

Supporting Information

Direct Trifluoromethylation of Imidazoheterocycles in a Recyclable Medium at Room Temperature

Xiao-Ming Ji,^{a,b} Liang Wei,^b Fan Chen^b and Ri-Yuan Tang^{*a,b}

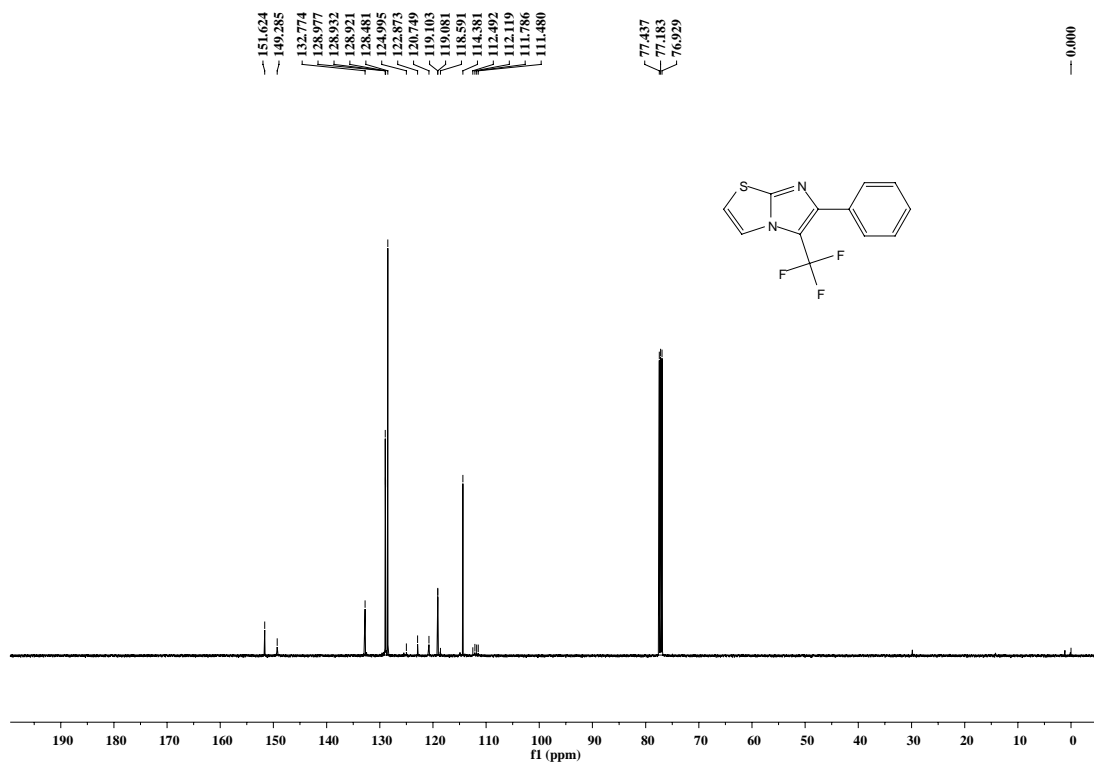
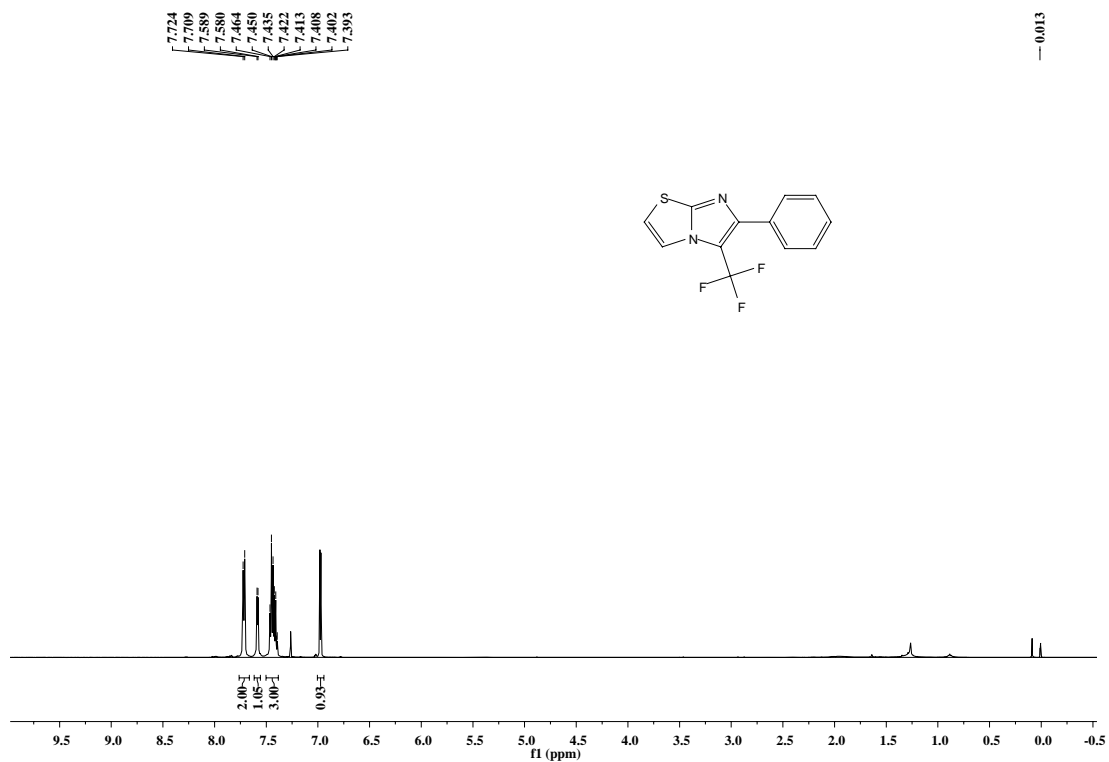
^a*College of Science, South China Agricultural University, Guangzhou 510642, China.*

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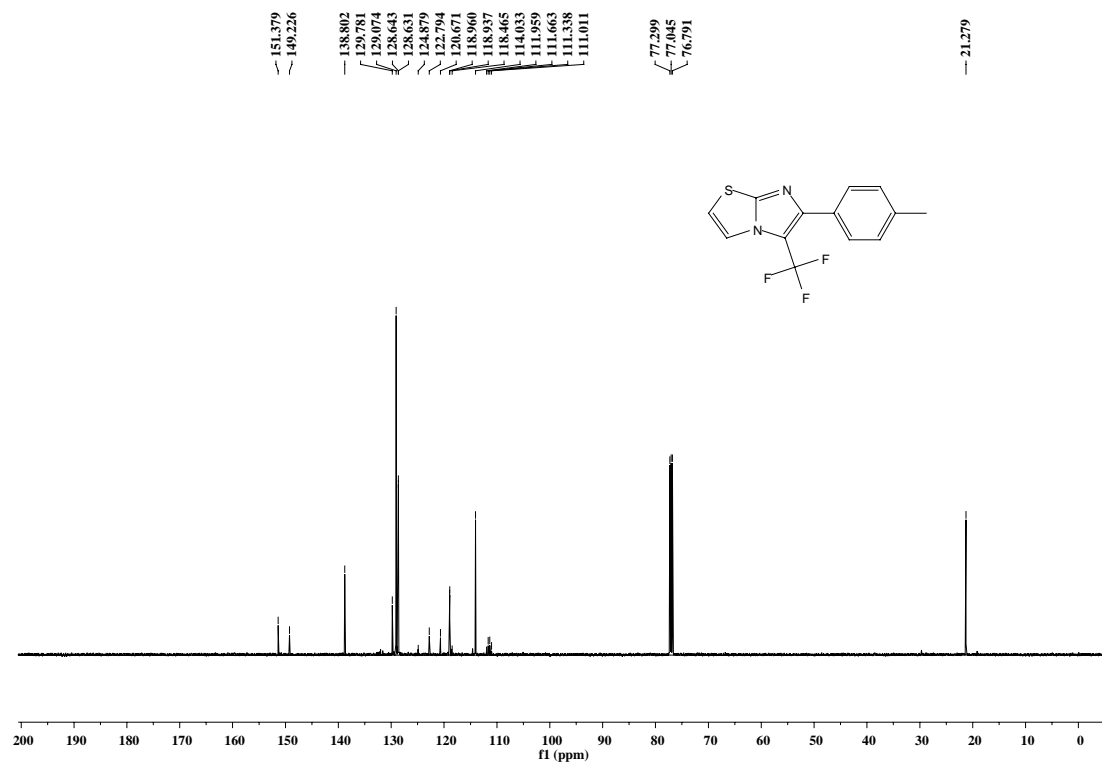
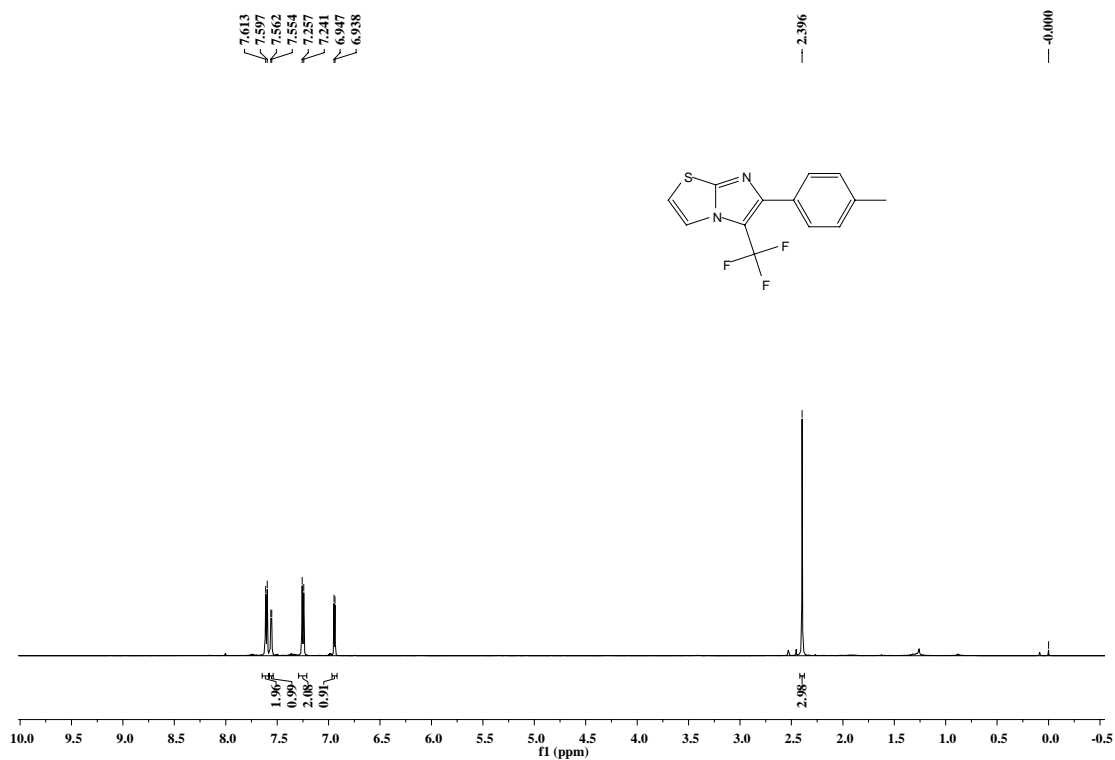
try@wzu.edu.cn

NMR Spectra for products

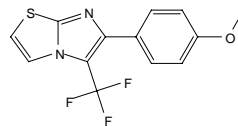
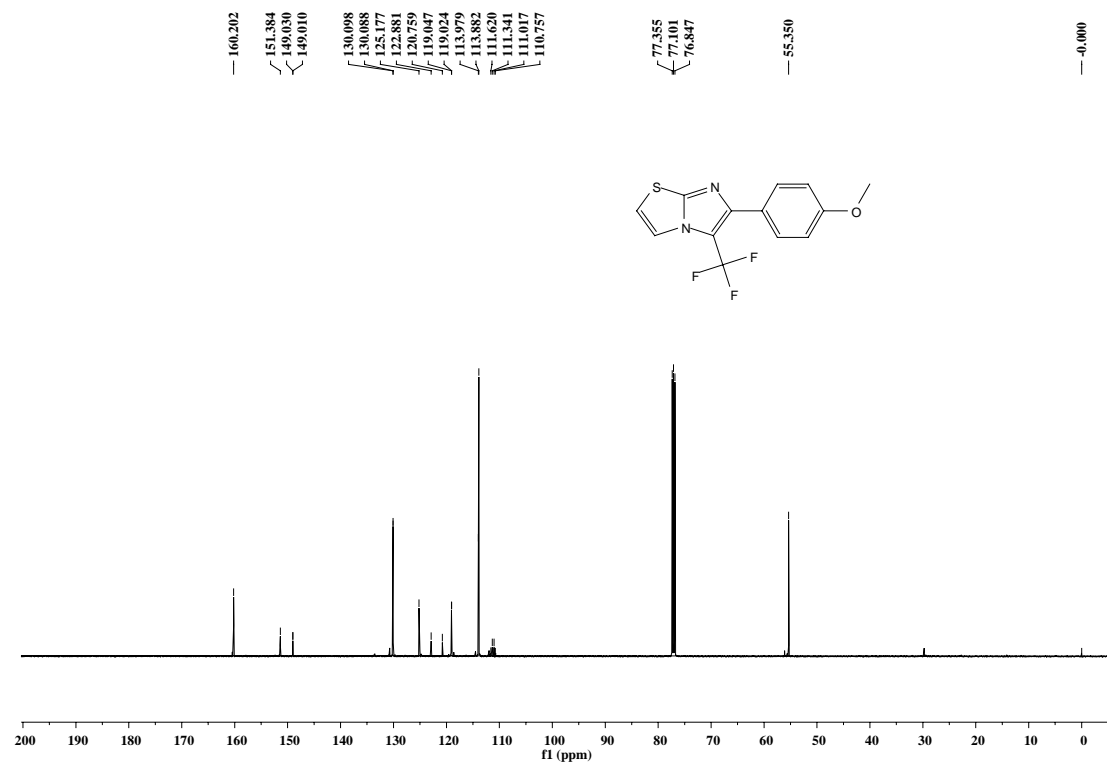
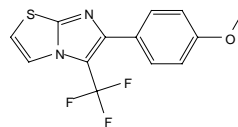
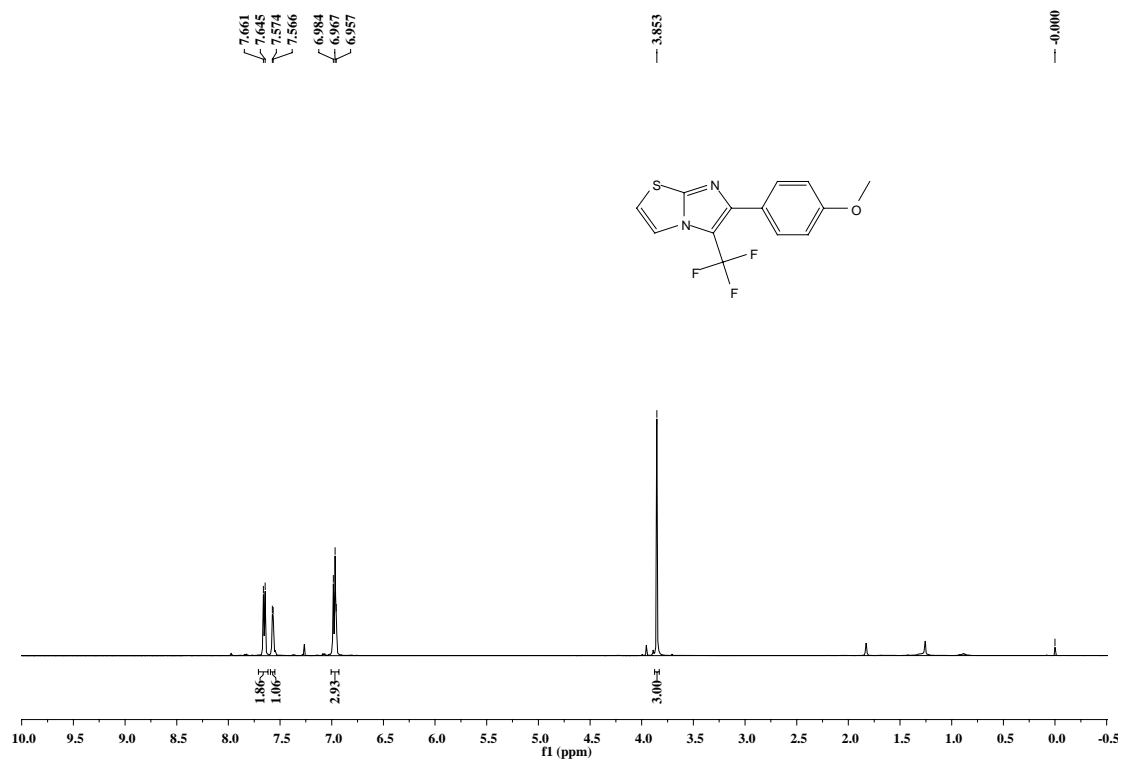
6-phenyl-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2a)



