

Supplementary data for article:

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## SUPPORTING INFORMATION – II

# Second generation of diazachrysenes: protection of Ebola virus infected mice and mechanism of action

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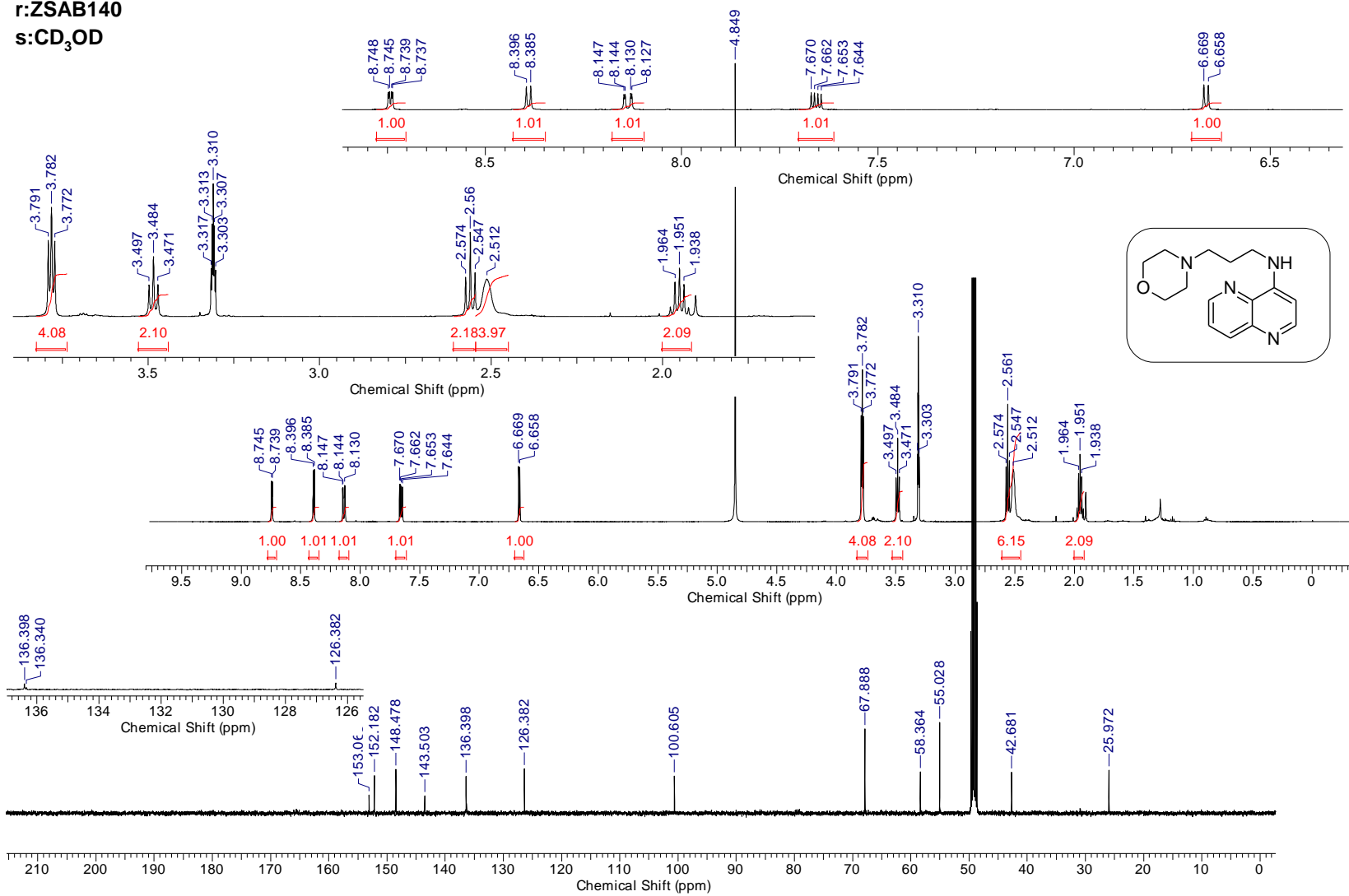
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<b>NMR spectra of tested compounds</b>	<b>II-S3</b>
<b>Analysis for purity, HPLC</b>	<b>II-S31</b>

# NMR spectra

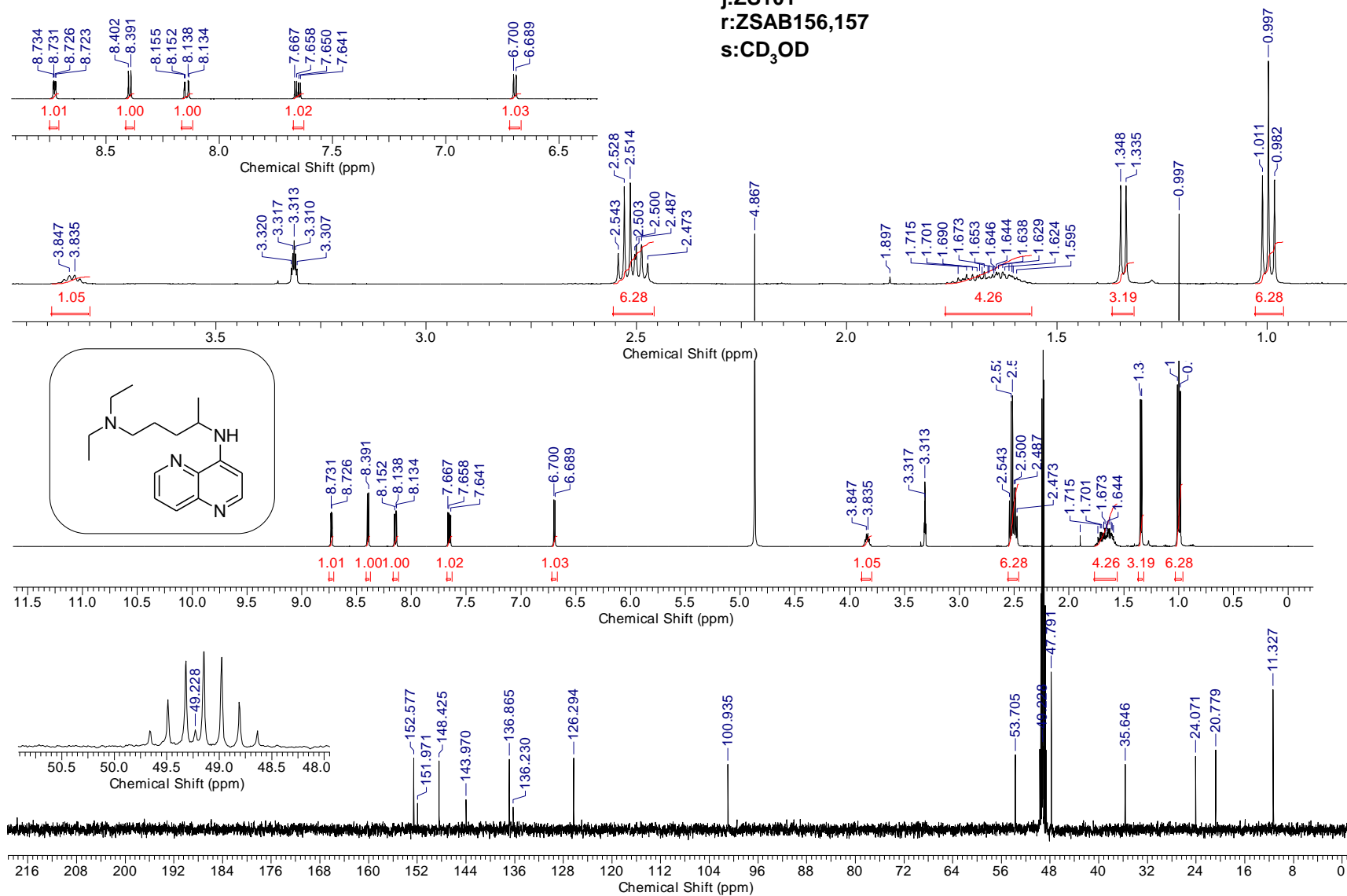
## *N*-(3-Morpholin-4-ylpropyl)-1,5-naphthyridin-4-amine 8 (ZS100).

j:ZS100  
r:ZSAB140  
s:CD<sub>3</sub>OD



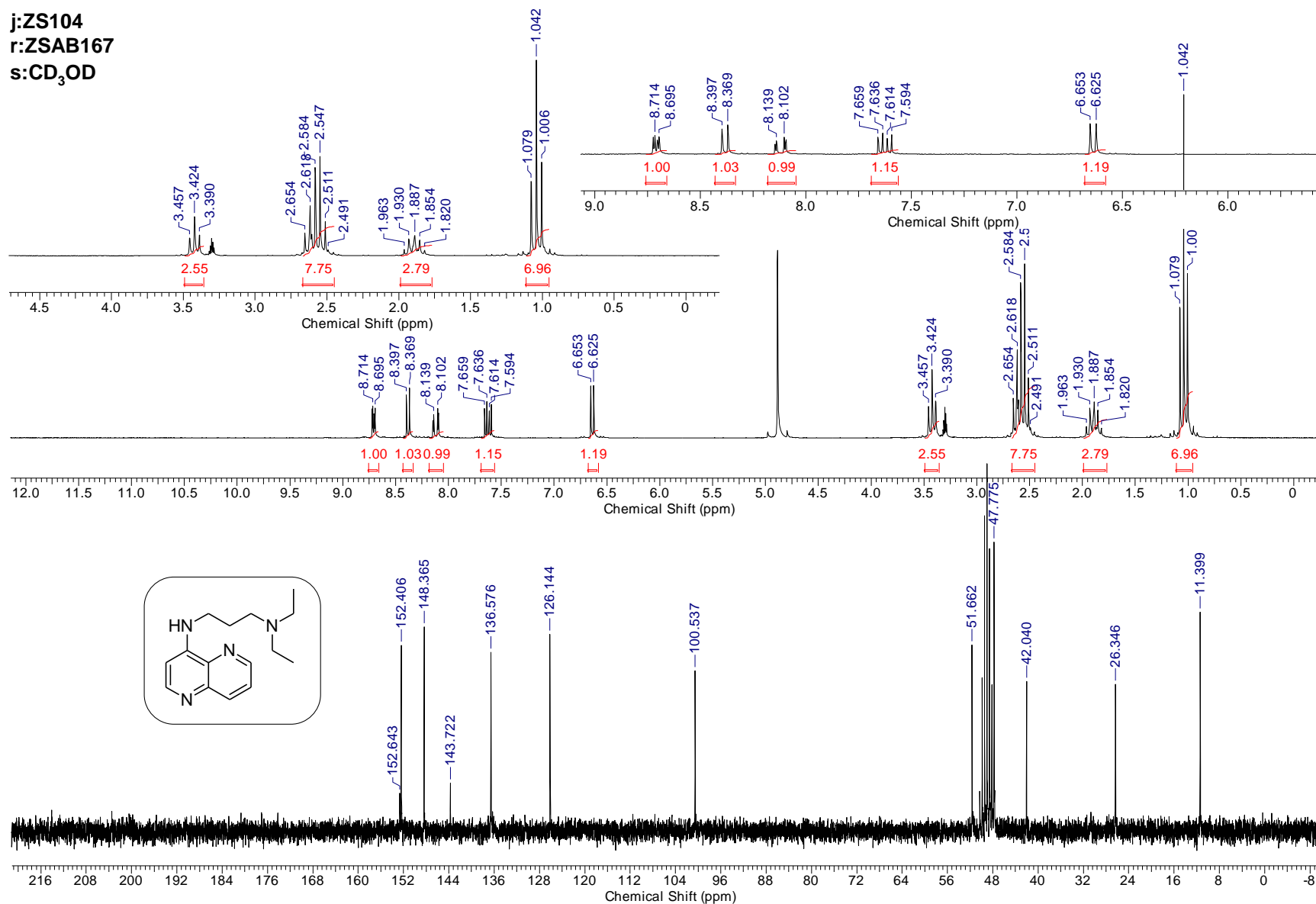
***N*<sup>1</sup>,*N*<sup>1</sup>-Diethyl-*N*<sup>4</sup>-1,5-naphthyridin-4-ylpentane-1,4-diamine 5 (ZS101).**

**j:ZS101**  
**r:ZSAB156,157**  
**s:CD<sub>3</sub>OD**

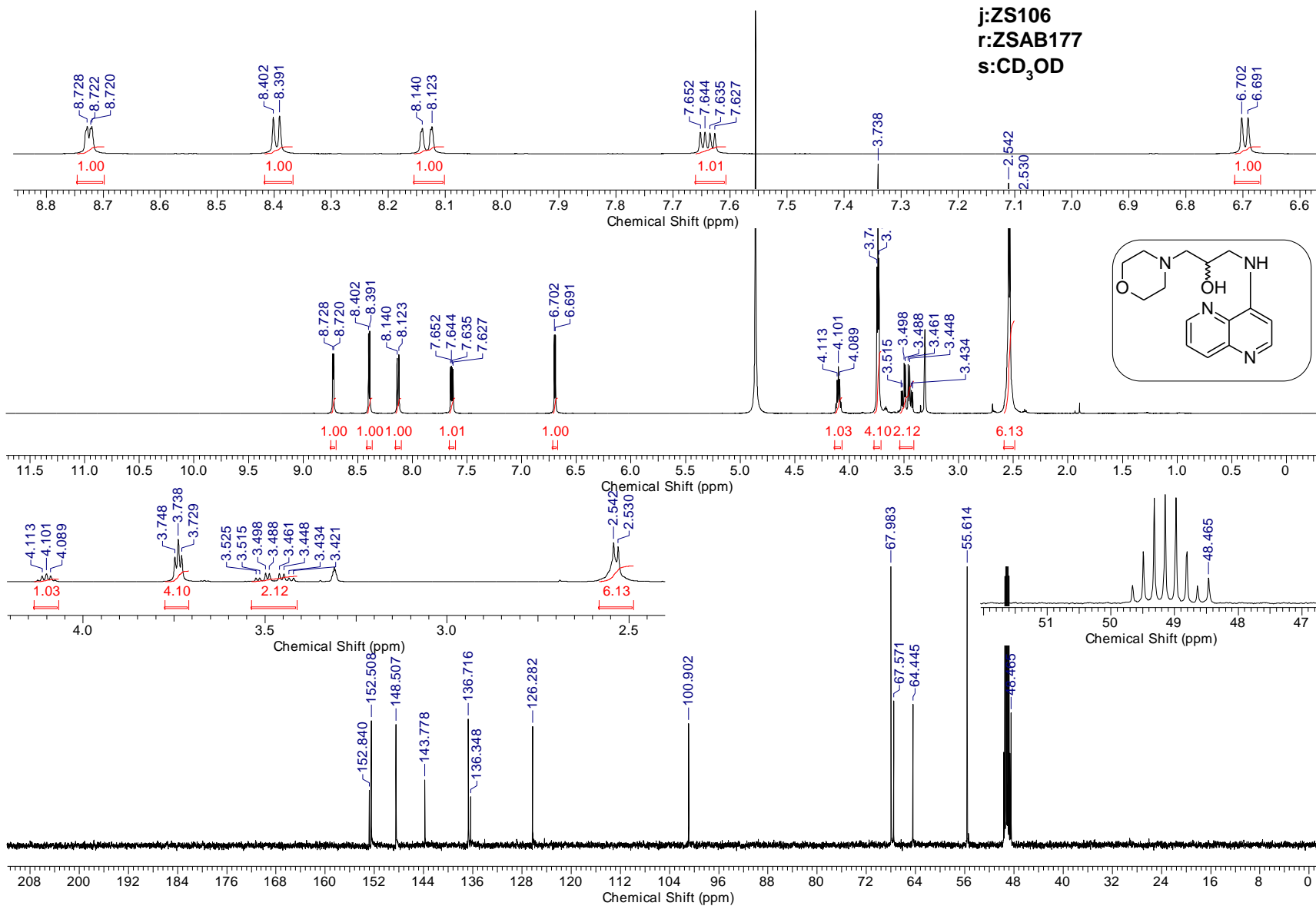


*N,N*-Diethyl-*N'*-1,5-naphthyridin-4-ylpropane-1,3-diamine 9 (ZS104).

j:ZS104  
r:ZSAB167  
s:CD<sub>3</sub>OD

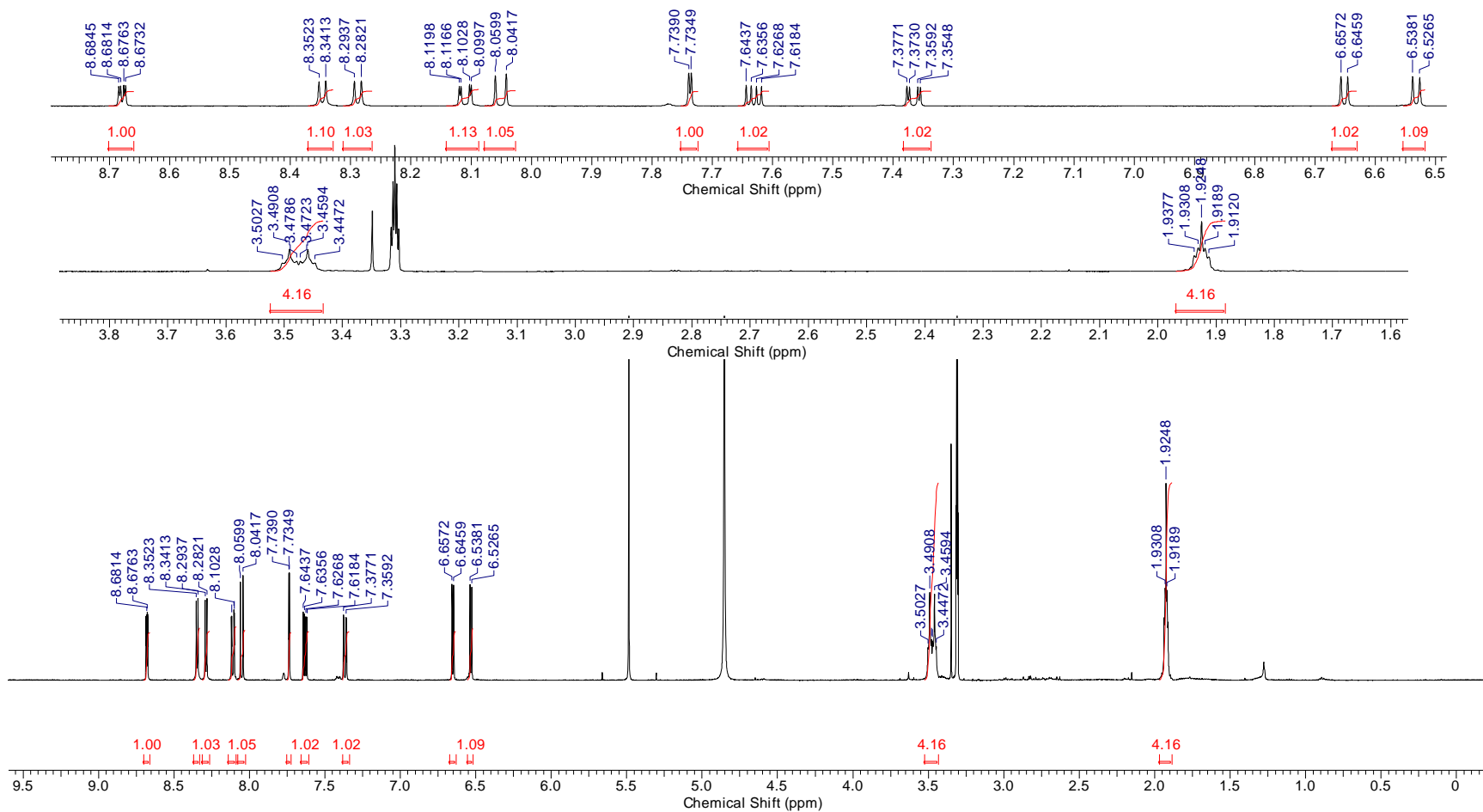
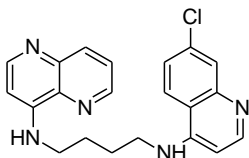


