

Enantioselective Organocatalytic Michael Additions of *N,N'*-Dialkylbarbituric Acids to Enones

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wyouqing@hotmail.com

Supporting Information

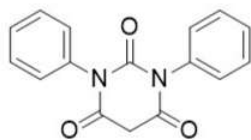
Copy of NMR for New Compounds	S2-37
Copy of HPLC for Chiral Michael Products.....	S38-55
Copy of HRMS for New Compounds	S56

Copy of NMR for New Compounds

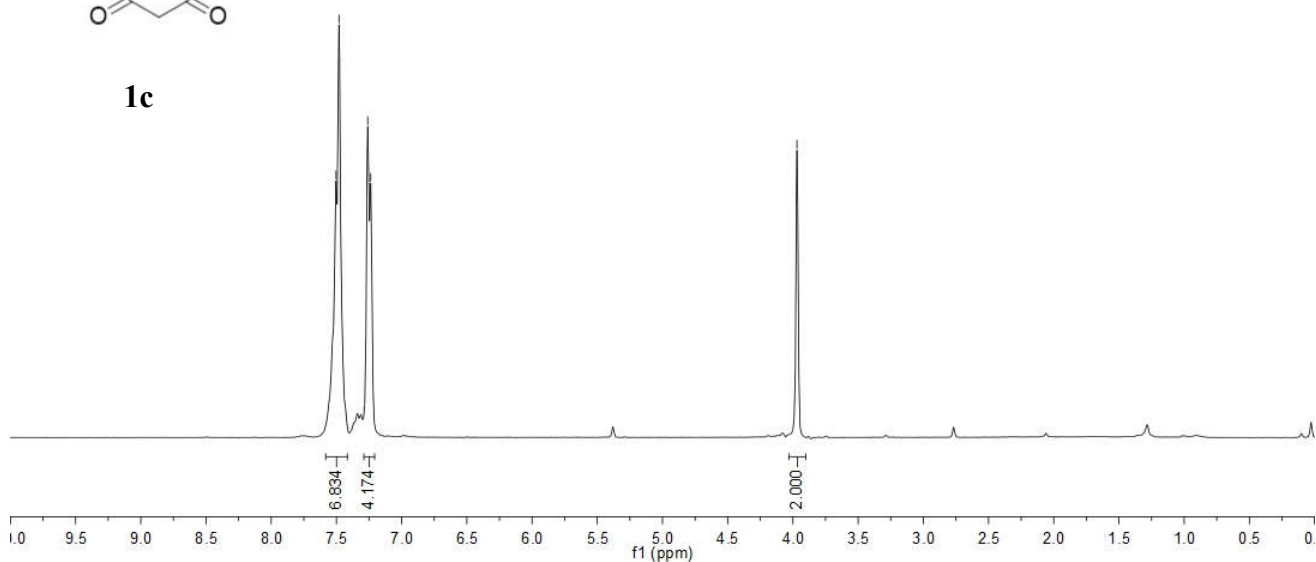
1y-2-76-H CDCL3 300M

7.5029
7.4802
7.2589
7.2374

3.9691



1c



LY-2-73-C 75M CDCL3

164.4889

151.2340

133.8907

129.5062

129.3545

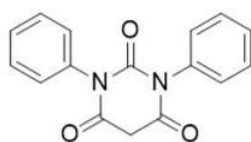
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77.5559

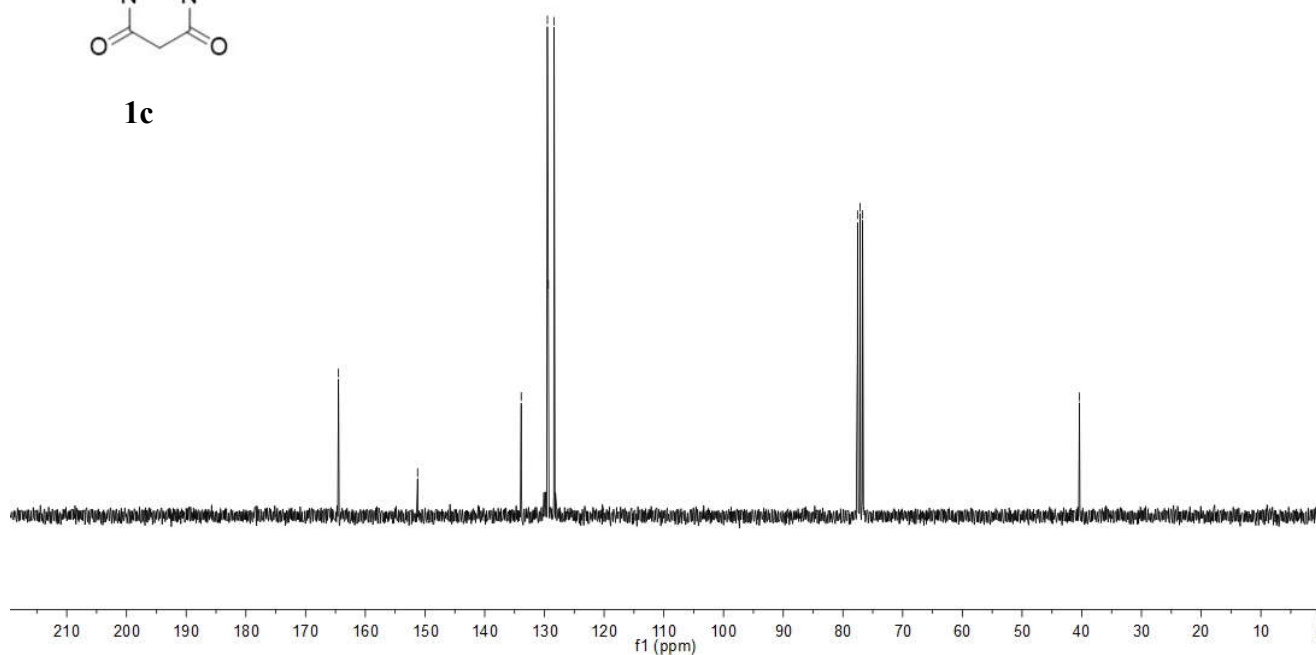
77.1320

76.7078

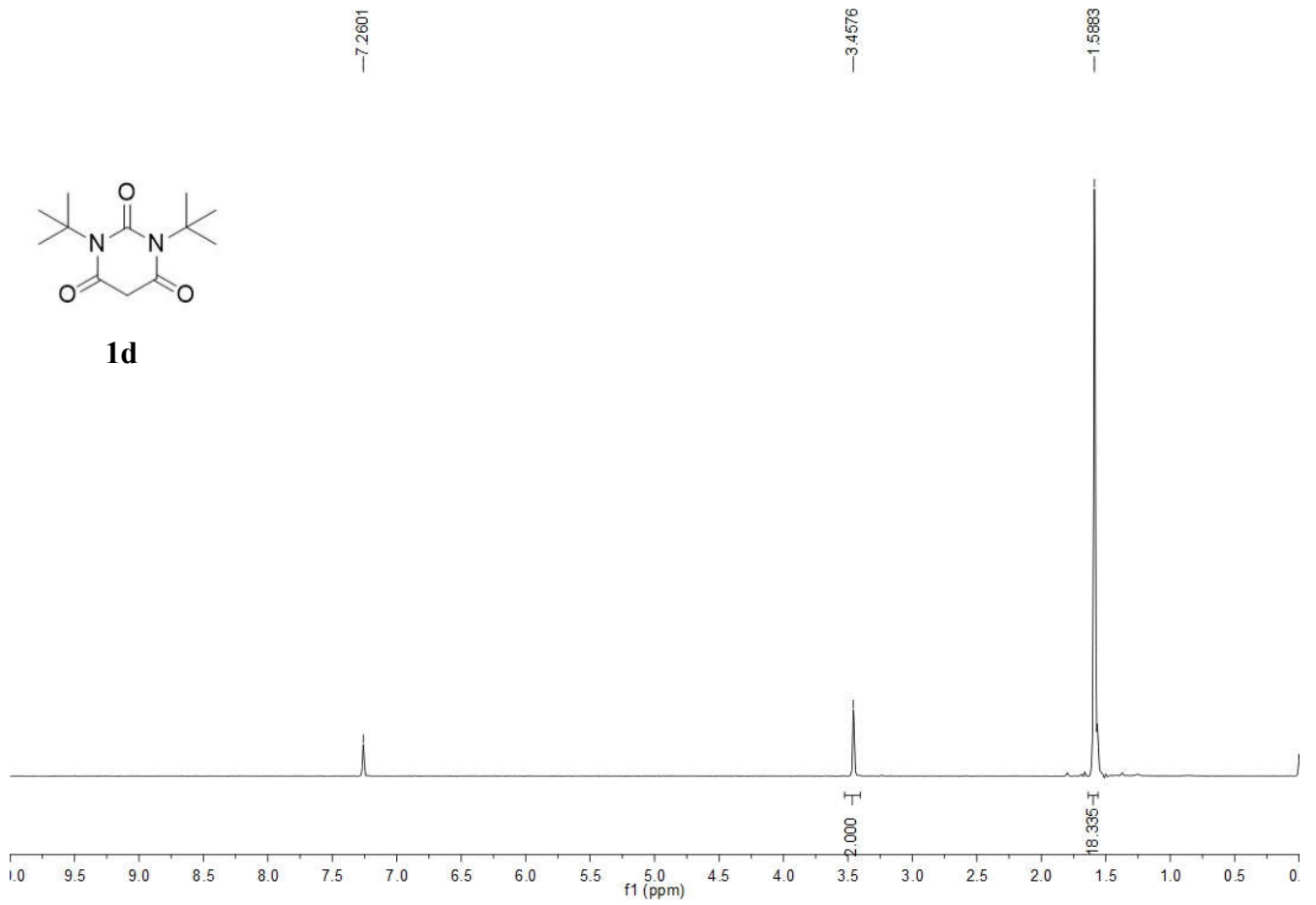
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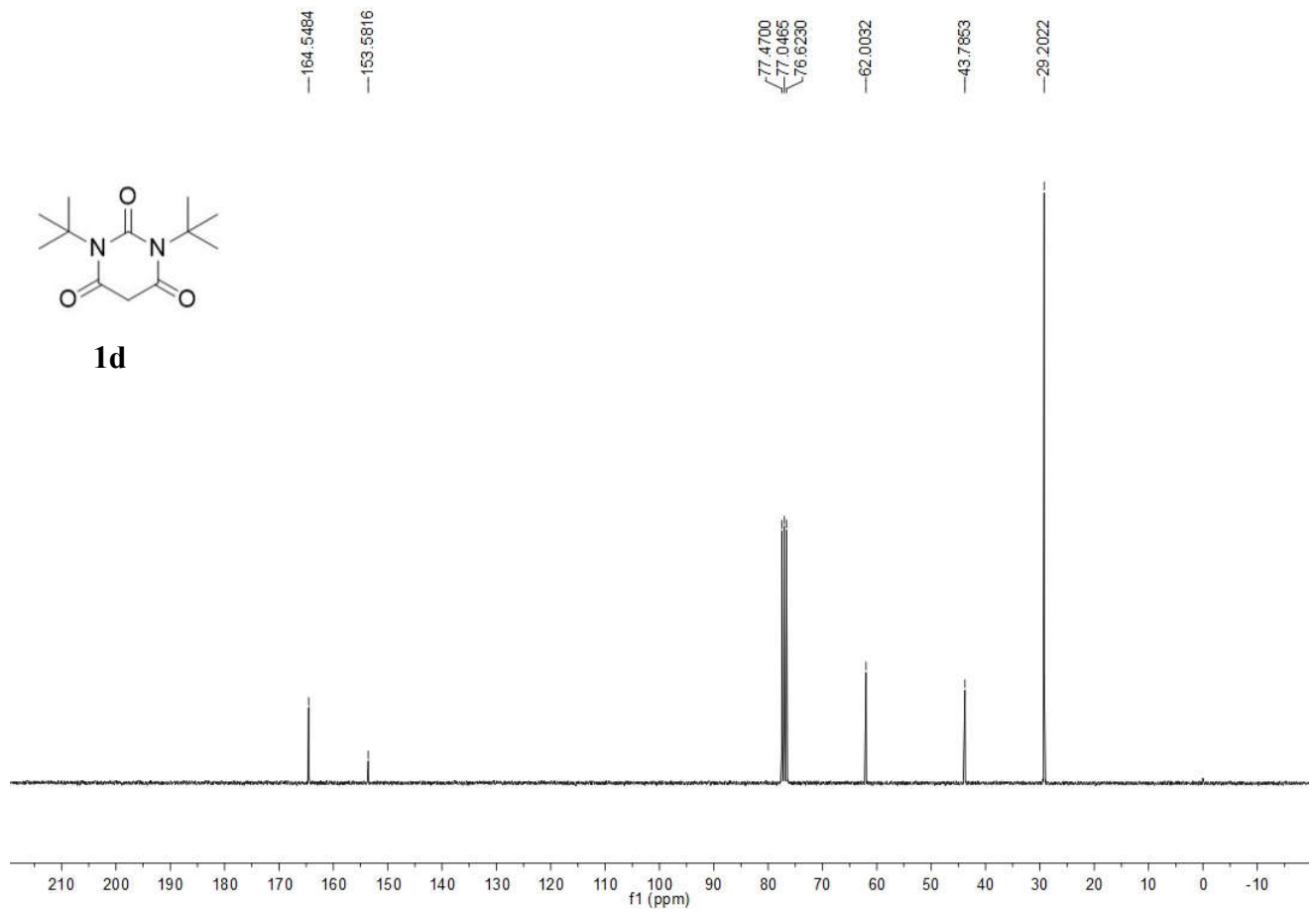
1c



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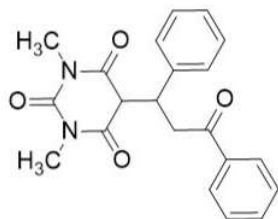
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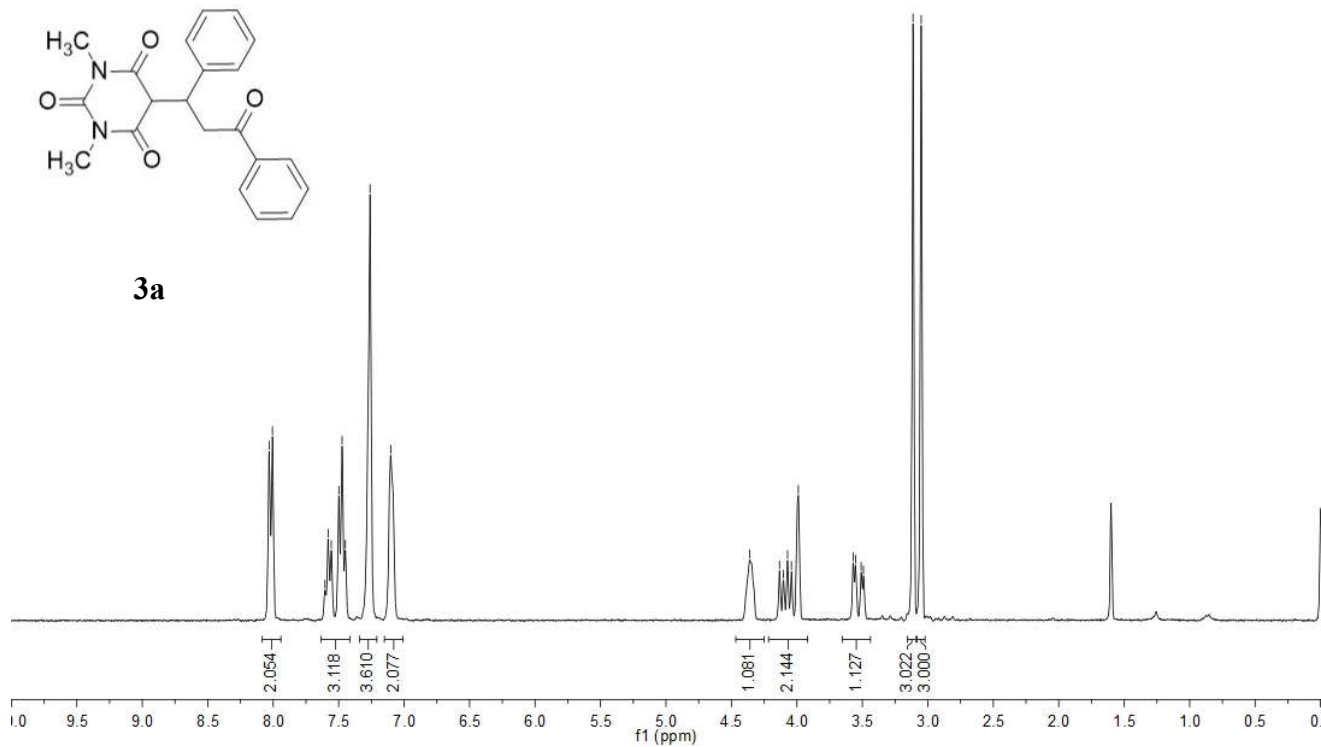
LY-2-36-H CDCL3 300M

8.0309
8.0068
7.5807
7.4984
7.4488
7.2604
7.1024

4.3607
4.0714
3.9893
3.5693
3.5521
3.5094
3.4919
3.1131
3.0508



3a



LY-3-36-C CDCL3 75M

197.6960

168.3404
167.8233

150.9923

138.1793

136.7607

133.3788

128.7294

128.6845

128.3768

128.0915

127.3660

77.4839

77.0603

76.6366

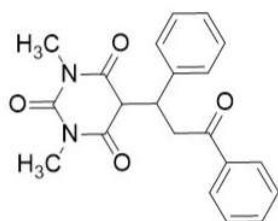
53.0365

44.4577

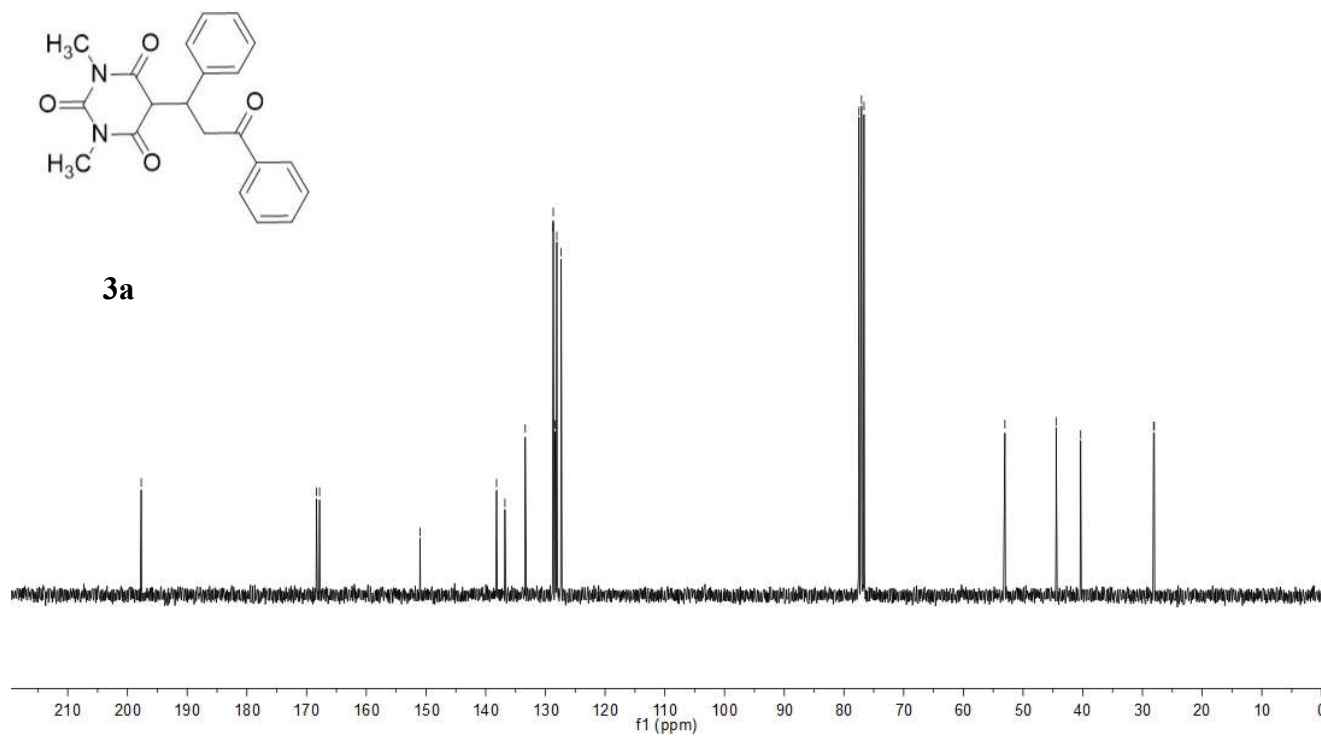
40.3561

28.1380

28.0270



3a

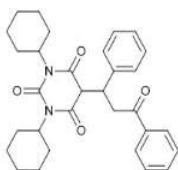


LY-2-67 300M NMR CDCl3

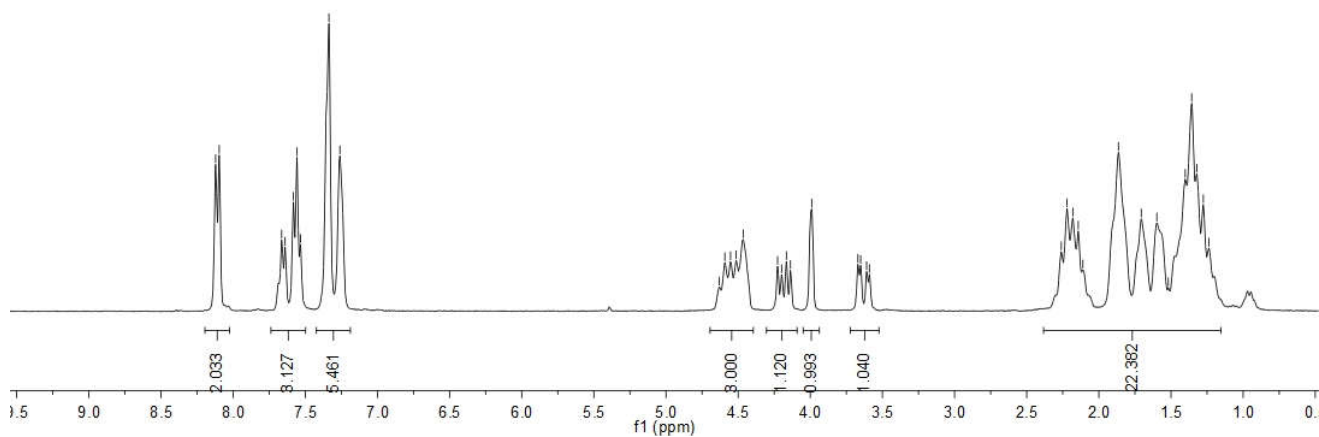
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8.0964
7.5825
7.5581
7.5336
7.3361
7.2599

4.6310
4.5921
4.5524
4.5144
4.4649
4.1372
3.9900
3.6686
3.6508
3.6094
3.5902

2.2601
2.2206
2.1804
2.1427
2.1107
1.8643
1.7080
1.5983
1.5185
1.4014
1.3567
1.3215
1.2758
1.2372



3b



ly-2-67 75M NMR CDCl3

197.7665

168.5255
168.1062

150.4573

138.3193

136.8463

133.2796

128.7797

128.6489

128.1012

77.4908

77.0673

76.6439

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55.0560

52.8640

44.2575

41.0445

29.0869

28.9836

28.7021

28.5889

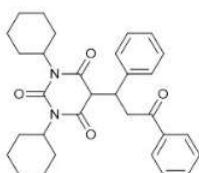
26.4239

26.3575

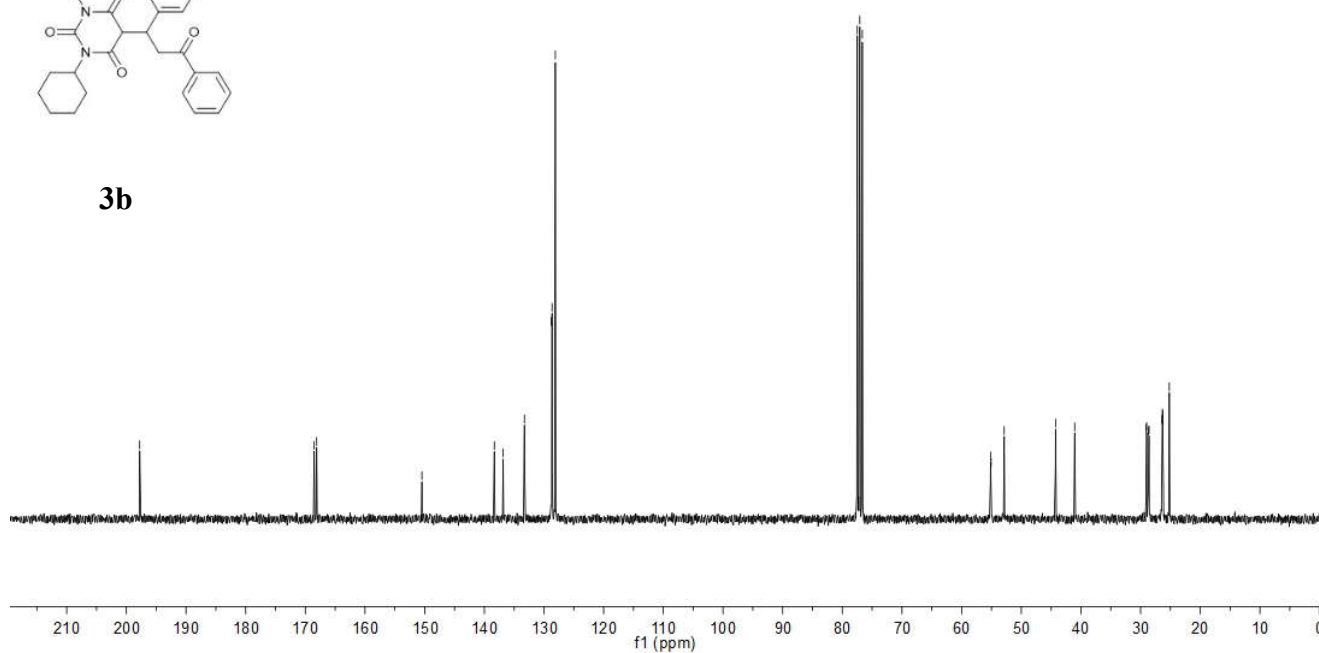
26.2996

26.2552

25.1920



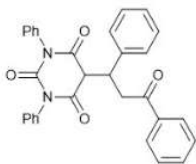
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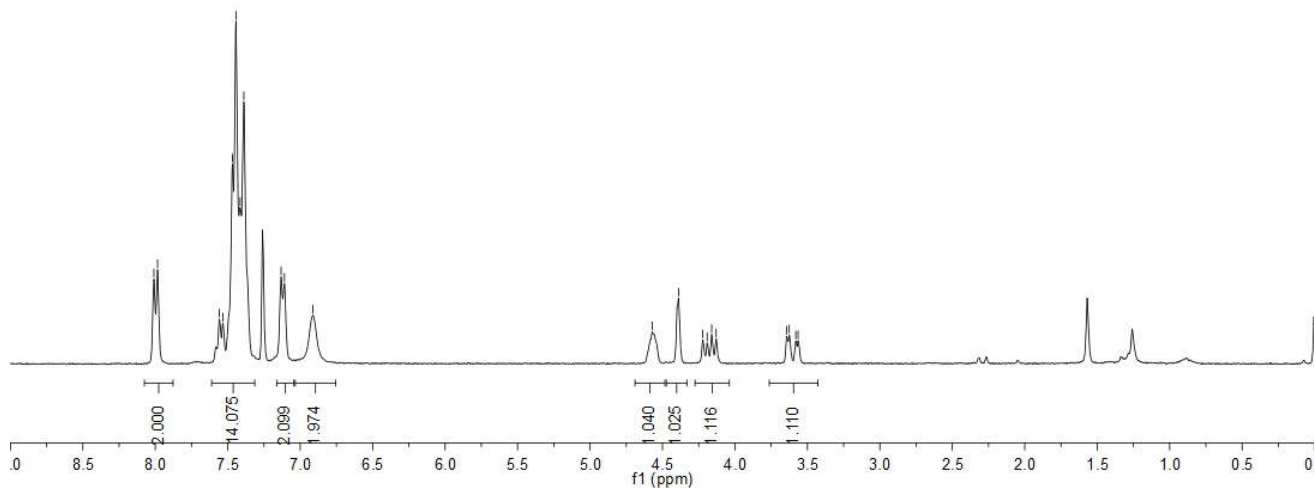
1y-2-75 300M NMR CDCL3

8.0096
7.9842
7.4689
7.4434
7.4146
7.3891
7.1318
7.1088
6.9124

4.5704
4.2228
4.1604
4.1300
3.6424
3.6254
3.5802
3.5642

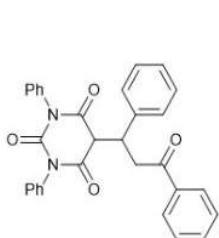


3c

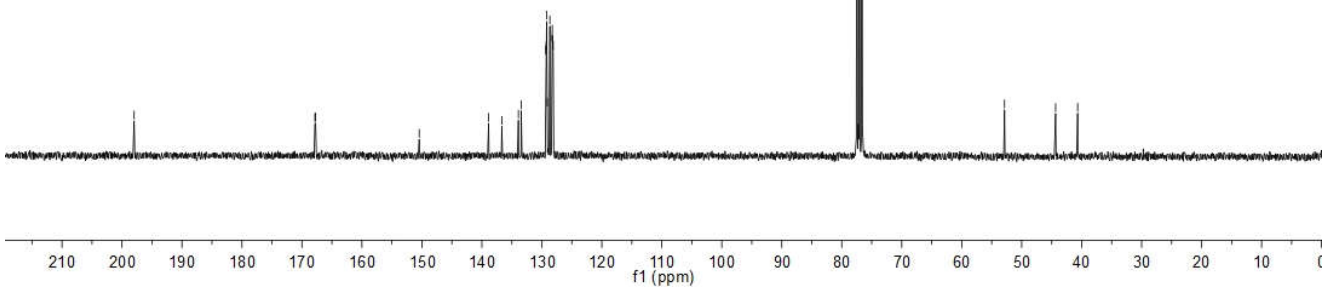
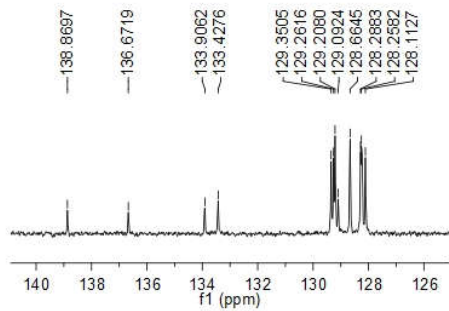


1y-2-77 75M NMR CDC13

197.9750
167.8325
167.7176
150.4420
138.8697
136.6719
133.9062
133.4276
129.3505
129.2616
129.2080
129.0924
128.6645
128.2883
128.2582
128.1127
77.4753
77.0518
76.6284
52.8603
44.3475
40.6697



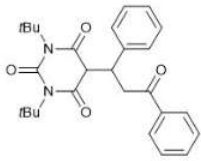
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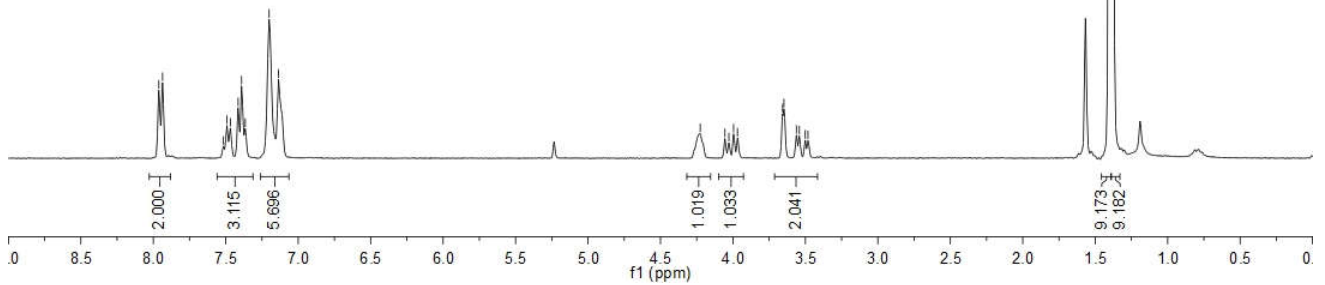
1y-2-75 NMR CDCl3

7.9615
7.9369
7.4918
7.4144
7.3650
7.2004
7.1358

4.2256
3.9688
3.6571
3.6480
3.5622
3.5416
3.5010
3.4823



4a



1y-2-75M 75M NMR CDCl3

197.7340

167.6558
167.0646

152.4934

136.3754

136.9377

133.1535

128.8372

128.5886

128.3391

128.1253

77.4609

77.0376

76.6142

61.9889

61.9474

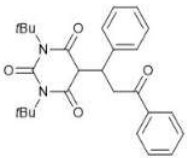
55.5195

43.6349

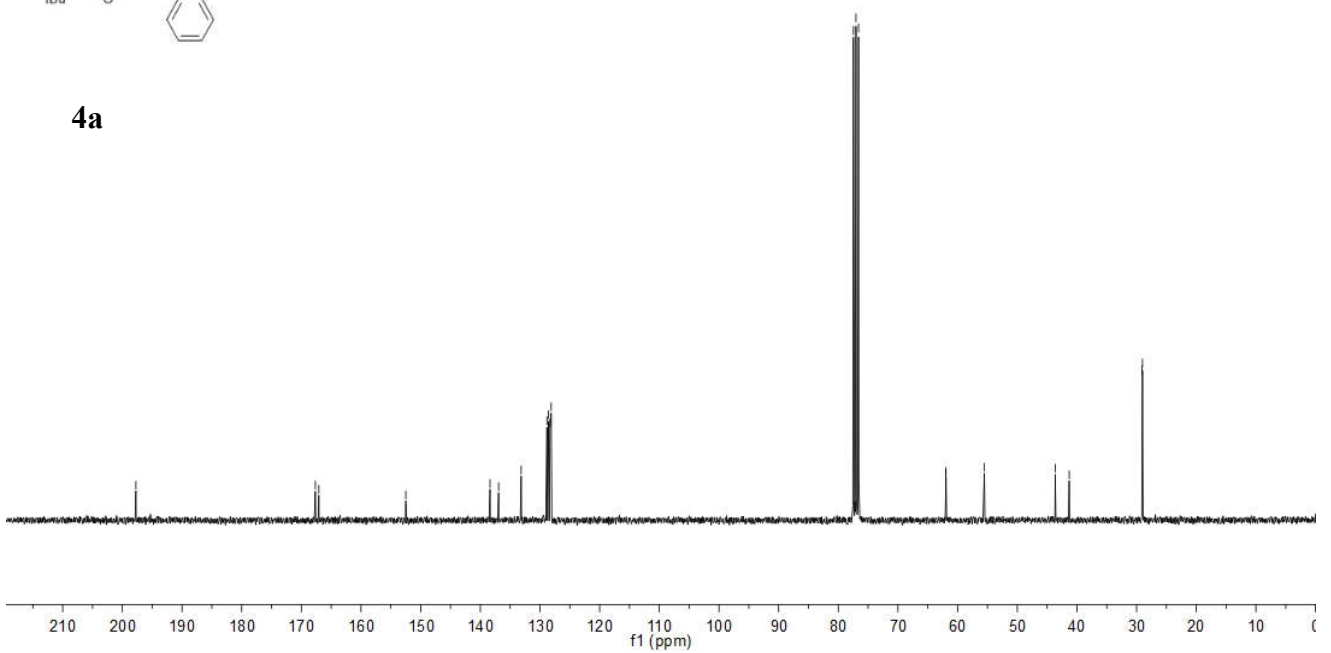
41.2925

29.0822

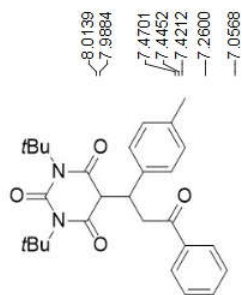
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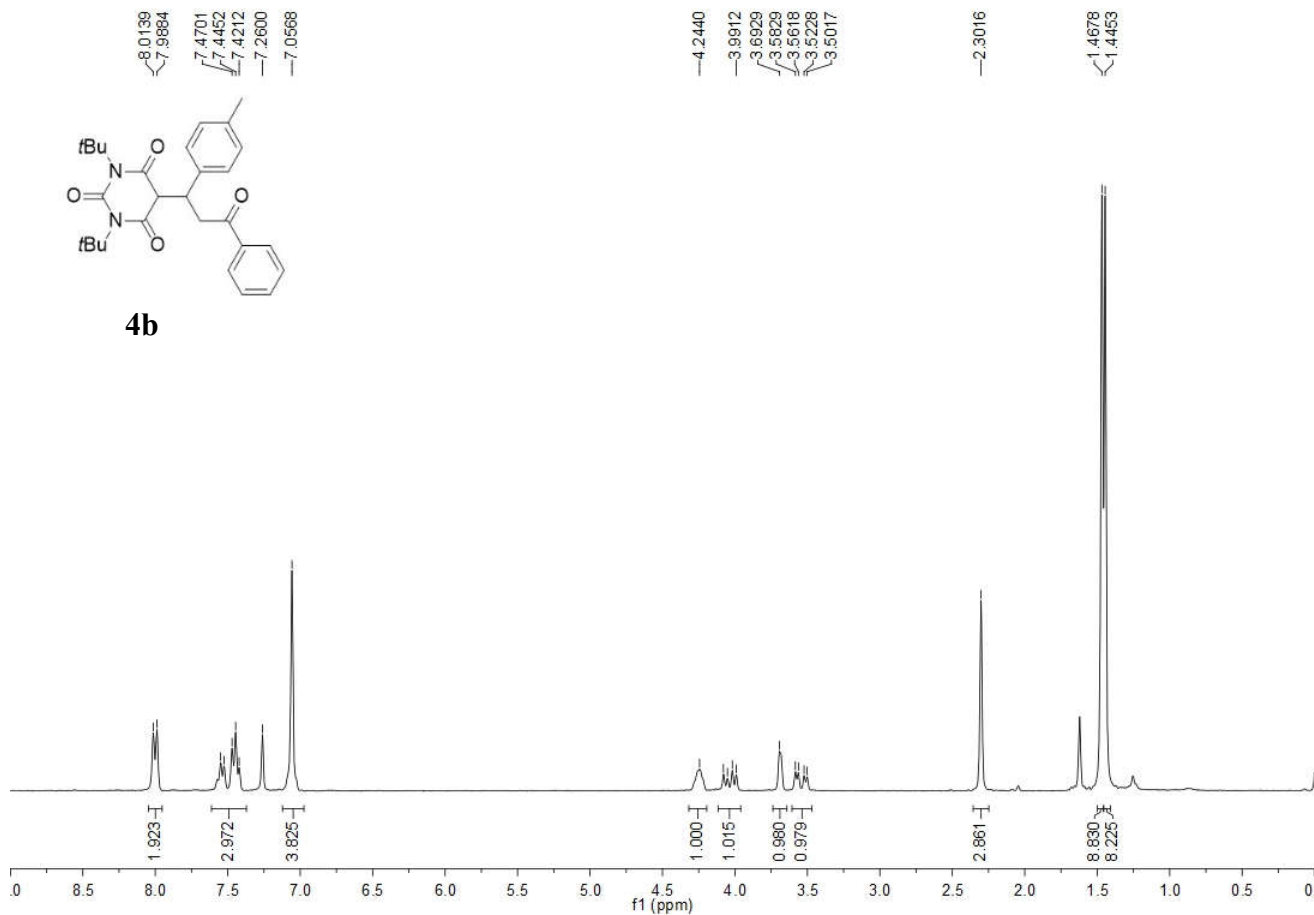
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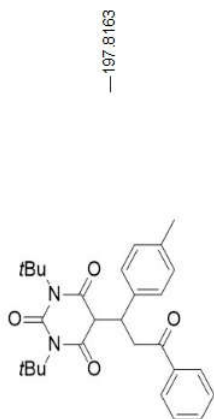
LY-3-5 1H CDCl3 NMR 300M



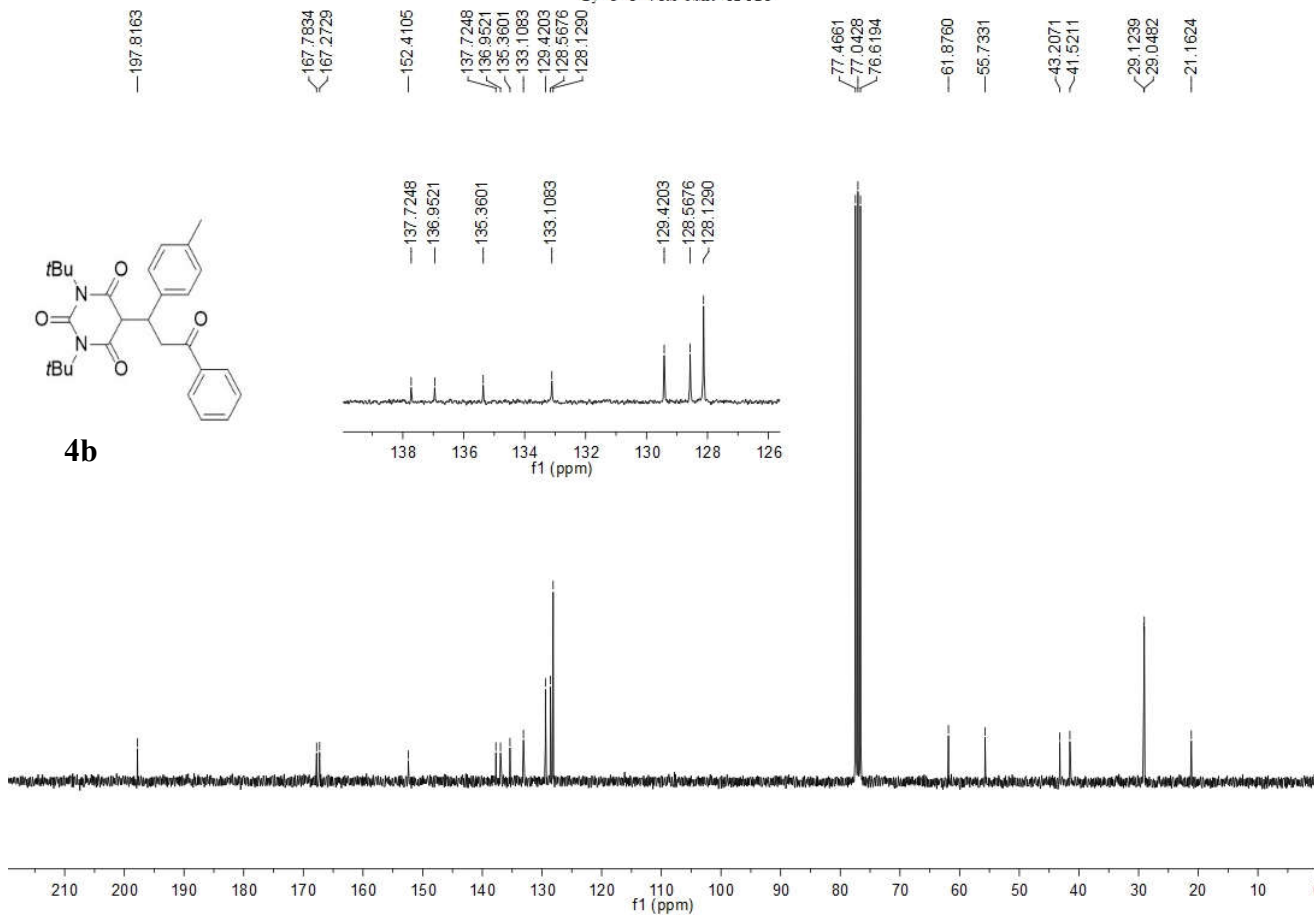
4b



1y-3-5 75M NMR CDCl3



4b

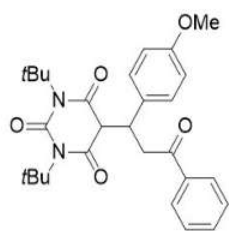


1y-2-94 300M NMR CDCL3

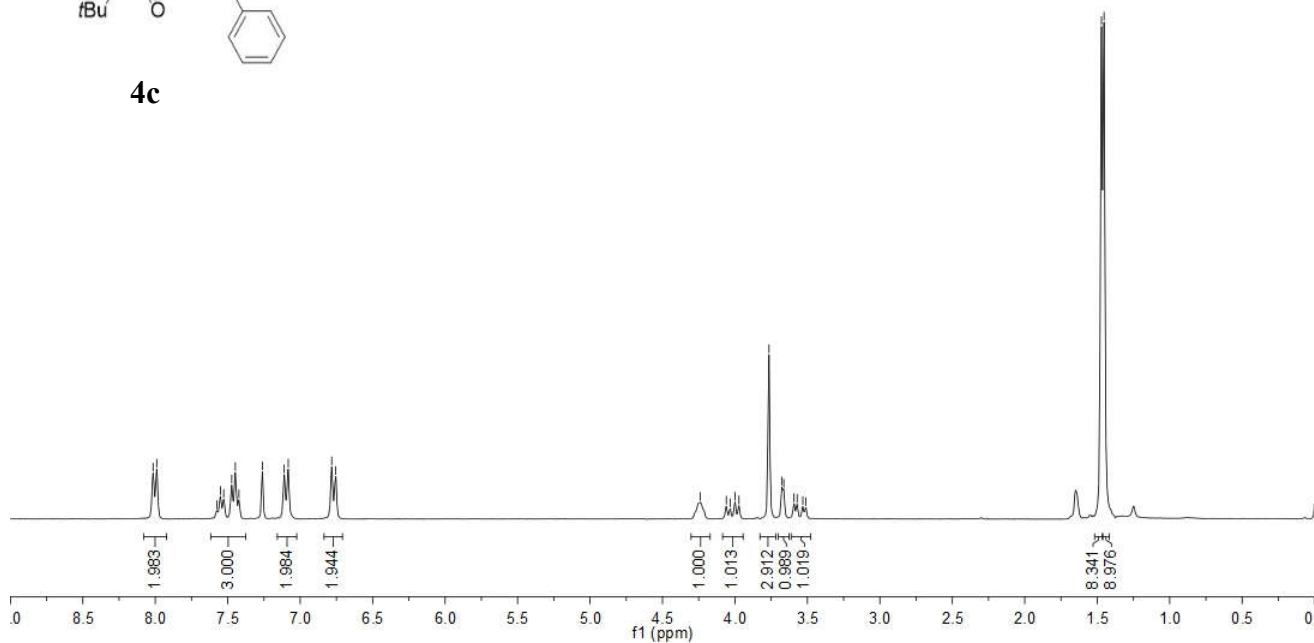
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7.9900
7.5507
7.4724
7.4229
7.2604
7.0824
6.7827
6.7547

4.2396
3.9722
3.7649
3.6755
3.6630
3.5927
3.5710
3.5316
3.5102

1.4708
1.4529



4c



1y-2-94 75M NMR CDC13

197.7978
167.7999
167.2092
159.3566
152.3463

136.9331
133.1338

129.3674
128.5813
128.1273

114.1157

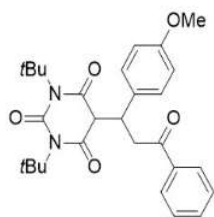
77.4764
77.0530
76.6295

61.8831
61.8488

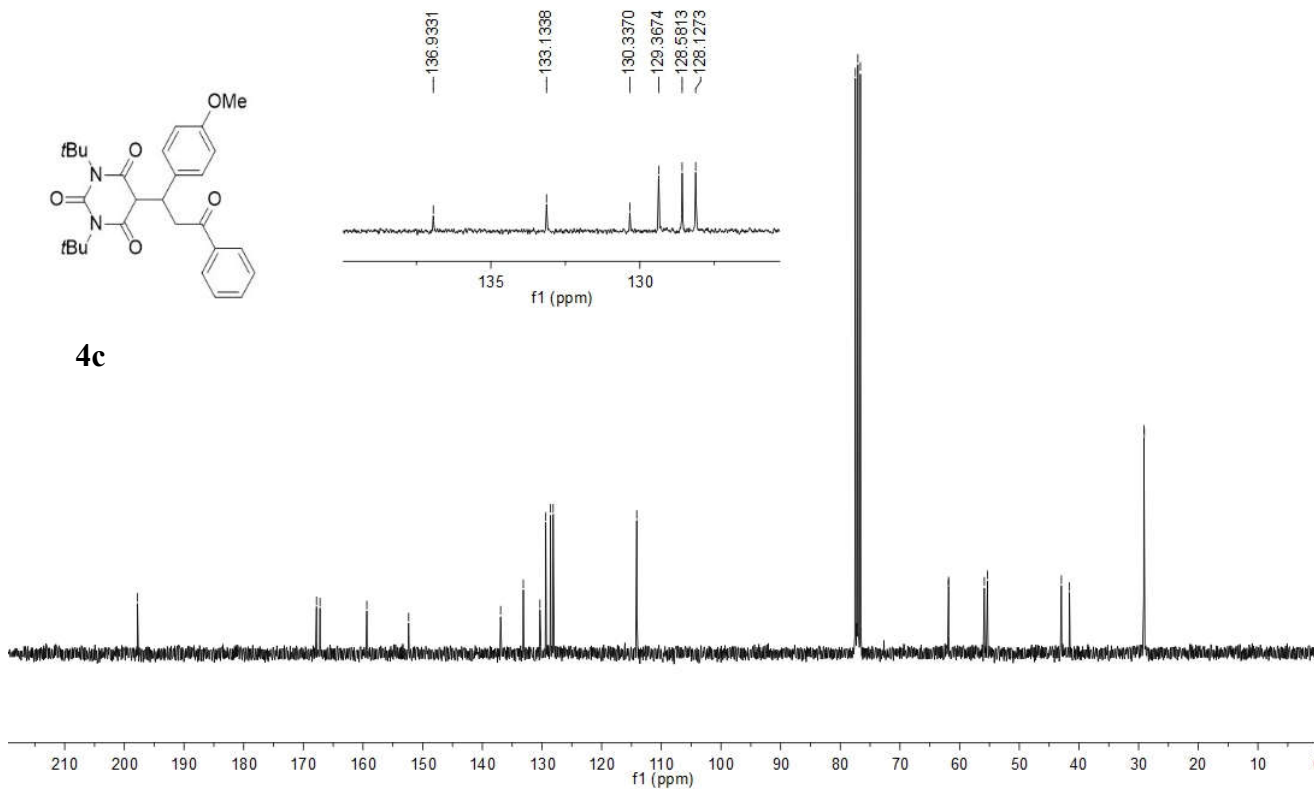
55.8580
55.3394

42.9440
41.5921

29.1123
29.0447



4c



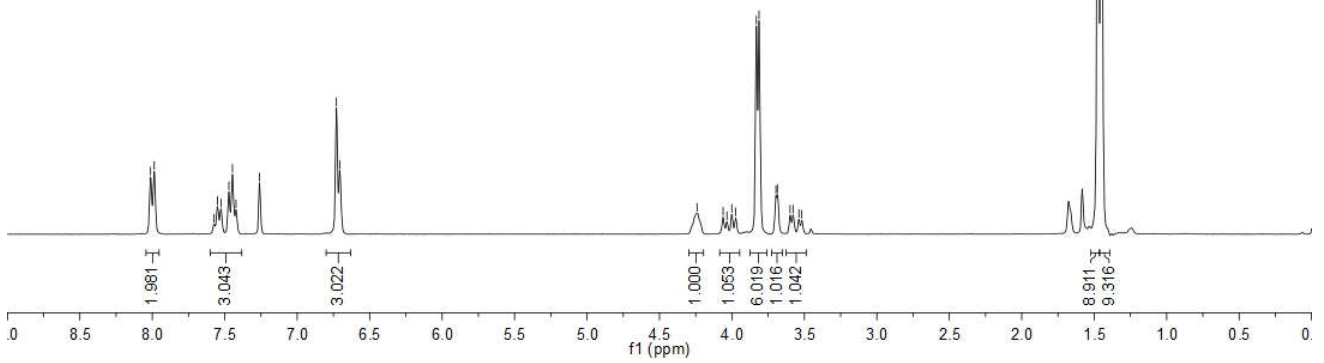
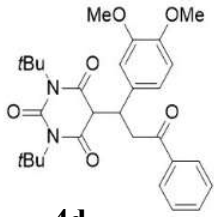
LY-2-93 300M NMR CDCL3

8.0119
7.9866
7.5500
7.4714
7.4223
7.2601

6.7294
6.7060

4.2406
3.9740
3.8315
3.8131
3.6964
3.6866
3.5985
3.5782
3.5377
3.5160

1.4751
1.4508



LY-2-93 75 NMR CDC13

197.9082
167.8089
167.3475

152.3244
146.7908

136.9486
133.1546

128.5911
128.1204
120.2014

111.9273
111.3638

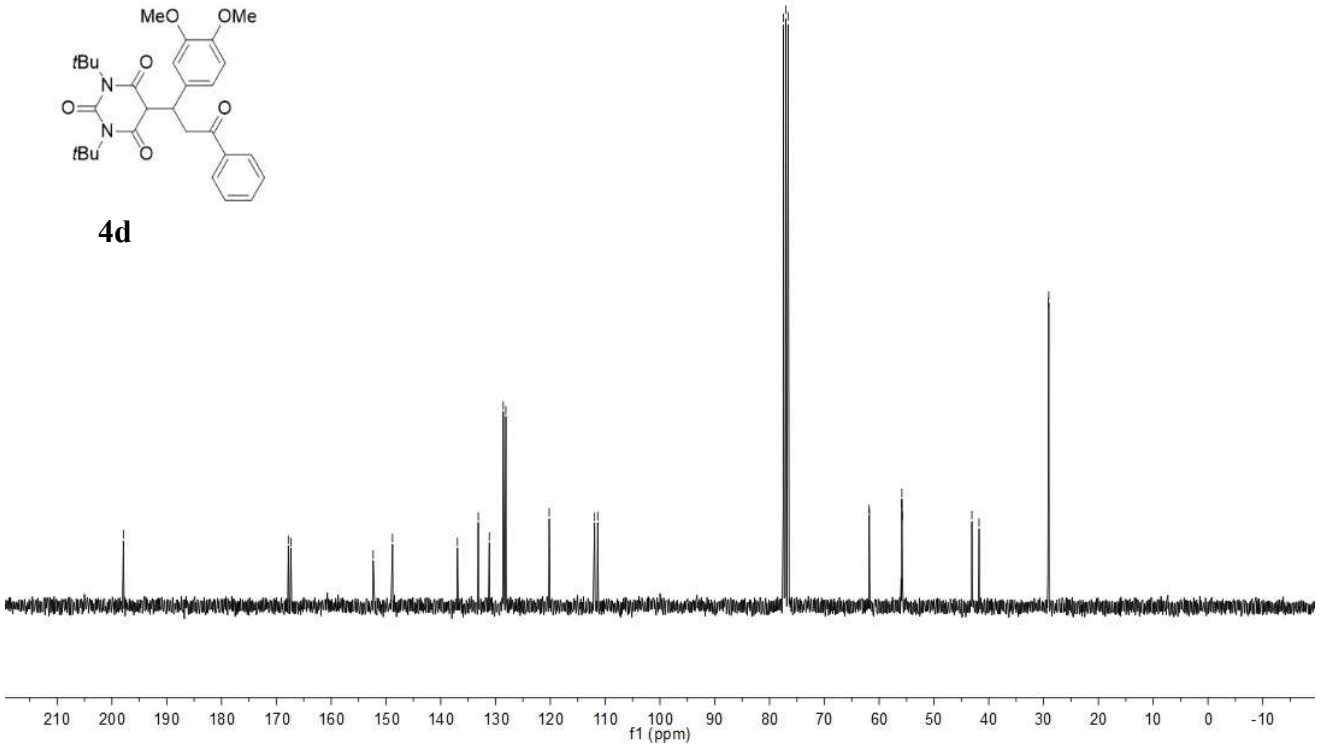
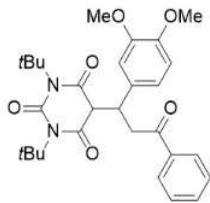
77.4791
77.0557
76.6320

