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Supplementary Materials

Indole C6 Functionalization of Tryprostatin B Using Prenyltransferase CdpNPT

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Analytical Scale CdpNPT Screening HPLC Traces

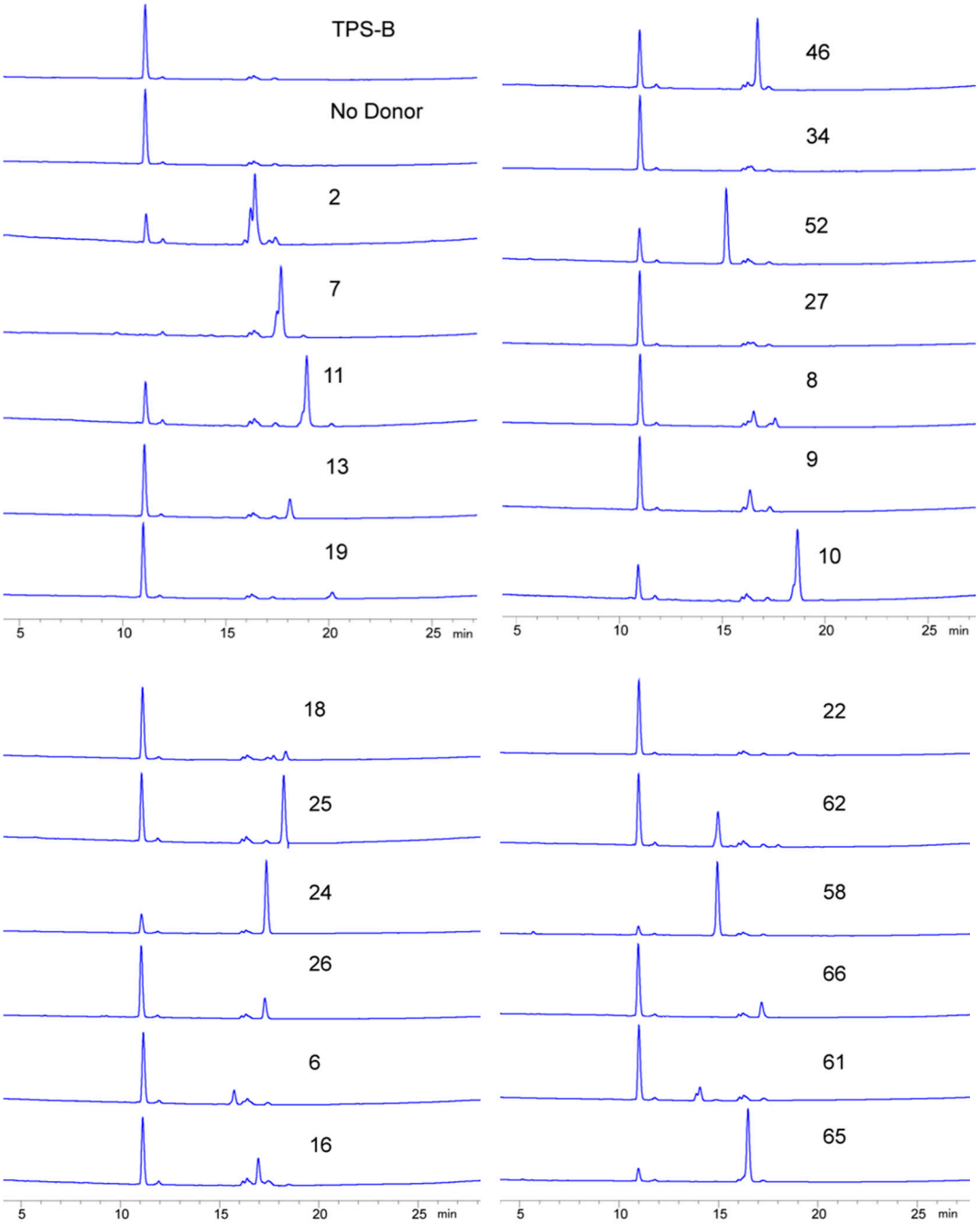


Figure S1. HPLC traces of analytical scale reactions containing TPS-B and CdpNPT under standard reaction conditions. Numerical labels indicate the alkyl-PP used in that reaction. TPS-B standard and enzymatic control reaction without the donor are indicated. The TPS-B used in these screenings is ~95% pure based on HPLC.

Table S1. Calculated percent turnover determined by HPLC in duplicate. Percent turnover was calculated by dividing the sum of all TPS-B and product peak areas by the peak area of remaining TPS-B.

OPP #	Trial 1 % Turnover	Trial 2 % Turnover	Mean % Turnover	Std Dev.
2	80.93	85.40	83.17	2.23
6	18.32	21.34	19.83	1.51
7	99.15	99.95	99.55	0.40
8	30.72	32.12	31.42	0.70
9	28.13	31.64	29.88	1.76
10	74.84	76.86	75.85	1.01
11	71.88	78.25	75.06	3.19
13	25.83	30.50	28.16	2.33
16	35.52	35.28	35.40	0.12
18	12.45	13.51	12.98	0.53
19	12.63	14.44	13.54	0.90
22	5.60	6.34	5.97	0.37
24	80.40	52.77	66.59	13.81
25	52.97	58.86	55.91	2.95
26	24.63	26.63	25.63	1.00
27	7.36	8.00	7.68	0.32
34	7.45	8.79	8.12	0.67
46	57.66	64.90	61.28	3.62
52	69.94	75.40	72.67	2.73
58	89.96	92.27	91.11	1.15
61	16.45	18.73	17.59	1.14
62	36.29	38.85	37.57	1.28
65	87.13	90.40	88.76	1.64
66	20.38	24.08	22.23	1.85

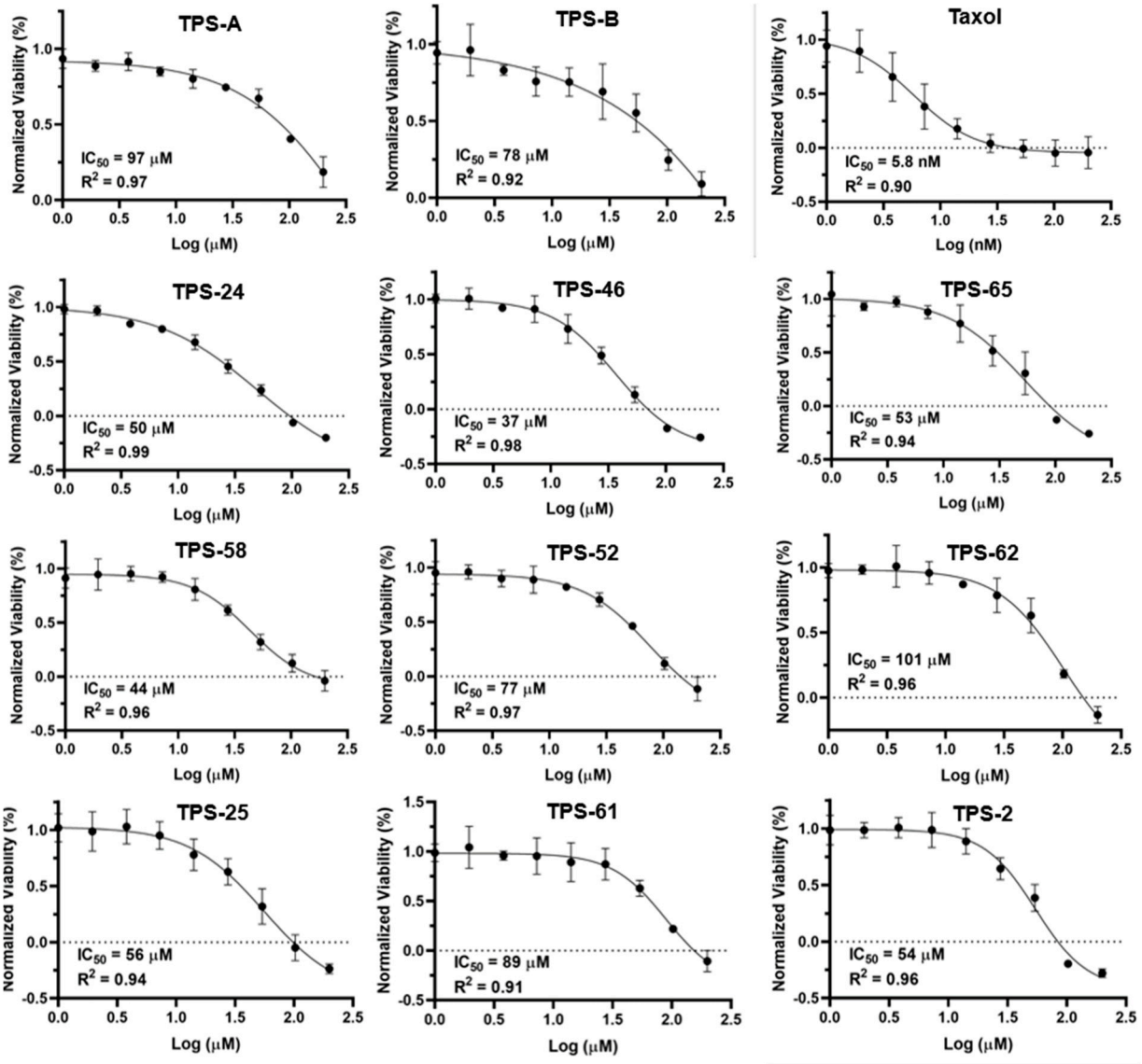


Figure S2. Cytotoxicity assay results for TPS analogs run in triplicate against K563 leukemia cells, with TPS-A, TPS-B, and Taxol as positive controls.

Table S2. HRMS data of the TPS analogs produced by CdpNPT and their corresponding alkyl donor

TPSB analog	Formula	Calculated Mass	Observed Mass
TPS-A	$C_{22}H_{27}N_3O_3$ $[M+H]^+$	382.2125	382.2133
TPS-B	$C_{21}H_{25}N_3O_2$ $[M+H]^+$	352.20194	352.203
TPS-2	$C_{26}H_{33}N_3O_2$ $[M+H]^+$	420.26453	420.2659
TPS-6	$C_{26}H_{31}N_3O_2$ $[M+H]^+$	418.241627	418.2498
TPS-7	$C_{27}H_{35}N_3O_2$ $[M+H]^+$	434.272927	434.2819
TPS-8	$C_{27}H_{33}N_3O_2$ $[M+H]^+$	432.257277	432.265
TPS-9	$C_{27}H_{33}N_3O_2$ $[M+H]^+$	432.257277	432.2652
TPS-10	$C_{28}H_{37}N_3O_2$ $[M+H]^+$	448.288577	448.2971
TPS-11	$C_{28}H_{37}N_3O_2$ $[M+H]^+$	448.288577	448.2964
TPS-13	$C_{28}H_{35}N_3O_2$ $[M+H]^+$	446.272927	446.2809
TPS-16	$C_{27}H_{33}N_3O_2$ $[M+H]^+$	432.257277	432.2653
TPS-18	$C_{28}H_{35}N_3O_2$ $[M+H]^+$	446.272927	446.2810
TPS-19	$C_{29}H_{39}N_3O_2$ $[M+H]^+$	462.304226	462.3118
TPS-22	$C_{29}H_{37}N_3O_2$ $[M+H]^+$	460.288577	460.2964
TPS-24	$C_{30}H_{33}N_3O_2$ $[M+H]^+$	468.26453	468.2651
TPS-25	$C_{31}H_{35}N_3O_2$ $[M+H]^+$	482.28018	482.2802
TPS-26	$C_{31}H_{35}N_3O_3$ $[M+H]^+$	498.267842	498.2758
TPS-27	$C_{29}H_{35}N_3O_2$ $[M+H]^+$	458.272927	458.2814
TPS-34	$C_{27}H_{34}N_6O_2$ $[M+H]^+$	475.274324	475.2823
TPS-46	$C_{29}H_{33}N_3O_2$ $[M+H]^+$	456.26453	456.2655
TPS-52	$C_{29}H_{33}N_3O_3$ $[M+H]^+$	472.25945	472.2602
TPS-58	$C_{29}H_{31}N_3O_4$ $[M+H]^+$	486.23871	486.2389
TPS-61-P1	$C_{26}H_{29}N_3O_3$ $[M+H]^+$	432.22815	432.2292
TPS-61-P2	$C_{26}H_{29}N_3O_3$ $[M+H]^+$	432.22815	432.2294
TPS-62	$C_{26}H_{29}N_3O_2S$ $[M+H]^+$	448.20531	448.2061
TPS-65	$C_{30}H_{31}N_3O_3$ $[M+H]^+$	482.2438	482.2442
TPS-66	$C_{30}H_{31}N_3O_2S$ $[M+H]^+$	498.213699	498.2216

Table S3. Tryprostatin Analog NMR Assignment Table

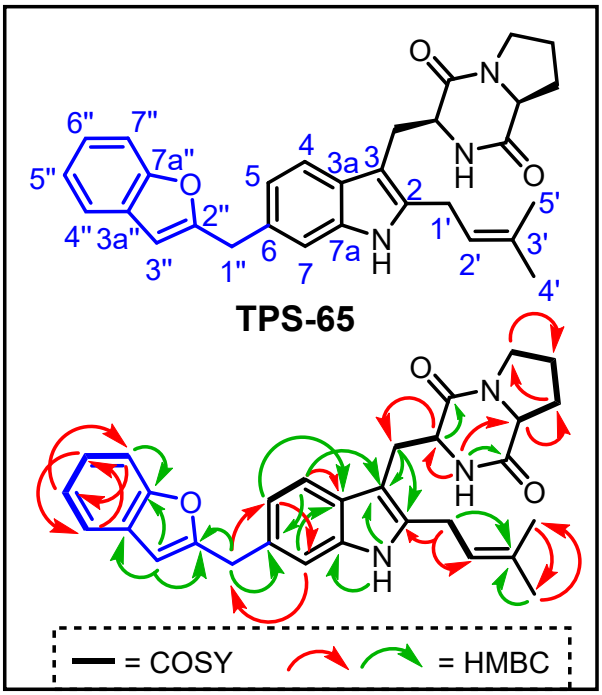
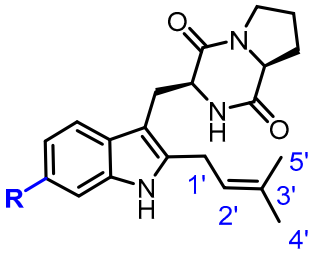
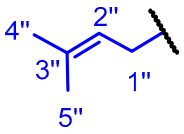
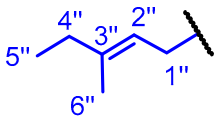


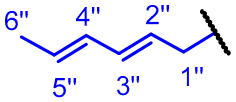
Figure S3: Representative NMR correlations used to assign TPS analogs

Segment	Position	δC (in ppm), type	δH (in ppm)
L-Trp	NH		5.62 (s)
	α	54.5, CH	4.33 (dd)
	β	25.6, CH_2	2.93 (m), 3.66 (d)
	1		7.98 (s)
	2	136.5, C	
	3	104.5, C	
	3a	126.8, C	
	4	117.9, CH	7.4 (d)
	5	121.3, CH	7.04 (d)
	6	131.0, C	
	7	111.1, CH	7.21 (s)
	7a	136.1, C	
	C=O		
Proline	α	59.3, CH	4.04 (t)
	β	28.4, CH_2	2.02 (m), 2.32 (dt)
	γ	22.7, CH_2	1.89 (m), 2.02 (m)
	δ	45.4, CH_2	3.58 (m), 3.65 (m)
	C=O	165.8, C	
C2-Prenyl	1'	25.1, CH_2	3.44 (qd)
	2'	119.8, CH	5.28 (m)
	3'	135.5, C	
	4'	18.0, CH_3	1.73 (s)
	5'	25.8, CH_3	1.76 (s)
C6-Sub	1''	35.2, CH_2	4.18 (s)
	2''	158.6, C	
	3''	103.3, CH	6.36 (s)
	3a''	128.9, C	
	4''	111.0, CH	7.38 (d)
	5''	123.4, CH	7.18 (td)
	6''	122.6, CH	7.15 (td)
	7''	120.5, CH	7.43 (d)
	7a''	155.0, C	









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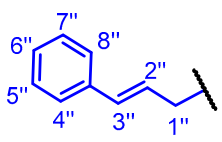
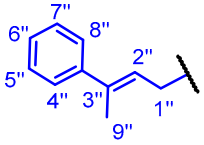
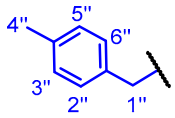
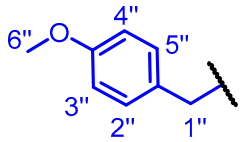
Segment	**Position**	**δC , type**	**δH**	**δC , type**	**δH**	**δC , type**	**δH**
L-Trp	NH		5.61 (s)		5.61 (s)		5.61 (s)
	α	54.6, CH	4.36 (m)	54.6, CH	4.34 (dd)	54.6, CH	4.35 (dd)
	β	25.5 CH_2	2.93 (dd), 3.66 (m)	25.6, CH_2	2.92 (dd), 3.64 (m)	25.7, CH_2	2.93 (dd), 3.65 (m)
	1		7.82 (s)		7.81 (s)		
	2						
	3						
	3a						
	4	117.7, CH	7.37 (d)	117.6, CH	7.37 (d)	117.6, CH	7.38 (d)
	5	121, CH	6.94 (d)	121.0, CH	6.94 (d)	121.1, CH	6.94 (d)
	6						
	7	110.1, CH	7.12 (s)	110.1, CH	7.11 (s)	110.5, CH	7.13
	7a						
	C=O						
Proline	α	59.3, CH	4.05 (t)	59.6, CH	4.05 (t)	59.3, CH	4.06 (t)
	β	28.4, CH_2	2.05 (m), 2.35 (m)	28.3, CH_2	2.04 (m), 2.33 (m)	28.4, CH_2	2.05 (m), 2.35 (m)
	γ	22.7, CH_2	1.92 (m), 2.05 (m)	22.6, CH_2	1.91 (m), 2.04 (m)	22.9, CH_2	1.92 (m), 2.05 (m)
	δ	45.5, CH_2	3.59 (m), 3.70 (m)	45.4, CH_2	3.59 (m), 3.67 (m)	45.4, CH_2	3.59 (m), 3.68 (m)
	C=O						
C2-Prenyl	1'	25.2, CH_2	3.46 (d)	25.1, CH_2	3.45 (m)	25.2, CH_2	3.46 (m)
	2'	119.8, CH	5.31 (t)	119.8, CH	5.29 (t)	119.6, CH	5.31 (t)
	3'						
	4'	17.8, CH_3	1.75 (s)	18.0, CH_3	1.74 (s)	18.0, CH_3	1.75 (s)
	5'	25.7, CH_3	1.76 (s)	25.7, CH_3	1.78 (s)	25.8, CH_3	1.79 (s)
C6-Sub	1''	36.5, CH_2	3.42 (d)	34.3, CH_2	3.44 (m)	39.1, CH_2	3.48 (m)
	2''	124.2, CH	5.37 (t)	122.3, CH	5.36	131.0, CH	5.72 (dt)
	3''					131.4, CH	6.06 (m)
	4''	17.8, CH_3	1.75 (s)	32.4, CH_2	2.05 (q)	131.4, CH	6.06 (m)
	5''	25.7, CH_3	1.79 (s)	12.7, CH_3	1..02 (t)	127.7, CH	5.63 (m)
	6''			16.0, CH_3	1.73 (s)	18.0, CH_3	1.73 (d)

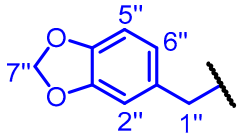


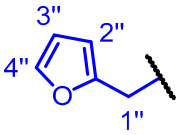


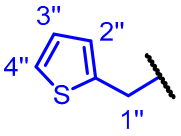


		TPS-24		TPS-25		TPS-46	
Segment	**Position**	**δC , type**	**δH**	**δC , type**	**δH**	**δC , type**	**δH**
L-Trp	NH		5.62 (s)		5.5 (s)		5.6 (s)
	α	54.5, CH	4.35 (dd)	54.7, CH	4.36 (dd)	54.5, CH	4.34 (dd)
	β	25.7, CH_2	2.92 (m), 3.66 (m)	25.7, CH_2	2.93 (dd), 3.64 (m)	25.7, CH_2	2.91 (m), 3.65 (m)
	1		7.95 (s)		7.83 (s)		7.87 (s)
	2	135.9, C				136.0, C	
	3	104.4, C				104.4, C	
	3a	126.5, C				126.3, C	
	4	117.5, CH	7.40 (d)	117.8, CH	7.39 (d)	117.6, CH	7.36 (d)
	5	120.9, CH	6.99 (d)	121.1, CH	6.99 (dd)	121.3, CH	6.95 (d)
	6	134.1, C				135.7, C	
	7	110.5, CH	7.17 (s)	110.3, CH	7.17 (s)	110.9, CH	7.06 (s)
	7a	135.9, C					
	C=O						
Proline	α	59.2, CH	4.04 (t)	59.3, CH	4.05 (t)	59.3, CH	4.04 (t)
	β	28.4, CH_2	2.02 (m), 2.32 (dt)	28.4, CH_2	2.03 (m), 2.33 (dt)	28.3, CH_2	2.02 (m), 2.32 (dt)
	γ	22.8, CH_2	1.89 (m), 2.02 (m)	22.7, CH_2	1.91 (m), 2.03 (m)	22.6, CH_2	1.90 (m), 2.02 (m)
	δ	45.4, CH_2	3.58 (m), 3.66 (m)	45.5, CH_2	3.58 (m), 3.67 (m)	45.4, CH_2	3.58 (m), 3.66 (m)
	C=O	165.9, C				165.9, C	
C2-Prenyl	1'	25.2, CH_2	3.44 (qd)	25.2, CH_2	3.45 (m)	25.0, CH_2	3.43 (qd)
	2'	119.6, CH	5.29 (t)	119.9, CH	5.29 (t)	119.8, CH	5.26 (t)
	3'	135.4, C				135.4, C	
	4'	18.0, CH_3	1.73 (s)	18.0, CH_3	1.74 (s)	17.9, C	1.72 (s)
	5'	25.8, CH_3	1.76 (s)	25.8, CH_3	1.78 (s)	25.7	1.76 (s)
C6-Sub	1''	39.5, CH_2	3.62 (d)	35.2, CH_2	3.65 (d)	41.7, CH_2	4.02 (s)
	2''	130.2, CH	6.44 (m)	127.4, CH	6.02 (t)	128.9, CH	7.08 (s)
	3''	129.2, CH	6.4 (m)			128.9, CH	7.08 (s)
	4''	137.7, C		125.8, CH	7.41 (m)	21.0, CH_3	2.30 (s)
	5''	125.9, CH	7.35 (d)	128.2, CH	7.29 (t)	128.9, CH	7.08 (s)
	6''	128.2, CH	7.27 (t)	126.7, CH	7.21 (t)	128.9, CH	7.08 (s)
	7''	126.8, CH	7.18 (t)	128.2, CH	7.29 (t)		
	8''	128.2, CH	7.27 (t)	125.8, CH	7.41 (m)		
	9''	125.9, CH	7.35 (d)	16.0, CH_3	2.16 (s)		



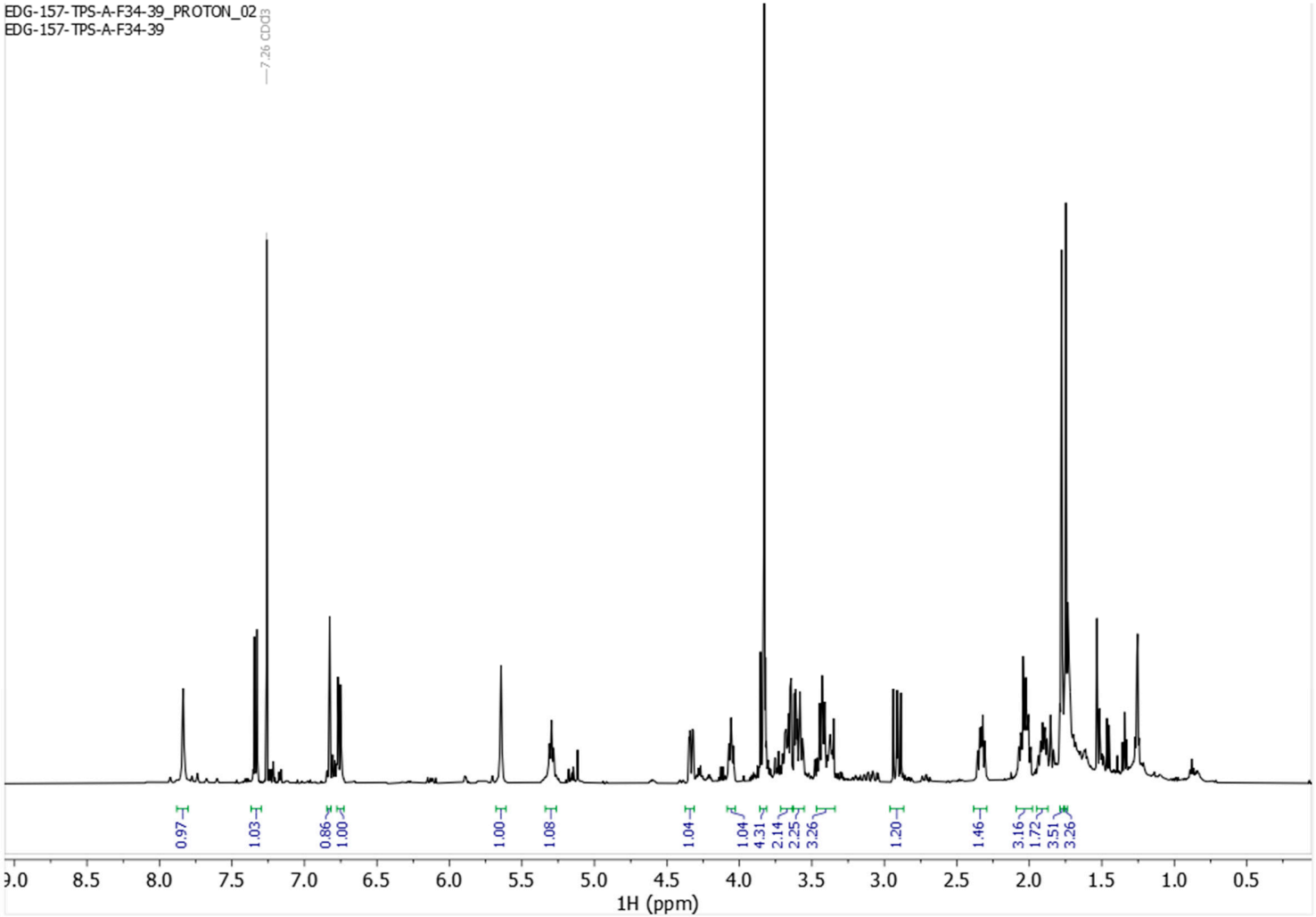




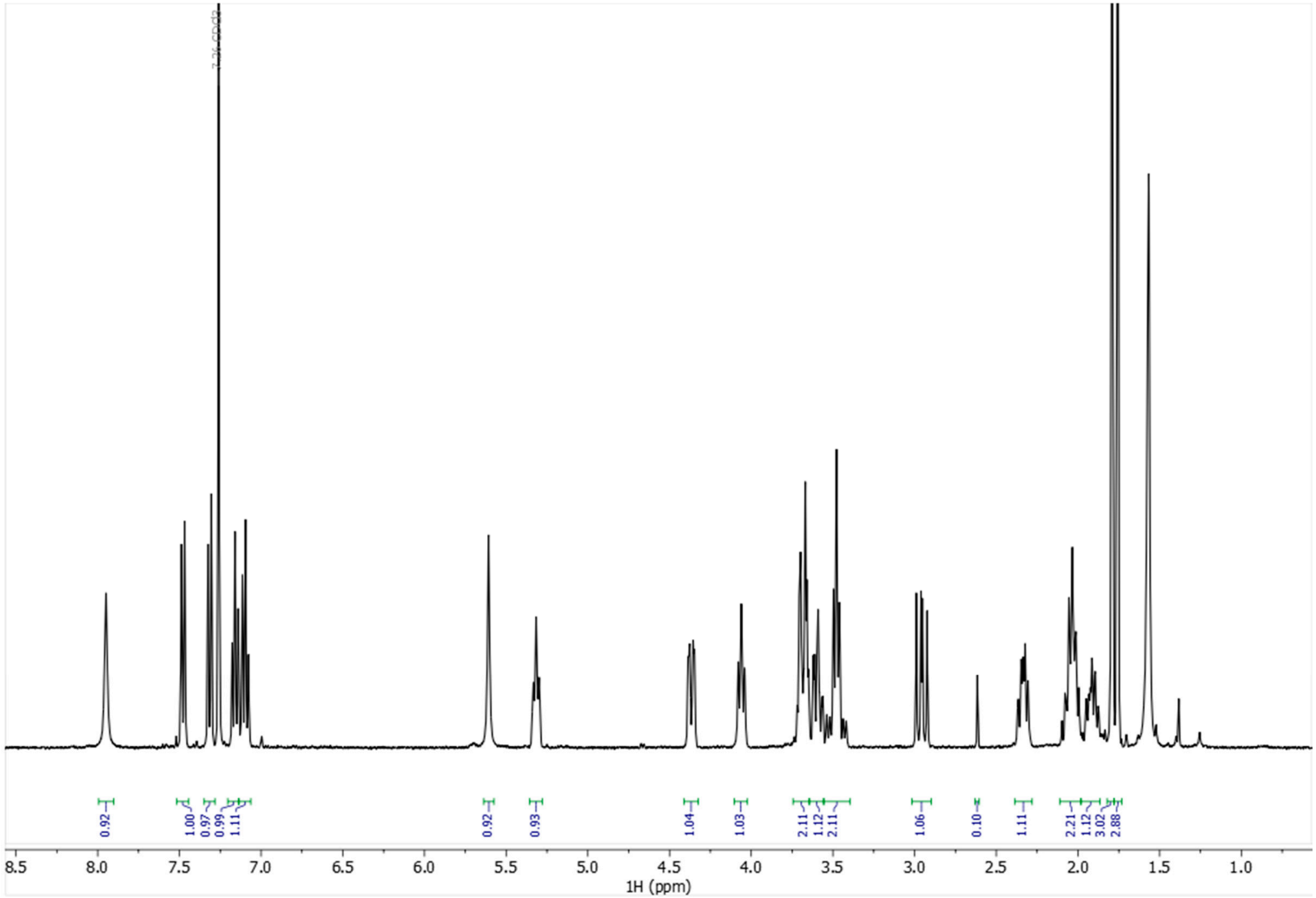


		TPS-52		TPS-58		TPS-61	TPS-62	
Segment	**Position**	**δC , type**	**δH**	**δC , type**	**δH**	**δH**	**δH**	**δC , type**
L-Trp	NH		5.62 (s)			5.60 (s)	5.61 (s)	
	α	54.5, CH	4.33 (dd)	54.5, CH	4.33 (dd)	4.35 (d)	4.36 (dd)	54.6, CH
	β	25.0, CH_2	2.91 (dd), 3.64 (m)	25.7, CH_2	2.91 (m), 3.63 (d)	2.93 (m), 3.66 (m)	2.93 (dd), 3.63 (m)	25.5, CH_2
	1		7.82 (s)		7.91 (s)	7.86 (s)	7.85 (s)	
	2			136.0, C				
	3			104.5, C				
	3a			126.3, C				
	4	117.7, CH	7.37 (d)	117.5, CH	7.37 (d)	7.40 (d)	7.40 (d)	117.7, CH
	5	121.2, CH	6.95 (d)	121.1, CH	6.93 (dd)	7.00 (d)	7.02 (dd)	121.1, CH
	6			135.6, C				
	7	110.6, CH	7.05 (s)	110.7, CH	7.07 (s)	7.16 (s)	7.16 (s)	110.7, CH
	7a			136.1, C				
	C=O							
Proline	α	59.7, CH	4.04 (t)	59.3, CH	4.04 (t)	4.05 (s)	4.05 (t)	59.3, CH
	β	28.5, CH_2	2.03 (m), 2.32 (m)	28.4, CH_2	2.02 (m), 2.32 (dt)	2.04 (m), 2.33 (m)	2.03 (m), 2.31 (m)	28.5, CH_2
	γ	22.6, CH_2	1.90 (m), 2.03 (m)	22.7, CH_2	1.89 (m), 2.02 (m)	1.90 (m), 2.33 (m)	1.89 (m), 2.01 (m)	22.8, CH_2
	δ	45.4, CH_2	3.58 (m), 3.66 (m)	45.4, CH_2	3.58 (m), 3.66 (m)	3.60 (m), 3.66 (m)	3.58 (t), 3.67 (m)	45.4, CH_2
	C=O			165.9, C				
C2-Prenyl	1'	25.2, CH_2	3.43 (m)	25.2, CH_2	3.43 (qd)	3.45 (m)	3.44 (t)	25.0, CH_2
	2'	119.5, CH	5.28 (t)	119.8, CH	5.27 (m)	5.29 (t)	5.30 (t)	119.7, CH
	3'			135.5, C				
	4'	18.1, CH_3	1.73 (s)	18.1, CH_3	1.73 (s)	1.74 (s)	1.74 (s)	17.7, CH_3
	5'	25.7, CH_3	1.76 (s)	25.9, CH_3	1.76 (s)	1.78 (s)	1.78 (s)	25.8, CH_3
C6-Sub	1''	41.1, CH_2	4.00 (s)	41.8, CH	3.96 (s)	4.05 (s)	4.23 (s)	36.3, CH_2
	2''	129.7, CH	7.11 (d)	109.2, CH	6.66 (m)	6.00 (d)	6.81 (dd)	125.1, CH
	3''	113.8, CH	6.81 (d)	145.7, C		6.28 (d)	6.92 (dd)	126.8, CH
	4''	113.8, CH	6.81 (d)	147.5, C		7.32 (s)	7.13 (dd)	123.9, CH
	5''	129.7, CH	7.11 (d)	108.0, CH	6.71 (d)			
	6''	55.2, CH_3	3.77 (s)	121.5, CH	6.66 (m)			
	7''			100.8, CH_2	5.88 (s)			

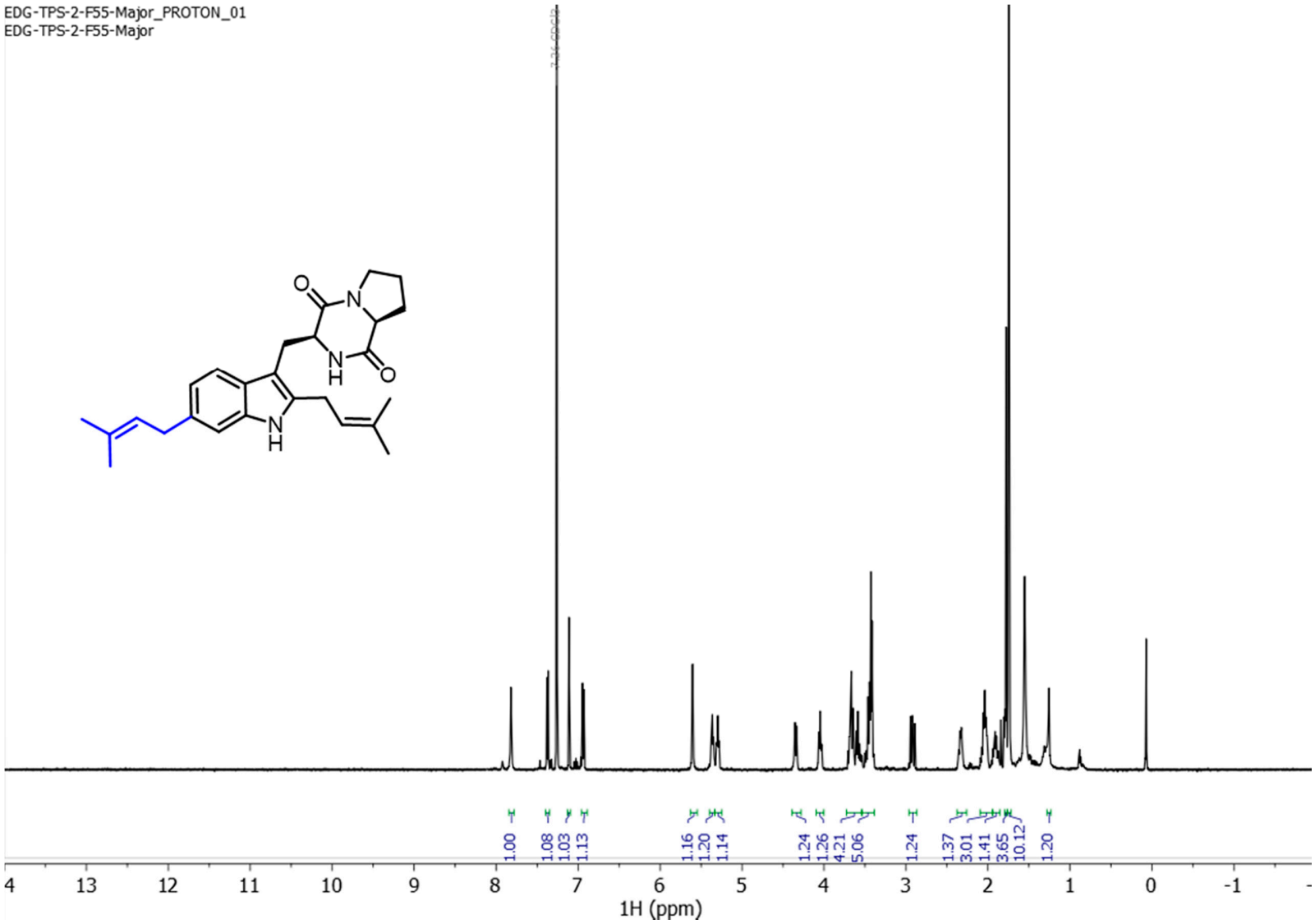
NMR Spectra for Tryprostatin Analogs:



