Supporting Information

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New 5-oxomilbemycins from a Genetically Engineered Strain *Streptomyces bingchenggensis* BCJ60

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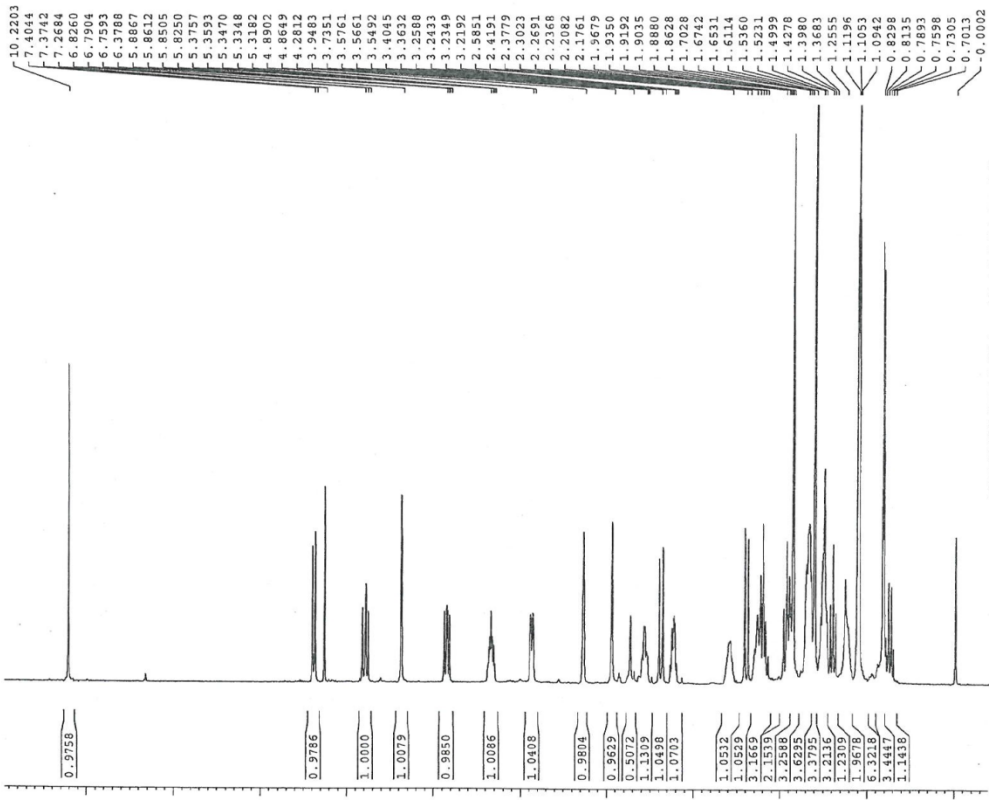
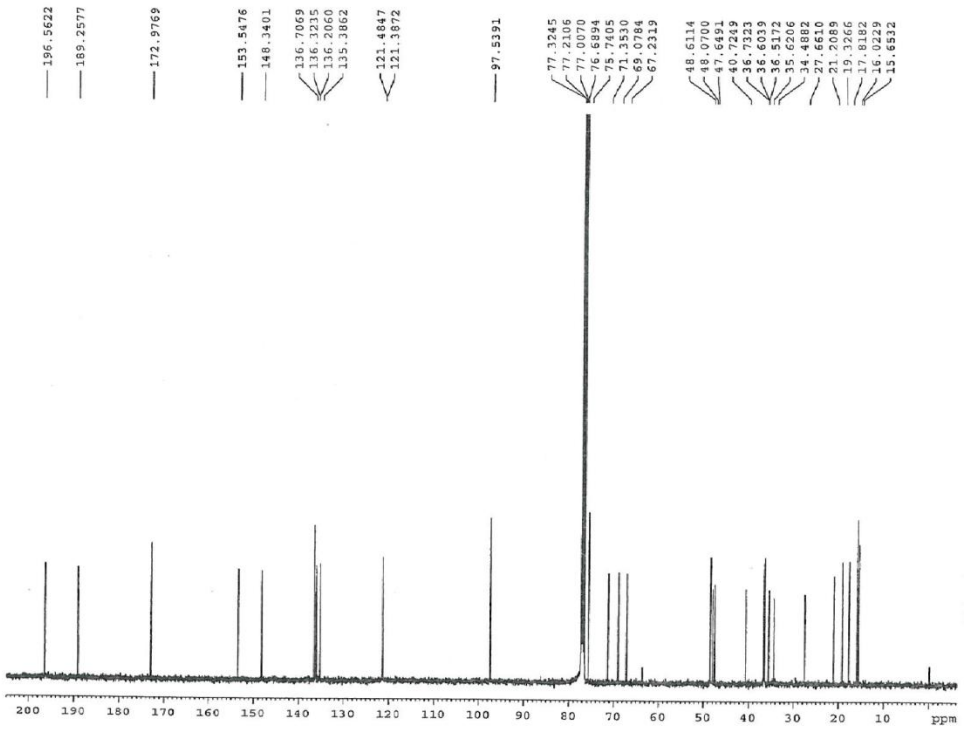
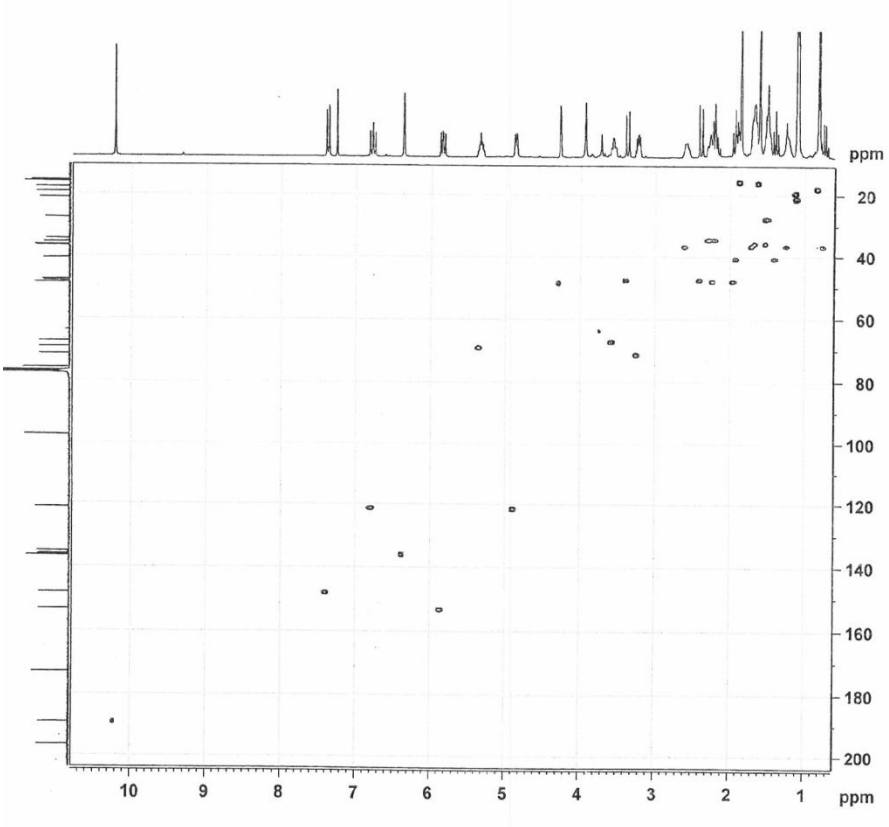