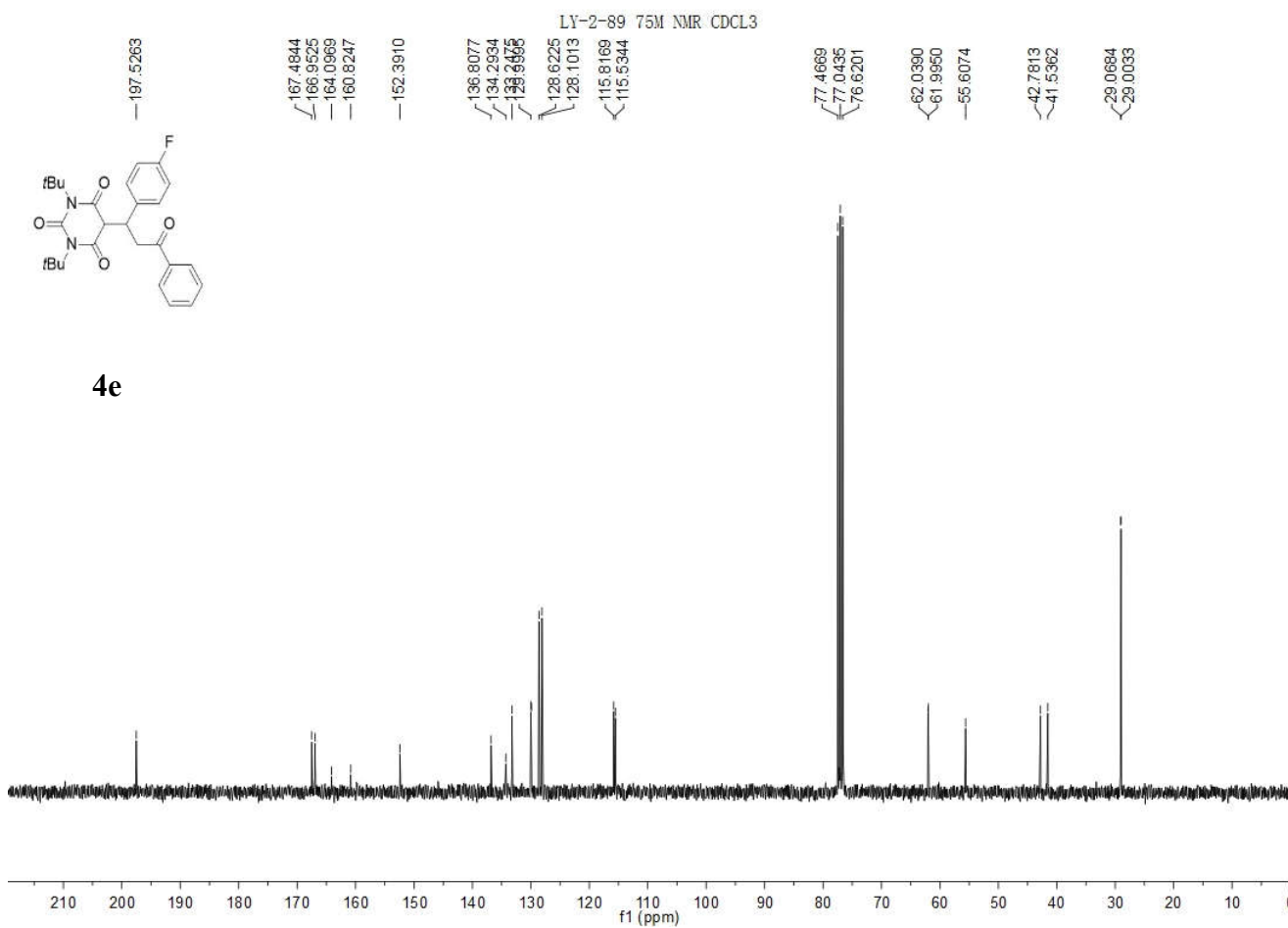
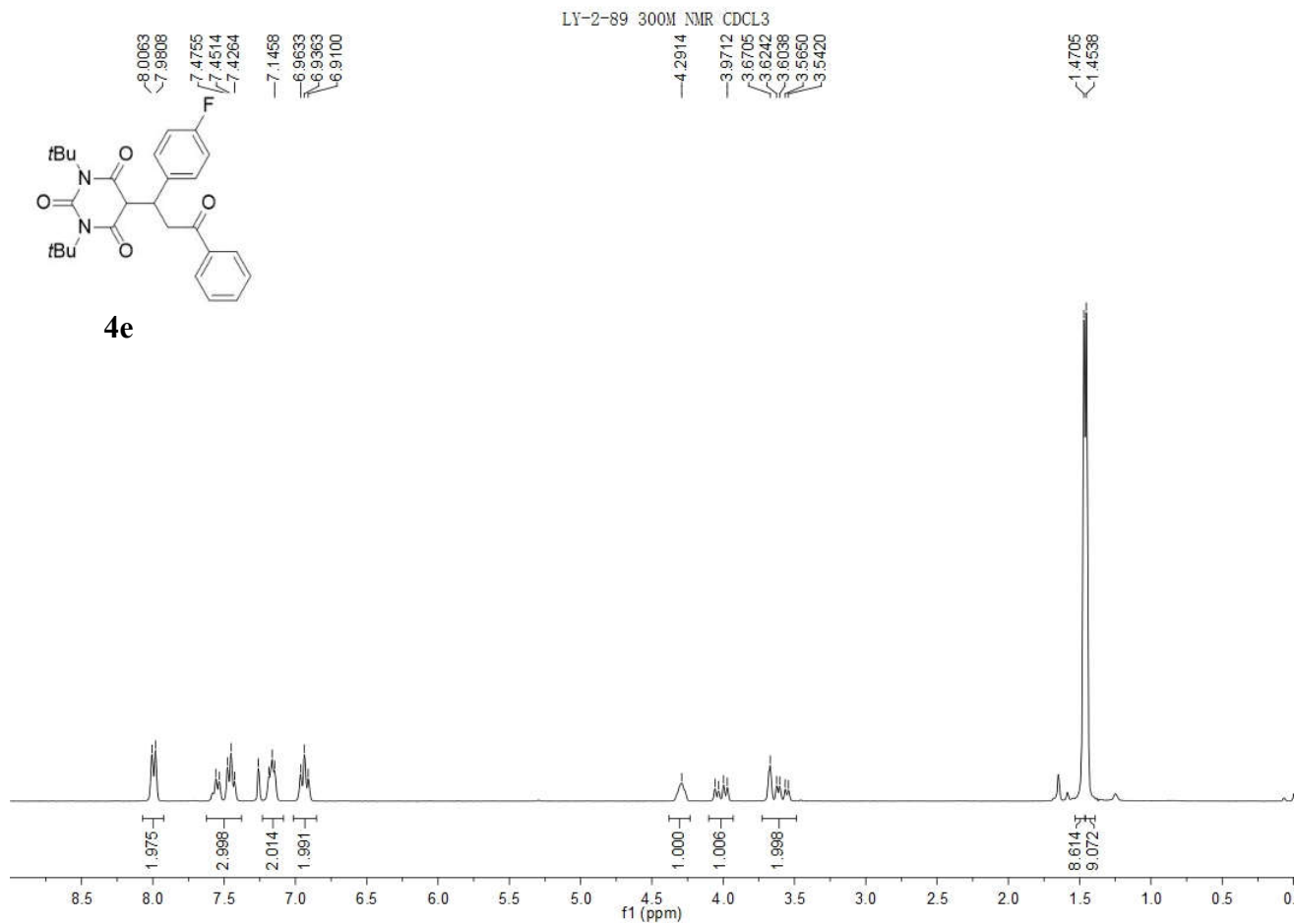
61.8215
61.7864

55.8554
55.7826

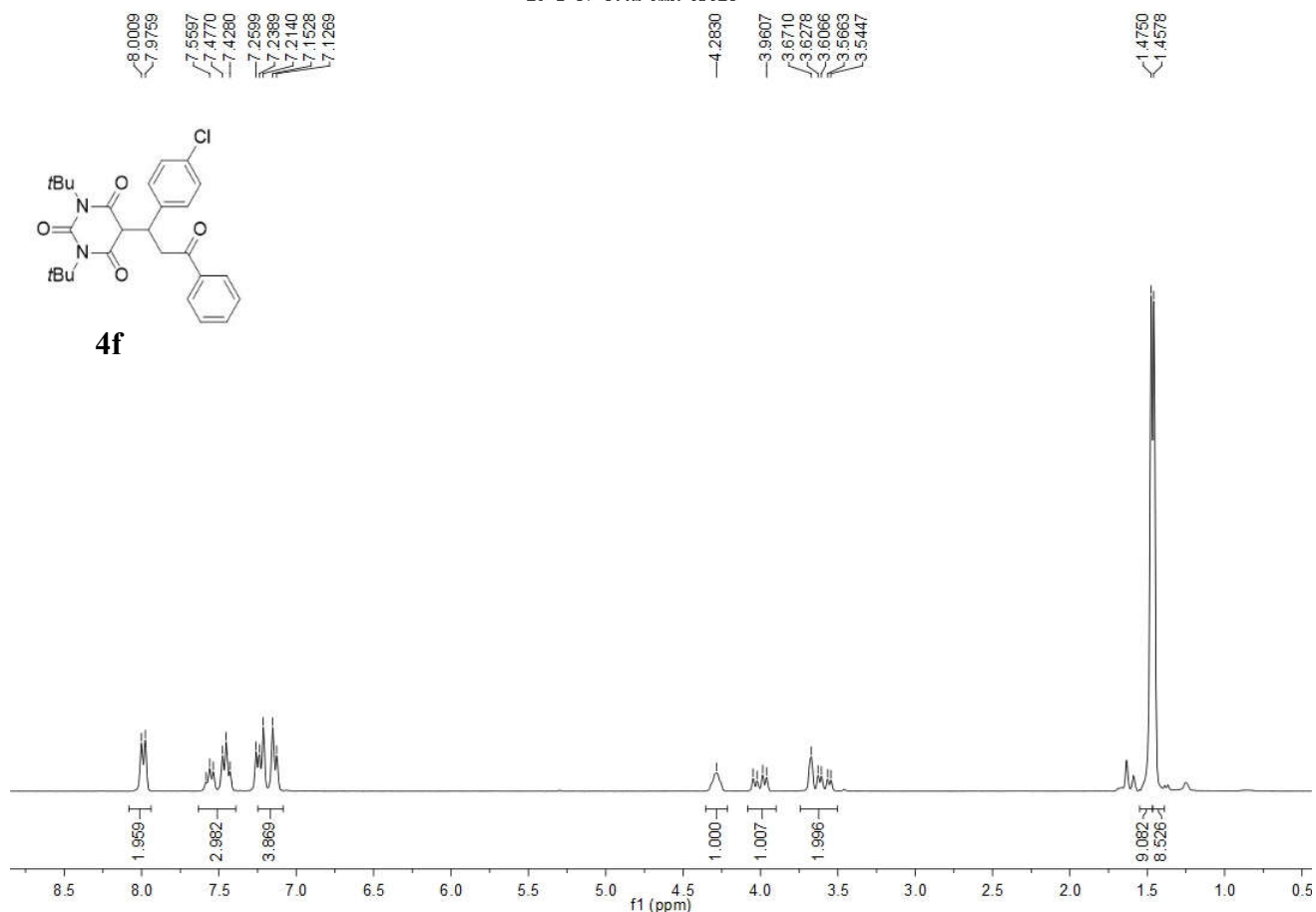
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41.7753

29.1291
29.0513

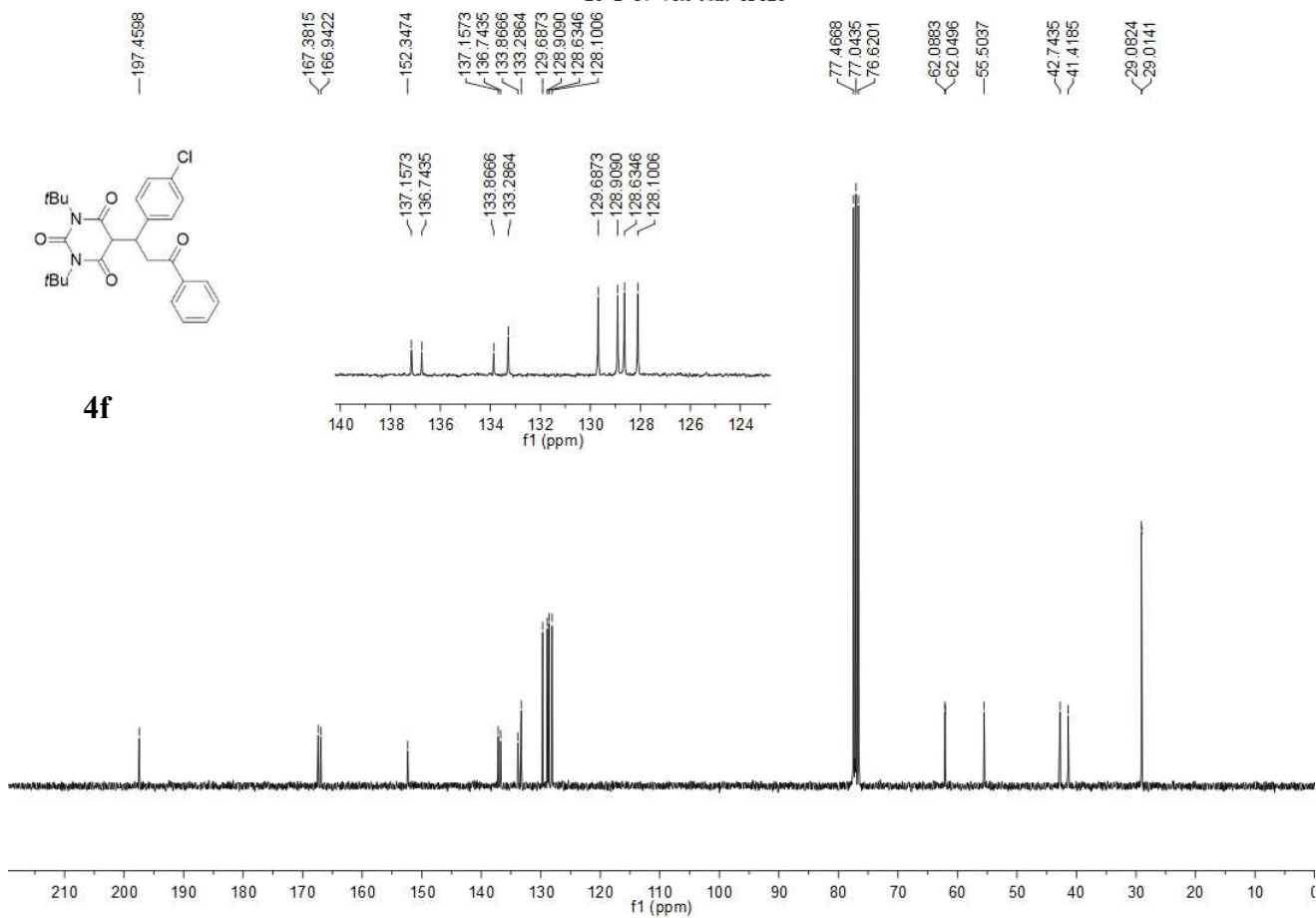




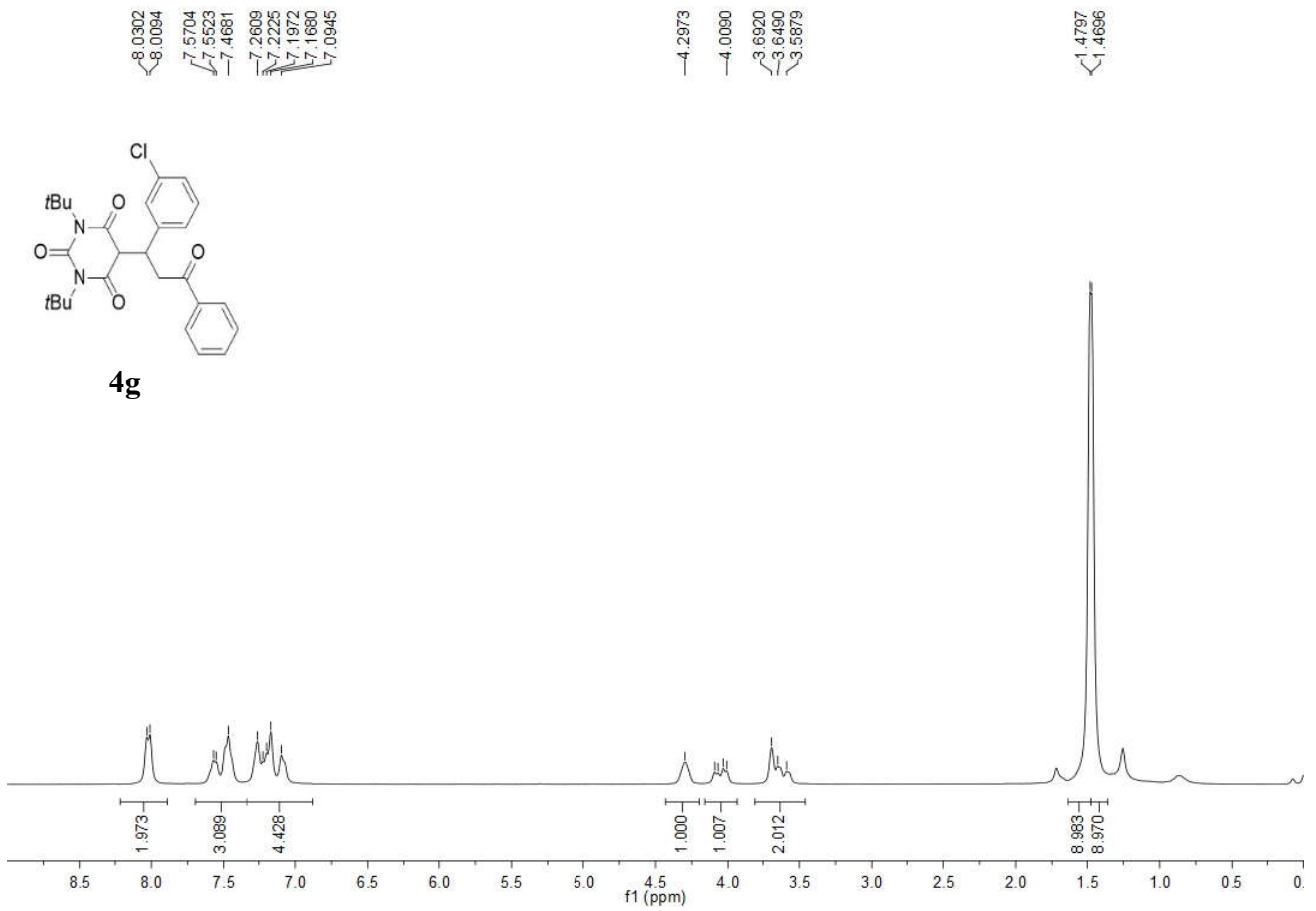
LY-2-87 300M NMR CDCL3



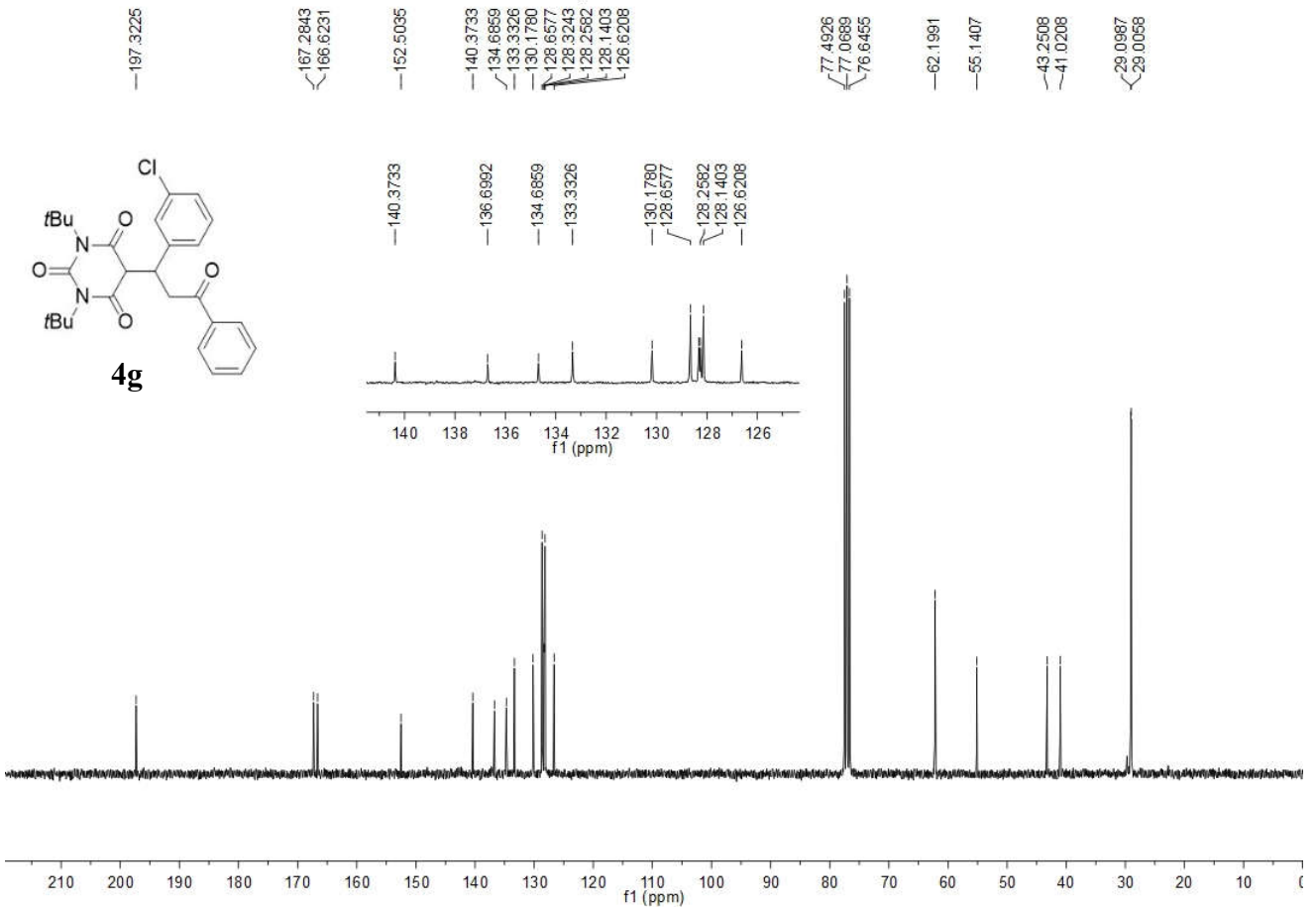
LY-2-87 75M NMR CDCL3



LY-3-13-1 300M NMR CDCL3



LY-3-13-1 75M NMR CDCl3

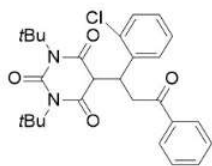


1y-3-13-2 300M NMR CDCL3

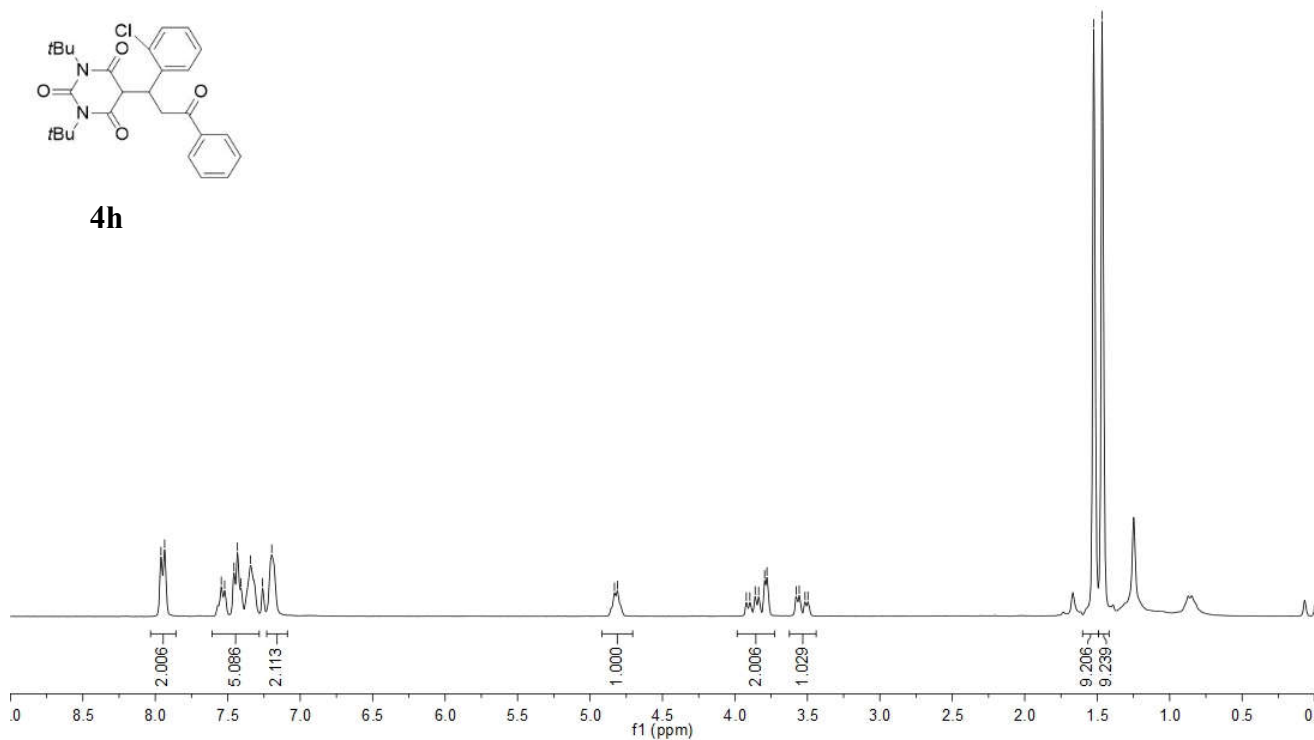
7.9607
7.9354
7.5445
7.5213
7.4571
7.4330
7.4088
7.3427
7.2597
7.1964

4.8312
4.8110
3.8971
3.8605
3.8363
3.7951
3.7790
3.5775
3.5566
3.5163
3.4961

1.5244
1.4664



4h



1y-3-13-2-c 75M NMR CDC13

197.1886

167.4839
167.1390

152.9400

137.5336
136.5057

134.1862
133.2590

130.1508
129.1334
128.8056
128.6127
128.1194
127.1920

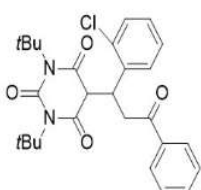
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77.0676
76.8440

62.1597
62.0722

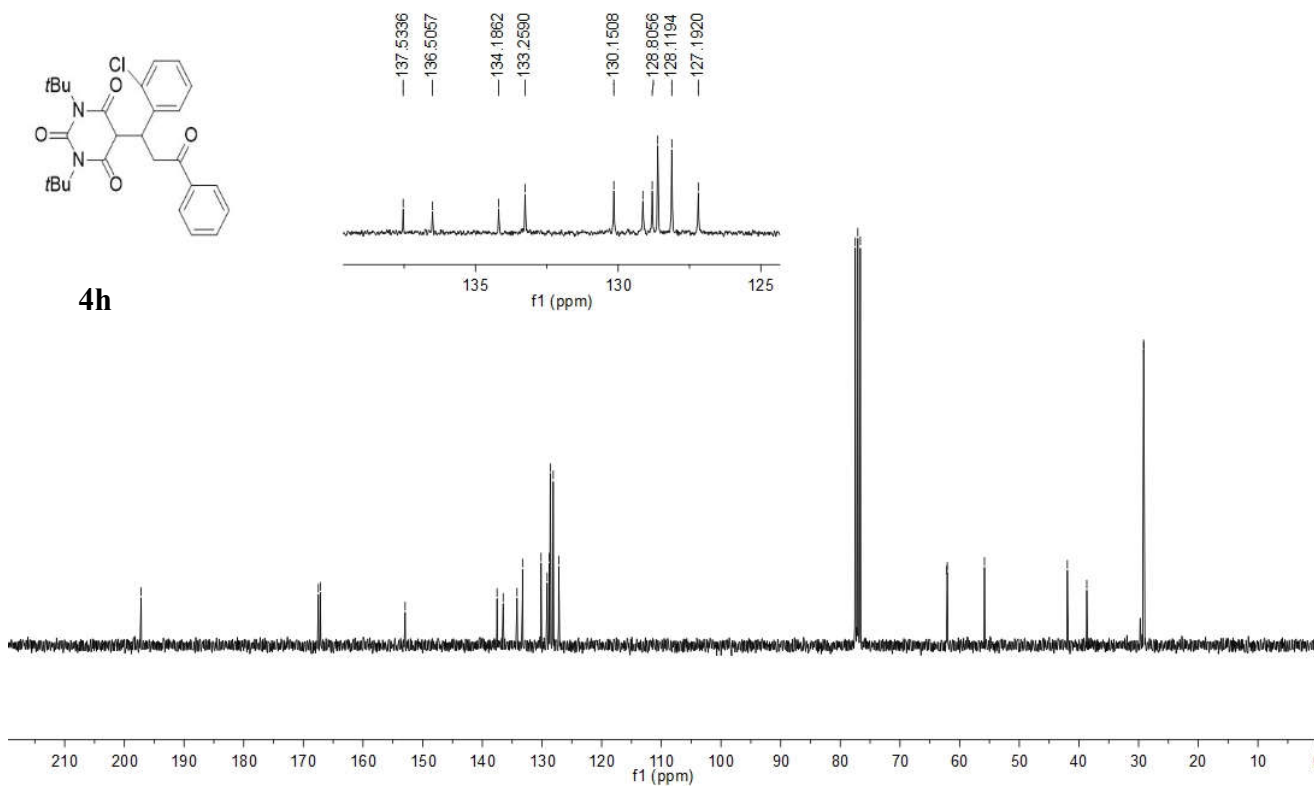
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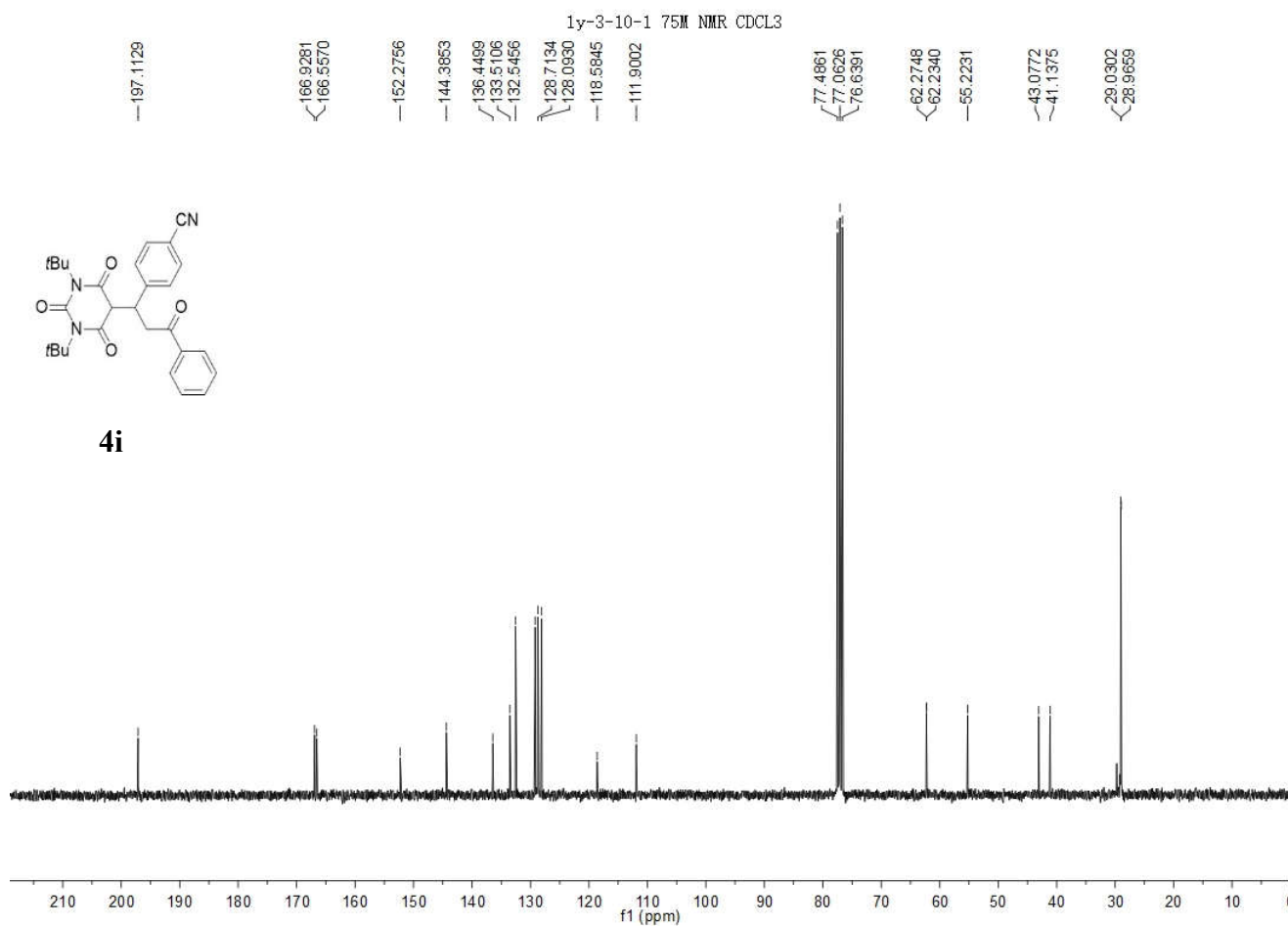
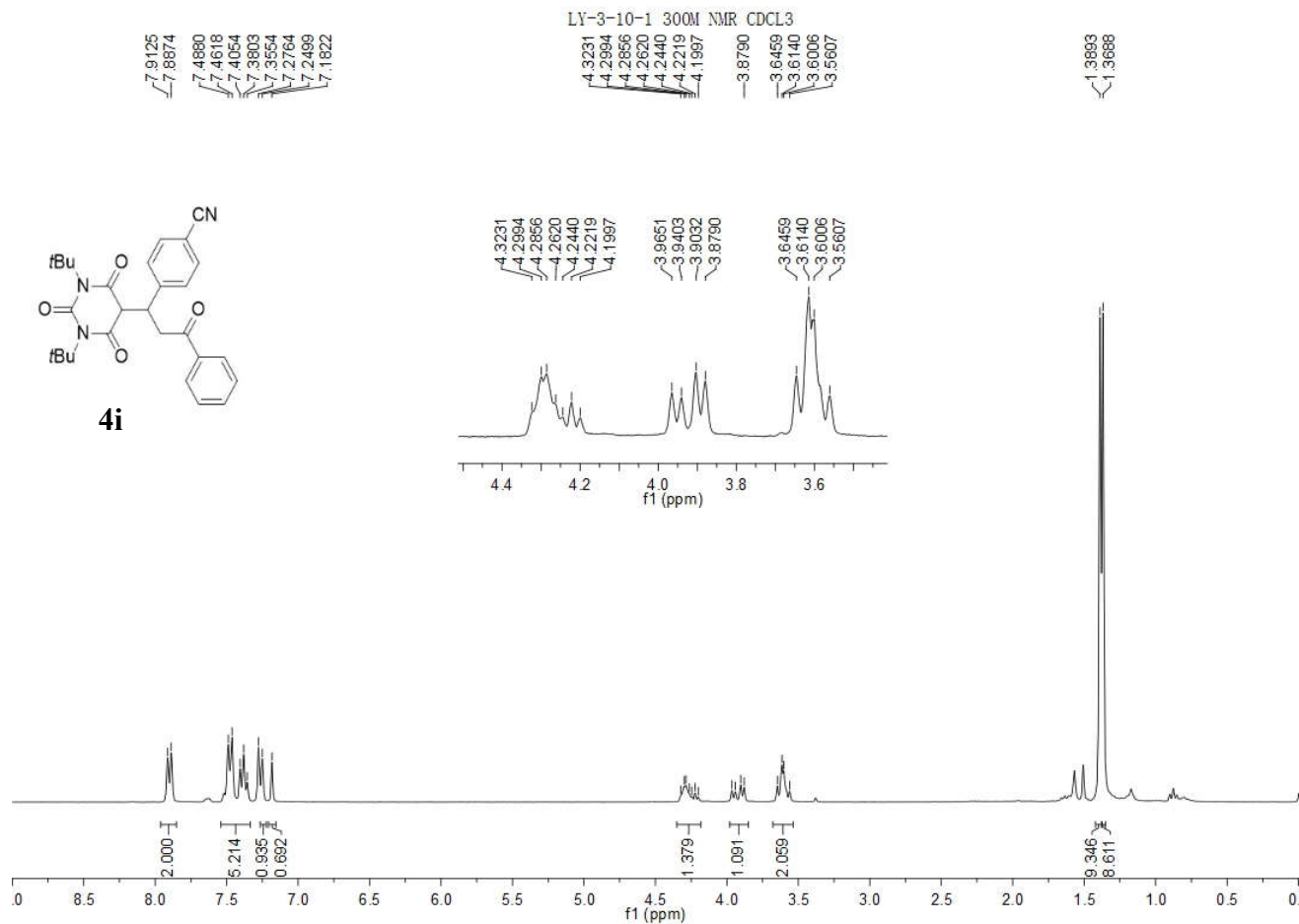
41.9425
38.6862

29.1621
29.1369

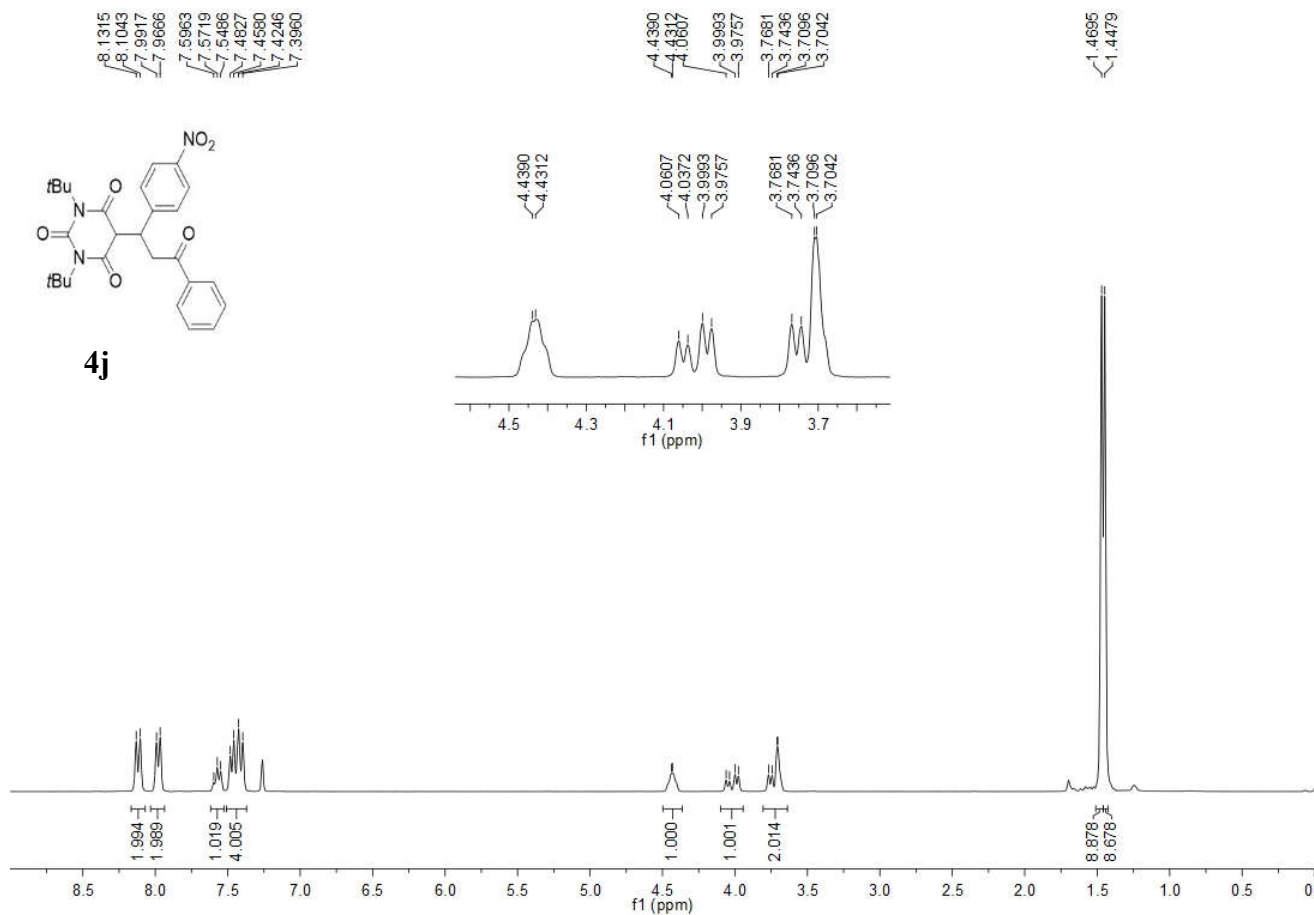


4h

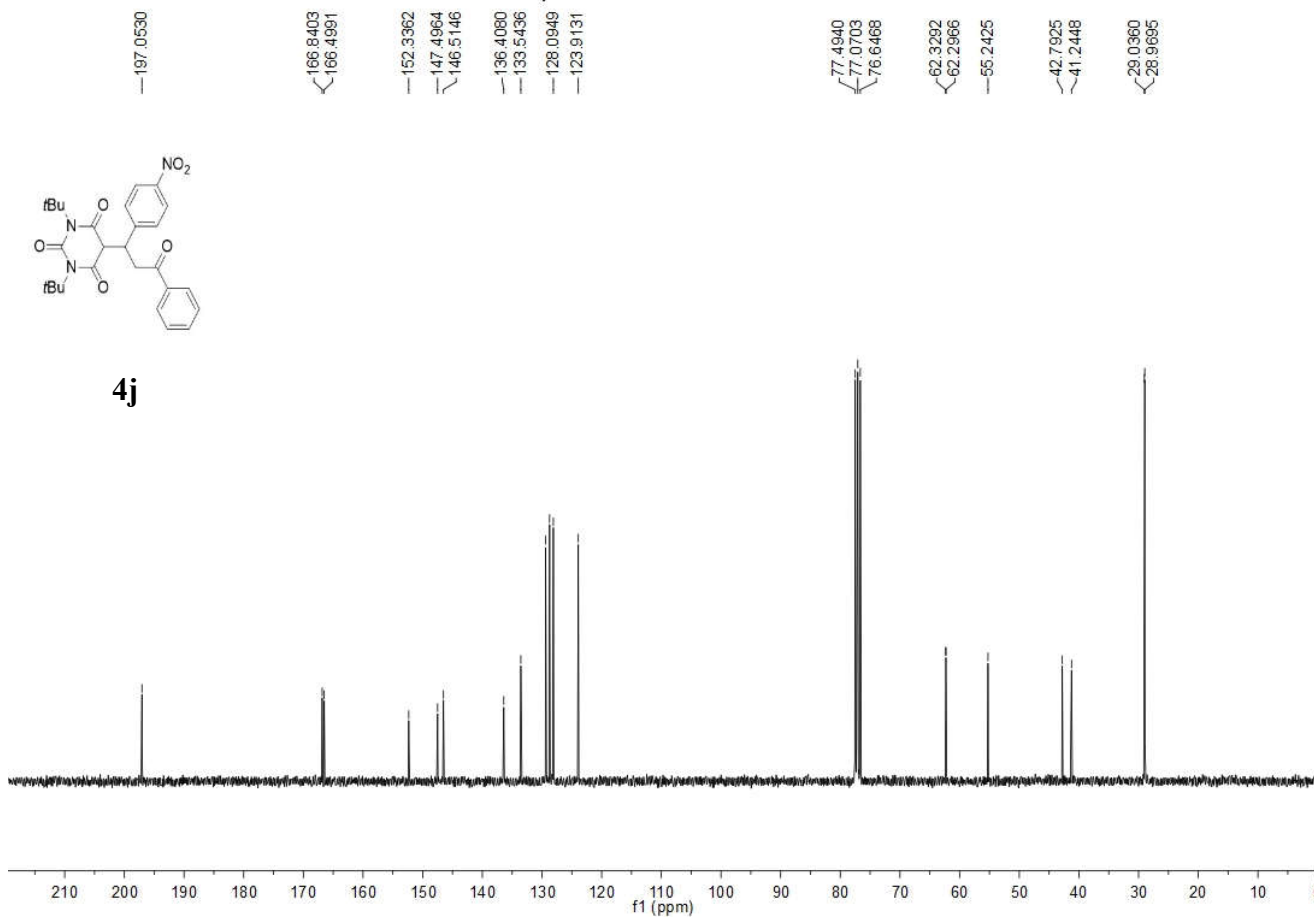




LY-2-90 300M NMR CDCL3



1y-2-90 75M NMR CDCL3

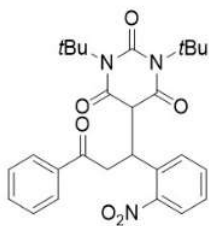


1y-2-91 300M NMR CDCL3

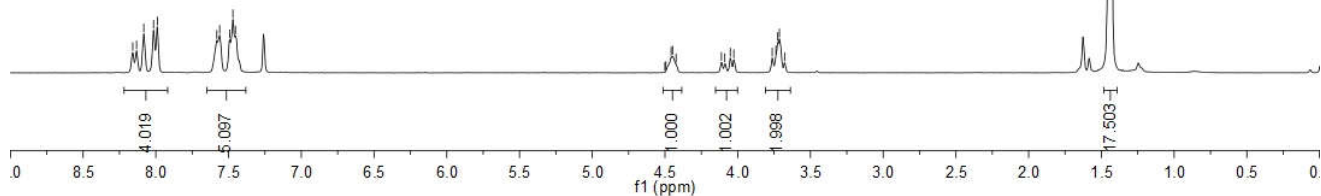
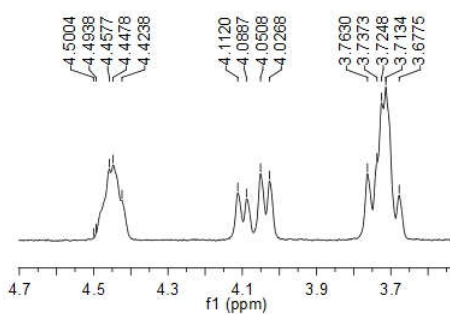
8.1587
8.1325
8.0828
8.0158
7.9899
7.5805
7.5611
7.4929
7.4704
7.4530

4.5004
4.4938
4.4577
4.4478
4.4238
4.0887
4.0268
3.7630
3.7373
3.7248
3.7134
3.6775

-1.4381



4k



LY-2-91 75M NMR CDCL3

-197.0604

166.8872
166.3409

-152.5195

-148.3672

-140.9347

-133.5257

-128.1316

-123.1397

-122.9813

77.4732

77.0496

76.6259

-62.3668

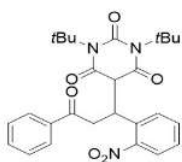
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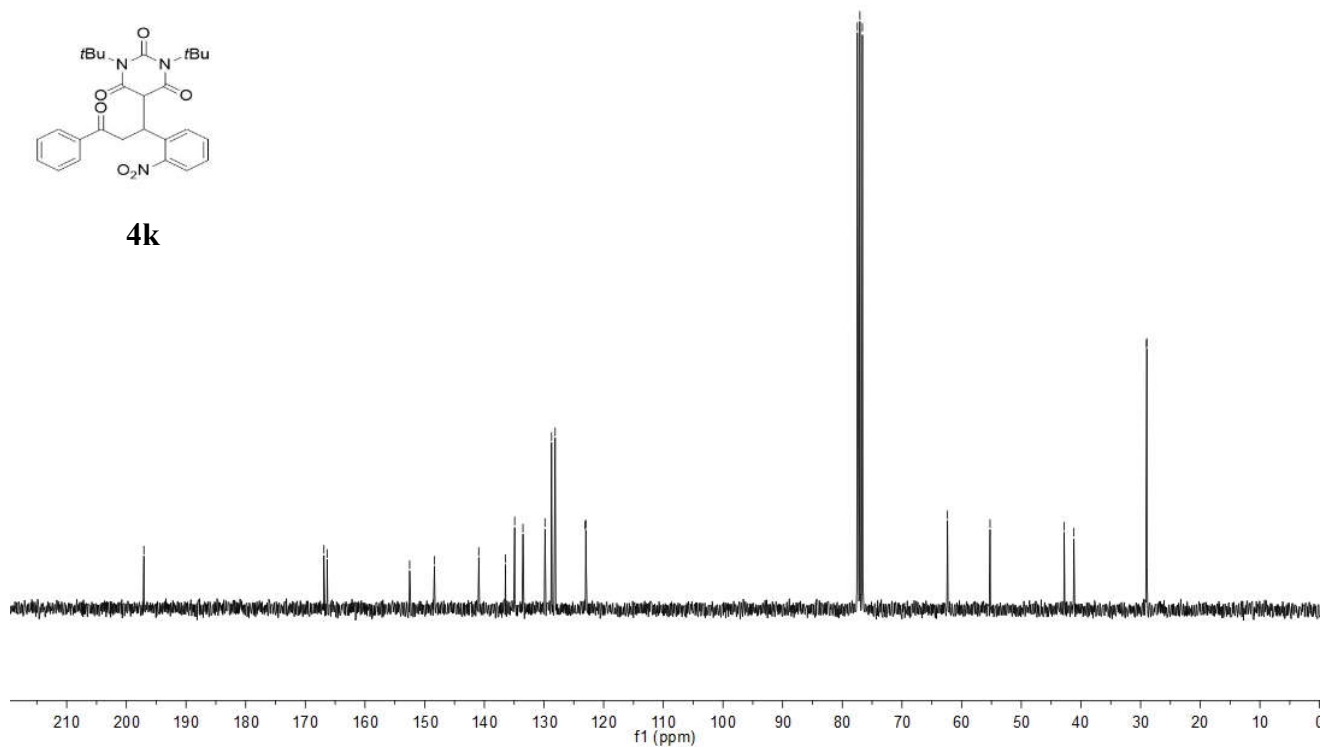
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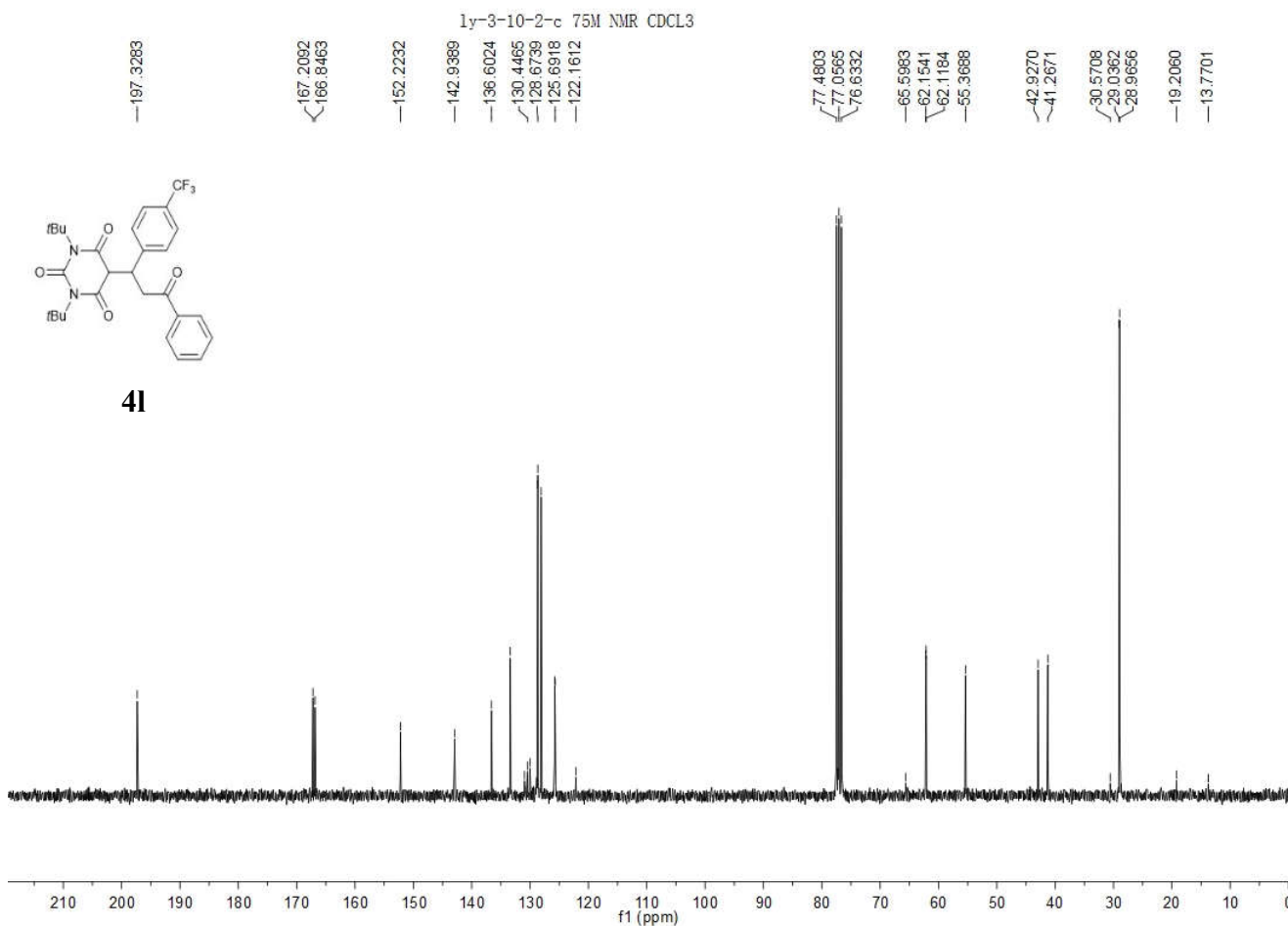
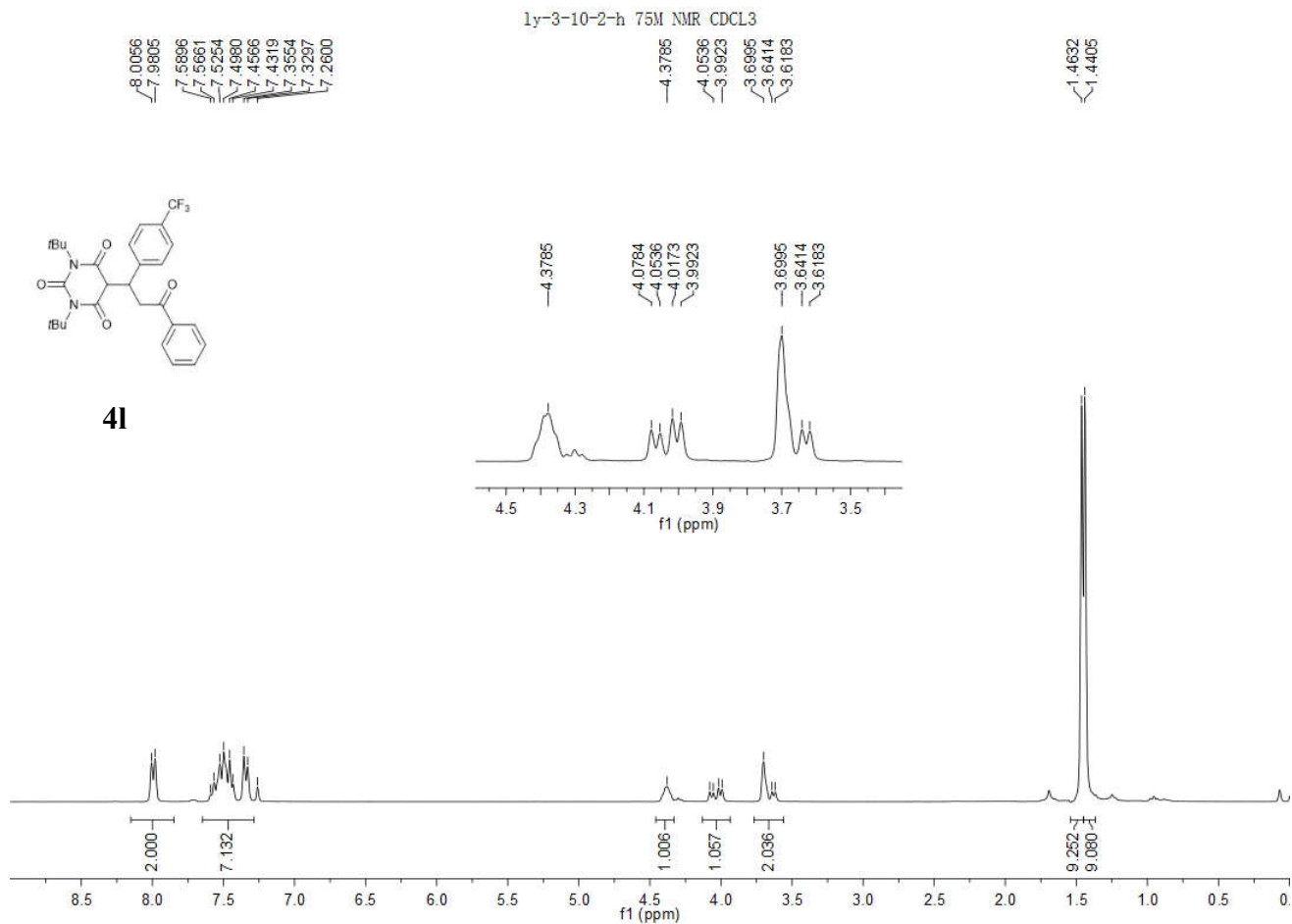
-29.0190

