

Fosbergenone: 3-[2-(1,2,5,5-tetramethyl-7-oxo-1,2,3,4,4a,5,6,7-octahydronaphthalen-1-yl)ethyl]-2,5-dihydrofuran-2-one

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Table S1. COSY and HMBC correlations of compound **1**.

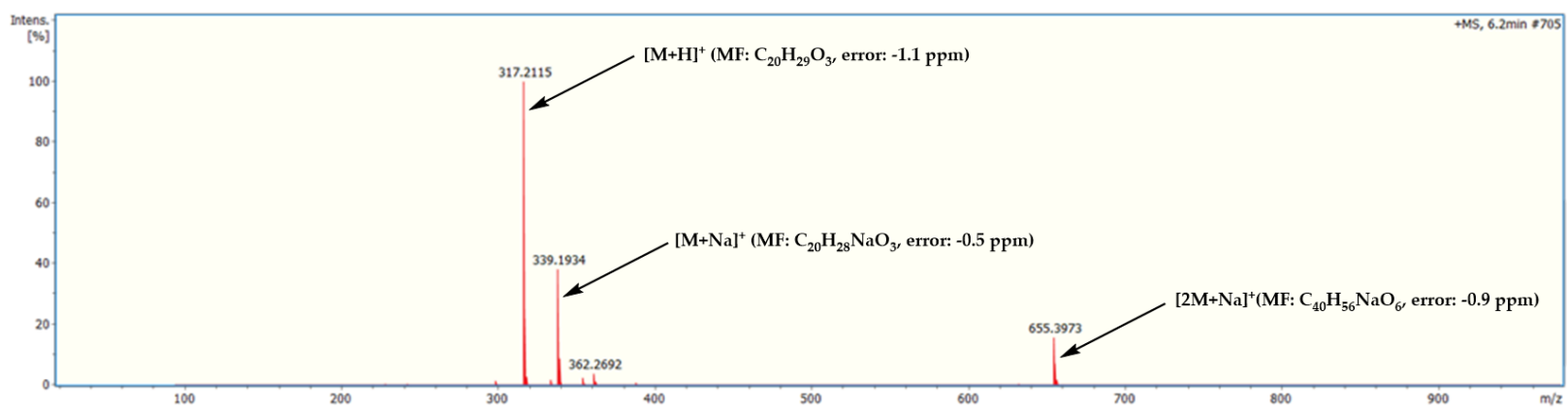


Figure S1. Annotated mass spectrum of compound 1.