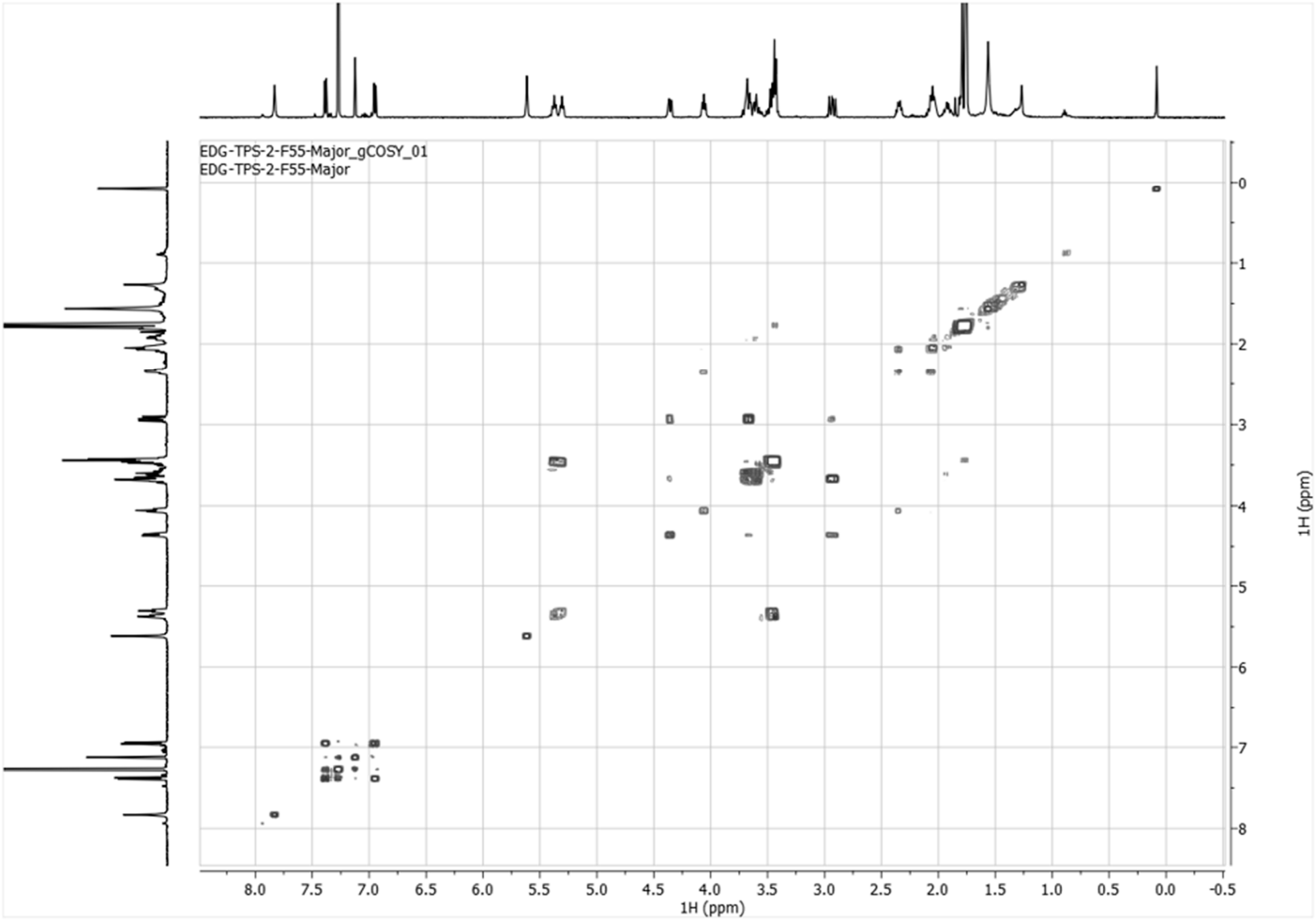
^{1}H NMR spectrum (500 MHz) of **TPS-A** in $CDCl_3$



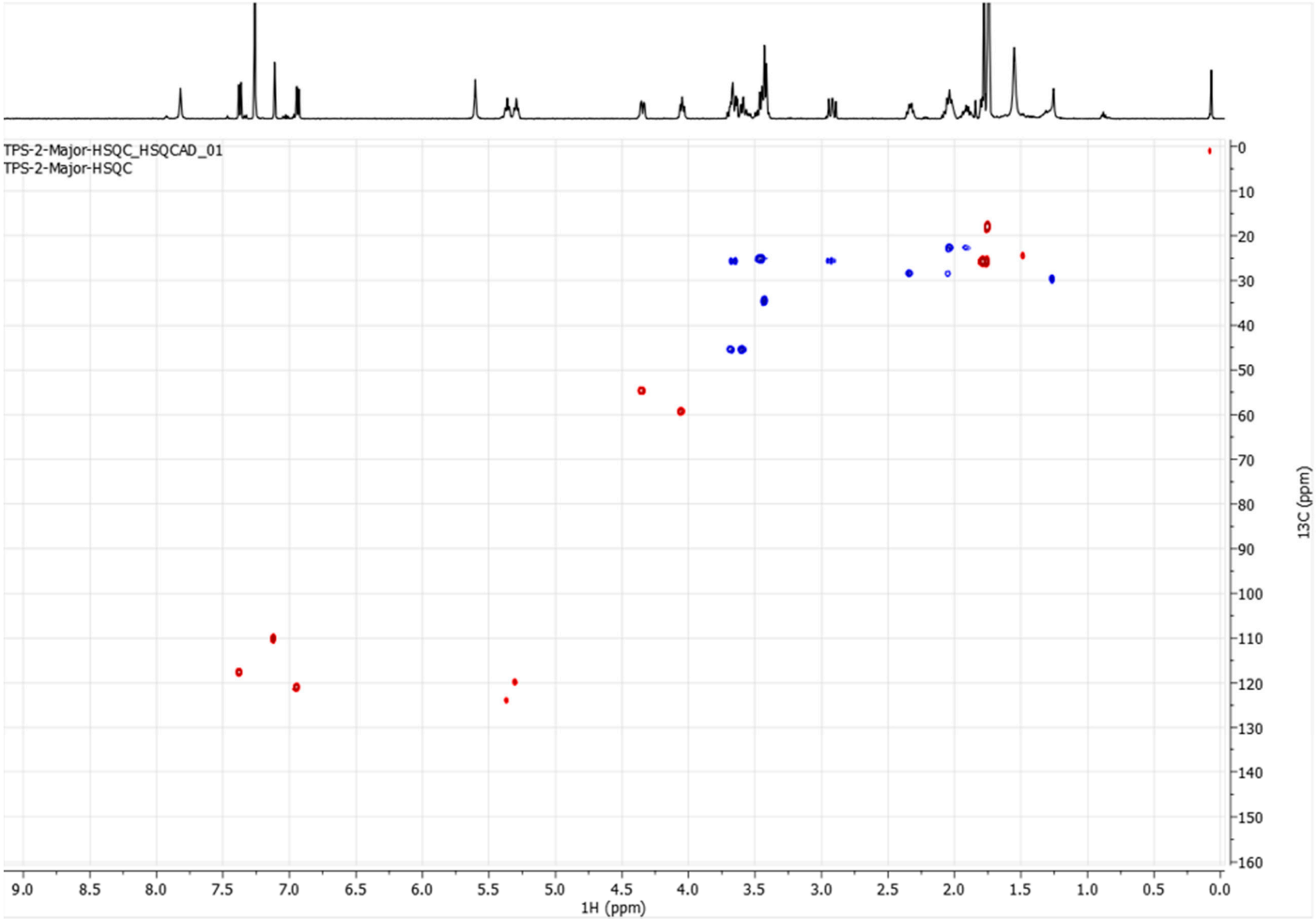
^{1}H NMR spectrum (400 MHz) of **TPS-B** in $CDCl_3$



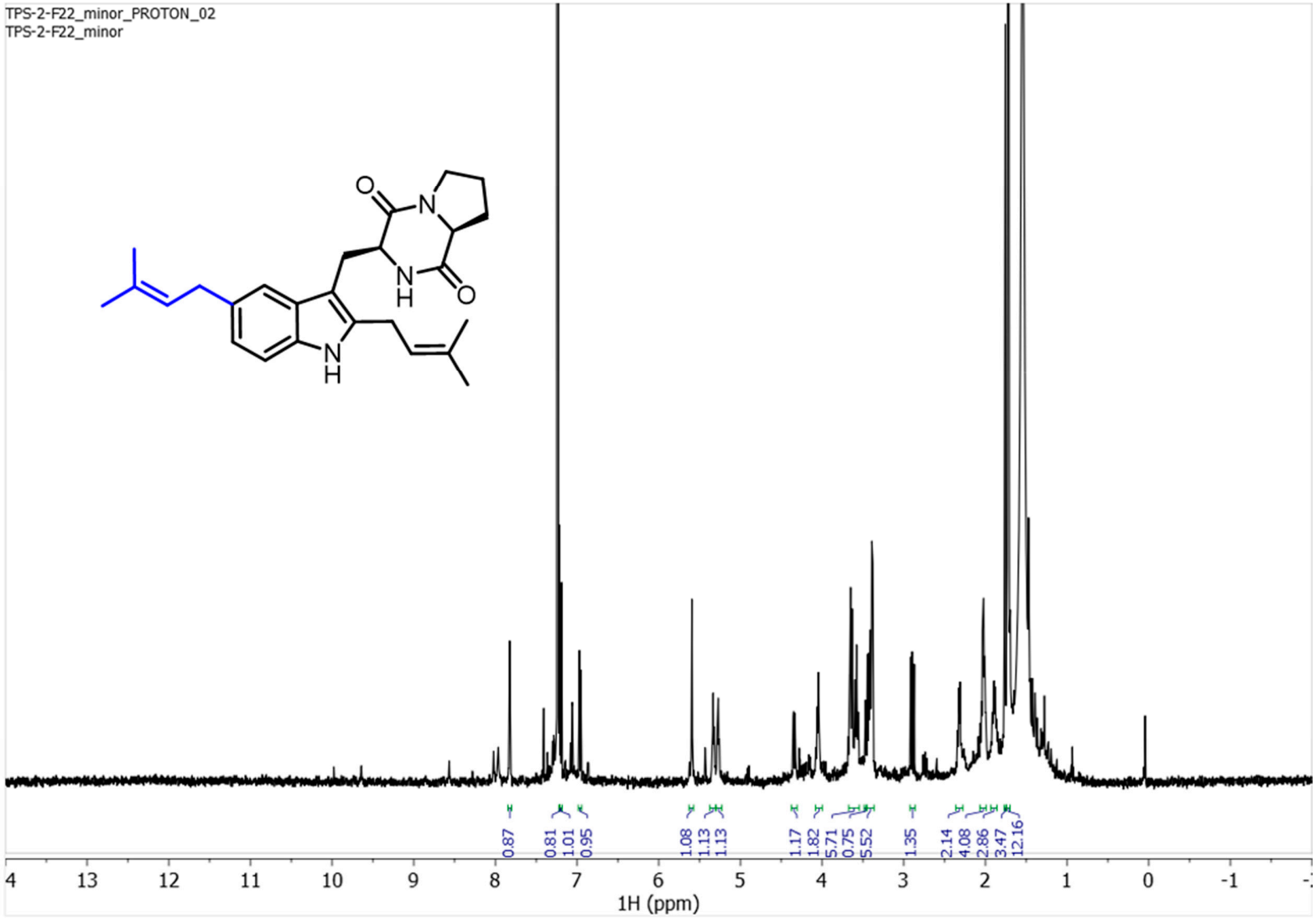
^{1}H NMR spectrum (500 MHz) of **TPS-2-C6** in $CDCl_3$



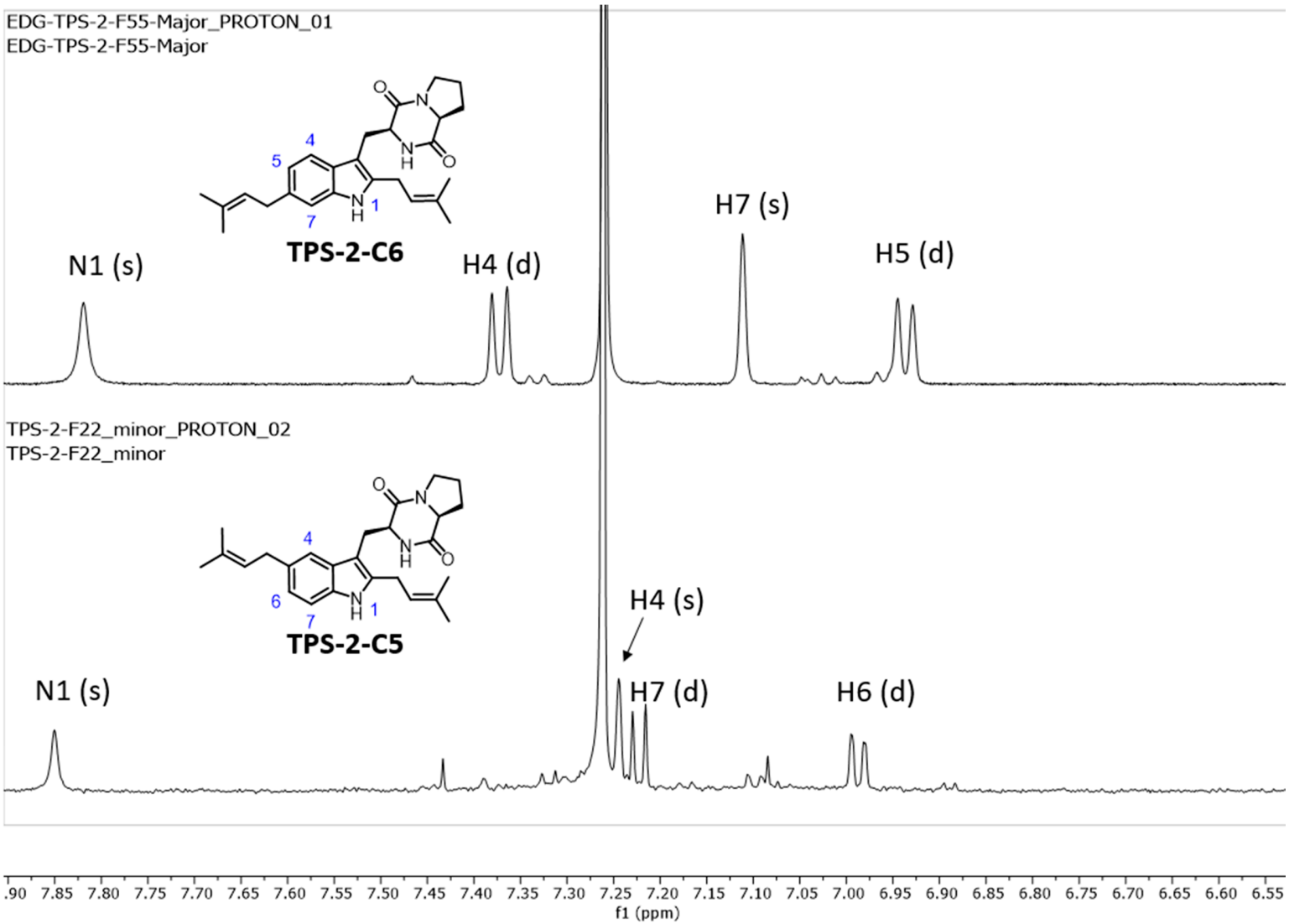
COSY NMR spectrum (500 MHz) of **TPS-2-C6** in $CDCl_3$



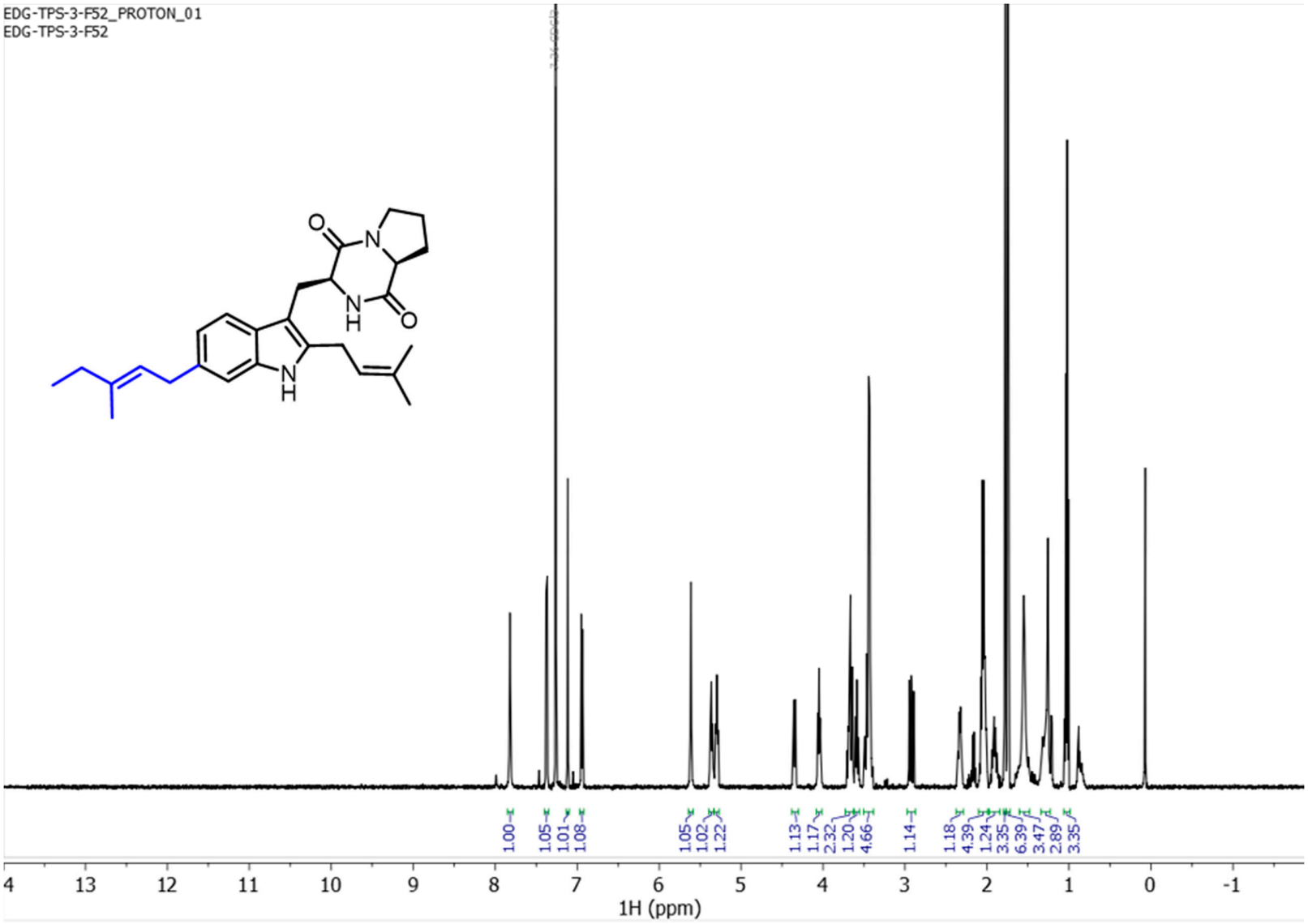
HSQC NMR spectrum (500 MHz) **of TPS-2-C6** in $CDCl_3$



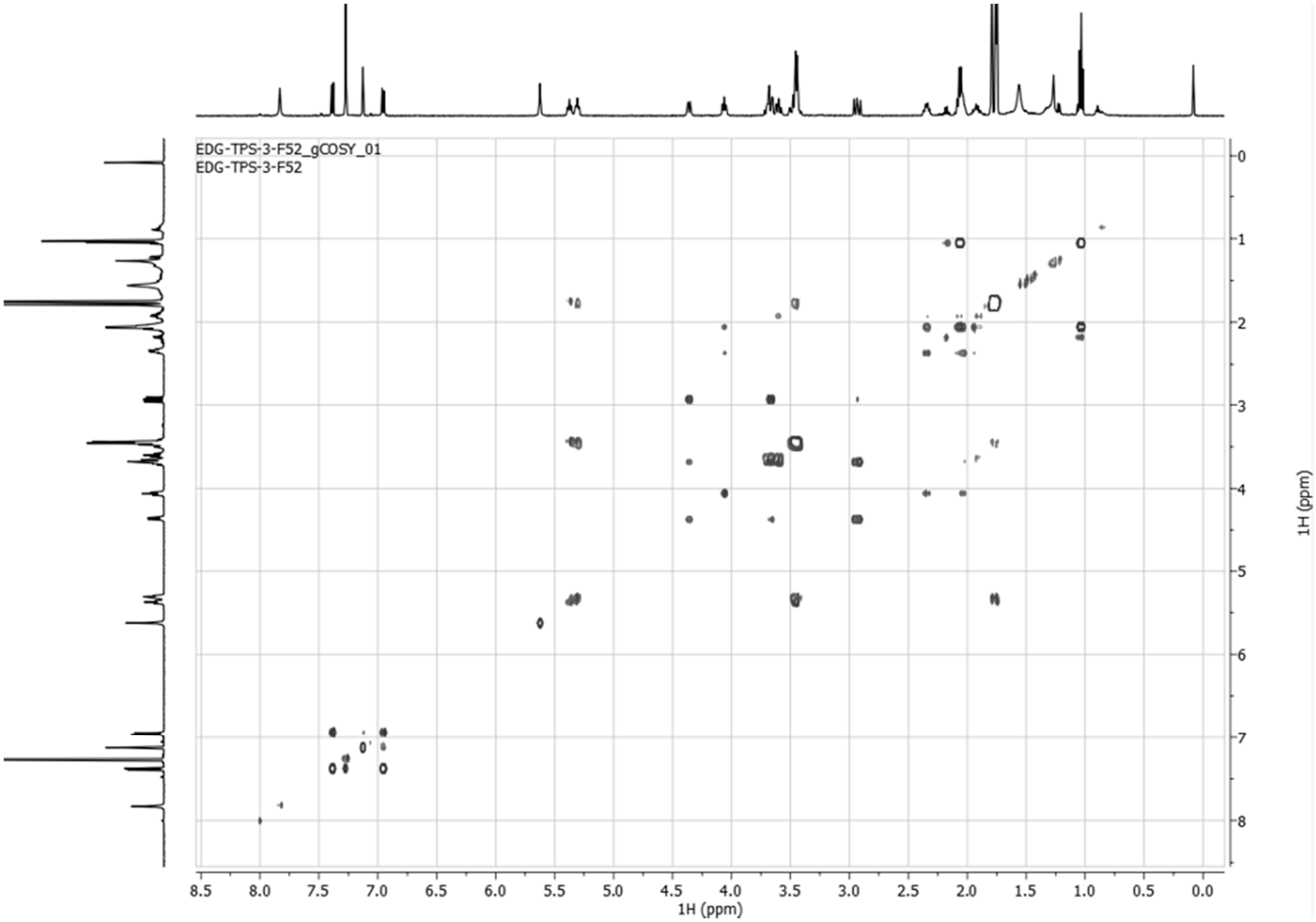
^{1}H NMR spectrum (500 MHz) **of TPS-2-C5** in $CDCl_3$



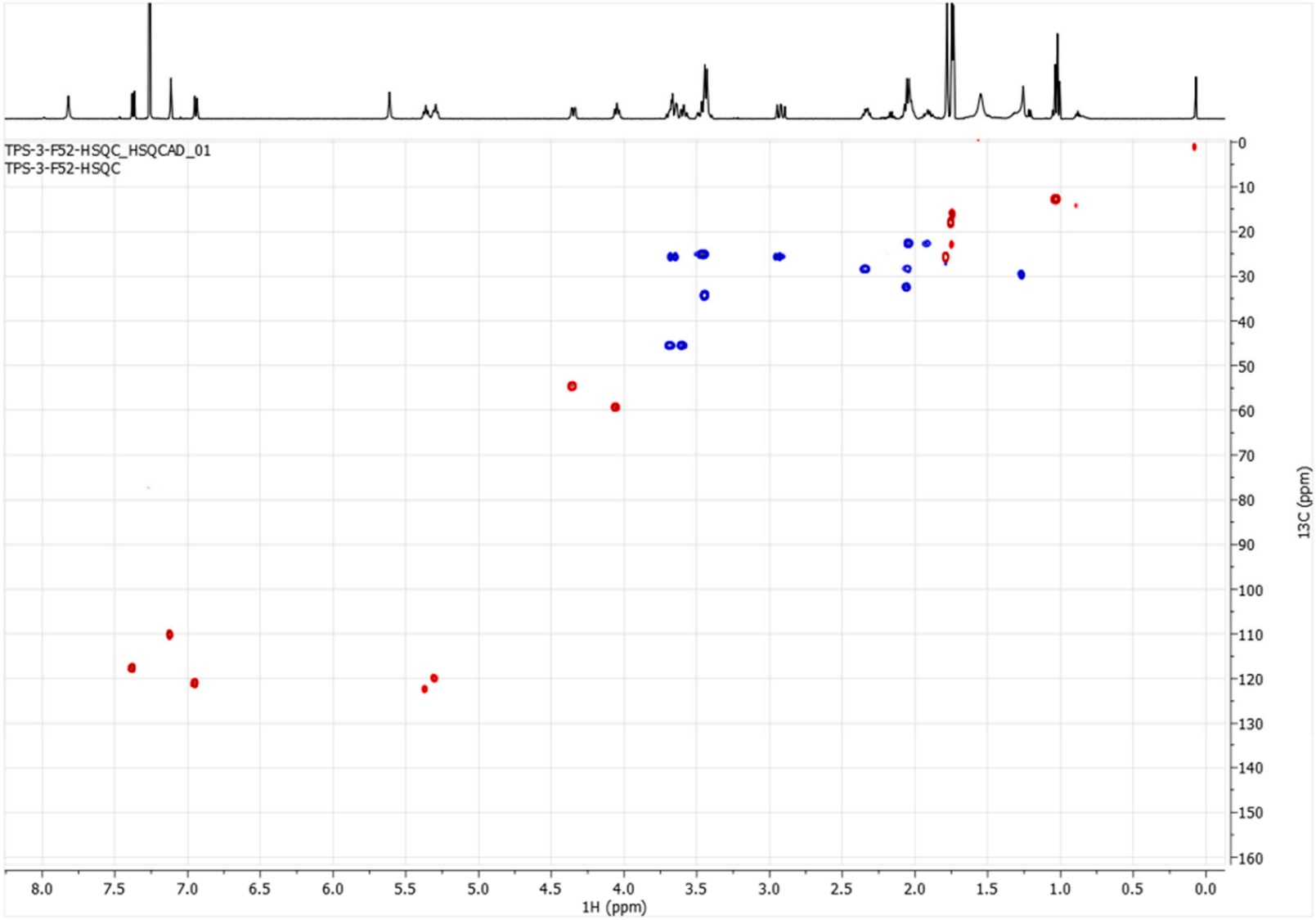
Stacked ^{1}H NMR Spectra (500 MHz) of isolated **TPS-2** regioisomers in $CDCl_3$



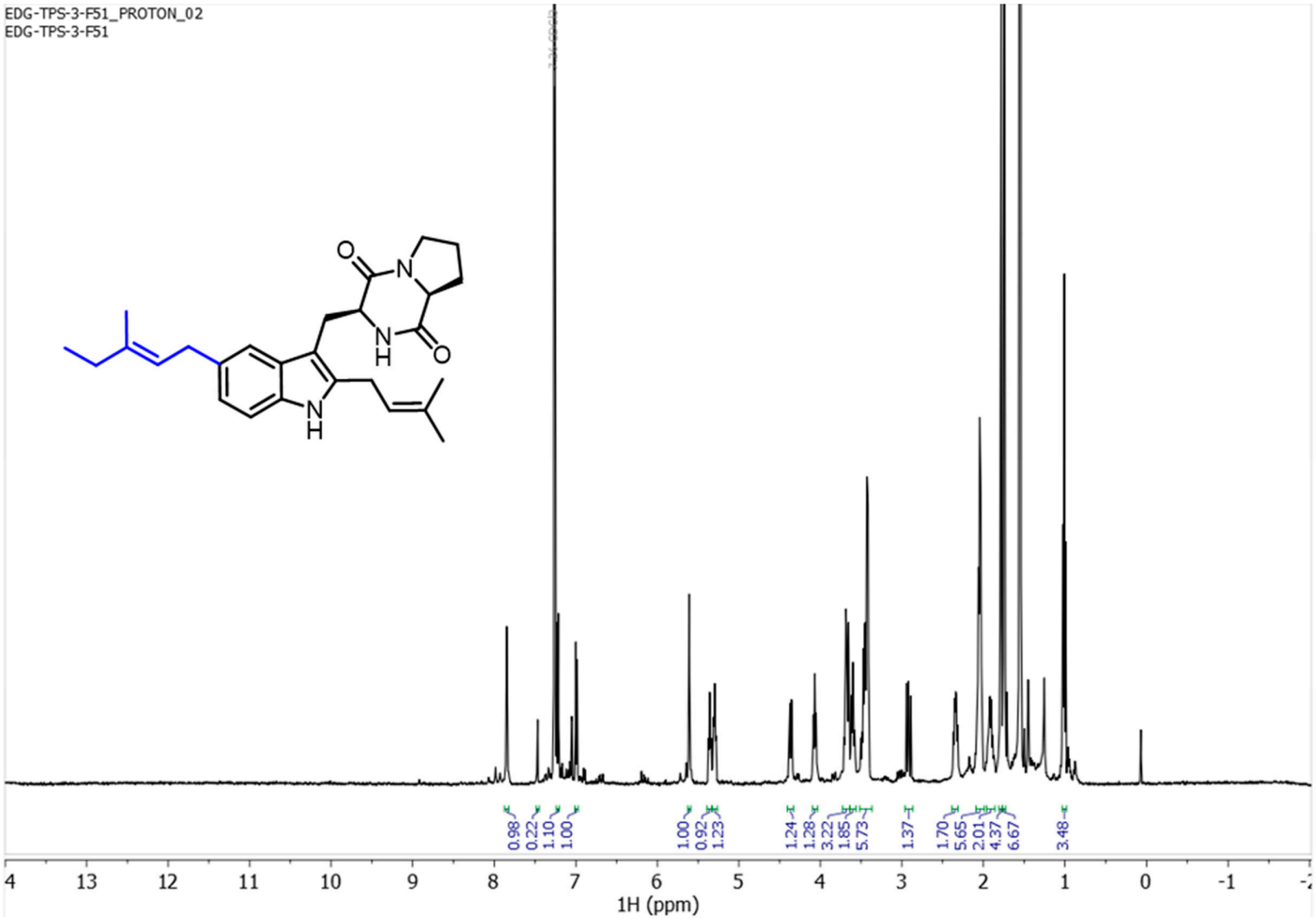
^{1}H NMR spectrum (500 MHz) of **TPS-7** in $CDCl_3$



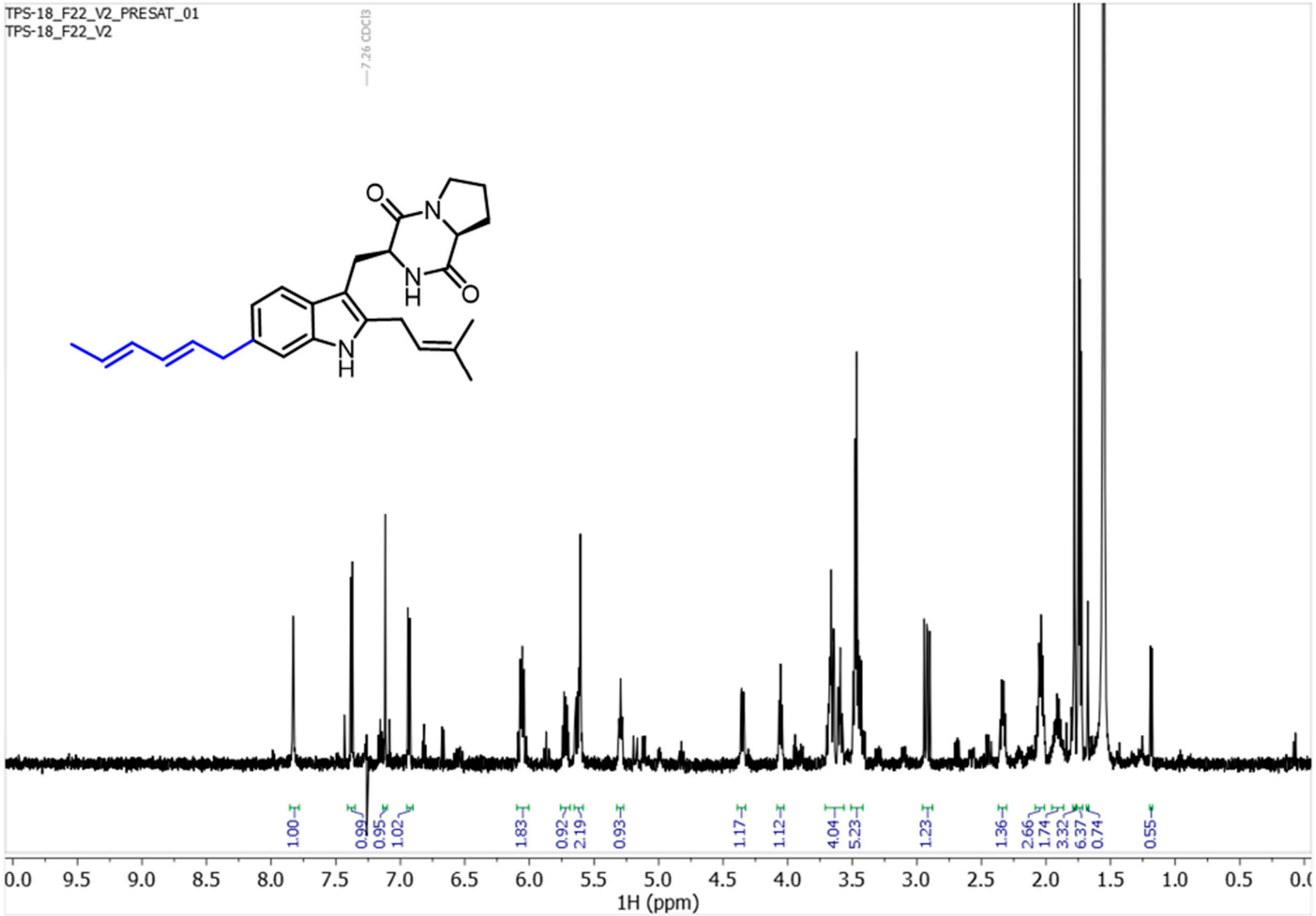
COSY spectrum (500 MHz) of **TPS-7** in $CDCl_3$



