Cytotoxic and anti-inflammatory effects of *ent*-kaurane derivatives isolated from the Alpine plant *Sideritis hyssopifolia*

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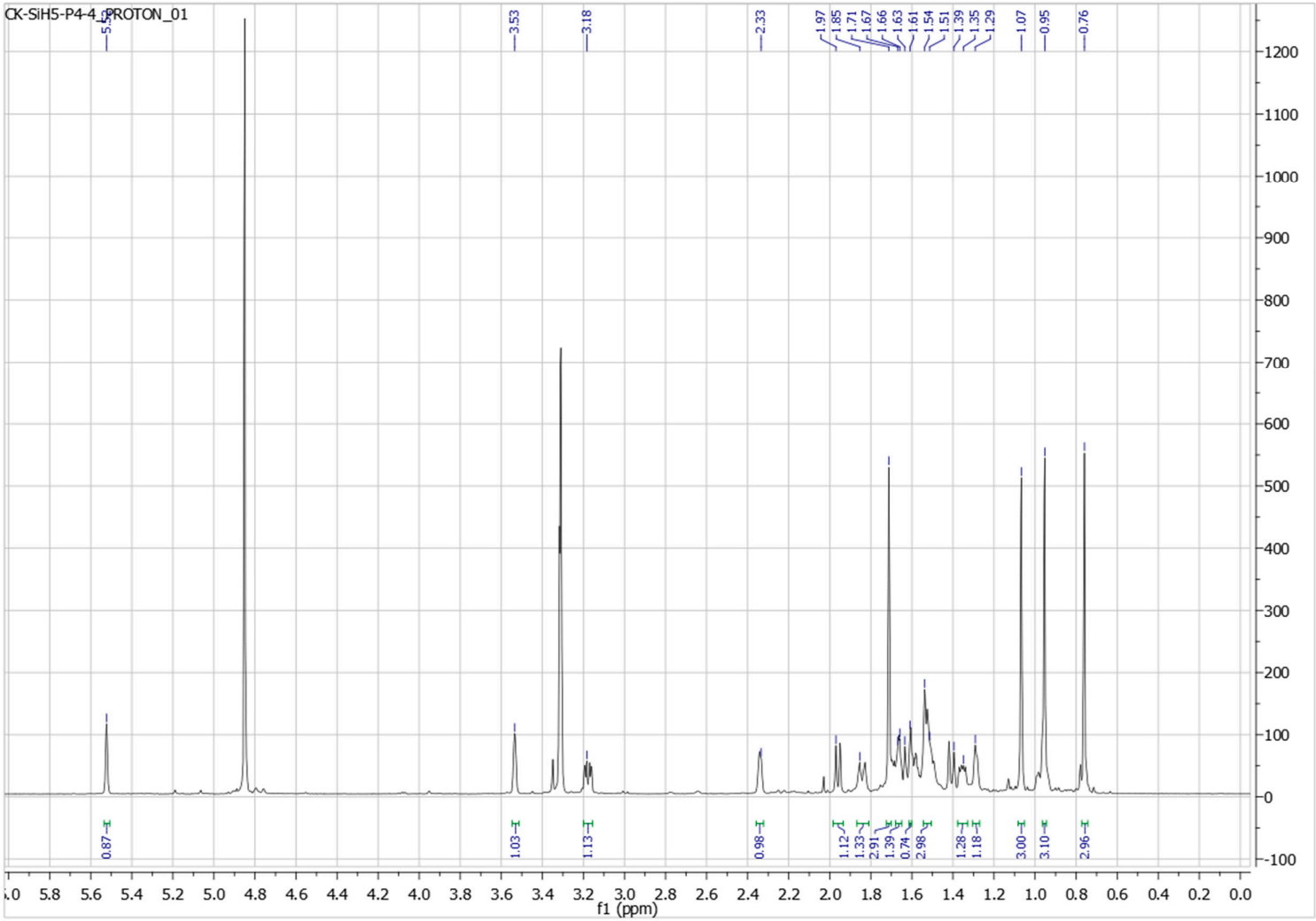
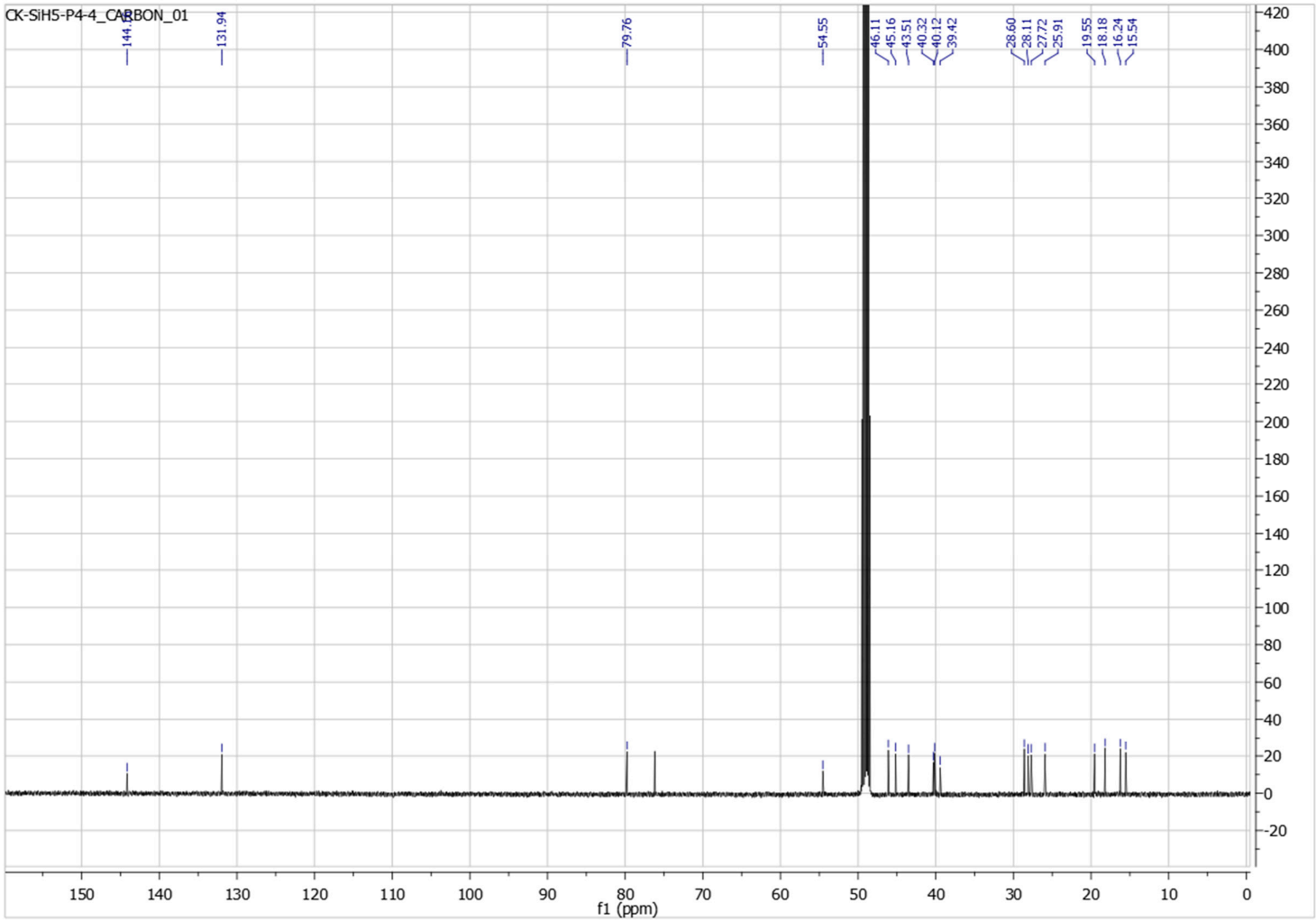
† These authors contributed equally to this work.

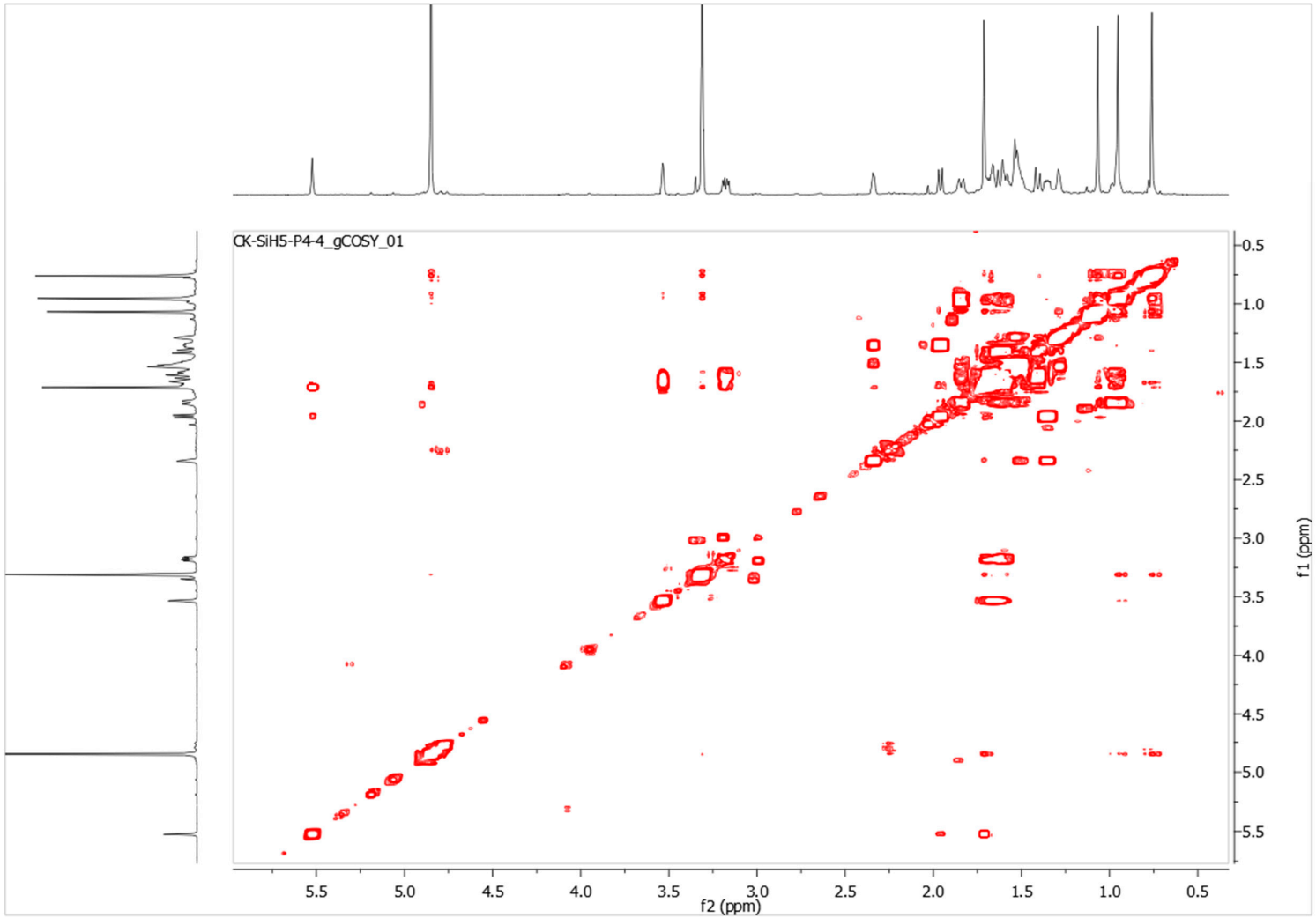
^{1}H NMR spectrum of **1** in CD_3OD (500MHz)