**1-Morpholin-4-yl-3-(1,5-naphthyridin-4-ylamino)propan-2-ol (ZS106).**



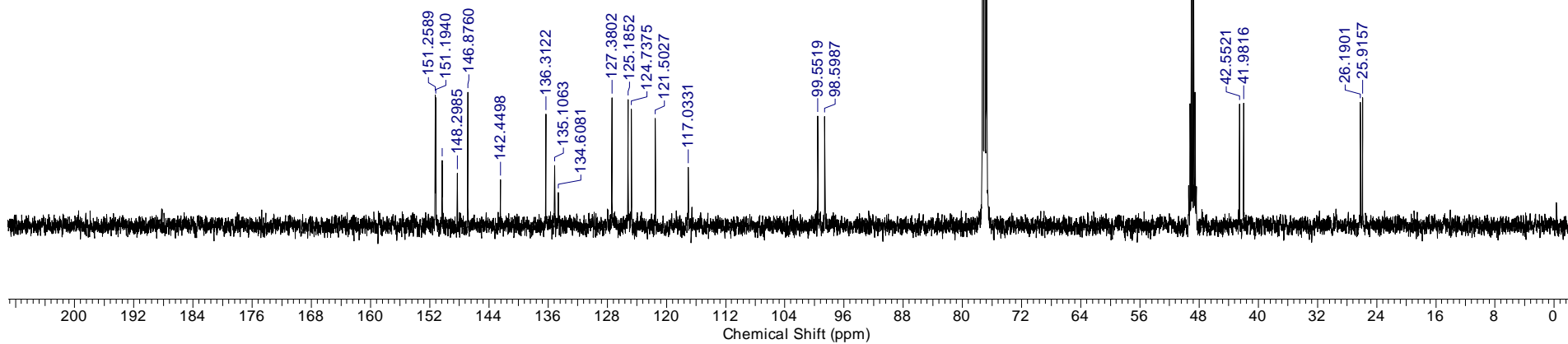
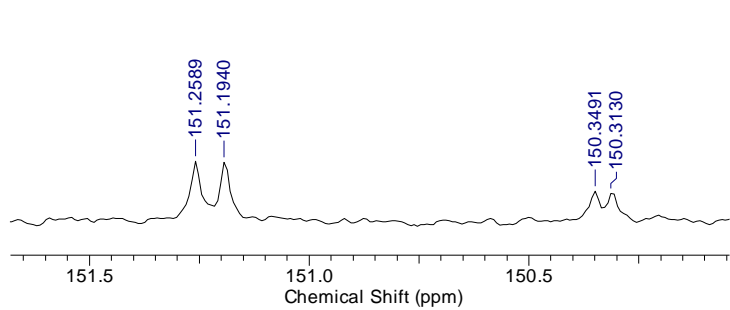
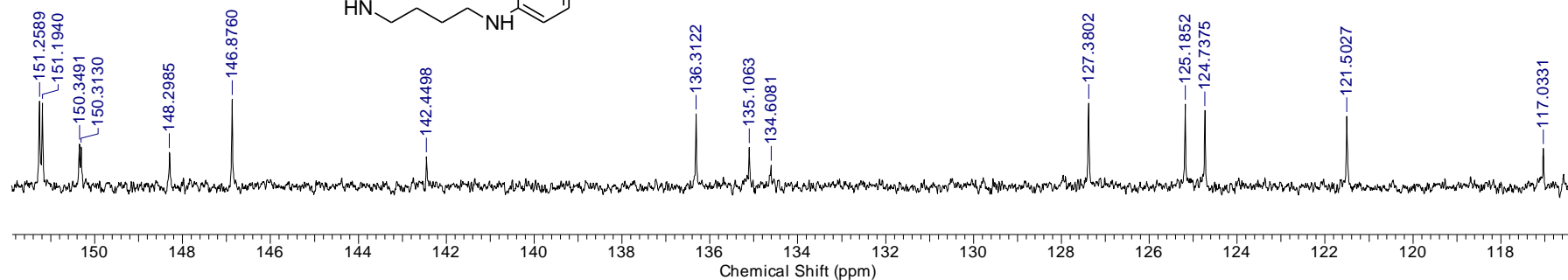
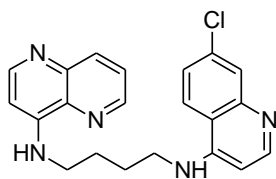
***N*-(7-Chloroquinolin-4-yl)-*N'*-(1,5-naphthyridin-4-yl)butane-1,4-diamine 11 (ZSML18).**

j:ZSML18  
r:MLAB115a  
s:CD<sub>3</sub>OD



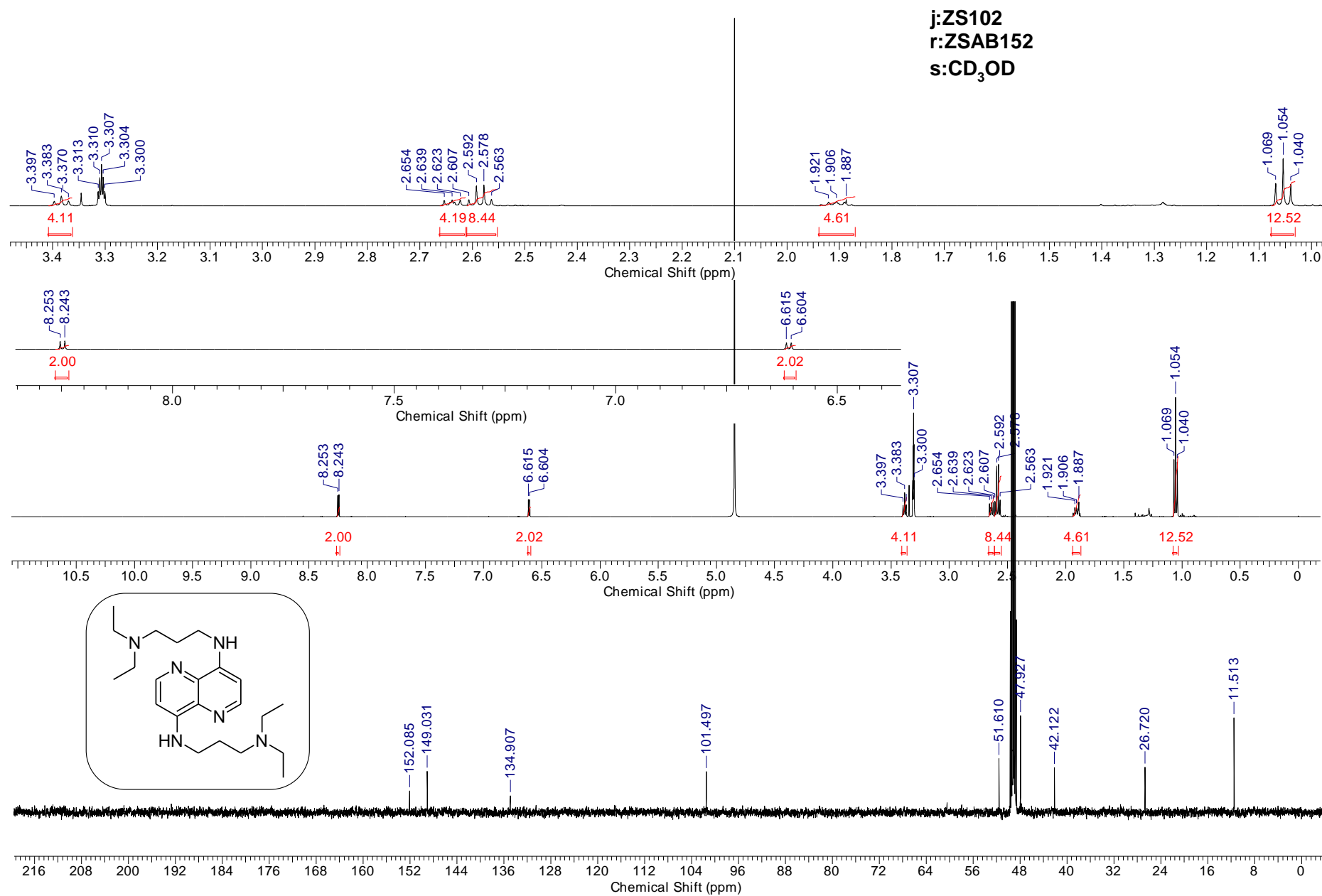


j:ZSML18  
r:MLAB115-1  
s:CDCl<sub>3</sub>, CD<sub>3</sub>OD



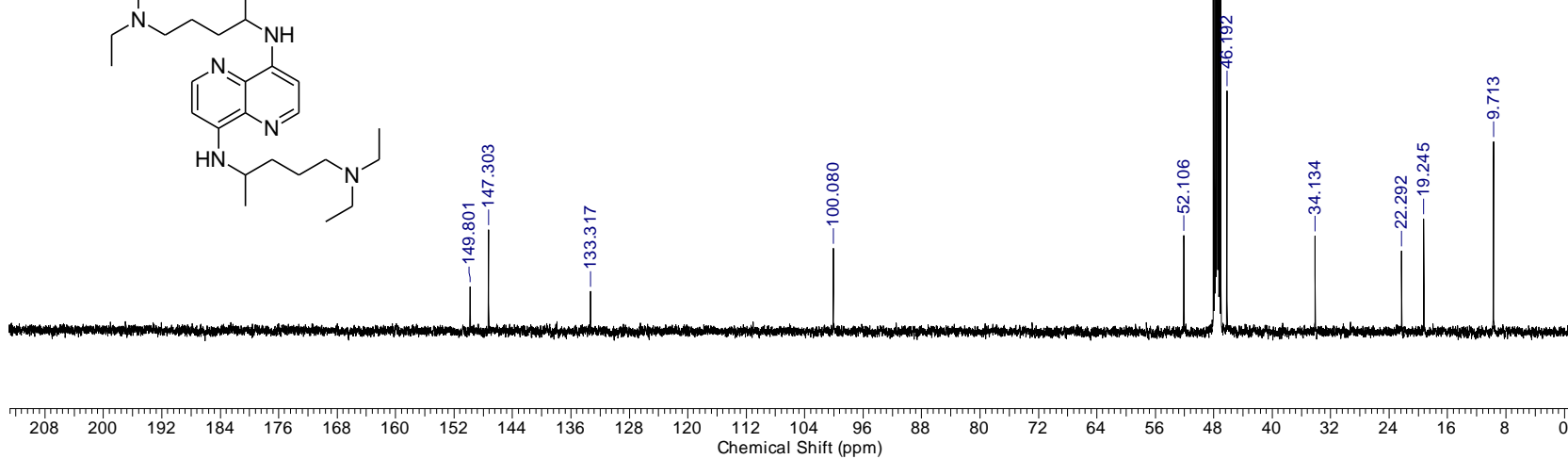
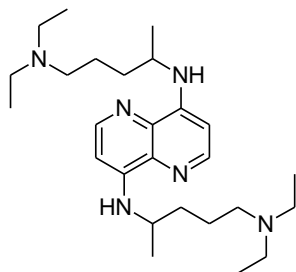
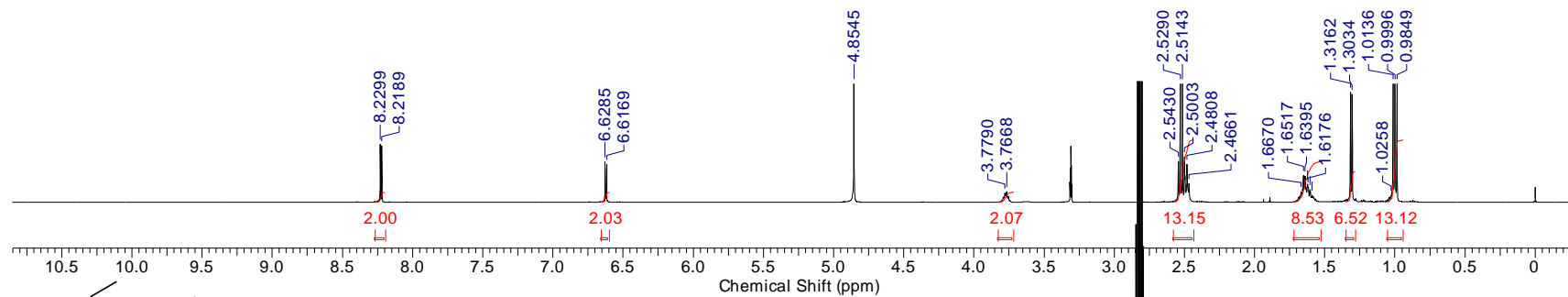
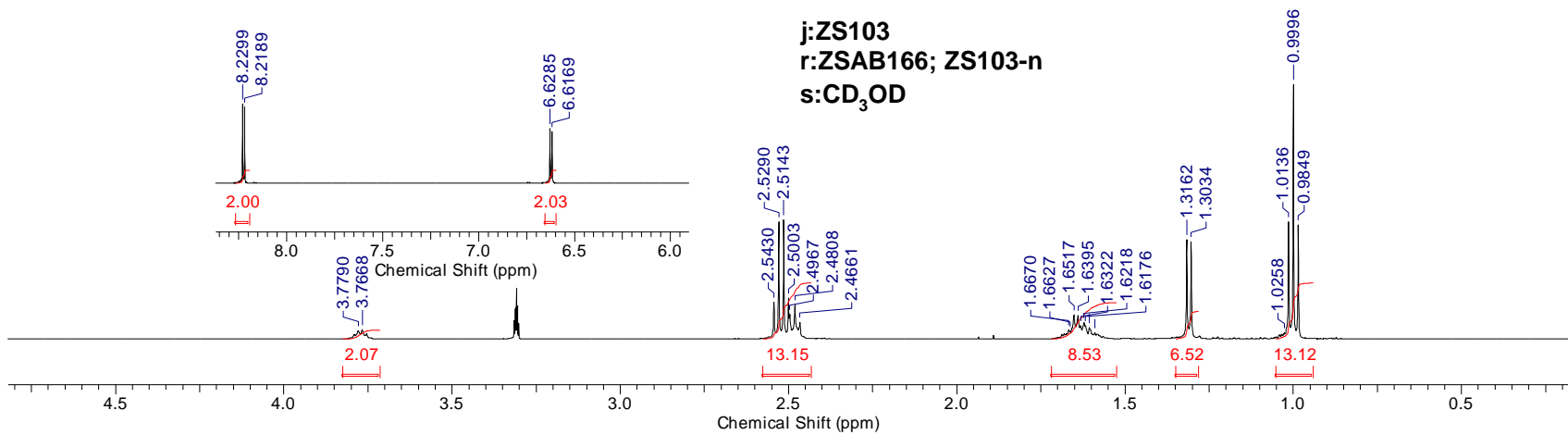


***N,N'*-Bis[3-(diethylamino)propyl]-1,5-naphthyridine-4,8-diamine 13 (ZS102).**



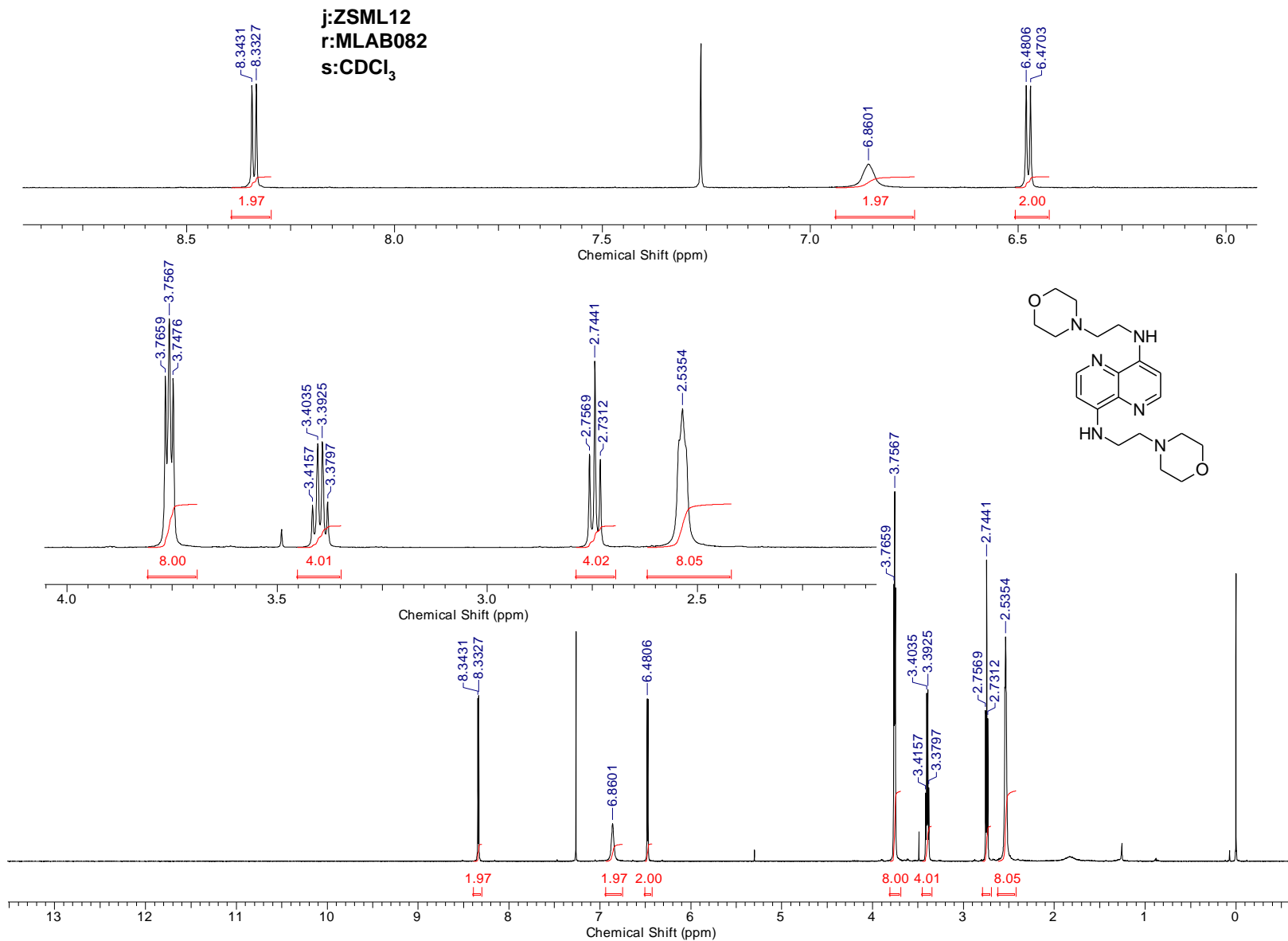
***N,N'*-Bis[4-(diethylamino)-1-methylbutyl]-1,5-naphthyridine-4,8-diamine 4 (ZS103).**

**j:ZS103  
r:ZSAB166; ZS103-n  
s:CD<sub>3</sub>OD**

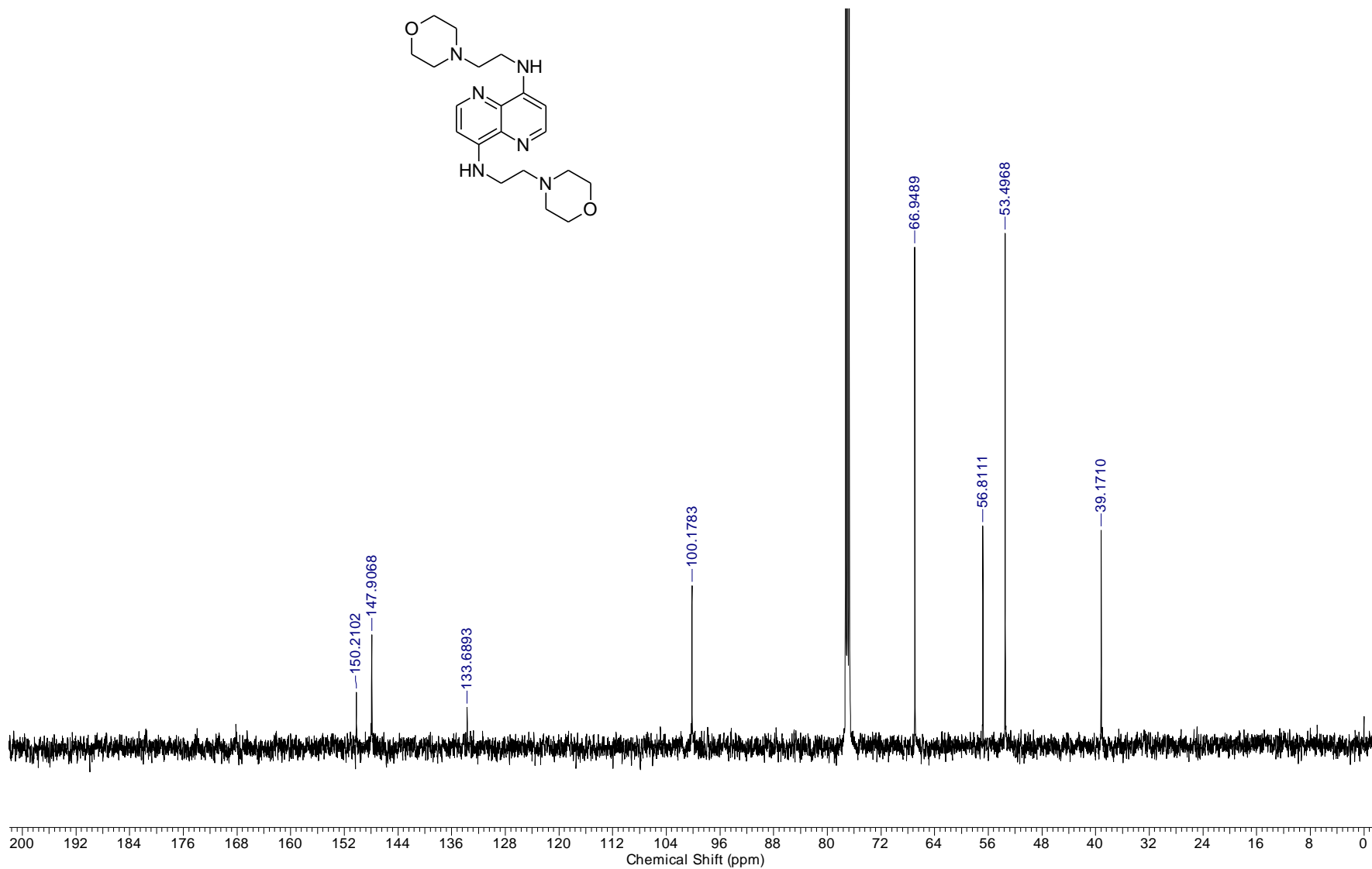
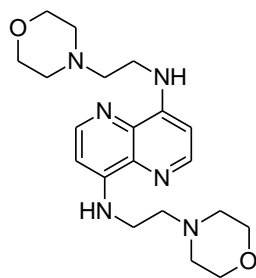




*N,N'*-Bis[2-(morpholin-4-yl)ethyl]-1,5-naphthyridine-4,8-diamine 3 (ZSML12).

