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Supplementary Material

Flexible Analogues of Azaindole DYRK1A Inhibitors Elicit Cytotoxicity in Glioblastoma Cells

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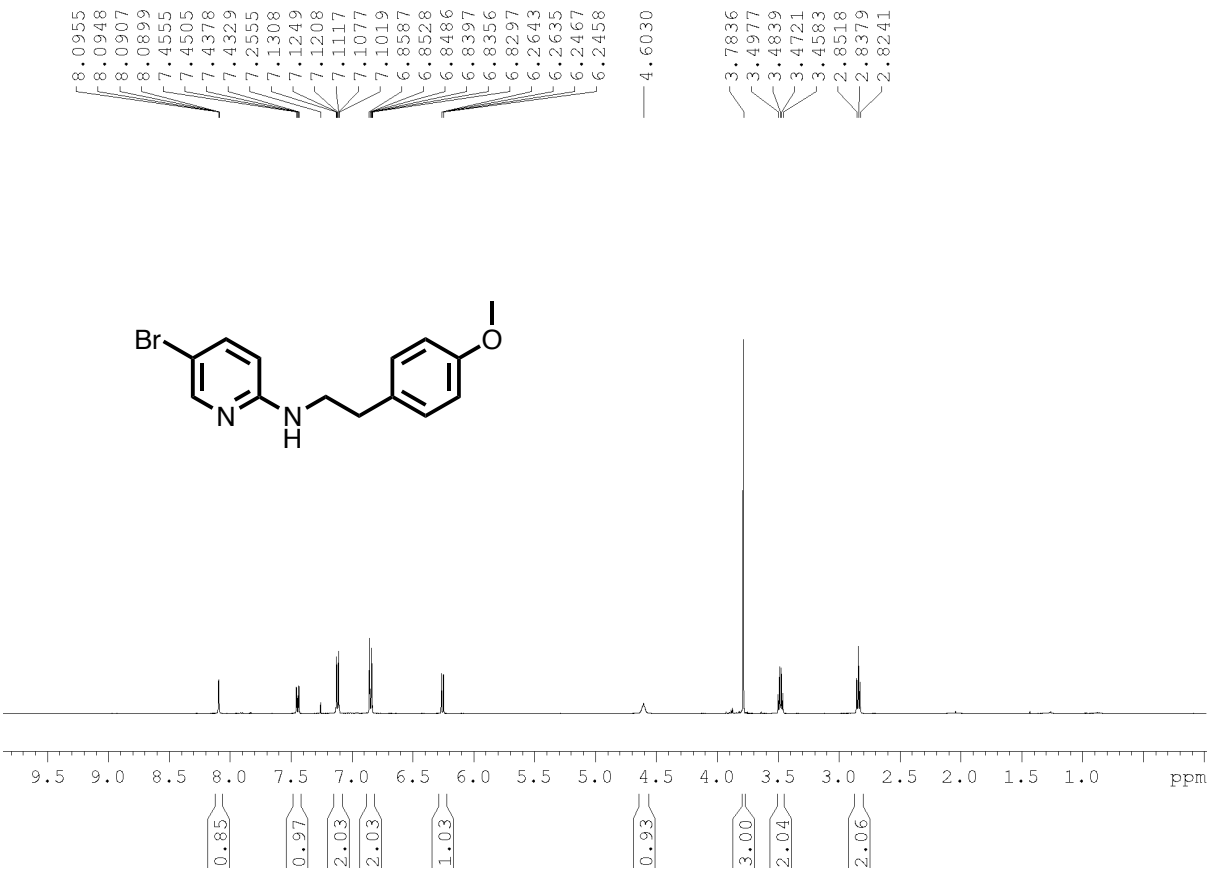