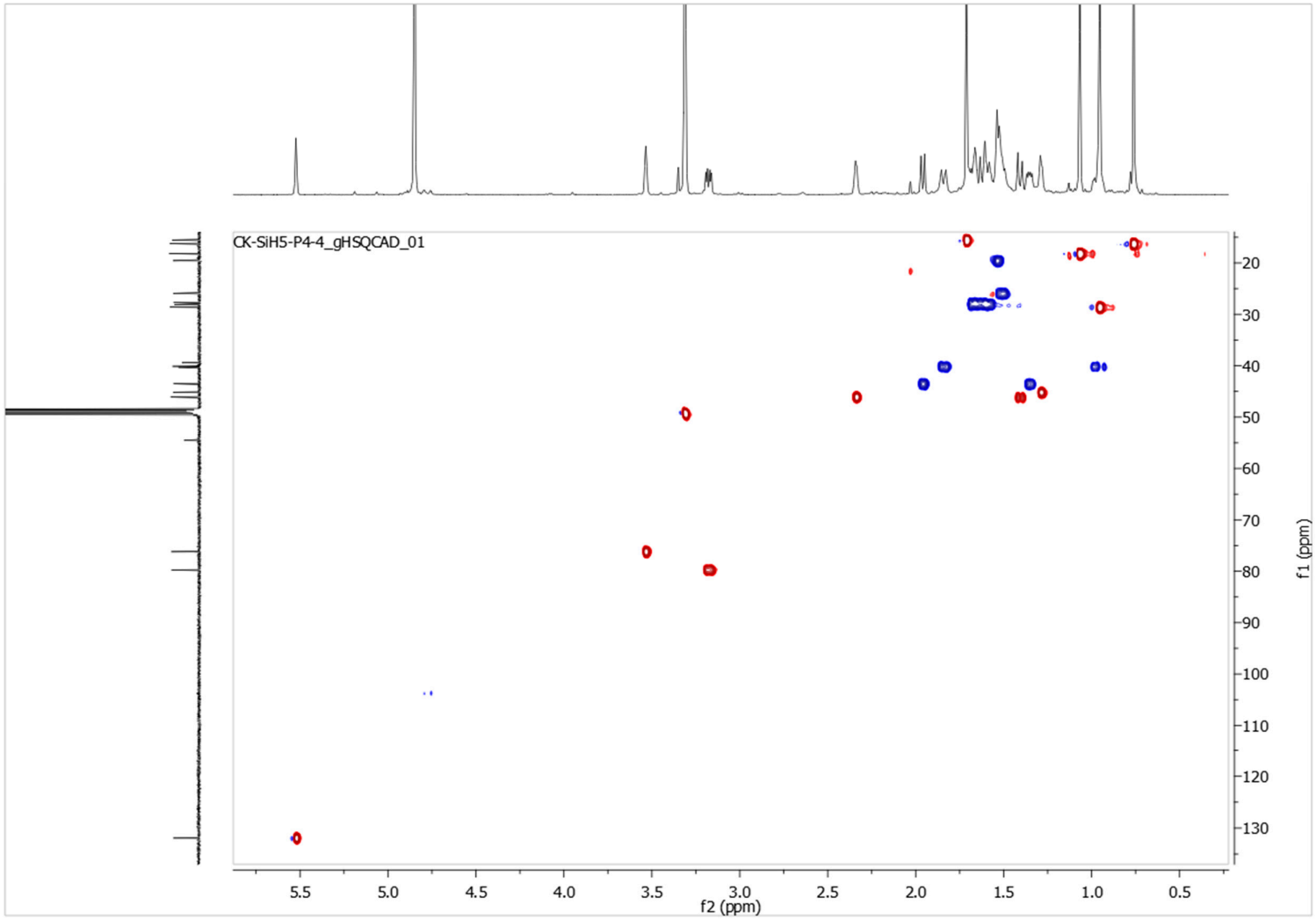
^{13}C NMR spectrum of **1** in CD_3OD (125MHz)



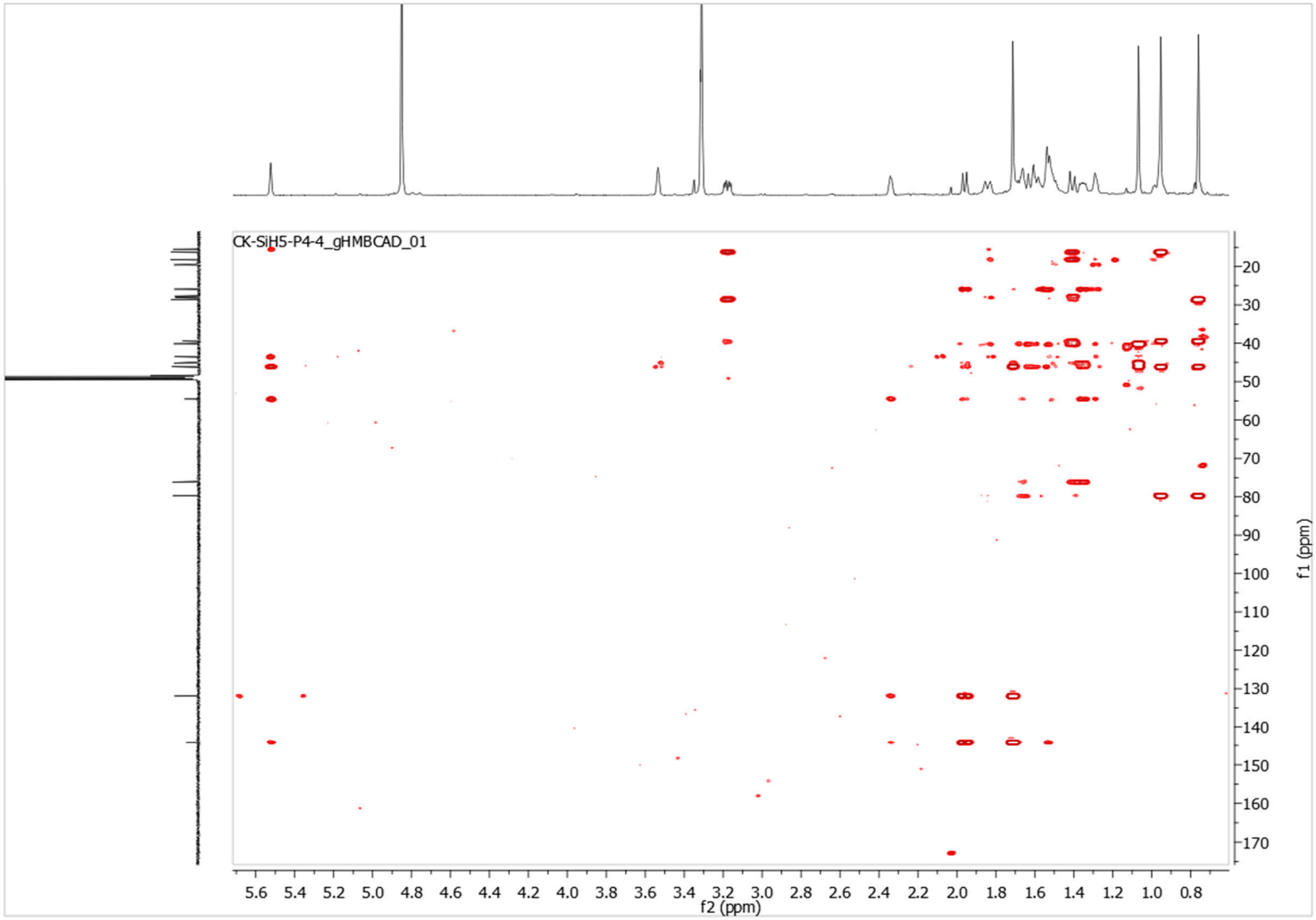
COSY NMR spectrum of **1** in CD_3OD (500MHz)



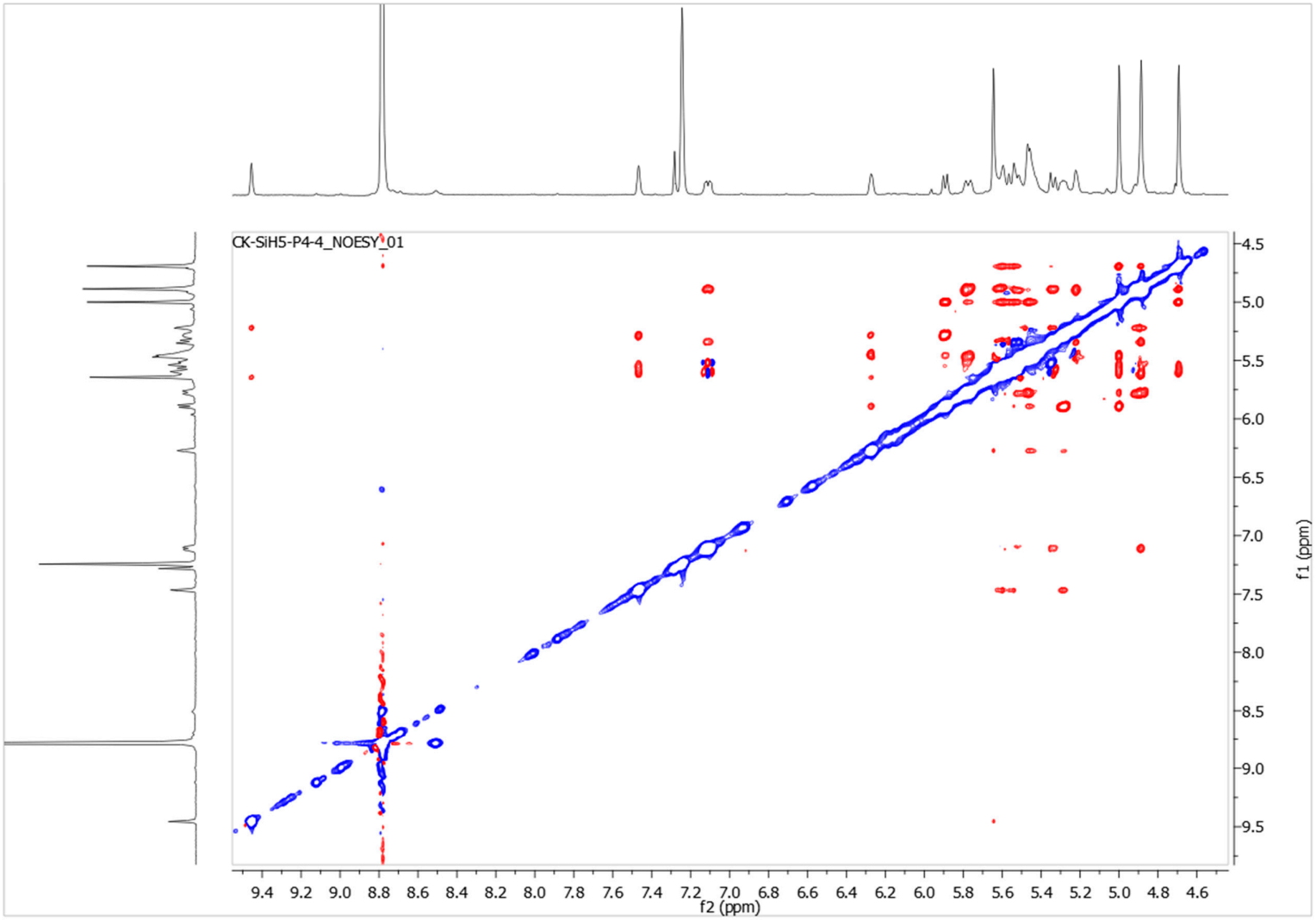
HSQC NMR spectrum of **1** in CD_3OD (500MHz)

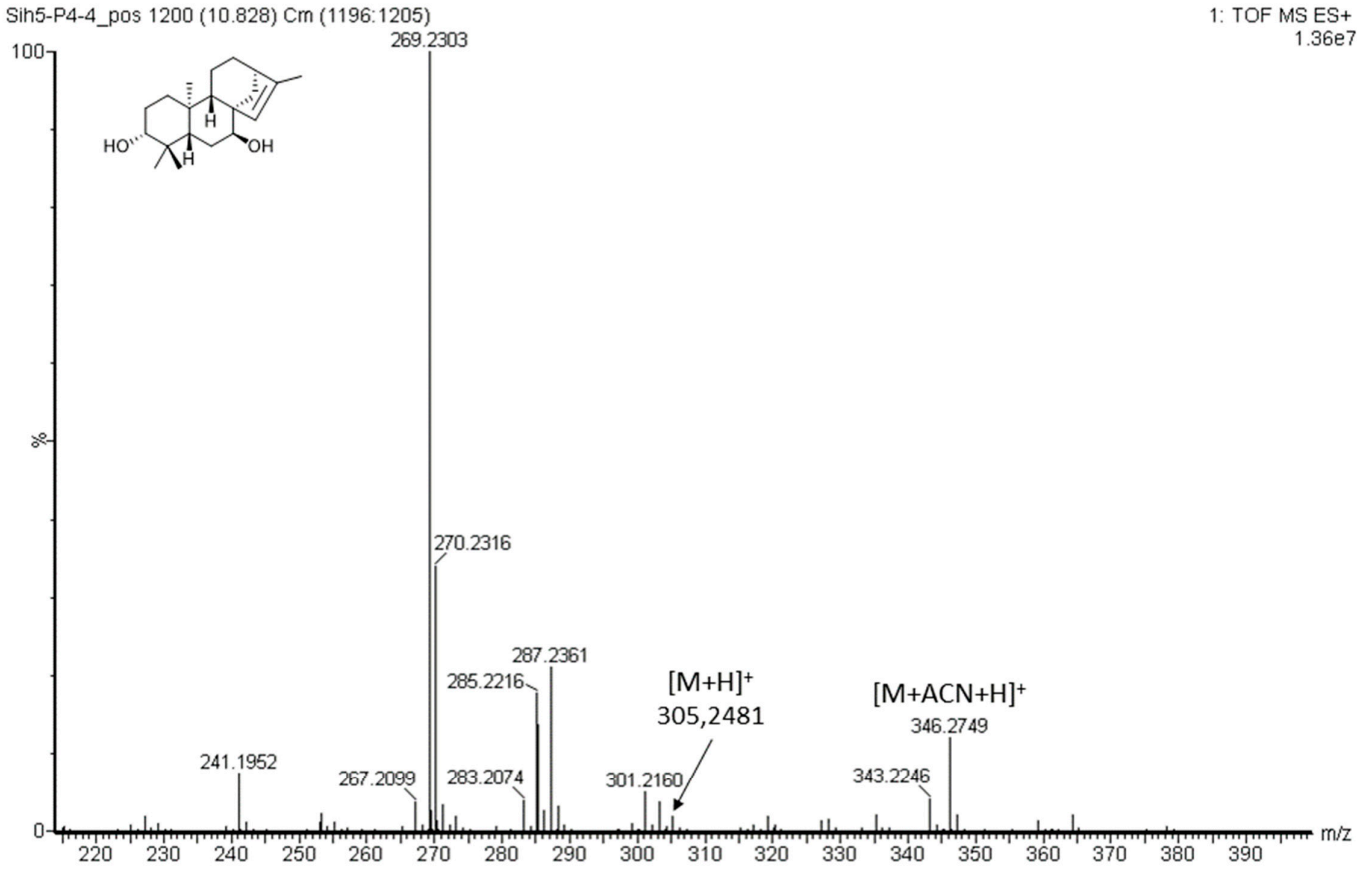


HMBC NMR spectrum of **1** in CD_3OD (500MHz)