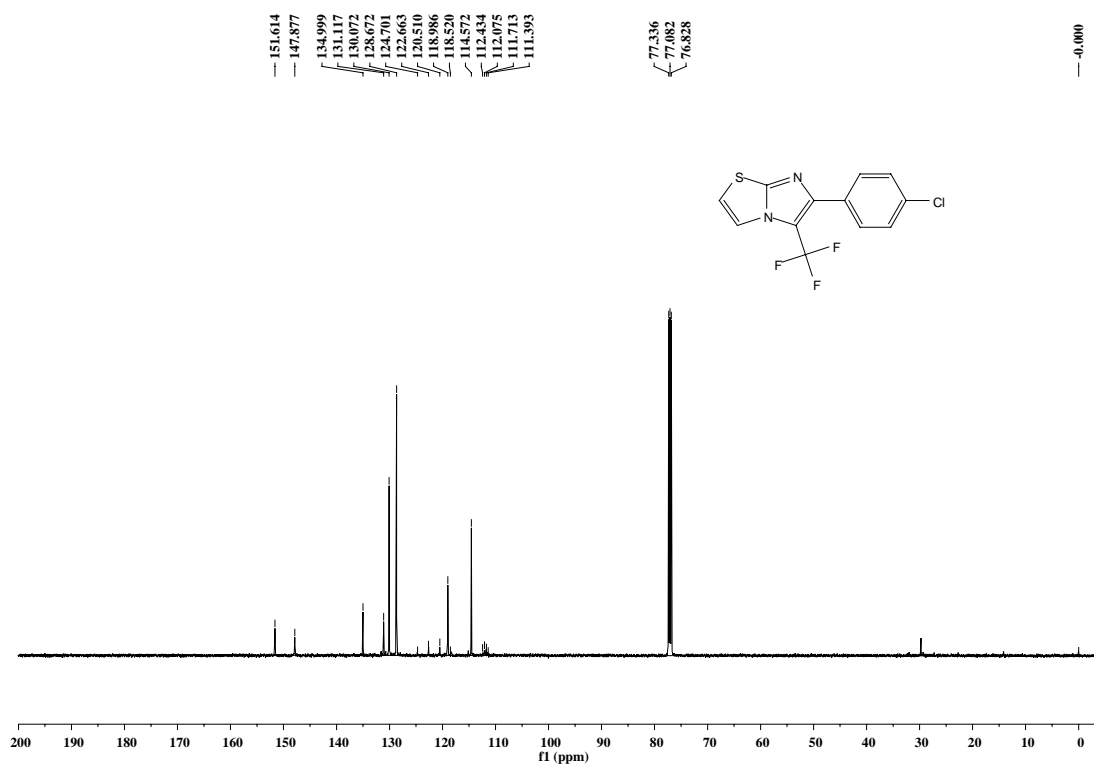
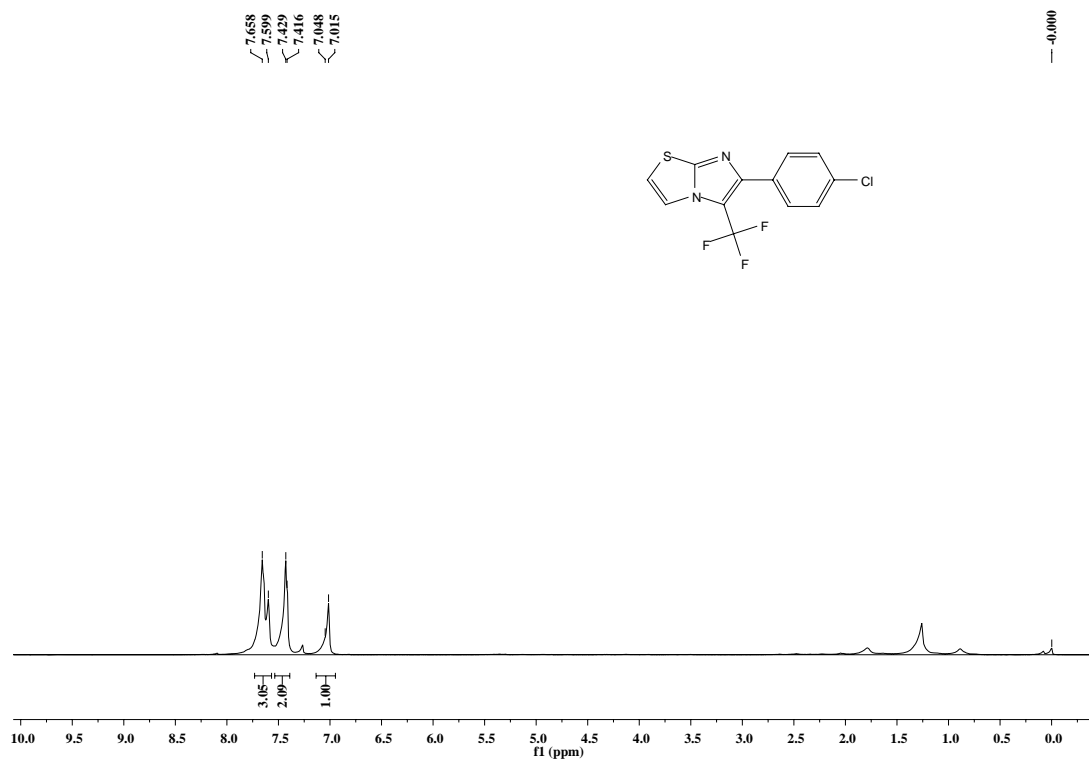
6-(*p*-tolyl)-5-(trifluoromethyl)imidazo[2,1-*b*]thiazole (2b)



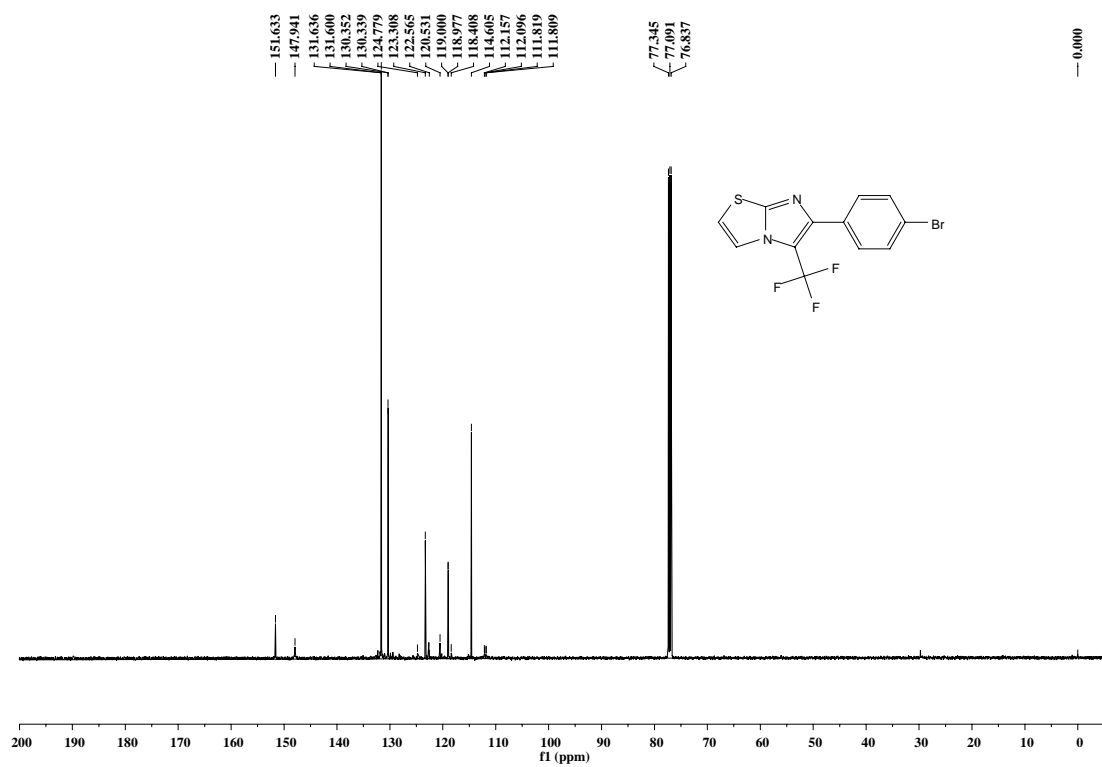
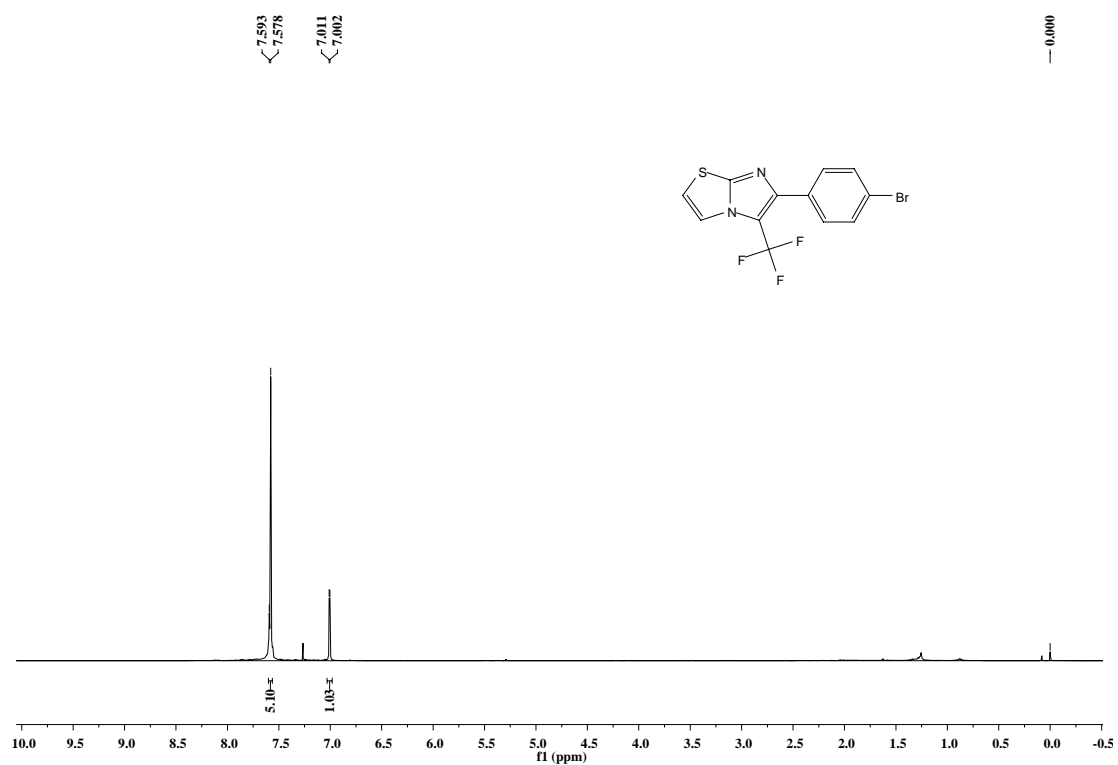
6-(4-methoxyphenyl)-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2c)



6-(4-chlorophenyl)-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2d)



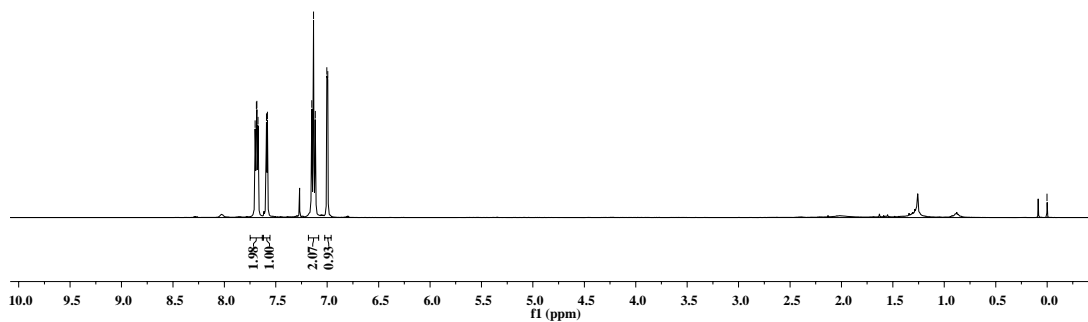
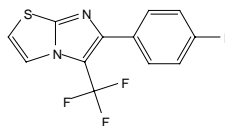
6-(4-bromophenyl)-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2e)



6-(4-fluorophenyl)-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2f)

7.700
7.689
7.683
7.672
7.591
7.582
7.150
7.133
7.115
7.003
6.994

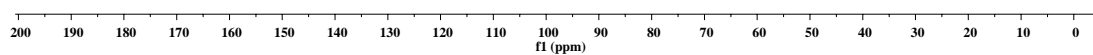
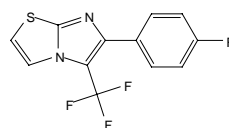
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164.212
162.235
151.538
148.107
136.699
136.687
136.632
136.620
128.793
128.767
124.807
122.684
120.561
118.976
118.954
118.438
115.527
115.354
114.408
112.241
111.904
111.573
111.177

77.336
77.082
76.827

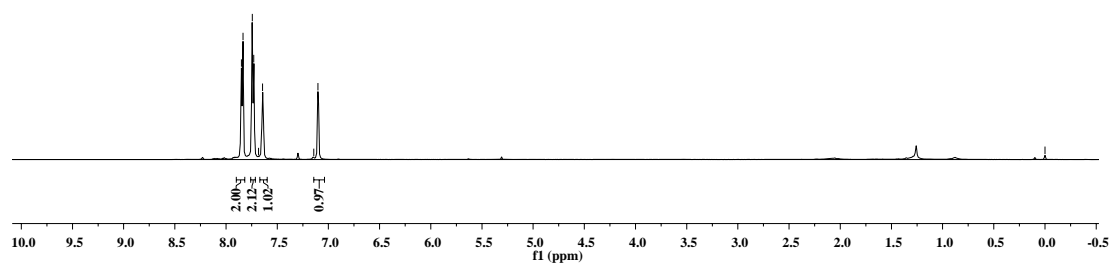
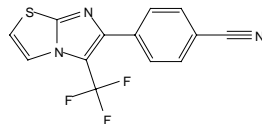
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4-(5-(trifluoromethyl)imidazo[2,1-b]thiazol-6-yl)benzotrile (2g)