*Figure S1 ^{1}H NMR spectrum of compound **6** in $CDCl_3$ (500 MHz).*

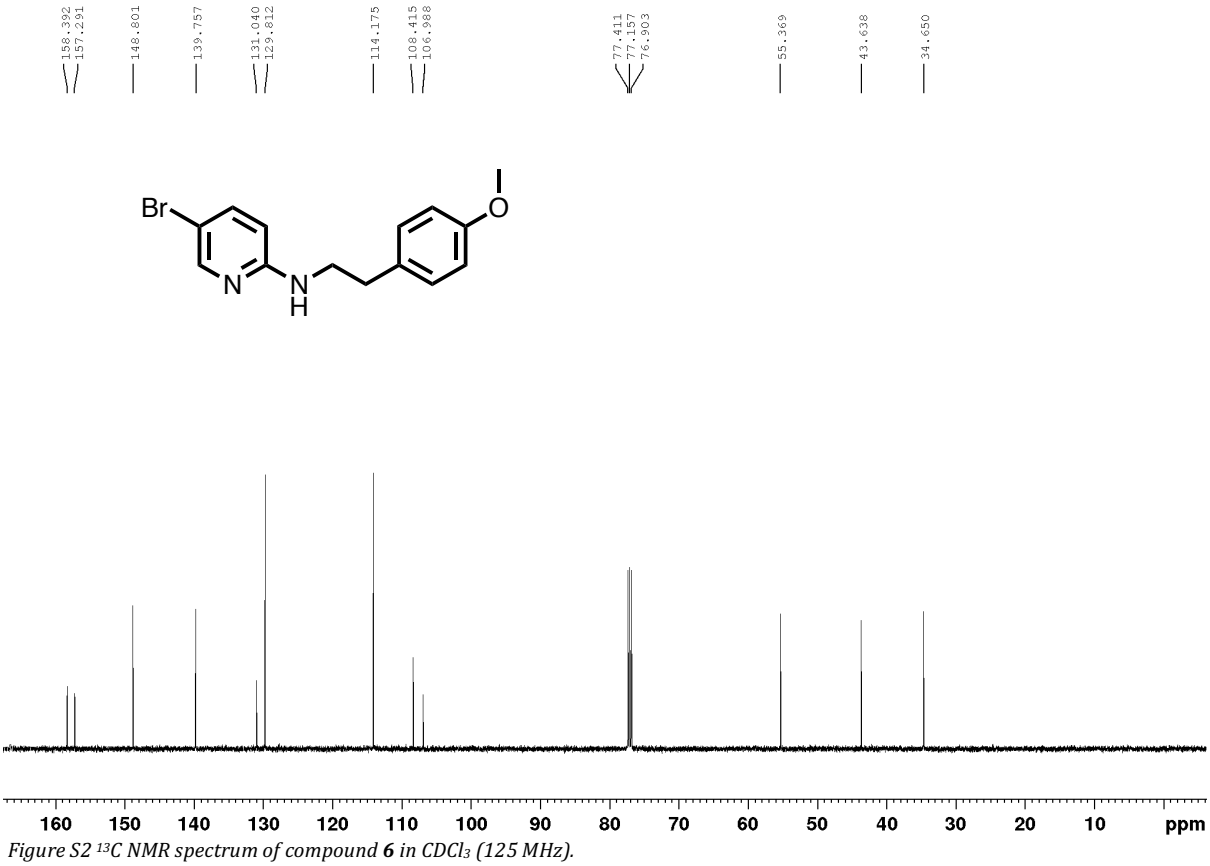


*Figure S2 ^{13}C NMR spectrum of compound **6** in $CDCl_3$ (125 MHz).*

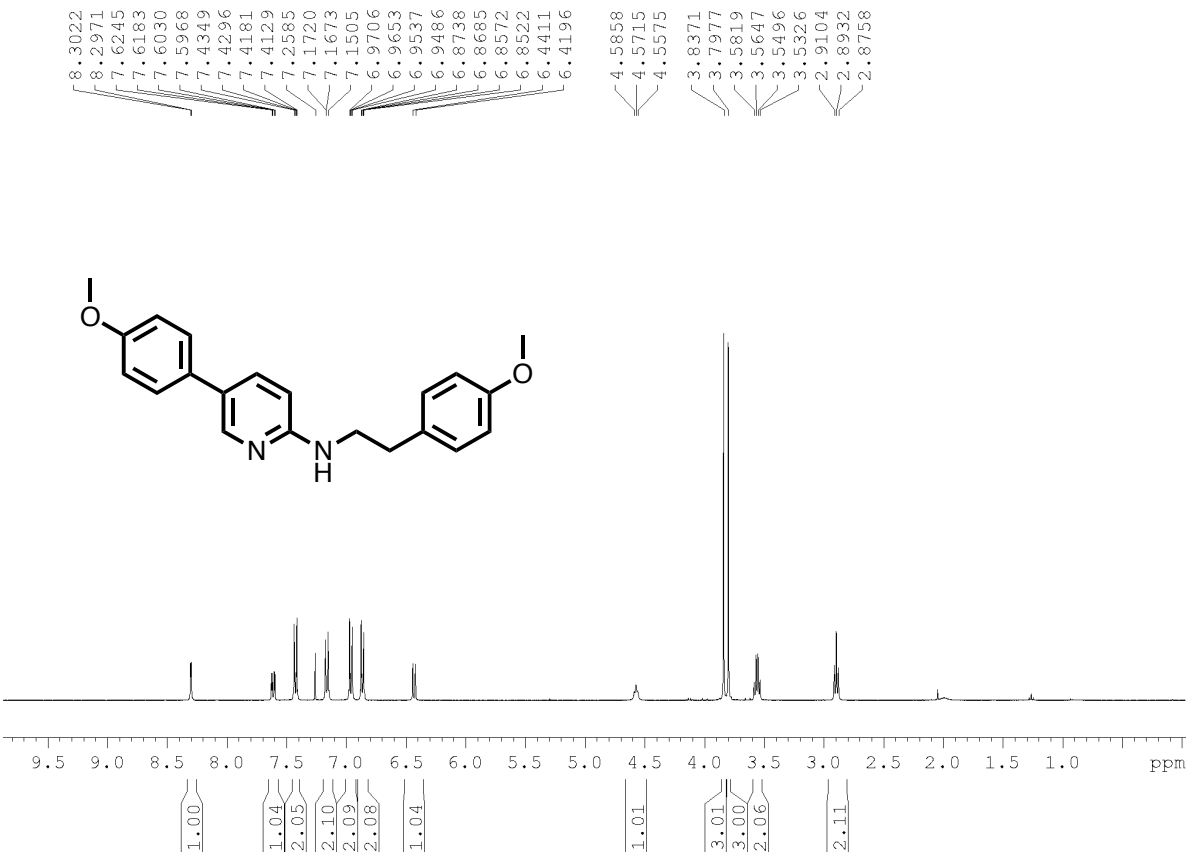


*Figure S3 ^{1}H NMR spectrum of compound **7** in $CDCl_3$ (400 MHz).*

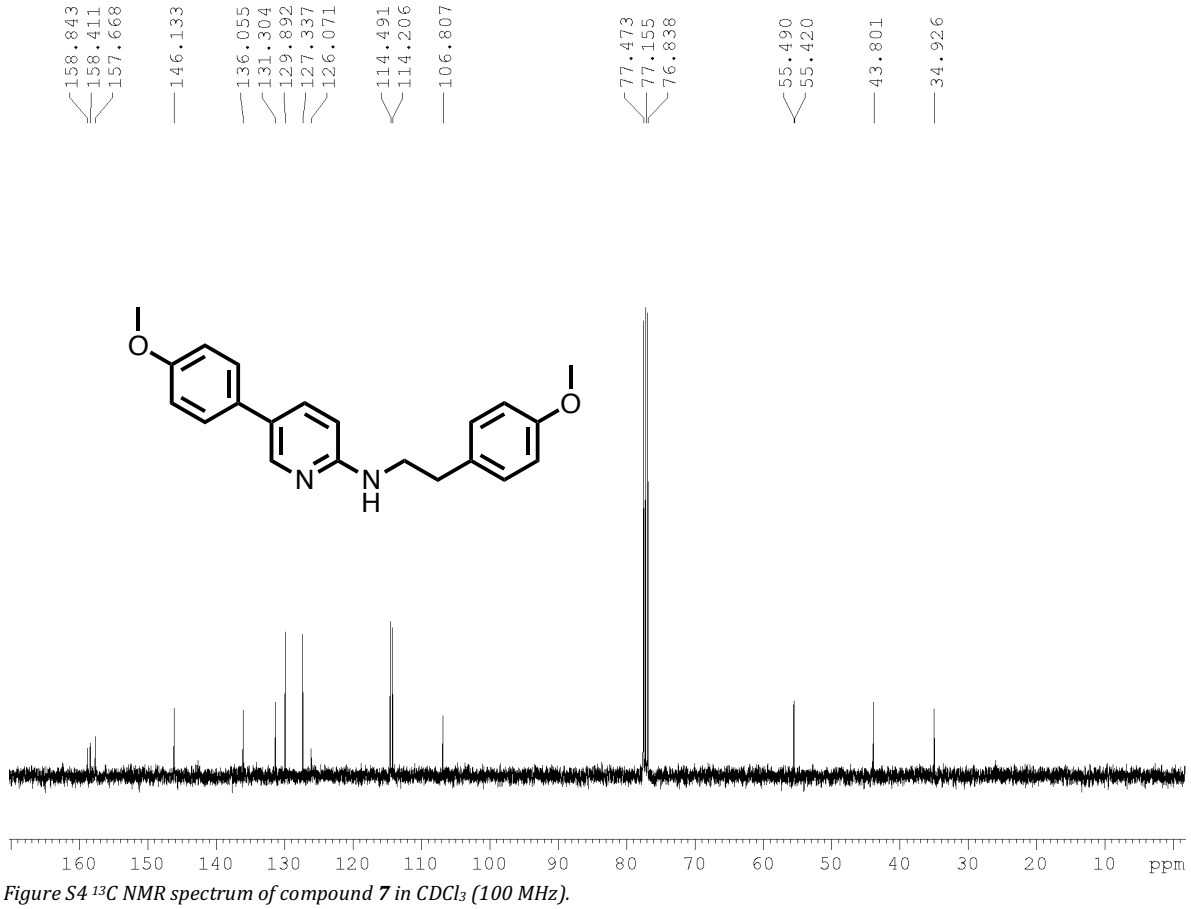


*Figure S4 ^{13}C NMR spectrum of compound **7** in $CDCl_3$ (100 MHz).*

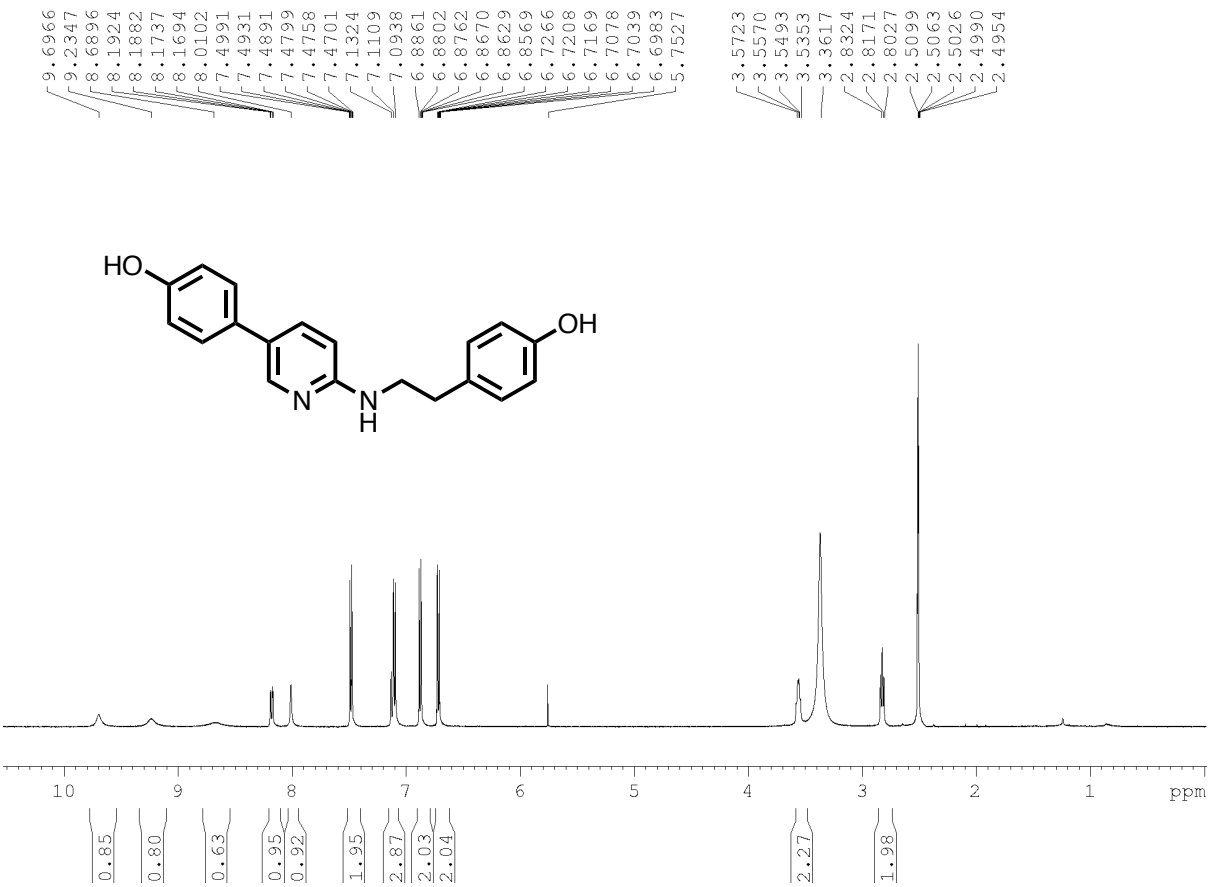


*Figure S5 [1]H NMR spectrum of compound **2c** in d-DMSO (500 MHz).*

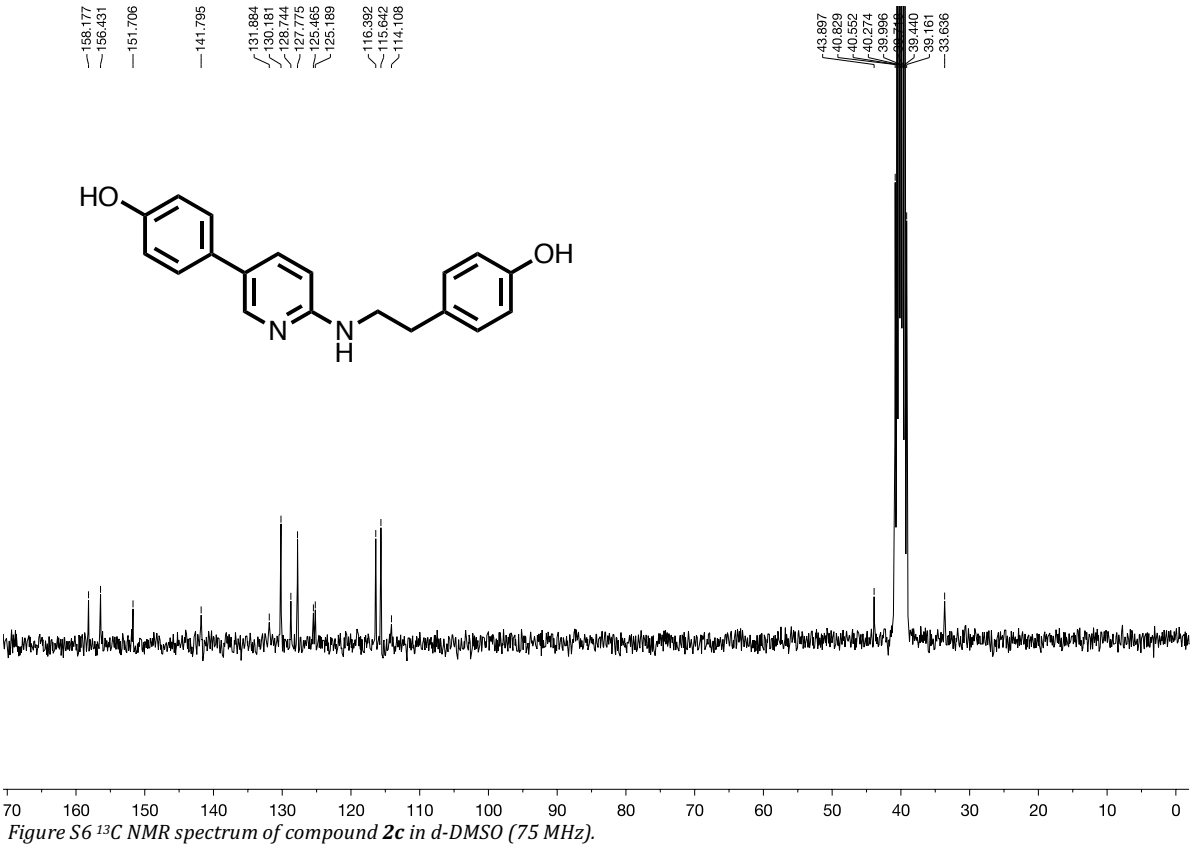
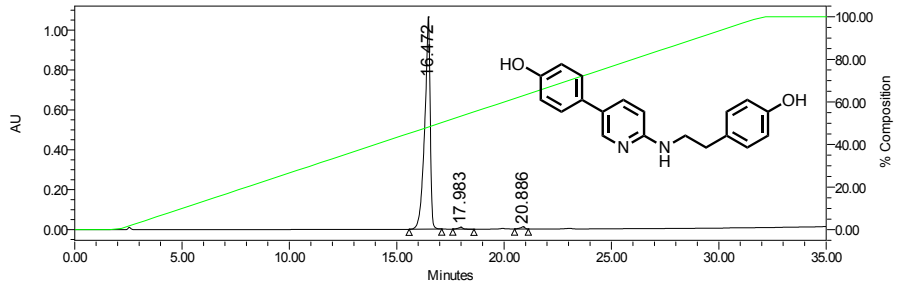