NOESY NMR spectrum of **1** in CD_3OD (500MHz)

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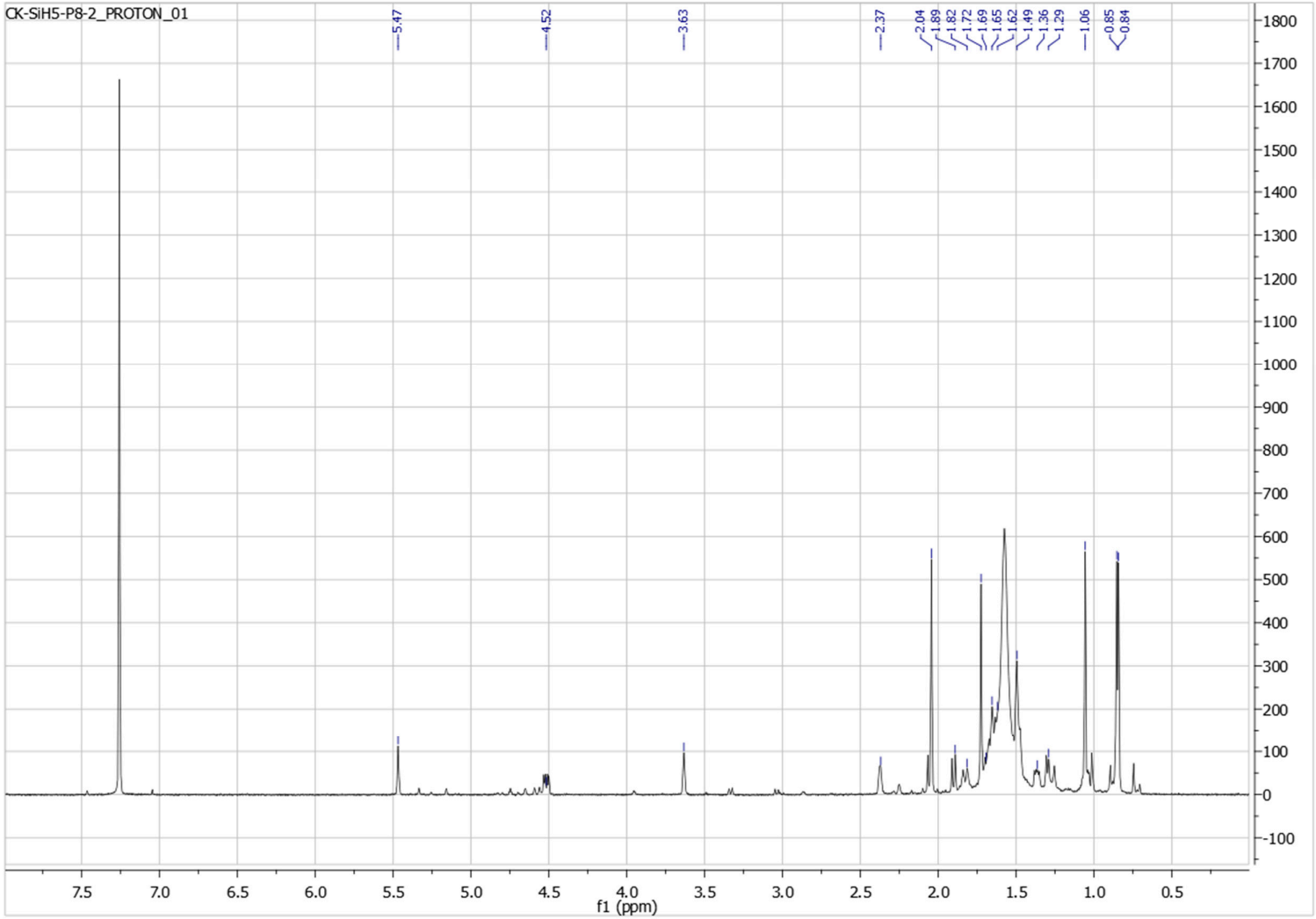
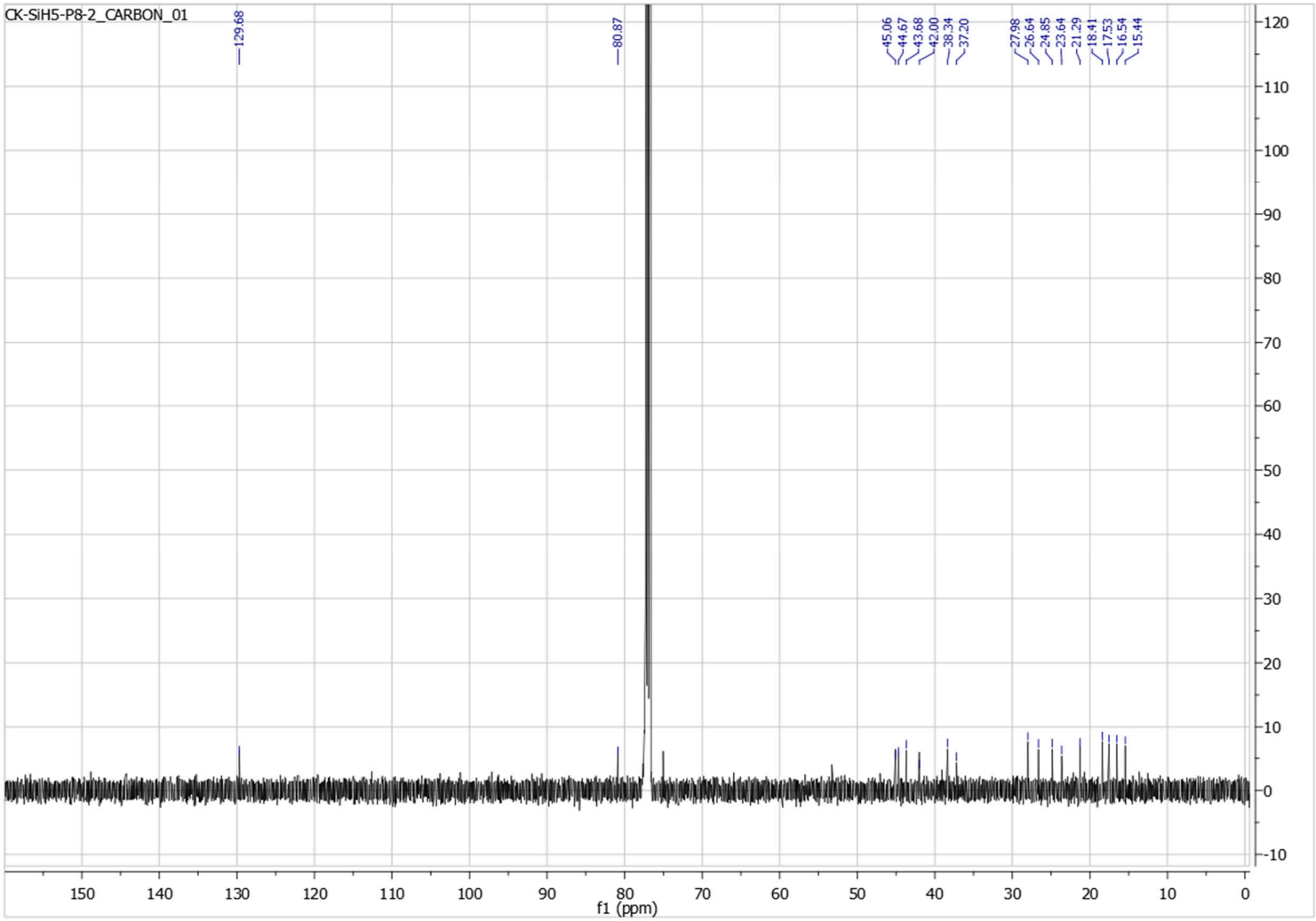
1: TOF MS ES+
1.36e7
100
%
0
269.2303
270.2316
287.2361
285.2216
[M+H]+
305,2481
[M+ACN+H]+
346.2749
241.1952
267.2099
283.2074
301.2160
343.2246
HO
OH
H
H
m/z
220
230
240
250
260
270
280
290
300
310
320
330
340
350
360
370
380
390

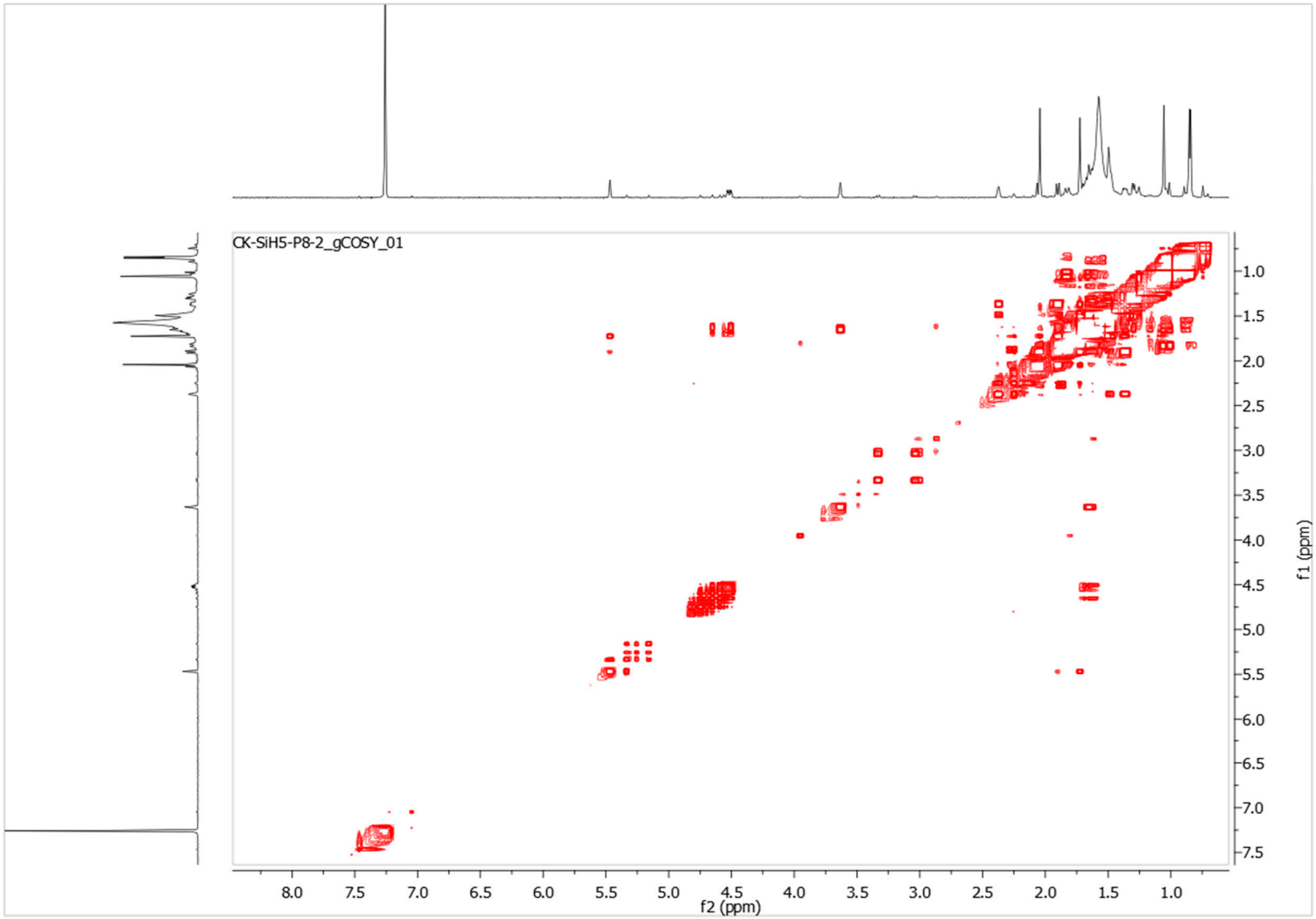
^{1}H NMR spectrum of **2** in CD_3OD (500MHz)



