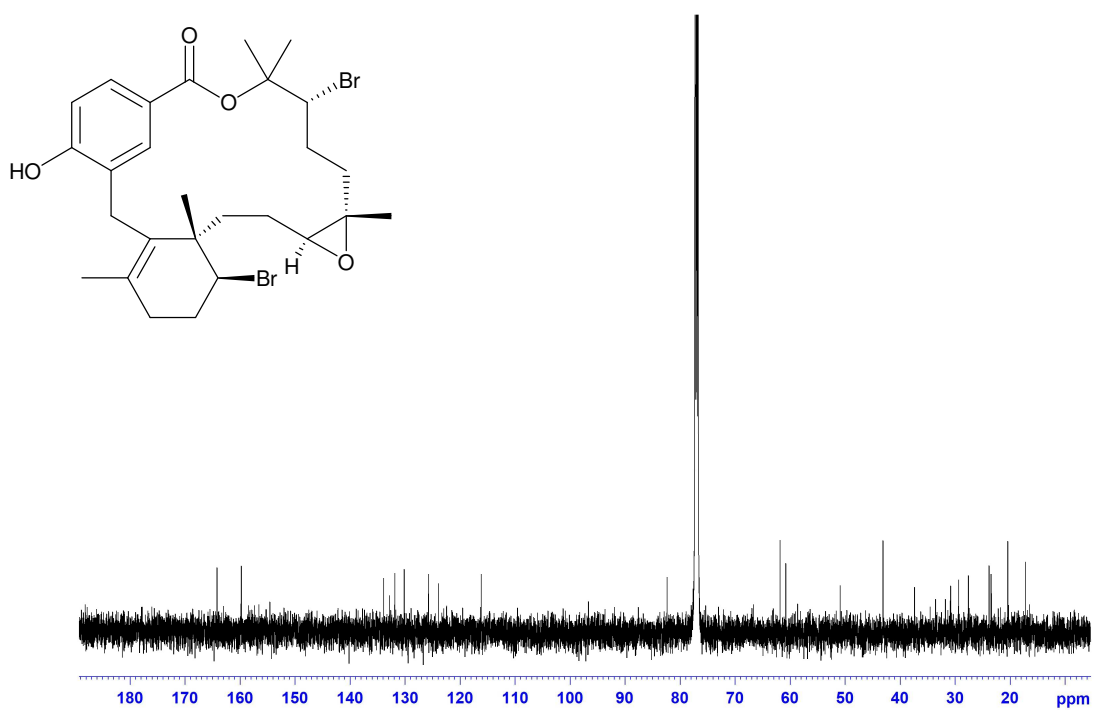


Figure S6. ¹³C NMR spectrum of bromophycolide T (**3**) (125 MHz; CDCl₃)

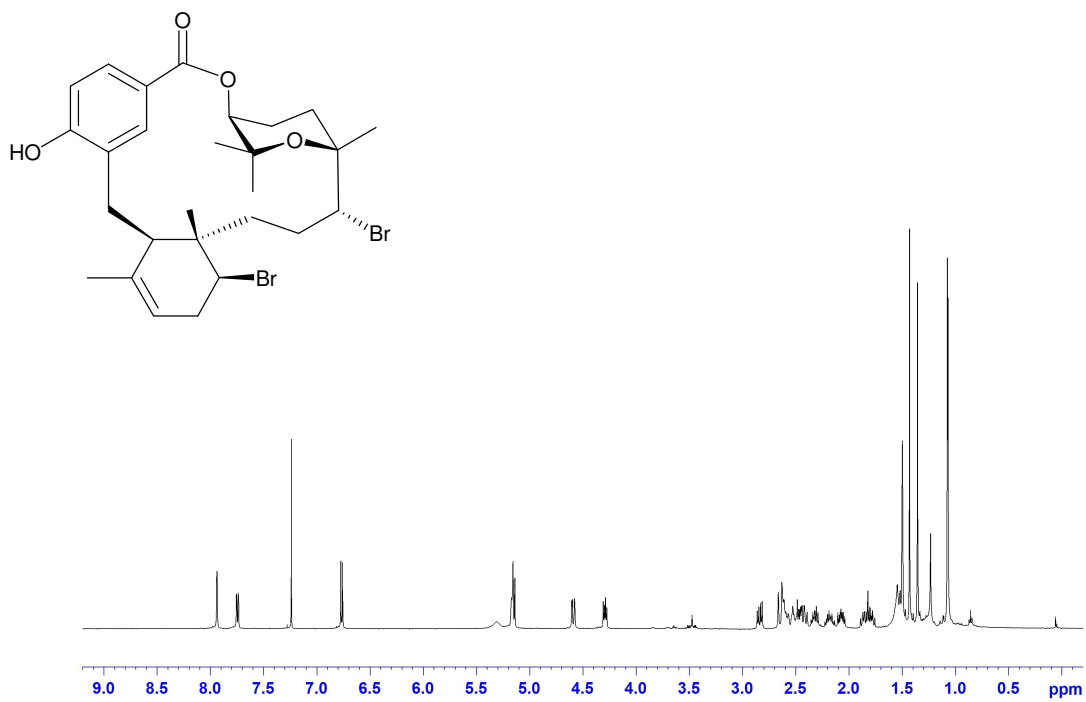


Figure S7. ¹H NMR spectrum of bromophycolide U (**4**) (500 MHz; CDCl₃)

