

Supplementary Materials

Table S1. Proton and carbon chemical shifts of compound **4** (δ in ppm).

Position	$\delta_{\text{C}}^{\text{a}}$	$\delta_{\text{H}}^{\text{a}}$ (J in Hz)
1 β	32.17	1.23 (m)
1 α		1.62 (m)
2 α		1.18 (m)
2 β	26.70	1.79 (m)
3 α		3.43 (m)
4 β		1.30 (m)
4 α	30.22	1.62 (m)
5 β		2.48 (dddd, 1.8, 1.8, 1.8, 1.8)
6 α		1.37 (m)
6 β	27.92	1.79 (m)
7 α		1.18 (m)
7 β		1.82 (m)
8	39.92	1.68 (m)
9 α	39.56	1.71 (m)
10	36.80	-
11 α	73.61	4.24 (d, 11.2)
12	213.73	-
13	62.48	-
14	84.51	-
15 β	32.74	2.06 (m)
15 α		2.36 (m)
16 β		1.60 (m)
16 α	27.93	1.83 (m)
17 α		3.94 (dd, 9.4, 7.0)
18		0.77 (s)
19	23.79	1.04 (s)
20	121.29	-
21	150.47	7.55 (dd, 2.5, 1.0)
22	147.53	7.79 (dd, 9.8, 2.5)
23	114.89	6.30 (dd, 9.8, 1.0)
24	161.71	-
1'	98.44	4.59 (d, 1.5)
2'	71.48	3.54 (m)
3'	71.83	3.76 (m)
4'	72.35	3.18 (dd, 9.0, 9.0)
5'	68.89	3.41 (m)
6'	18.13	1.07 (d, 6.3)

^a (CD₃)₂SO (¹H: 400 MHz; ¹³C: 100 MHz).

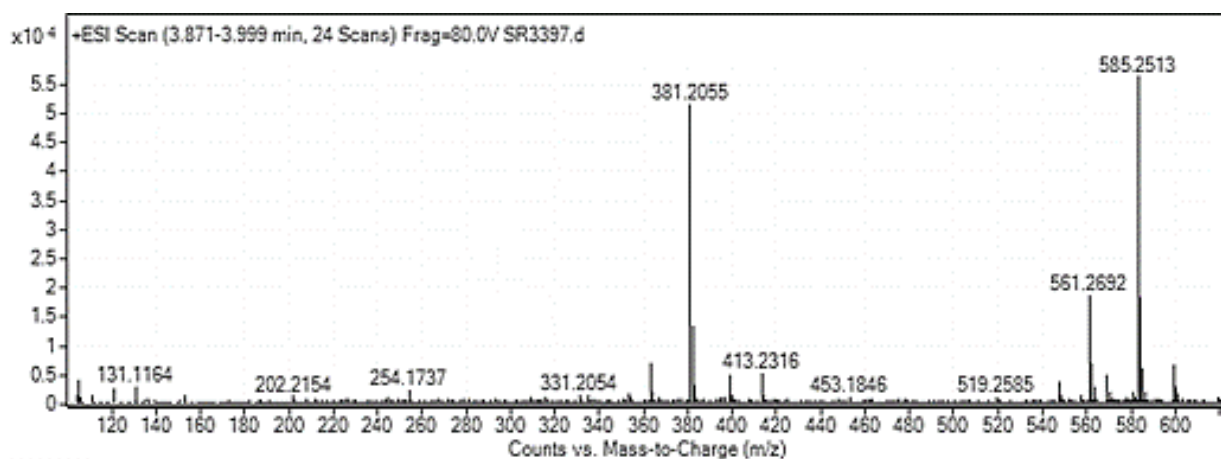


Figure S1. Mass spectrum of compound 4.