*Figure S6 [13]C NMR spectrum of compound **2c** in d-DMSO (75 MHz).*



Peak information

	RT	Area	% Area
1	16.472	18809791	98.35
2	17.983	144280	0.75
3	20.886	170729	0.89

Figure S6 HPLC chromatogram of compound **2c**.*

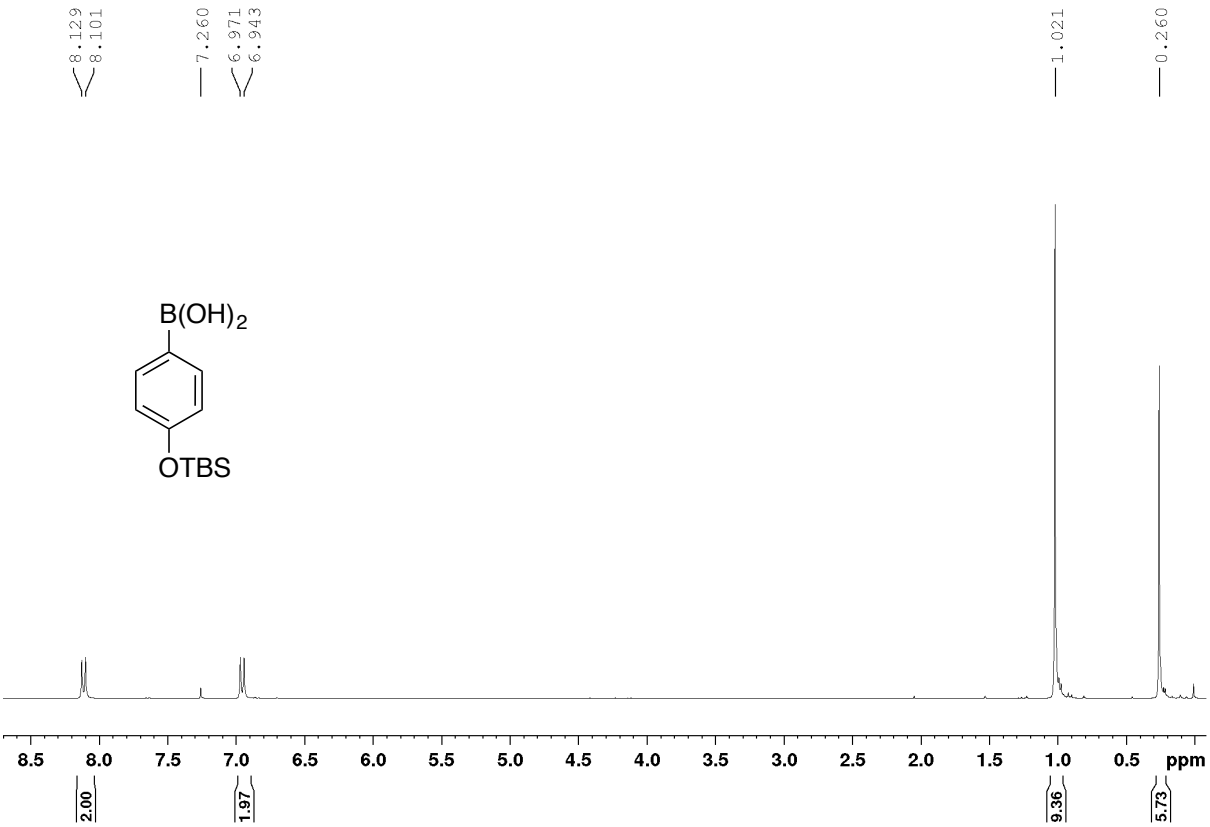


*Figure S7 ^1H NMR spectrum of compound **9** in $CDCl_3$ (300 MHz).*

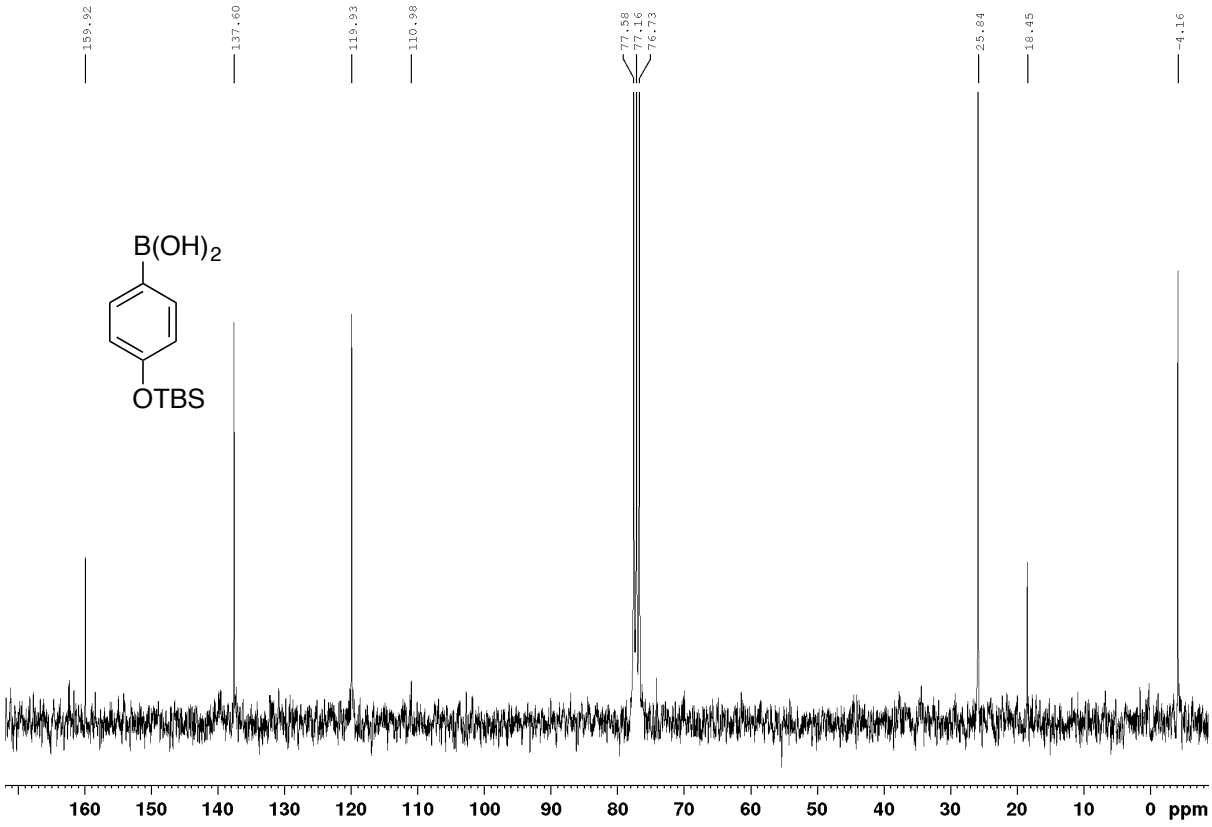


*Figure S8 ^{13}C NMR spectrum of compound **9** in $CDCl_3$ (75 MHz).*

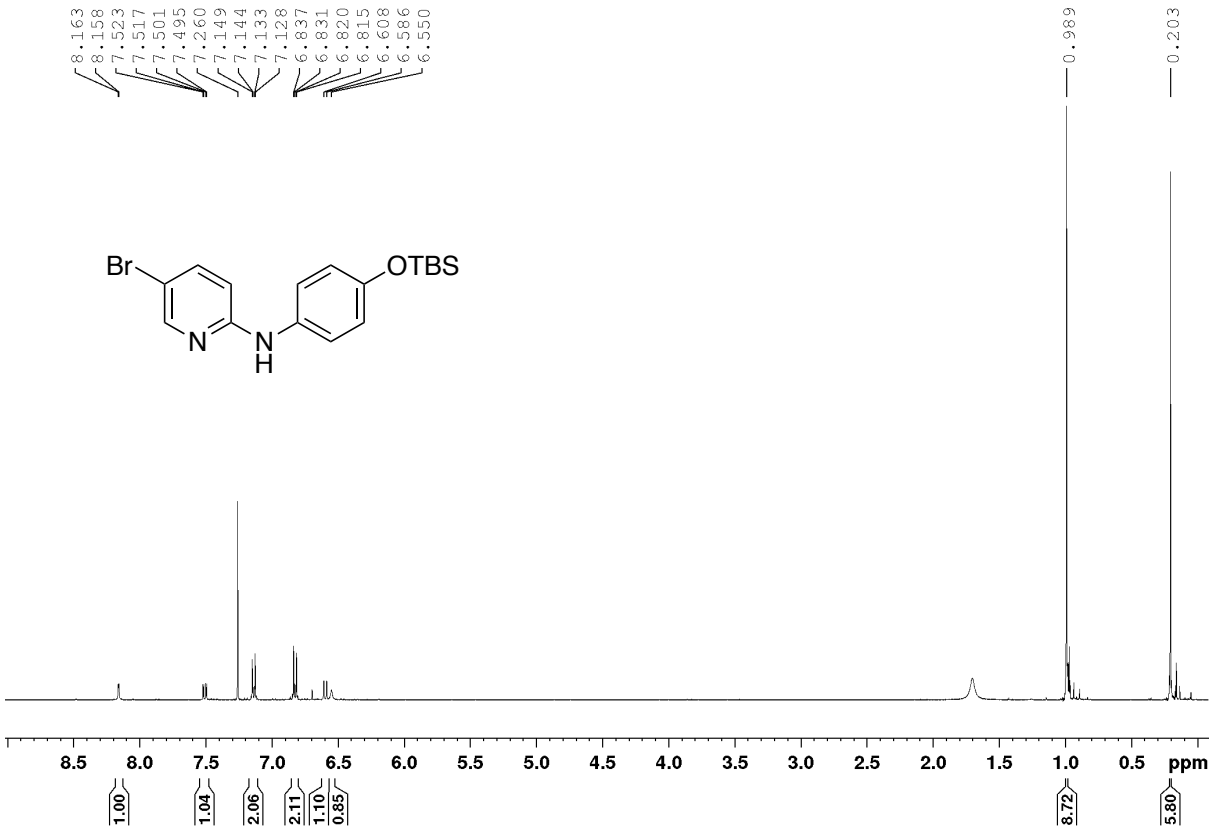


*Figure S9 ^{1}H NMR spectrum of compound **10** in $CDCl_3$ (400 MHz).*

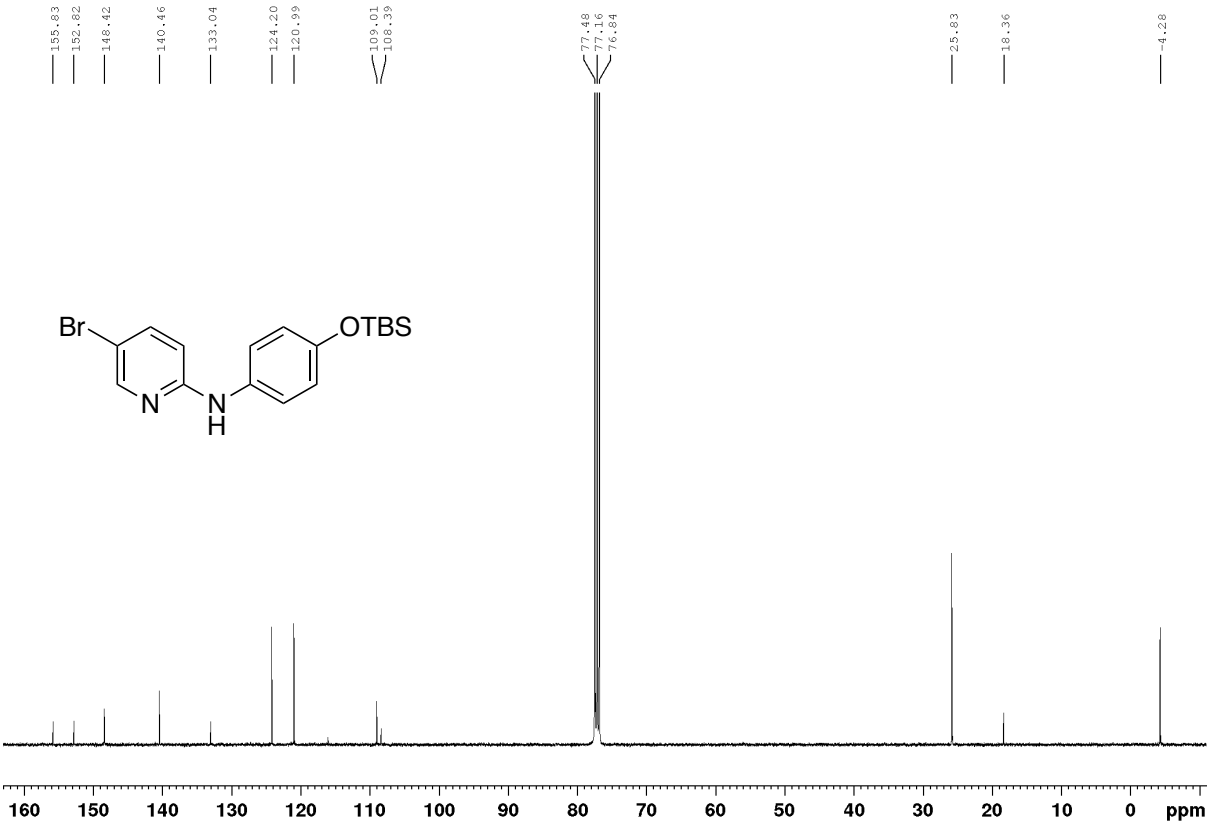


*Figure S10 ^{13}C NMR spectrum of compound **10** in $CDCl_3$ (100 MHz).*

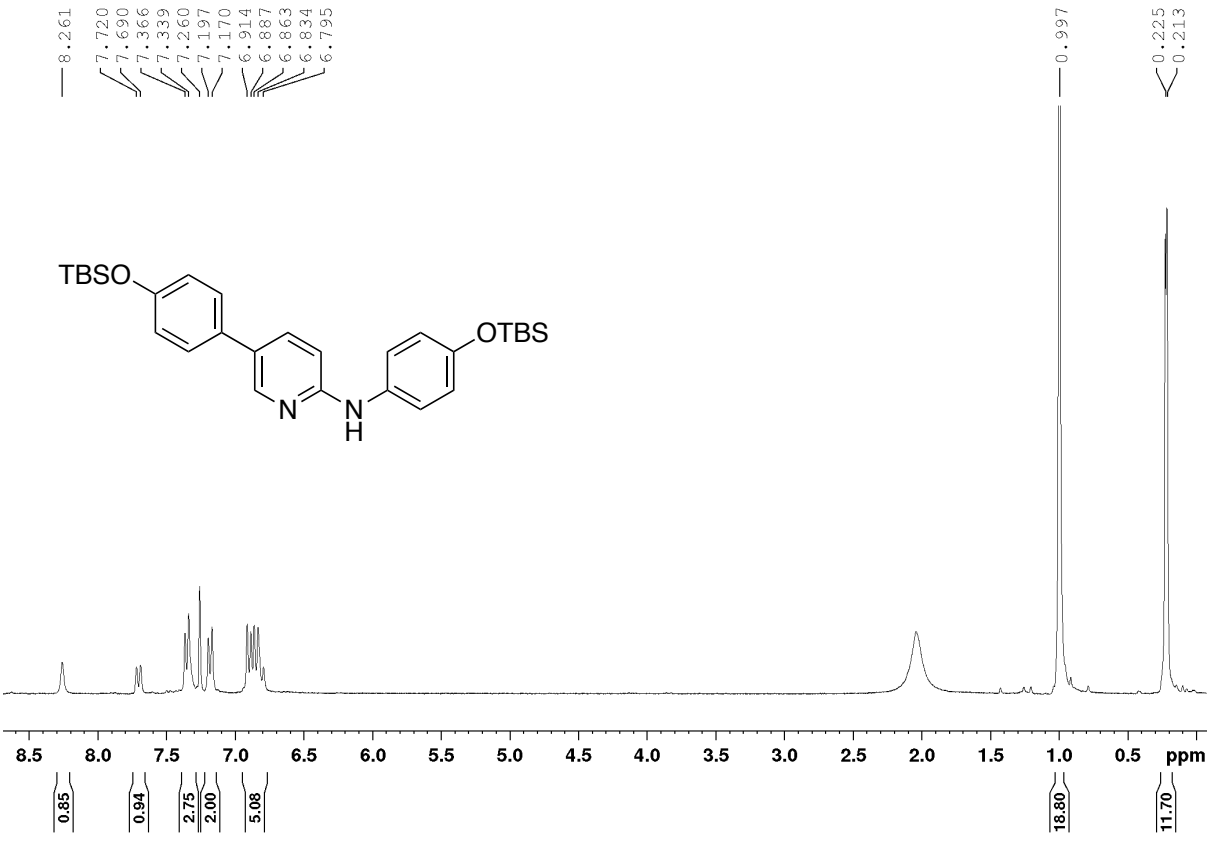


*Figure S11 ^{1}H NMR spectrum of compound **11** in $CDCl_3$ (300 MHz).*

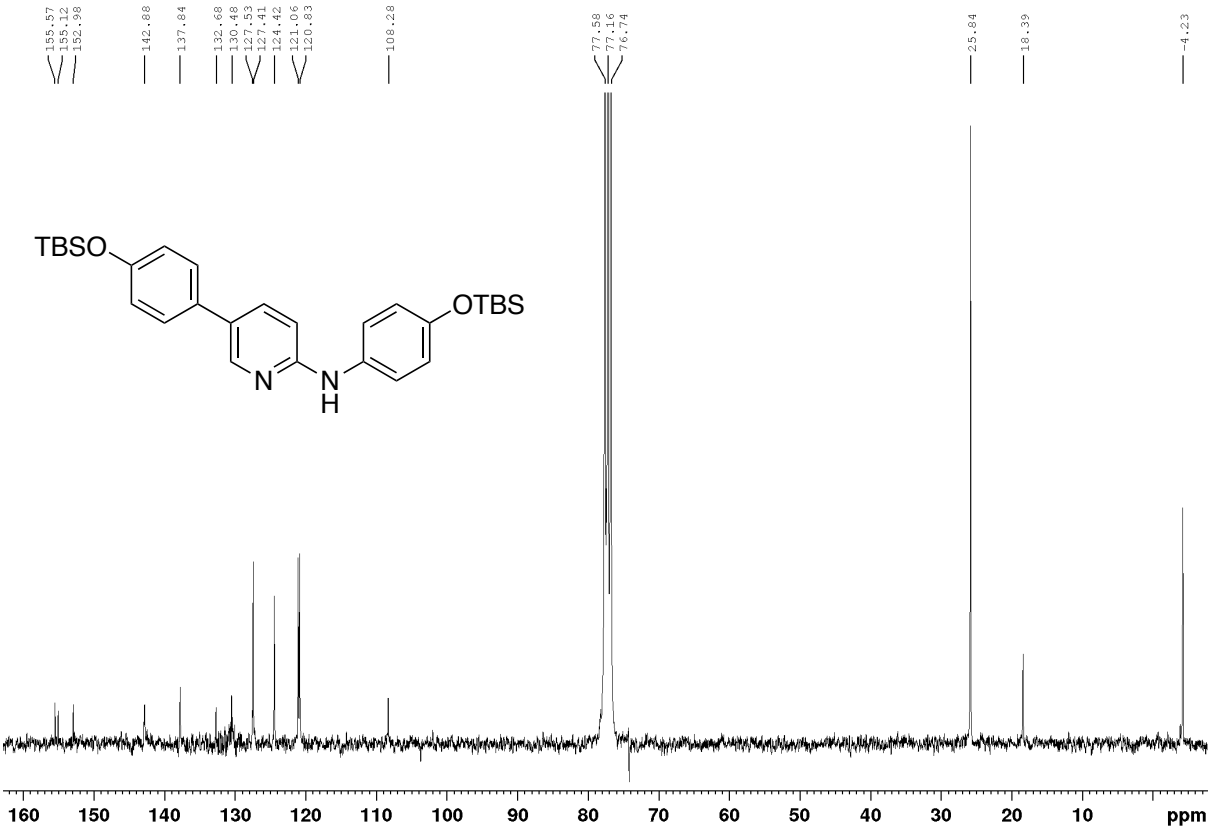


*Figure S12 ^{13}C NMR spectrum of compound **11** in $CDCl_3$ (75 MHz).*

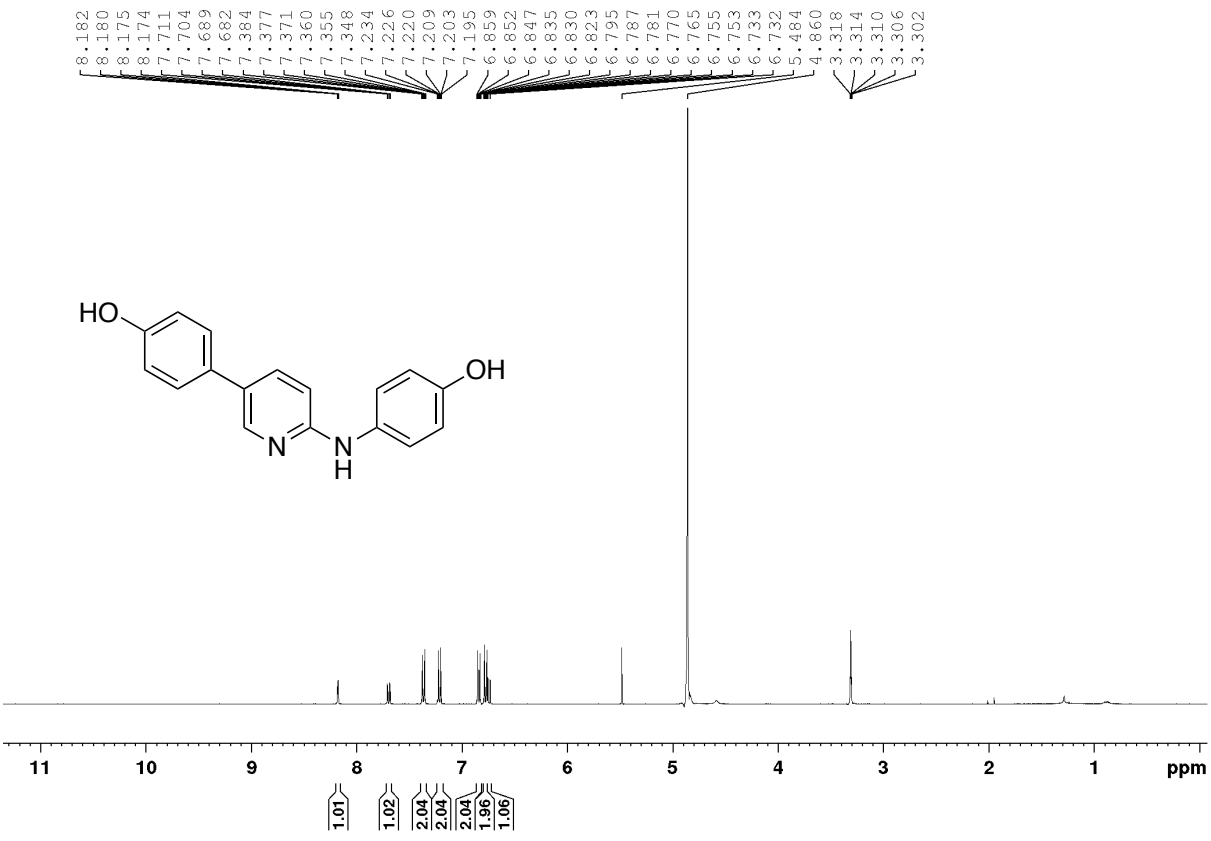
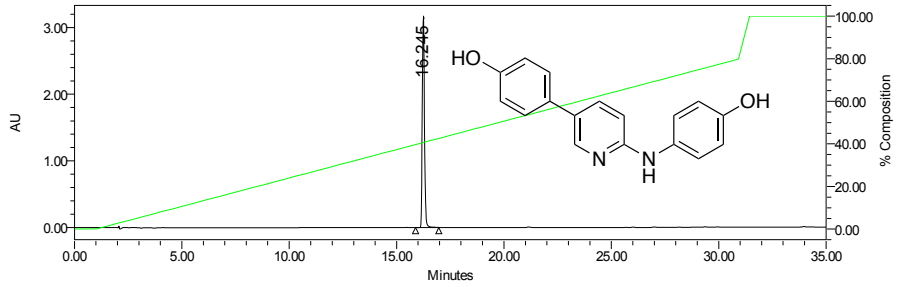