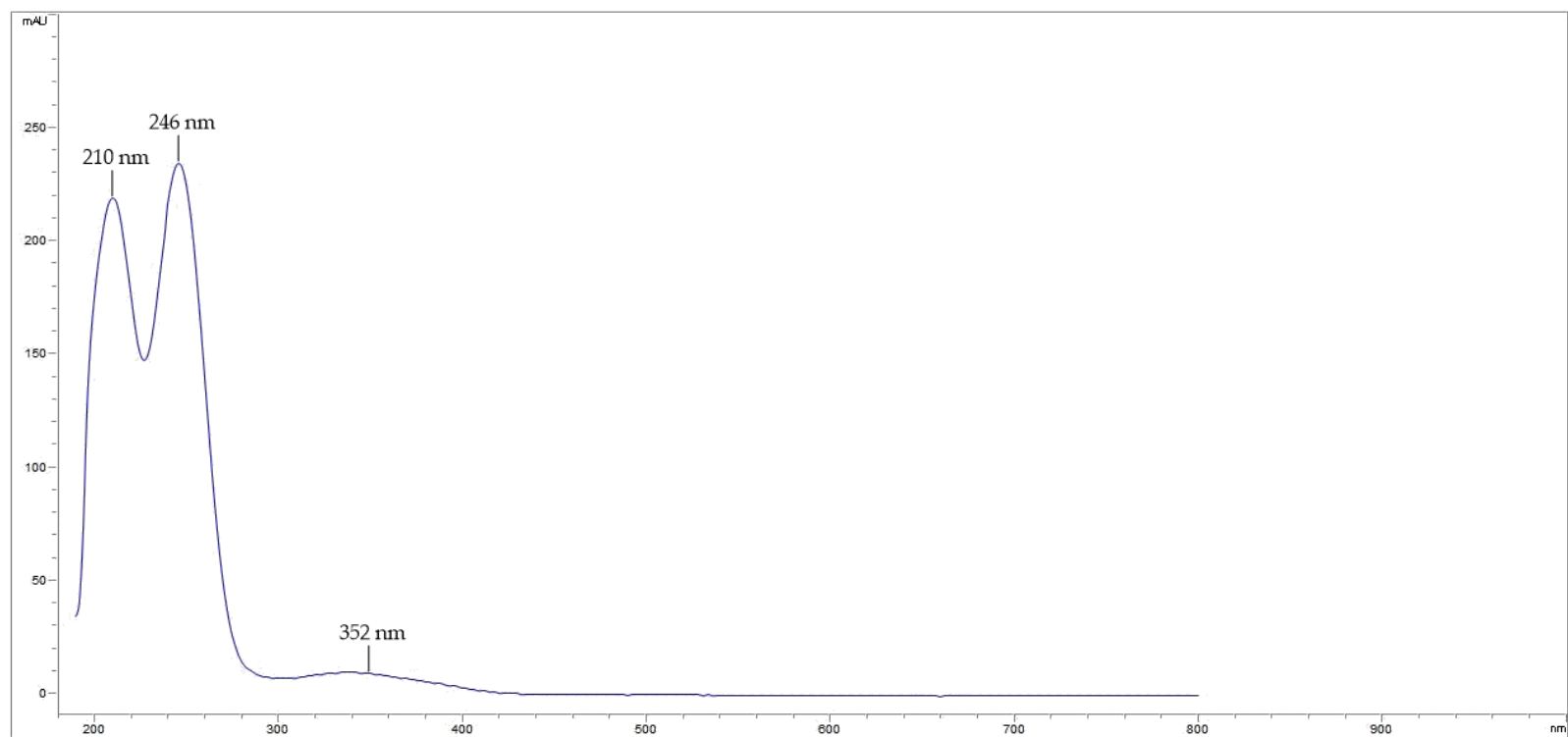


Figure S2. Annotated UV spectrum of compound 1.