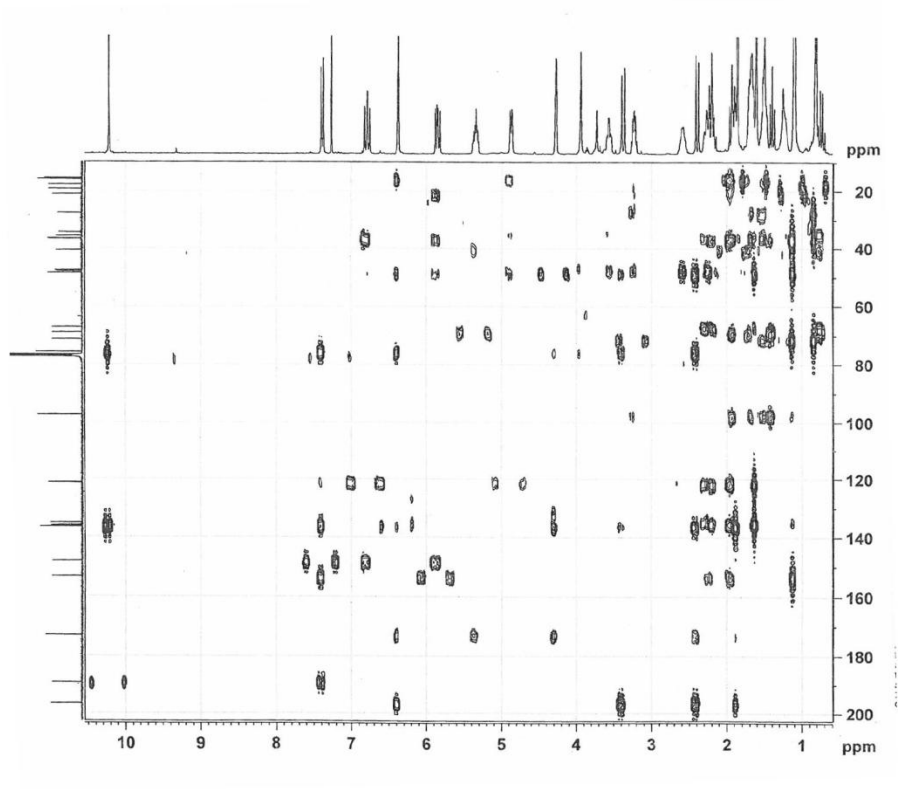
S1. The ^{1}H NMR spectrum of compound **1**.