*Figure S13 ^{1}H NMR spectrum of compound **2a** in d-MeOD (400 MHz).*

*Figure S14 [13]C NMR spectrum of compound **2a** in d-MeOD (100 MHz).*



	RT	Area	% Area
1	16.245	22795731	100.00

Figure S14 HPLC chromatogram of compound **2a**.*

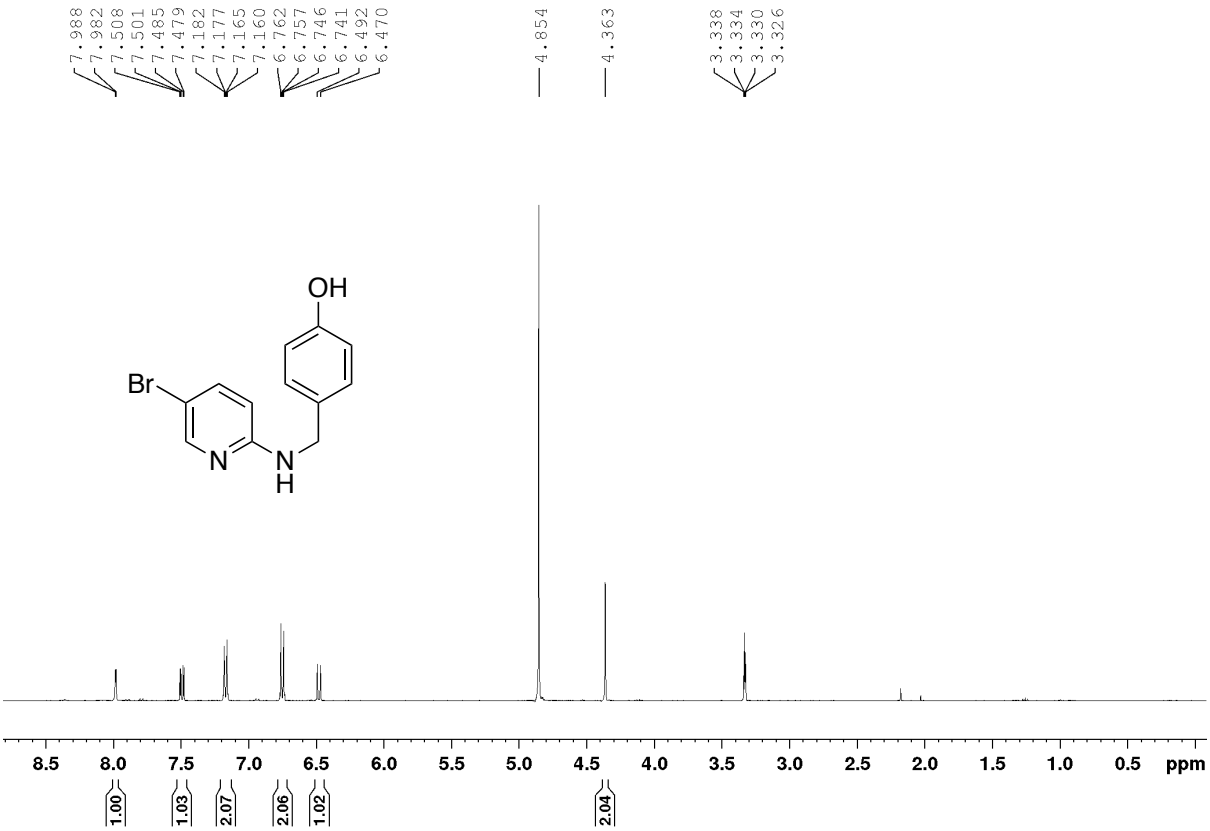


*Figure S15 [1]H NMR spectrum of compound **12** in d-MeOD (400 MHz).*

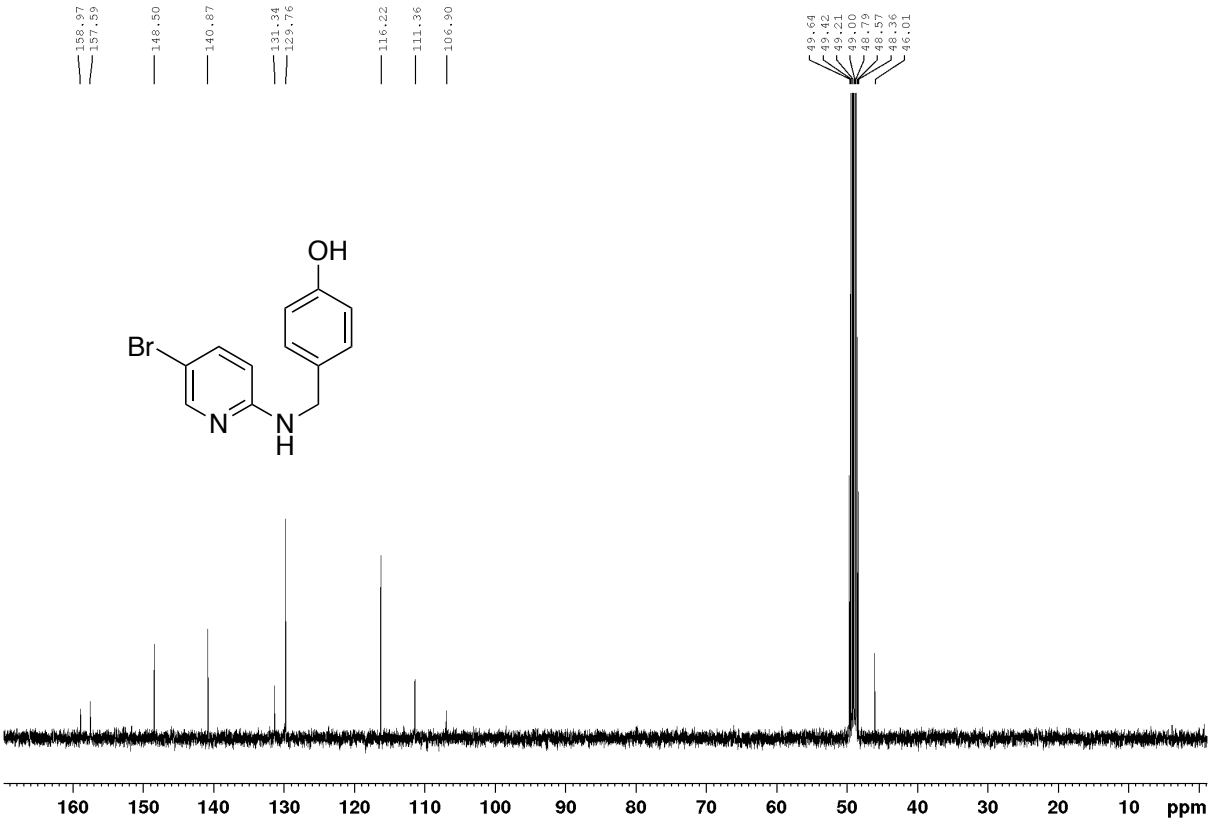


*Figure S16 [13]C NMR spectrum of compound **12** in d-MeOD (100 MHz).*

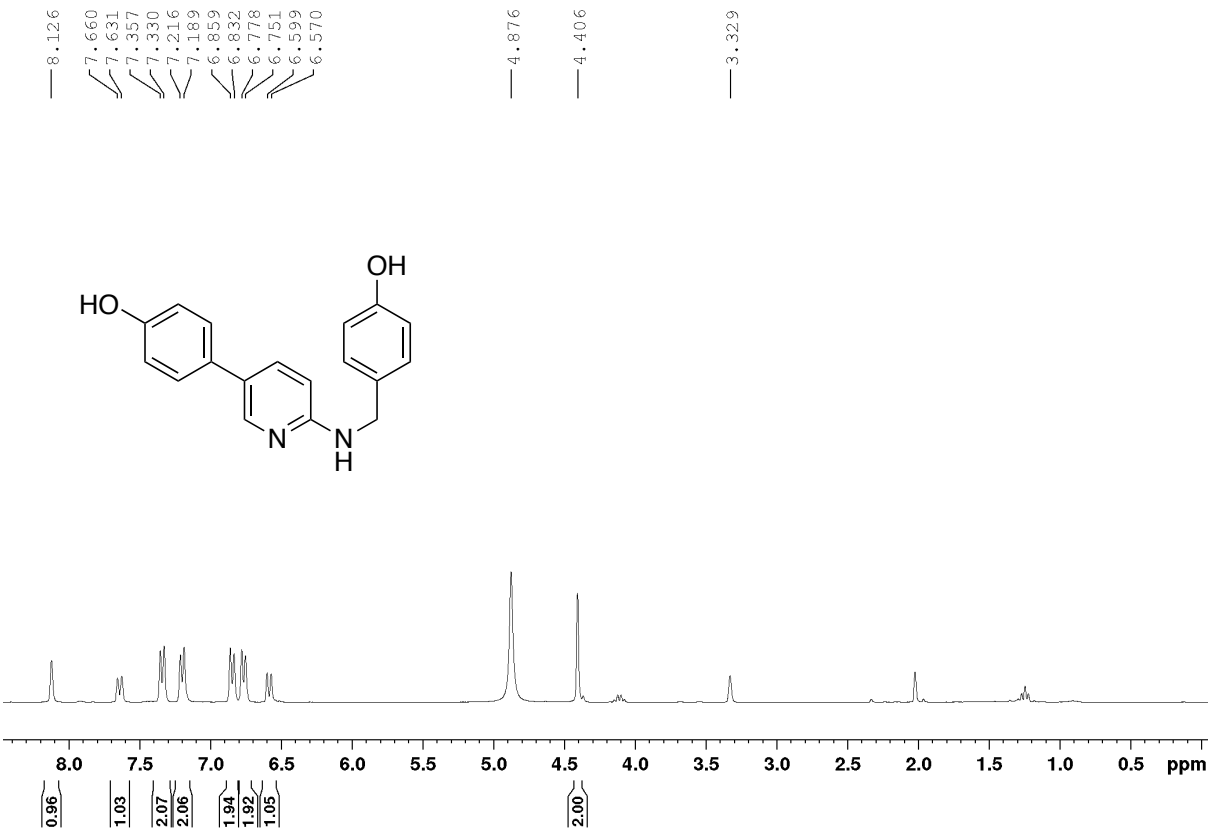


*Figure S17 [1]H NMR spectrum of compound **2b** in d-MeOD (300 MHz).*

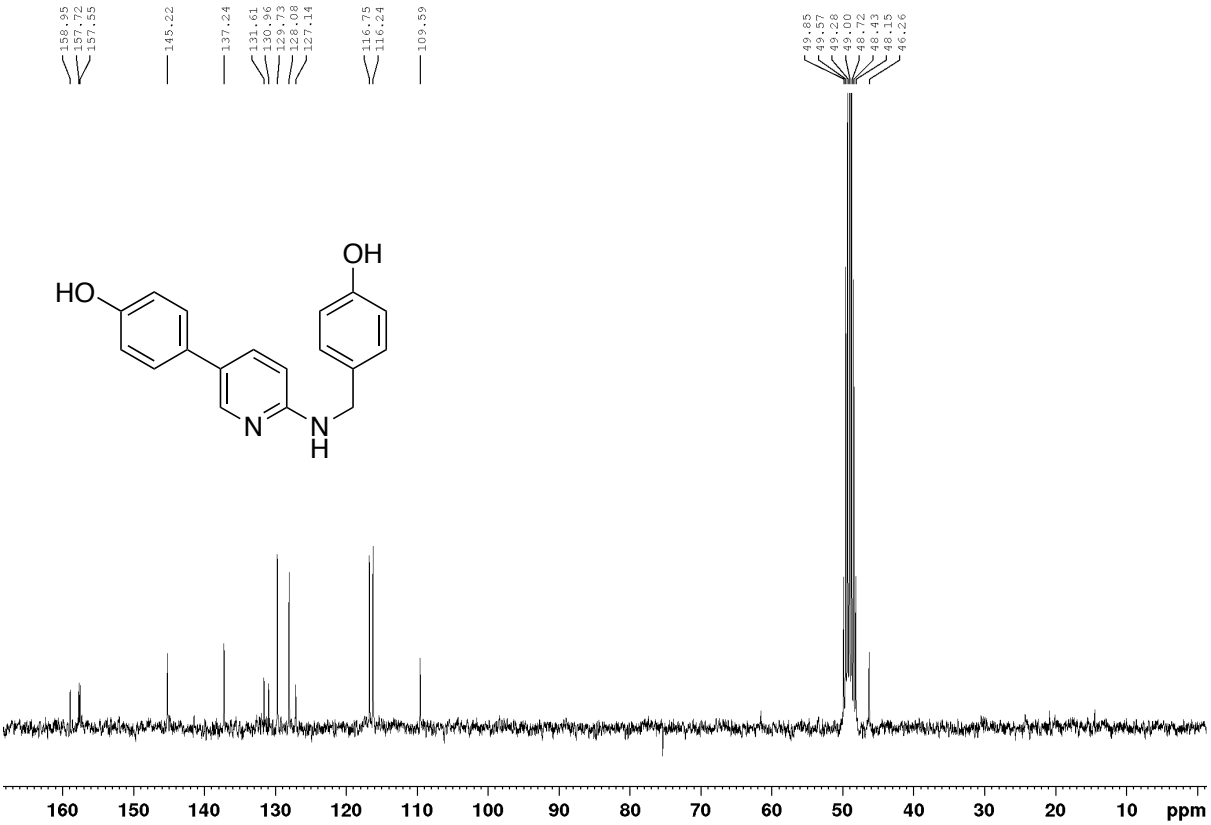
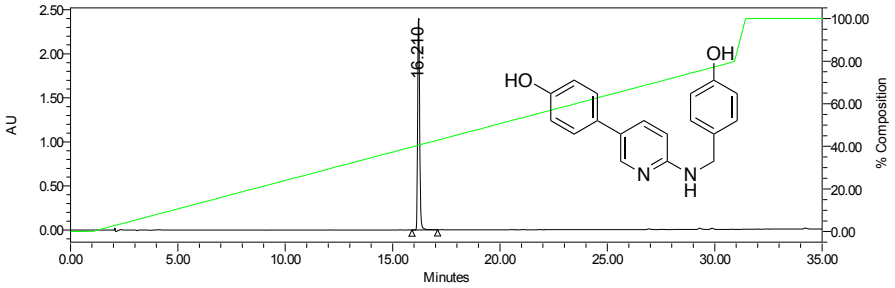