7.850
7.835
7.744
7.729
7.682
7.144
7.102

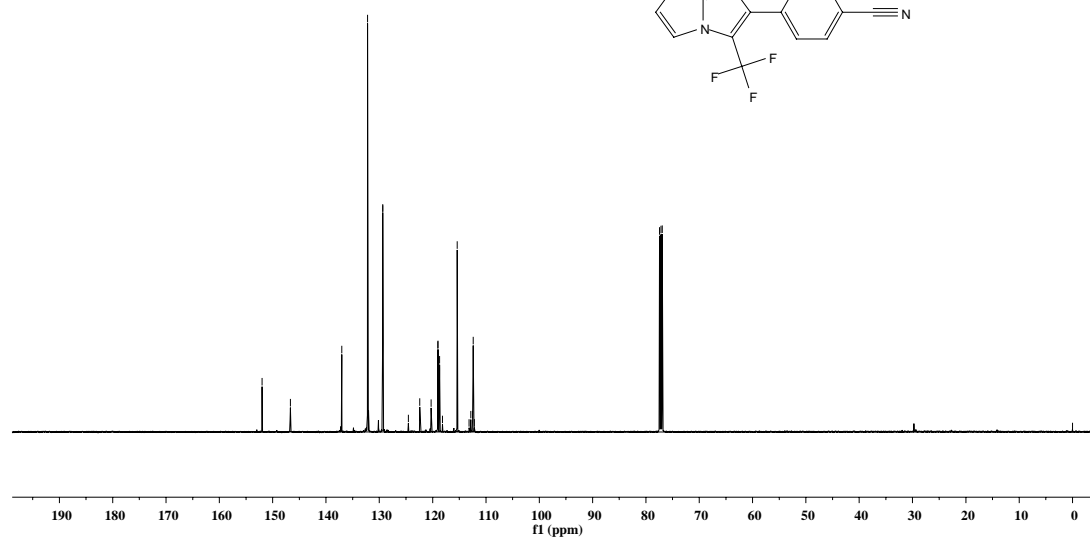
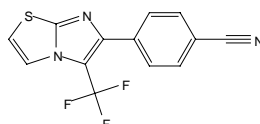
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151.989
146.834
132.197
129.356
129.345
124.540
122.415
120.289
119.011
118.989
118.696
118.164
115.400
113.157
112.829
112.501
112.386
112.173

77.439
77.184
76.930

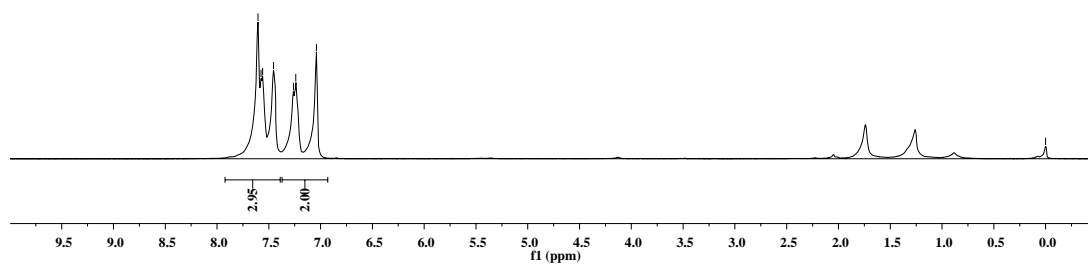
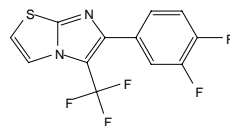
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6-(3,4-difluorophenyl)-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2h)

7.605
7.575
7.560
7.455
7.262
7.239
7.041

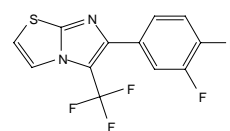
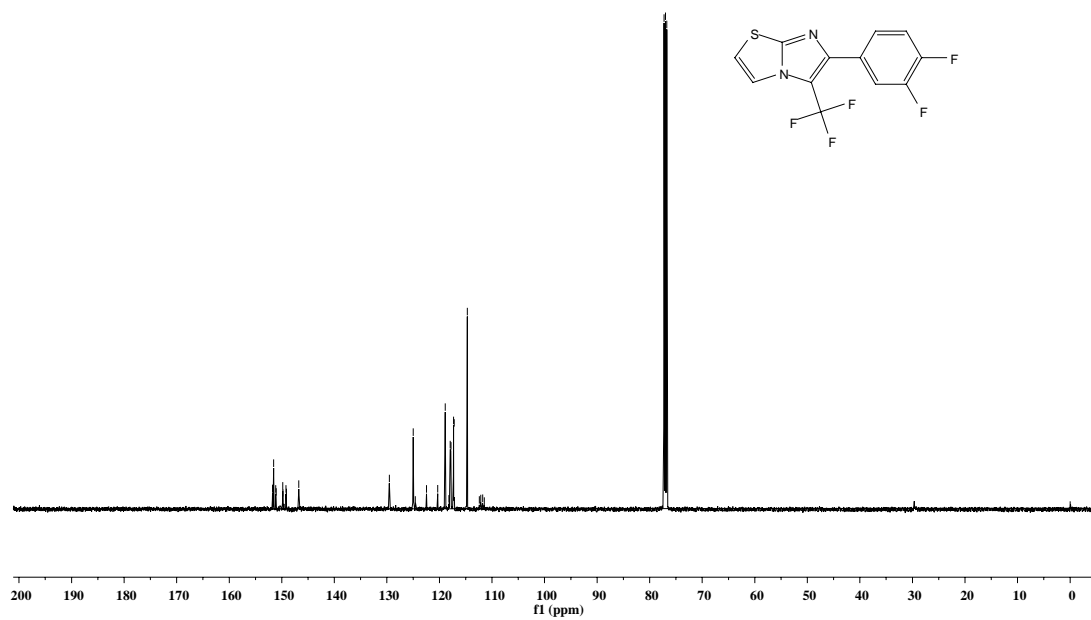
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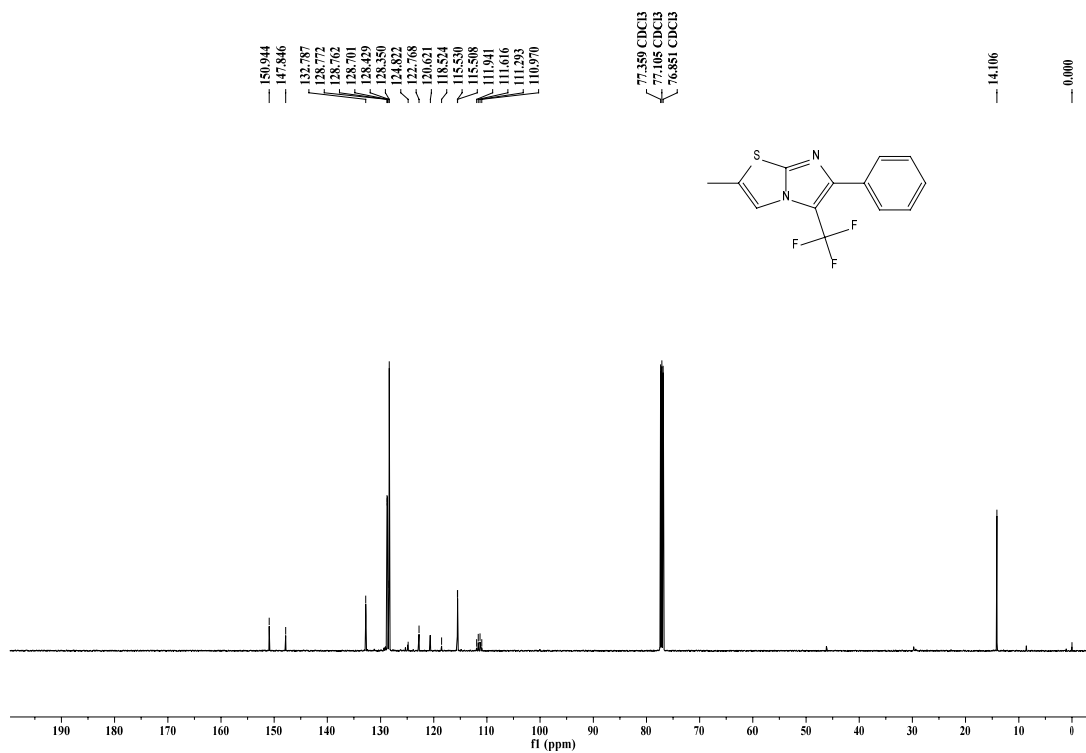
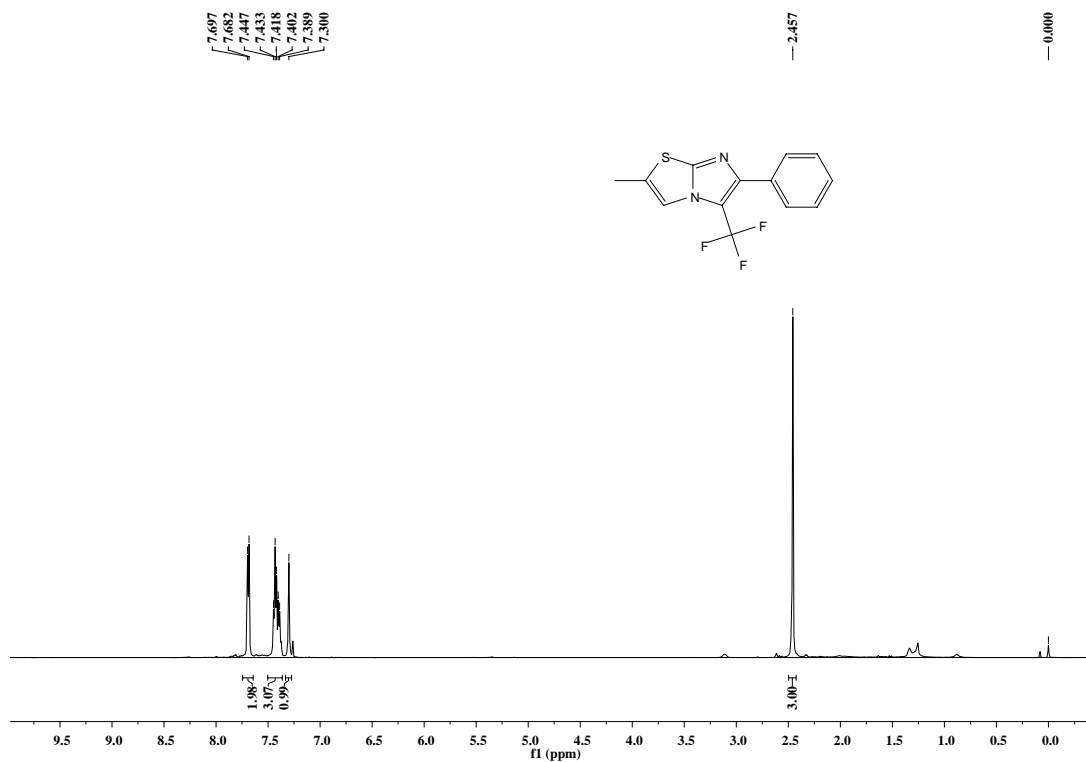
151.752
151.711
151.534
151.160
151.070
149.813
149.770
149.201
149.107
148.771
129.522
124.981
124.604
122.448
120.324
118.907
118.201
117.964
117.816
117.325
117.186
114.709
112.405
112.131
111.784
111.461