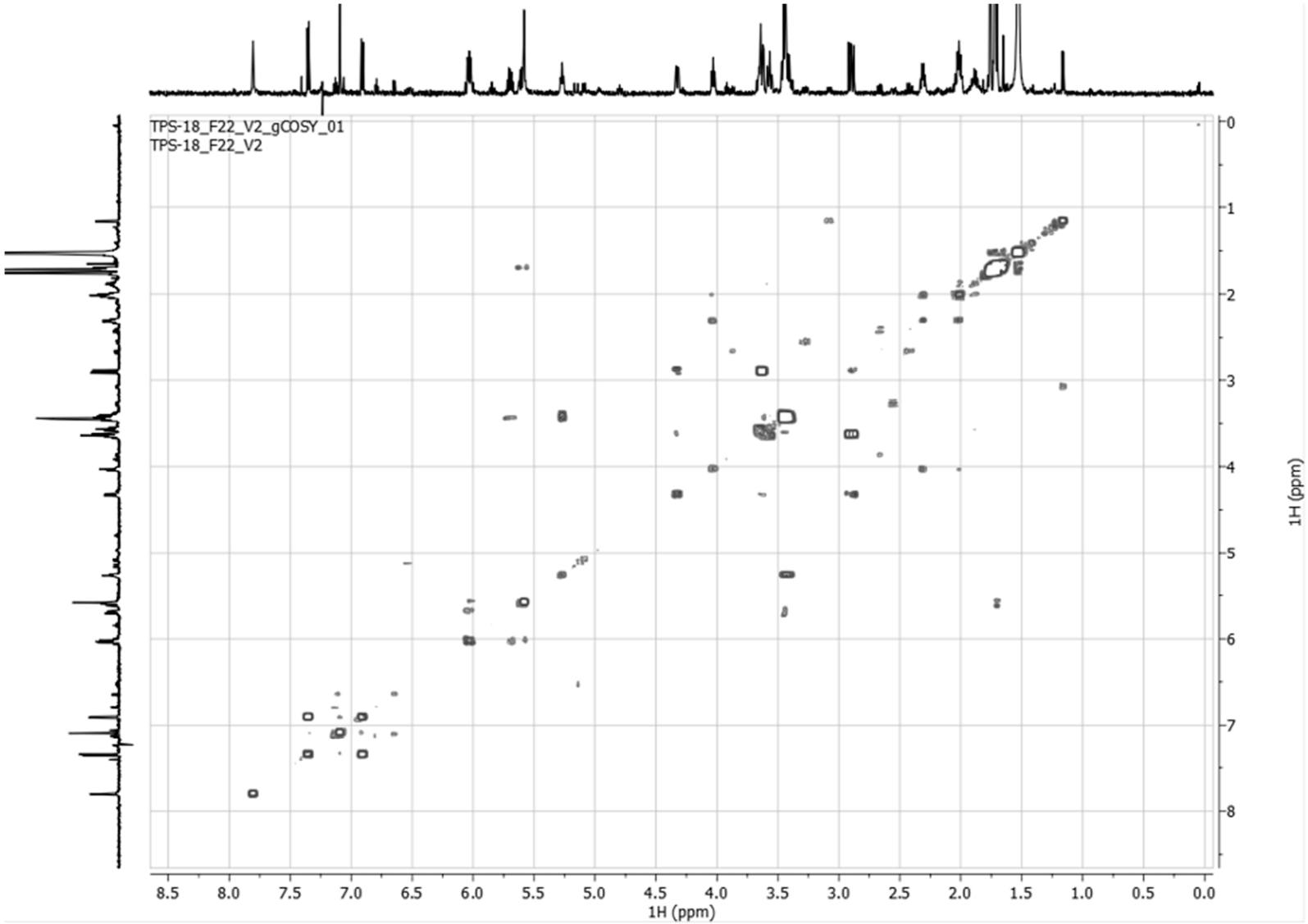
HSQC NMR spectrum (500 MHz) of **TPS-7** in $CDCl_3$



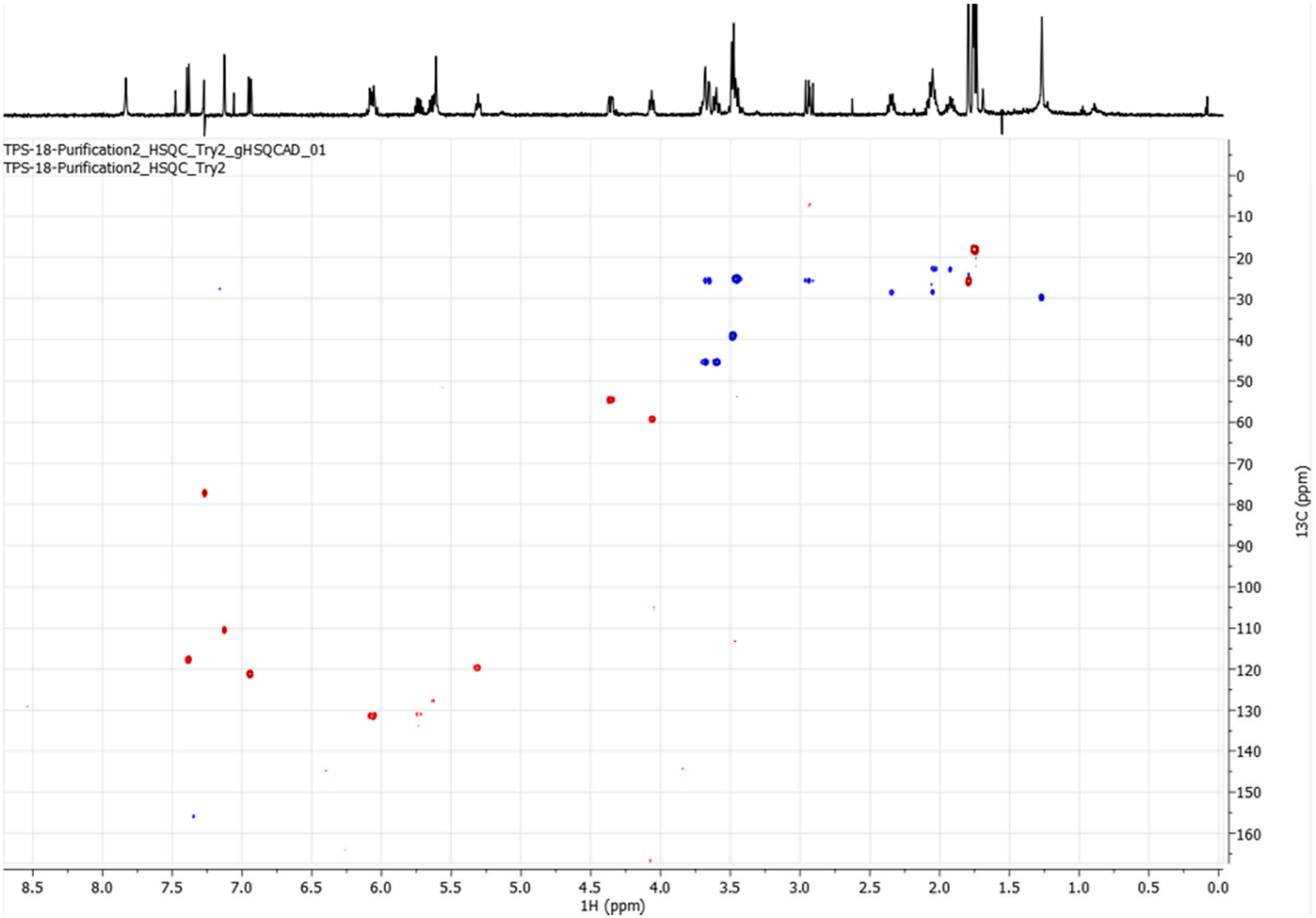
^{1}H NMR spectrum (500 MHz) of **TPS-7-C5** (minor product) in $CDCl_3$.



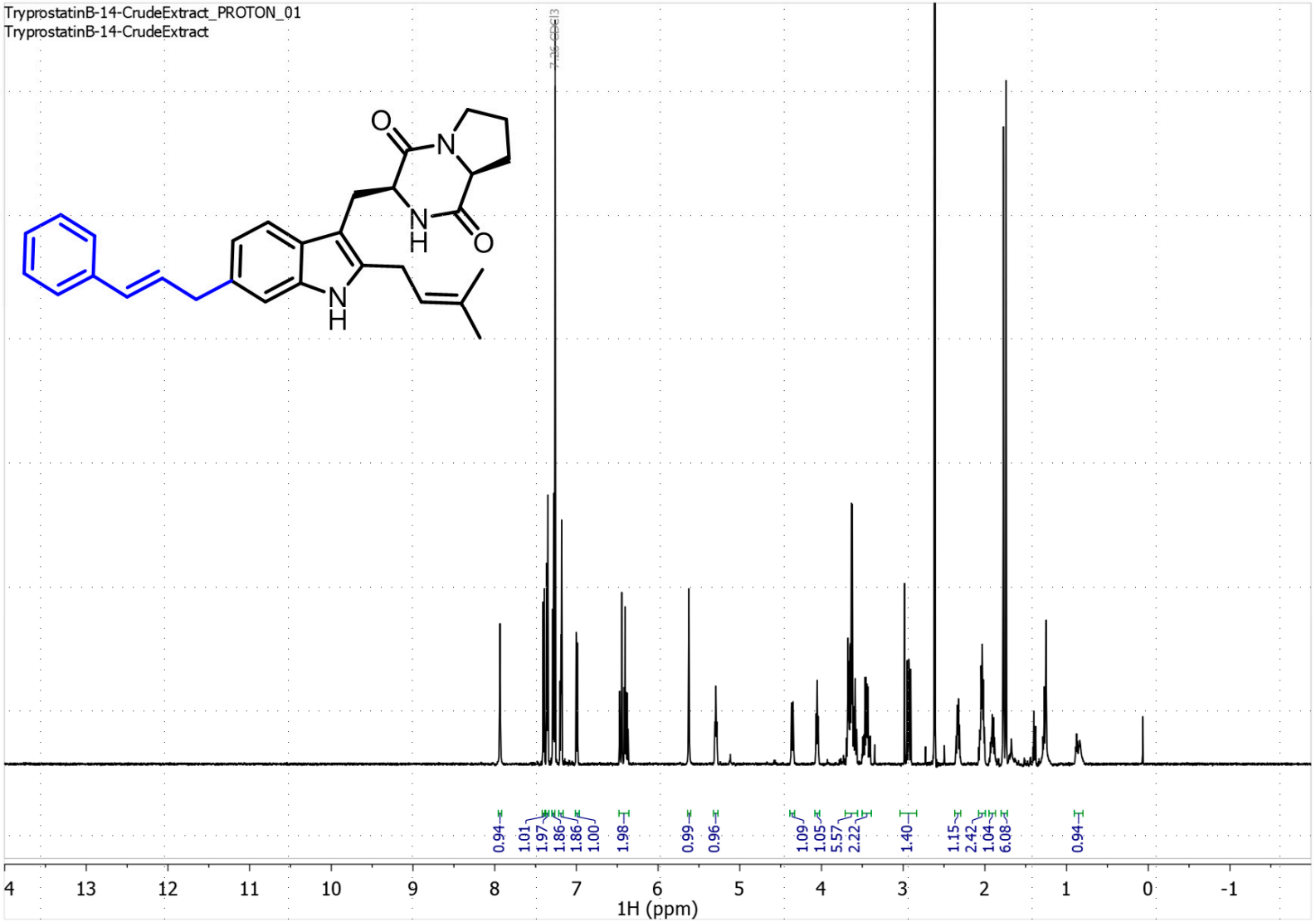
^{1}H PRESAT NMR spectrum (500 MHz) of **TPS-16** in $CDCl_3$



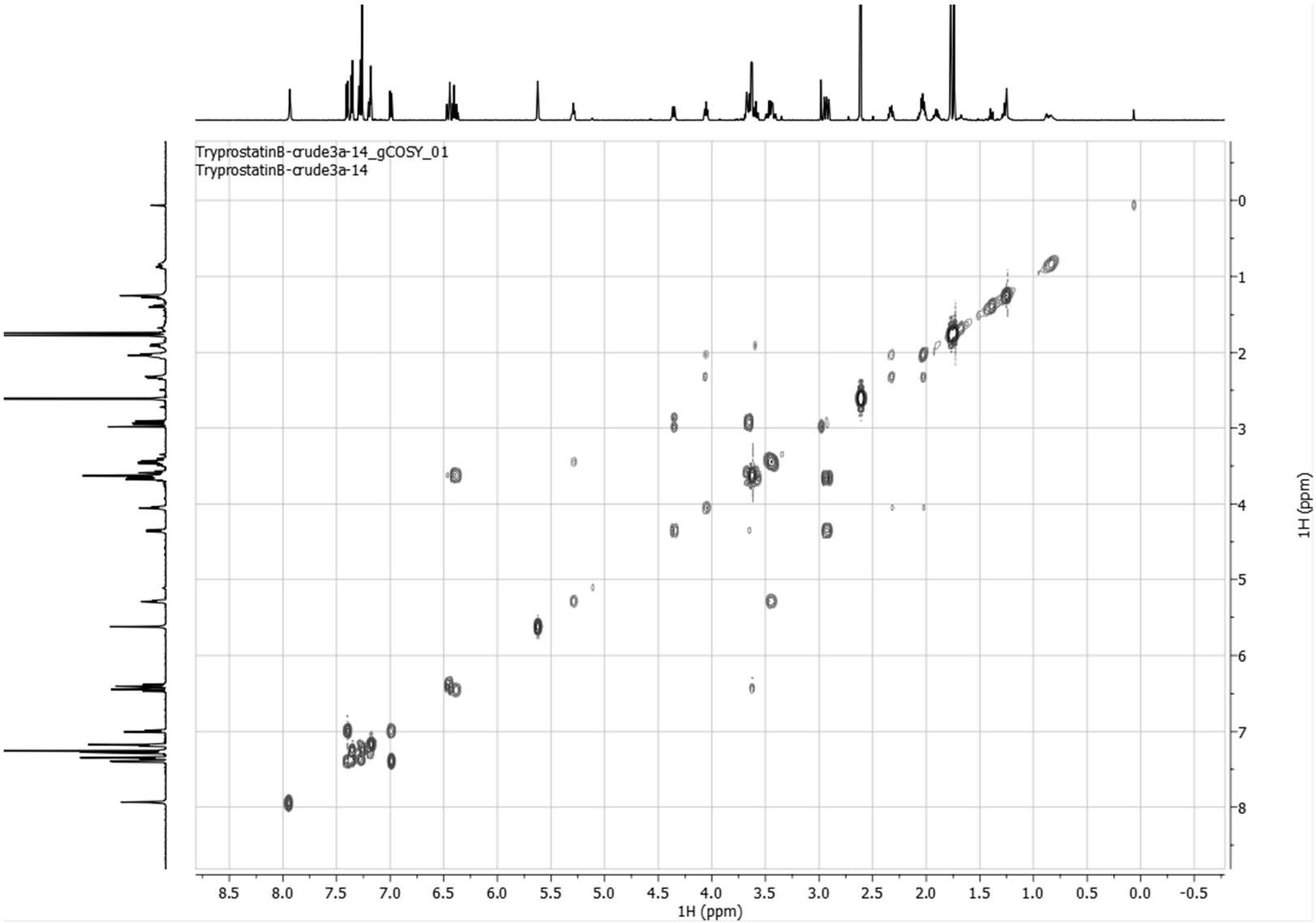
COSY NMR spectrum (500 MHz) of **TPS-16** in $CDCl_3$



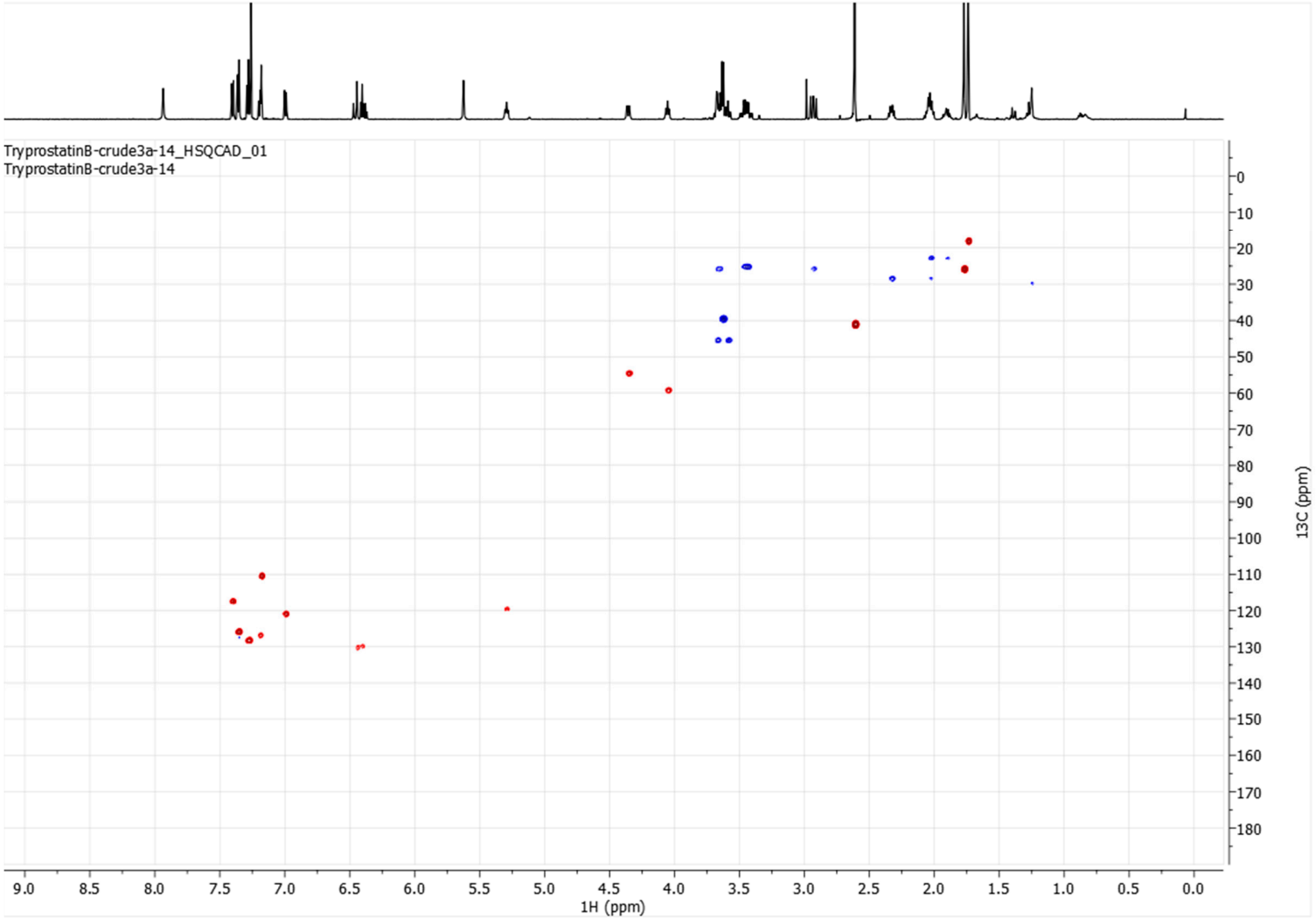
HSQC NMR spectrum (500 MHz) of **TPS-16** in $CDCl_3$



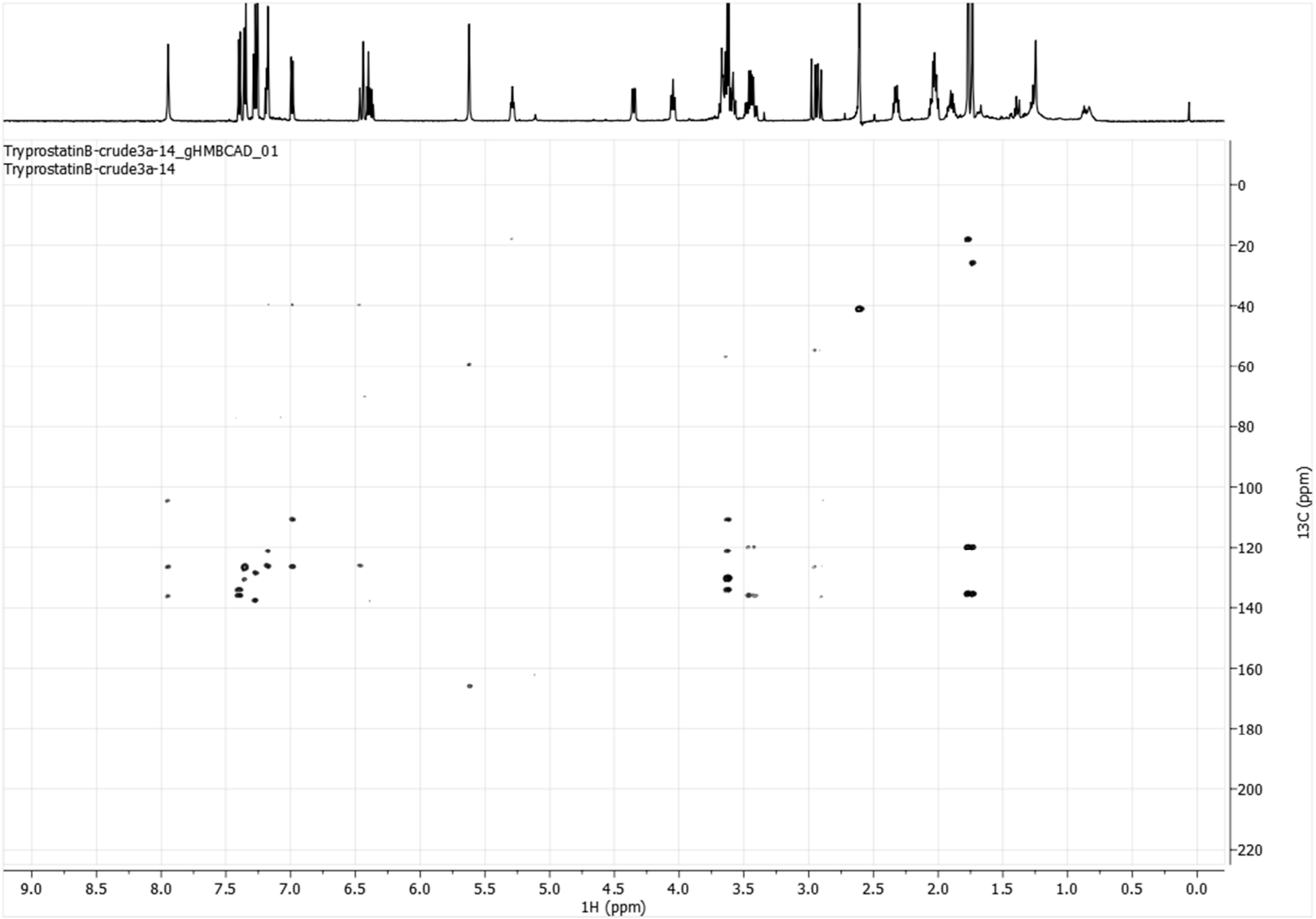
^{1}H NMR spectrum (600 MHz) of **TPS-24** in $CDCl_3$



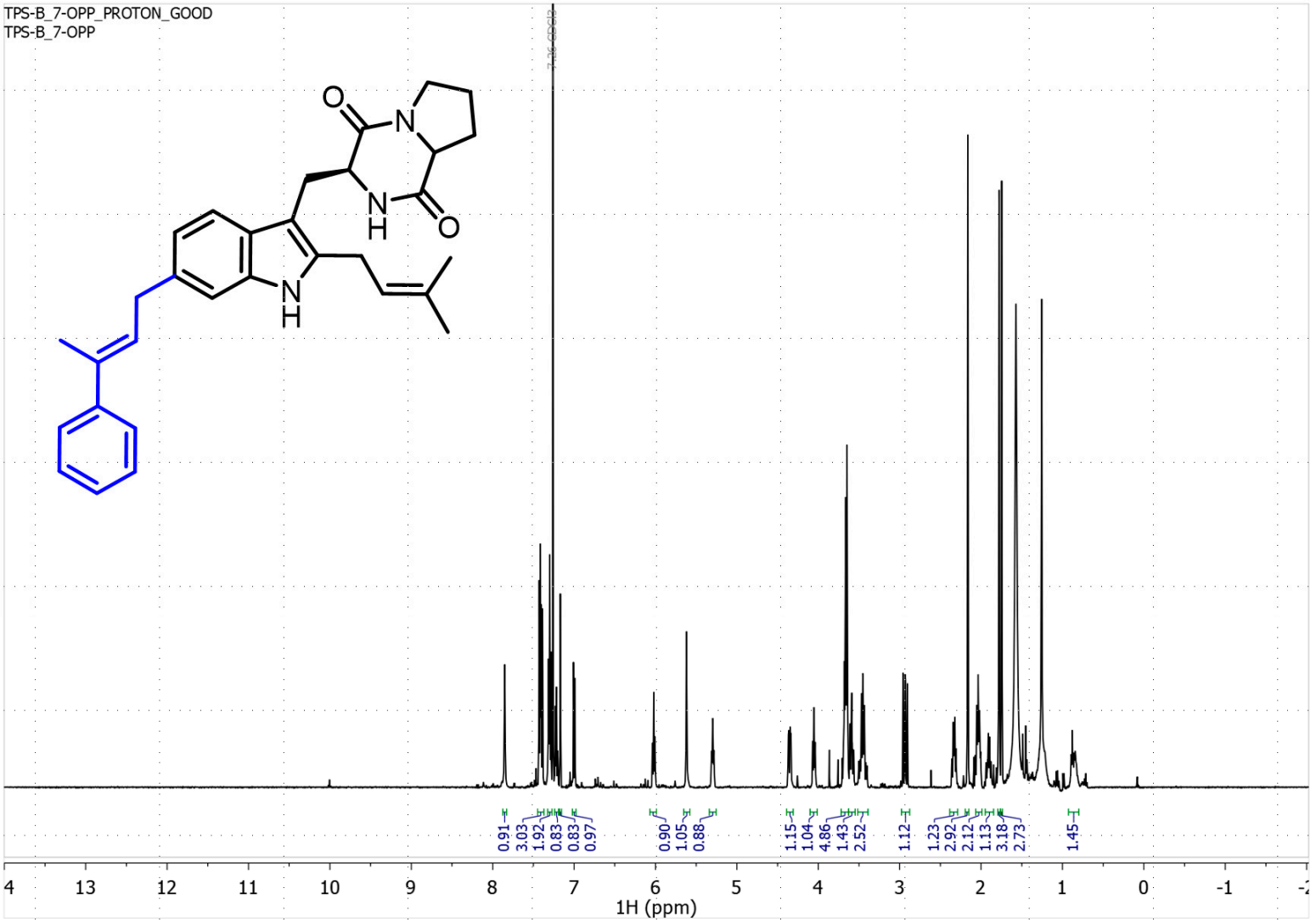
COSY NMR spectrum (600 MHz) of **TPS-24** in $CDCl_3$



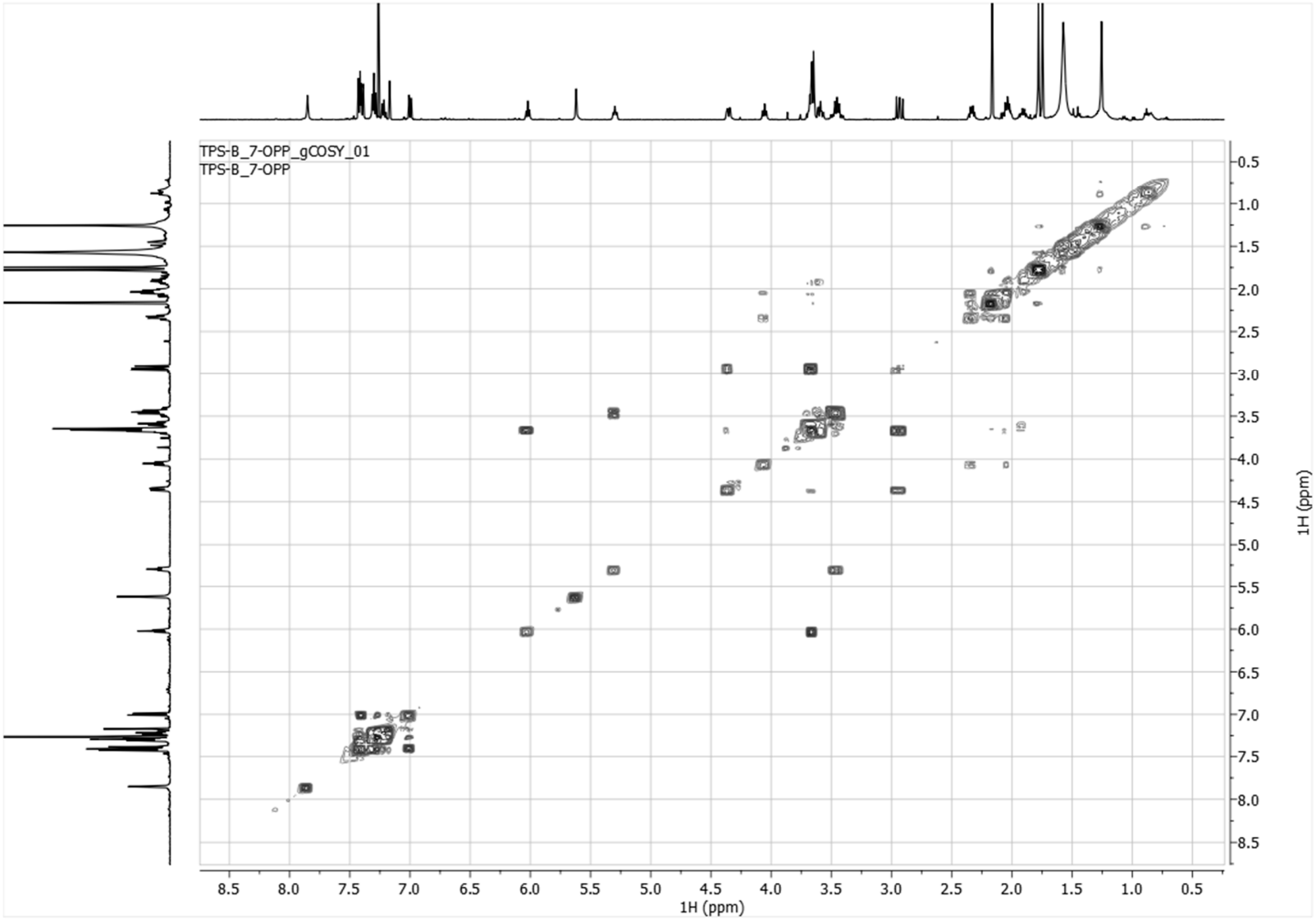
HSQC NMR spectrum (600 MHz) of **TPS-24** in $CDCl_3$



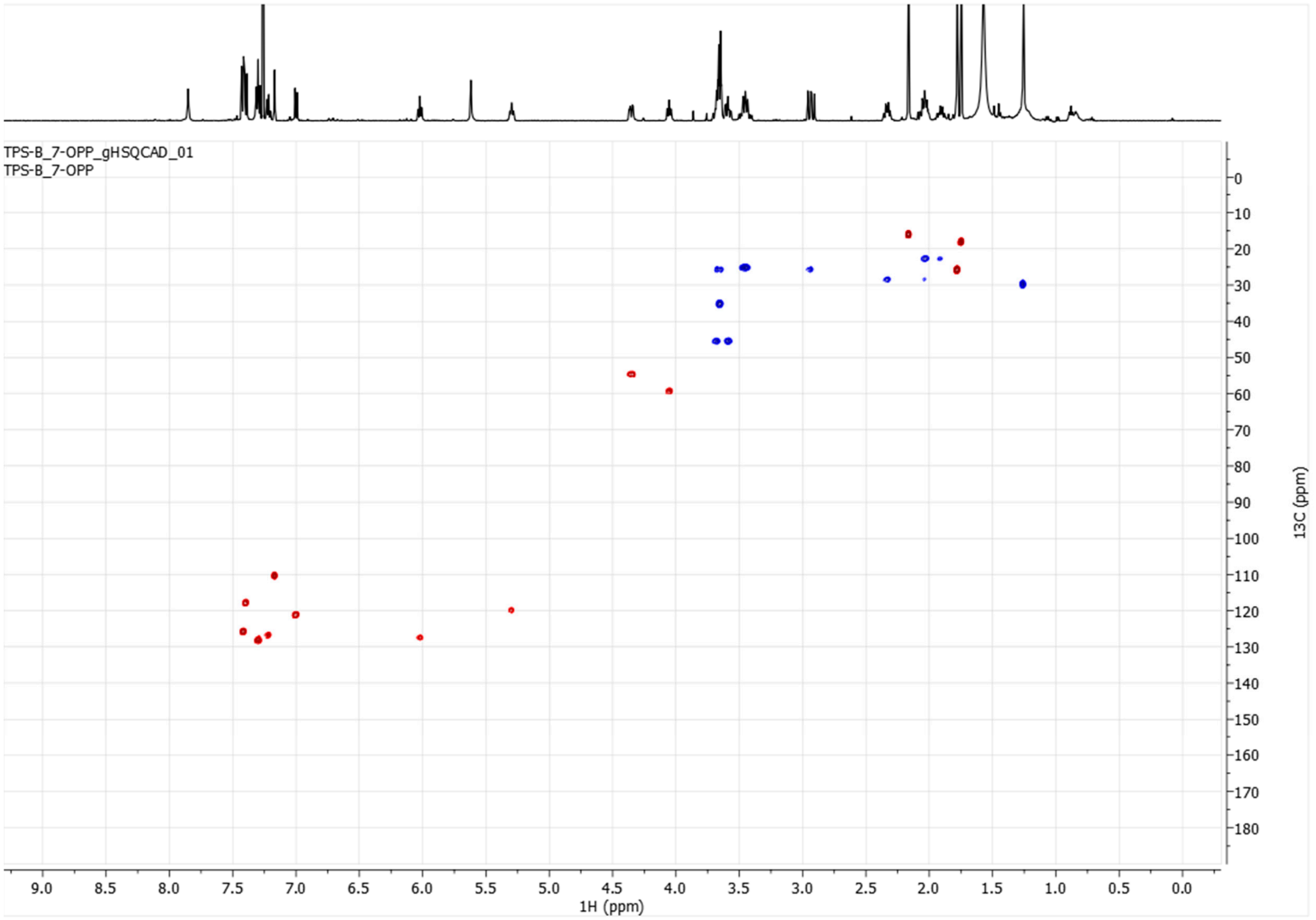
HMBC NMR spectrum (600 MHz) of **TPS-24** in $CDCl_3$