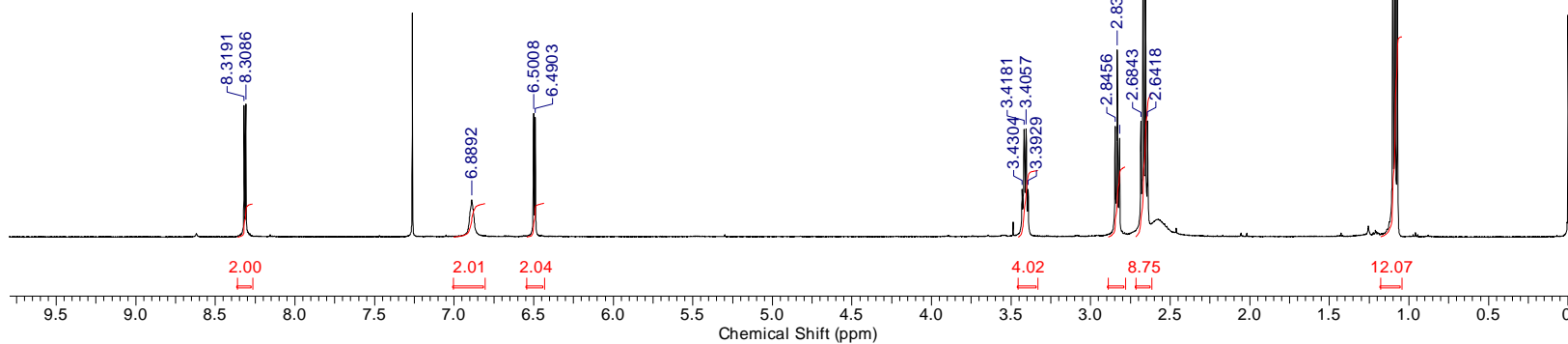
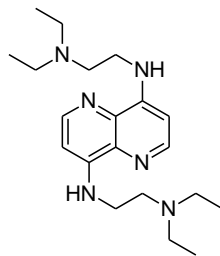
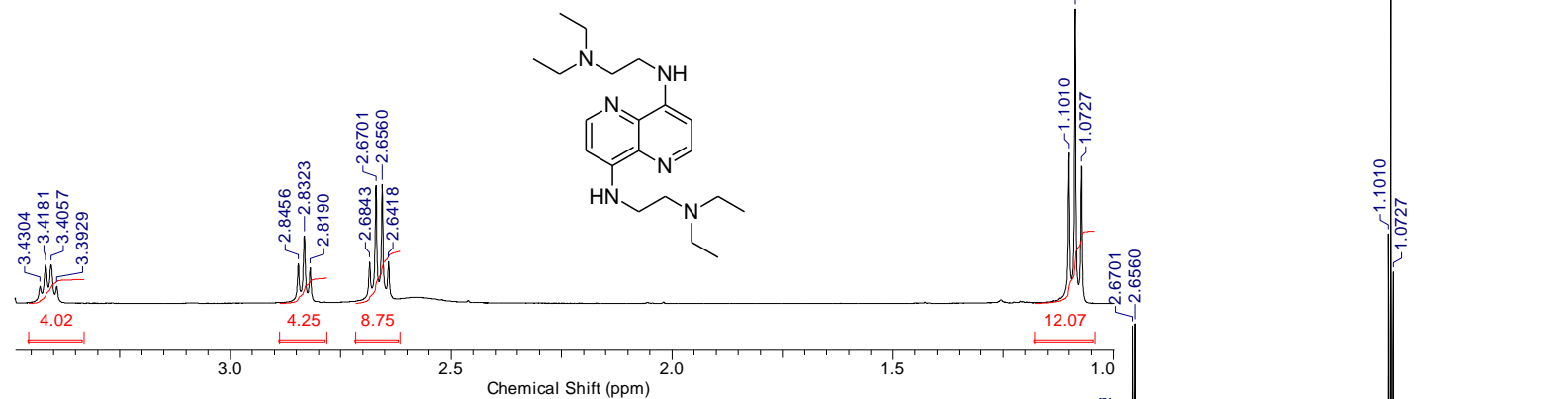
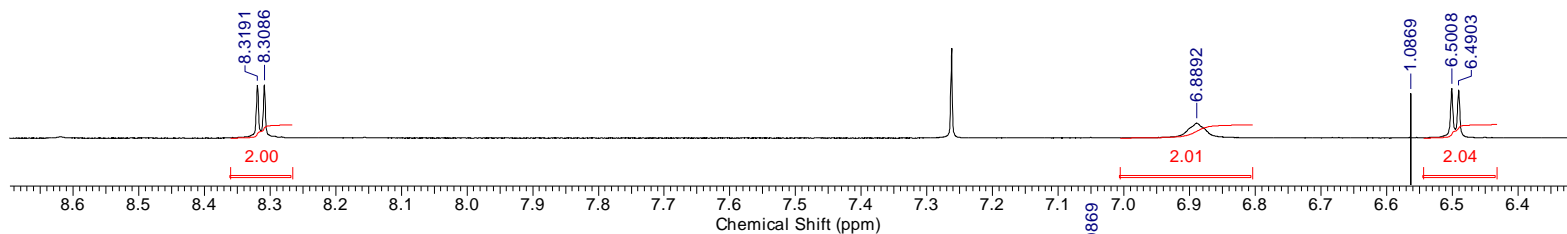


j:ZSML12  
r:MLAB082  
s:CDCl<sub>3</sub>



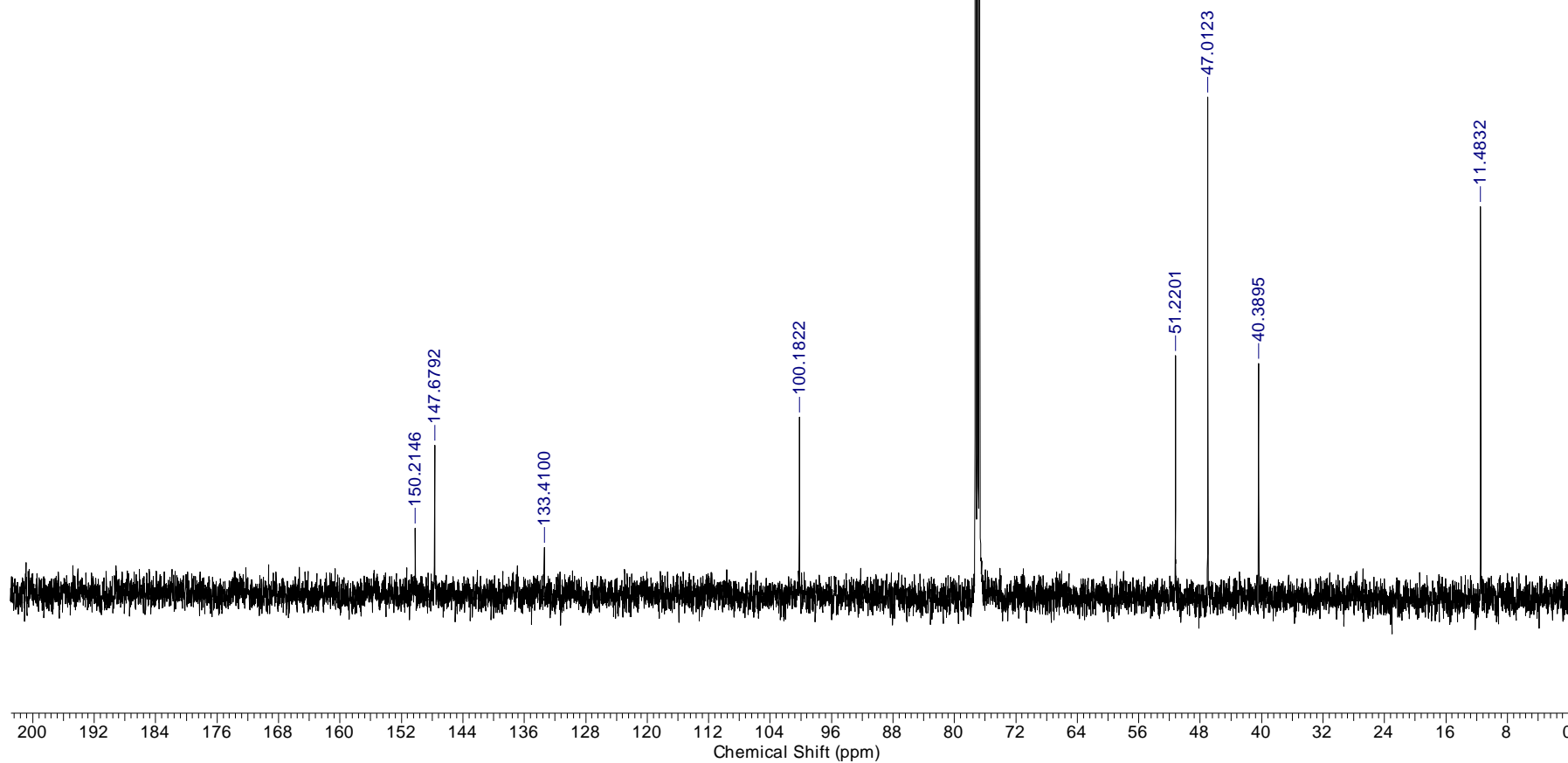
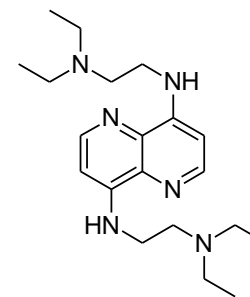
***N,N'*-Bis[2-(diethylamino)ethyl]-1,5-naphthyridine-4,8-diamine 15 (ZSML13).**

j:ZSML13  
r:MLAB080-c  
s:CDCl<sub>3</sub>

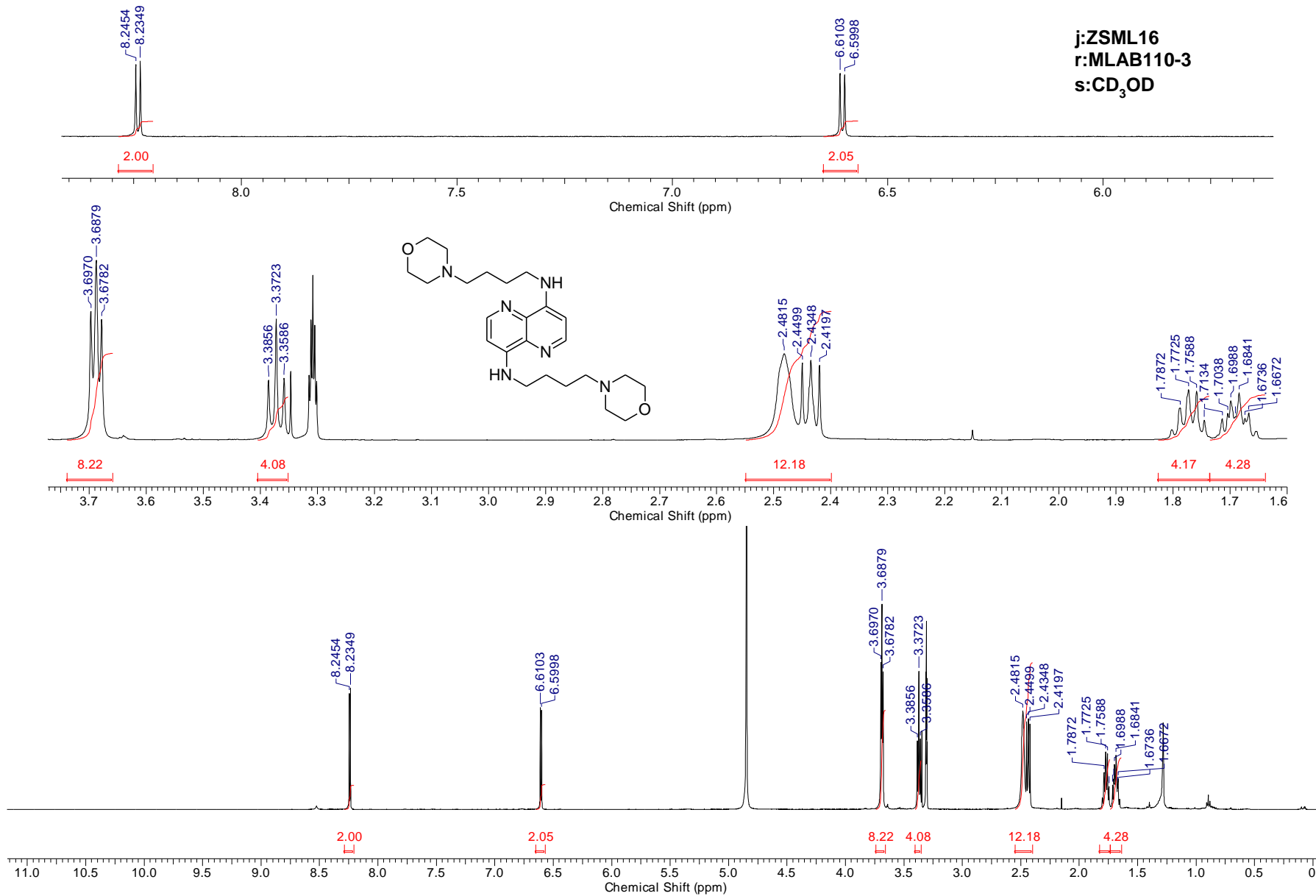




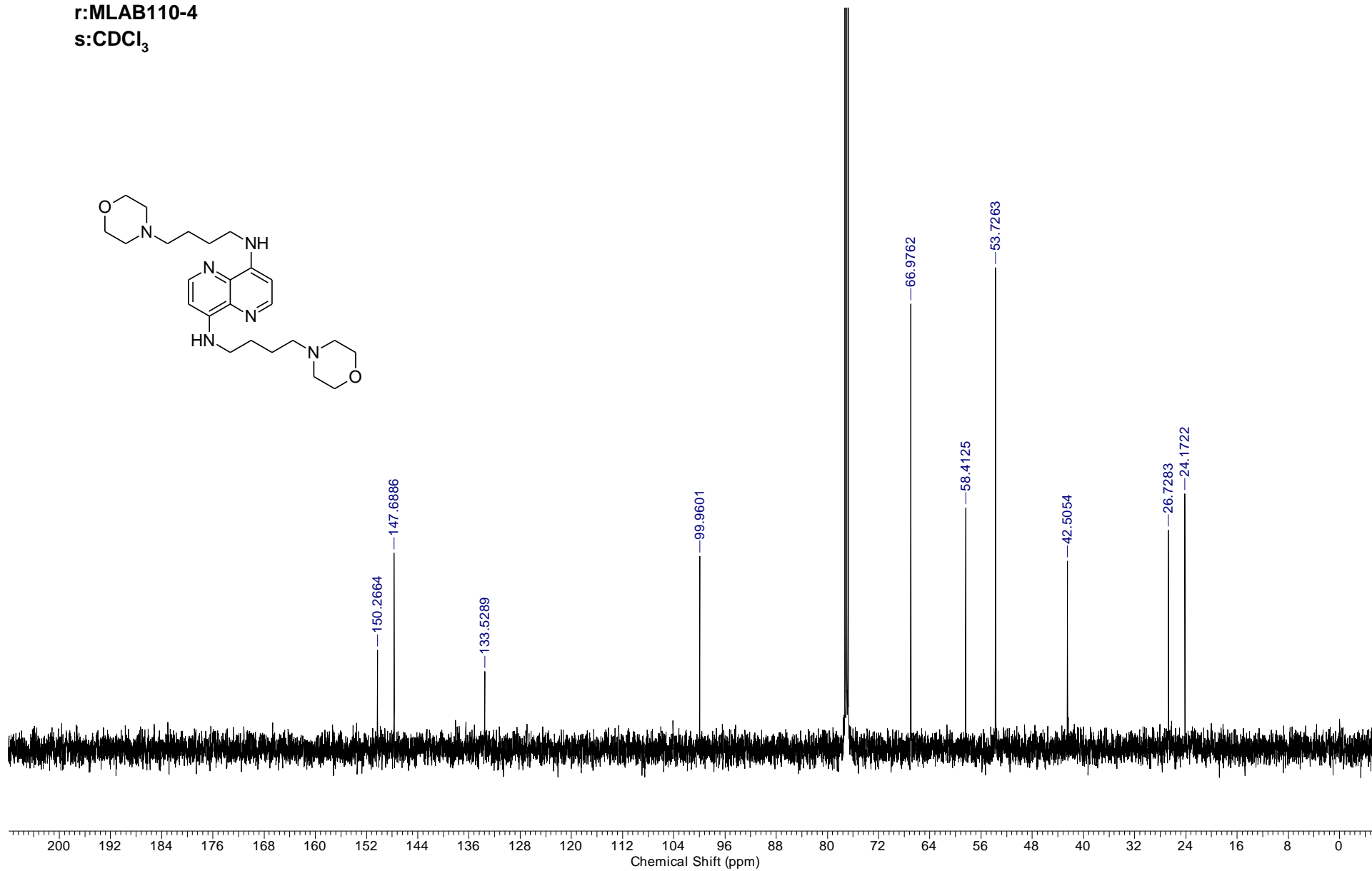
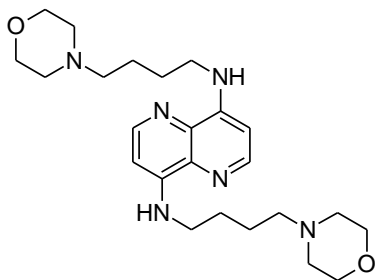
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r:MLAB080-c  
s:CDCl<sub>3</sub>



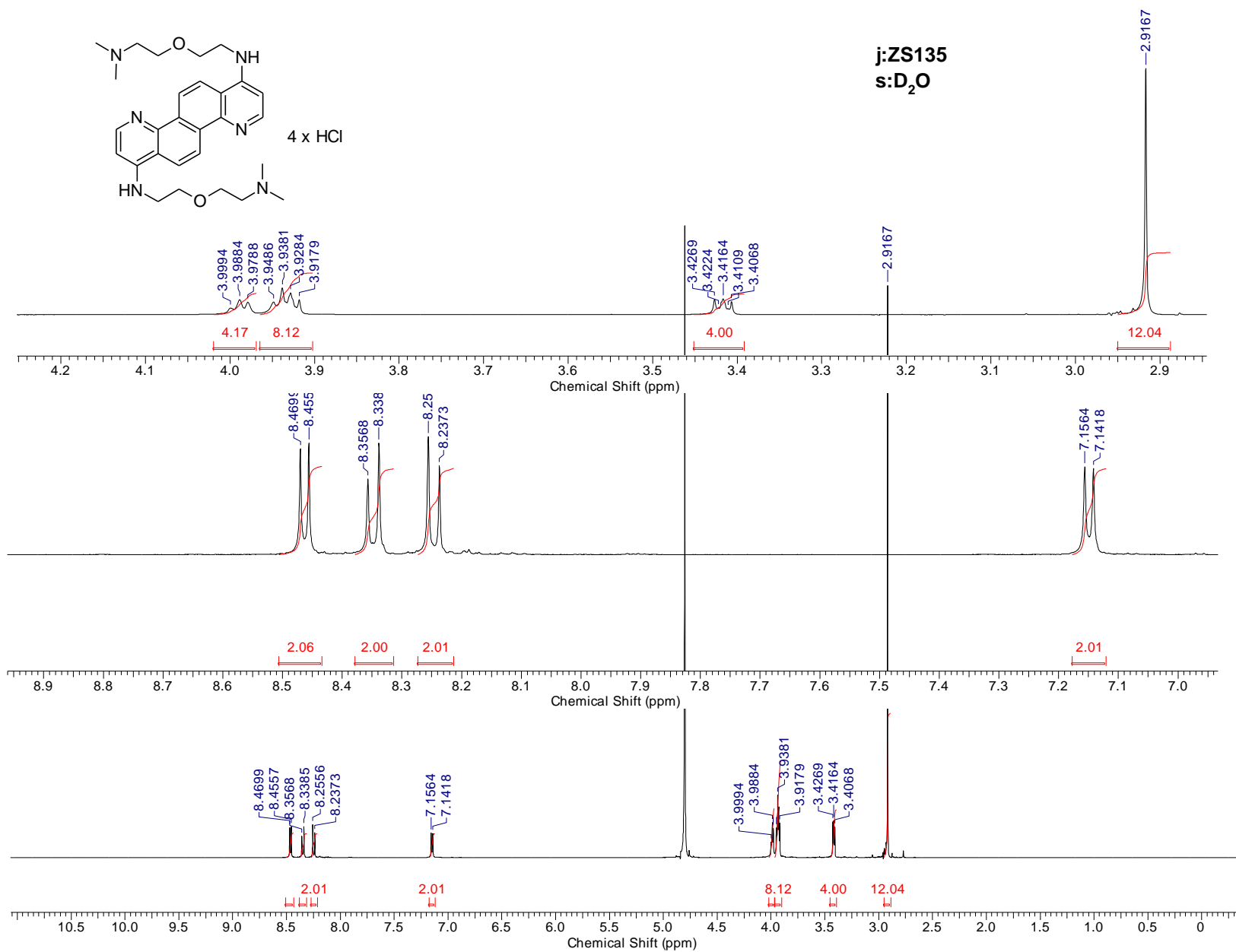
*N,N'*-Bis[4-(morpholin-4-yl)butyl]-1,5-naphthyridine-4,8-diamine 16 (ZSML16).



