Supporting Information

Ionic Liquid-supported Benzyl Azide: An Efficient Soluble Scavenger for Alkynes

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Content

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1. HPLC analysis

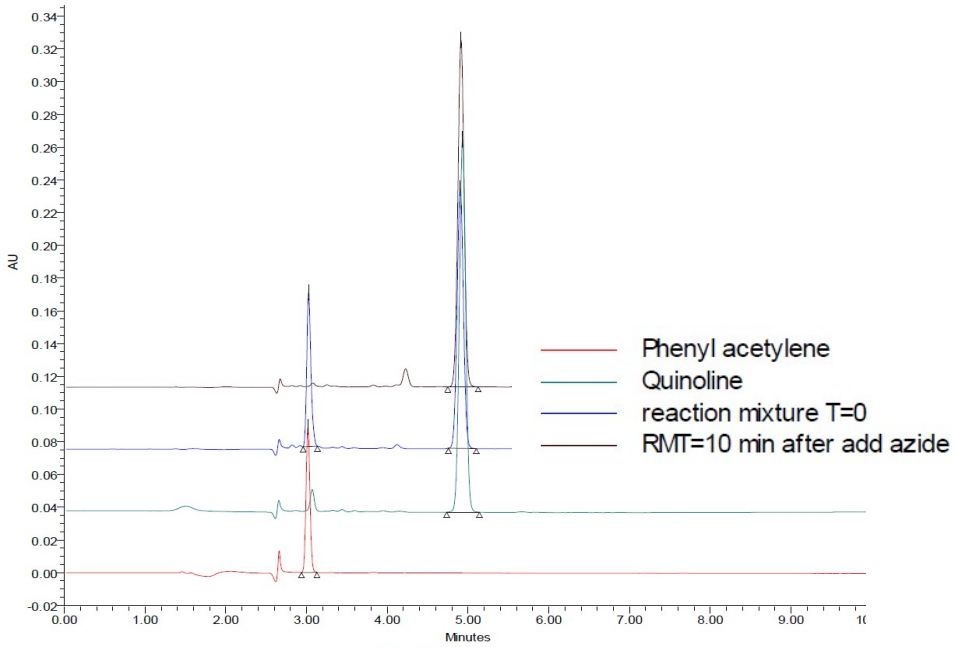


Figure S1: HPLC analysis of a) phenylacetylene, b) 2,4-diphenylquionoline, c) reaction mixture and d) reaction mixture after treating with **12** for 10 min.

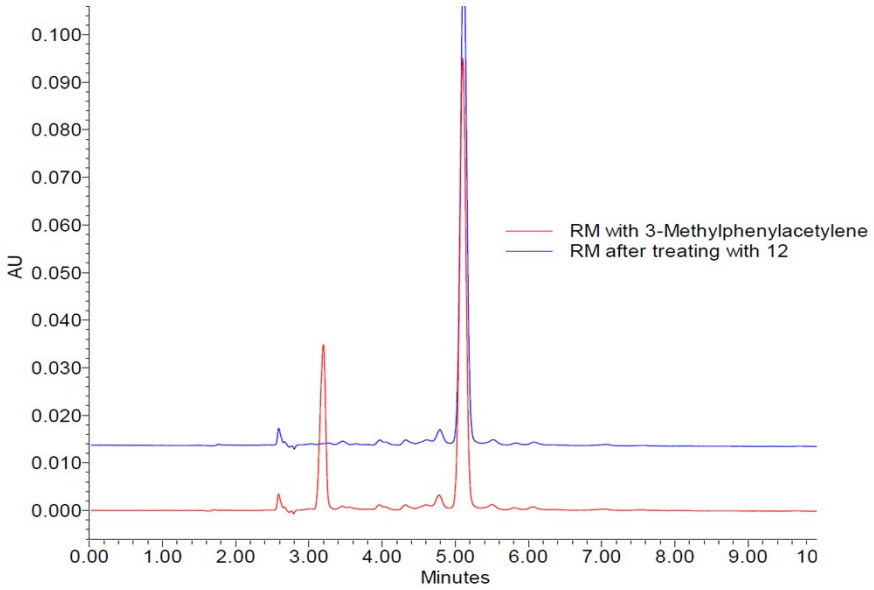


Figure S2: HPLC analysis of a) Reaction mixture containing 3-Methylphenylacetylene (red line) b) Reaction mixture after treating with **12** for 10 min (blue line).

