

Supporting Information

NMR Data (400 MHz, basic frequency, CDCl₃) for the paper:

Twilight Zone Sponges from Guam Yield Theonellin Isocyanate and Psammaplysins I and J

By

Anthony D. Wright,^{¥,*} Peter J. Schupp,^{§,⊥} Jan-Philipp Schrör,[§] Anna Engemann,[§] Sven Rohde,[§] Dovi Kelman,[¥] Nicole de Voogd,^{||} Anthony Carroll,^Δ and Cherie A. Motti[○]

[¥]College of Pharmacy, University of Hawaii at Hilo, Hilo, 96720 Hawaii, USA, [§]Marine Laboratory, University of Guam, Mangilao, Guam 96923, [⊥]Institute for Chemistry and Biology of the Marine Environment (ICBM), PO Box 2503, University of Oldenburg, 26111 Oldenburg, ^{||}Netherlands Centre for Biodiversity Naturalis, Leiden, The Netherlands, ^ΔGriffith University, School of Environment, Gold Coast Campus, QLD 4222, [○]Australia, Australian Institute of Marine Science, PMB no. 3, Townsville MC, Townsville, QLD 4810, Australia

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***Suberea* sp.**



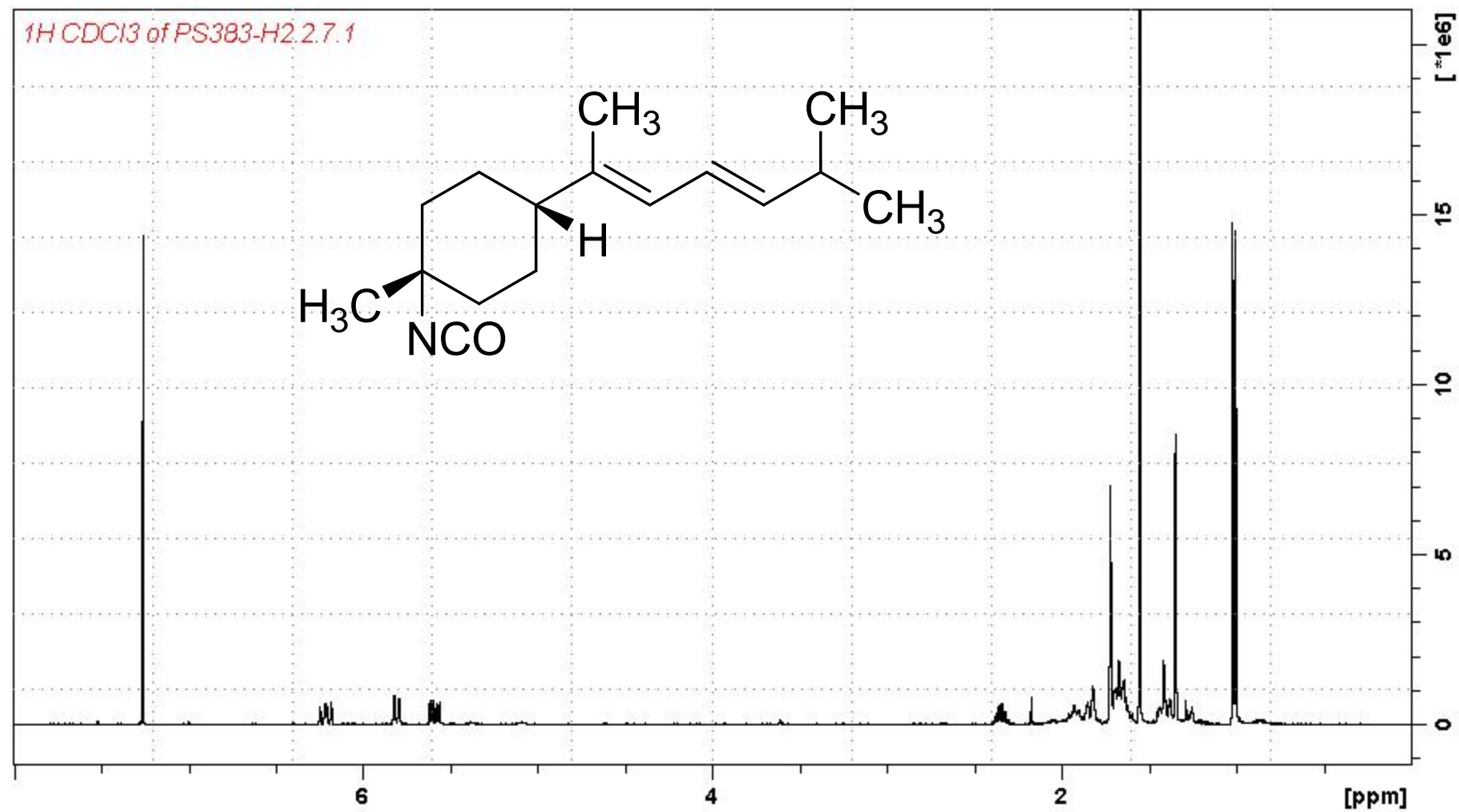
***Rhaphoxya* sp.**

Table S1. ^1H (400 MHz CDCl_3) and ^{13}C NMR(100 MHz CDCl_3) Spectroscopic Data for **3**, **4** and **10**^a

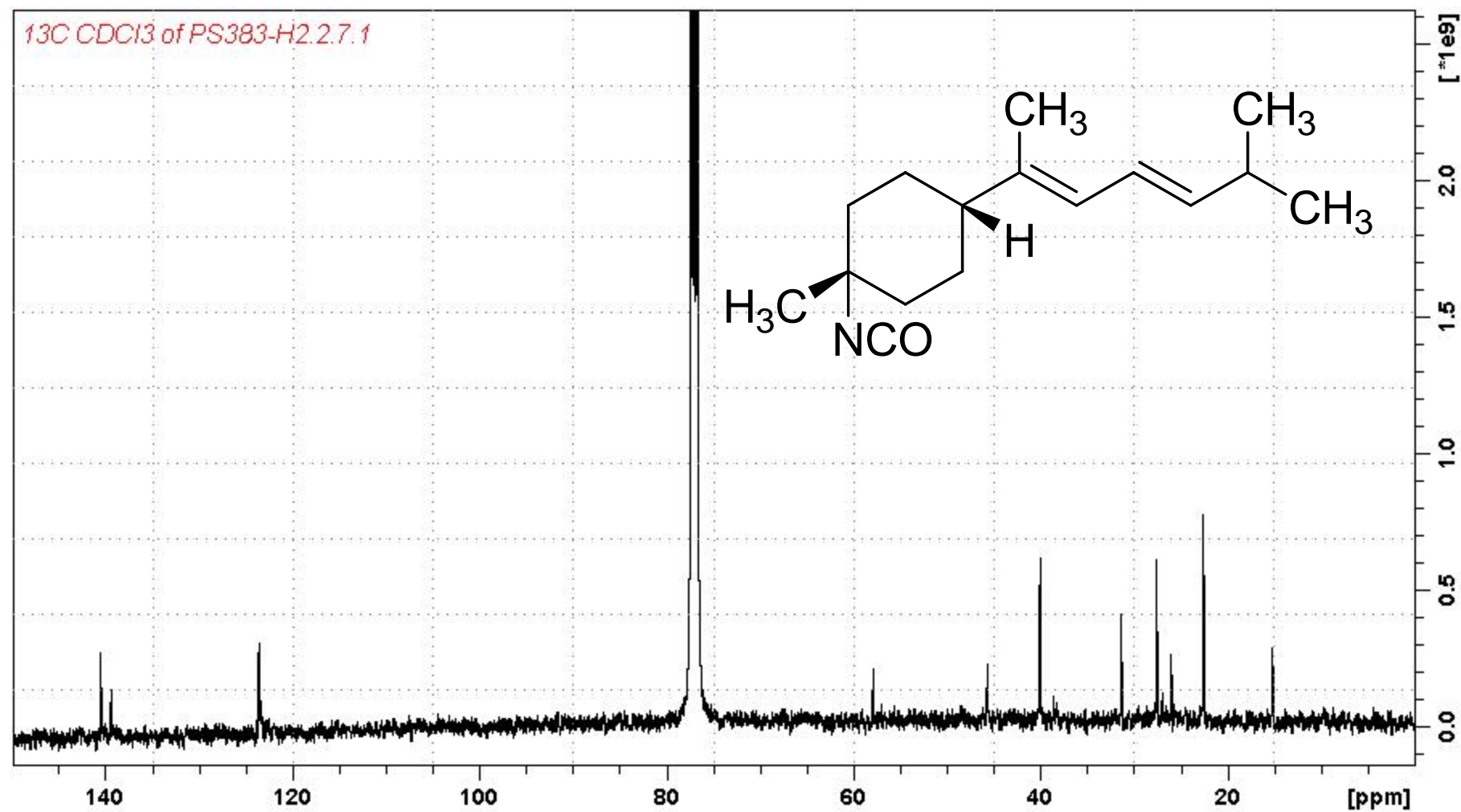
No.	δ_{C} , mult. (3)	δ_{H} (<i>J</i> in Hz) (3)	δ_{C} , mult. (4)	δ_{H} (<i>J</i> in Hz) (4)	δ_{C} , mult. (10)	δ_{H} (<i>J</i> in Hz) (10)
1	26.4, CH_2	1.42, m; 1.71, m	24.1, CH_2	1.30, m; 1.83, m	145.4, CH	7.00, s
2	38.2, CH_2	1.81, m; 1.91, m	31.0, CH_2	2.02, m	103.5, C	
3	56.7, C, t, 4.0 Hz		134.2 C		148.5, C	
4	38.2, CH_2	1.81, m; 1.91, m	120.1, CH	5.38, brm	104.6, C	
5	26.4, CH_2	1.42, m; 1.71, m	27.1, CH_2	1.92, m; 2.11, m	37.1, CH_2	3.09, d, (16.0) 3.38, d, (16.0)
6	44.7, CH	1.97, m	43.4, CH	1.72, m	121.3, C	
7	138.6, C		67.1, C		78.8, CH	5.03, s
8	123.8, CH	5.79, brd. (10.7)	39.3, CH_2	1.60, m; 1.70, m	156.7, C	
9	123.4, CH	6.20, ddd, (1.3, 10.7, 15.2)	23.0, CH_2	2.09, m	158.8, C	
10	140.7, CH	5.59, dd, (6.9, 15.2)	123.2, CH	5.09, brt, (6.7)	37.0, CH_2	3.68, m
11	31.4, CH	2.34, dqg, (6.9, 6.7, 6.7)	132.8, C		29.3, CH_2	2.08, m
12	22.5, CH_3	1.00, d, (6.7)	26.1, CH_3	1.70, brs	70.8, CH_2	4.05, t, (5.5)
13	25.1, CH_3	1.43, brs	23.5, CH_3	1.65, brs	151.0, C	
14	15.2, CH_3	1.71, brs	23.7, CH_3	1.35, s	118.0, C	
15	22.5, CH_3	1.01, d, (6.7)	18.0, CH_3	1.63, brs	132.8, CH	
16	152.1, NC		129.7, NCS		138.6, C	
17					132.8, CH	7.34, s
18					118.0, C	
19					34.3, CH_2	2.73, t, (7.0)
20					52.1, CH_2	2.82, t, (7.0)
21					59.0, CH_3	3.67, s
N CH_3					57.0, CH_3	2.44, s
CONH						7.26, s
NH						3.68, s
OH						4.10, s

^aAll assignments are based on interpretation of extensive 1D and 2D NMR measurements

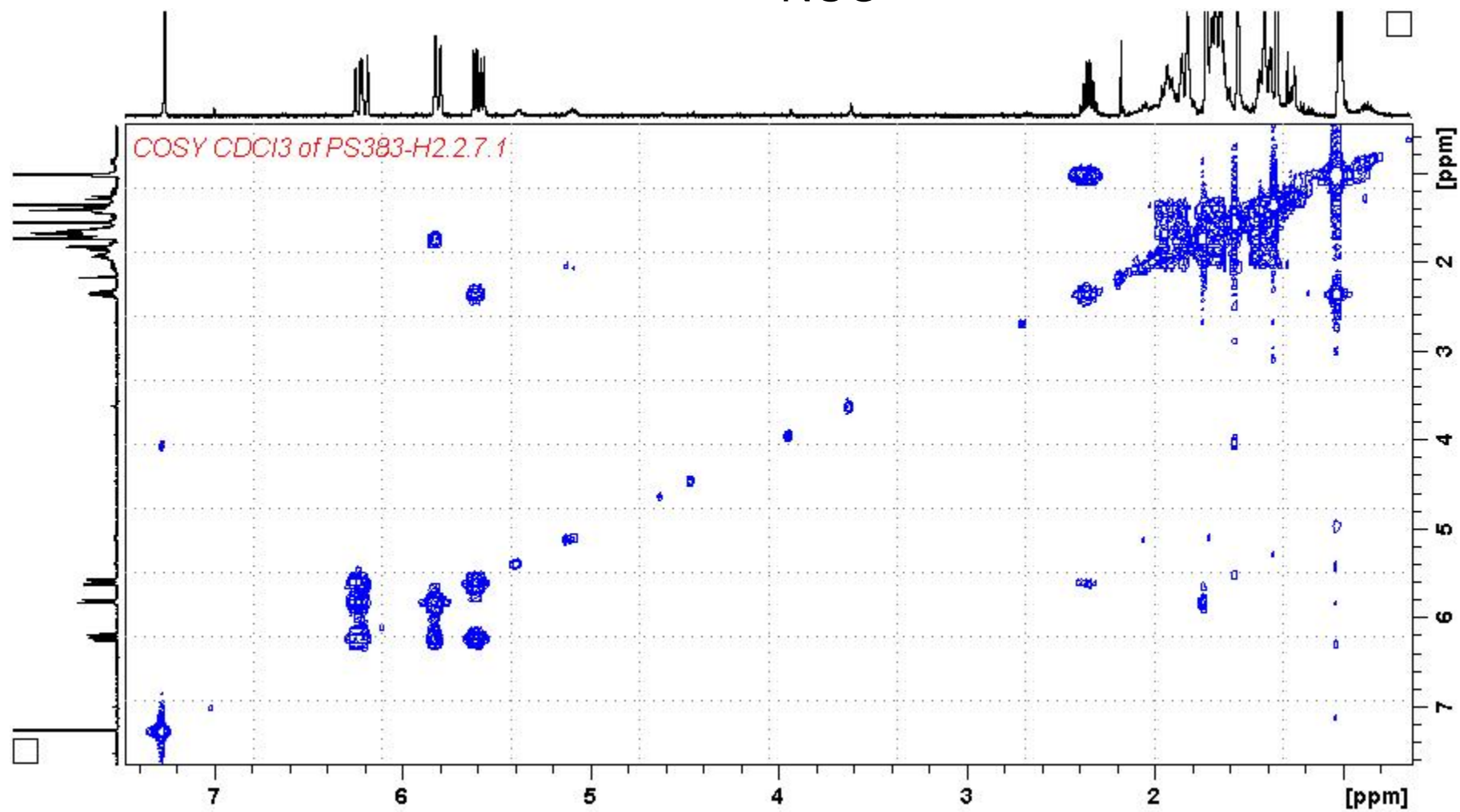
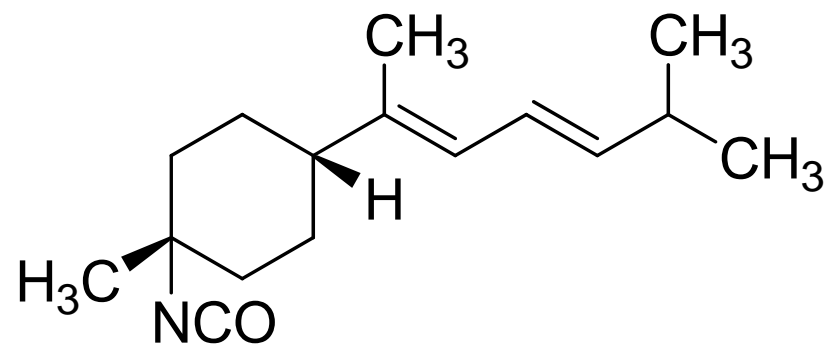
$^1\text{H-NMR}$ spectrum of **1**