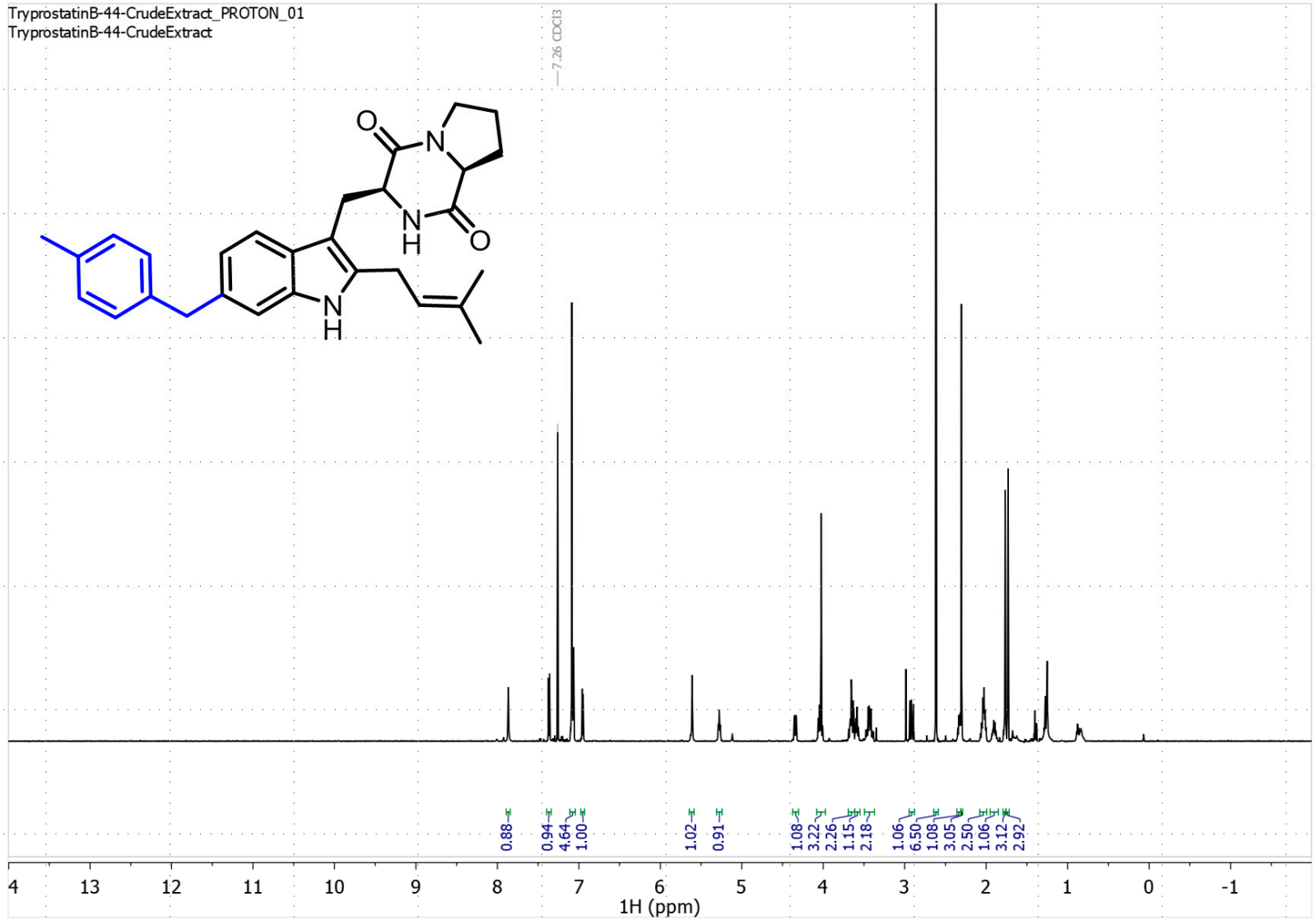
^{1}H NMR spectrum (500 MHz) of **TPS-25** in $CDCl_3$



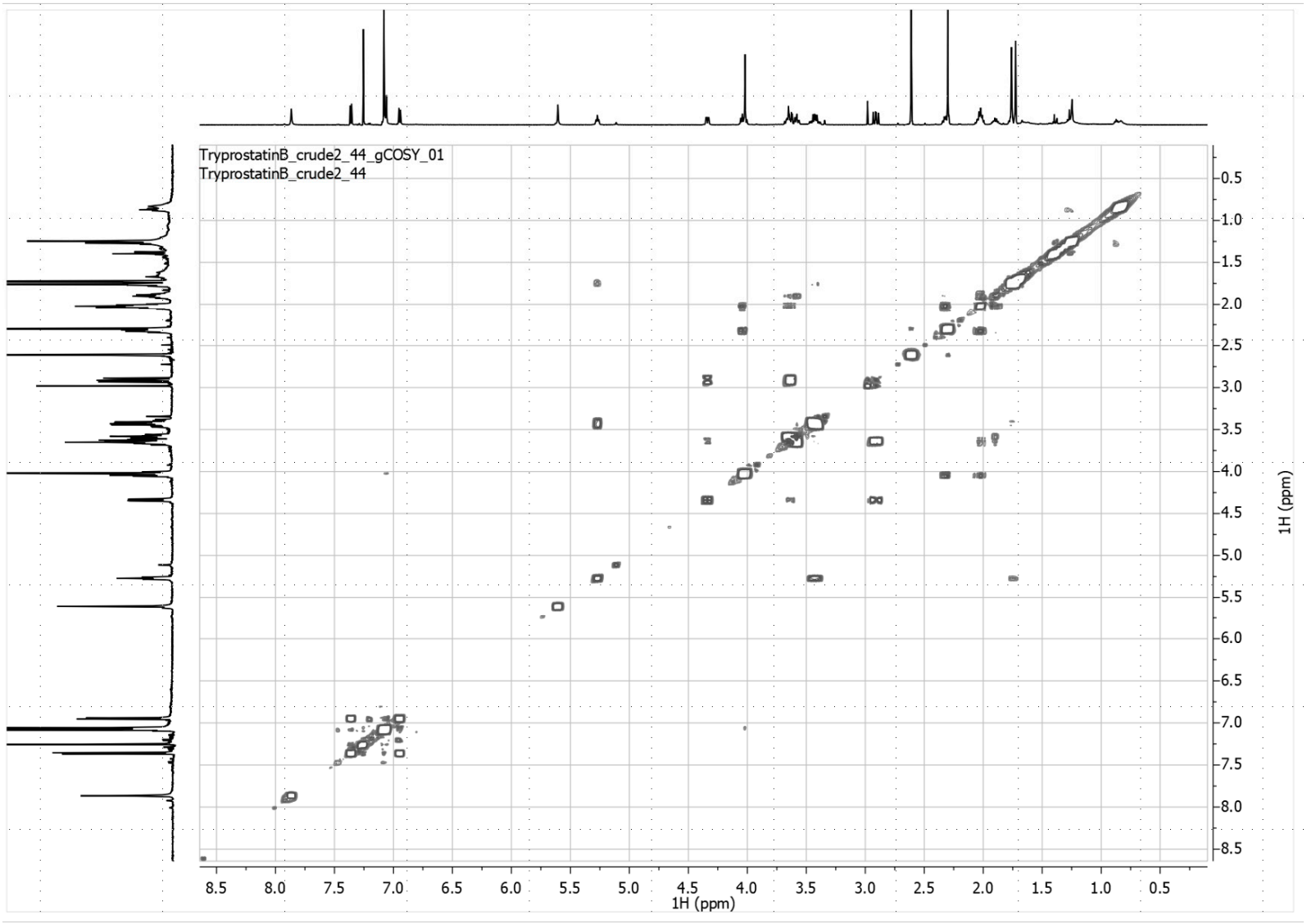
COSY NMR spectrum (500 MHz) of **TPS-25** in $CDCl_3$



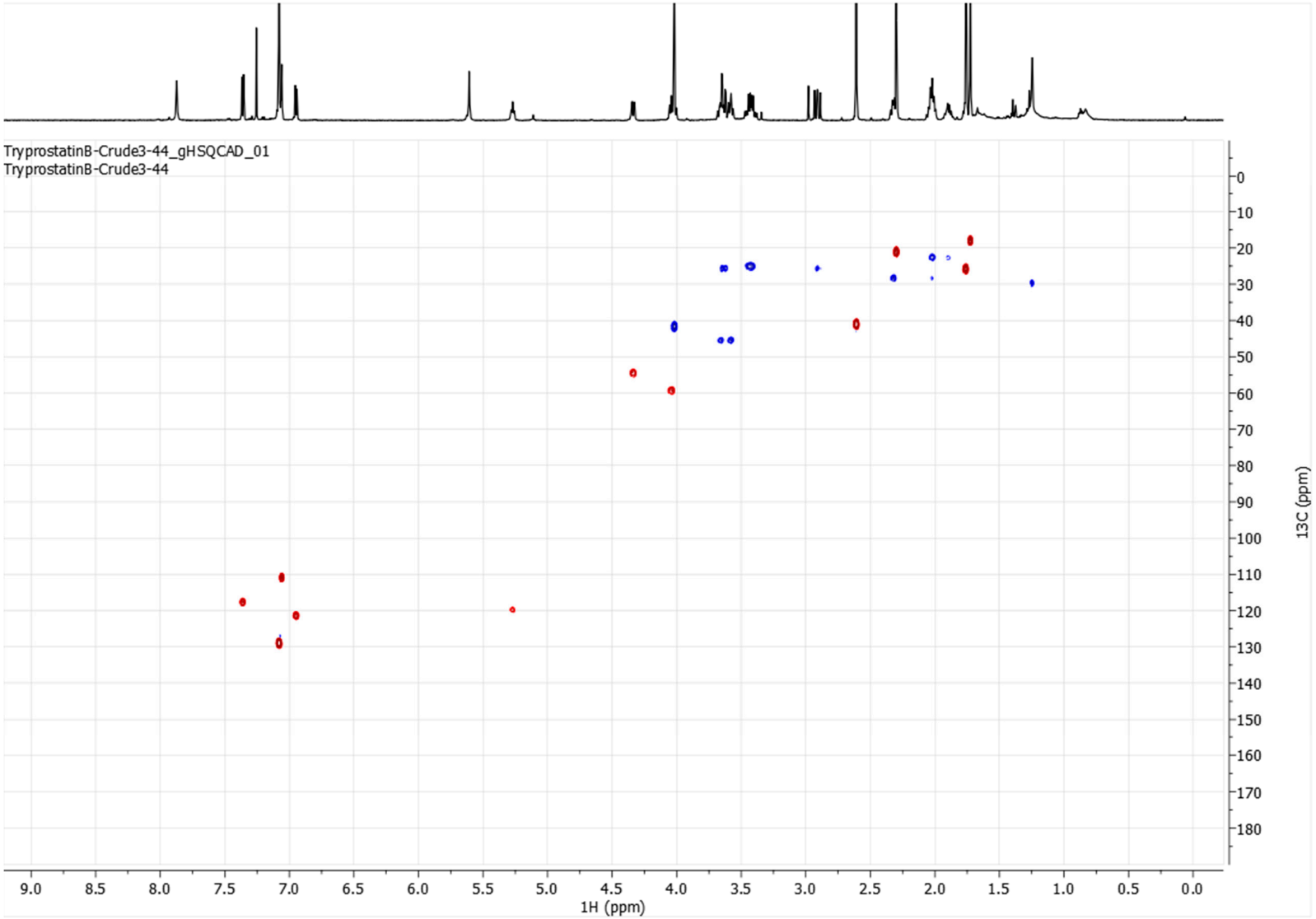
HSQC NMR spectrum (500 MHz) of **TPS-25** in $CDCl_3$



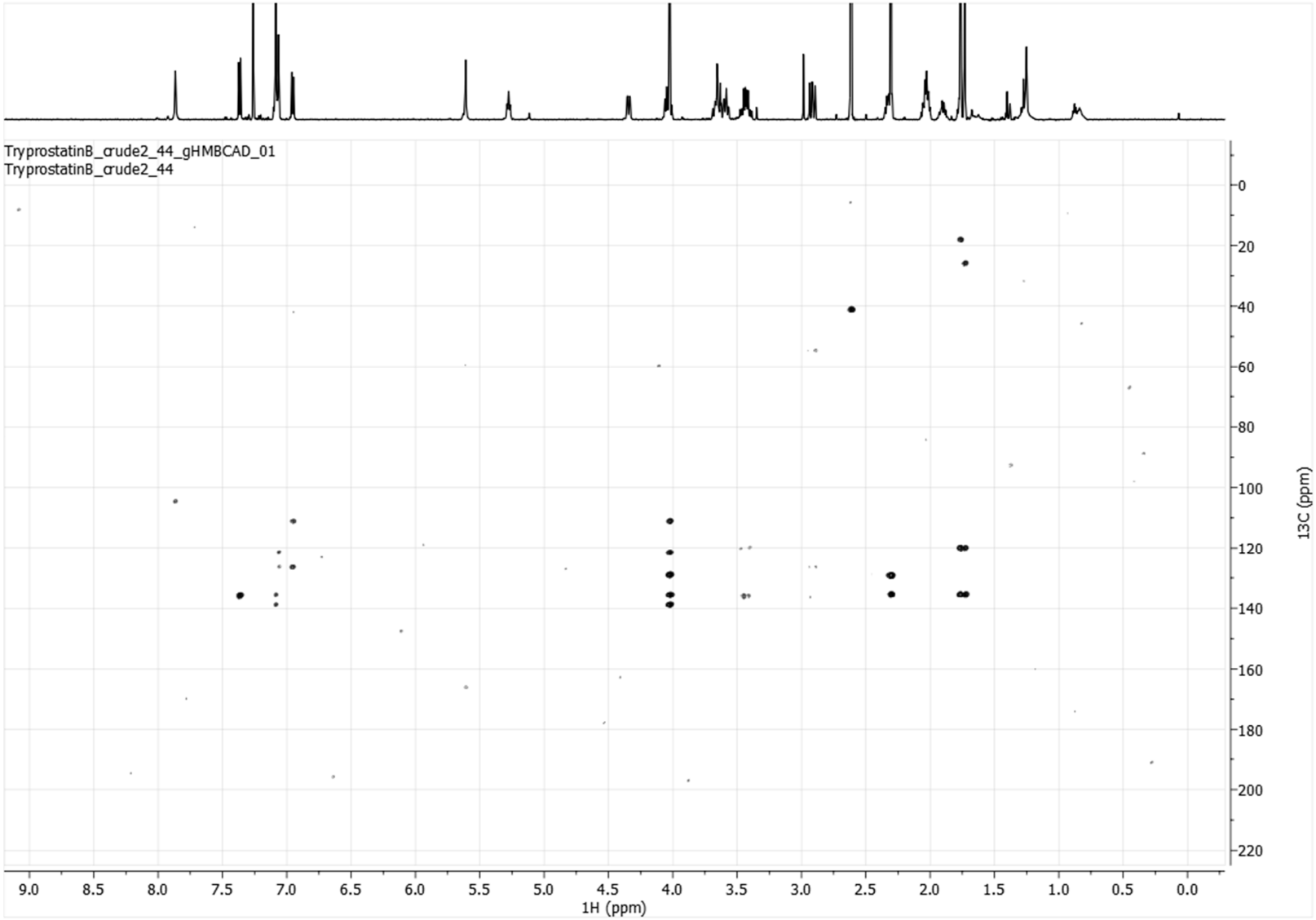
^{1}H NMR spectrum (600 MHz) of **TPS-46** in $CDCl_3$



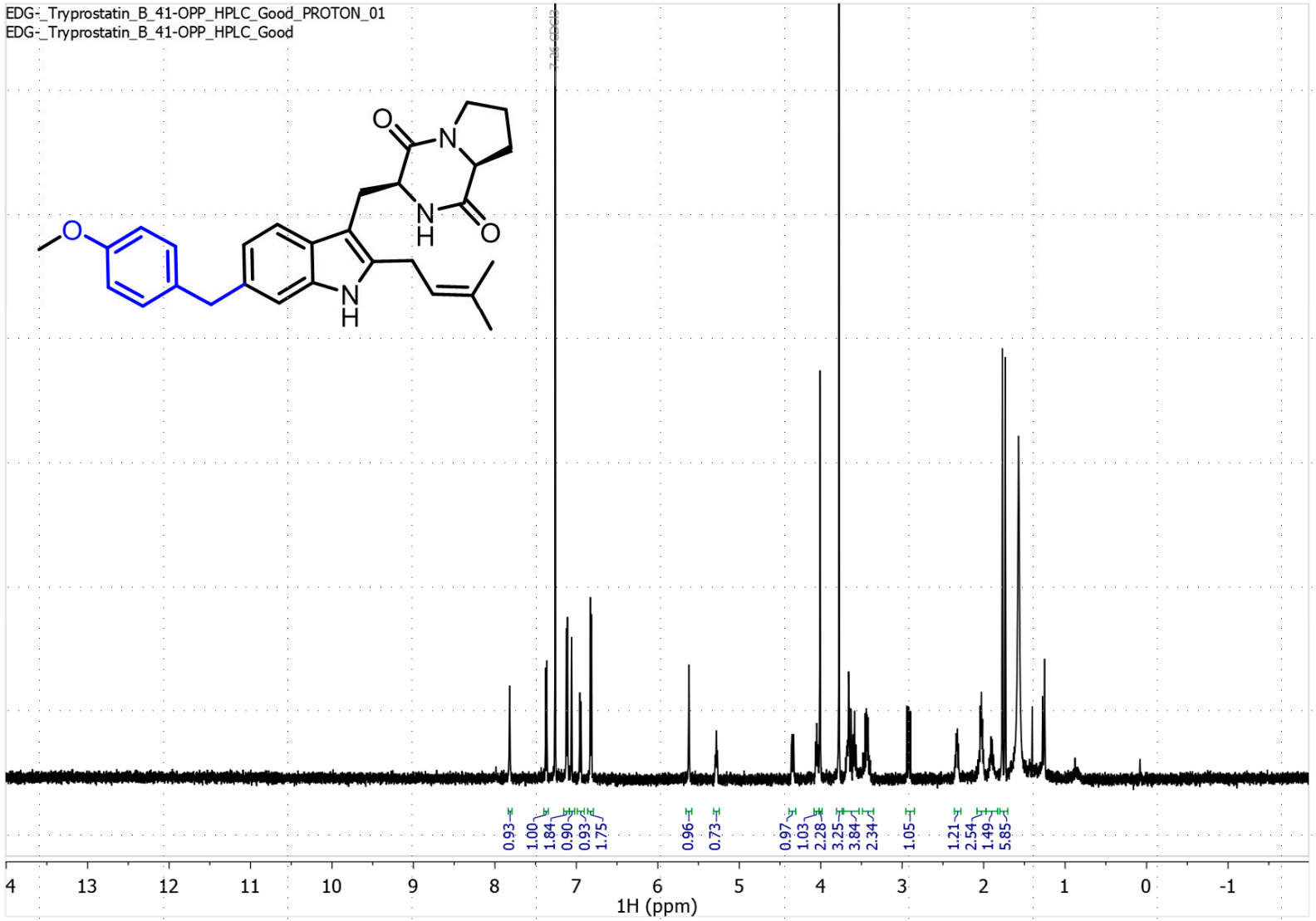
COSY NMR spectrum (600 MHz) of **TPS-46** in $CDCl_3$



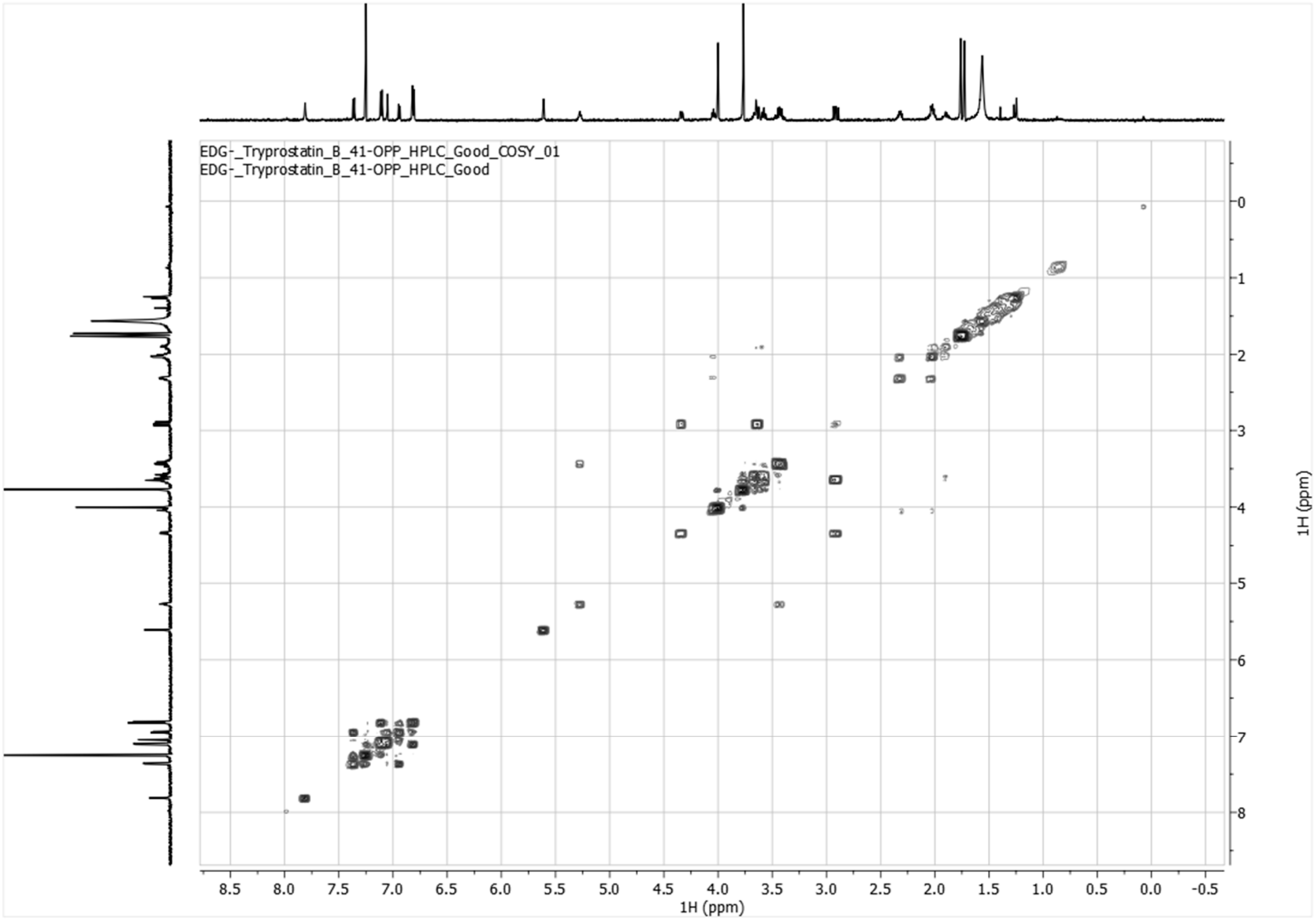
HSQC NMR spectrum (600 MHz) of **TPS-46** in $CDCl_3$



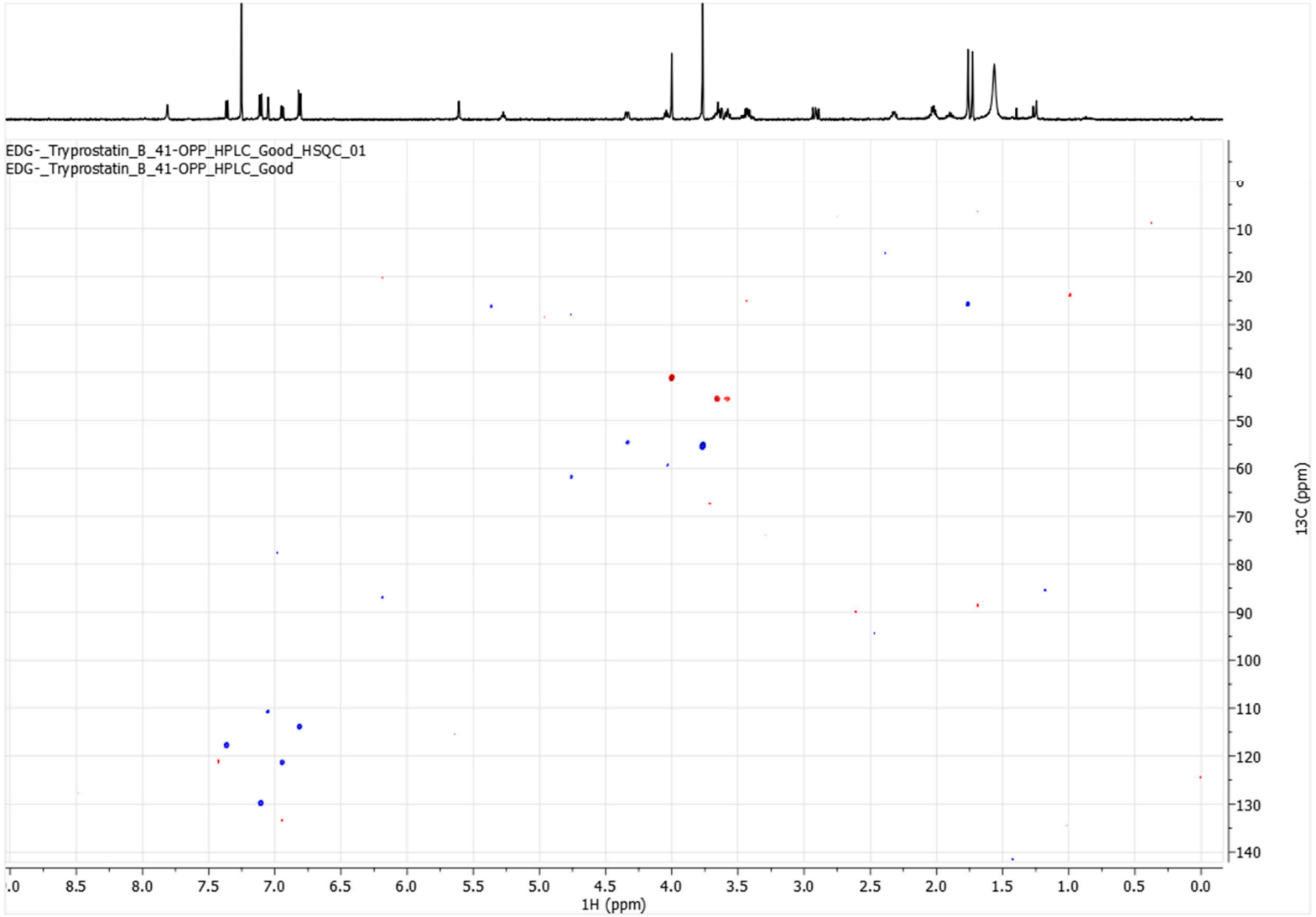
HMBC NMR spectrum (600 MHz) of **TPS-46** in $CDCl_3$



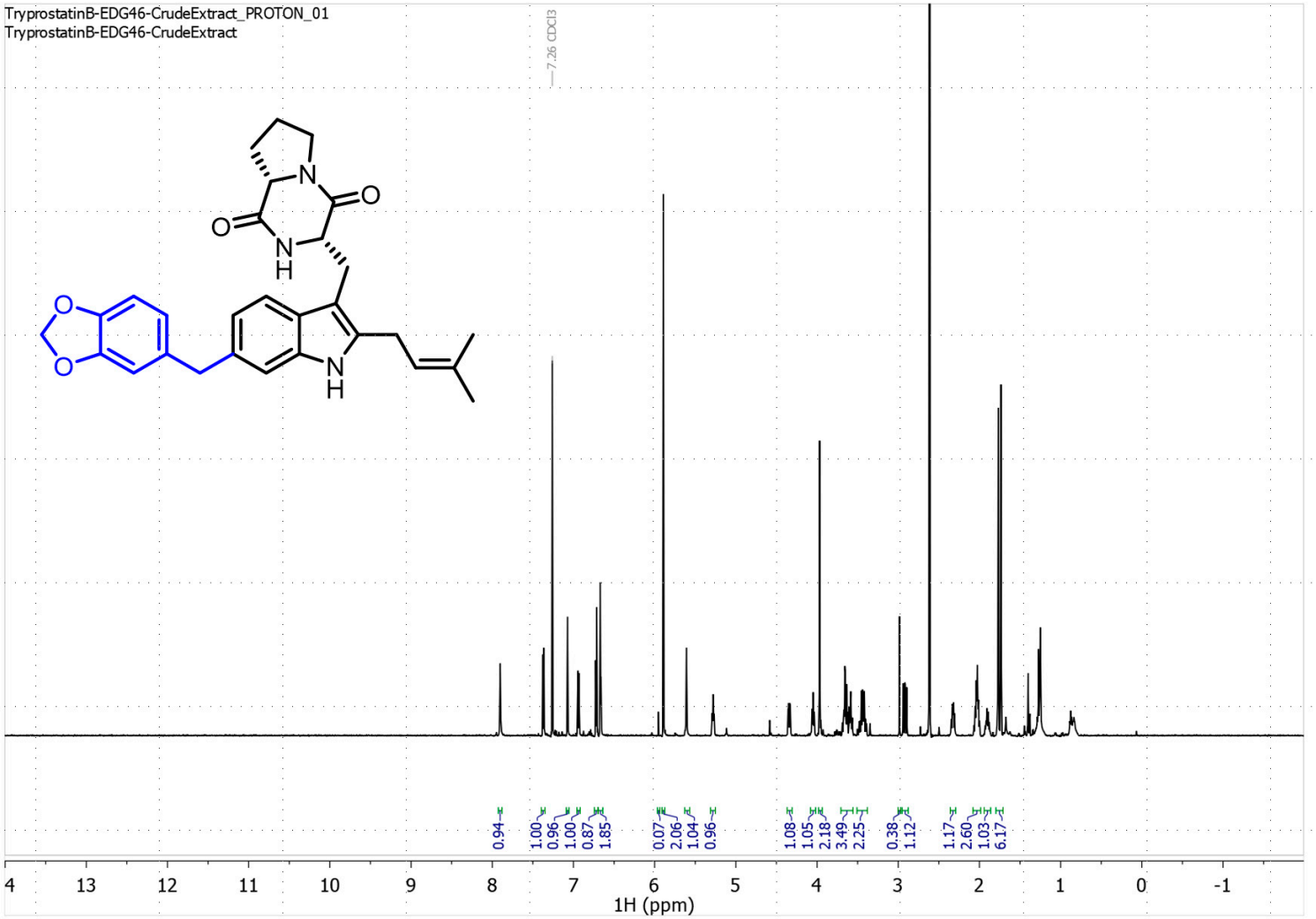
^{1}H NMR spectrum (600 MHz) of **TPS-52** in $CDCl_3$



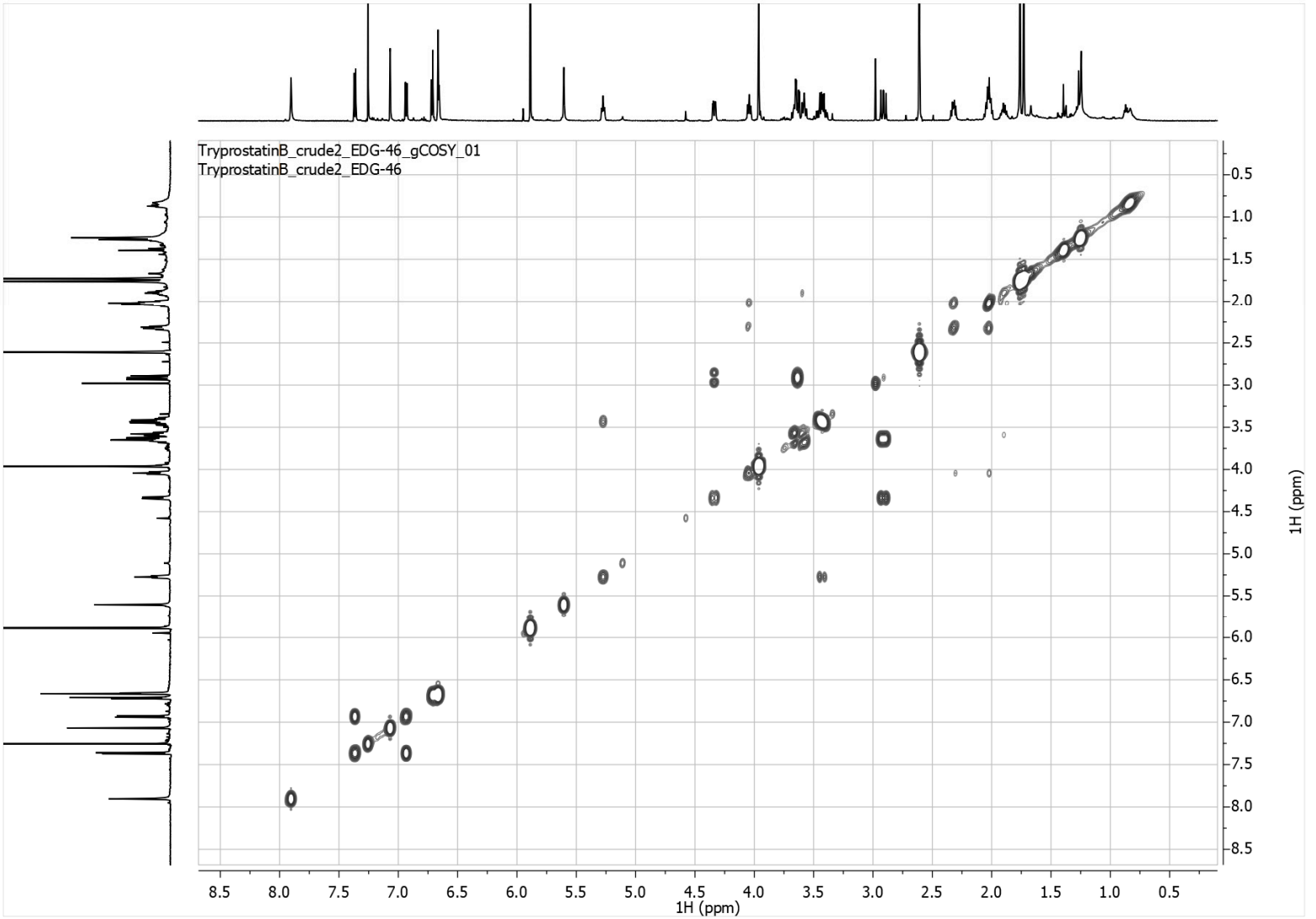
COSY NMR spectrum (600 MHz) of **TPS-52** in $CDCl_3$



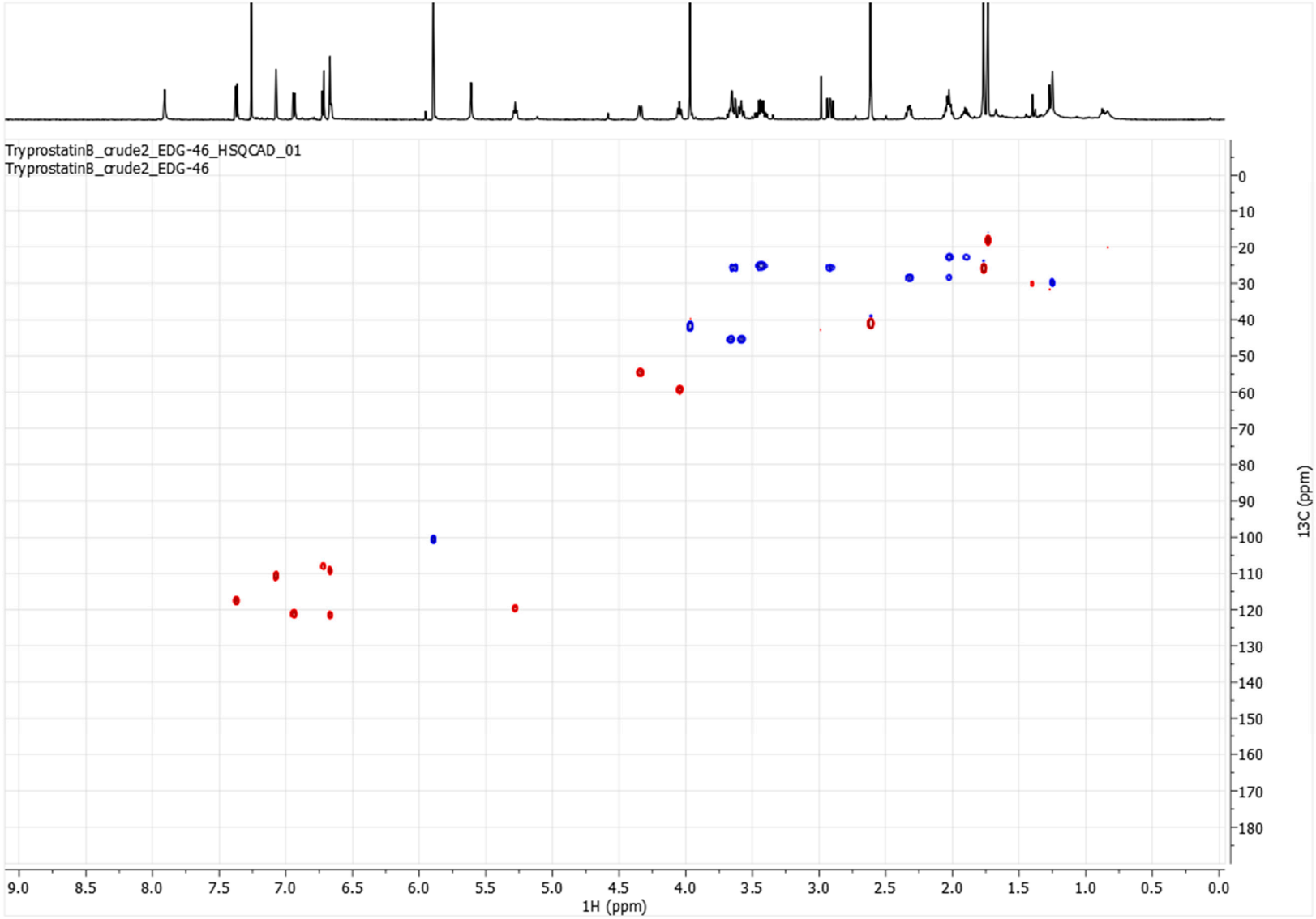
HSQC NMR spectrum (600 MHz) of **TPS-52** in $CDCl_3$