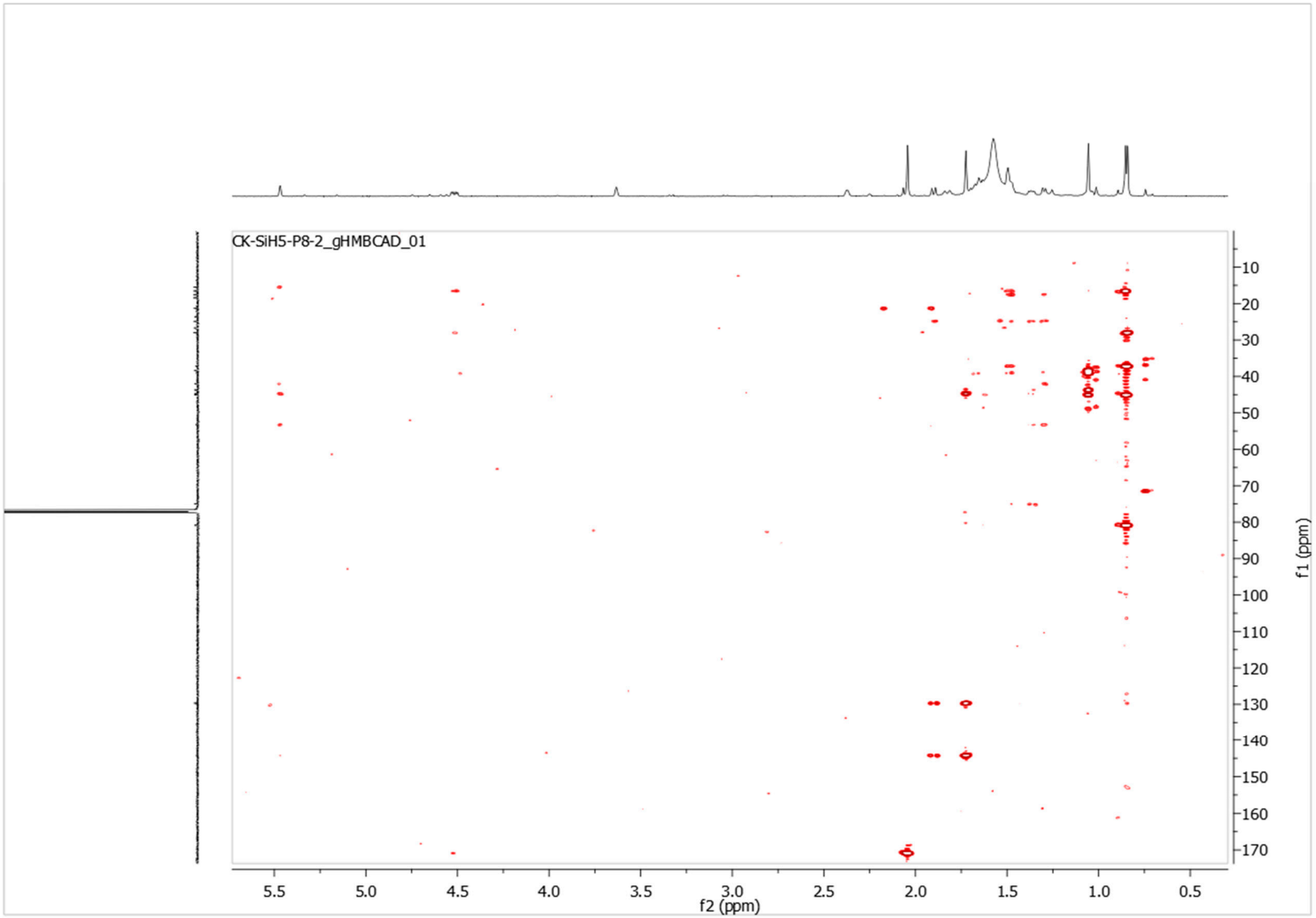
^{13}C NMR spectrum of **2** in CD_3OD (125MHz)



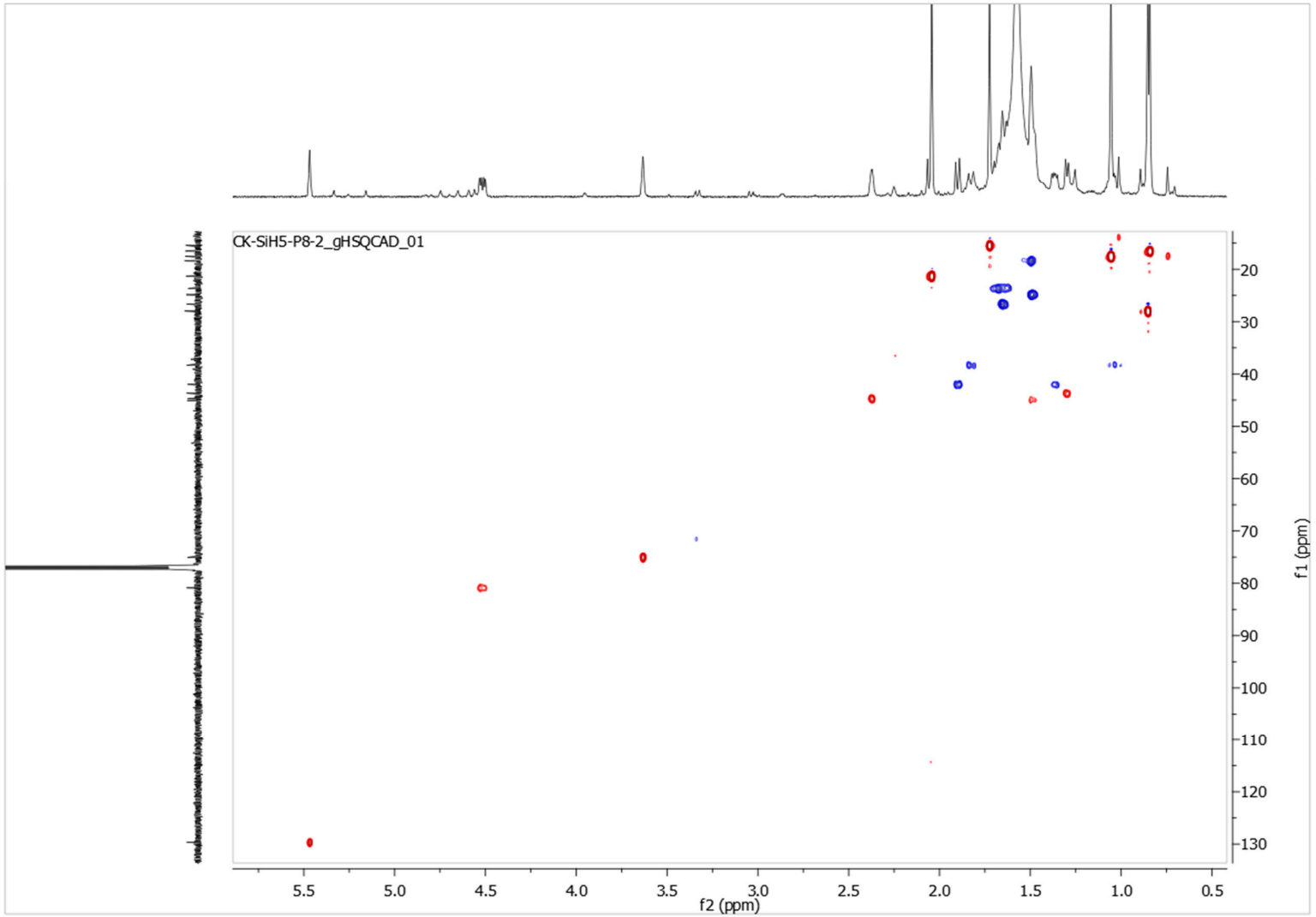
COSY NMR spectrum of **2** in CD_3OD (500MHz)



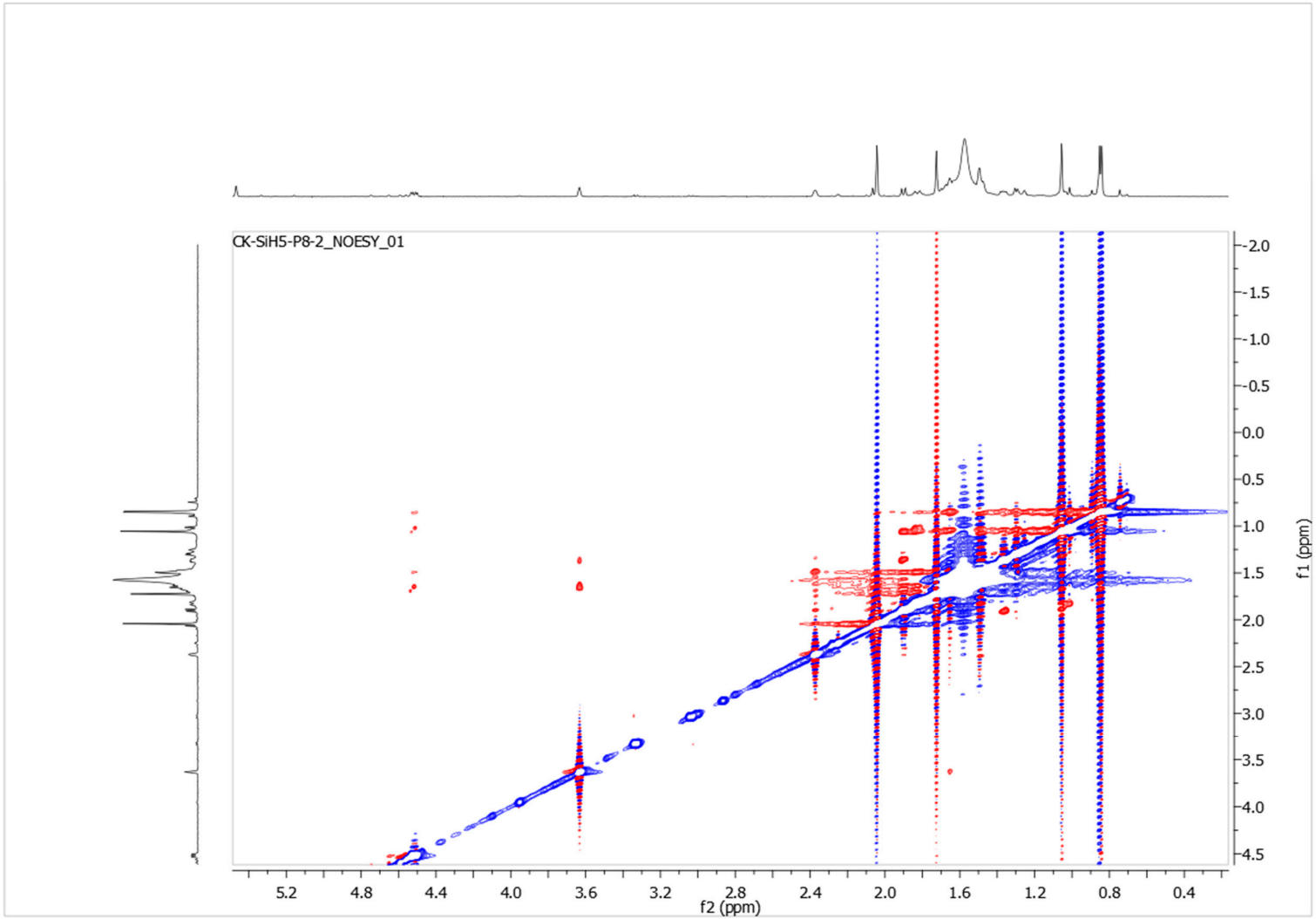
HMBC NMR spectrum of **2** in CD_3OD (500MHz)

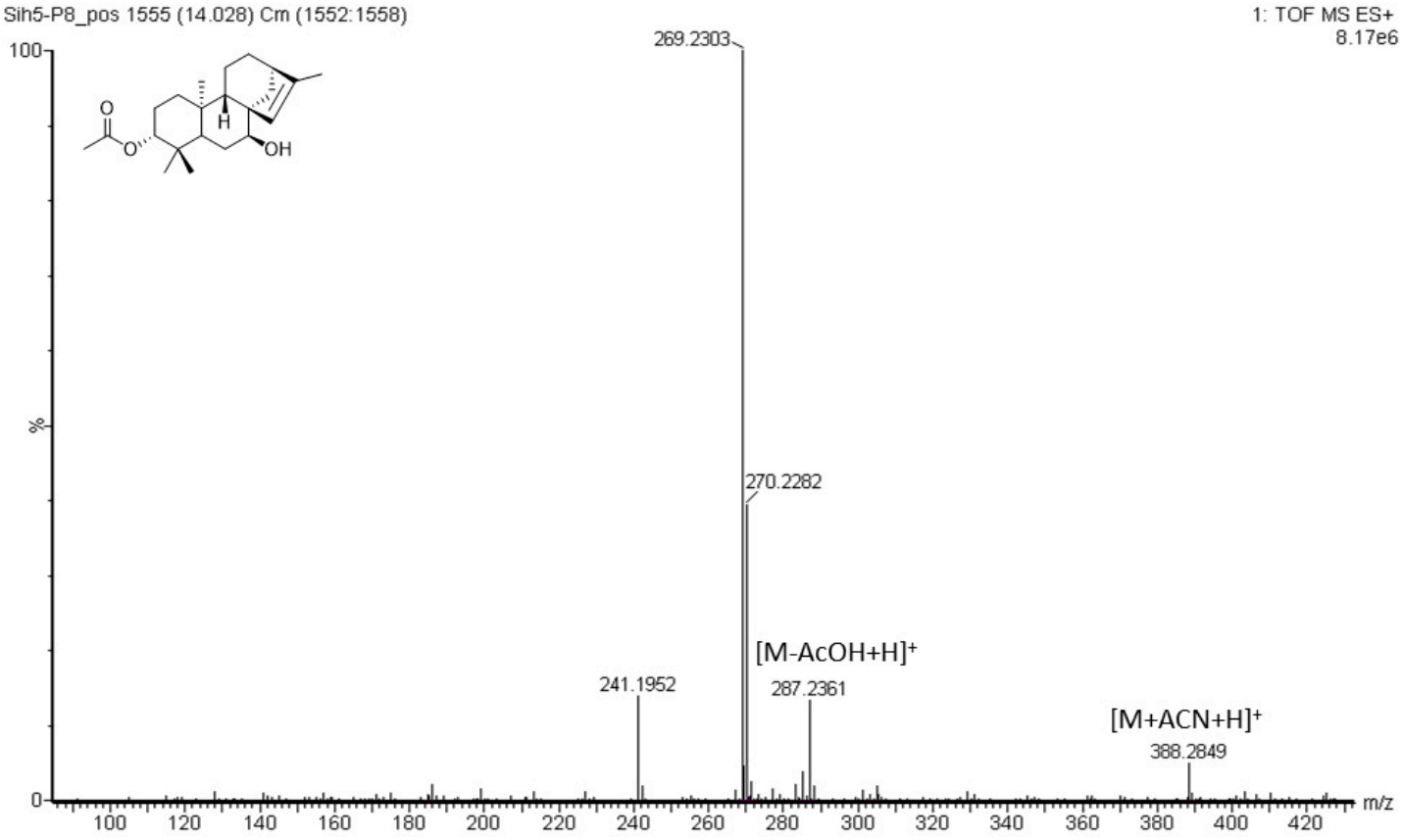


HSQC NMR spectrum of **2** in CD_3OD (500MHz)