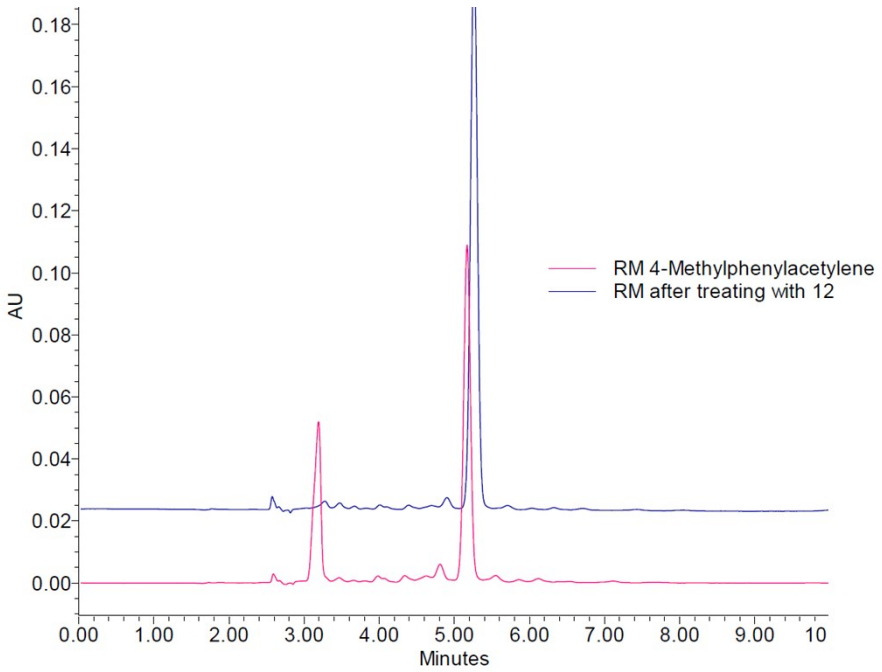


Figure S3: HPLC analysis of a) Reaction mixture containing 4-methylphenylacetylene (pink line) b) Reaction mixture after treating with **12** for 10 min (blue line).