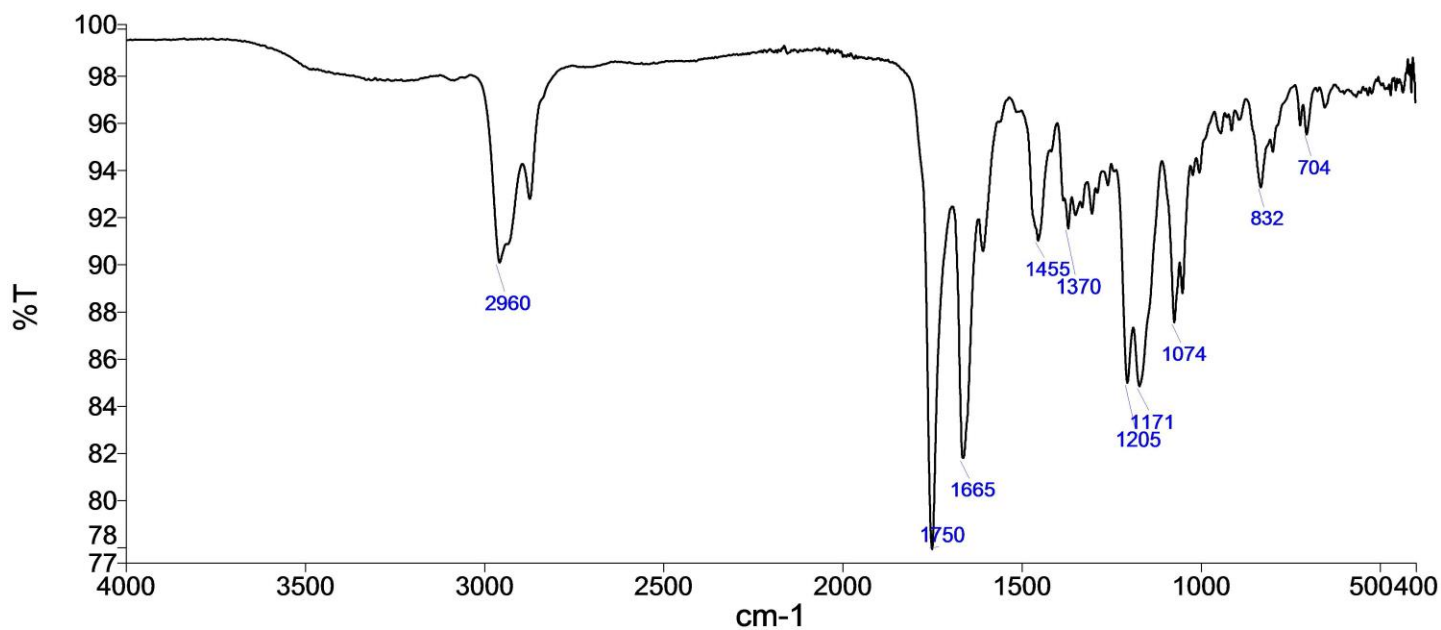


Figure S3. IR spectrum of compound 1.