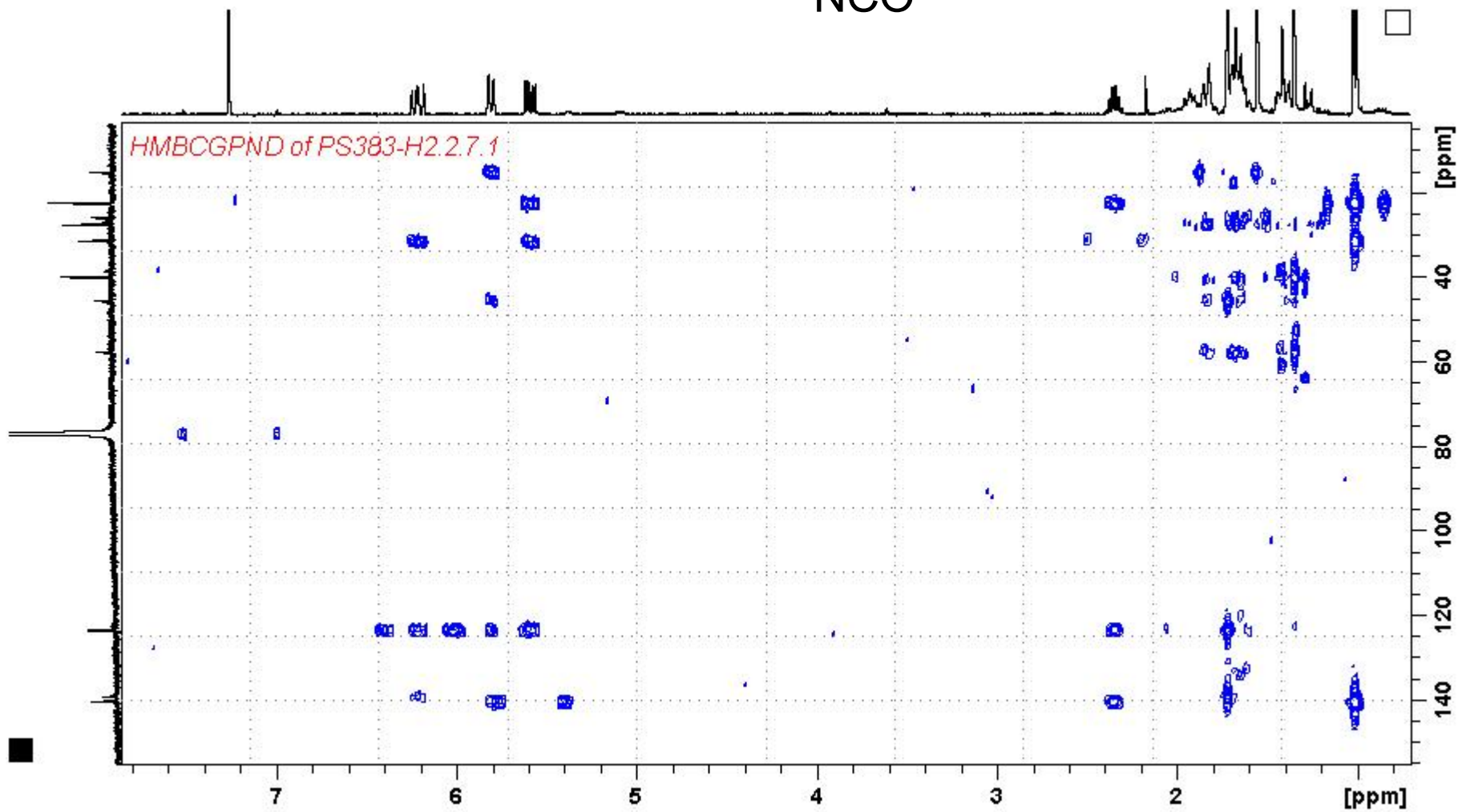
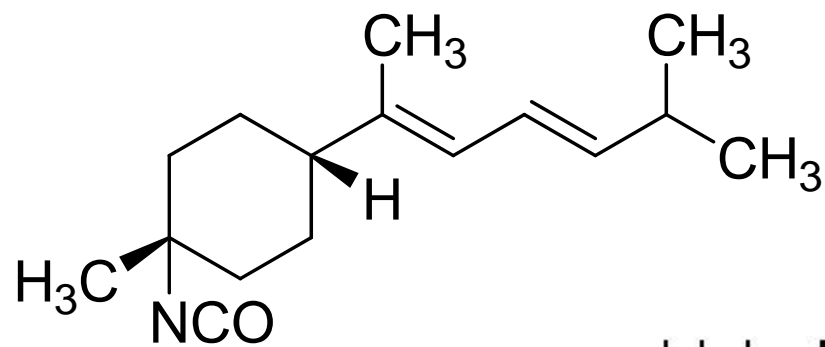
^{13}C -NMR spectrum of **1**



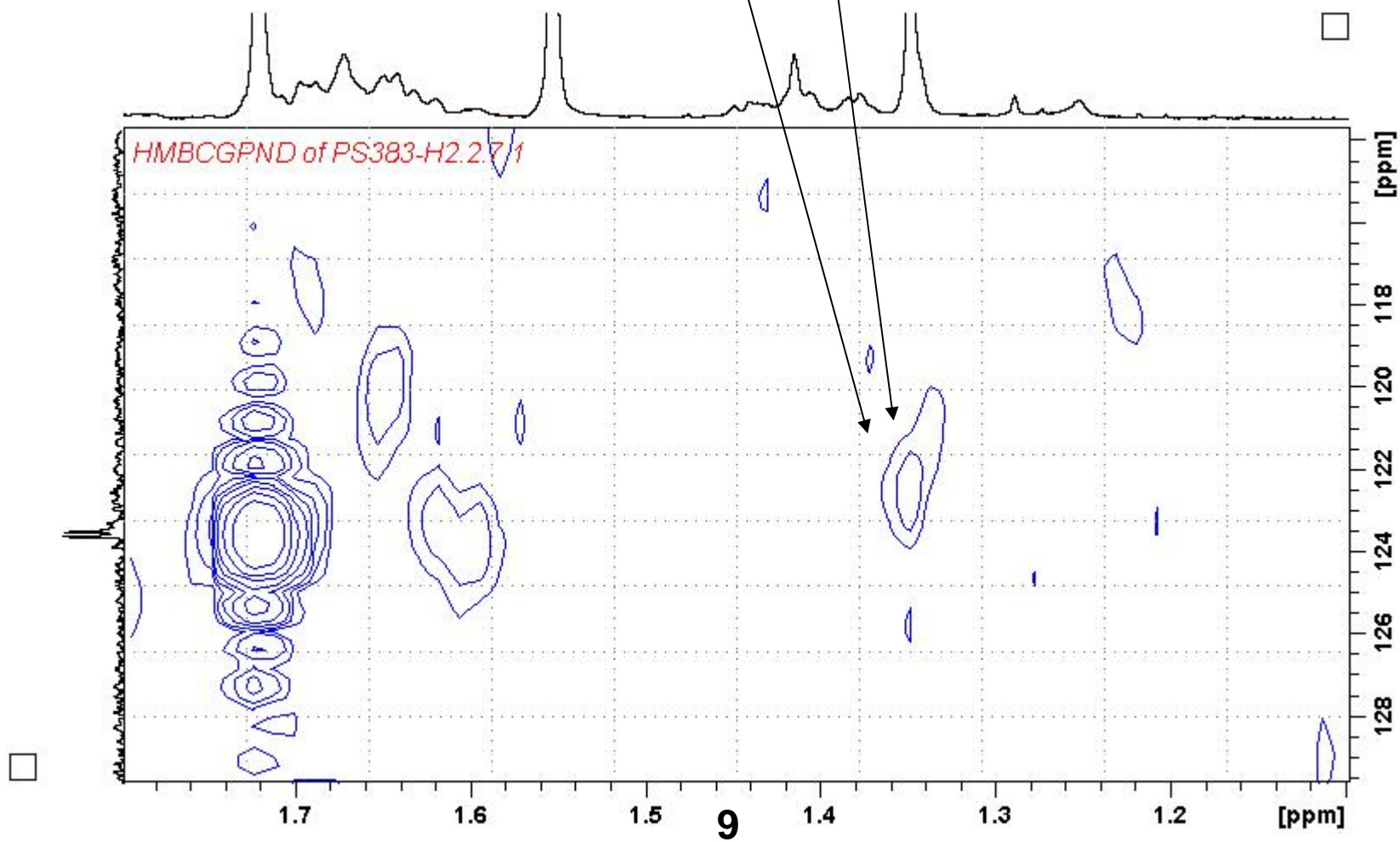
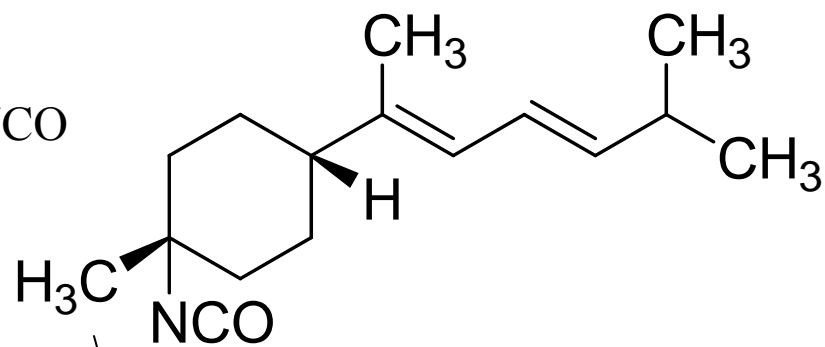
COSY-NMR spectrum of **1**



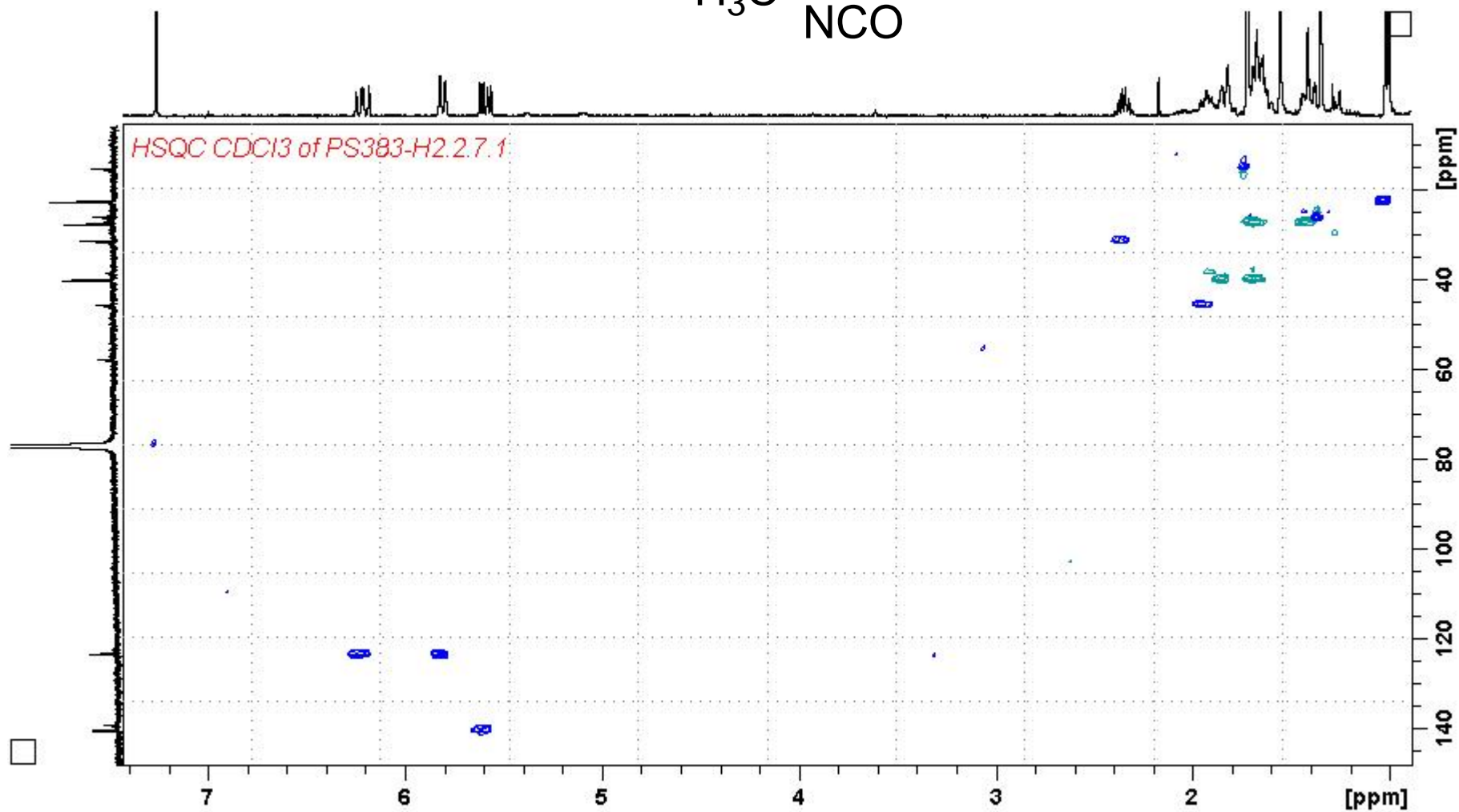
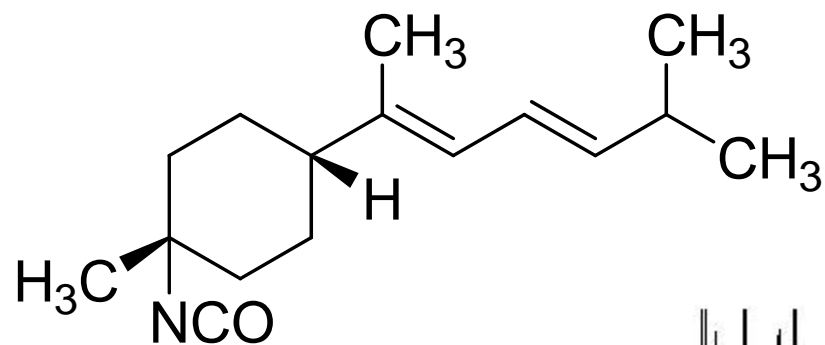
HMBC-NMR spectrum of **1**