77.246
76.992
76.738

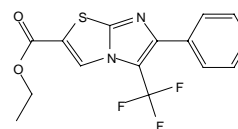
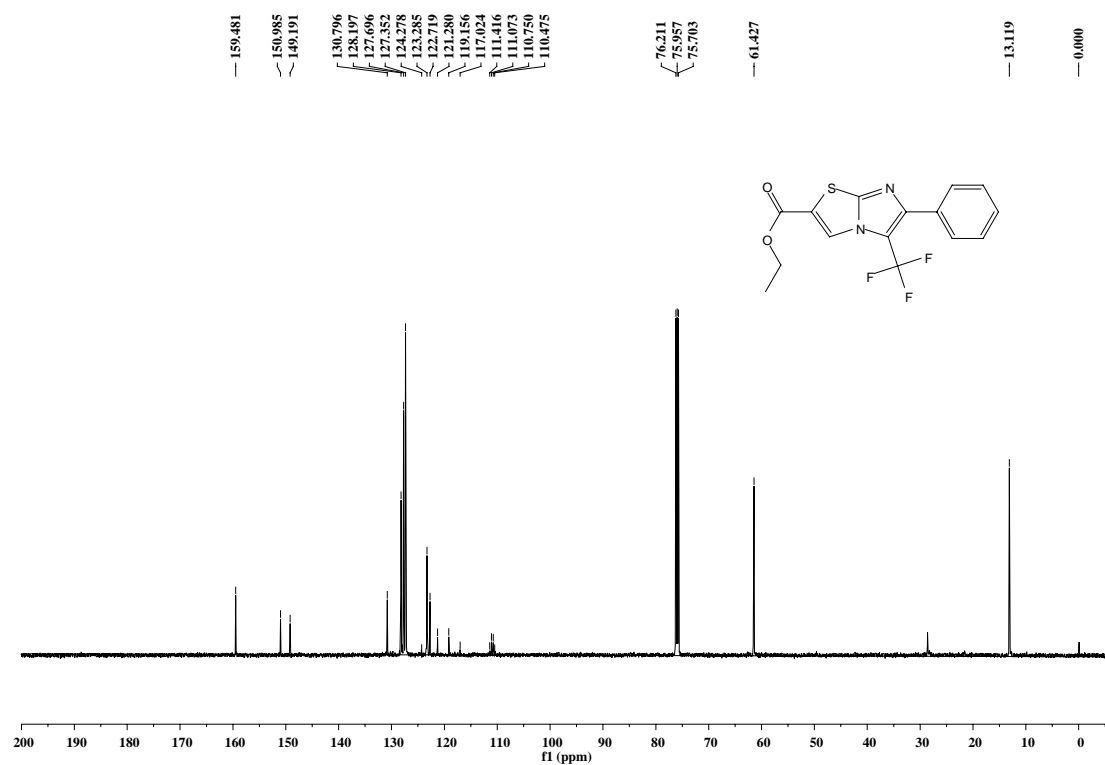
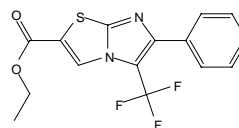
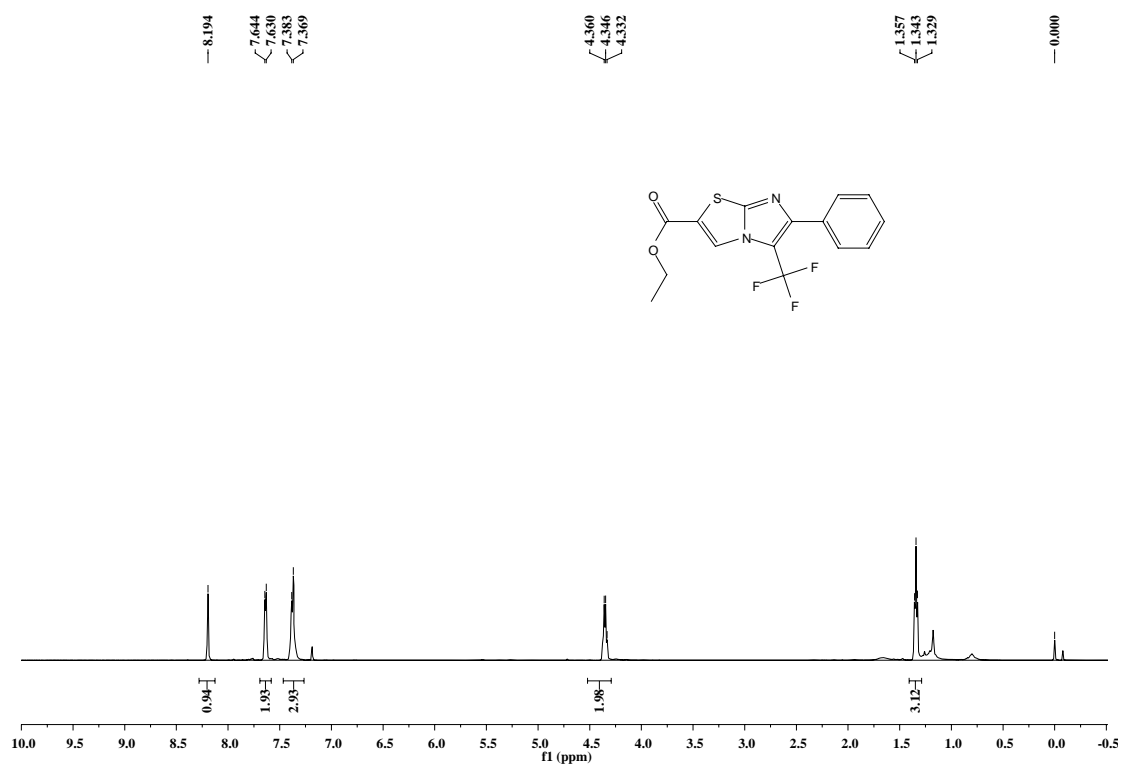
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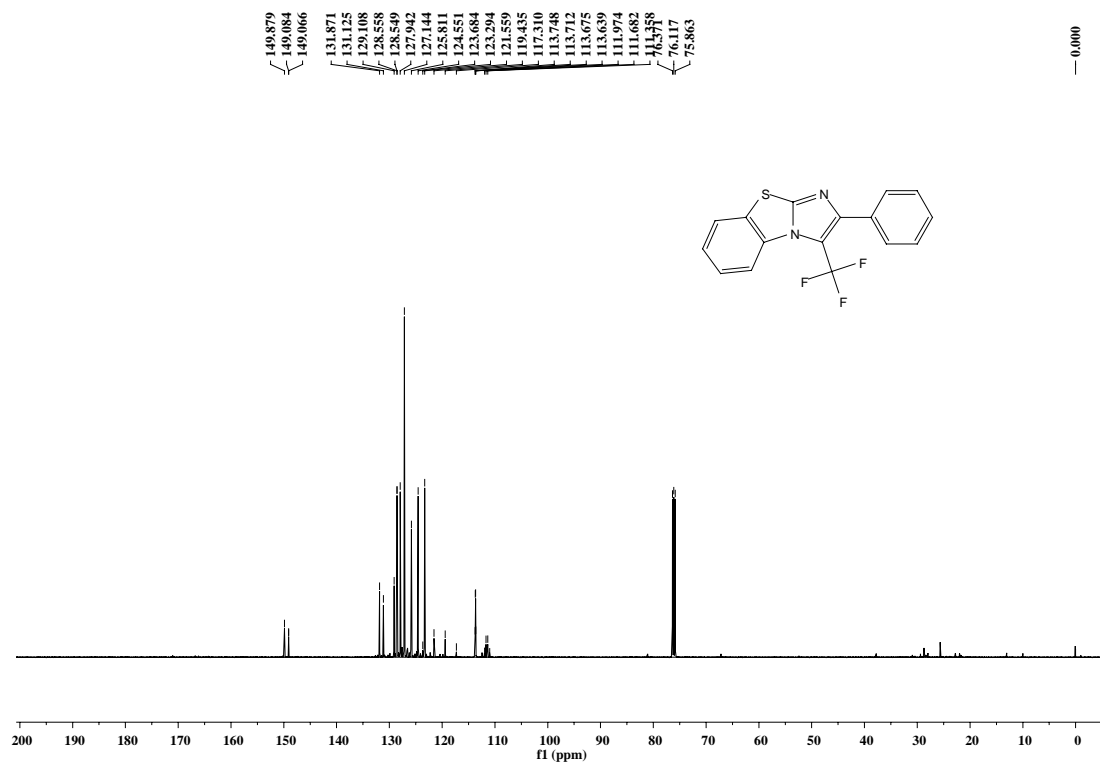
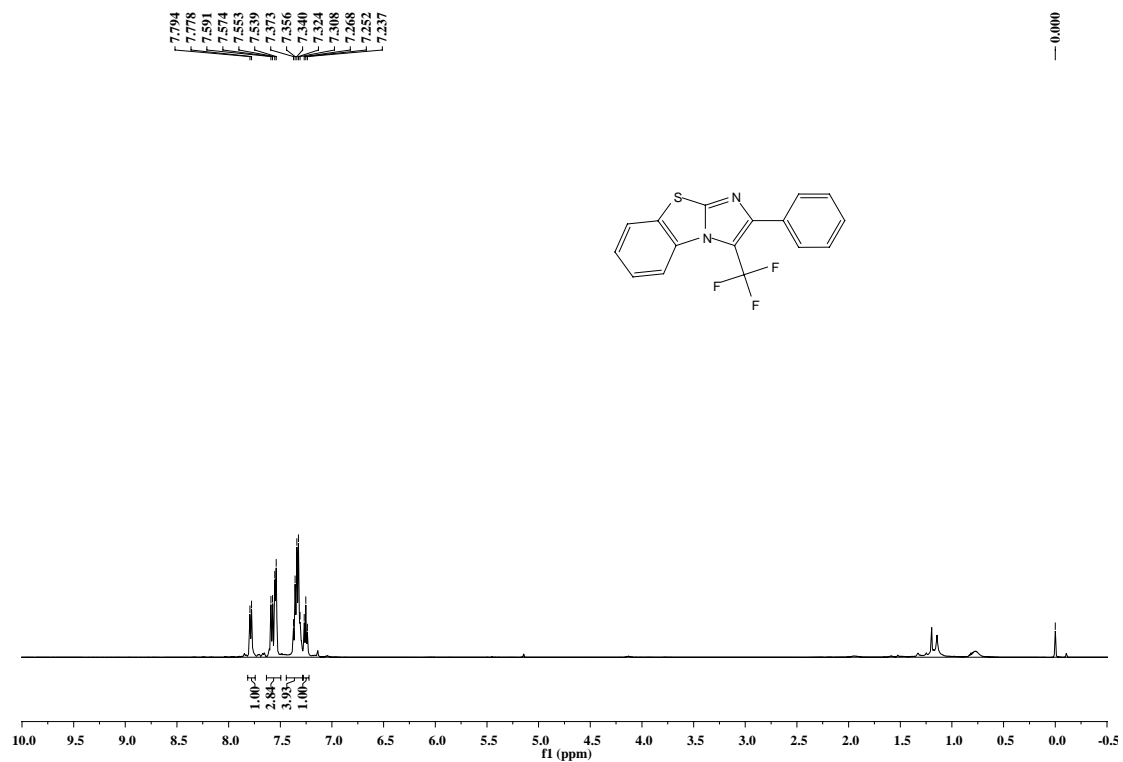
2-methyl-6-phenyl-5-(trifluoromethyl)imidazo[2,1-b]thiazole (2i)



Ethyl 6-phenyl-5-(trifluoromethyl)imidazo[2,1-b]thiazole-2-carboxylate (2j)



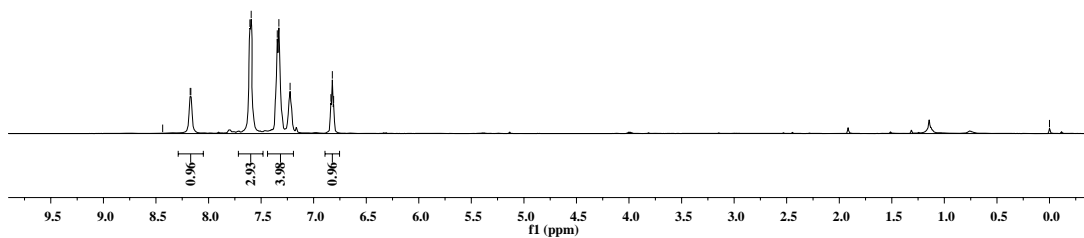
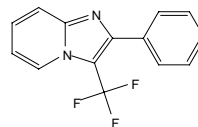
2-phenyl-3-(trifluoromethyl)benzo[d]imidazo[2,1-b]thiazole (2k)



2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2l)

8.436
8.174
8.168
7.606
7.595
7.546
7.331
7.224
6.835
6.823
6.810

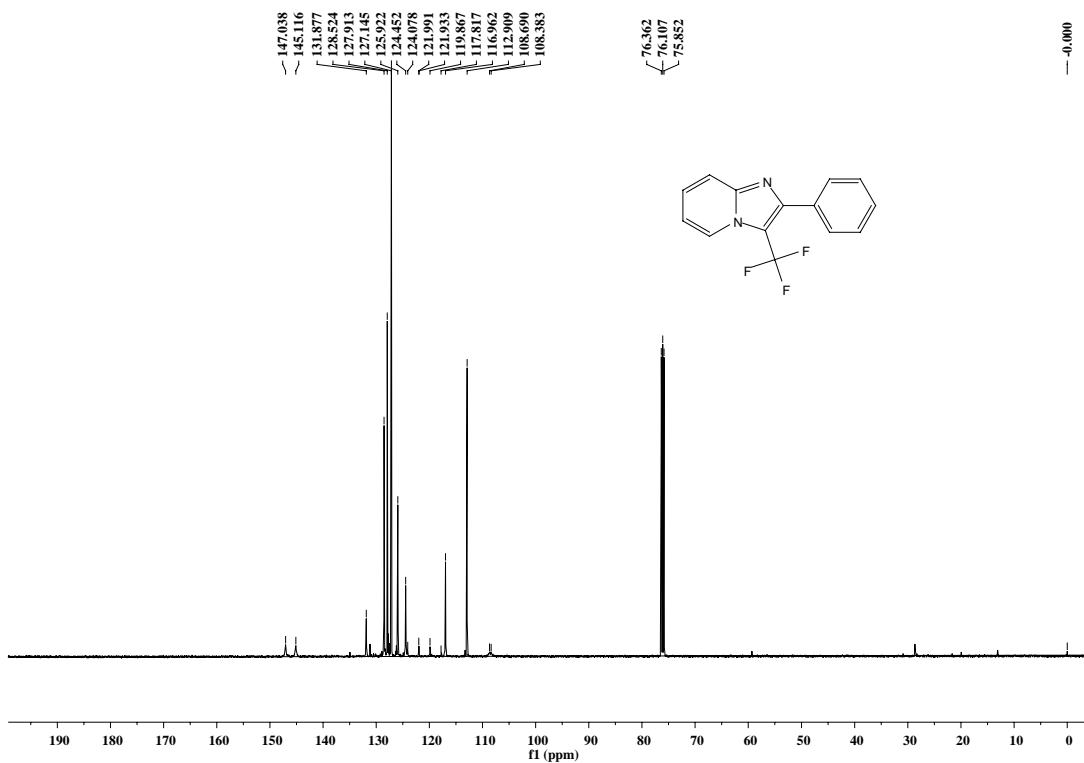
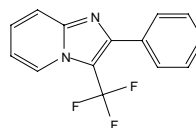
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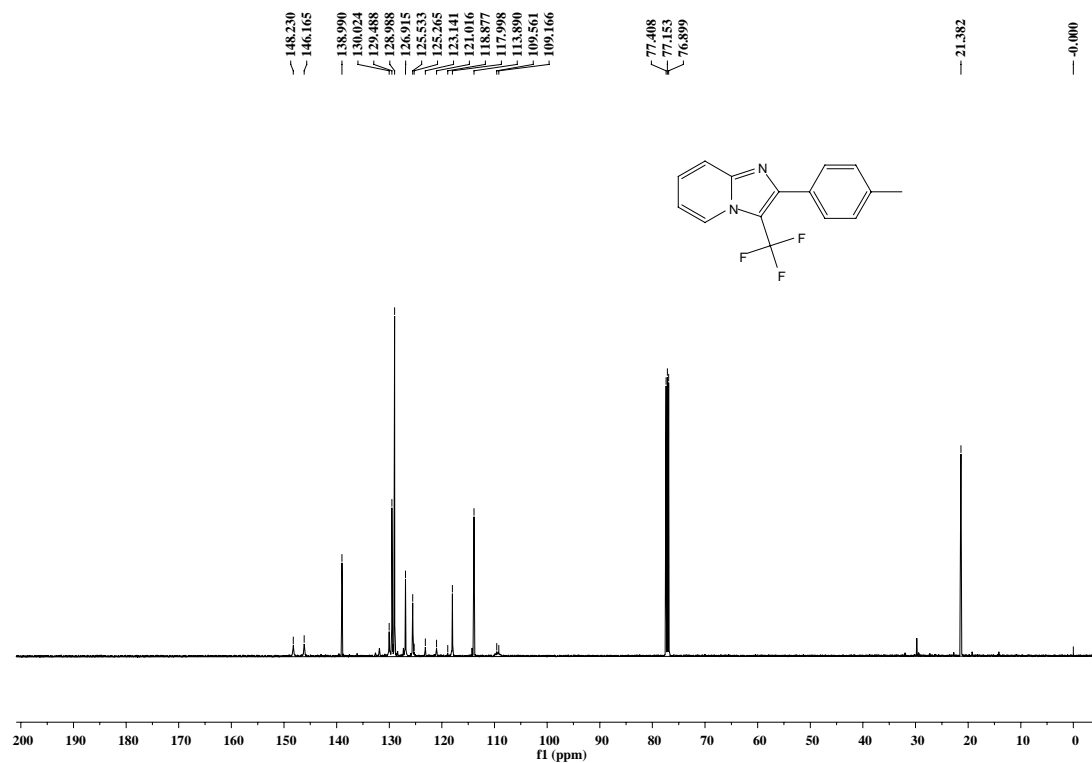
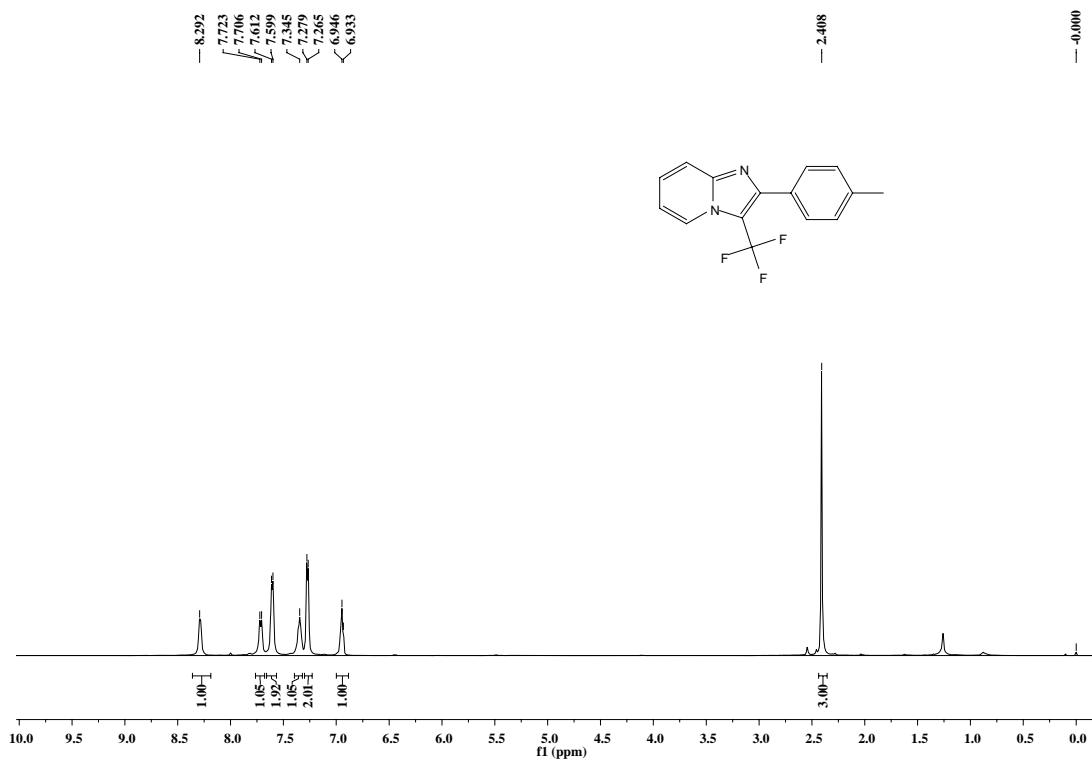
147.038
145.116
131.877
128.524
127.913
127.145
125.922
124.452
124.078
121.991
121.933
119.867
117.817
116.962
112.909
108.690
108.383