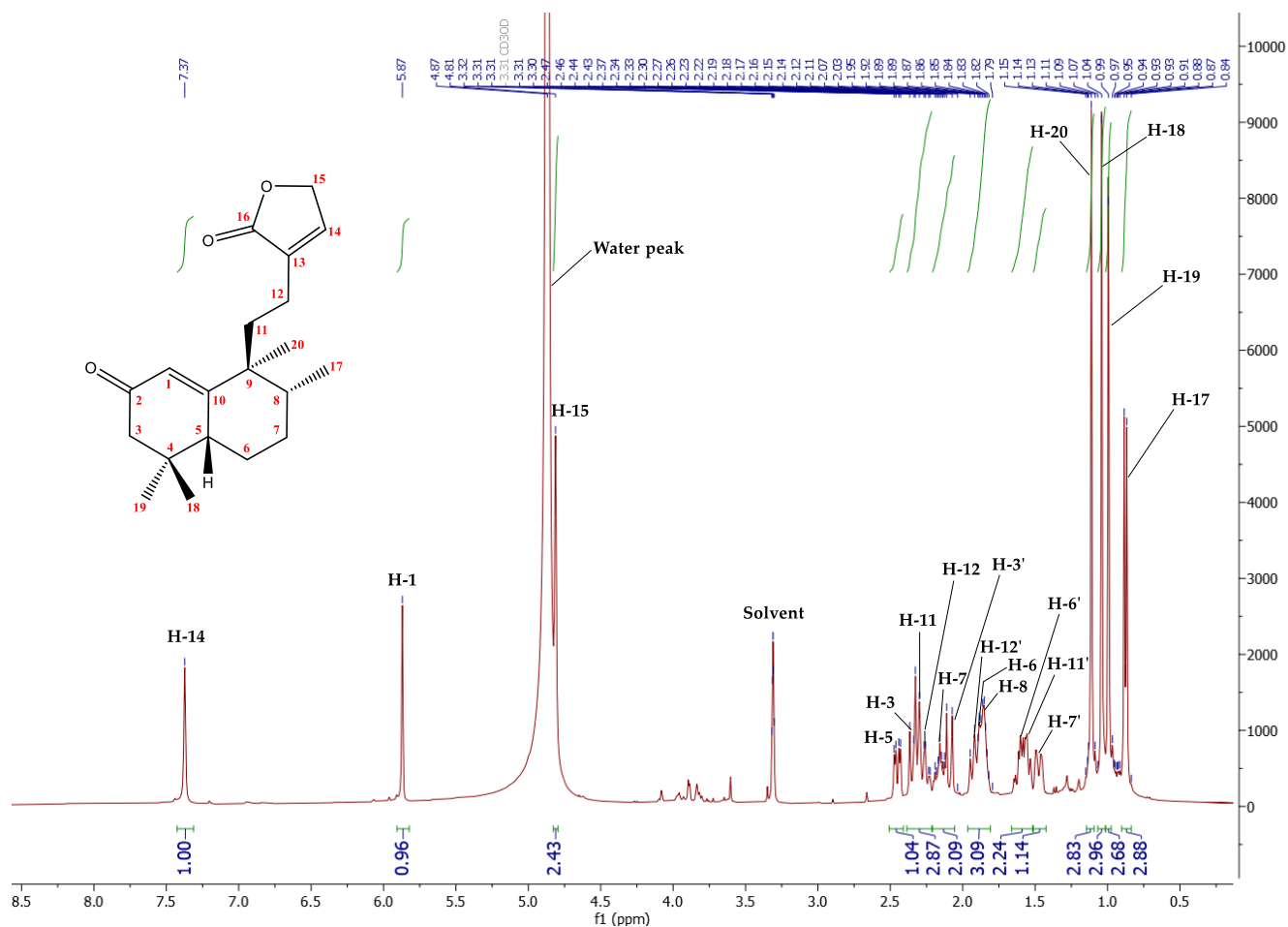


Figure S4. Annotated ¹H NMR spectrum of compound 1 in CD₃OD-*d*₄ at 400 MHz.