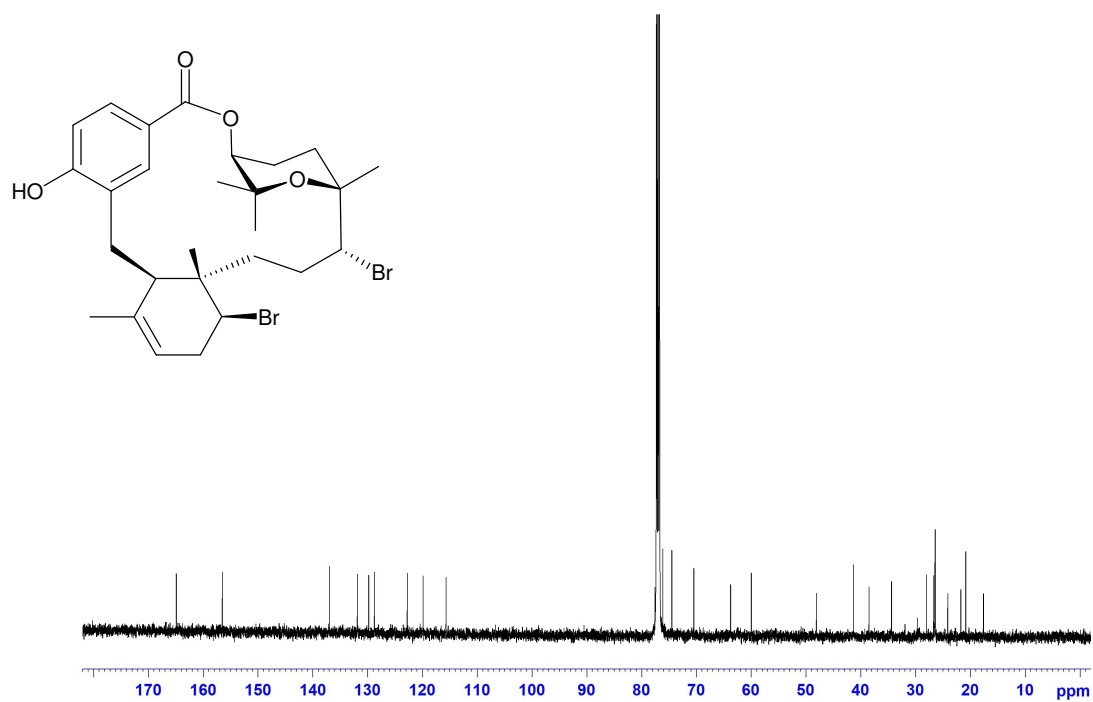


Figure S8. ¹³C NMR spectrum of bromophycolide U (**4**) (125 MHz; CDCl₃)

Table S1: COSY correlations for bromophycolides R-U (1-4). For diastereotopic protons with dissimilar chemical shifts, the proton whose chemical shift is listed first in Table 1 of the main article is termed “a” and the other is “b”. “NA” (not applicable) indicates that no proton signal exists for that position.

COSY correlations observed between protons listed on far left and those below:				
#	bromophycolide R (1)	bromophycolide S (2)	bromophycolide T (3)	bromophycolide U (4)
3	-	16	16	16
5a	5b	5b, 6	5b	5b, 6
5b	5a, 6	5a	5a	5a
6	5b	5a	NA	5a
8a	8b, 9a	8b, 9a, 9b	8b, 9a, 9b	8b, 9a
8b	8a	8a, 9a, 9b	8a, 9a,	8a, 9b
9a	8a, 9b, 10	8a, 8b, 9b, 10	8a, 8b, 9b, 10	8a, 8b, 9b, 10
9b	9a	8a, 8b, 9a	8a, 8b, 9a, 10	8a, 8b, 9a, 10
10	9a	9a	8a, 8b, 9a, 9b, 10	8a, 8b, 9a, 9b, 10
12a	12b, 13a, 13b	12b, 13b	12b, 13b	12b, 13a, 13b
12b	12a, 13a	12a, 13a, 13b	12a, 13a, 13b	12a, 13a, 13b
13a	12a, 12b, 13b	12b, 13b, 14	12b, 13b, 14	12a, 12b, 13b, 14
13b	12a, 13a, 14	12a, 12b, 13a, 14	12a, 12b, 13a	12a, 12b, 13a, 14
14	13b	13a, 13b	13a	13a, 13b
16	17	3, 17	3, 17	3, 17
17	16	16	16	16
20a	20b, 21a, 21b	20b, 21a, 21b	20b, 21a, 21b	21a, 21b
20b	20a, 21a, 21b	20a, 21a, 21b	20a, 21a, 21b	NA
21a	20a, 20b, 21b, 22	20a, 20b, 21b, 22	20a, 20b, 21b, 22	20, 21b, 22
21b	20a, 20b, 21a, 22	20a, 20b, 21a, 22	20a, 20b, 21a, 22	20, 21a, 22
22	21a, 21b	21a, 21b	21a, 21b	21a, 21b
23a	-	6	-	6
23b	-	6	NA	NA
24	-	-	-	-
25	-	-	-	-
26a	-	-	-	-
26b	-	NA	NA	NA
27	-	-	-	-