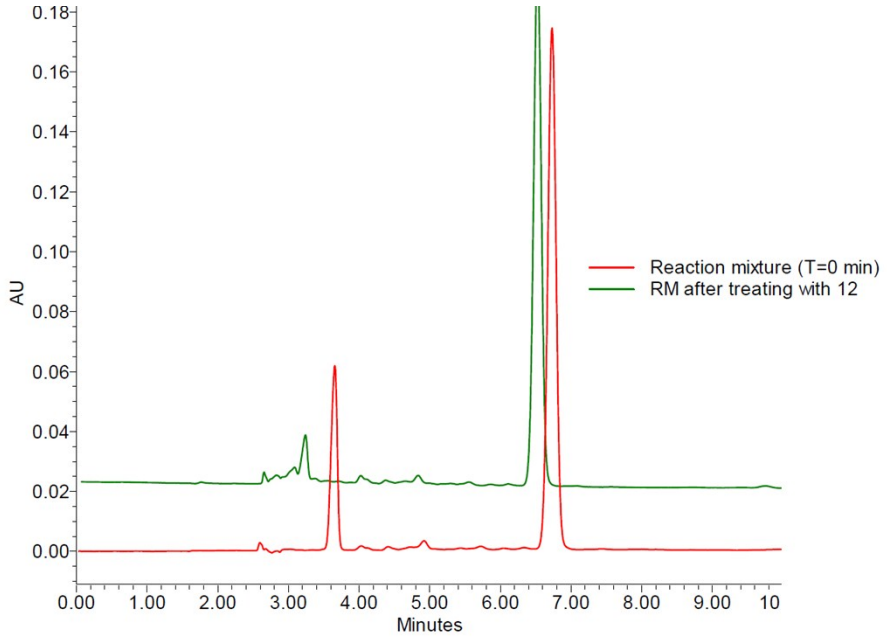
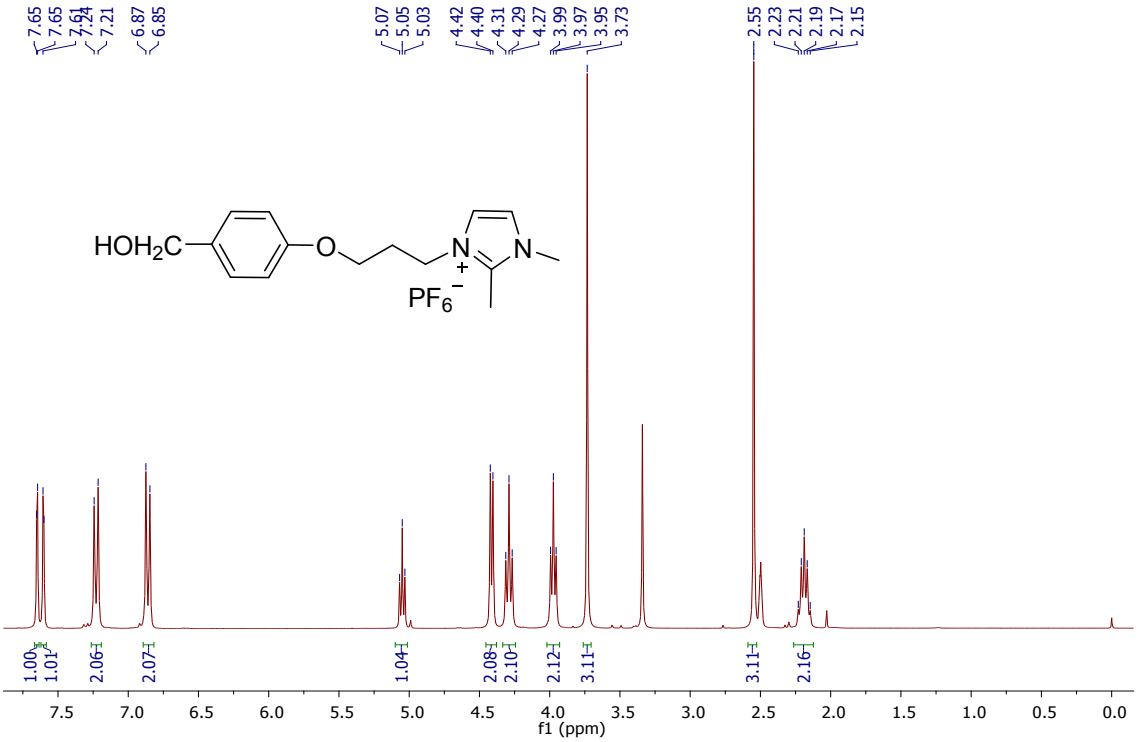
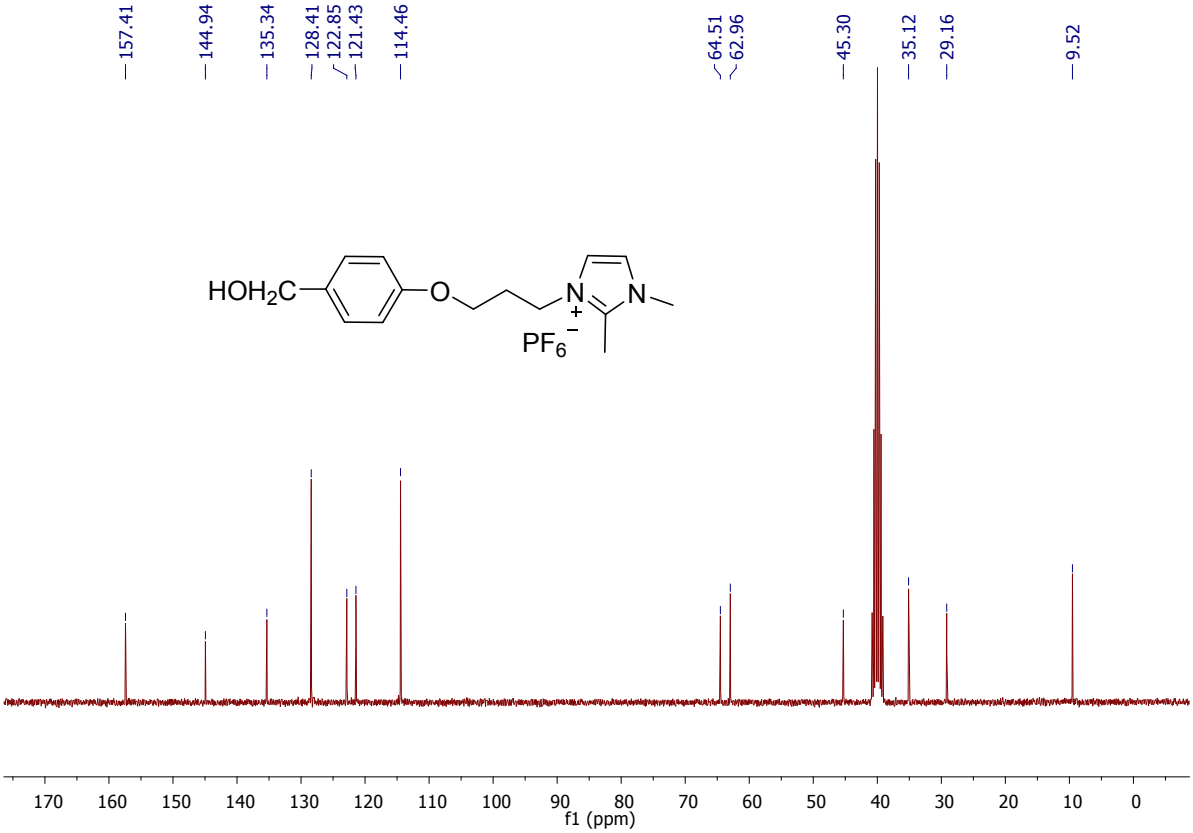
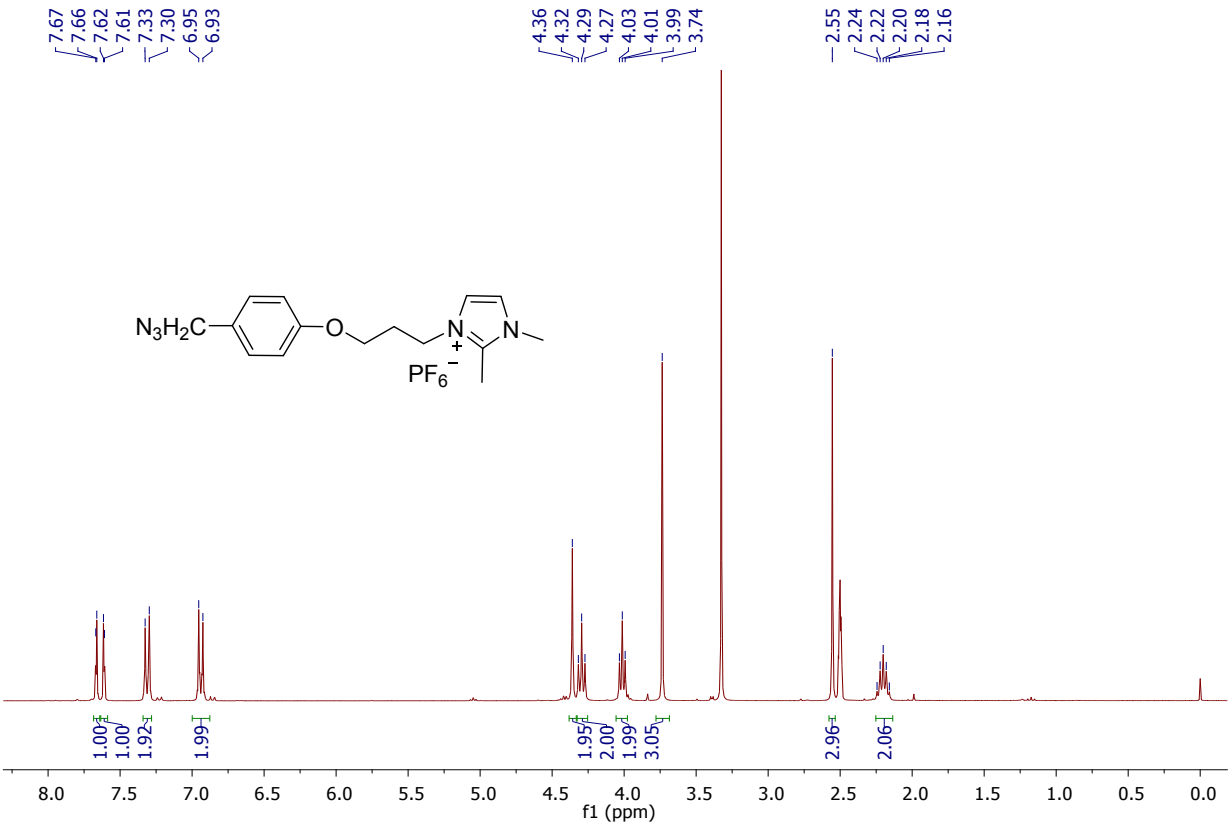