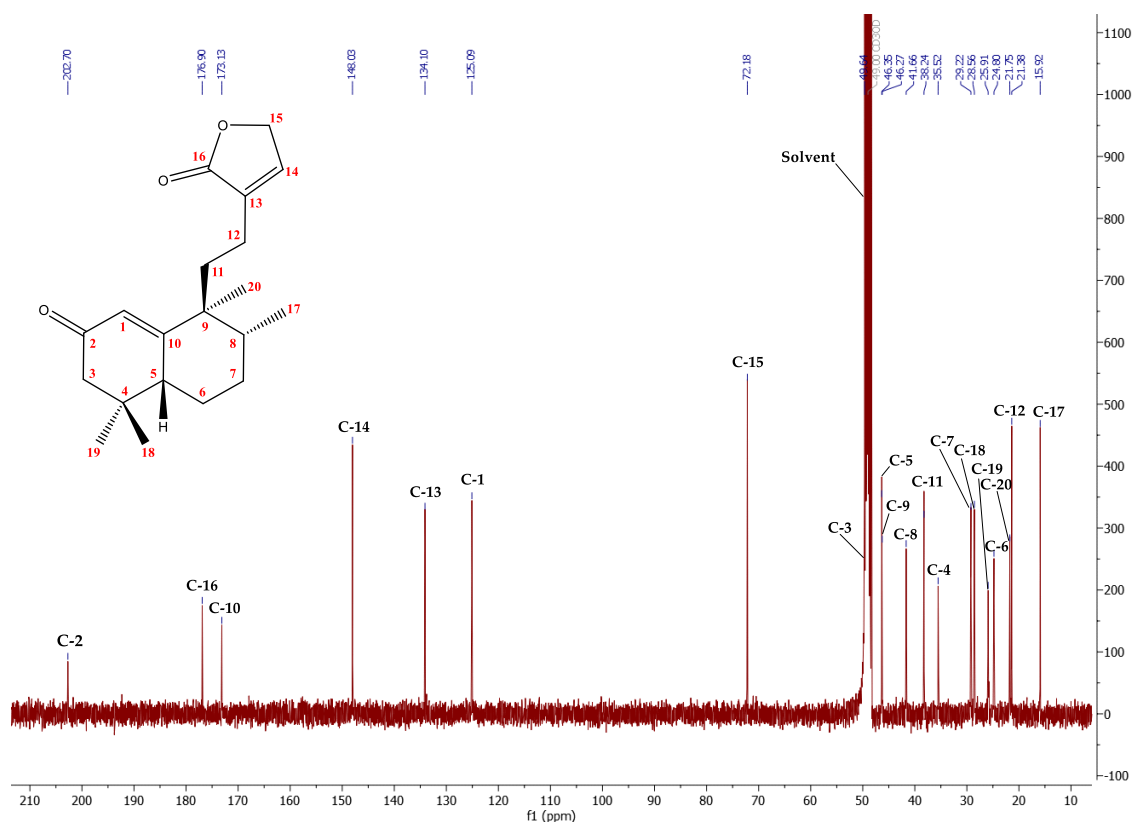


Figure S5. ^{13}C NMR spectrum of compound 1 in $\text{CD}_3\text{OD}-d_4$ at 100 MHz.

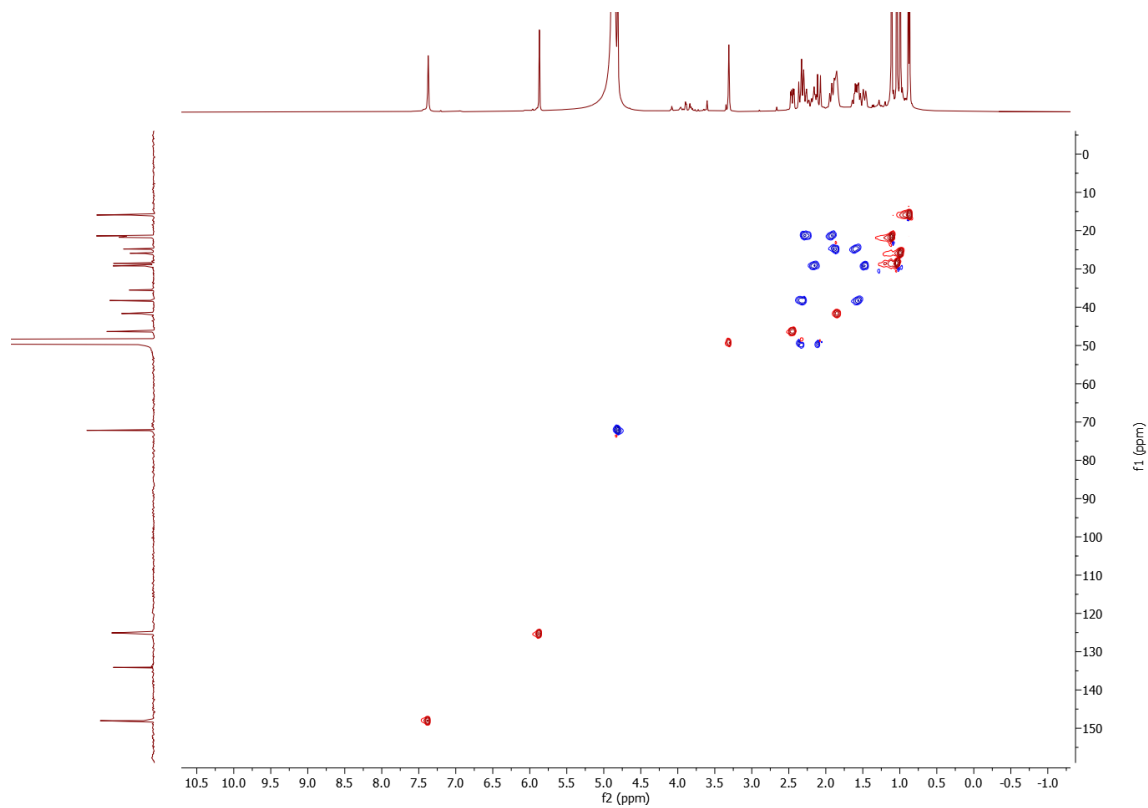


Figure S6. HSQC spectrum of compound 1 in $\text{CD}_3\text{OD}-d_4$.

