

Electronic Supplementary File

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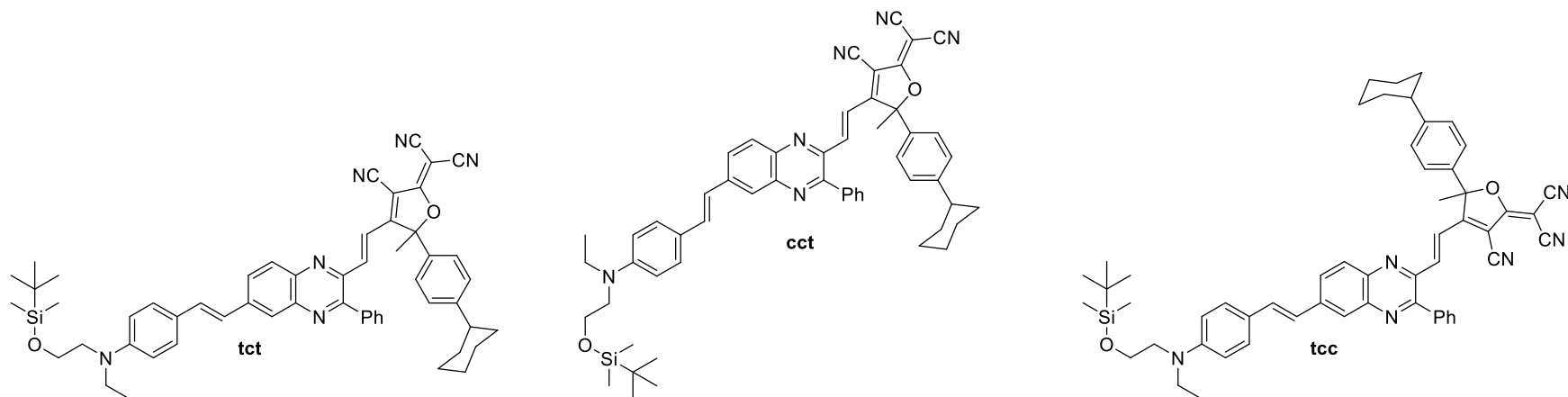


Figure S1. The most stable **Chr-An1** conformers **a-c** with Boltzmann weight factors estimated by Conformational search being 83 (*tct*), 10 (*cct*), 5 (*tcc*)%.

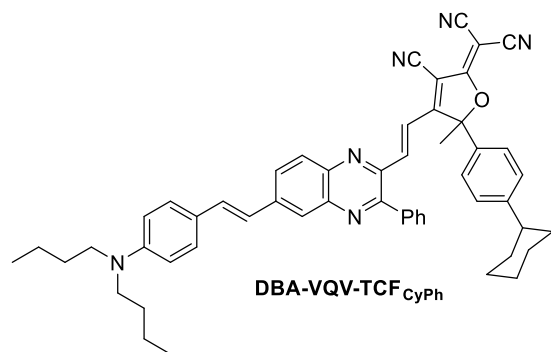


Figure S2. **DBA-VQV-TCF_{CyPh}** chromophore.

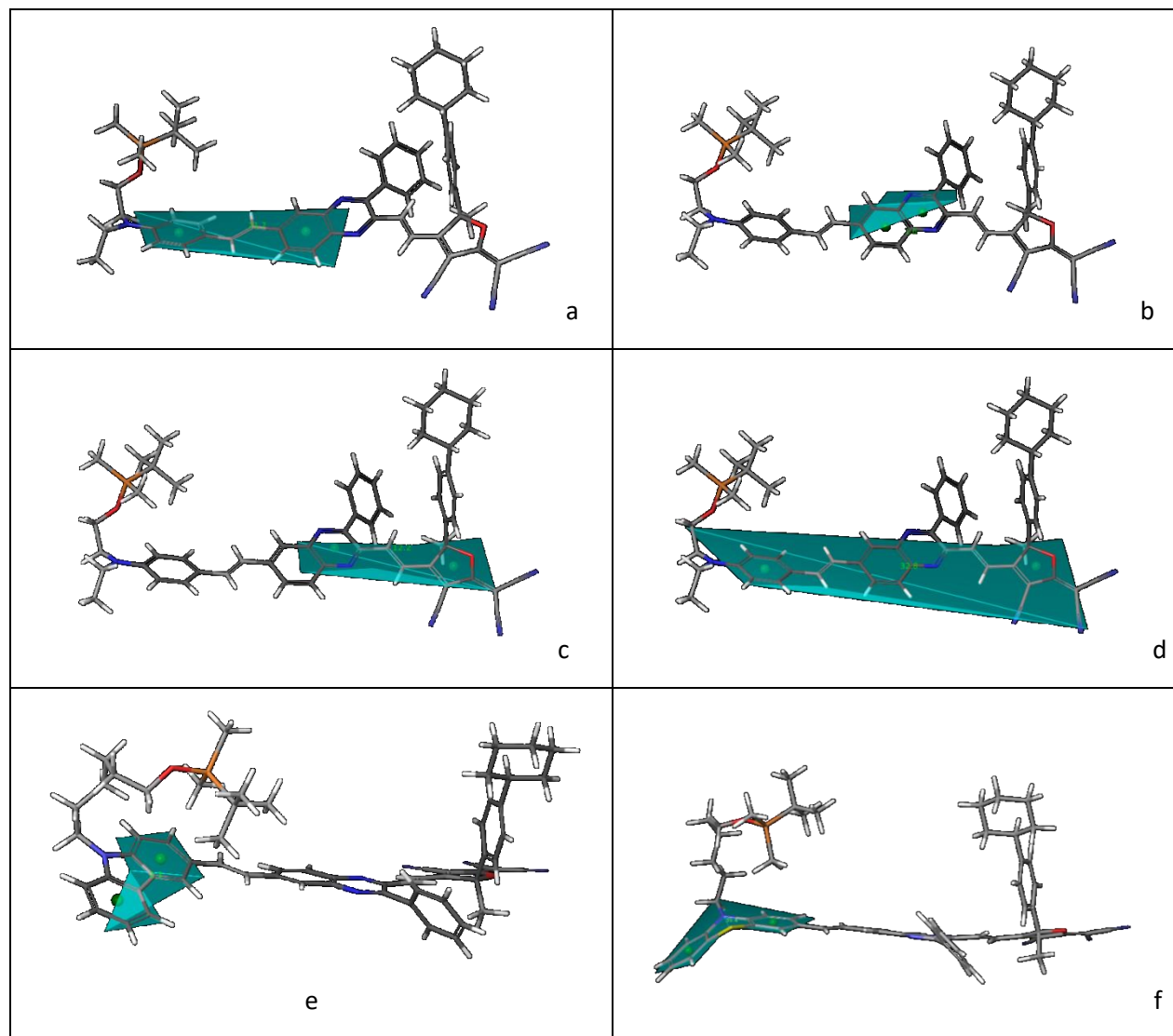


Figure S3. Dihedral angles between donor and bridge planes (a), between bridge fused cycles planes (b), between bridge cycle and acceptor (c), between donor and acceptor planes (d) for **Chr-An1** chromophore; between donor planes for **Chr-Car** (e) and **Chr-PT** (f) chromophores.

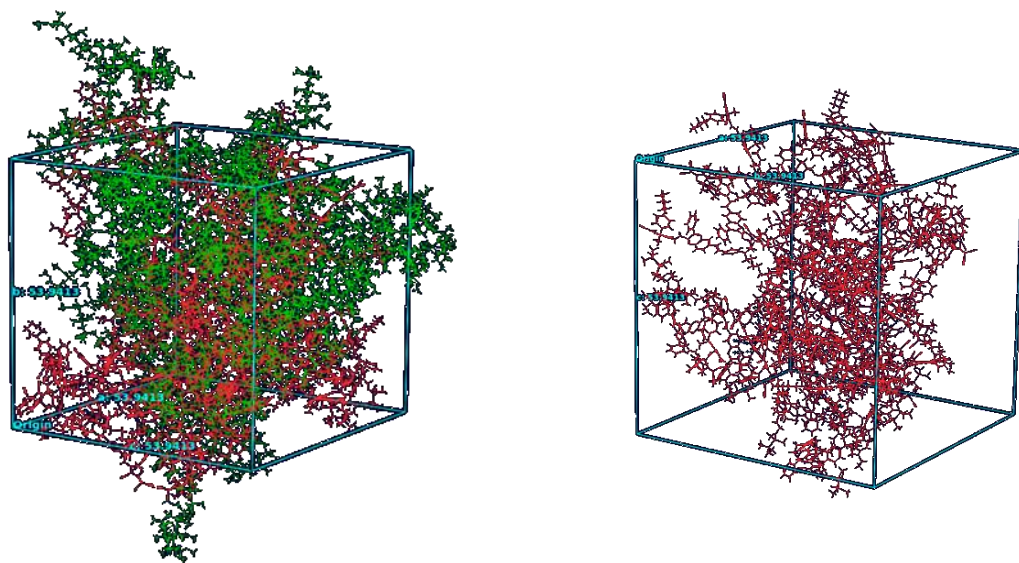
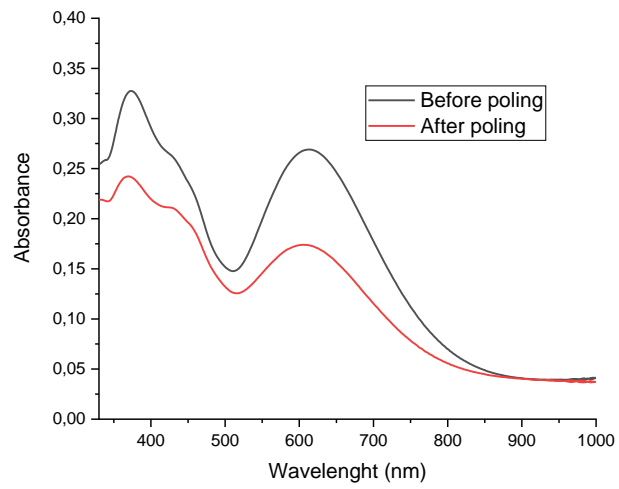
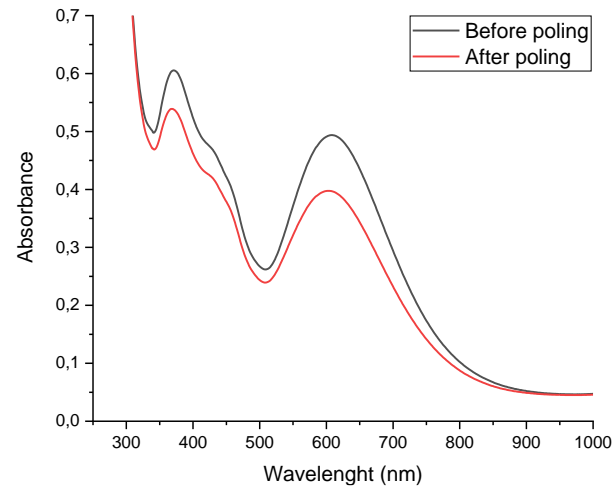


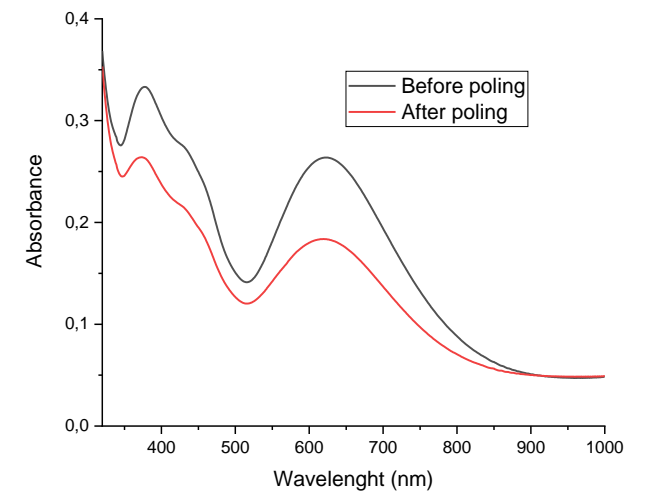
Figure S4. Chr-An3/PMMA(40) in the amorphous cell



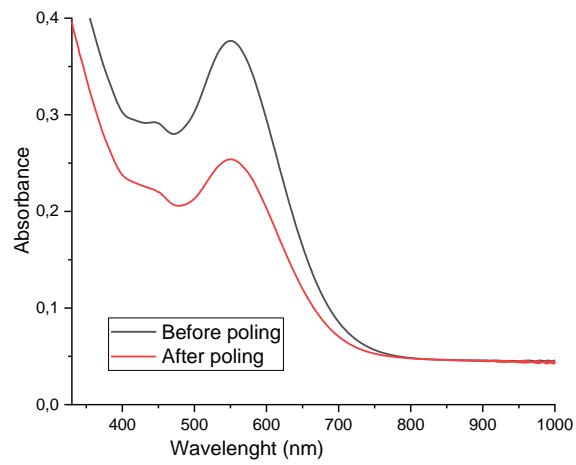
a



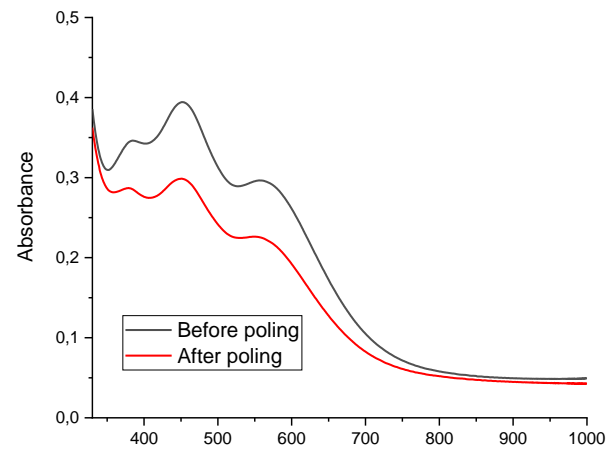
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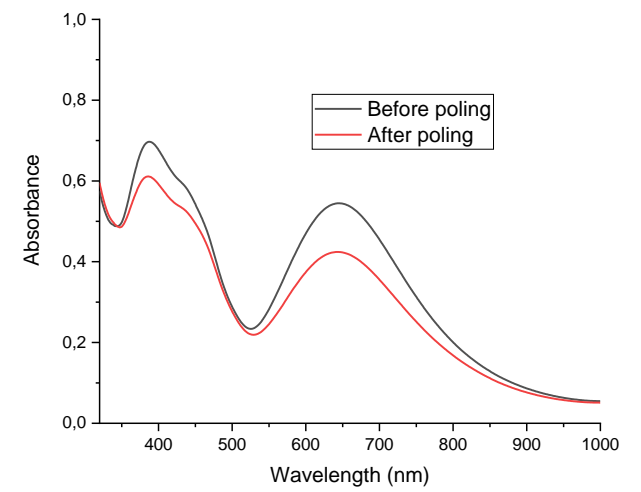
c



d



e



f

Figure S5. UV–vis electronic absorption spectra registered before and after poling for films **Chr-An1/PMMA** (a), **Chr-An2/PMMA** (b), **Chr-An3/PMMA** (c), **Chr-Car/PMMA** (d), **Chr-PT/PMMA** (e), **Chr-TQ/PMMA** (f) with chromophore load 25 wt. %

Table S1. Polymer films characteristics: poling temperature, T_p , order parameter, η , film thickness, and λ_{\max} .

Polymer films	T_p , °C	η	h , nm	λ_{\max} , nm
Chr-An1(25)/PMMA	110	0.35	240	612
Chr-An1(40)/PMMA	110	0.17	800	612
Chr-An2(25)/PMMA	100	0.23	640	607
Chr-An2(40)/PMMA	110	0.20	830	608
Chr-An3(25)/PMMA	110	0.35	290	624
Chr-An3(40)/PMMA	110	0.33	250	626
Chr-Car(25)/PMMA	110	0.35	400	551
Chr-Car(40)/PMMA	100	0.24	800	553
Chr-PT(25)/PMMA	110	0.23	400	556
Chr-PT(40)/PMMA	110	0.10	1000	562
Chr-TQ(25)/PMMA	90	0.24	600	645

Table S2. The coordinates (x,y,z) of the chromophores **Chr-An1**, **Chr-An2**, **Chr-An3**, **Chr-Car**, **Chr-PT**, **Chr-TQ**

Chr_An1				Chr_An2			
C	19.08380	6.12580	7.93400	C	0.63380	-5.24560	0.41580
C	20.38890	5.61010	7.64190	C	0.33010	-5.49550	-0.96310
N	18.91930	7.17780	8.75780	N	0.96850	-4.01570	0.83780
C	20.00880	7.70520	9.31800	C	0.96200	-3.01560	-0.04610
C	21.31700	7.13170	9.09000	C	0.57190	-3.24940	-1.41960
N	21.49140	6.13270	8.24460	N	0.30810	-4.46950	-1.85770
C	20.53210	4.53460	6.74410	C	0.00850	-6.80290	-1.37940
C	19.43070	3.94700	6.12680	C	-0.05860	-7.85700	-0.47050
C	18.13010	4.47120	6.43800	C	0.26390	-7.58760	0.90430
C	17.95920	5.51760	7.30510	C	0.59940	-6.33350	1.33510
H	21.53770	4.17170	6.55110	H	-0.22760	-6.95690	-2.42850
C	19.64640	2.83690	5.20870	C	-0.47130	-9.17510	-0.92790
H	17.25550	4.01790	5.98240	H	0.25680	-8.40470	1.61810
H	16.97270	5.90880	7.53660	H	0.84970	-6.13280	2.37220
C	18.73120	2.24460	4.40210	C	-0.83300	-10.21480	-0.13510
H	17.71120	2.62900	4.39780	H	-0.82310	-10.06700	0.94400
H	20.67740	2.49060	5.16230	H	-0.54240	-9.28510	-2.00840
C	19.39950	-0.88360	1.48320	C	-2.36560	-14.09650	-1.24950
C	20.35720	-0.60880	2.49290	C	-2.39150	-13.62720	0.08430
C	20.14210	0.37150	3.44500	C	-1.86270	-12.38930	0.41430
C	18.96840	1.15310	3.46700	C	-1.30390	-11.52520	-0.54730
C	18.00340	0.85000	2.48820	C	-1.26360	-12.00590	-1.87240
C	18.20100	-0.13000	1.52620	C	-1.76220	-13.25140	-2.21610
H	21.30440	-1.13180	2.49440	H	-2.88010	-14.20870	0.85480
H	20.91520	0.53830	4.19030	H	-1.91570	-12.06110	1.45050
H	17.07050	1.41060	2.47440	H	-0.80320	-11.40400	-2.65130
H	17.40960	-0.31160	0.80880	H	-1.64080	-13.59900	-3.23390
C	19.85510	8.91130	10.11920	C	1.41170	-1.71100	0.42630
C	18.66760	9.39350	10.56900	C	1.71910	-1.46270	1.72870
H	17.75960	8.84770	10.32340	H	1.63210	-2.28480	2.43480
H	20.76870	9.44920	10.33890	H	1.52870	-0.93410	-0.31980

C	18.51490	10.56910	11.37090	C	2.15340	-0.20940	2.26300
C	17.31220	11.04710	11.83680	C	2.54130	-0.00240	3.56970
C	17.55100	12.22880	12.64110	C	2.87480	1.39840	3.74260
O	18.86620	12.48720	12.66880	O	2.71000	2.04240	2.57710
C	19.62030	11.48410	11.89300	C	2.20140	1.12990	1.53650
C	16.68180	13.05130	13.32250	C	3.30200	2.10020	4.84920
C	20.52790	10.79460	12.91810	C	0.79180	1.63510	1.20380
C	16.05910	10.44610	11.55720	C	2.58840	-1.02100	4.55980
N	15.07540	9.89130	11.27810	N	2.59880	-1.91060	5.31010
H	21.16930	11.53980	13.39640	H	0.84140	2.66670	0.84630
H	19.91080	10.32330	13.68850	H	0.31630	1.01170	0.44280
H	21.15460	10.02730	12.45920	H	0.17430	1.60970	2.10560
C	17.18980	14.16460	14.05410	C	3.55270	3.50170	4.74320
C	15.27240	12.84680	13.33720	C	3.50740	1.48730	6.11910
N	17.58320	15.07750	14.65990	N	3.75810	4.64540	4.67030
N	14.11470	12.72890	13.38130	N	3.68930	1.03000	7.17470
C	24.87700	8.43640	11.10650	C	0.11070	-0.16120	-4.37560
C	24.86530	8.28060	9.71880	C	0.83660	-1.31890	-4.66510
C	23.70640	7.86070	9.06980	C	0.98780	-2.31190	-3.69990
C	22.53440	7.61020	9.79790	C	0.43200	-2.15480	-2.42120
C	22.55830	7.75710	11.19350	C	-0.30660	-0.99350	-2.14390
C	23.72330	8.16430	11.84390	C	-0.46860	-0.00530	-3.11560
H	25.78380	8.75850	11.61210	H	-0.01350	0.60900	-5.13210
H	25.76320	8.48400	9.14060	H	1.28170	-1.45040	-5.64770
H	23.69530	7.72260	7.99290	H	1.53530	-3.22170	-3.92600
H	21.67110	7.51890	11.77500	H	-0.79030	-0.88120	-1.17670
H	23.73170	8.25680	12.92700	H	-1.06020	0.87870	-2.89240
C	20.72870	-2.78740	0.56320	C	-3.20070	-15.68680	-2.97980
N	19.62800	-1.83190	0.49870	N	-2.90050	-15.33050	-1.59760
C	18.69580	-2.01410	-0.61220	C	-3.23780	-16.34200	-0.60230
H	19.27070	-2.39450	-1.46490	H	-2.62360	-16.19410	0.28920
C	17.53590	-2.97360	-0.31270	C	-4.71410	-16.42210	-0.19900
H	18.31580	-1.03590	-0.92370	H	-2.95960	-17.32550	-1.00640
H	20.36260	-3.75770	0.19940	H	-3.31780	-14.77660	-3.57220

C	21.95760	-2.40970	-0.27210	C	-2.19090	-16.61470	-3.66240
H	21.02760	-2.94440	1.60260	H	-4.17550	-16.19510	-3.00270
H	16.88910	-3.07590	-1.19200	O	-5.10440	-15.28090	0.53990
H	17.90800	-3.97070	-0.05080	H	-5.33580	-16.53480	-1.10090
H	16.92690	-2.61390	0.52230	H	-2.05910	-17.52300	-3.05380
H	22.63890	-3.27390	-0.29150	H	-2.62350	-16.93080	-4.62500
H	21.64150	-2.22540	-1.31050	O	-0.95350	-15.96000	-3.86800
O	22.63470	-1.29360	0.27560	Si	0.46880	-16.77440	-4.28060
Si	23.18240	0.03410	-0.61280	C	1.78240	-15.40960	-4.51520
C	24.29020	1.03130	0.58320	C	0.18520	-17.75930	-5.87110
C	24.88290	2.25020	-0.16010	H	-0.61160	-18.50250	-5.74360
C	23.47540	1.53510	1.79310	H	-0.10030	-17.10990	-6.70660
C	25.44290	0.13980	1.09420	H	1.08900	-18.30520	-6.16720
C	21.70360	1.04240	-1.21930	C	2.00990	-14.65560	-3.18730
C	24.16960	-0.57450	-2.10900	C	1.31430	-14.40700	-5.59190
H	22.02440	1.94020	-1.76190	C	3.11540	-16.04700	-4.96640
H	21.07940	0.45640	-1.90530	H	-4.84610	-17.33620	0.40190
H	21.06800	1.35880	-0.38520	Si	-6.70130	-14.95070	0.98370
H	24.53220	0.26740	-2.71120	C	-6.62630	-13.30300	1.94520
H	25.04020	-1.16850	-1.80850	C	-7.76930	-14.80990	-0.57130
H	23.55540	-1.19990	-2.76840	C	-7.35510	-16.36400	2.05830
H	24.12080	2.11600	2.46830	C	-5.67010	-13.43620	3.15000
H	22.64600	2.18670	1.49260	C	-6.12150	-12.17180	1.02310
H	23.05190	0.70620	2.36950	C	-8.03690	-12.94090	2.46150
H	25.52530	2.83130	0.51730	H	-8.39080	-16.18090	2.36840
H	25.50080	1.95430	-1.01700	H	-7.34620	-17.31690	1.51500
H	24.10300	2.92940	-0.52690	H	-6.75420	-16.49560	2.96530
H	26.08020	0.70270	1.79150	H	-8.79890	-14.52980	-0.31790
H	25.06530	-0.74150	1.62510	H	-7.37840	-14.05350	-1.26100
H	26.08600	-0.21070	0.27740	H	-7.82160	-15.76110	-1.11490
C	21.59700	13.80050	8.76460	C	0.93240	-17.96860	-2.88920
C	22.34430	12.99150	9.63010	H	1.88160	-18.47470	-3.10300
C	21.73160	12.22990	10.62680	H	1.04010	-17.44730	-1.93160
C	20.34250	12.24670	10.78280	H	0.17560	-18.75170	-2.75820

C	19.58740	13.04030	9.90960	C	5.12520	1.32630	-1.69860
C	20.20480	13.80250	8.92460	C	5.47470	0.89470	-0.41100
H	23.42700	12.95710	9.54010	C	4.53150	0.81710	0.60900
H	22.35430	11.62830	11.28190	C	3.19660	1.17510	0.37860
H	18.50590	13.07970	10.00680	C	2.83720	1.59930	-0.90500
H	19.59340	14.41880	8.26920	C	3.78640	1.66870	-1.92460
C	23.57860	14.66760	5.51060	H	6.50600	0.61970	-0.20220
C	22.94630	13.79390	6.60550	H	4.84340	0.48580	1.59580
C	22.25120	14.65120	7.68980	H	1.81410	1.88190	-1.12850
C	23.23850	15.68780	8.27670	H	3.47040	2.00480	-2.90830
C	23.86870	16.55800	7.17840	C	7.49160	3.02290	-4.29680
C	24.55110	15.69930	6.10280	C	6.40960	2.90730	-3.21270
H	22.78200	15.19300	4.96280	C	6.17290	1.43740	-2.79220
H	24.09330	14.03350	4.77750	C	5.84450	0.57000	-4.02900
H	23.72620	13.17910	7.07740	C	6.92940	0.68870	-5.11060
H	22.22210	13.09480	6.16820	C	7.16510	2.15060	-5.51780
H	21.44950	15.21590	7.19040	H	8.45910	2.71040	-3.87670
H	22.71980	16.31460	9.01290	H	7.60810	4.07210	-4.59670
H	24.03500	15.16200	8.82300	H	5.46740	3.32880	-3.59200
H	23.08620	17.17370	6.71020	H	6.68330	3.50260	-2.33280
H	24.58840	17.25710	7.62330	H	7.12010	1.06310	-2.37600
H	25.40760	15.17290	6.55080	H	5.72100	-0.47660	-3.72350
H	24.95920	16.33730	5.30870	H	4.87940	0.88690	-4.44950
				H	7.86910	0.26340	-4.72830
				H	6.65080	0.08840	-5.98610
				H	6.26050	2.53970	-6.00870
				H	7.97290	2.21400	-6.25770
				H	2.75860	-13.86200	-3.32550
				H	1.09120	-14.18570	-2.81990
				H	2.38460	-15.32010	-2.39930
				H	2.06700	-13.61730	-5.72970
				H	1.16720	-14.88950	-6.56610
				H	0.37180	-13.92370	-5.31220
				H	3.88160	-15.26970	-5.09840