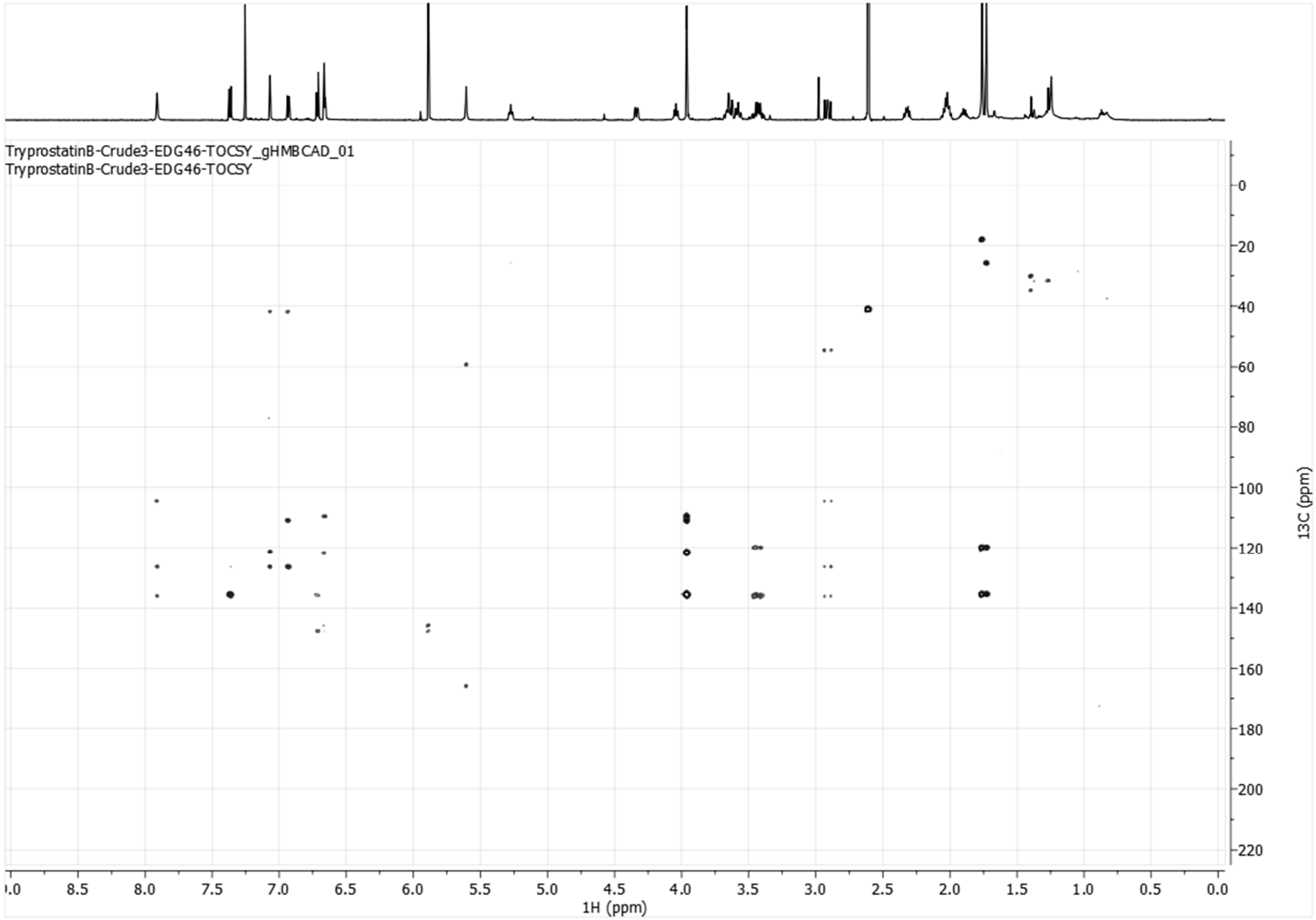
^{1}H NMR Spectrum (600 MHz) of **TPS-58** in $CDCl_3$



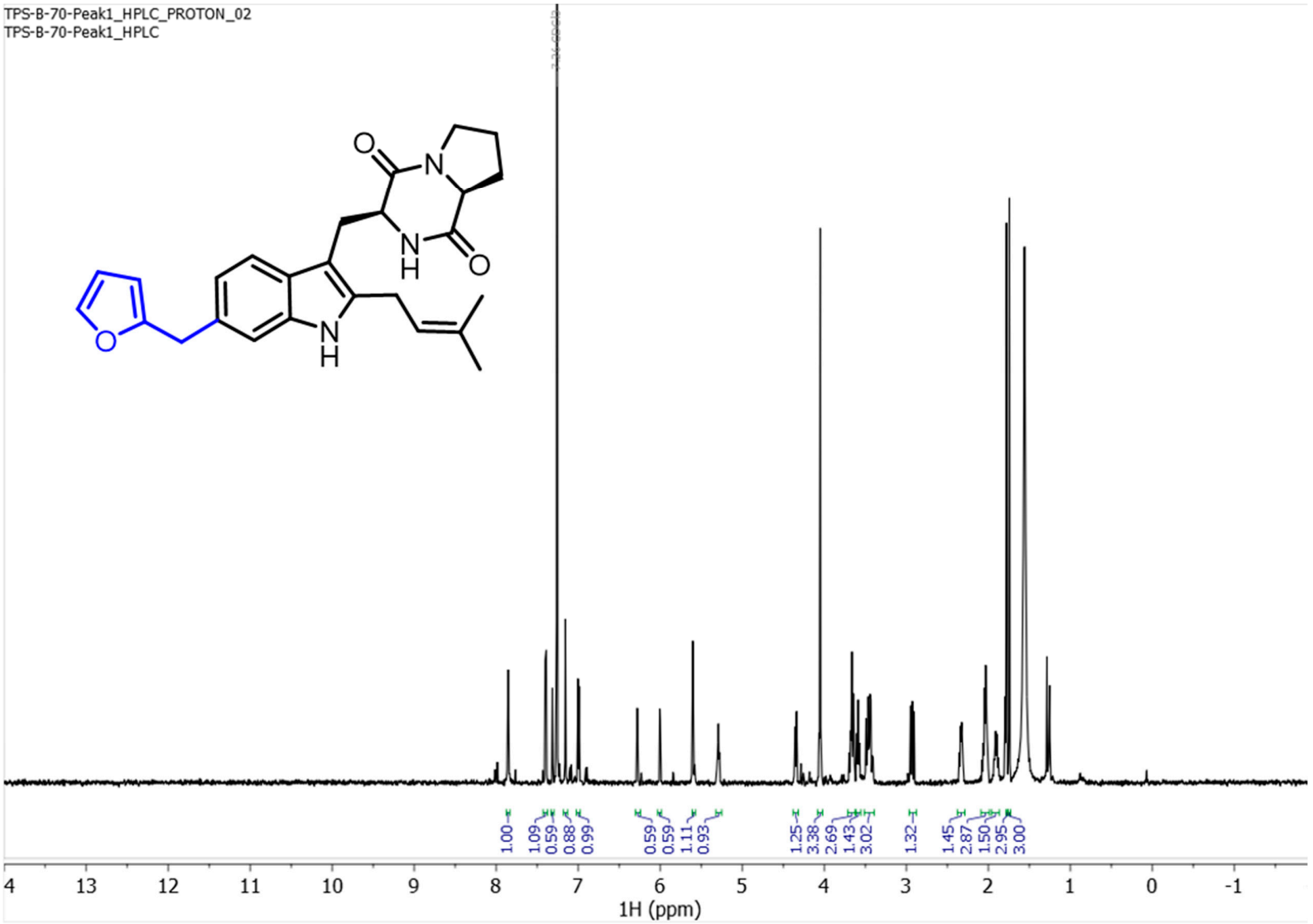
COSY NMR spectrum (600 MHz) of **TPS-58** in $CDCl_3$



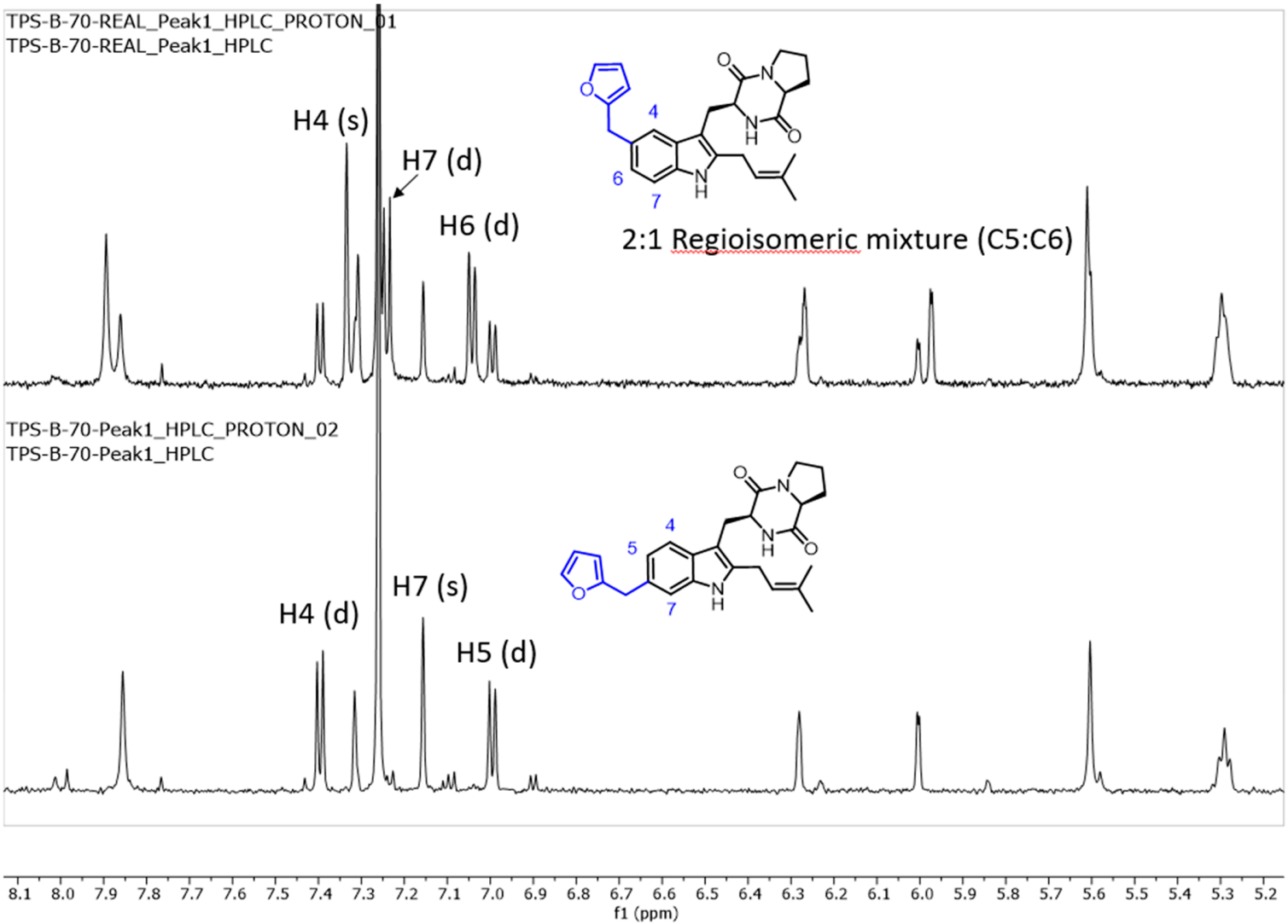
HSQC NMR spectrum (600 MHz) of **TPS-58** in $CDCl_3$



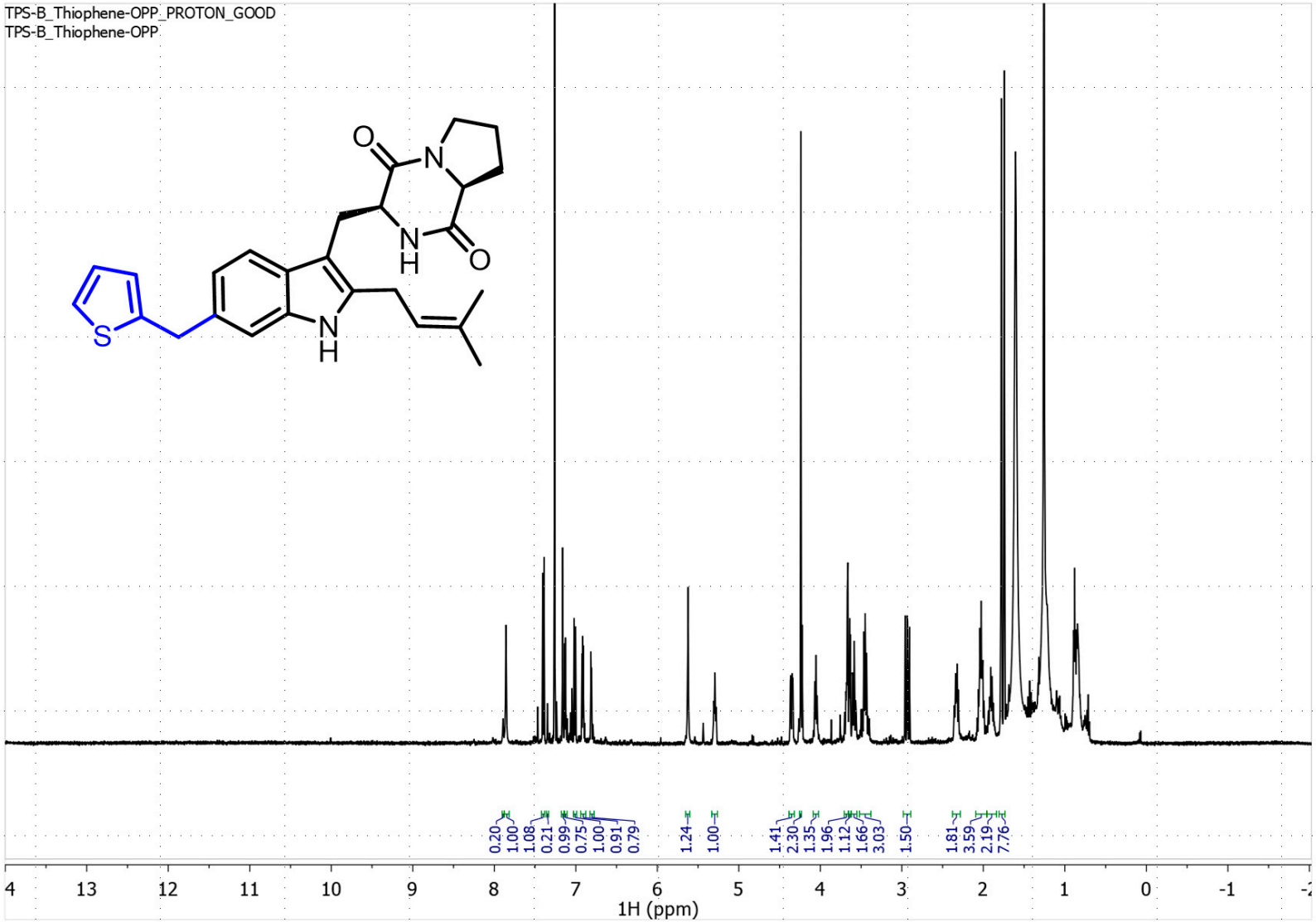
HMBC NMR spectrum (600 MHz) of **TPS-58** in $CDCl_3$



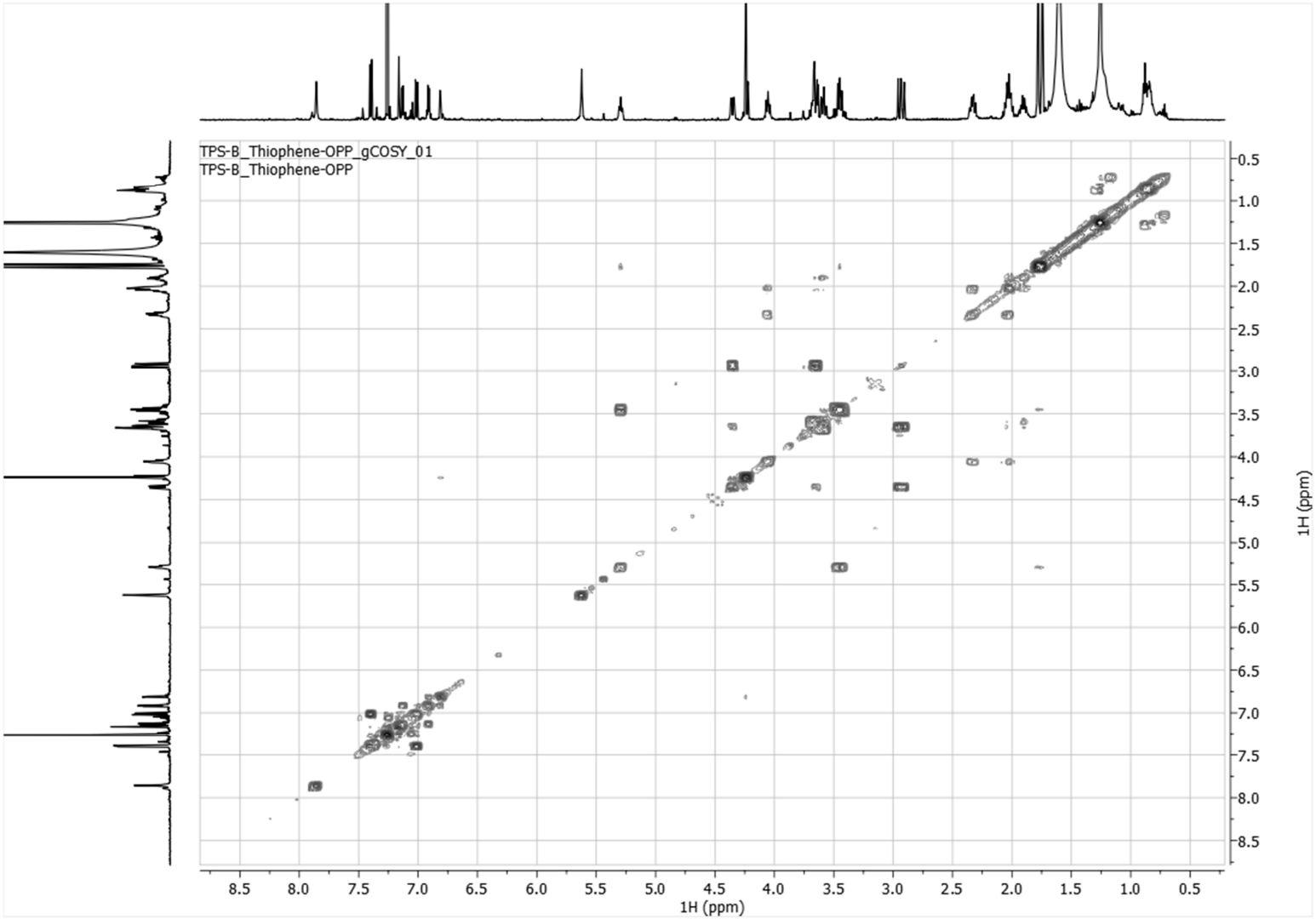
^{1}H NMR spectrum (500 MHz) of **TPS-61** in $CDCl_3$



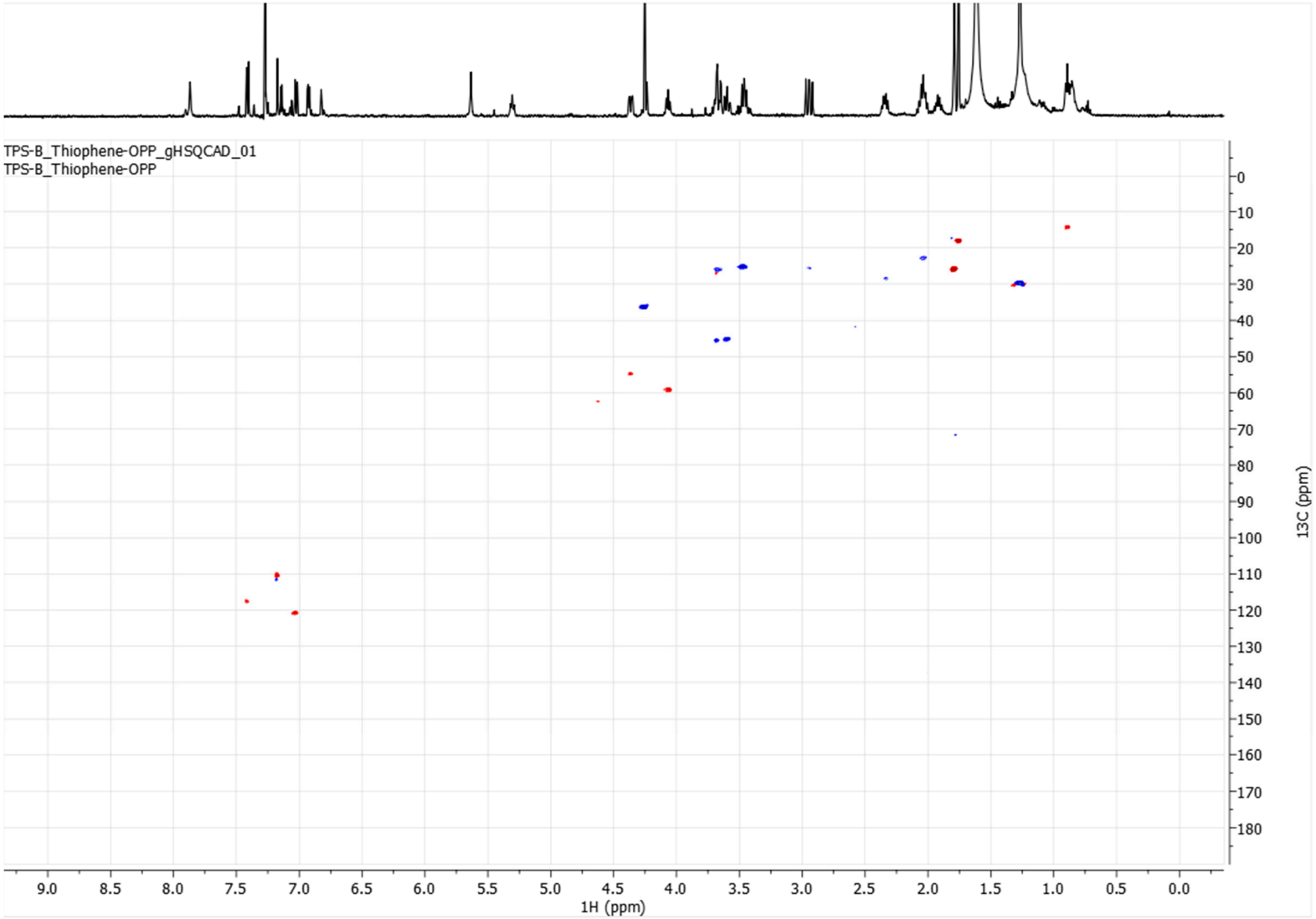
Stacked ^{1}H spectra of **TPS-61** fractions after partial purification. The top spectrum displays the H7 doublet and H4 singlet indicative of C-5 alkylation as a minor reaction product. The bottom spectrum is the purified C6 alkylated major product.



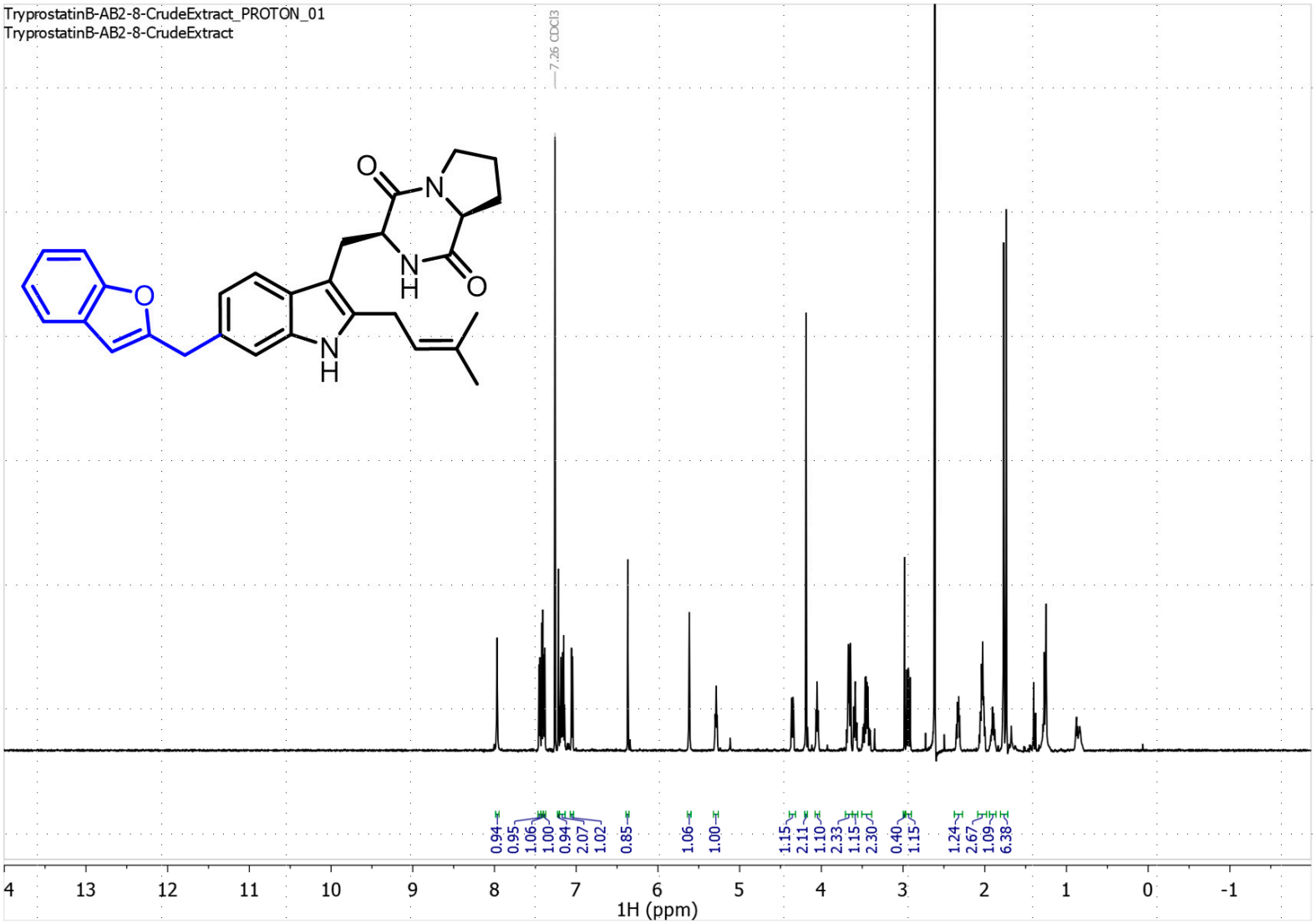
^{1}H NMR spectrum (500 MHz) of **TPS-62** in $CDCl_3$. The minor C5 alkylated product is 20% of the products based on integrations.



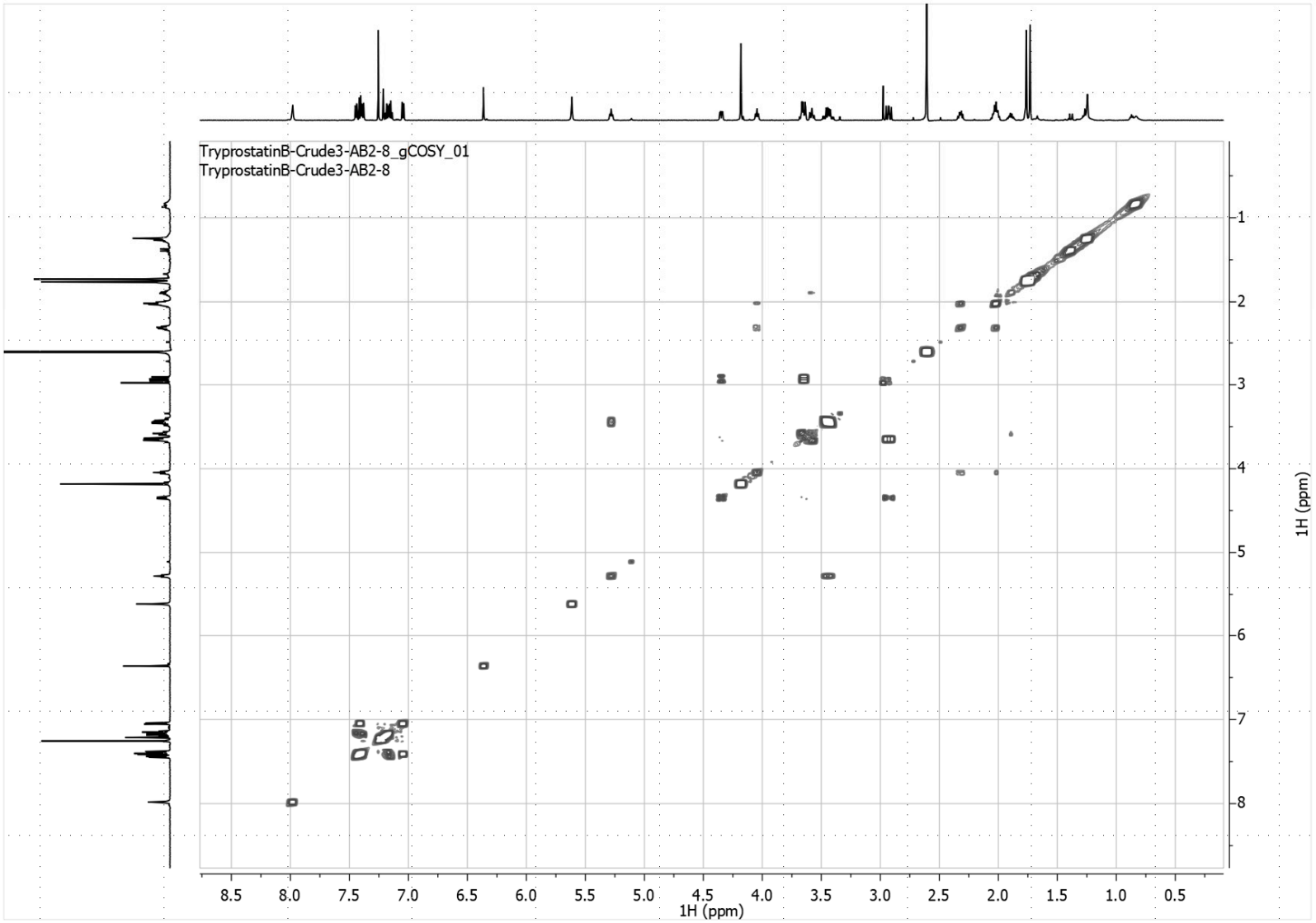
COSY NMR spectrum (500 MHz) of **TPS-62** in $CDCl_3$



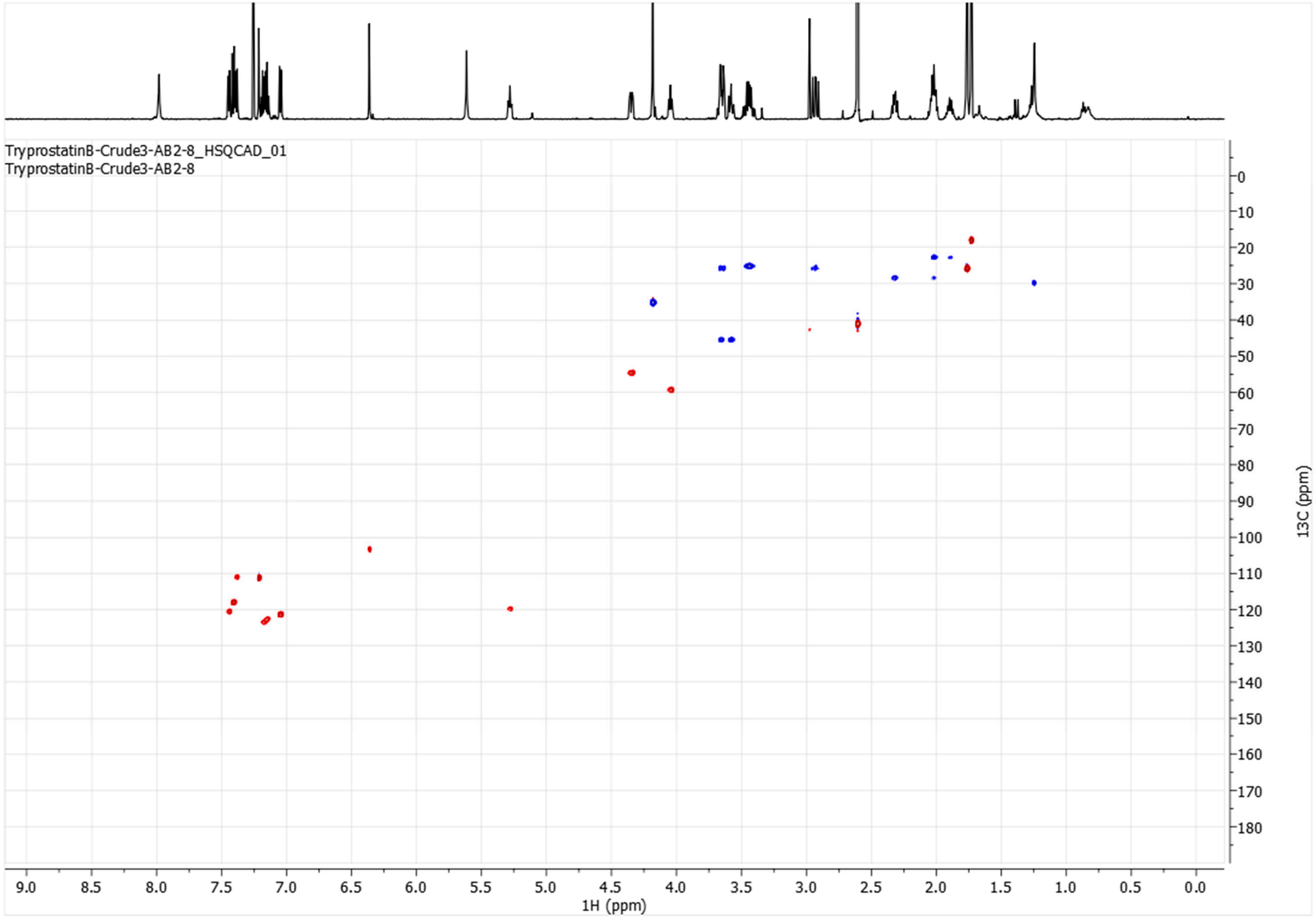
HSQC NMR spectrum (500 MHz) of **TPS-62** in $CDCl_3$