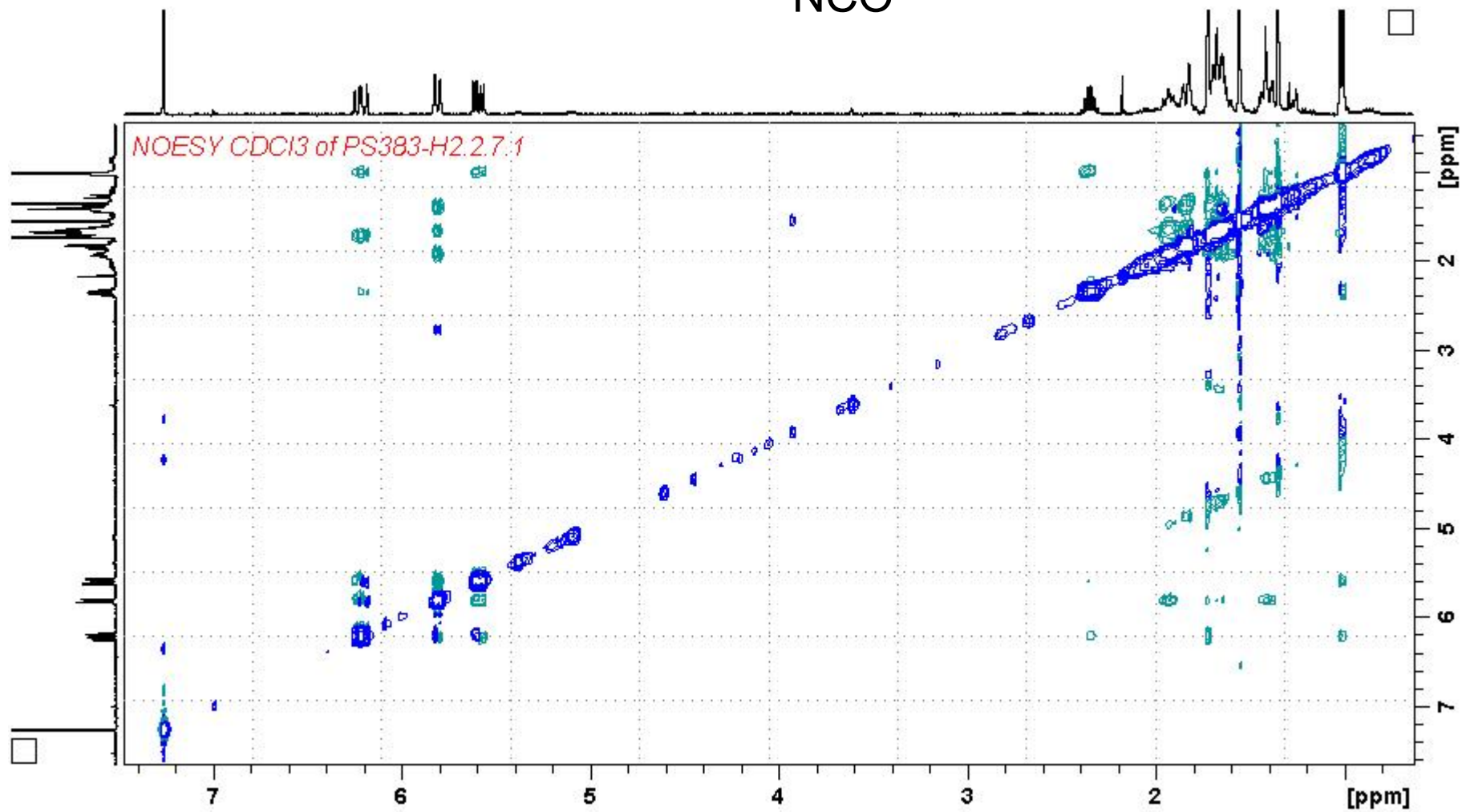
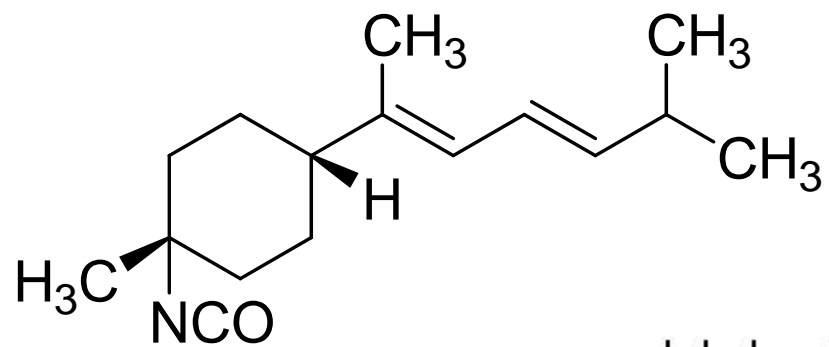
Expansion of HMBC-NMR spectrum of **1**
showing CH₃ correlation to the C of the NCO



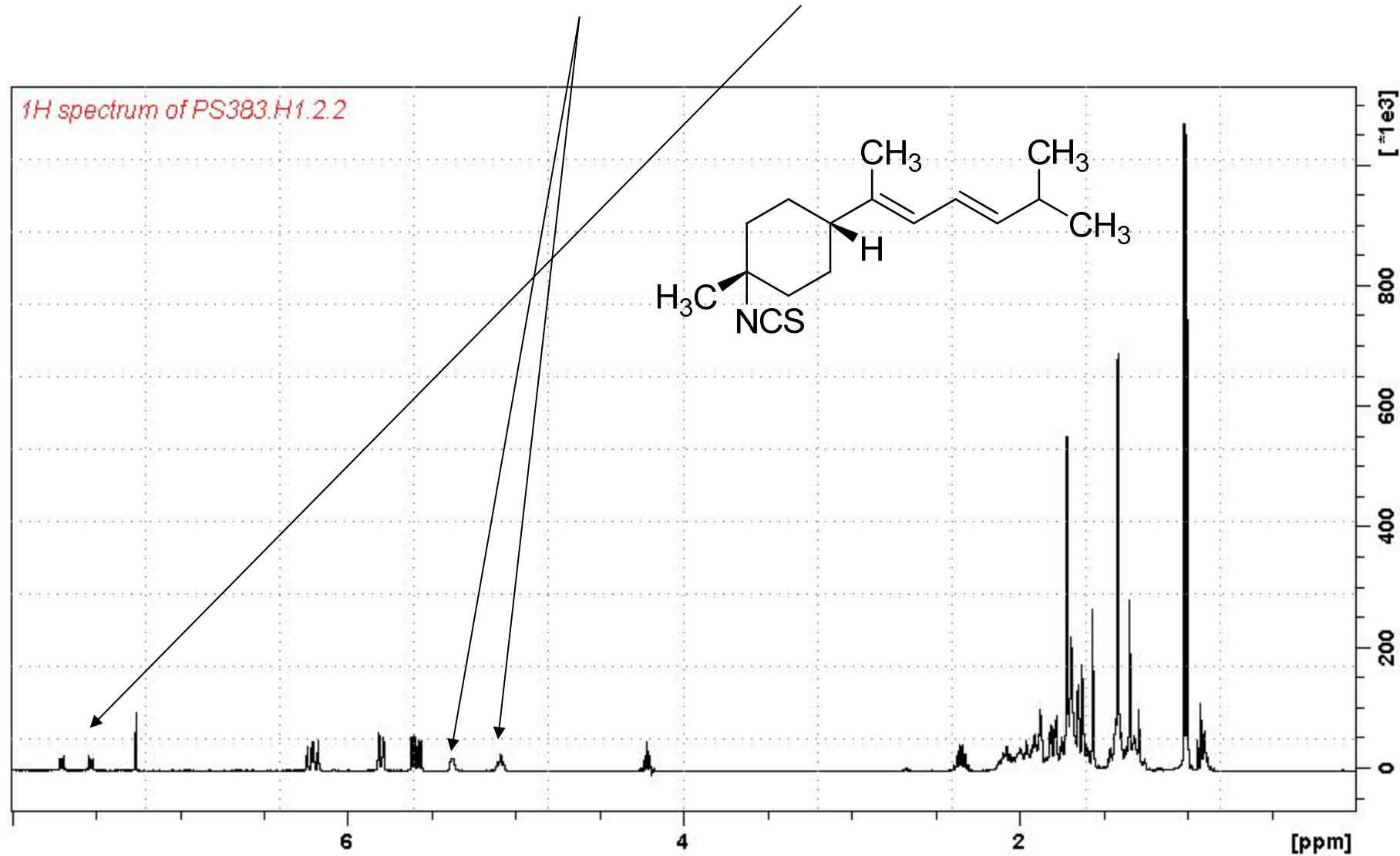
HSQC-NMR spectrum of **1**



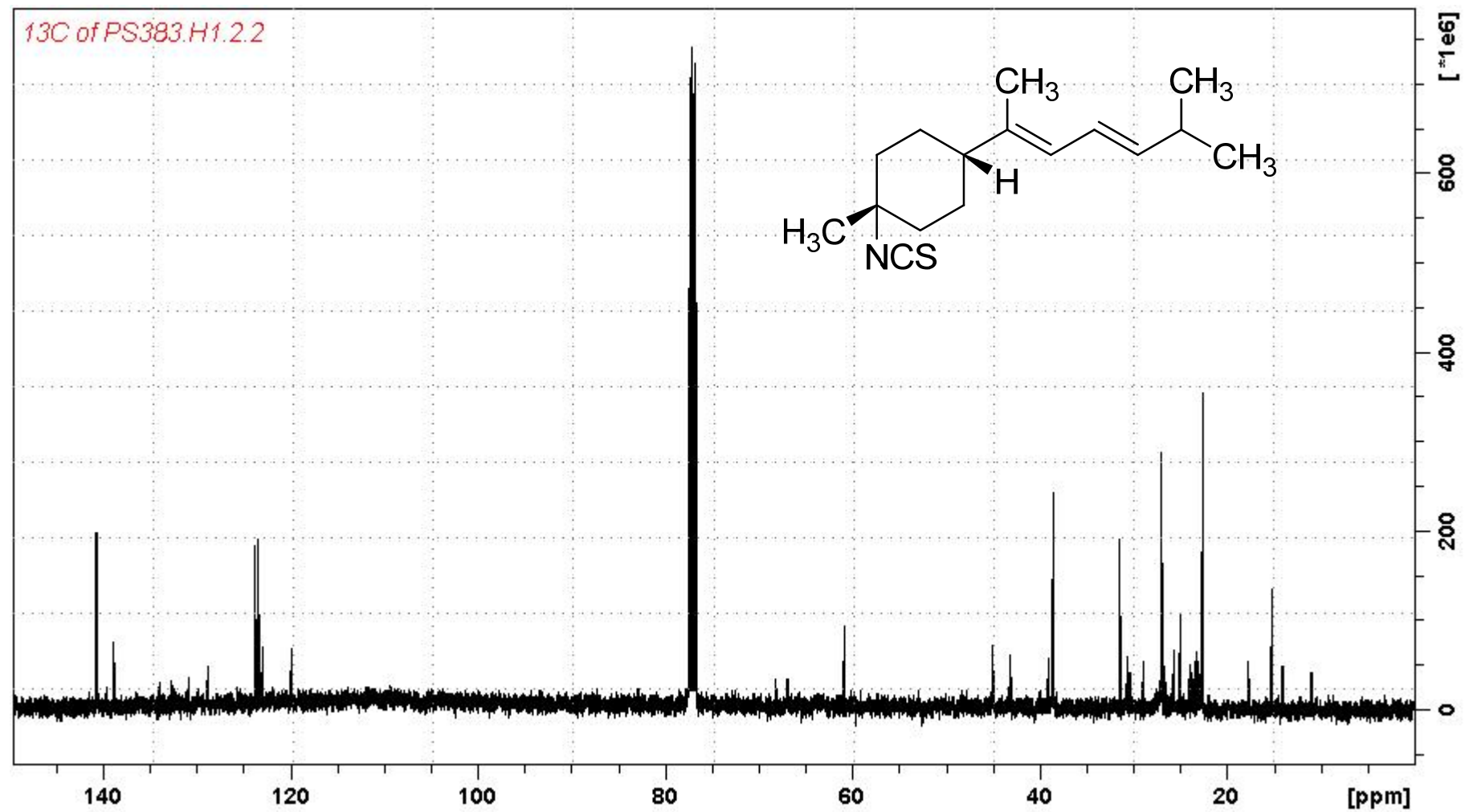
NOESY-NMR spectrum of **1**



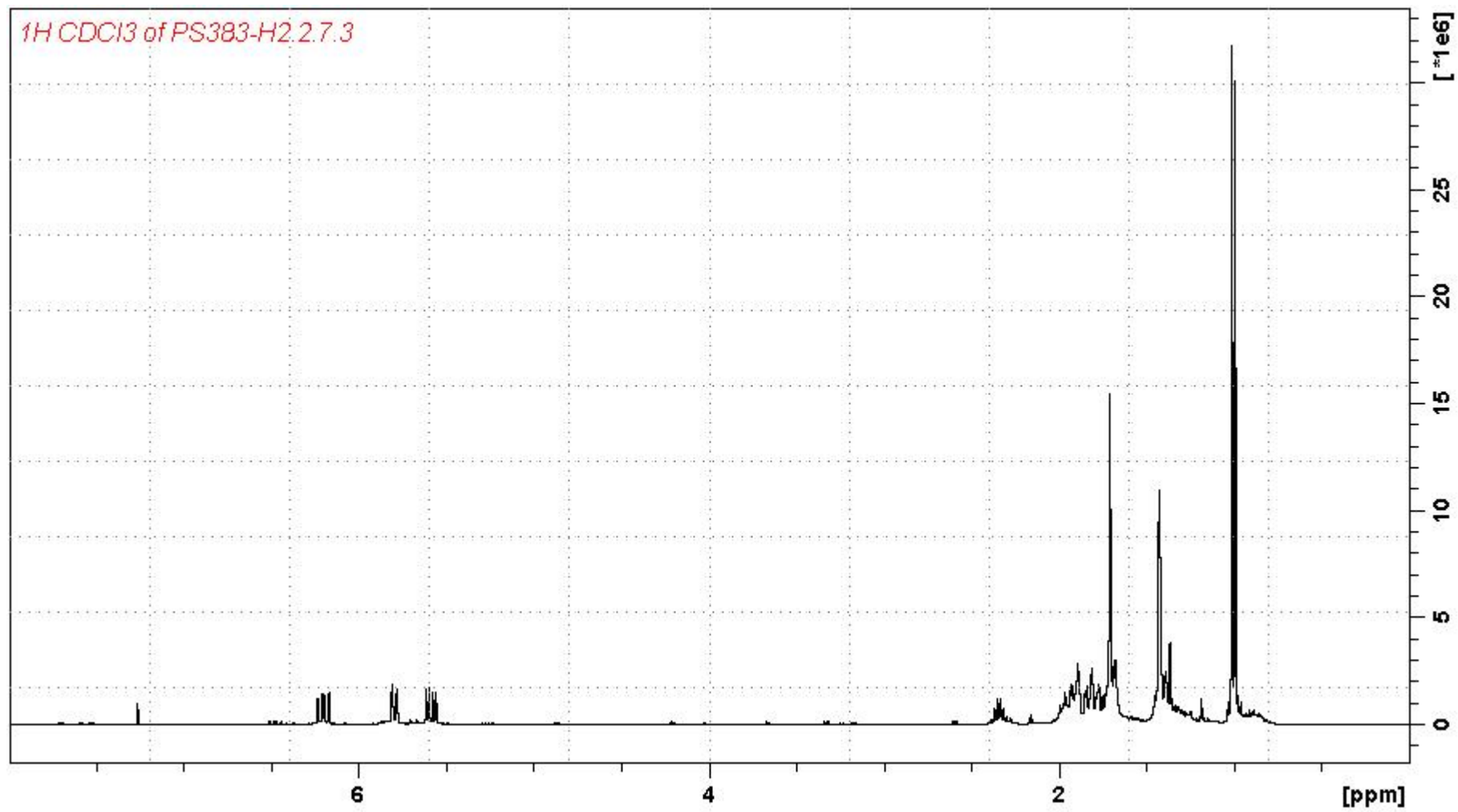
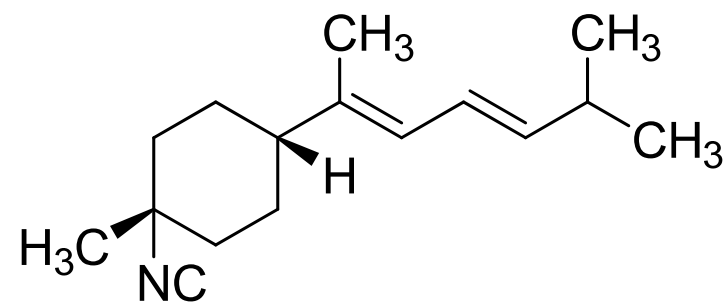
^1H -NMR spectrum of **2** with traces of **4** and some phthalate