				H	3.50340	-16.75990	-4.22820
				H	3.01990	-16.57360	-5.92400
				H	-5.62340	-12.48820	3.70530
				H	-6.00140	-14.20930	3.85430
				H	-4.65180	-13.68630	2.83300
				H	-6.06870	-11.22460	1.57940
				H	-5.12170	-12.38180	0.62840
				H	-6.79270	-12.00930	0.17090
				H	-8.00590	-11.98920	3.01080
				H	-8.75770	-12.81770	1.64360
				H	-8.43400	-13.69850	3.14830
Chr-An3				Chr_Car			
C	-35.98610	2.64310	-15.03960	C	13.12100	3.19870	-10.28790
C	-36.16680	3.84780	-14.28330	C	14.21780	3.16020	-9.36780
N	-34.89570	1.87690	-14.86780	N	11.88060	2.83810	-9.90460
C	-34.00760	2.23950	-13.94000	C	11.70200	2.47790	-8.63410
C	-34.23860	3.40050	-13.10740	C	12.79240	2.52210	-7.68450
N	-35.27470	4.19520	-13.31620	N	14.02060	2.82290	-8.06440
C	-37.29680	4.65490	-14.51920	C	15.51250	3.49980	-9.80970
C	-38.26450	4.29390	-15.45350	C	15.75650	3.87950	-11.12580
C	-38.06420	3.08500	-16.20400	C	14.64340	3.92920	-12.03160
C	-36.96920	2.28790	-16.00850	C	13.37450	3.60020	-11.63120
C	-39.44210	5.13300	-15.60910	H	16.31890	3.45730	-9.08300
C	-40.55160	4.84980	-16.33500	C	17.12220	4.21080	-11.52080
H	-40.59610	3.90490	-16.87520	H	14.80760	4.24850	-13.05620
H	-39.41990	6.05210	-15.02680	H	12.53430	3.63840	-12.31820
C	-32.77130	1.47230	-13.85850	C	17.58690	4.40130	-12.77720
C	-32.53580	0.34200	-14.57810	H	16.90130	4.27680	-13.61400
H	-33.32080	-0.01970	-15.23750	H	17.82890	4.26050	-10.69390
H	-31.99710	1.87830	-13.21970	C	10.39050	1.98120	-8.23730
C	-31.31590	-0.40560	-14.56260	C	9.27420	2.06760	-9.00420
C	-31.04740	-1.50010	-15.35520	H	9.35180	2.53550	-9.98290
C	-29.71070	-1.97720	-15.05780	H	10.34060	1.49440	-7.27200

O	-29.15570	-1.19230	-14.12110	C	7.97940	1.59300	-8.61850
C	-30.10790	-0.16870	-13.66020	C	6.85860	1.65340	-9.41160
C	-28.99140	-3.03680	-15.56580	C	5.73150	1.11380	-8.67680
C	-30.41940	-0.52550	-12.20080	O	6.14160	0.71460	-7.46440
C	-31.95690	-2.04110	-16.30290	C	7.57700	0.98900	-7.27460
N	-32.75910	-2.42170	-17.05500	C	4.40910	0.97150	-9.02850
H	-29.50350	-0.48510	-11.60550	C	7.64020	2.01370	-6.13550
H	-31.15800	0.15640	-11.77280	C	6.84990	2.17040	-10.73190
H	-30.82150	-1.54100	-12.15330	N	6.93240	2.60890	-11.80620
C	-27.67210	-3.29050	-15.08380	H	7.17670	1.59480	-5.23840
C	-29.50910	-3.91100	-16.56390	H	8.66870	2.30110	-5.90620
N	-26.59570	-3.50890	-14.69730	H	7.08610	2.91130	-6.42480
N	-29.89050	-4.65110	-17.37810	C	3.48510	0.40840	-8.10080
C	-31.73550	4.55760	-9.81100	C	3.90020	1.37040	-10.29670
C	-32.14340	5.49930	-10.75890	N	2.71110	-0.04520	-7.35940
C	-32.95070	5.11500	-11.82720	N	3.43030	1.67850	-11.31630
C	-33.34640	3.77740	-11.97610	C	12.30230	1.75510	-3.48850
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C	-32.14500	3.22900	-9.93440	C	11.60430	2.90630	-5.49610
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C	-28.40600	2.79130	-15.36200	H	14.24180	0.86540	-6.14270
C	-28.98670	1.54690	-15.13720	H	13.96570	0.40180	-3.71780
C	-29.45190	1.19490	-13.86410	C	9.44240	-2.88920	-6.54030
C	-29.30930	2.12230	-12.82630	C	9.57510	-1.84780	-5.61330
C	-28.73750	3.37230	-13.06130	C	8.98790	-0.60050	-5.82980
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H	-45.73640	2.36400	-10.55790	O	23.75440	0.25340	-11.93960
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Chr-PT				Chr-TQ			
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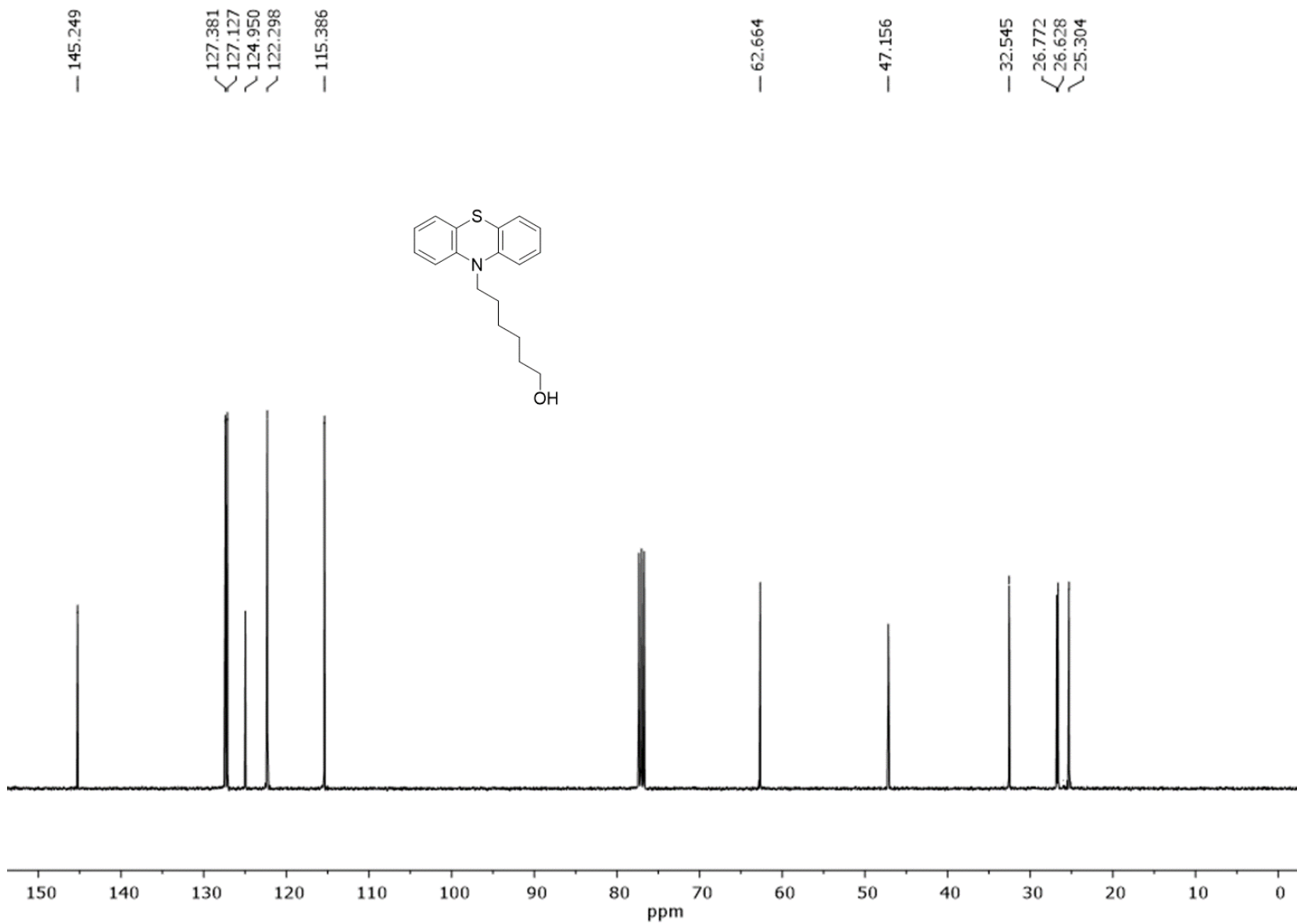
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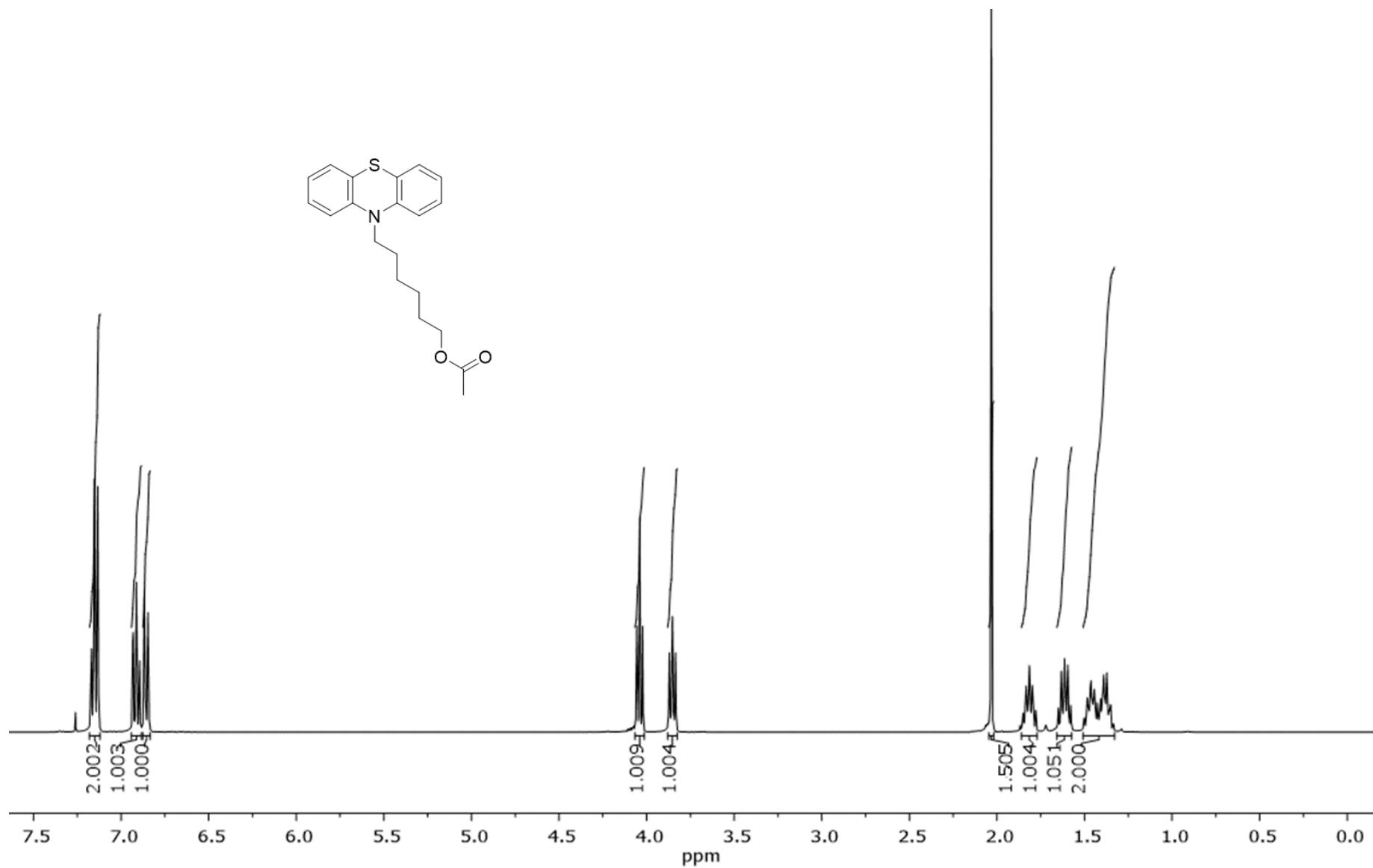
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H	-22.64210	-21.63890	-20.96240	H	-14.23390	-11.06690	-27.67080
H	-21.54890	-20.42690	-21.61620	C	-12.36530	-11.56740	-29.64190
C	-22.57220	-19.76110	-19.85450	H	-14.20020	-12.39300	-30.44280
C	-22.26650	-18.26900	-20.03560	H	-14.24640	-10.65190	-30.20250
H	-23.54450	-19.87890	-19.36170	C	-11.67570	-11.48170	-31.01090
H	-21.83080	-20.21500	-19.18170	H	-12.06230	-10.71190	-29.01870
C	-22.24070	-17.50040	-18.70700	H	-12.02450	-12.46910	-29.11420
H	-21.29460	-18.15580	-20.53980	C	-10.15640	-11.26150	-30.95920
H	-23.01330	-17.83450	-20.71080	H	-11.88080	-12.40030	-31.57360
C	-21.96120	-15.99620	-18.85600	H	-12.12250	-10.65840	-31.58560
H	-23.19710	-17.62940	-18.18460	C	-9.36940	-12.35170	-30.23350
H	-21.47110	-17.93910	-18.05630	H	-9.77480	-11.18420	-31.98530
C	-23.10230	-15.19570	-19.48290	H	-9.93370	-10.30380	-30.46610
H	-21.75620	-15.56470	-17.86820	O	-9.64290	-13.62180	-30.81490
H	-21.05770	-15.84140	-19.46360	H	-8.29590	-12.11510	-30.29390
O	-24.23920	-15.24260	-18.62730	H	-9.63590	-12.37160	-29.16640
H	-22.78110	-14.15270	-19.62160	Si	-8.67770	-14.98520	-30.61510
H	-23.35180	-15.59470	-20.47750	C	-9.69260	-16.41420	-31.37610
Si	-25.75860	-14.63050	-19.00280	C	-7.03100	-14.73460	-31.51140
C	-26.73050	-14.72700	-17.35890	C	-8.33610	-15.26880	-28.77530
C	-25.60300	-12.84780	-19.61980	C	-10.00870	-16.10390	-32.85460
C	-26.56130	-15.67560	-20.35970	C	-8.89250	-17.73220	-31.29640
H	-26.58890	-12.40290	-19.80180	C	-11.01970	-16.58010	-30.60480
H	-25.07880	-12.21130	-18.89790	H	-6.37260	-15.60330	-31.39050

H	-25.04930	-12.80110	-20.56550	H	-7.17700	-14.57110	-32.58490
H	-27.53830	-15.26970	-20.64950	H	-6.49230	-13.86470	-31.11620
H	-25.93710	-15.69610	-21.26170	H	-7.73400	-16.17170	-28.61690
H	-26.70940	-16.71370	-20.04170	H	-7.77820	-14.42990	-28.34180
C	-26.06440	-13.81480	-16.30620	H	-9.26230	-15.38110	-28.20030
C	-28.18910	-14.26970	-17.57580	H	-10.60860	-16.91350	-33.29510
C	-26.72780	-16.17880	-16.83400	H	-10.57600	-15.17250	-32.95860
H	-26.59780	-13.88440	-15.34670	H	-9.09710	-16.01020	-33.45730
H	-25.02140	-14.10020	-16.12920	H	-9.47490	-18.55890	-31.72820
H	-26.07790	-12.76080	-16.60990	H	-7.94890	-17.67550	-31.85310
H	-28.74800	-14.31460	-16.62970	H	-8.65520	-18.00980	-30.26160
H	-28.24850	-13.23520	-17.93750	H	-11.62120	-17.38740	-31.04780
H	-28.71790	-14.90730	-18.29530	H	-10.85230	-16.83970	-29.55220
H	-27.27410	-16.24190	-15.88130	H	-11.61890	-15.66300	-30.63410
H	-27.21400	-16.86930	-17.53430				
H	-25.70860	-16.54040	-16.65960				

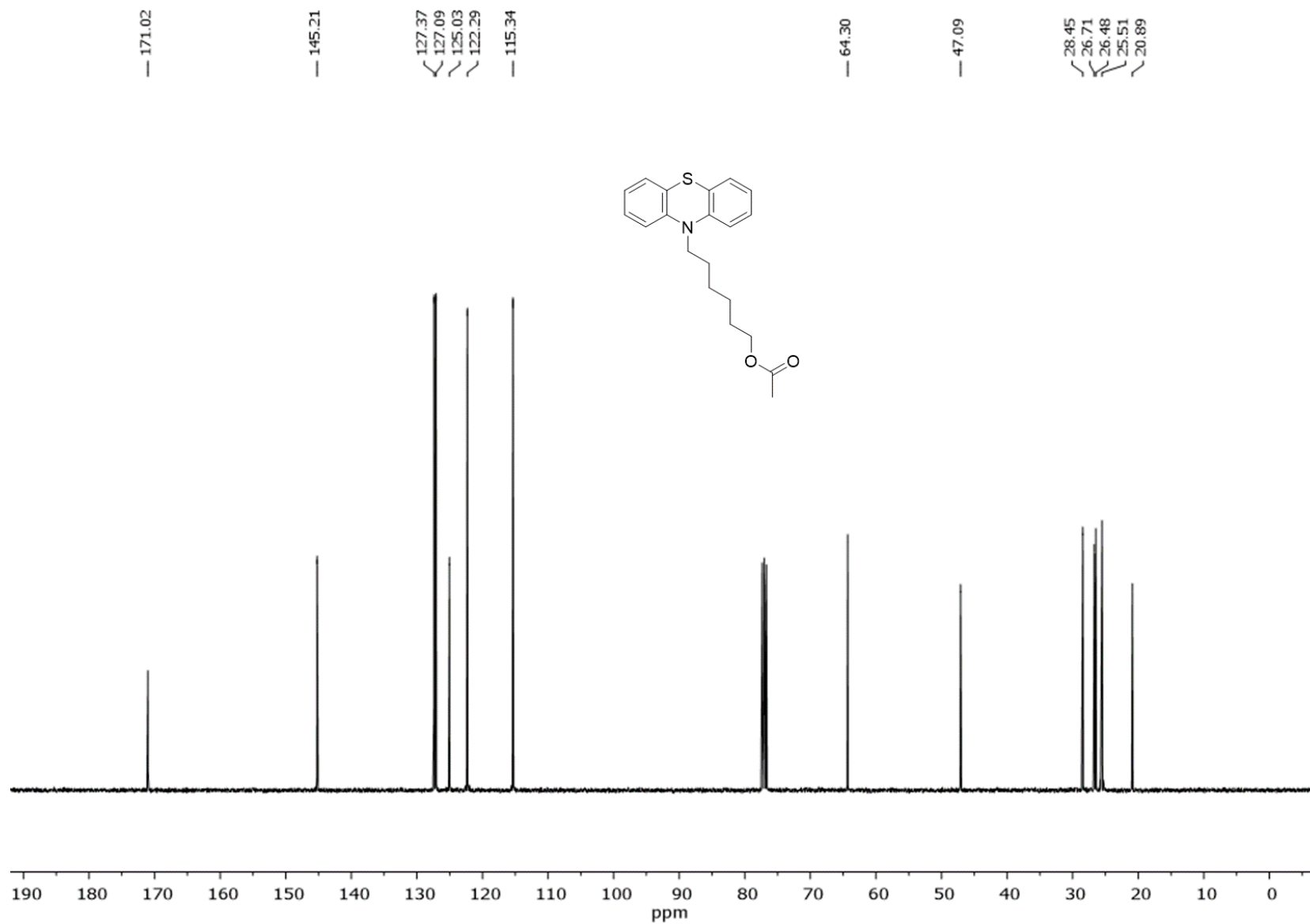
^1H NMR (CDCl_3 , 400 MHz) of 6-(10H-phenothiazin-10-yl)hexan-1-ol



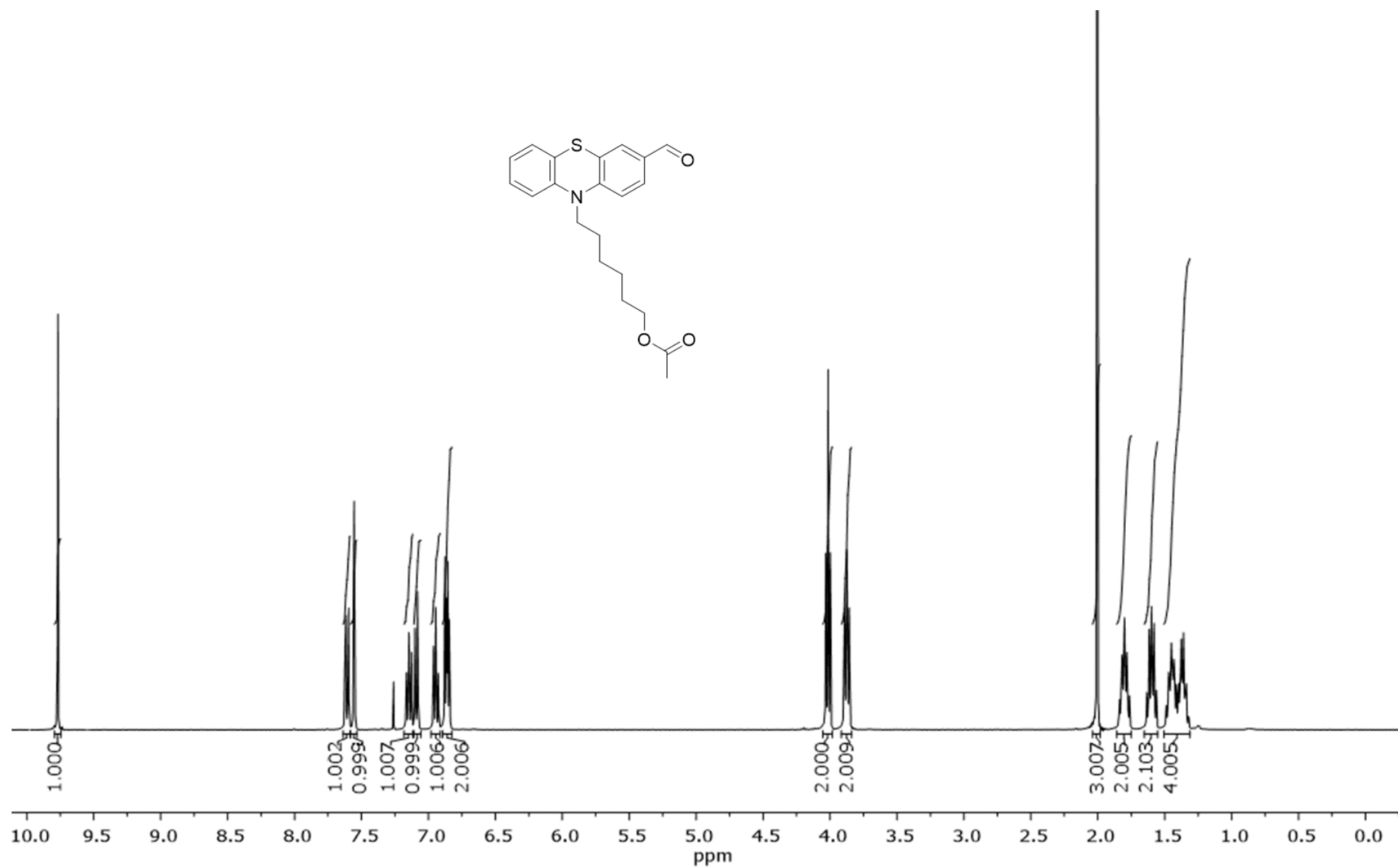
^{13}C NMR (CDCl_3 , 100 MHz) of 6-(10H-phenothiazin-10-yl)hexan-1-ol



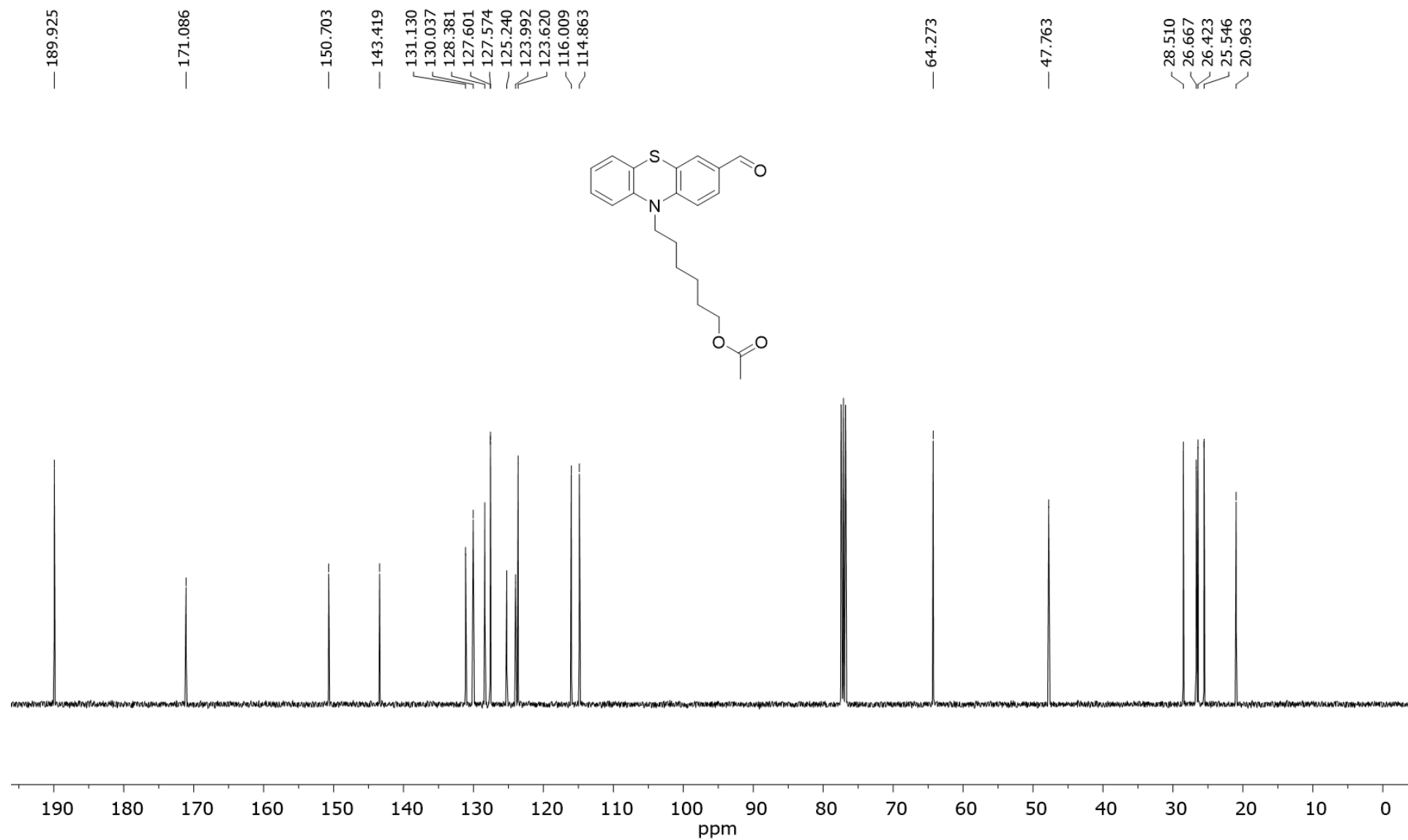
^1H NMR (CDCl_3 , 400 MHz) of 6-(10H-phenothiazin-10-yl)hexyl acetate