*Figure S18 [13]C NMR spectrum of compound **2b** in d-MeOD (75 MHz).*



	RT	Area	% Area
1	16.210	15564916	100.00

Figure S18 HPLC chromatogram of compound* ***2b****.*

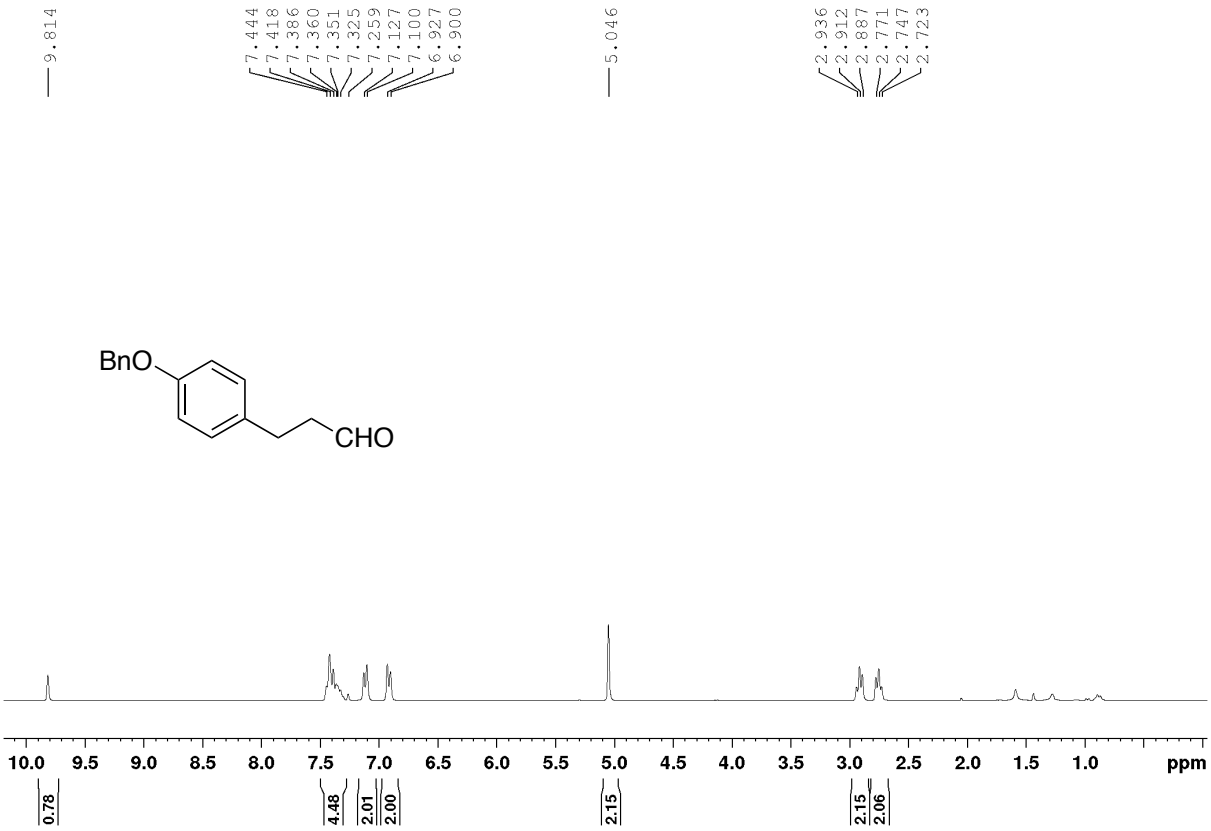


Figure S19 [1]H NMR spectrum of compound ***13*** *in* $CDCl_3$ *(300 MHz).*

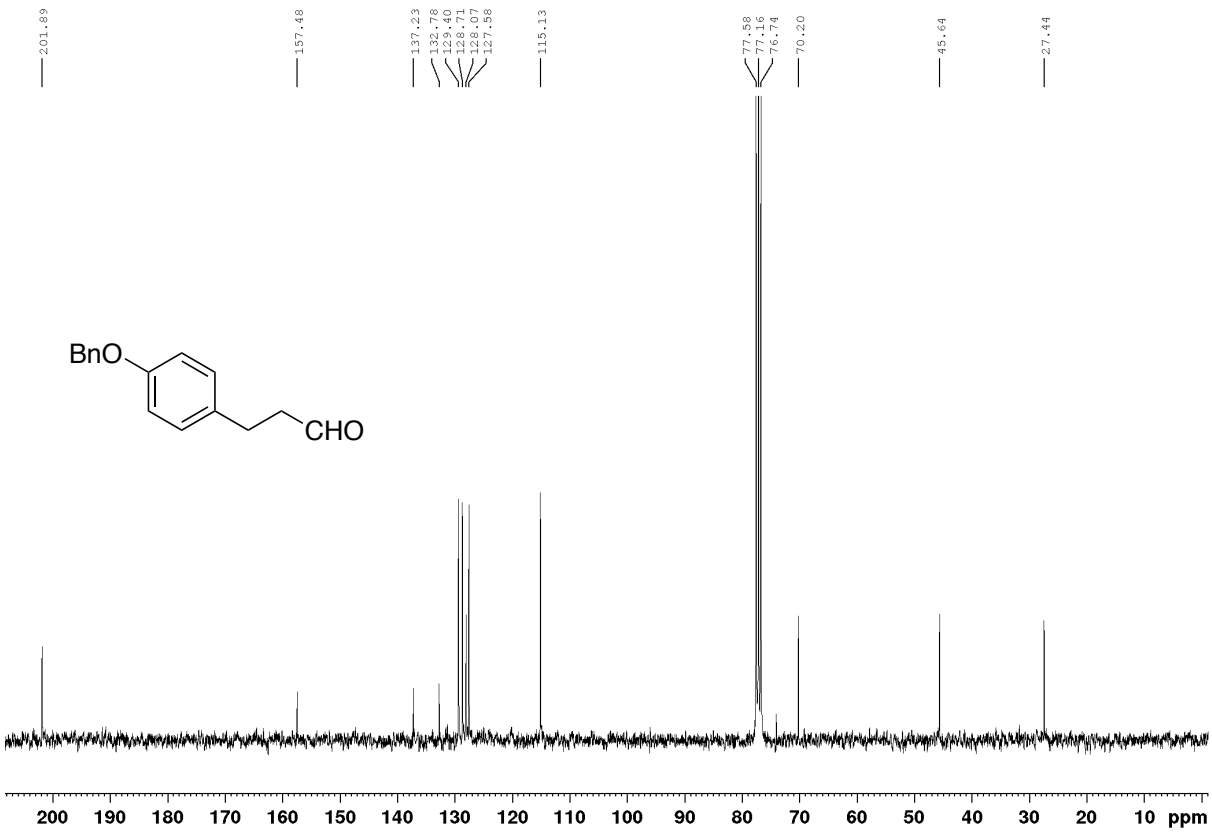


*Figure S20 [13]C NMR spectrum of compound **13** in $CDCl_3$ (75 MHz).*

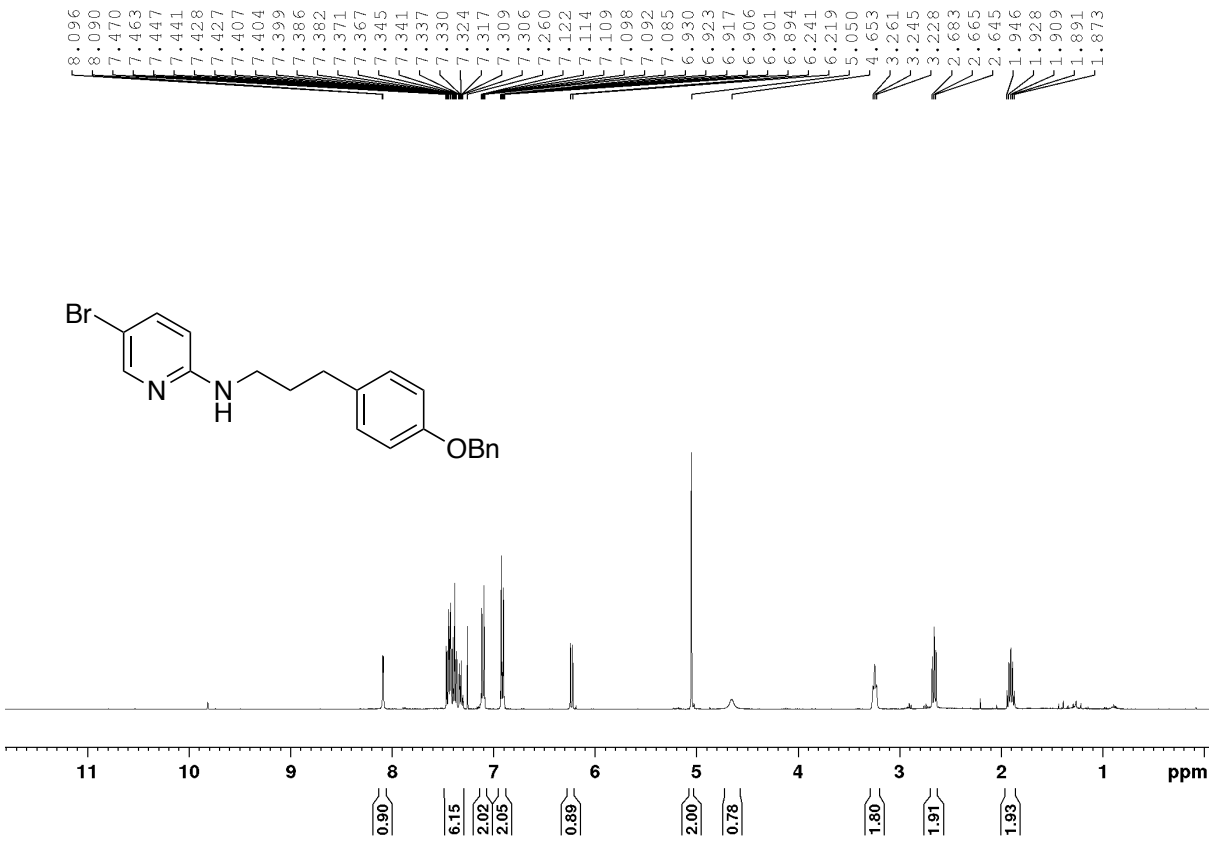


*Figure S21 [1]H NMR spectrum of compound **14** in $CDCl_3$ (400 MHz).*

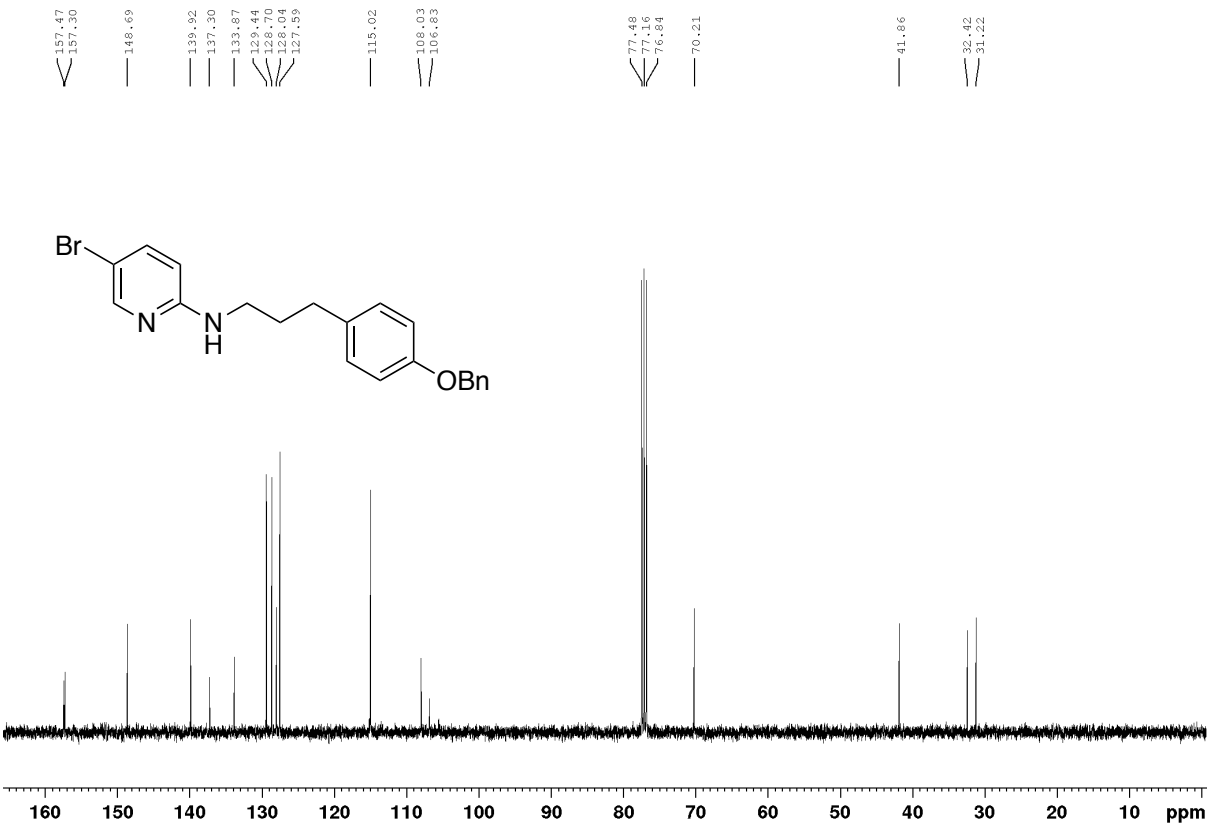


*Figure S22 ^{13}C NMR spectrum of compound **14** in $CDCl_3$ (100 MHz).*

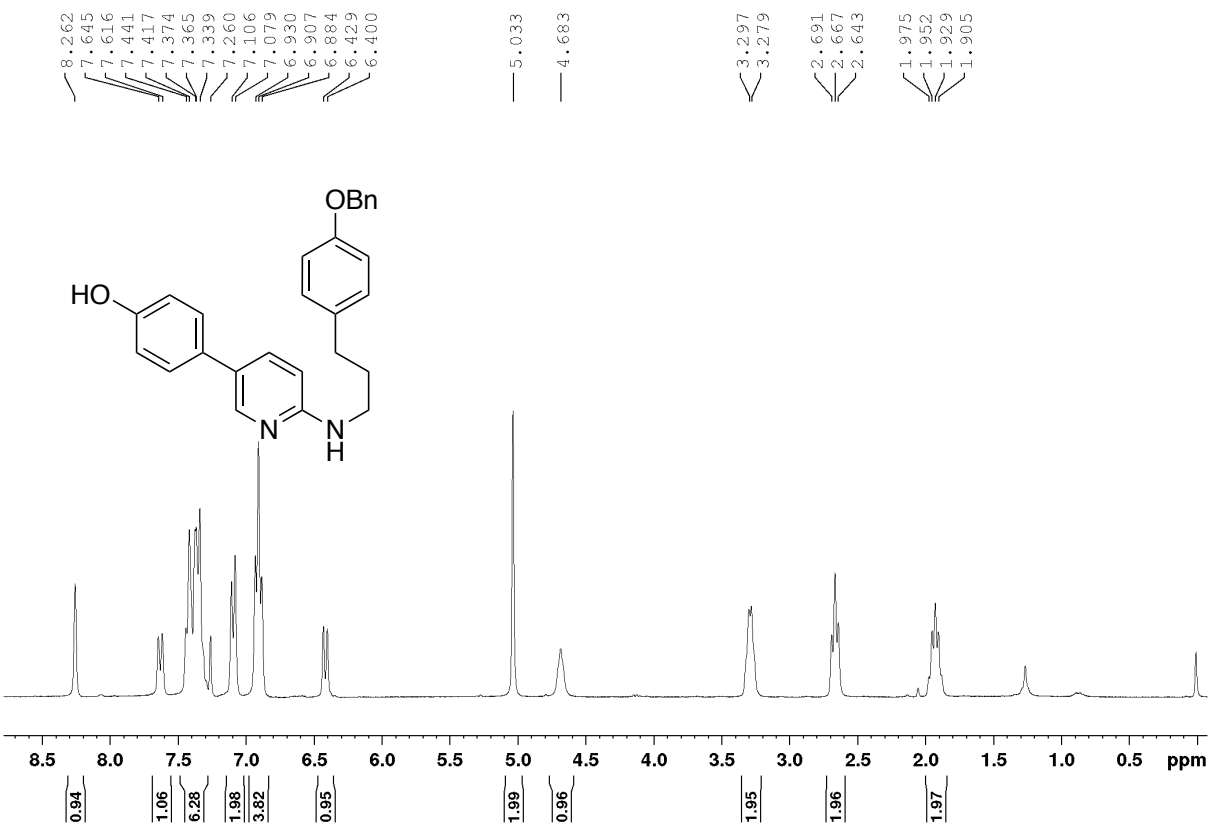


*Figure S23 ^{1}H NMR spectrum of compound **15** in $CDCl_3$ (300 MHz).*

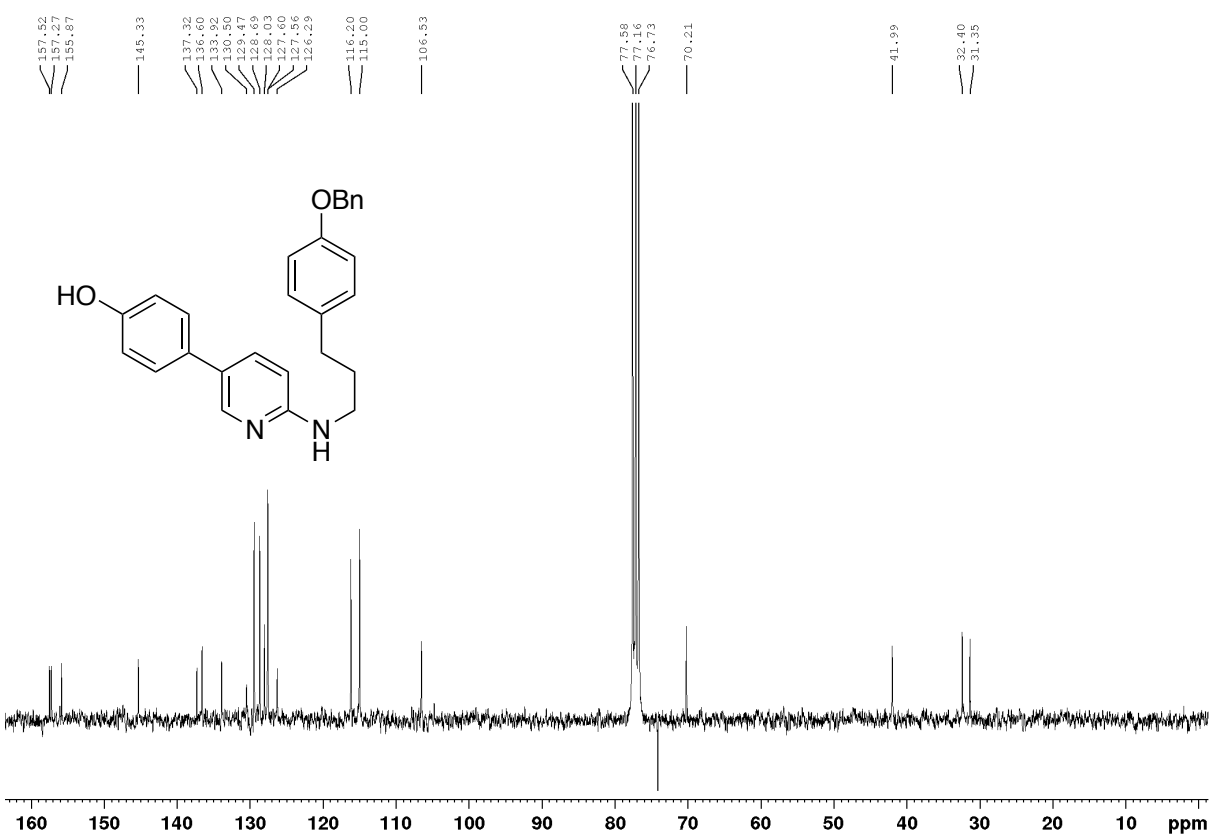


*Figure S24 [13]C NMR spectrum of compound **15** in $CDCl_3$ (75 MHz).*

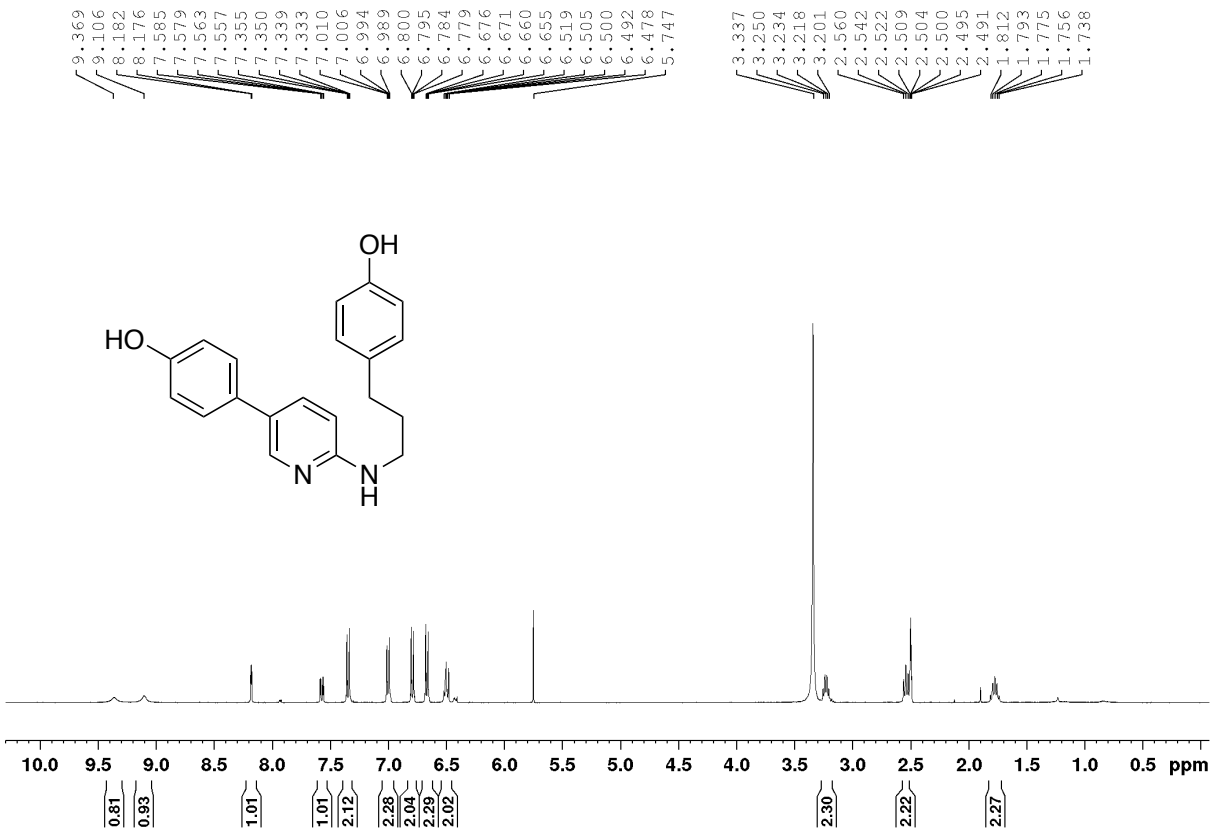