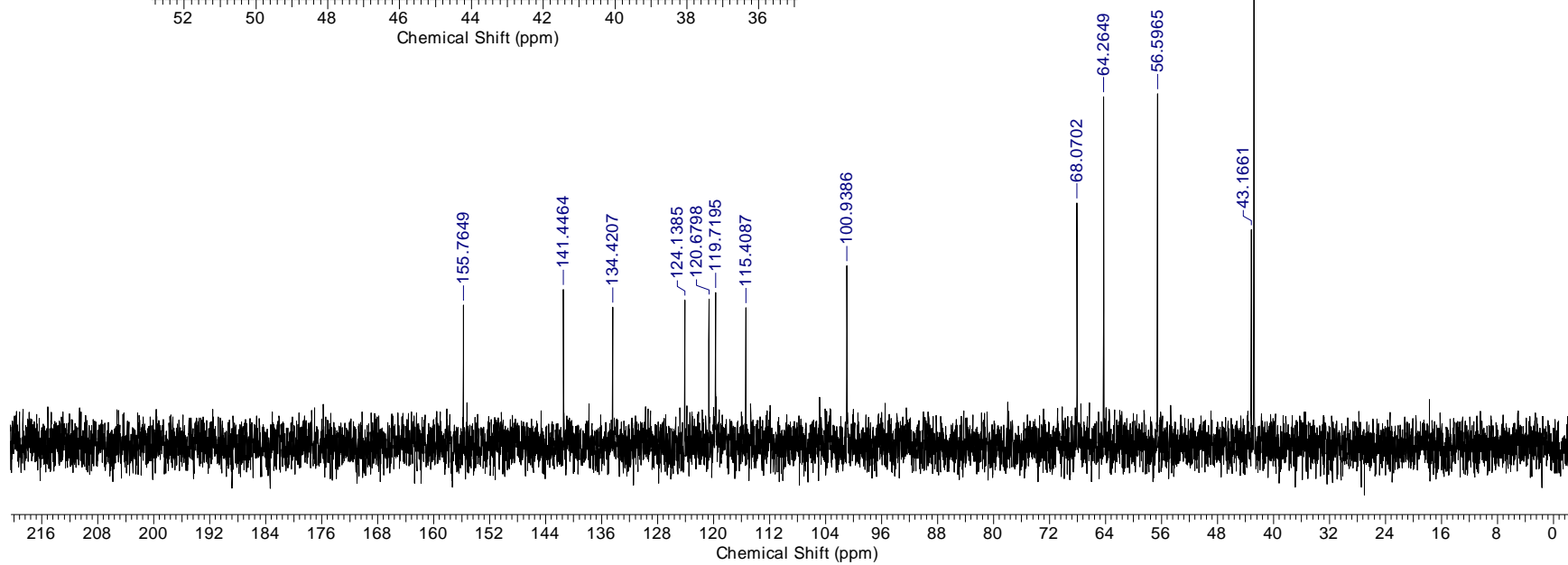
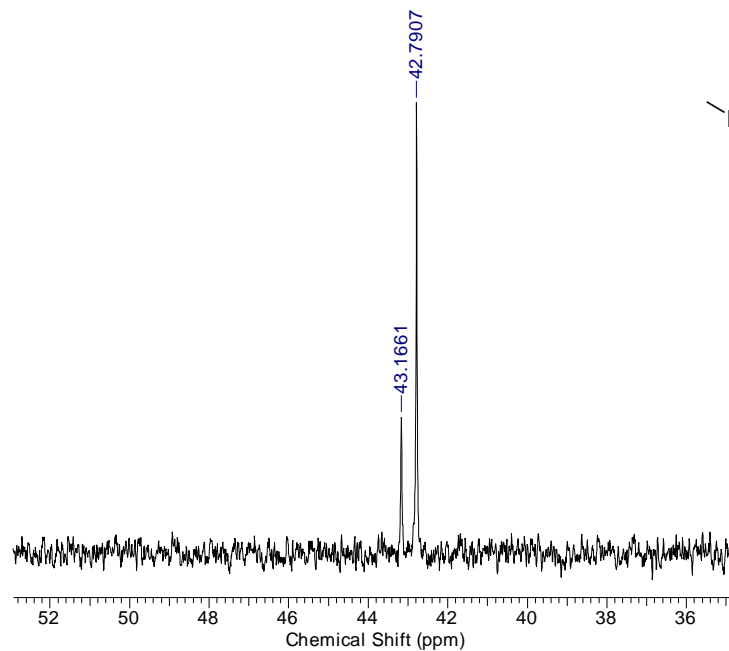
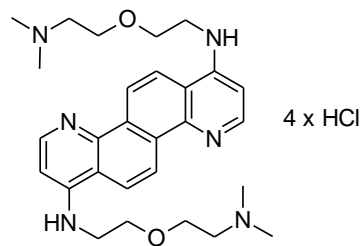
j:ZSML16  
r:MLAB110-4  
s:CDCl<sub>3</sub>



***N,N'*-Bis{2-[2-(dimethylamino)ethoxy]ethyl}quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 21 (ZS135).**

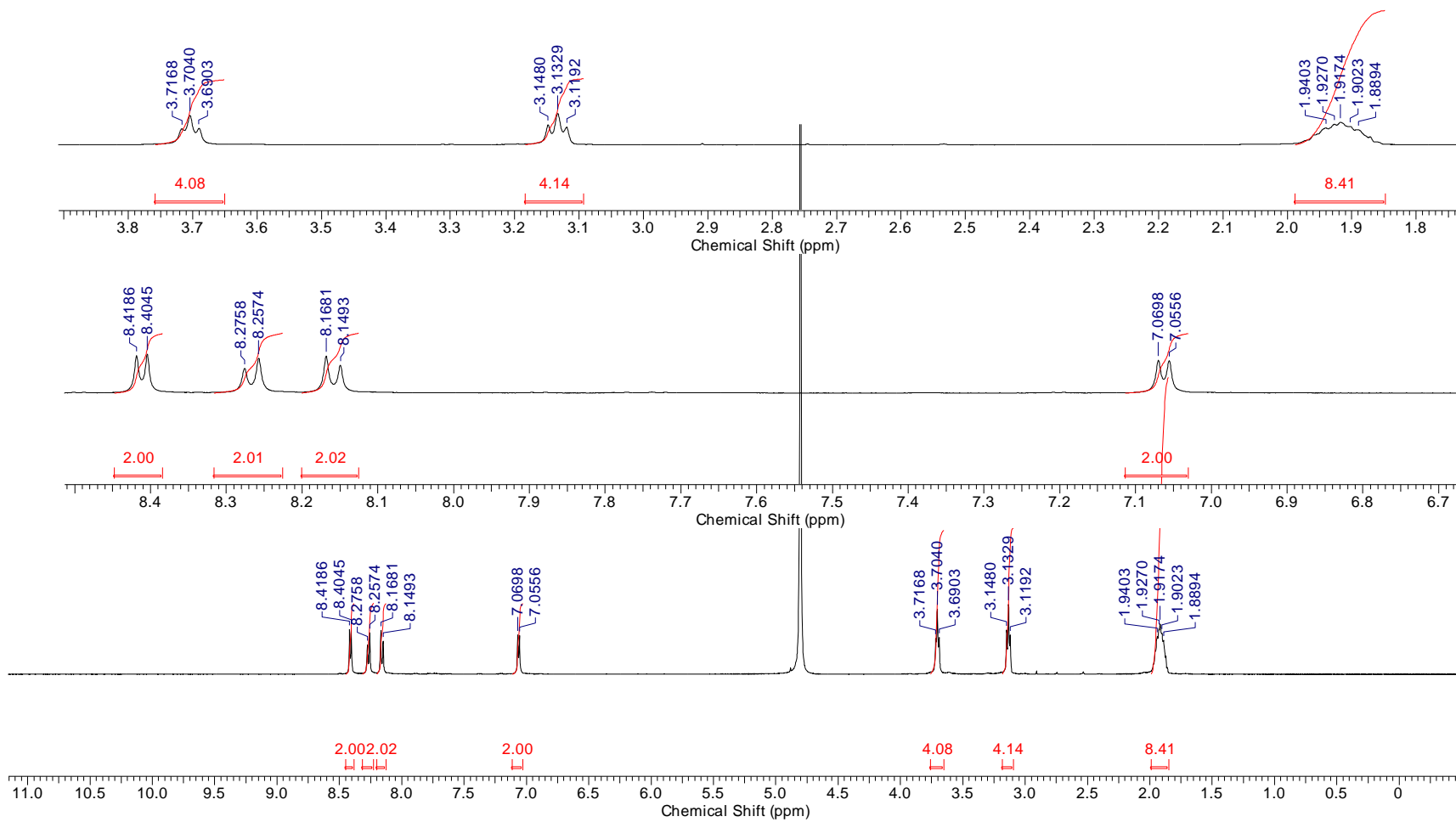
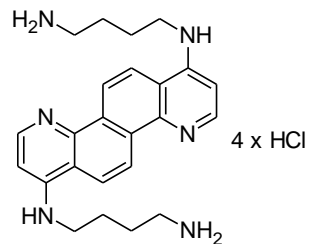


j:ZS135  
s:D<sub>2</sub>O

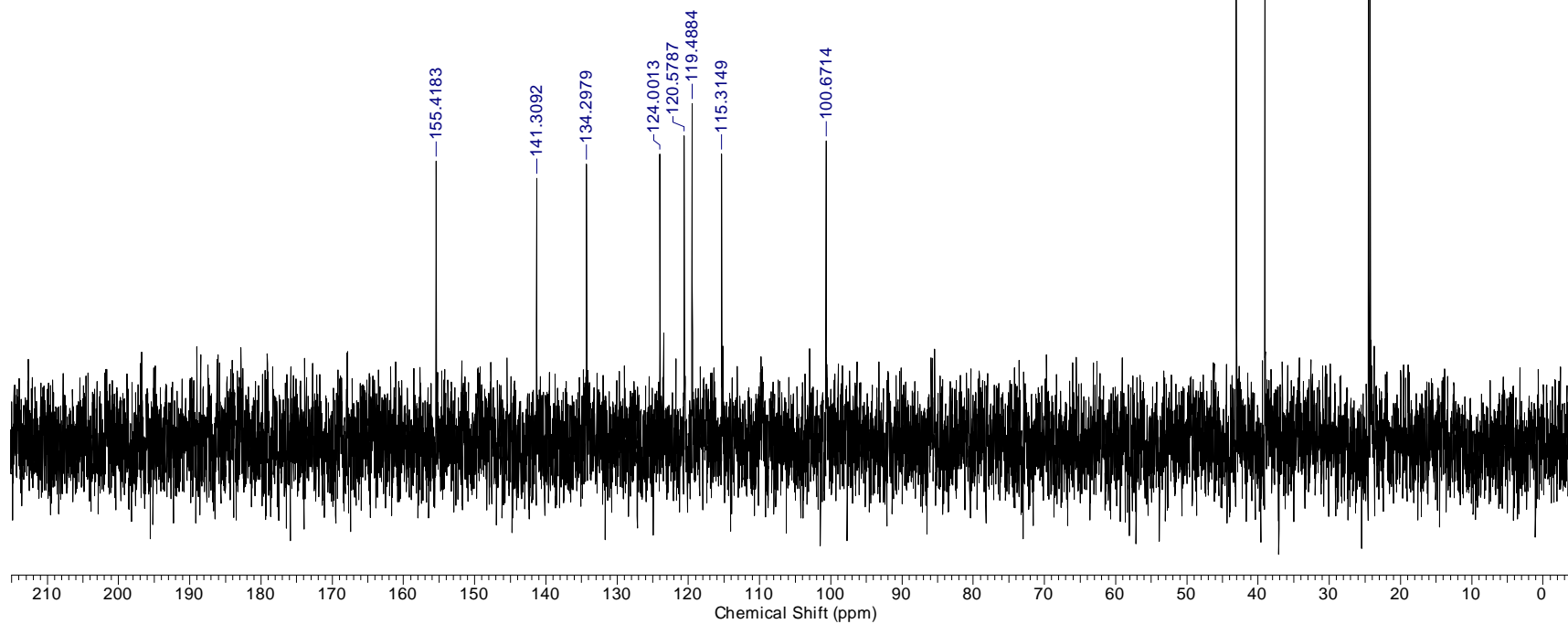
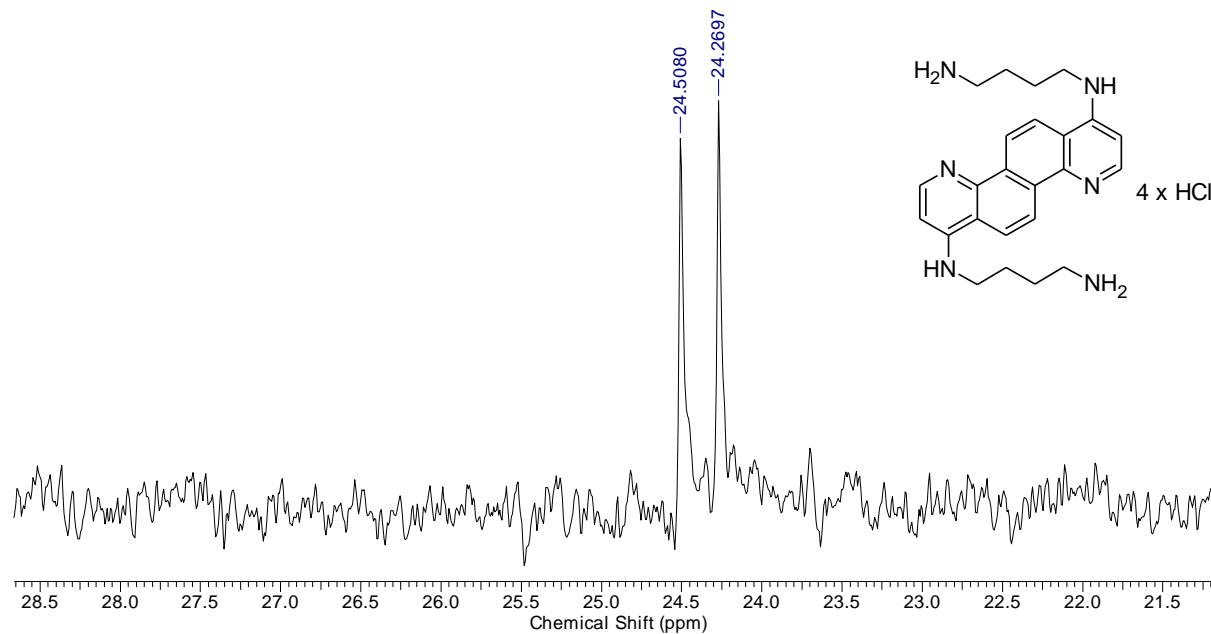
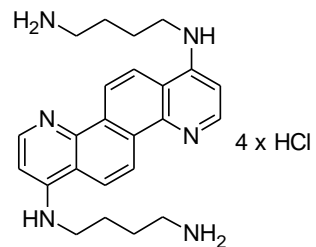


*N,N'*-Bis(4-aminobutyl)quino[8,7-*h*]quinoline-1,7-diamine dihydrochloride 22 (ZS137).

j:ZS137  
s:D<sub>2</sub>O



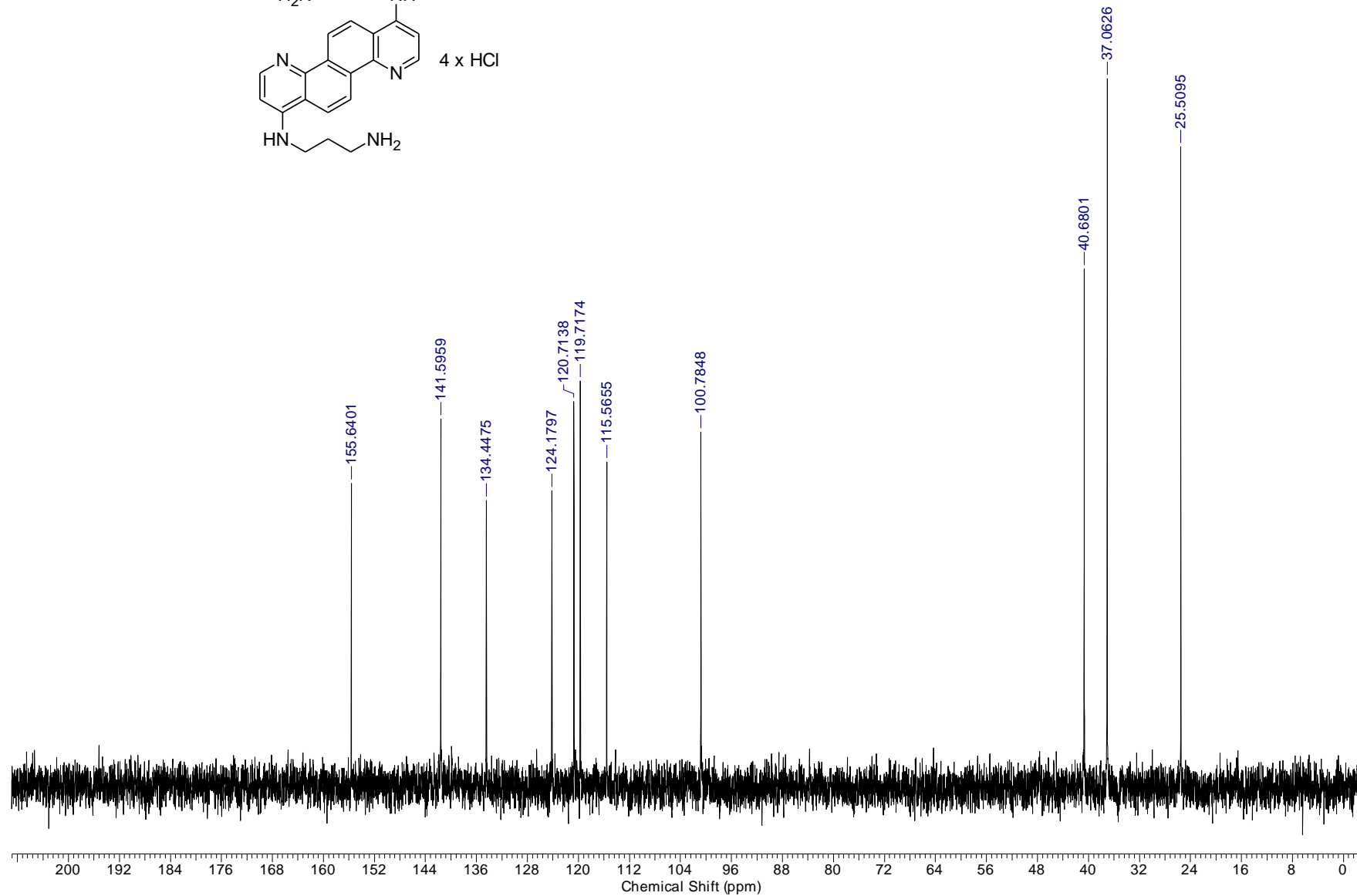
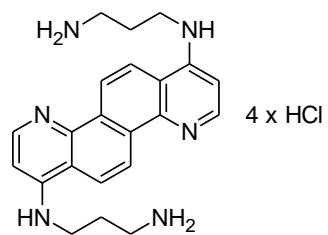
j:ZS137  
s:D<sub>2</sub>O