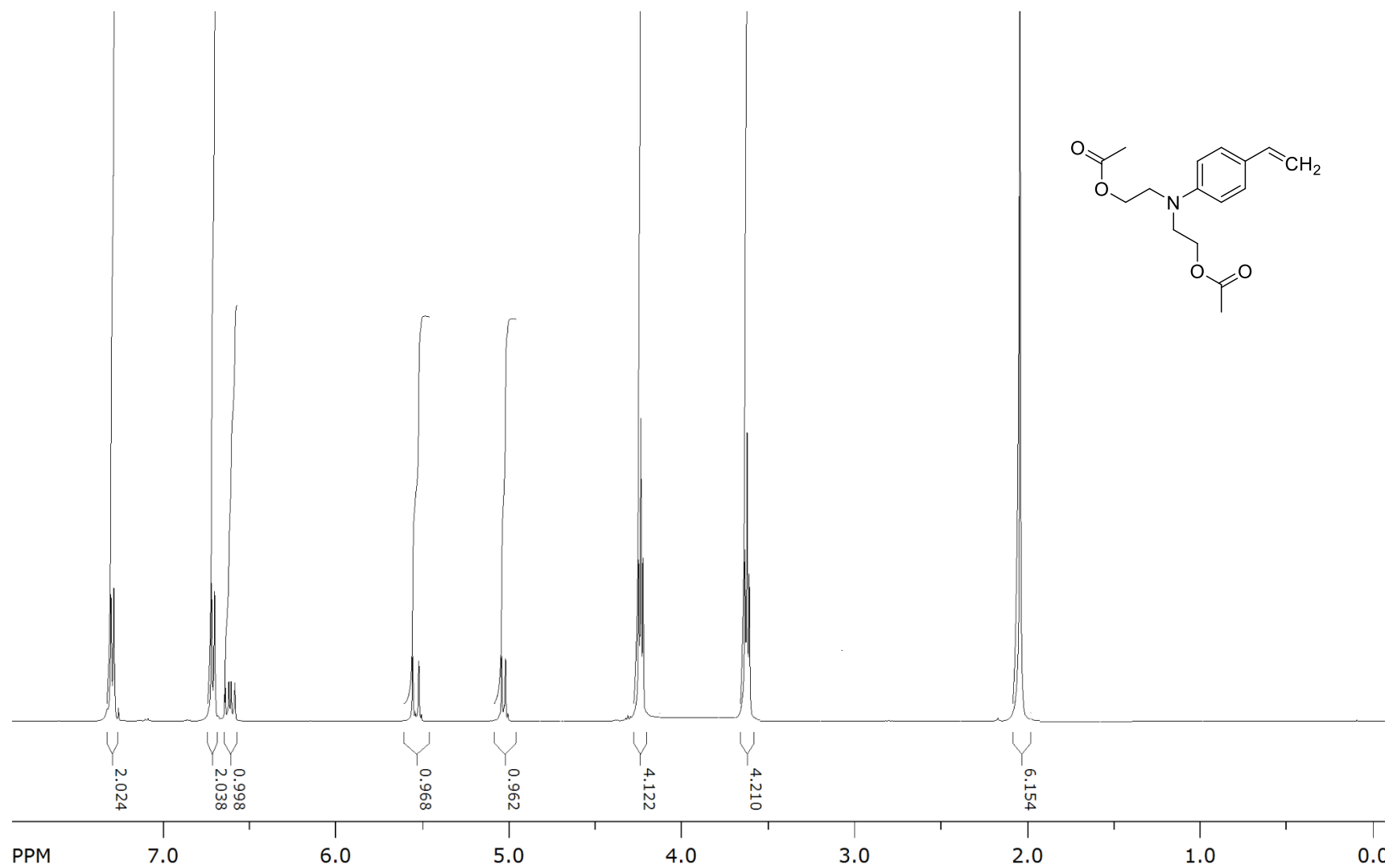
^{13}C NMR (CDCl_3 , 100 MHz) of 6-(10H-phenothiazin-10-yl)hexyl acetate



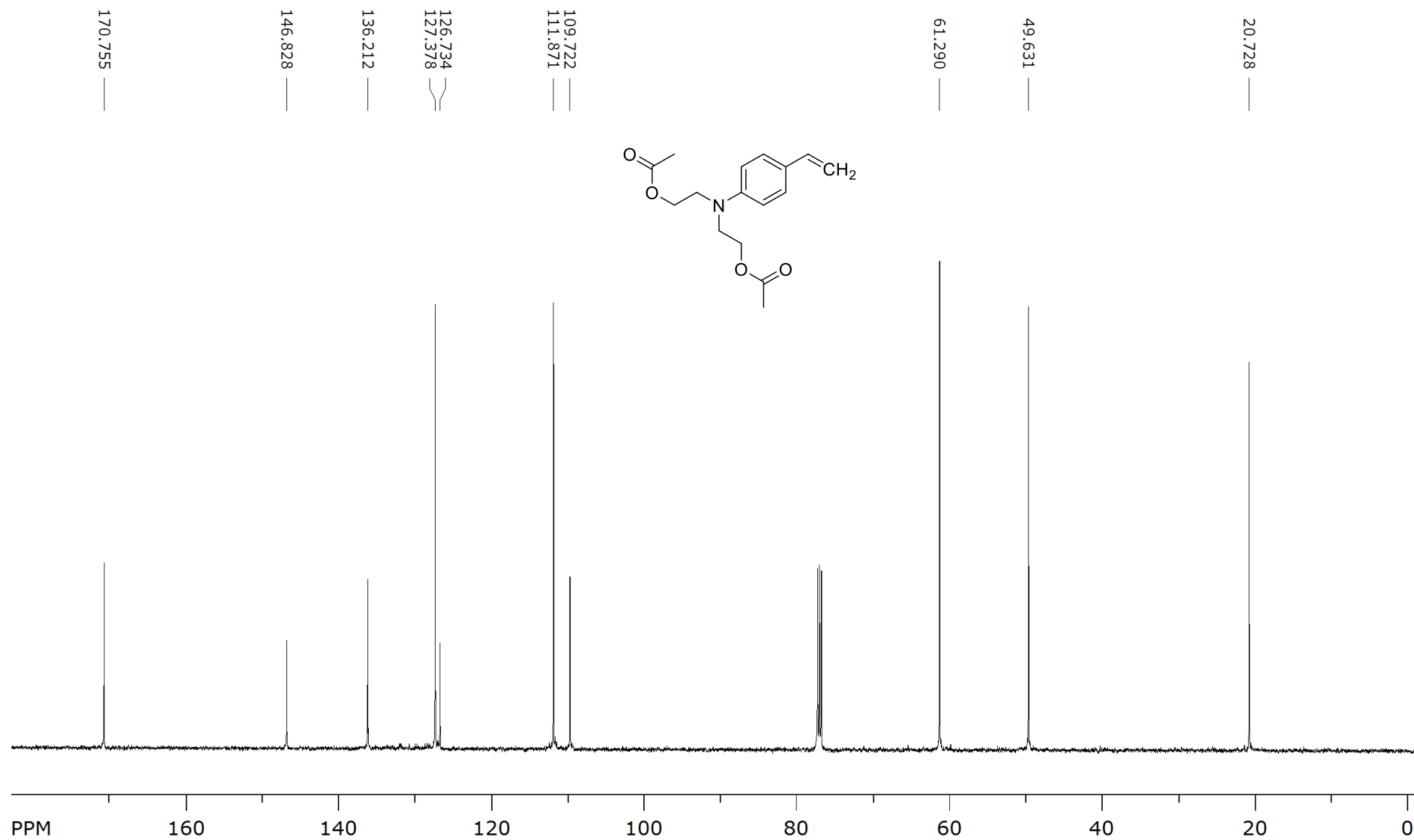
^1H NMR (CDCl_3 , 400 MHz) of 6-(3-formyl-10H-phenothiazin-10-yl)hexyl acetate (**1e**)



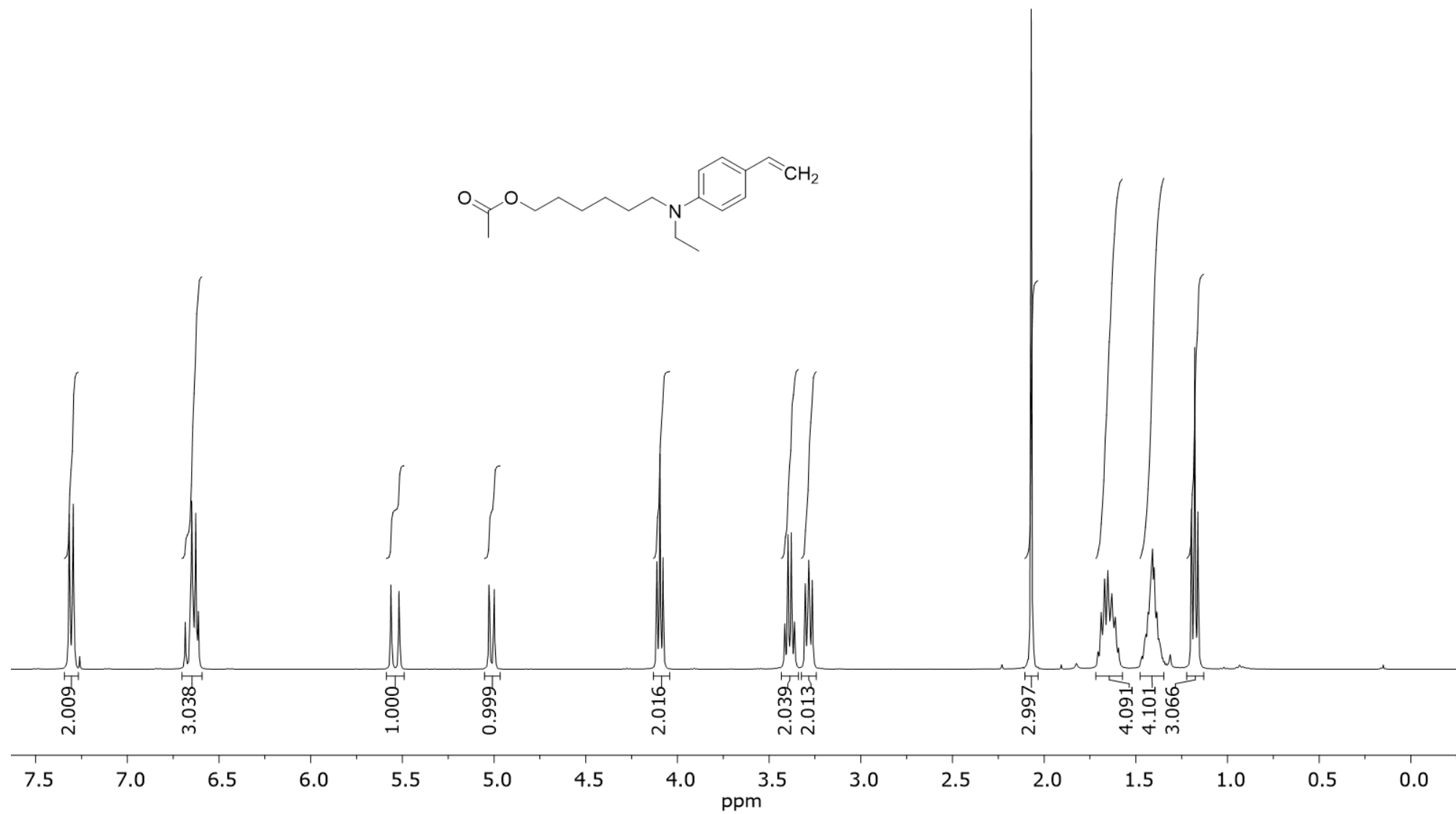
^{13}C NMR (CDCl_3 , 100 MHz) of 6-(3-formyl-10H-phenothiazin-10-yl)hexyl acetate (**1e**)



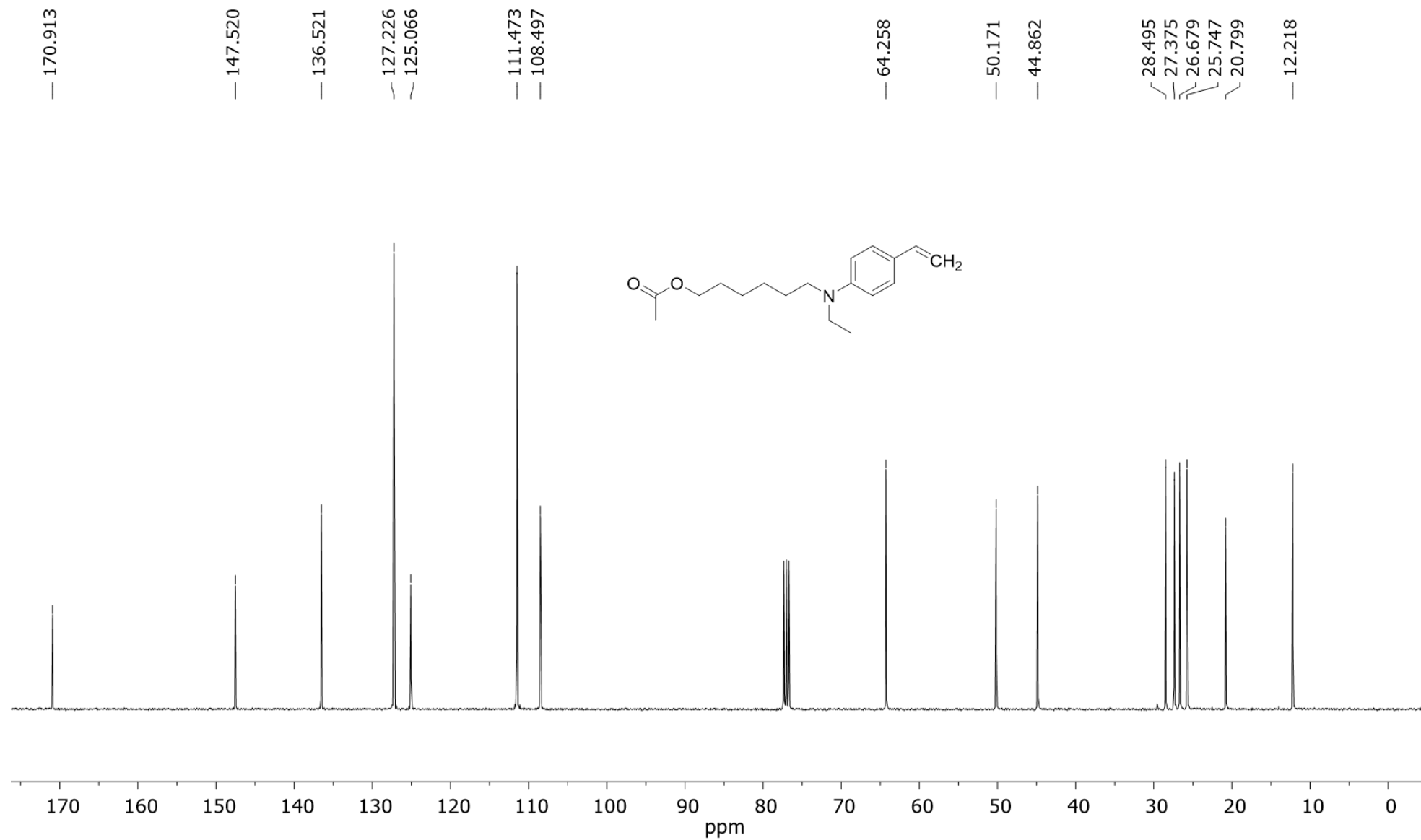
^1H NMR (CDCl_3 , 400 MHz) of ((4-vinylphenyl)azanediyl)bis(ethane-2,1-diyl) diacetate (**2b**)

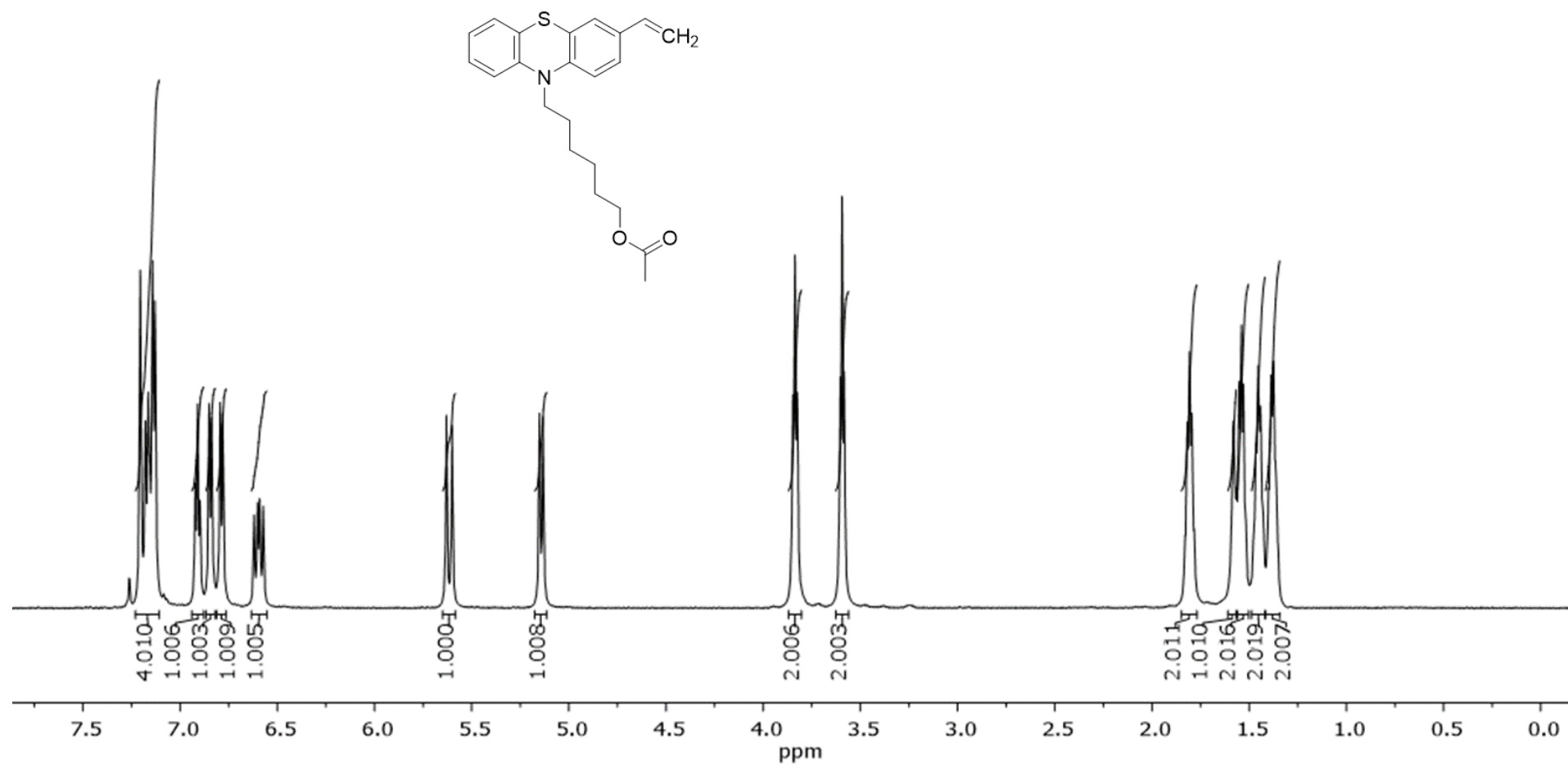


^{13}C NMR (CDCl_3 , 100 MHz) of ((4-vinylphenyl)azanediyl)bis(ethane-2,1-diyl) diacetate (**2b**)

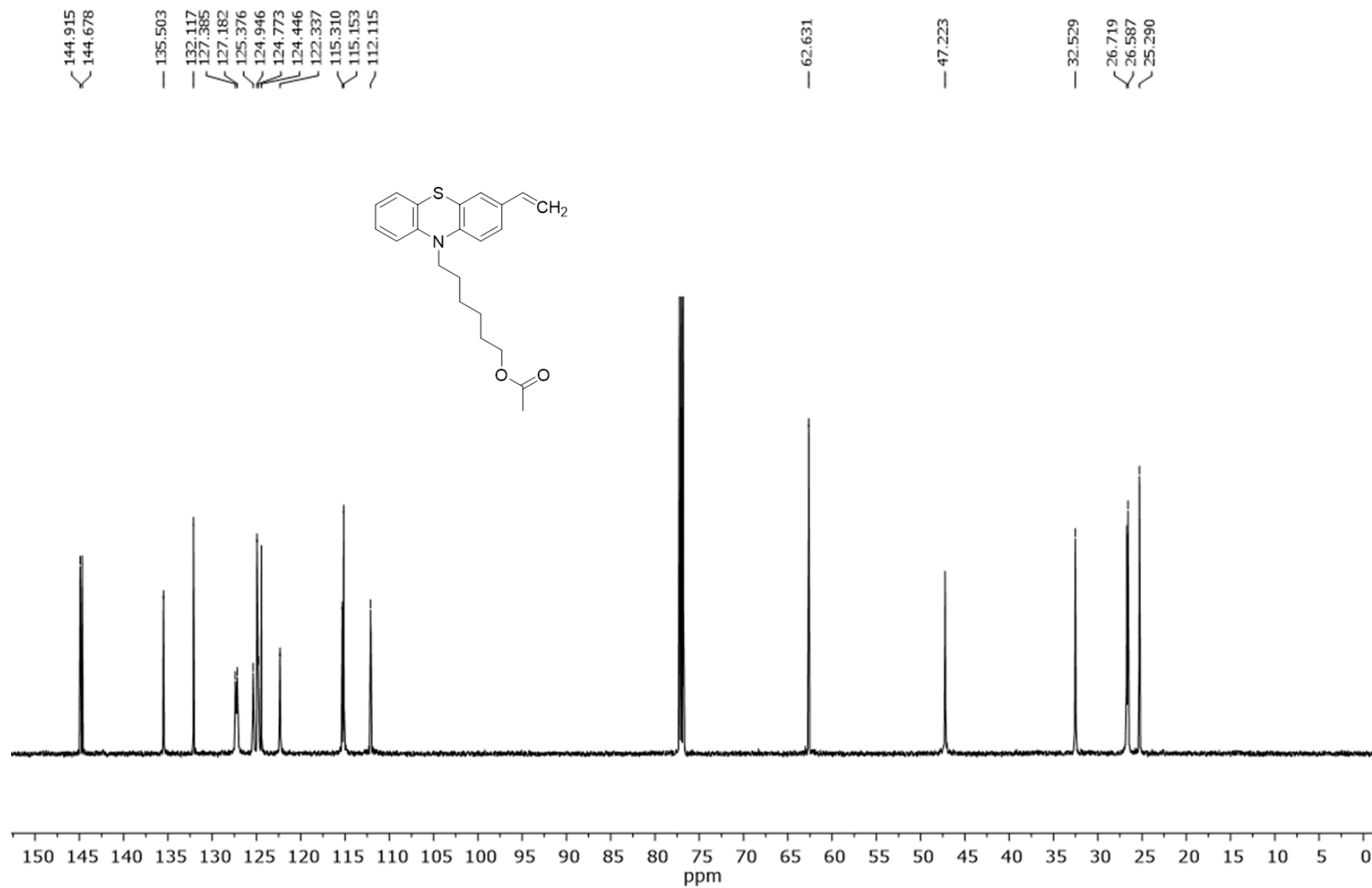


¹H NMR (CDCl₃, 400 MHz) of 6-(ethyl(4-vinylphenyl)amino)hexyl acetate (**2c**)

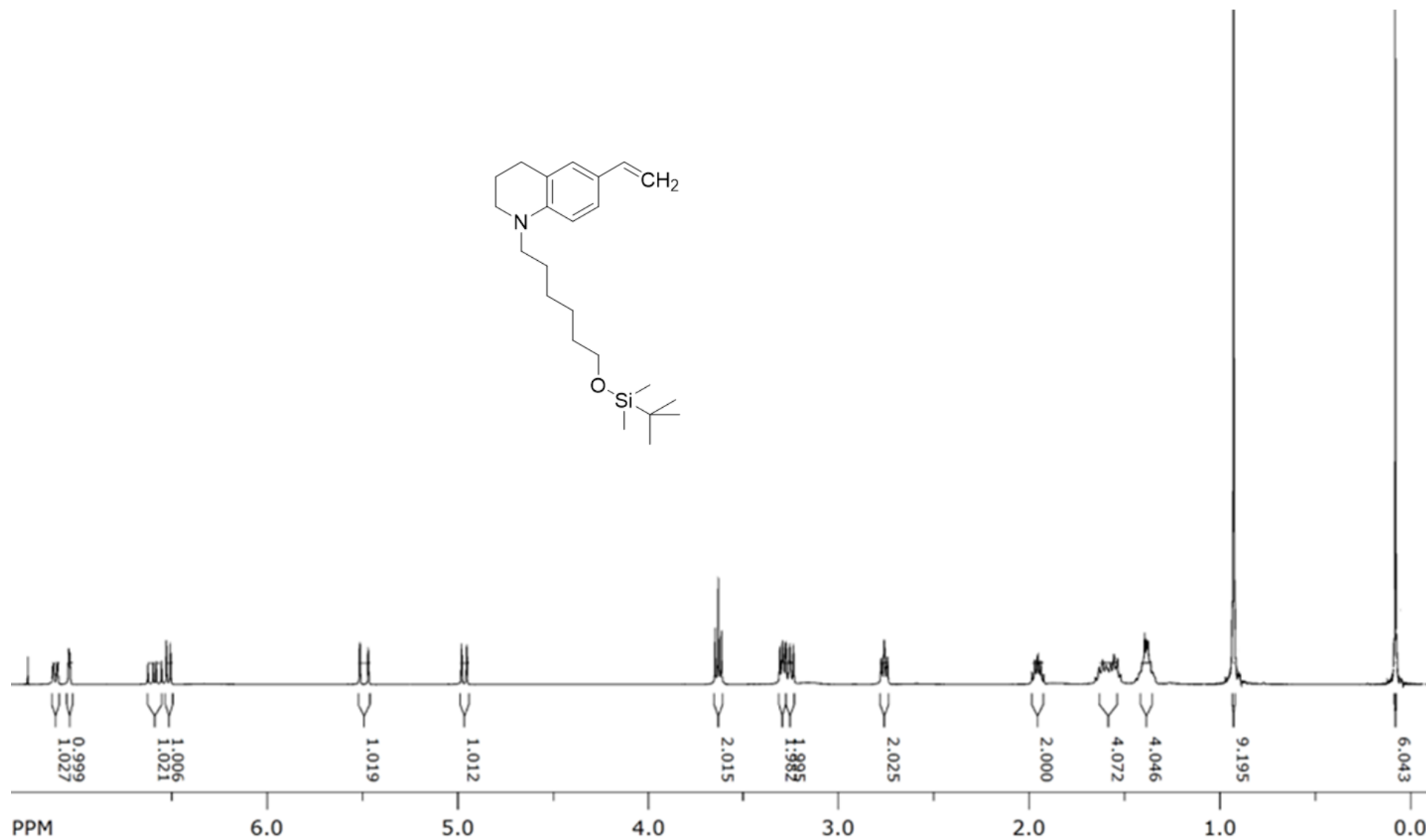




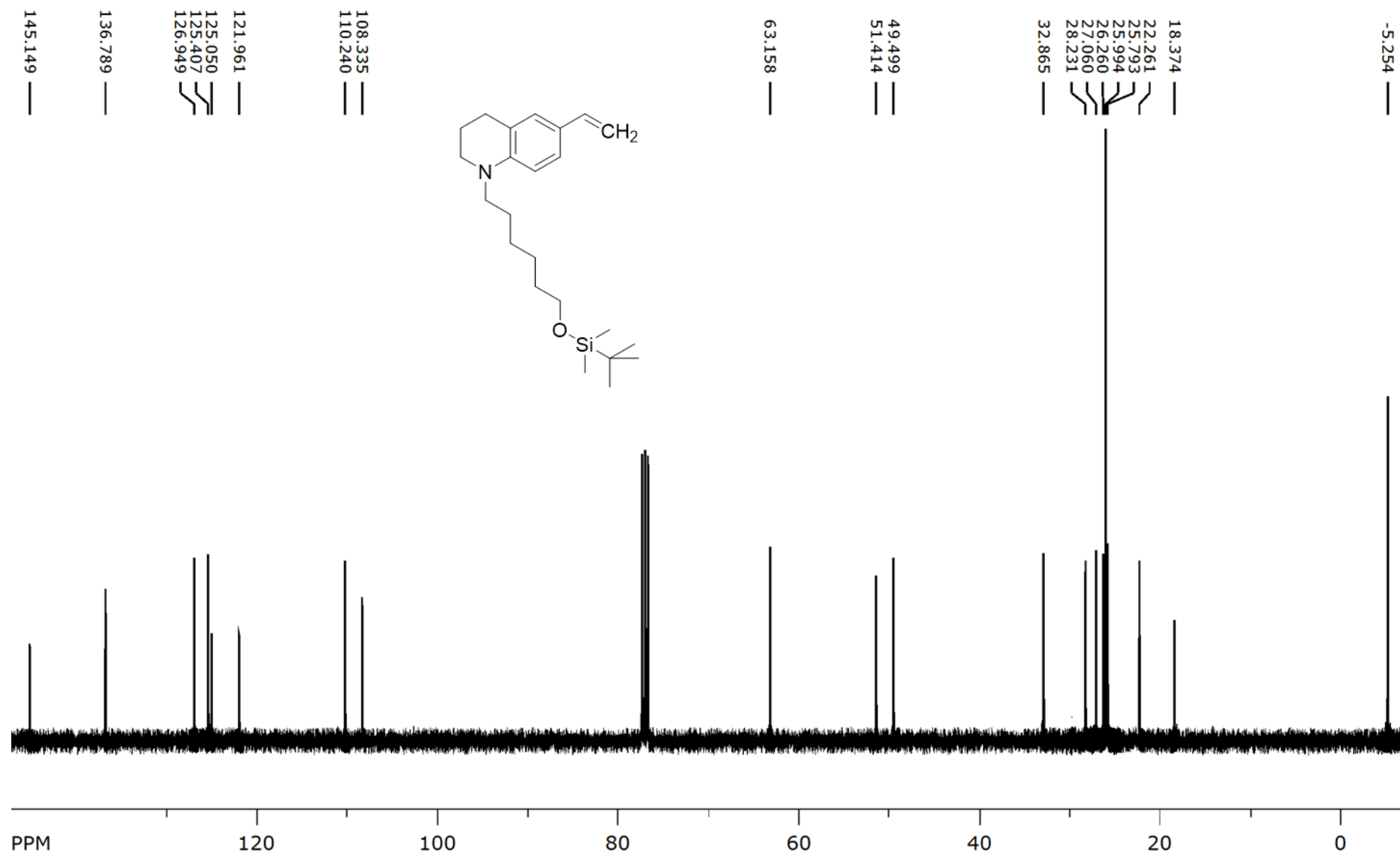
¹H NMR (CDCl₃, 600 MHz) of 6-(3-vinyl-10H-phenothiazin-10-yl)hexyl acetate (**2e'**)