*Figure S25 [1]H NMR spectrum of compound **2d** in d-DMSO (400 MHz).*

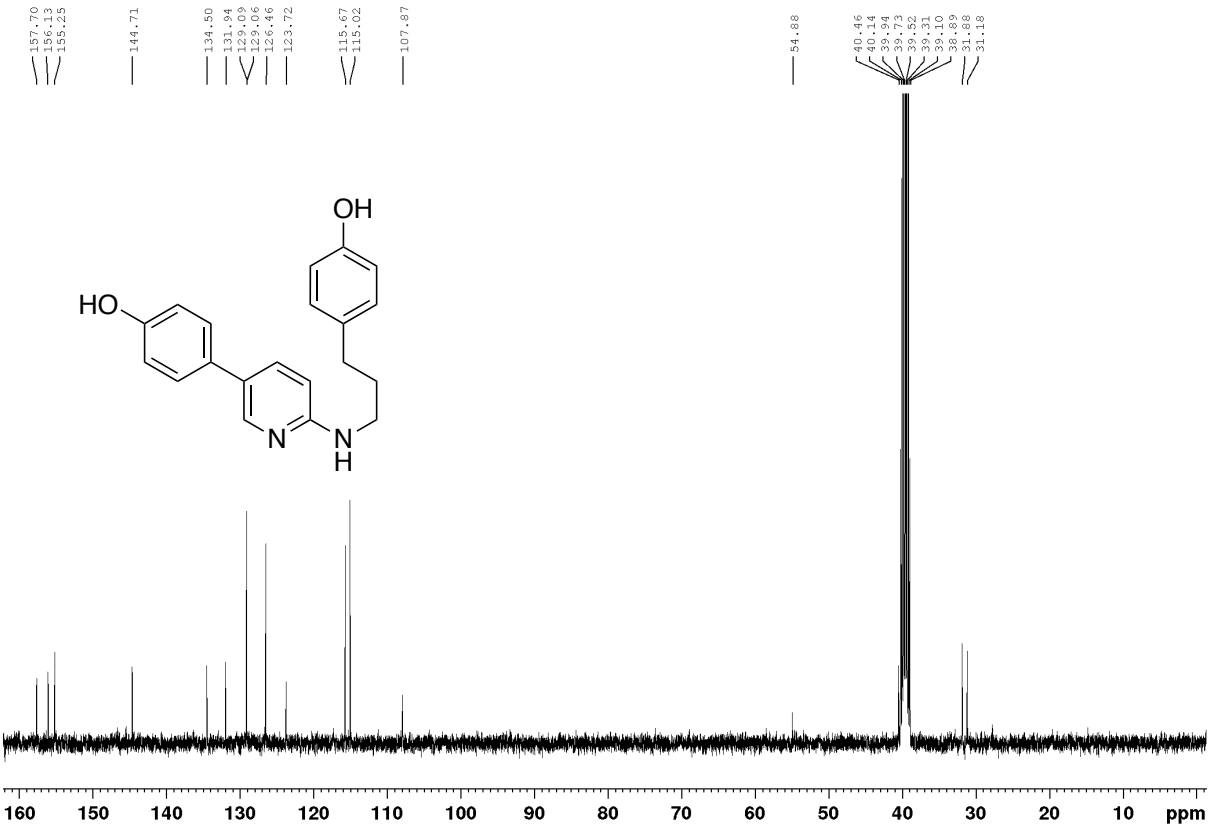
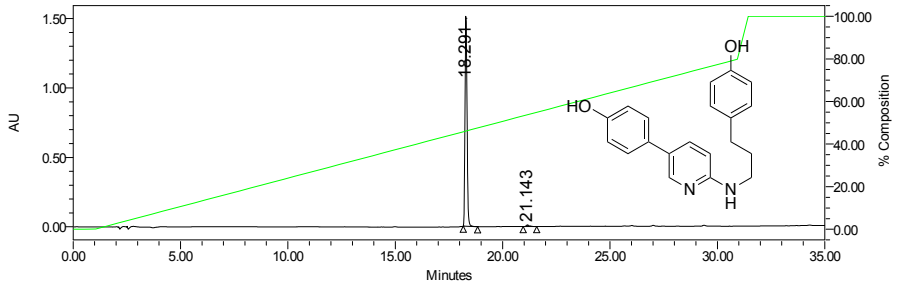


*Figure S26 [13]C NMR spectrum of compound **2d** in d-DMSO (100 MHz).*



	RT	Area	% Area
1	18.291	9871019	98.99
2	21.143	100604	1.01

Figure S26 HPLC chromatogram of compound **2d**.*

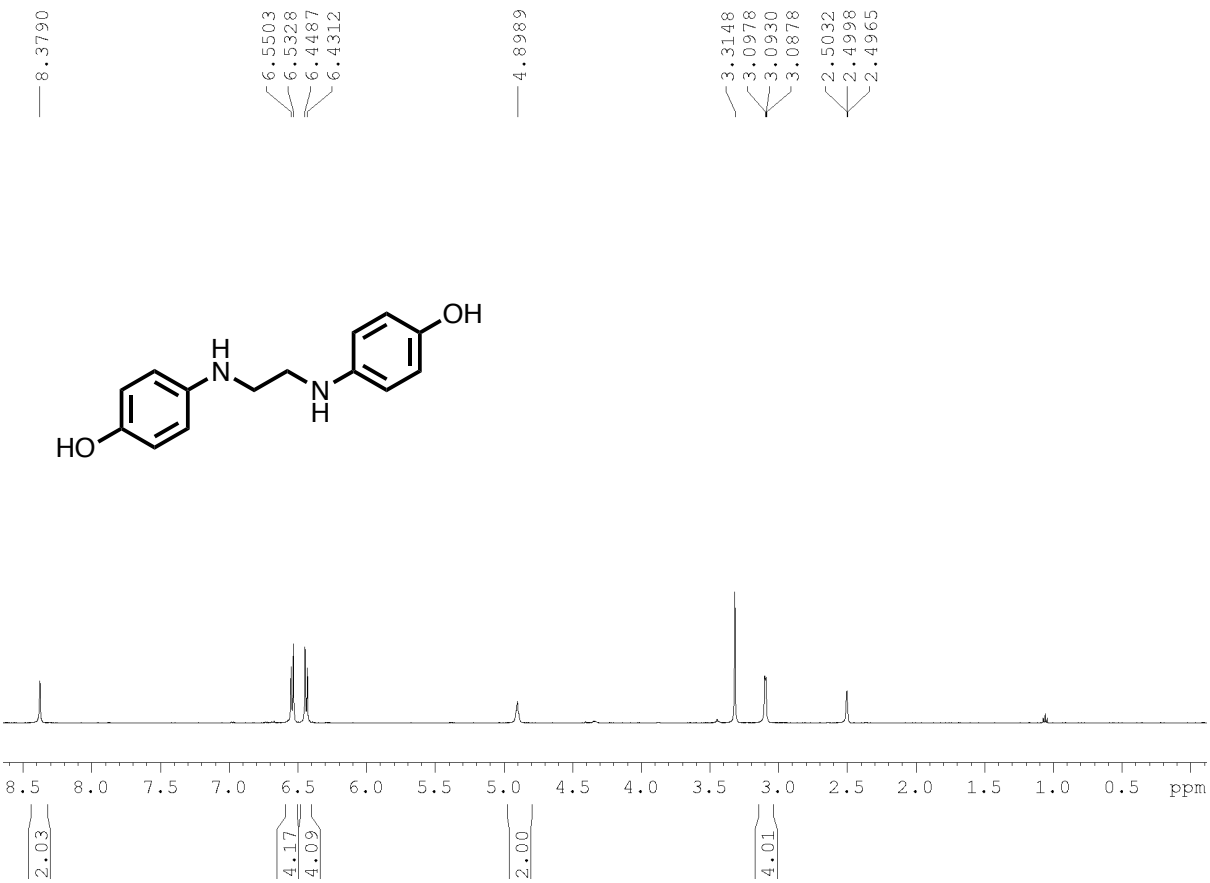


*Figure S27 [1]H NMR spectrum of compound **3a** in d-DMSO (500 MHz).*

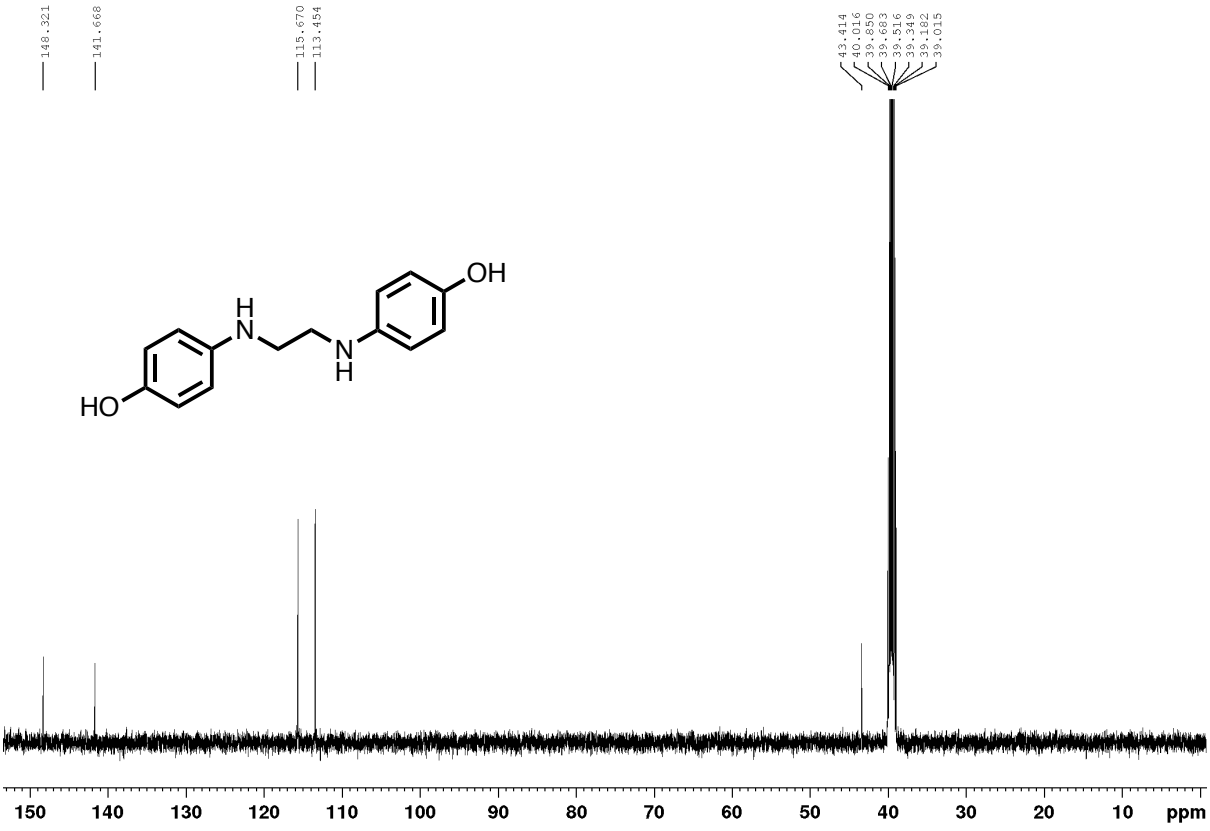
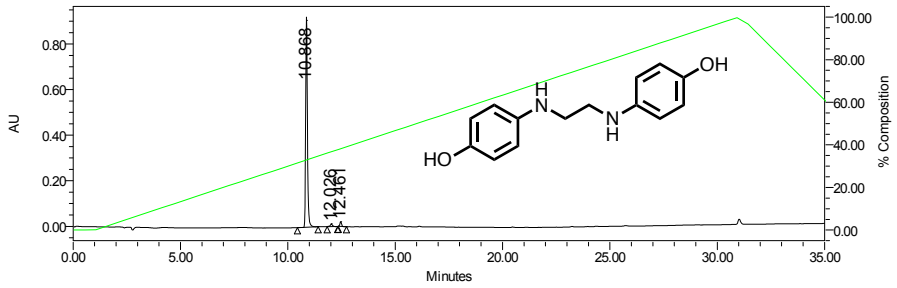


*Figure S28 [13]C NMR spectrum of compound **3a** in d-DMSO (125 MHz).*



Peak information

	RT	Area	% Area
1	10.868	5313505	96.47
2	12.026	82062	1.49
3	12.461	112191	2.04

Figure S28 HPLC chromatogram of compound **3a**.*

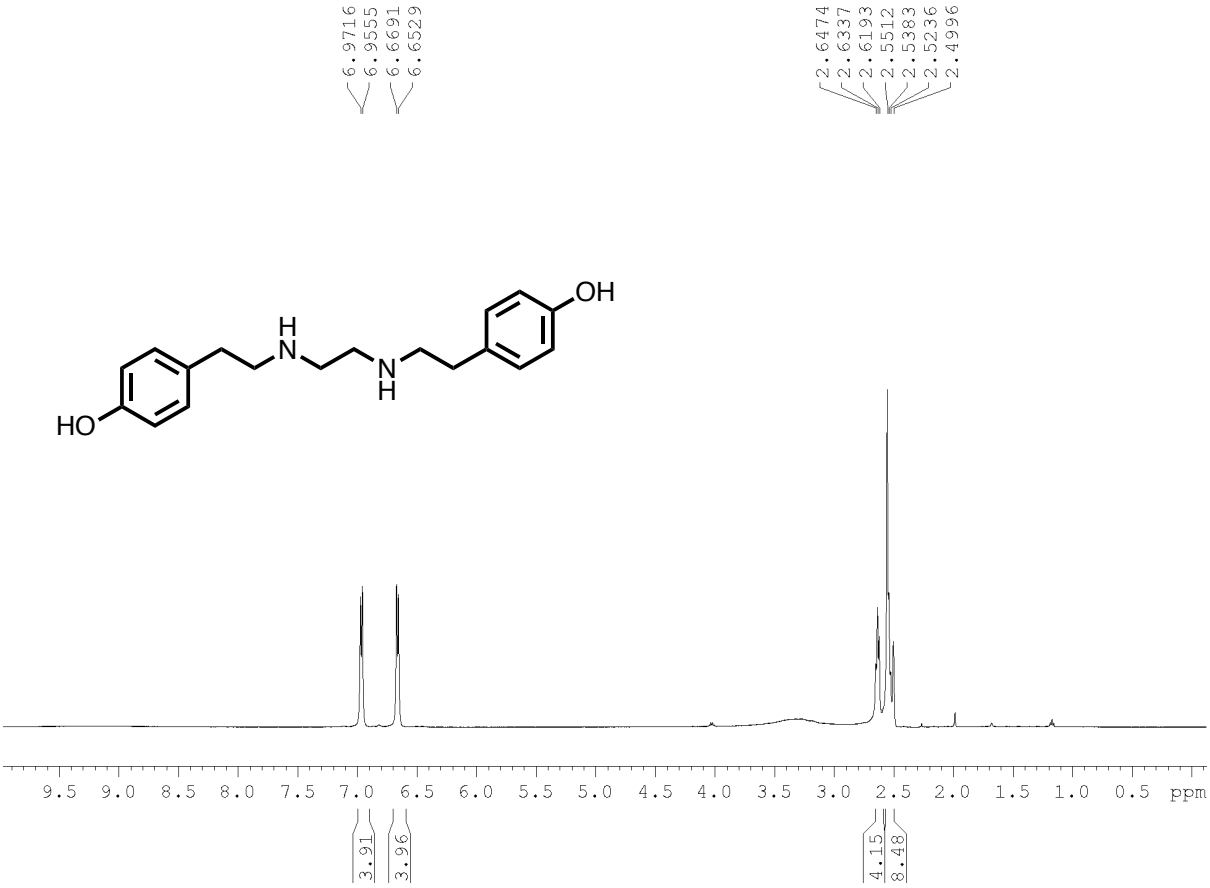


*Figure S29 [1]H NMR spectrum of compound **3c** in d-DMSO (500 MHz).*

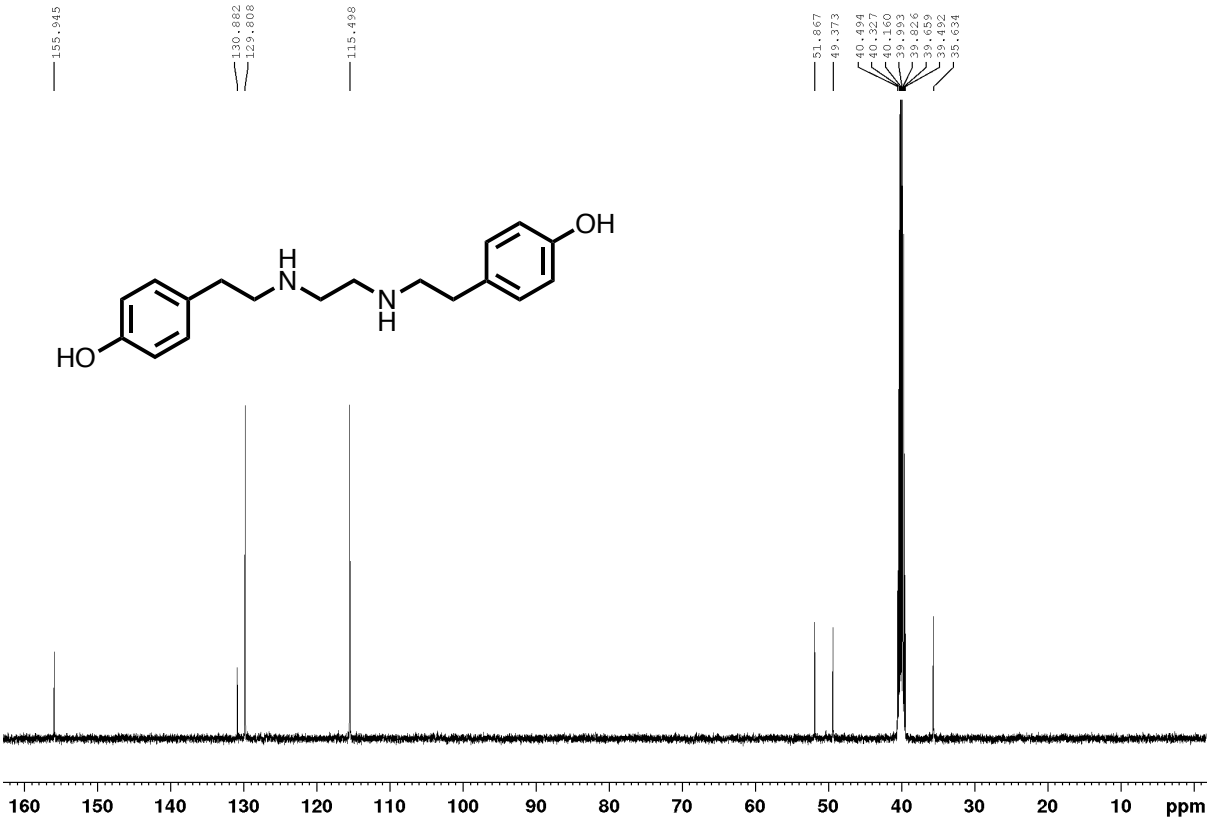
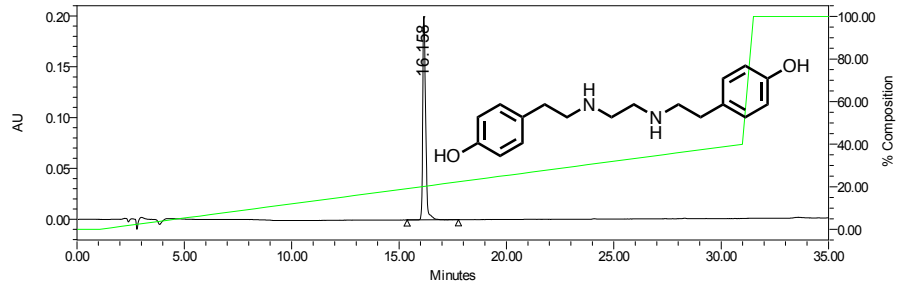