76.362
76.107
75.852

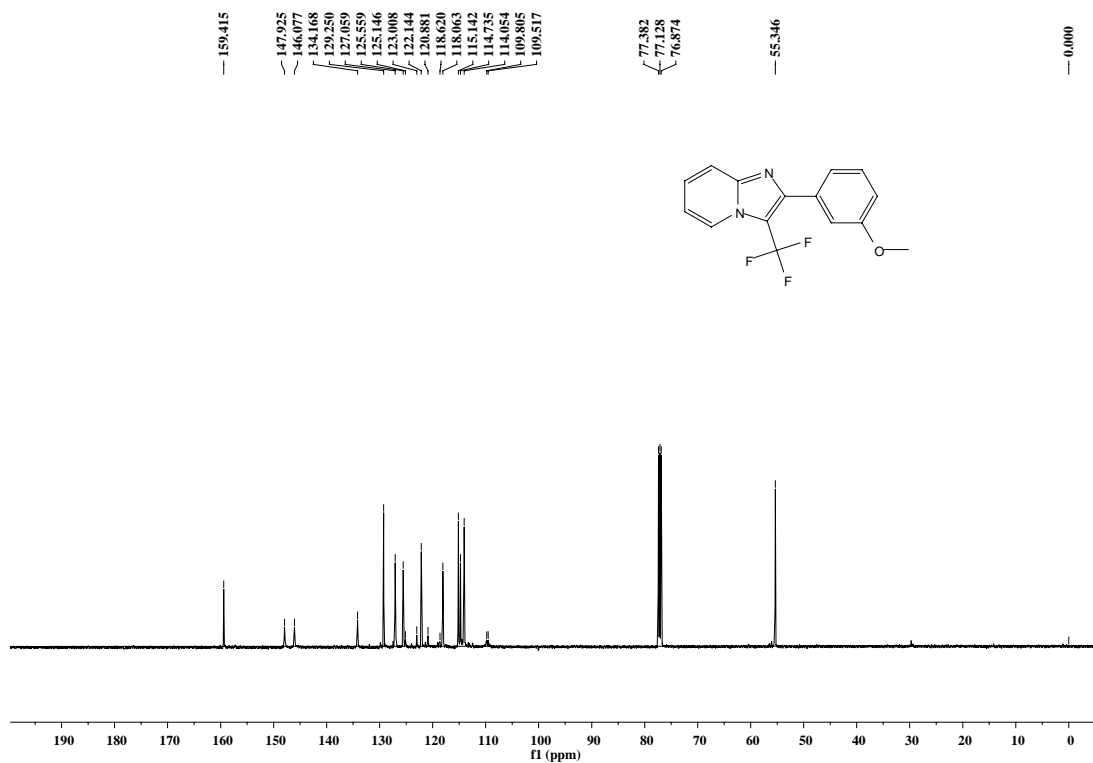
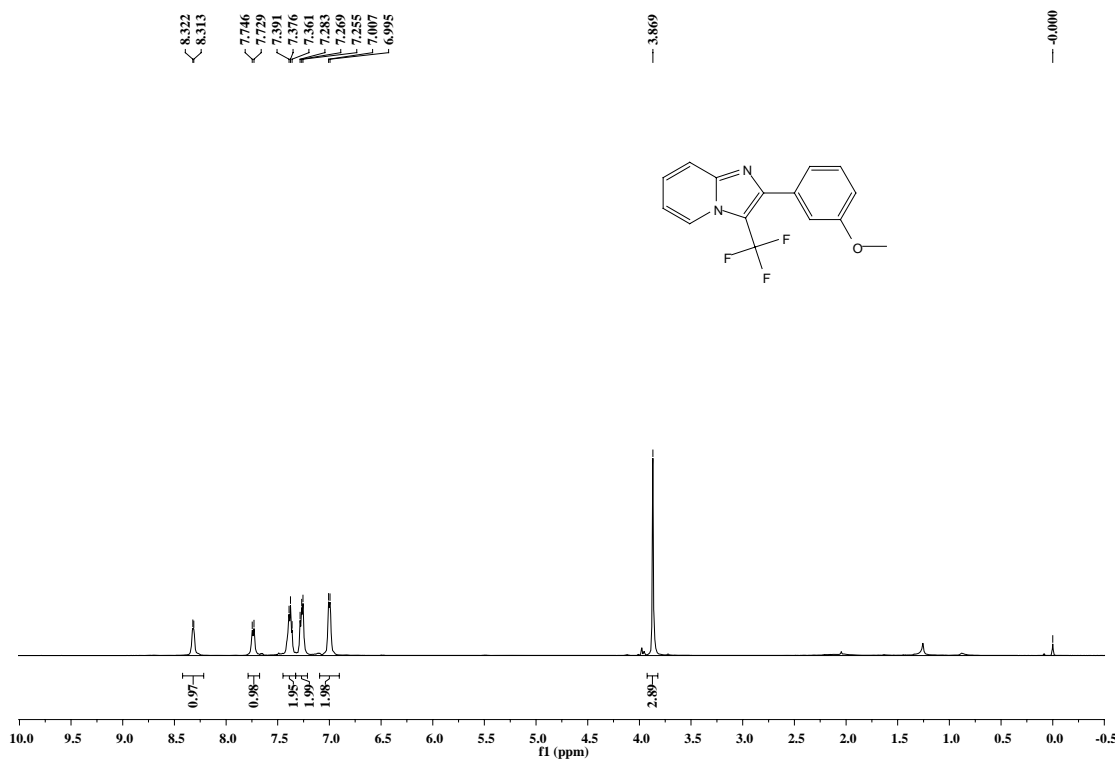
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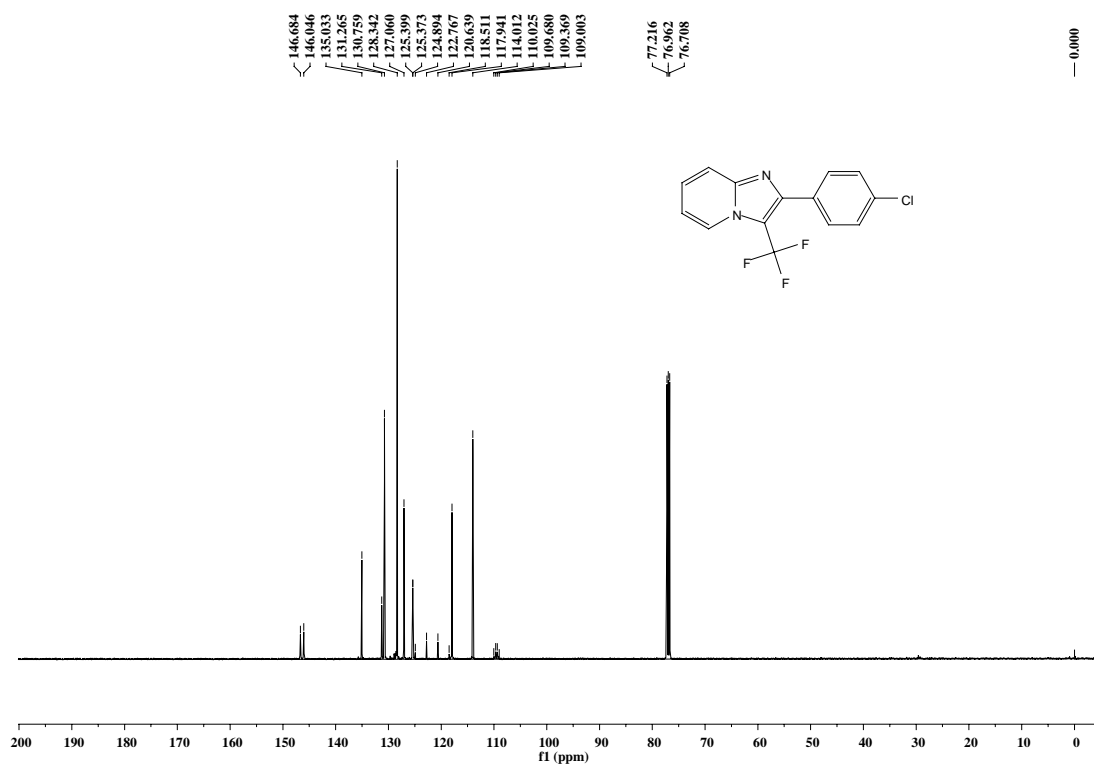
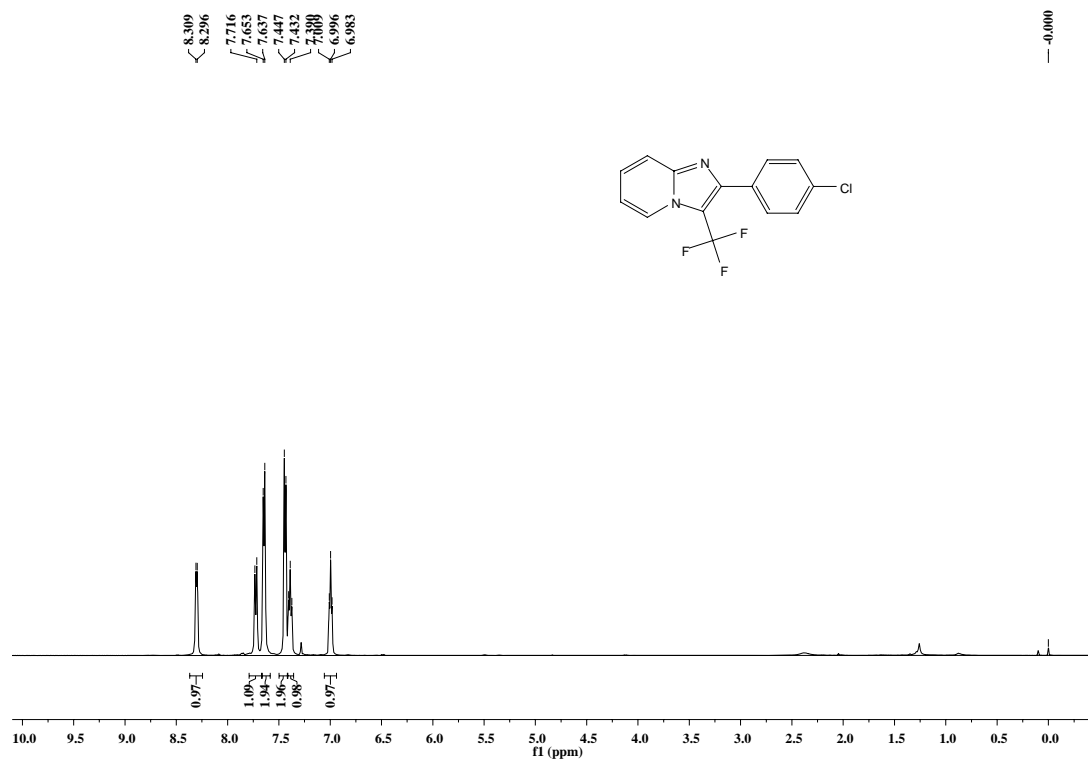
2-(*p*-tolyl)-3-(trifluoromethyl)imidazo[1,2-*a*]pyridine (2m)



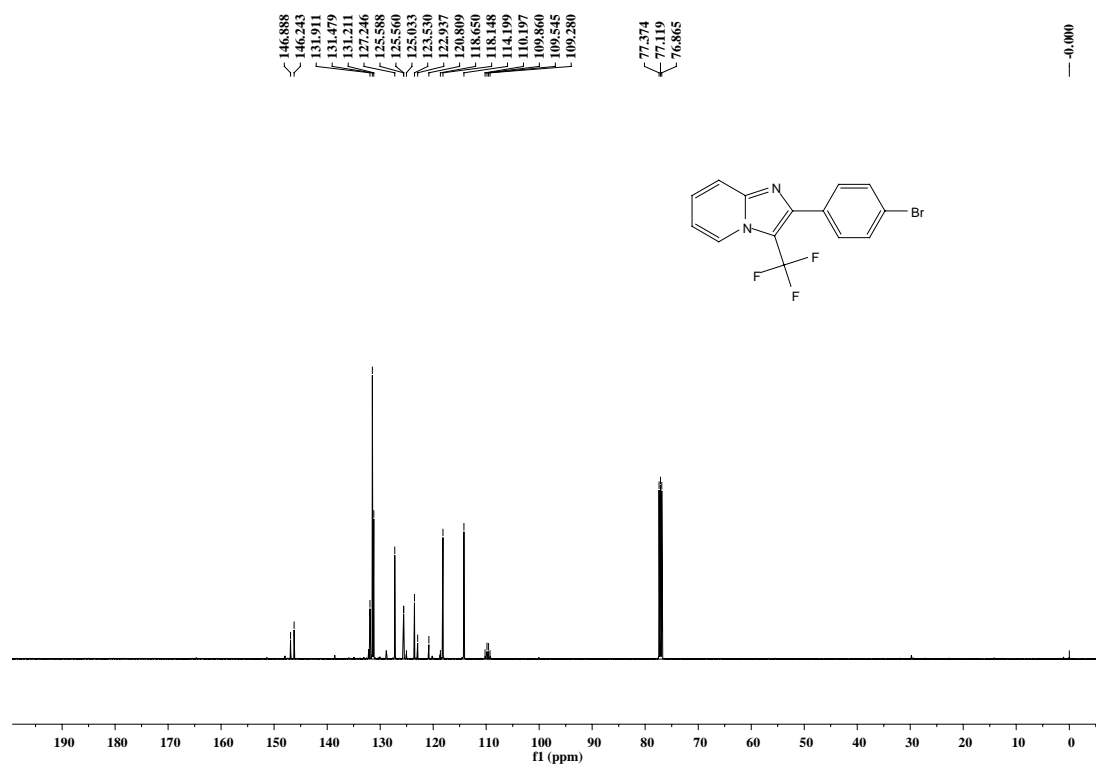
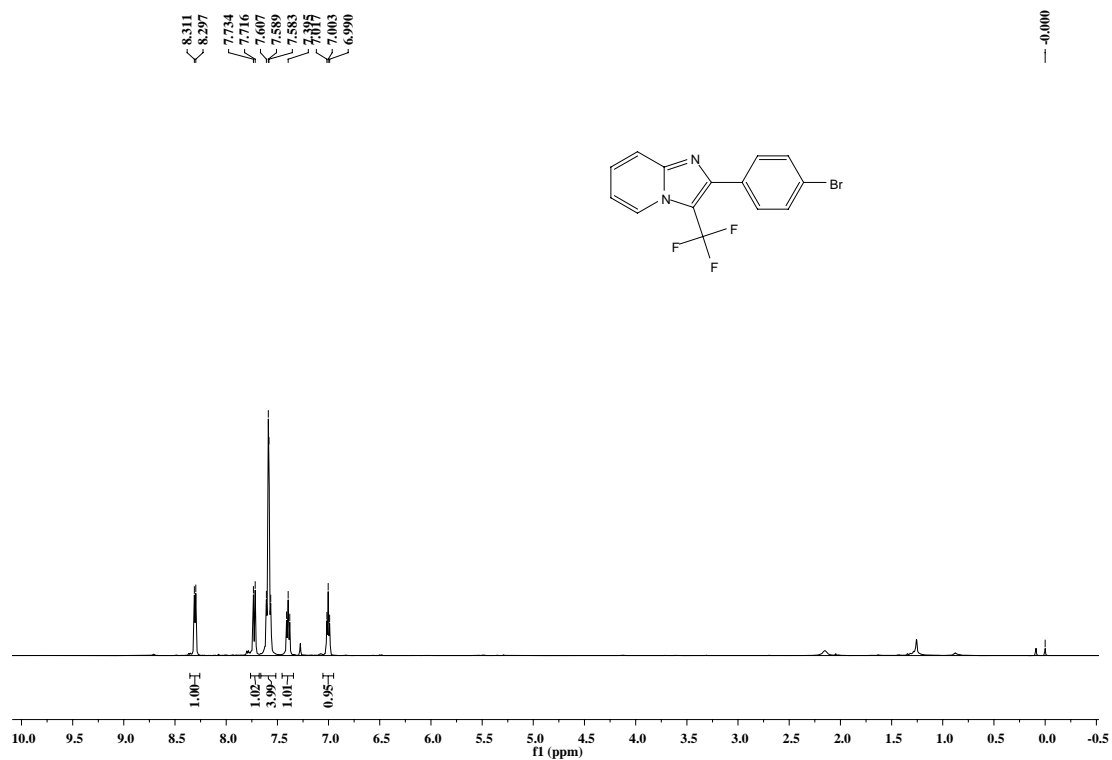
2-(3-methoxyphenyl)-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2n)