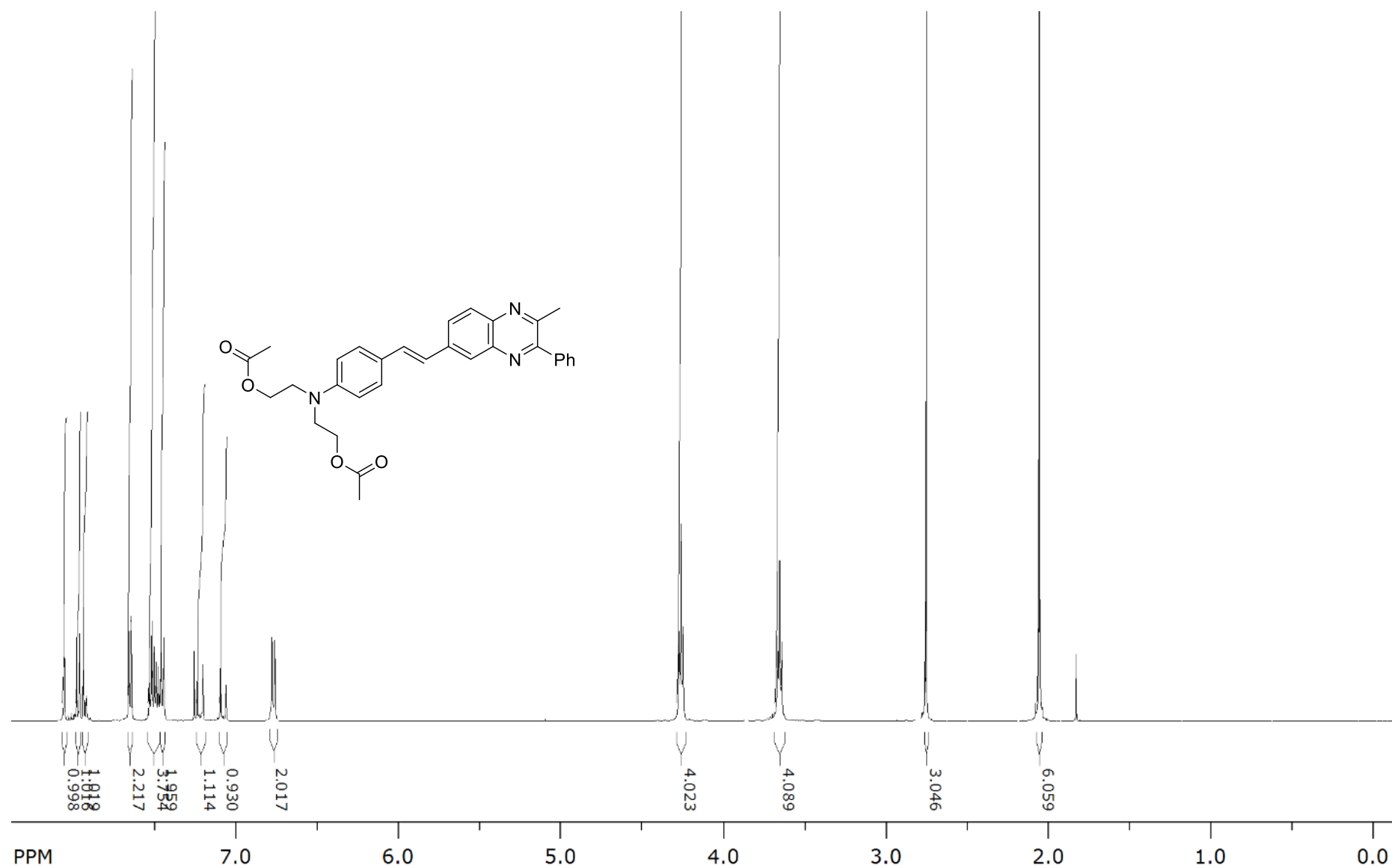
¹³C NMR (CDCl₃, 150 MHz) of 6-(3-vinyl-10H-phenothiazin-10-yl)hexyl acetate (**2e'**)



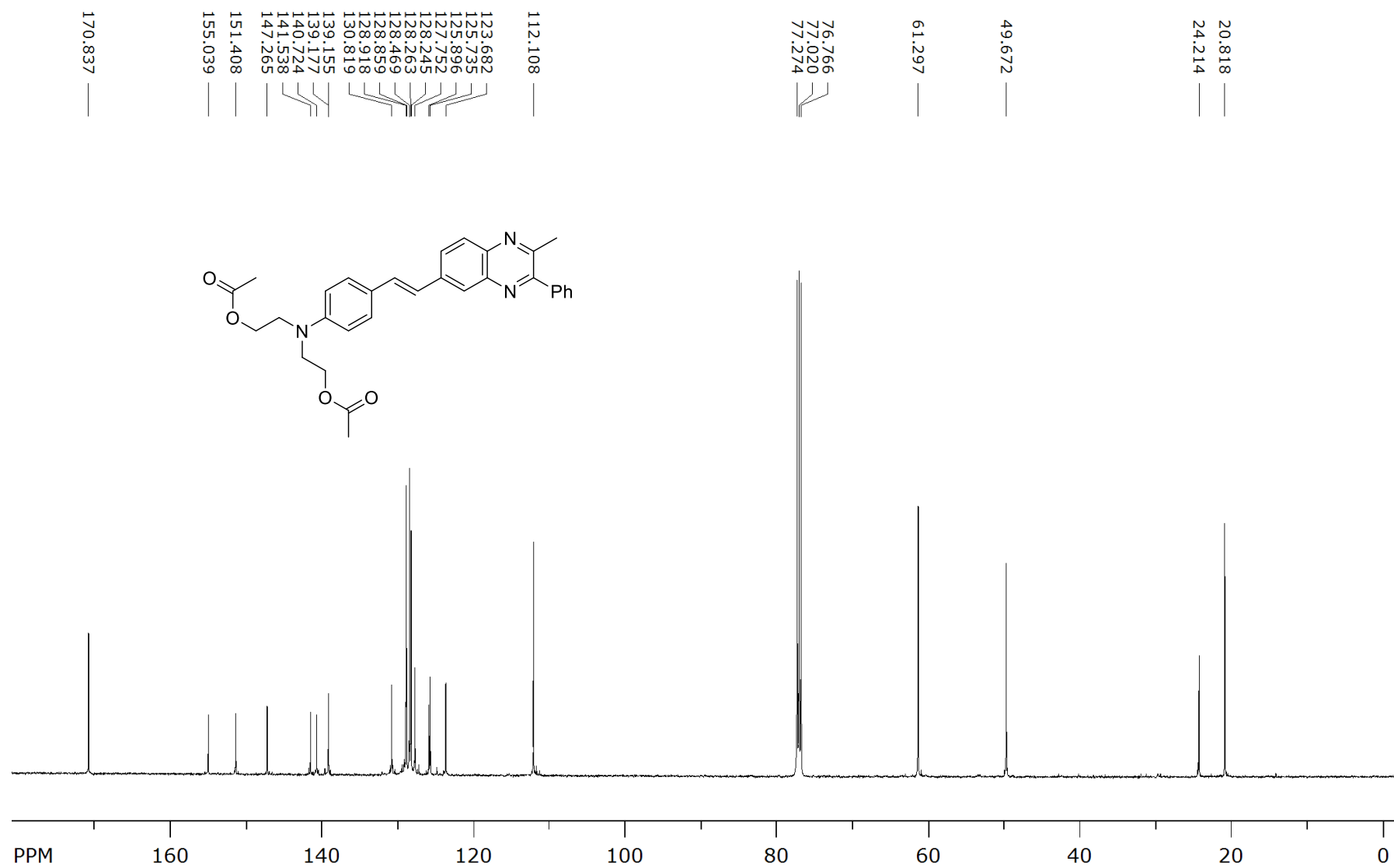
¹H NMR (CDCl₃, 500 MHz) of 1-(6-((*tert*-butyldimethylsilyl)oxy)hexyl)-6-vinyl-1,2,3,4-tetrahydroquinoline (**2f'**)



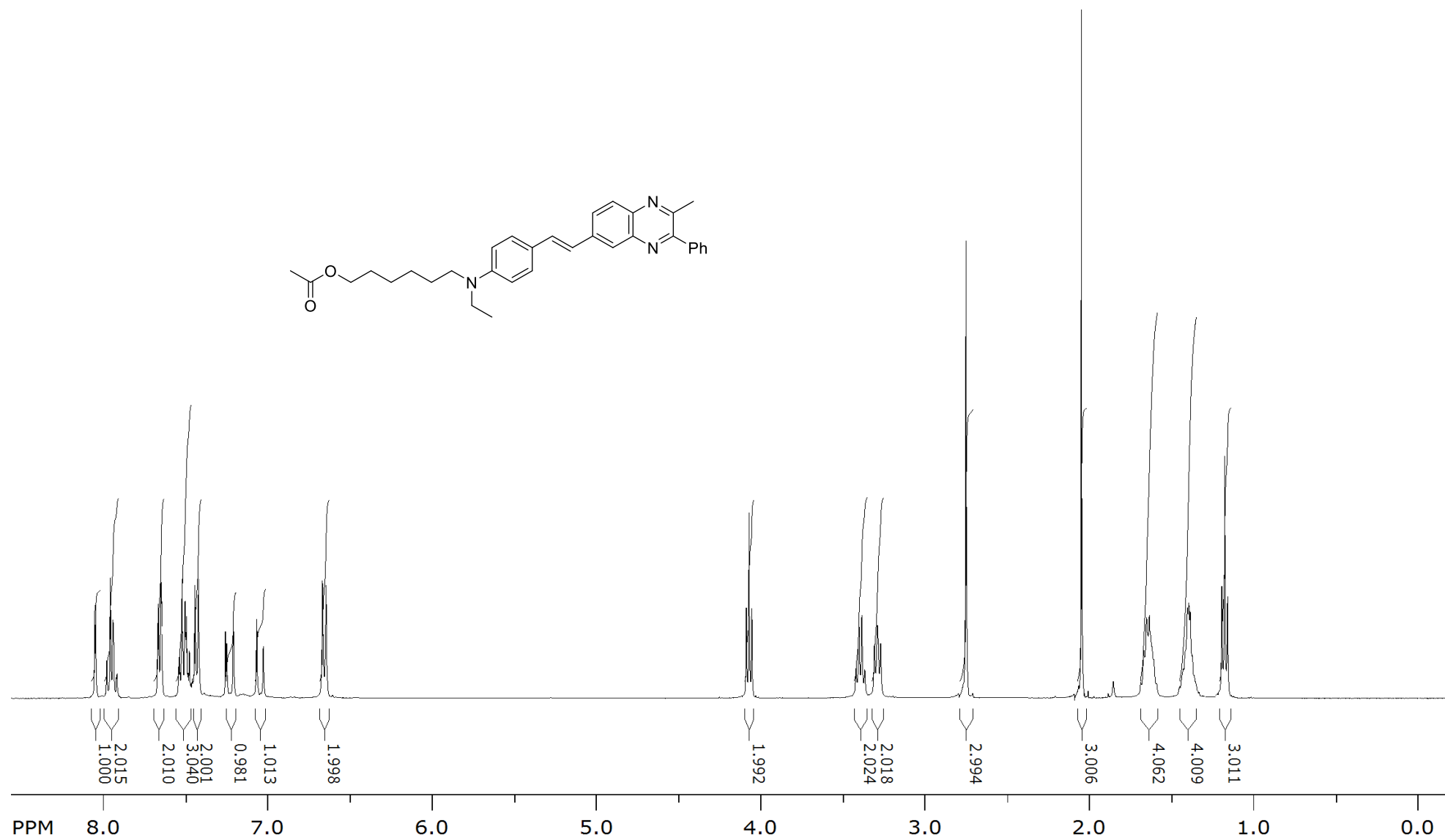
¹³C NMR (CDCl₃, 125 MHz) of 1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-6-vinyl-1,2,3,4-tetrahydroquinoline (**2f'**)



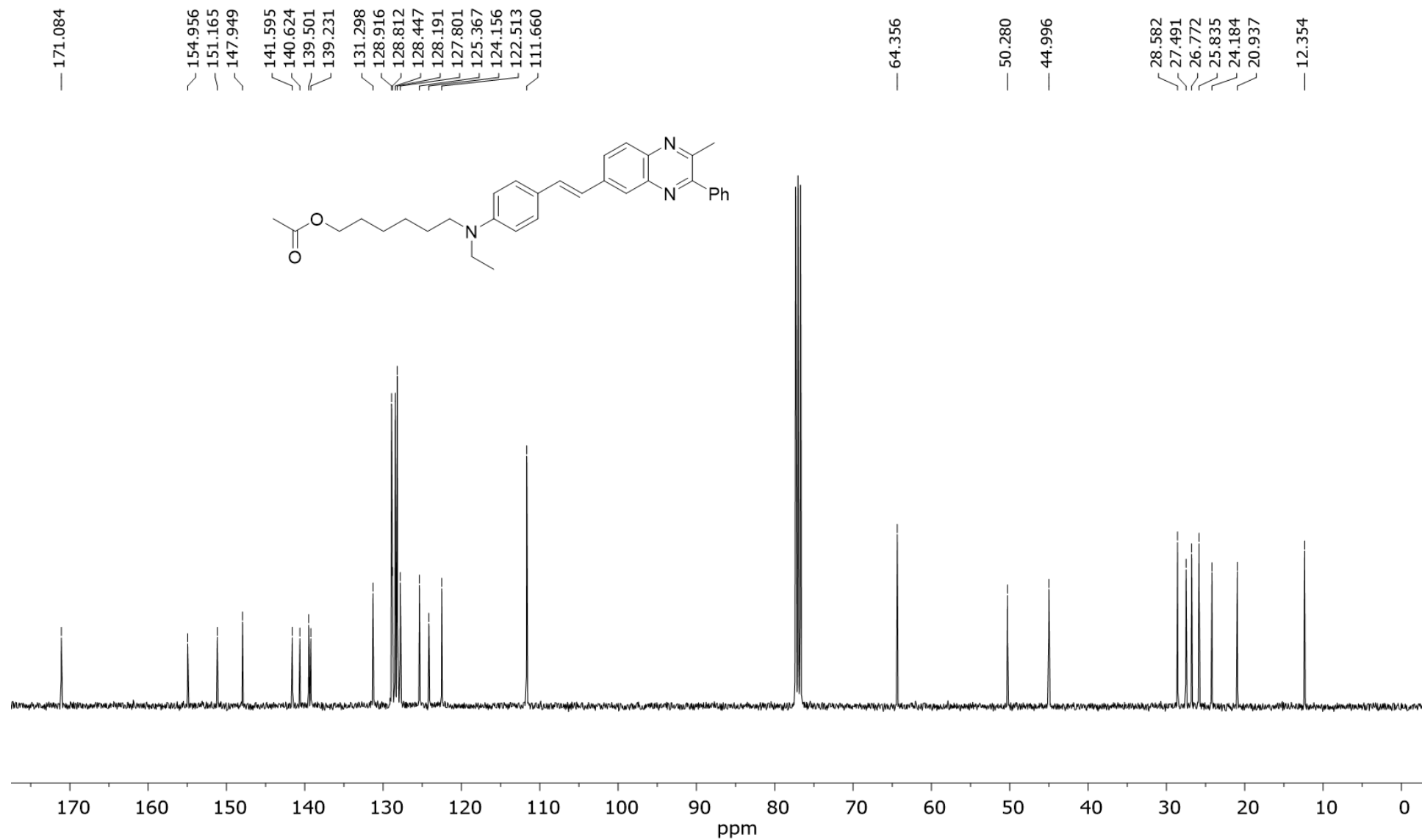
¹H NMR (CDCl₃, 500 MHz) of (*E*)-((4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)azanediyl)bis(ethane-2,1-diyl) diacetate (**4b**).



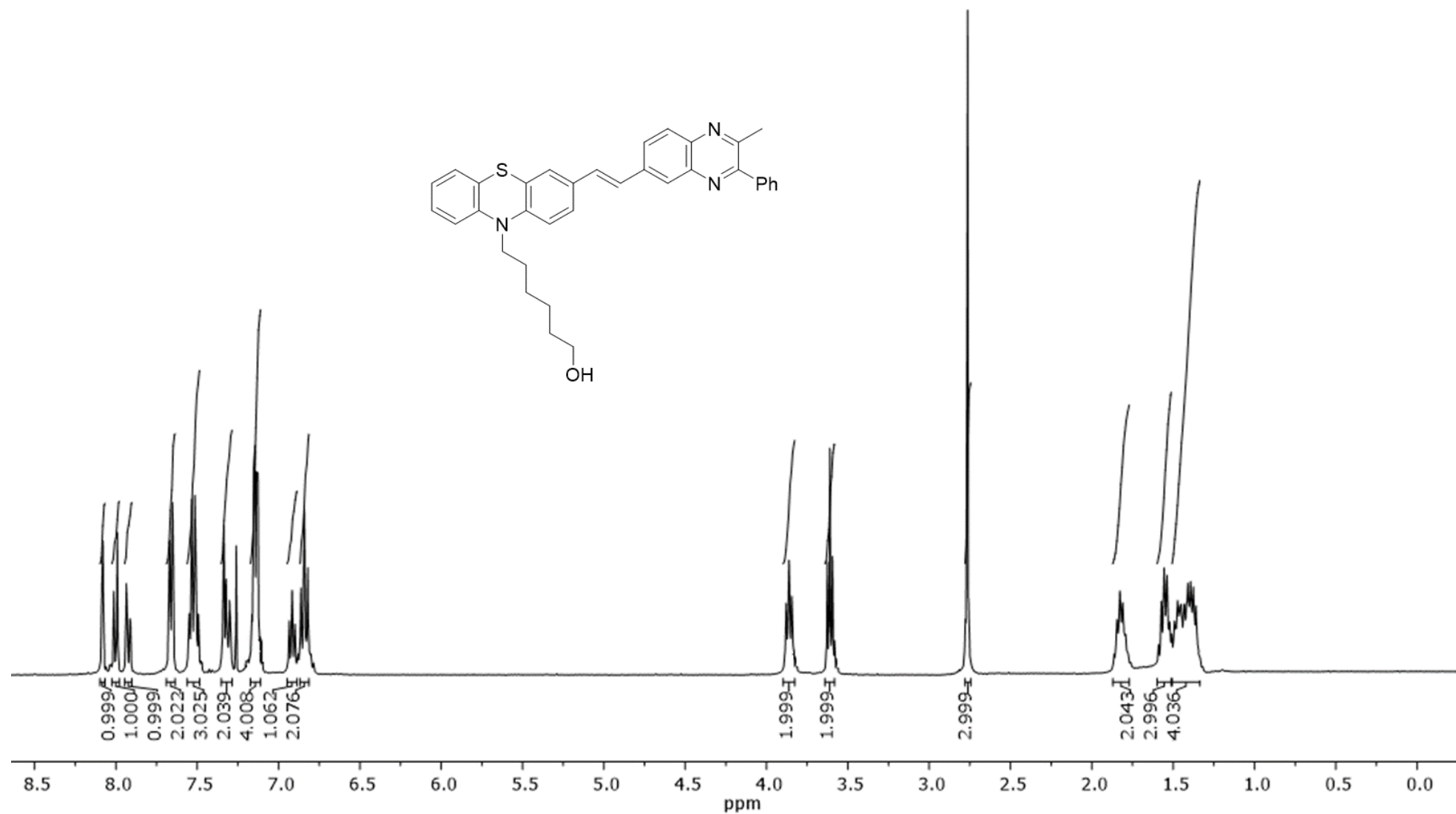
¹³C NMR (CDCl₃, 125 MHz) of *(E)*-((4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)azanediyl)bis(ethane-2,1-diyl) diacetate (**4b**)



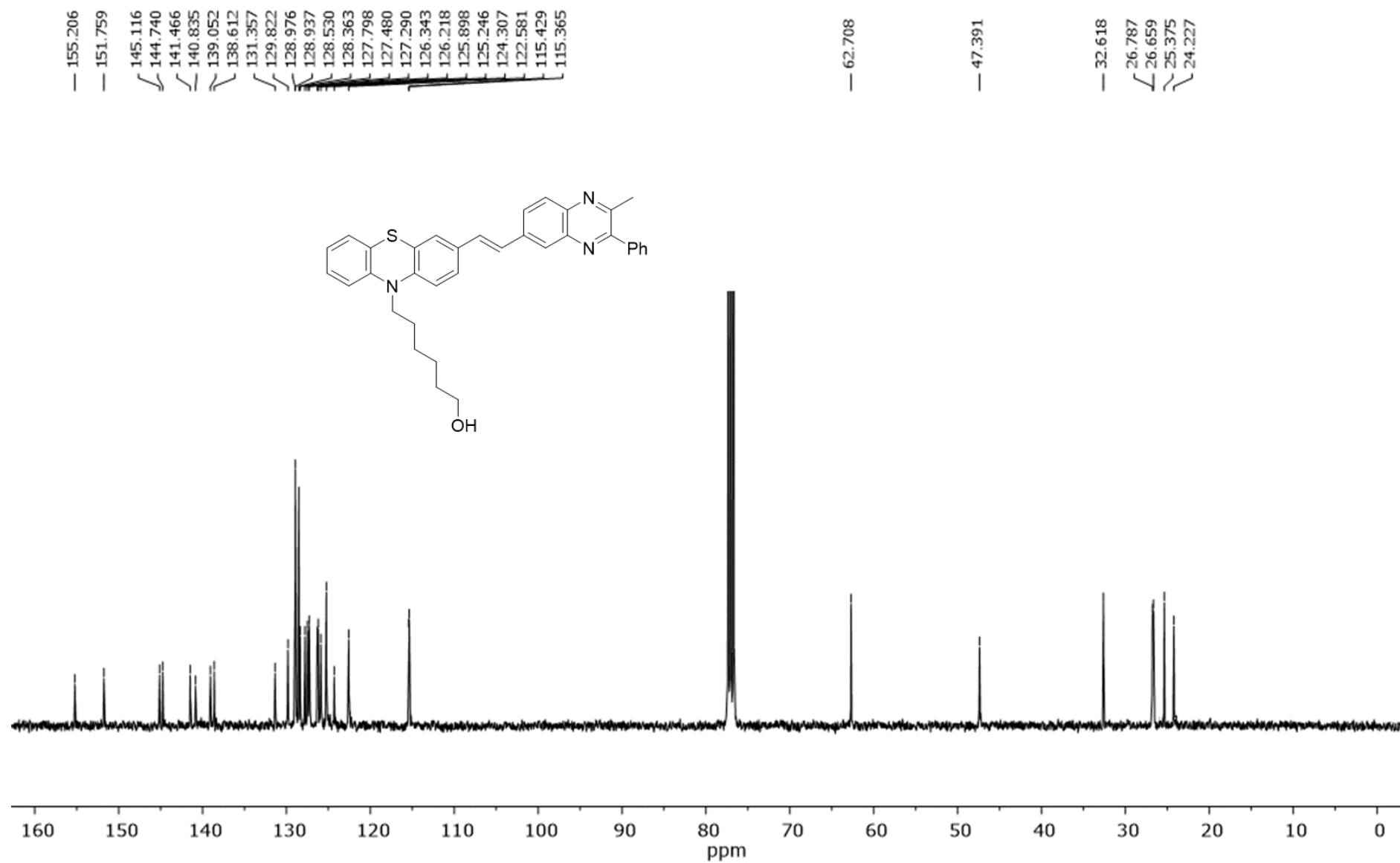
¹H NMR (CDCl₃, 400 MHz) of (E)-6-(ethyl(4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)amino)hexyl acetate (**4c**).