-28.9581



4k



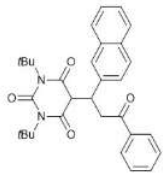


ly-3-2 300M NMR CDCL3

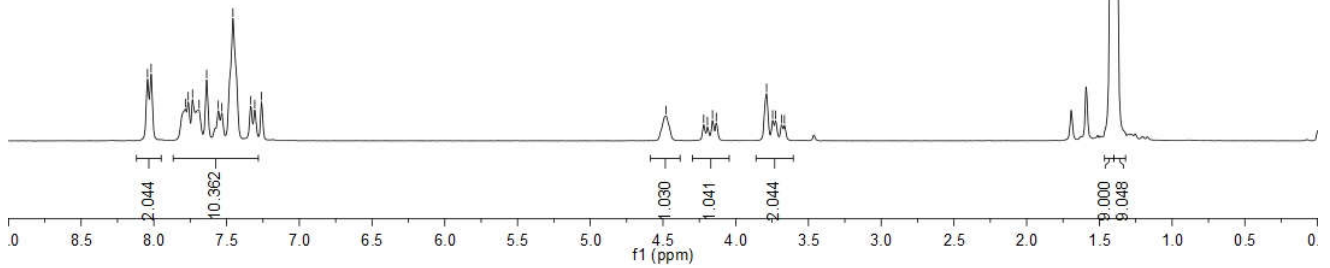
8.0436
8.0187
7.7829
7.7637
7.7338
7.6888
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7.5570
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7.4564
7.3337
7.3064
7.2805

4.4796
4.1942
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3.7878
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3.6654

1.4189
1.3861



4m

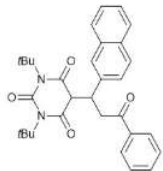


LY-3-2-C 75M NMR CDCL3

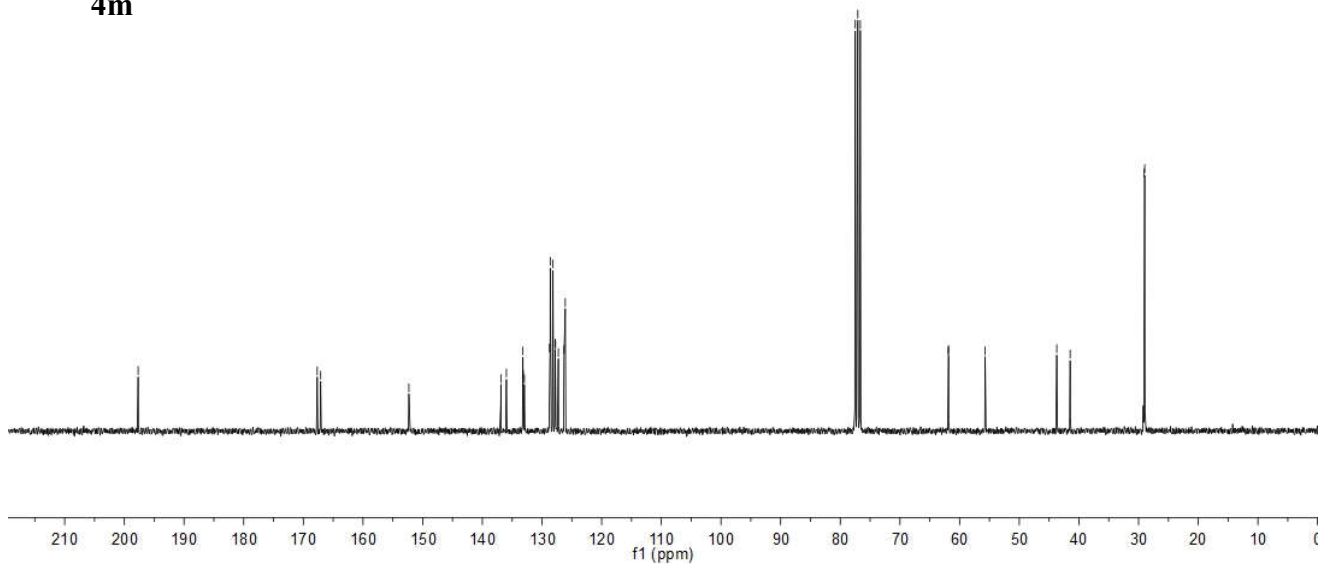
197.6895
167.6767
167.0986
152.3136

135.9706
133.2045
133.1500
132.9501
128.7326
128.6152
128.1618
127.7792
127.7287
127.2613
126.3050
126.0997

77.4921
77.0687
76.6452
61.9124
61.8561
55.7180
43.7157
41.4736
29.0654
28.9783



4m



1y-3-7 300M NMR CDCL3

7.9253
7.8987

7.2629
7.2337
7.1960

4.2885

3.9883

3.7136

3.7018

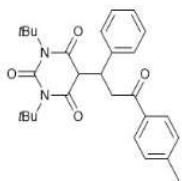
3.6058

3.5646

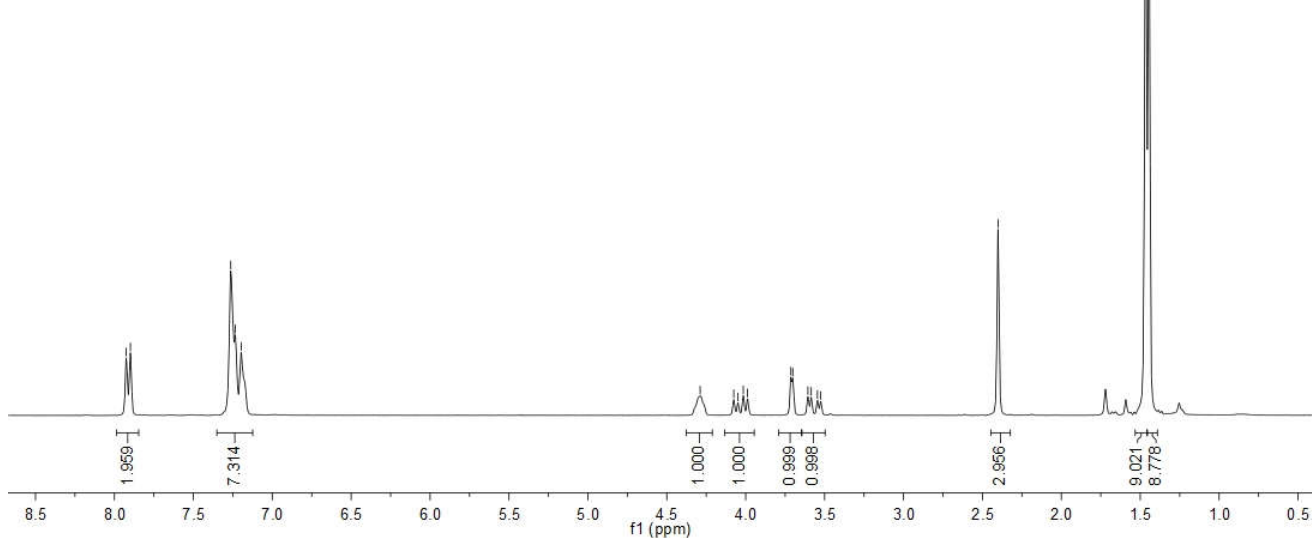
3.5244

2.4011

1.4663
1.4455



4n



LY-3-7 75M NMR CDC13

197.3077

167.6749
167.0812

152.5086

143.9171

138.4659

134.4705

129.2552

128.8130

128.3455

128.2480

128.0575

77.4819

77.0582

76.6349

61.9534

61.9129

55.6100

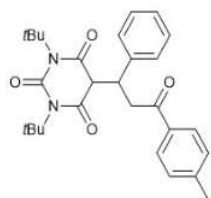
43.7037

41.1378

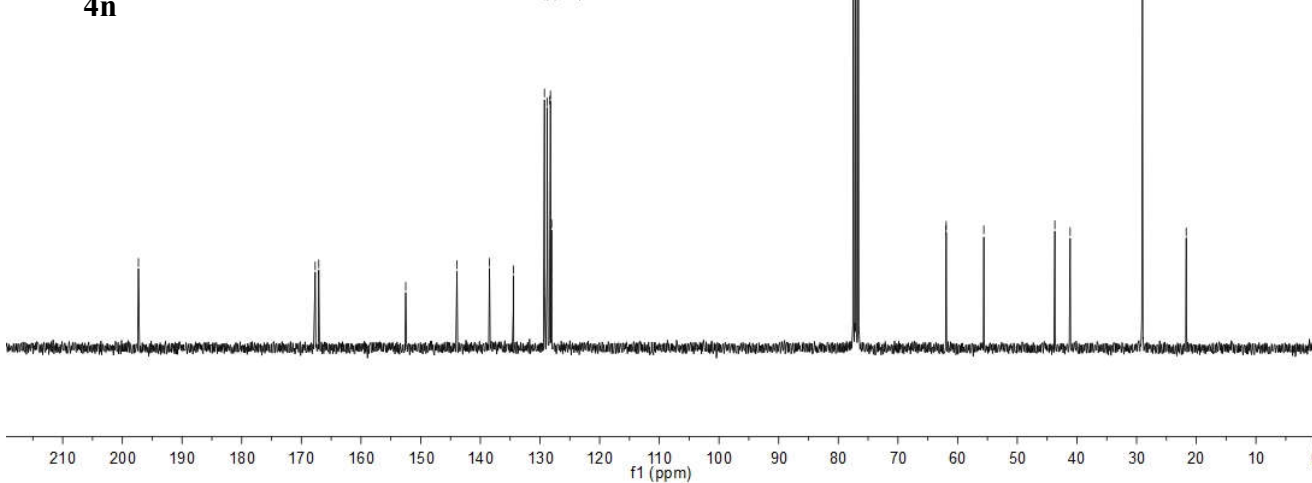
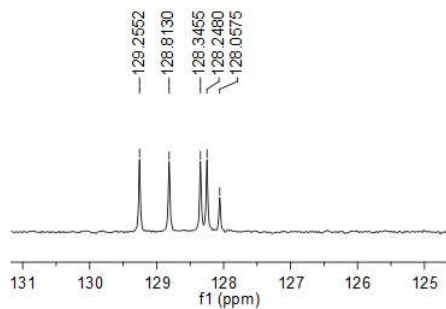
29.0872

29.0190

21.6848



4n



LY-2-86 300M CDCL3 NMR

8.0699
8.0362
8.0171

7.2601
7.1853
7.1498
7.1183
7.0916

4.2750

4.0070

3.6889

3.5660

3.5460

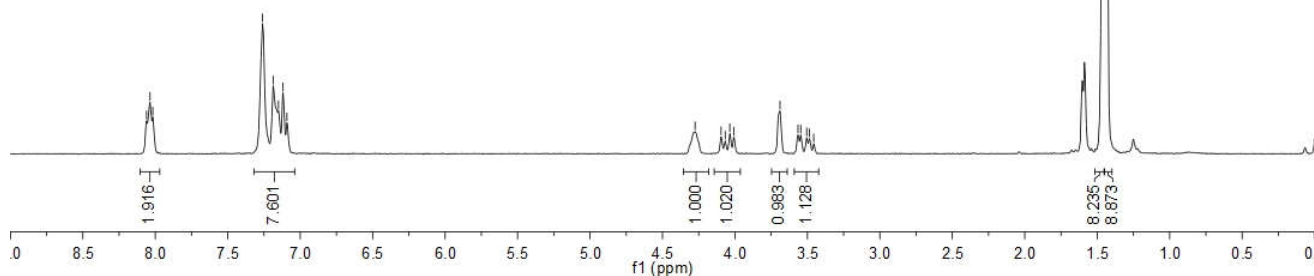
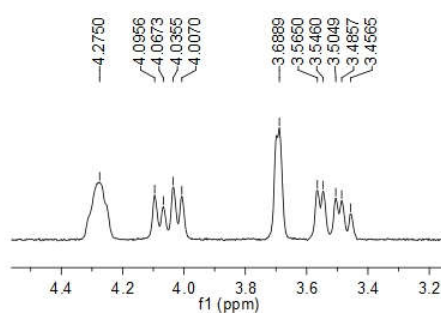
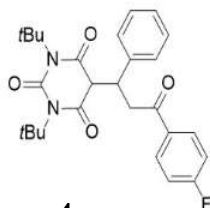
3.5049

3.4857

3.4565

1.4644

1.4372



1y-2-86 13C CDCL3 75M NMR

196.1675

167.5674

167.0521

161.5923

158.1433

152.4611

138.2664

130.8331

128.8663

128.2974

128.1646

115.8244

115.5334

77.4560

77.0327

76.6092

62.0100

61.9750

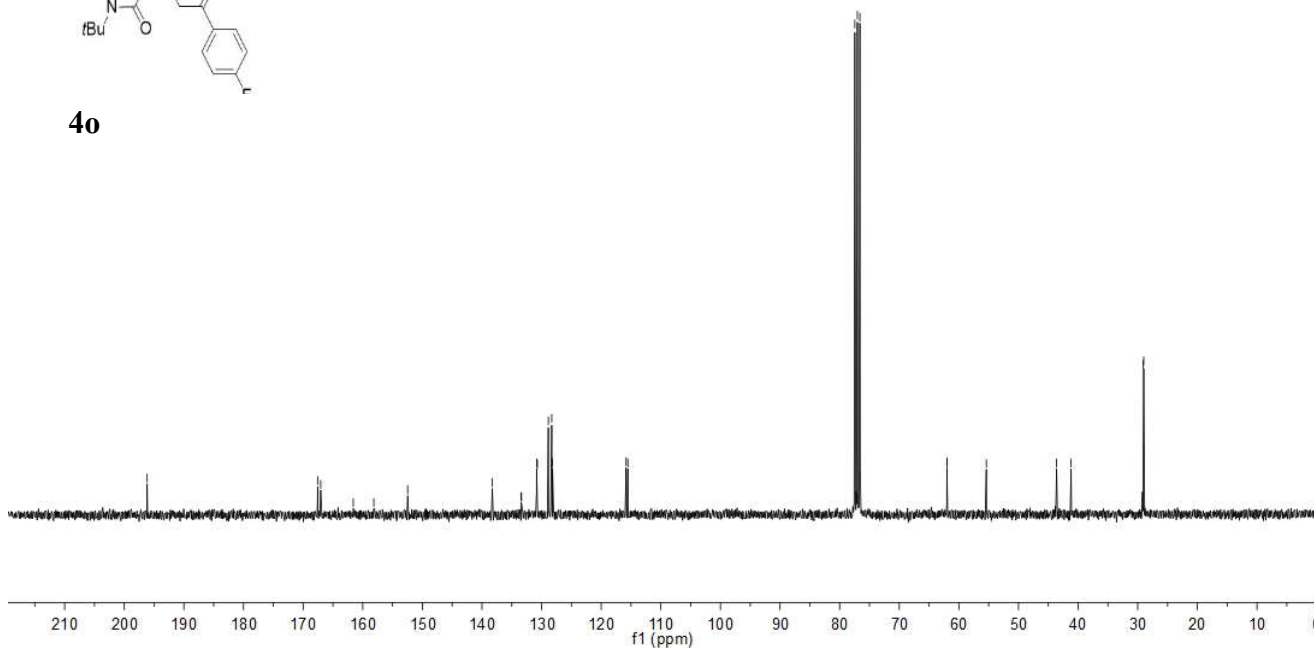
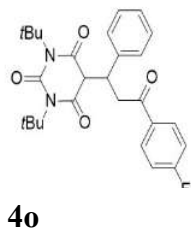
55.4001

43.6113

41.1813

29.0727

28.9894

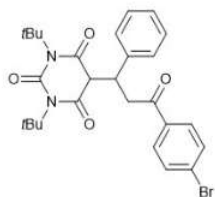


LY-3-12-1 300M NMR CDCL3

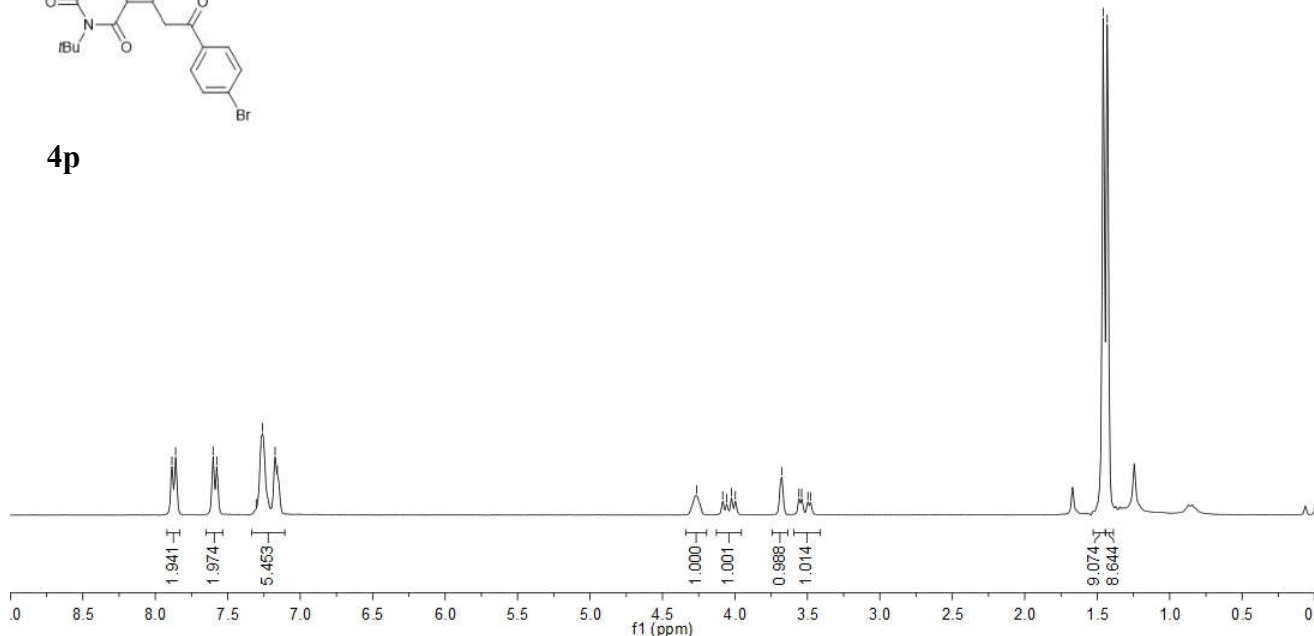
7.8851
7.8598
7.6009
7.5760
7.3036
7.2602
7.1735
7.1575

4.2645
3.9970
3.6766
3.5584
3.5397
3.4966
3.4787

1.4569
1.4311



4p



Ly-3-12-1-c 75M NMR CDCL3

196.7674

167.5234
166.9857

152.4500

138.1161
136.6100

131.9102

129.6869
128.8988

128.3660
128.2773

128.2230

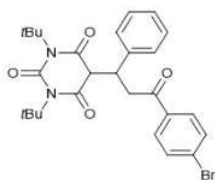
77.4858
77.0623
76.6388

62.0249
61.9940

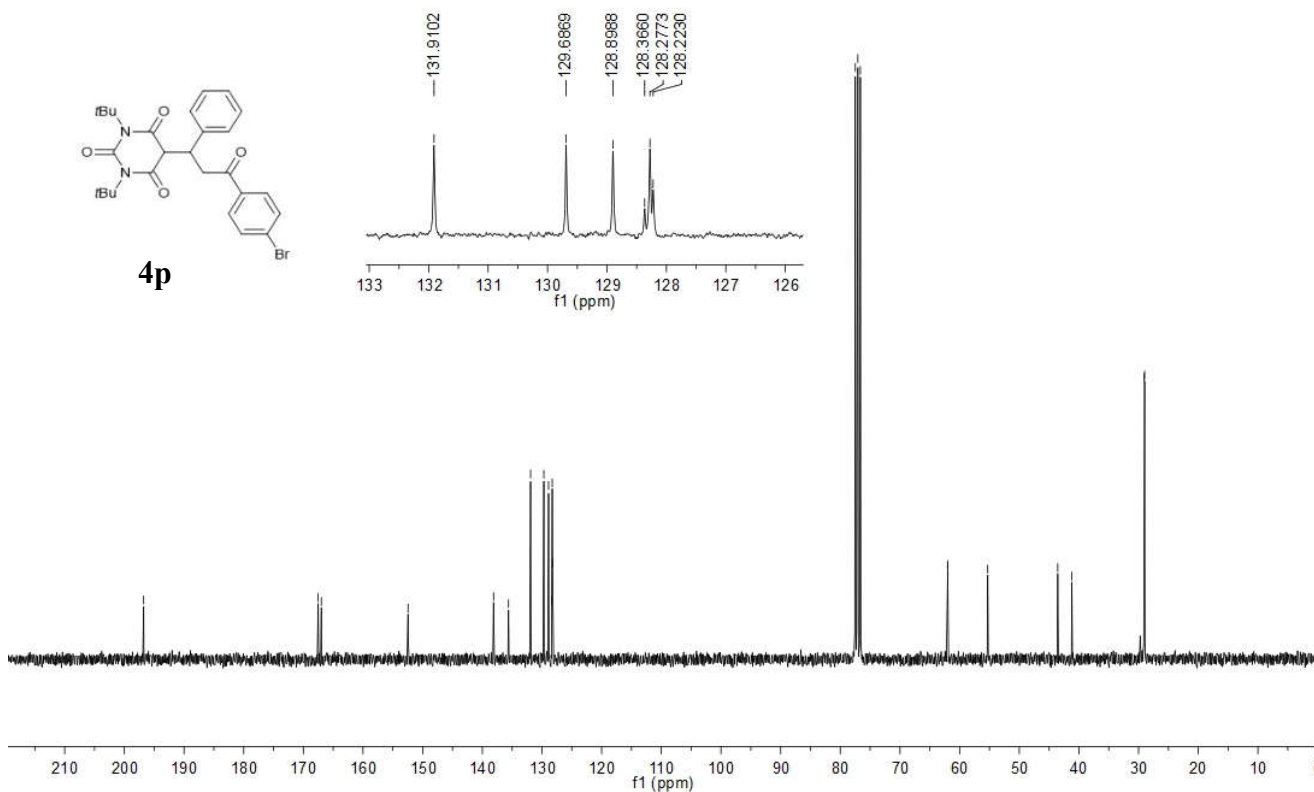
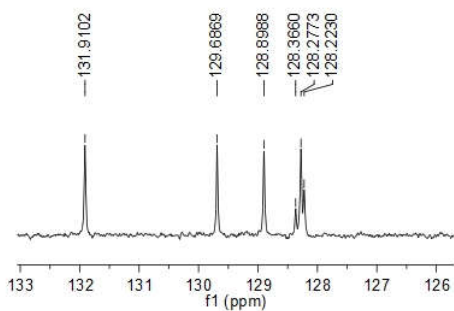
55.2916

43.5536
41.1914

29.0651
28.9908



4p

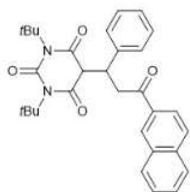


LY-3-4-H NMR 300M CDCL3

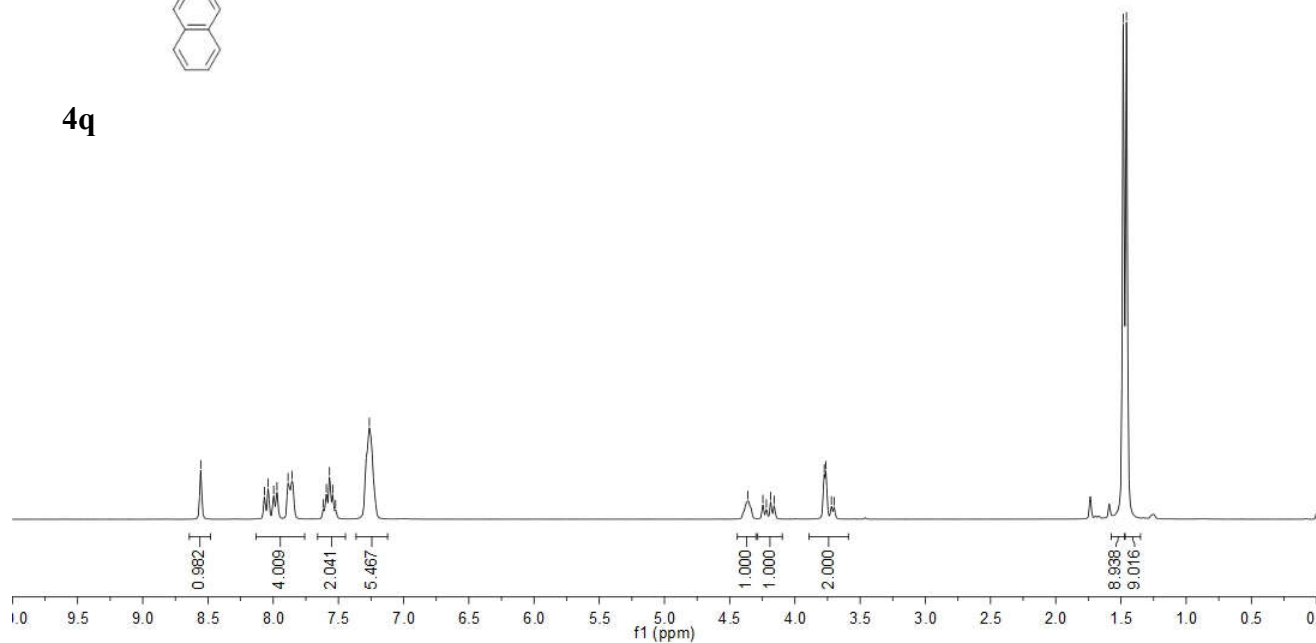
8.5561
8.0388
7.9710
7.8864
7.8551
7.5217
7.2629

4.3599
4.2458
4.2188
4.1853
4.1589
3.7752
3.7626
3.7200
3.6993

1.4825
1.4580

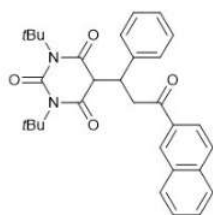


4q

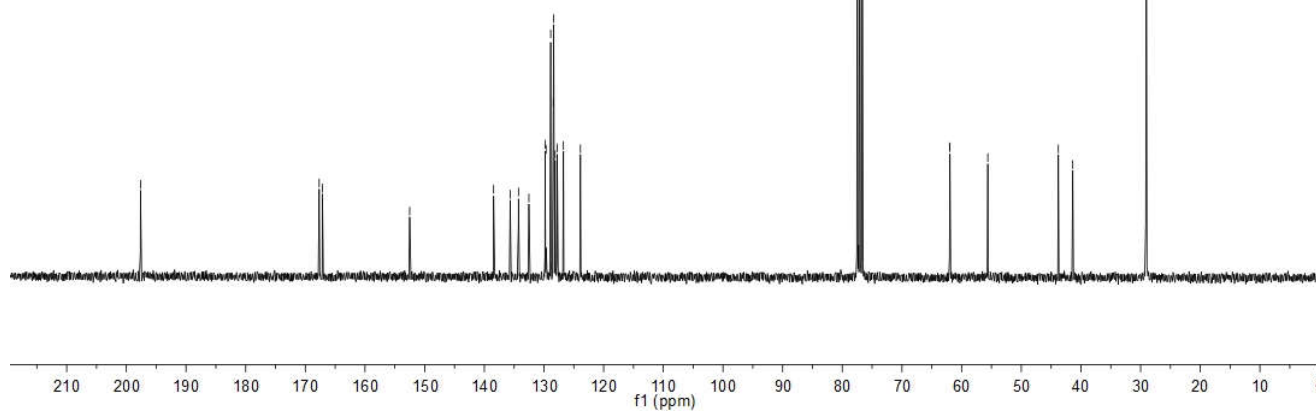
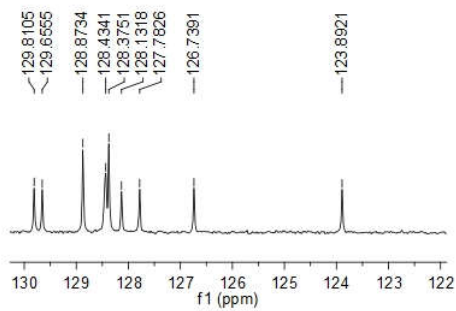


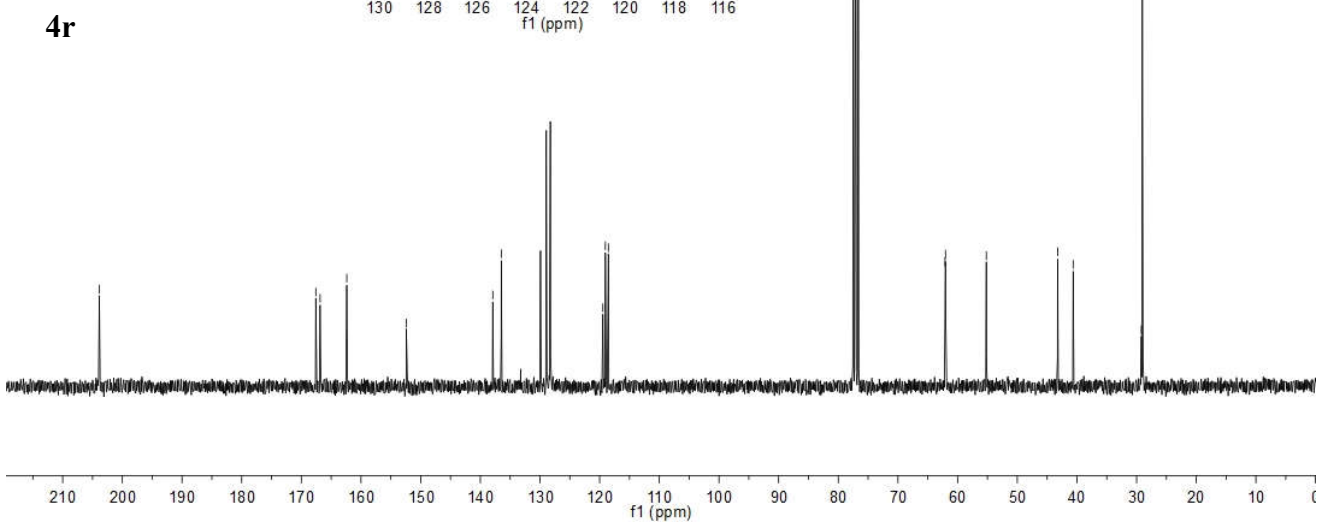
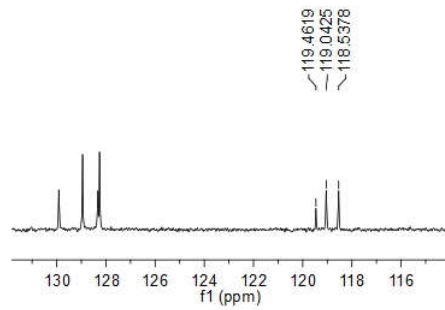
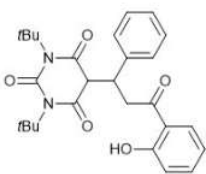
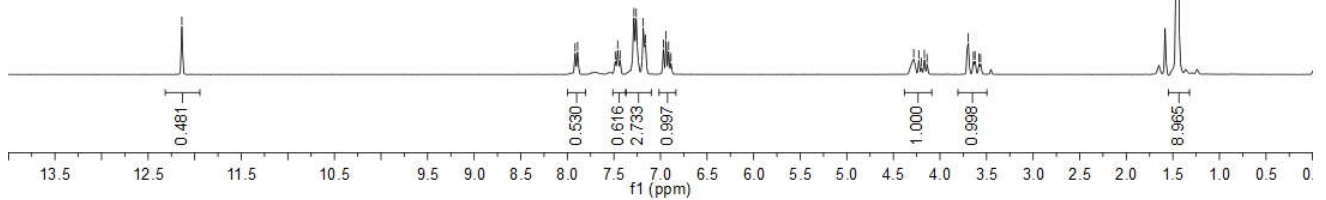
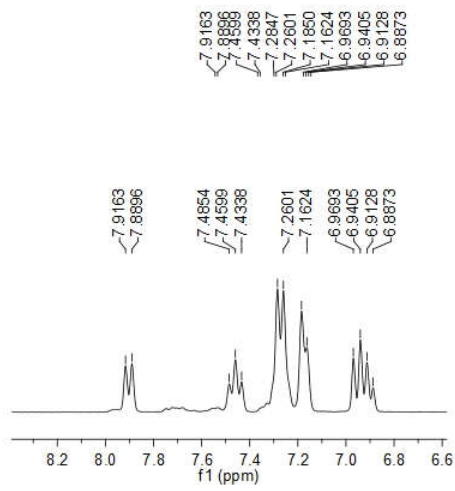
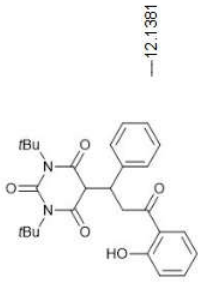
LY-3-4 75M NMR CDC13

197.6286
167.6822
167.1358
152.5118
138.4456
135.6597
134.2722
132.5305
129.8105
129.6555
128.8734
128.4341
128.3751
128.1318
127.7626
126.7391
126.7391
123.8921
77.4933
77.0698
76.6462
62.0070
61.9635
55.6071
43.7900
41.3739
29.1046
29.0342

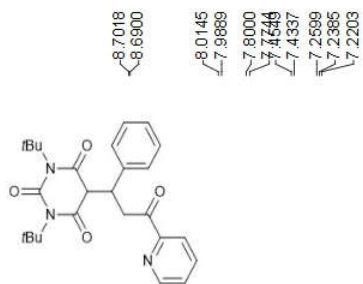


4q

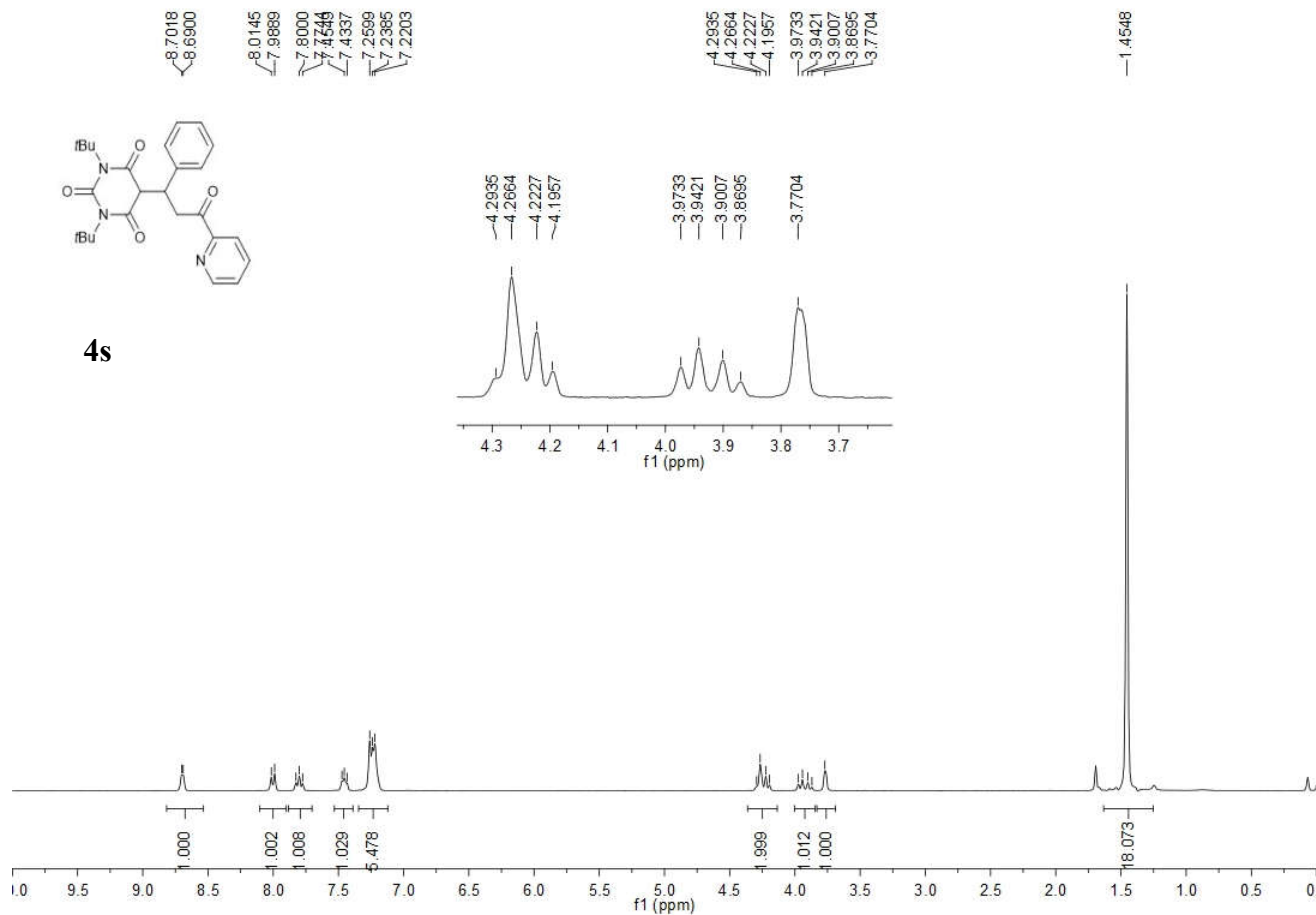




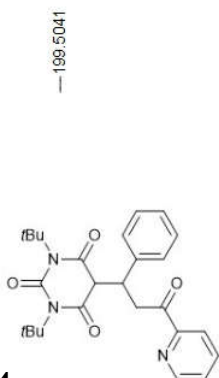
LY-3-3H 300M NMR CDCL3



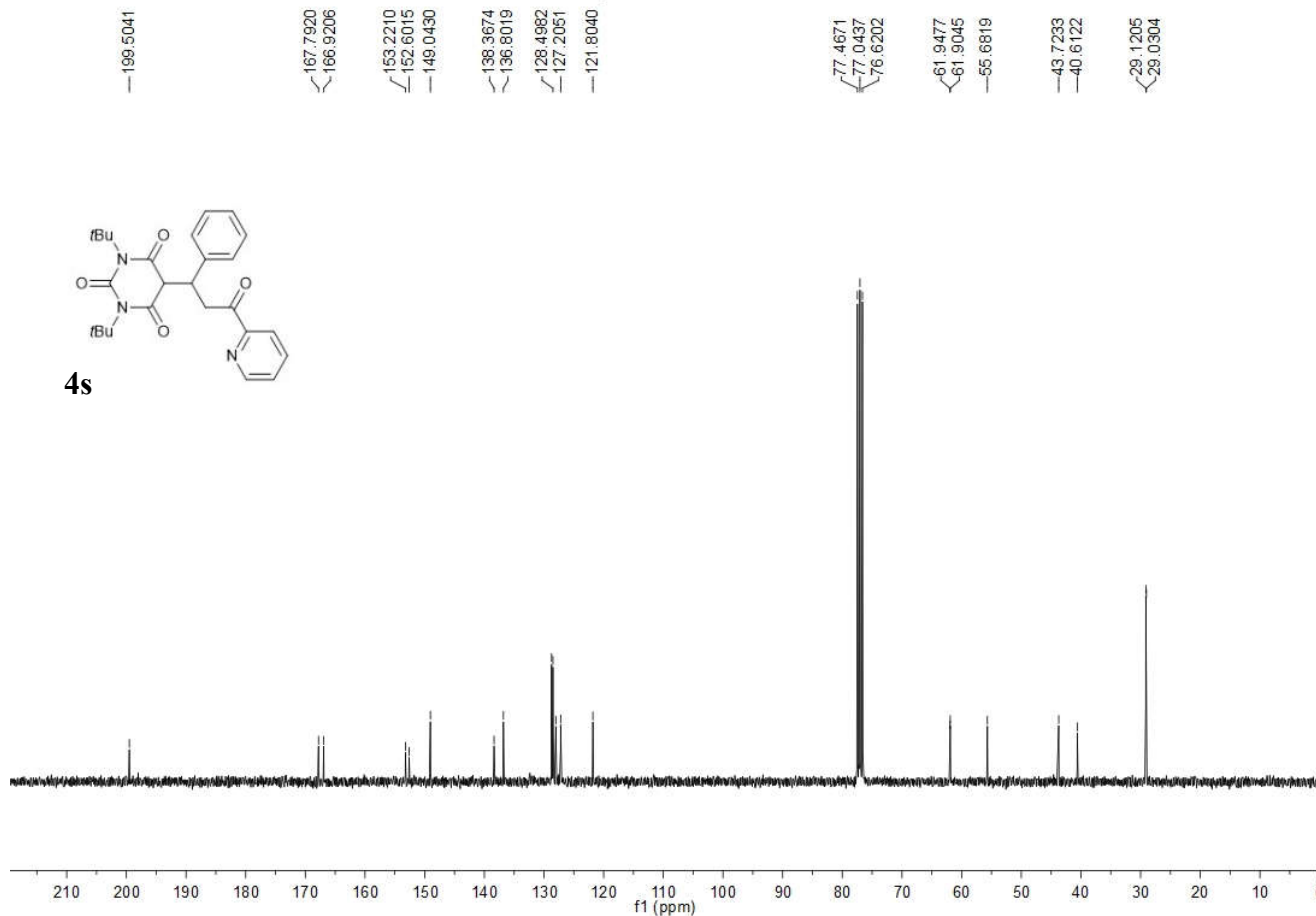
4s



1y-3-3 75M NMR CDC13



4s



ly-3-8-1 NMR 300M CDCL3

8.1188
8.0938

7.4567
7.4298
7.2600

4.4413

4.1559

3.8822

3.7658

3.7462

3.7061

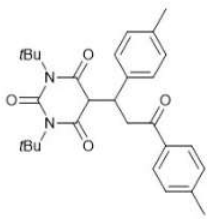
3.6867

2.6007

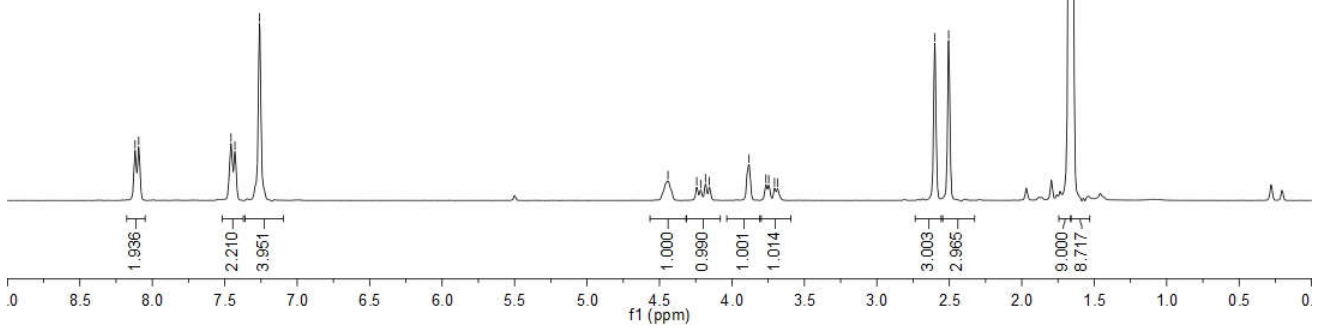
2.5048

1.6732

1.6528



4t



LY-3-8-1 75M NMR CDCL3

197.4035

167.8067
167.2971

152.4250

143.8596

137.6588

135.4596

134.4842

129.3985

129.2361

128.2498

128.1352

77.4929

77.0694

76.6458

61.8694

61.8409

55.8250

43.2704

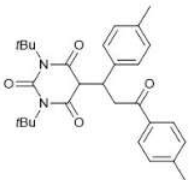
41.3685

29.1280

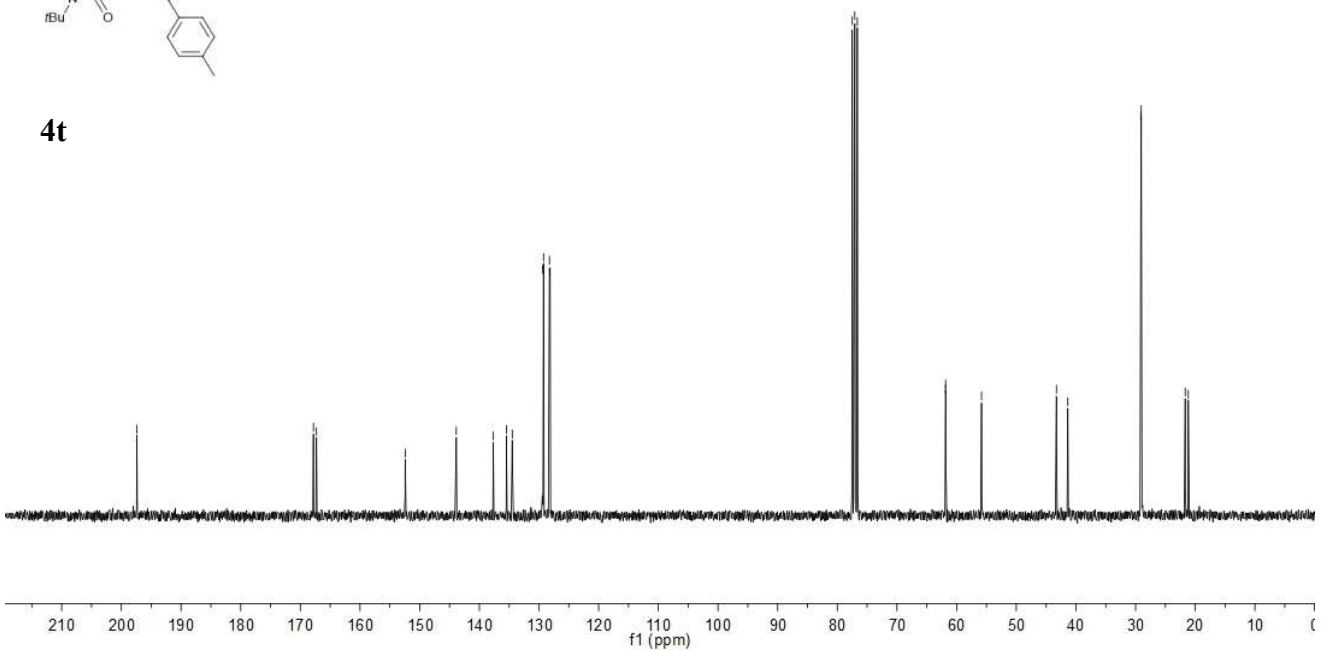
29.0522

21.8864

21.1707



4t

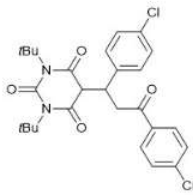


LY-3-8-2 300M NMR CDCL3

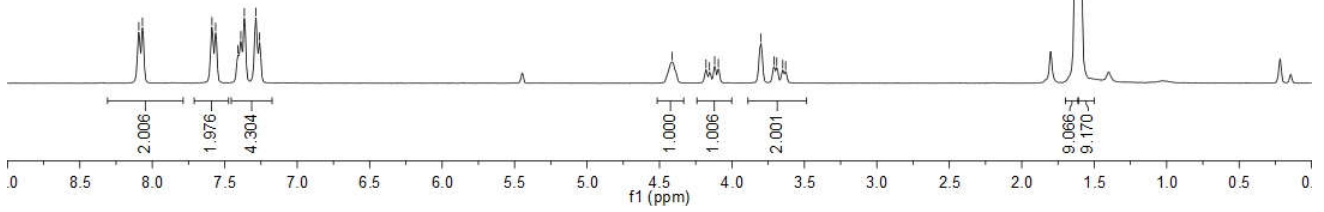
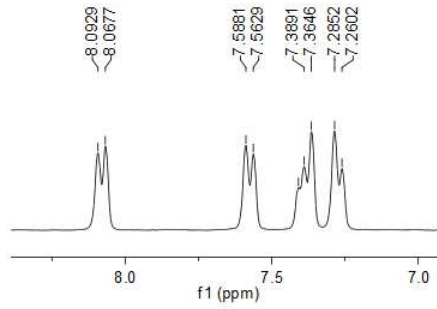
8.0929
8.0677
7.5881
7.5629
7.4088
7.3891
7.3646
7.2852
7.2602