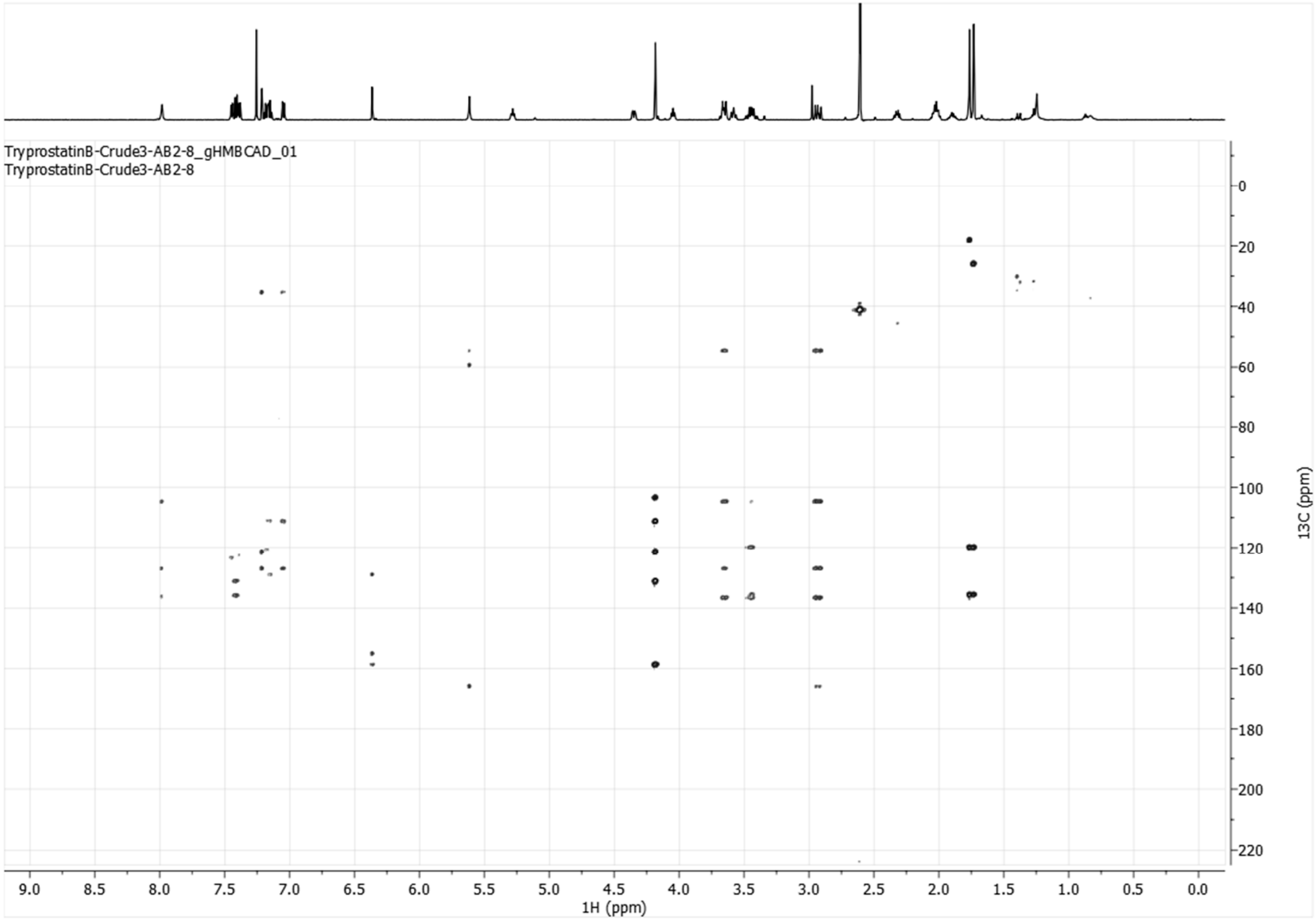
^{1}H NMR spectrum (600 MHz) of **TPS-65** in $CDCl_3$



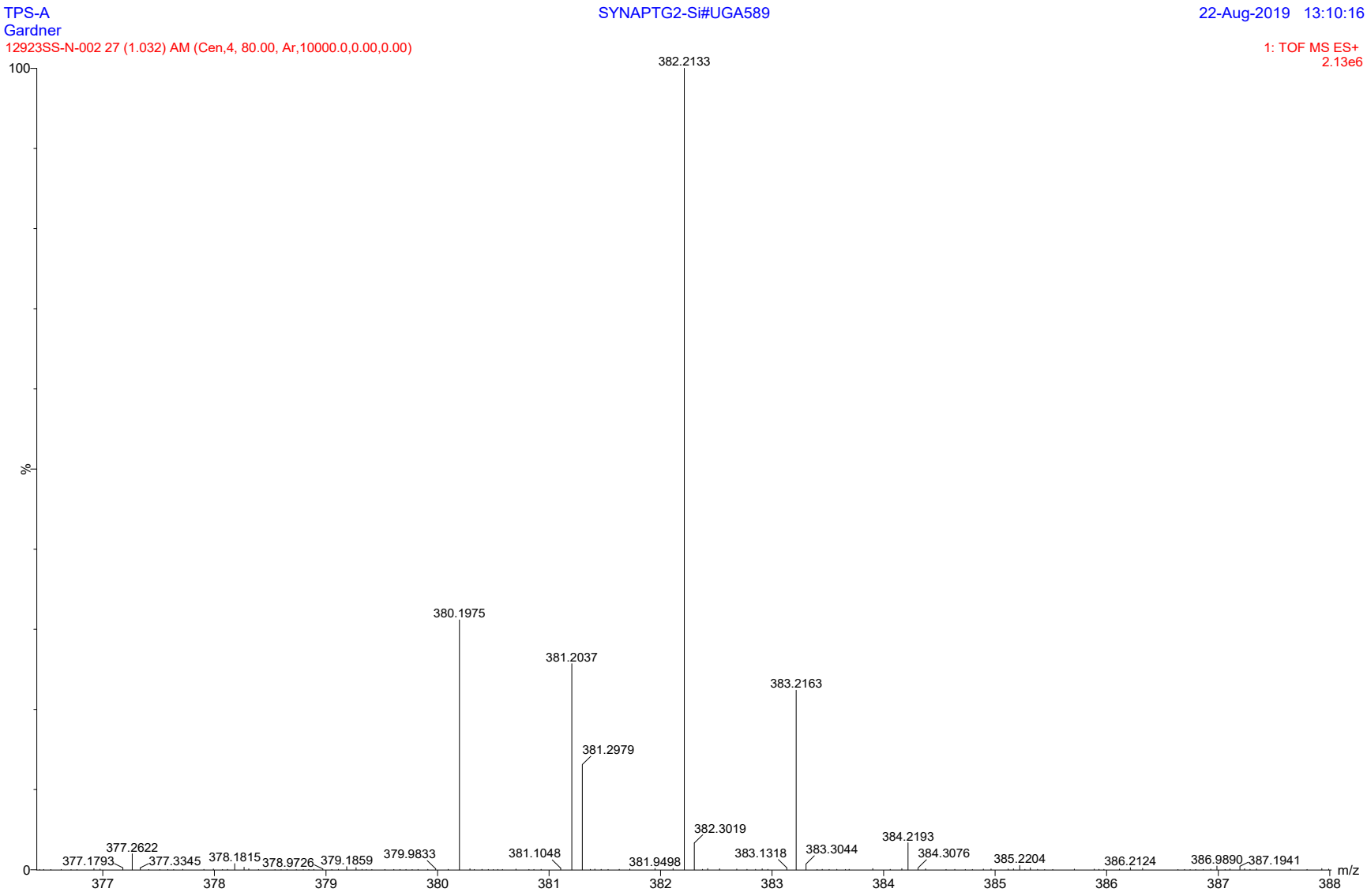
COSY NMR spectrum (600 MHz) of **TPS-65** in $CDCl_3$



HSQC NMR spectrum (600 MHz) of **TPS-65** in $CDCl_3$



HMBC NMR spectrum (600 MHz) of **TPS-65** in $CDCl_3$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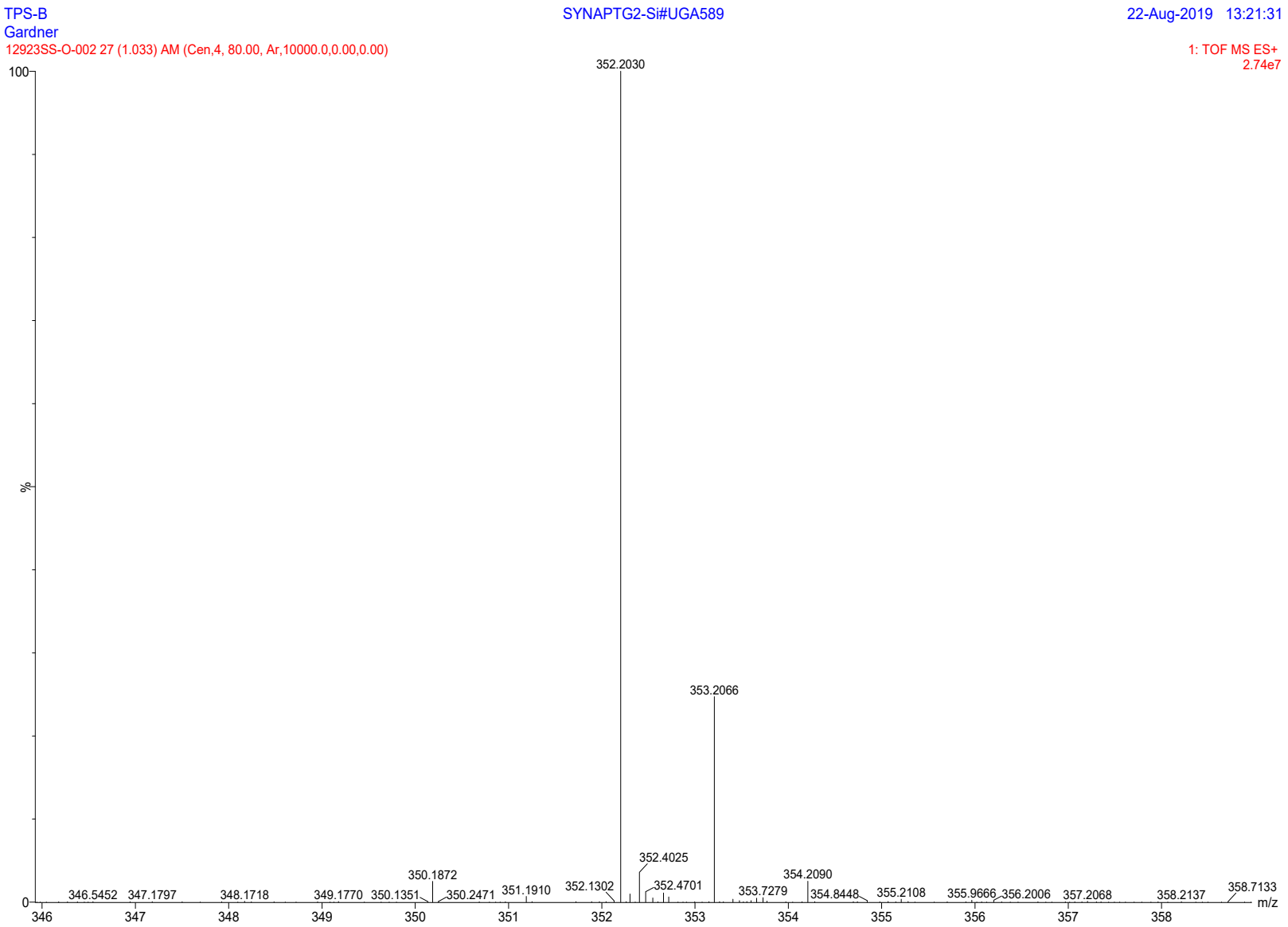
HRMS of **TPS-A**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22-Aug-2019 13:21:31
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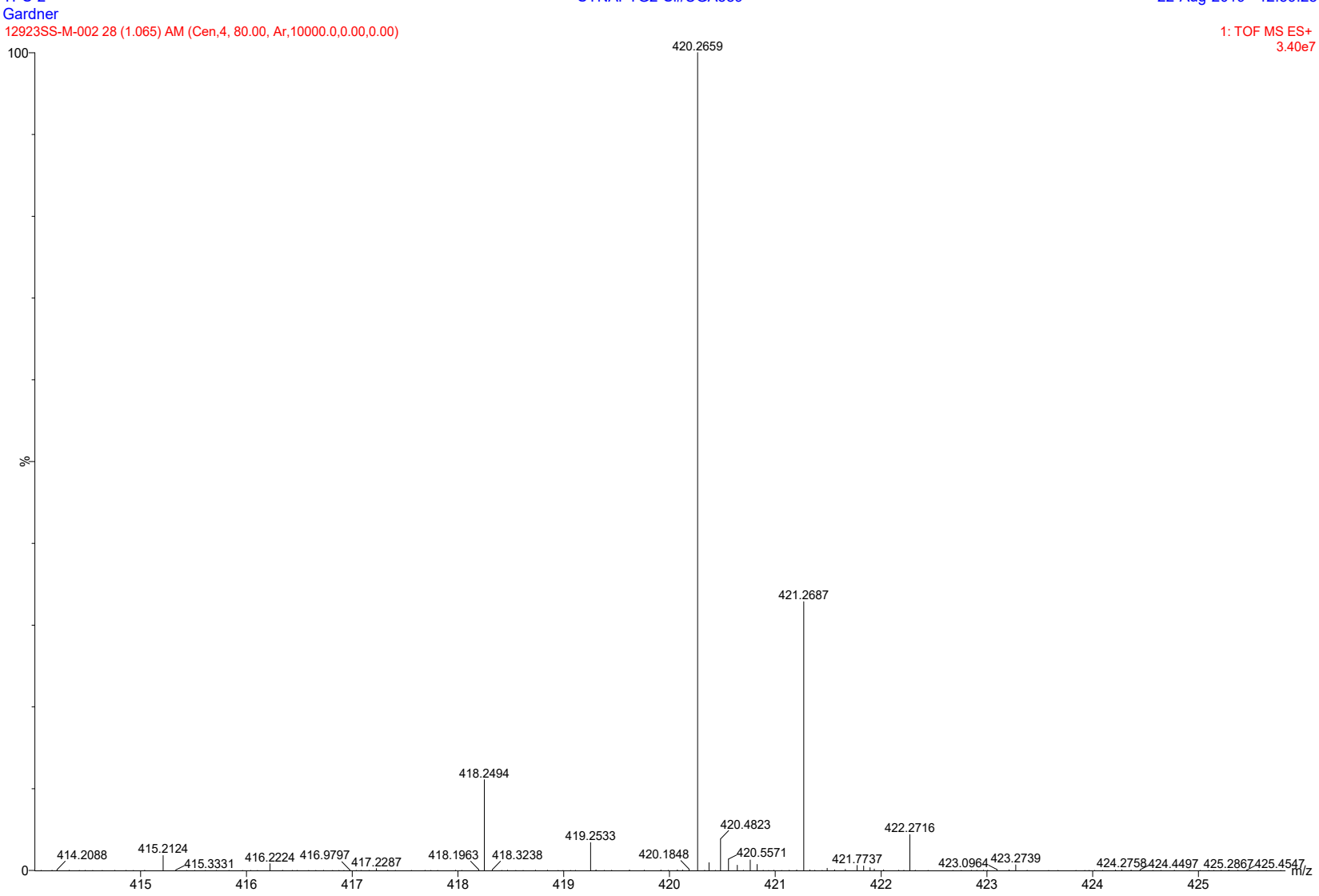
m/z

HRMS of **TPS-B**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Gardner
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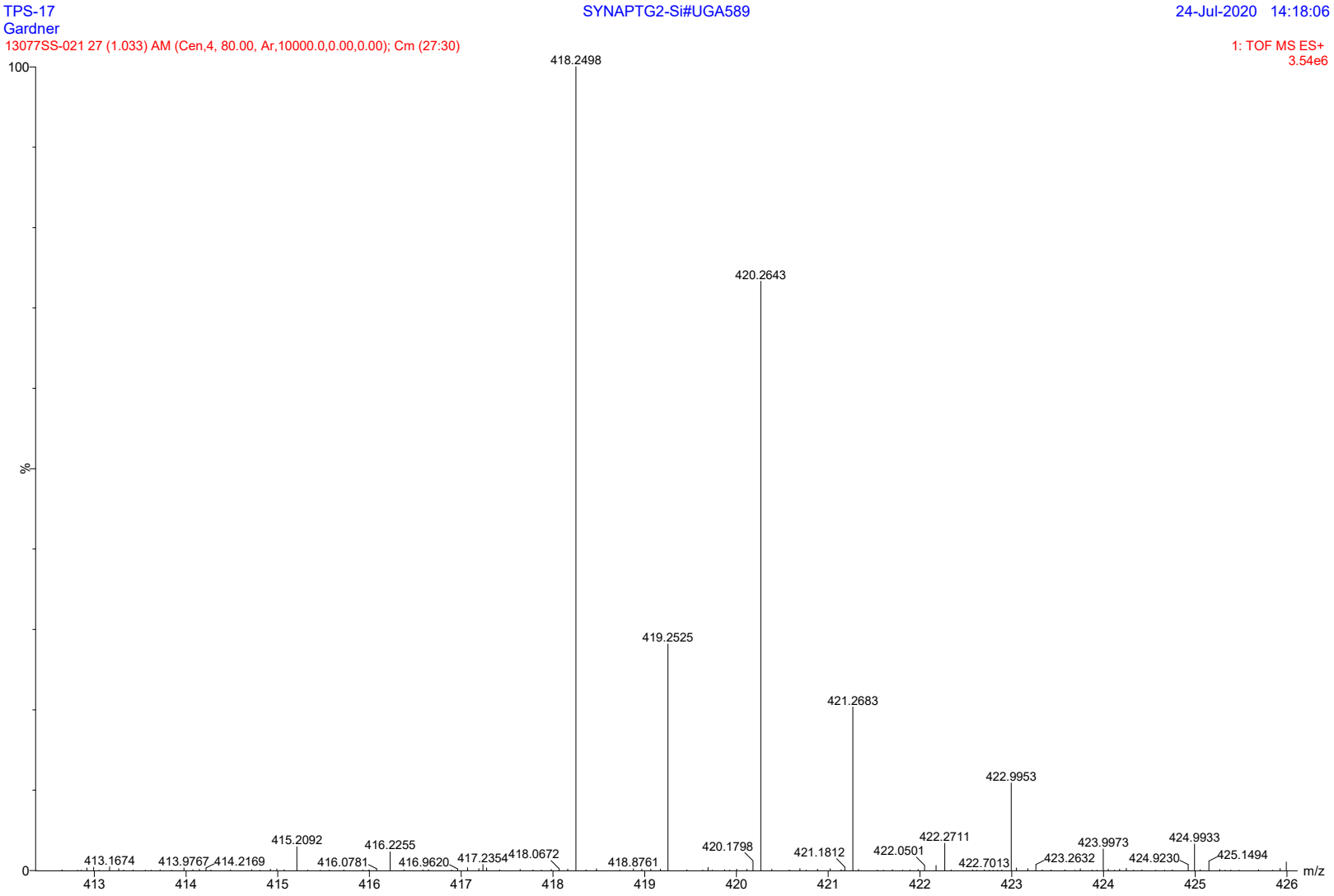
m/z

HRMS of **TPS-2**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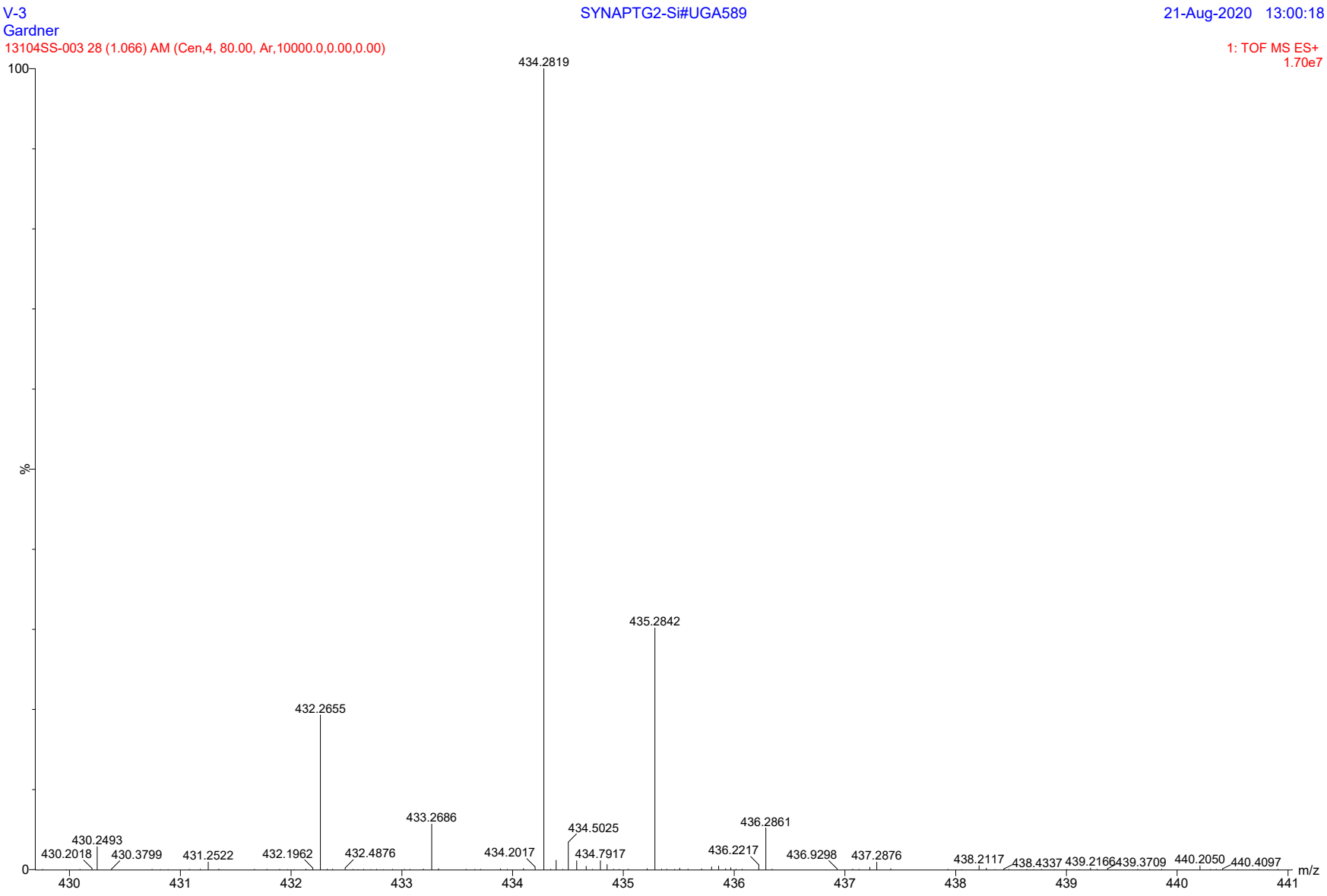
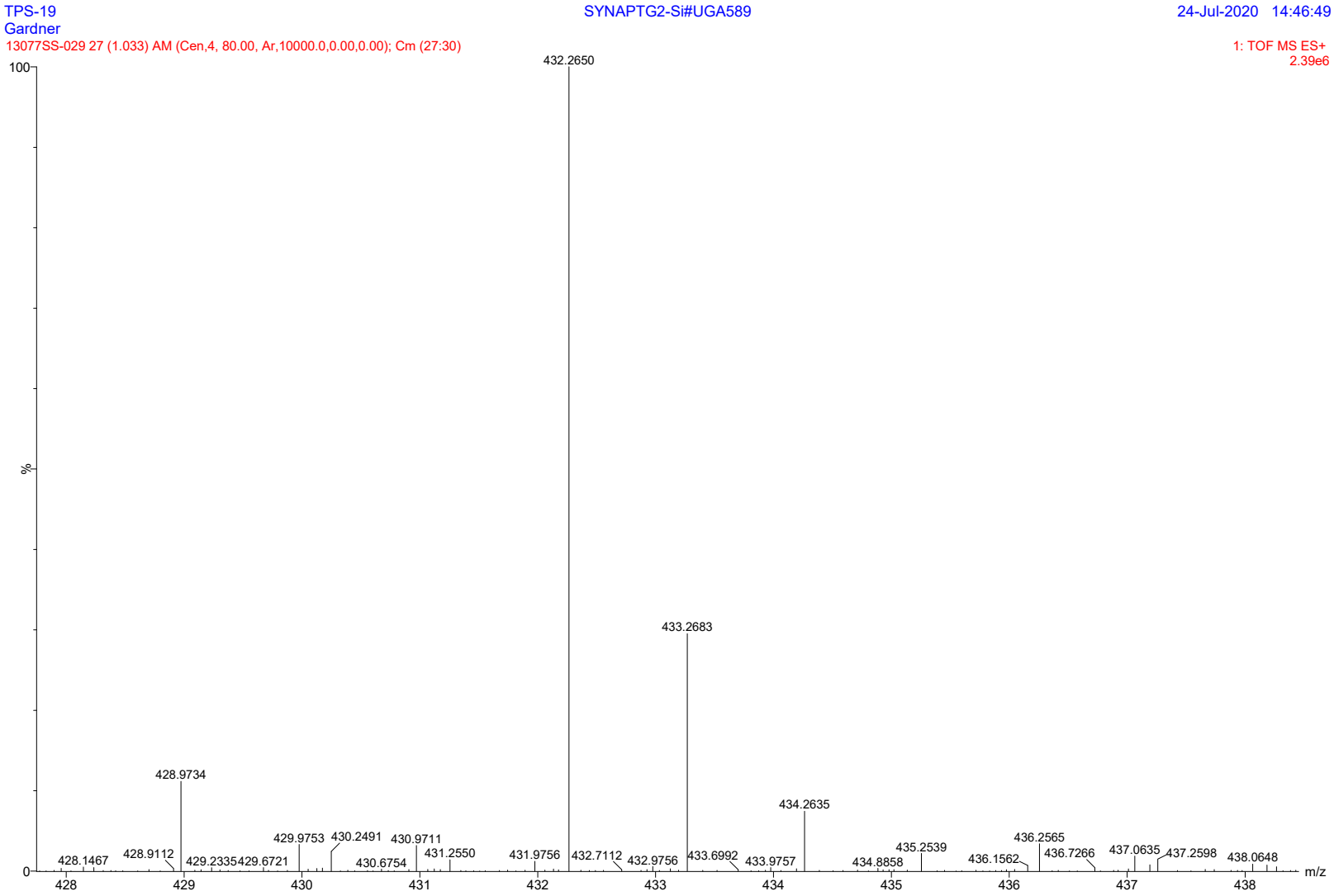
m/z

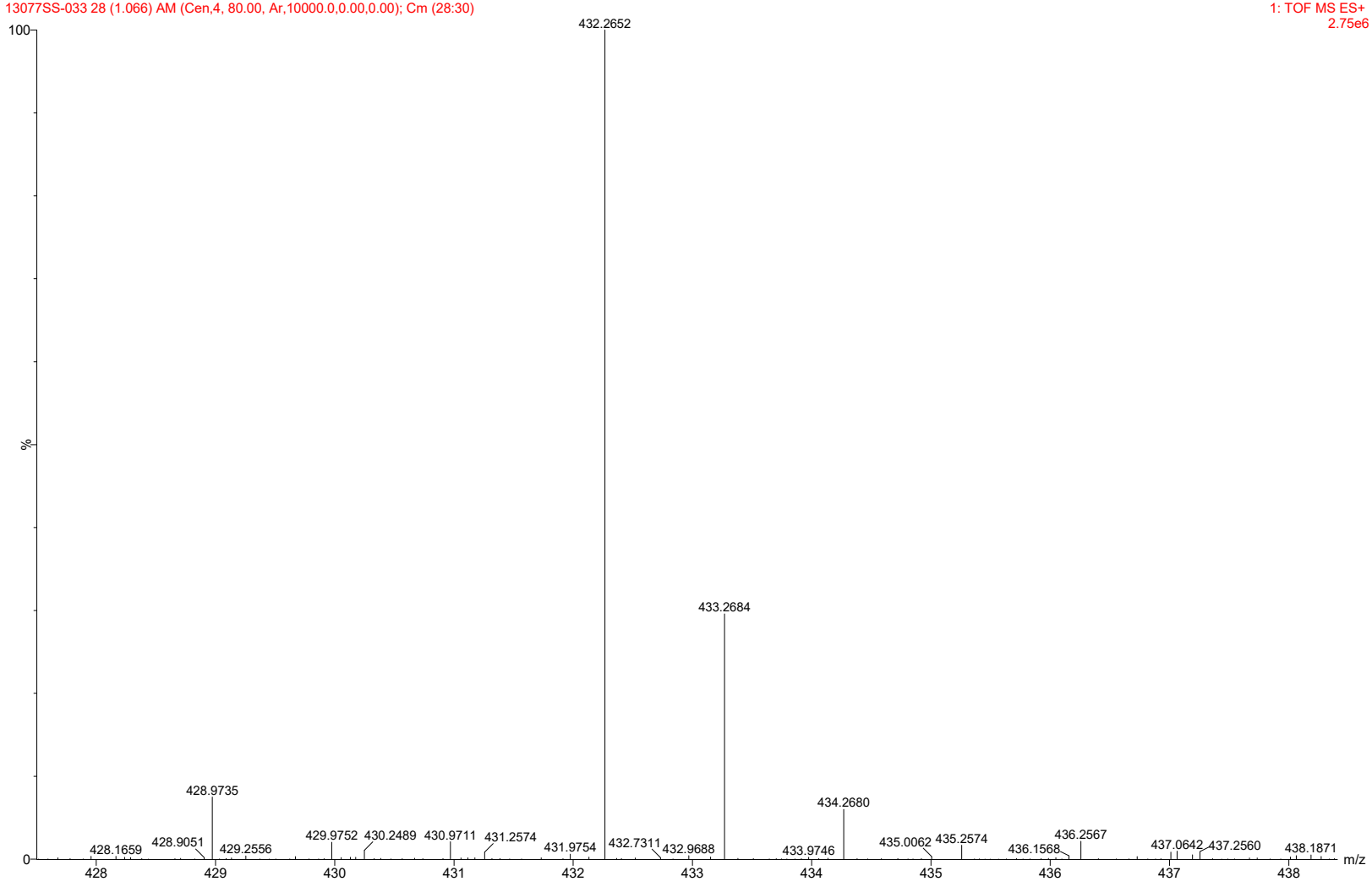
HRMS of **TPS-6**


V-3
Gardner
13104SS-003 28 (1.066) AM (Cen,4, 80.00, Ar,10000.0,0.00,0.00)
SYNAPTG2-Si#UGA589
21-Aug-2020 13:00:18
1: TOF MS ES+
1.70e7
100
%
0
434.2819
435.2842
432.2655
433.2686
436.2861
434.5025
430.2493
430.2018
430.3799
431.2522
432.1962
432.4876
434.2017
434.7917
436.2217
436.9298
437.2876
438.2117
438.4337
439.2166
439.3709
440.2050
440.4097
m/z
430
431
432
433
434
435
436
437
438
439
440
441

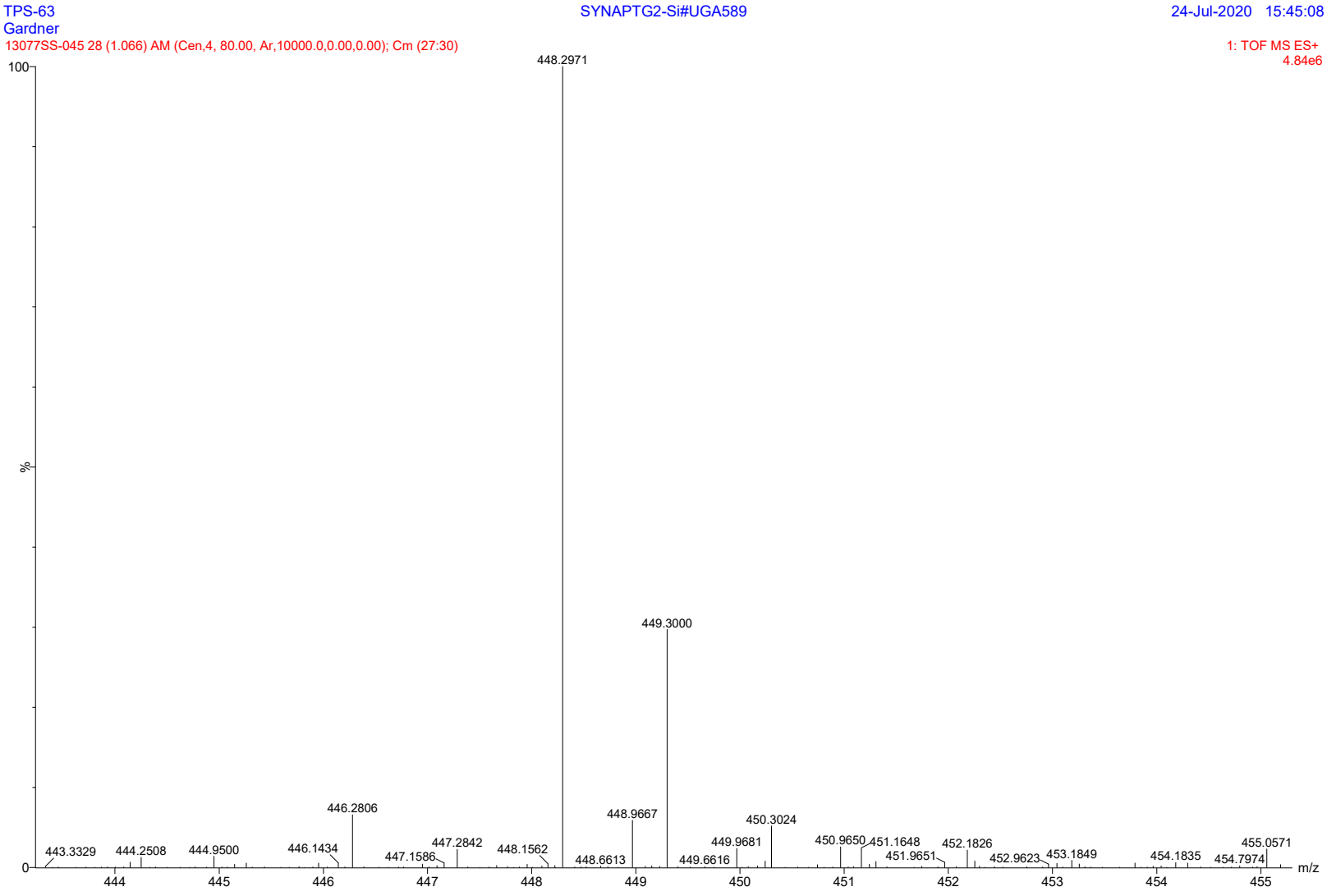
HRMS of **TPS-7**


TPS-19
Gardner
SYNAPTG2-Si#UGA589
24-Jul-2020 14:46:49
13077SS-029 27 (1.033) AM (Cen,4, 80.00, Ar,10000.0,0.00,0.00); Cm (27:30)
1: TOF MS ES+
2.39e6
100
%
0
m/z
428
429
430
431
432
433
434
435
436
437
438
432.2650
433.2683
428.9734
434.2635
428.1467
428.9112
429.2335
429.6721
429.9753
430.2491
430.6754
430.9711
431.2550
431.9756
432.7112
432.9756
433.6992
433.9757
434.8858
435.2539
436.1562
436.2565
436.7266
437.0635
437.2598
438.0648