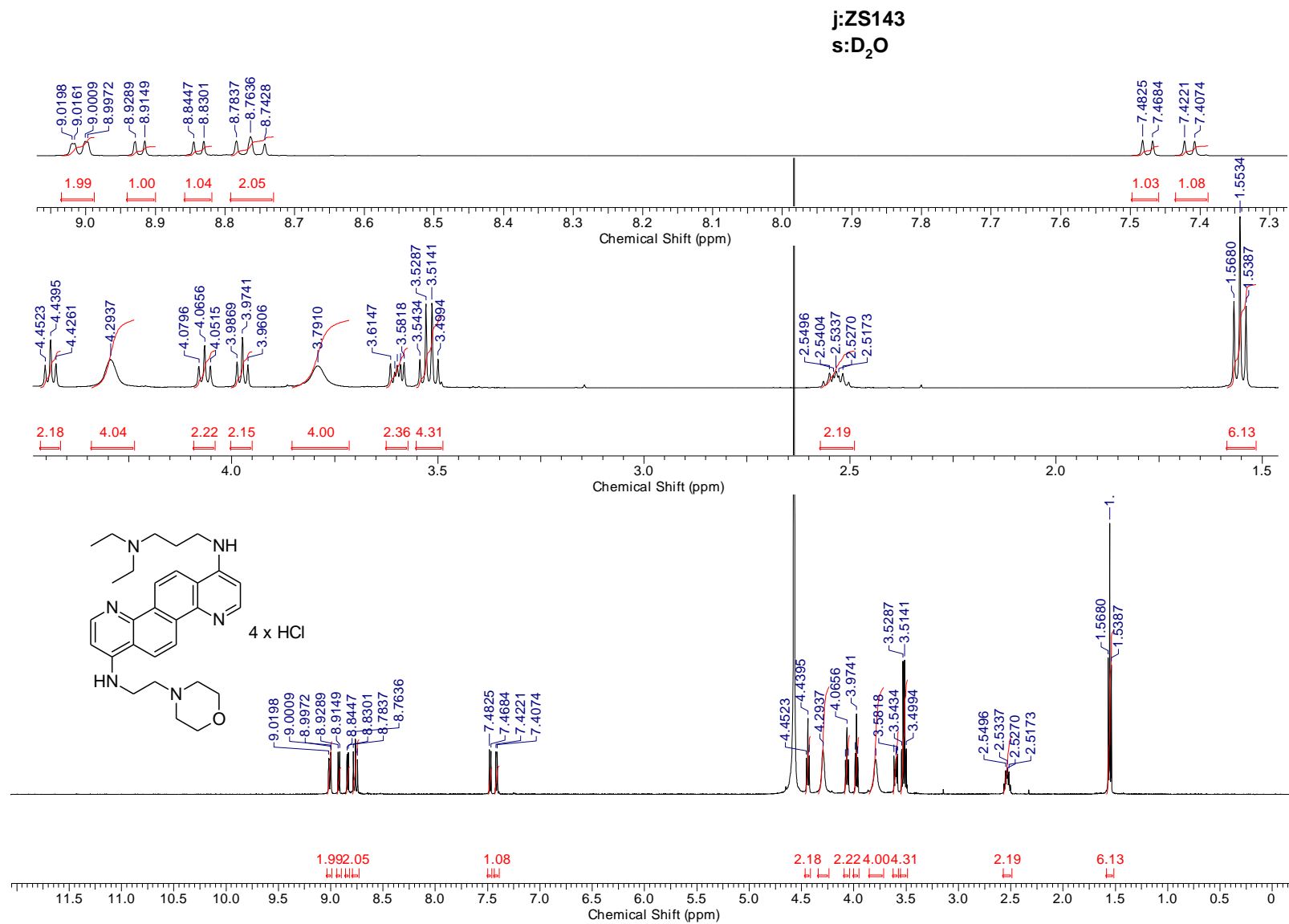




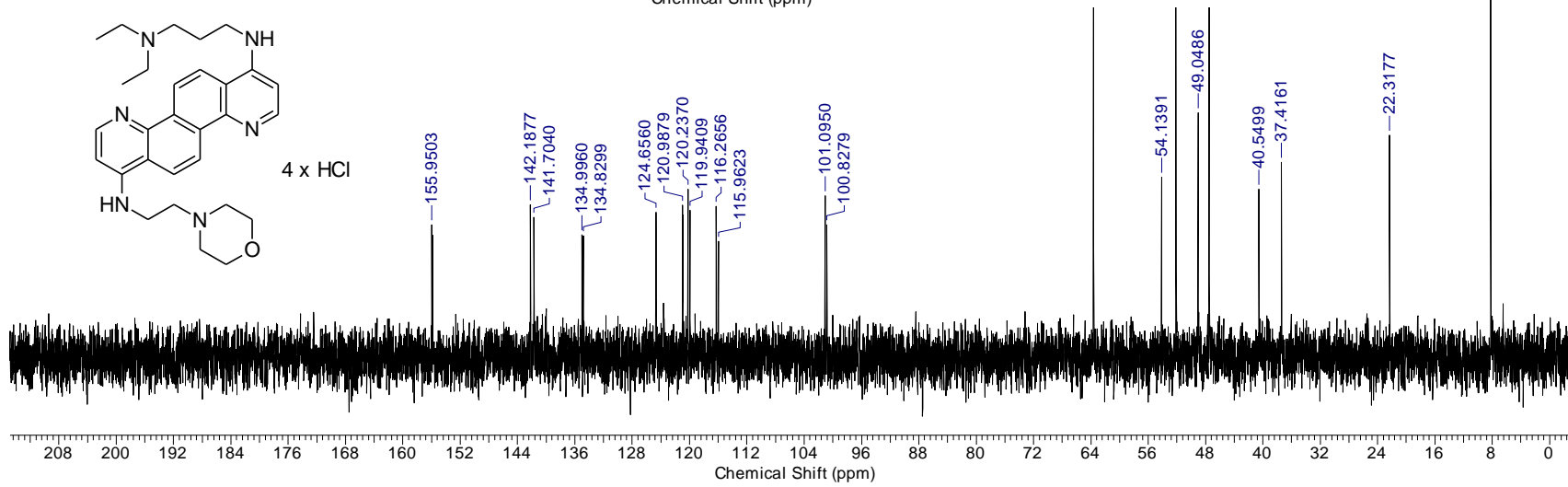
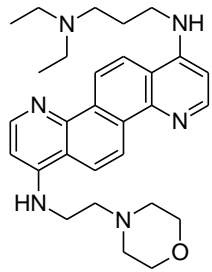
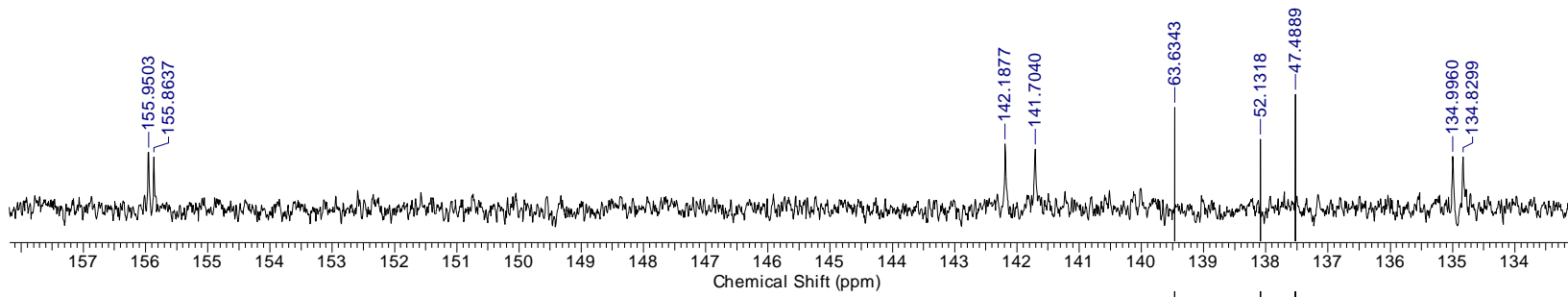
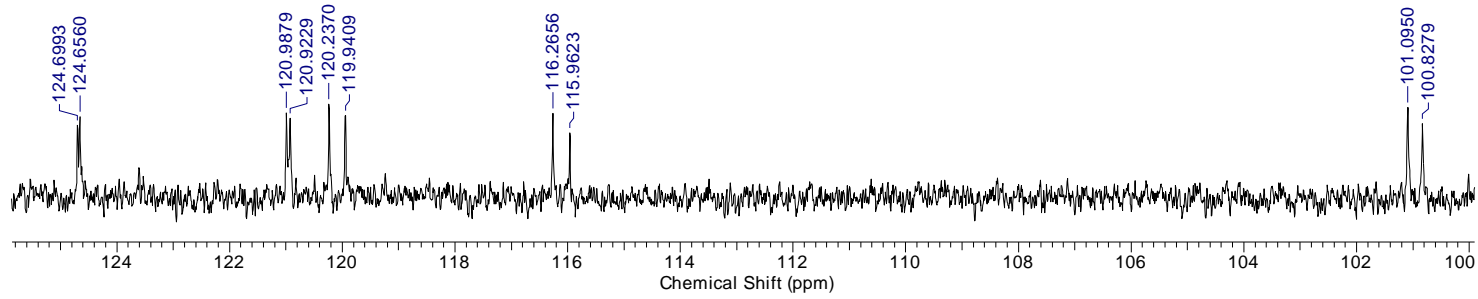
j:ZS139  
s:D<sub>2</sub>O



*N*-[3-(Diethylamino)propyl]-*N'*-(2-morpholin-4-ylethyl)quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 19 (ZS143).

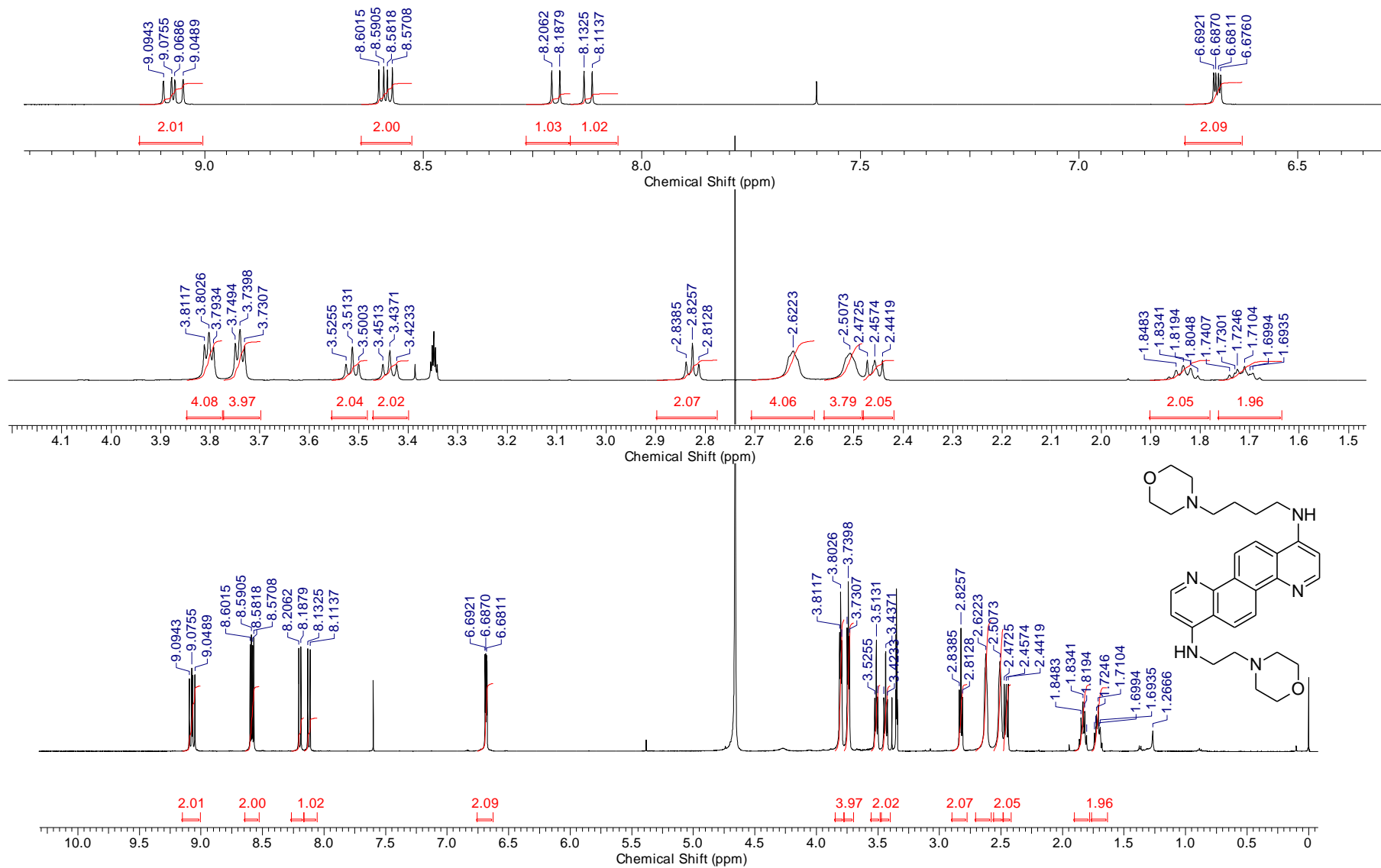


j:ZS143  
s:D<sub>2</sub>O

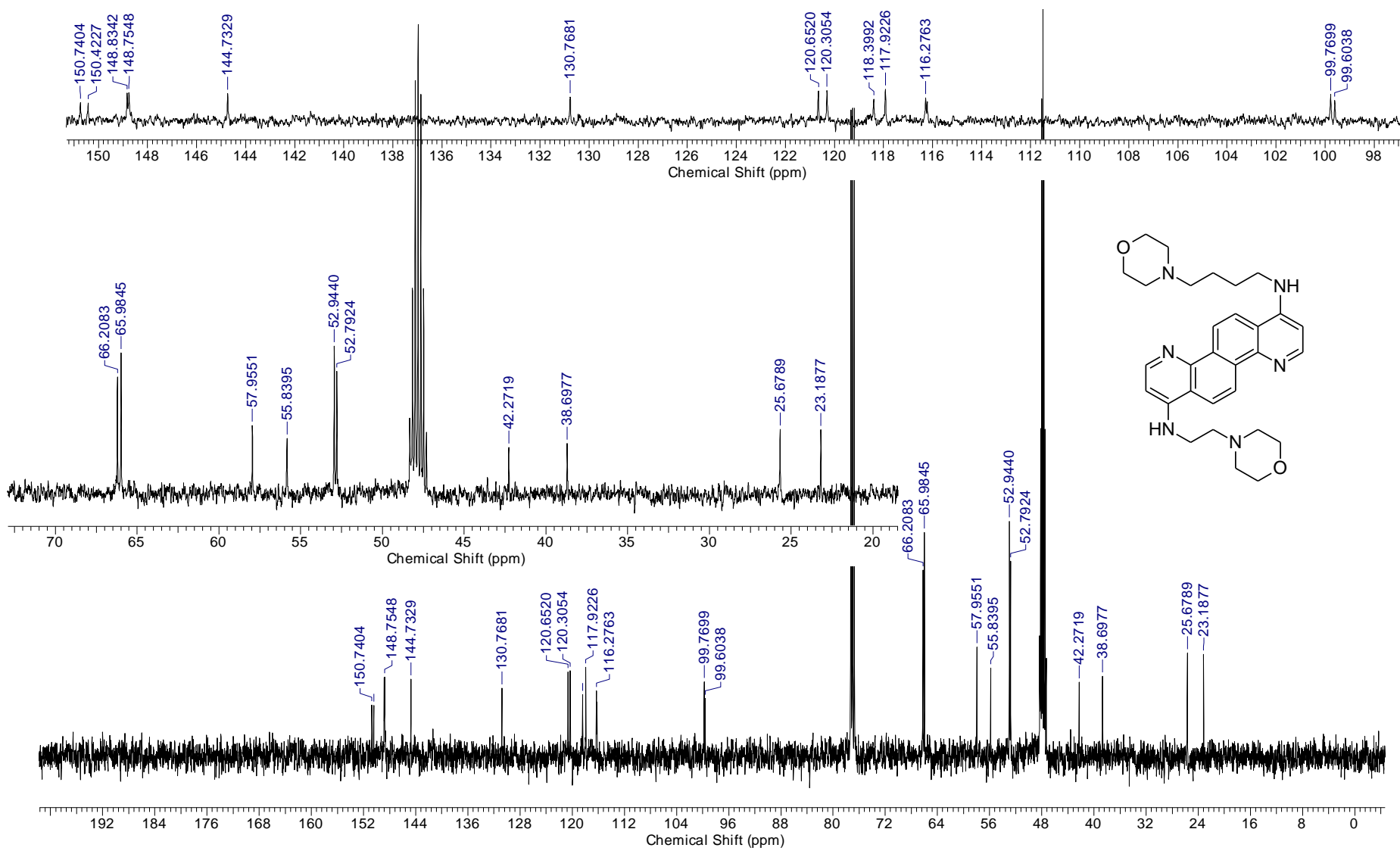


*N*-(4-Morpholin-4-ylbutyl)-*N'*-(2-morpholin-4-ylethyl)quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 2 (ZSML08).

j:ZSML08  
r:MLAA032  
s:CD<sub>3</sub>OD + CDCl<sub>3</sub>

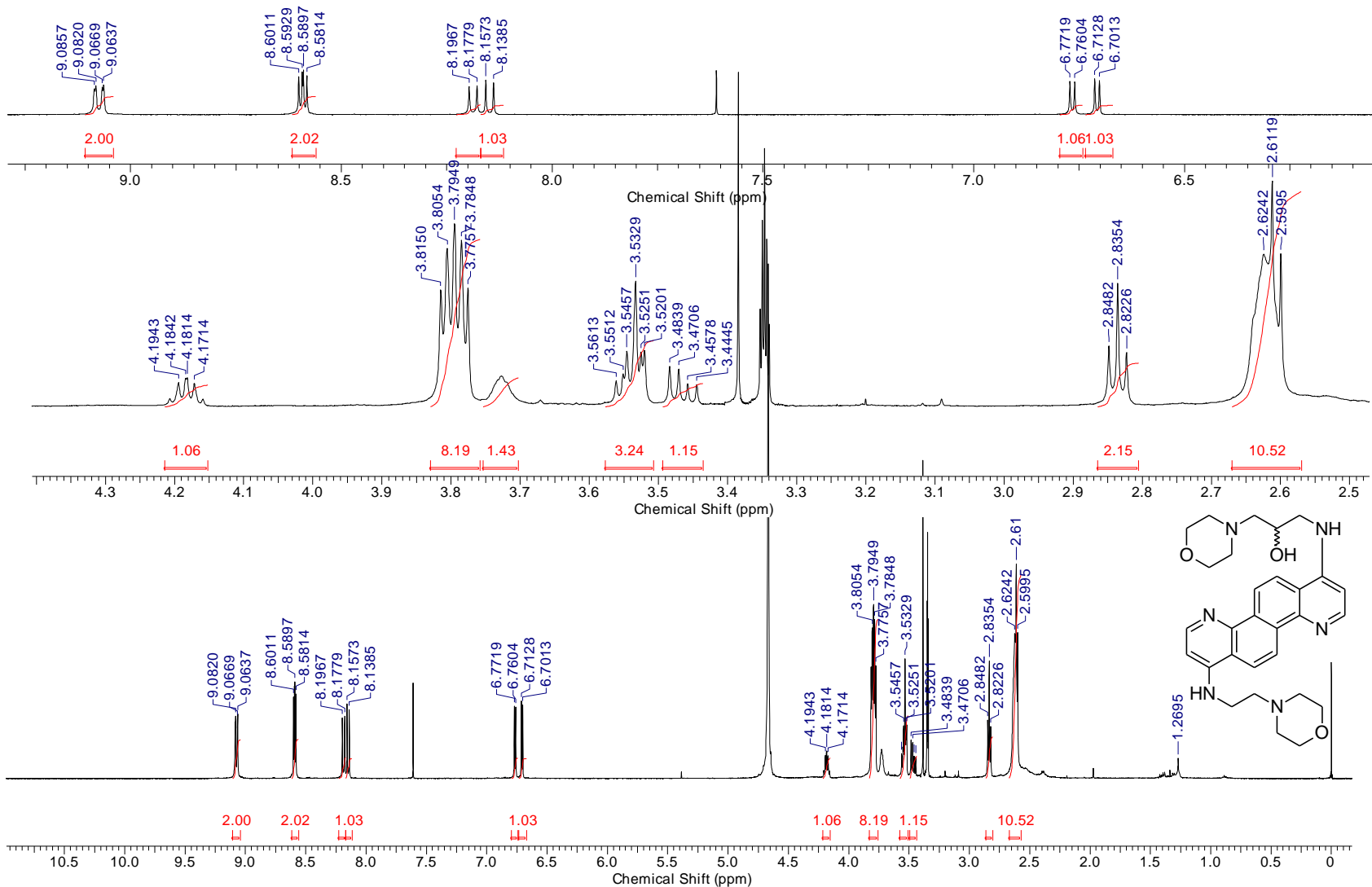


j:ZSML08  
r:MLAA032  
s:CD<sub>3</sub>OD + CDCl<sub>3</sub>

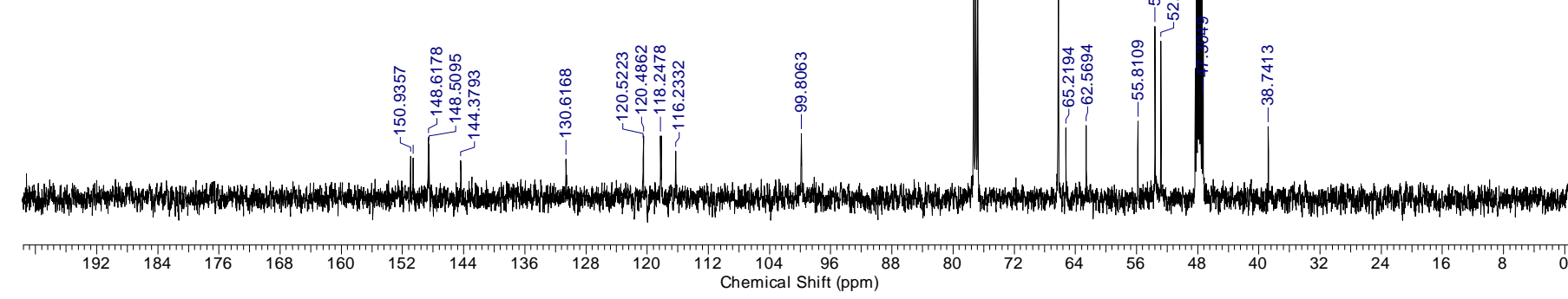
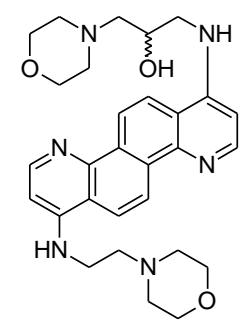
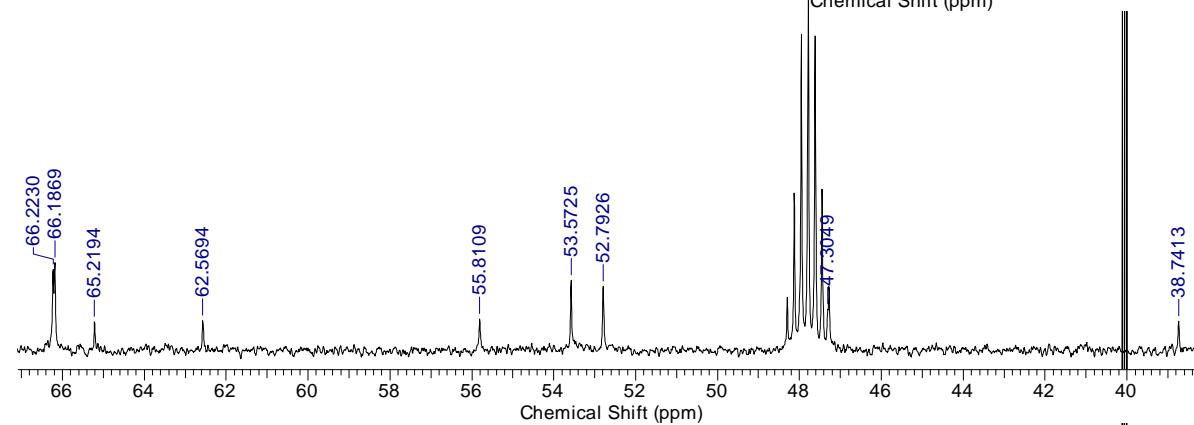
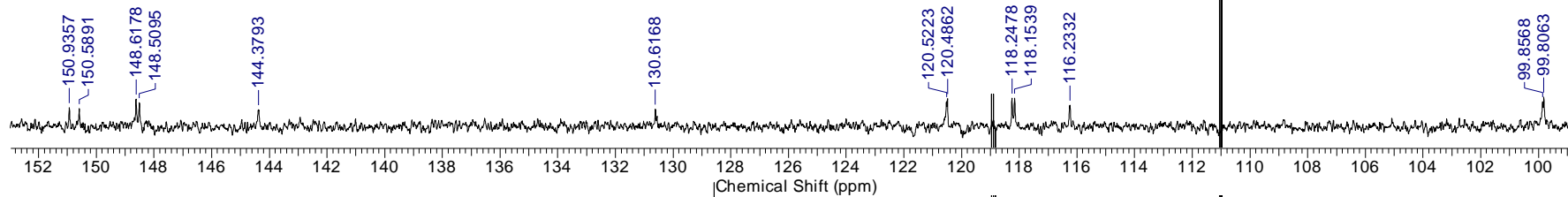
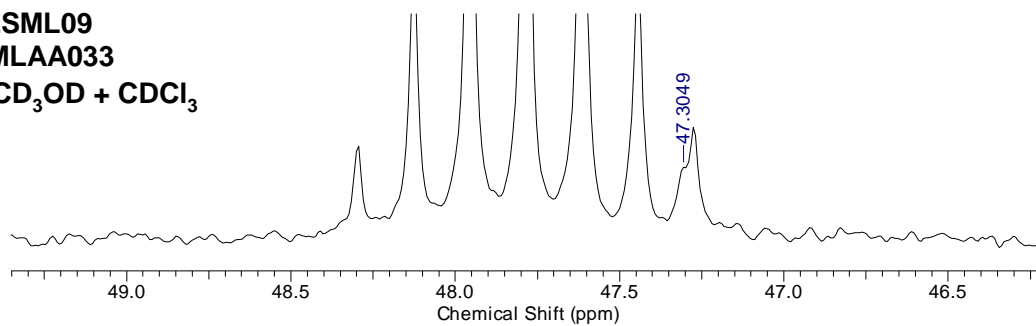