4.4124
4.0938
3.7986
3.7094
3.6909
3.6492
3.6294

1.6220
1.5978



4u



LY-3-8-2-C 75M NMR CDCL3

196.3253

167.2776
166.8889

152.3053

138.7541

136.9546

135.0473

133.9733

129.6342

129.5374

128.9608

77.4710

77.0476

76.6242

62.1256

62.0945

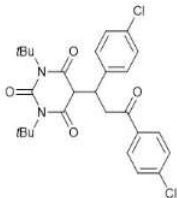
55.2904

42.6680

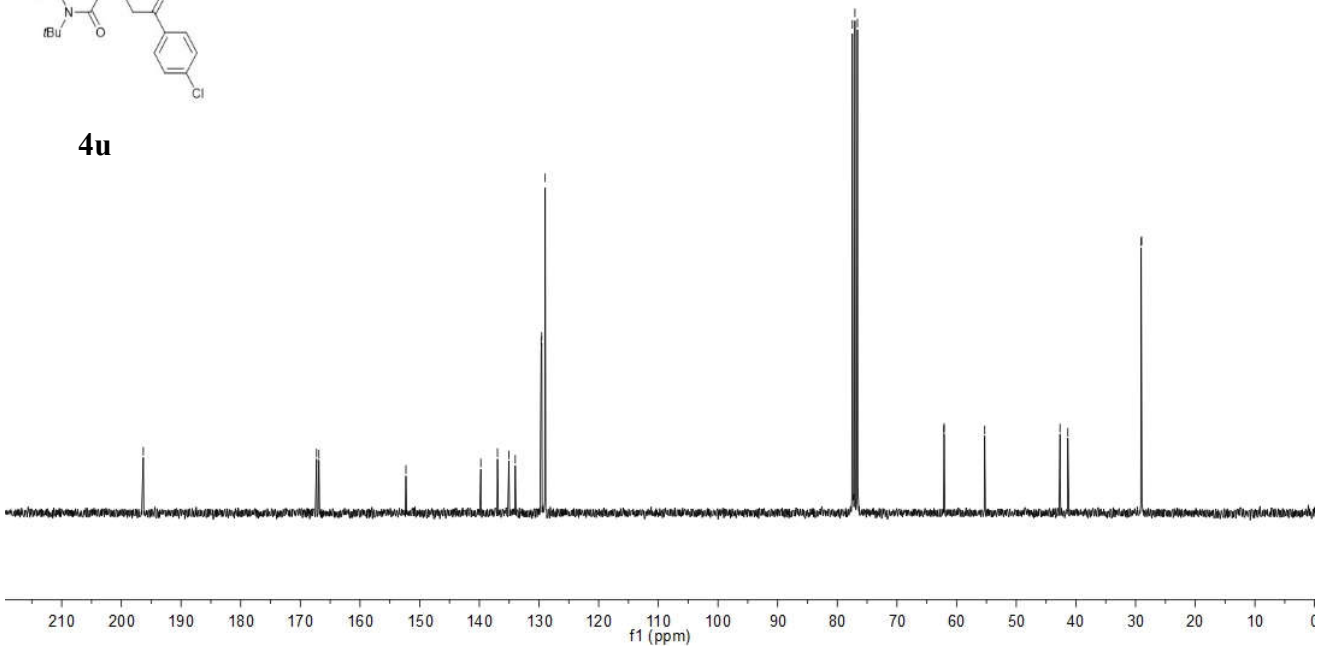
41.3587

29.0663

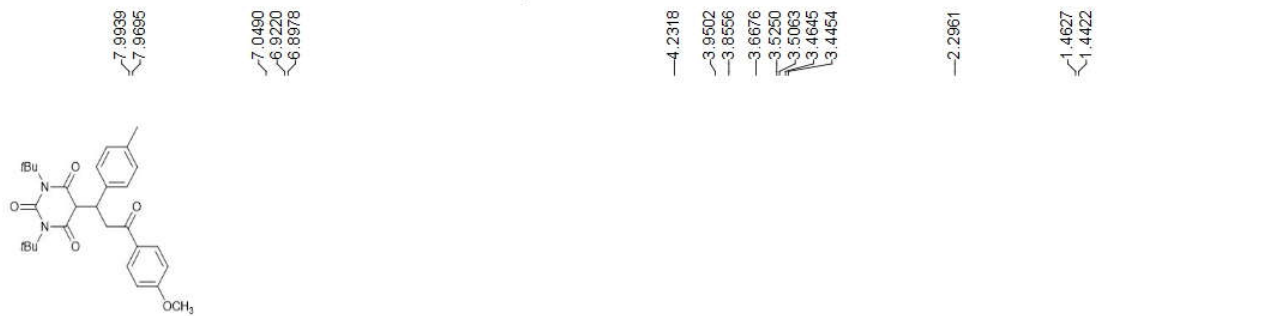
28.9916



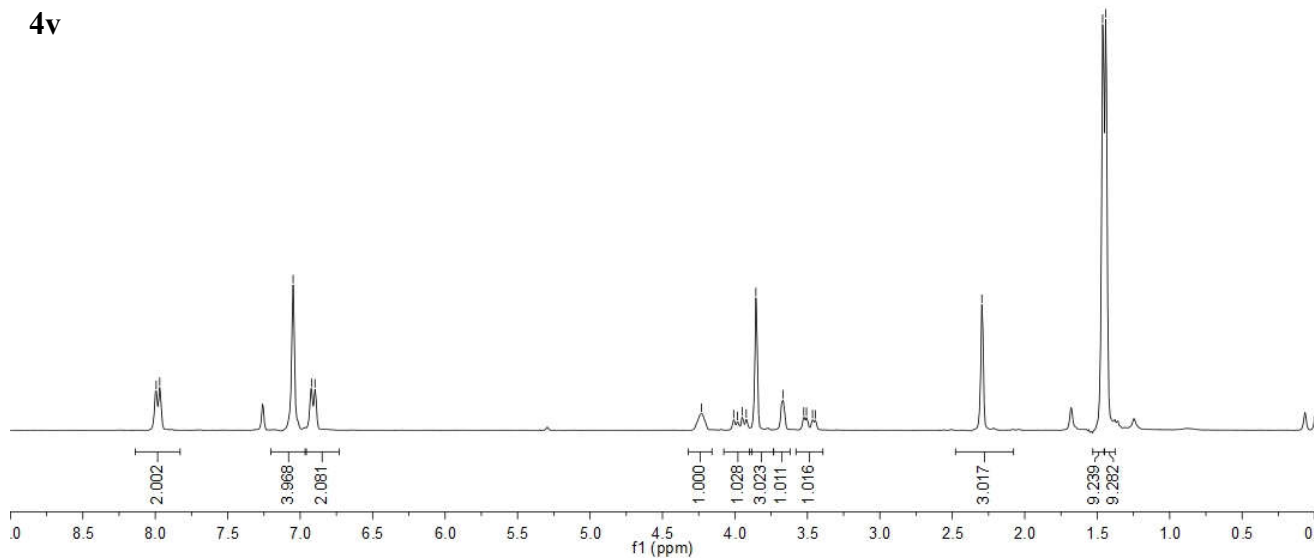
4u



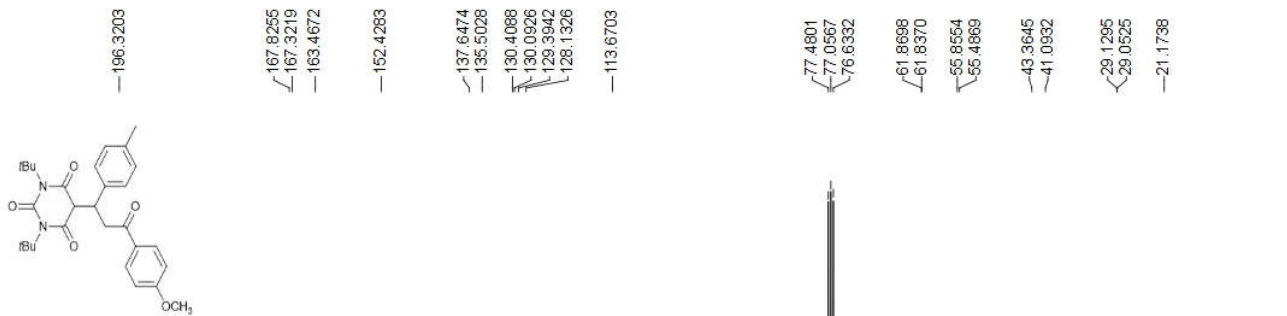
ly-3-6-H 300M NMR CDCL3



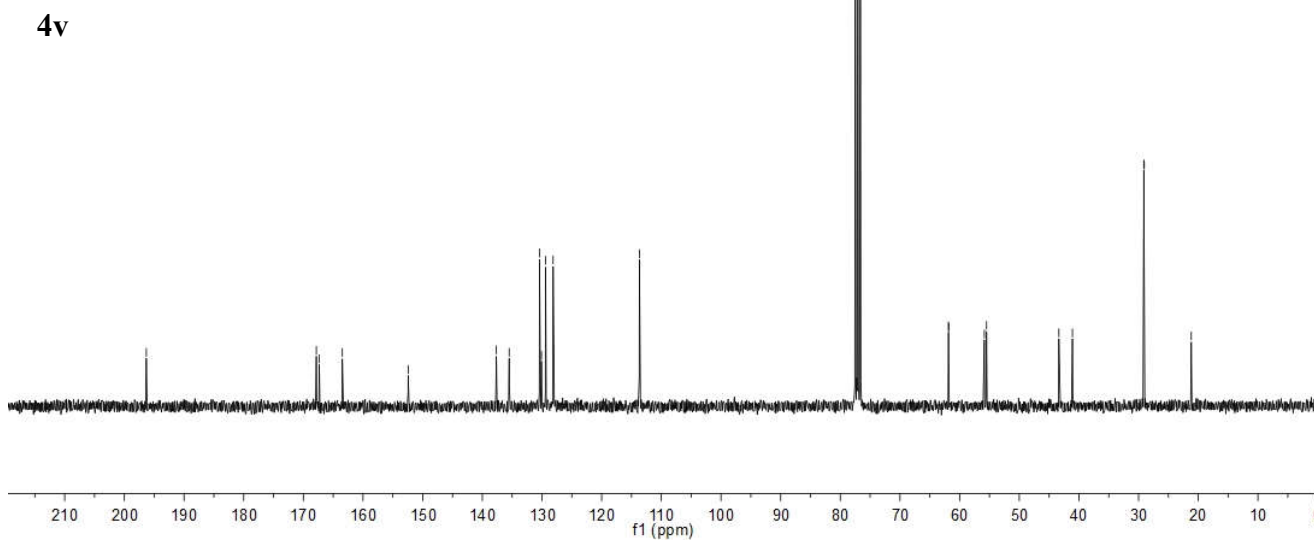
4v



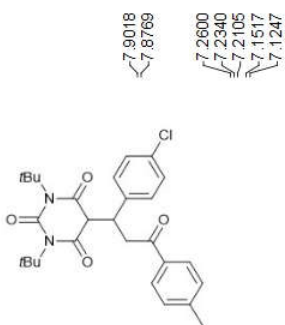
LY-3-6-C 75M NMR CDCL3



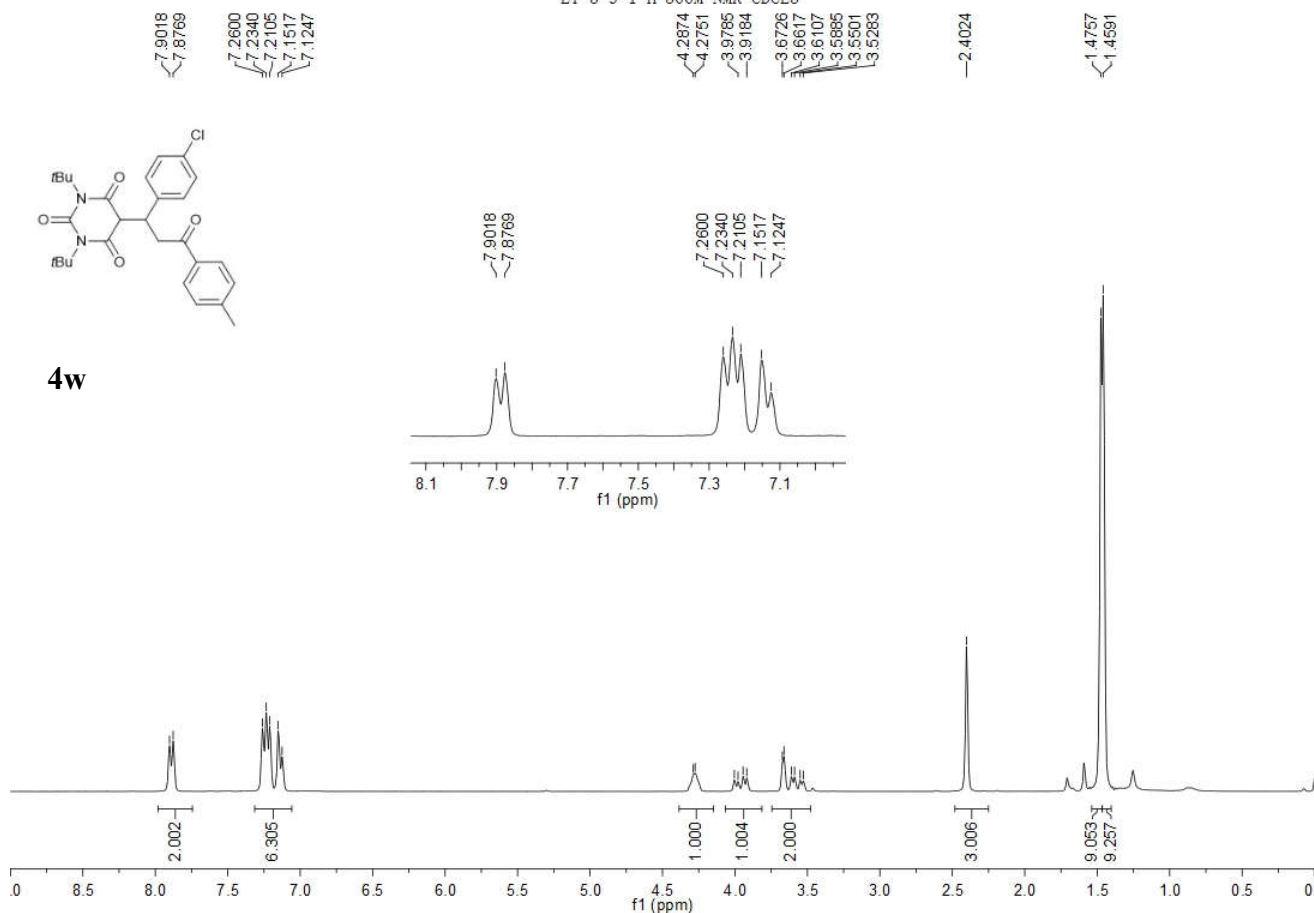
4v



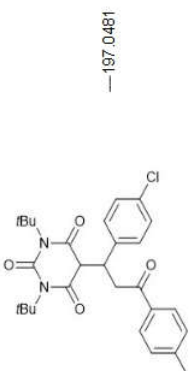
LY-3-9-1-H 300M NMR CDCl₃



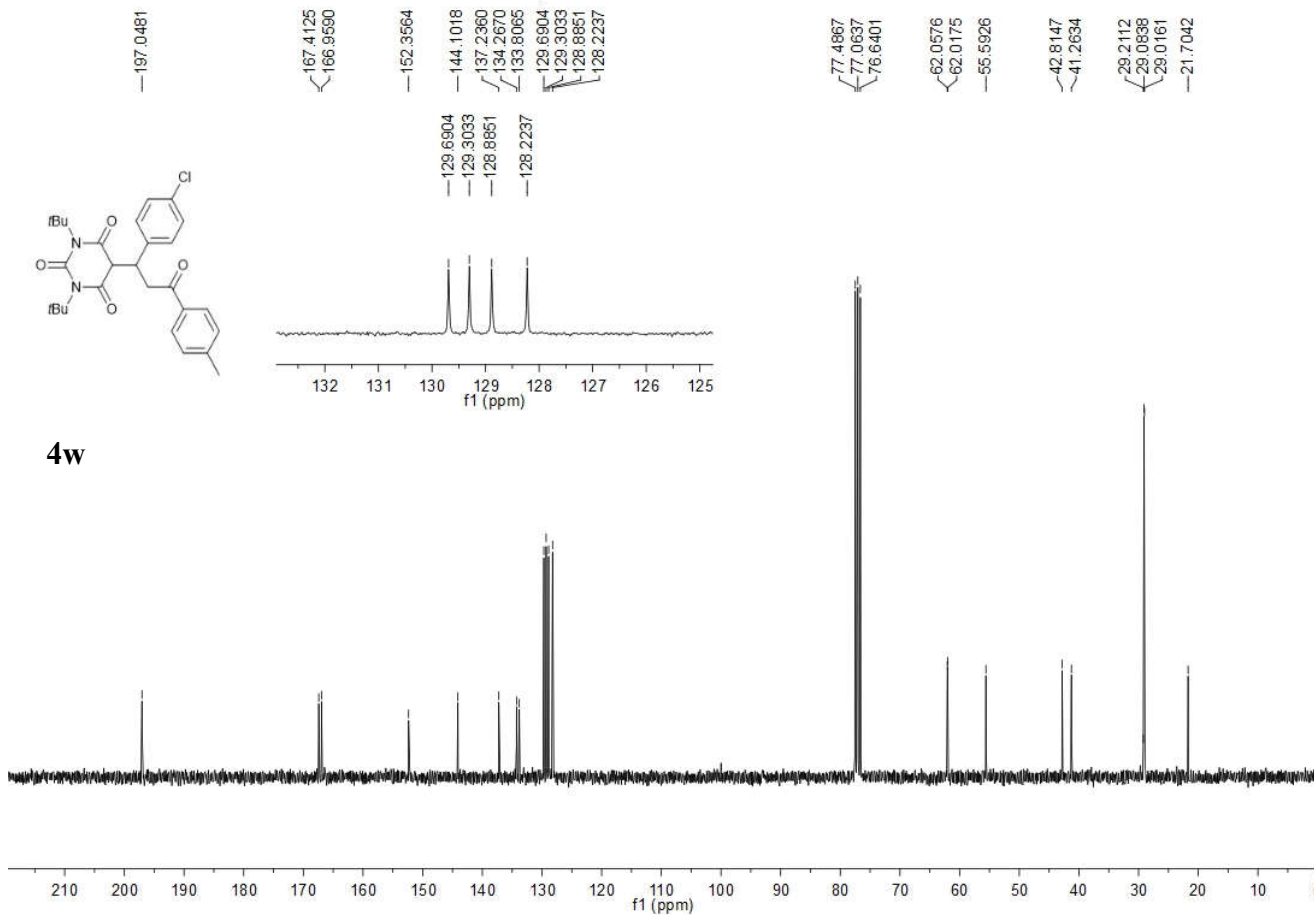
4w



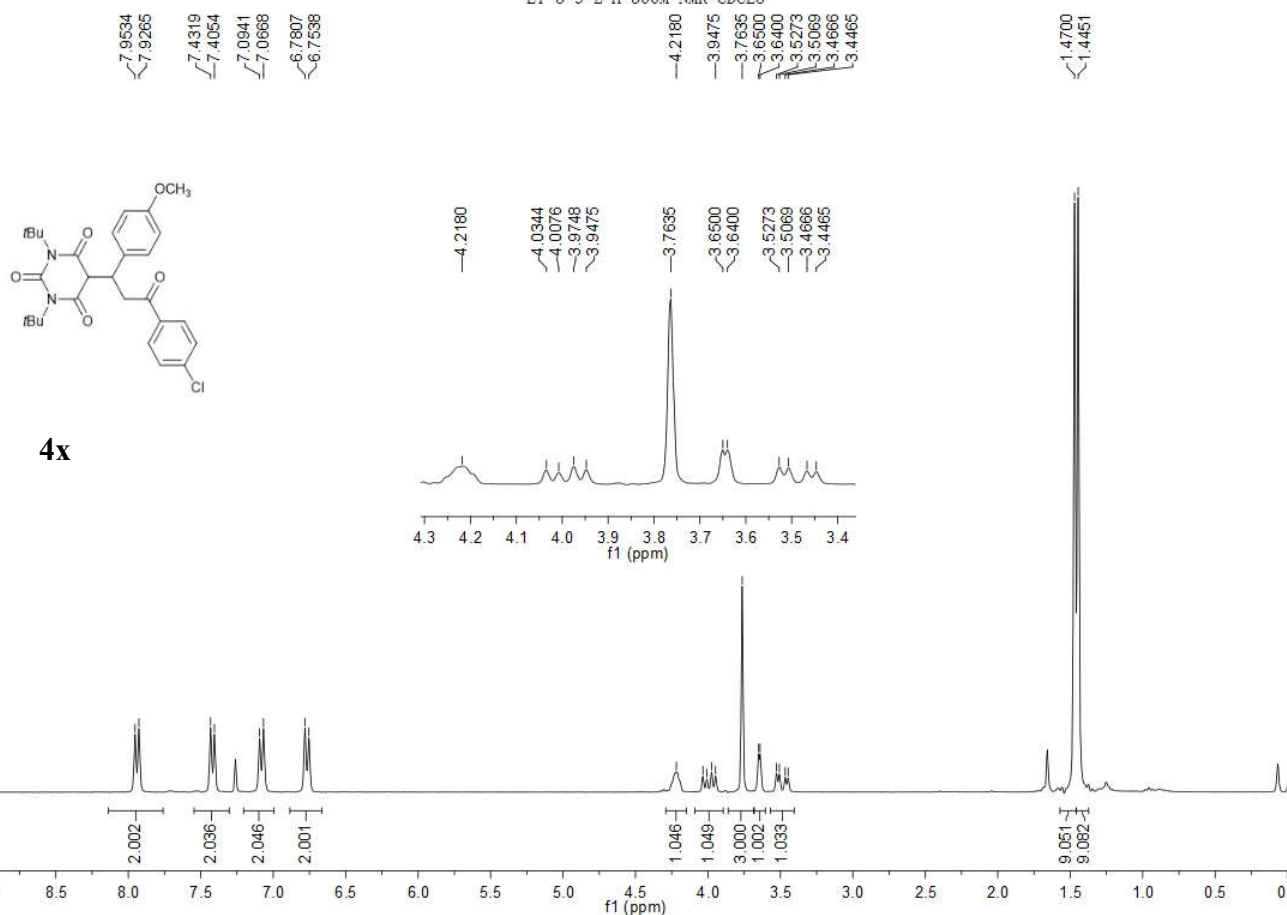
1y-3-9-1 75M NMR CDCl₃



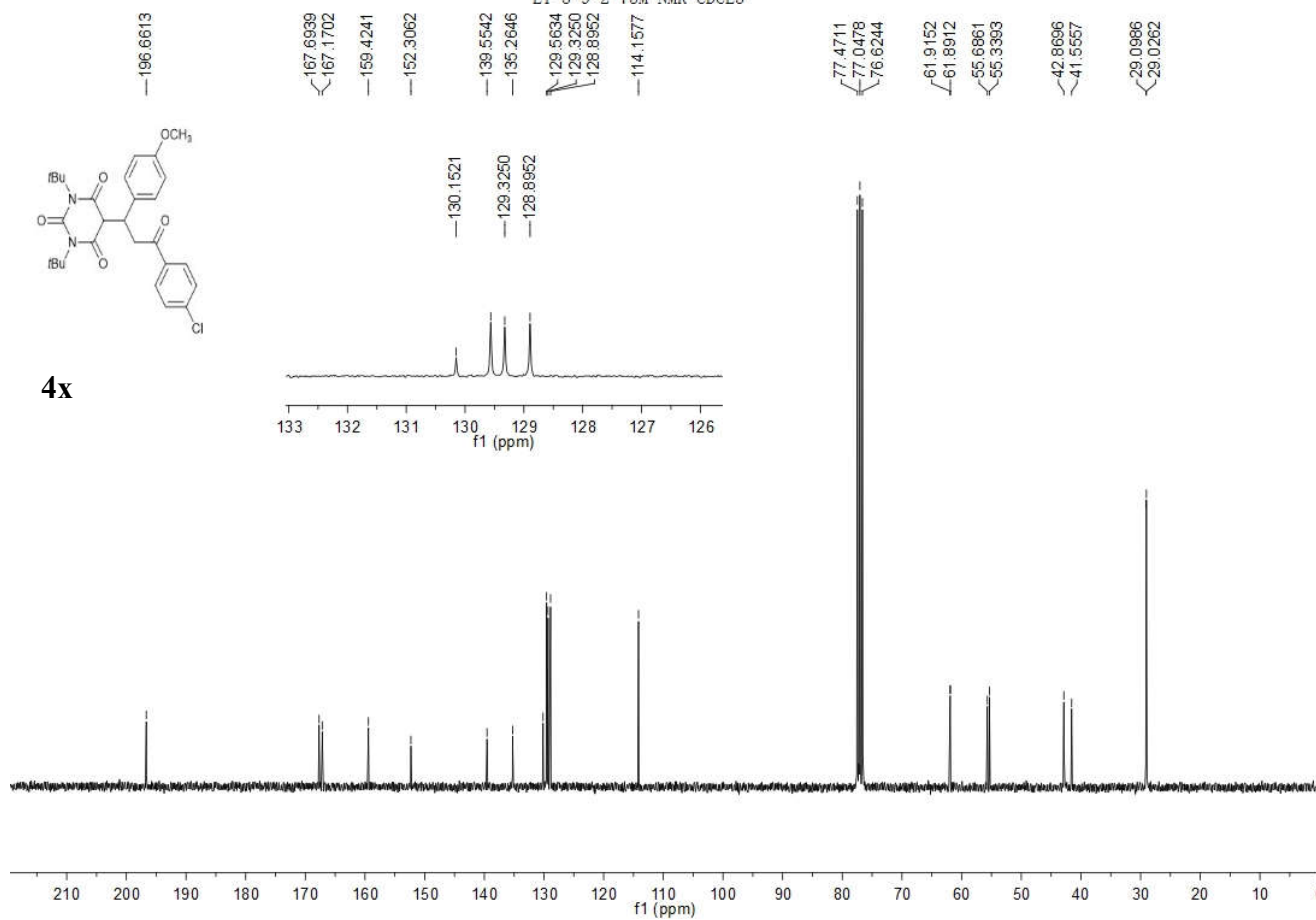
4w



LY-3-9-2-H 300M NMR CDCL3



LY-3-9-2 75M NMR CDCL3

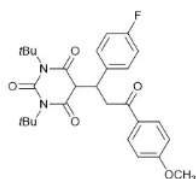


1y-3-11-1 300M NMR CDCL3

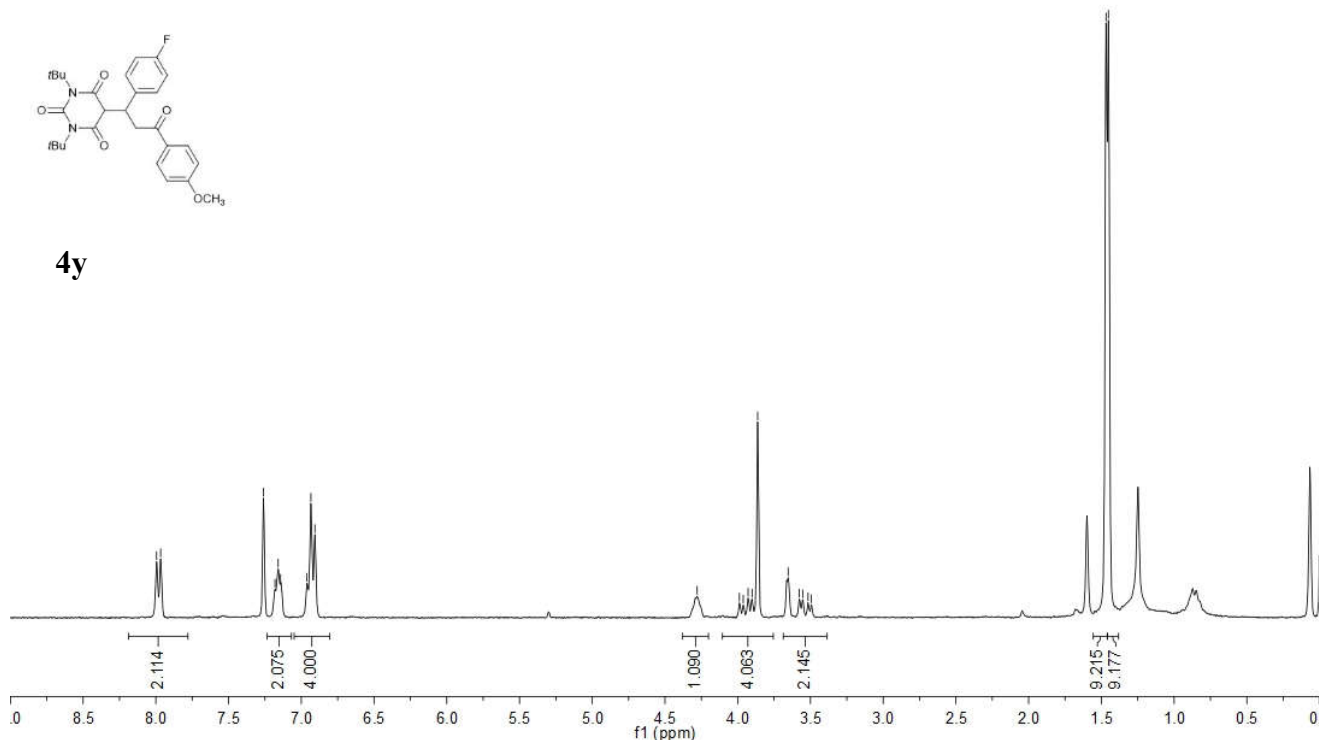
7.9948
7.9669
7.2602
7.1807
7.1591
7.1426
6.9612
6.9341
6.9066

4.2789
3.9286
3.9013
3.8628
3.6531
3.5767
3.5535
3.5164
3.4934

1.4679
1.4517



4y



1y-3-11-1 75M NMR CDCL3

196.0234
167.5403
167.0010
163.5841
152.4072

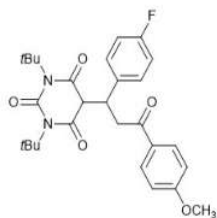
134.3725
130.4047
129.9956
129.8890
115.7898
115.5082
113.7323

77.4675
77.0441
76.6207

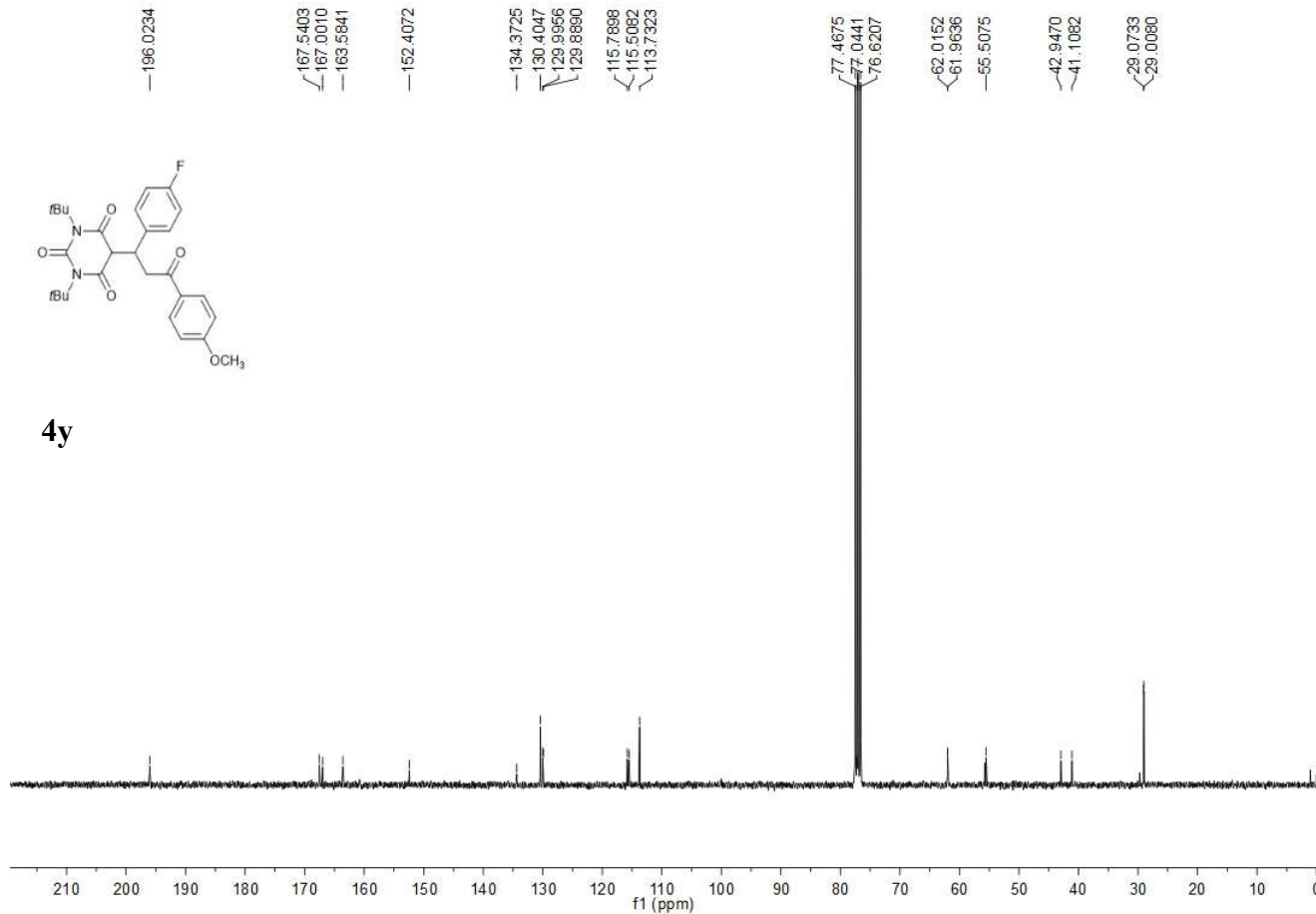
62.0152
61.9636
55.5075

42.9470
41.1082

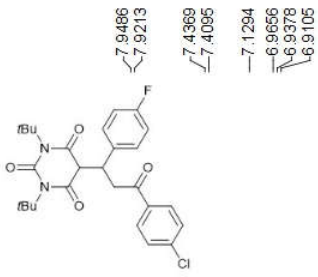
29.0733
29.0080



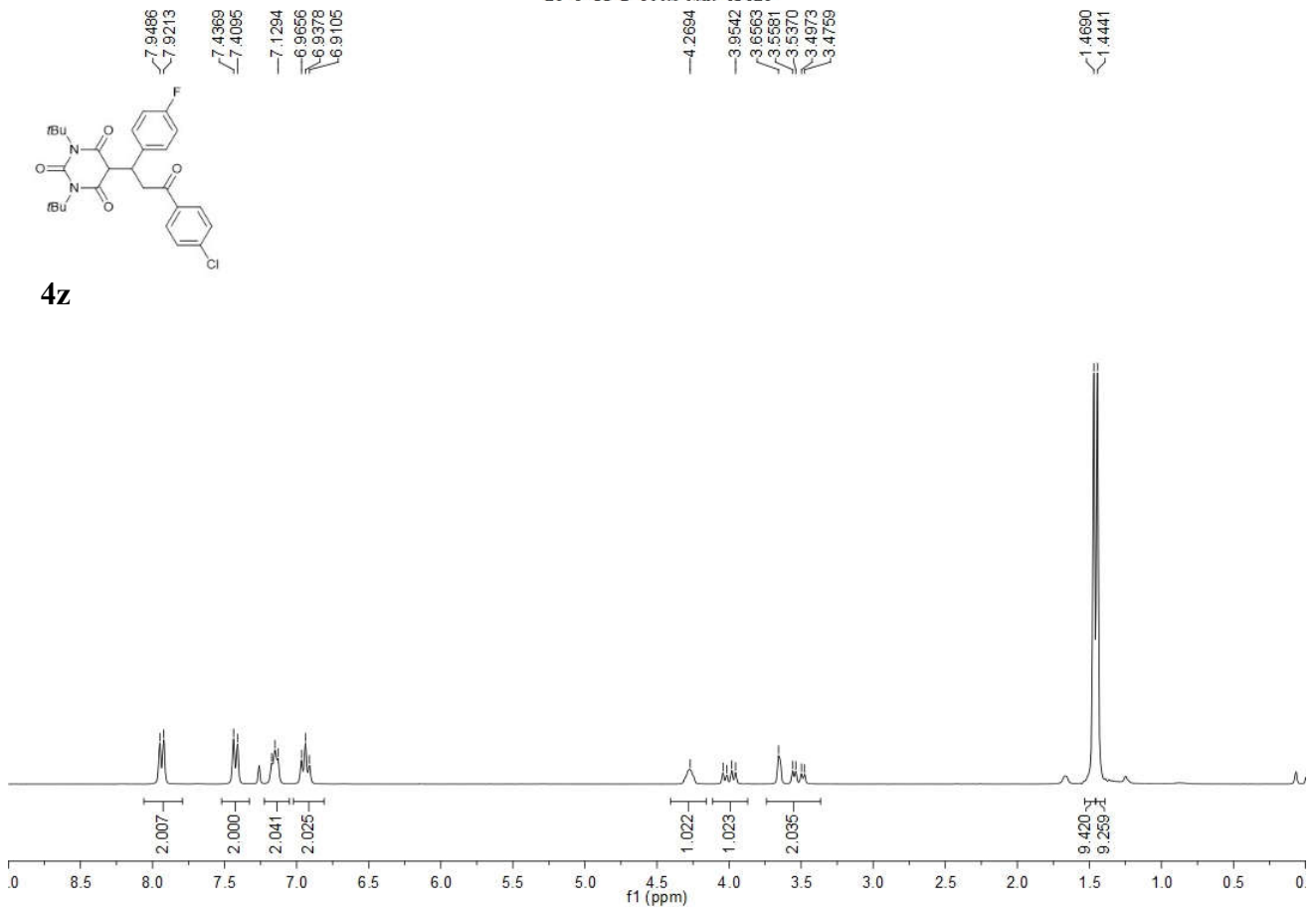
4y



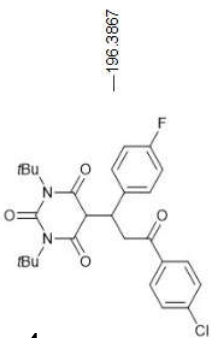
LY-3-11-2 300M NMR CDCL3



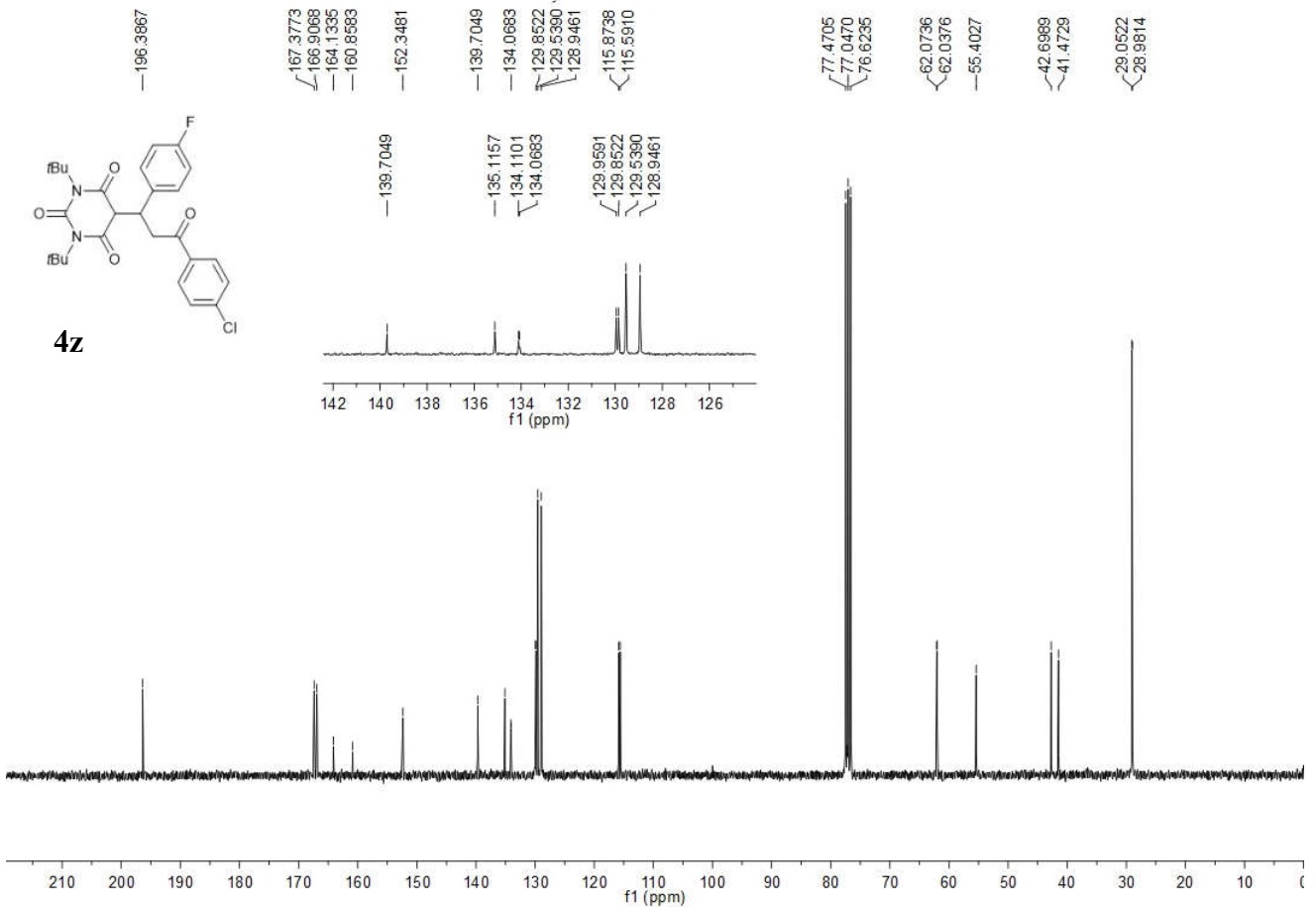
4z



LY-3-11-2-c 75M NMR CDCL3



4z

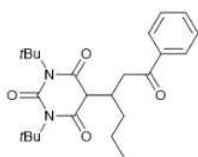


LY-3-33A 300M NMR CDCL3

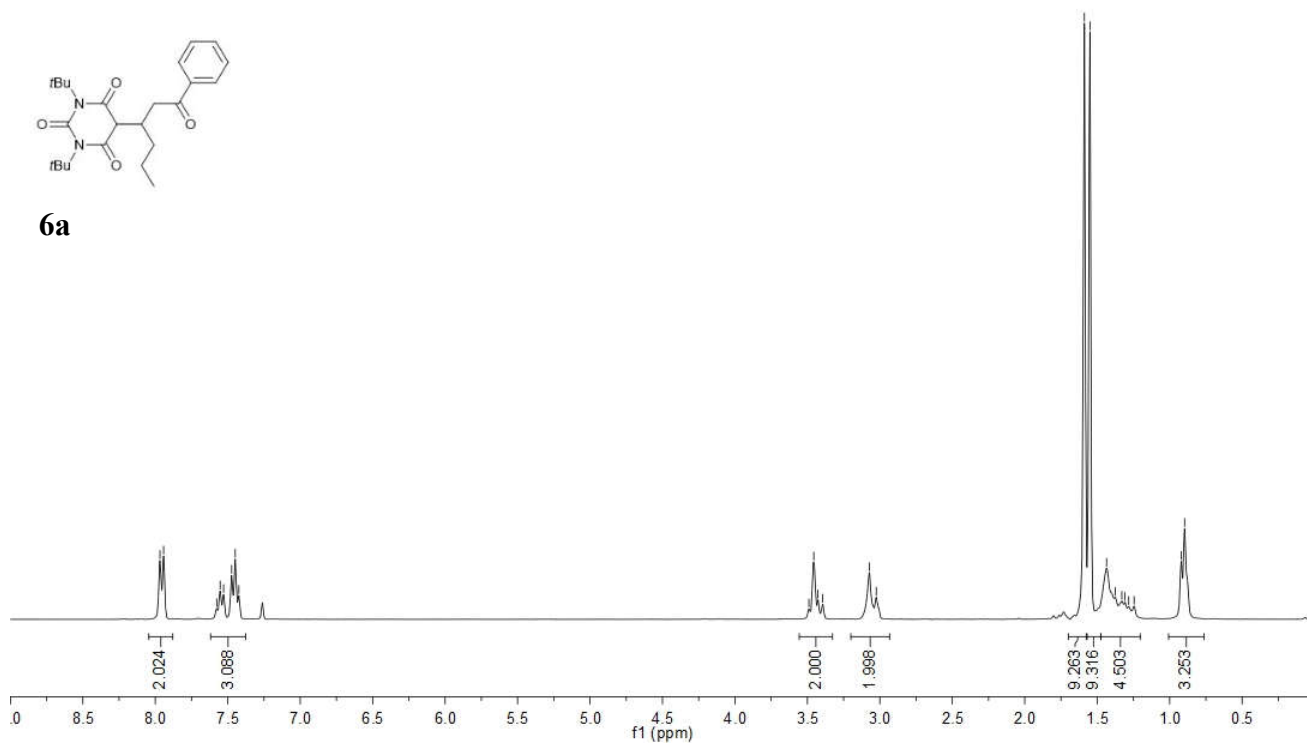
7.9677
7.9425
7.5763
7.5524
7.5286
7.4730
7.4483
7.4233

3.4897
3.4558
3.4270
3.3945
3.0726
3.0248

1.5886
1.5503
1.4356
1.3754
1.3300
1.3082
1.2824
1.2456
0.9206
0.8972



6a



LY-3-33A 75M NMR CDC13

198.9715

169.0227
168.2233

152.8169

136.9041
133.1450
128.6027
128.0641

77.4886
77.0652
76.6417

61.7890
61.6860

55.1047

40.0774

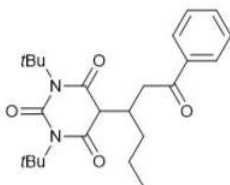
34.2562

29.3209

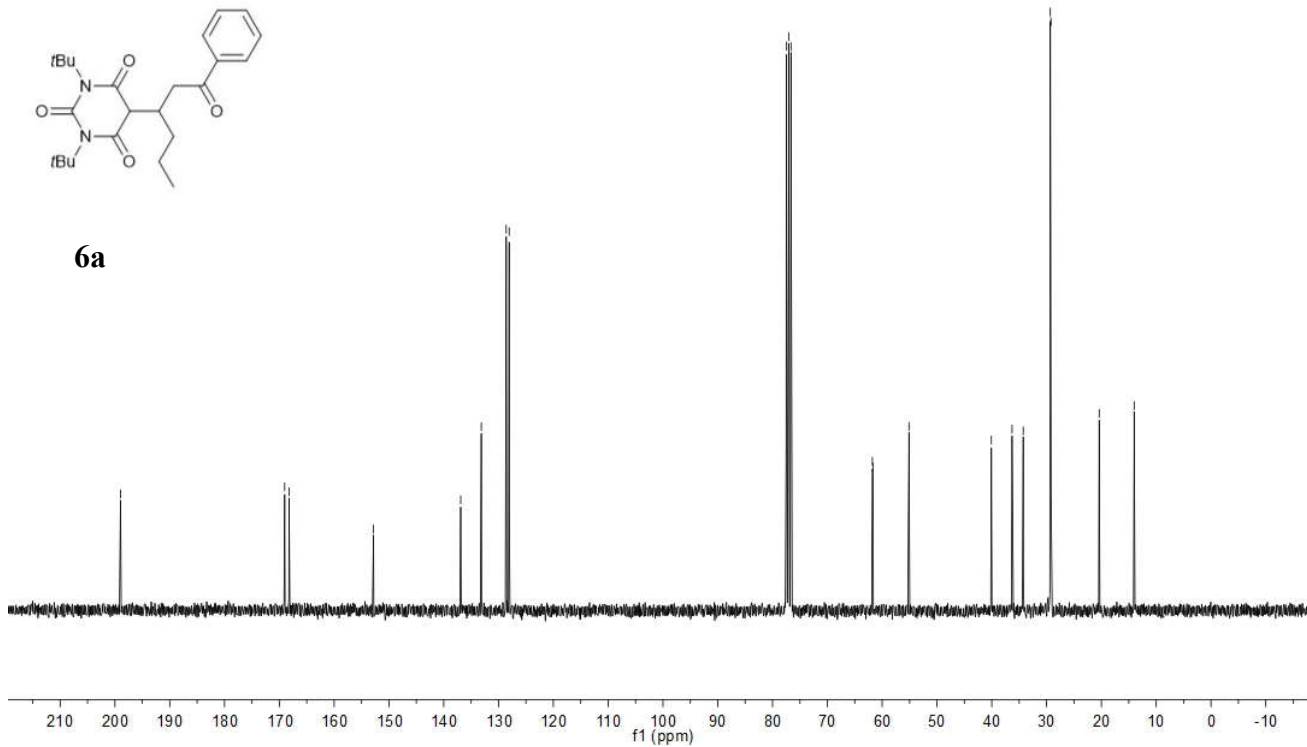
29.2029

20.3937

14.0168



6a

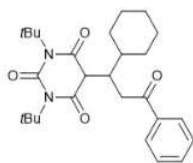


LY-3-27B 300M NMR CDCL3

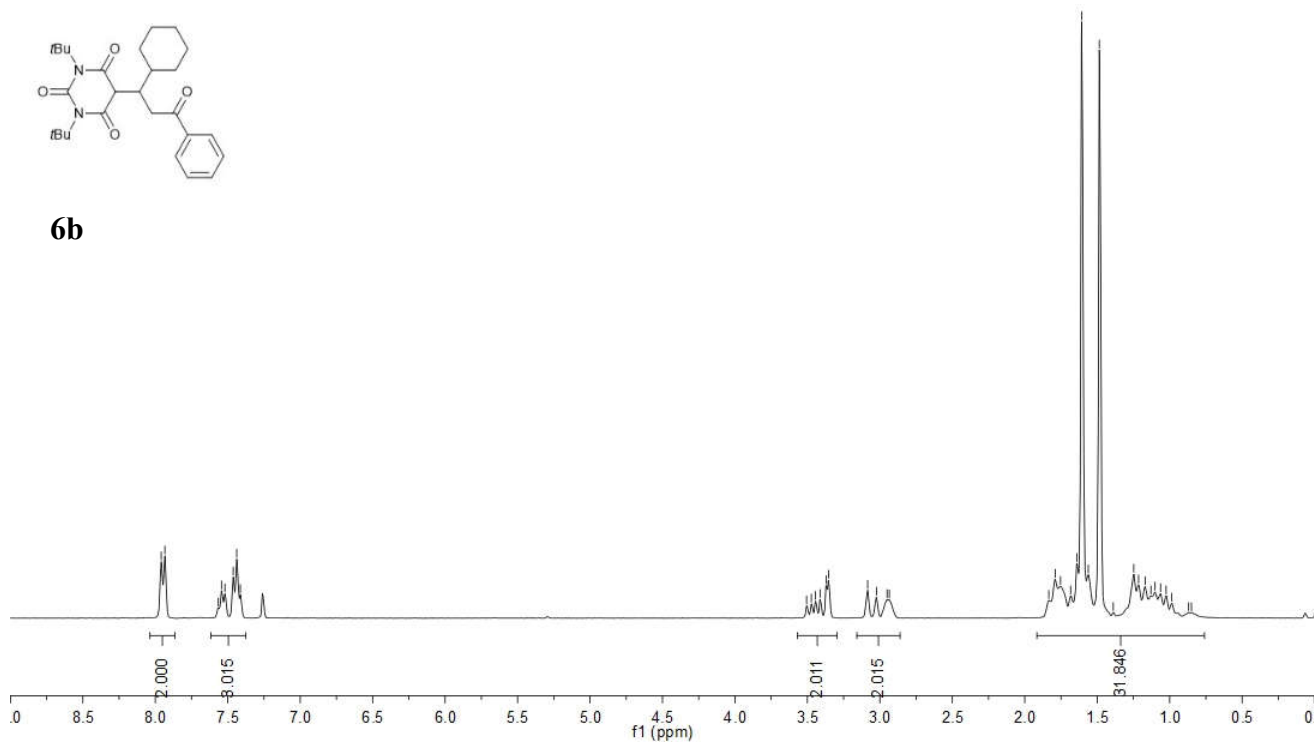
7.9591
7.9336
7.5650
7.5433
7.5194
7.4621
7.4381
7.4131

3.5056
3.4727
3.4443
3.4127
3.3711
3.3544
3.0841
3.0235
2.9504
2.9348

1.7898
1.7532
1.6837
1.6398
1.6079
1.5617
1.4857
1.3891
1.2480
1.2145
1.1696
1.1293
1.1009
1.0629
1.0248
0.9853
0.8691
0.8497



6b



LY-3-27B 75M NMR CDCL3

199.0928

169.9765
167.7812

153.0537

136.8426
133.0686
128.5503
128.0625

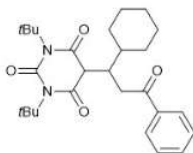
77.4724
77.0491
76.6257

61.7075
61.5154

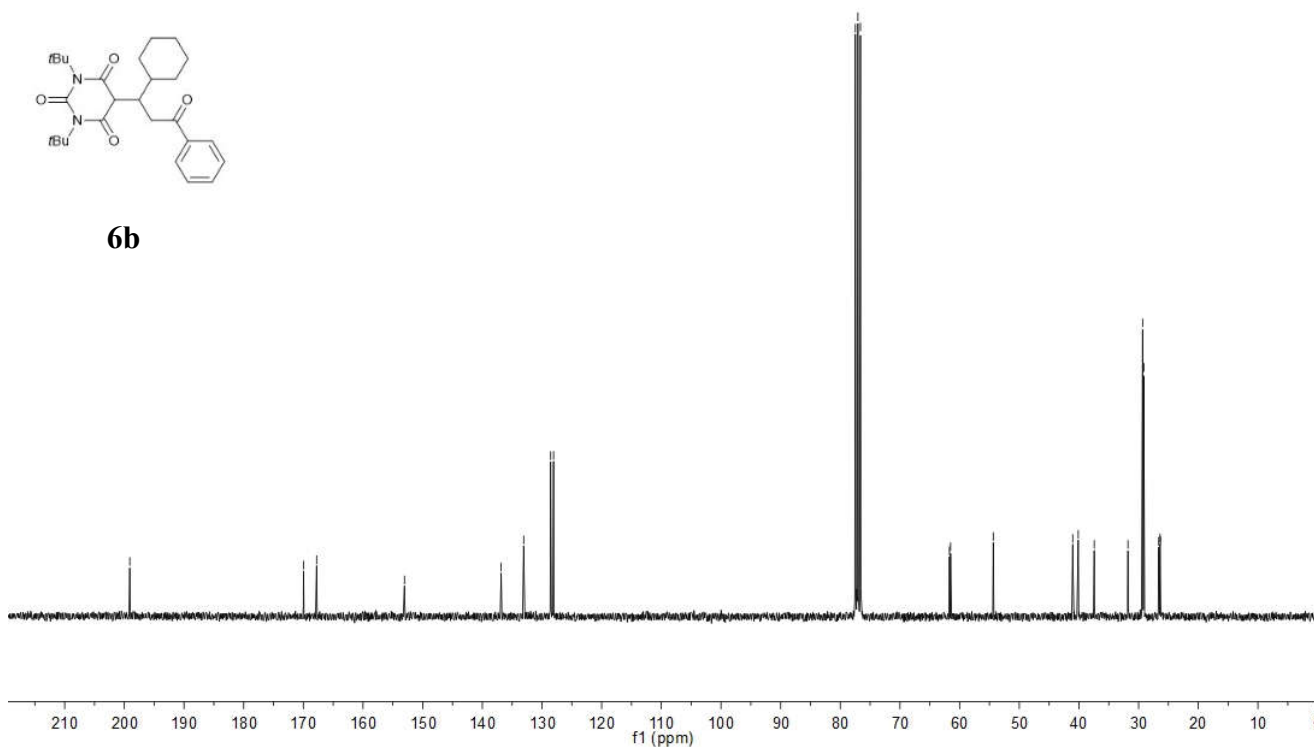
54.3625

41.0448
40.1192
37.4377

31.7876
29.3338
29.1305
26.6283
26.4073
26.3569



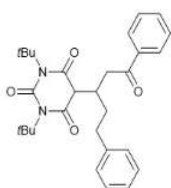
6b



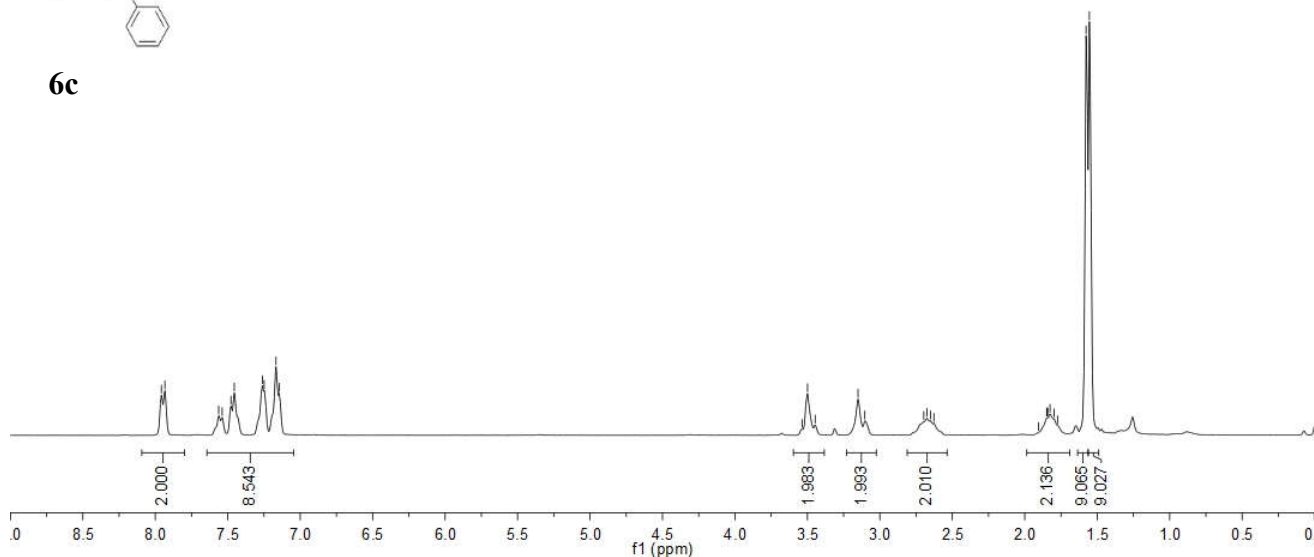
1y-3-37 300M NMR CDCl3

7.9578
7.9337
7.5625
7.4777
7.4549
7.2509
7.2484
7.1670
7.1452

3.5355
3.4990
3.4463
3.1507
3.1039
2.6967
2.6745
2.6498
2.6270
1.8418
1.8259
1.7979
1.7740
1.5772
1.5542