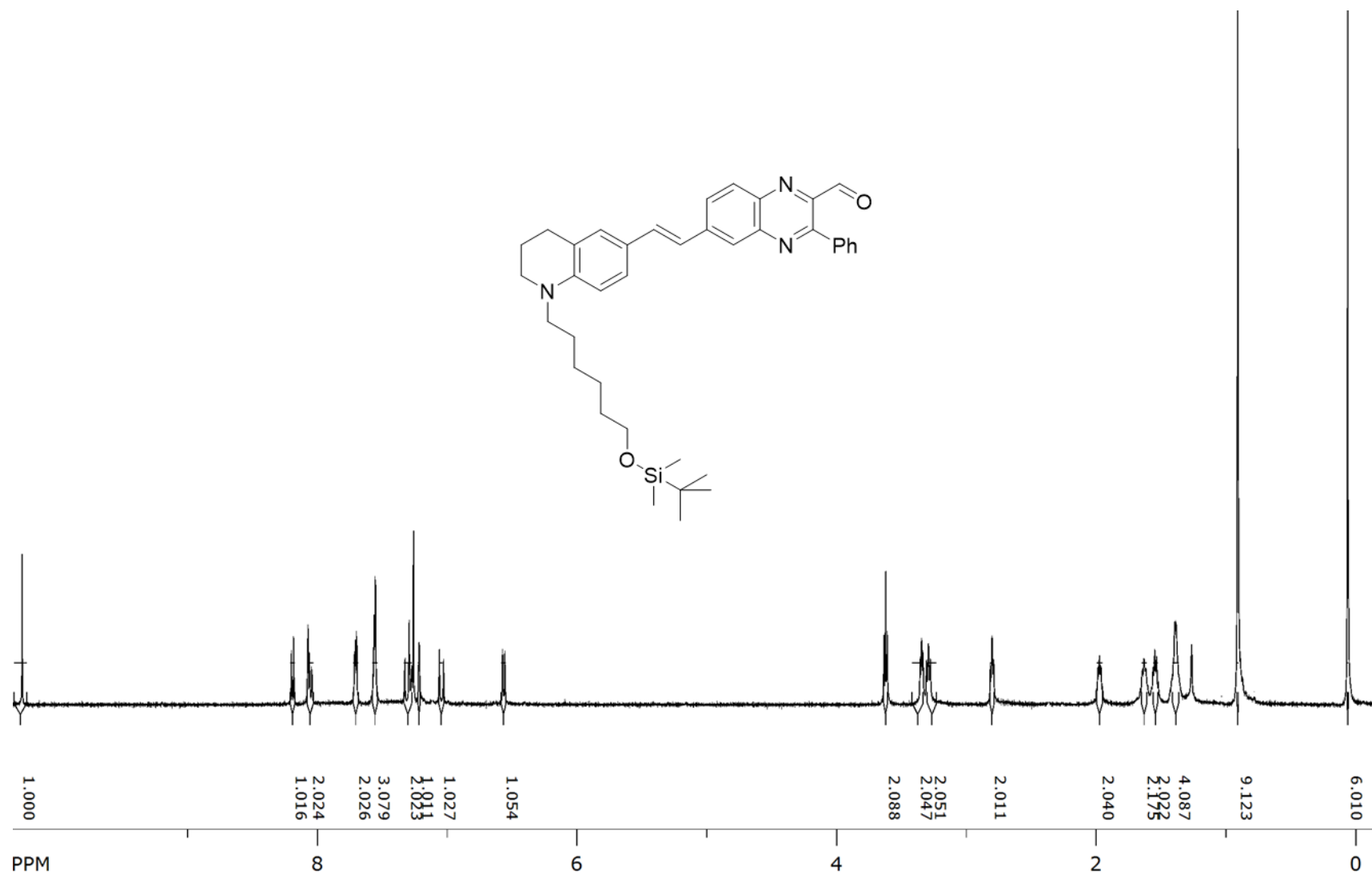
¹³C NMR (CDCl₃, 100 MHz) of (E)-6-(ethyl(4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)amino)hexyl acetate (**4c**)



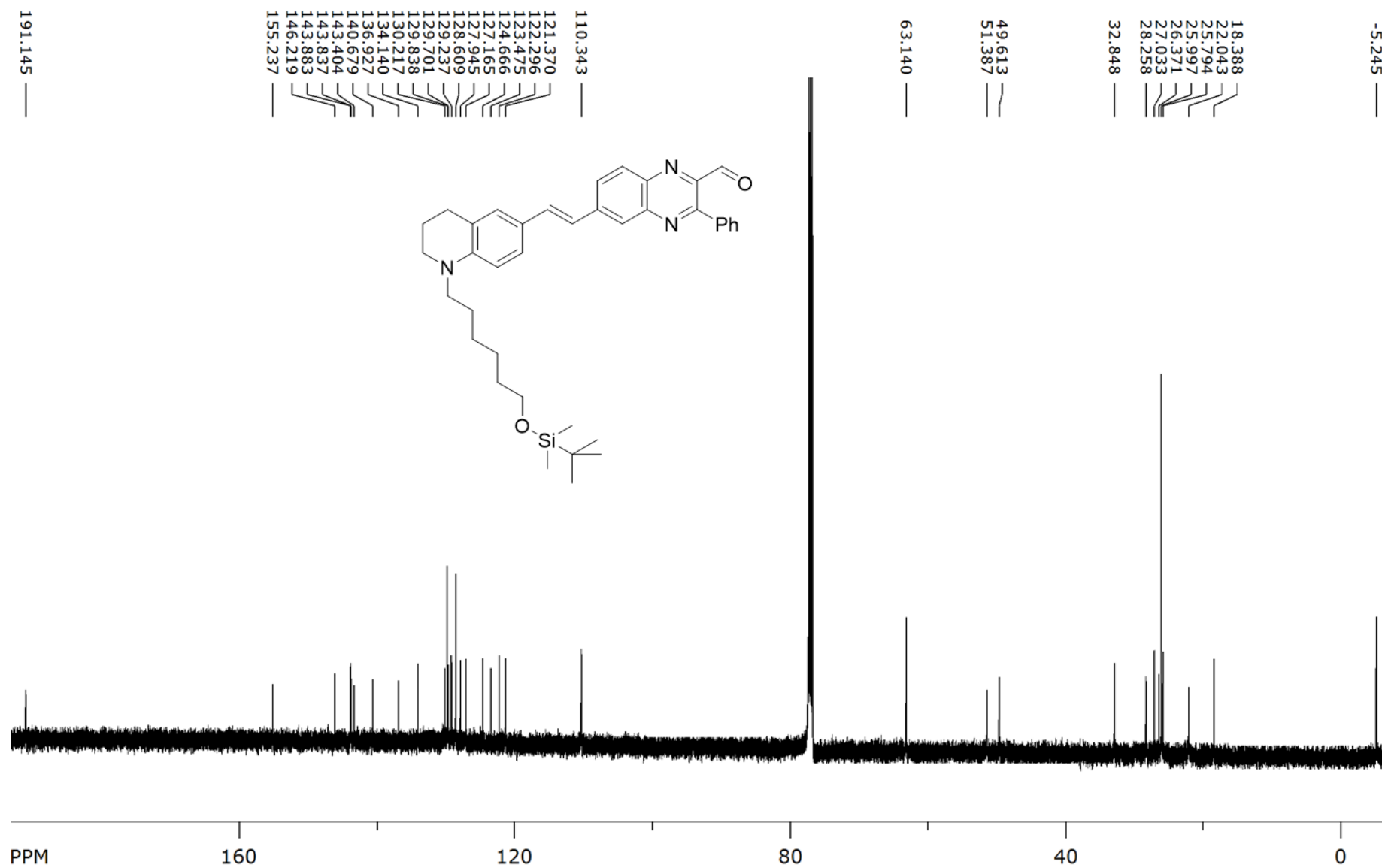
¹H NMR (CDCl₃, 400 MHz) of (E)-6-(3-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)-10H-phenothiazin-10-yl)hexan-1-ol (**5e**)



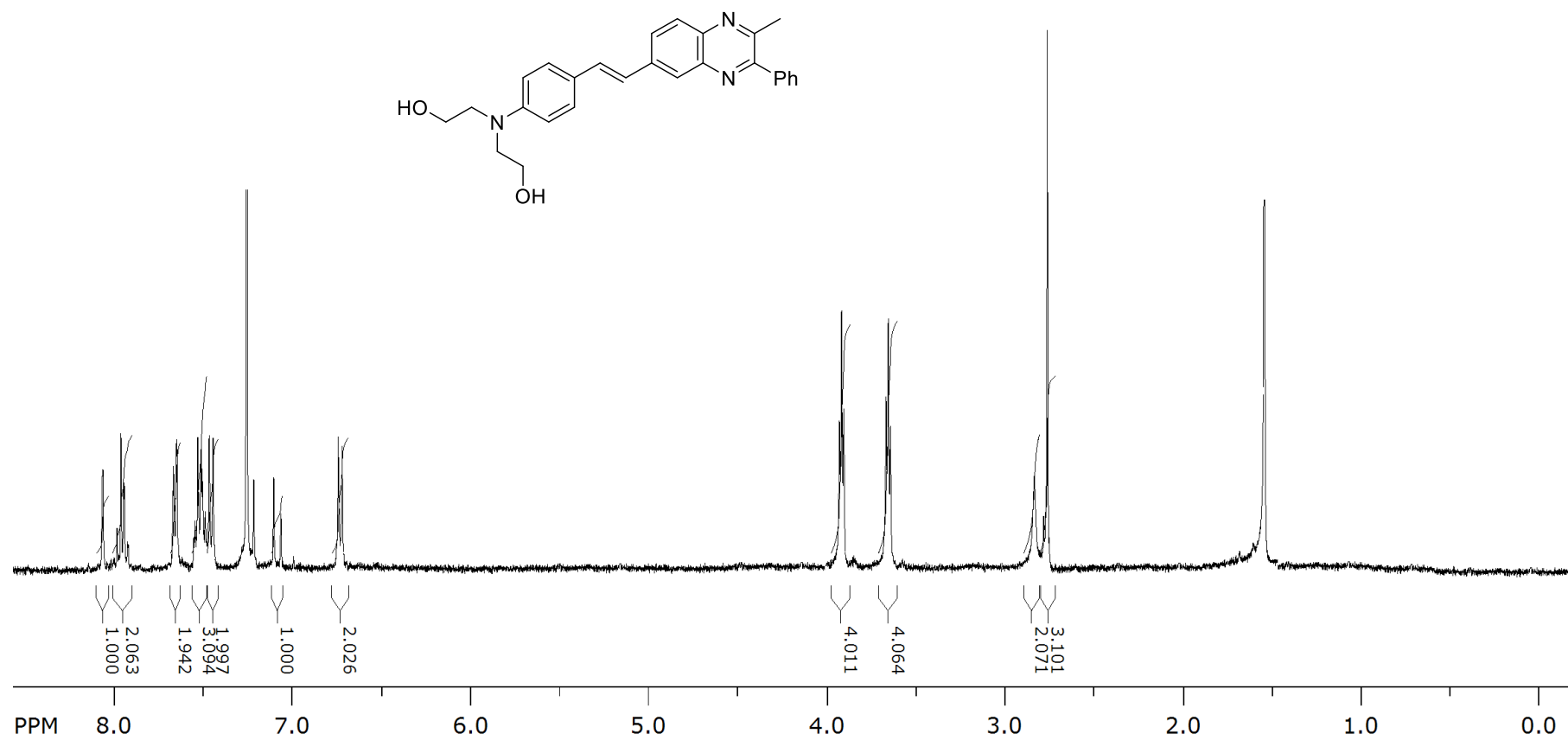
¹³C NMR (CDCl₃, 100 MHz) of (E)-6-(3-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)-10H-phenothiazin-10-yl)hexan-1-ol (**5e**)



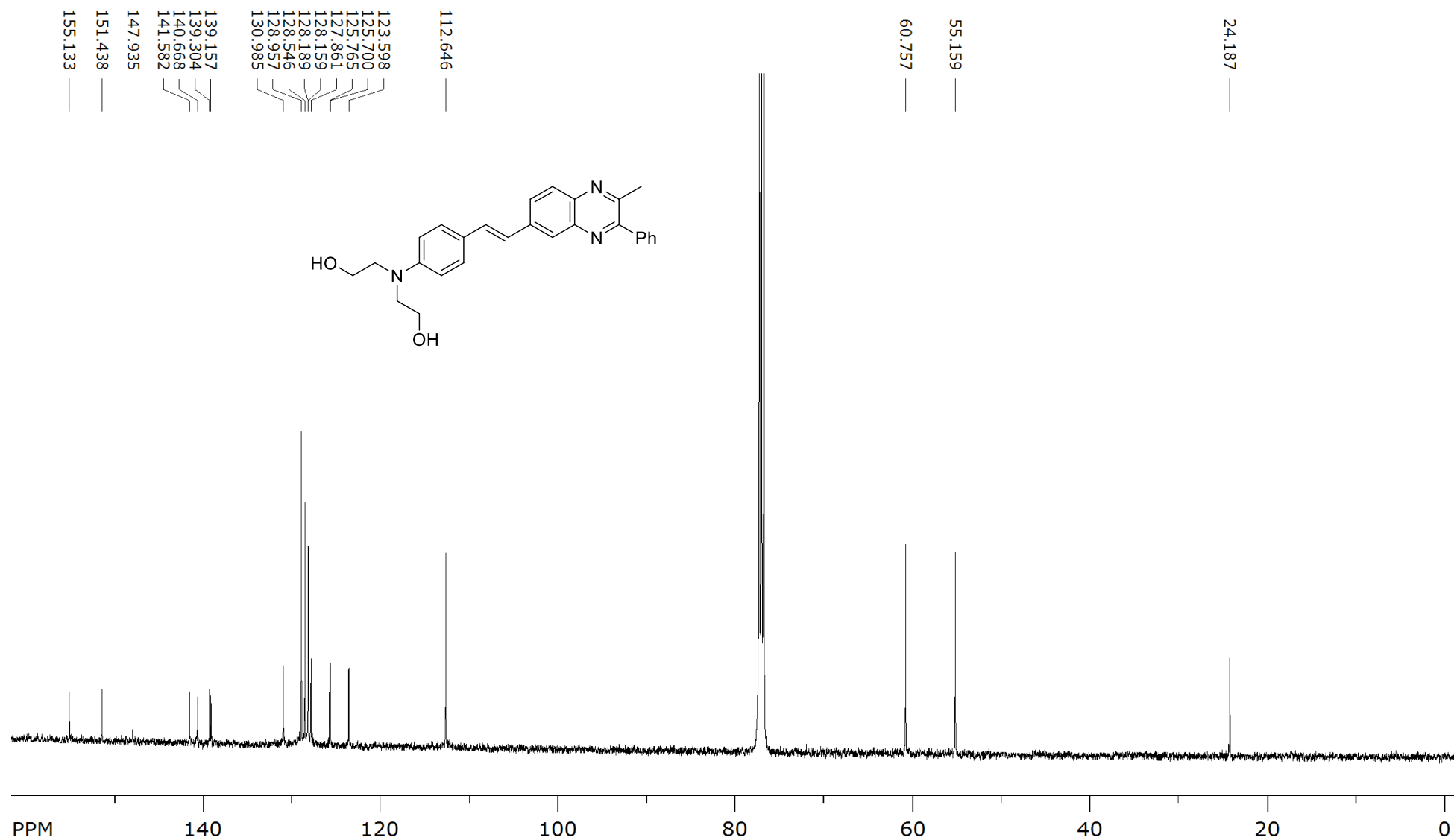
¹H NMR (CDCl₃, 500 MHz) of (*E*)-6-(2-(1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinolin-6-yl)vinyl)-3-phenylquinoxaline-2-carbaldehyde (**7f**)



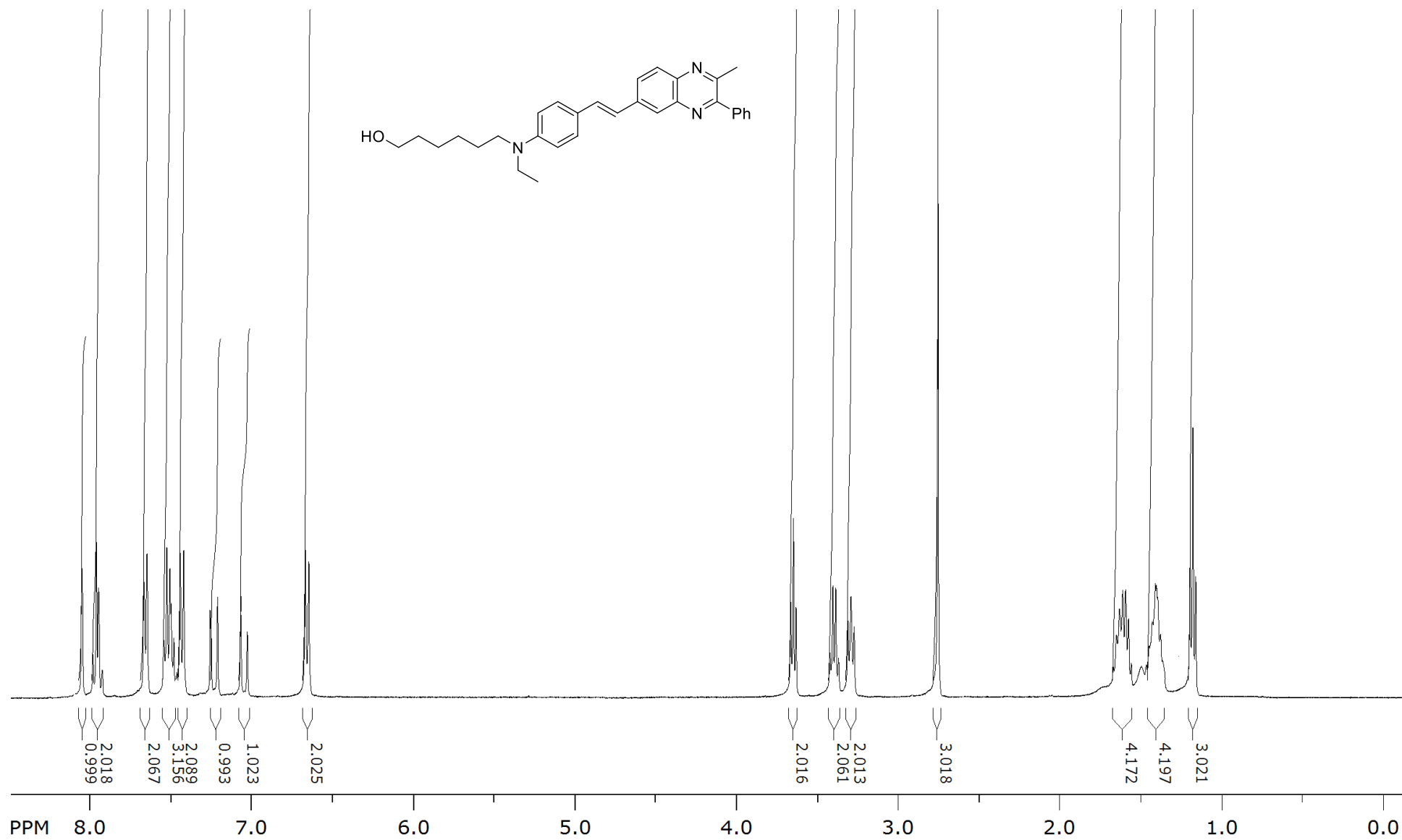
¹³C NMR (CDCl₃, 125 MHz) of (E)-6-(2-(1-(6-((tert-butyl)dimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinolin-6-yl)vinyl)-3-phenylquinoxaline-2-carbaldehyde (**7f**)



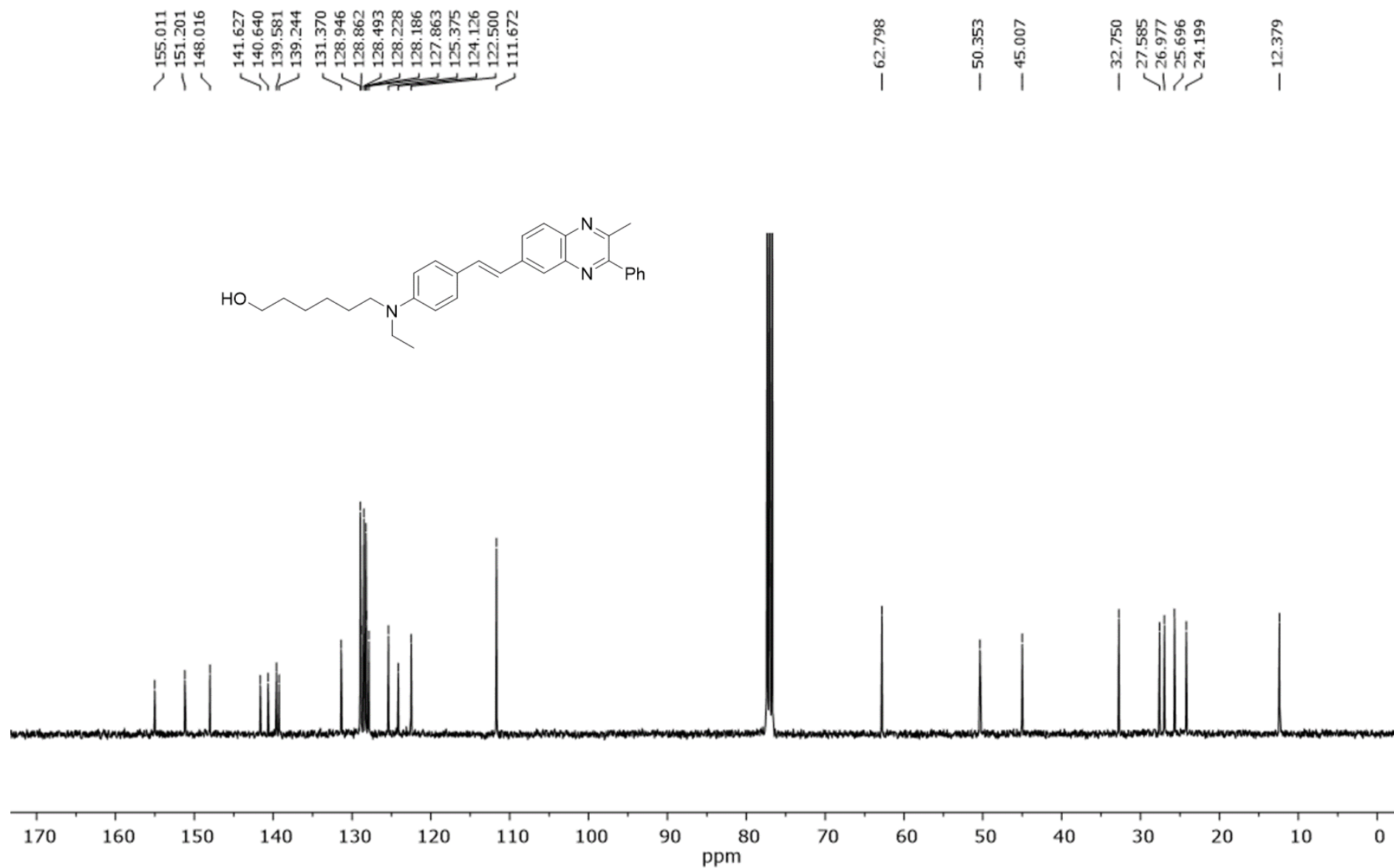
^1H NMR (CDCl₃, 500 MHz) of *(E)*-2,2'-((4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)azanediyl)bis(ethan-1-ol) (**5b**)



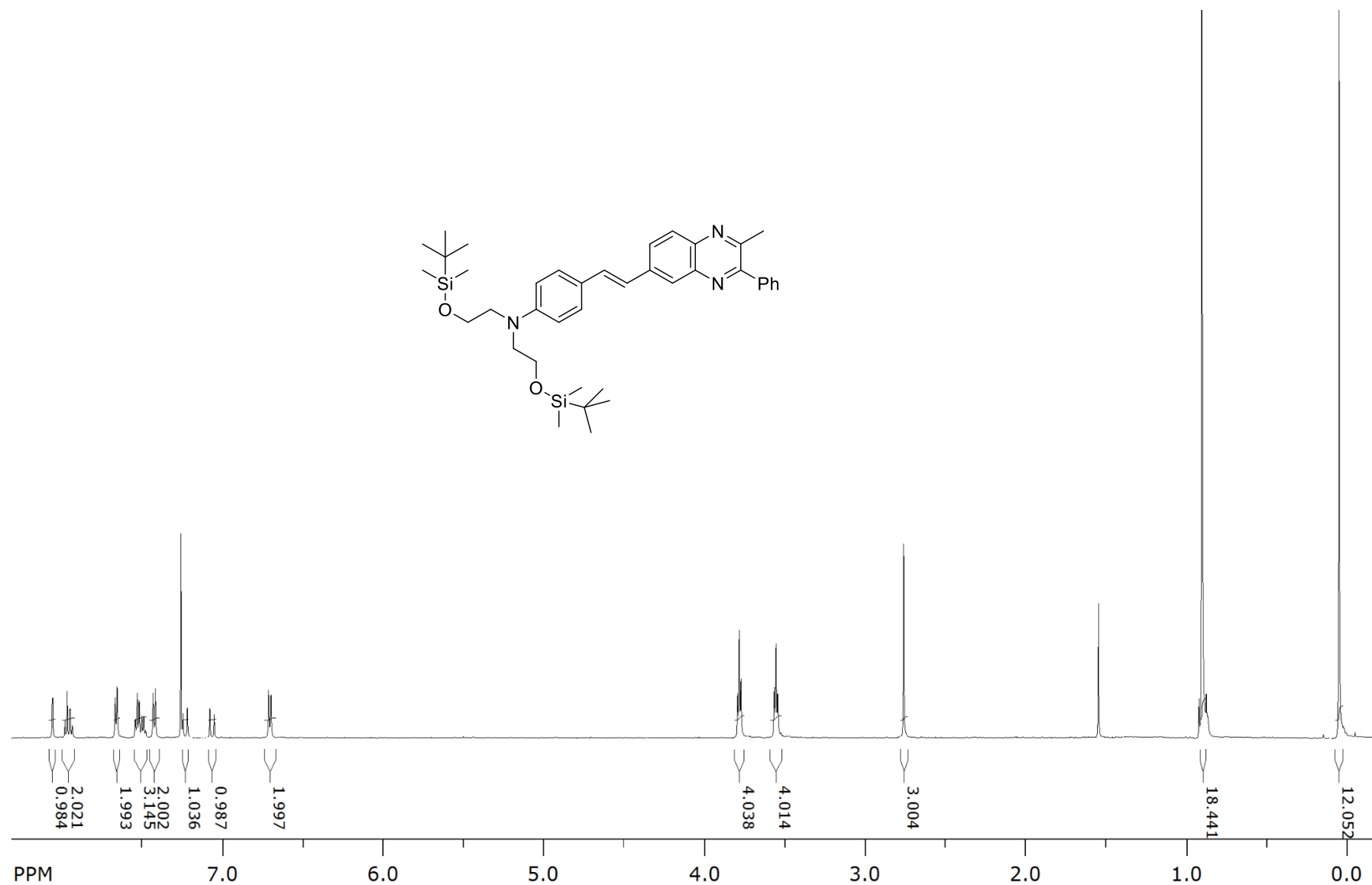
¹³C NMR (CDCl₃, 125 MHz) of (*E*)-2,2'-((4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)azanediyl)bis(ethan-1-ol) (**5b**)