Figure S4: HPLC analysis of a) Reaction mixture containing 4-tert-butylphenylacetylene (red line) b) Reaction mixture after treating with **12** for 15 min (green line).

2. Copies of ^{1}H and ^{13}C NMR for 10, 12 and 17a-o



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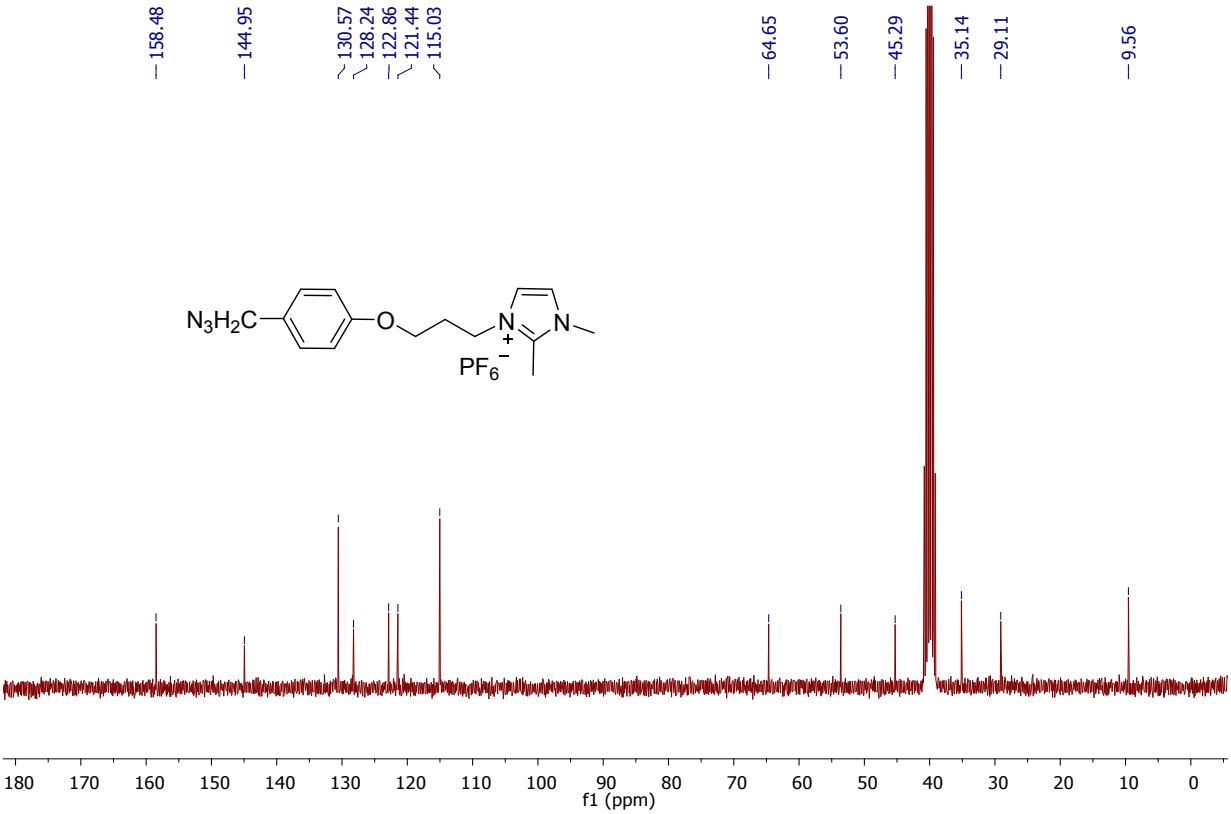
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