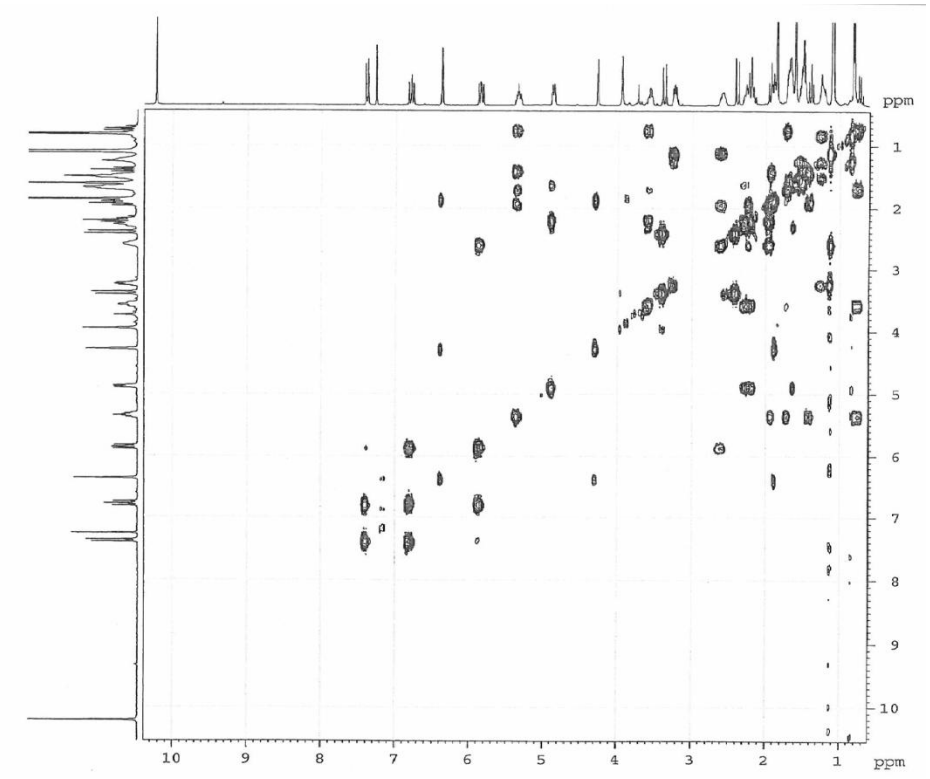
S2. The ^{13}C NMR spectrum of compound **1**.