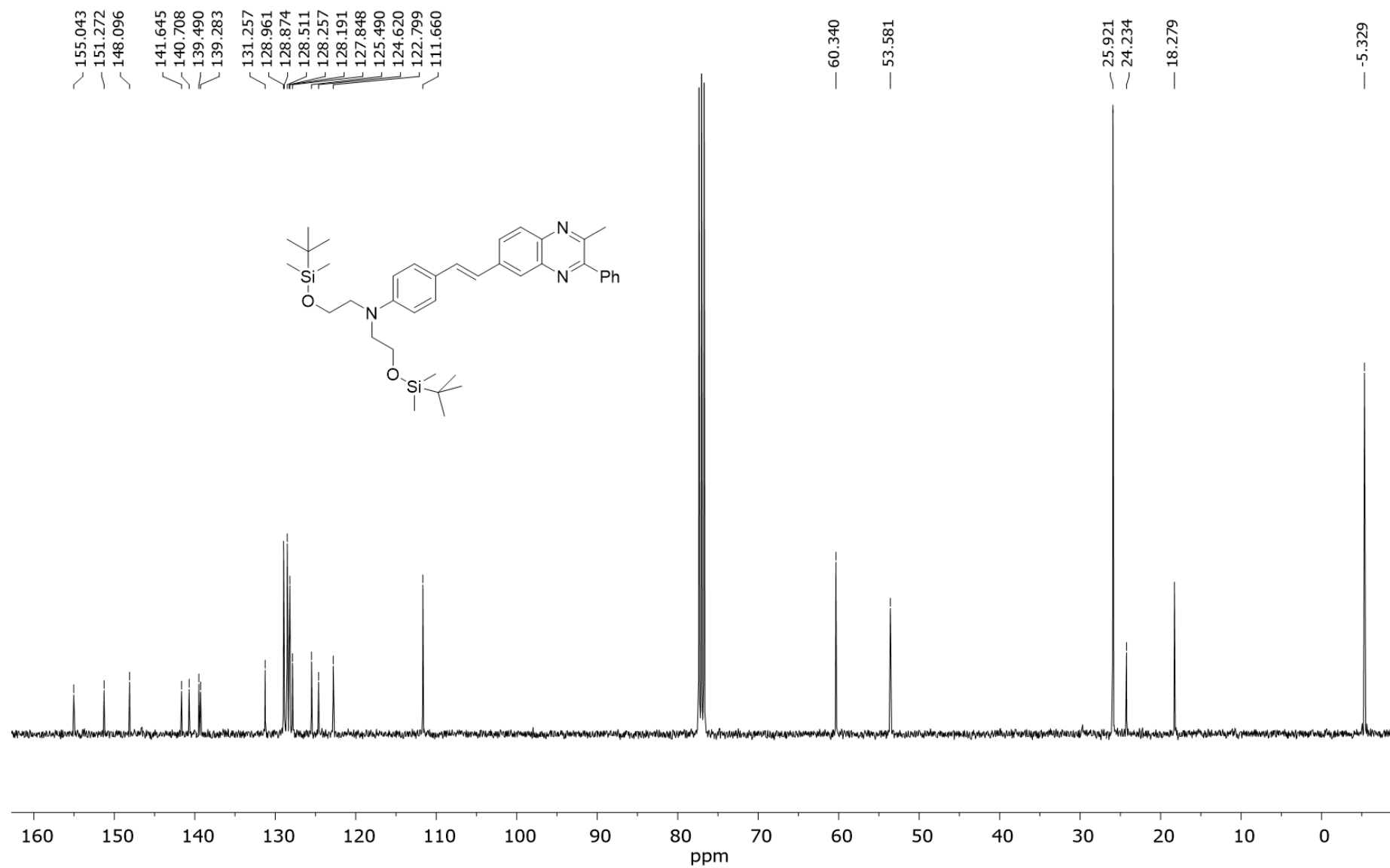
¹H NMR (CDCl₃, 400 MHz) of *(E)*-6-(ethyl(4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)amino)hexan-1-ol (**5c**)



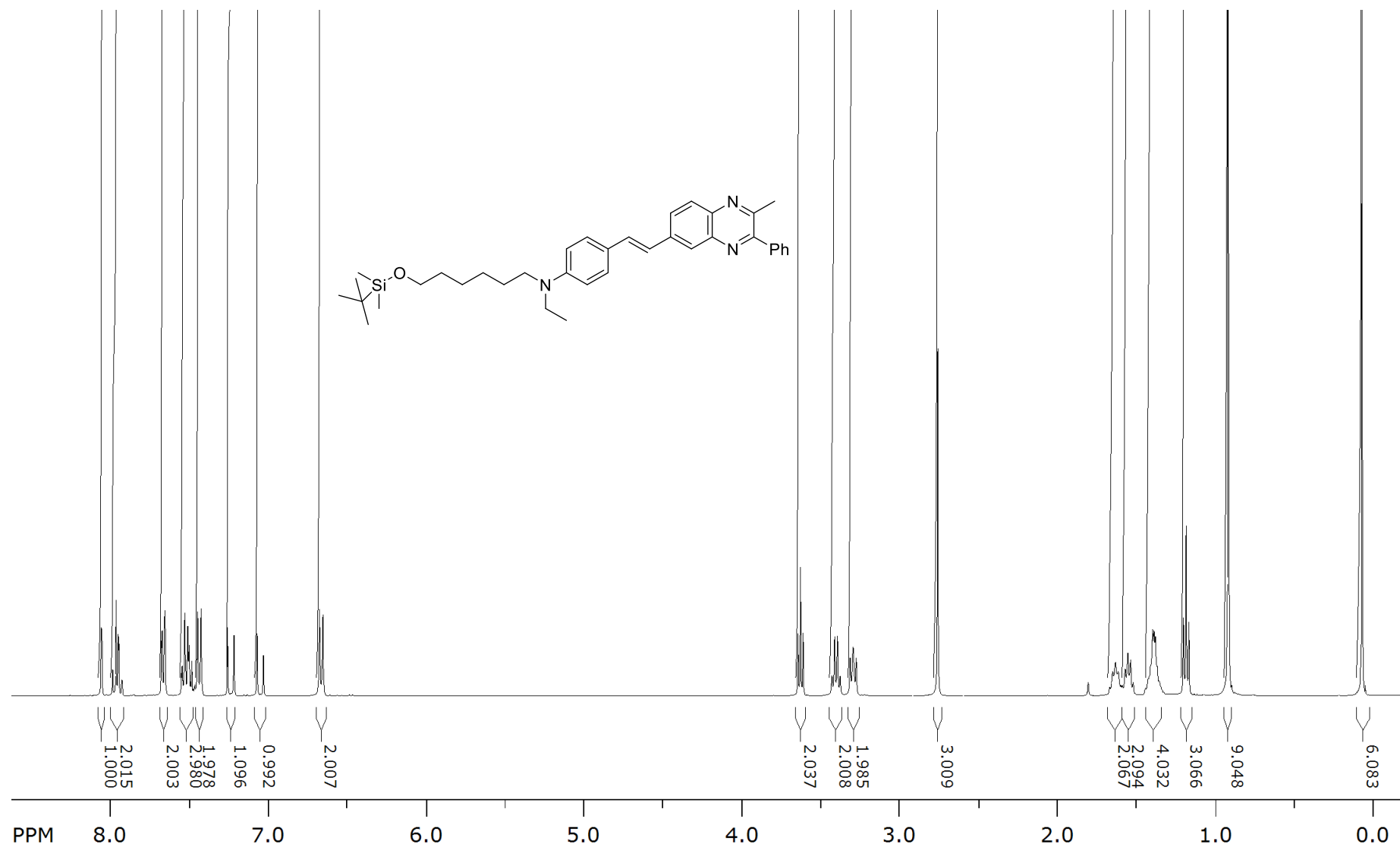
¹³C NMR (CDCl₃, 100 MHz) of (E)-6-(ethyl(4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)phenyl)amino)hexan-1-ol (**5c**)



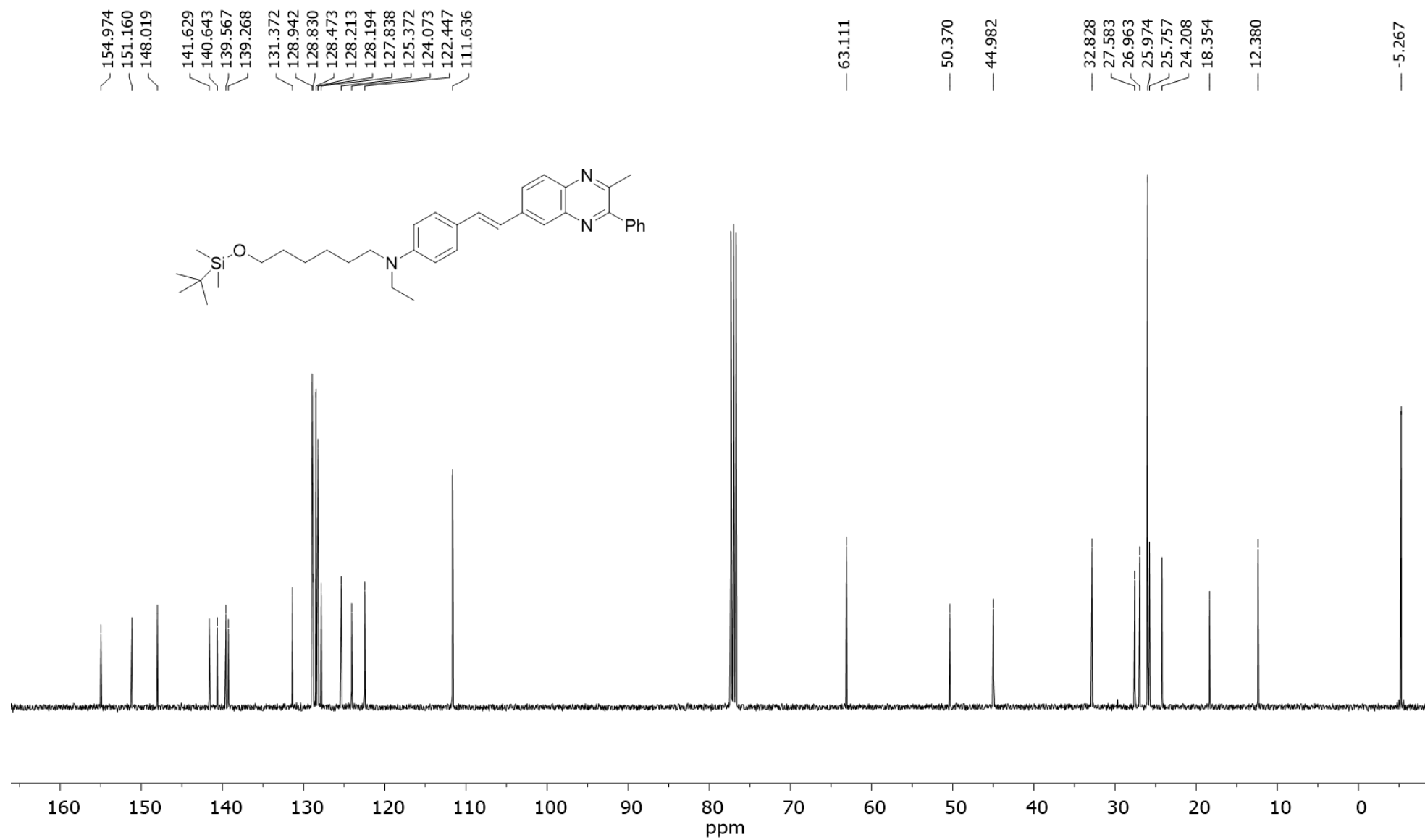
¹H NMR (CDCl₃, 400 MHz) of *(E)*-*N,N*-bis(2-((tert-butyldimethylsilyl)oxy)ethyl)-4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)aniline (**6b**).



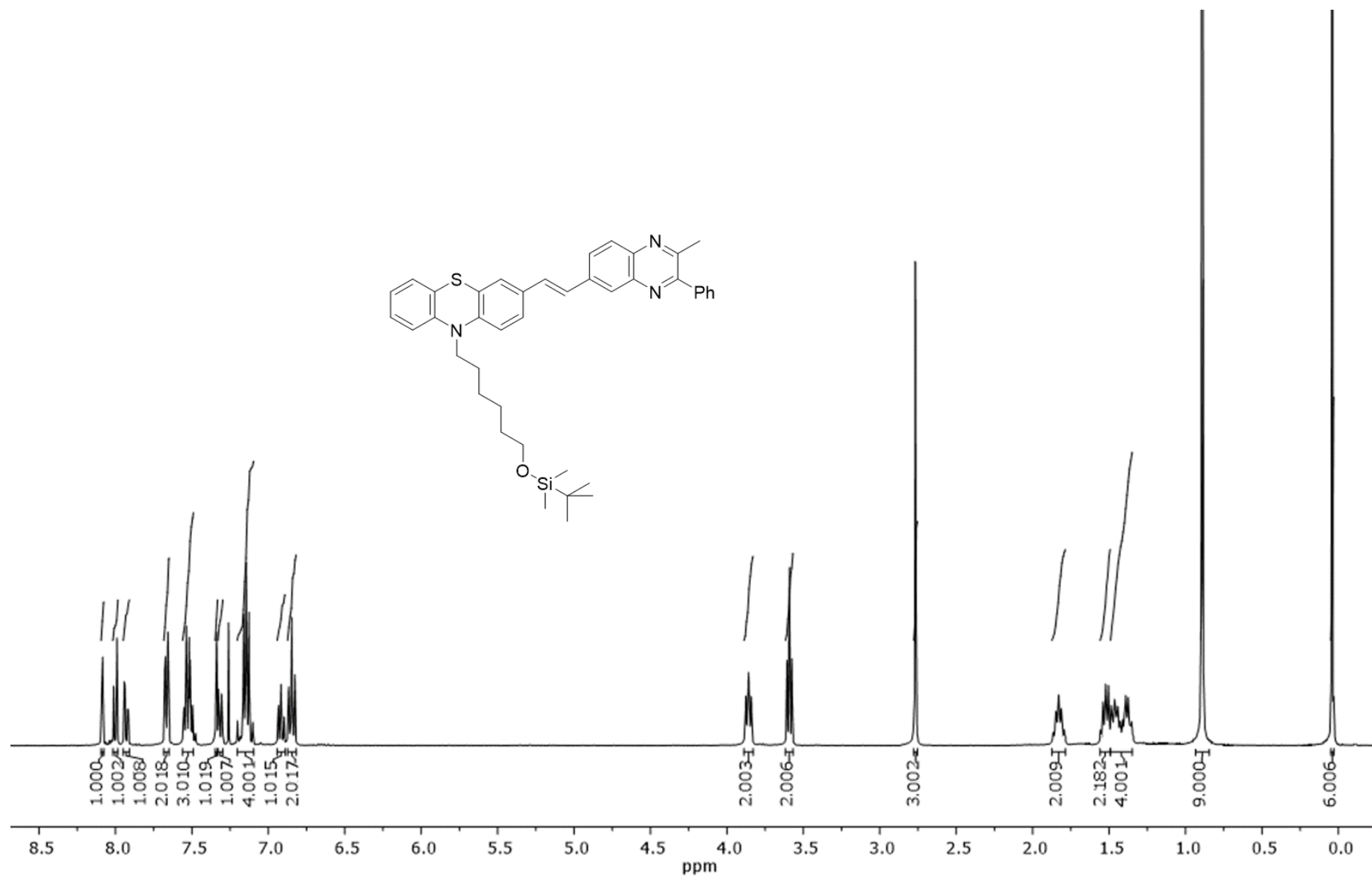
¹³C NMR (CDCl₃, 100 MHz) of *(E)*-N,N-bis(2-((tert-butyldimethylsilyl)oxy)ethyl)-4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)aniline (**6b**)



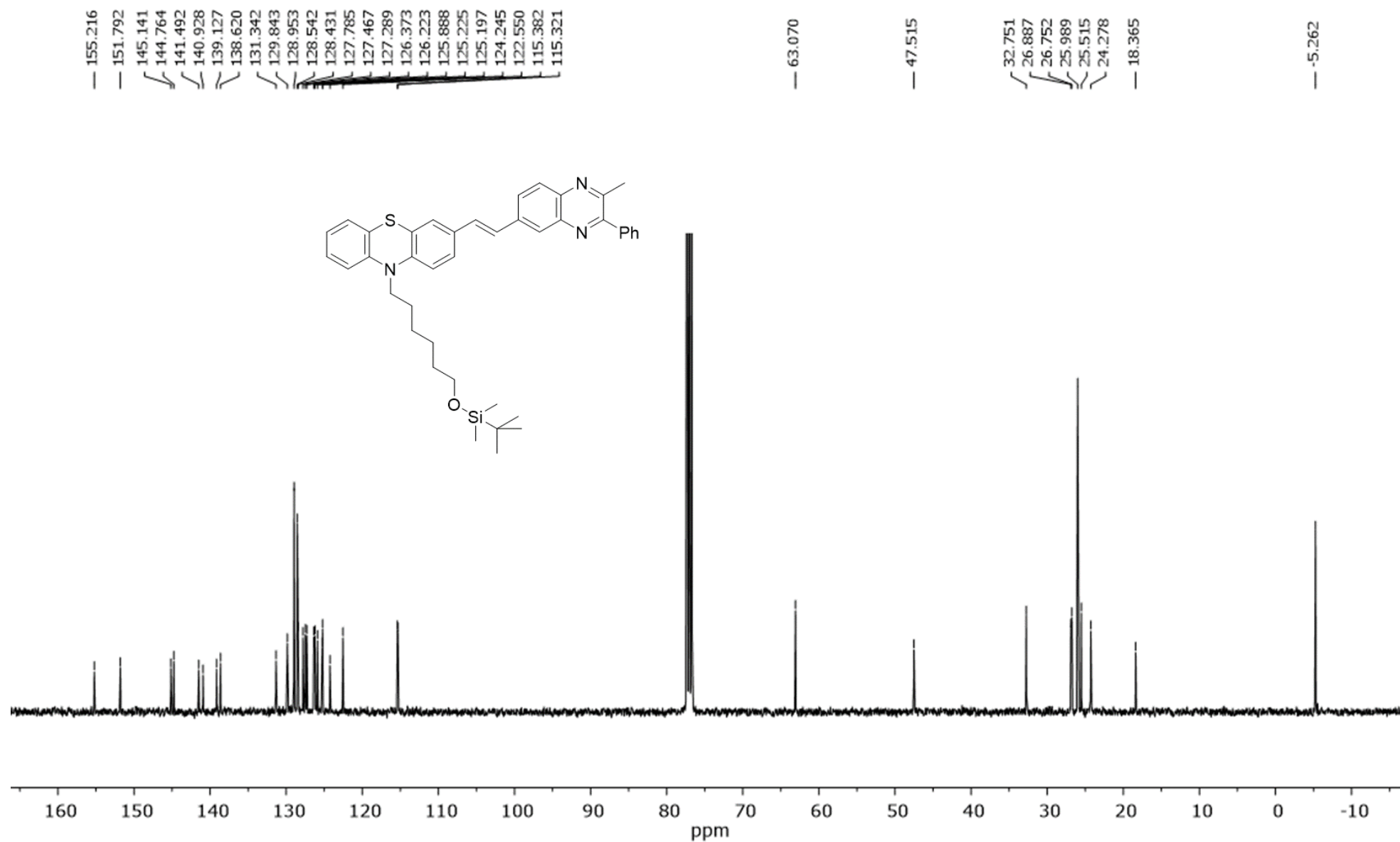
¹H NMR (CDCl₃, 400 MHz) of *(E)*-N-(6-((*tert*-butyldimethylsilyl)oxy)hexyl)-N-ethyl-4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)aniline (**6c**)



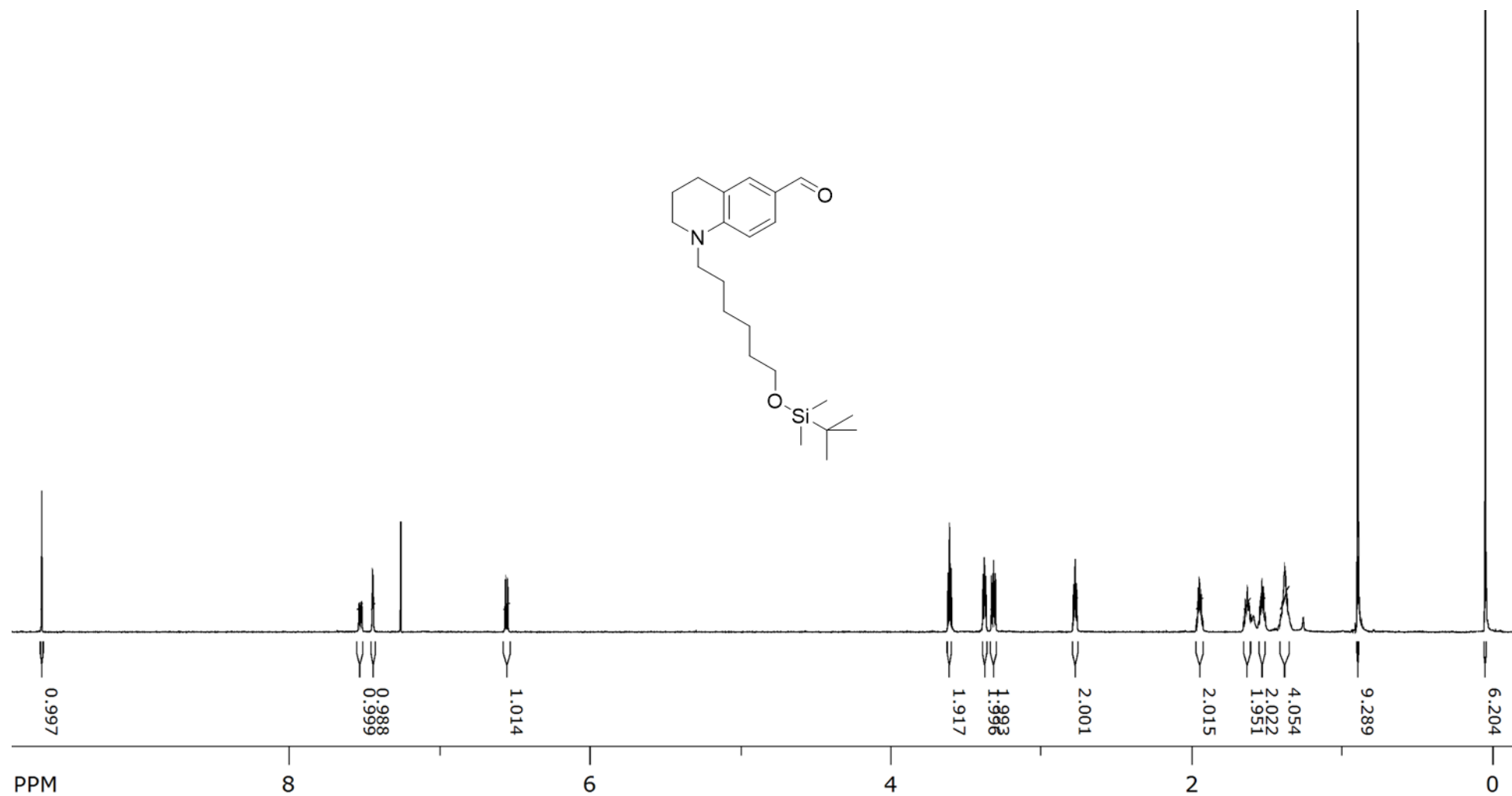
¹³C NMR (CDCl₃, 100 MHz) of (E)-N-(6-((tert-butyldimethylsilyl)oxy)hexyl)-N-ethyl-4-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)aniline (**6c**)



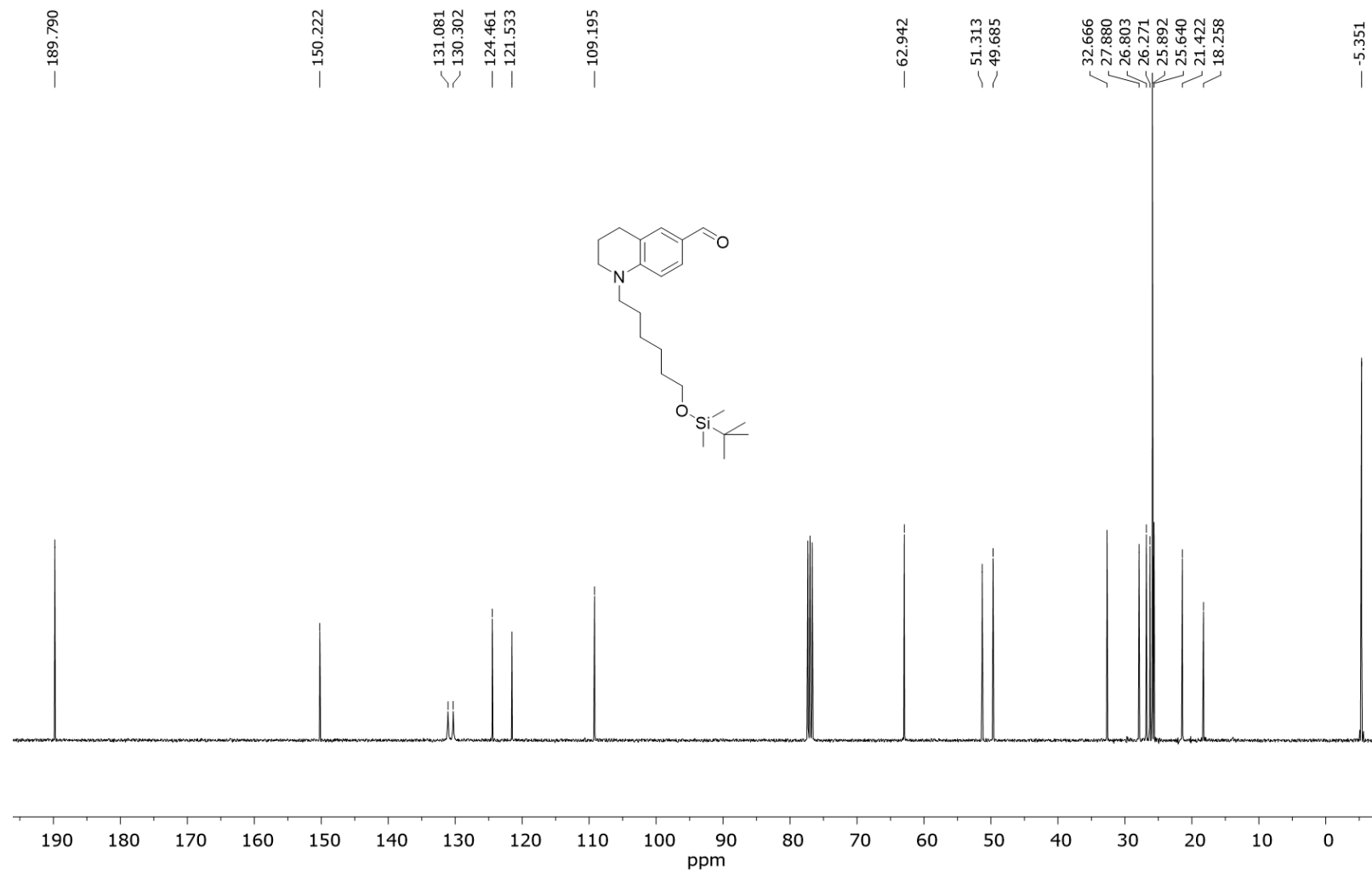
¹H NMR (CDCl₃, 400 MHz) of (E)-10-(6-((tert-butyldimethylsilyl)oxy)hexyl)-3-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)-10H-phenothiazine (**6e**)



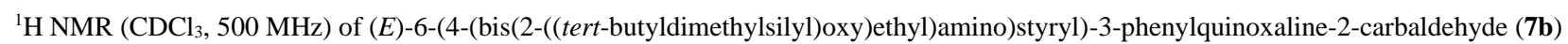
¹³C NMR (CDCl₃, 100 MHz) of (E)-10-(6-((tert-butyldimethylsilyl)oxy)hexyl)-3-(2-(2-methyl-3-phenylquinoxalin-6-yl)vinyl)-10H-phenothiazine (**6e**)