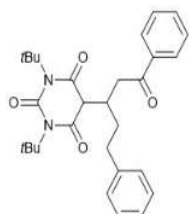


6c

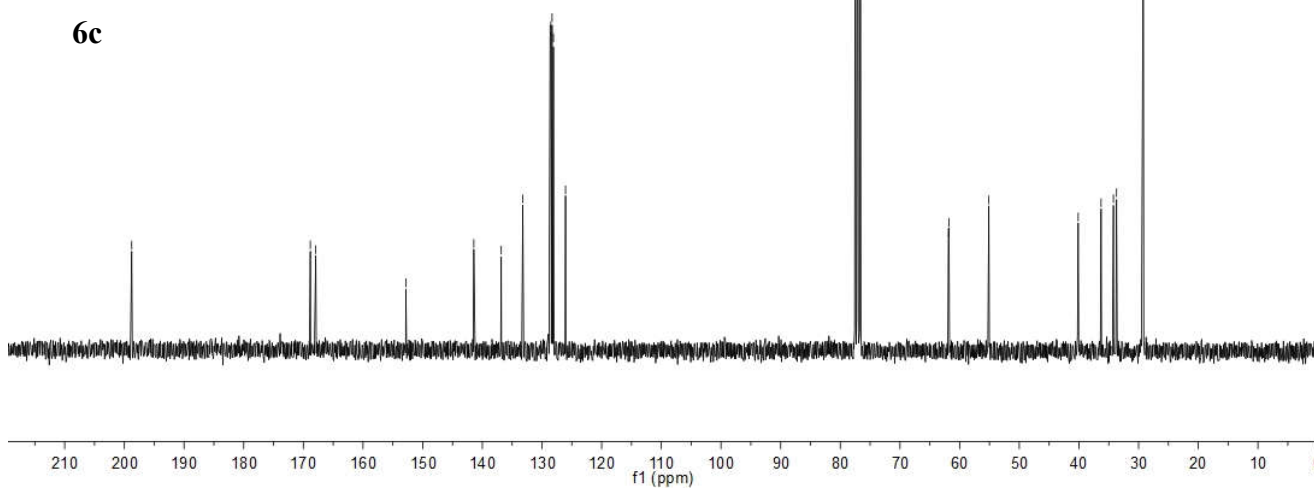


1y-3-37 1H in CDCl3 300M NMR

198.7709
168.8266
167.9199
152.8087
141.4297
136.8306
133.2195
128.6373
128.5104
128.3091
128.0826
126.0536
77.4847
77.0612
76.6380
61.8743
61.7837
55.1048
40.1272
33.6987
29.3244
29.2235

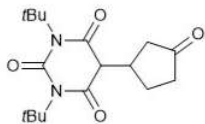


6c

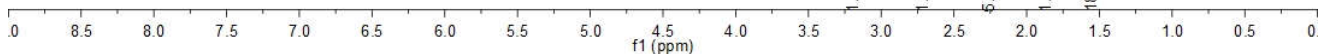
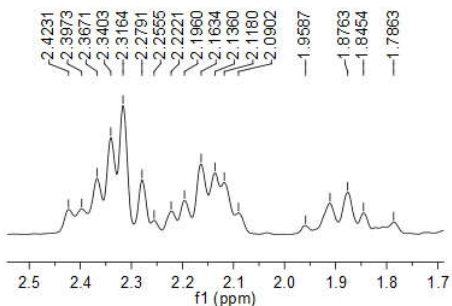


-7.2598

3.2184
3.1958
2.7275
2.7076
2.3403
2.2555
2.1634
2.0902
1.8763
1.7863
1.5746



7



LY-3-21A-C 75M NMR CDCL3

-216.0149

167.5628
167.3369

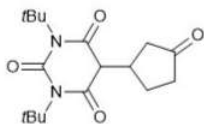
153.1660

77.4684
77.0451
76.6216

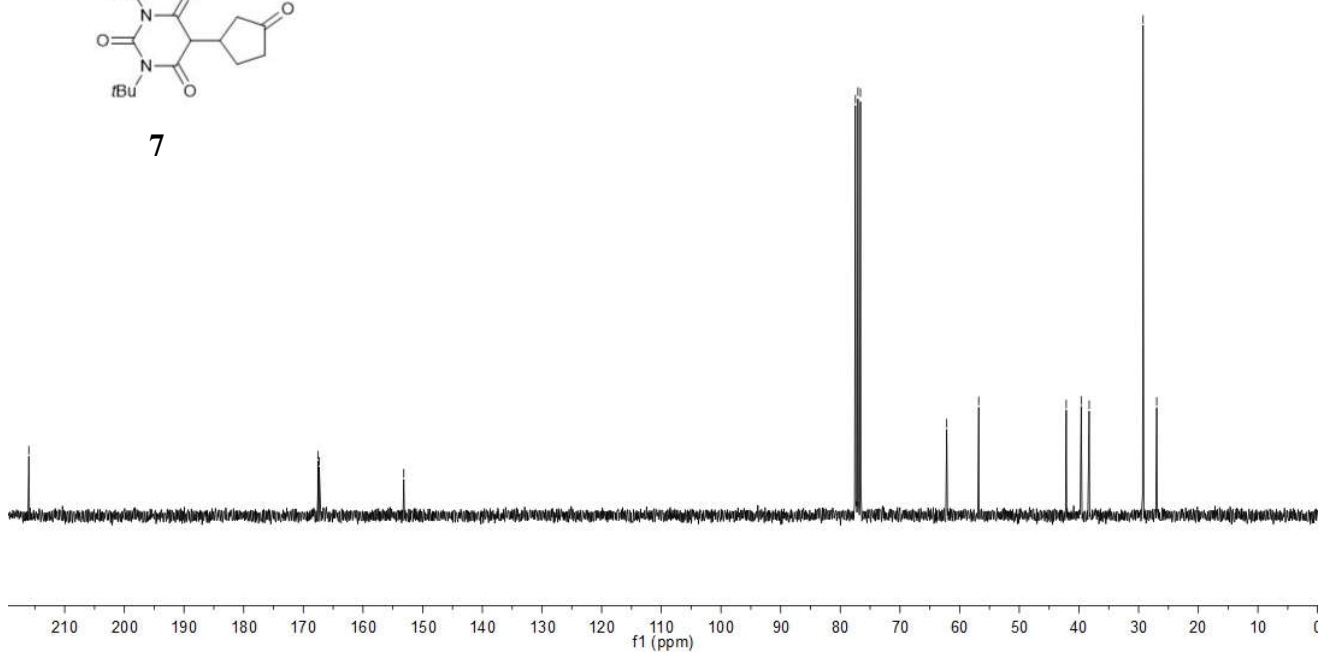
62.1634
56.8012

42.1320
36.6275
36.2847

29.2491
26.9643



7

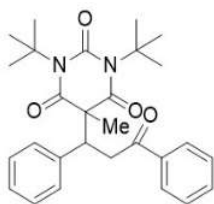


LY-3-Me 300M CDCL3 1H in NMR

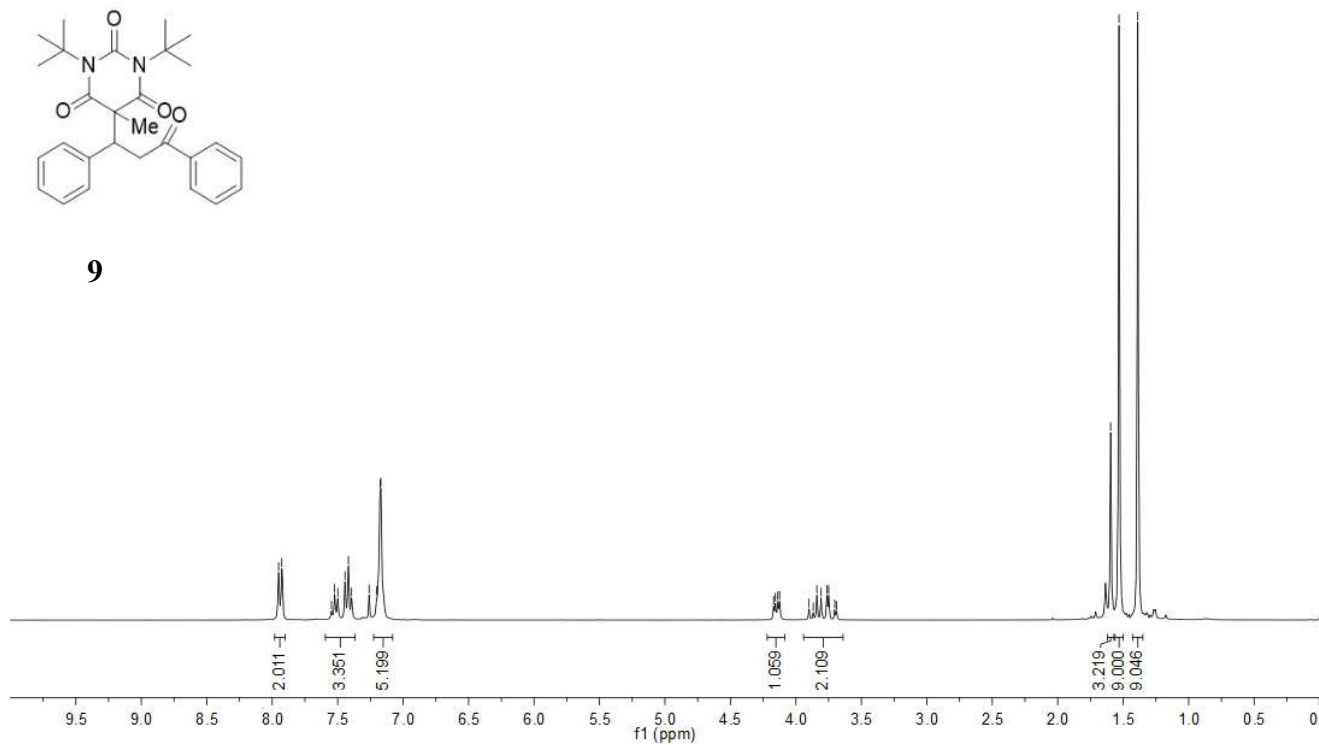
7.9510
7.9269
7.5473
7.5232
7.4987
7.4438
7.4181
7.3941
7.2595
7.2013
7.1754
7.1706

4.1702
4.1565
4.1361
4.1245
3.8998
3.8675
3.8400
3.8078
3.7630
3.7493
3.7033
3.6895

1.5960
1.5323
1.3888



9



LY-3-Me 75M NMR CDCL3 1H in CDC13

197.8856

171.3833
170.8855

151.6461

138.9518
137.0362

132.9840

128.8928
128.5711
128.5106
128.0522
127.7314

77.4496
77.0252
76.6028

61.8039

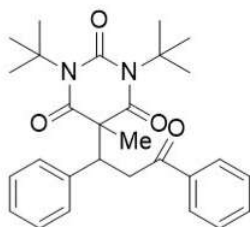
56.4354

48.1598

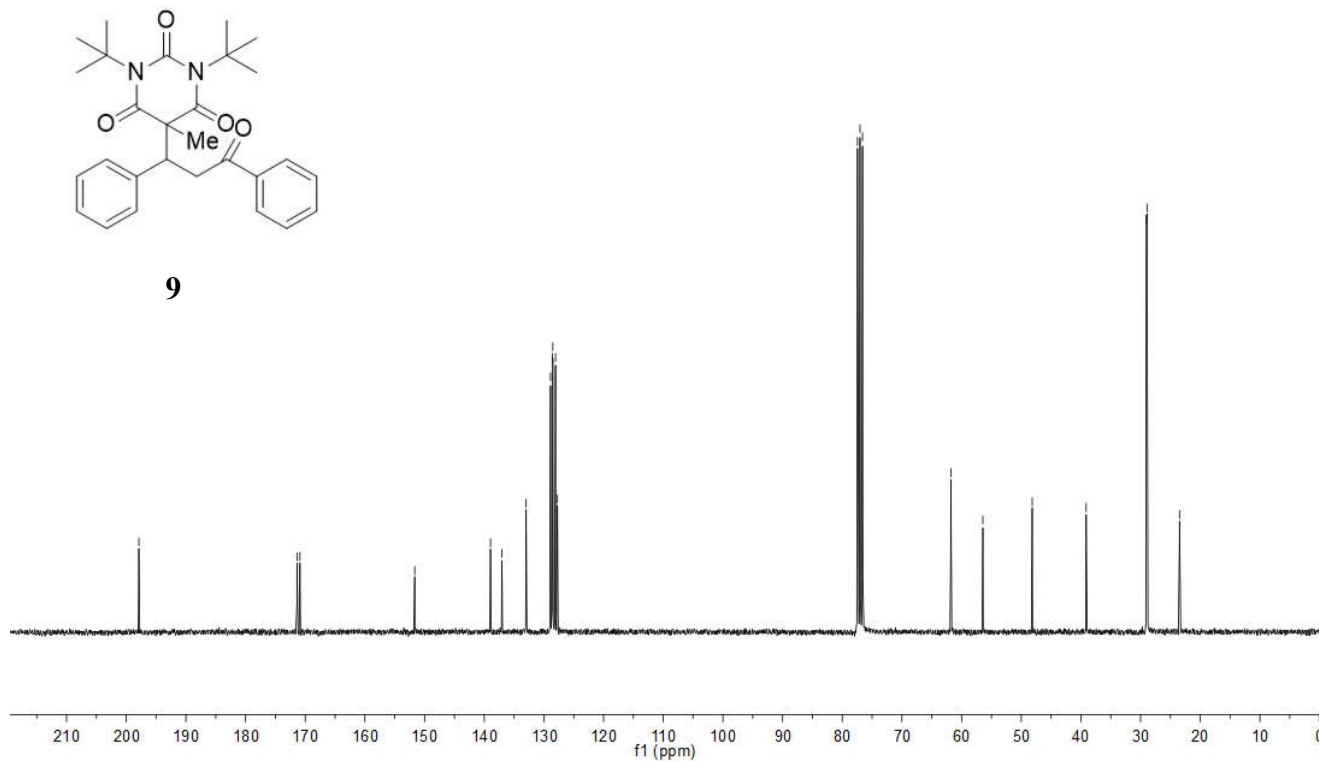
39.1226

29.0463
28.9218

23.4775

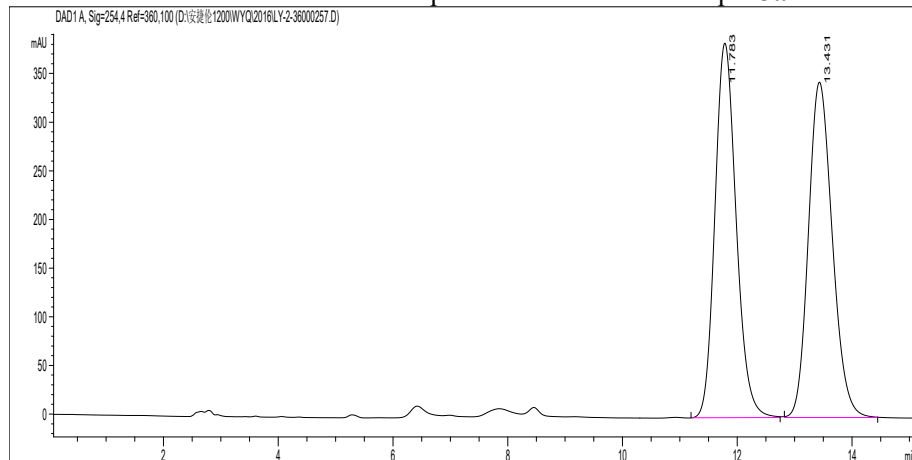


9



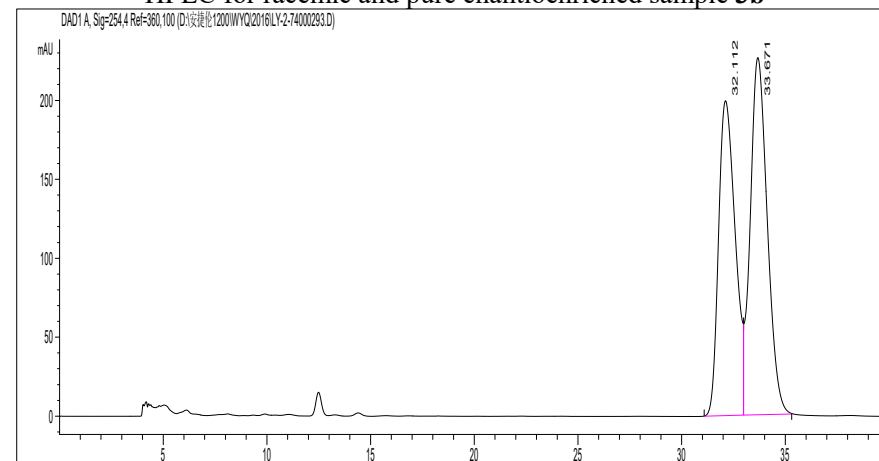
Copy of HPLC for Chiral Michael Products

HPLC for racemic and pure enantioenriched sample **3a**

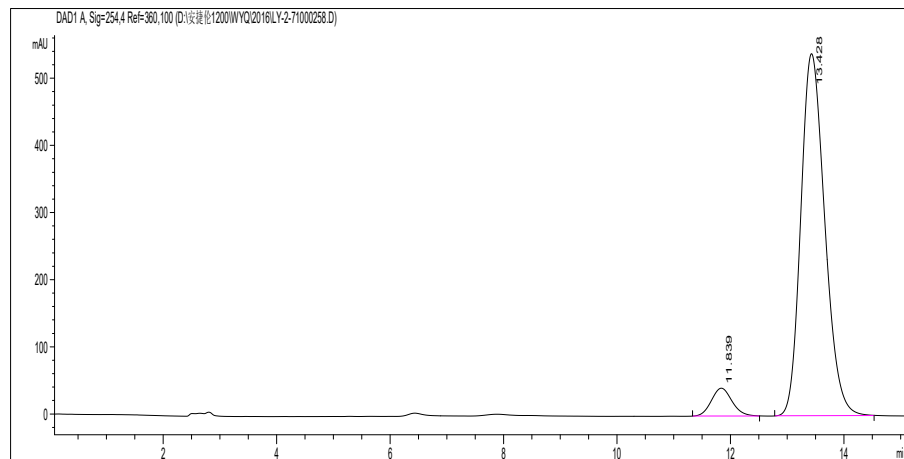


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.783	9907.3	385	0.3982	0.824	49.845
2	13.431	9968.8	344.8	0.4493	0.809	50.155

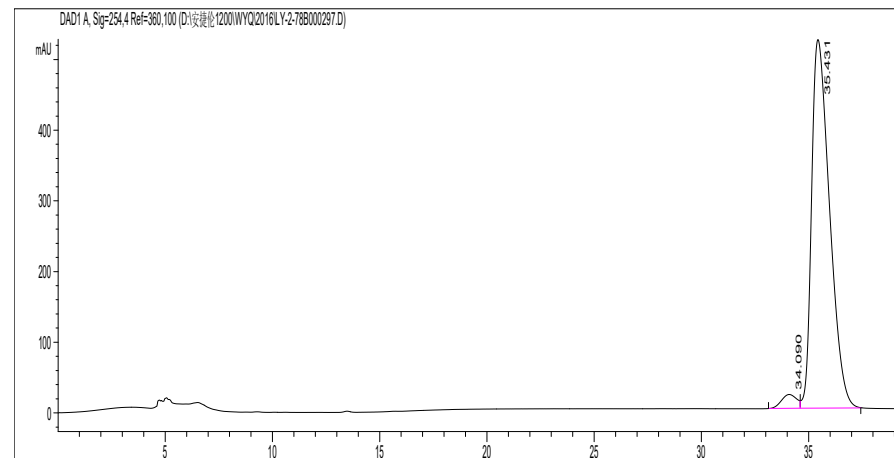
HPLC for racemic and pure enantioenriched sample **3b**



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	32.112	11170.3	199.5	0.8772	0.687	46.289
2	33.671	12961.2	226.4	0.8721	0.771	53.711

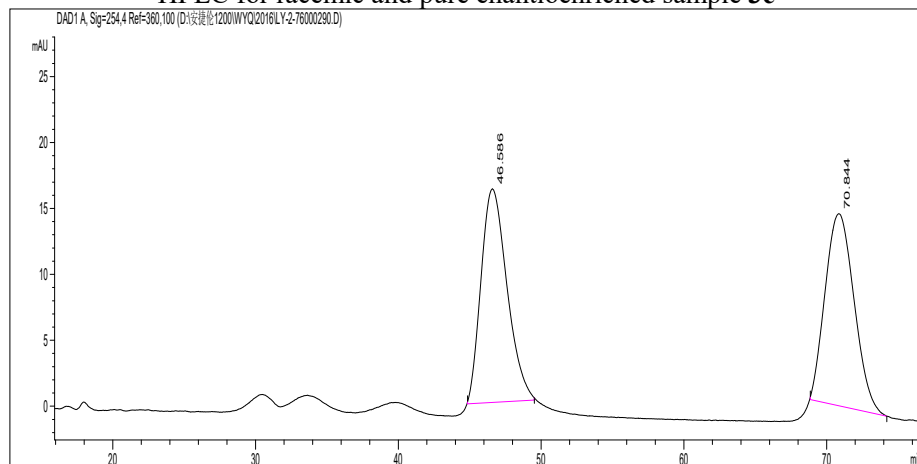


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.839	1059.8	41.7	0.3928	0.895	6.271
2	13.428	15839.3	539.4	0.4566	0.767	93.729



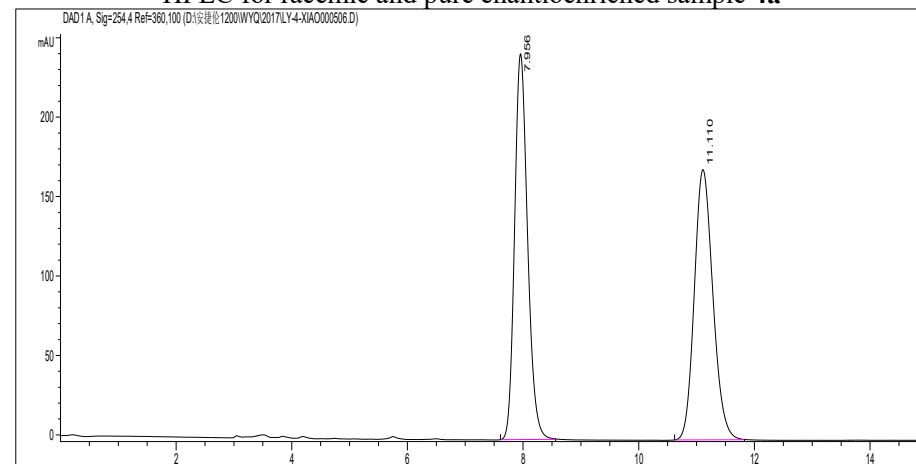
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	34.09	974.1	19.8	0.7232	1.045	3.097
2	35.431	30475.5	521.7	0.8995	0.523	96.903

HPLC for racemic and pure enantioenriched sample 3c

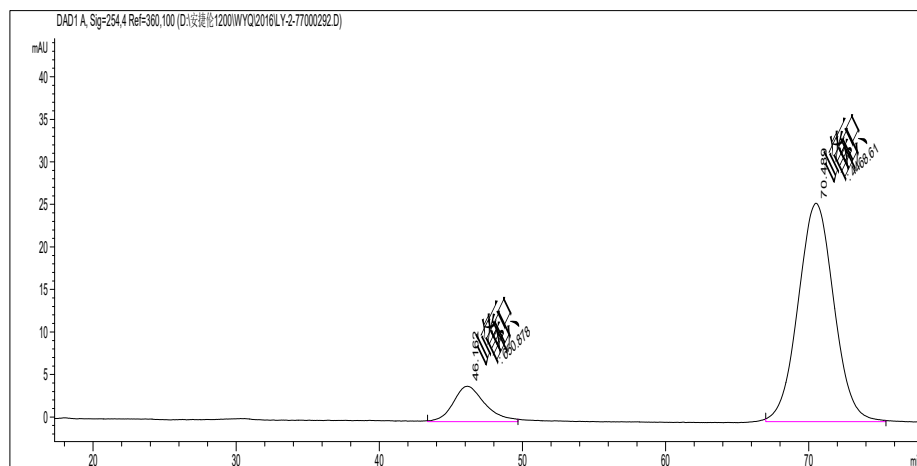


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	46.586	2048	16.2	1.4912	0.75	49.926
2	70.844	2054.1	14.6	1.6584	0.853	50.074

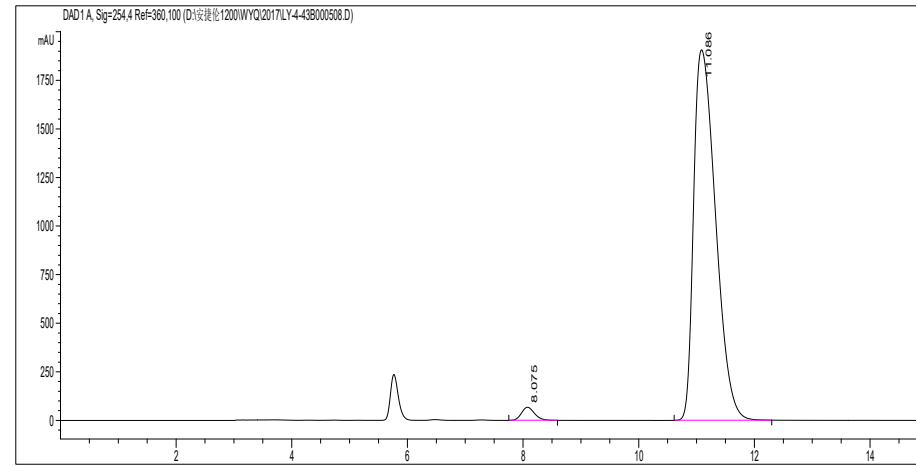
HPLC for racemic and pure enantioenriched sample 4a



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.956	3790	243	0.24	0.793	49.916
2	11.11	3802.7	170.3	0.3445	0.822	50.084

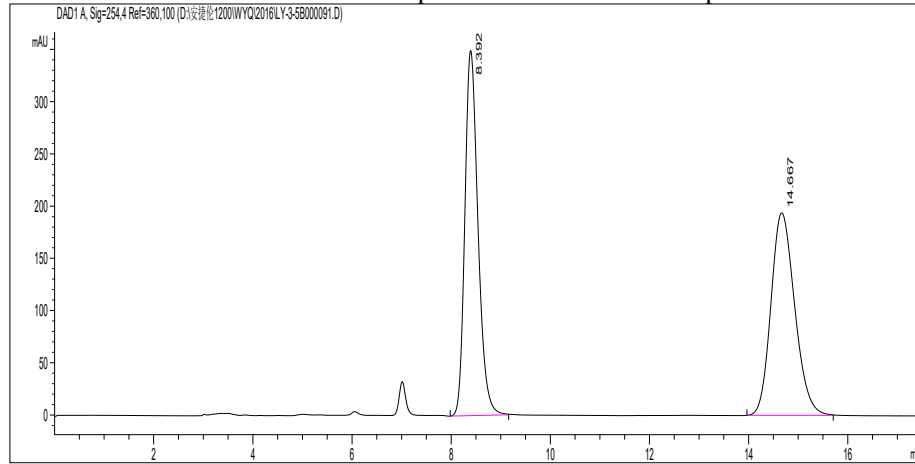


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	46.162	650.9	4.2	2.5986	0.793	12.714
2	70.489	4468.6	25.7	2.8995	0.943	87.286



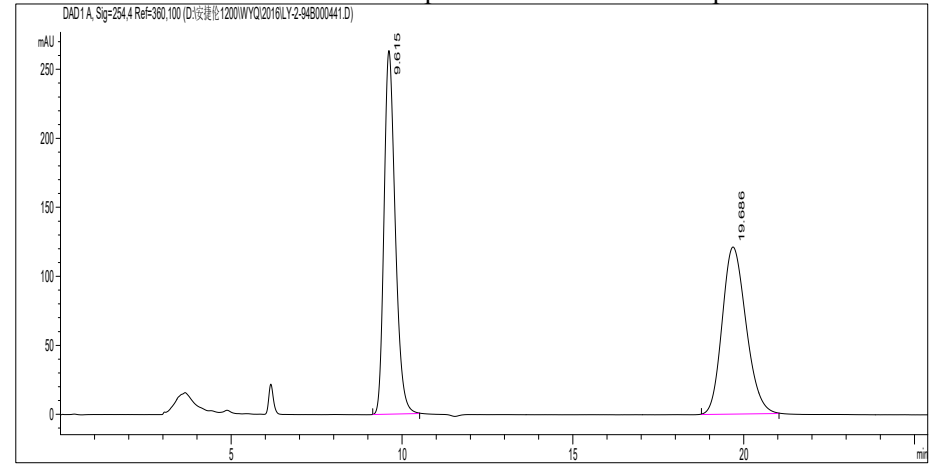
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.075	1069.5	67.6	0.2426	0.807	2.085
2	11.086	50235.8	1906.8	0.4154	0.536	97.915

HPLC for racemic and pure enantioenriched sample **4b**

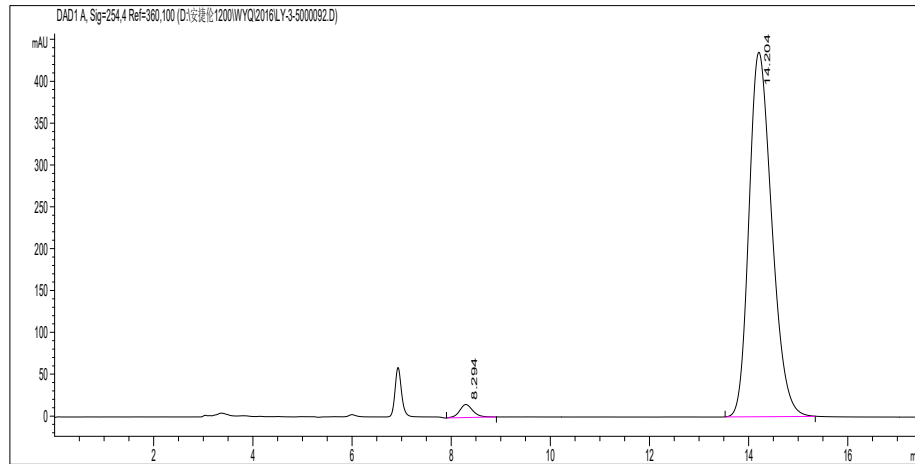


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.392	6427.2	349.5	0.2825	0.744	49.886
2	14.667	6456.6	193.9	0.5144	0.795	50.114

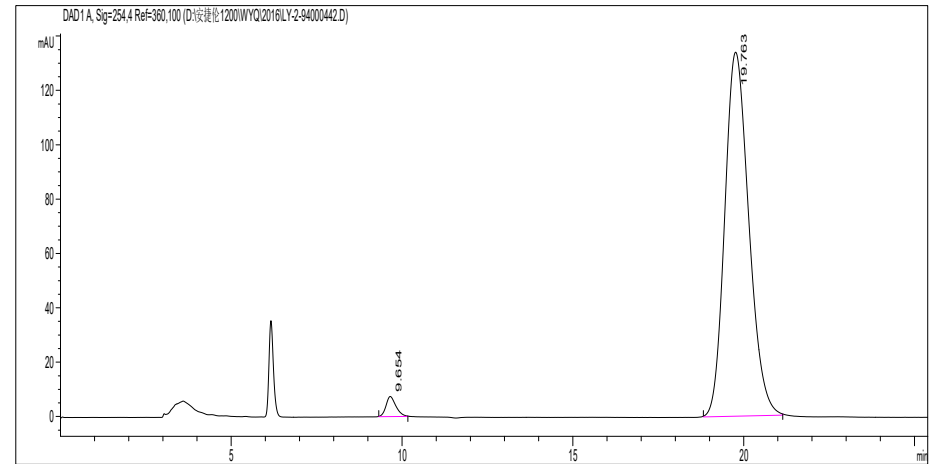
HPLC for racemic and pure enantioenriched sample **4c**



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	9.615	6014.7	263.6	0.3482	0.727	50.534
2	19.686	5887.5	121.2	0.7509	0.794	49.466

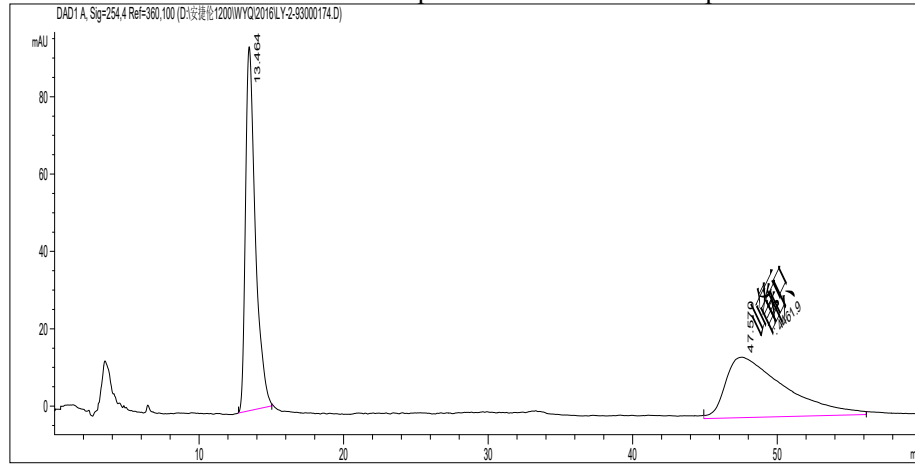


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.294	298.8	15.6	0.2888	0.829	2.099
2	14.204	13939.2	435.6	0.4953	0.725	97.901



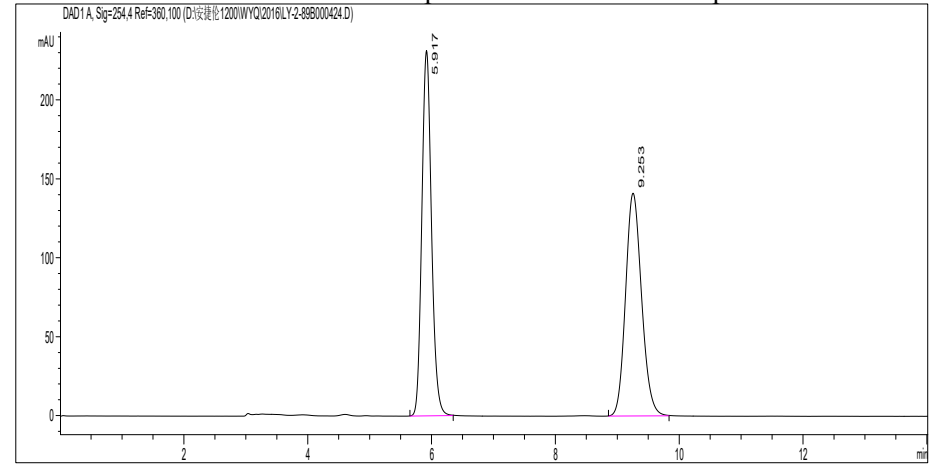
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	9.654	151.5	7.4	0.2979	0.703	2.263
2	19.763	6545.9	134	0.7541	0.784	97.737

HPLC for racemic and pure enantioenriched sample 4d

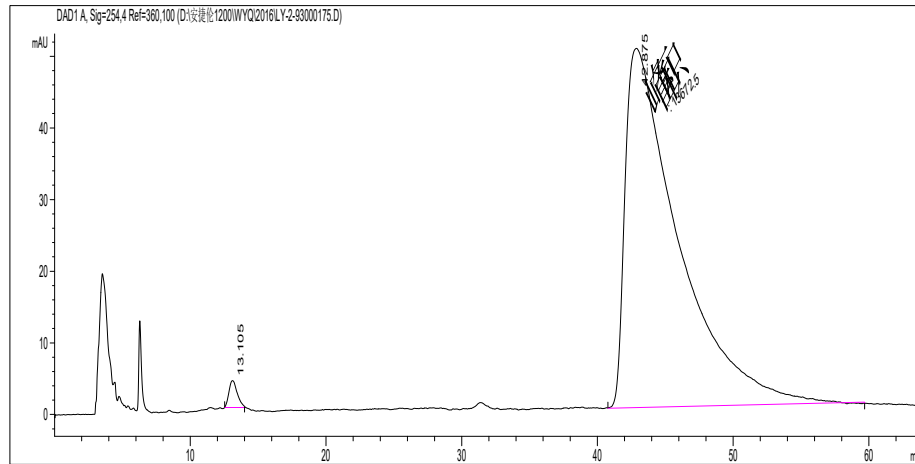


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	13.464	4476.2	94.2	0.7027	0.56	50.080
2	47.57	4461.9	15.7	4.7505	0.382	49.920

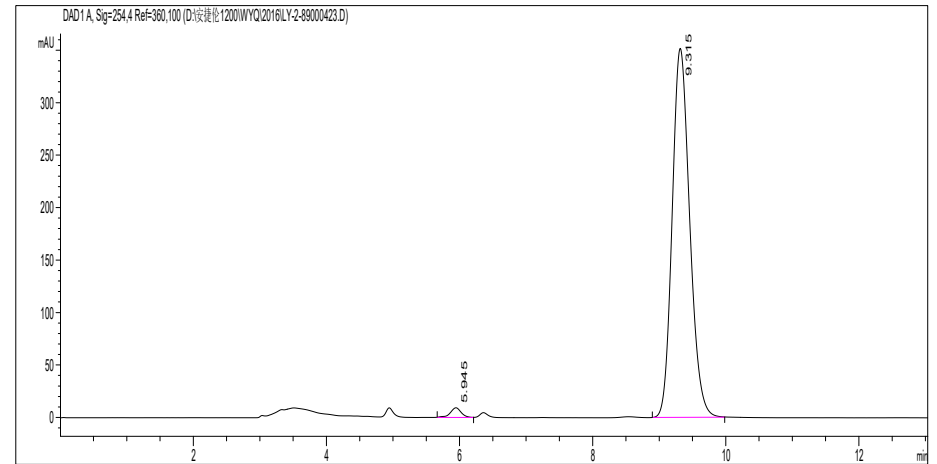
HPLC for racemic and pure enantioenriched sample 4e



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.917	2509.8	231.5	0.1685	0.879	49.763
2	9.253	2533.7	141.2	0.2774	0.833	50.237

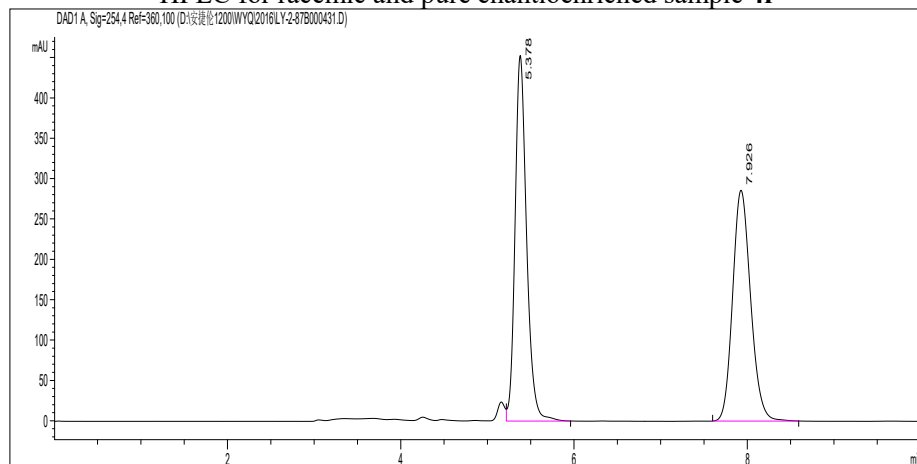


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	13.105	161.6	3.8	0.5182	0.692	1.168
2	42.875	13672.5	50.1	4.5446	0.263	98.832



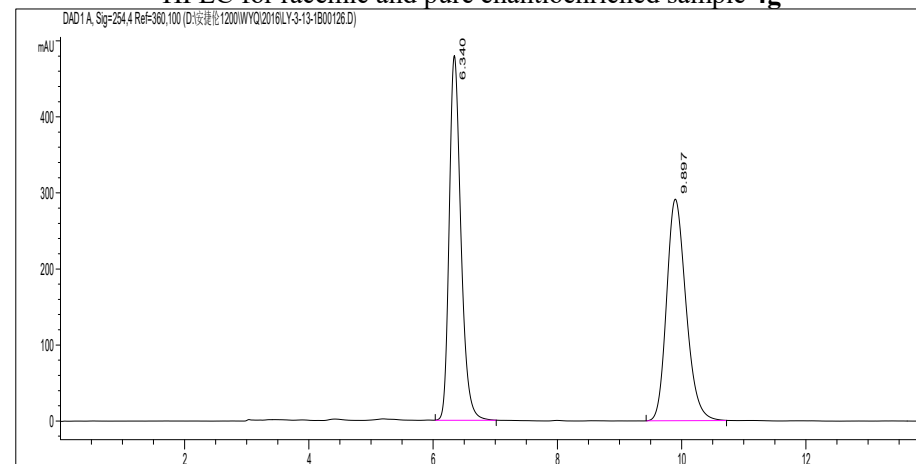
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.945	105.7	9.3	0.1731	1.056	1.617
2	9.315	6431.6	351.7	0.2834	0.806	98.383

HPLC for racemic and pure enantioenriched sample 4f

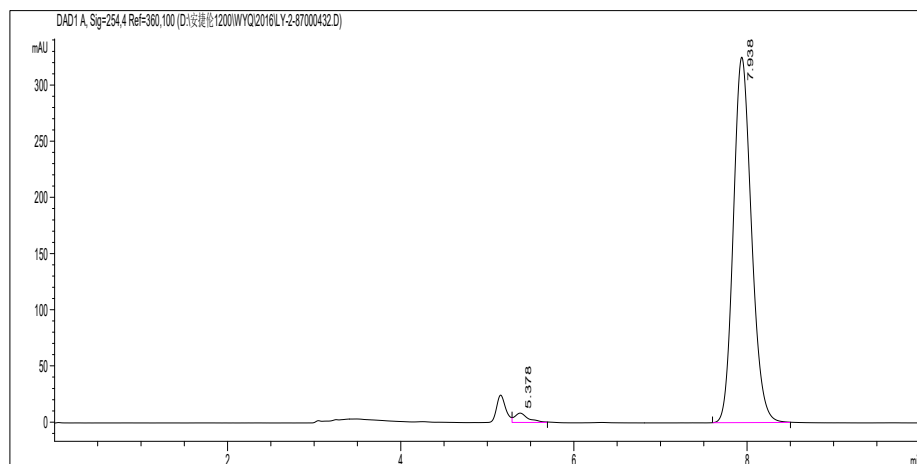


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.378	4190.4	453.4	0.1398	0.75	50.343
2	7.926	4133.4	286.1	0.2225	0.819	49.657

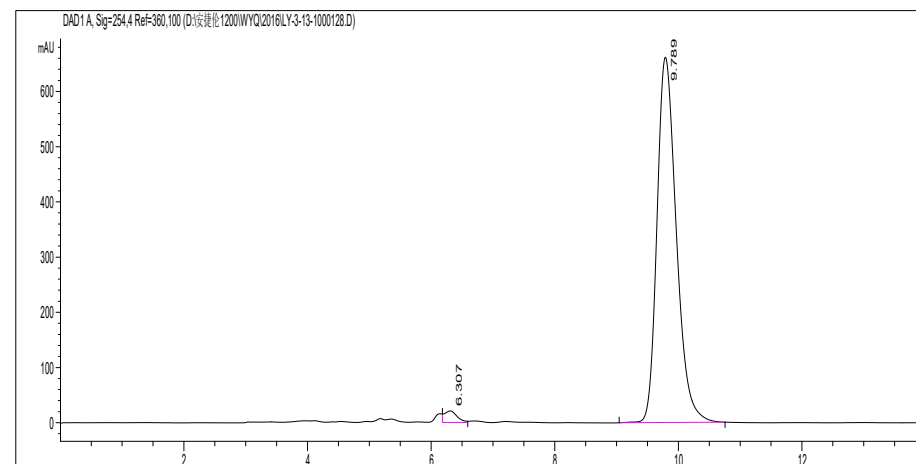
HPLC for racemic and pure enantioenriched sample 4g



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.34	6268.8	479.9	0.2004	0.728	49.837
2	9.897	6309.8	291.5	0.3325	0.769	50.163

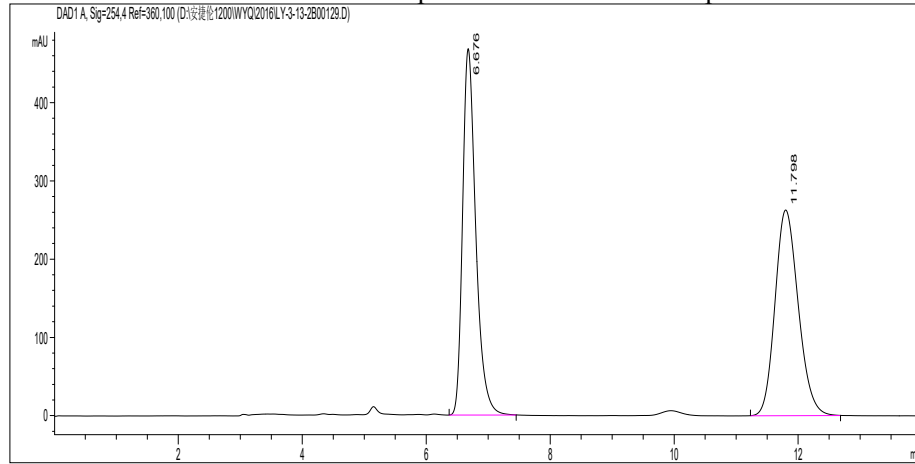


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.378	92.5	8.4	0.1585	0.578	1.919
2	7.938	4725.1	325.5	0.2254	0.817	98.081



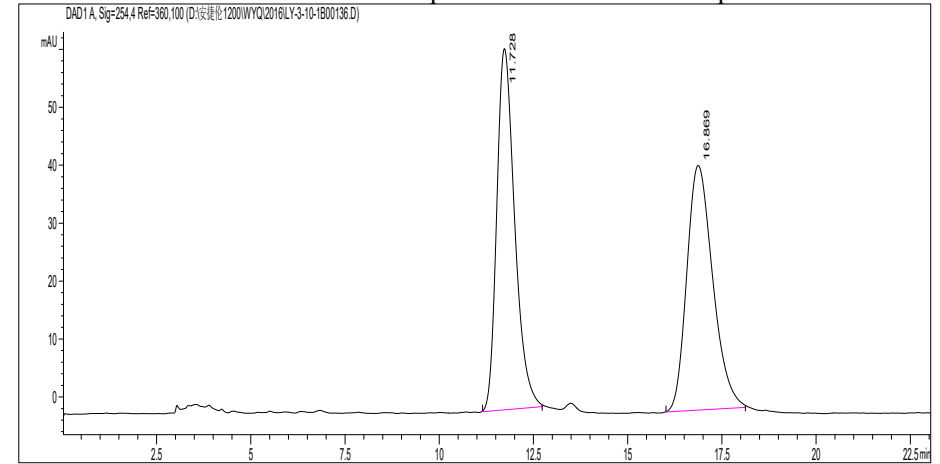
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.307	307.6	21.3	0.2103	0.759	2.095
2	9.789	14373.4	662	0.3333	0.721	97.905

HPLC for racemic and pure enantioenriched sample 4h

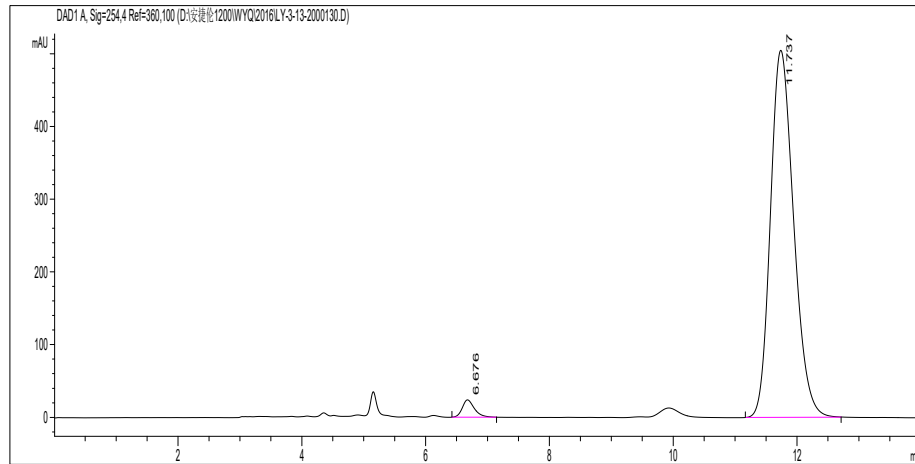


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.676	6923.8	468.3	0.2265	0.684	50.259
2	11.798	6852.5	262.9	0.404	0.806	49.741

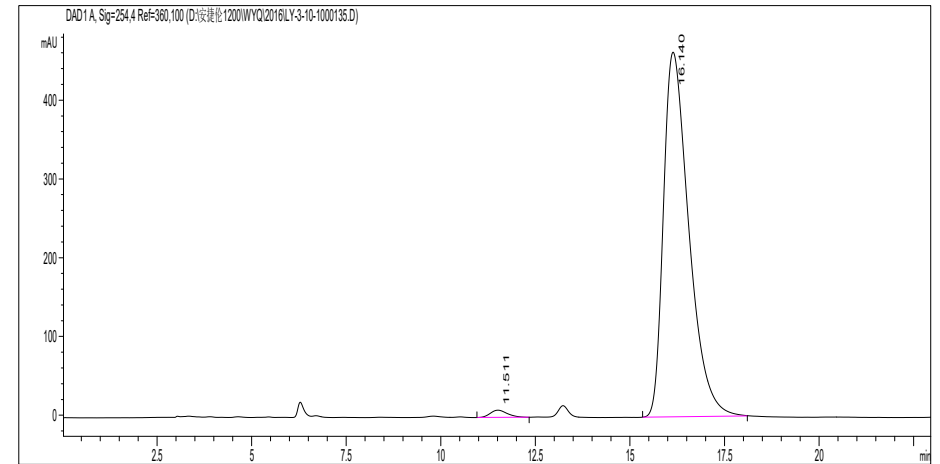
HPLC for racemic and pure enantioenriched sample 4i



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.728	2065.2	62.4	0.5063	0.699	50.432
2	16.869	2029.8	42.3	0.7281	0.742	49.568

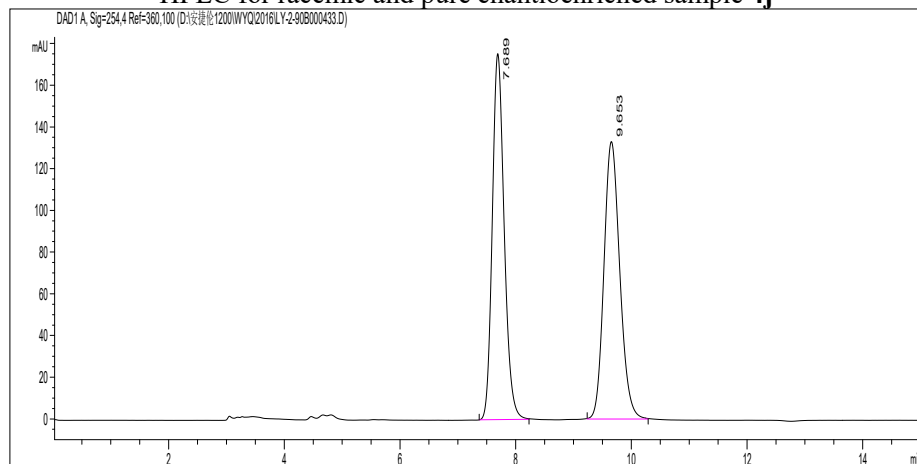


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.676	333.2	24.1	0.2073	0.709	2.468
2	11.737	13165	505	0.4041	0.763	97.532



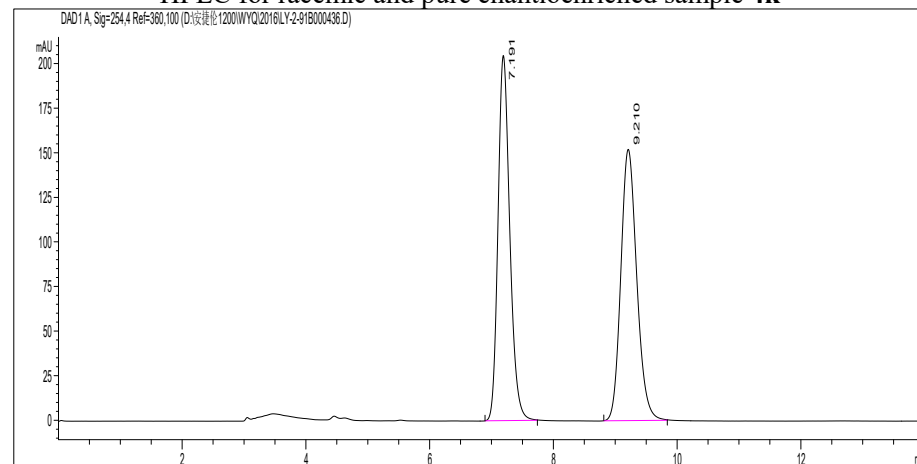
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.511	289.4	9.2	0.4656	0.789	1.319
2	16.14	21654.4	463.1	0.7136	0.571	98.681