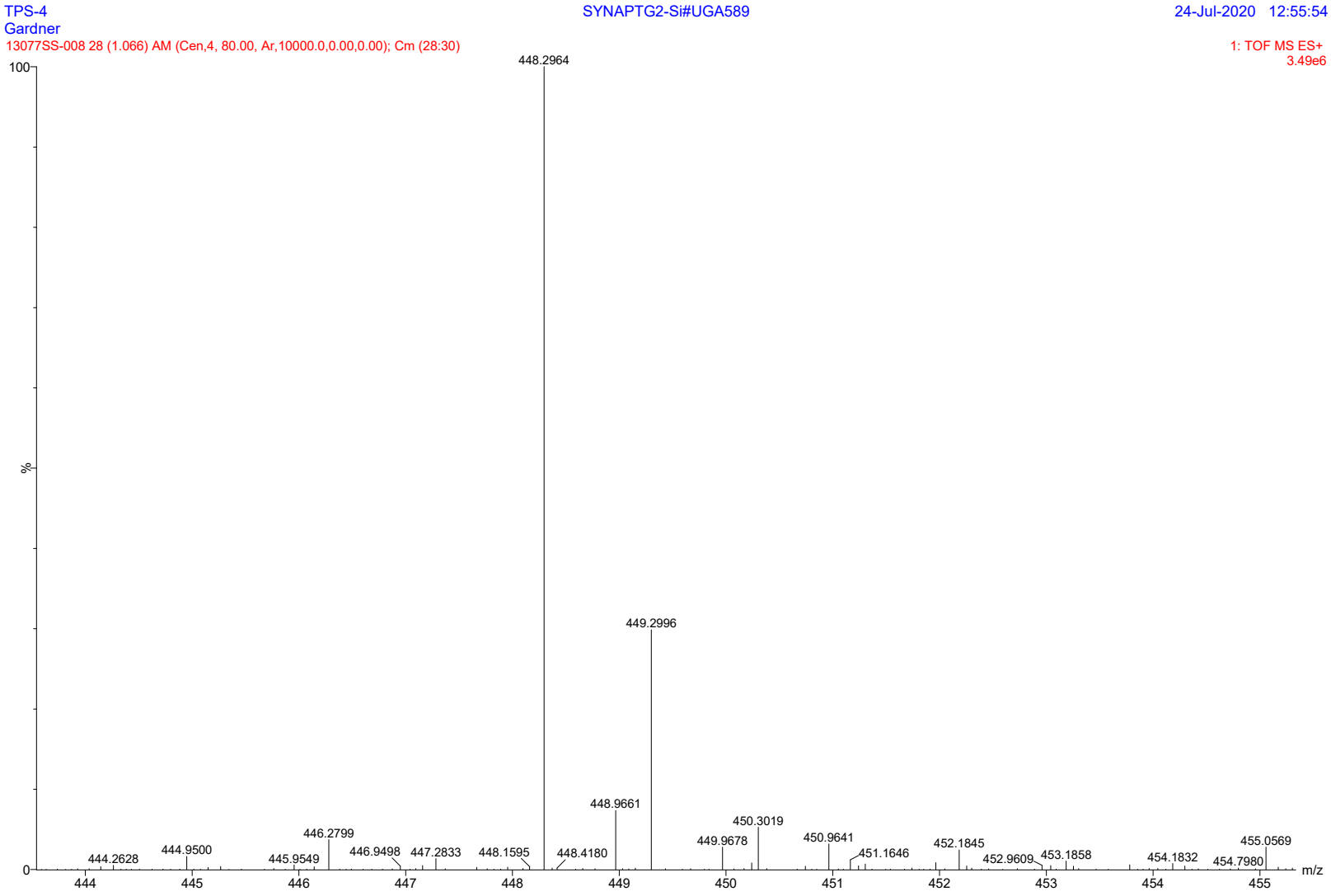
HRMS of **TPS-8**


TPS-22
Gardner
SYNAPTG2-Si#UGA589
24-Jul-2020 15:01:35
13077SS-033 28 (1.066) AM (Cen,4, 80.00, Ar,10000.0,0.00,0.00); Cm (28:30)
1: TOF MS ES+
2.75e6
100
%
0
432.2652
433.2684
428.9735
434.2680
428.1659
428.9051
429.2556
429.9752
430.2489
430.9711
431.2574
431.9754
432.7311
432.9688
433.9746
435.0062
435.2574
436.1568
436.2567
437.0642
437.2560
438.1871
428
429
430
431
432
433
434
435
436
437
438
m/z