*Figure S30 [13]C NMR spectrum of compound **3c** in d-DMSO (125 MHz).*



Peak information

	RT	Area	% Area
1	16.158	1886865	100.00

Figure S30 HPLC chromatogram of compound **3c**.*

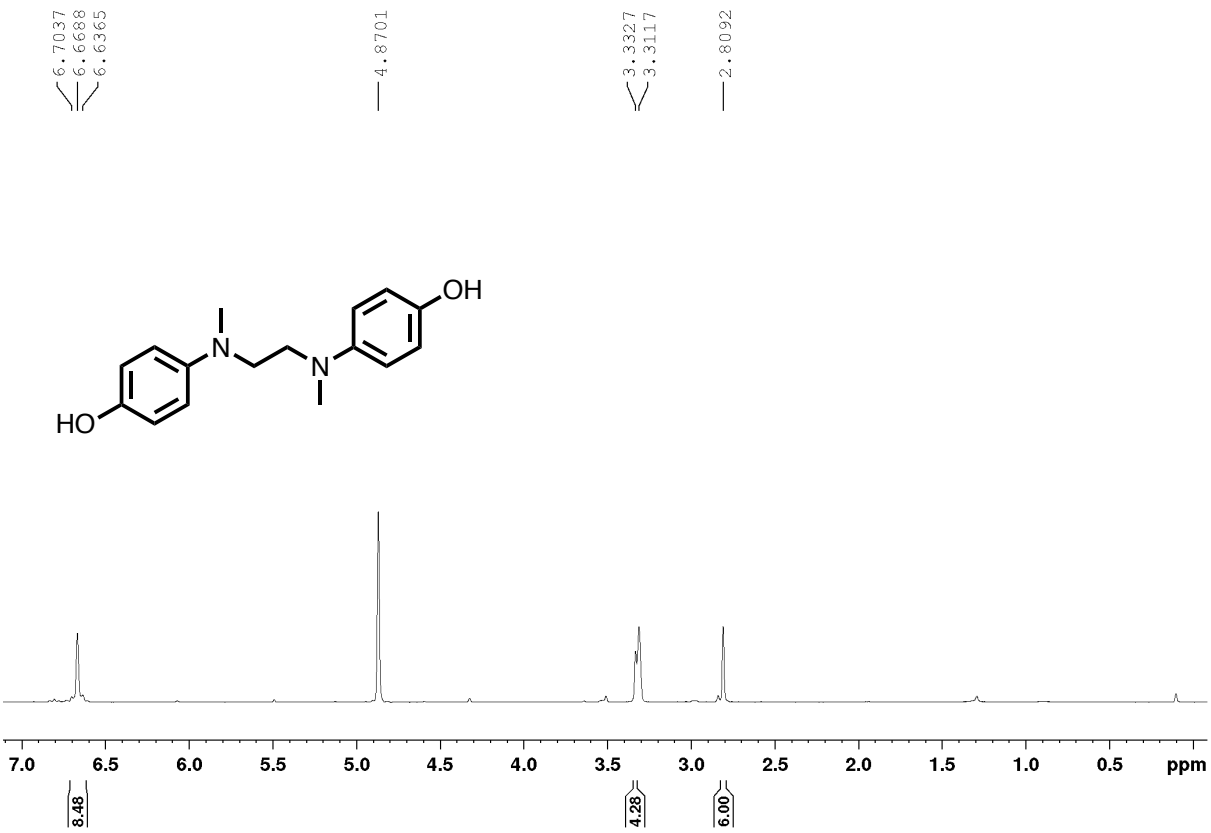


*Figure S31 [1]H NMR spectrum of compound **4a** in d-MeOD (400 MHz).*

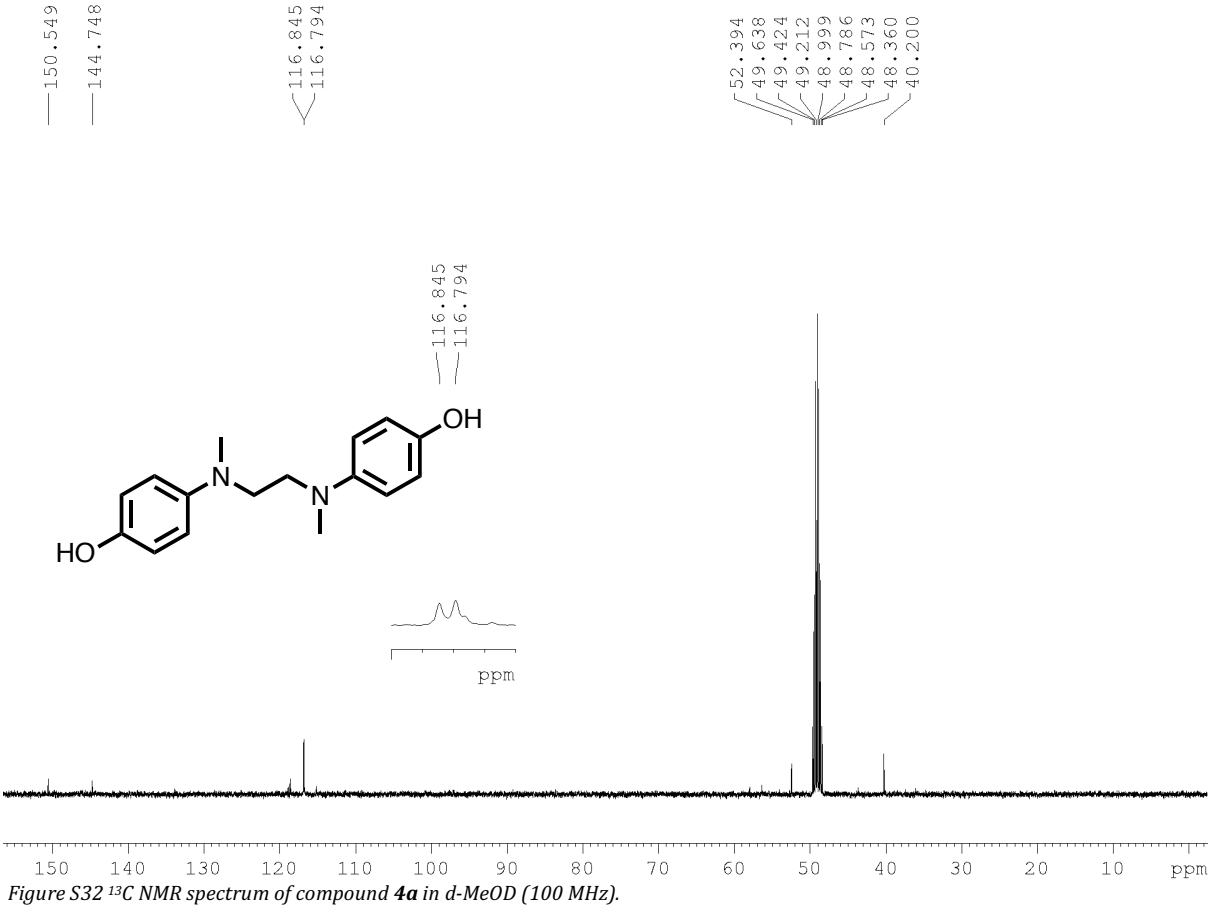
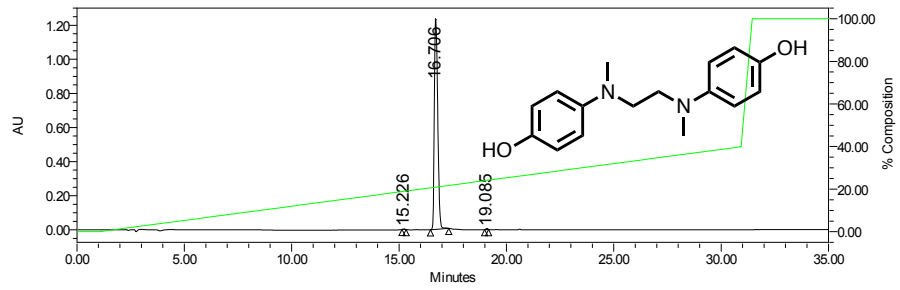


*Figure S32 [13]C NMR spectrum of compound **4a** in d-MeOD (100 MHz).*



Peak information

	RT	Area	% Area
1	15.226	13360	0.10
2	16.706	13590867	99.67
3	19.085	31497	0.23

Figure S32 HPLC chromatogram of compound **4a**.*

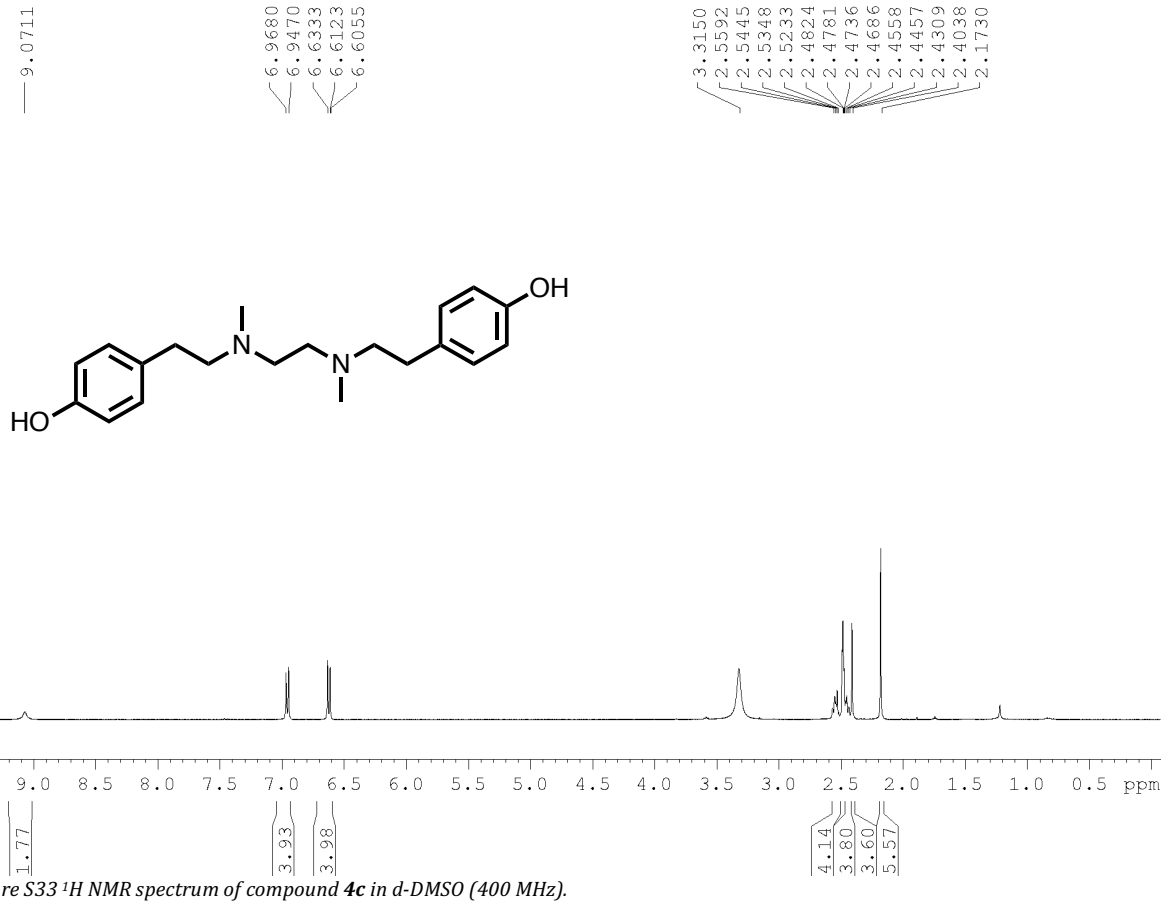


*Figure S33 [1]H NMR spectrum of compound **4c** in d-DMSO (400 MHz).*

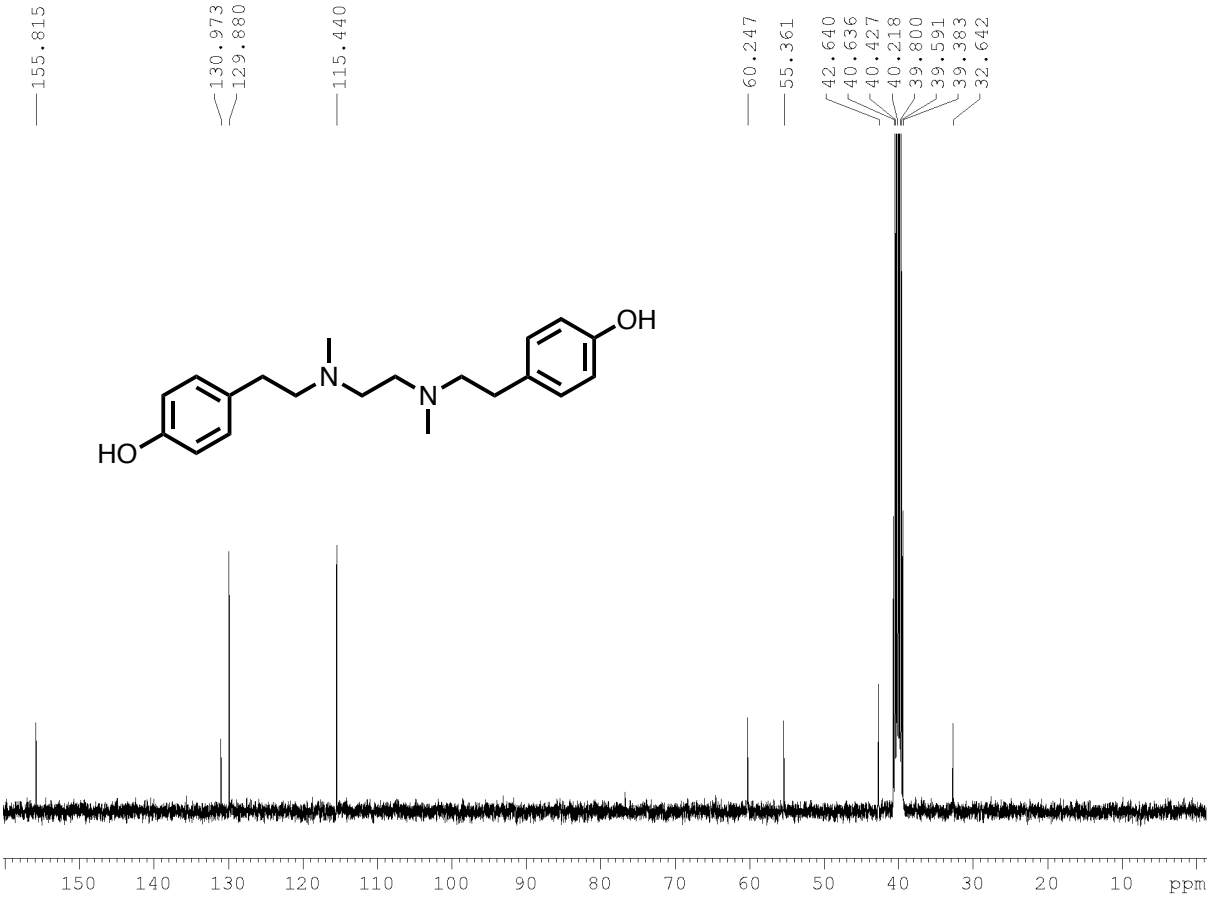
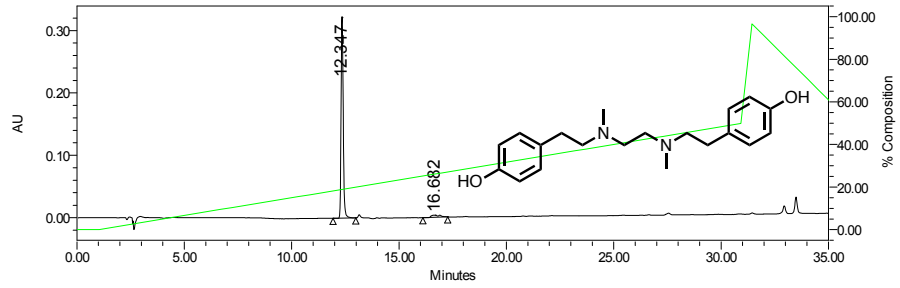