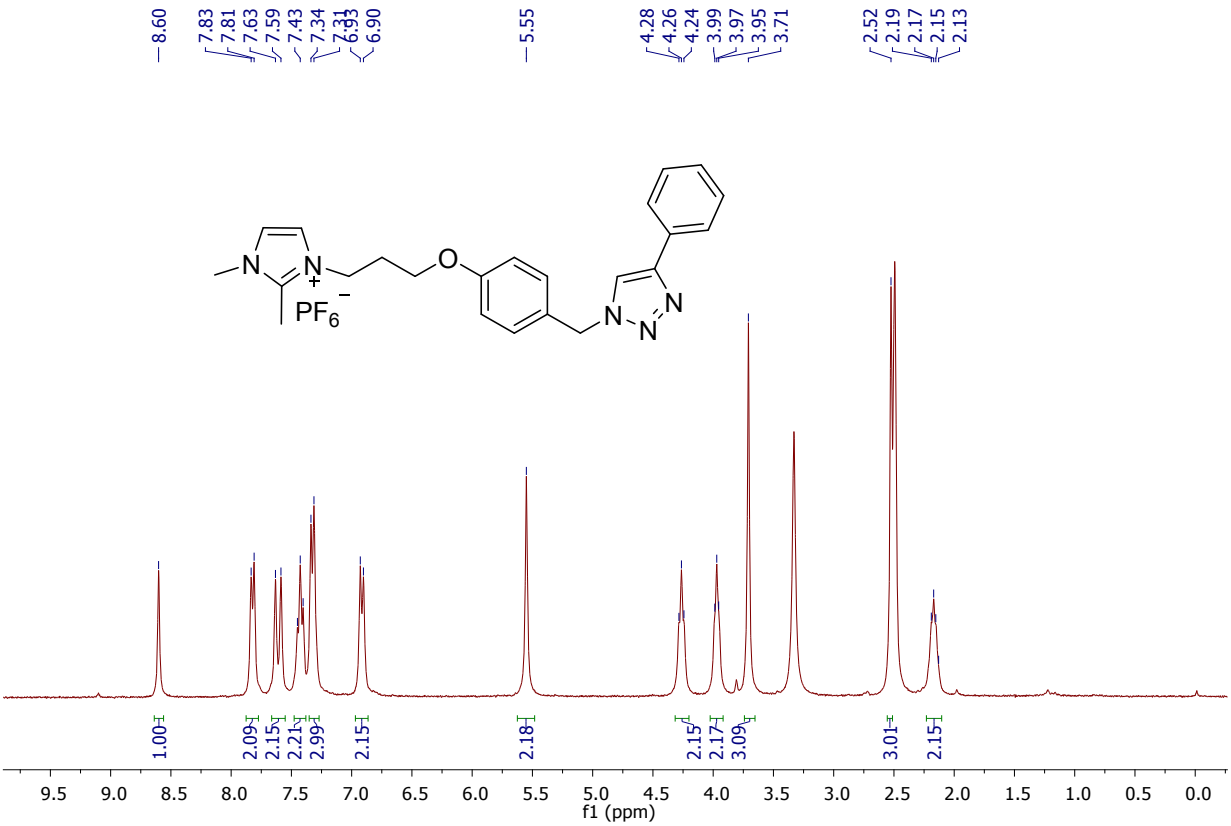
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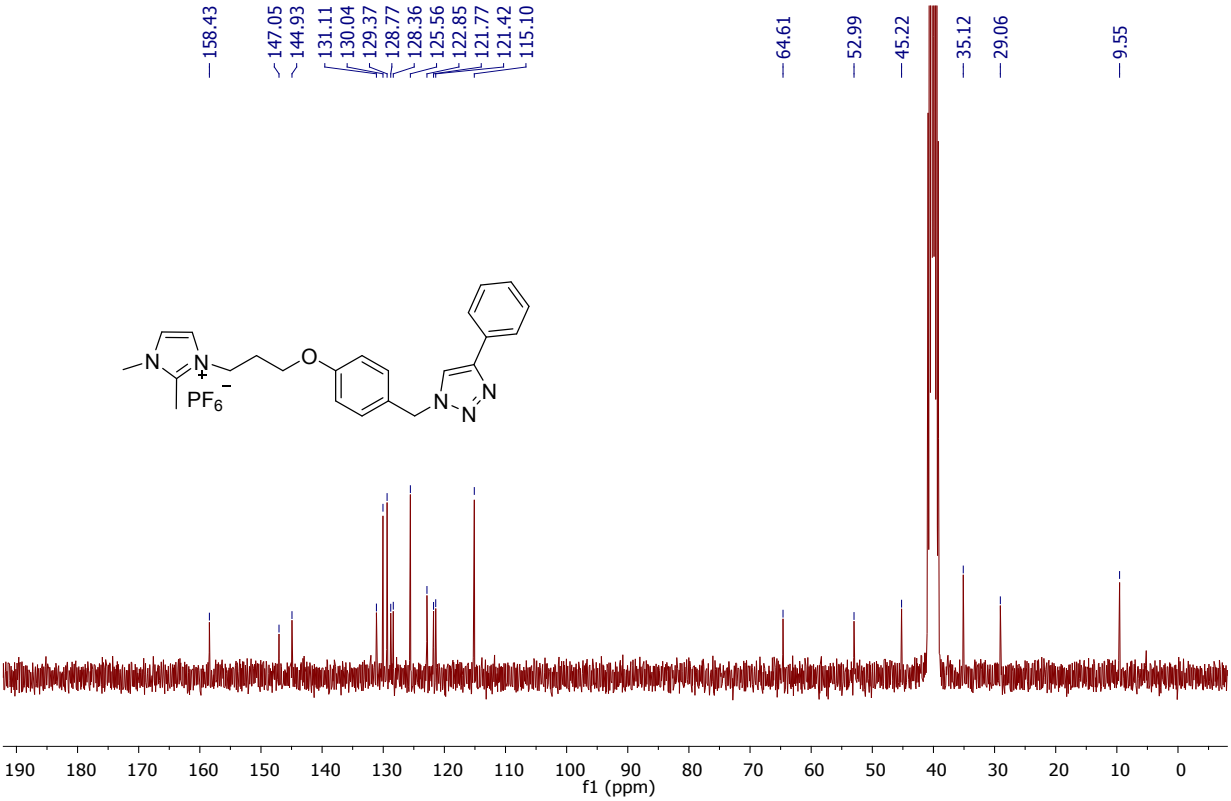
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