HPLC for racemic and pure enantioenriched sample 4j

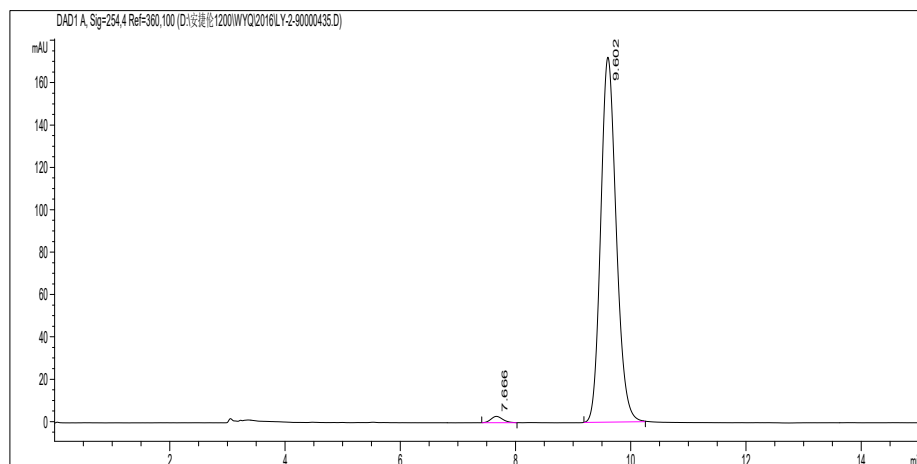


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.689	2507.4	175.5	0.2186	0.803	49.734
2	9.653	2534.3	133.1	0.2941	0.83	50.266

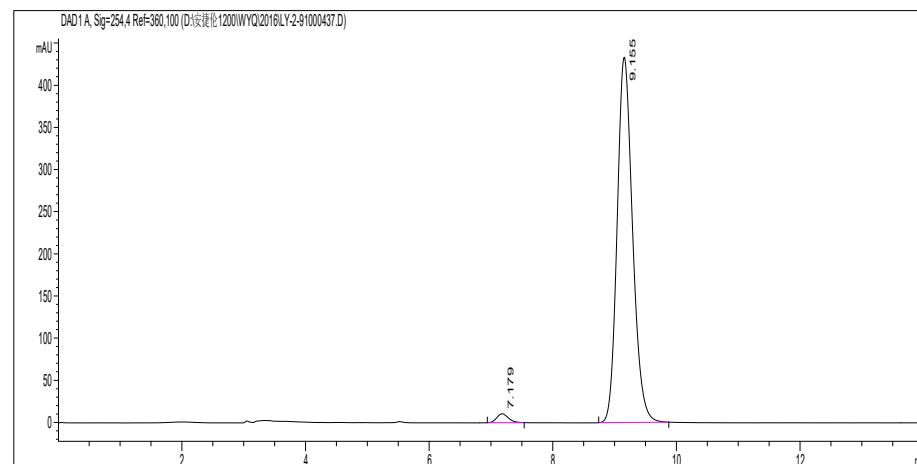
HPLC for racemic and pure enantioenriched sample 4k



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.191	2712.1	204.9	0.2024	0.773	49.904
2	9.21	2722.5	152.3	0.2746	0.82	50.096

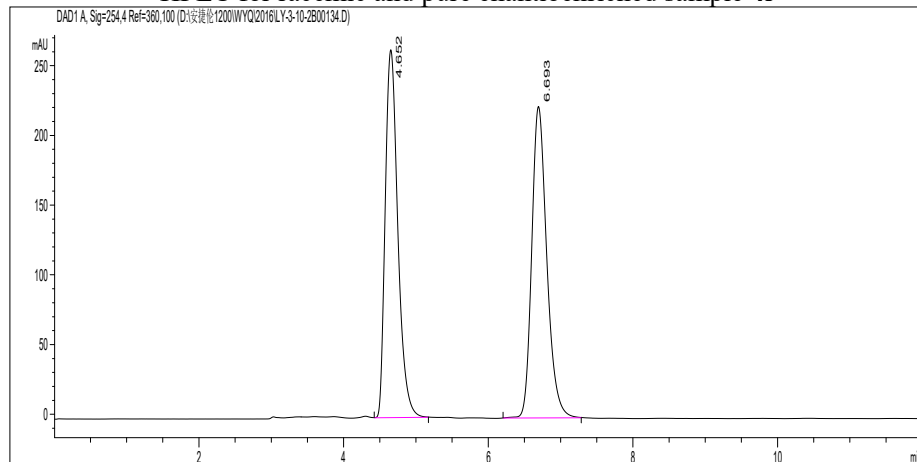


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.666	42.6	3	0.2162	0.804	1.300
2	9.602	3232.5	172.4	0.2888	0.819	98.700



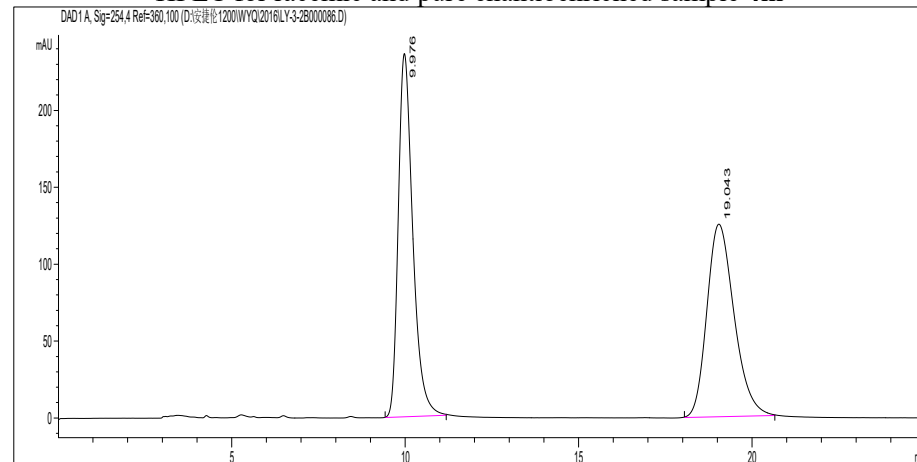
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.179	143.3	10.7	0.2042	0.789	1.871
2	9.155	7516.9	433.6	0.2663	0.799	98.129

HPLC for racemic and pure enantioenriched sample 4l

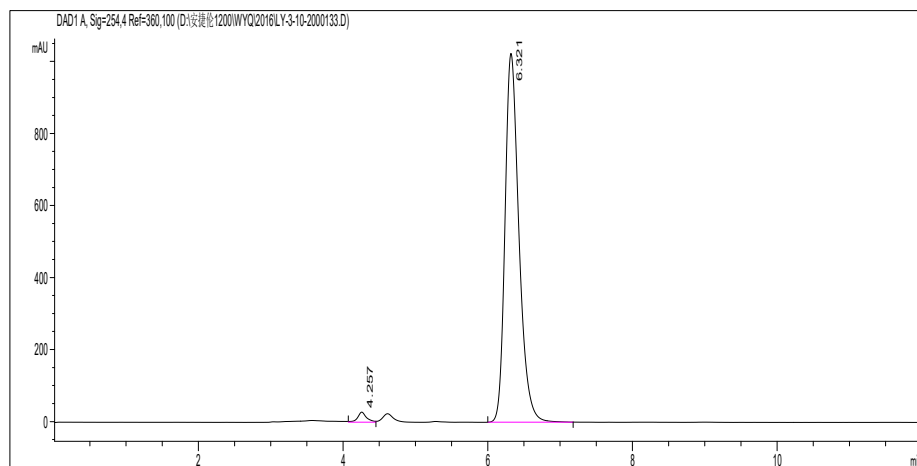


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.652	3191.1	263.9	0.1891	0.725	49.666
2	6.693	3234	223.5	0.2208	0.756	50.334

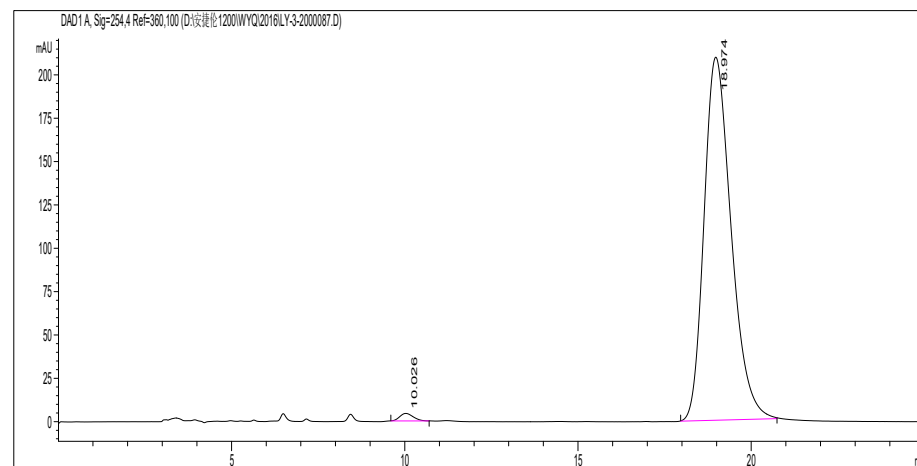
HPLC for racemic and pure enantioenriched sample 4m



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	9.976	6868.3	236.3	0.4432	0.674	50.097
2	19.043	6841.8	125.3	0.8329	0.745	49.903

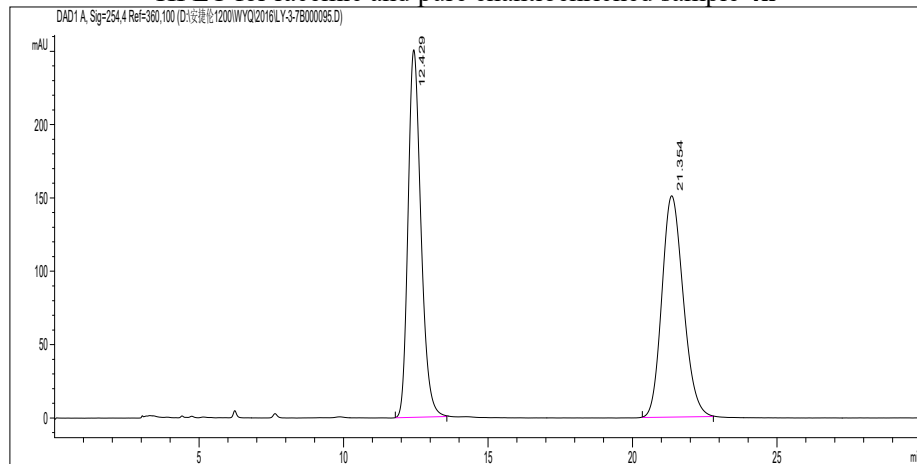


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.257	245.9	28.3	0.1255	0.821	1.764
2	6.321	13699.1	1024.3	0.204	0.703	98.236



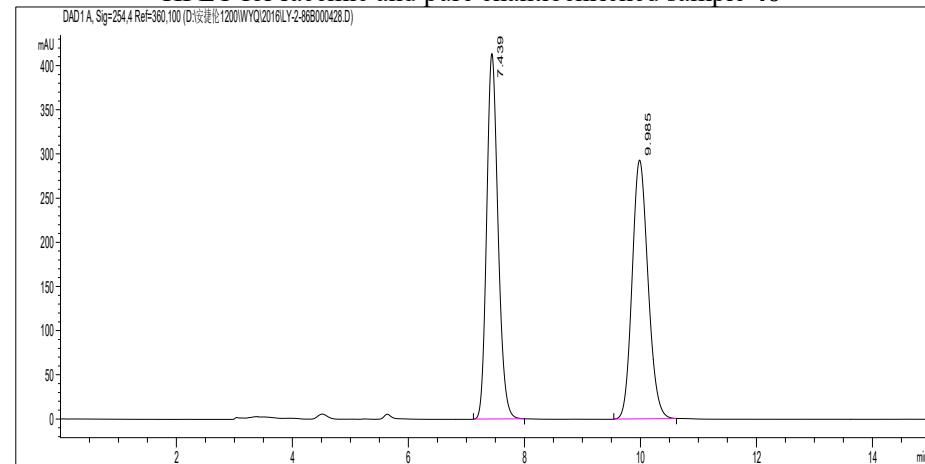
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	10.026	122.6	4.4	0.4197	0.777	1.064
2	18.974	11399.2	209.6	0.8324	0.718	98.936

HPLC for racemic and pure enantioenriched sample 4n

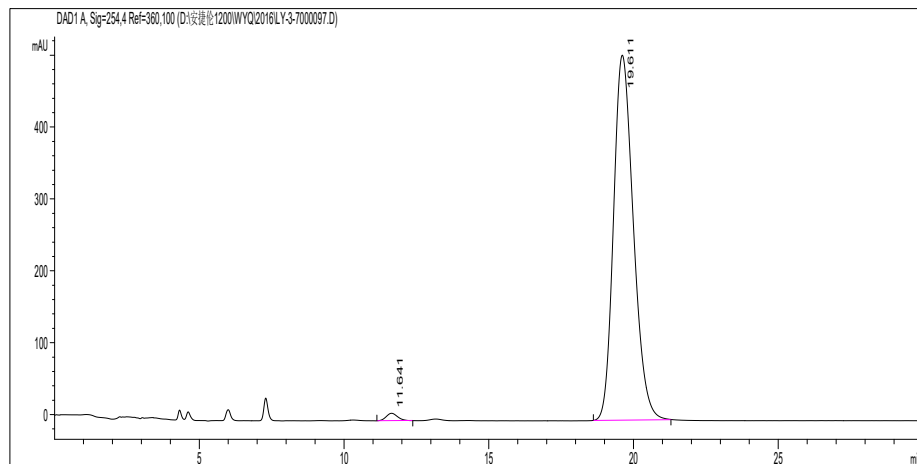


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	12.429	7769.5	250.6	0.4777	0.749	49.951
2	21.354	7784.8	151	0.7936	0.806	50.049

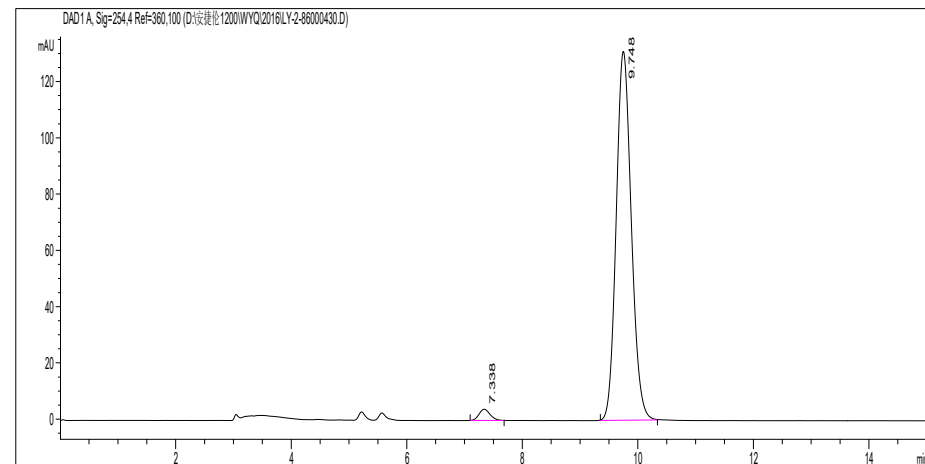
HPLC for racemic and pure enantioenriched sample 4o



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.439	5643.6	414.1	0.211	0.804	50.296
2	9.985	5577.1	293.1	0.294	0.834	49.704

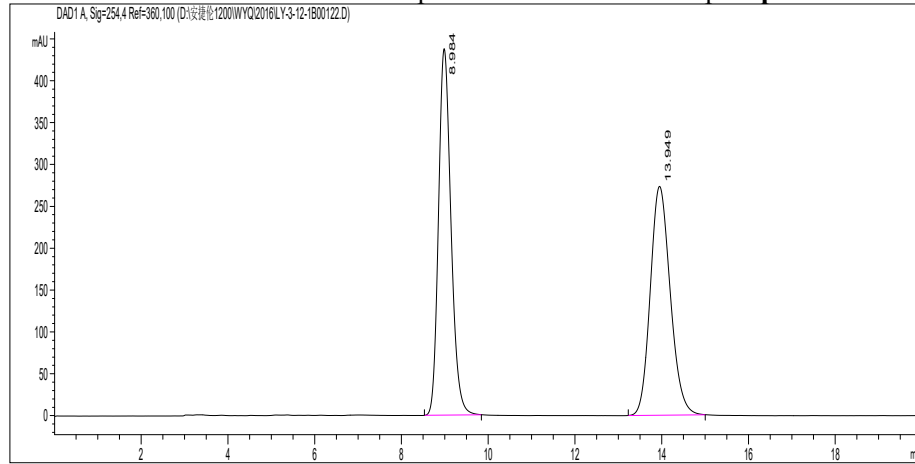


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.641	284.6	10.4	0.4166	0.842	1.160
2	19.611	24249.9	508	0.7369	0.752	98.840



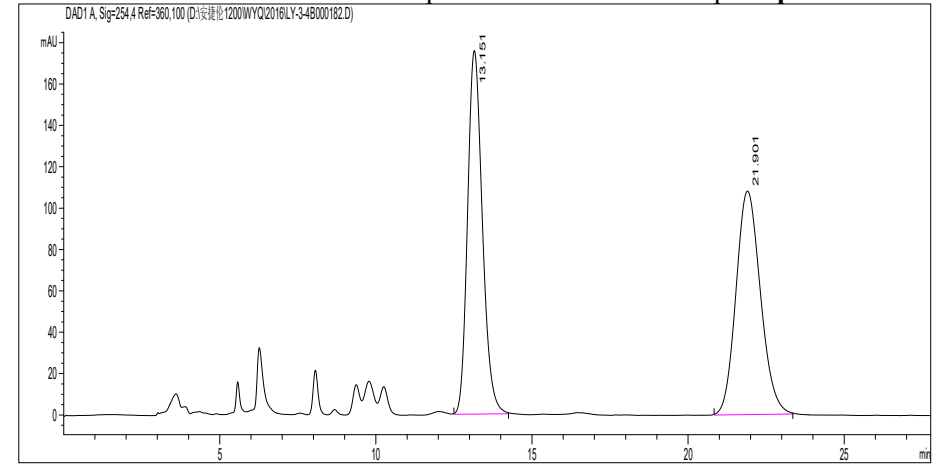
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.338	54	4	0.2088	0.811	2.216
2	9.748	2383.3	131.1	0.28	0.851	97.784

HPLC for racemic and pure enantioenriched sample 4p

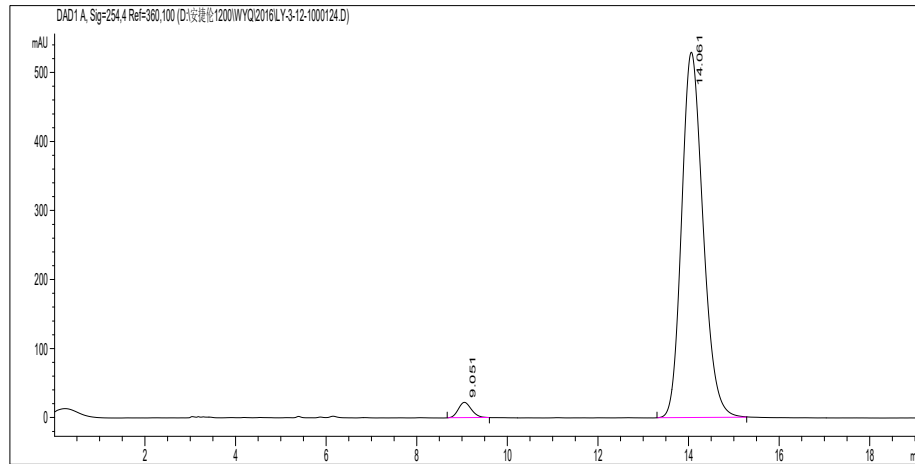


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.984	8752.4	437.9	0.3072	0.786	50.025
2	13.949	8743.8	273.5	0.4949	0.821	49.975

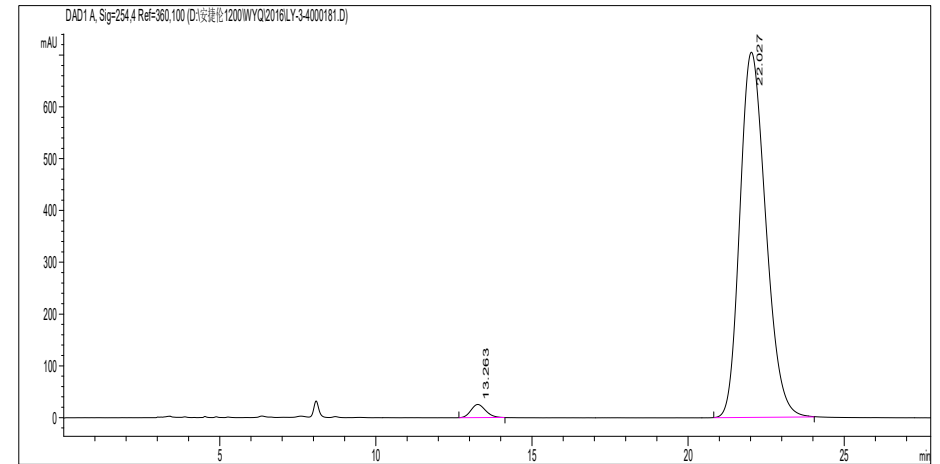
HPLC for racemic and pure enantioenriched sample 4q



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	13.151	5794.9	175.9	0.5085	0.788	49.551
2	21.901	5899.8	108.1	0.8346	0.845	50.449

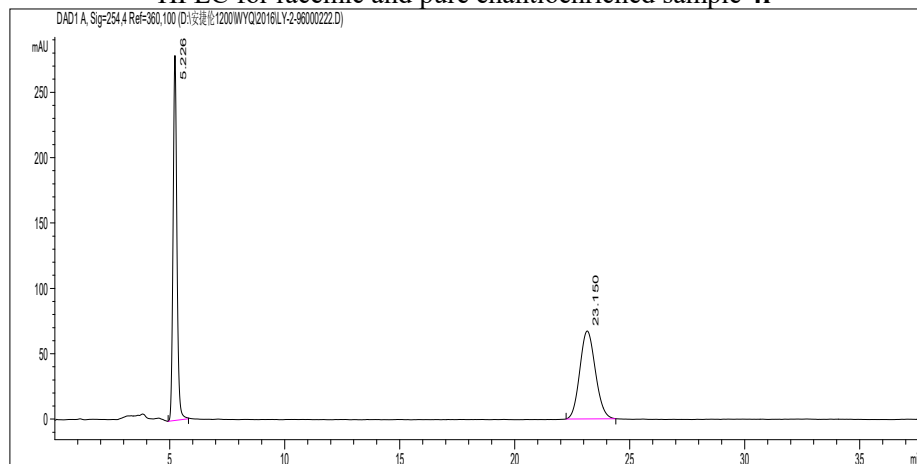


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	9.051	456.8	22.4	0.3119	0.821	2.558
2	14.061	17400	529.5	0.5074	0.785	97.442



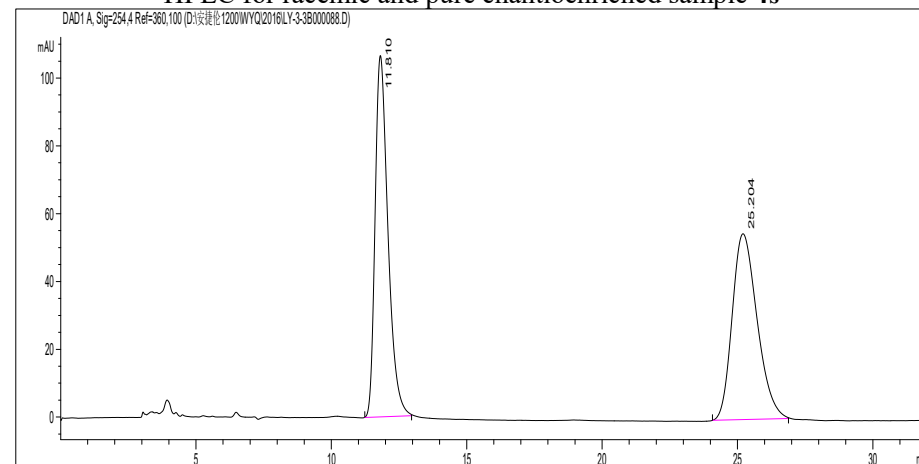
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	13.263	845.4	25.6	0.5098	0.818	2.043
2	22.027	40529.9	705.3	0.8964	0.759	97.957

HPLC for racemic and pure enantioenriched sample 4r

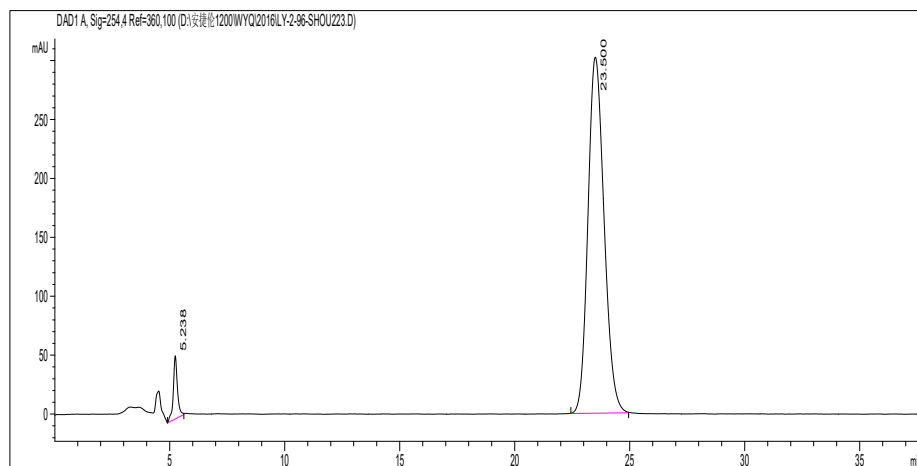


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.226	3234.2	279.2	0.1731	0.89	50.392
2	23.15	3183.8	67.4	0.7253	0.876	49.608

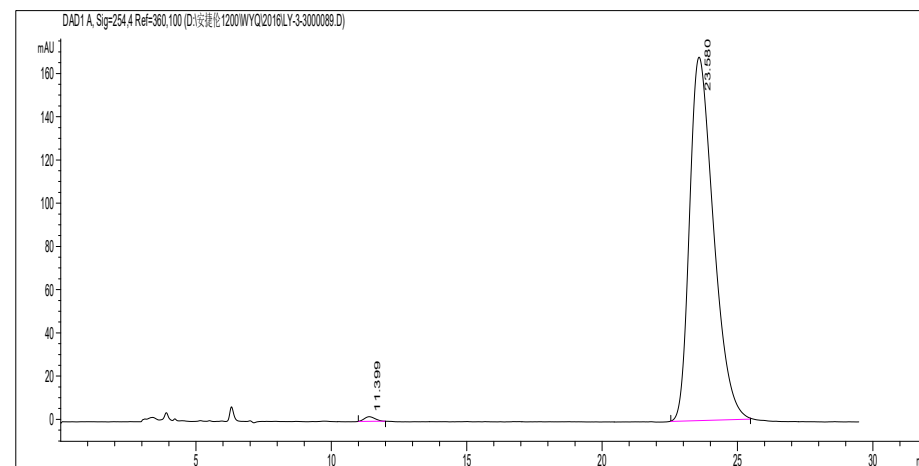
HPLC for racemic and pure enantioenriched sample 4s



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.81	3518.6	106.6	0.503	0.643	50.054
2	25.204	3511	54.9	0.9646	0.736	49.946

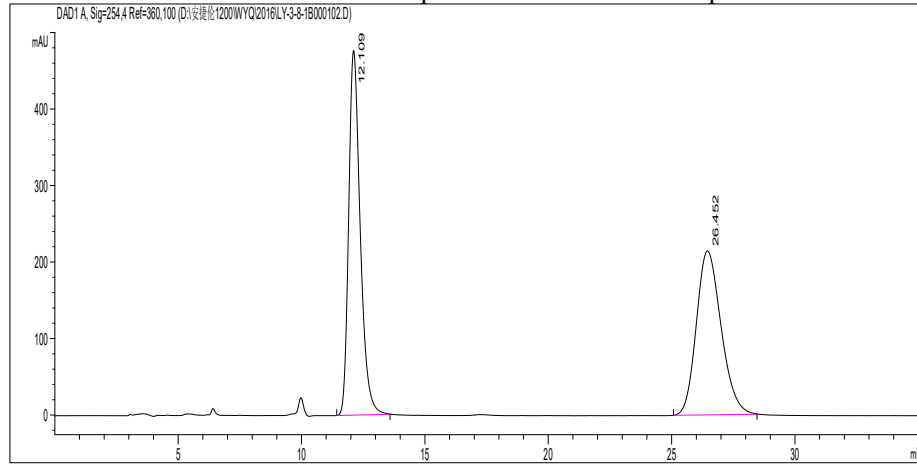


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.238	675.2	53.7	0.1826	0.877	4.377
2	23.5	14749.9	302.2	0.7535	0.803	95.623



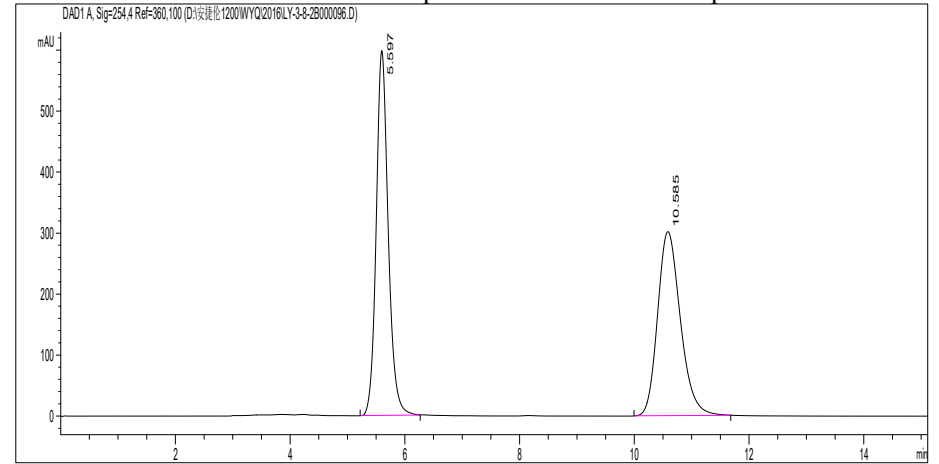
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	11.399	61.3	2.2	0.3892	0.789	0.589
2	23.58	10353.7	168.2	0.9302	0.62	99.411

HPLC for racemic and pure enantioenriched sample **4t**

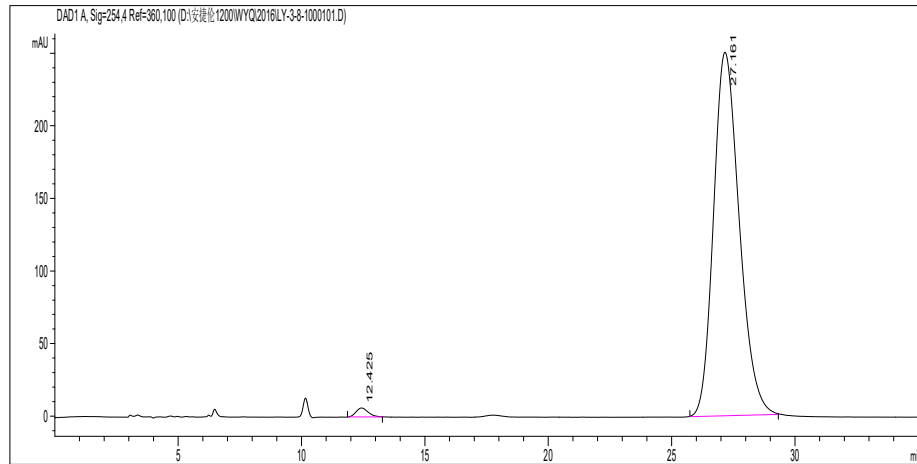


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	12.109	15512.1	476.7	0.4937	0.695	50.869
2	26.452	14982.2	214.5	1.071	0.782	49.131

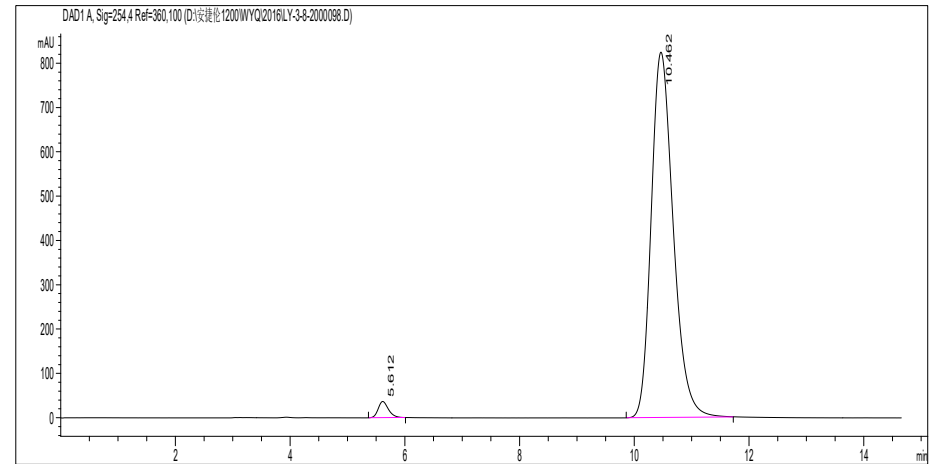
HPLC for racemic and pure enantioenriched sample **4u**



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.597	8692.7	598.7	0.2194	0.819	51.033
2	10.585	8341	302.2	0.4261	0.773	48.967

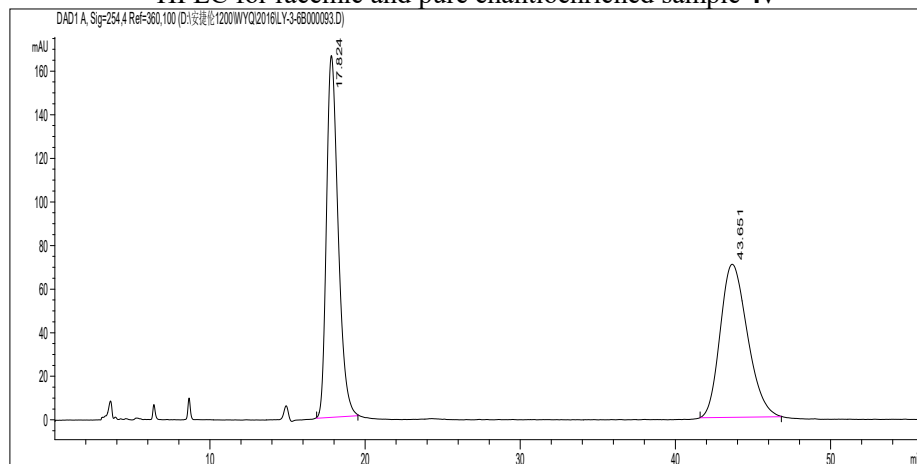


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	12.425	215.1	6.2	0.5223	0.765	1.169
2	27.161	18190.6	250.5	1.1111	0.761	98.831



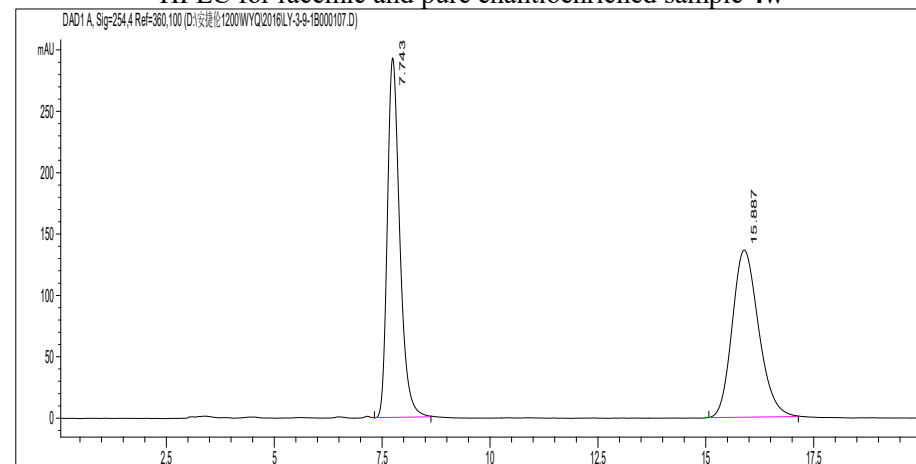
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.612	460.3	36.7	0.1922	0.742	2.046
2	10.462	22035.5	824.6	0.4118	0.744	97.954

HPLC for racemic and pure enantioenriched sample 4v

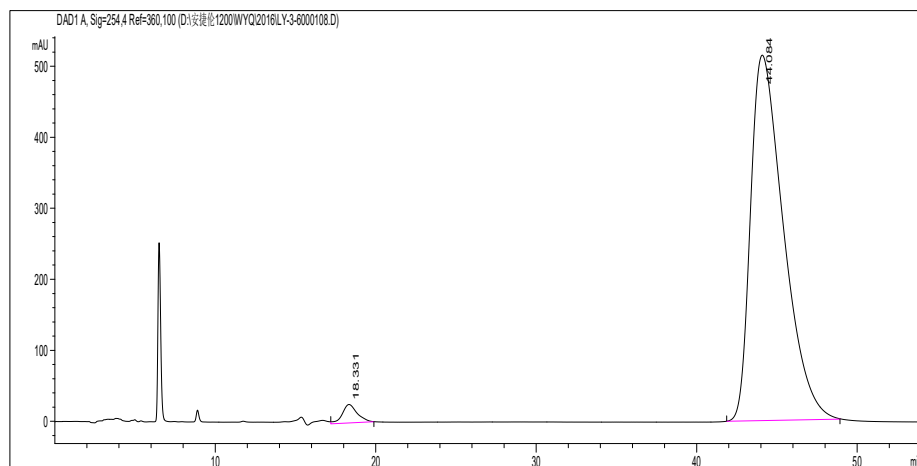


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	17.824	8692.6	166	0.7988	0.68	50.310
2	43.651	8585.6	70.3	1.5992	0.726	49.690

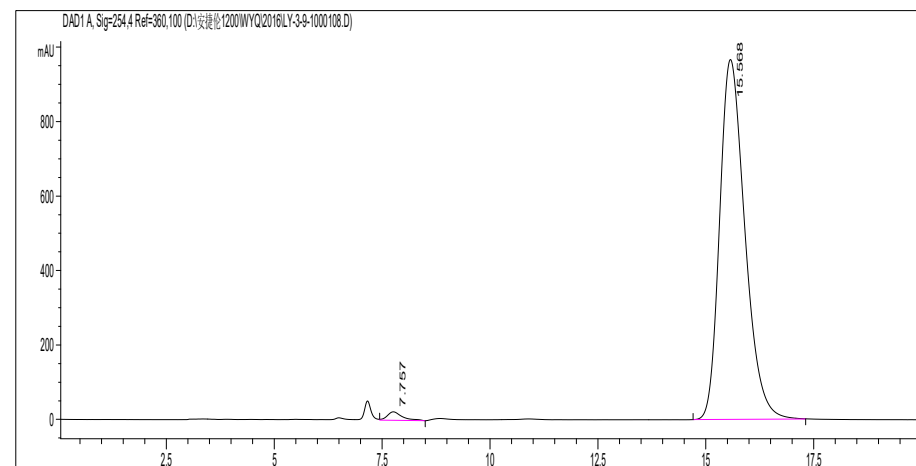
HPLC for racemic and pure enantioenriched sample 4w



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.743	5853.5	293	0.305	0.699	50.193
2	15.887	5808.4	136.4	0.6589	0.791	49.807

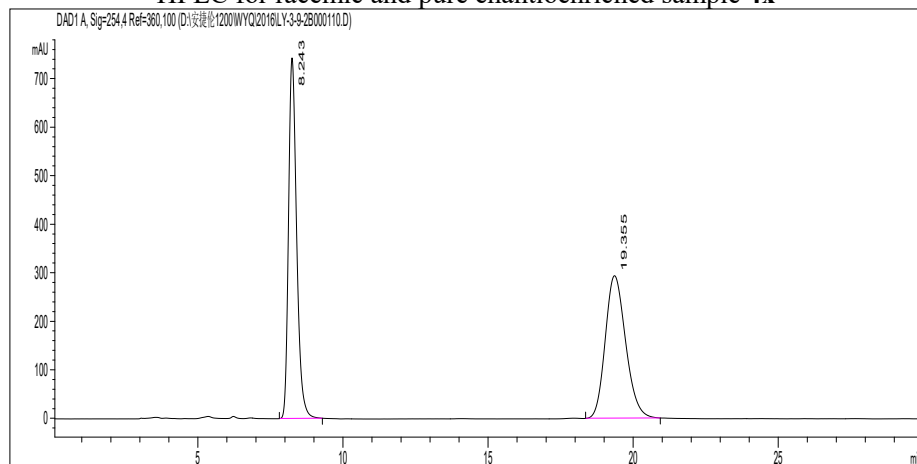


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	18.331	1715.6	26.2	0.9552	0.812	2.280
2	44.084	73526.2	514.8	2.0824	0.525	97.720



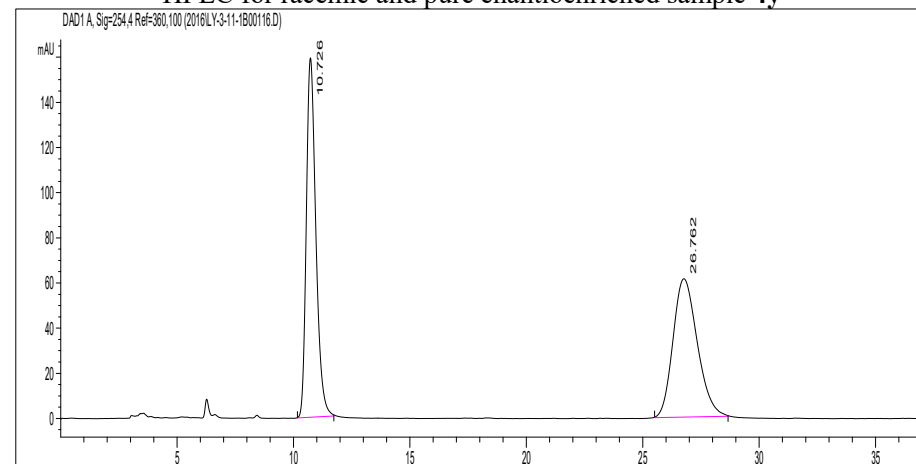
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	7.757	555.2	22.9	0.3548	0.619	1.392
2	15.568	39323.5	967.1	0.6264	0.702	98.608

HPLC for racemic and pure enantioenriched sample 4x

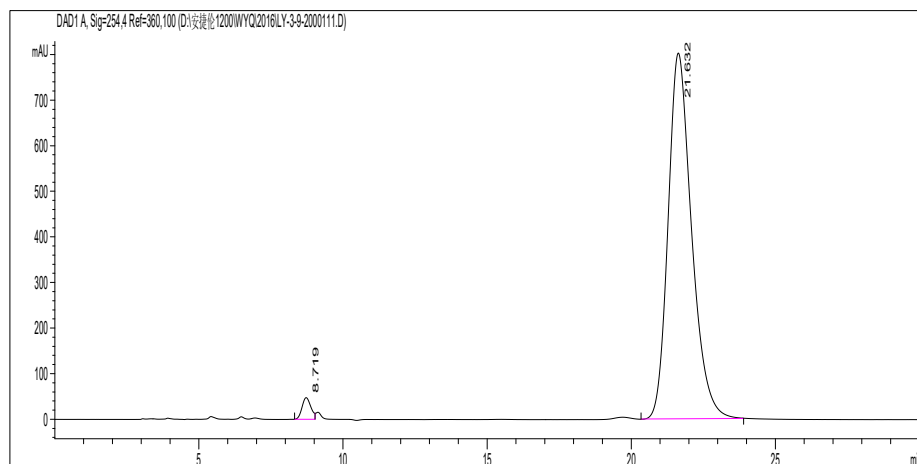


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.243	14458.3	743.2	0.299	0.716	50.193
2	19.355	14347.2	293.7	0.7558	0.793	49.807

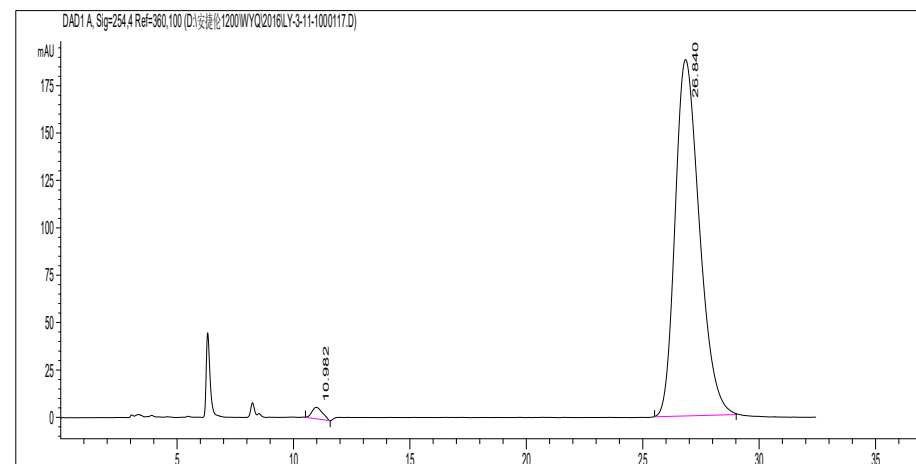
HPLC for racemic and pure enantioenriched sample 4y



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	10.726	4526.5	159.2	0.4357	0.708	50.418
2	26.762	4451.4	61.3	1.0848	0.768	49.582

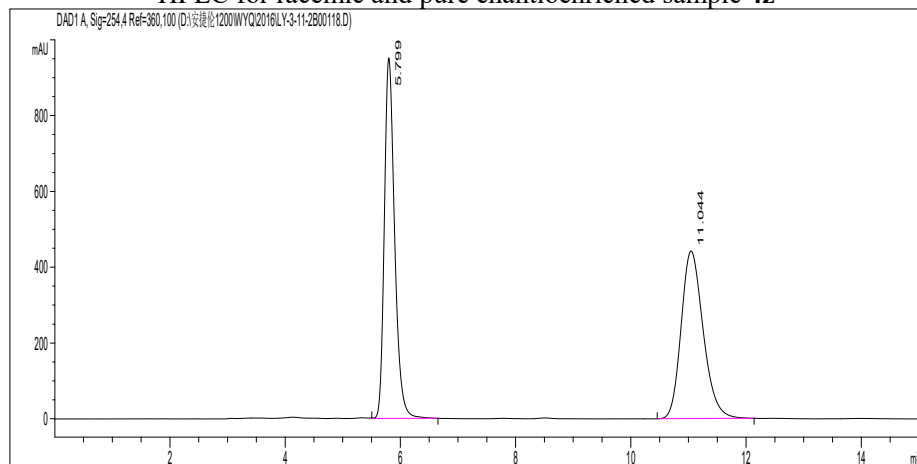


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	8.719	1018	47.6	0.3295	0.844	2.191
2	21.632	45441.3	802.6	0.8505	0.729	97.809



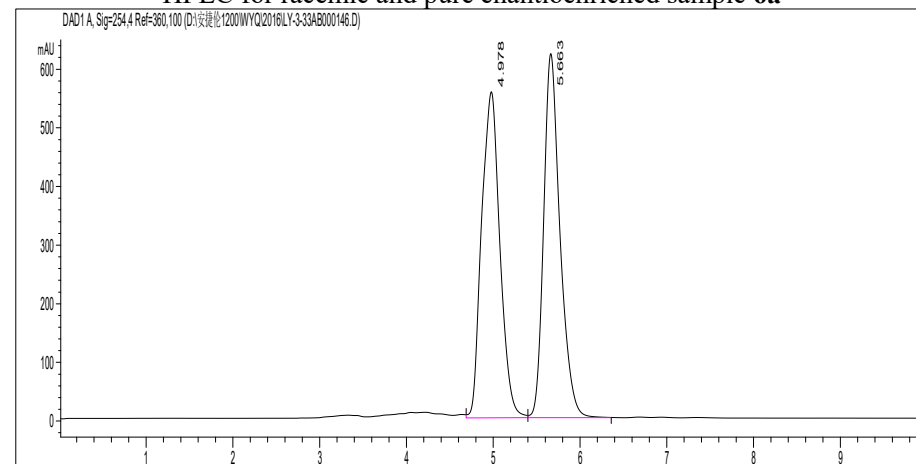
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	10.982	192.5	6.1	0.467	0.704	1.389
2	26.84	13672.7	188.2	1.1137	0.712	98.611

HPLC for racemic and pure enantioenriched sample 4z

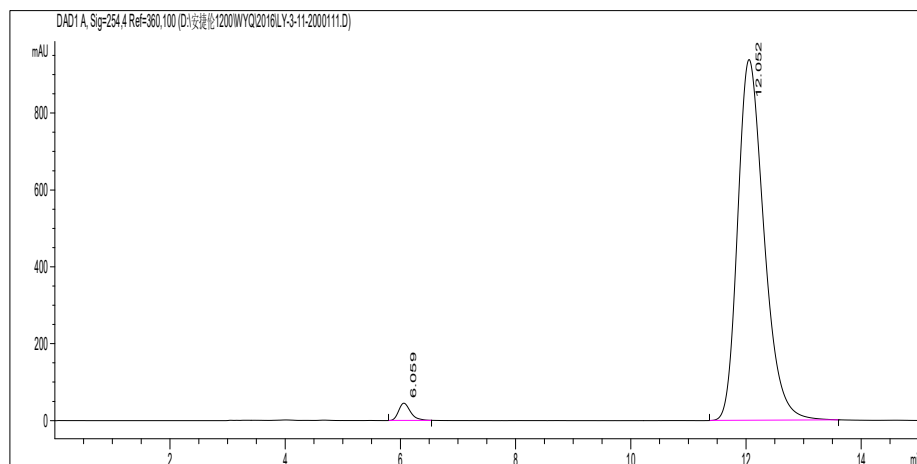


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.799	11817.1	951.7	0.1909	0.719	50.112
2	11.044	11764.3	442.4	0.4083	0.771	49.888

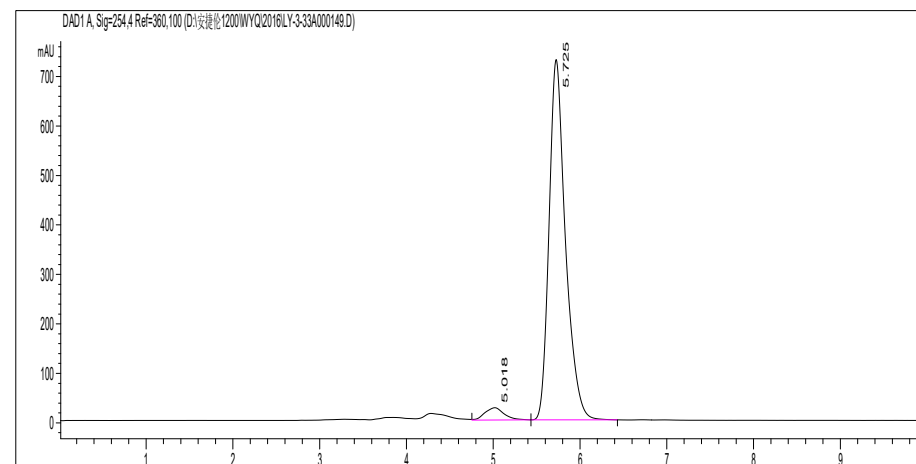
HPLC for racemic and pure enantioenriched sample 6a



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.978	8157.4	556.4	0.235	1.042	50.097
2	5.663	8125.9	621.4	0.1946	0.717	49.903

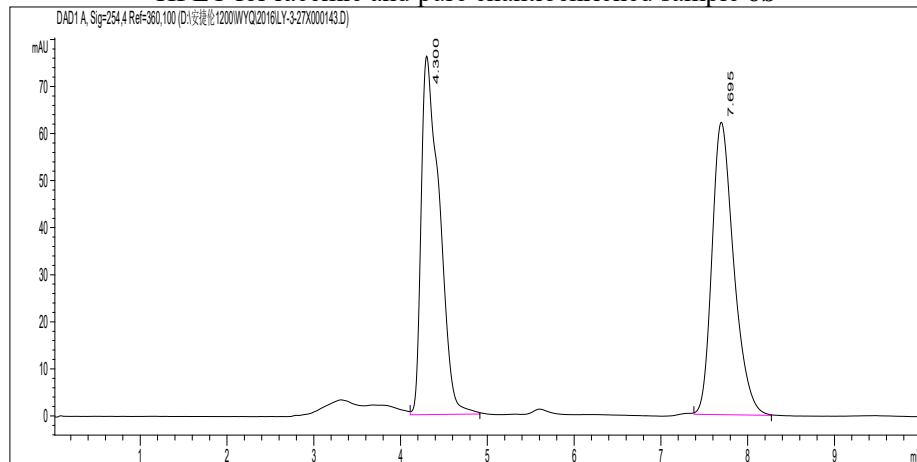


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.059	650	45.1	0.2201	0.73	2.136
2	12.052	29772.5	938.8	0.488	0.714	97.864



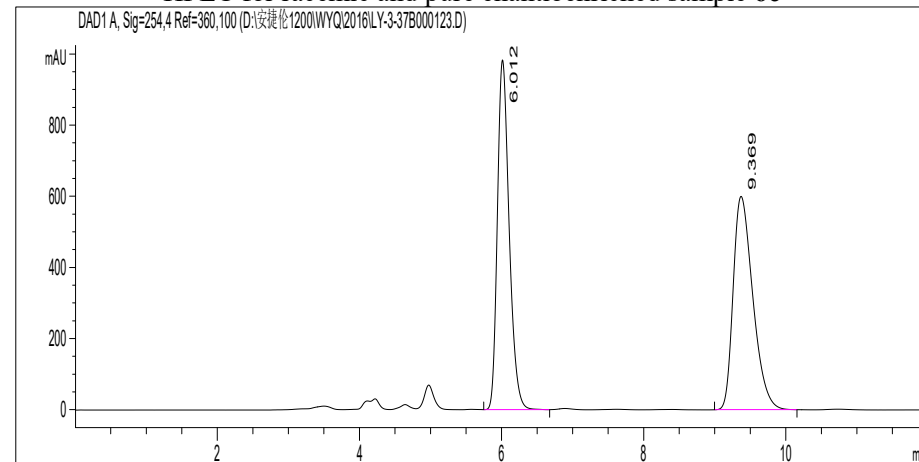
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.018	394.1	25.1	0.2471	0.965	3.945
2	5.725	9596.2	728.6	0.1937	0.706	96.055