*Figure S34 [13]C NMR spectrum of compound **4c** in d-DMSO (100 MHz).*



Peak information

	RT	Area	% Area
1	12.347	2252913	95.69
2	16.682	101566	4.31

Figure S34 HPLC chromatogram of compound **4c**.*

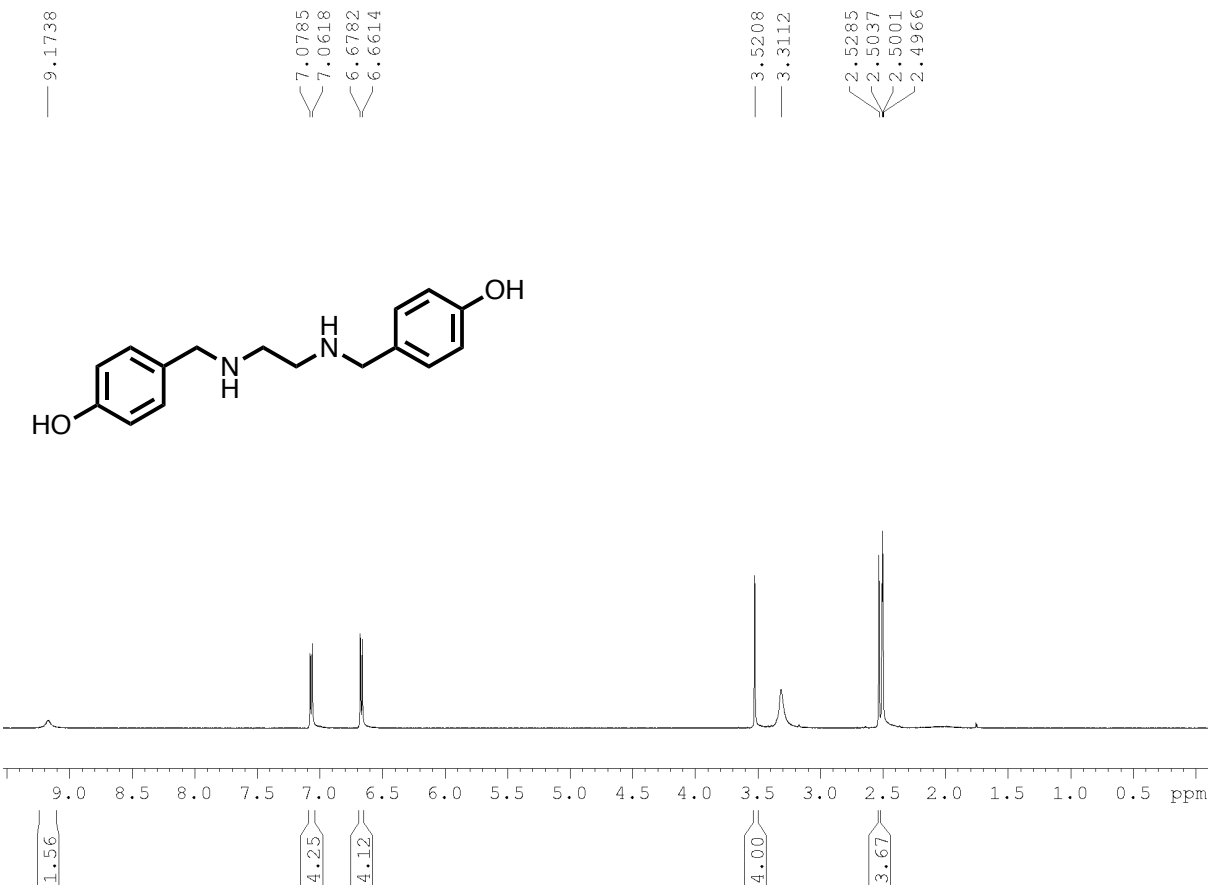


*Figure S35 [1]H NMR spectrum of compound **3b** in d-DMSO (500 MHz).*

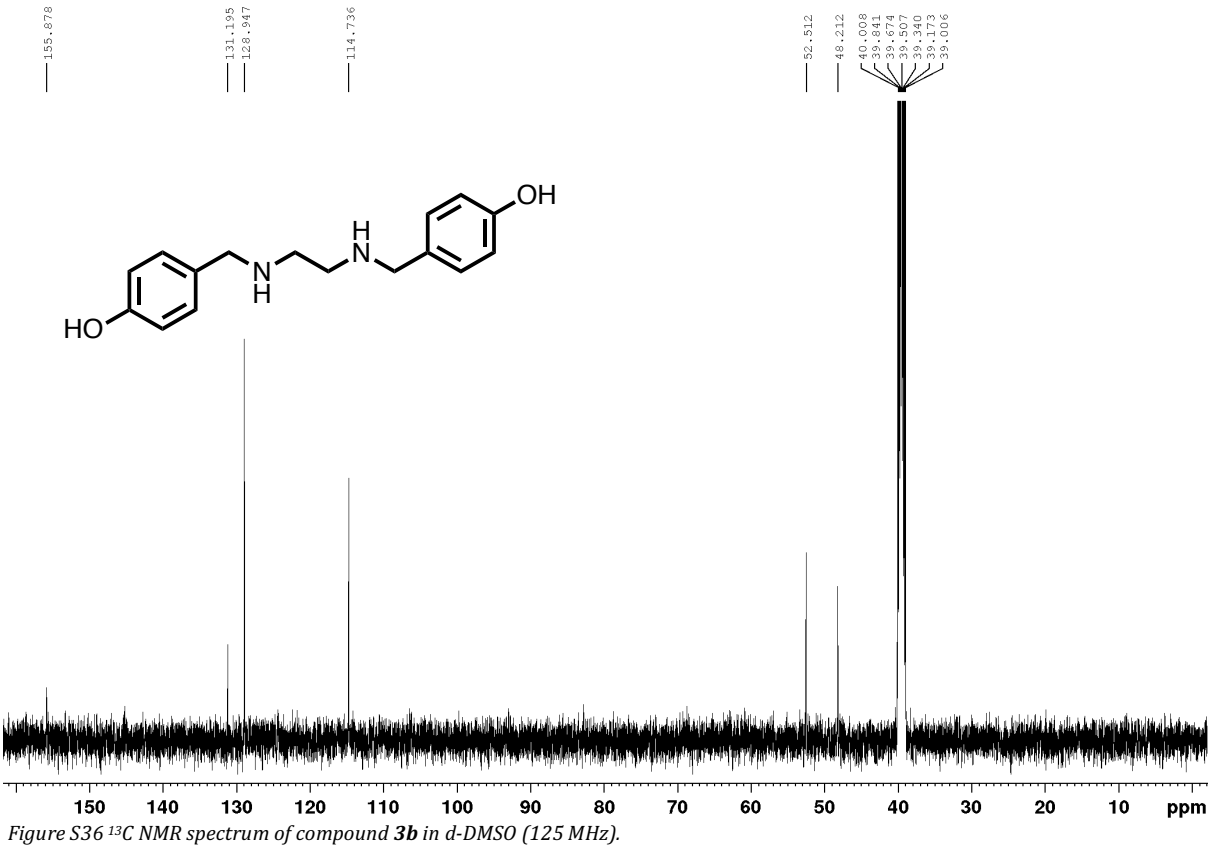
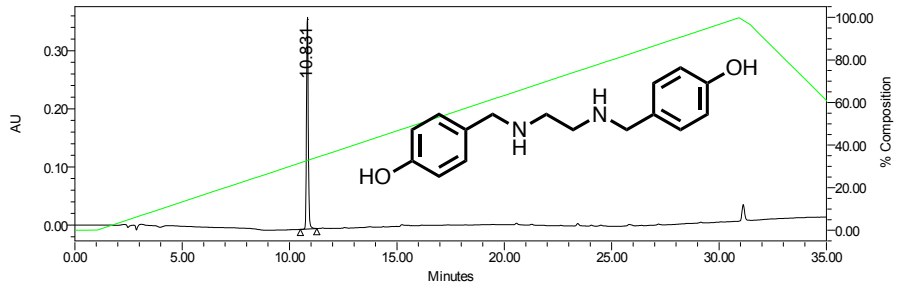


*Figure S36 [13]C NMR spectrum of compound **3b** in d-DMSO (125 MHz).*



Peak information

	RT	Area	% Area
1	10.831	2064069	100.00

Figure S36 HPLC chromatogram of compound **3b**.*

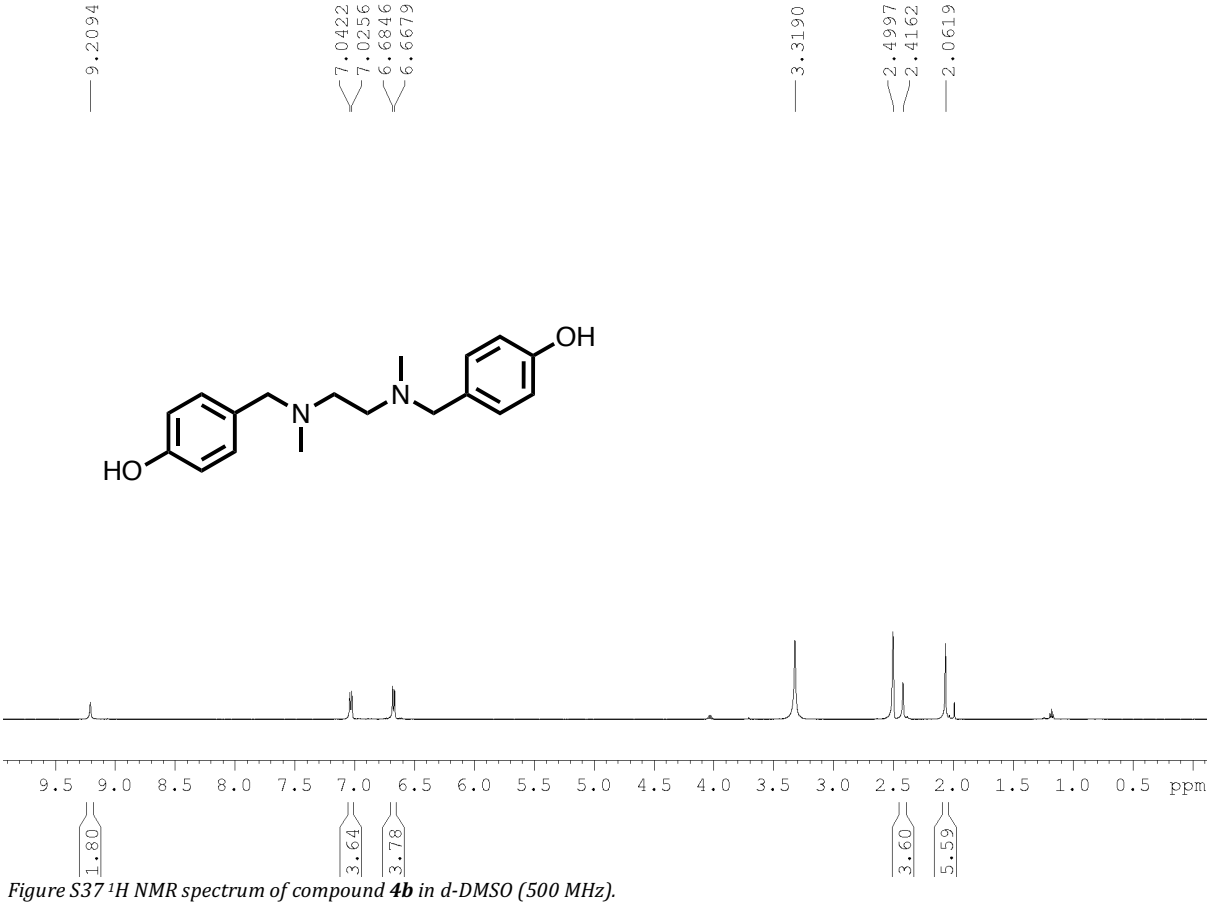


*Figure S37 ^{1}H NMR spectrum of compound **4b** in d-DMSO (500 MHz).*

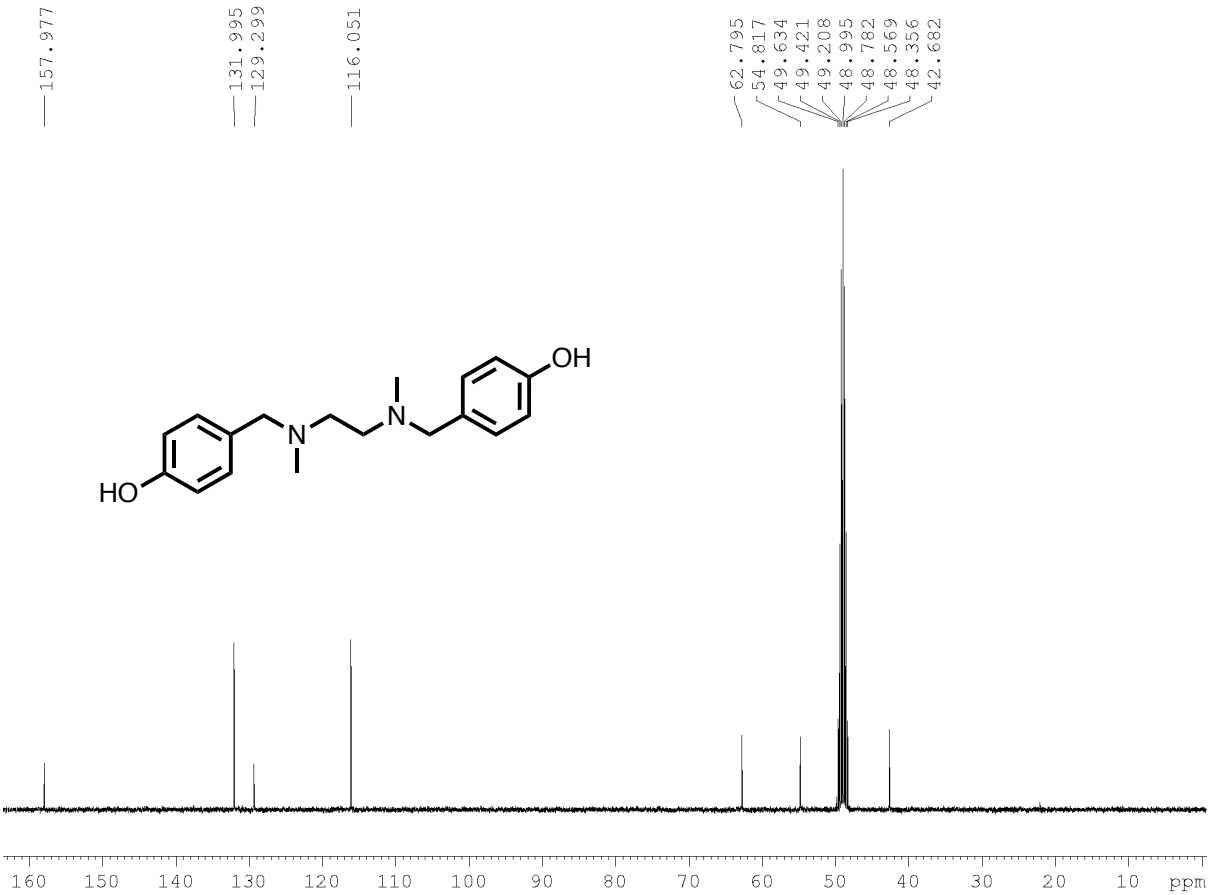
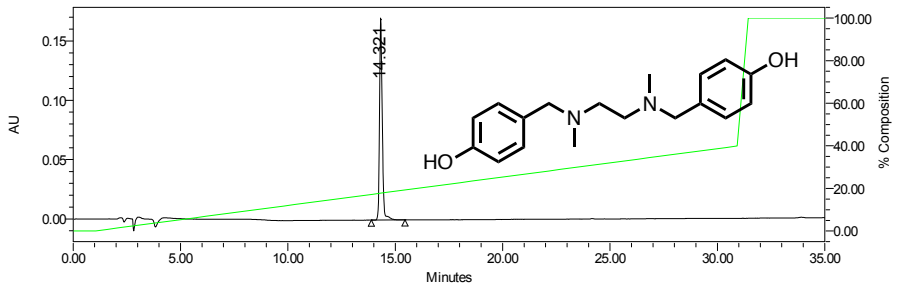


*Figure S38 [13]C NMR spectrum of compound **4b** in d-MeOD (100 MHz).*



Peak information

	RT	Area	% Area
1	14.321	1521524	100.00

Figure S38 HPLC chromatogram of compound **4b**.*