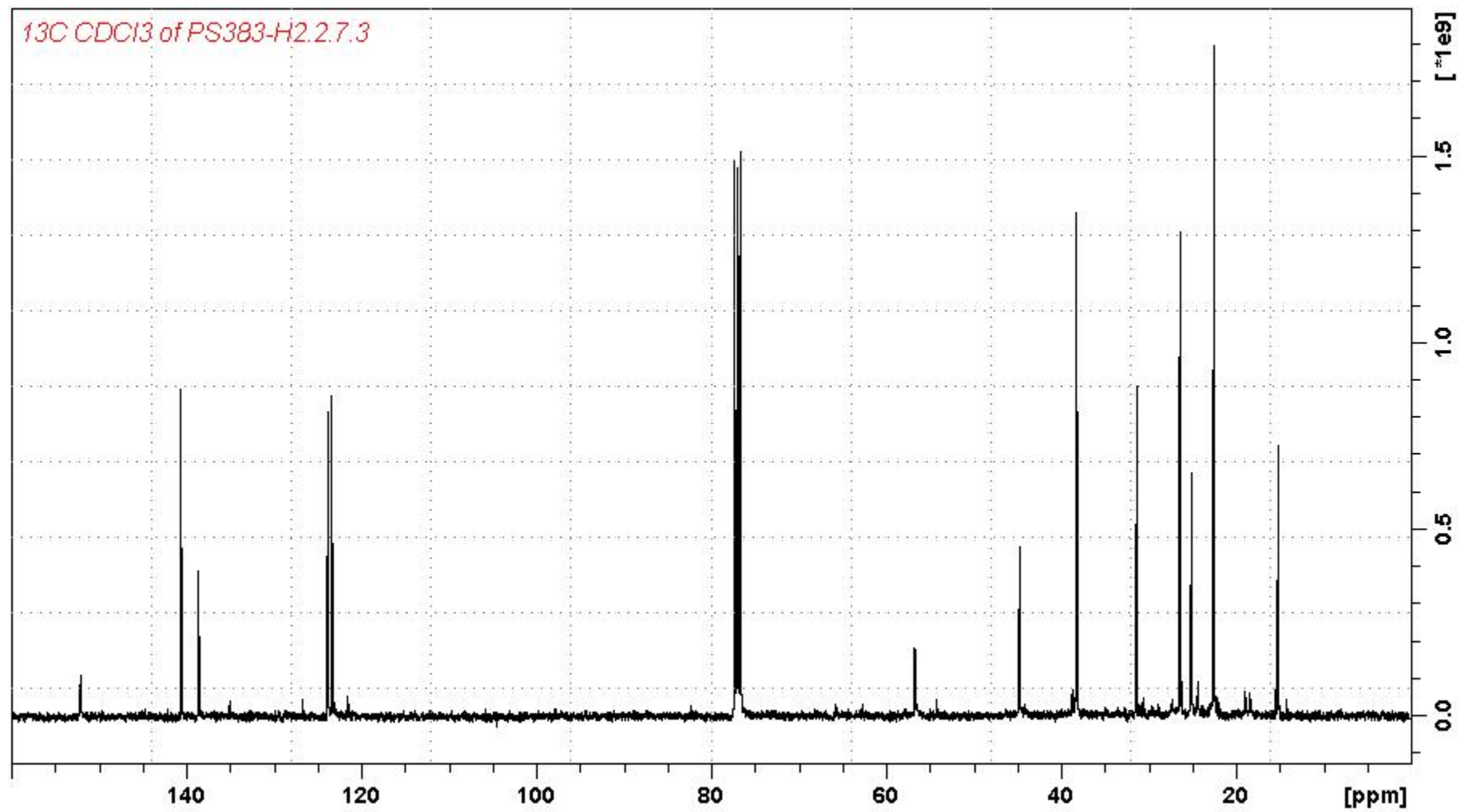
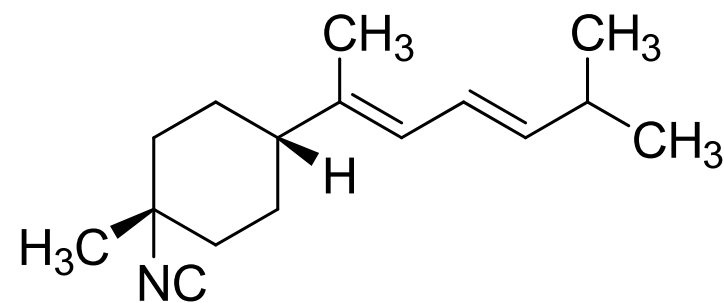
^{13}C -NMR spectrum of **2** with traces of **4** and some phthalate



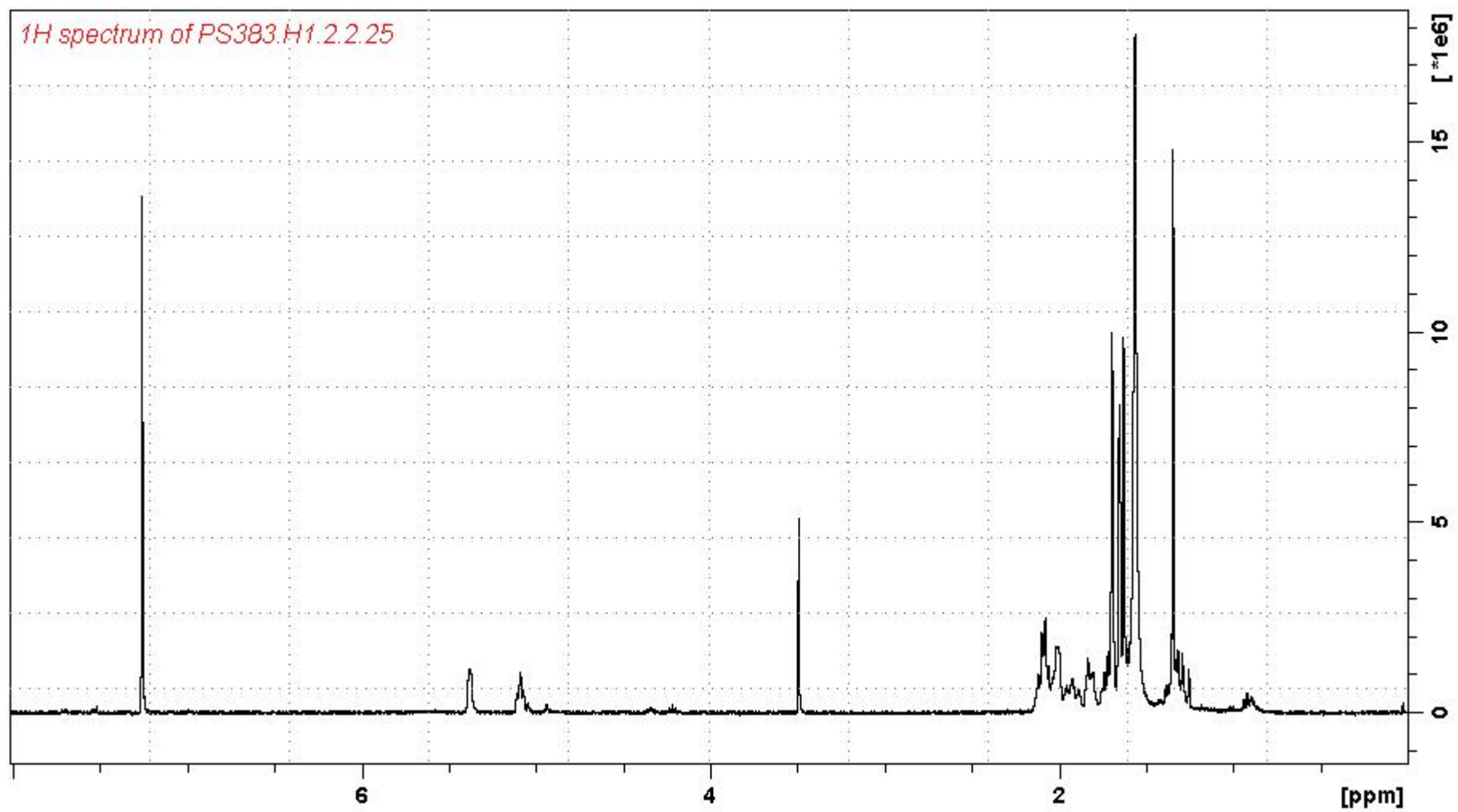
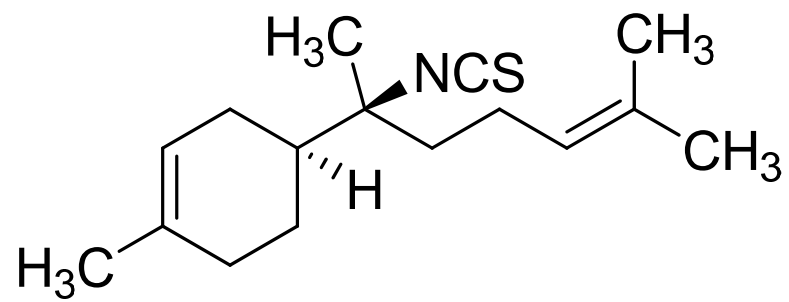
^1H -NMR spectrum of **3**



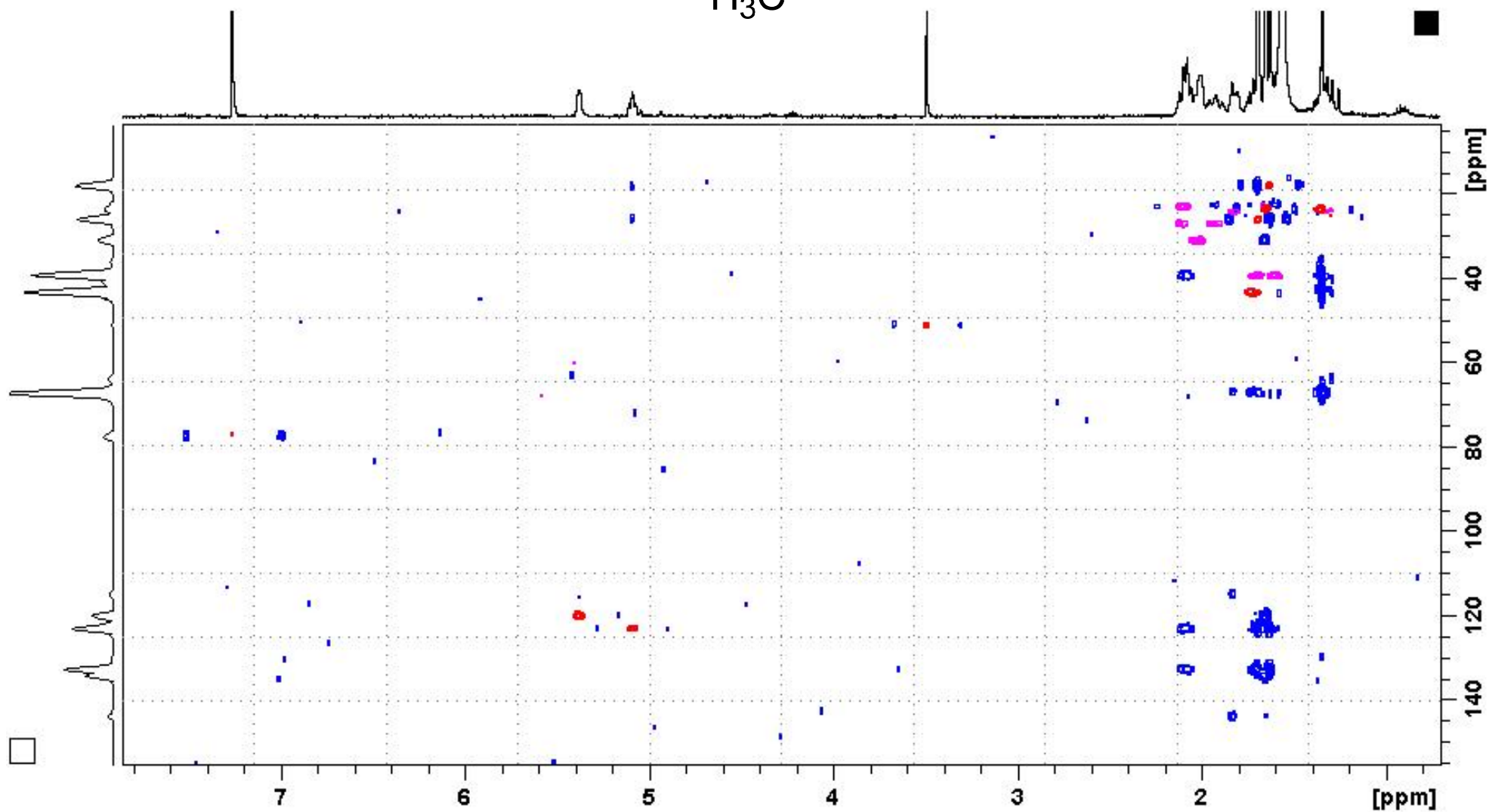
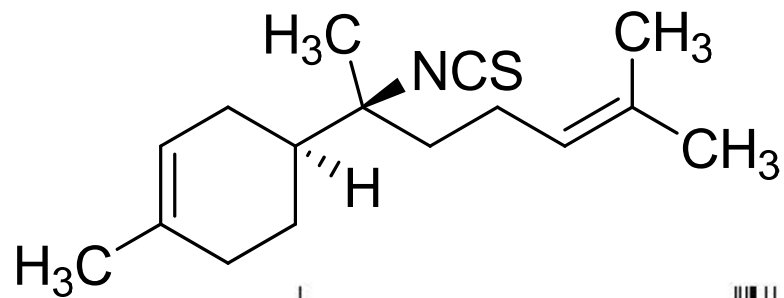
^{13}C -NMR spectrum of **3**