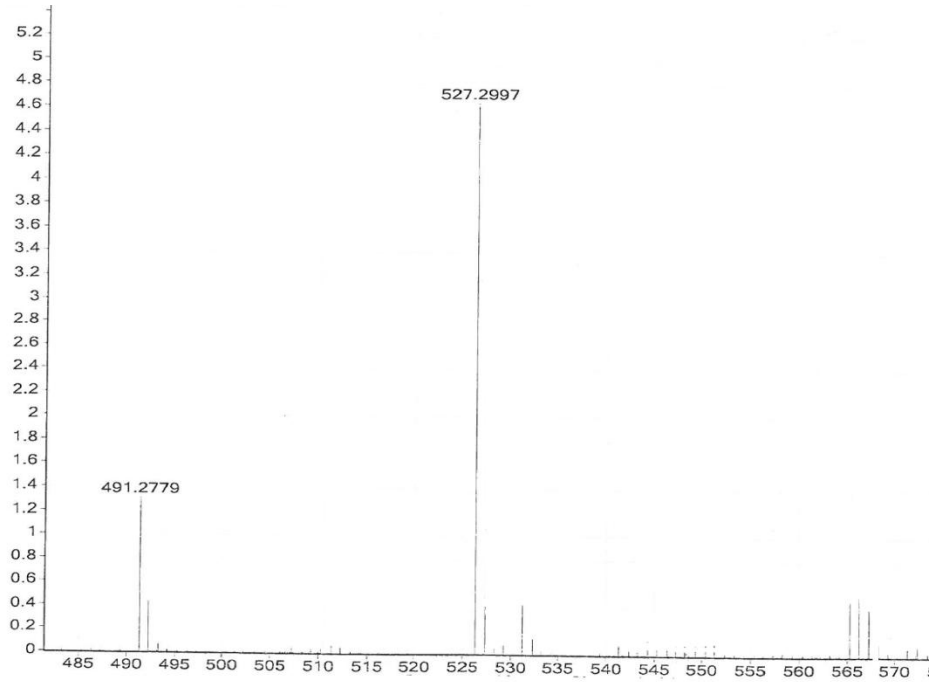
S3. The HMQC spectrum of compound **1**.



S4. The HMBC spectrum of compound **1**.



S5. The ^{1}H-^{1}H COSY spectrum of compound **1**.

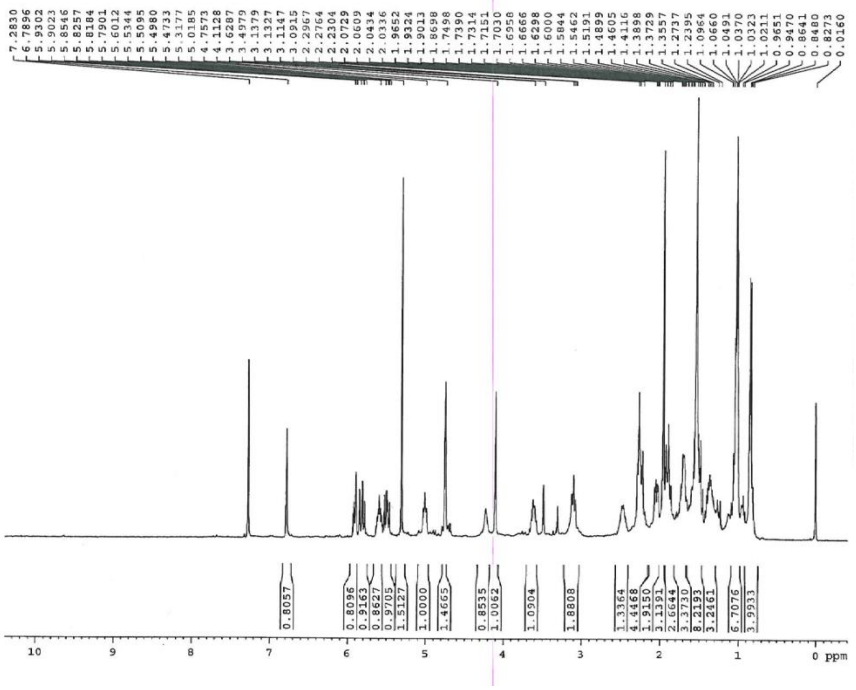


Best	ID Source	Formula	Species	m/z	Score	Diff (ppm)	Score (MFG)	Mass (MFG)	DBE
-	MFG	C31 H42 O7	(M+H)+	527.2997	96.68	1.43	96.68	526.2931	11