HPLC for racemic and pure enantioenriched sample **6b**

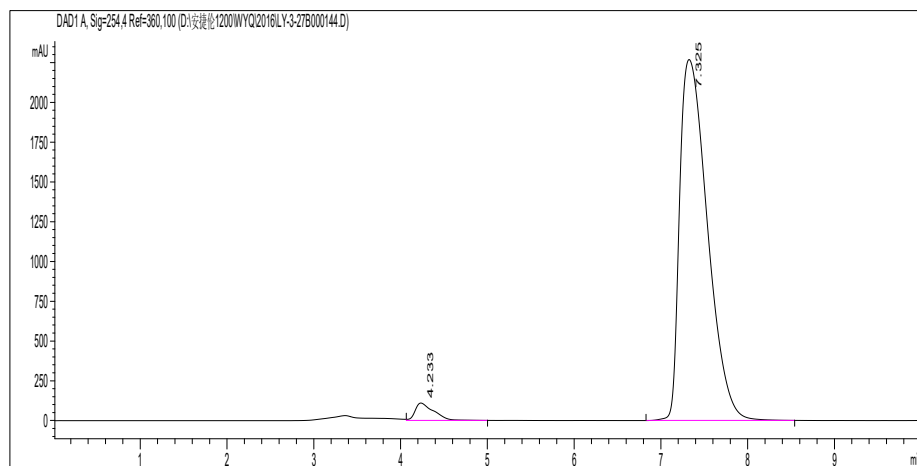


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.3	1119.3	76.3	0.2032	0.407	50.757
2	7.695	1085.9	62.2	0.2638	0.701	49.243

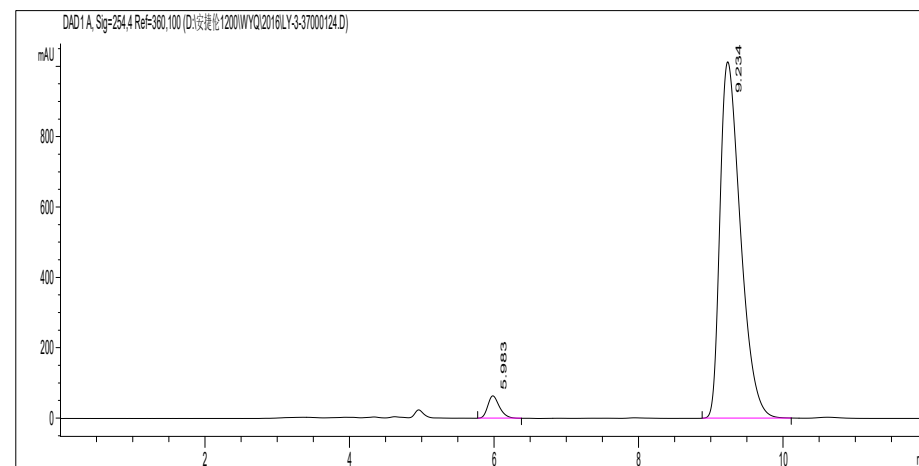
HPLC for racemic and pure enantioenriched sample **6c**



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	6.012	11331.3	984.1	0.1763	0.72	49.537
2	9.369	11543	600.2	0.2964	0.633	50.463

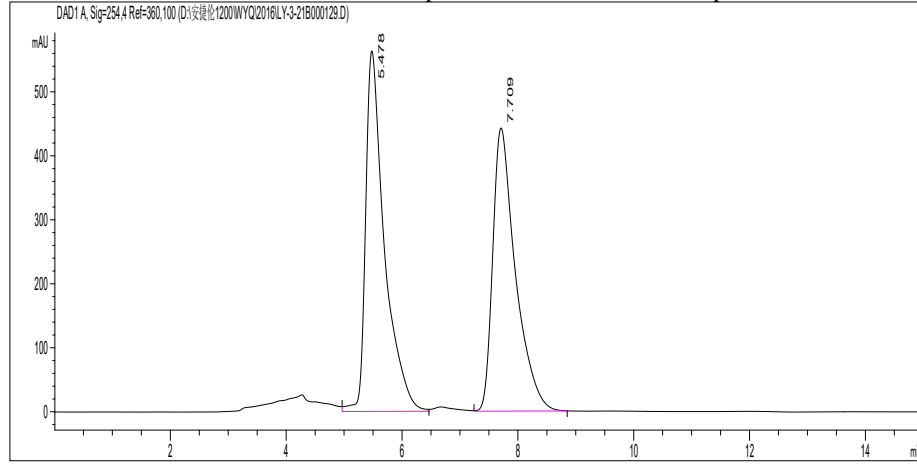


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.233	1655.3	109.9	0.2138	0.42	3.173
2	7.325	50507.5	2269.5	0.3516	0.485	96.827



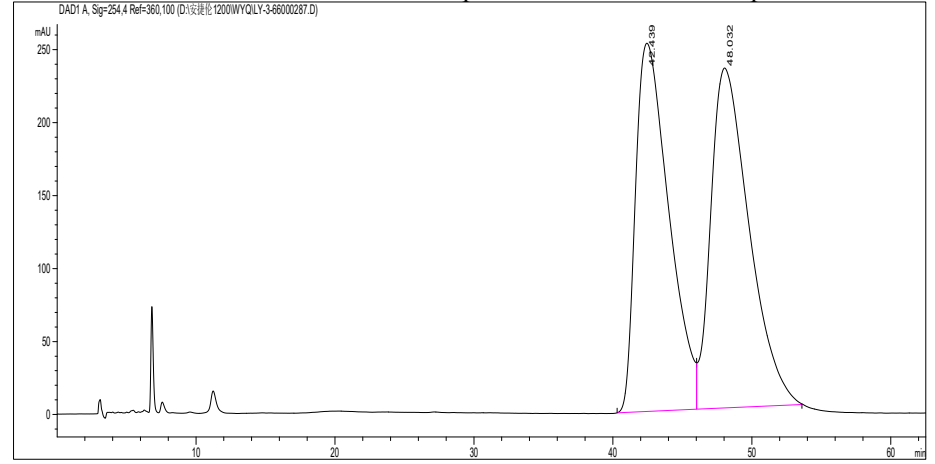
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.983	715.3	63.8	0.1708	0.717	3.458
2	9.234	19970.7	1013.6	0.3039	0.569	96.542

HPLC for racemic and pure enantioenriched sample 7

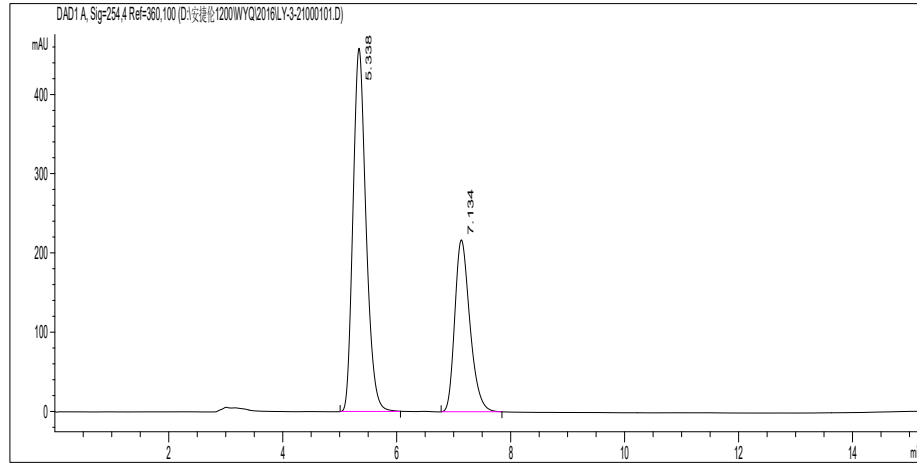


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.478	12698.5	563.5	0.3229	0.466	51.321
2	7.709	12044.9	442.4	0.3976	0.531	48.679

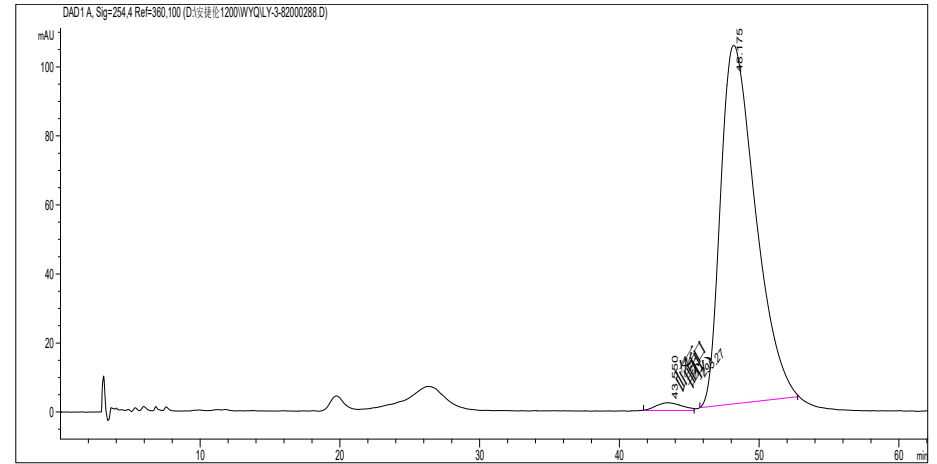
HPLC for racemic and pure enantioenriched sample 8



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	42.439	42073.1	252.4	2.3308	0.487	48.415
2	48.032	44827.9	233	2.6065	0.533	51.585

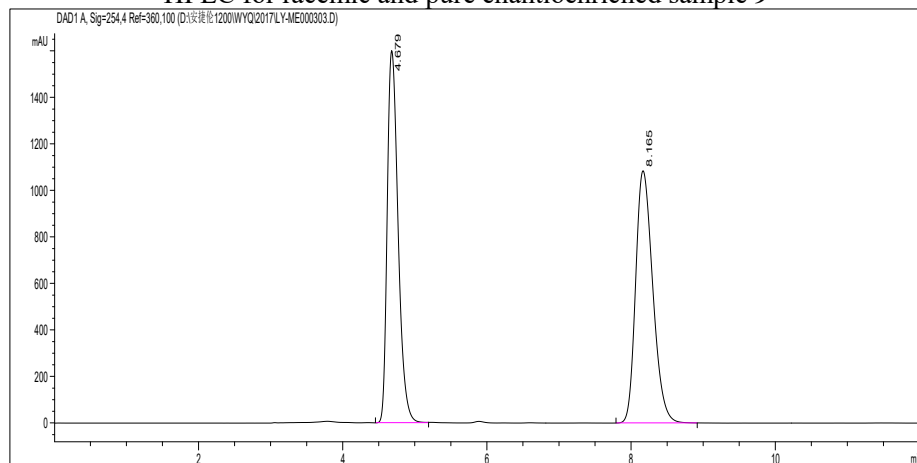


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	5.338	7285.7	458.6	0.2434	0.803	64.555
2	7.134	4000.4	217.1	0.281	0.718	35.445

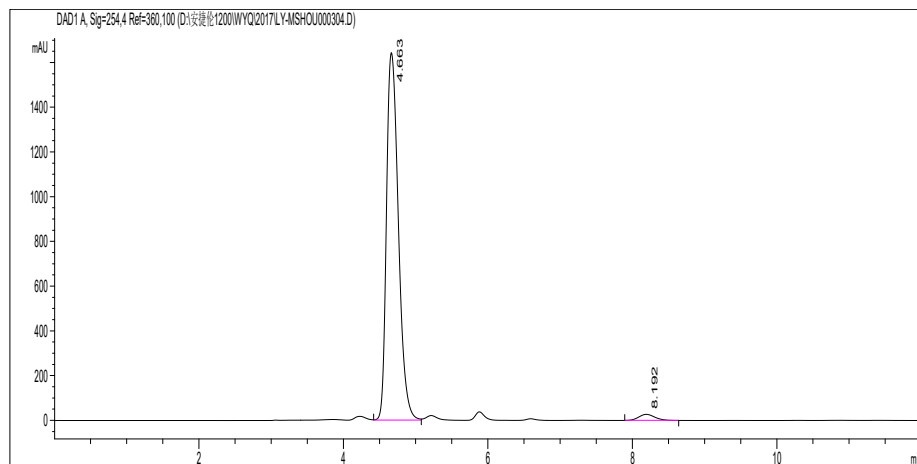


编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	43.55	295.3	2.3	2.1621	0.944	1.611
2	48.175	18035.9	103.9	2.2031	0.552	98.389

HPLC for racemic and pure enantioenriched sample 9



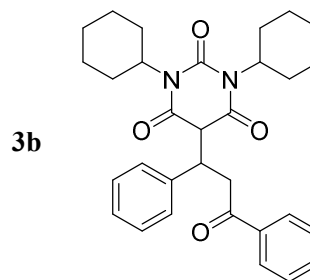
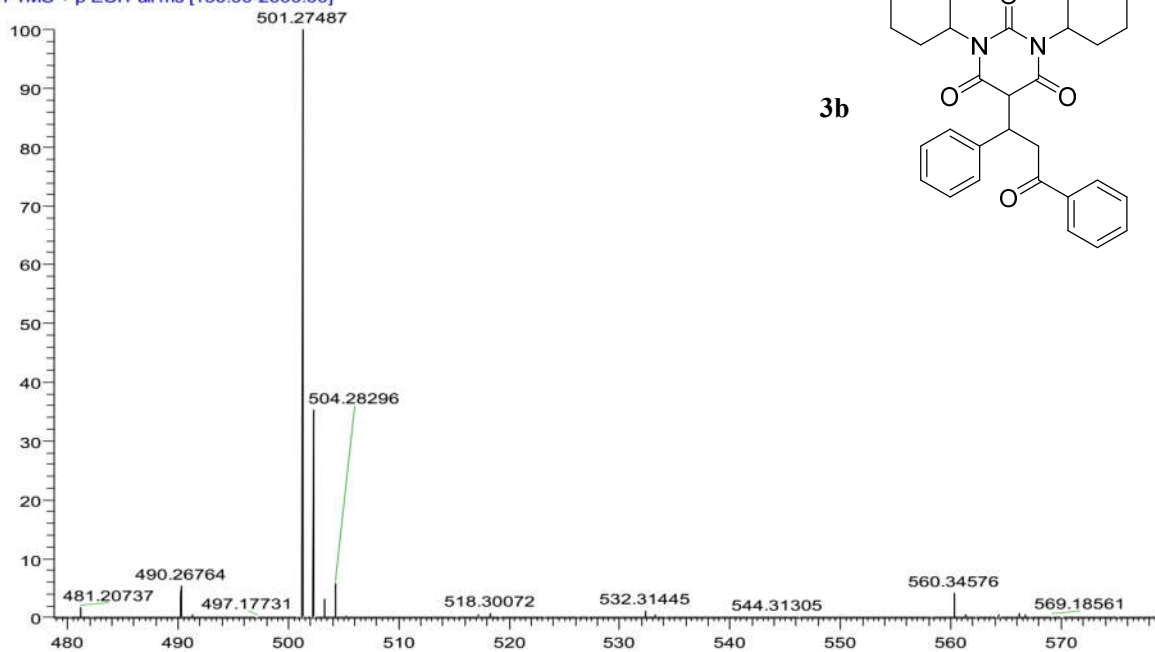
编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.679	16730.5	1601.1	0.1639	0.656	48.283
2	8.165	17920.6	1085.1	0.2567	0.718	51.717



编号	时间	峰面积	峰高	峰宽	对称因子	峰面积 %
1	4.663	18776	1643.9	0.1813	0.656	97.775
2	8.192	427.2	27.3	0.2427	0.839	2.225

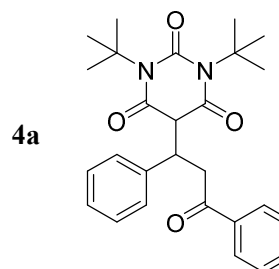
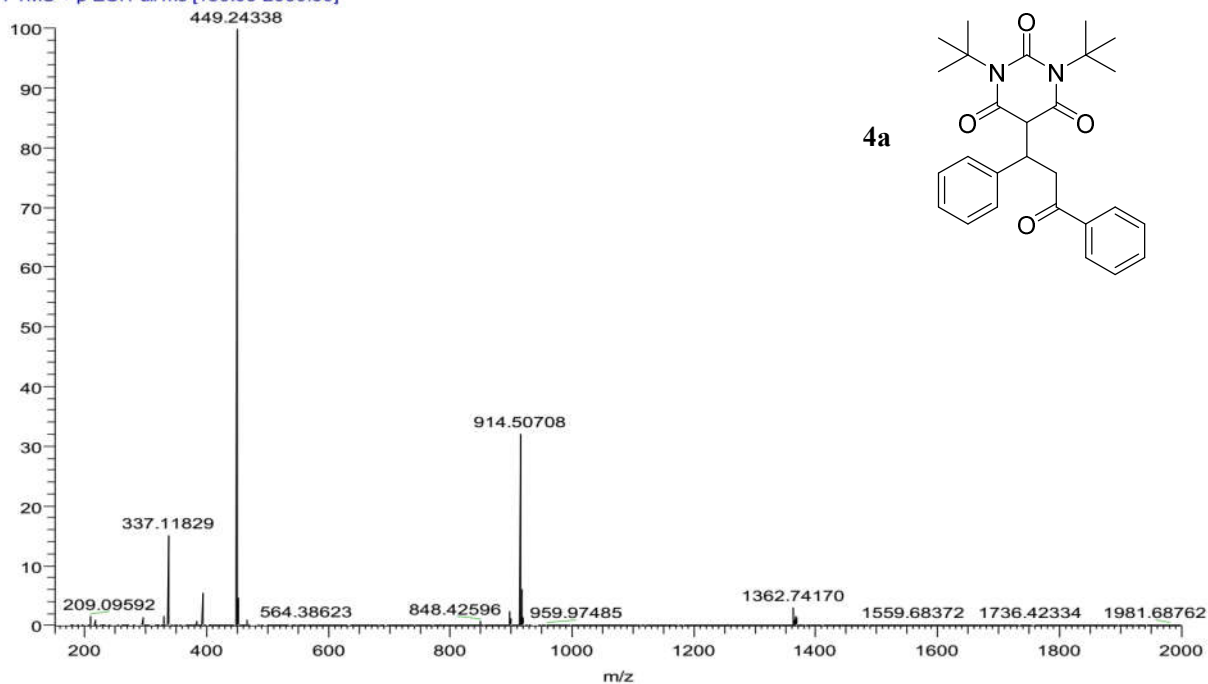
LY-2-67: HRMS (ESI) m/z calcd for $C_{31}H_{37}N_2O_4^+$ (M+H)⁺ 501.27478, found 501.27487.

00153 #6 RT: 0.09 AV: 1 NL: 4.80E6
T: FTMS + p ESI Full ms [150.00-2000.00]



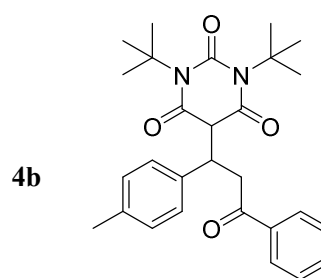
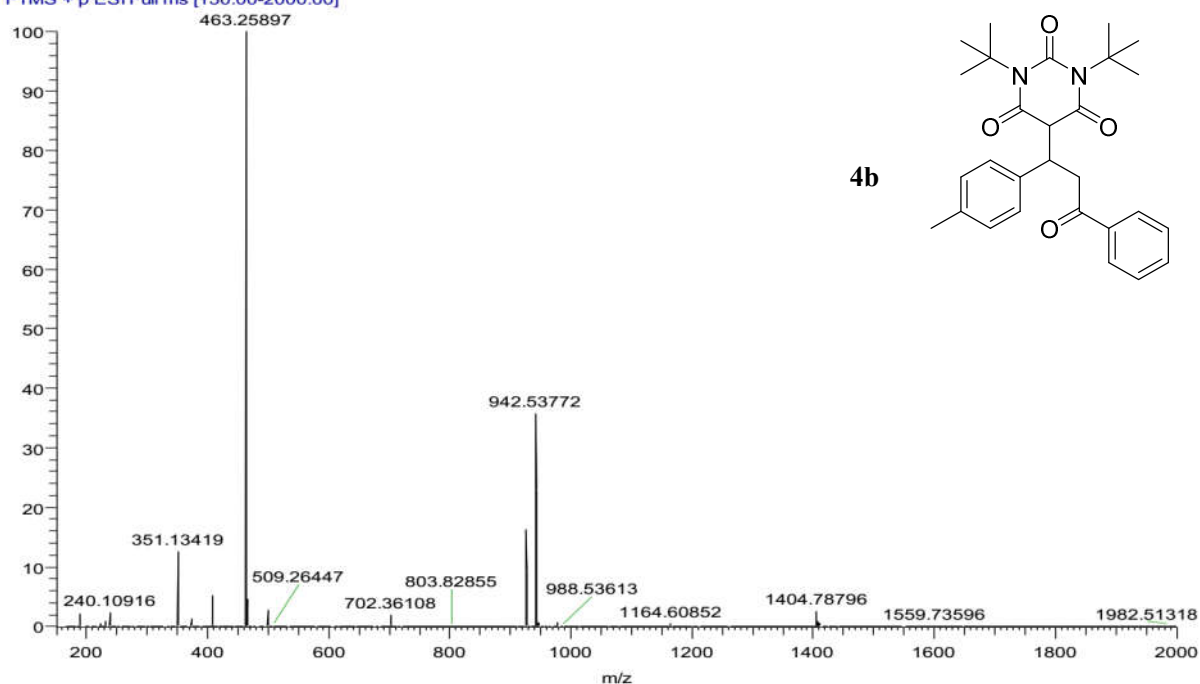
LY-2-75: HRMS (ESI) m/z calcd for $C_{27}H_{33}N_2O_4^+$ (M+H)⁺ 449.24348, found 449.24338.

00155 #13 RT: 0.21 AV: 1 NL: 8.75E7
T: FTMS + p ESI Full ms [150.00-2000.00]



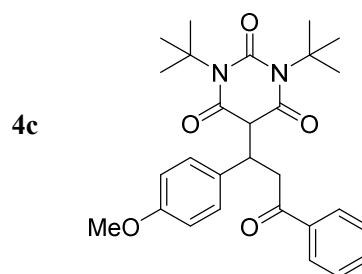
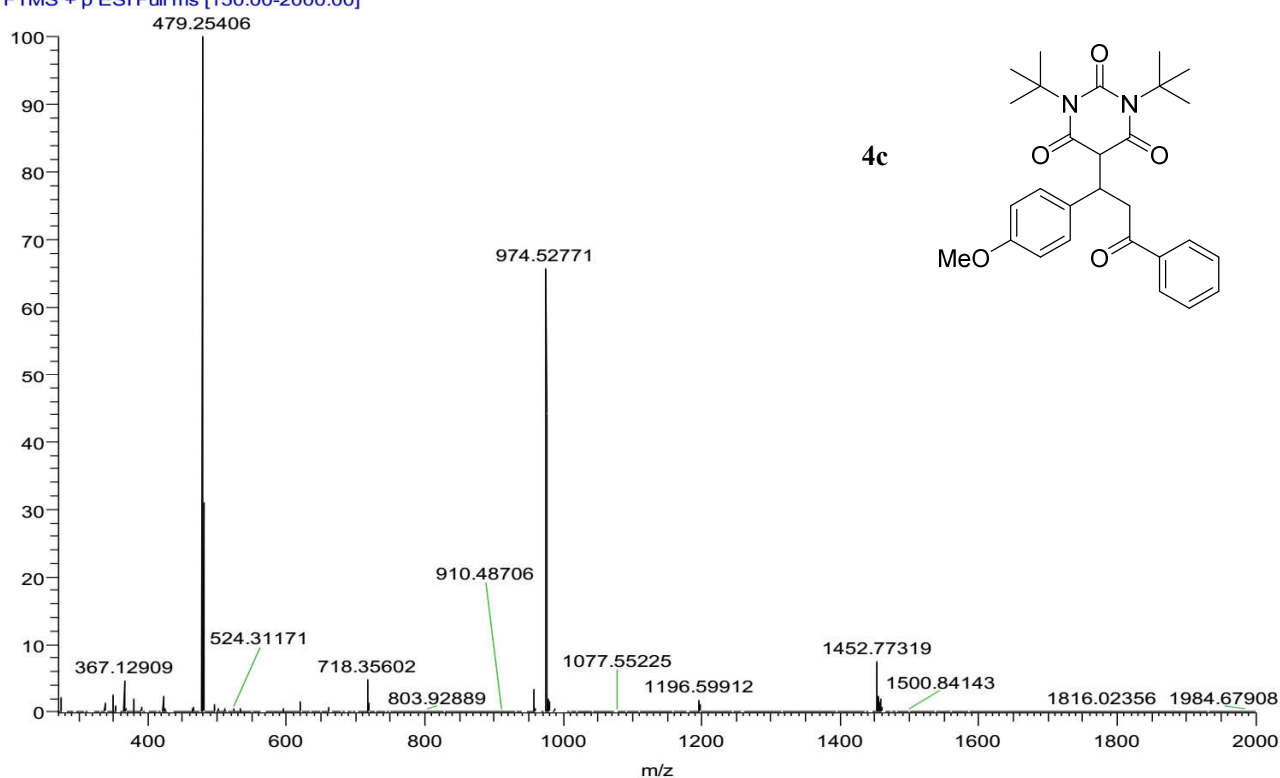
LY-3-5: HRMS (ESI) m/z calcd for C₂₈H₃₅N₂O₄⁺ (M+H)⁺ 463.25913, found 463.25897.

00159 #5 RT: 0.07 AV: 1 NL: 4.81E7
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-2-94 HRMS (ESI): m/z calcd for C₂₈H₃₅N₂O₅⁺ (M+H)⁺ 479.25405, found: 479.25406

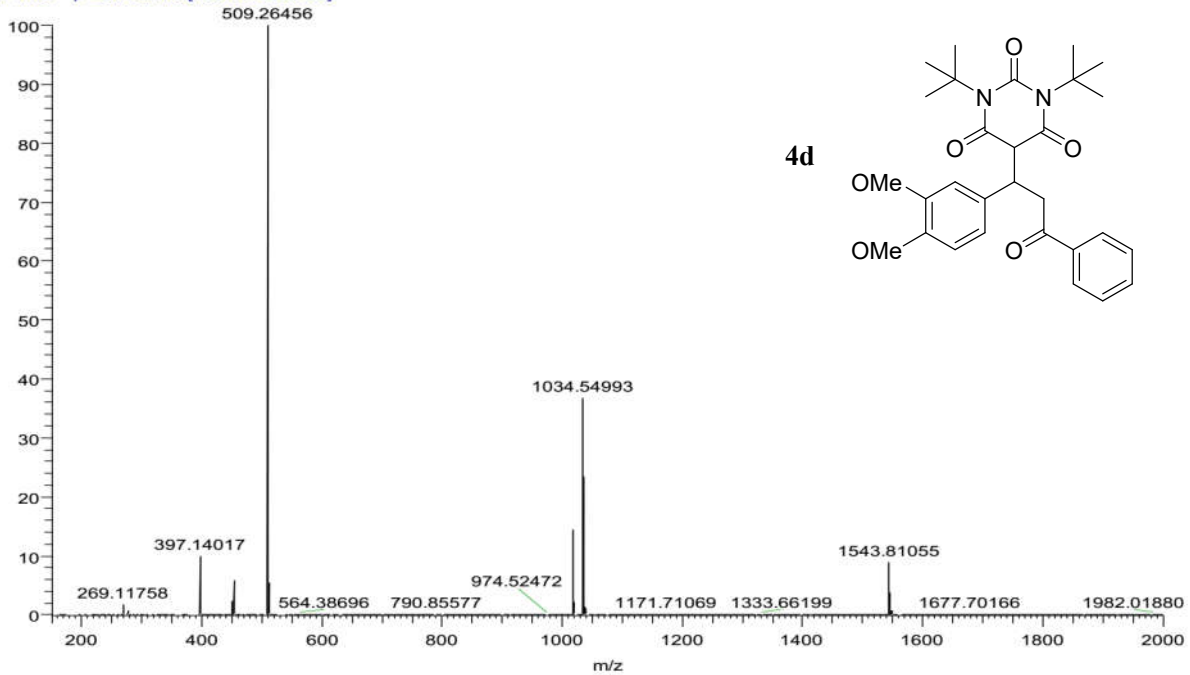
00136 #11 RT: 0.16 AV: 1 NL: 1.01E7
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-2-93: HRMS (ESI) m/z calcd for $C_{29}H_{37}N_2O_6^+$ (M+H)⁺ 509.26461, found

509.26456.

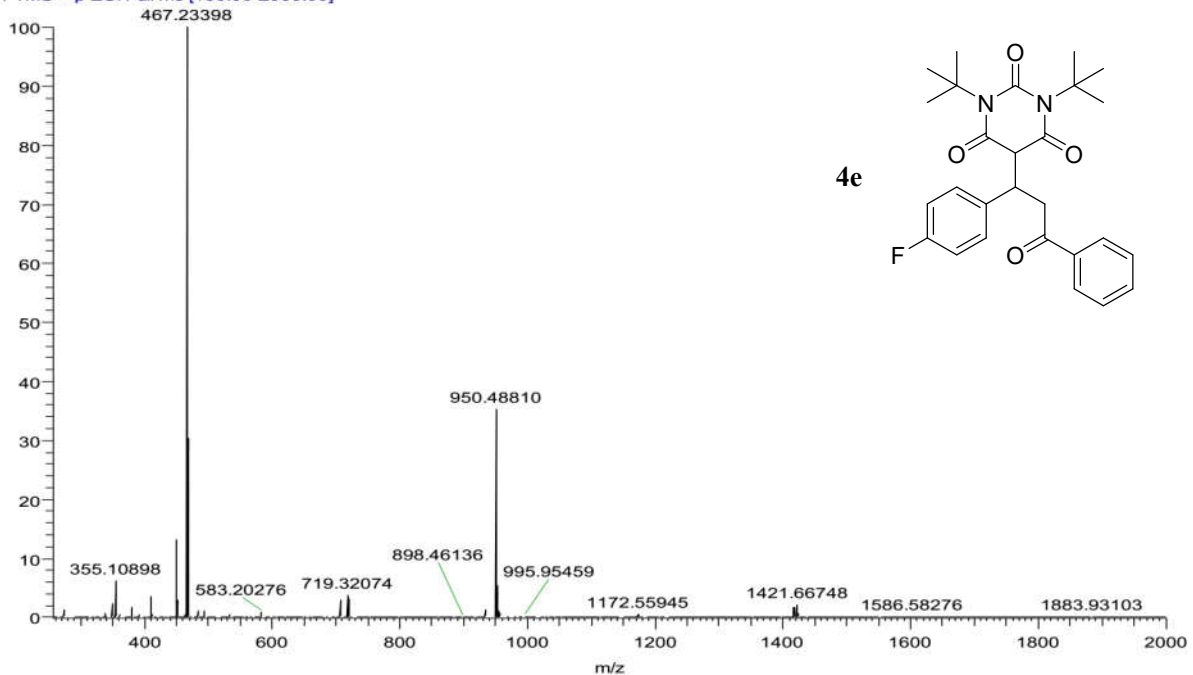
00156 #9 RT: 0.14 AV: 1 NL: 8.70E7
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-2-89: HRMS (ESI) m/z calcd for $C_{27}H_{32}FN_2O_4^+$ (M+H)⁺ 467.23406, found

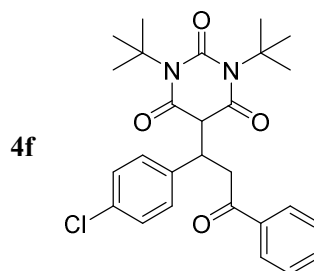
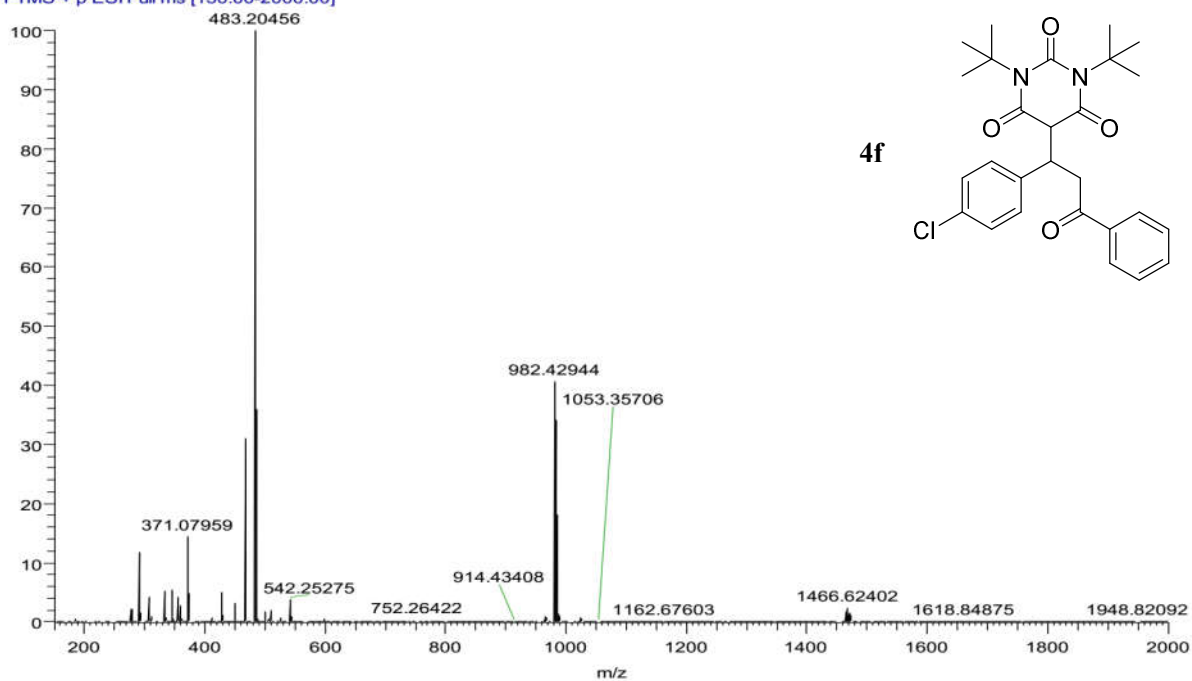
467.23398.

00158 #8 RT: 0.12 AV: 1 NL: 8.13E6
T: FTMS + p ESI Full ms [150.00-2000.00]



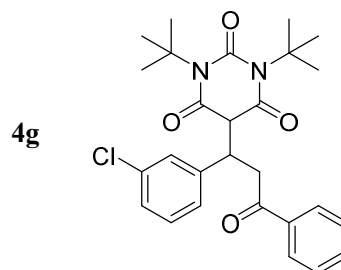
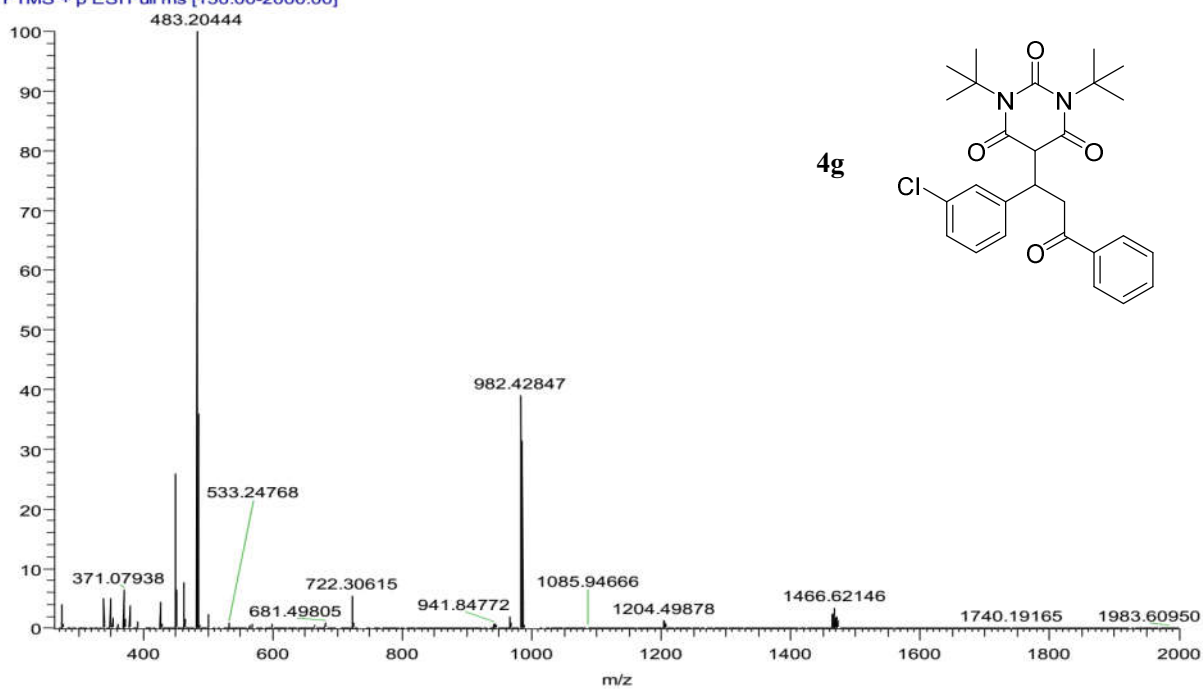
LY-2-87: HRMS (ESI) m/z calcd for $C_{27}H_{32}ClN_2O_4^+$ (M+H)⁺ 483.20451, found 483.20456.

00158 #11 RT: 0.15 AV: 1 NL: 2.63E7
T: FTMS + p ESI Full ms [150.00-2000.00]



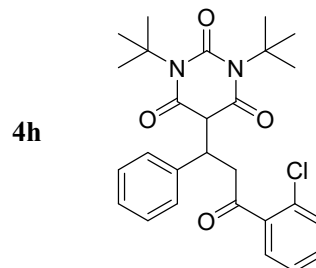
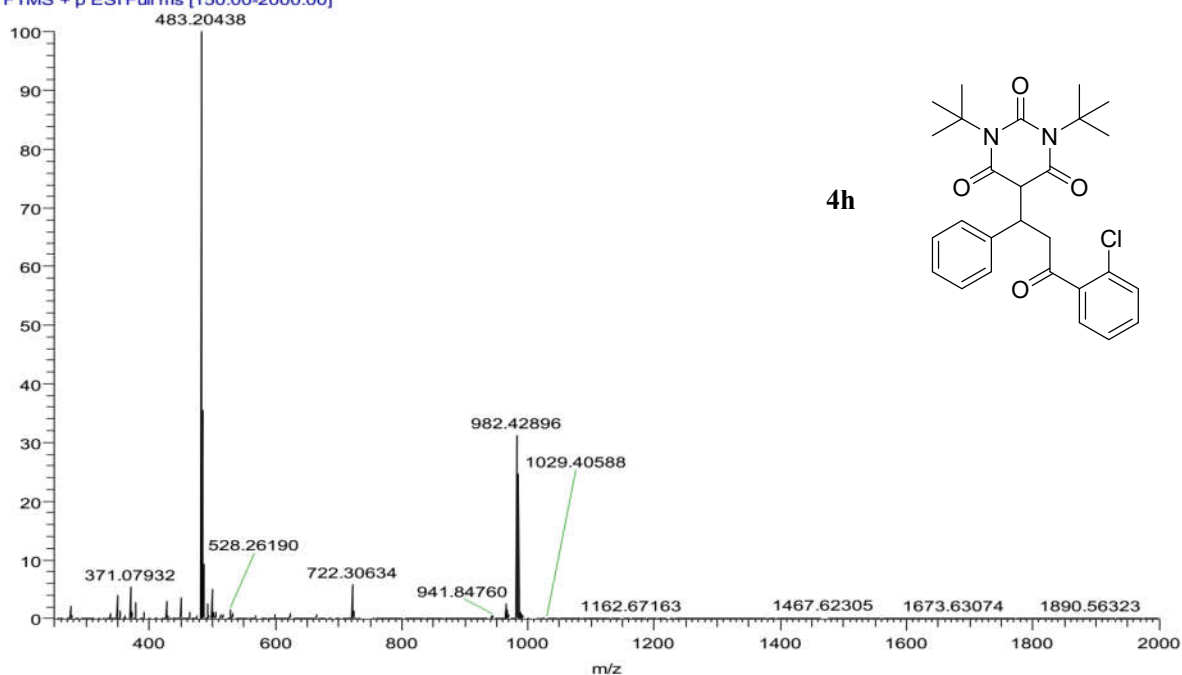
LY-3-13-1: HRMS (ESI) m/z calcd for $C_{27}H_{32}ClN_2O_4^+$ (M+H)⁺ 483.20451, found 483.20444.

00141 #12 RT: 0.19 AV: 1 NL: 5.00E6
T: FTMS + p ESI Full ms [150.00-2000.00]



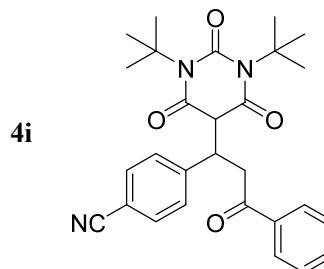
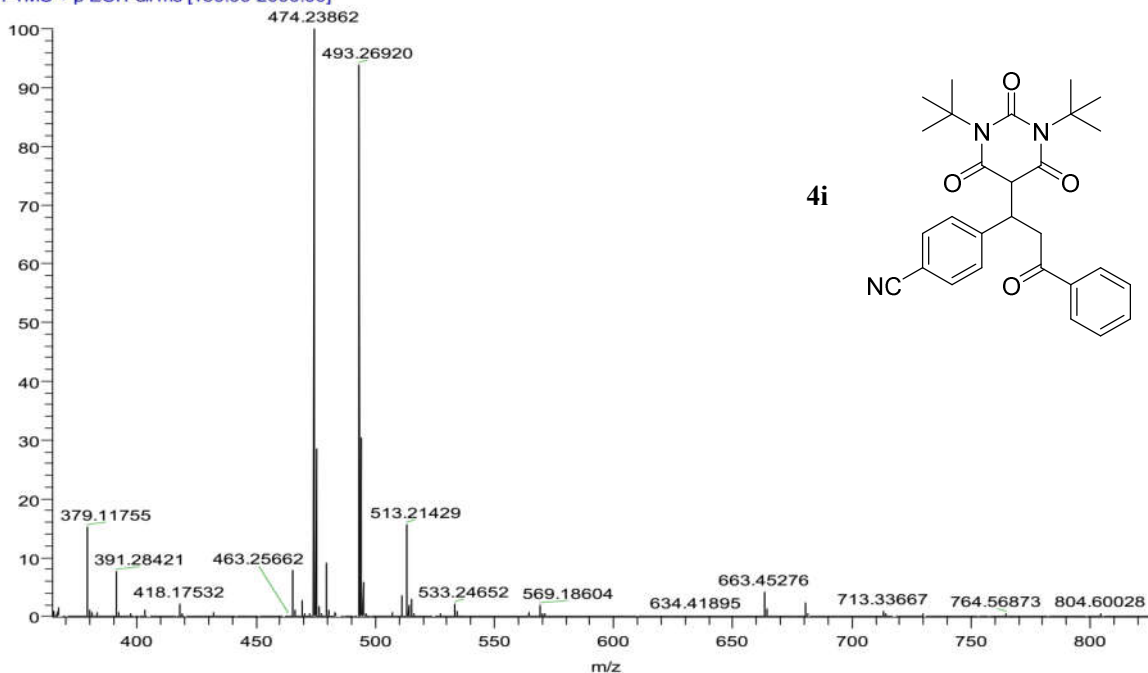
LY-3-13-2: HRMS (ESI) m/z calcd for C₂₇H₃₂ClN₂O₄⁺ (M+H)⁺ 483.20451, found 483.20438.

00156 #12 RT: 0.18 AV: 1 NL: 5.70E6
T: FTMS + p ESI Full ms [150.00-2000.00]



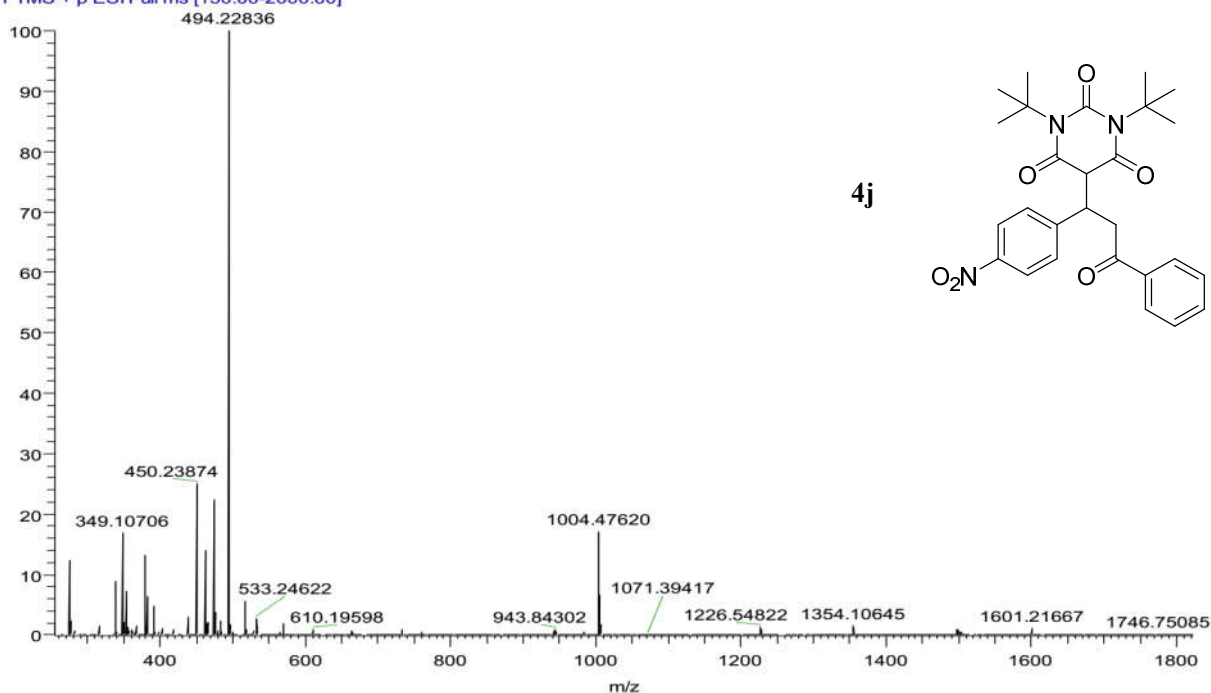
LY-3-10-1: HRMS (ESI) m/z calcd for C₂₈H₃₂N₃O₄⁺ (M+H)⁺ 474.23873, found 474.23862.

00137 #7 RT: 0.12 AV: 1 NL: 1.37E6
T: FTMS + p ESI Full ms [150.00-2000.00]



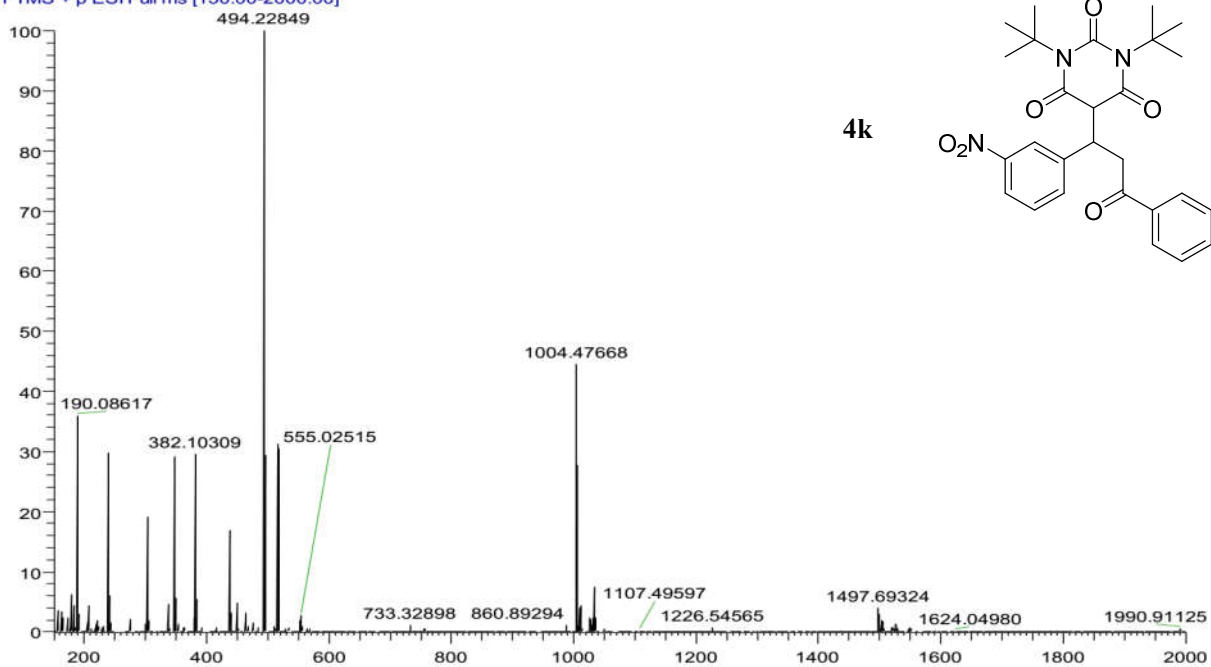
LY-2-90: HRMS (ESI) m/z calcd for $C_{27}H_{32}N_3O_6^+$ (M+H)⁺ 494.22856, found 494.22836.

00150 #9 RT: 0.16 AV: 1 NL: 1.30E6
T: FTMS + p ESI Full ms [150.00-2000.00]



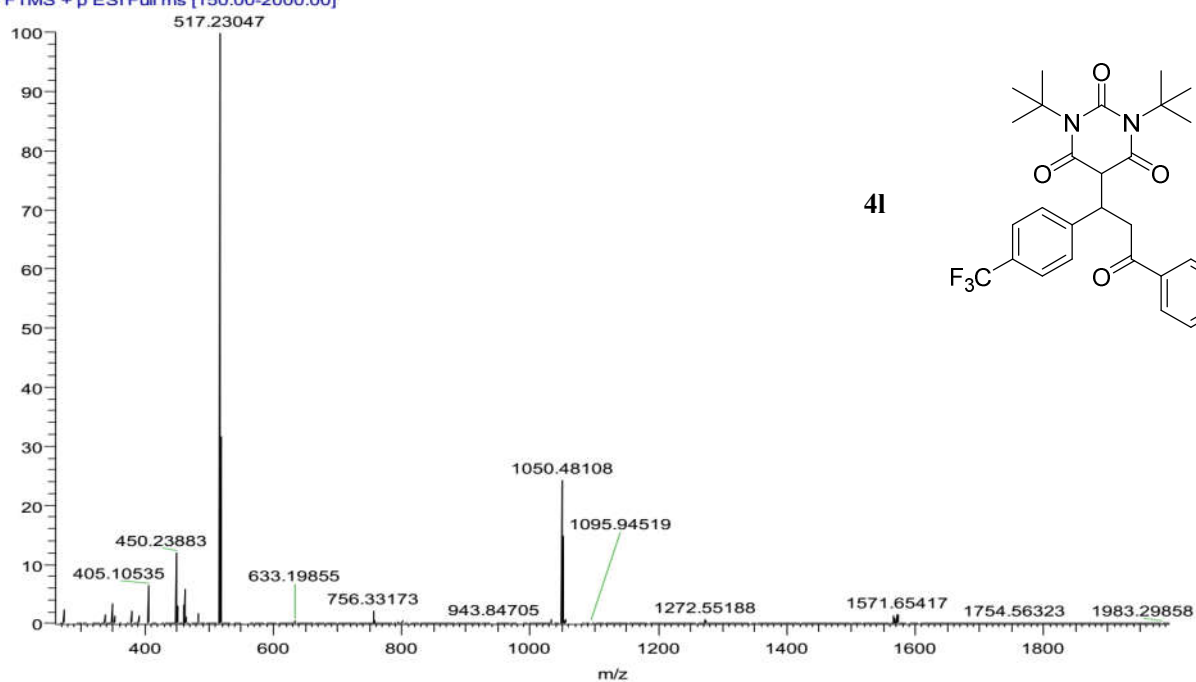
LY-2-91: HRMS (ESI) m/z calcd for $C_{27}H_{32}N_3O_6^+$ (M+H)⁺ 494.22856, found 494.22849.

00154 #4 RT: 0.06 AV: 1 NL: 4.29E6
T: FTMS + p ESI Full ms [150.00-2000.00]

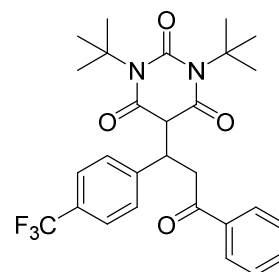


LY-3-10-2: HRMS (ESI) m/z calcd for $C_{28}H_{32}F_3N_2O_4^+$ ($M+H$)⁺ 517.23087, found 517.23047.

00142 #7 RT: 0.10 AV: 1 NL: 7.46E6
T: FTMS + p ESI Full ms [150.00-2000.00]

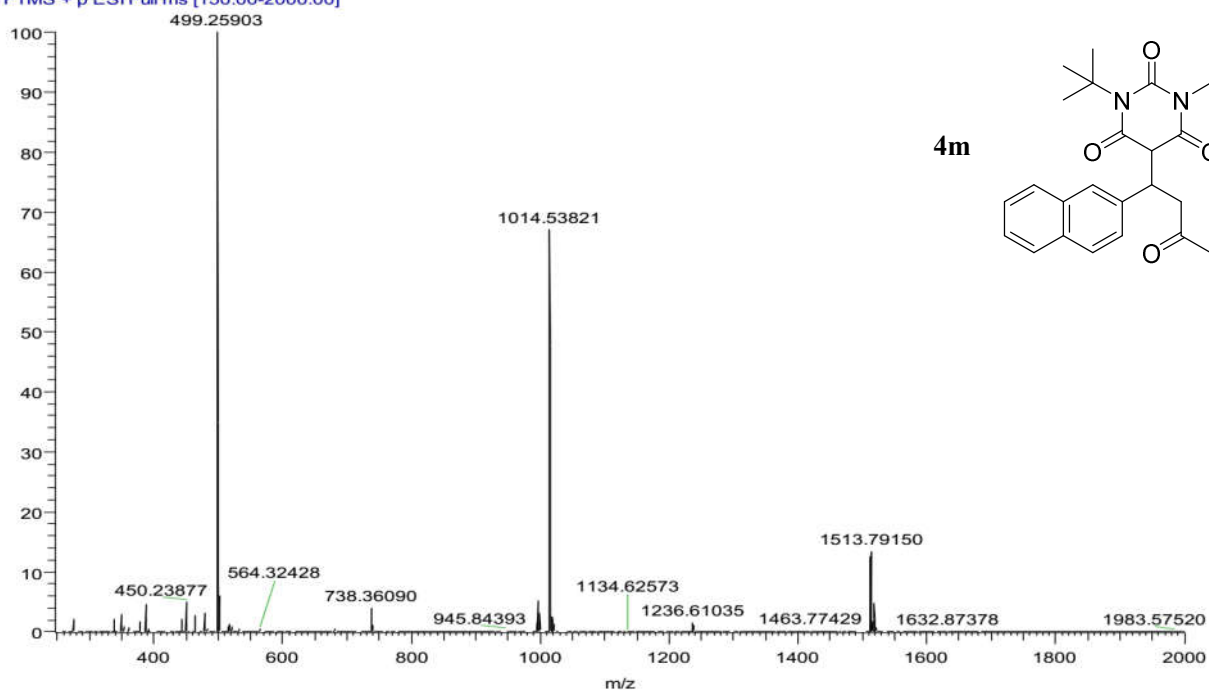


4l

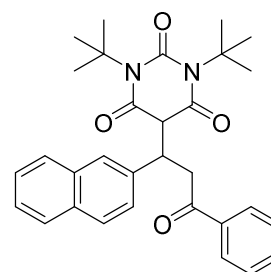


LY-3-2: HRMS (ESI) m/z calcd for $C_{31}H_{35}N_2O_4^+$ ($M+H$)⁺ 499.25913, found 499.25903.