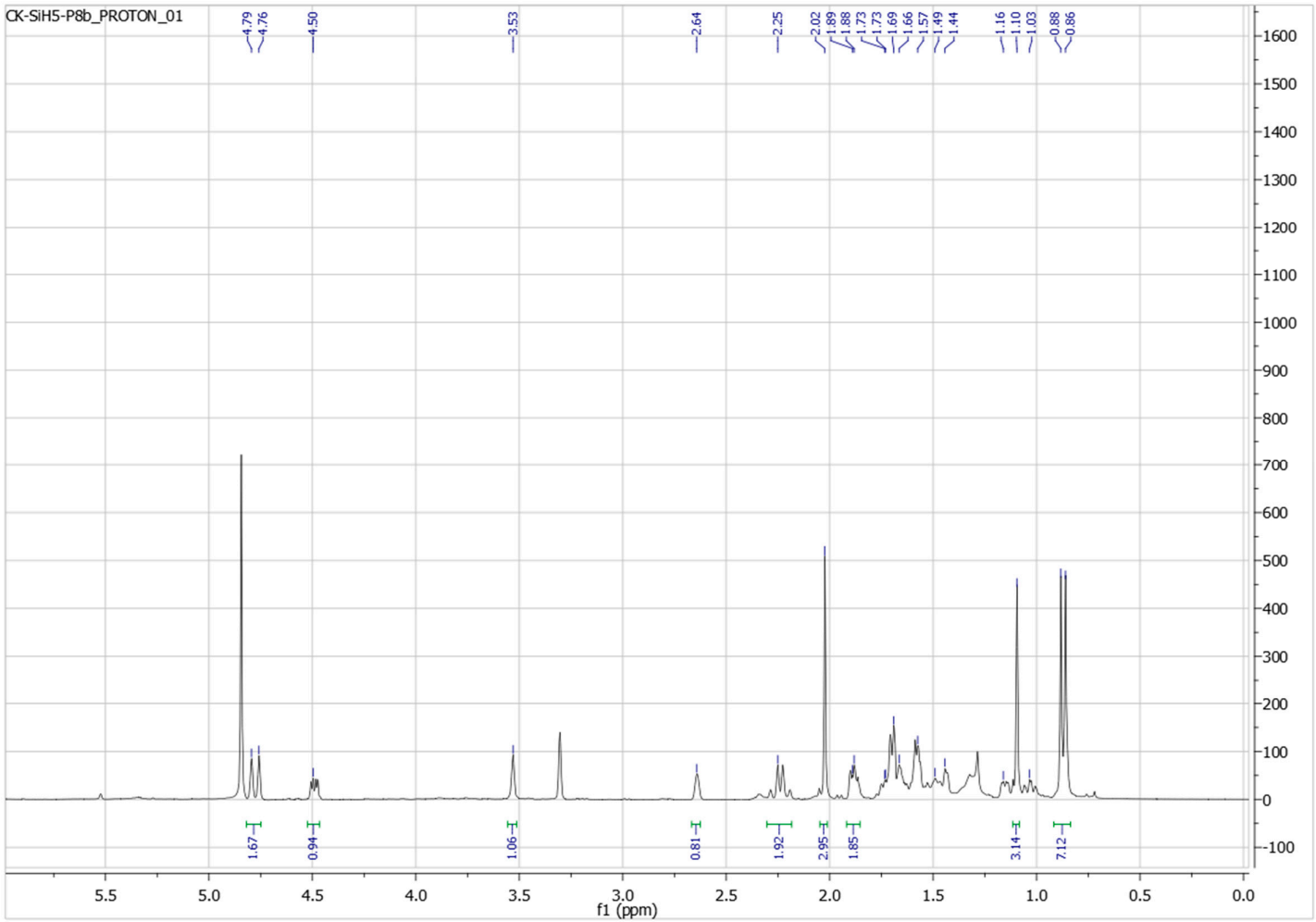


NOESY NMR spectrum of **2** in CD_3OD (500MHz)

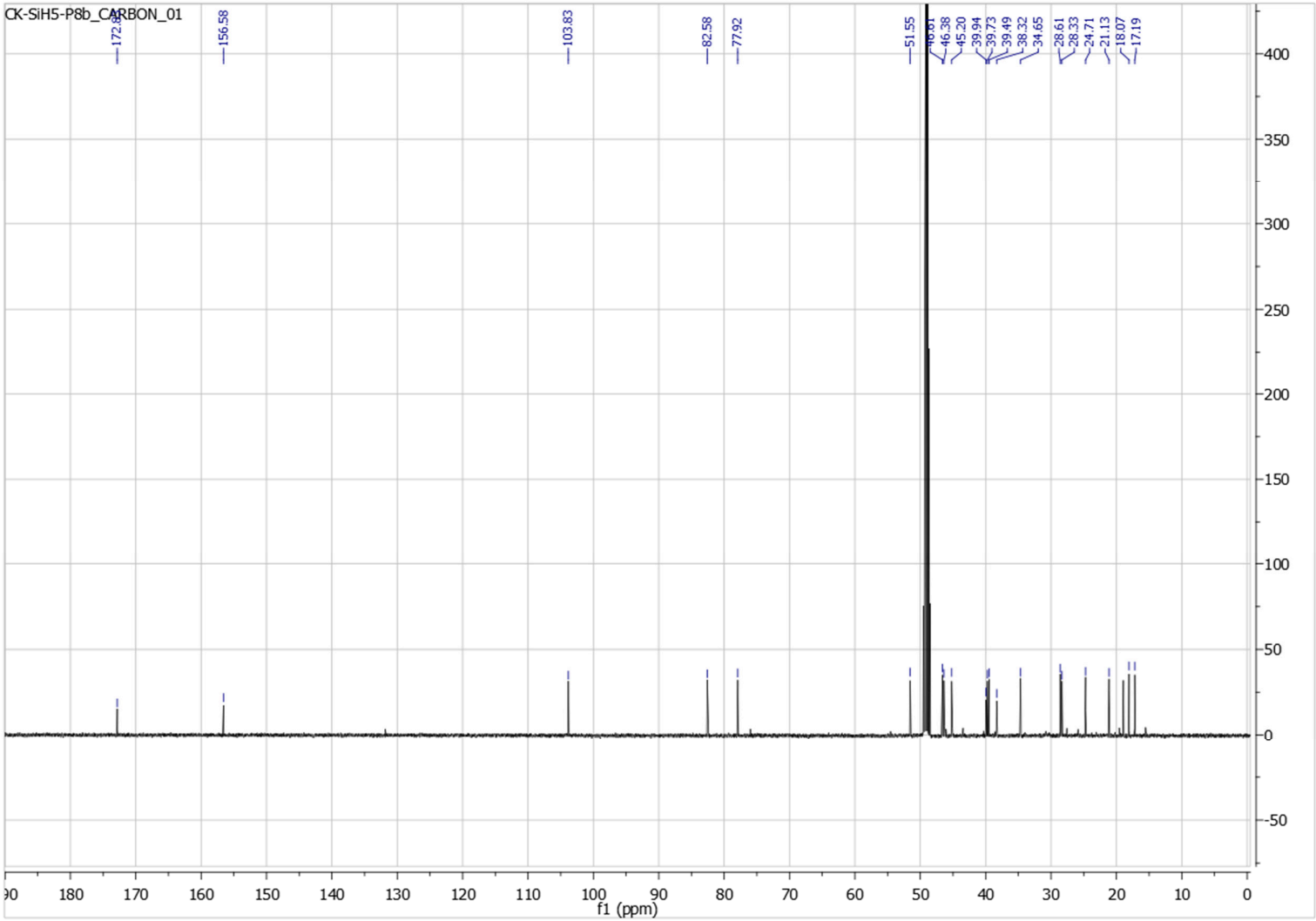



Sih5-P8_pos 1555 (14.028) Cm (1552:1558)
1: TOF MS ES+
8.17e6
100
%
0
269.2303
270.2282
[M-AcOH+H]+
241.1952
287.2361
[M+ACN+H]+
388.2849
m/z
100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
O
O
H
OH

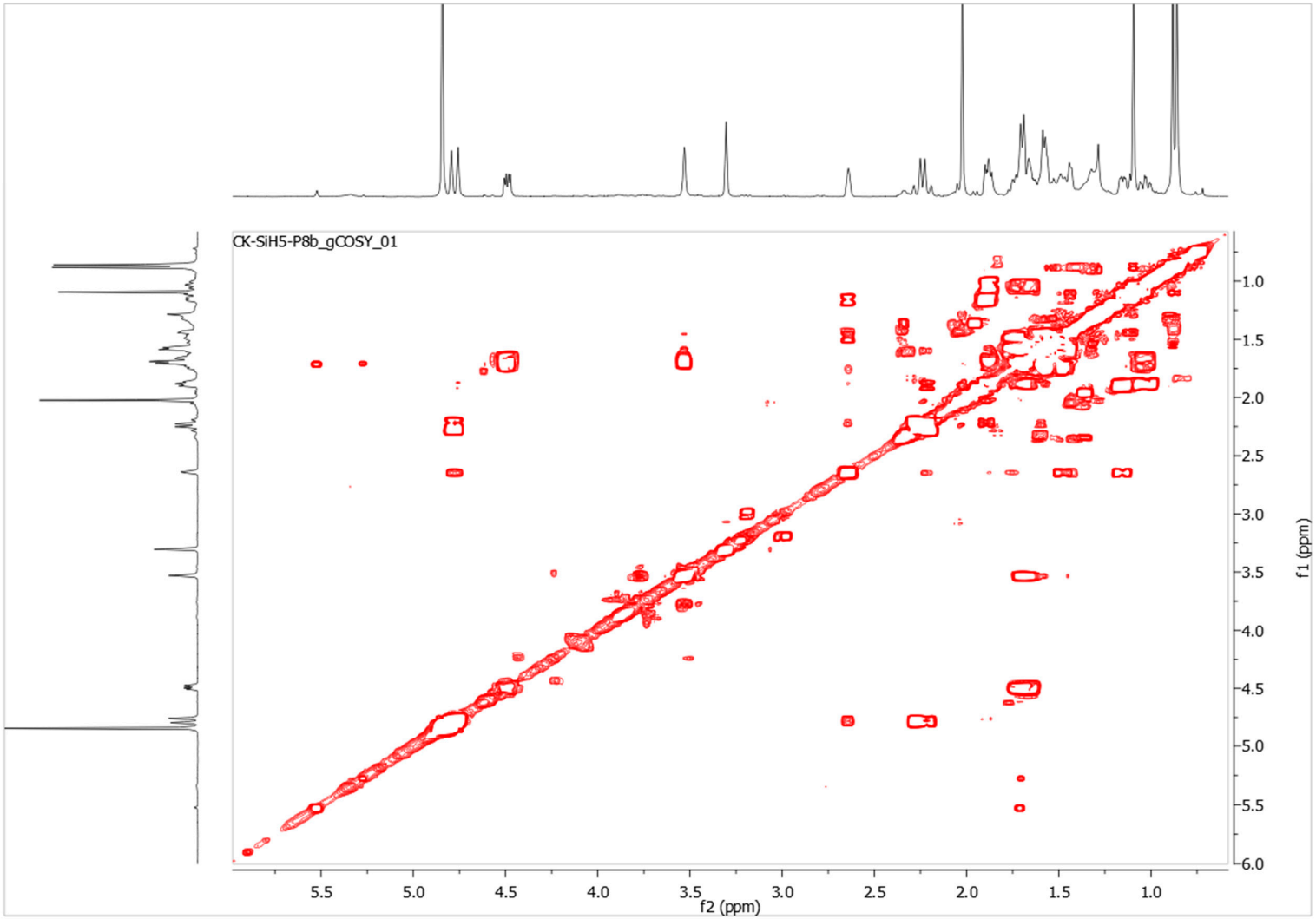
^{1}H NMR spectrum of **3** in CD_3OD (500MHz)