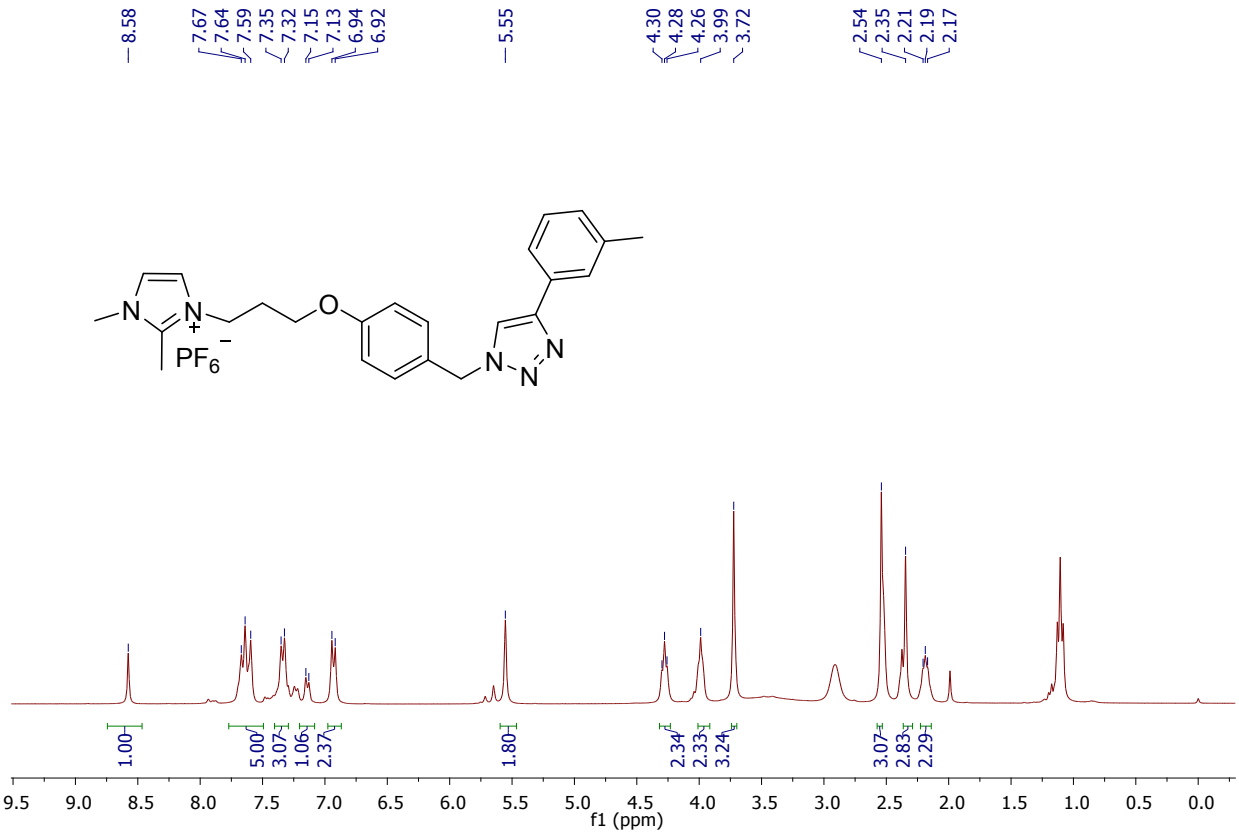
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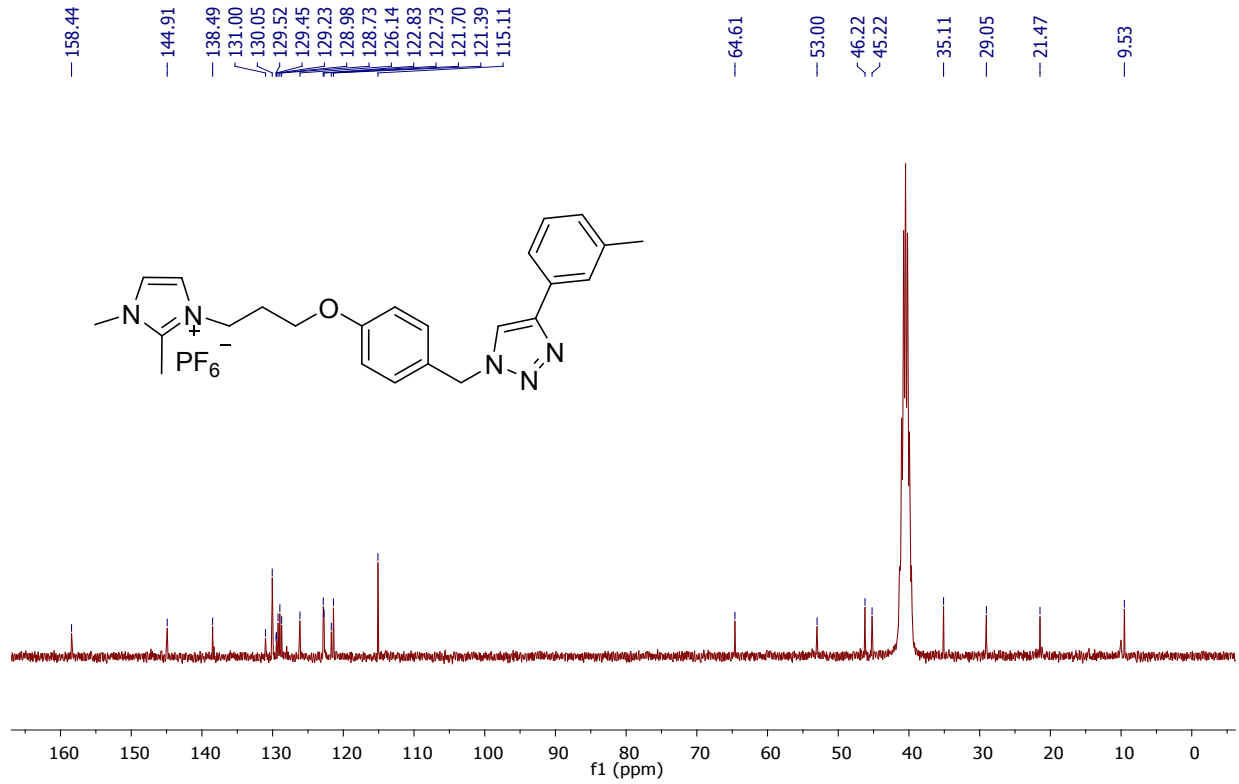
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