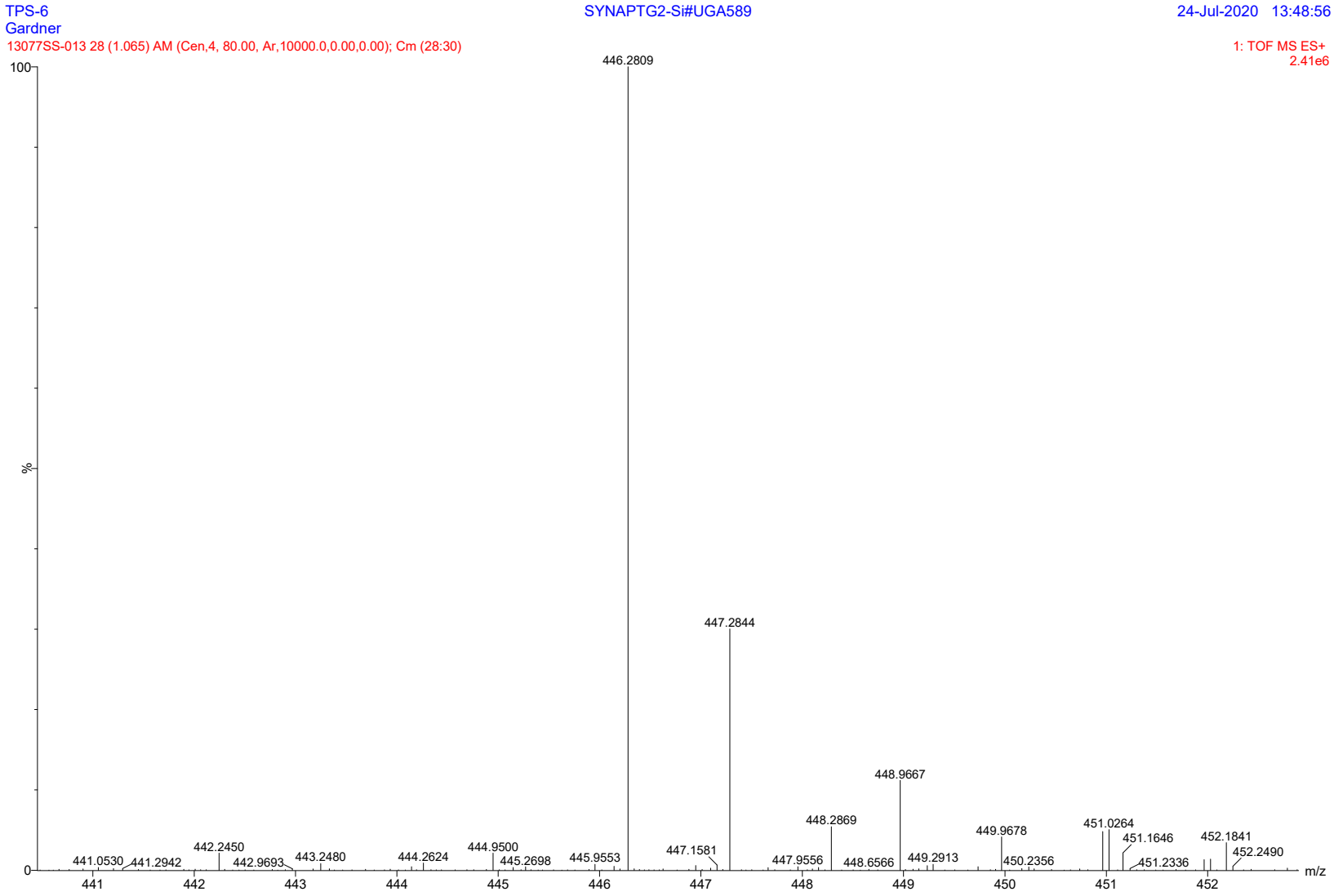
HRMS of **TPS-9**



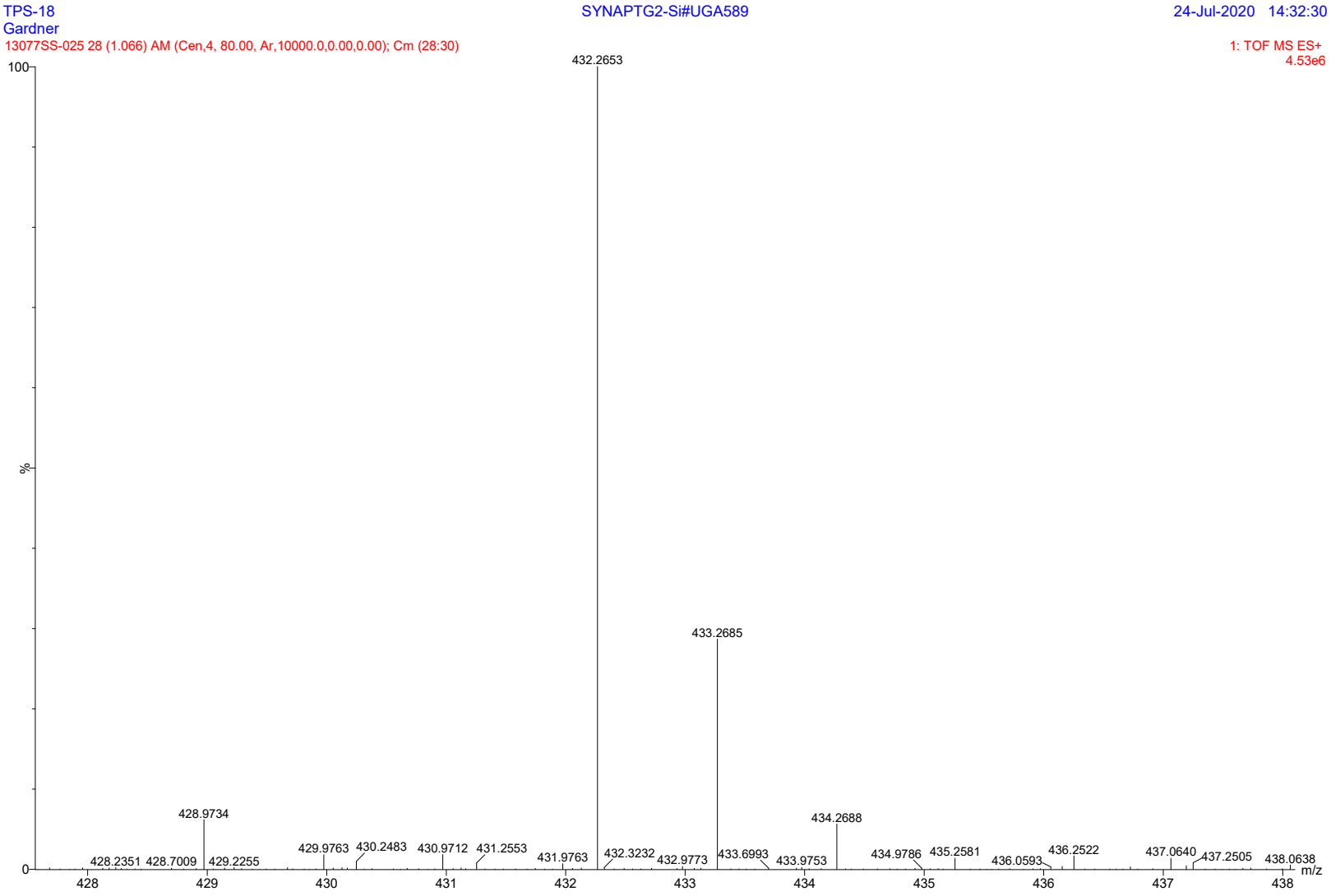
HRMS of **TPS-10**



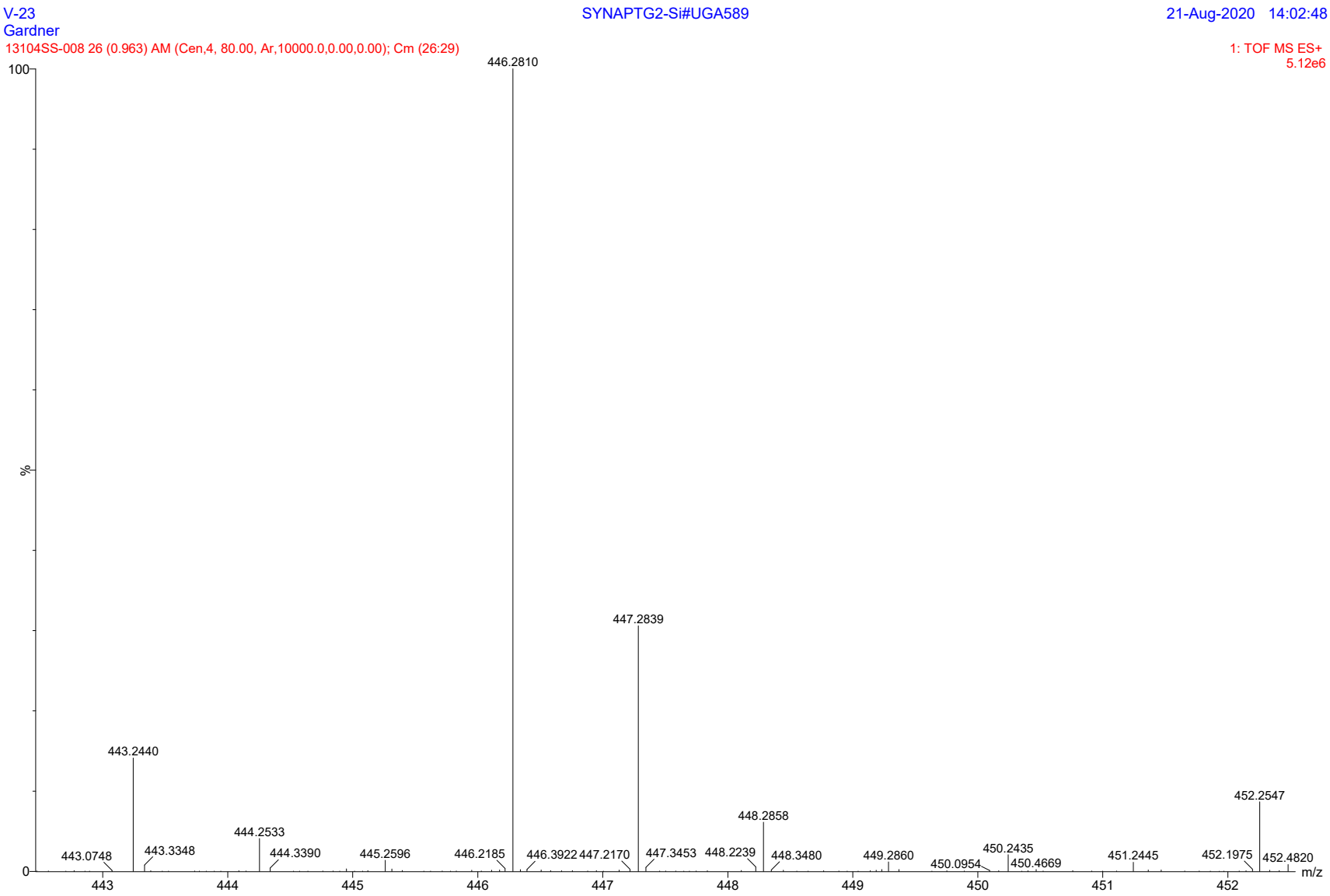
HRMS of **TPS-11**



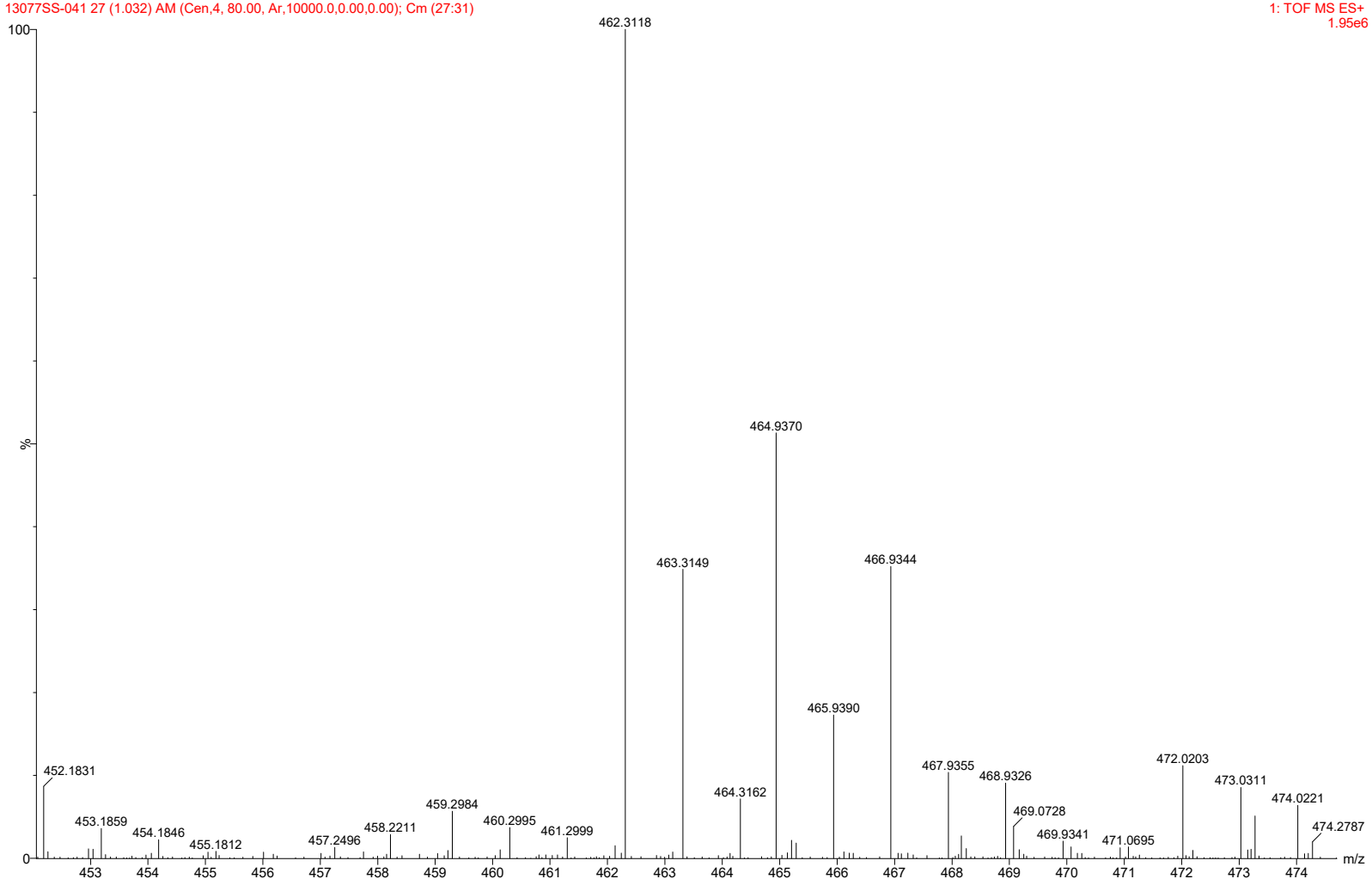
HRMS of **TPS-13**



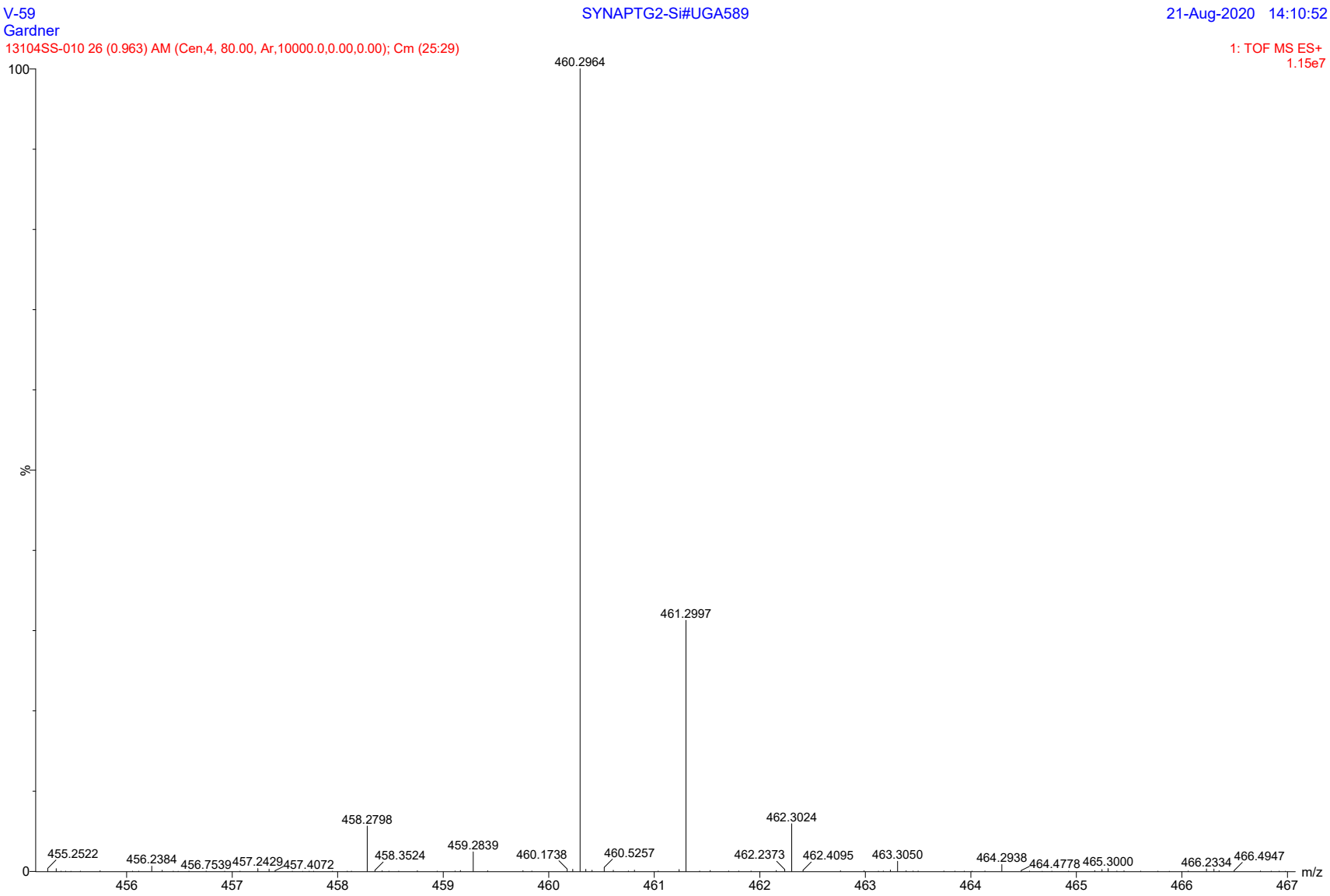
HRMS of **TPS-16**



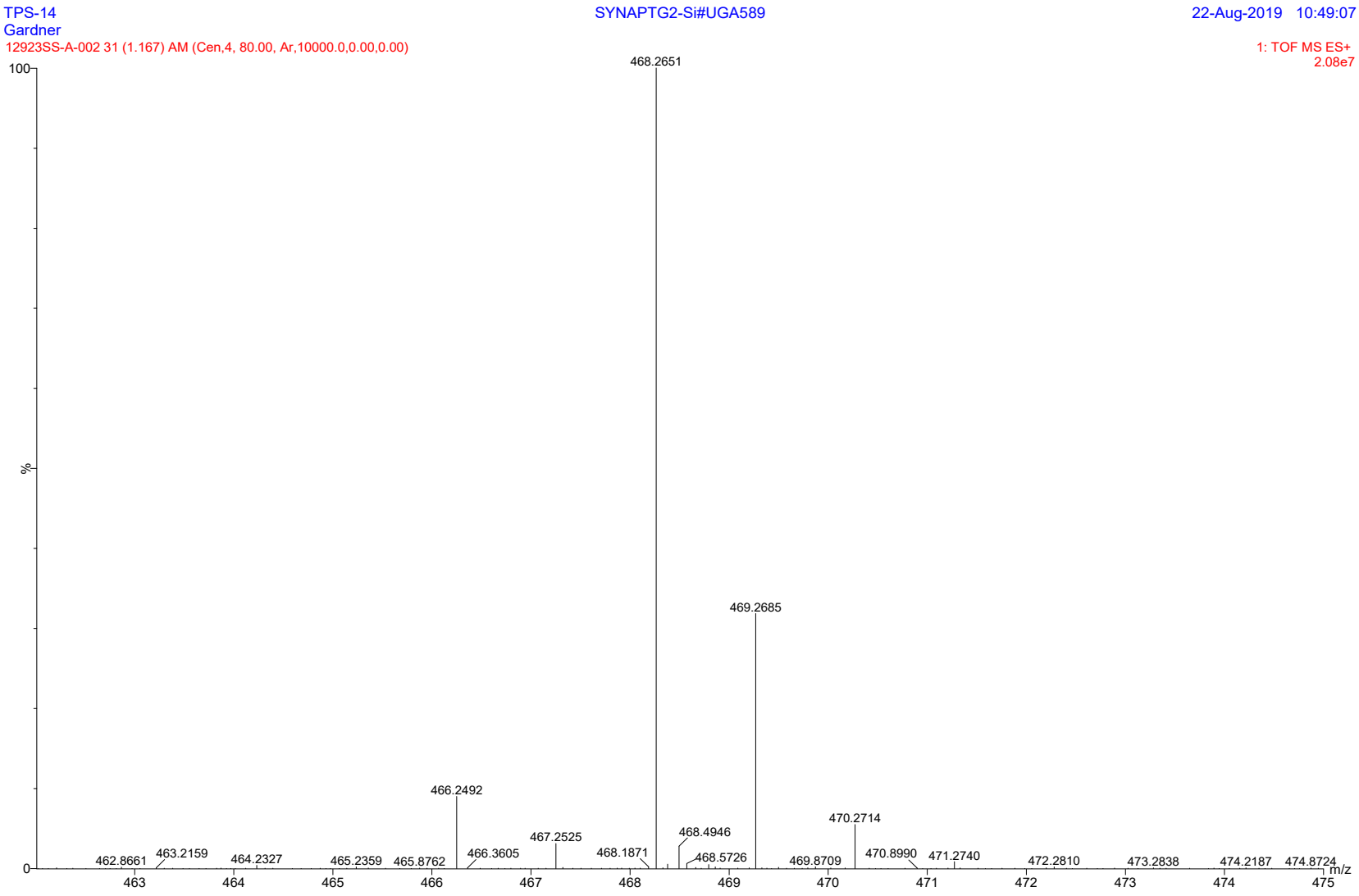
HRMS of **TPS-18**



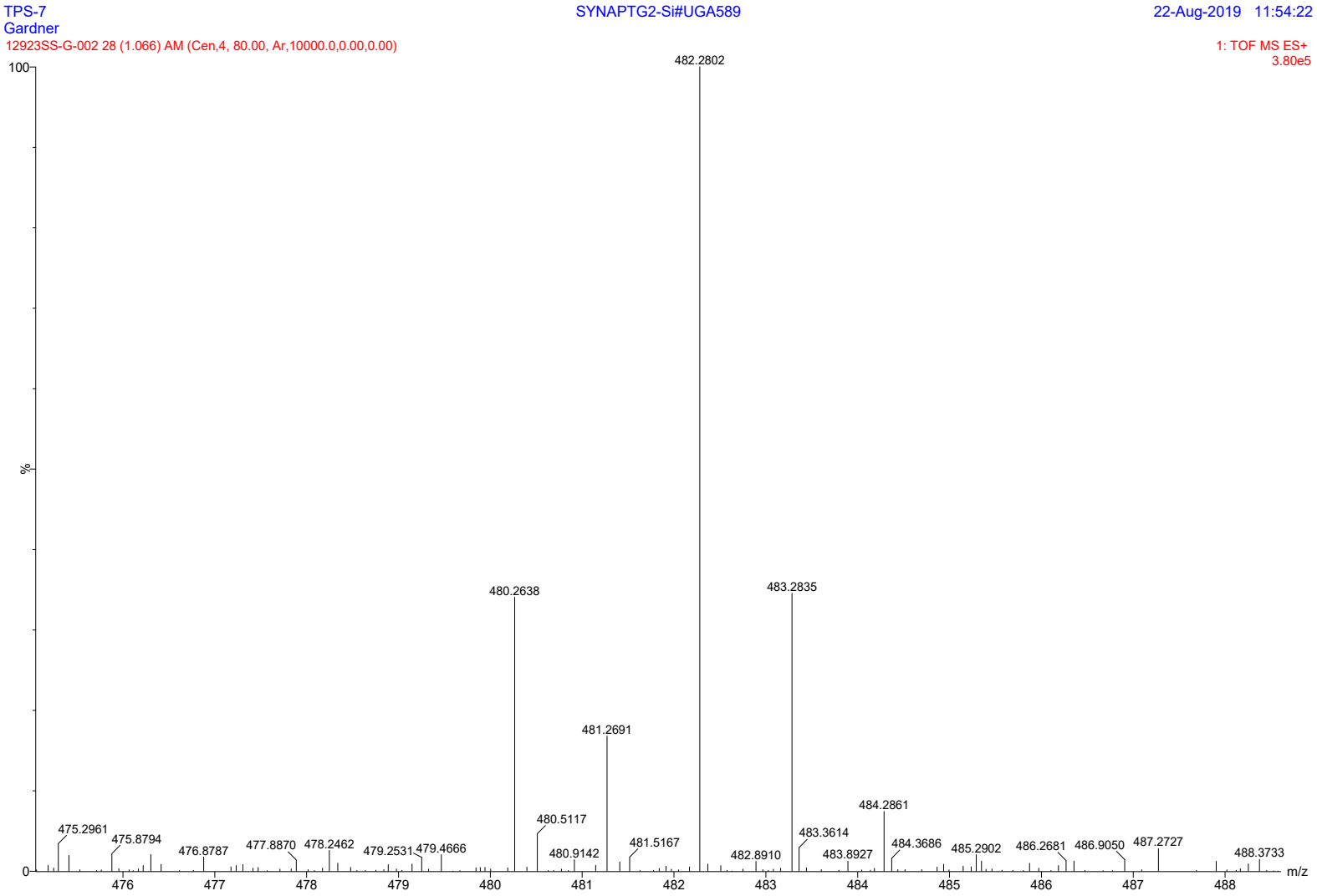
HRMS of **TPS-19**



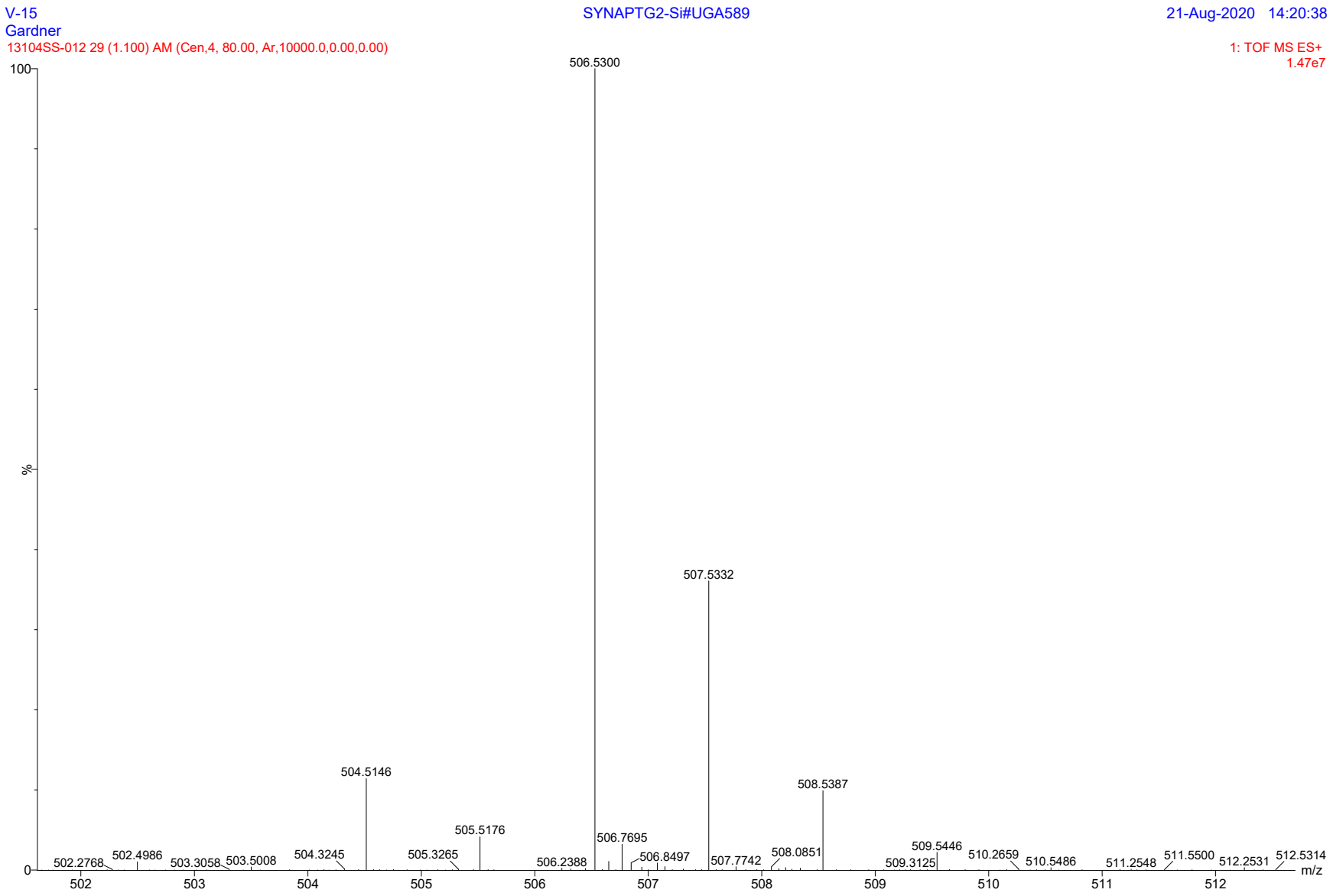
HRMS of **TPS-22**



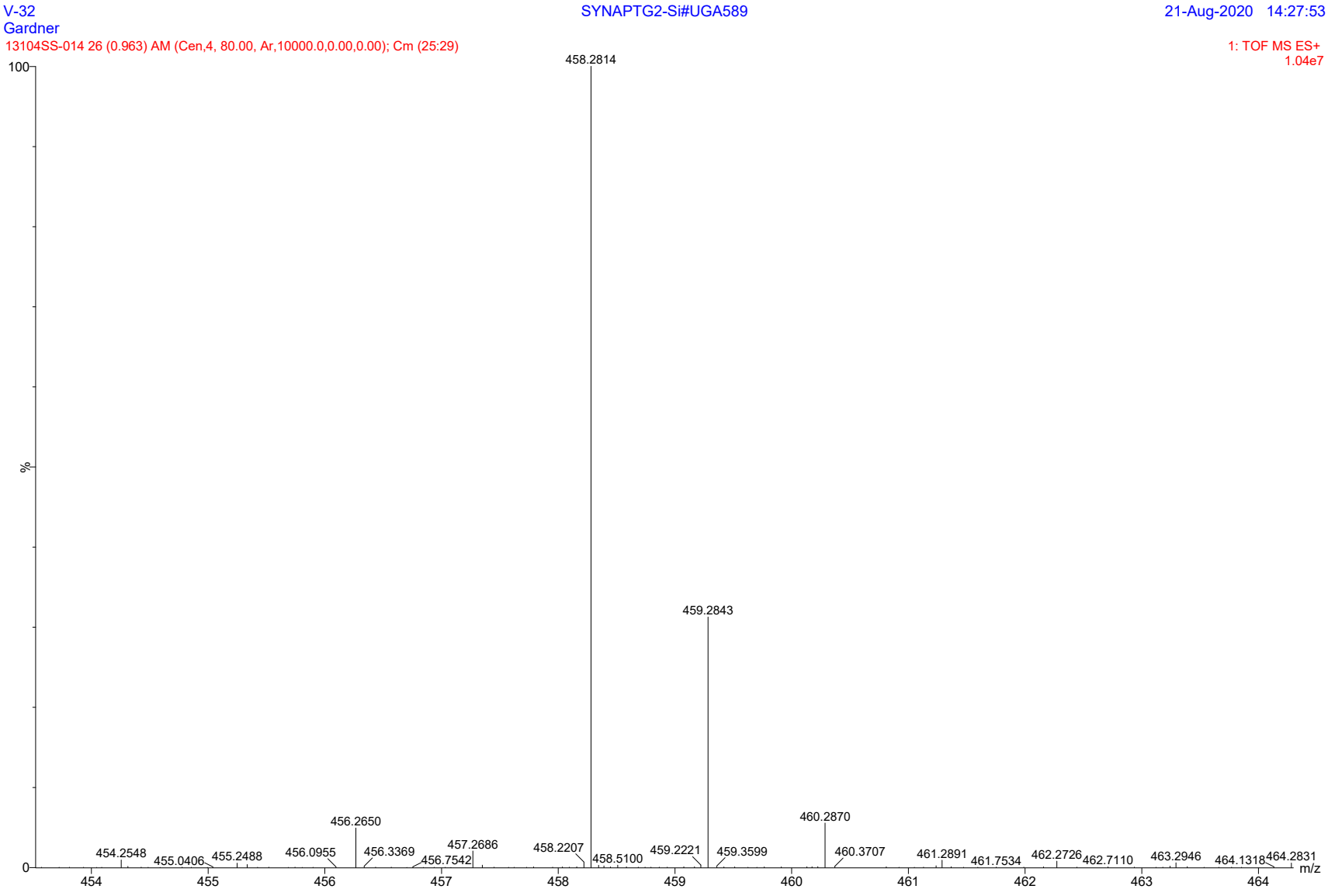
HRMS of **TPS-24**



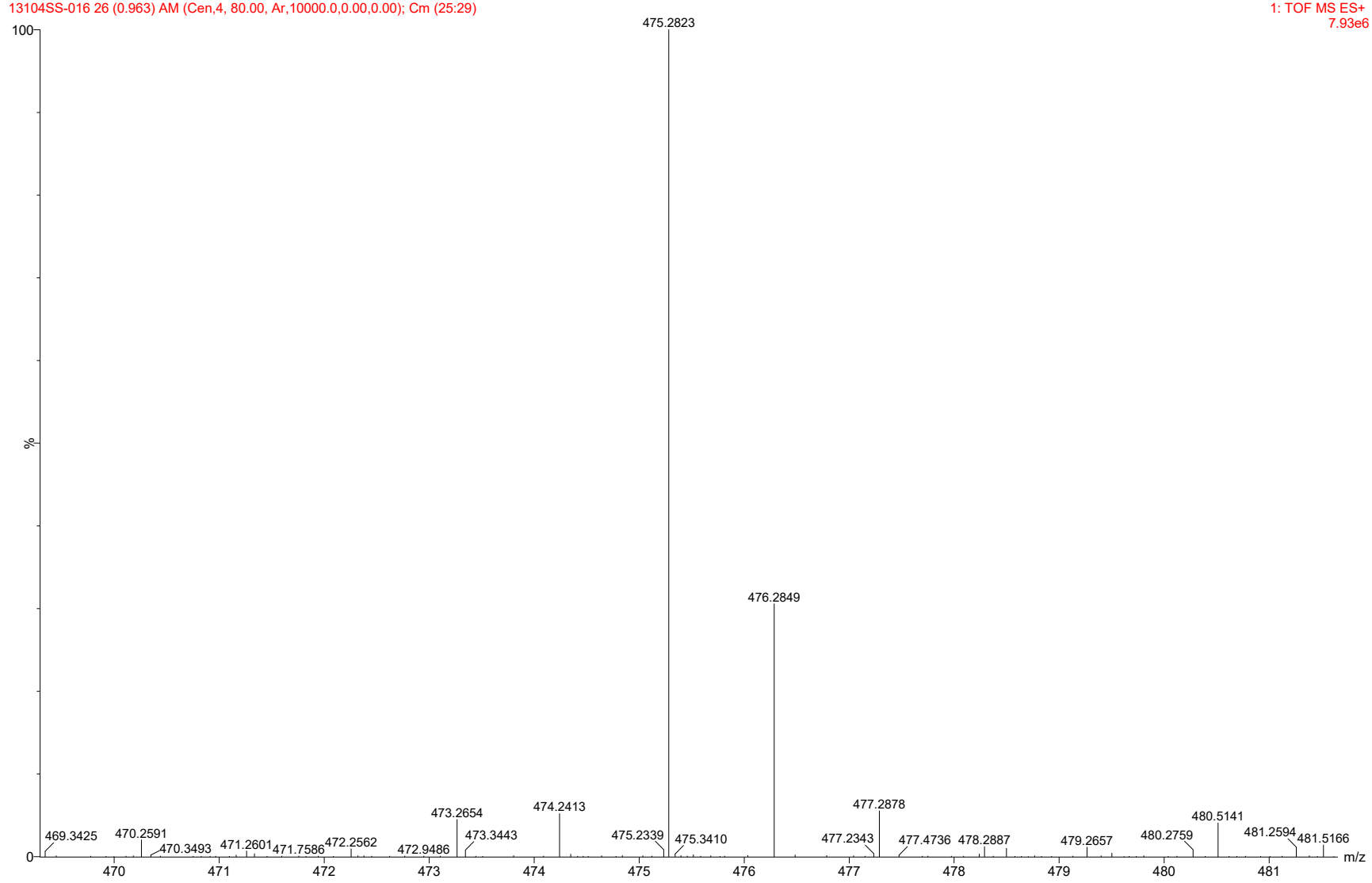
HRMS of **TPS-25**



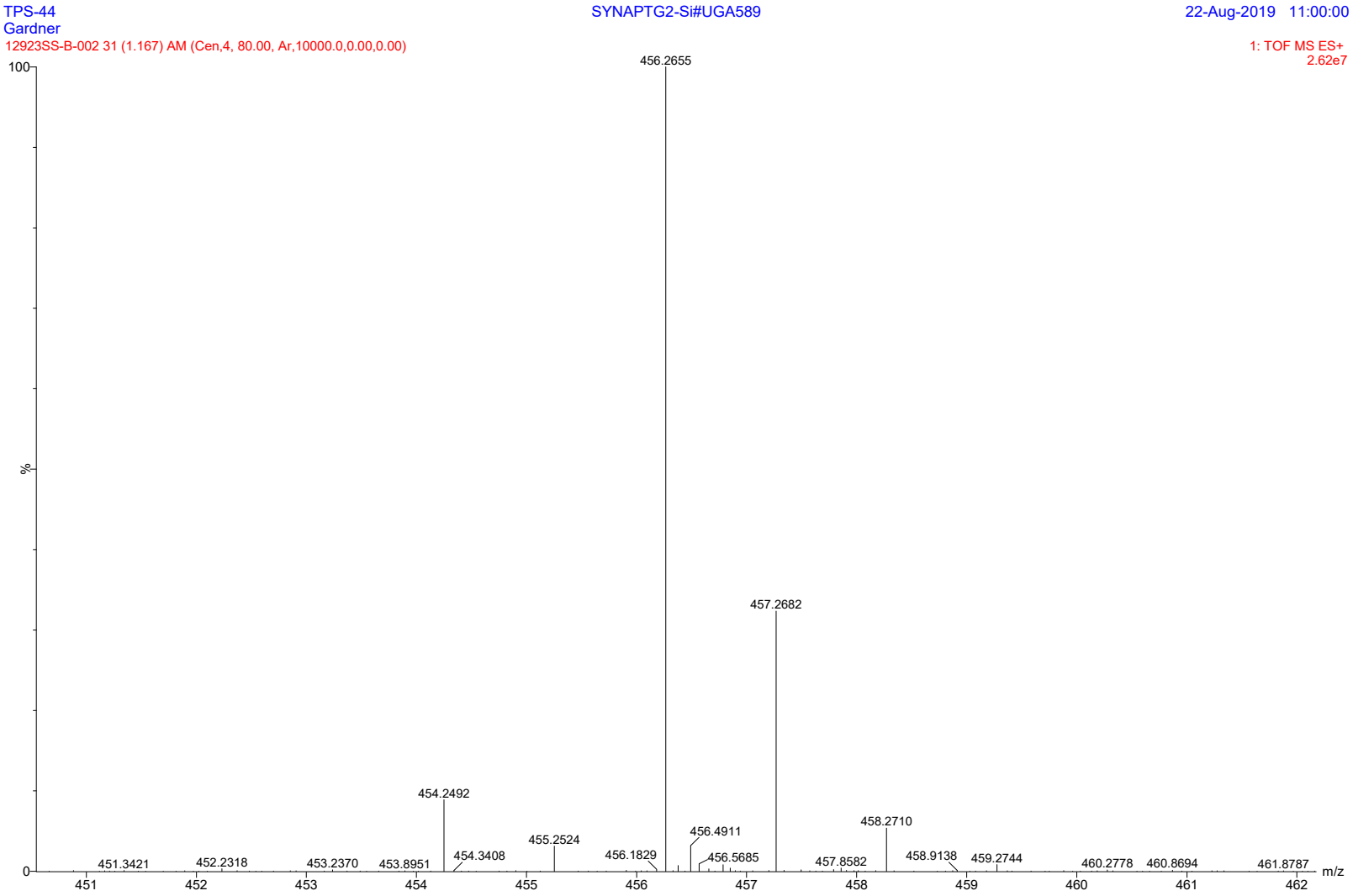
HRMS of **TPS-26**



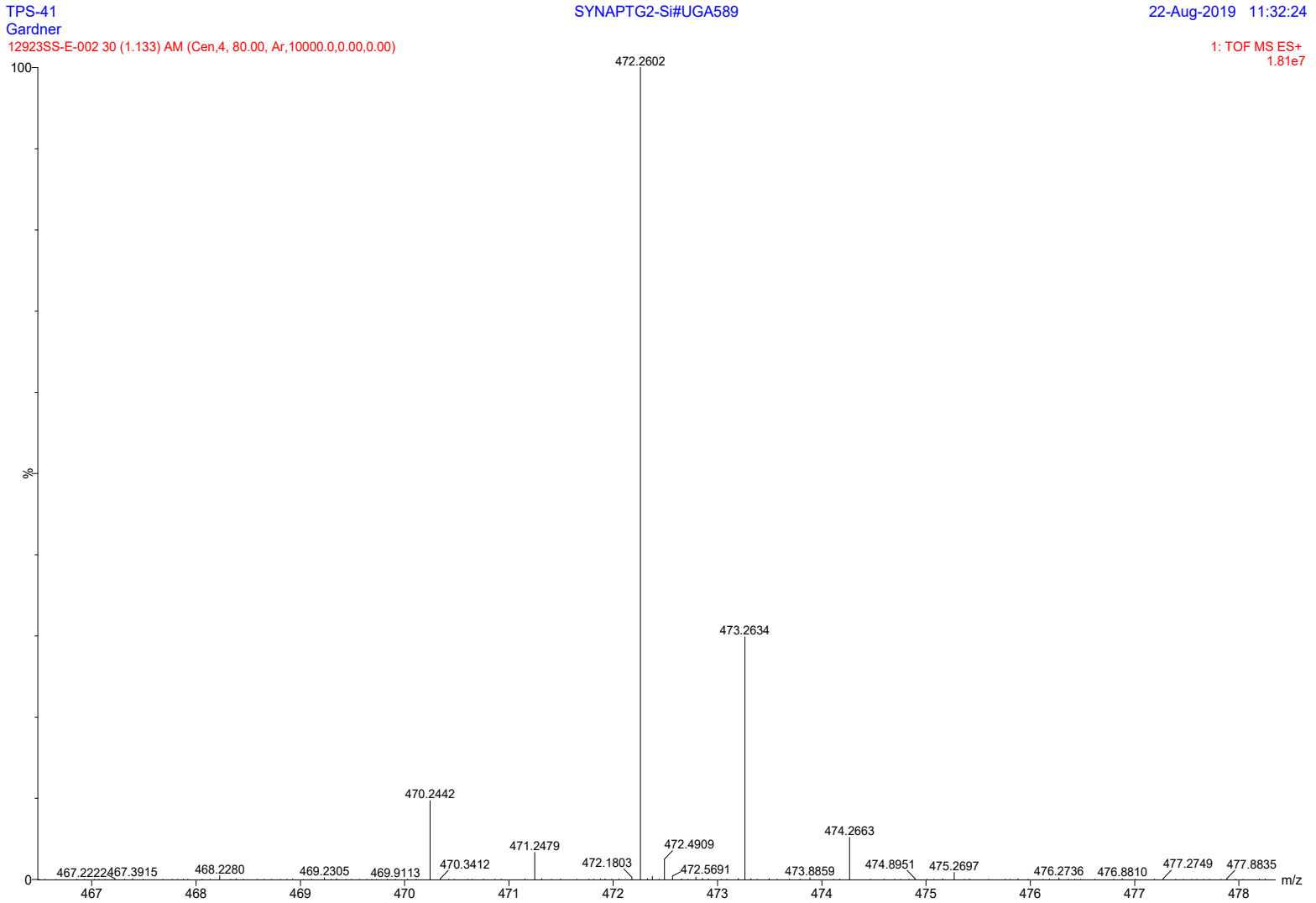
HRMS of **TPS-27**



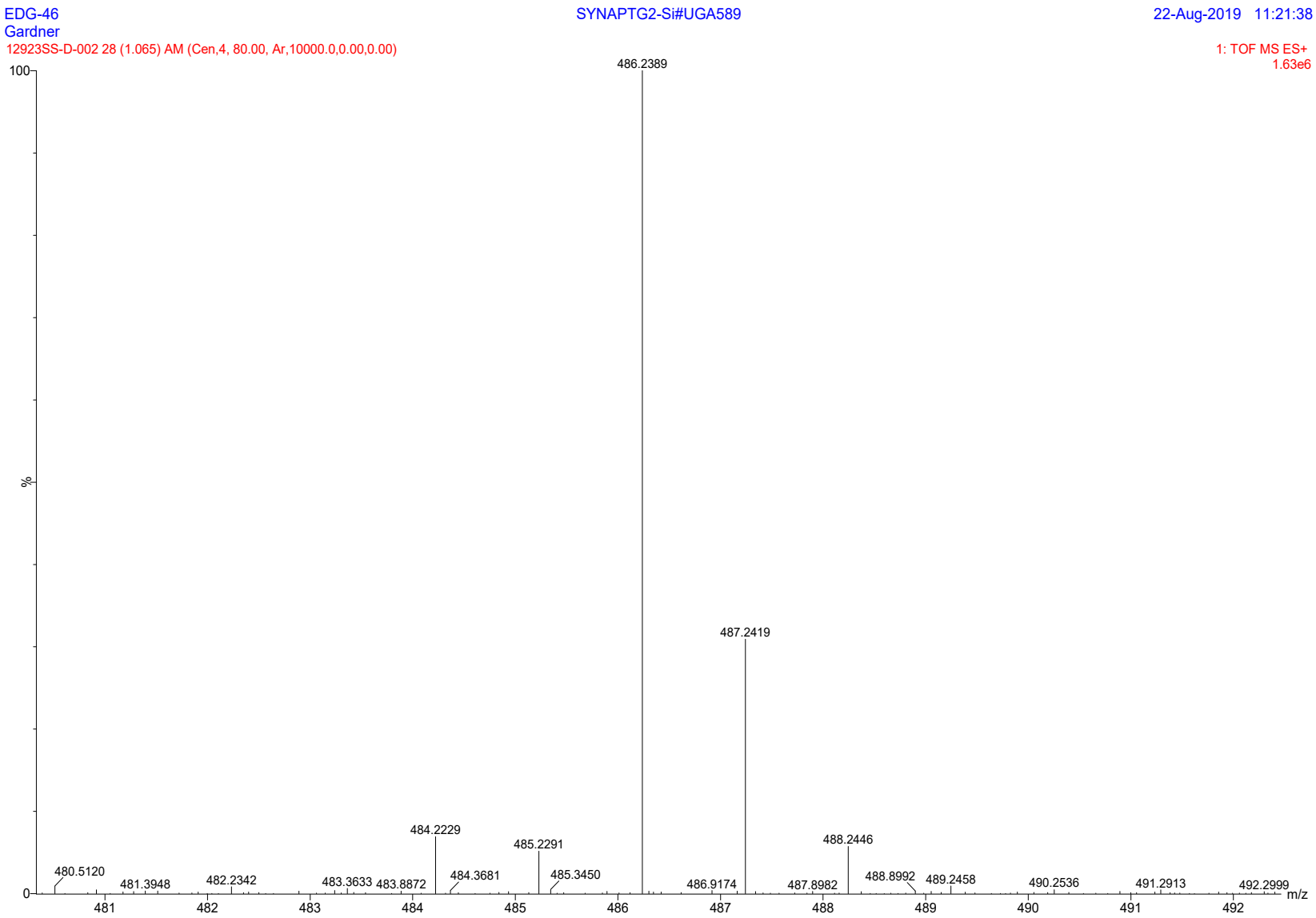
HRMS of **TPS-34**



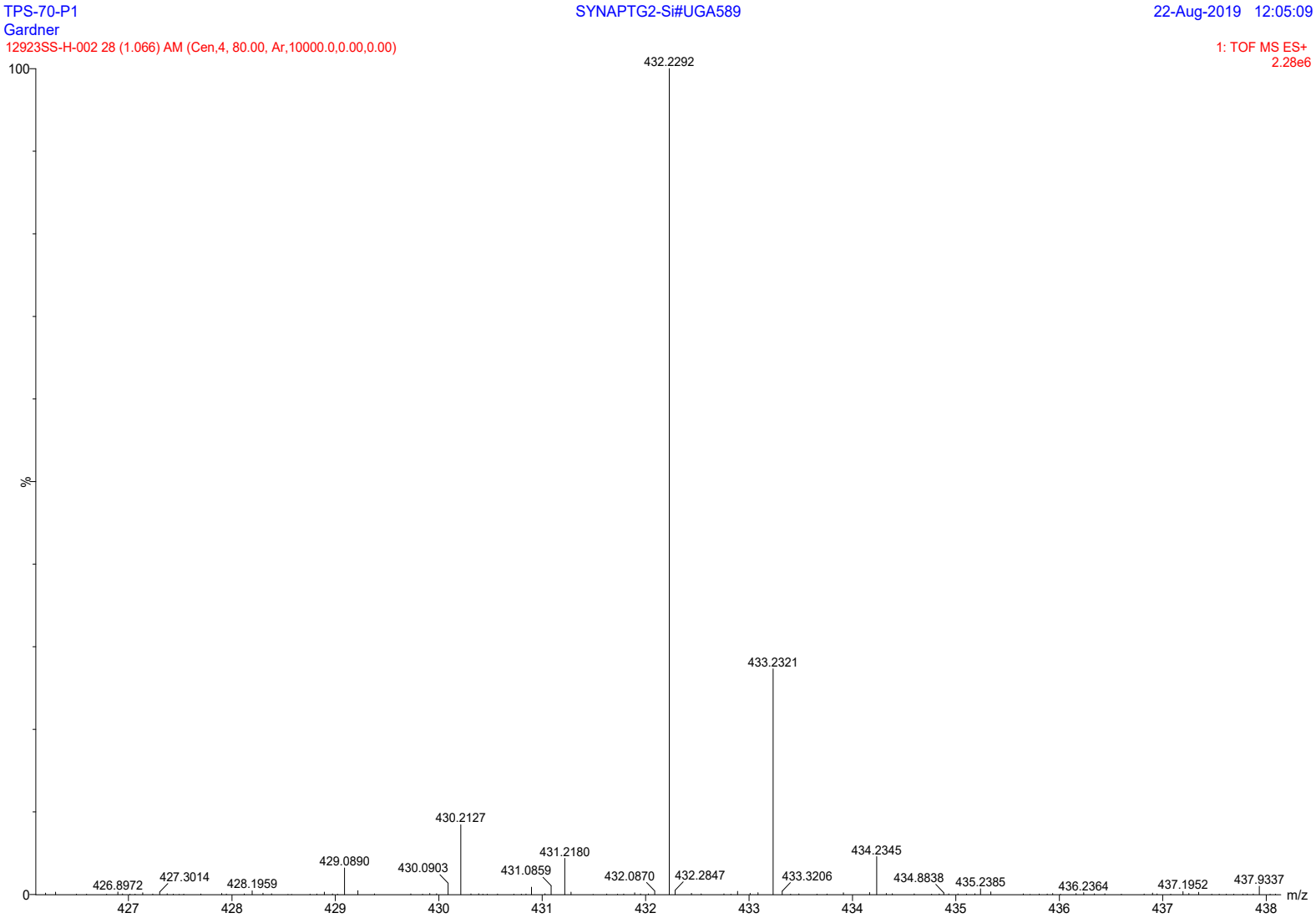
HRMS of **TPS-46**



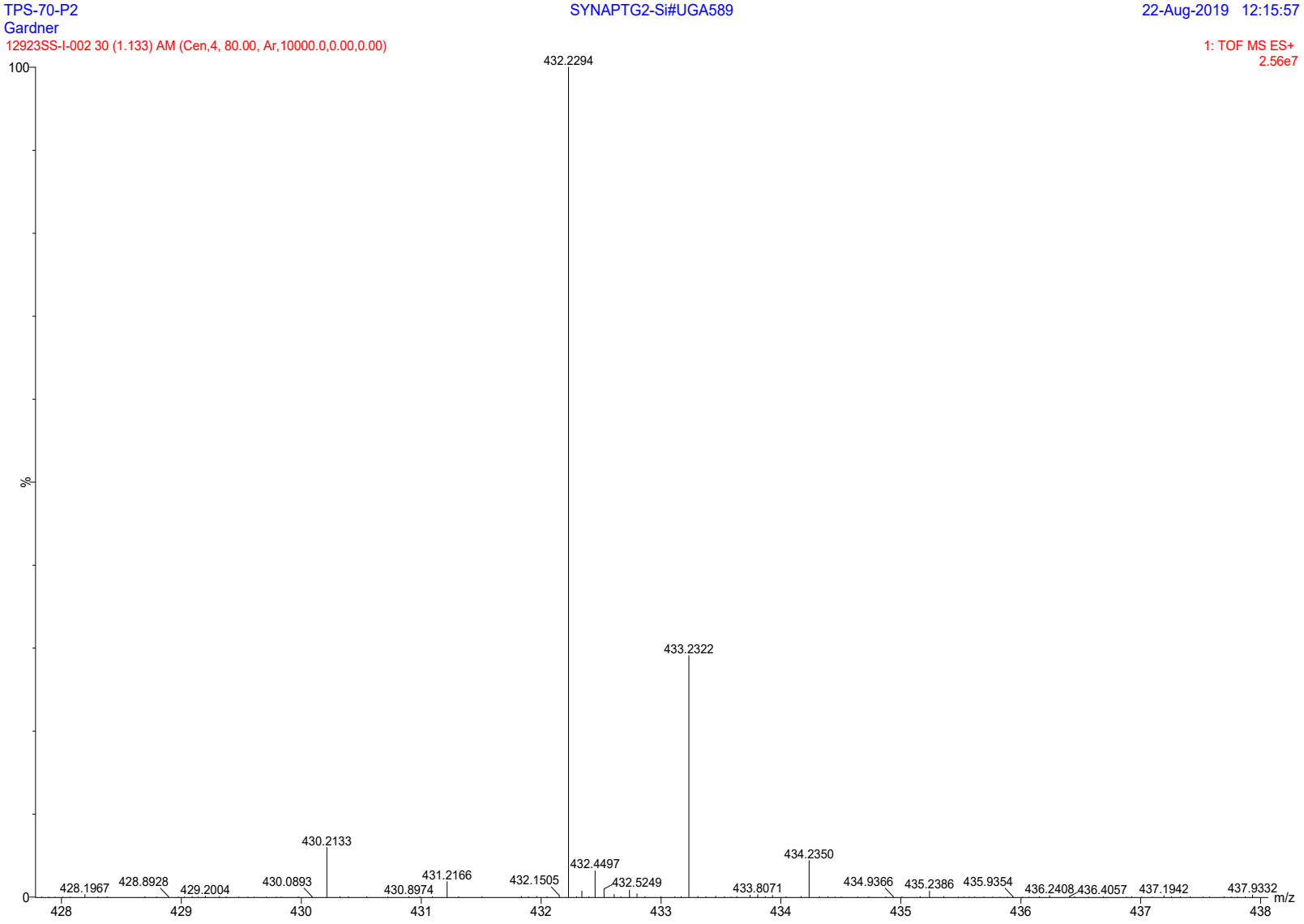
HRMS of **TPS-52**



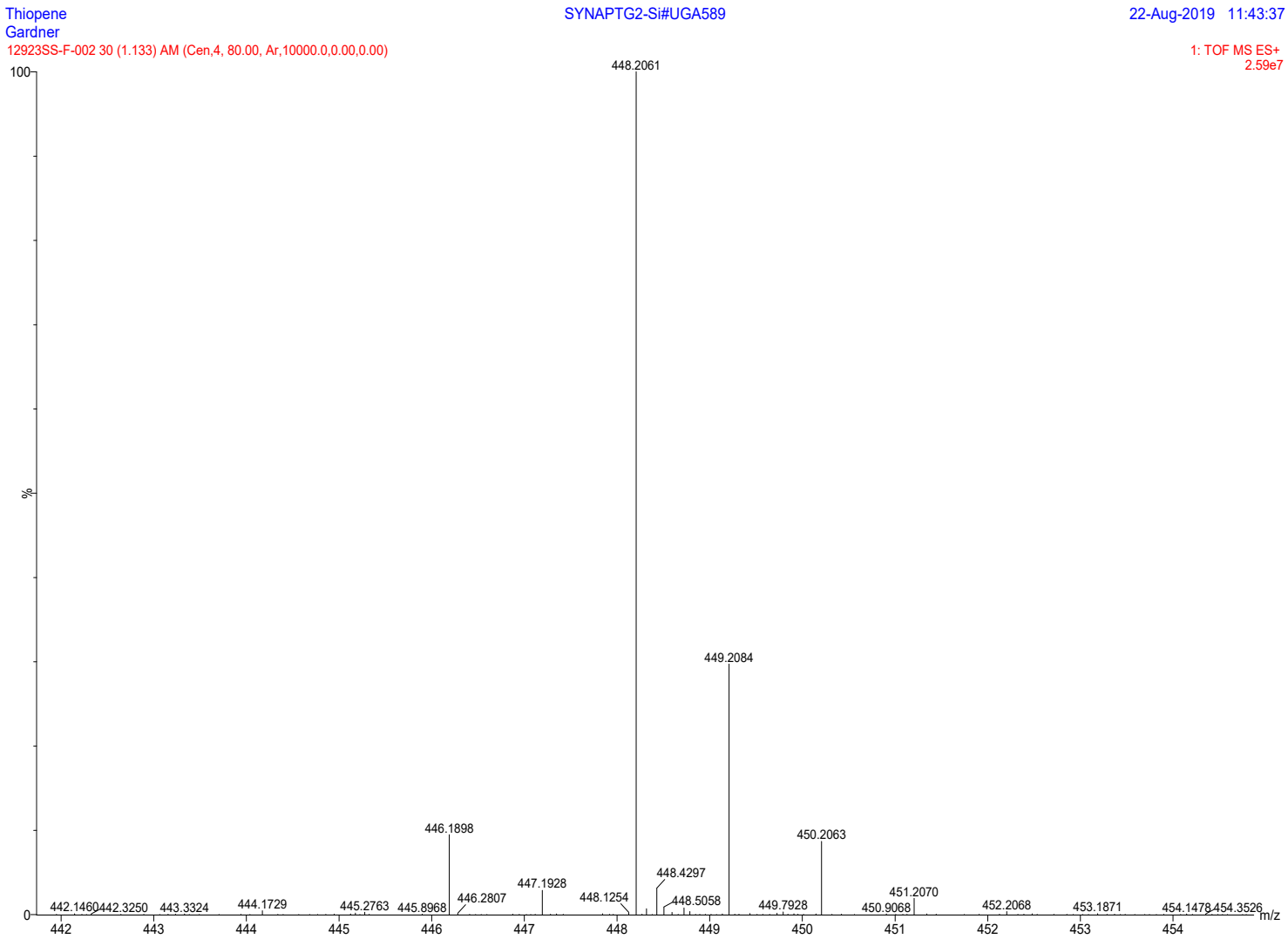
HRMS of **TPS-58**



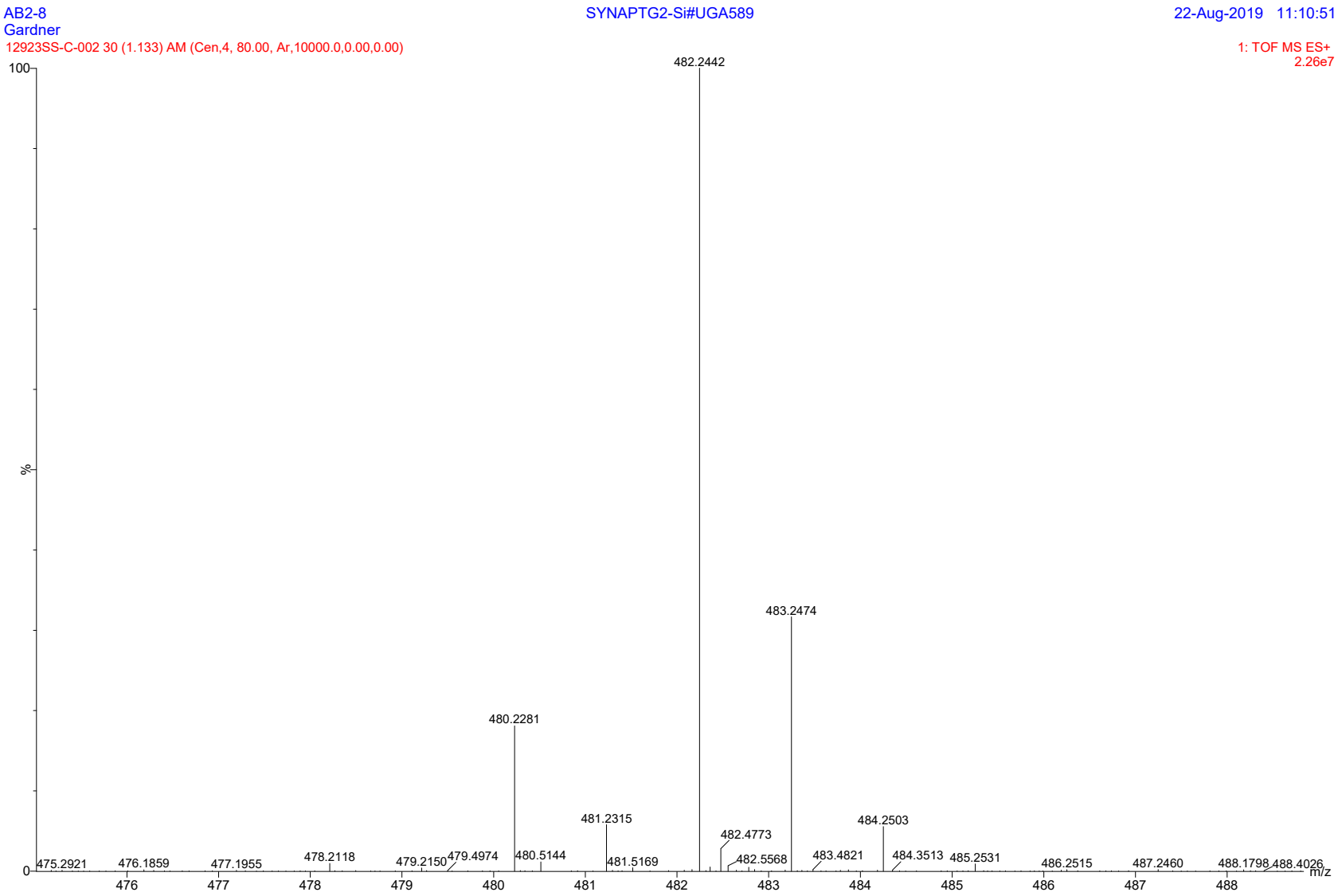
HRMS of **TPS-61-P1**



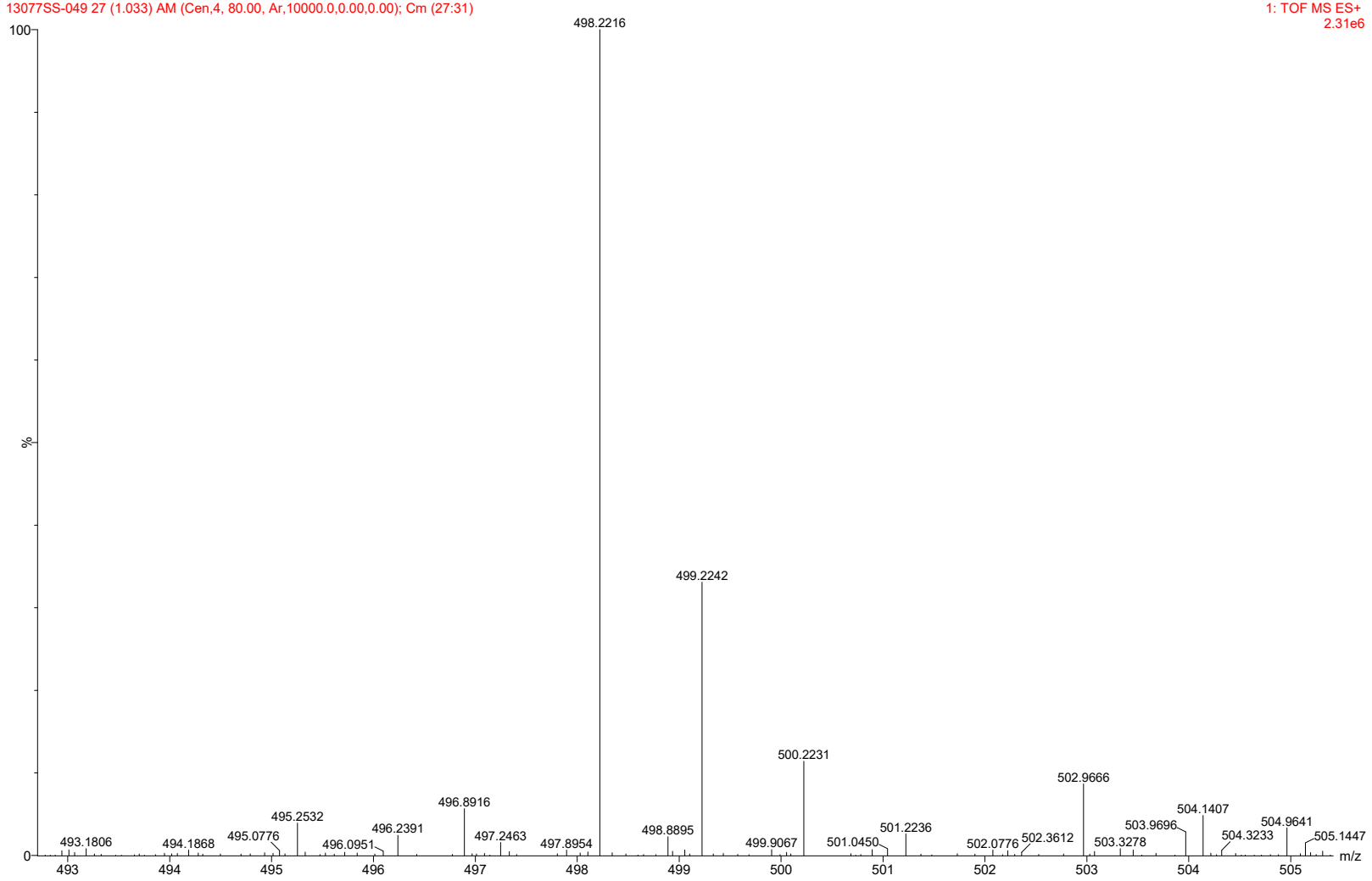
HRMS of **TPS-61-P2**



HRMS of **TPS-62**



HRMS of **TPS-65**



HRMS of **TPS-66**