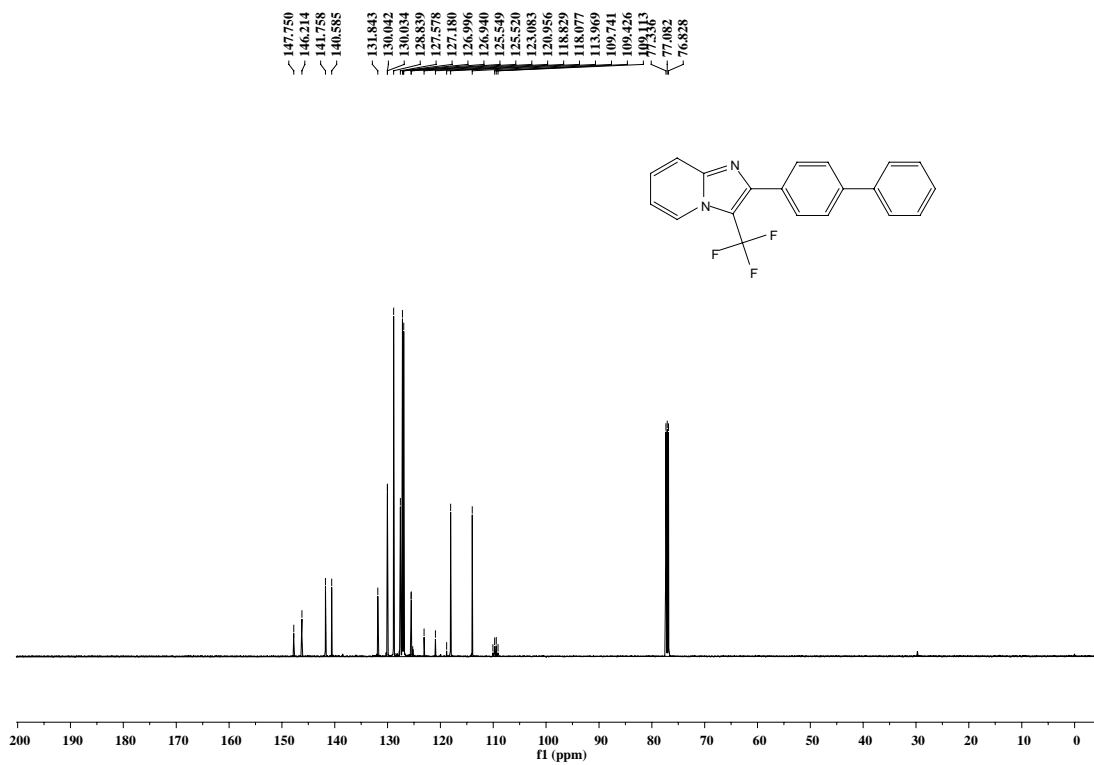
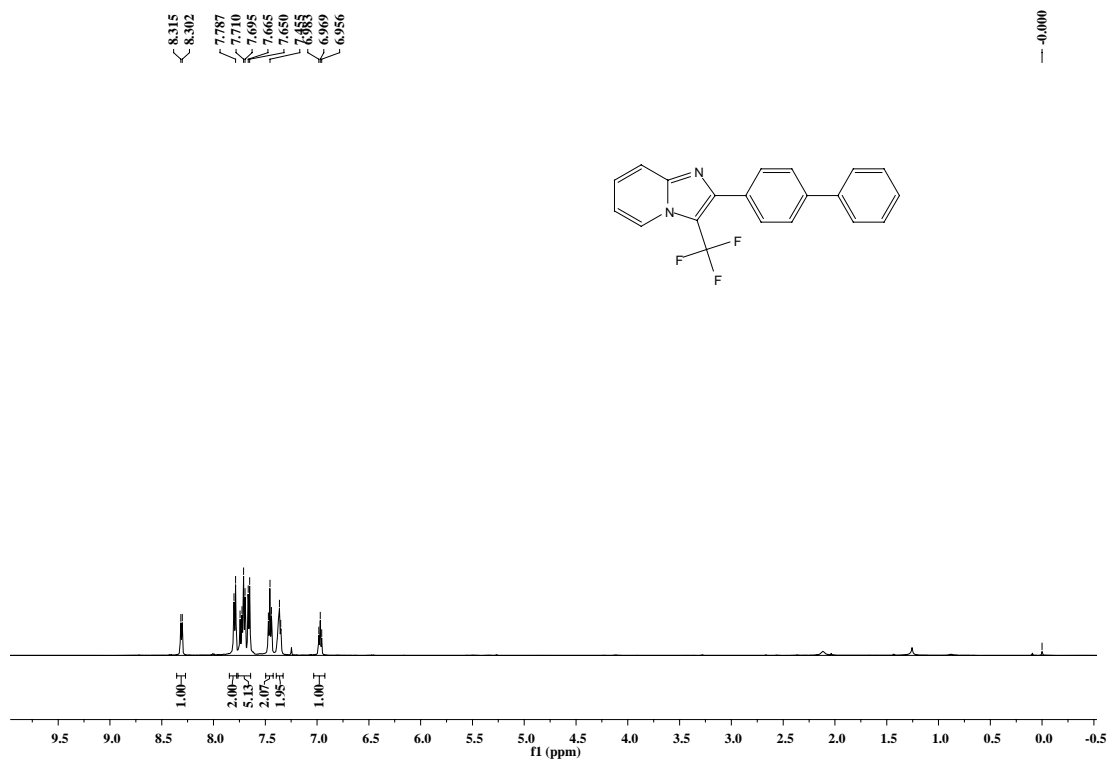
2-(4-chlorophenyl)-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2o)



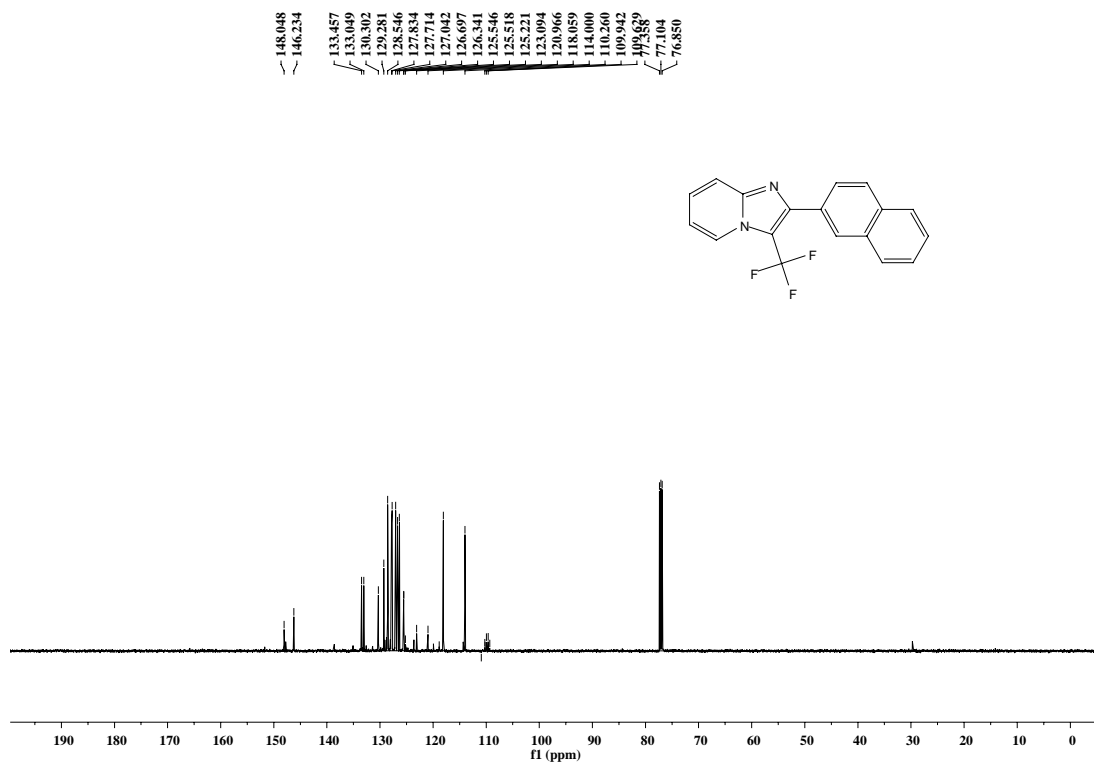
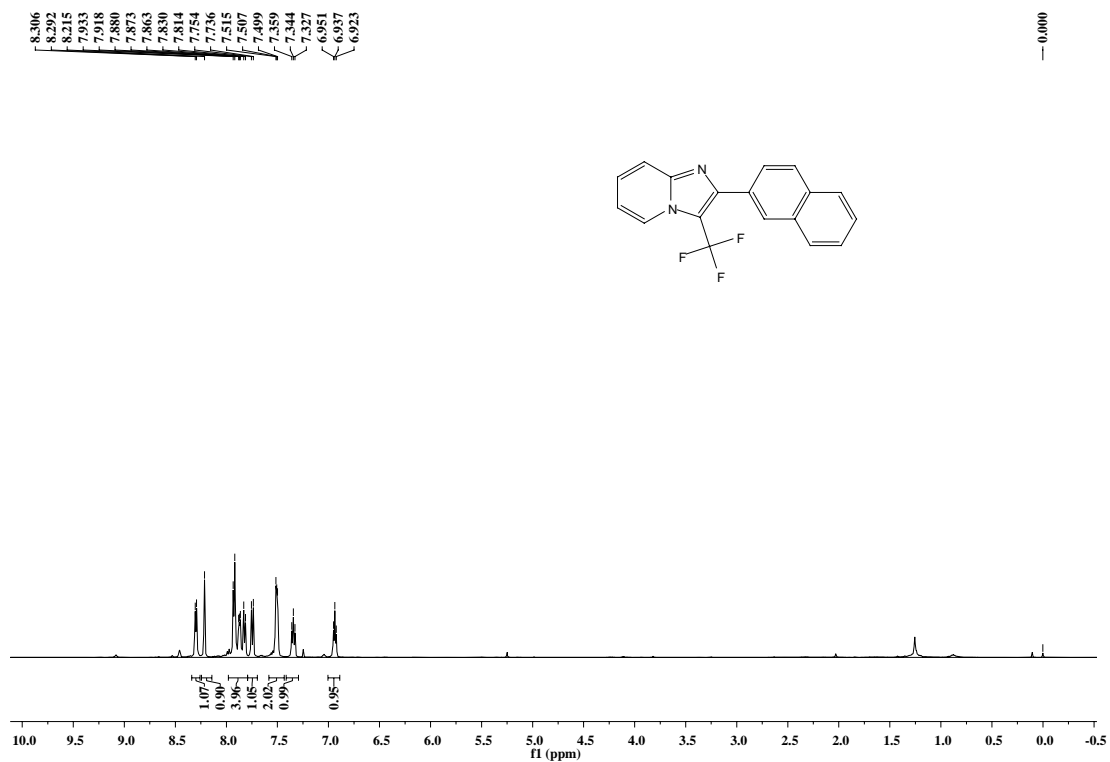
2-(4-bromophenyl)-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2p)



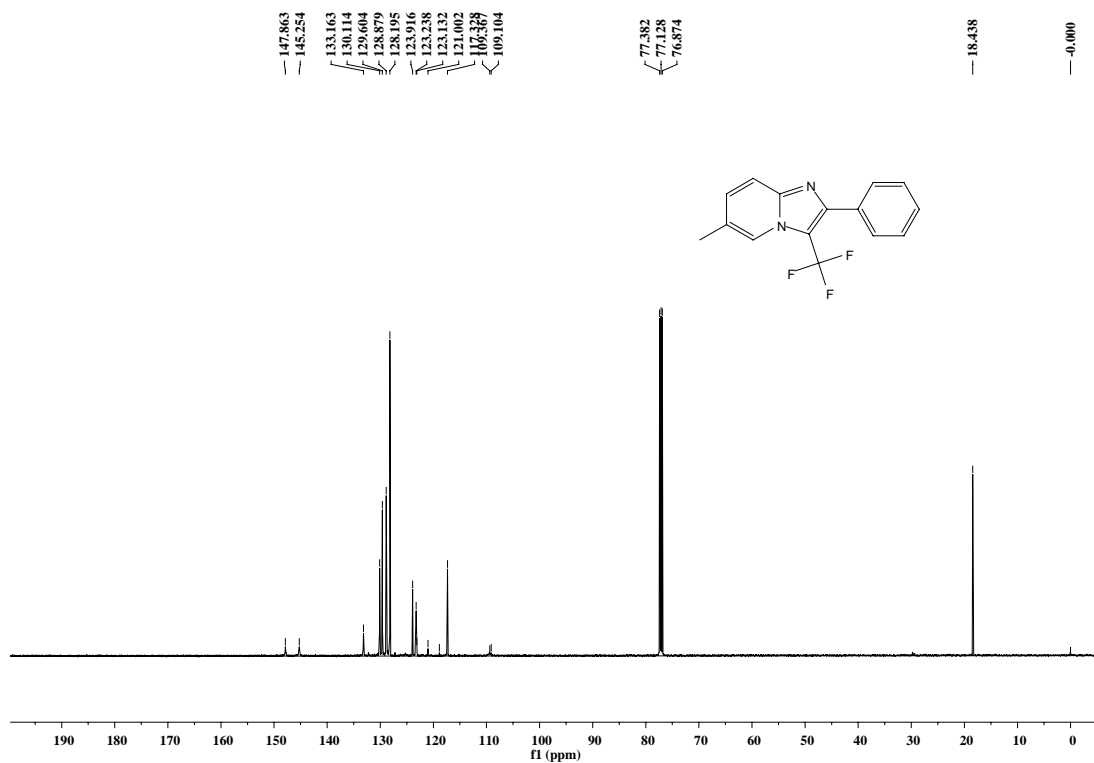
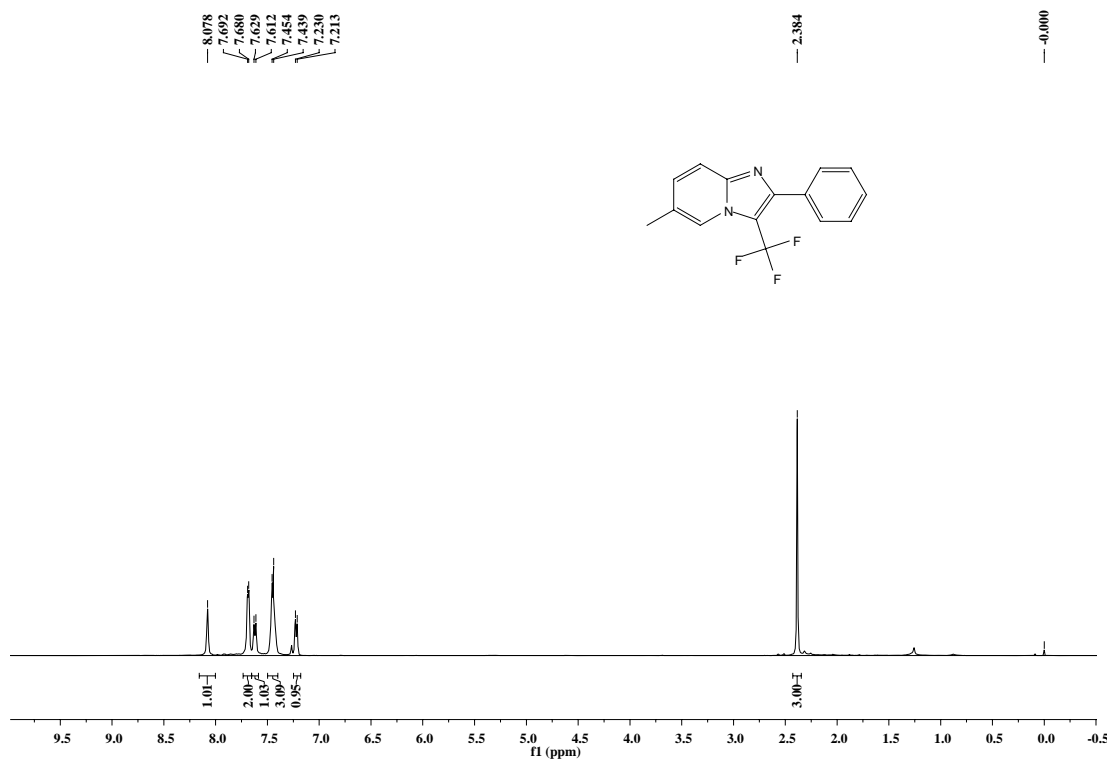
2-([1,1'-biphenyl]-4-yl)-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2q)