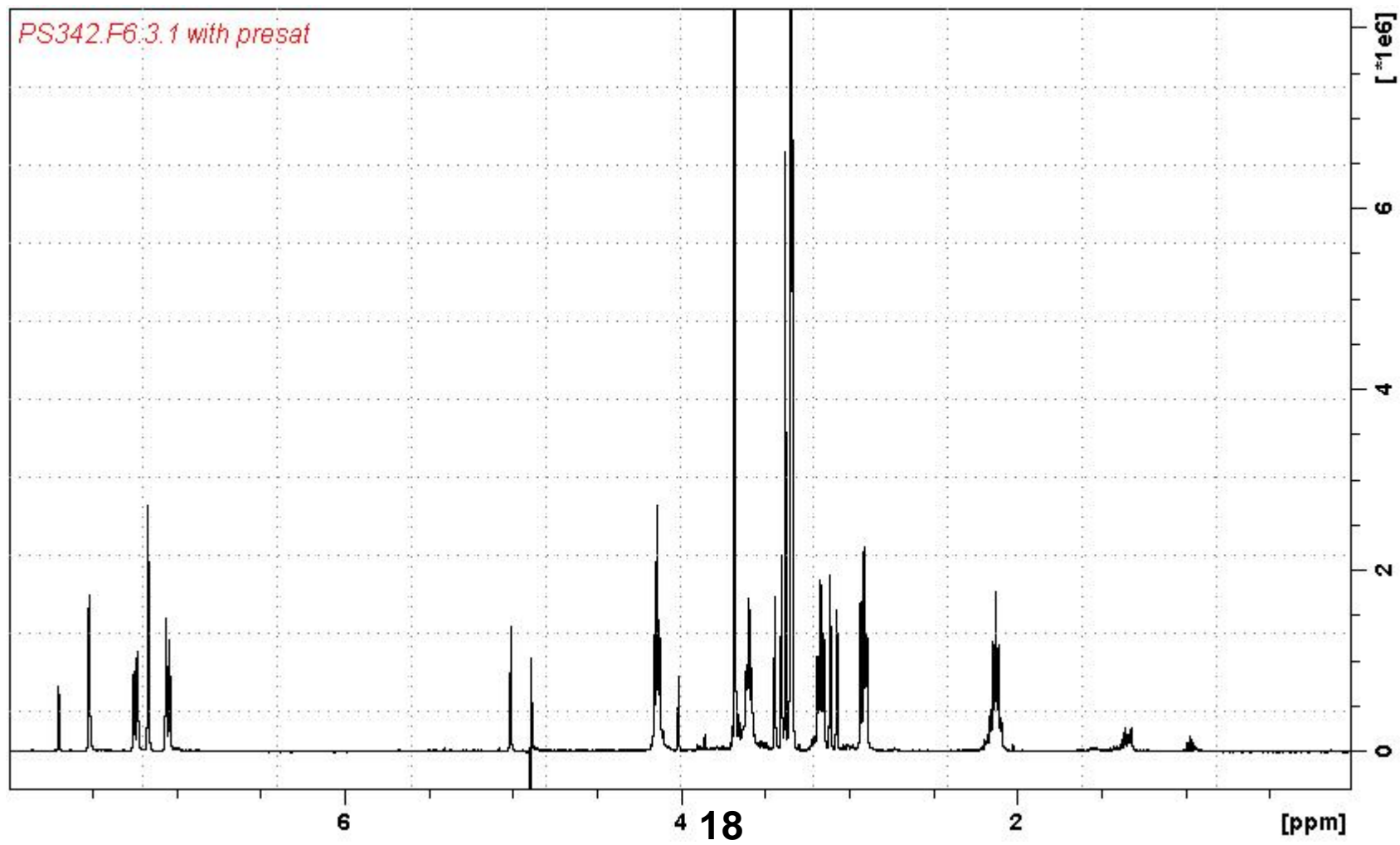
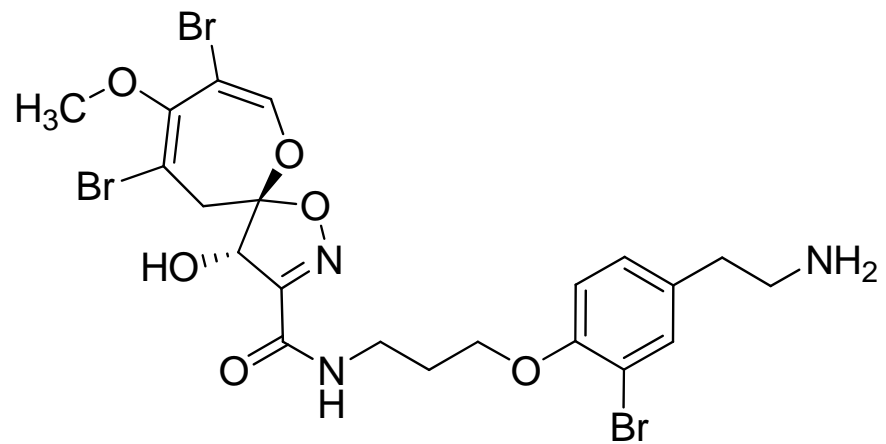
^1H -NMR spectrum of **4**



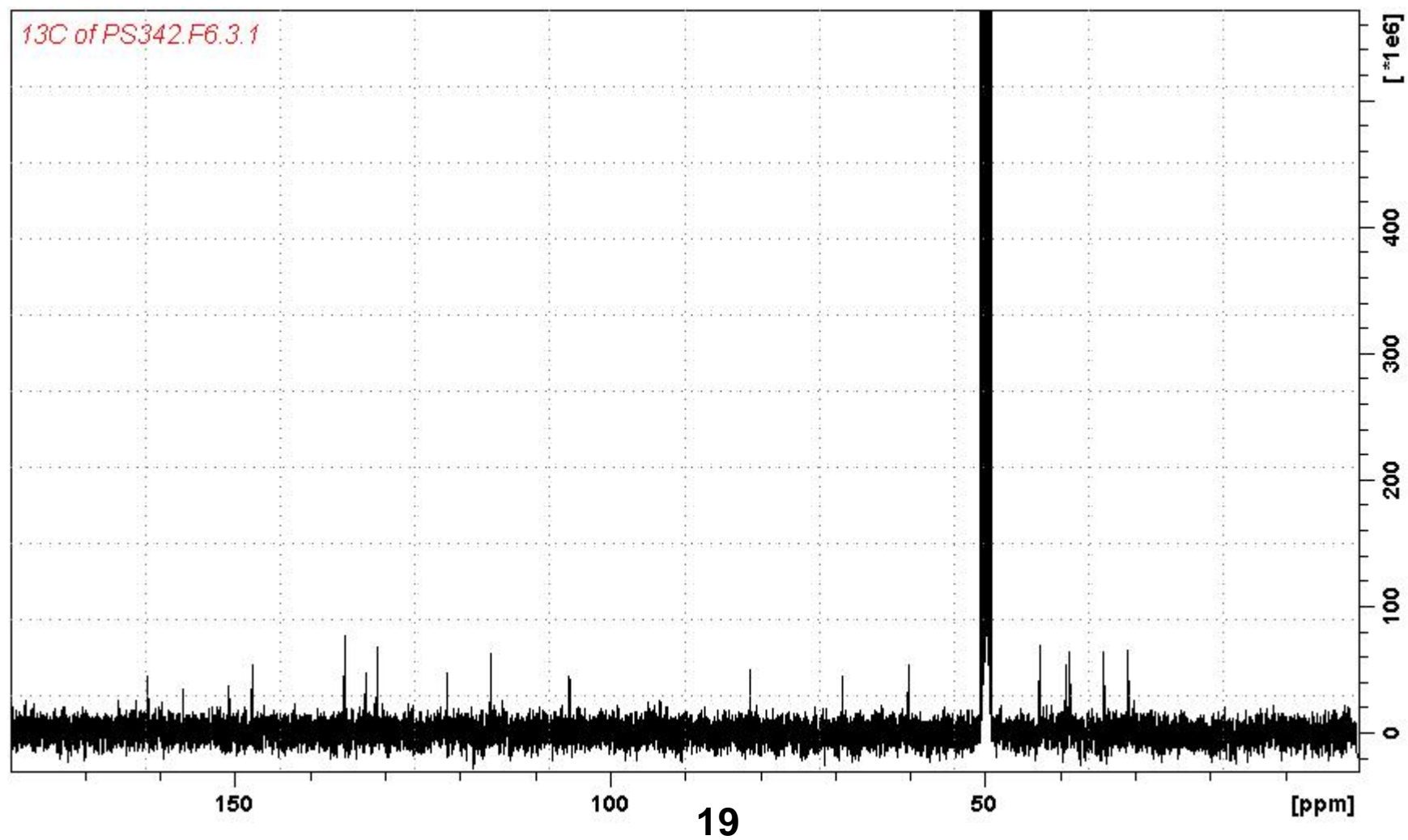
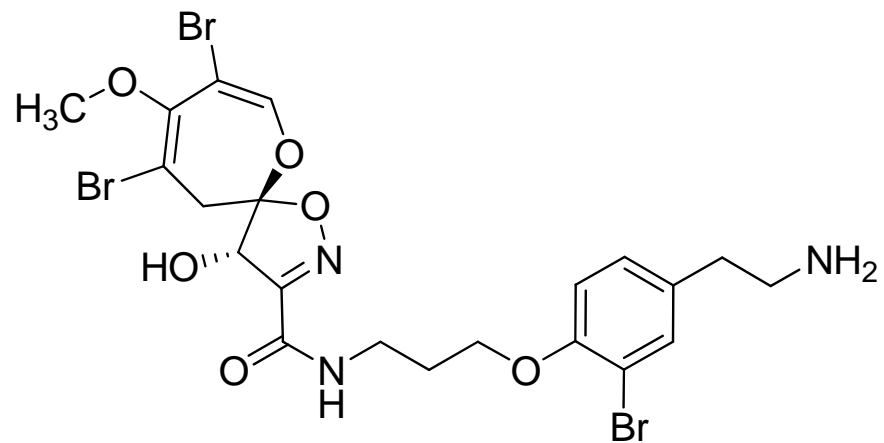
Combined HSQC (Red and purple) and
HMBC (Blue)-NMR spectra of **4**



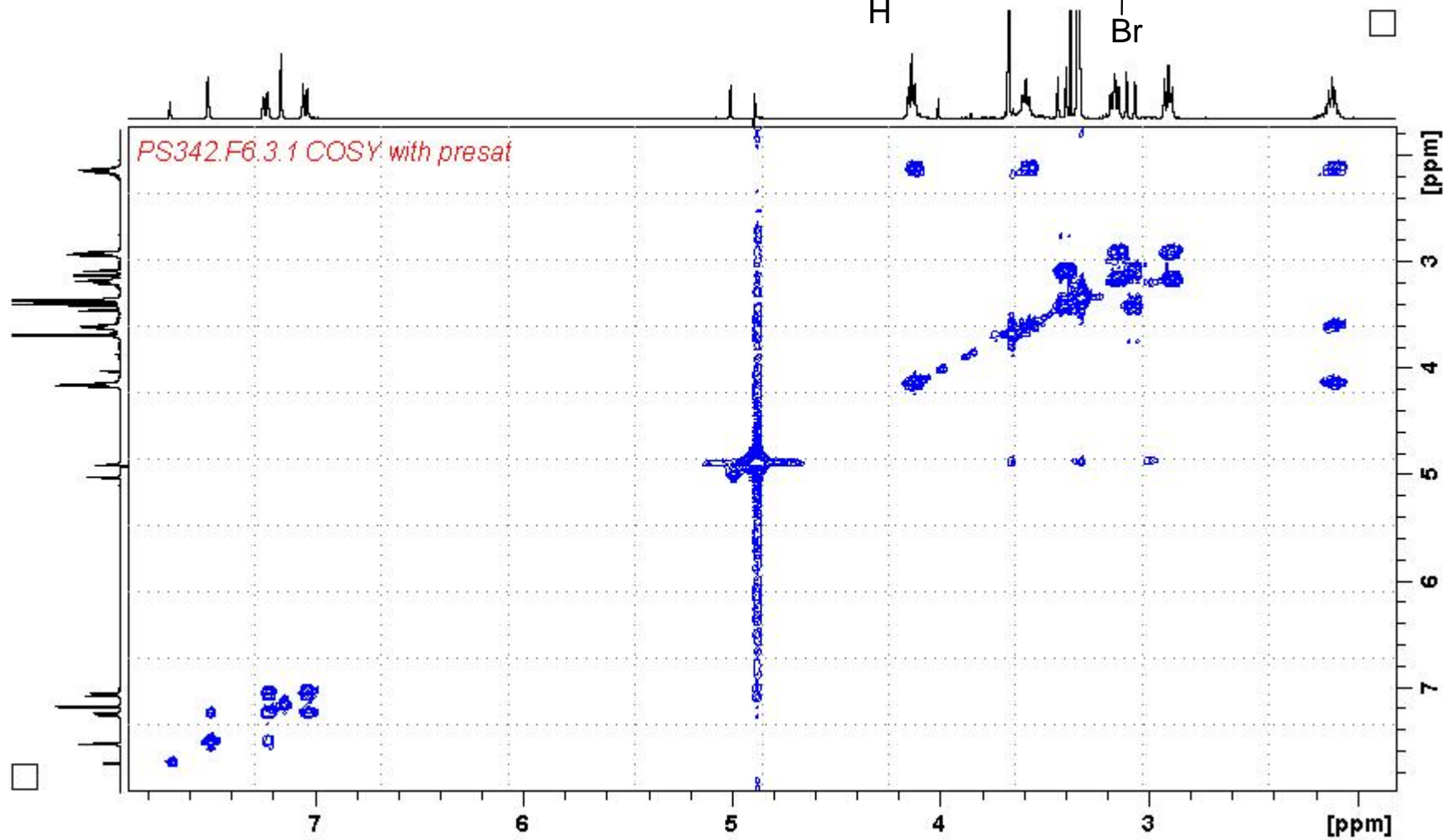
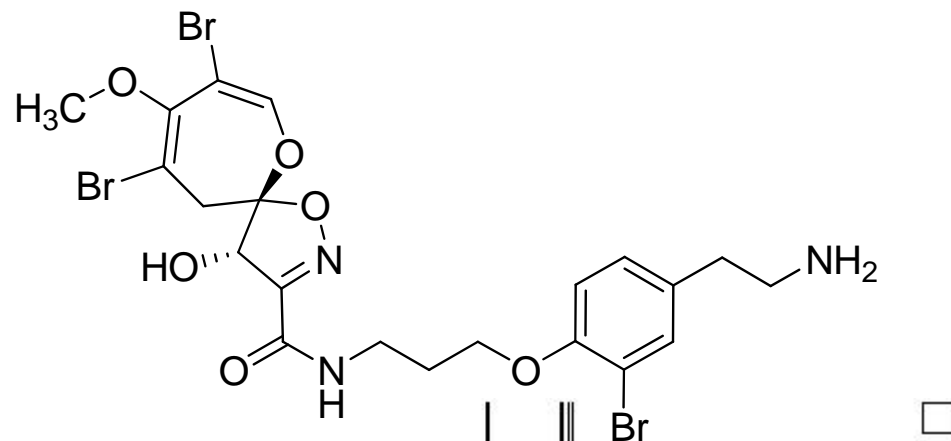
$^1\text{H-NMR}$ spectrum of **5**



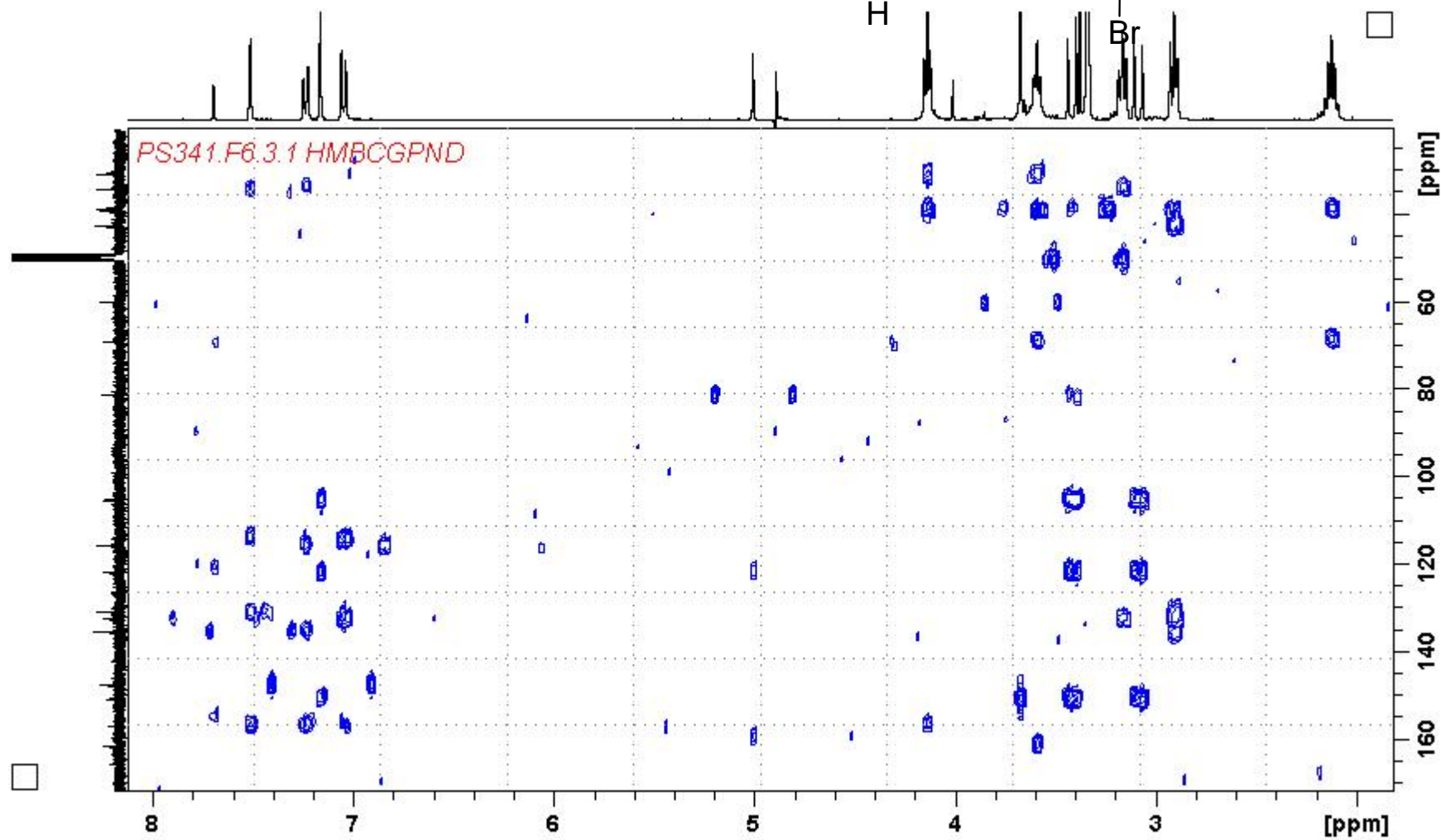
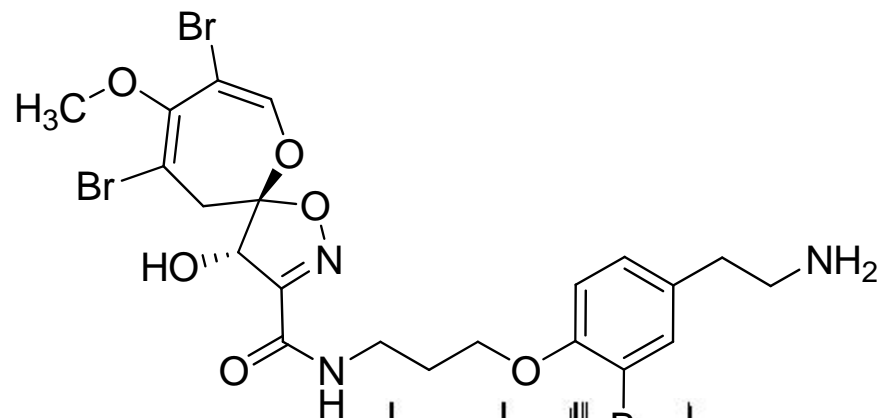
^{13}C -NMR spectrum of **5**