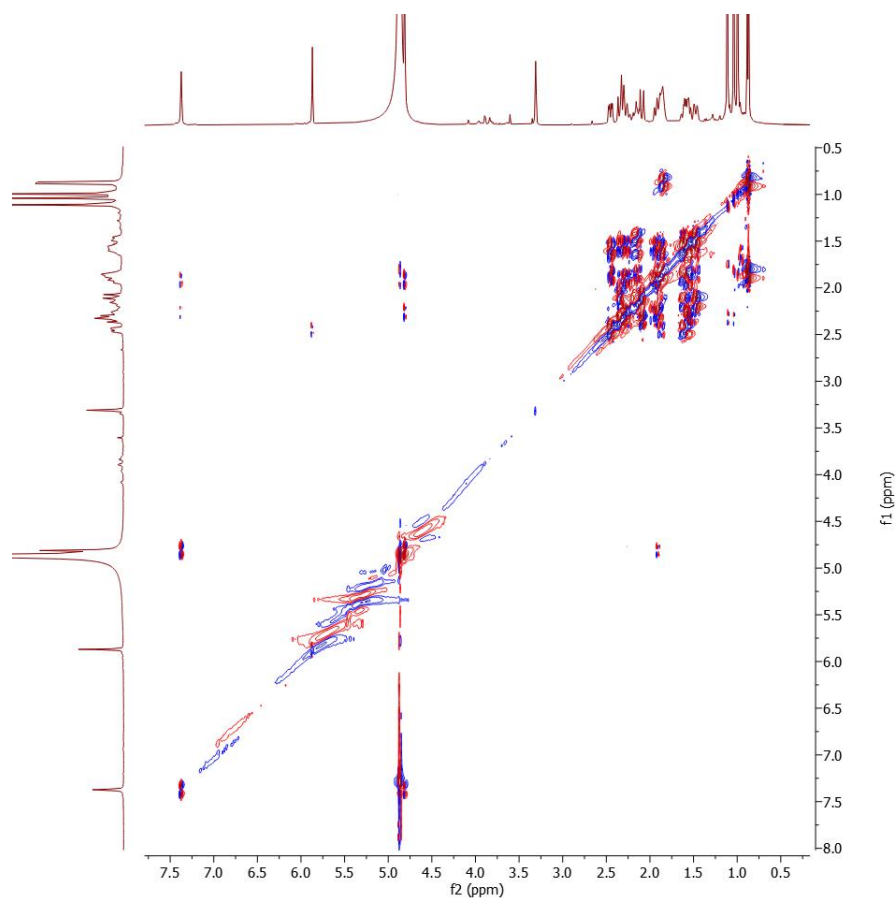


Figure S7. COSY spectrum of compound **1** in $\text{CD}_3\text{OD}-d_4$.