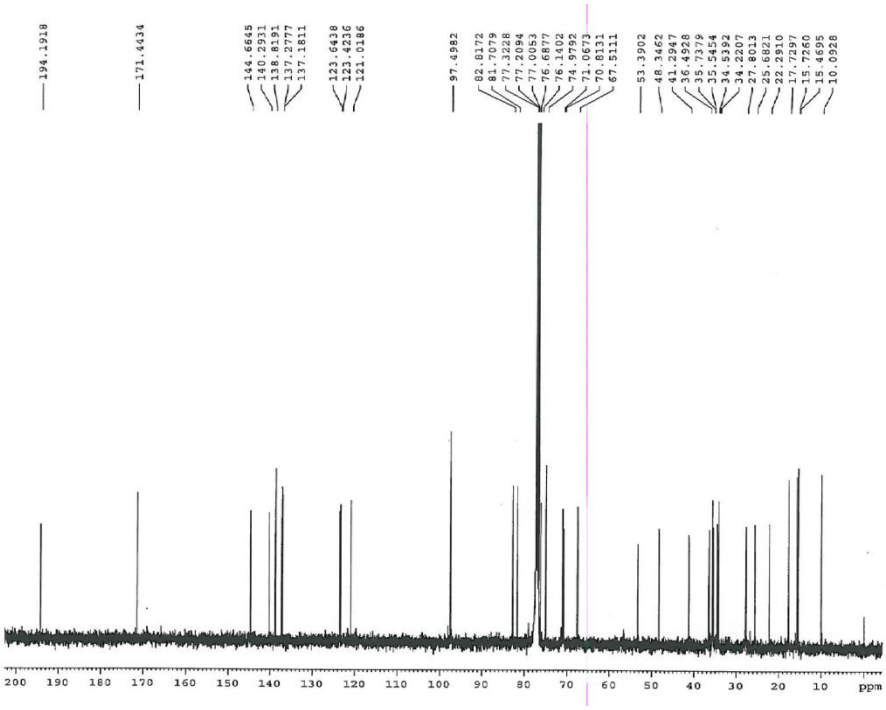
Species	m/z	Score (iso. shape)	Score (mass)	Score (MFG, MS/MS)	Score (MS)	Score (MFG)	Score (iso. spacing)	Height	Ion Formula
- (N+H)+	527.2997	93.57	97.72		96.68	96.68	98.35	113087	C31 H43 O7

Height (Calc)	Height Sum % (Calc)	Height % (Calc)	m/z (Calc)	Diff (mDa)	Height	Height %	Height Sum	m/z	Diff (ppm)
110626.4	70.2	100	527.3003	0.6	113087	100	71.7	527.299	1.13
37933.8	24.1	34.3	528.3037	1.3	34899.9	30.9	22.1	528.302	2.47
7894.4	5	7.1	529.3066	0.5	7936.5	7	5	529.306	0.88
1221.1	0.8	1.1	530.3094	1	1752.2	1.5	1.1	530.308	1.87