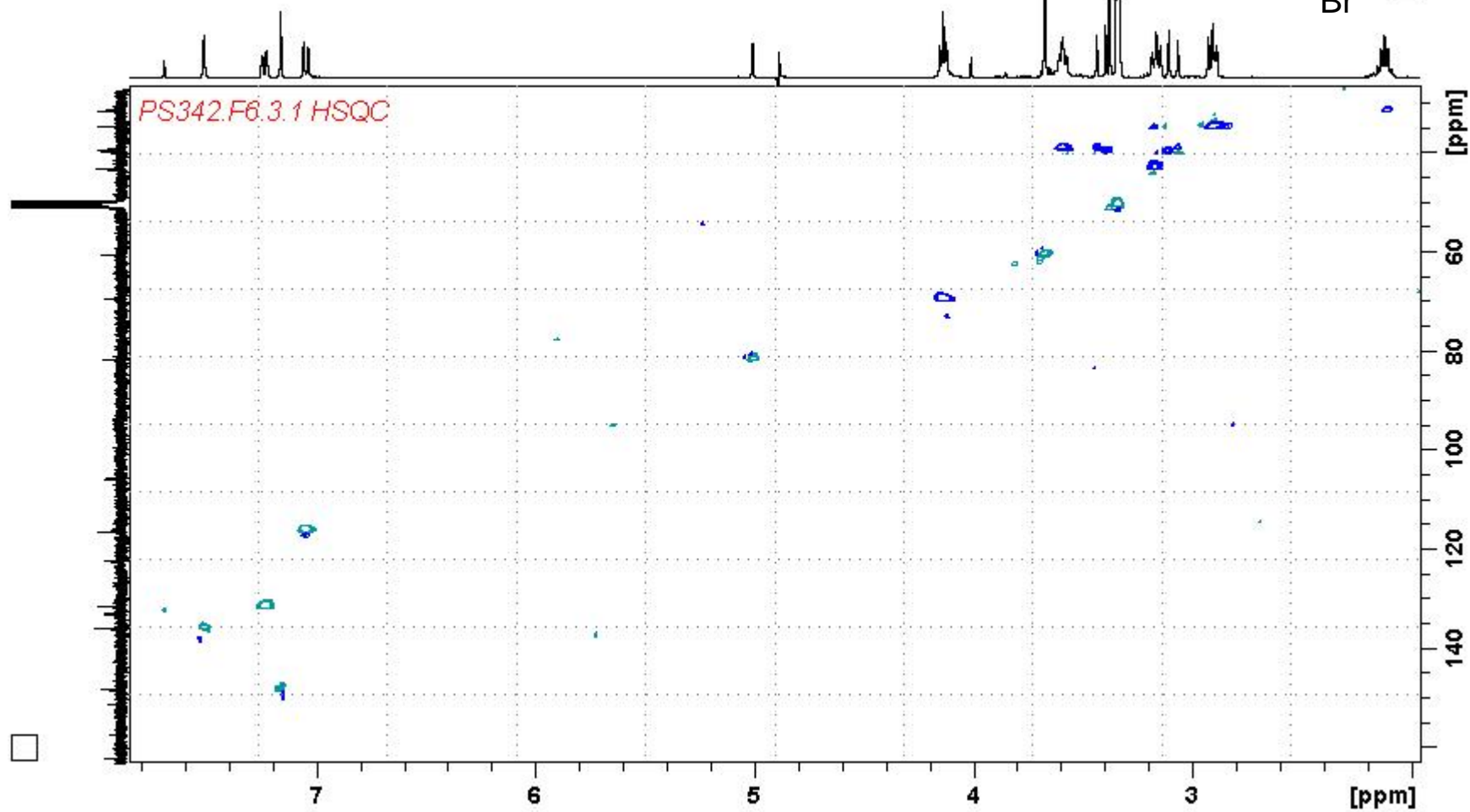
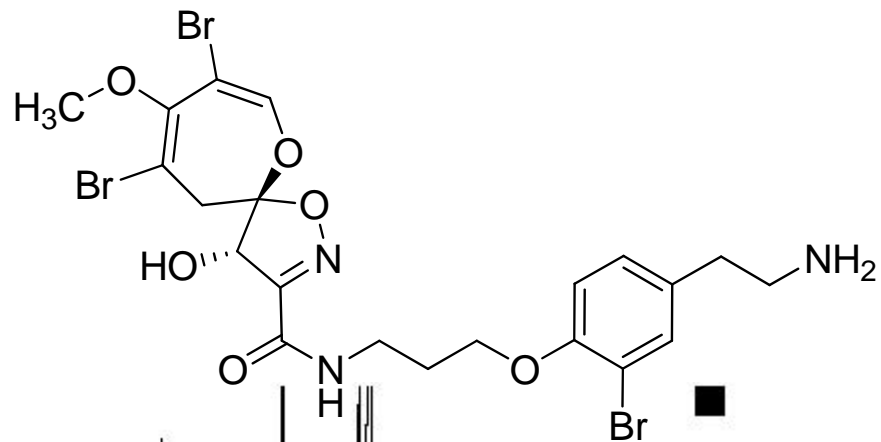
COSY-NMR spectrum of **5**



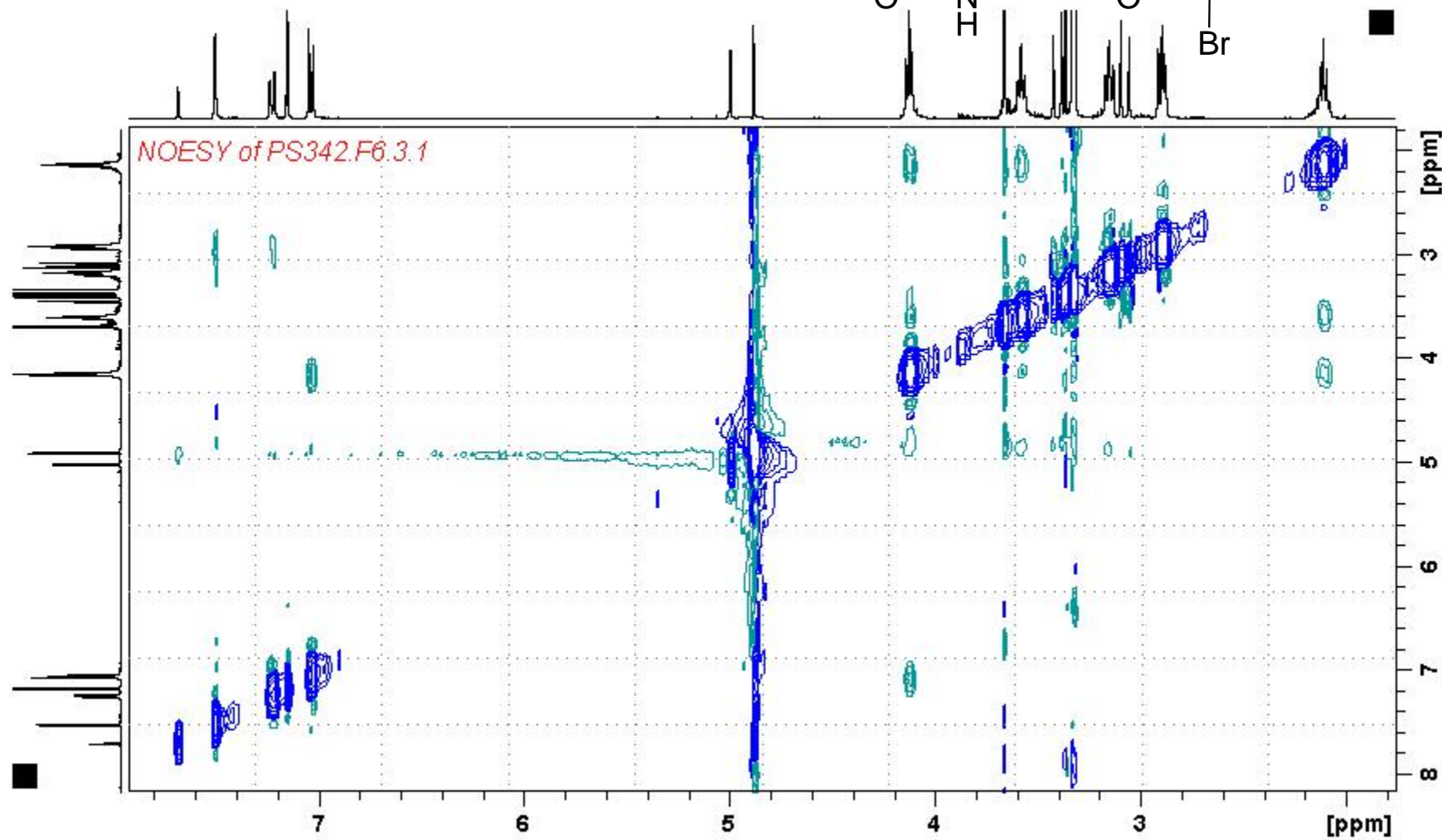
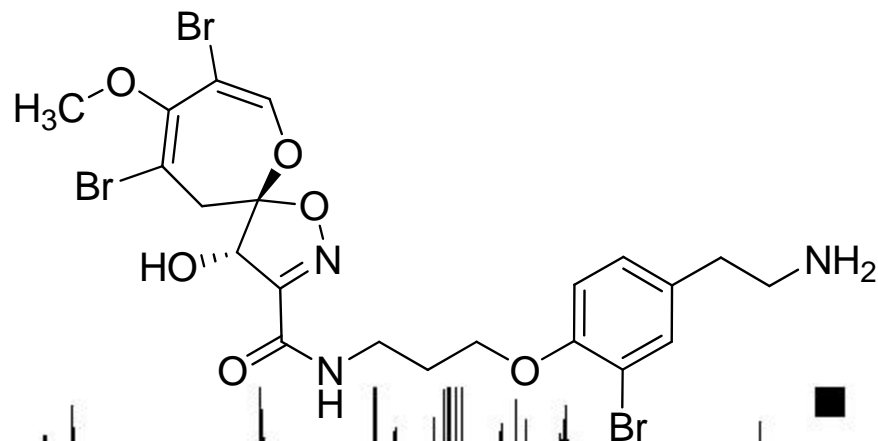
HMBC-NMR spectrum of **5**