1-Morpholin-4-yl-3-({7-[(2-morpholin-4-ylethyl)amino]quino[8,7-*h*]quinolin-1-yl)amino)propan-2-ol tetrahydrochloride 20 (ZSML09).

j:ZSML09  
 r:MLAA033  
 s:CD<sub>3</sub>OD + CDCl<sub>3</sub>

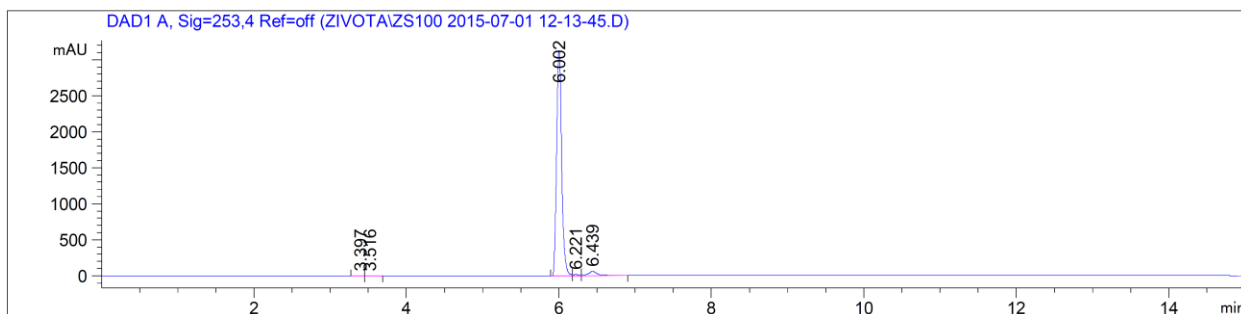


j:ZSML09  
r:MLAA033  
s:CD<sub>3</sub>OD + CDCl<sub>3</sub>



## HPLC purity determination

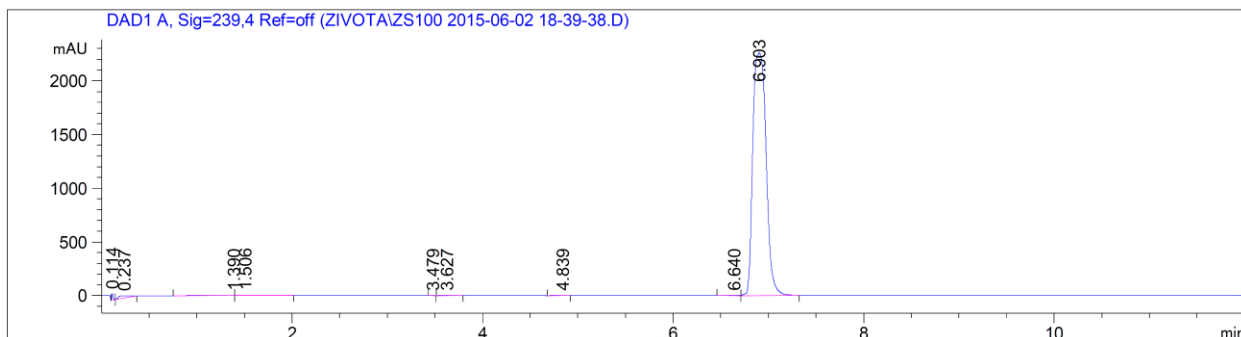
### *N*-(3-Morpholin-4-ylpropyl)-1,5-naphthyridin-4-amine 8 (ZS100).



Signal 1: DAD1 A, Sig=253,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.397	BB	0.0933	8.58262	1.11460	0.0566
2	3.516	BB	0.0764	10.09997	1.57403	0.0666
3	6.002	BV	0.0699	1.45219e4	3112.81812	95.7593
4	6.221	VV	0.0729	95.05752	17.77387	0.6268
5	6.439	VB	0.1176	529.36005	60.16938	3.4907

Totals : 1.51650e4 3193.44999



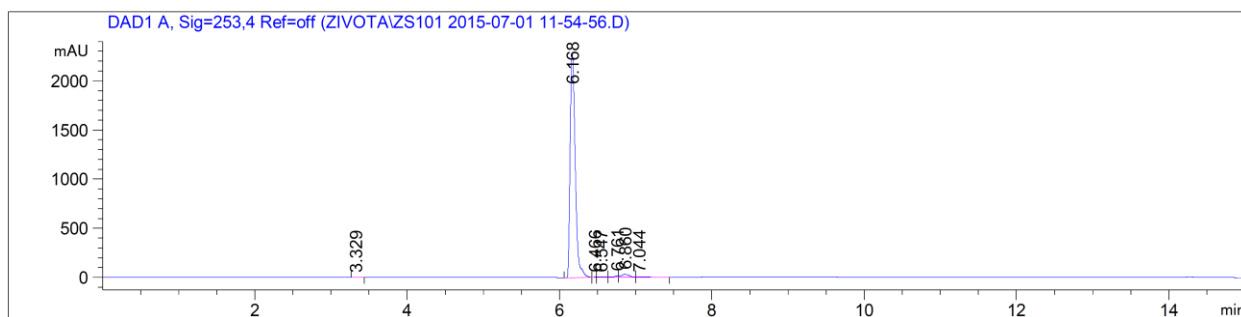
Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.114	BB	0.0178	65.63227	59.61153	0.2940
2	0.237	BB	0.1020	187.67328	22.11294	0.8405
3	1.390	BV	0.1218	38.82023	3.76498	0.1739
4	1.506	VB	0.2221	76.29395	4.03429	0.3417
5	3.479	BB	0.0359	5.20179	1.78854	0.0233
6	3.627	BB	0.1303	28.37070	2.56057	0.1271
7	4.839	BV	0.1624	20.19368	1.45952	0.0904
8	6.640	BB	0.1153	20.93728	2.15518	0.0938
9	6.903	BB	0.1140	2.18845e4	2269.60791	98.0154

Totals : 2.23276e4 2367.09545

### *N*<sup>1</sup>,*N*<sup>1</sup>-Diethyl-*N*<sup>4</sup>-1,5-naphthyridin-4-ylpentane-1,4-diamine 5 (ZS101).

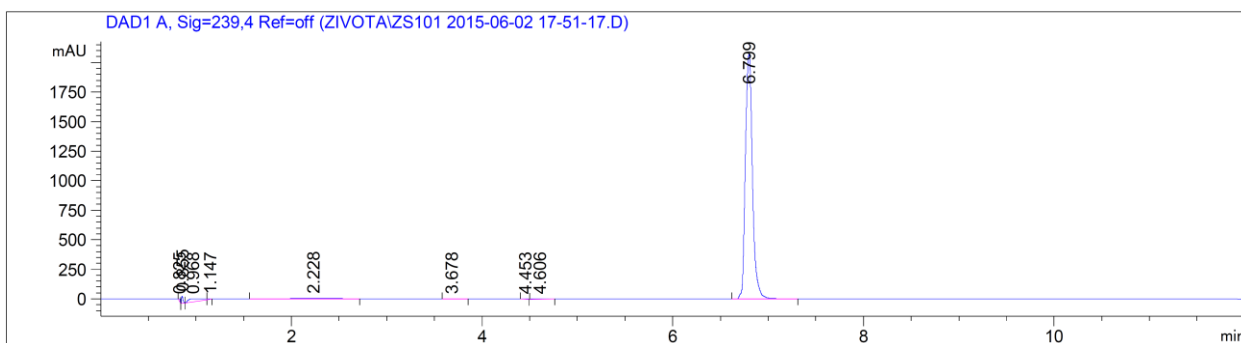




Signal 1: DAD1 A, Sig=253,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.329	BV	0.0804	7.72992	1.16532	0.0695
2	6.168	BV	0.0725	1.06794e4	2287.92065	96.0006
3	6.466	VV	0.0438	15.32661	4.72882	0.1378
4	6.547	VV	0.0861	59.26585	8.96998	0.5328
5	6.761	VV	0.0716	71.98312	14.46378	0.6471
6	6.860	VV	0.1069	235.72408	30.92774	2.1190
7	7.044	VB	0.1495	54.87851	4.33933	0.4933

Totals : 1.11243e4 2352.51562

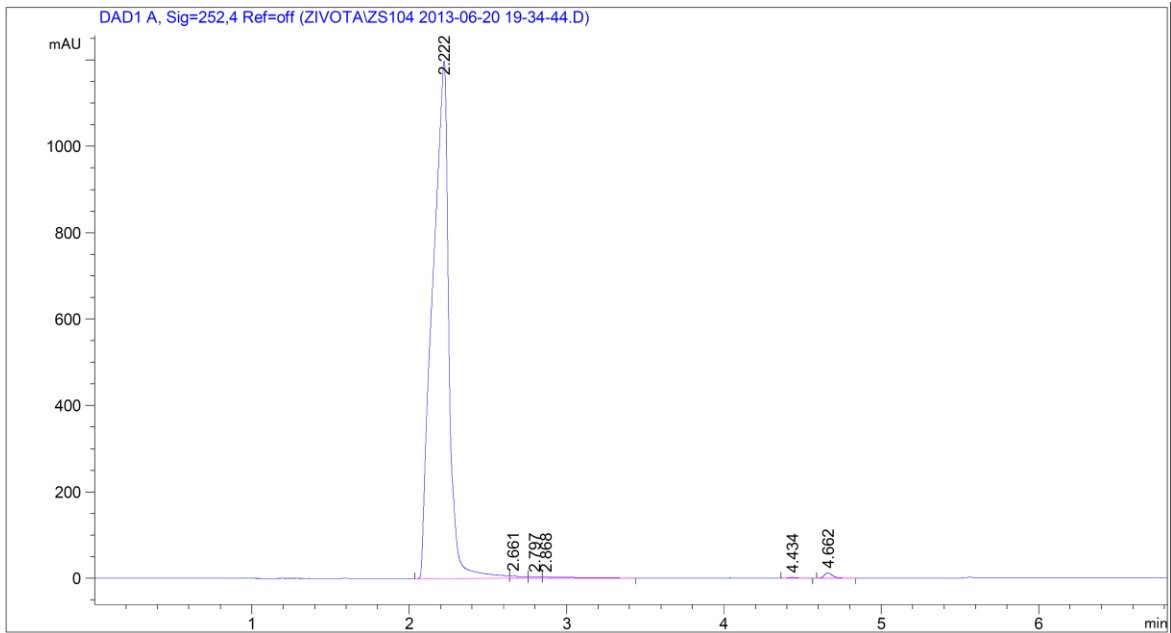


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.825	BB	0.0185	23.07977	18.50707	0.2079
2	0.855	BB	0.0166	62.78275	60.51252	0.5655
3	0.968	BV	0.1098	225.47797	24.86665	2.0308
4	1.147	VB	0.0556	11.32918	2.44128	0.1020
5	2.228	BB	0.3284	112.00332	3.99752	1.0088
6	3.678	BB	0.1225	18.81624	1.81382	0.1695
7	4.453	BB	0.0429	9.49245	2.64440	0.0855
8	4.606	BB	0.1276	34.28220	3.19817	0.3088
9	6.799	BB	0.0813	1.06056e4	2069.69604	95.5213

Totals : 1.11028e4 2187.67747

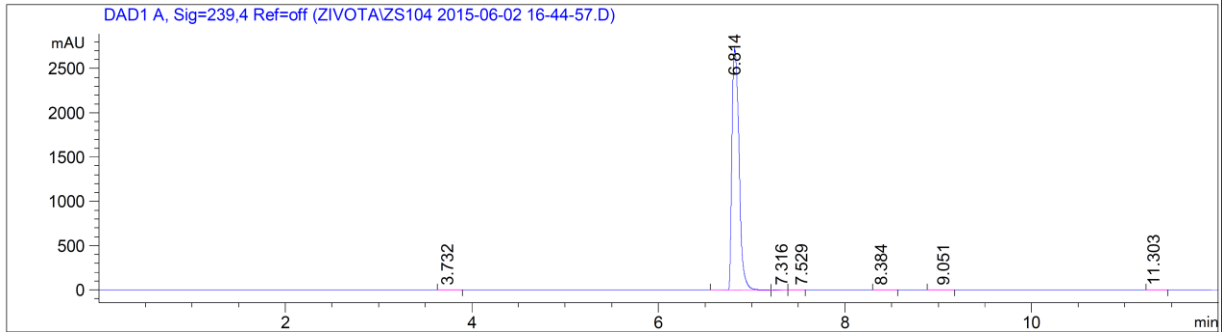
***N,N*-Diethyl-*N'*-1,5-naphthyridin-4-ylpropane-1,3-diamine 9 (ZS104).**



Signal 1: DAD1 A, Sig=252,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.222	BV	0.0959	8564.44336	1197.83606	98.3039
2	2.661	VV	0.0668	32.00362	6.24189	0.3673
3	2.797	VV	0.0627	19.48689	4.12201	0.2237
4	2.868	VB	0.1646	46.23114	3.38004	0.5306
5	4.434	BB	0.0501	5.87287	1.59017	0.0674
6	4.662	BB	0.0556	44.17532	12.24465	0.5071

Totals : 8712.21321 1225.41483

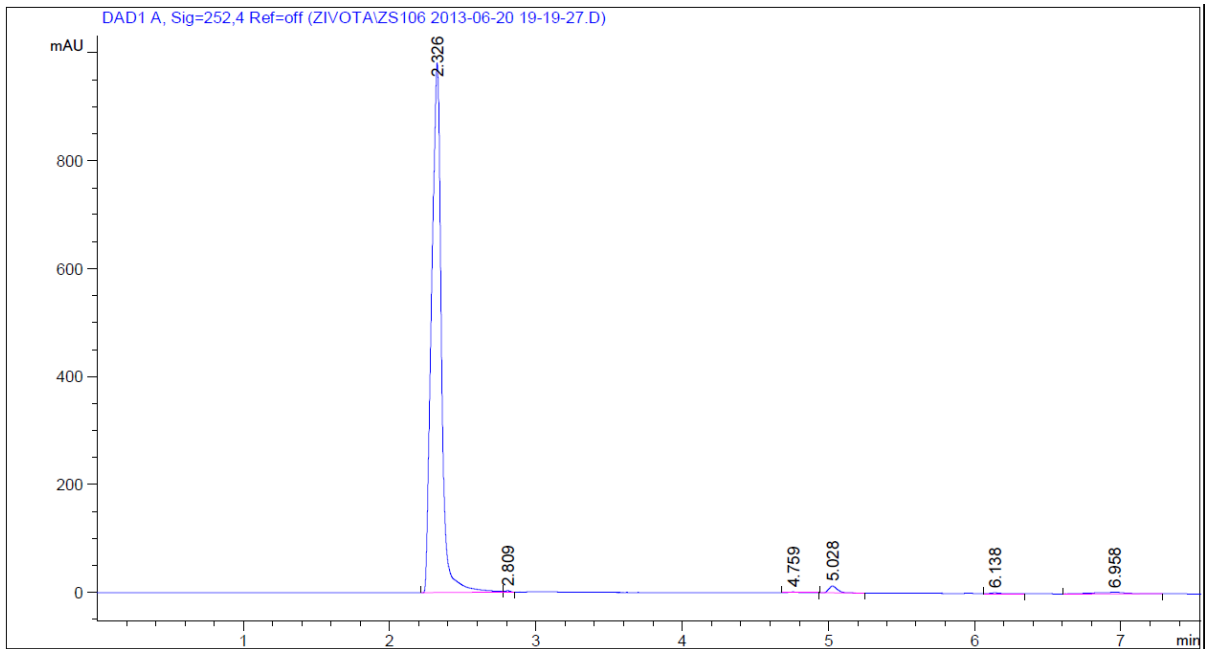


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.732	BB	0.1225	11.29223	1.08389	0.0773
2	6.814	BB	0.0718	1.45367e4	2720.51758	99.4855
3	7.316	BV	0.0850	25.99200	3.63367	0.1779
4	7.529	VV	0.1518	13.98026	1.08183	0.0957
5	8.384	BB	0.0956	9.01437	1.11152	0.0617
6	9.051	BV	0.0688	9.44595	1.68657	0.0646
7	11.303	BB	0.0592	5.45470	1.11265	0.0373

Totals : 1.46118e4 2730.22770

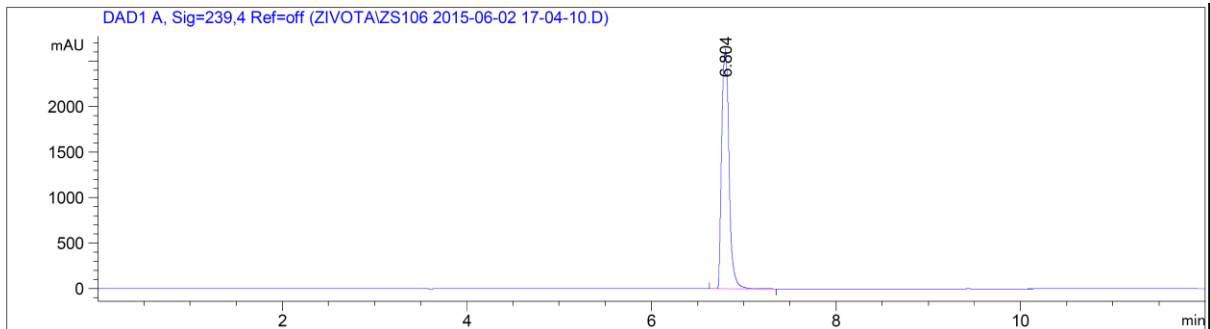
### 1-Morpholin-4-yl-3-(1,5-naphthyridin-4-ylamino)propan-2-ol 10 (ZS106).