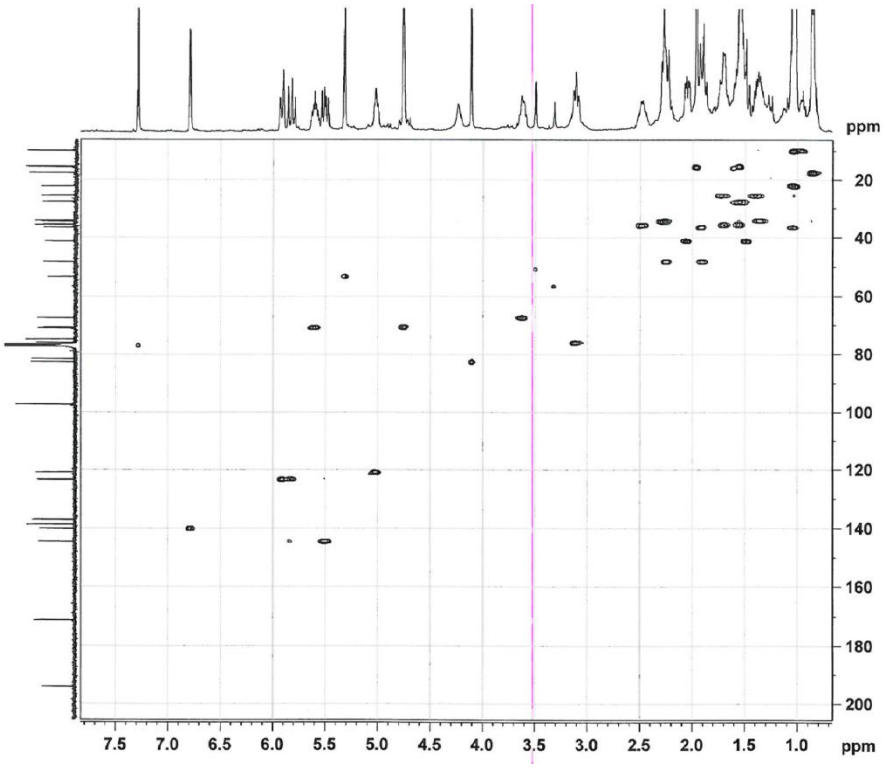
S6. The HR-ESI-MS of compound **1**.



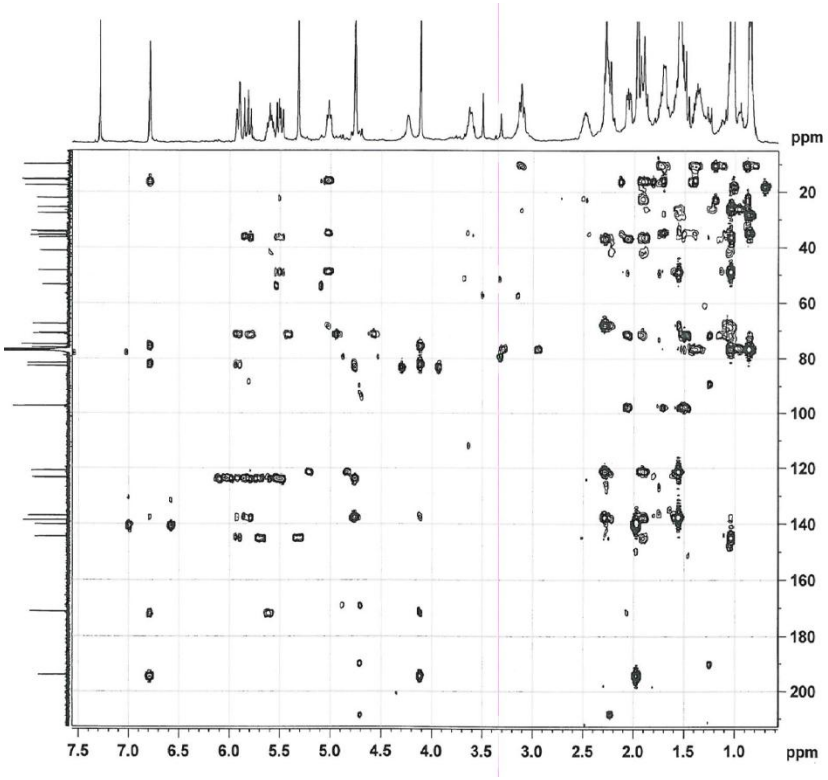
S7. The ^{1}H NMR spectrum of compound **2**.