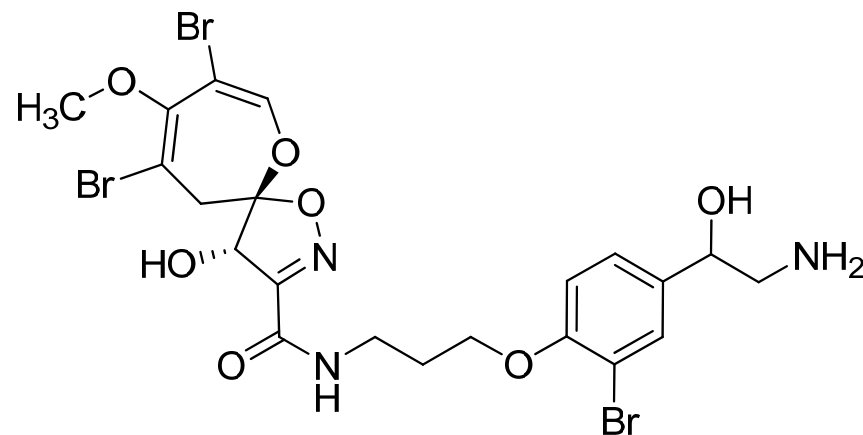
HSQC-NMR spectrum of **5**



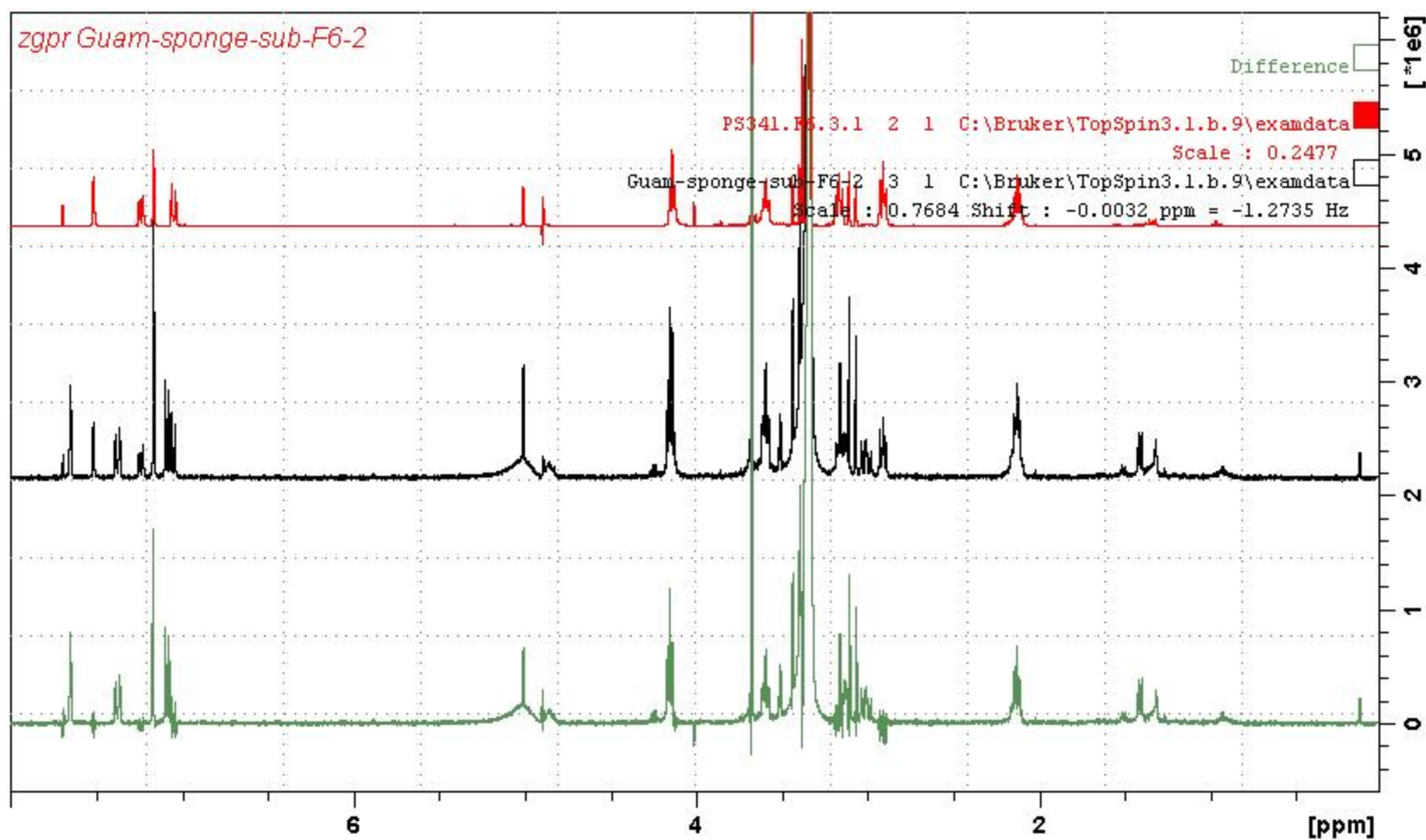
NOESY-NMR spectrum of **5**



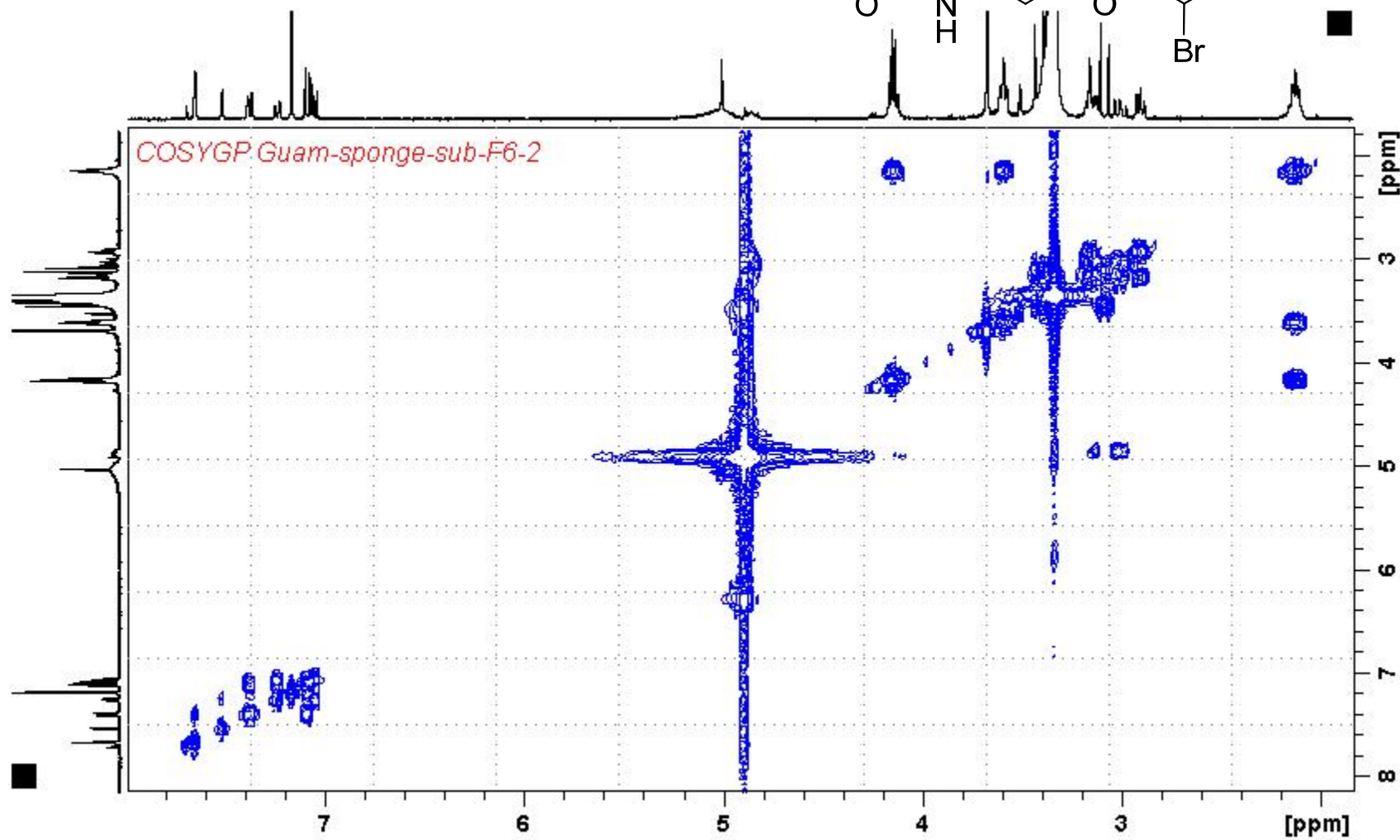
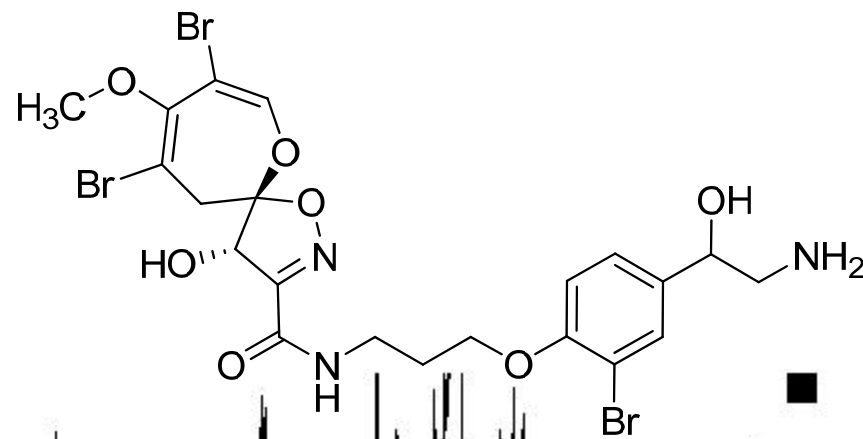
$^1\text{H-NMR}$ spectra of 3:2 mixture of **5** and **6** (Black), $^1\text{H-NMR}$ of **5** (Red), and their difference spectra (Green). Hence the green spectrum is the $^1\text{H-NMR}$ spectrum of **6**



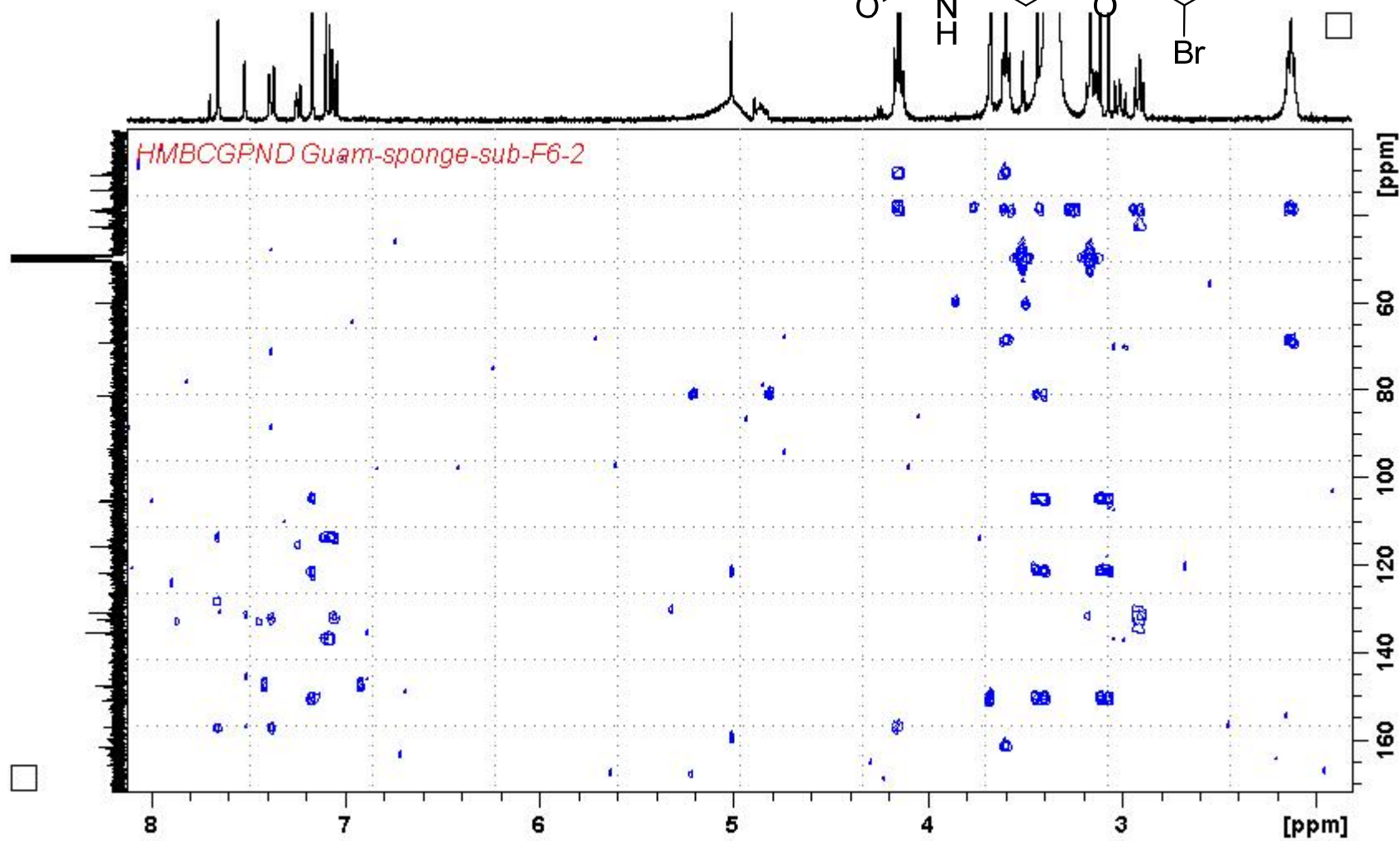
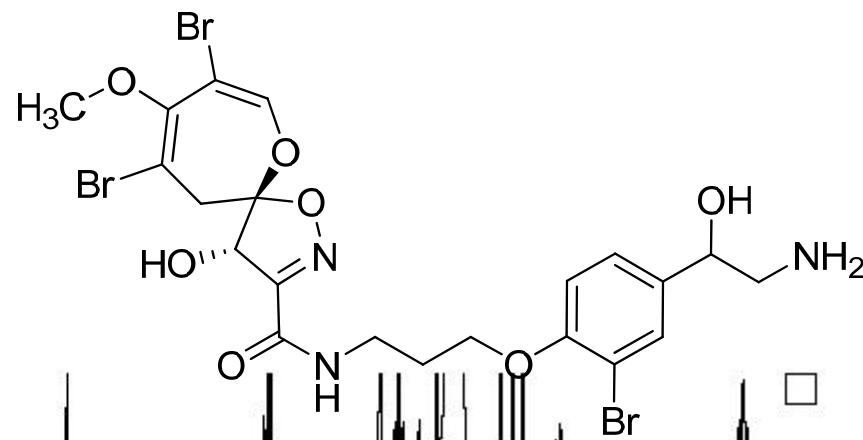
All spectra were recorded with presat of the HOD peak at about $\delta 4.9$



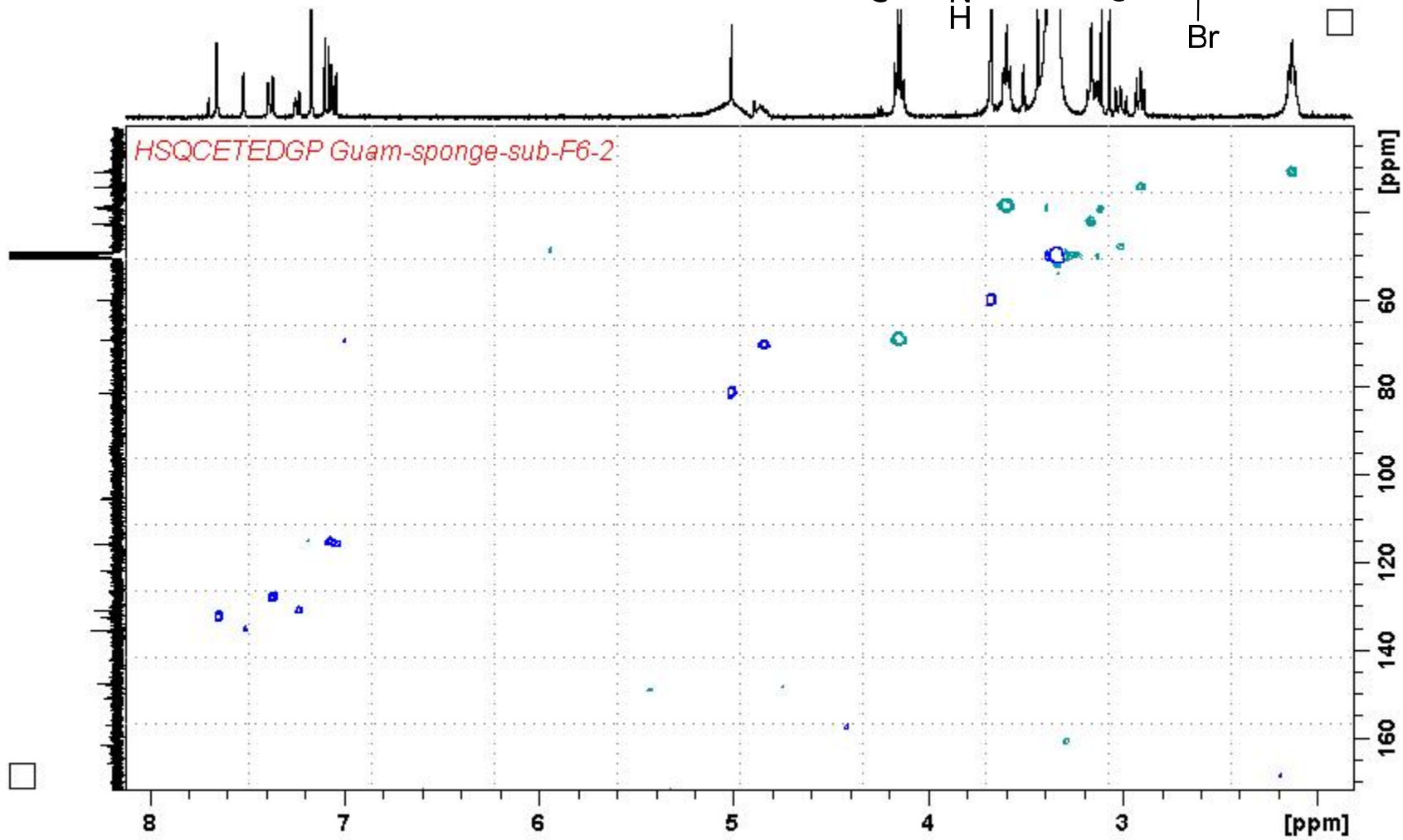
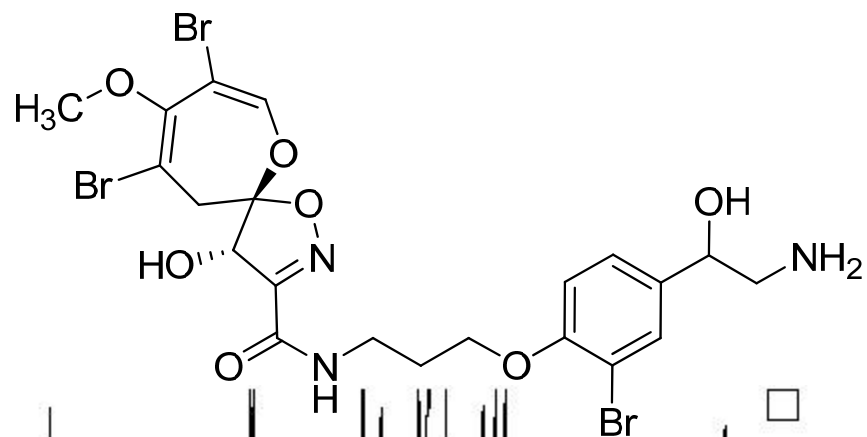
COSY-NMR spectrum of **6**
3:2 Mixture of **5** and **6**