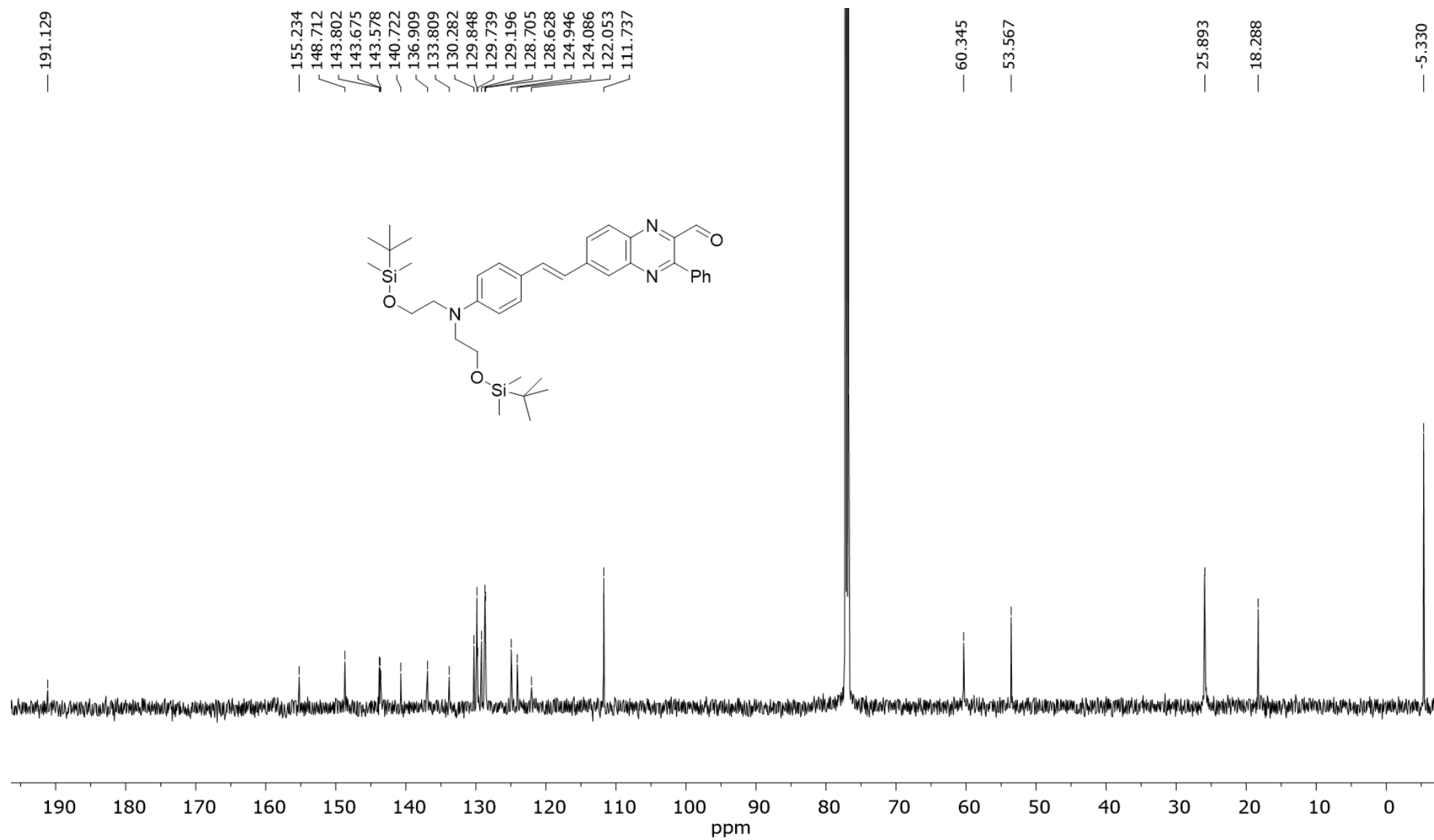


¹H NMR (CDCl₃, 600 MHz) of 1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinoline-6-carbaldehyde (**1f'**)

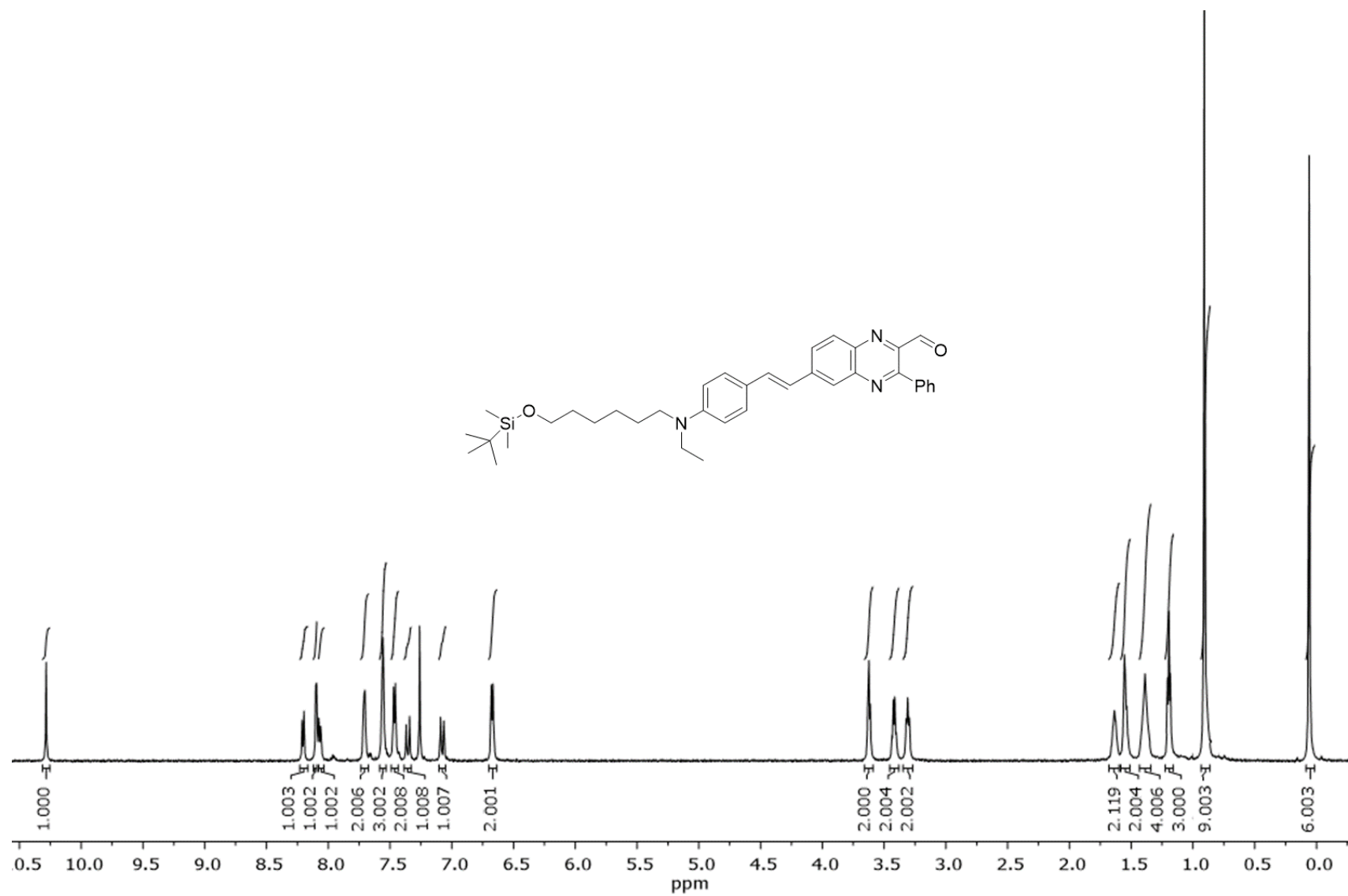


¹³C NMR (CDCl₃, 100 MHz) of 1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinoline-6-carbaldehyde (**1f'**)

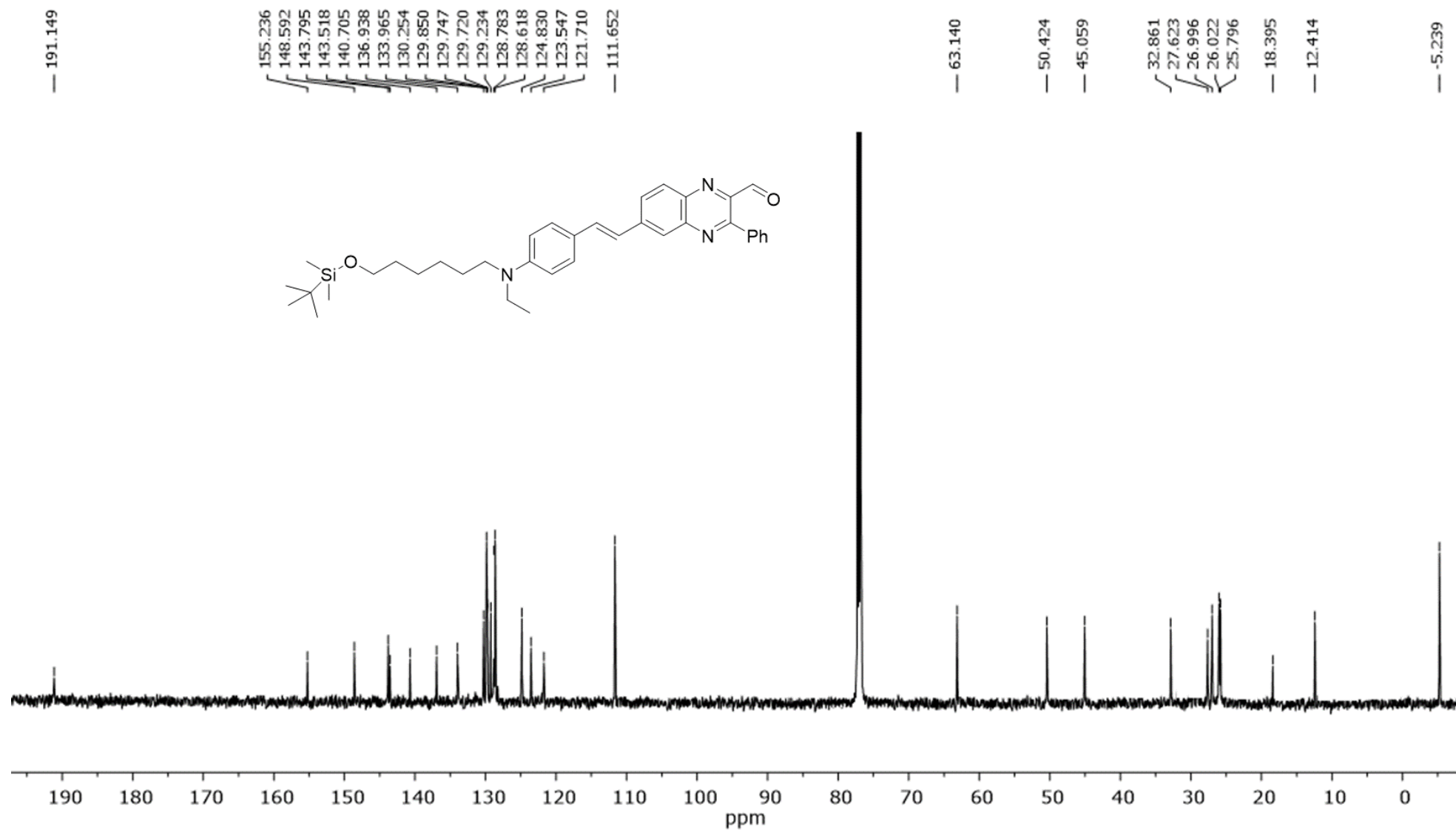




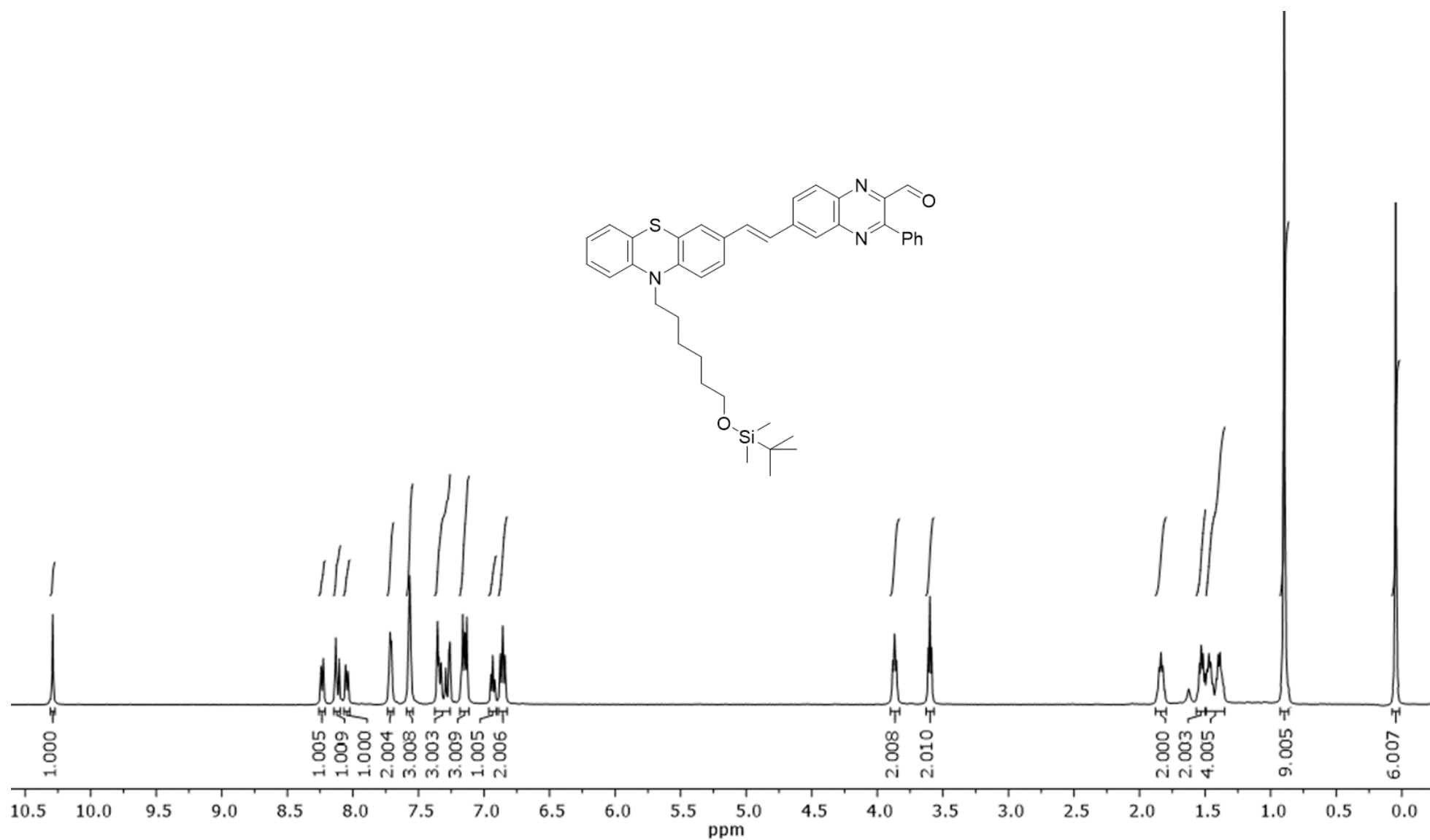
¹³C NMR (CDCl₃, 150 MHz) of *(E)*-6-(4-(bis(2-((*tert*-butyl)dimethylsilyl)oxy)ethyl)amino)styryl)-3-phenylquinoxaline-2-carbaldehyde (**7b**)



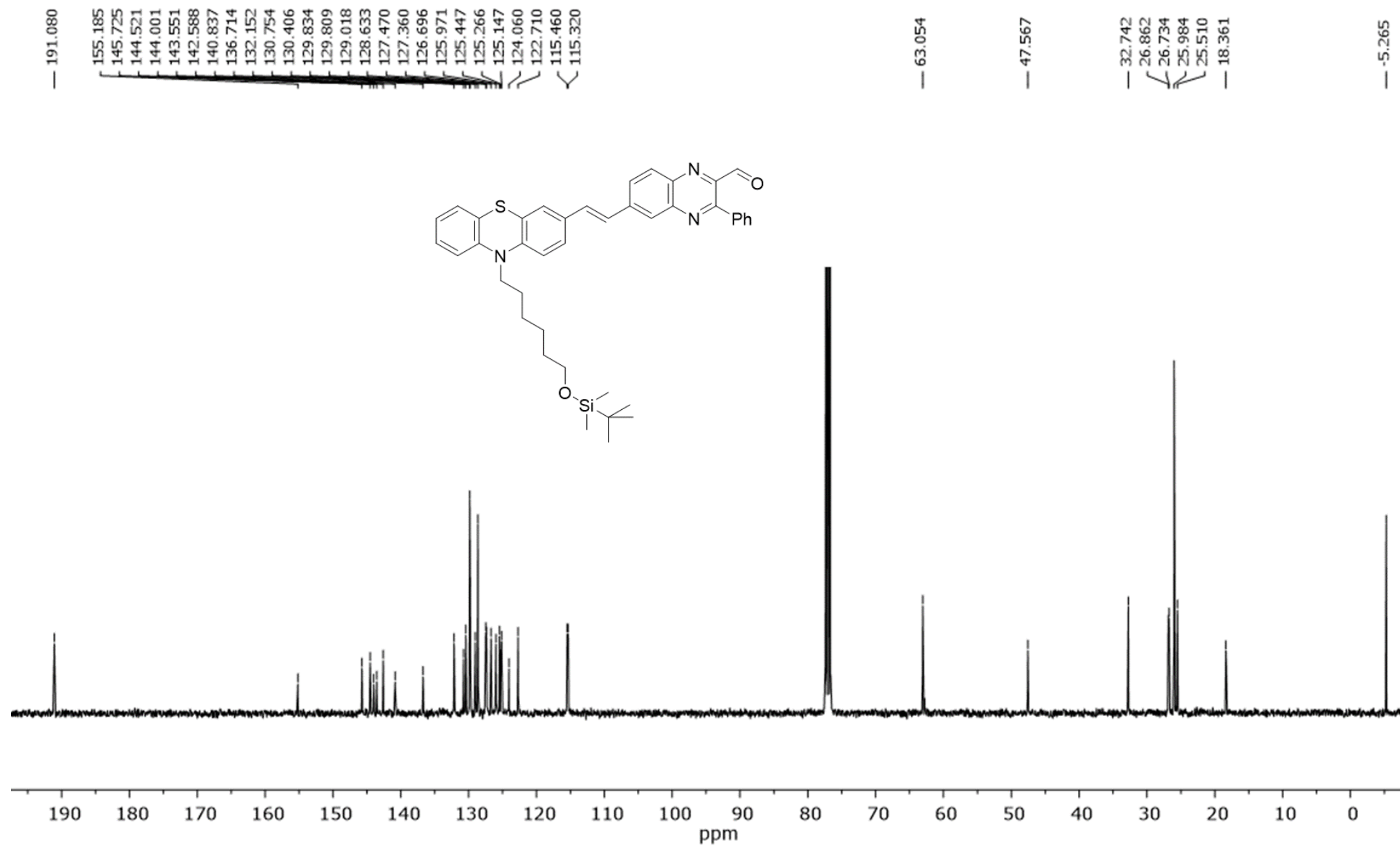
¹H NMR (CDCl₃, 600 MHz) of (E)-6-(4-((6-((tert-butyldimethylsilyl)oxy)hexyl)(ethyl)amino)styryl)-3-phenylquinoxaline-2-carbaldehyde (**7c**)



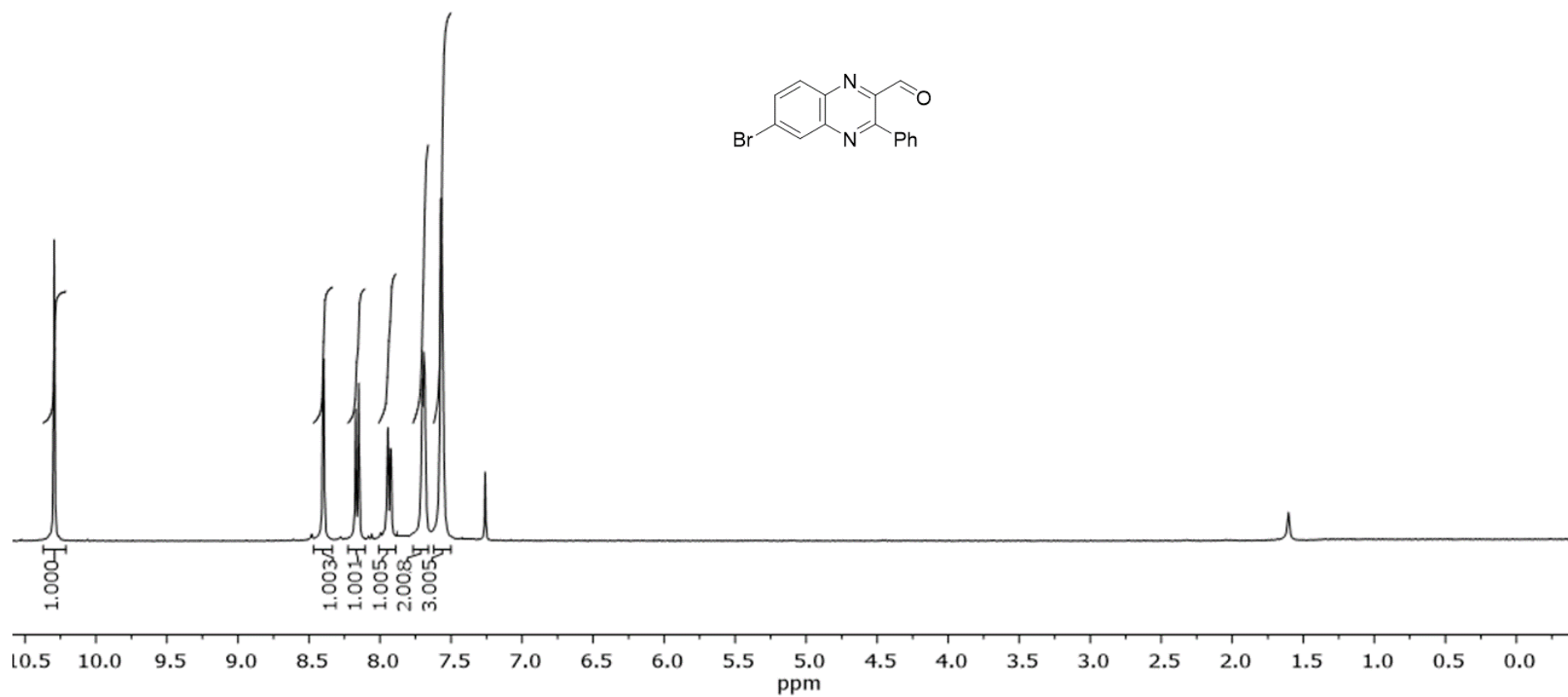
¹³C NMR (CDCl₃, 150 MHz) of (E)-6-(4-(((tert-butyldimethylsilyl)oxy)hexyl)(ethyl)amino)styryl)-3-phenylquinoxaline-2-carbaldehyde (**7c**)



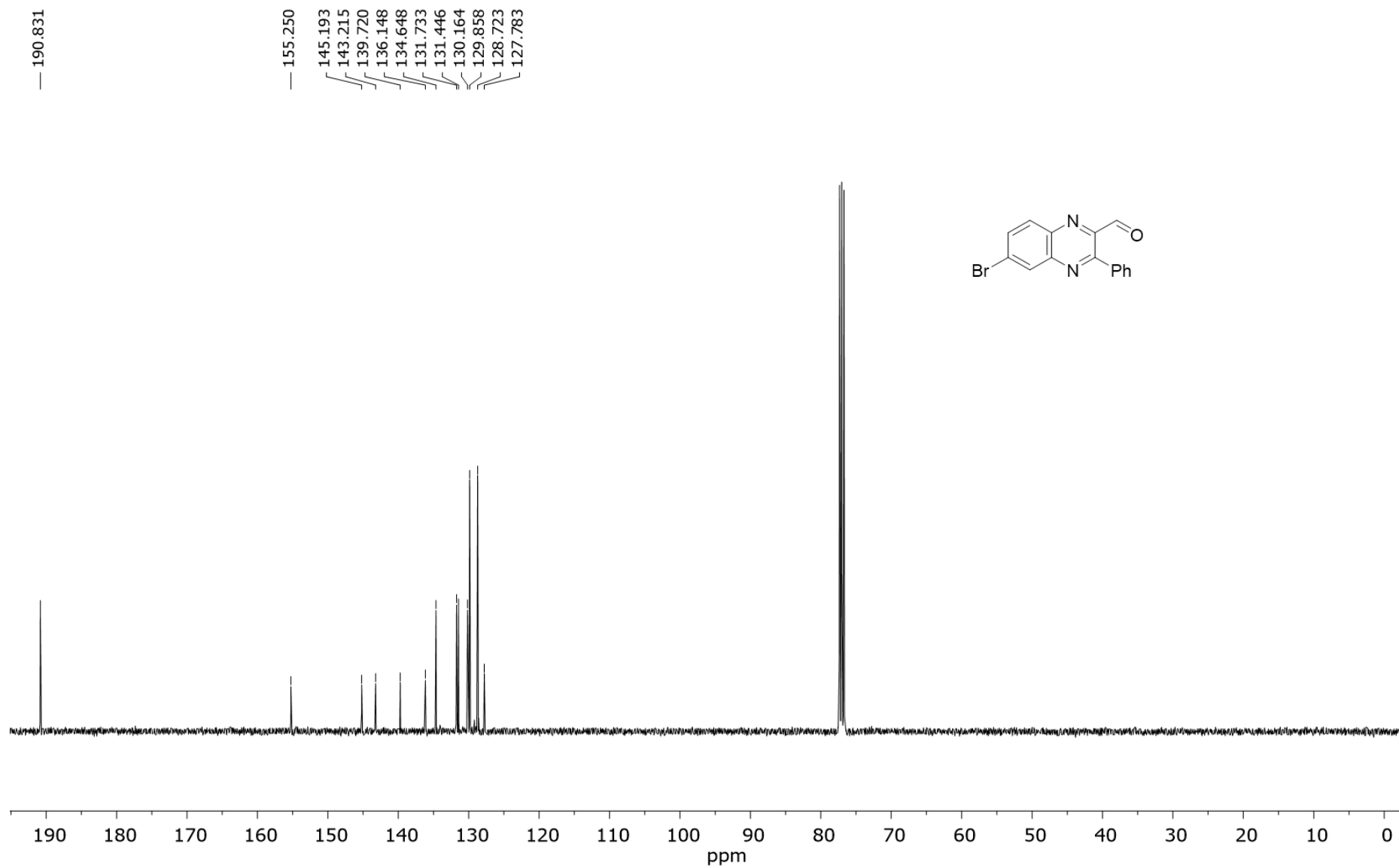
¹H NMR (CDCl₃, 500 MHz) of (E)-6-(2-(10-(6-((tert-butyldimethylsilyl)oxy)hexyl)-10H-phenothiazin-3-yl)vinyl)-3-phenylquinoxaline-2-carbaldehyde (**7e**)