00146 #7 RT: 0.10 AV: 1 NL: 8.58E6
T: FTMS + p ESI Full ms [150.00-2000.00]

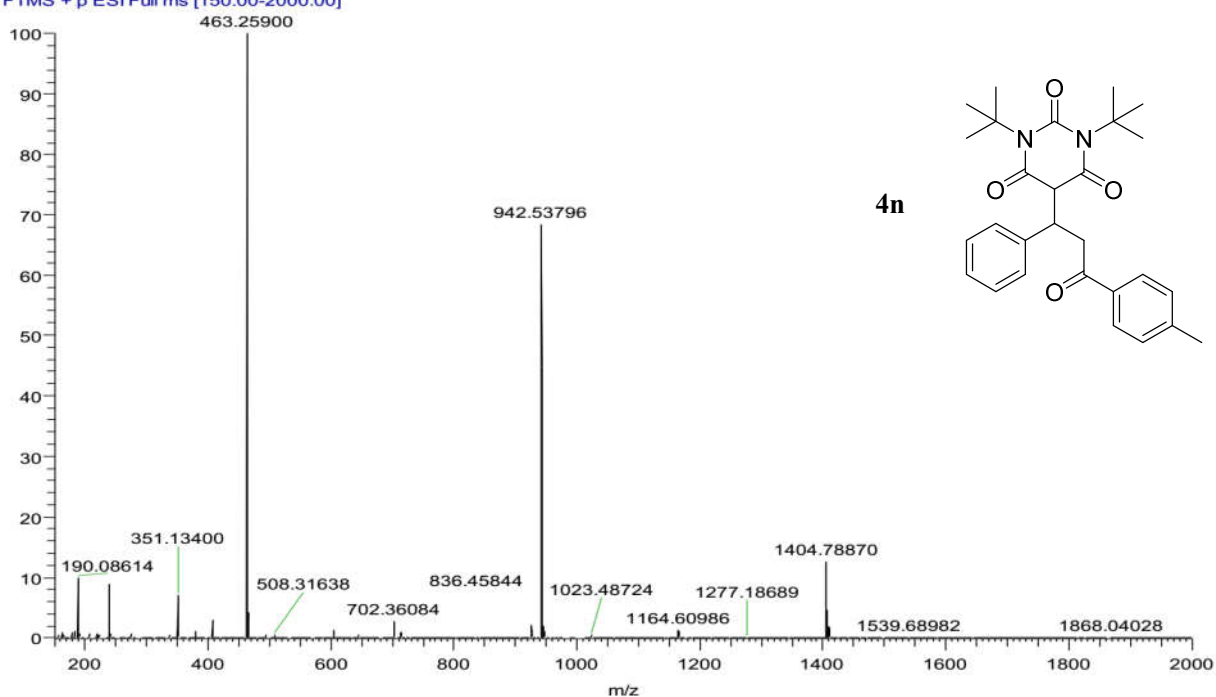


4m



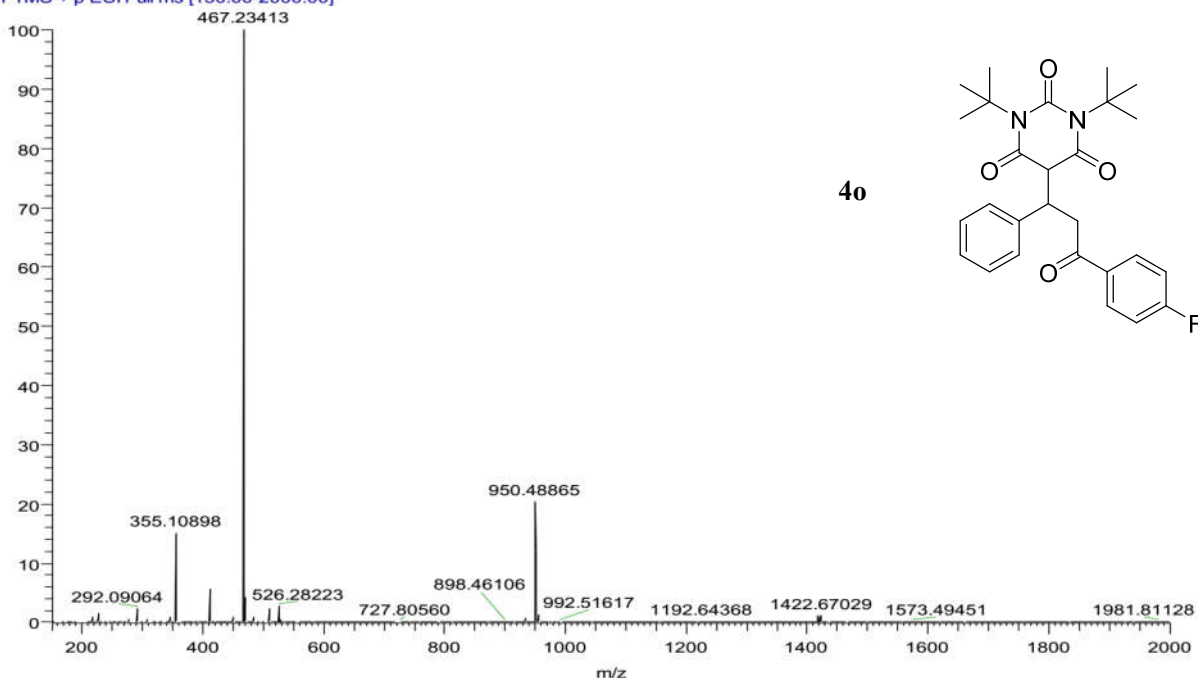
LY-3-7: HRMS (ESI) m/z calcd for $C_{28}H_{35}N_2O_4^+$ ($M+H$) $^+$ 463.25913, found 463.25900.

00139 #11 RT: 0.16 AV: 1 NL: 1.86E7
T: FTMS + p ESI Full ms [150.00-2000.00]



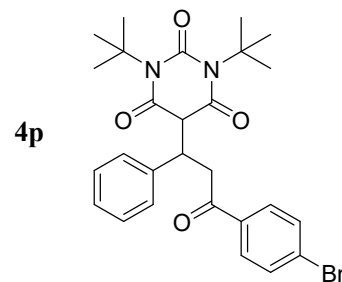
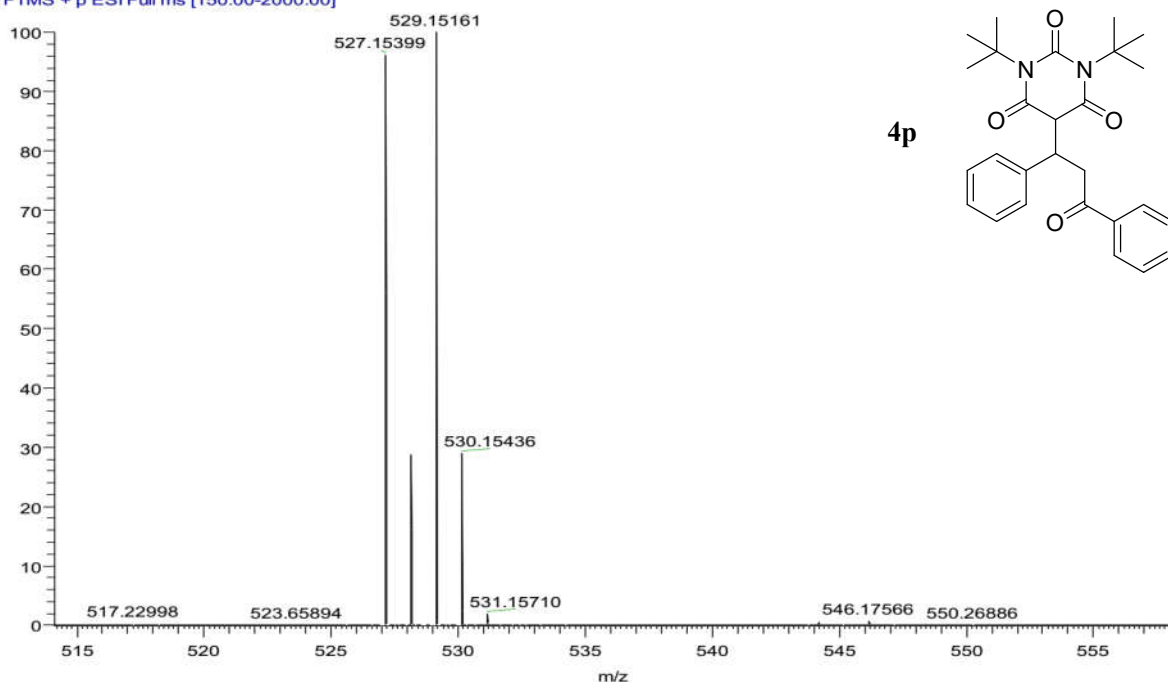
LY-2-86: HRMS (ESI) m/z calcd for $C_{27}H_{32}FN_2O_4^+$ ($M+H$) $^+$ 467.23406, found 467.23413.

00157 #19 RT: 0.31 AV: 1 NL: 6.47E7
T: FTMS + p ESI Full ms [150.00-2000.00]



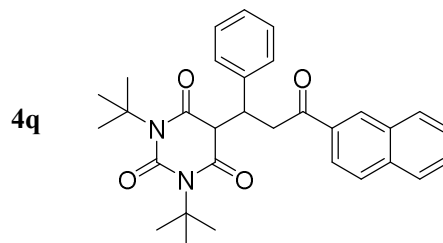
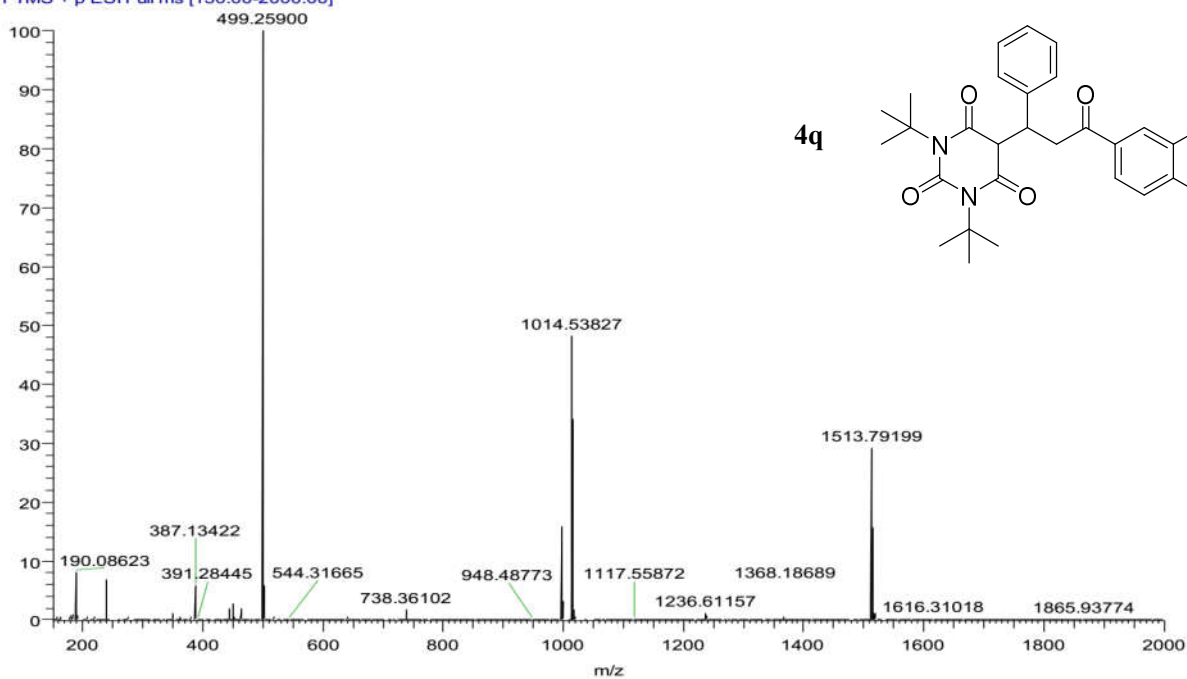
LY-3-12-1: HRMS (ESI) m/z calcd for $C_{27}H_{32}BrN_2O_4^+$ (M+H)⁺ 527.15400, found 527.15399.

00147 #7 RT: 0.11 AV: 1 NL: 7.91E6
T: FTMS + p ESI Full ms [150.00-2000.00]



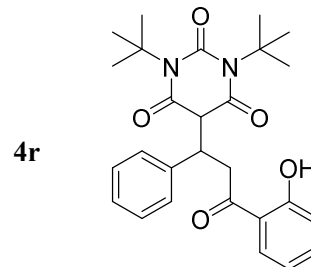
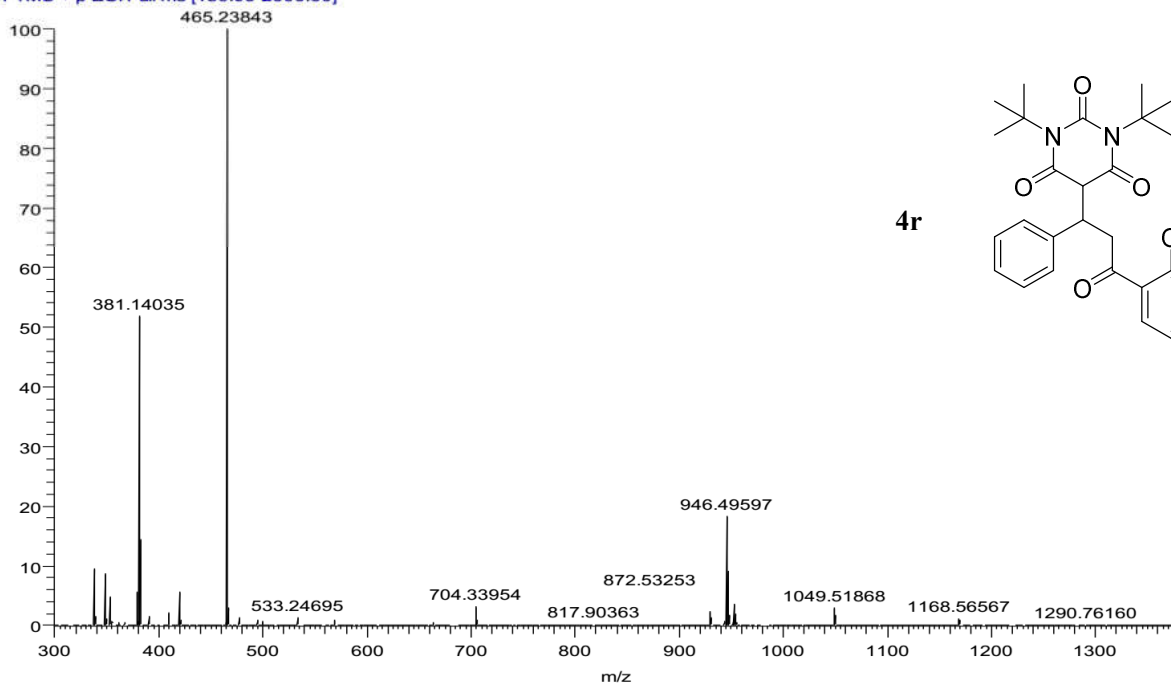
LY-3-4: HRMS (ESI) m/z calcd for $C_{31}H_{35}N_2O_4^+$ (M+H)⁺ 499.25913, found 499.25900.

00144 #7 RT: 0.11 AV: 1 NL: 2.02E7
T: FTMS + p ESI Full ms [150.00-2000.00]



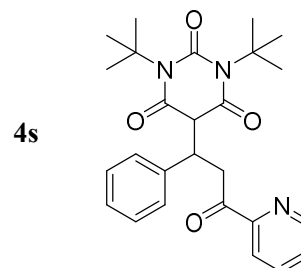
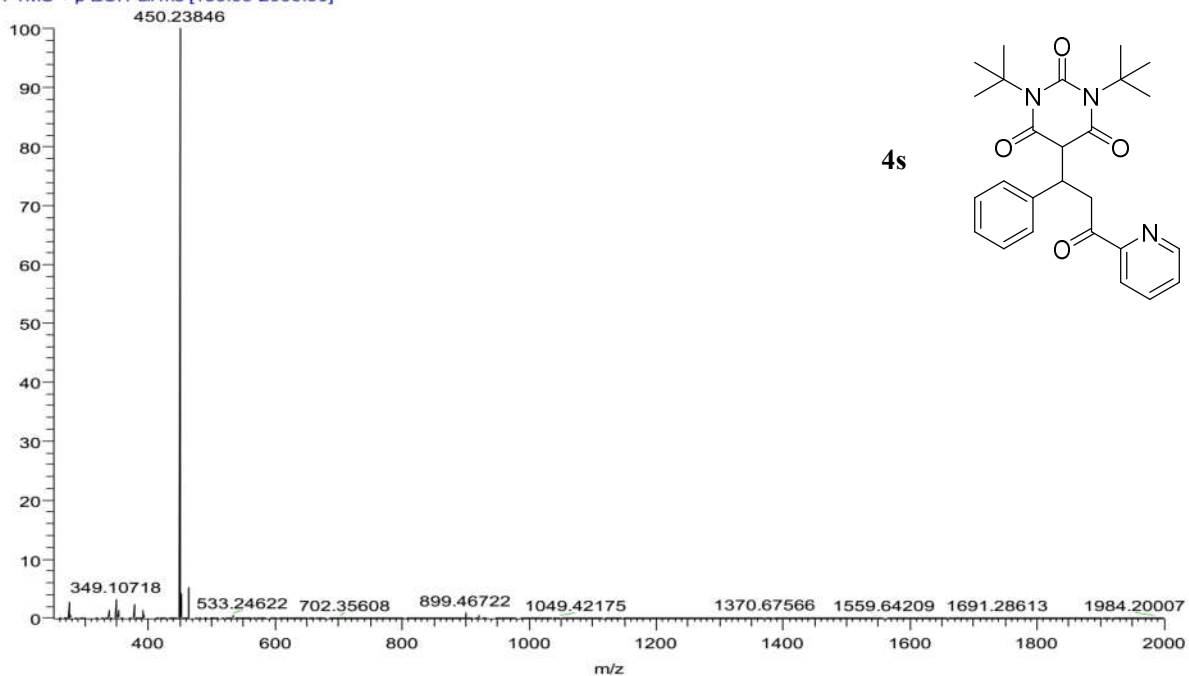
LY-2-96: HRMS (ESI) m/z calcd for $C_{27}H_{33}N_2O_5^+$ (M+H)⁺ 465.23840, found 465.23843.

00135_170118182251 #13 RT: 0.20 AV: 1 NL: 3.33E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-3: HRMS (ESI) m/z calcd for $C_{26}H_{32}N_3O_4^+$ (M+H)⁺ 450.23873, found 450.23846.

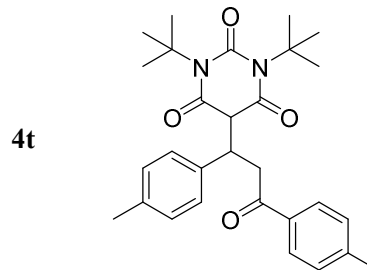
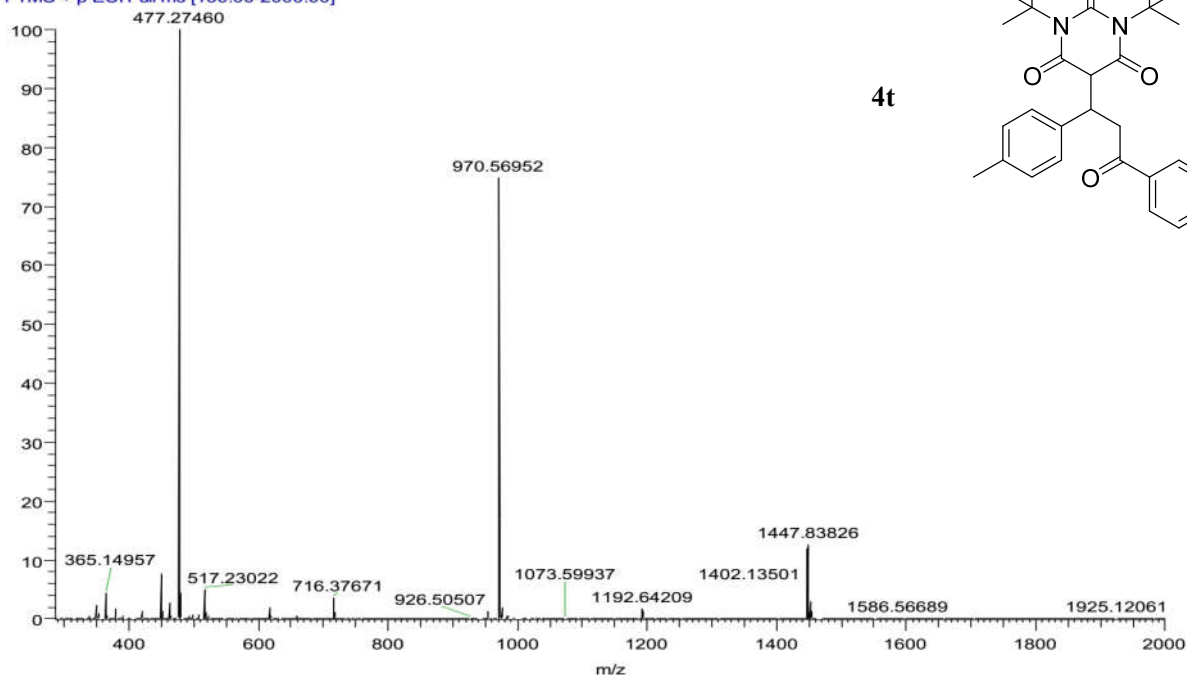
00140 #15 RT: 0.24 AV: 1 NL: 7.57E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-8-1: HRMS (ESI) m/z calcd for $C_{29}H_{37}N_2O_4^+$ (M+H)⁺ 477.27478, found

477.27460.

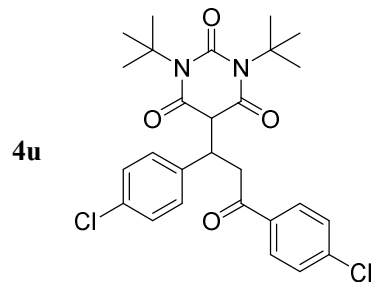
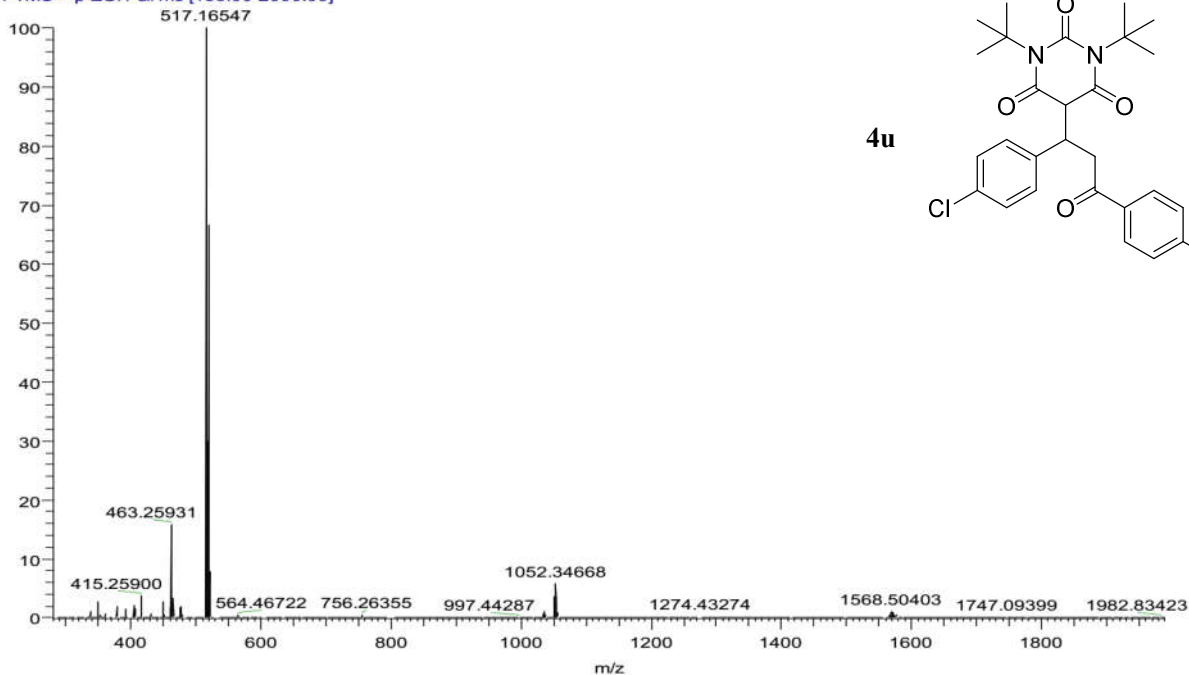
00143 #9 RT: 0.14 AV: 1 NL: 9.69E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-8-2: HRMS (ESI) m/z calcd for $C_{27}H_{31}Cl_2N_2O_4^+$ (M+H)⁺ 517.16554, found

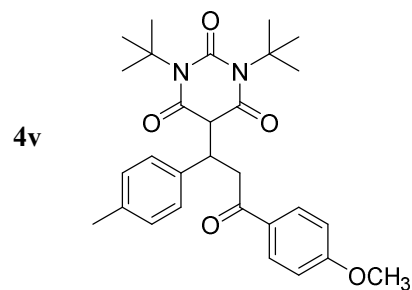
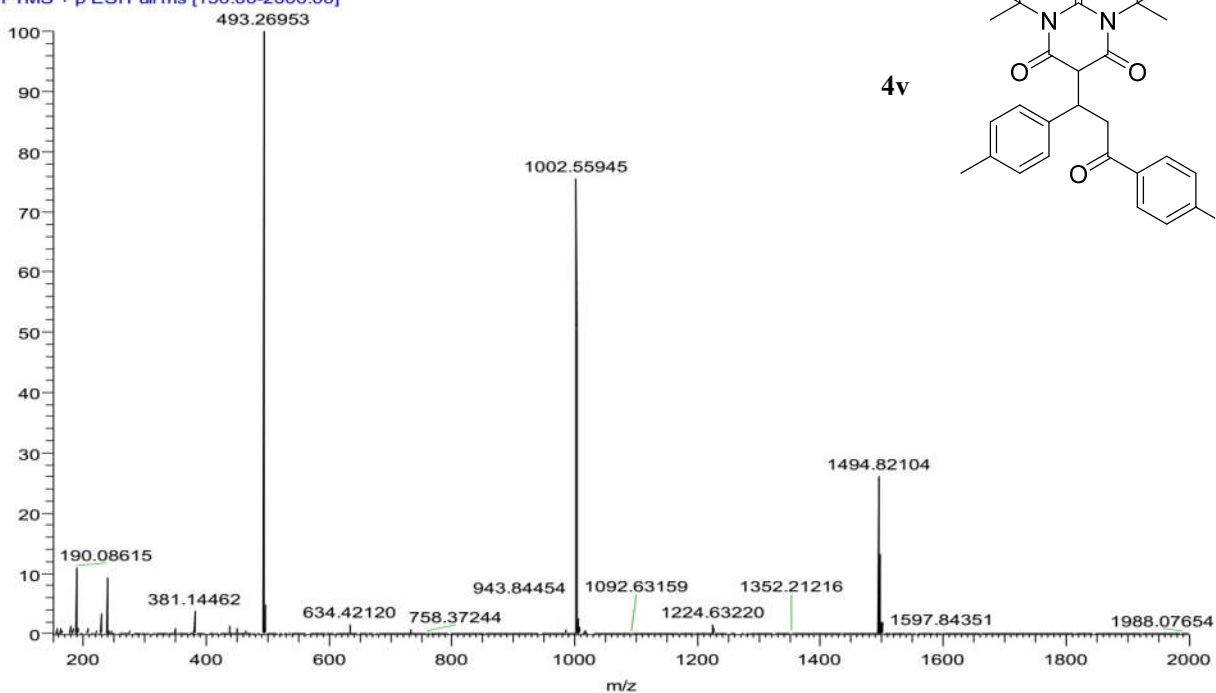
517.16547.

00152 #5 RT: 0.09 AV: 1 NL: 5.86E6
T: FTMS + p ESI Full ms [150.00-2000.00]



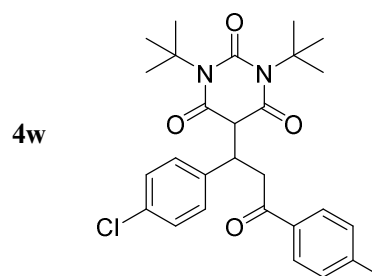
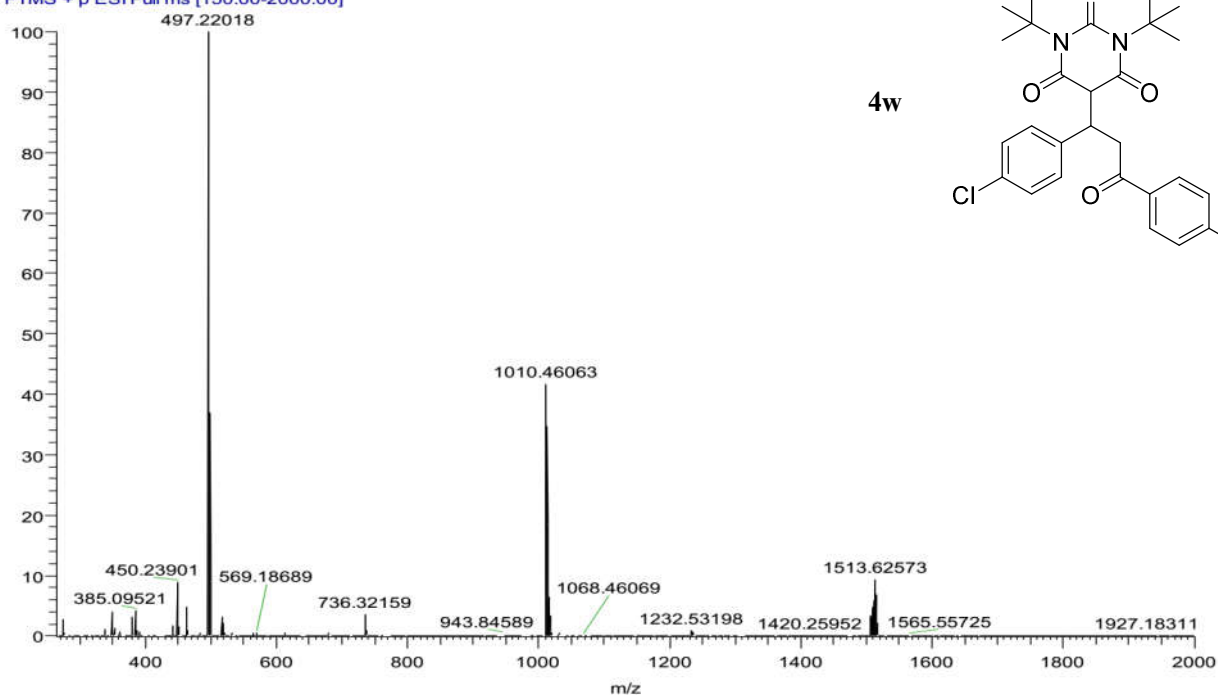
LY-2-91: HRMS (ESI) m/z calcd for $C_{29}H_{37}N_2O_5^+$ (M+H)⁺ 493.26970, found 493.26953.

00155 #11 RT: 0.16 AV: 1 NL: 1.69E7
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-9-1: HRMS (ESI) m/z calcd for $C_{28}H_{34}ClN_2O_4^+$ (M+H)⁺ 497.22016, found 497.22018.

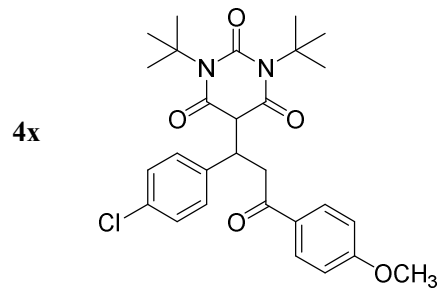
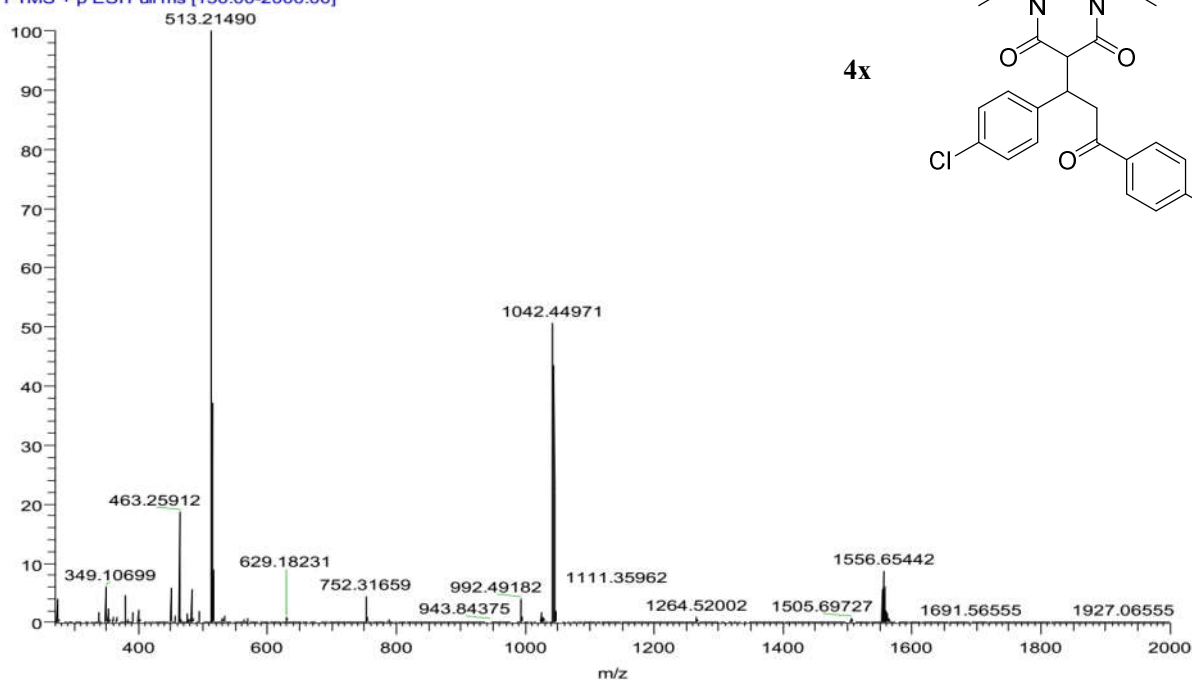
00145 #11 RT: 0.17 AV: 1 NL: 5.83E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-9-2: HRMS (ESI) m/z calcd for $C_{28}H_{34}ClN_2O_5^+$ (M+H)⁺ 513.21508, found

513.21490.

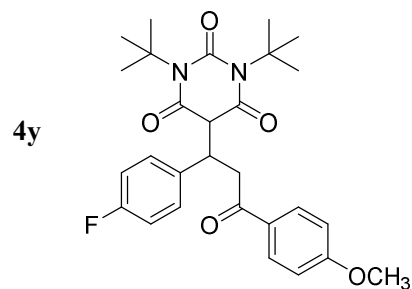
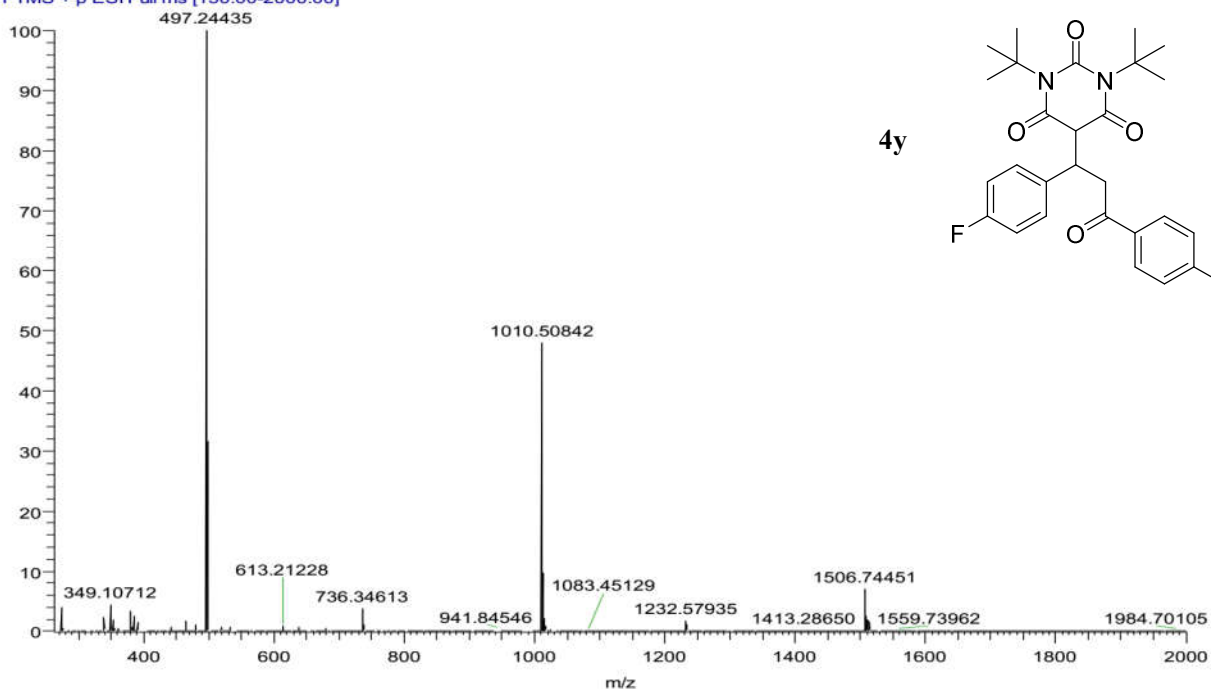
00157 #10 RT: 0.15 AV: 1 NL: 3.43E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-11-1: HRMS (ESI) m/z calcd for $C_{28}H_{34}FN_2O_5^+$ (M+H)⁺ 497.24463, found

497.24435.

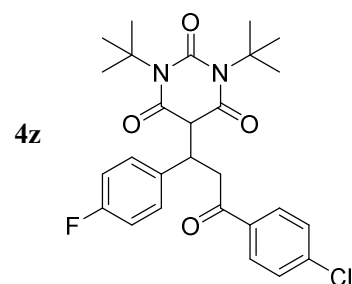
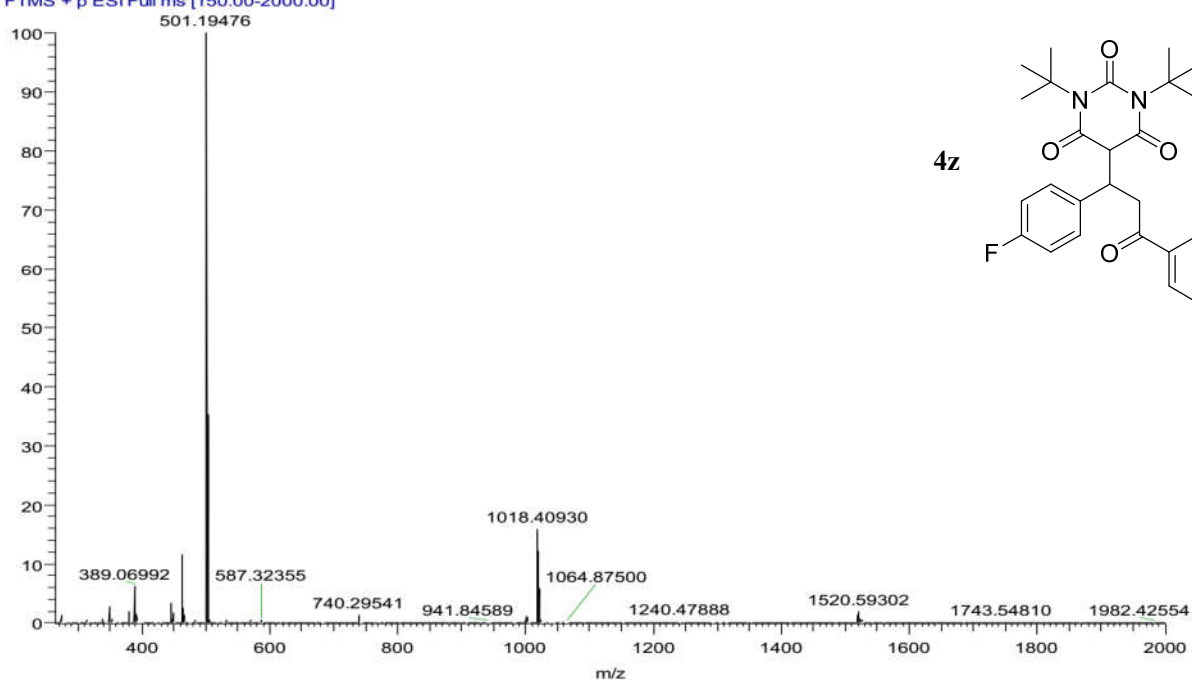
00138 #10 RT: 0.16 AV: 1 NL: 5.89E6
T: FTMS + p ESI Full ms [150.00-2000.00]



calcd for $C_{27}H_{31}ClFN_2O_4^+$ (M+H)⁺ 501.19509, found 501.19476.

00160 #7 RT: 0.11 AV: 1 NL: 6.54E6

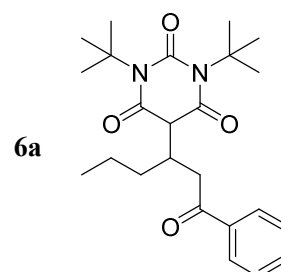
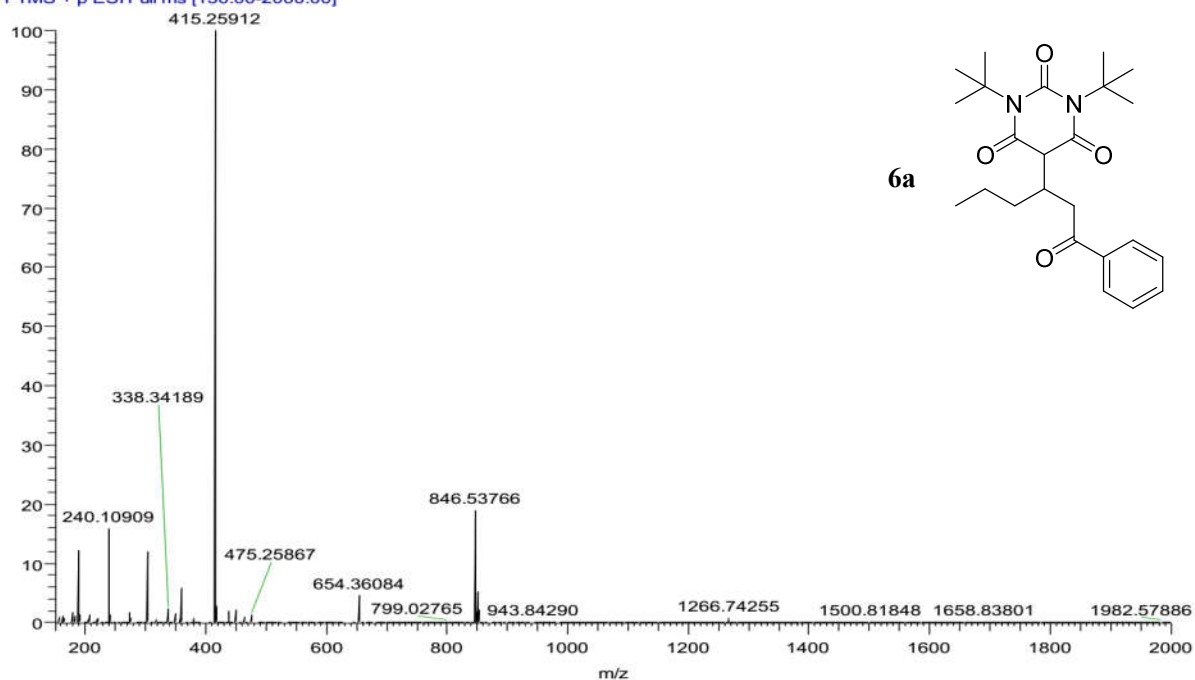
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-33A: HRMS (ESI) m/z calcd for $C_{24}H_{35}N_2O_4^+$ (M+H)⁺ 415.25913, found 415.25912.

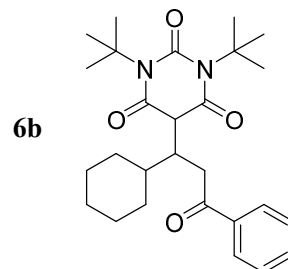
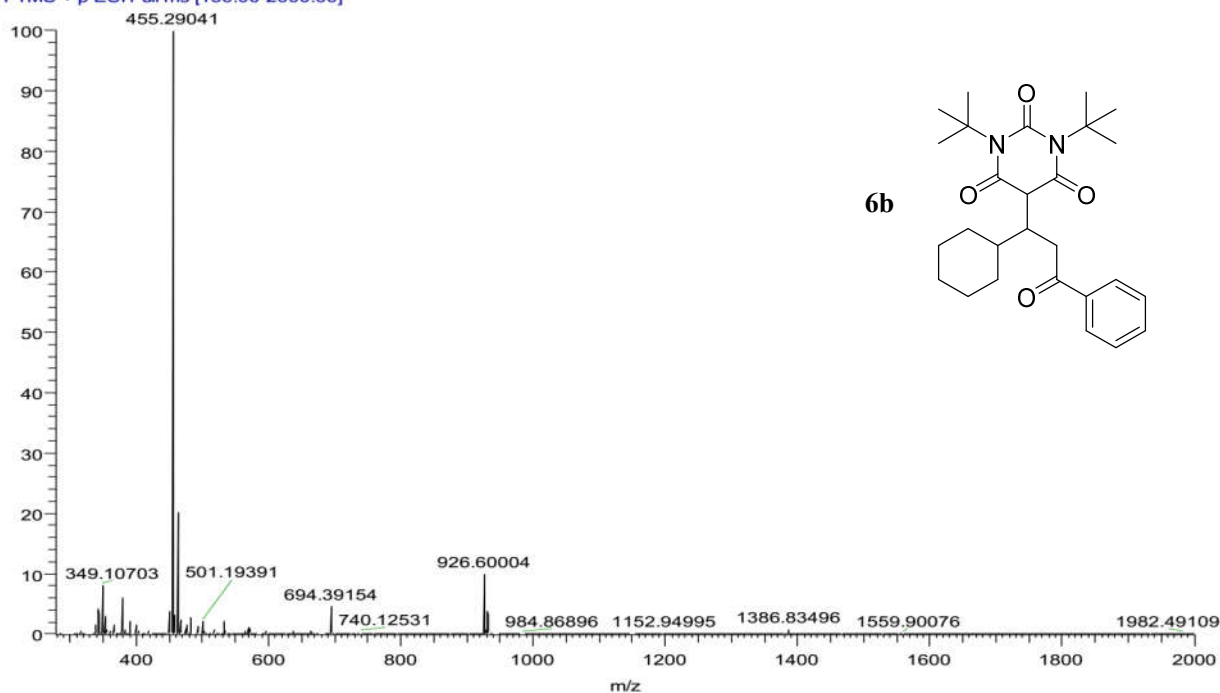
00151 #5 RT: 0.07 AV: 1 NL: 1.41E7

T: FTMS + p ESI Full ms [150.00-2000.00]



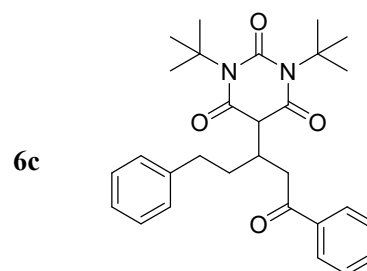
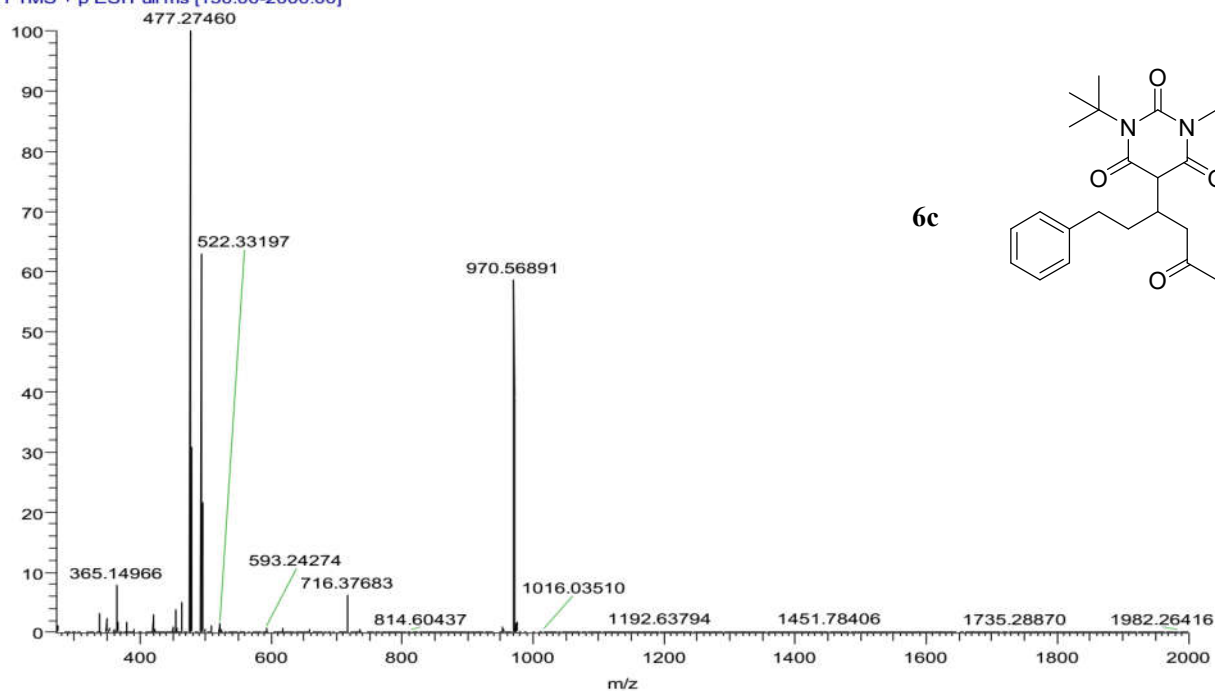
LY-3-27B: HRMS (ESI) m/z calcd for $C_{27}H_{39}N_2O_4^+$ (M+H)⁺ 455.29043, found 455.29041.

00161 #14 RT: 0.22 AV: 1 NL: 2.57E6
T: FTMS + p ESI Full ms [150.00-2000.00]



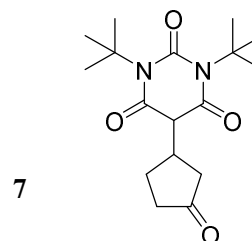
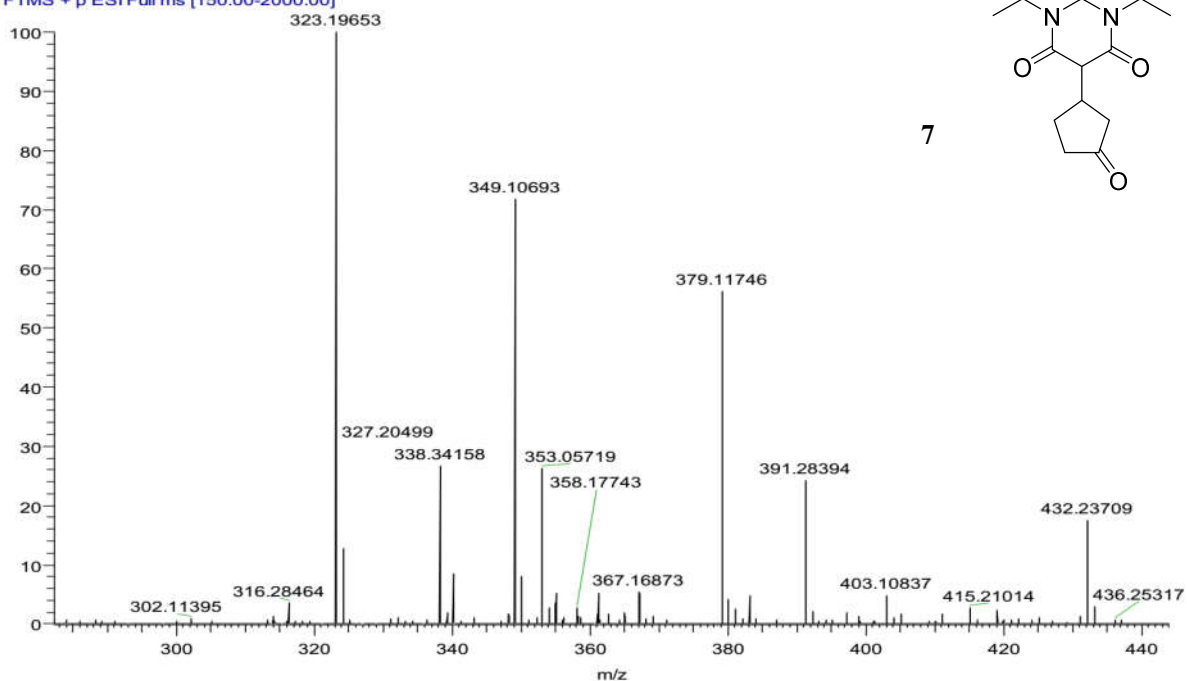
LY-3-37: HRMS (ESI) m/z calcd for $C_{29}H_{37}N_2O_4^+$ (M+H)⁺ 477.27478, found 477.27460.

00162 #10 RT: 0.16 AV: 1 NL: 8.33E6
T: FTMS + p ESI Full ms [150.00-2000.00]



LY-3-21A: HRMS (ESI) m/z calcd for $C_{17}H_{27}N_2O_4^+$ (M+H)⁺ 323.19653, found 323.19653.

00148 #3 RT: 0.05 AV: 1 NL: 3.08E5
T: FTMS + p ESI Full ms [150.00-2000.00]



Ly-3-76: HRMS (ESI) m/z calcd for $C_{28}H_{35}N_2O_4^+$ (M+H)⁺ 463.25913, found 463.25928.

70 #7 RT: 0.12 AV: 1 NL: 4.83E6
T: FTMS + p ESI Full ms [150.00-2000.00]