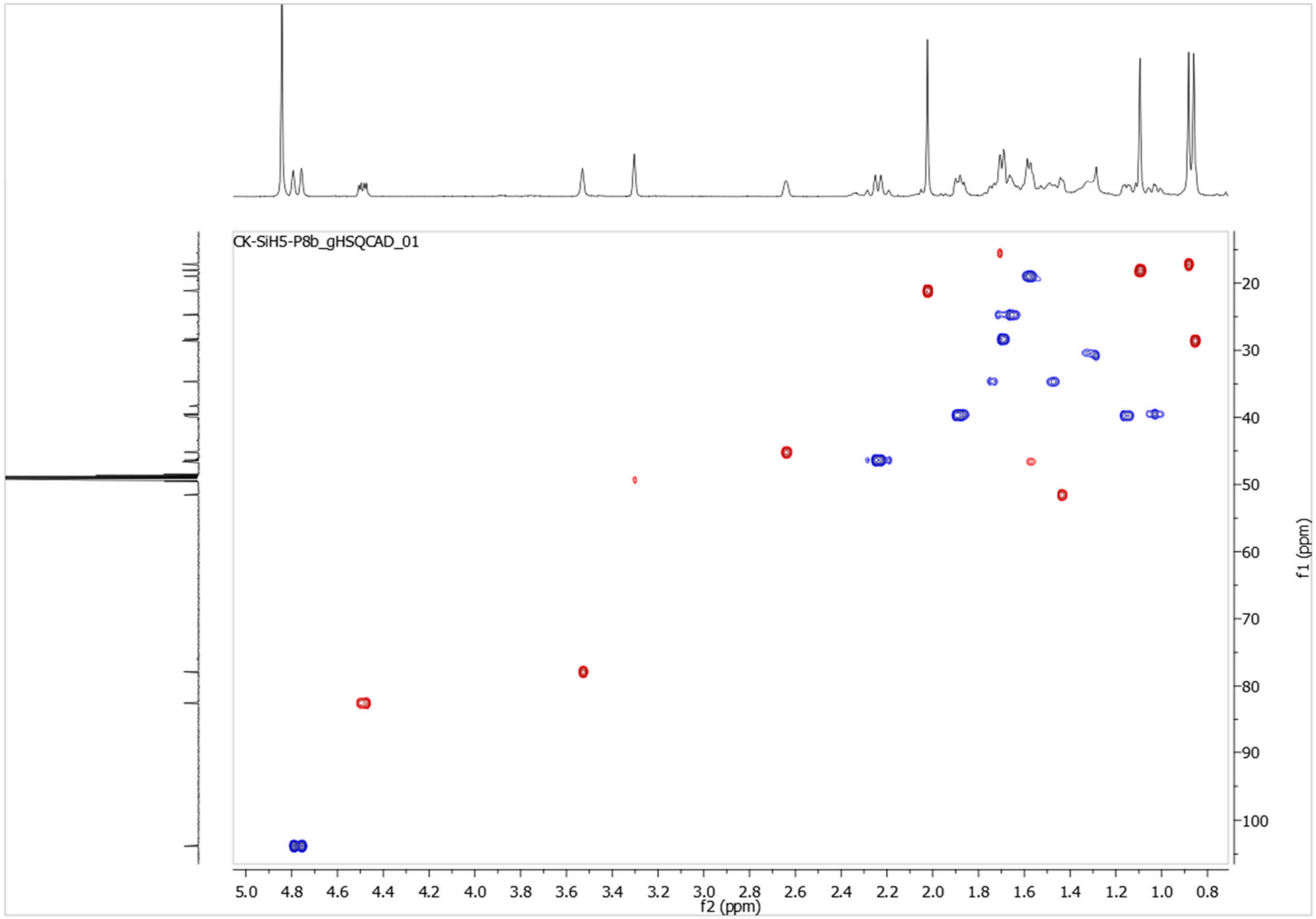
^{13}C NMR spectrum of **3** in CD_3OD (125MHz)



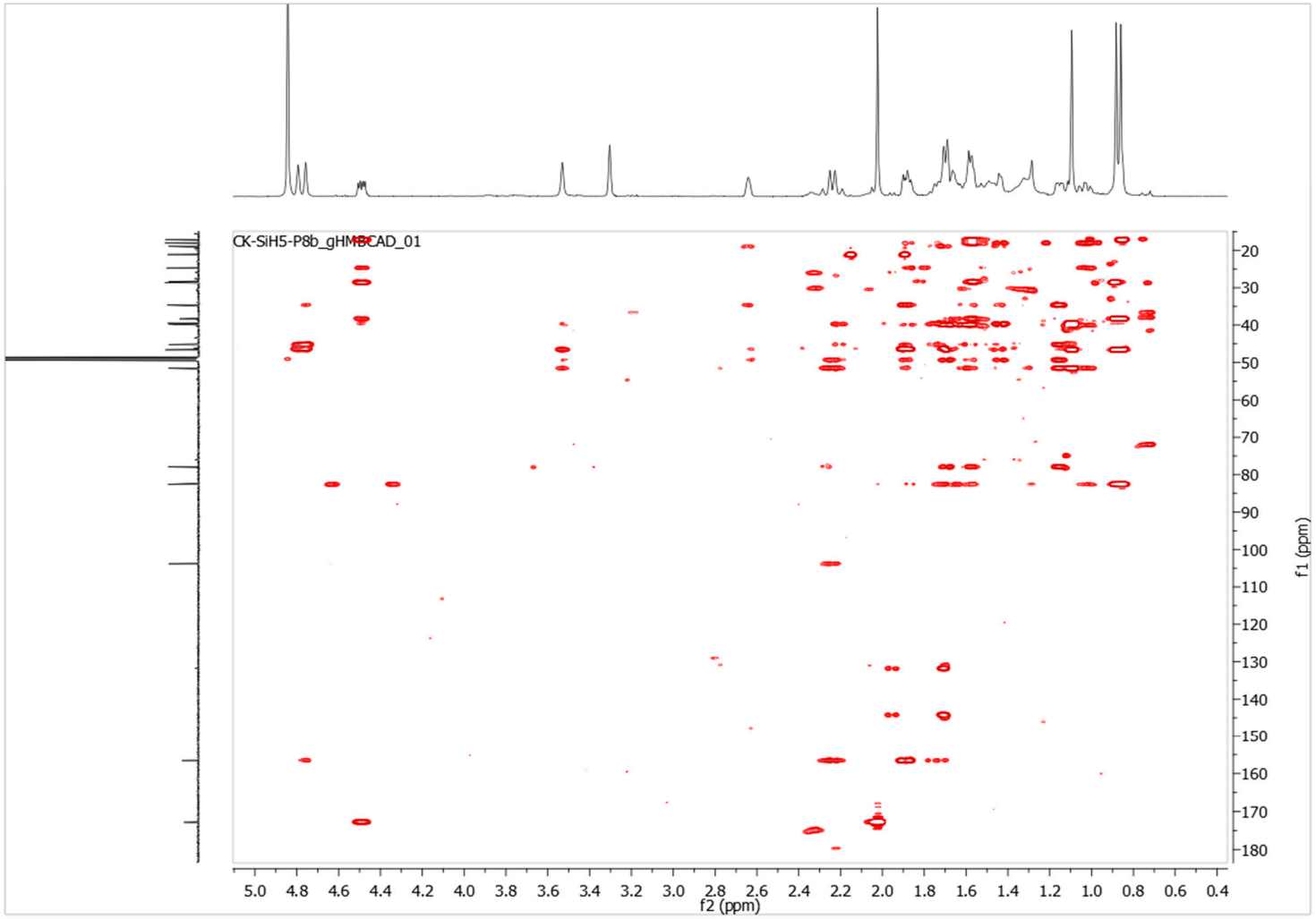
COSY NMR spectrum of **3** in CD_3OD (500MHz)

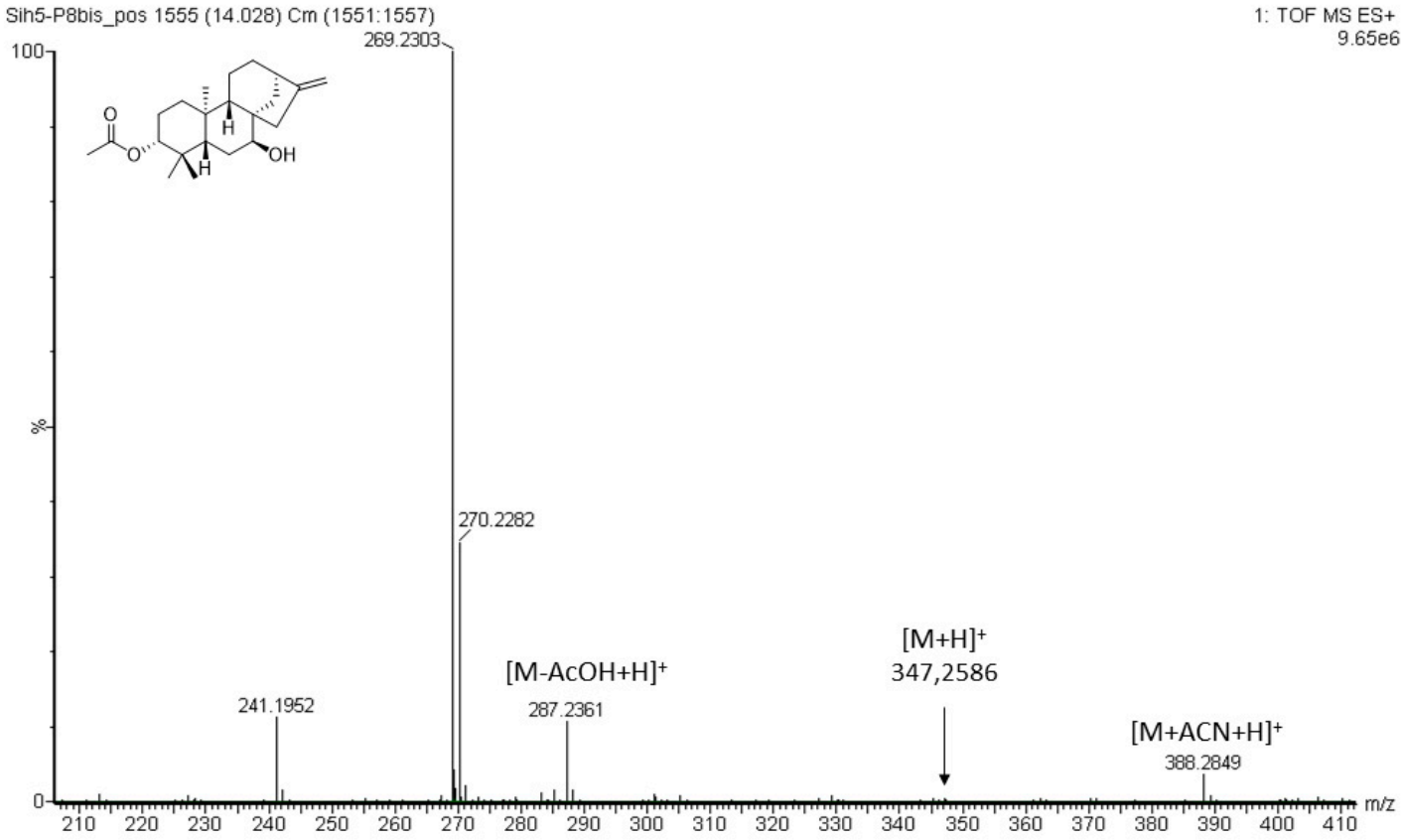


HSQC NMR spectrum of **3** in CD_3OD (500MHz)

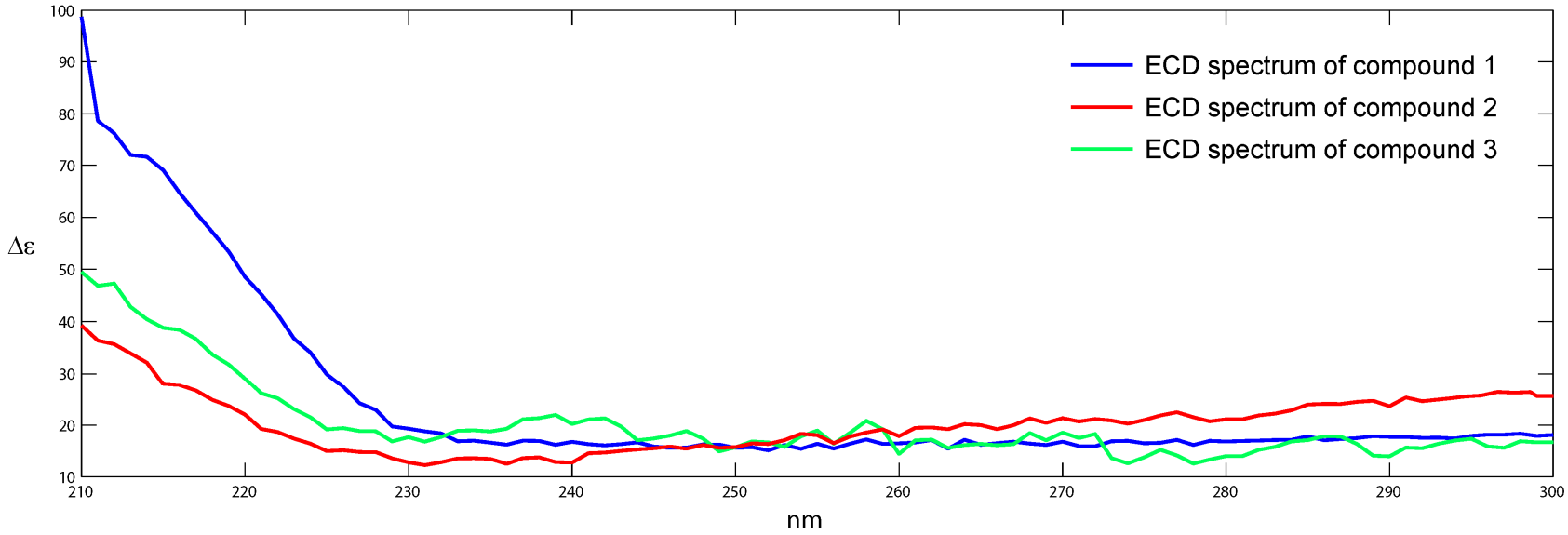


HMBC NMR spectrum of **3** in CD_3OD (500MHz)