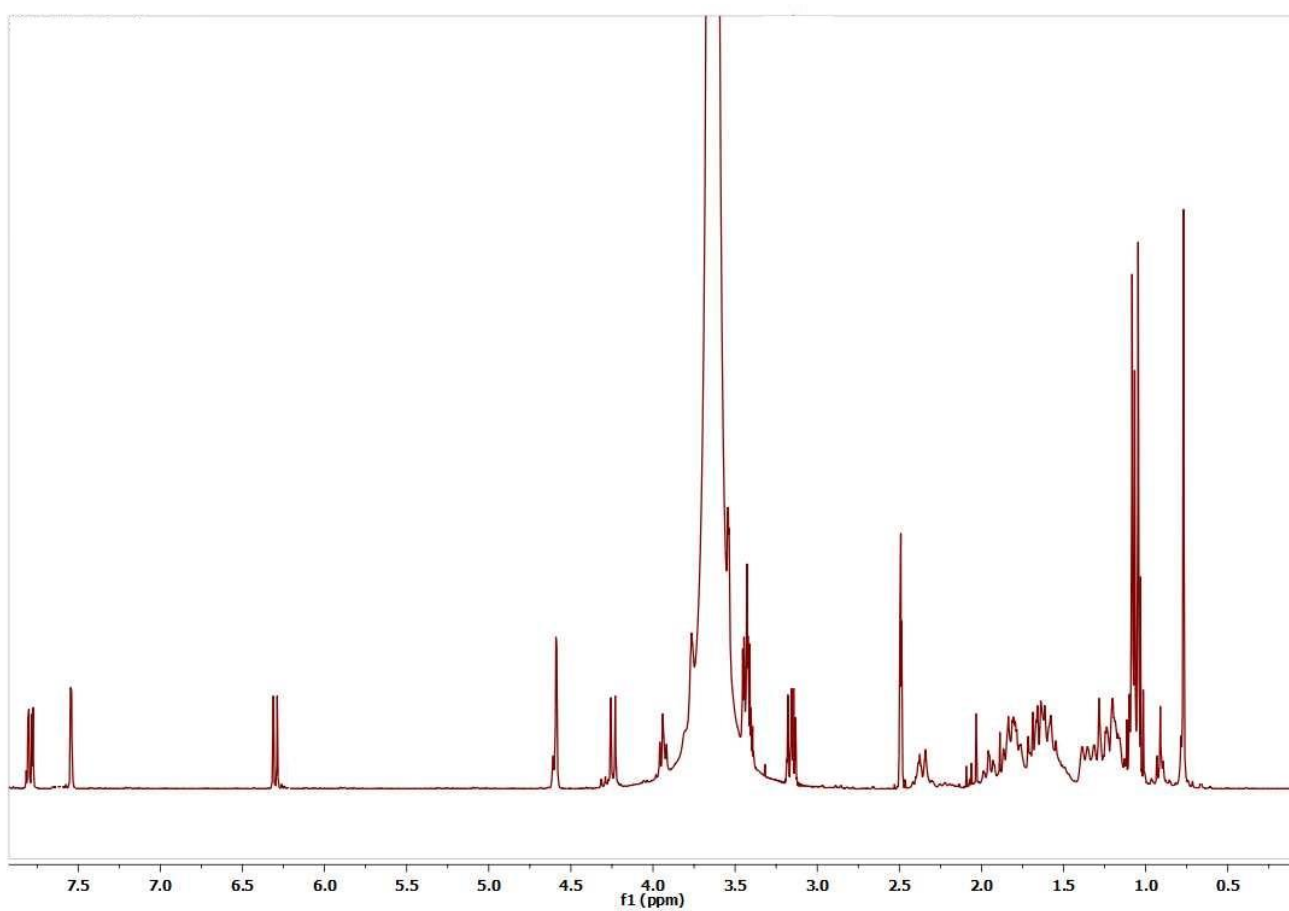


Figure S2. ^1H -NMR spectrum of compound 4 (δ in ppm).

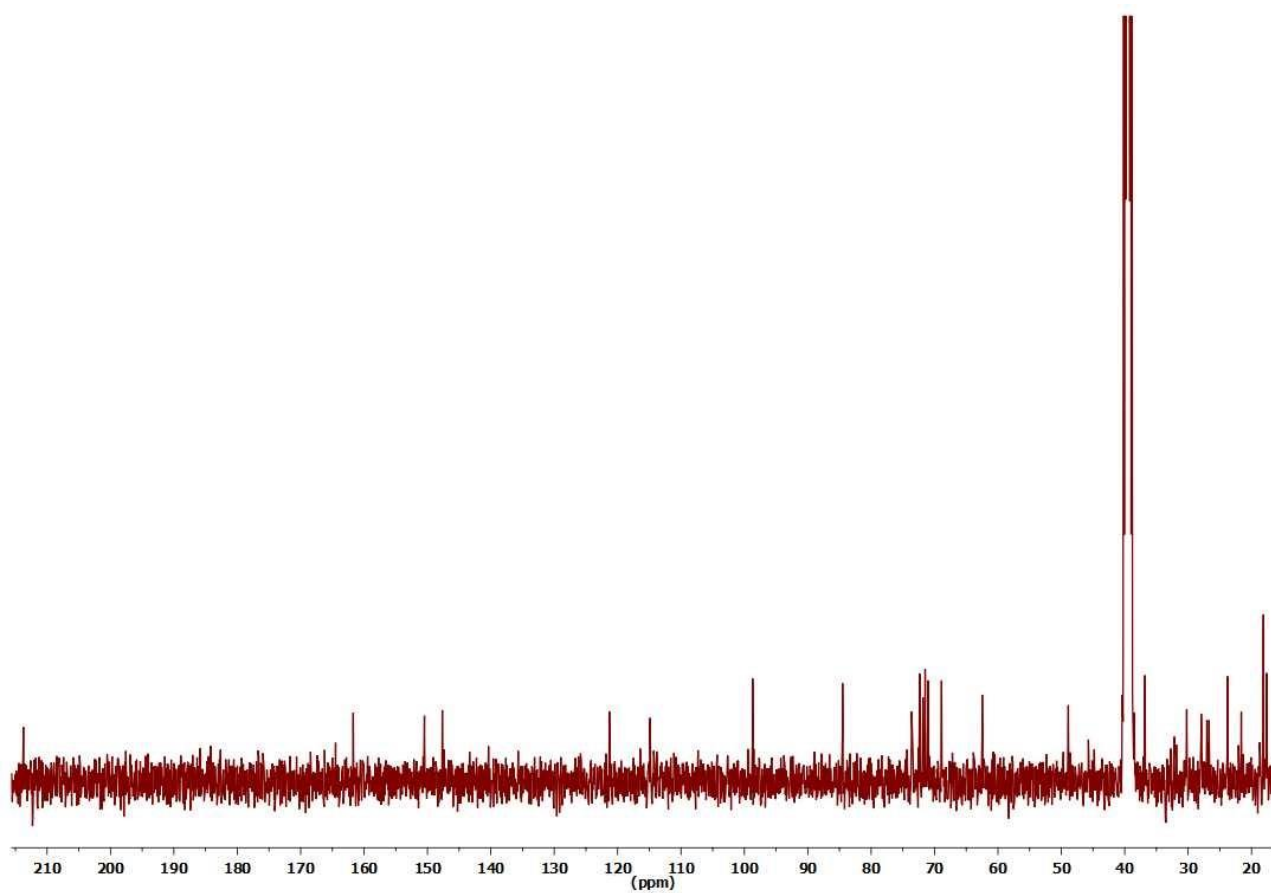


Figure S3. ^{13}C -NMR spectrum of compound 4 (δ in ppm).