Table S2: HMBC correlations for bromophycolides R-U (1-4). For diastereotopic protons with dissimilar chemical shifts, the proton whose chemical shift is listed first in Table 1 of the main article is termed “a” and the other is “b”. “NA” (not applicable) indicates that no proton signal exists for that position.

HMBC correlations observed between protons listed on far left and those below:				
#	bromophycolide R (1)	bromophycolide S (2)	bromophycolide T (3)	bromophycolide U (4)
3	16, 18	1, 16, 18	1, 5, 16, 18	1, 5, 16, 18
5a	-	6, 18, 19	4, 6	3, 4, 6, 7, 18, 19
5b	-	6	3, 4, 6, 18, 19	3, 4, 6, 18, 19
6	-	-	NA	-
8a	-	-	-	-
8b	-	-	7, 9, 24	6, 7, 9, 24
9a	-	-	10	10
9b	-	-	10	8
10	9	9	-	9, 11
12a	-	11	10	10, 11, 13, 25
12b	-	-	10	11, 13, 14
13a	-	-	-	12, 14, 15
13b	-	-	-	11, 12
14	-	-	-	1, 12, 13, 15
16	-	3, 18	1, 3, 18	1, 3, 18
17	2, 4	2, 4, 18	2, 4, 18	2, 4, 18
20a	-	-	19	-
20b	-	-	-	NA
21a	-	-	-	-
21b	-	-	-	-
22	-	-	-	6, 7, 21, 24
23a	6, 20	6, 20	6, 19, 20	6, 19, 20
23b	6, 20	NA	NA	NA
24	6, 7, 8, 22	6, 7, 8, 22	6, 7, 8, 22	6, 7, 8, 22
25	10, 11, 12	10, 11, 12	10, 12	10, 11, 12
26a	14, 27	14, 15, 27	14, 15, 27	14, 15, 27
26b	14, 27	NA	NA	NA
27	14, 15, 26	14, 15, 26	14, 15, 26	14, 15, 26
OH	18	-	4, 17	-

Table S3: Observed NOEs from ROESY NMR experiment for bromophycolides R (**1**) and T (**3**). For diastereotopic protons with dissimilar chemical shifts, the proton whose chemical shift is listed first in Table 1 of the main article is termed “a” and the other is “b”. “NA” (not applicable) indicates that no proton signal exists for that position.

NOE correlations observed between protons listed on far left and those below:		
#	bromophycolide R (1)	bromophycolide T (3)
3	6, 10	5a, 12b, 13a
5a	5b, 6, 24	9b, 23
5b	5a, 6, 23b, 24	20a, 20b, 23
6	3, 5a, 5b, 10, 22	NA
8a	9a, 24	8b, 9a, 9b, 24, 25
8b	12a, 24	8a, 9a, 9b, 10
9a	8a, 9b, 13b, 22, 24, 25	8a, 8b, 9b, 10, 22
9b	9a, 10, 25	5a, 8a, 8b, 9a, 10, 24, 25
10	3, 6, 9b, 12a, 12b	8b, 9a, 9b, 12a
12a	10, 13a, 13b	10, 12b, 13a, 13b, 25
12b	10, 14	12a, 13a, 13b, 25
13a	12a, 12b, 13b, 25	12a, 12b, 13b
13b	12a, 12b, 13a, 14, 25	12a, 12b, 13a, 14, 25
14	12b, 13b	13b, 26, 27
16	17	17
17	16, OH	16, OH
20a	20b, 21a, 21b, 23a,	20b, 21a, 21b, 23
20b	20a, 21b	20a, 21a, 21b, 23
21a	20b, 21b, 22	20a, 20b, 21b
21b	20a, 20b, 21a, 22	20a, 20b, 21a, 22
22	6, 9a, 21a, 21b	8a, 9a, 9b, 21a, 21b
23a	20a	5a, 20a, 20b,
23b	5b	NA
24	5a, 5b, 8a, 8b, 9a	8a, 8b, 9b
25	9a, 9b, 13a, 13b	8a, 9b, 12a, 12b, 13b
26a	27	14, 27
26b		NA
27	26a	14, 26
OH	17	17