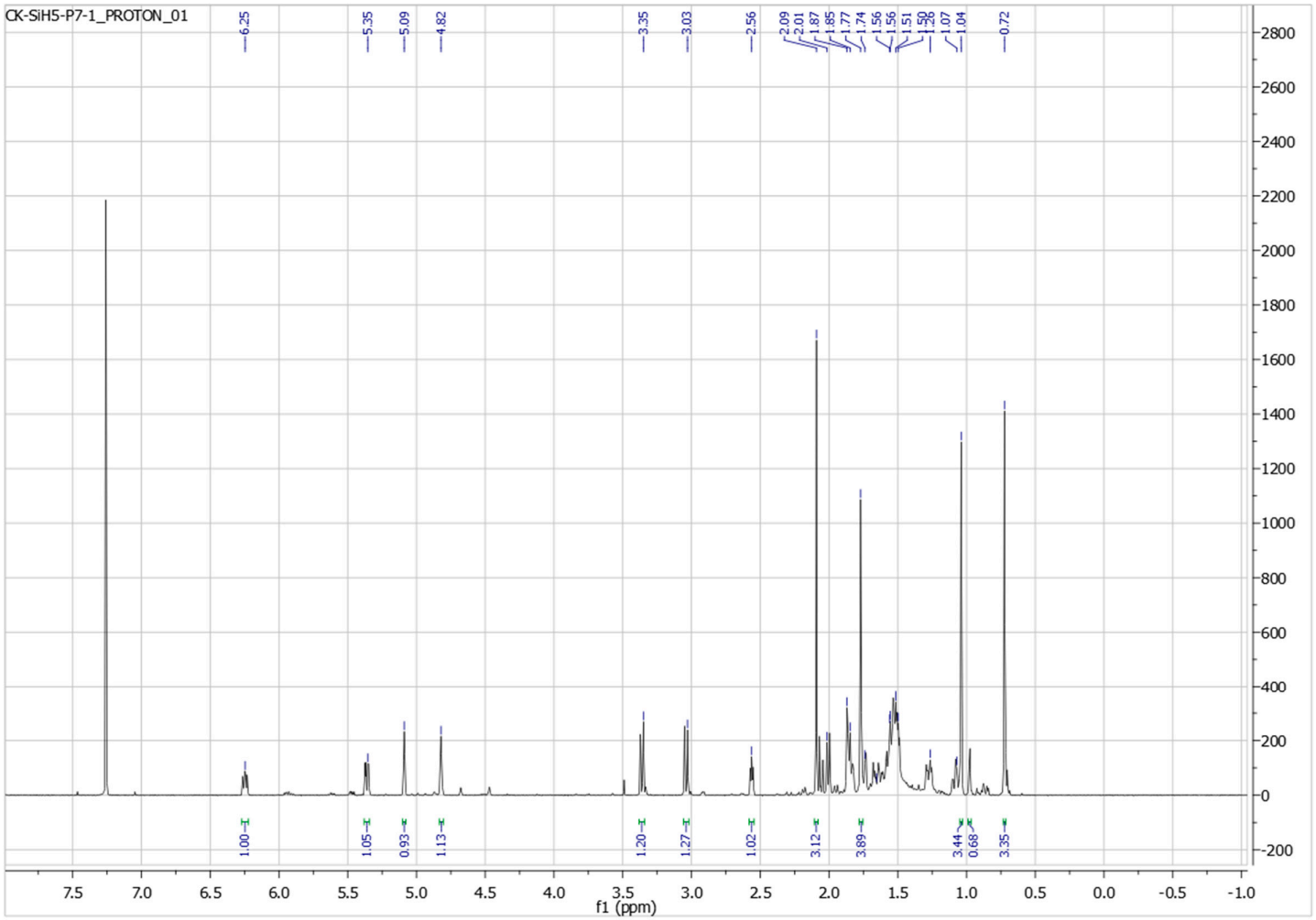



Sih5-P8bis_pos 1555 (14.028) Cm (1551:1557)
1: TOF MS ES+
9.65e6
100
%
0
269.2303
270.2282
241.1952
287.2361
[M-AcOH+H]+
[M+H]+
347,2586
[M+ACN+H]+
388.2849
O
O
H
H
OH
210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410
m/z

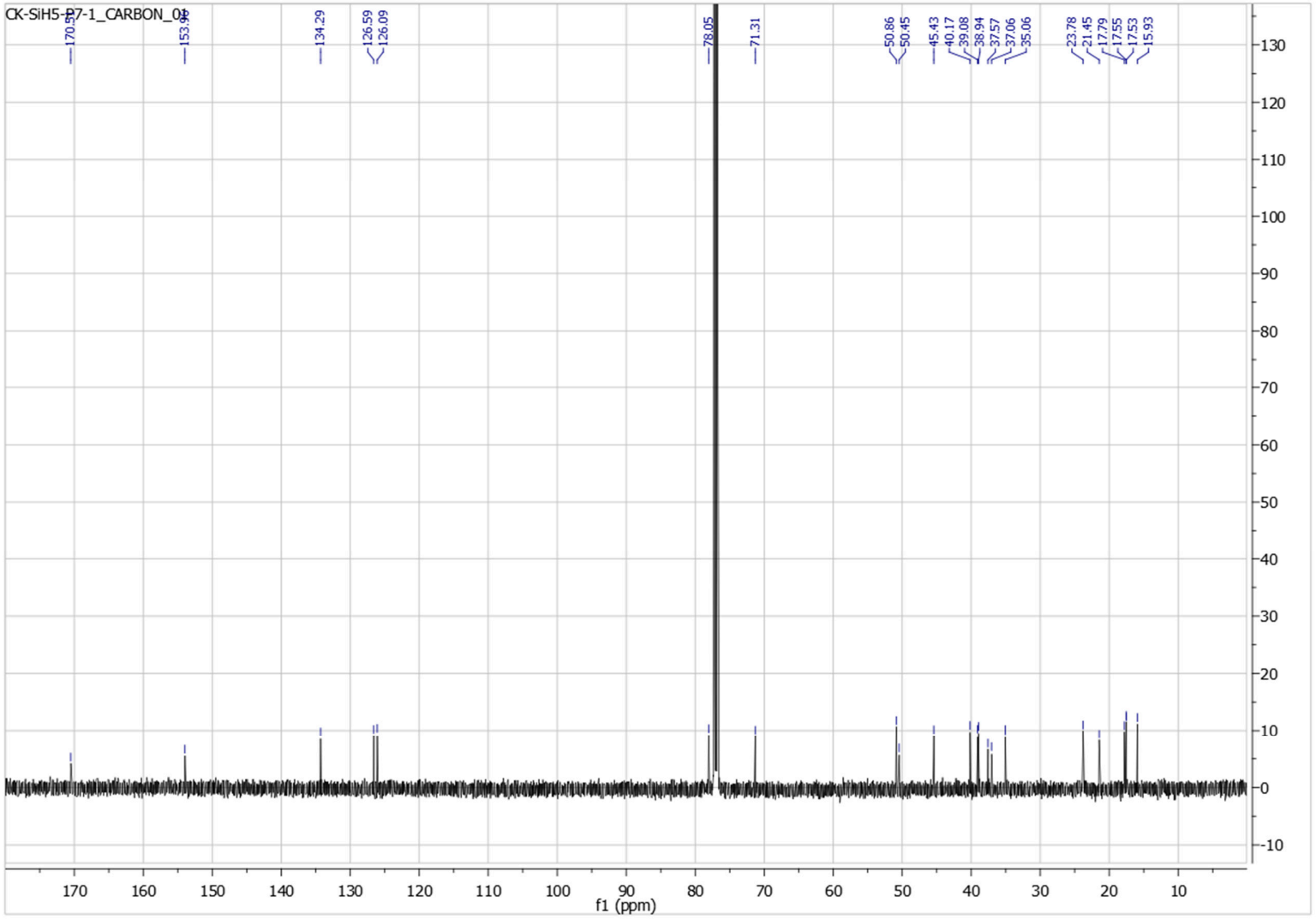
ECD spectra of **1**-**3**



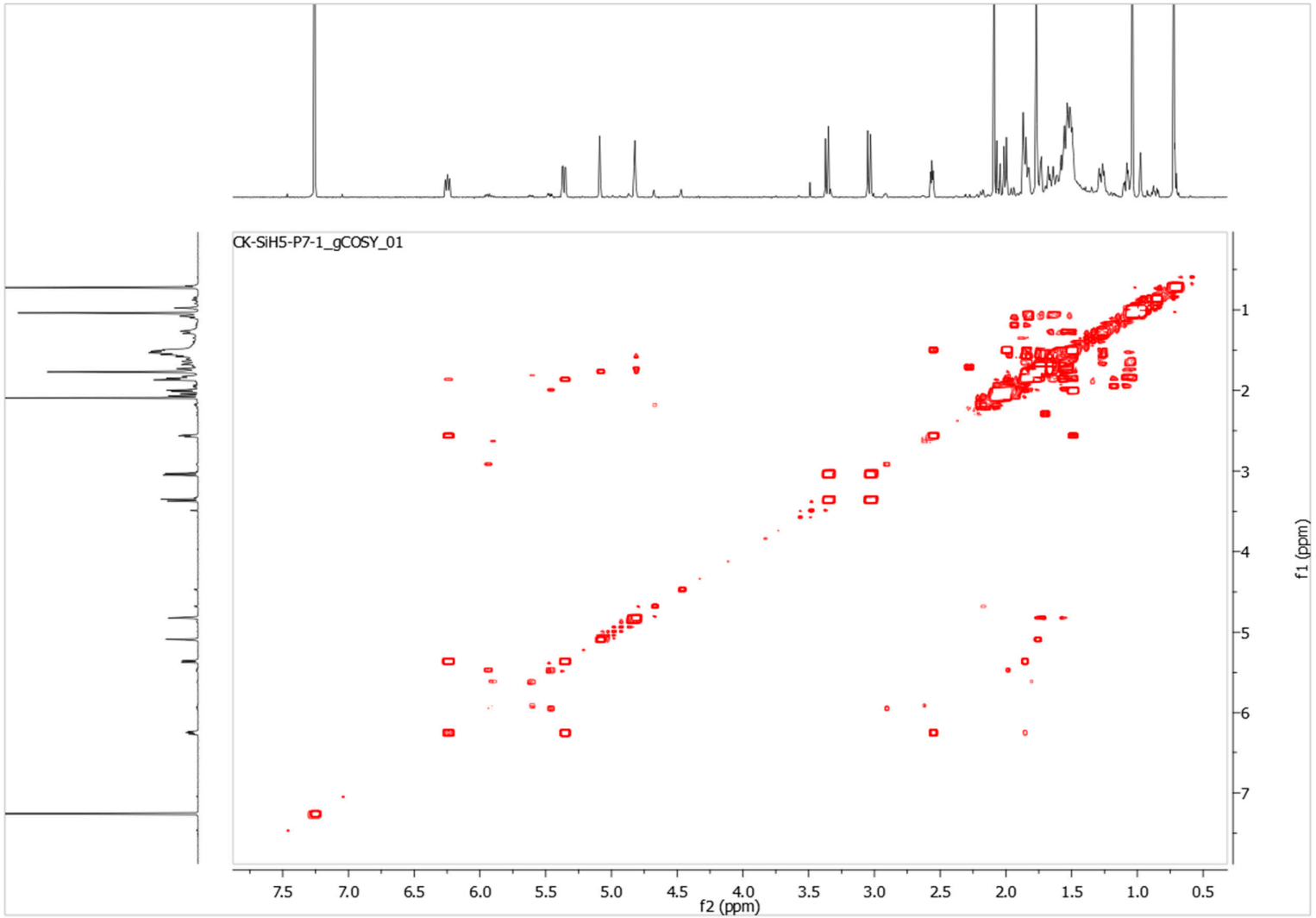
^{1}H NMR spectrum of **4** in CD_3OD (500MHz)



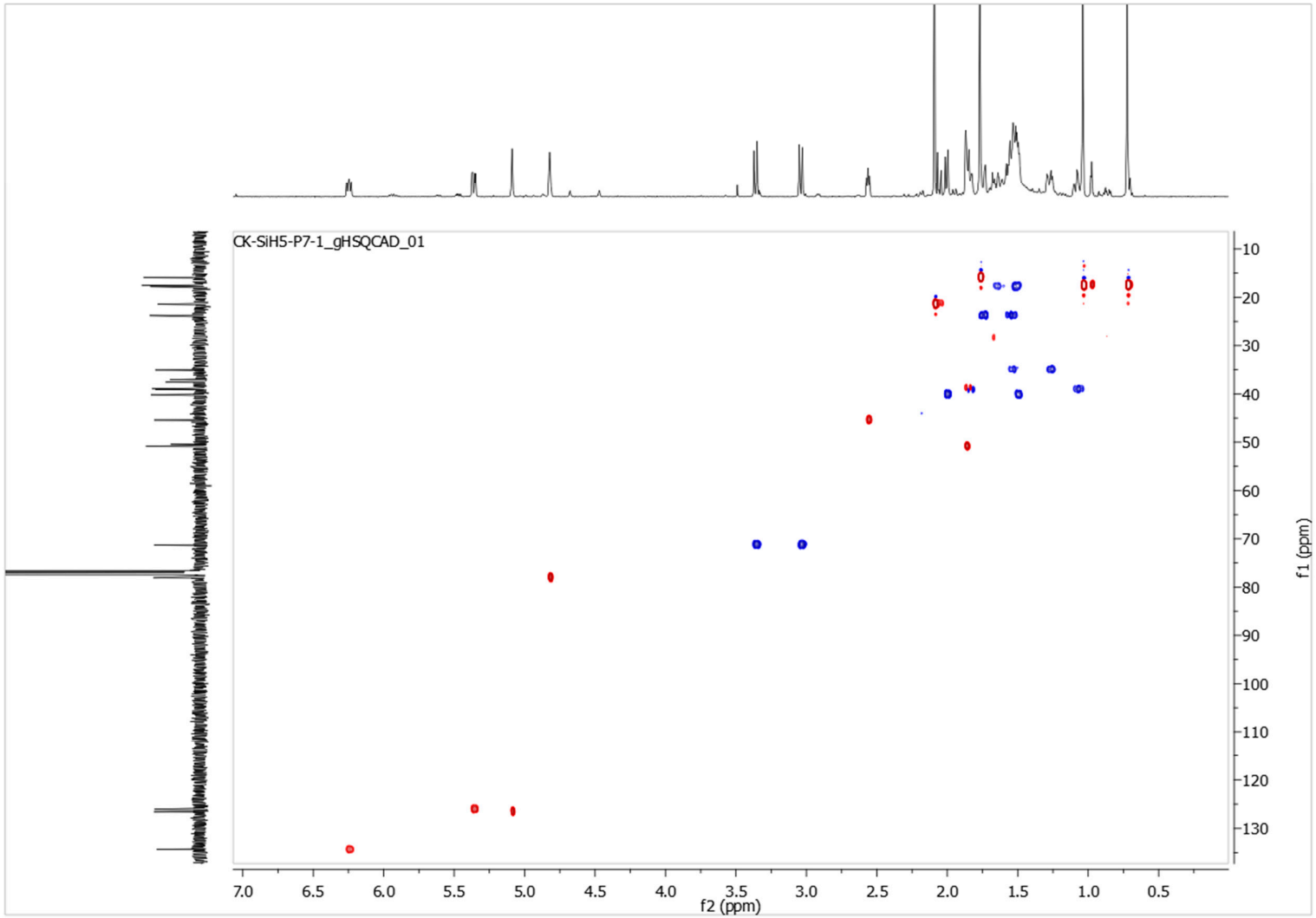
^{13}C NMR spectrum of **4** in CD_3OD (125MHz)