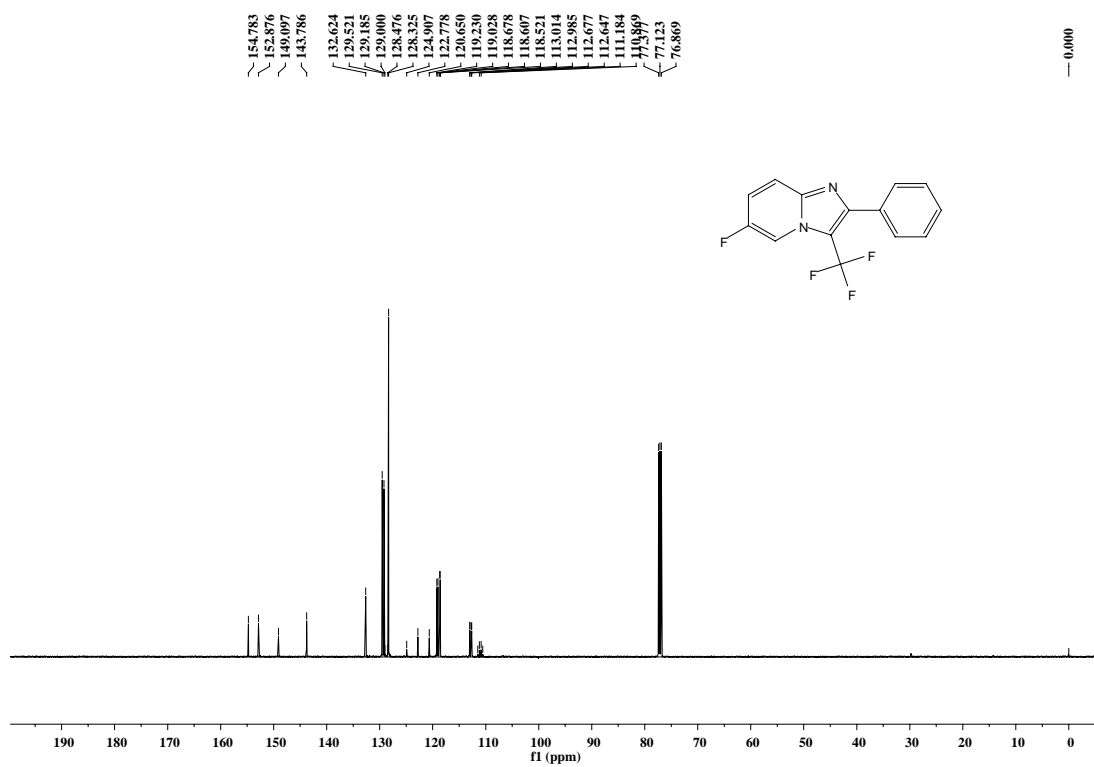
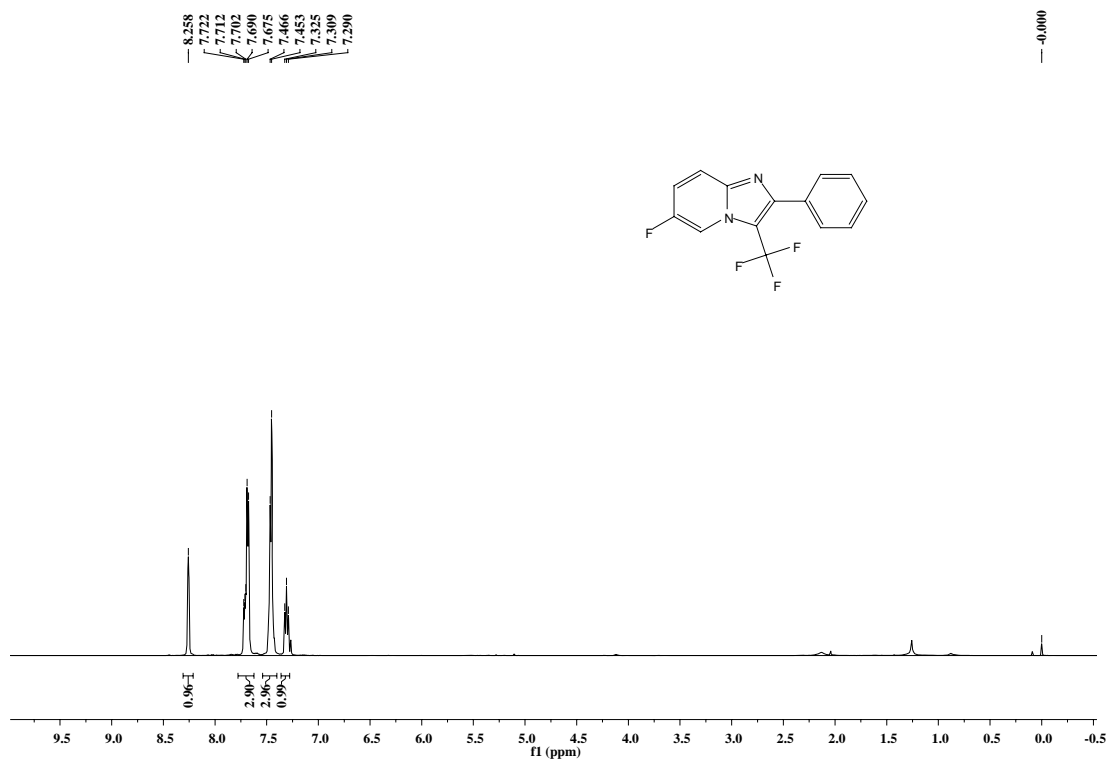
2-(naphthalen-2-yl)-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2r)



6-methyl-2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2s)



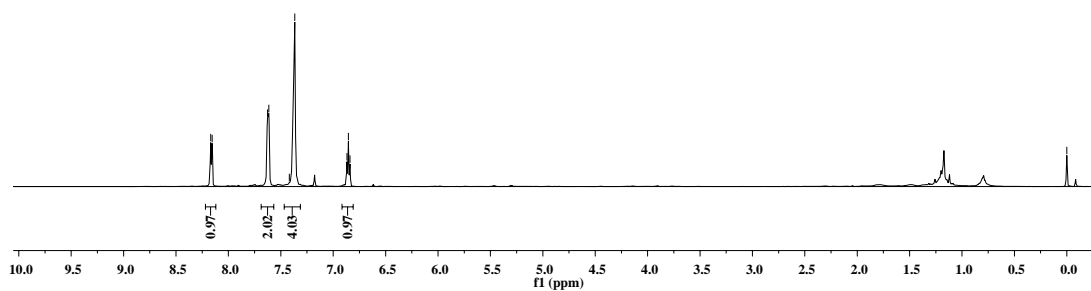
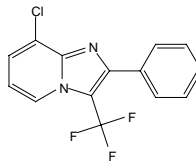
6-fluoro-2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2t)



8-chloro-2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2u)

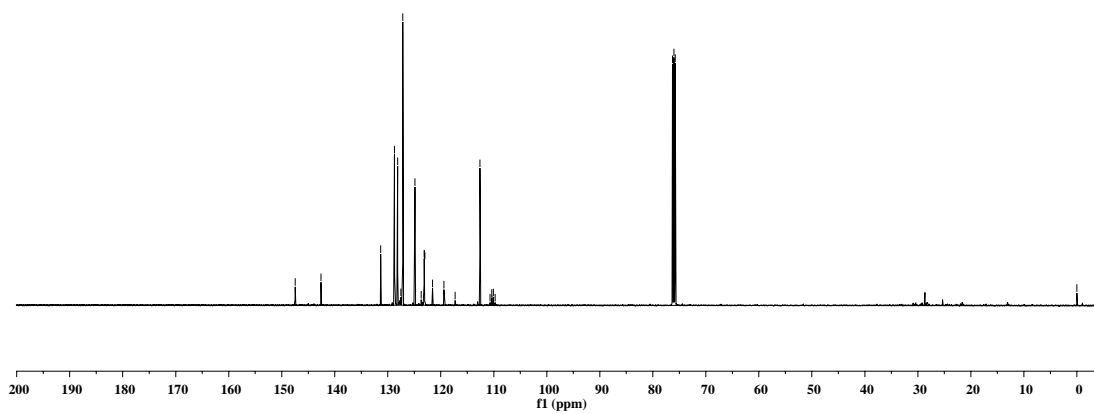
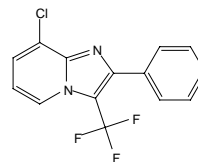
8.169
8.155
7.627
7.615
7.419
7.367
6.869
6.855
6.840

-0.000

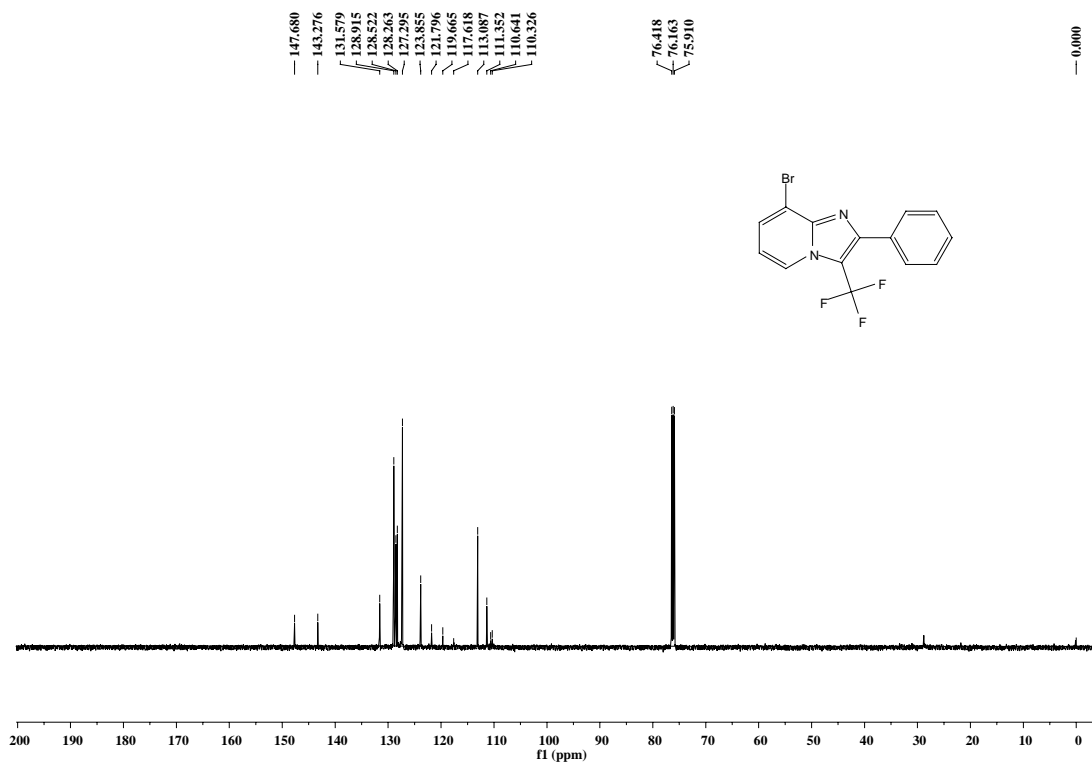
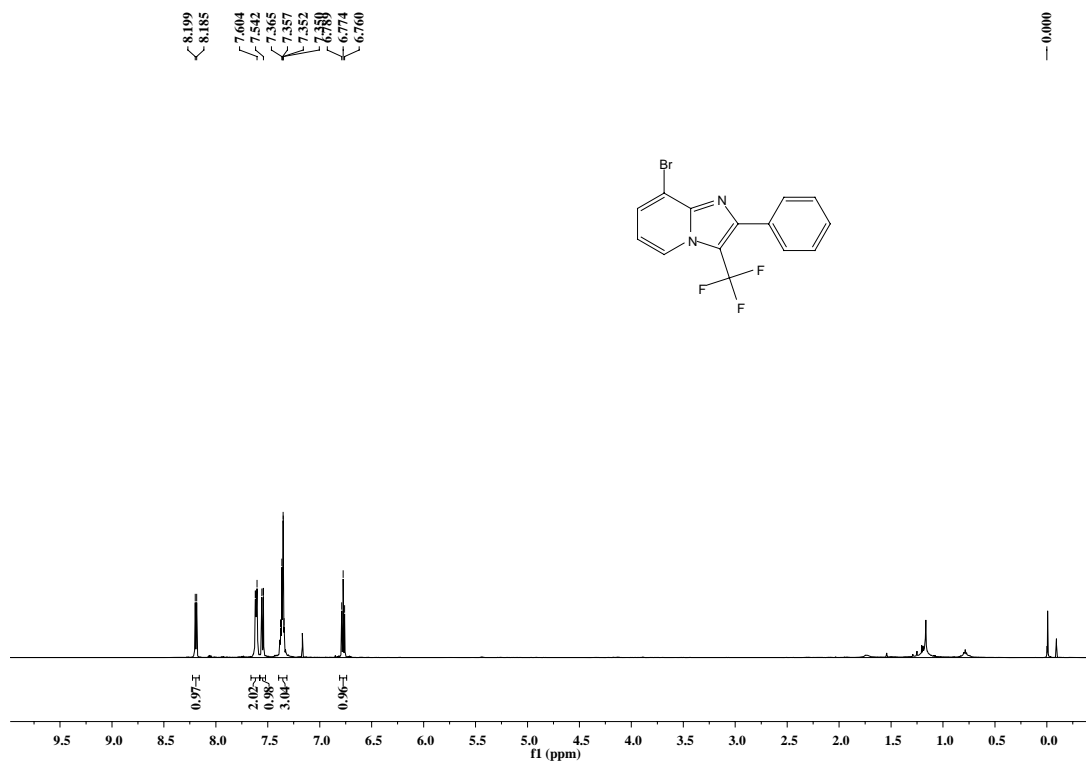