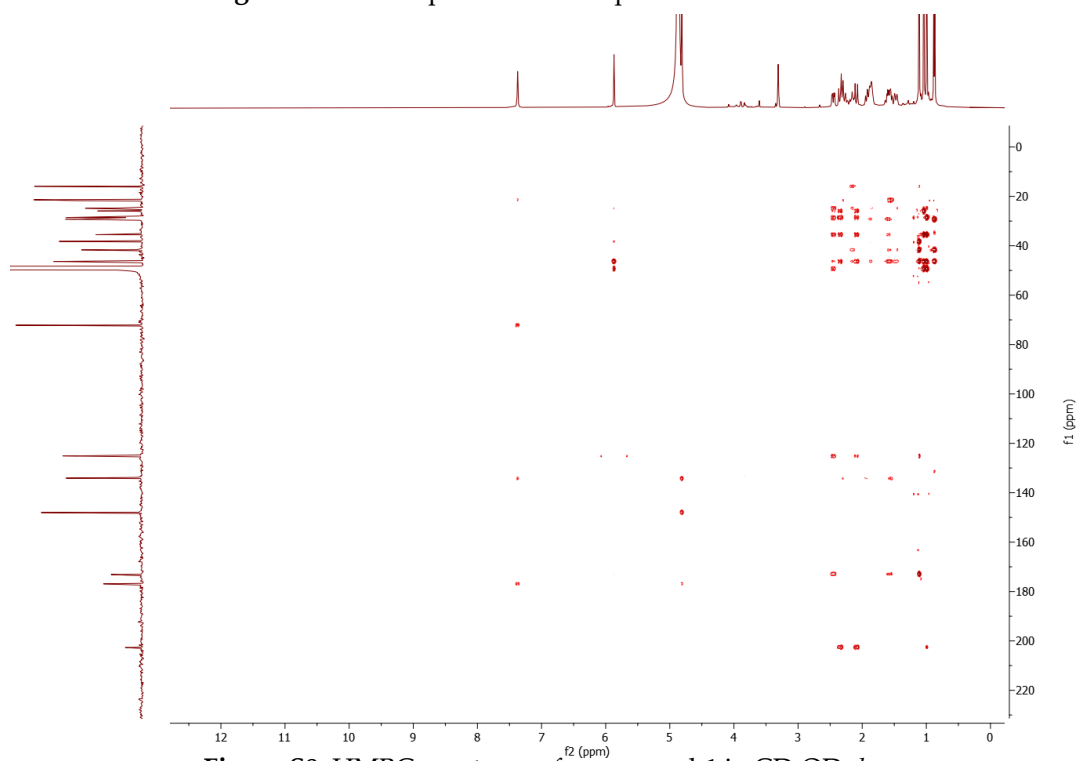


Figure S8. HMBC spectrum of compound **1** in $\text{CD}_3\text{OD}-d_4$.