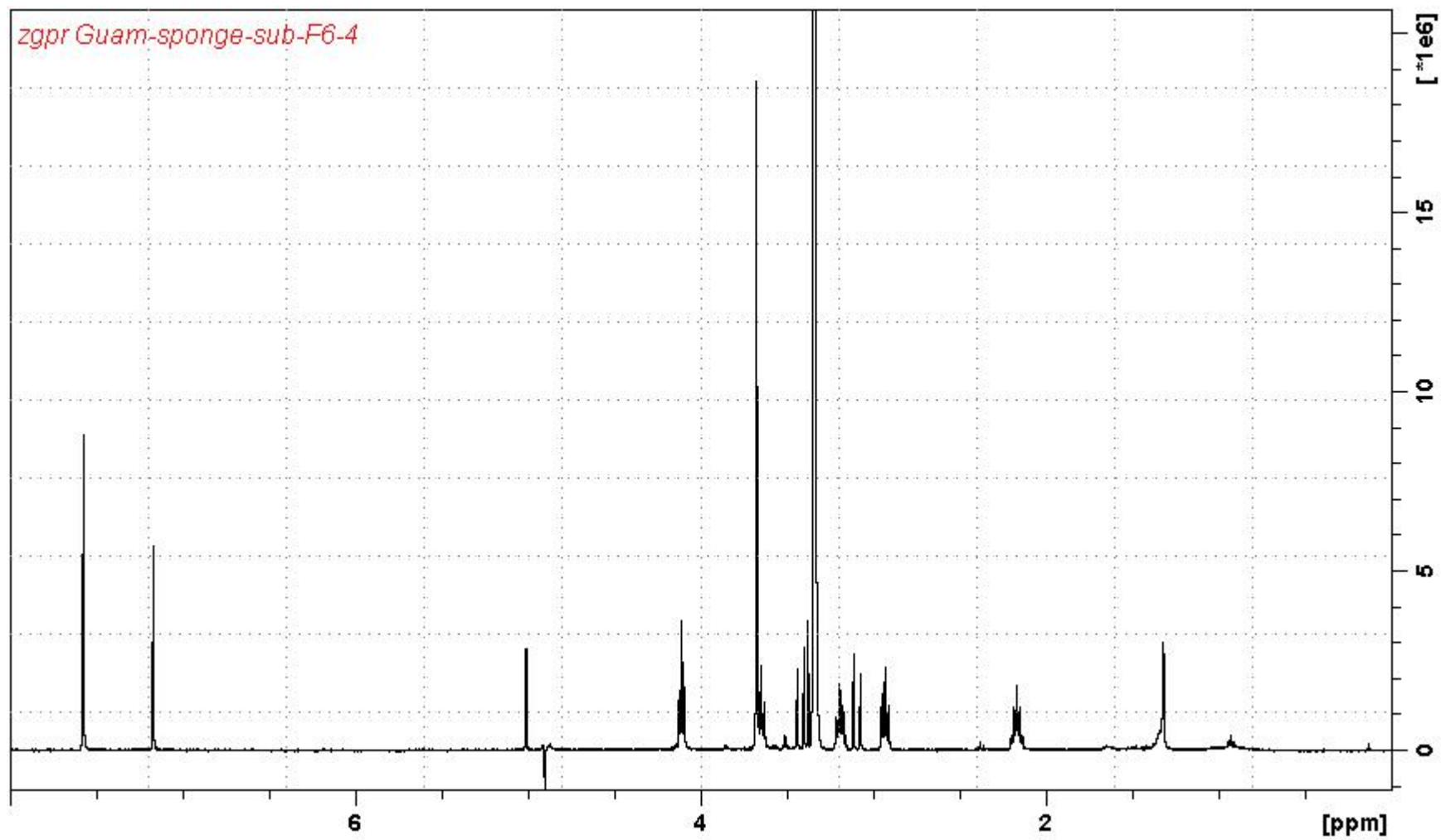
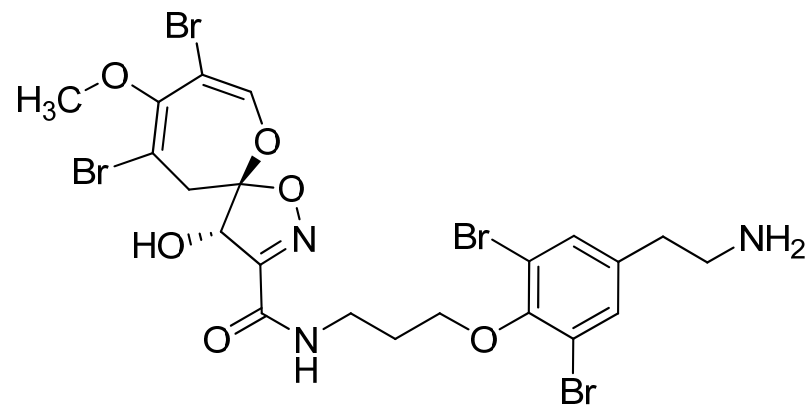
HMBC-NMR spectrum of **6**
3:2 Mixture of **5** and **6**



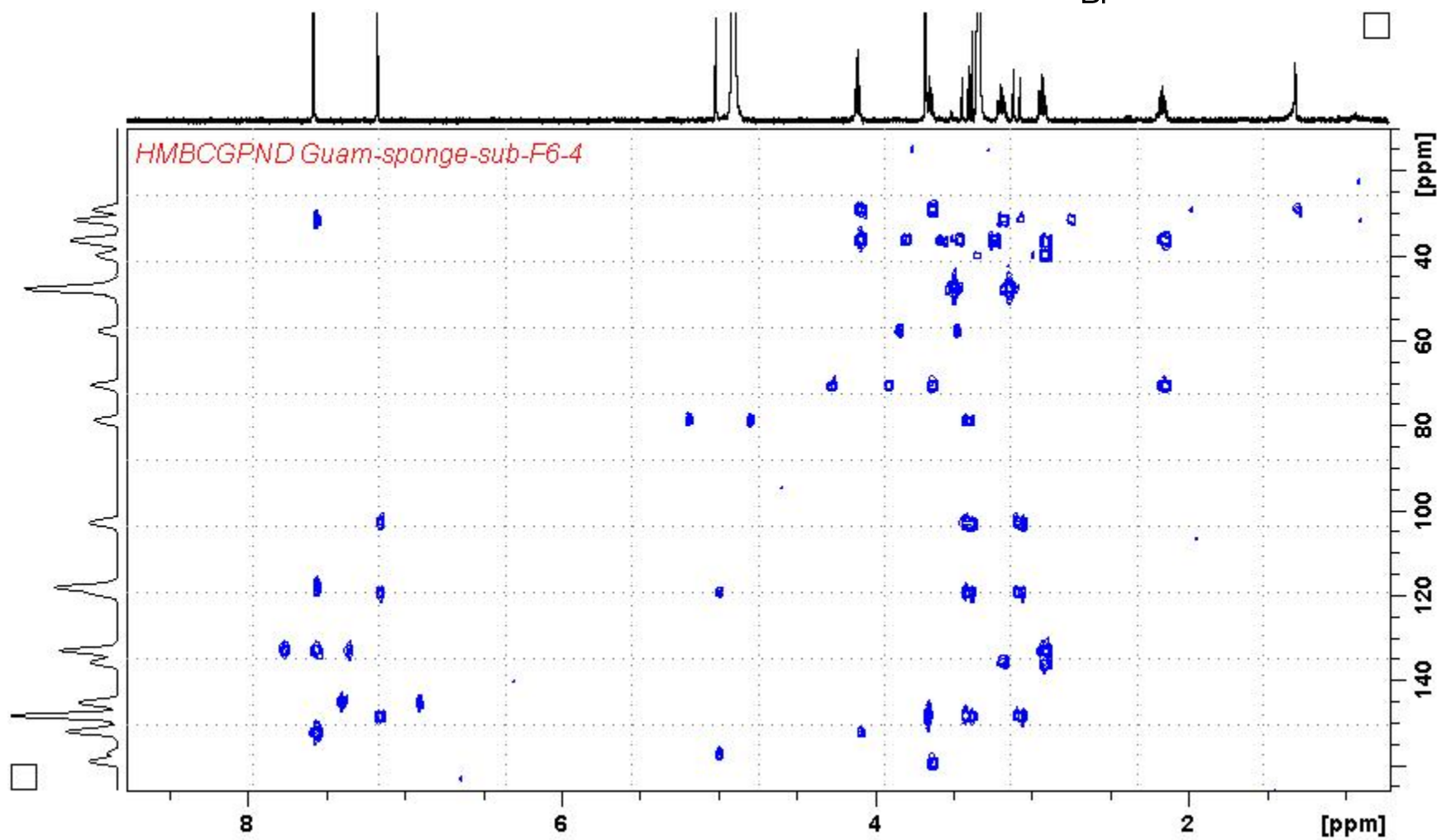
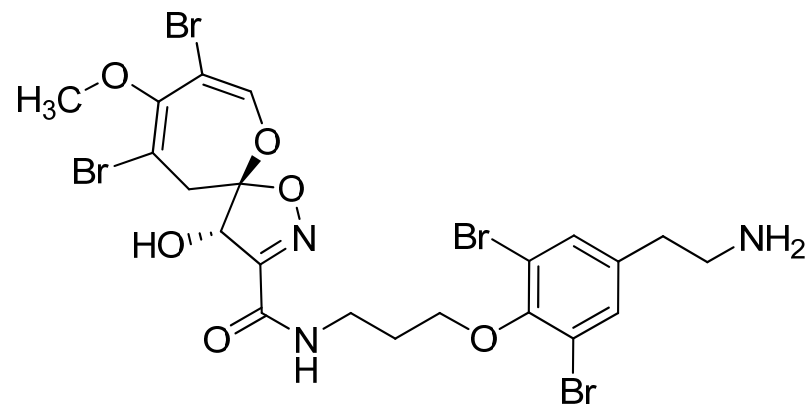
HSQC-NMR spectrum of **6**
3:2 Mixture of **5** and **6**



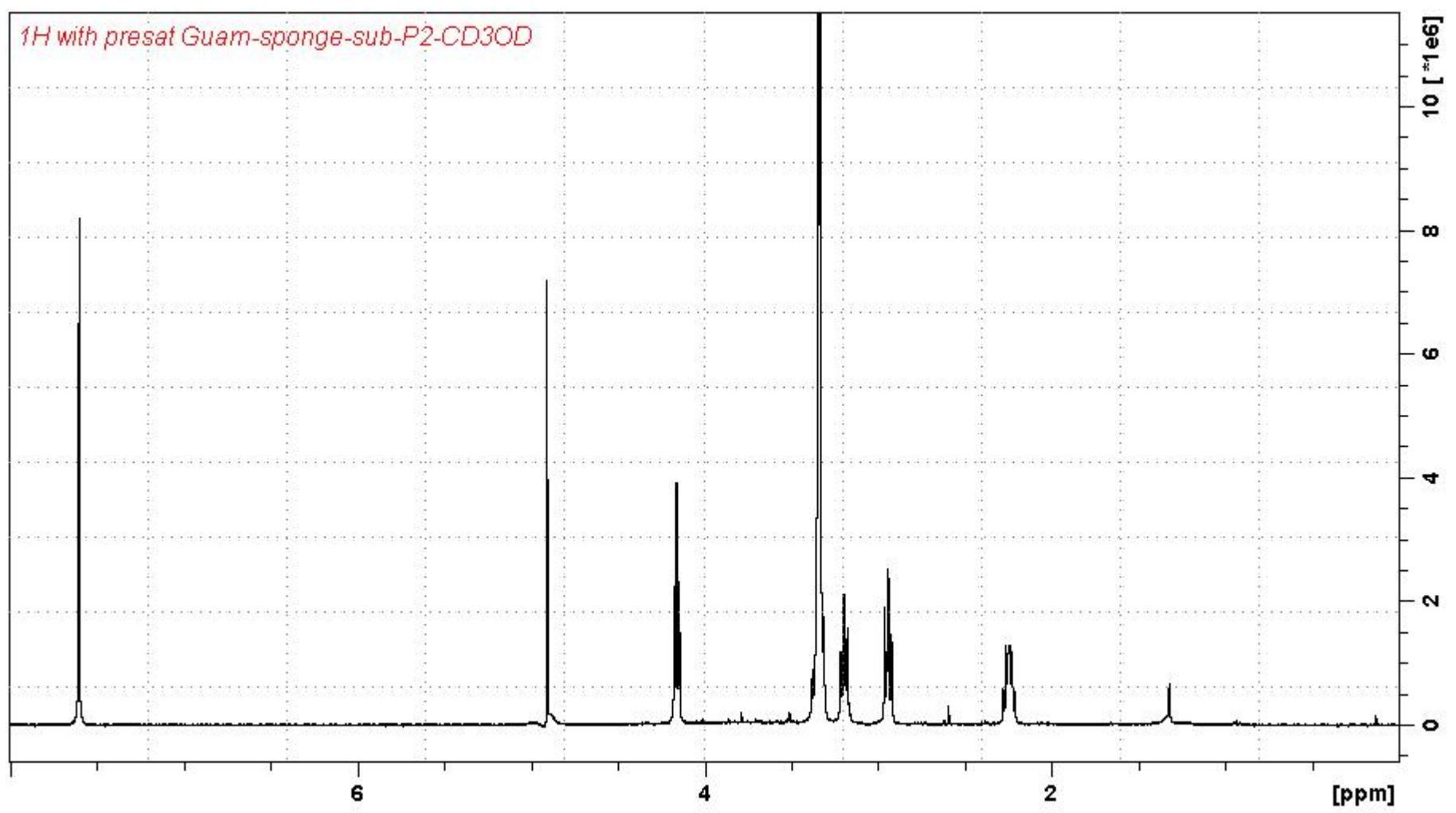
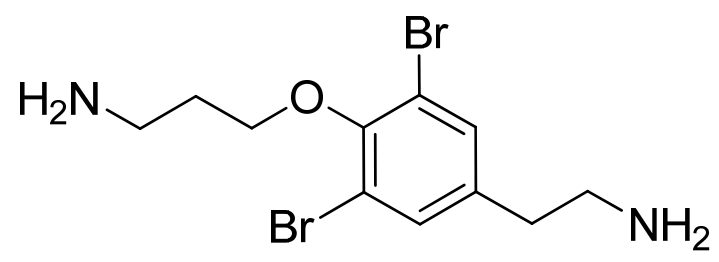
¹H-NMR spectrum of **7**



HMBC-NMR spectrum of 7



^1H -NMR spectrum of **9**



HMBC-NMR spectrum of **9**