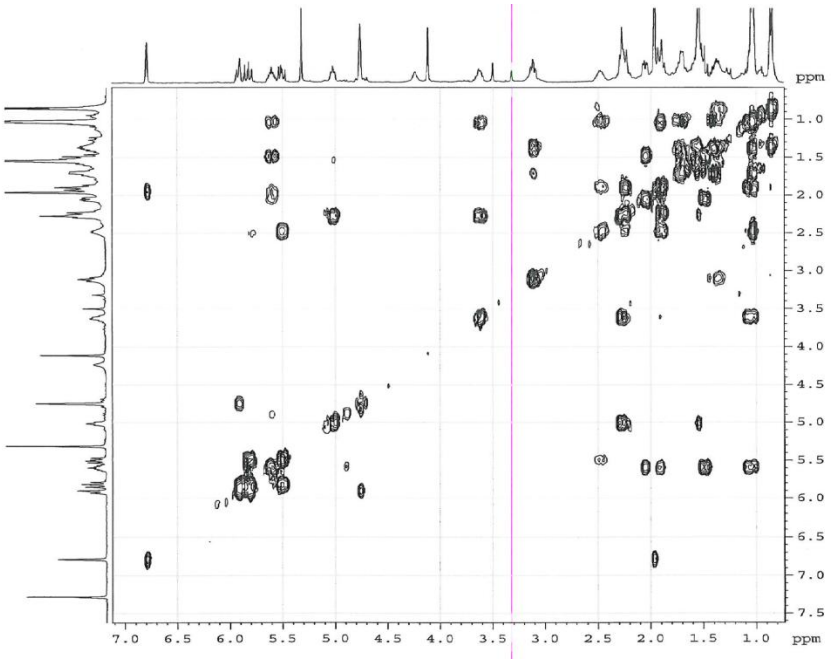
S8. The ^{13}C NMR spectrum of compound **2**.



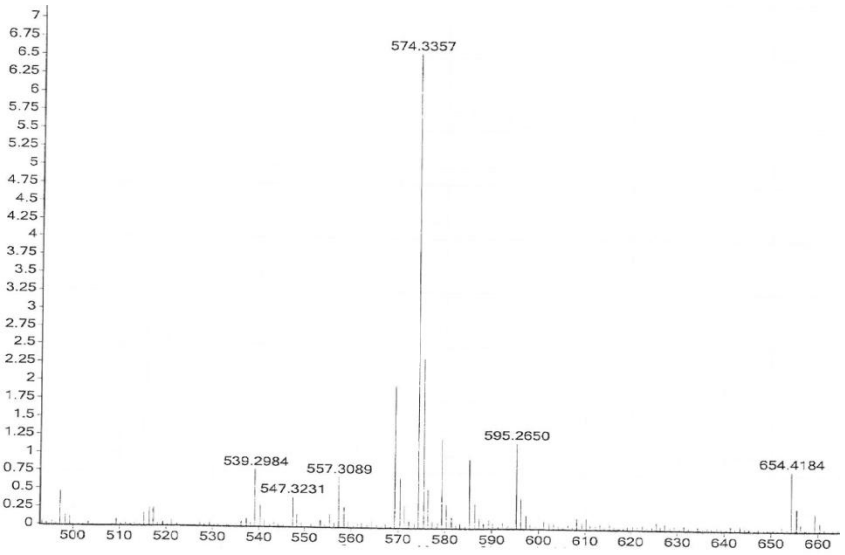
S9. The HMQC spectrum of compound **2**.



S10. The HMBC spectrum of compound **2**.



S11. The ^{1}H-^{1}H COSY spectrum of compound **2**.



Best	ID Source	Formula	Species	m/z	Score	Diff (ppm)	Score (MFG)	Mass (MFG)	DBE
-	MFG	C32 H44 O8	(M+NH4)+	574.335	93.65	3.47	93.65	556.3036	11

Species	m/z	Score (iso. abund	Score (mass)	Score (MFG, MS/MS	Score (MS)	Score (MFG)	Score (iso. spacing	Height	Ion Formula
- (M+NH4)+	574.3357	99.94	87.19		93.65	93.65	99.04	654287.1	C32 H48 N O8

Height (Calc)	Height Sum% (Calc	Height % (Calc	m/z (Calc)	Diff (mDa)	Height	Height %	Height Sum	m/z	Diff (ppm)
654566	69	100	574.3374	1.8	654287.1	100	68.9	574.335	3.09
234547.2	24.7	35.8	575.3408	2.1	233459.4	35.7	24.6	575.338	3.68
51552.9	5.4	7.9	576.3436	2.6	52060.4	8	5.5	576.341	4.55
8439.1	0.9	1.3	577.3464	4.5	9298.3	1.4	1	577.341	7.76

S12. The HR-ESI-MS of compound **2**.