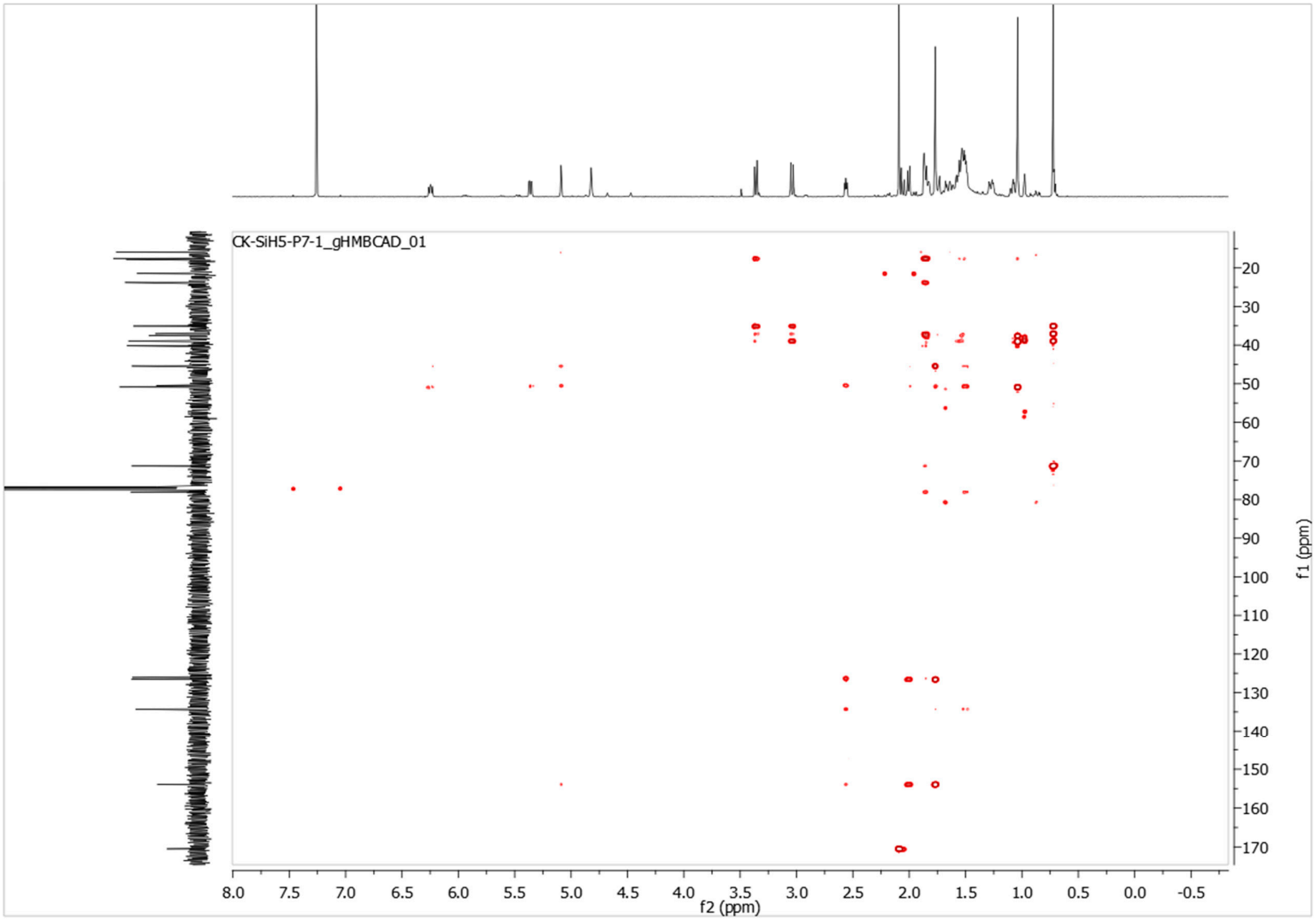
COSY NMR spectrum of **4** in CD_3OD (500MHz)



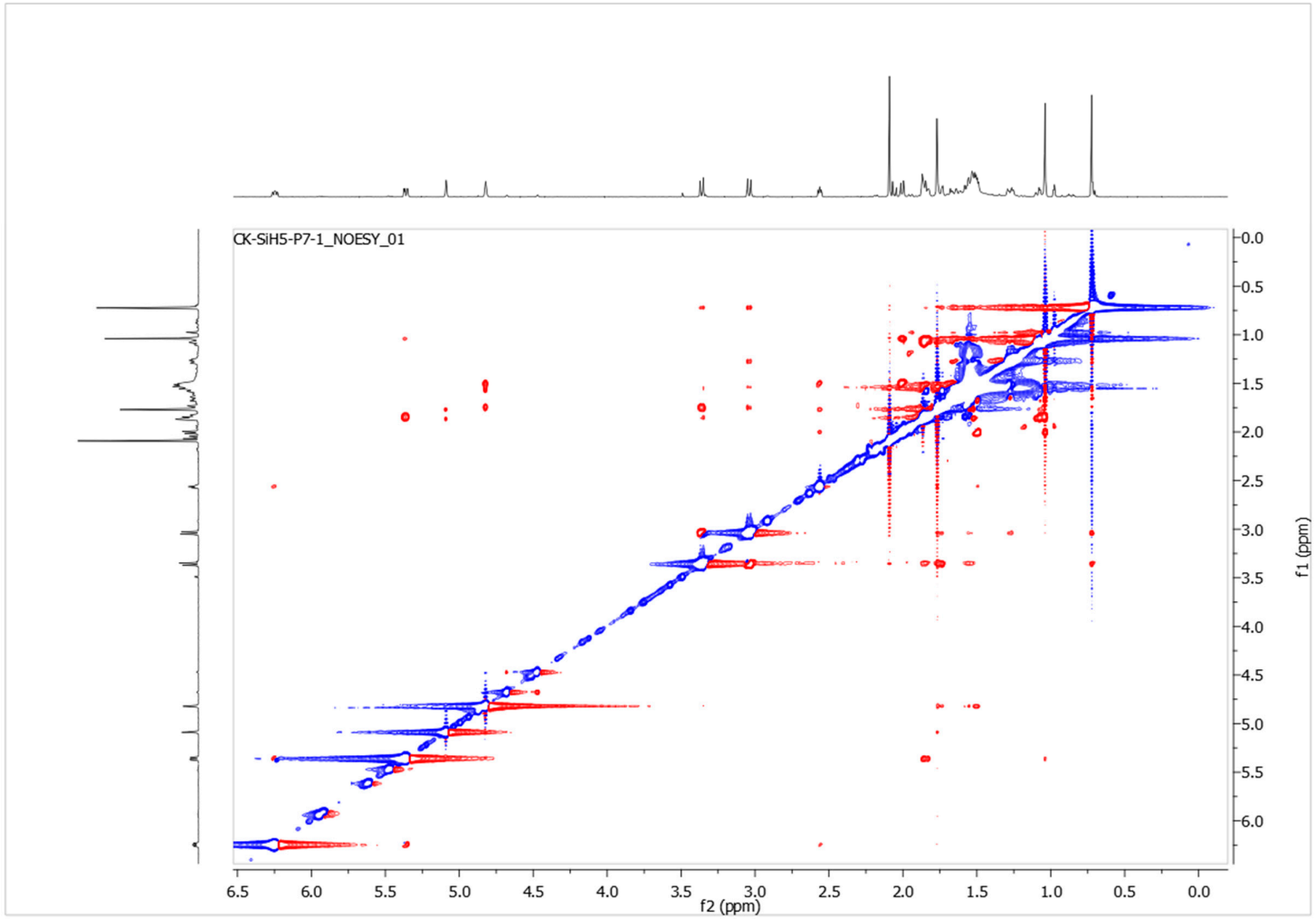
HSQC NMR spectrum of **4** in CD_3OD (500MHz)

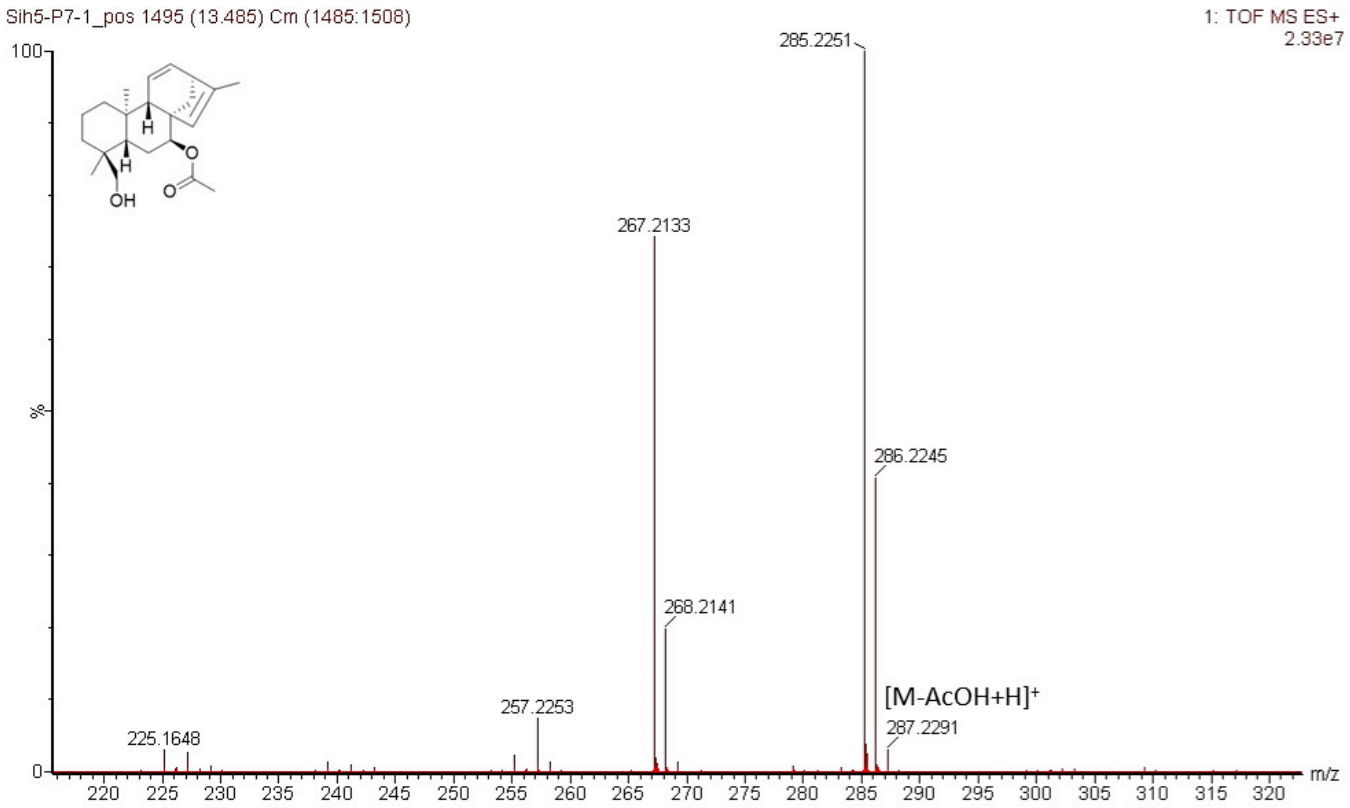


HMBC NMR spectrum of **4** in CD_3OD (500MHz)



NOESY NMR spectrum of **4** in CD_3OD (500MHz)




Sih5-P7-1_pos 1495 (13.485) Cm (1485:1508)
1: TOF MS ES+
2.33e7
100
%
0
285.2251
267.2133
286.2245
268.2141
257.2253
225.1648
[M-AcOH+H]+
287.2291
m/z
220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320
H
H
OH
O
O