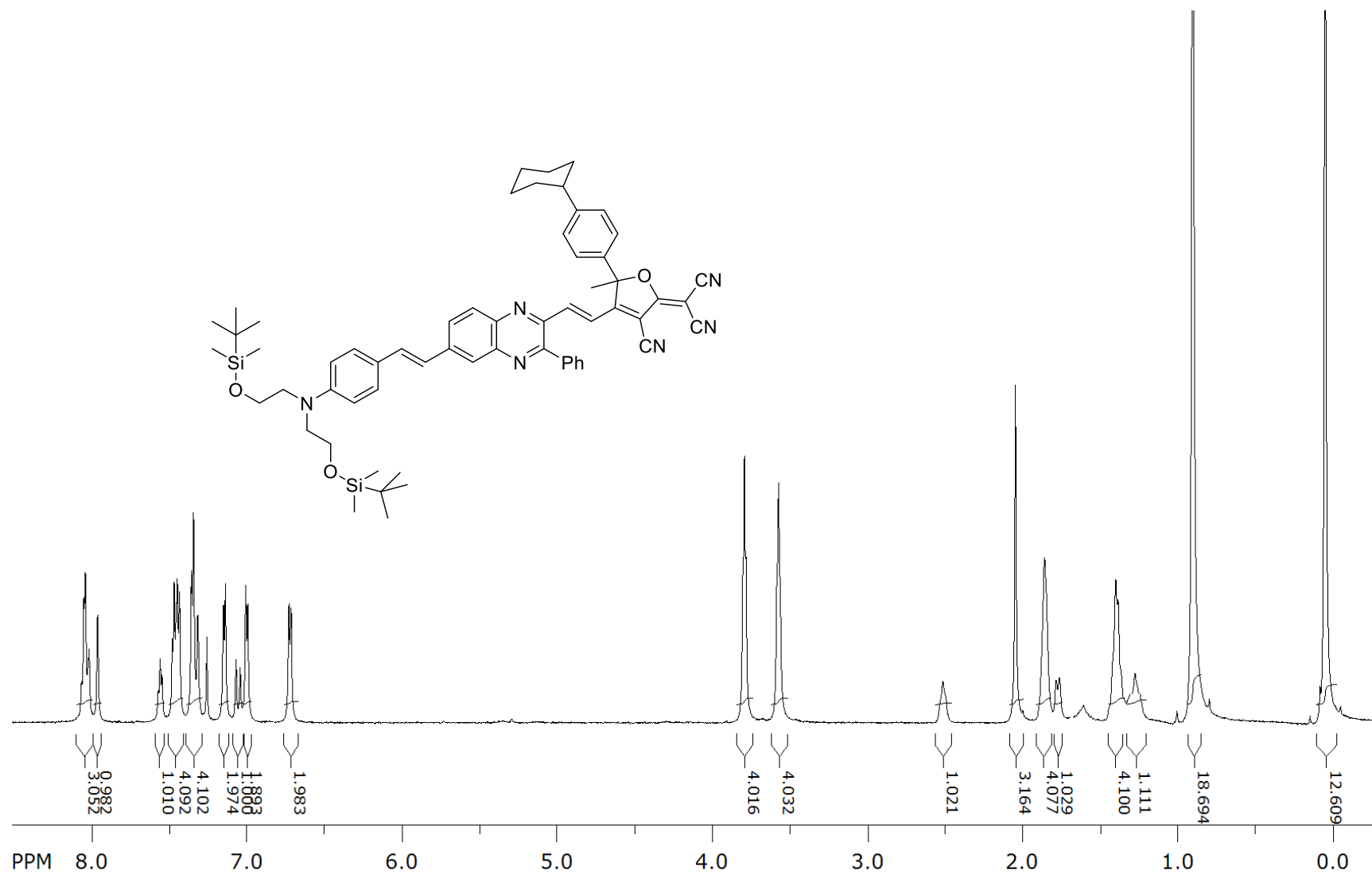
¹³C NMR (CDCl₃, 100 MHz) of (E)-6-(2-(10-(6-((tert-butyl)dimethylsilyl)oxy)hexyl)-10H-phenothiazin-3-yl)vinyl)-3-phenylquinoxaline-2-carbaldehyde (**7e**)



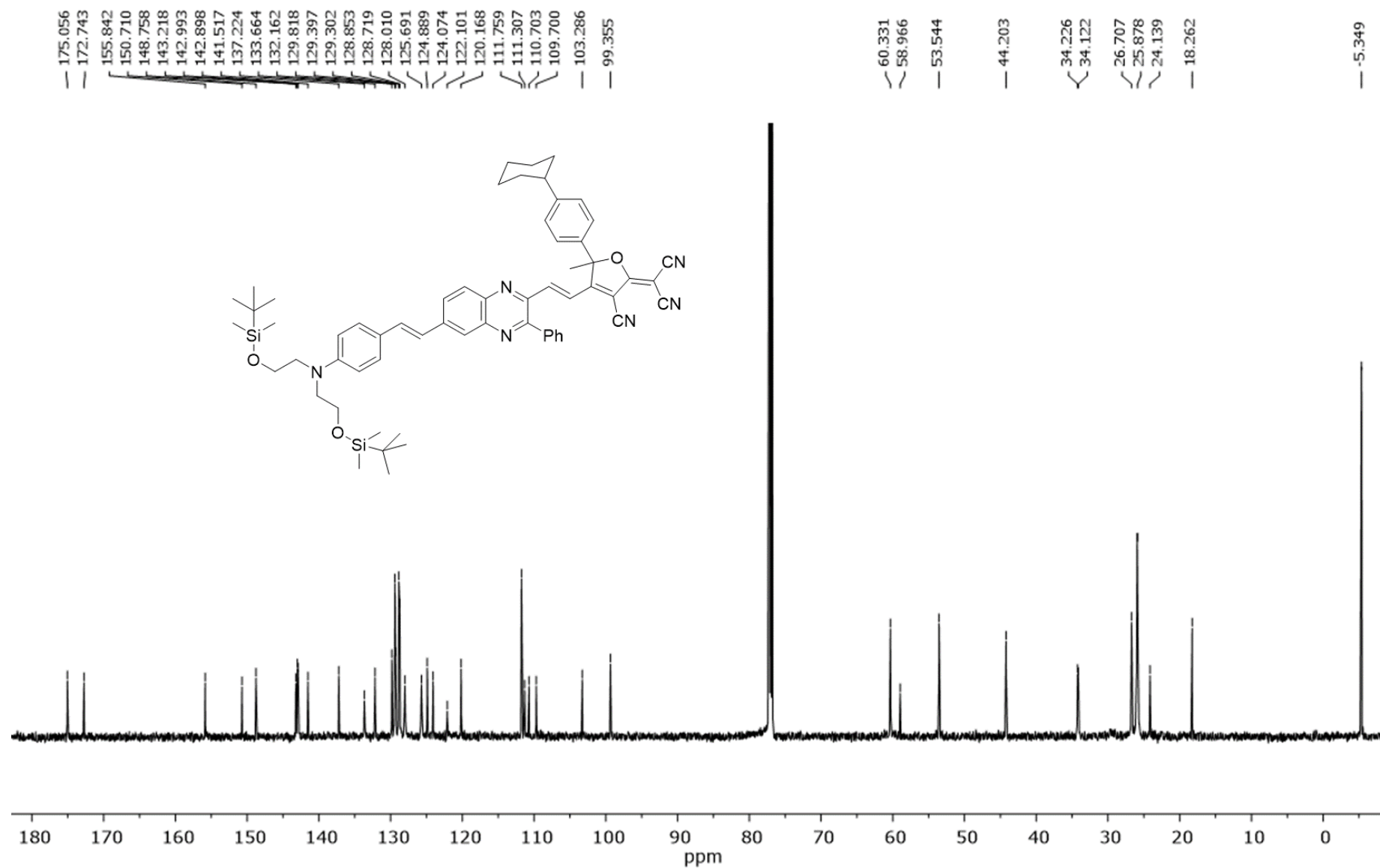
¹H NMR (CDCl₃, 400 MHz) of 6-bromo-3-phenylquinoxaline-2-carbaldehyde (**3'**)



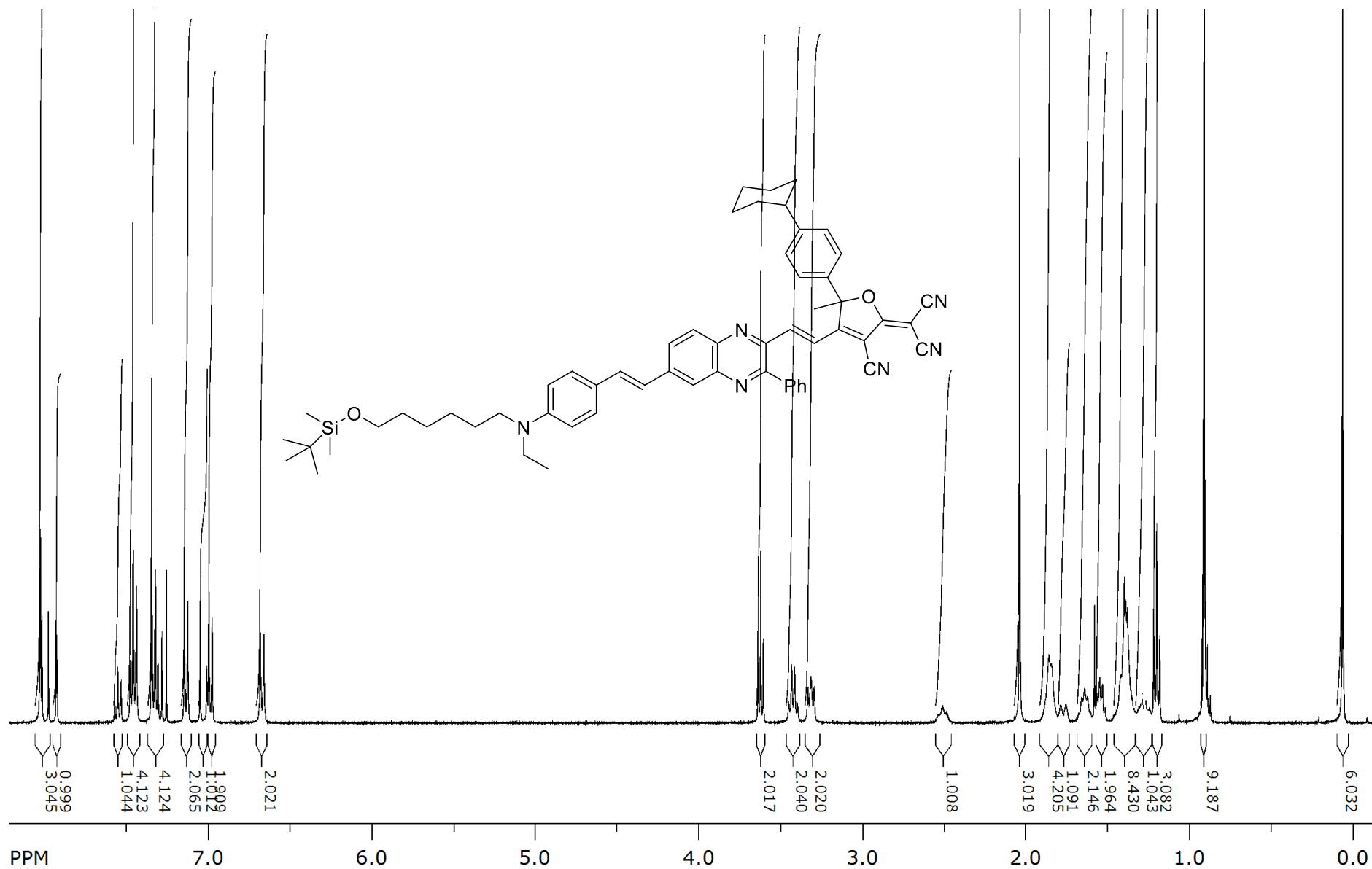
¹³C NMR (CDCl₃, 100 MHz) of 6-bromo-3-phenylquinoxaline-2-carbaldehyde (**3'**)



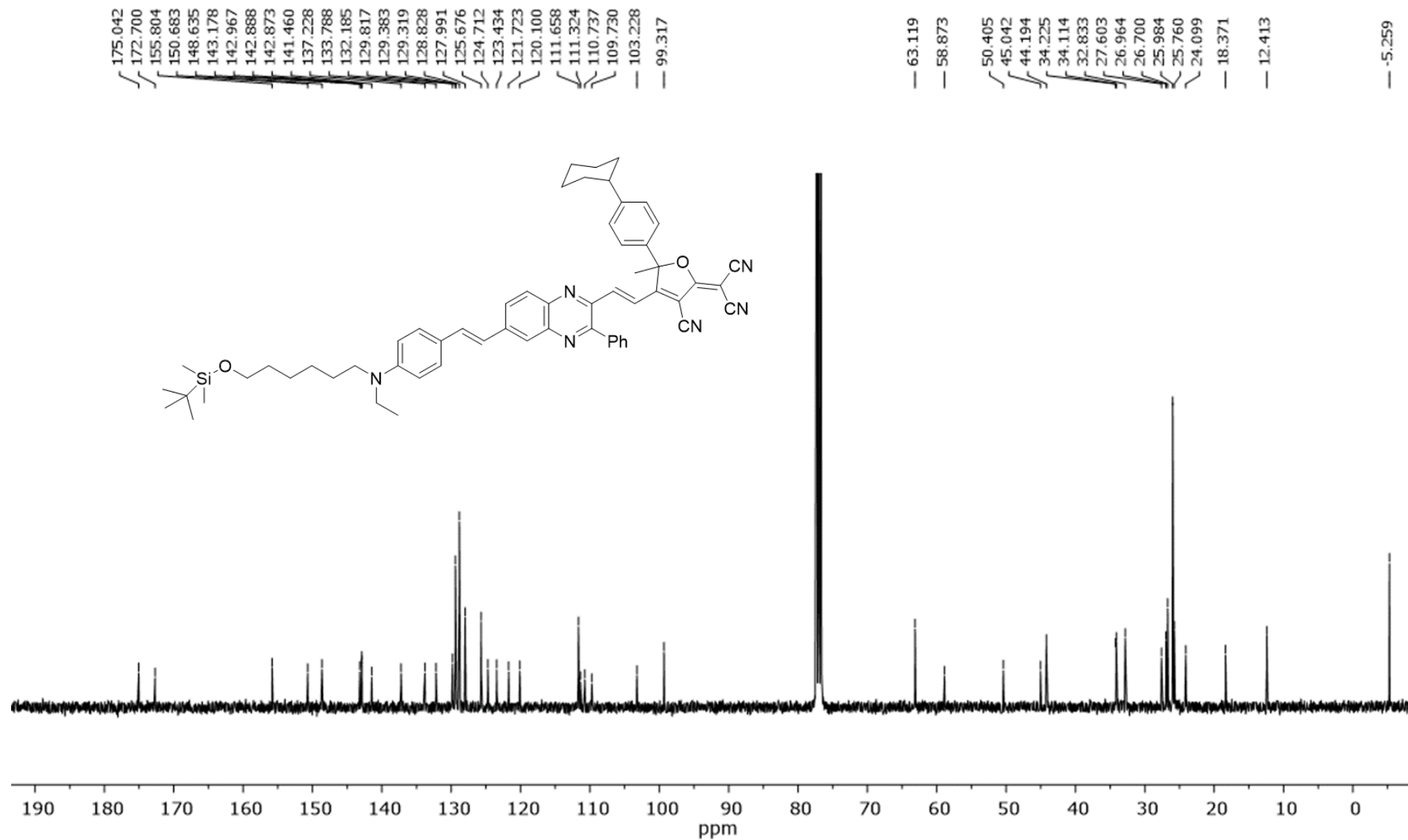
¹H NMR (CDCl₃, 600 MHz) of 2-(4-((E)-2-(6-((E)-4-(bis(2-((tert-butyl)dimethylsilyl)oxy)ethyl)amino)styryl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-An2**).



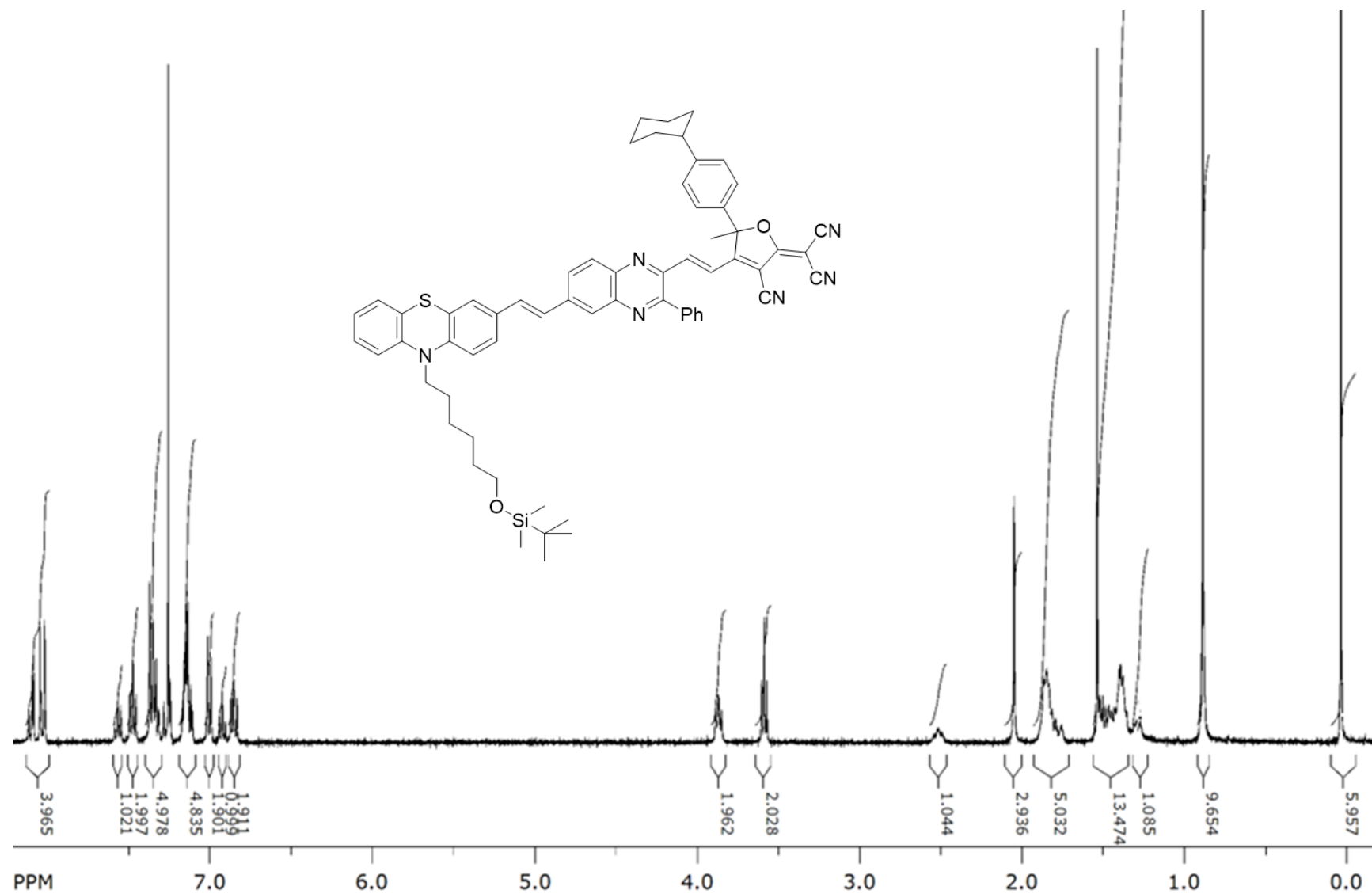
¹³C NMR (CDCl₃, 150 MHz) of 2-(4-((E)-2-(6-((E)-4-(bis(2-((tert-butyl)dimethylsilyl)oxy)ethyl)amino)styryl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-An2**)



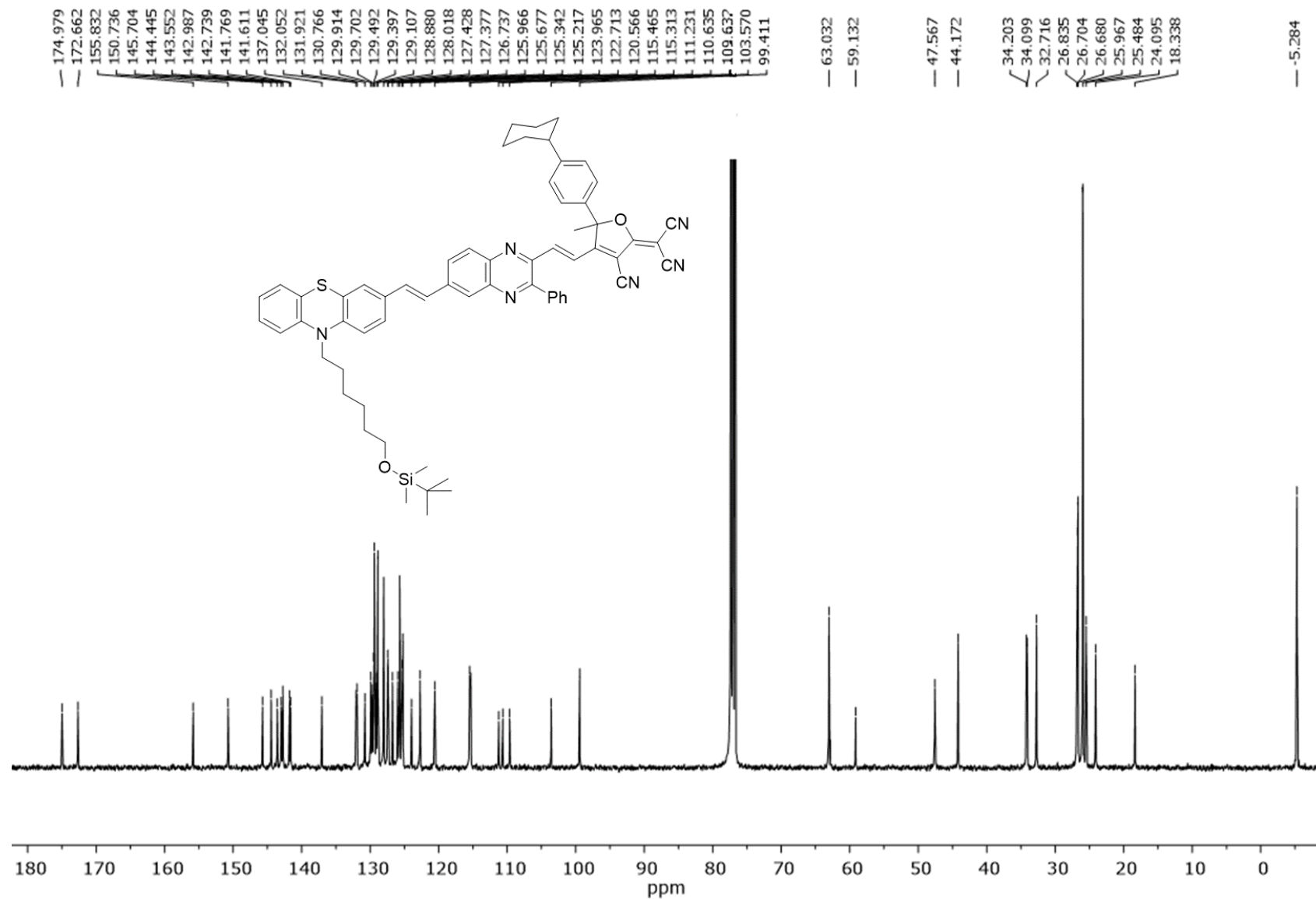
¹H NMR (CDCl₃, 400 MHz) of 2-(4-((E)-2-(6-((E)-4-((6-((tert-butyldimethylsilyl)oxy)hexyl)(ethyl)amino)styryl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-An3**)



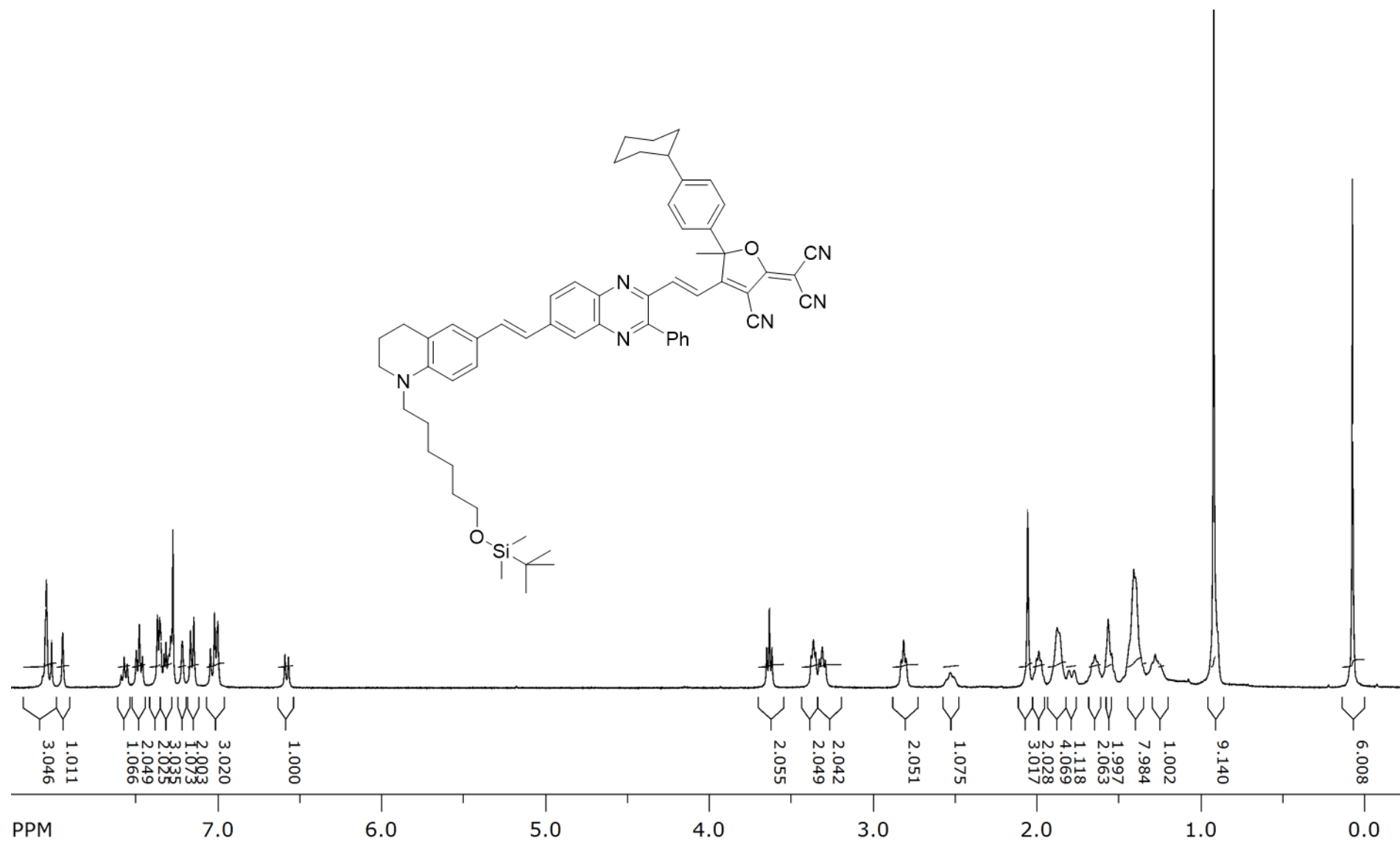
¹³C NMR (CDCl₃, 100 MHz) of 2-(4-((E)-2-(6-((E)-4-((6-((tert-butyldimethylsilyl)oxy)hexyl)(ethyl)amino)styryl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-An3**)



¹H NMR (CDCl₃, 400 MHz) of 2-(4-((E)-2-(6-((E)-2-(10-(6-((tert-butyl dimethylsilyl)oxy)hexyl)-10H-phenothiazin-3-yl)vinyl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-PT**)



¹³C NMR (CDCl₃, 100 MHz) of 2-(4-((E)-2-(6-((E)-2-(10-(6-((tert-butyldimethylsilyl)oxy)hexyl)-10H-phenothiazin-3-yl)vinyl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-PT**)



¹H NMR (CDCl₃, 400 MHz) of 2-(4-((E)-2-(6-((E)-2-(1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinolin-6-yl)vinyl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-TQ**)

¹³C NMR (CDCl₃, 100 MHz) of 2-(4-((E)-2-(6-((E)-2-(1-(6-((tert-butyldimethylsilyl)oxy)hexyl)-1,2,3,4-tetrahydroquinolin-6-yl)vinyl)-3-phenylquinoxalin-2-yl)vinyl)-3-cyano-5-(4-cyclohexylphenyl)-5-methylfuran-2(5H)-ylidene)malononitrile (**Ch-TQ**)