147.470
143.591
131.347
128.743
128.149
127.542
127.165
124.879
123.683
123.131
123.102
122.997
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112.600
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110.390
110.360
110.073
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76.278
76.024
75.769

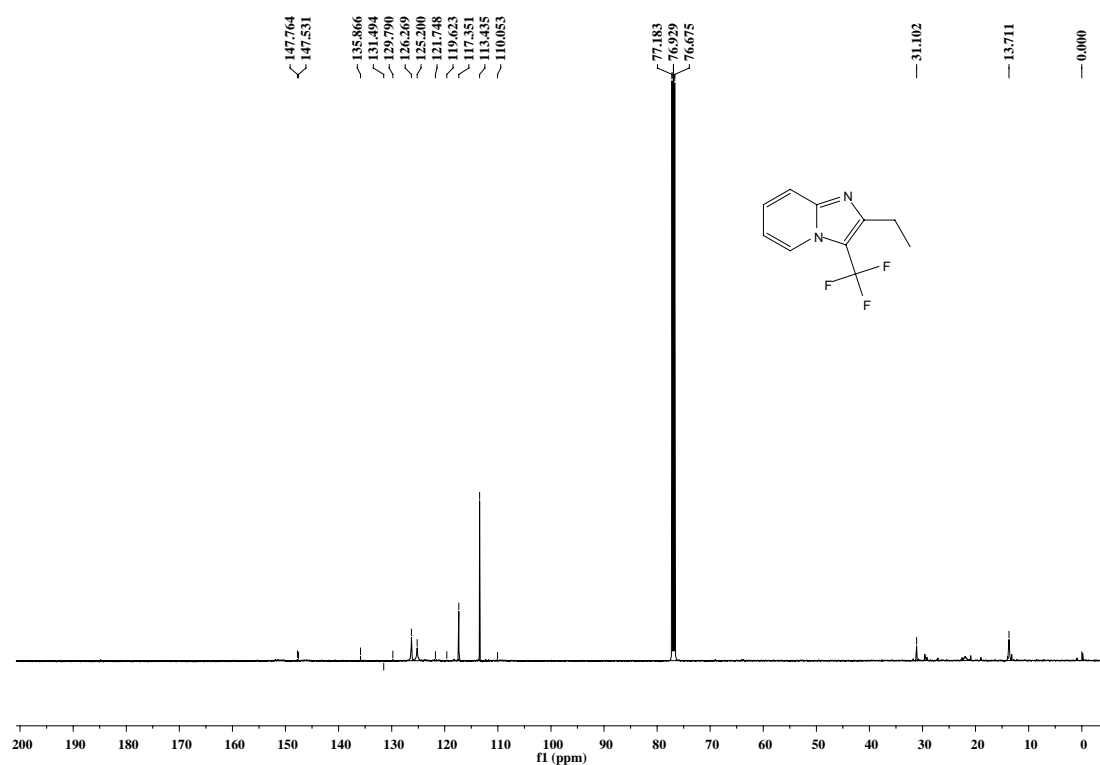
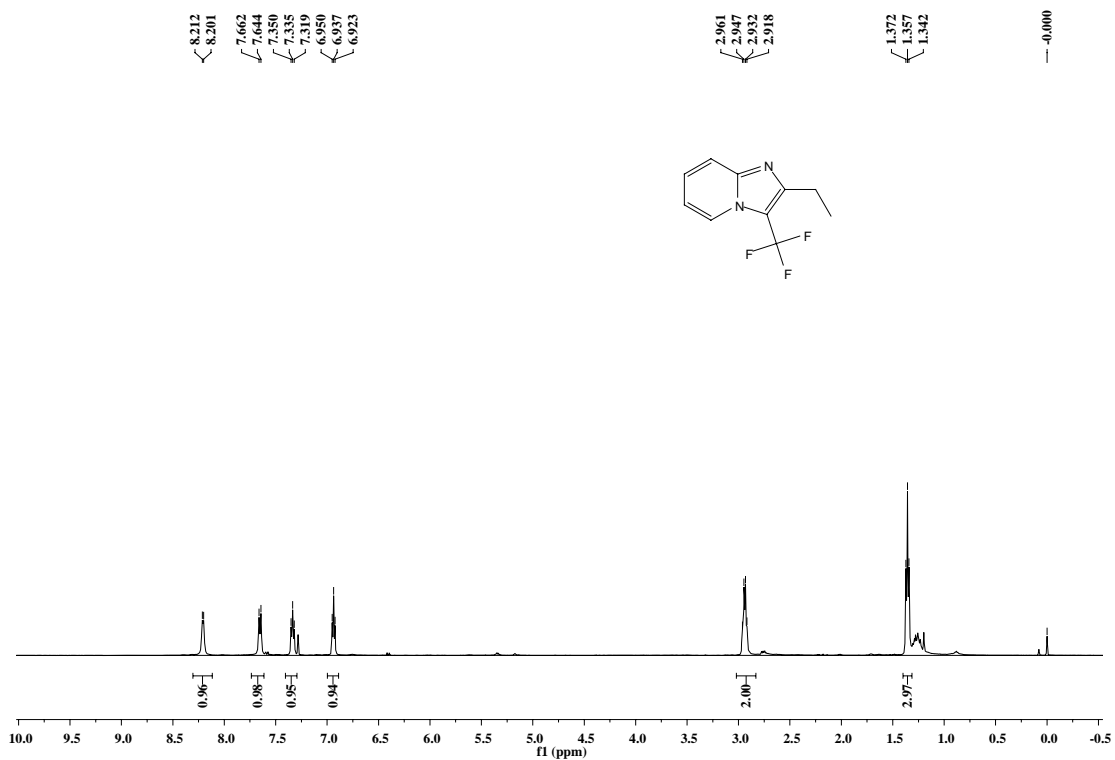
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8-bromo-2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2v)



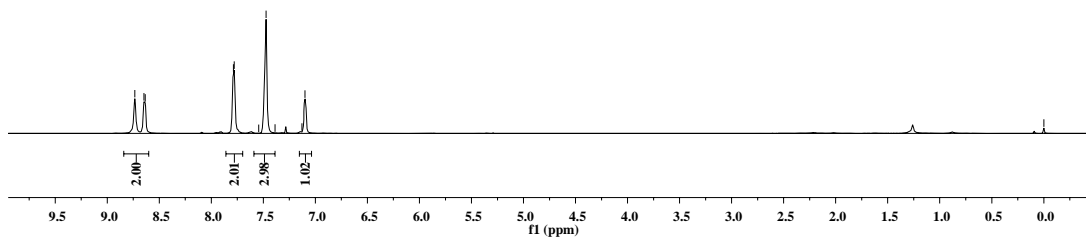
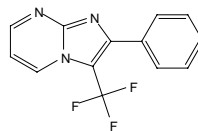
2-ethyl-3-(trifluoromethyl)imidazo[1,2-a]pyridine (2w)



2-phenyl-3-(trifluoromethyl)imidazo[1,2-a]pyrimidine (2x)

8.735
8.647
8.636
7.788
7.780
7.545
7.474
7.388
7.128
7.099

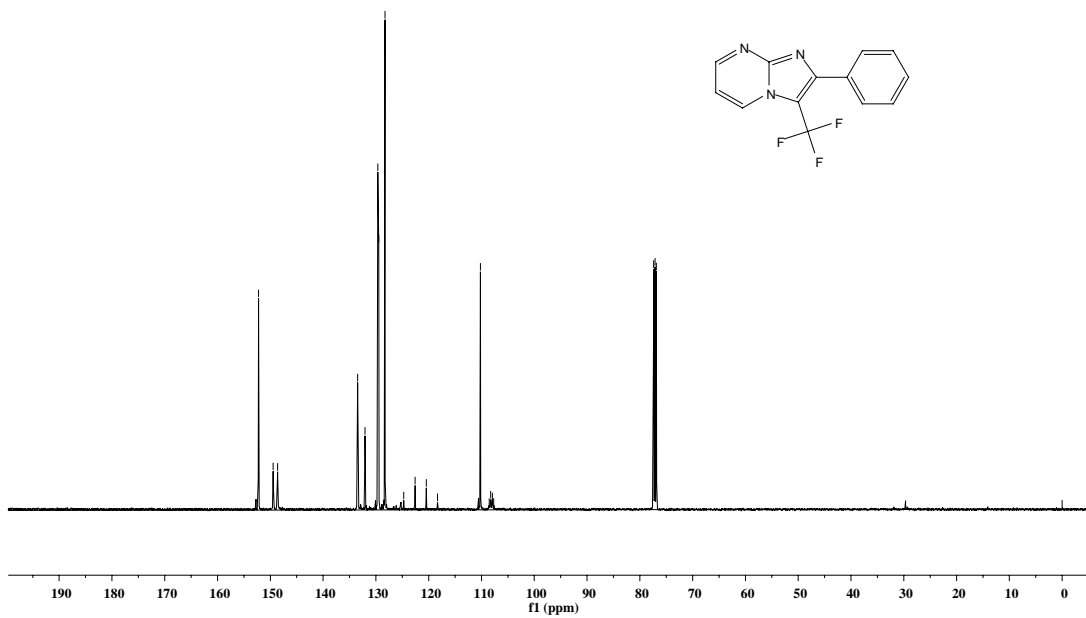
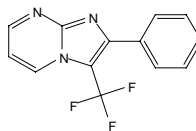
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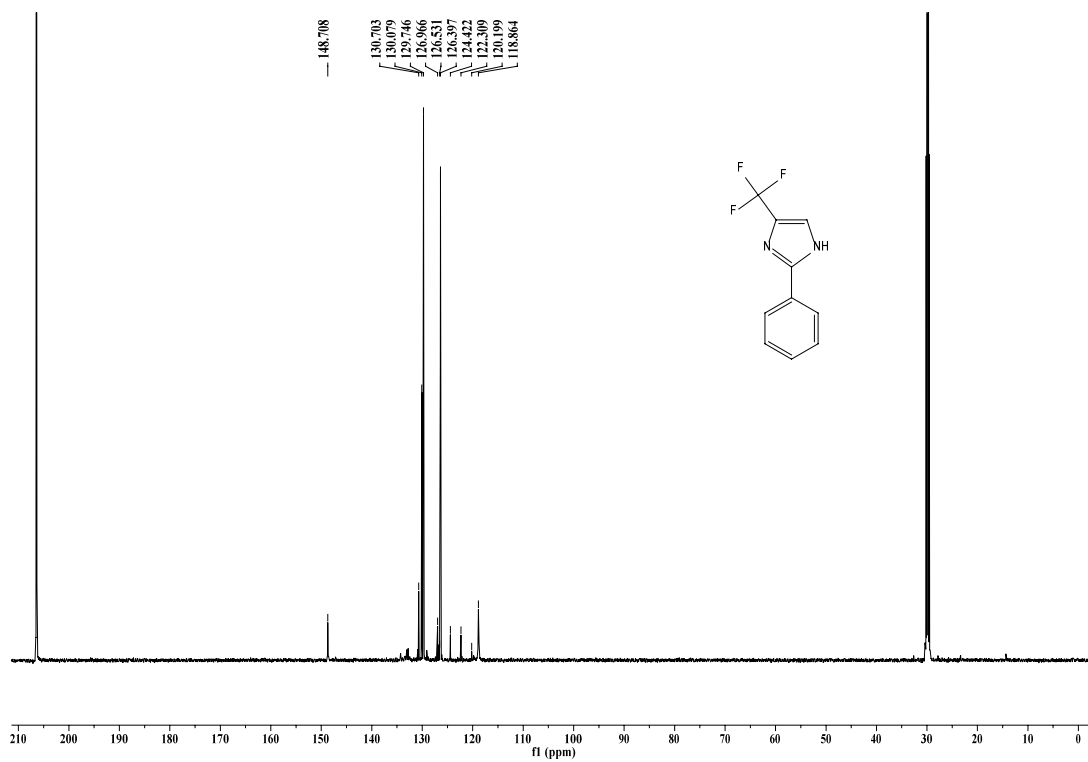
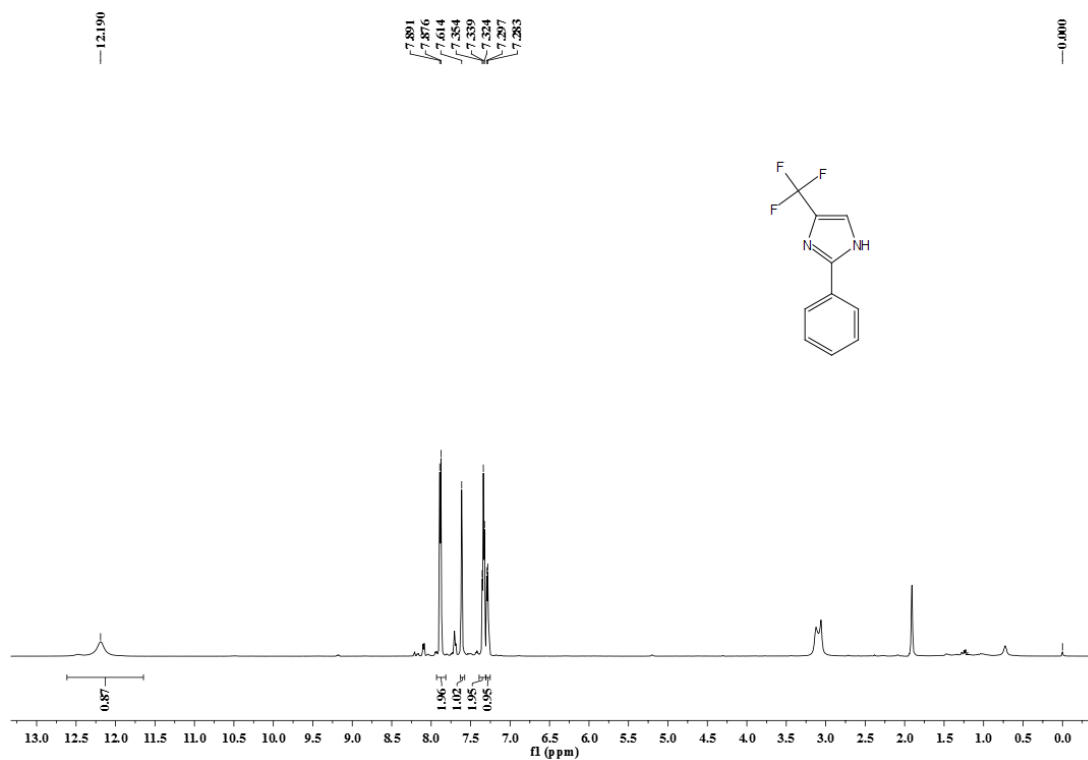
152.240
149.457
148.617
133.455
132.059
129.648
129.460
128.277
124.720
122.582
120.451
118.323
110.192
108.533
108.258
107.921
107.683

77.382
77.128
76.873

-0.000



2-phenyl-4-(trifluoromethyl)-1H-imidazole (4e)



5-phenyl-4-(trifluoromethyl)-1H-imidazole (4f)