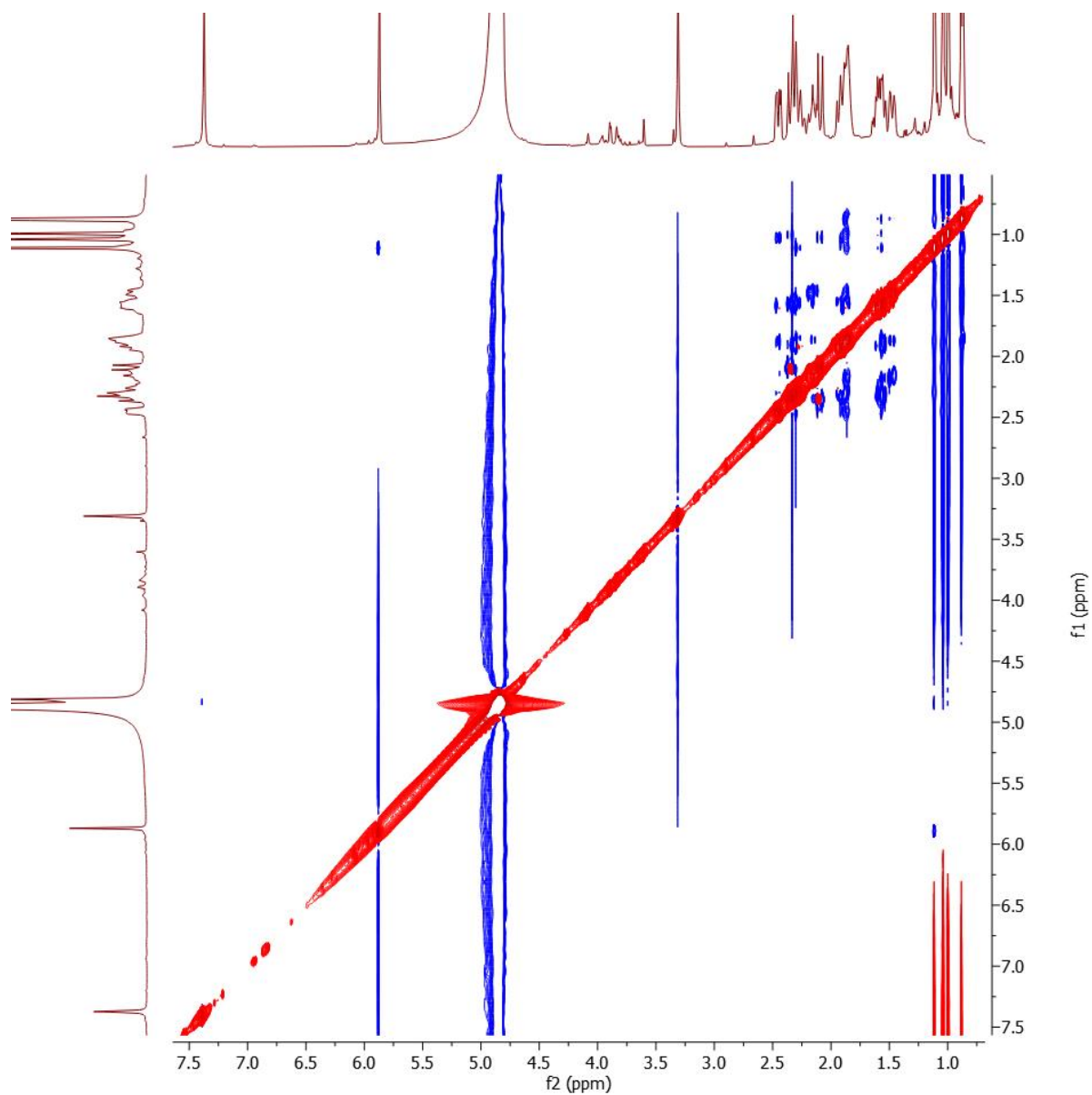


Figure S9. 2D NOESY spectrum of compound **1** in $\text{CD}_3\text{OD}-d_4$.

Table S1. COSY and HMBC correlations of compound **1**.

Position	δ_c /ppm, Type	δ_H /ppm (Integral, multiplicity, J/Hz)	COSY correlations	HMBC correlations
1	125.1, CH	5.8 (1H, s)	H-5	C-3, C-5, C-9, C-10, C-11
2	202.7, C	-	-	-
3	49.6, CH ₂	2.35 (1H, <i>d</i> , 15.5); 2.09 (1H, <i>d</i> , 15.5)	H-3'	C-1, C-2, C-4, C-5, C-18, C-19
4	35.5, C	-	-	-
5	46.4, CH	2.45 (1H, <i>dd</i> , 12.8, 4.7)	H-1, H-6'	C-1, C-2, C-3, C-4, C-6, C-9, C-10, C-18
6	24.8, CH ₂	1.86 (1H, <i>m</i>); 1.59 (1H, <i>m</i>)	H-5, H-6', H-7	C-4, C-5, C-7, C-8, C-10
7	29.2, CH ₂	2.16 (1H, <i>m</i>); 1.47 (1H, <i>m</i>)	H-6', H-7'	C-6, C-8, C-9, C-17
8	41.7, CH	1.84 (1H, <i>m</i>)	H-17	C-6, C-7, C-11
9	46.3, C	-	-	-
10	173.1, C	-	-	-
11	38.2, CH ₂	2.30 (1H, <i>m</i>); 1.50 (1H, <i>m</i>)	H-11', H-12'	C-9, C-10, C-13, C-20
12	21.4, CH ₂	2.27 (1H, <i>m</i>); 1.92 (1H, <i>m</i>)	H-11', H-12', H-14	C-9, C-11, C-13, C-20
13	134.1, C	-	-	-
14	148.0, CH	7.37 (1H, s)	H-12, H-12', H-15	C-12, C-13, C-15, C-16
15	72.2, CH ₂	4.81 (2H, s)	H-14	C-13, C-14, C-16
16	176.9, C	-	-	-
17	15.9, CH ₃	0.87 (3H, <i>d</i> , 7.0)	H-8	C-7, C-8, C-9, C-20
18	28.6, CH ₃	1.03 (3H, s)	-	C-3, C-4, C-5, C-6, C-19
19	25.9, CH ₃	0.99 (3H, s)	-	C-2, C-3, C-4, C-5, C-6, C-18
20	21.8, CH ₃	1.11 (3H, s)	-	C-1, C-8, C-9, C-10, C-11, C-17