Signal 1: DAD1 A, Sig=252,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.326	BV	0.0770	4579.94482	981.19379	97.4873
2	2.809	VB	0.0431	7.22071	2.54880	0.1537
3	4.759	BB	0.0598	7.18563	1.66761	0.1530
4	5.028	BB	0.0634	52.28813	12.59346	1.1130
5	6.138	BB	0.0570	6.10371	1.46899	0.1299
6	6.958	BV	0.1755	45.24614	3.05205	0.9631

Totals : 4697.98913 1002.52471

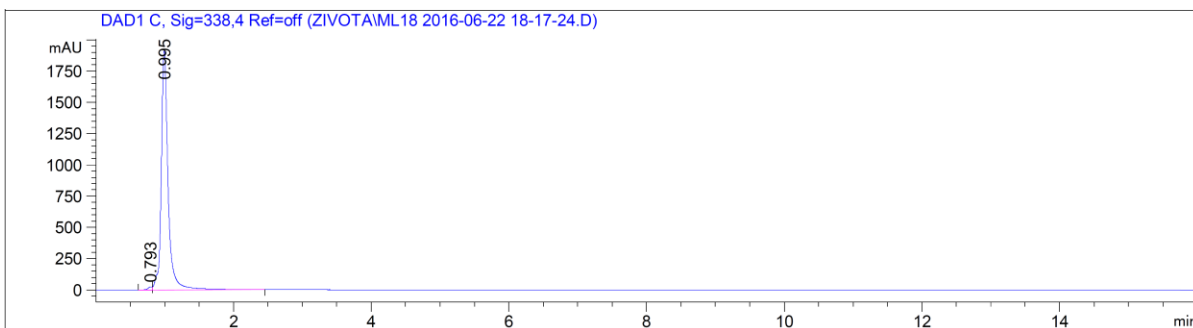


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.804	BB	0.0695	1.46632e4	2633.13550	100.0000

Totals : 1.46632e4 2633.13550

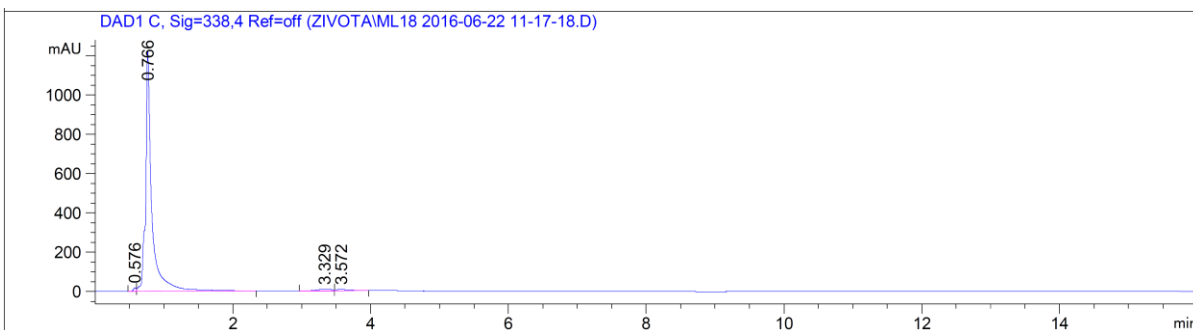
***N*-(7-Chloroquinolin-4-yl)-N'-(1,5-naphthyridin-4-yl)butane-1,4-diamine 11 (ZSML18).**



Signal 2: DAD1 C, Sig=338,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.793	BV	0.0577	87.89162	23.74557	0.6590
2	0.995	VV	0.1023	1.32502e4	1912.64734	99.3410

Totals : 1.33381e4 1936.39290

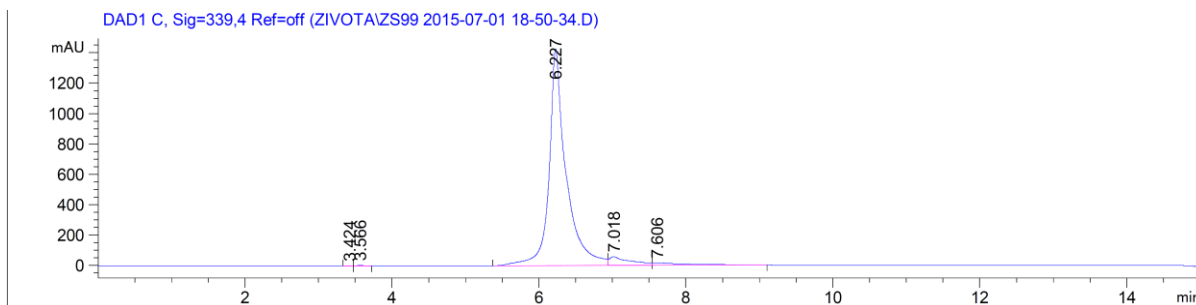


Signal 2: DAD1 C, Sig=338,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.576	BV	0.0375	47.58437	18.82564	0.5979
2	0.766	VB	0.0858	7716.13135	1219.68103	96.9483
3	3.329	BV	0.1731	111.49686	7.71455	1.4009
4	3.572	VB	0.1718	83.80080	5.77586	1.0529

Totals : 7959.01337 1251.99709

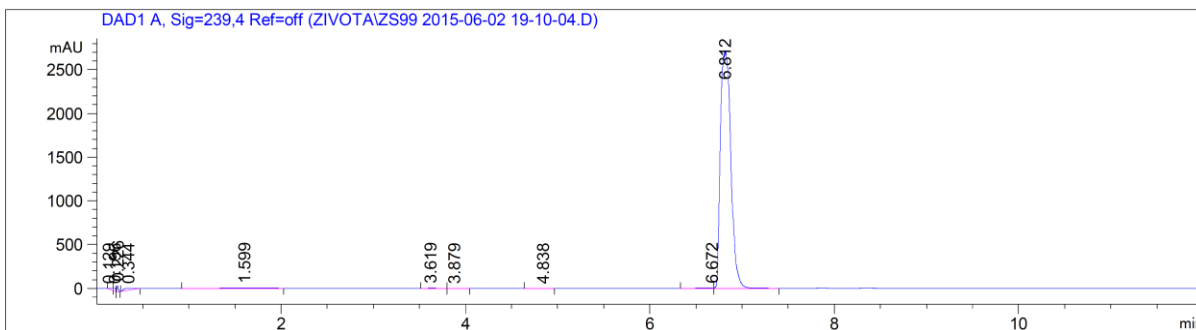
***N,N'*-Bis(3-morpholin-4-ylpropyl)-1,5-naphthyridine-4,8-diamine 12 (ZS99).**



Signal 2: DAD1 B, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.411	VB	0.0705	8.56749	1.50346	0.0332
2	3.564	BB	0.0913	15.91063	2.12547	0.0617
3	6.227	BV	0.2105	2.46260e4	1548.64502	95.5470
4	7.018	VV	0.2340	973.06805	54.33010	3.7754
5	7.598	VB	0.1994	150.16563	8.96736	0.5826

Totals : 2.57737e4 1615.57141

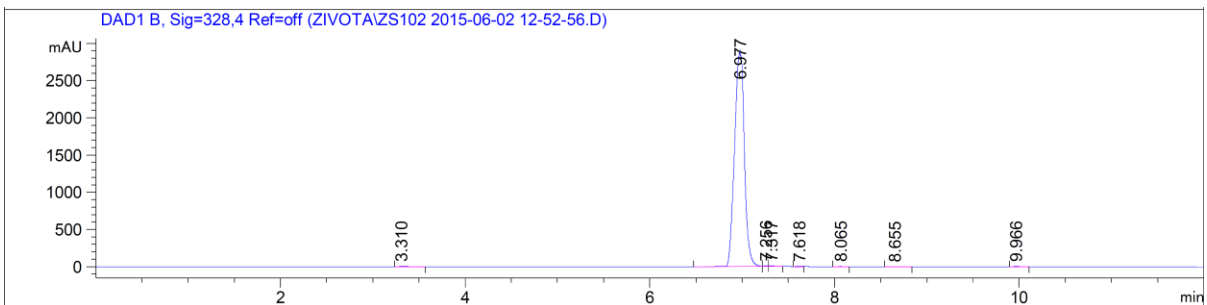


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.129	BV	0.1163	43.44361	4.41571	0.1981
2	0.196	VB	0.0282	55.81647	33.04084	0.2545
3	0.226	BB	0.0170	69.42977	64.96683	0.3166
4	0.344	BV	0.0969	179.28369	22.14957	0.8175
5	1.599	BB	0.3086	100.80338	3.84193	0.4597
6	3.619	BV	0.1558	43.61283	3.28592	0.1989
7	3.879	VB	0.1171	15.23909	1.53114	0.0695
8	4.838	BB	0.2246	24.96494	1.31404	0.1138
9	6.672	BB	0.1336	20.33248	1.78859	0.0927
10	6.812	BB	0.0960	2.13771e4	2696.99902	97.4787

Totals : 2.19301e4 2833.33358

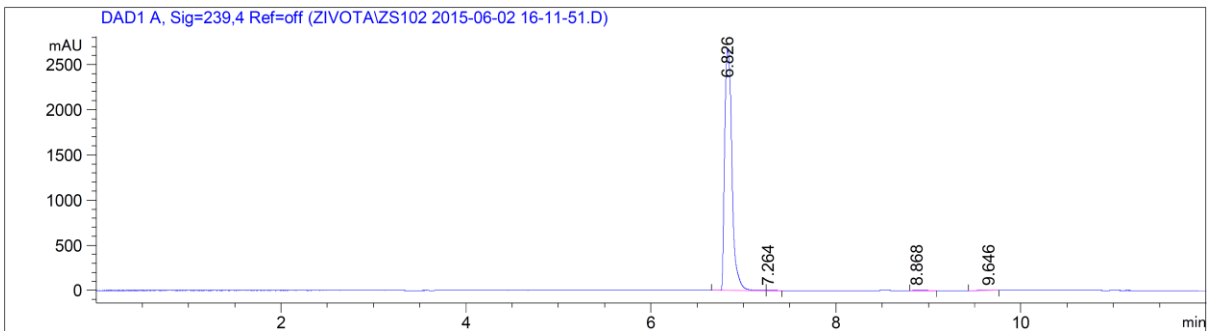
***N,N'*-Bis[3-(diethylamino)propyl]-1,5-naphthyridine-4,8-diamine 13 (ZS102).**



Signal 2: DAD1 B, Sig=328,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	3.310	BB	0.1247	32.70963	3.09757	0.1525
2	6.977	BV	0.0862	2.13022e4	2915.68530	99.3017
3	7.256	VV	0.0462	31.07222	10.00788	0.1448
4	7.317	VB	0.0548	49.24163	12.54987	0.2295
5	7.618	BV	0.0489	9.57386	2.57146	0.0446
6	8.065	BB	0.0582	5.26067	1.11230	0.0245
7	8.655	BB	0.0631	8.30544	1.62673	0.0387
8	9.966	BV	0.0662	13.64024	2.59928	0.0636

Totals : 2.14520e4 2949.25038

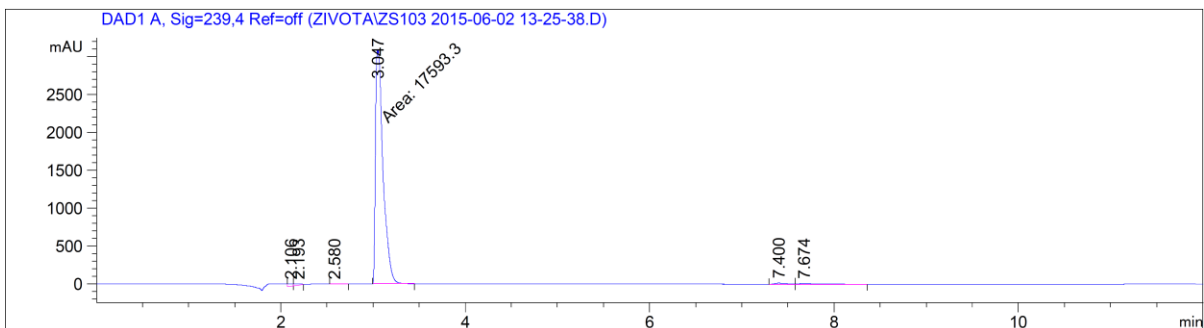


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.826	VV	0.0650	1.46199e4	2666.64551	99.8126
2	7.264	VB	0.0894	8.17396	1.12339	0.0558
3	8.868	BB	0.0977	9.35926	1.14046	0.0639
4	9.646	BB	0.0868	9.90981	1.37144	0.0677

Totals : 1.46473e4 2670.28080

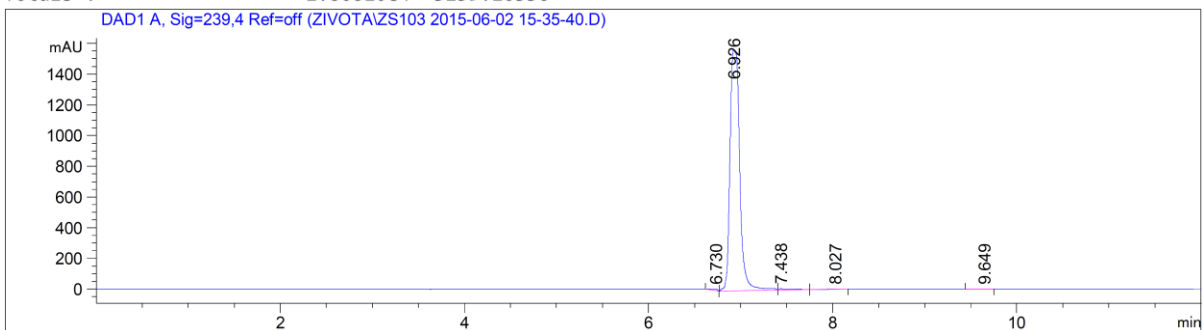
***N,N'*-Bis[4-(diethylamino)-1-methylbutyl]-1,5-naphthyridine-4,8-diamine 4 (ZS103).**



Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.106	VV	0.0517	101.91100	26.92634	0.5636
2	2.193	VB	0.0733	80.61775	13.01164	0.4459
3	2.580	VB	0.0716	12.44416	2.08684	0.0688
4	3.047	MM	0.0948	1.75933e4	3092.11792	97.3025
5	7.400	BV	0.1215	134.09627	14.75637	0.7416
6	7.674	VB	0.1833	158.66046	10.26425	0.8775

Totals : 1.80810e4 3159.16336



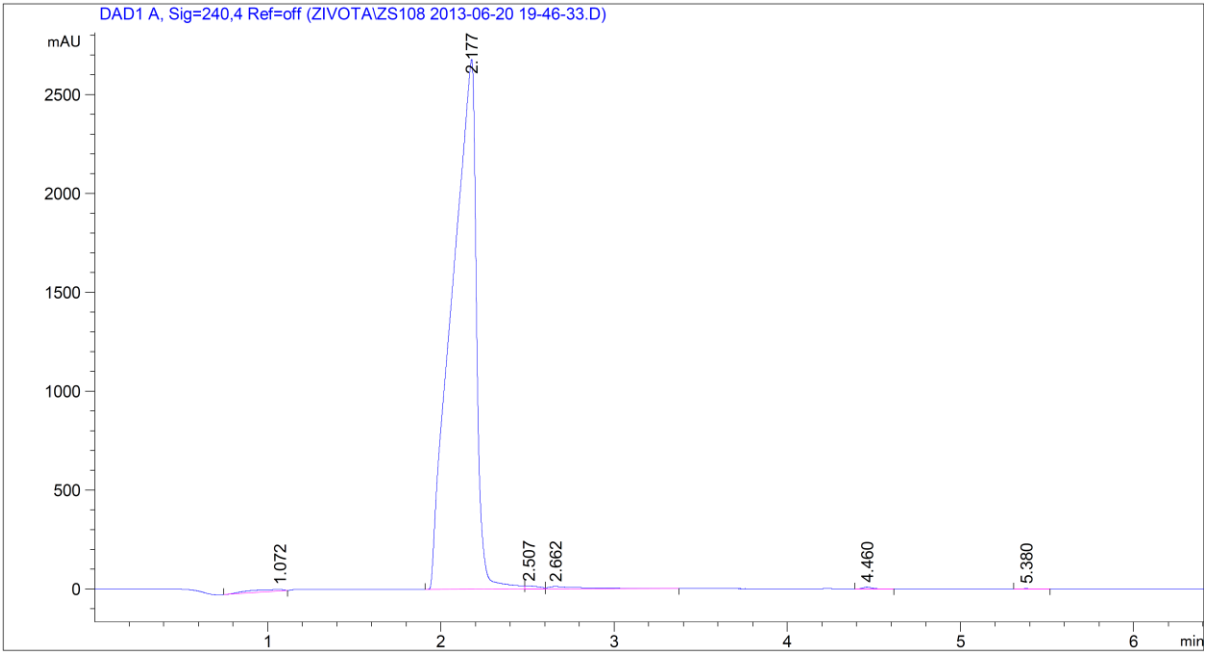
Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.730	BB	0.0626	43.72330	9.17591	0.3732
2	6.926	BV	0.1008	1.15180e4	1566.35547	98.3016
3	7.438	VV	0.1496	109.06716	8.82736	0.9308
4	8.027	VB	0.3635	38.33007	1.23716	0.3271
5	9.649	BV	0.0870	7.88452	1.08270	0.0673

Totals : 1.17170e4 1586.67860

**1,1'-[1,5-Naphthyridine-4,8-diyl]bis(3-morpholin-4-ylpropan-2-ol) 14 (ZS108).**

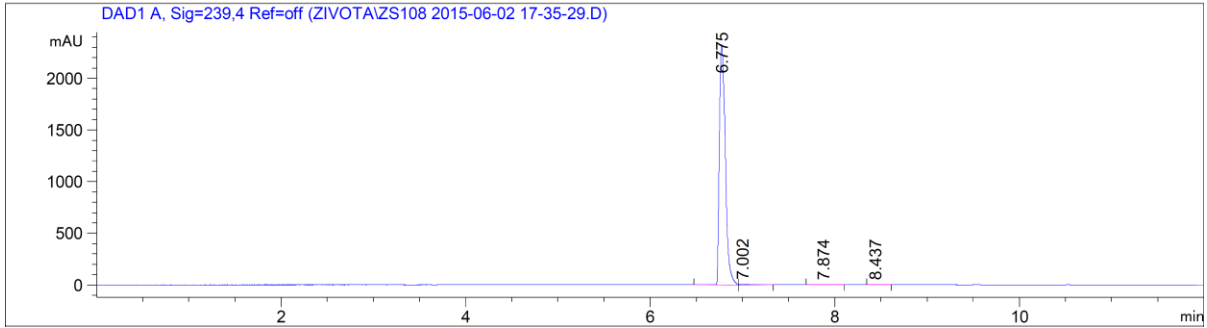




Signal 1: DAD1 A, Sig=240,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	1.072	BB	0.3025	164.04135	6.52098	0.6199
2	2.177	BV	0.1232	2.59885e4	2678.74805	98.2121
3	2.507	VV	0.0703	85.67378	15.91399	0.3238
4	2.662	VB	0.1962	185.00366	11.94586	0.6991
5	4.460	BB	0.0569	31.98832	8.81144	0.1209
6	5.380	BB	0.0500	6.39209	1.91012	0.0242

Totals : 2.64616e4 2723.85044

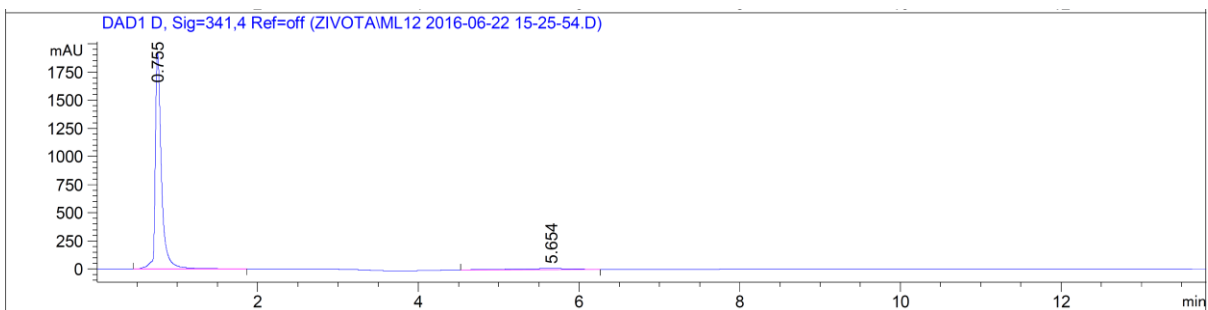


Signal 1: DAD1 A, Sig=239,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.775	BB	0.0674	1.04636e4	2330.27075	99.1652
2	7.002	BB	0.0968	65.22064	8.06993	0.6181
3	7.874	BB	0.1112	13.98400	1.50715	0.1325
4	8.437	BB	0.0667	8.87663	1.70580	0.0841

Totals : 1.05516e4 2341.55364

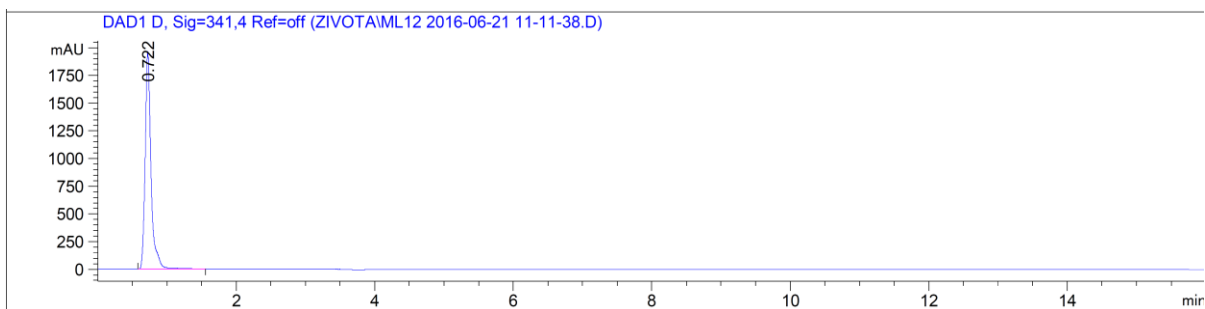
***N,N'*-Bis[2-(morpholin-4-yl)ethyl]-1,5-naphthyridine-4,8-diamine 3 (ZSML12).**



Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.755	BB	0.0800	1.03825e4	1923.16821	95.4488
2	5.654	BV	0.6635	495.06088	8.71770	4.5512

Totals : 1.08776e4 1931.88591

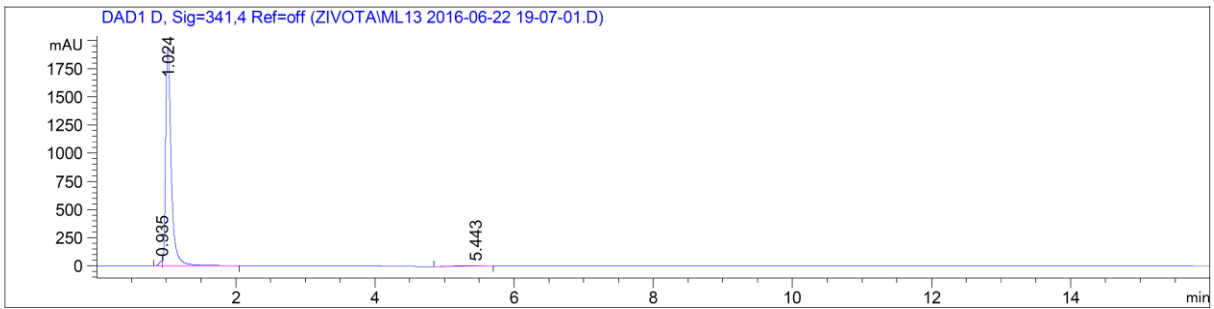


Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.722	BV	0.0838	1.15879e4	1964.26660	100.0000

Totals : 1.15879e4 1964.26660

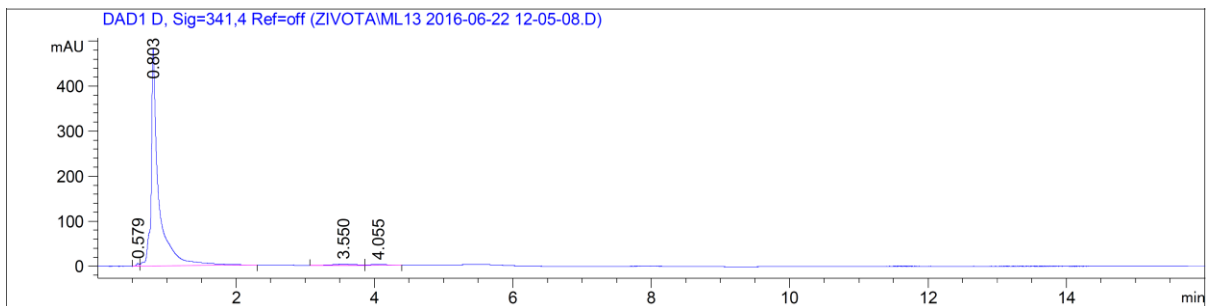
***N,N'*-Bis[2-(diethylamino)ethyl]-1,5-naphthyridine-4,8-diamine 15 (ZSML13).**



Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.935	BV	0.0463	118.56948	39.75815	1.0665
2	1.024	VB	0.0853	1.08735e4	1941.24707	97.8063
3	5.443	BV	0.4934	125.31347	2.97798	1.1272

Totals : 1.11174e4 1983.98320

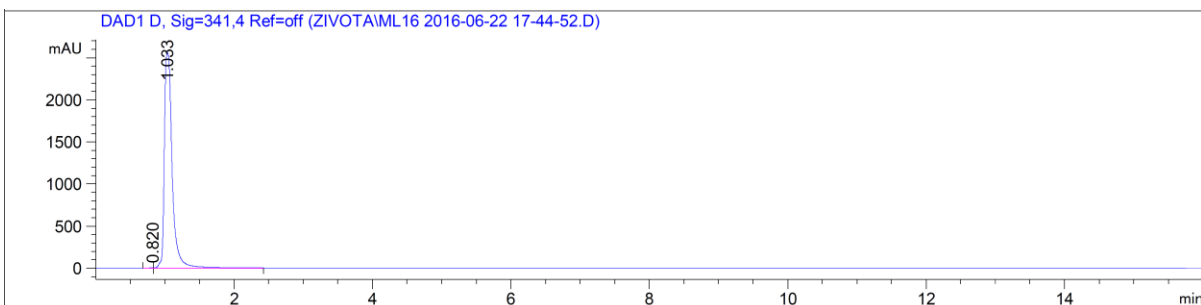


Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.579	BV	0.0378	16.20865	6.33641	0.4262
2	0.803	VB	0.1011	3686.86792	482.92194	96.9463
3	3.550	BV	0.2696	67.70758	2.95175	1.7804
4	4.055	VB	0.2176	32.21491	1.74298	0.8471

Totals : 3802.99906 493.95308

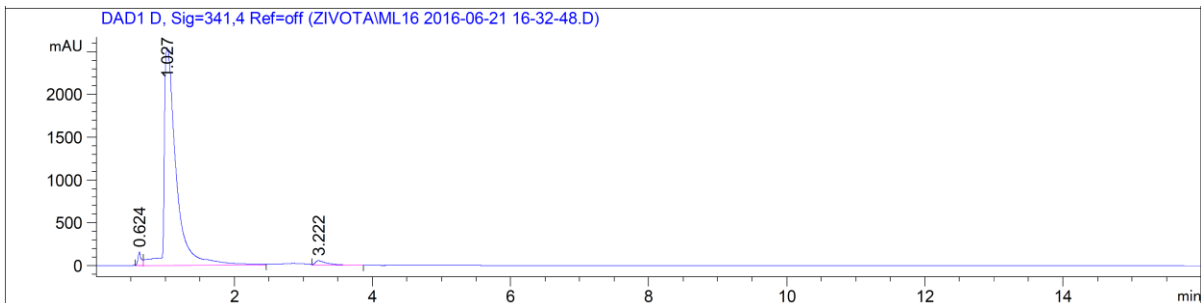
***N,N'*-Bis[4-(morpholin-4-yl)butyl]-1,5-naphthyridine-4,8-diamine 16 (ZSML16).**



Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.820	BV	0.0556	15.65641	3.75806	0.0773
2	1.033	VV	0.0932	2.02344e4	2587.51416	99.9227

Totals : 2.02500e4 2591.27222

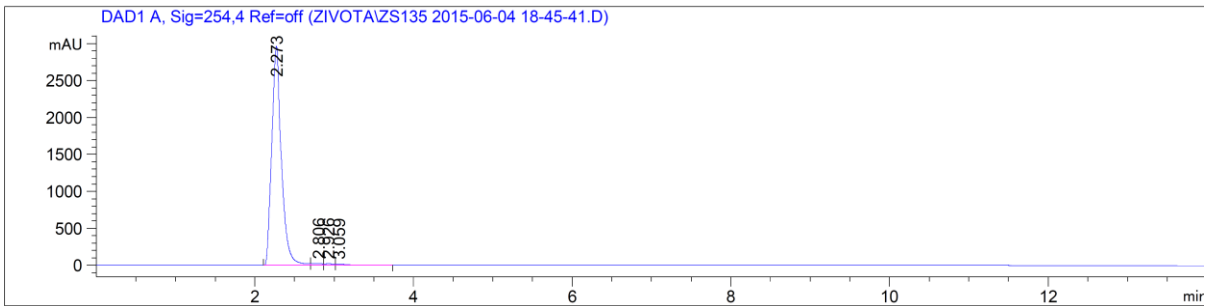


Signal 3: DAD1 D, Sig=341,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.624	BV	0.0454	518.76703	159.72467	1.6036
2	1.027	VV	0.1449	3.11435e4	2542.84912	96.2705
3	3.222	VB	0.1735	687.72131	54.21645	2.1259

Totals : 3.23500e4 2756.79025

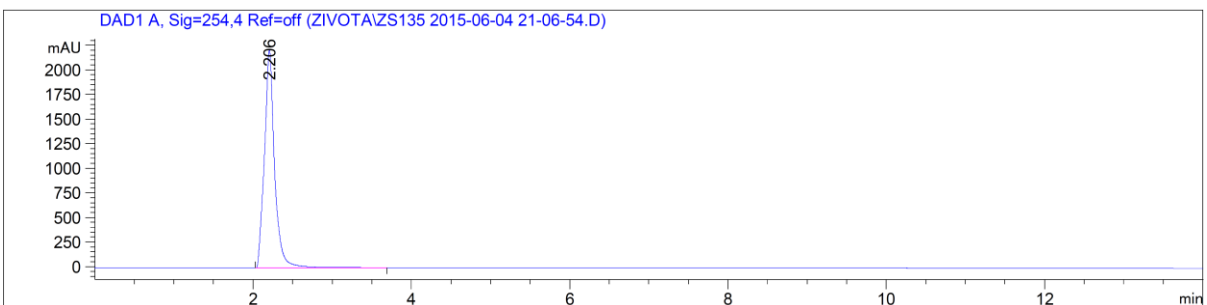
***N,N'*-Bis{2-[2-(dimethylamino)ethoxy]ethyl}quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 21 (ZS135).**



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.273	BV	0.1014	2.49906e4	2962.07593	97.8839
2	2.806	VV	0.1150	204.68803	21.32609	0.8017
3	2.926	VV	0.1022	156.97392	19.87038	0.6148
4	3.059	VB	0.1329	178.58263	16.88495	0.6995

Totals : 2.55308e4 3020.15734

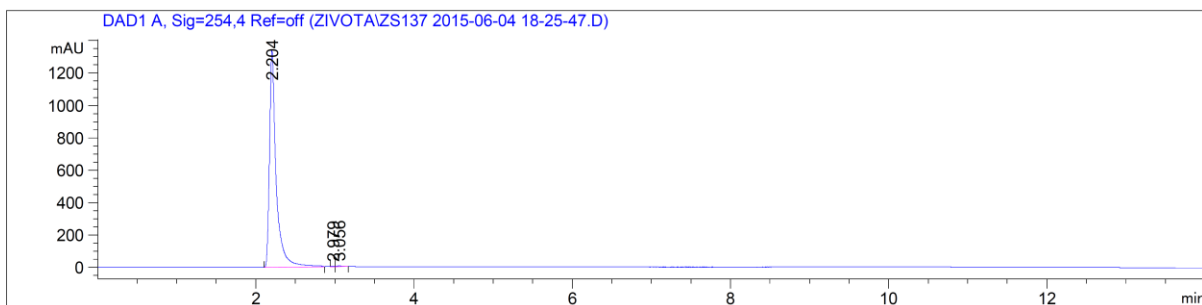


Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.206	BB	0.1244	1.98461e4	2218.57007	100.0000

Totals : 1.98461e4 2218.57007

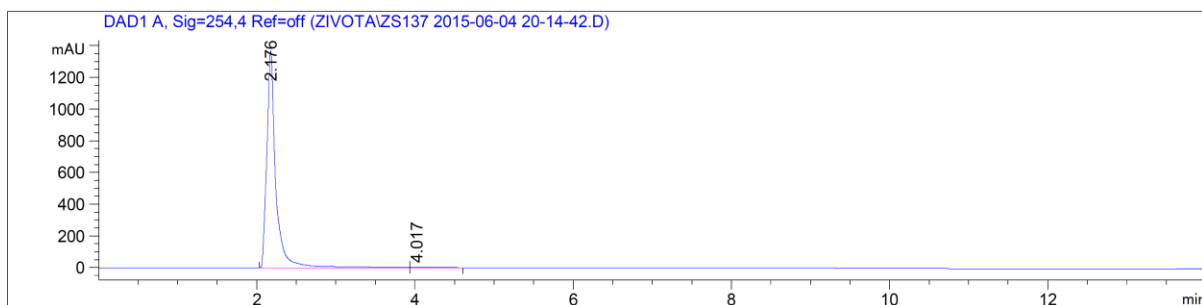
***N,N'*-Bis(4-aminobutyl)quino[8,7-*h*]quinoline-1,7-diamine dihydrochloride 22 (ZS137).**



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.204	BB	0.0821	7834.41406	1341.32239	99.7031
2	2.979	VV	0.0400	5.14414	1.90549	0.0655
3	3.056	VB	0.0531	18.18274	4.64707	0.2314

Totals : 7857.74095 1347.87494

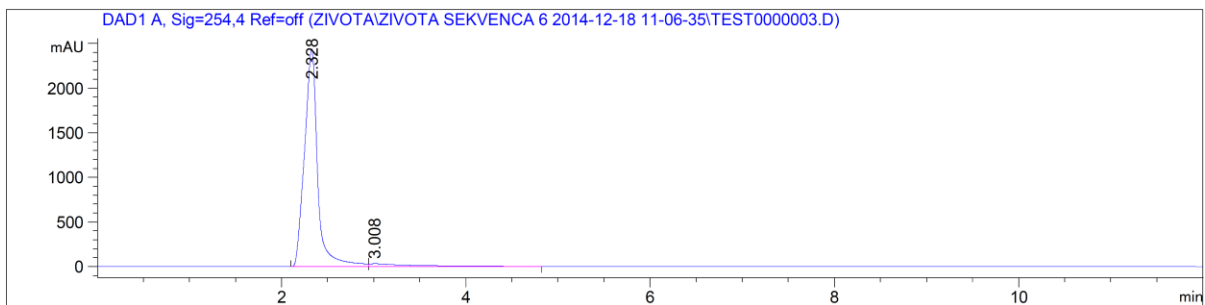


Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.176	BV	0.1094	1.08267e4	1366.77856	99.6308
2	4.017	VB	0.1678	40.11929	2.89358	0.3692

Totals : 1.08668e4 1369.67214

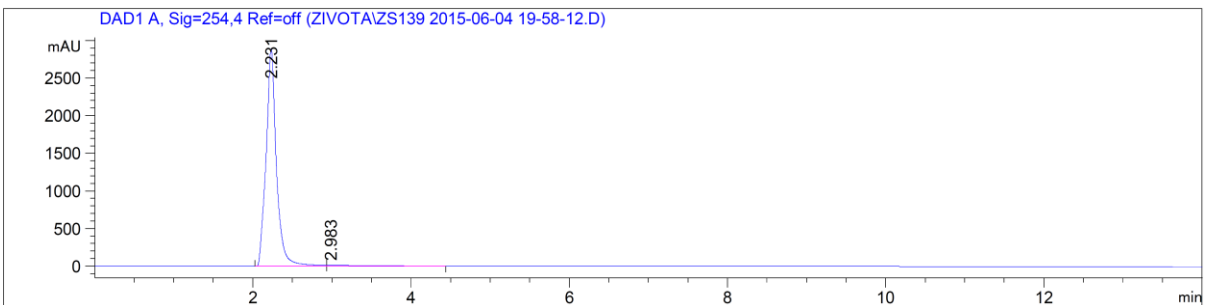
***N,N'*-Bis(3-aminopropyl)quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 23 (ZS139).**



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.328	BV	0.1410	2.41568e4	2440.06592	96.2572
2	3.008	VB	0.3623	939.28448	31.28627	3.7428

Totals : 2.50960e4 2471.35219

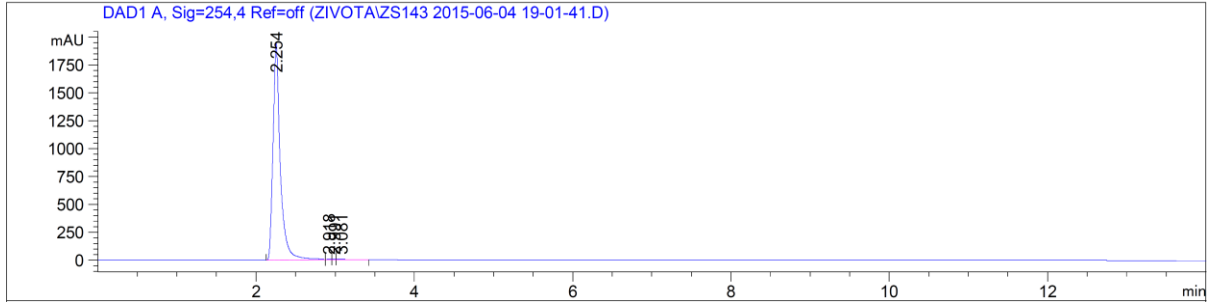


Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.231	BV	0.1176	2.63500e4	2896.32446	98.4717
2	2.983	VB	0.3976	408.95474	12.16841	1.5283

Totals : 2.67589e4 2908.49287

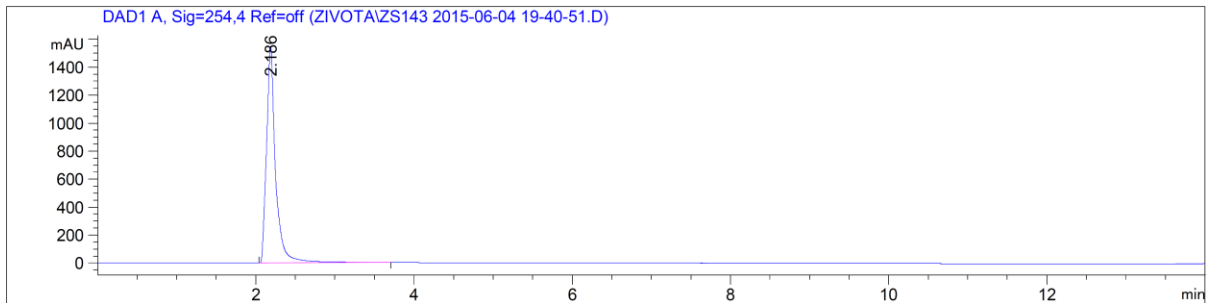
**N-[3-(Diethylamino)propyl]-N'-(2-morpholin-4-ylethyl)quino[8,7-h]quinoline-1,7-diamine tetrahydrochloride 19 (ZS143).**



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.254	BB	0.0899	1.24551e4	1952.70703	99.5900
2	2.918	BV	0.0482	8.24104	2.42205	0.0659
3	2.991	VV	0.0378	6.84807	2.43910	0.0548
4	3.081	VB	0.0906	36.19036	5.51253	0.2894

Totals : 1.25064e4 1963.08071



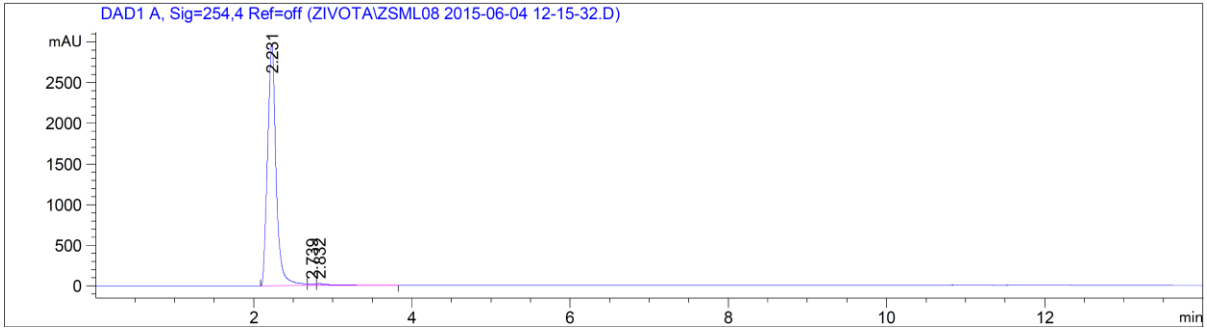
Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.186	BB	0.1119	1.24121e4	1550.30701	100.0000

Totals : 1.24121e4 1550.30701

***N*-(4-Morpholin-4-ylbutyl)-*N*'-(2-morpholin-4-ylethyl)quino[8,7-*h*]quinoline-1,7-diamine tetrahydrochloride 2 (ZSML08).**

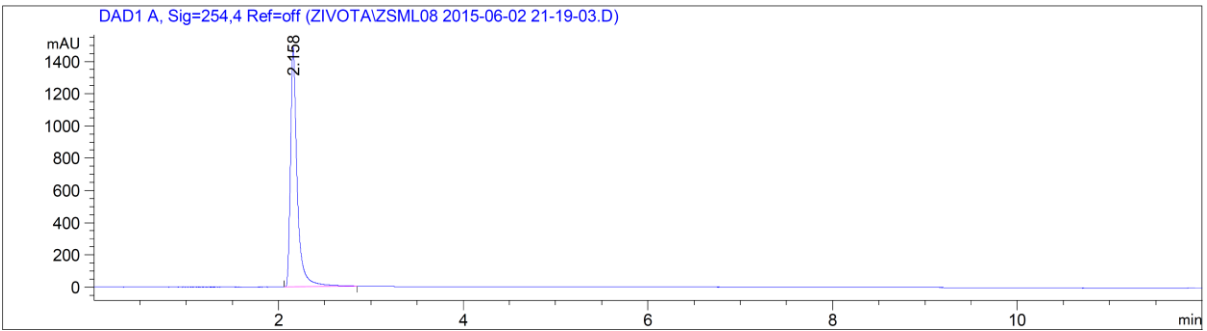




Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.231	BV	0.0989	2.22582e4	2971.25781	97.8663
2	2.739	VV	0.0828	156.06012	23.11955	0.6862
3	2.832	VB	0.1584	329.22473	25.97022	1.4476

Totals : 2.27435e4 3020.34759

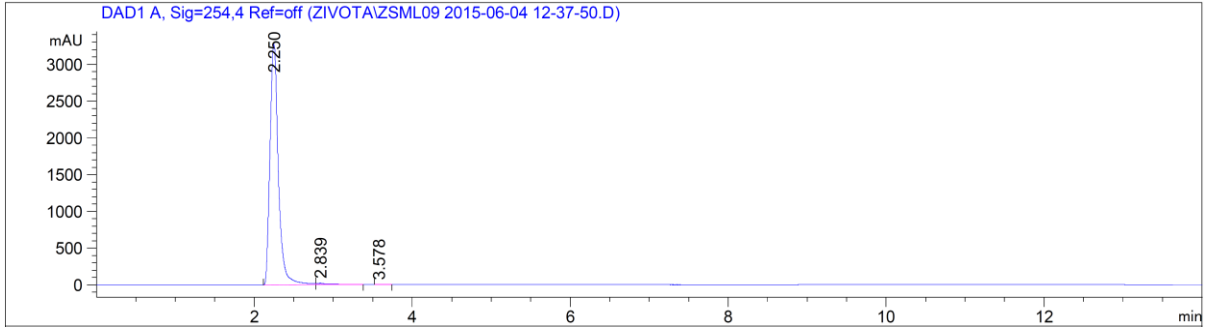


Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.158	BB	0.0730	7531.18701	1490.29614	100.0000

Totals : 7531.18701 1490.29614

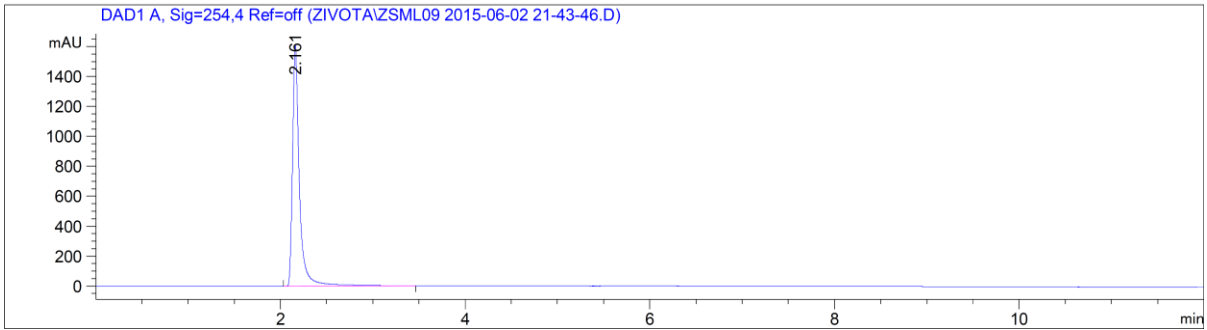
**1-Morpholin-4-yl-3-((7-((2-morpholin-4-ylethyl)amino)quino[8,7-*h*]quinolin-1-yl)amino)propan-2-ol tetrahydrochloride 20 (ZSML09).**



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.250	BV	0.0879	2.41691e4	3281.67480	99.1716
2	2.839	VB	0.1325	195.79173	18.88359	0.8034
3	3.578	BB	0.0721	6.09961	1.02182	0.0250

Totals : 2.43710e4 3301.58021



Signal 1: DAD1 A, Sig=254,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.161	BB	0.0753	8368.87695	1606.11804	100.0000

Totals : 8368.87695 1606.11804