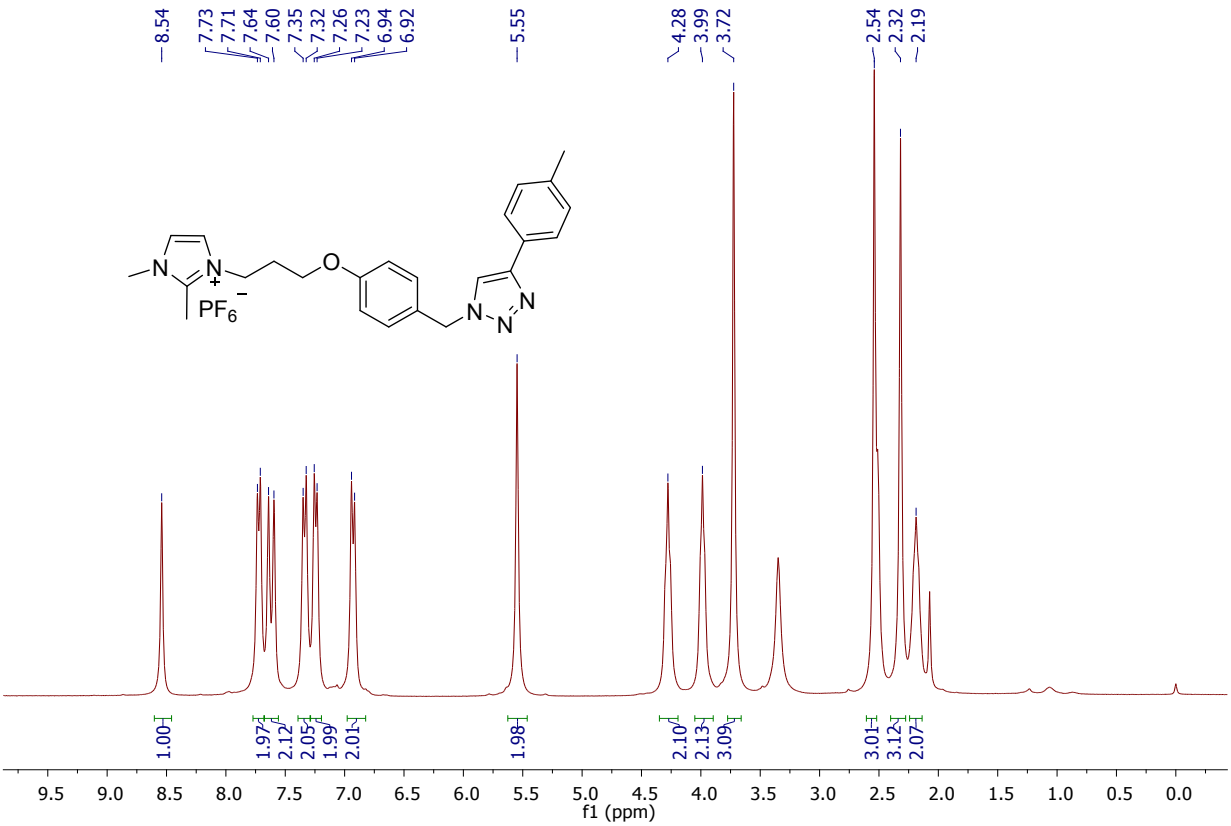
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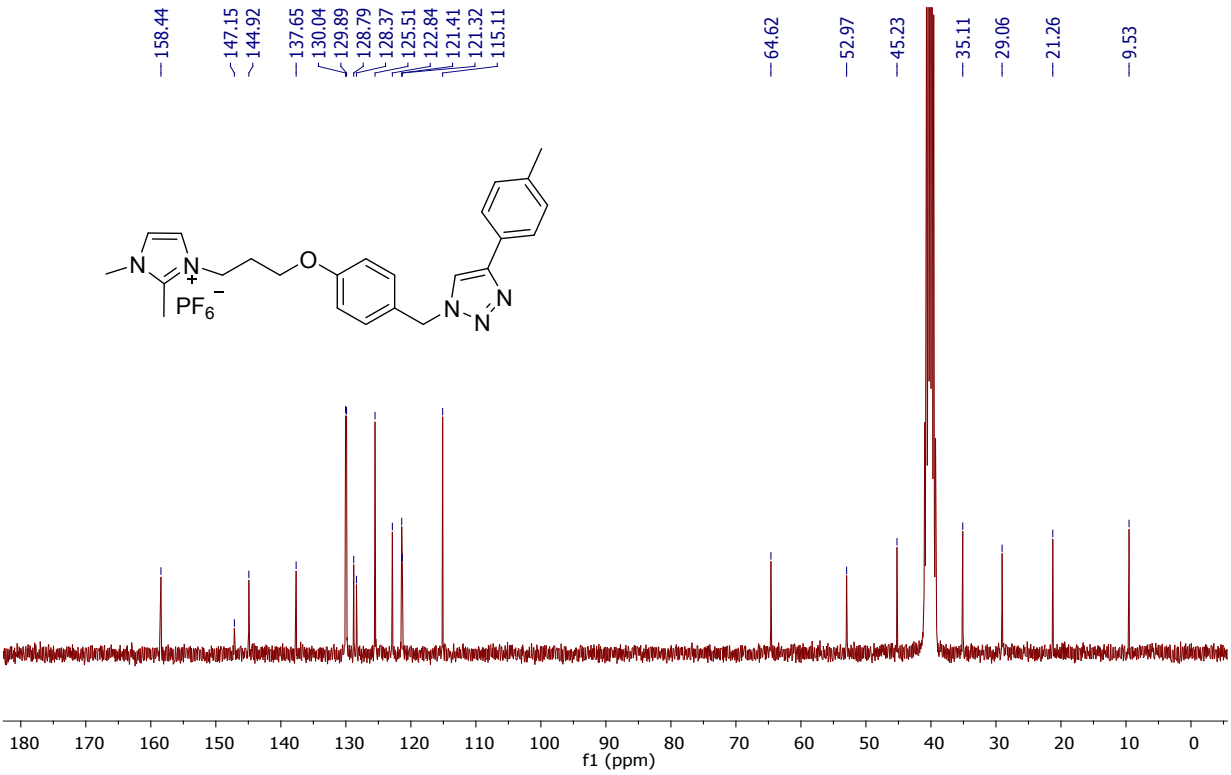
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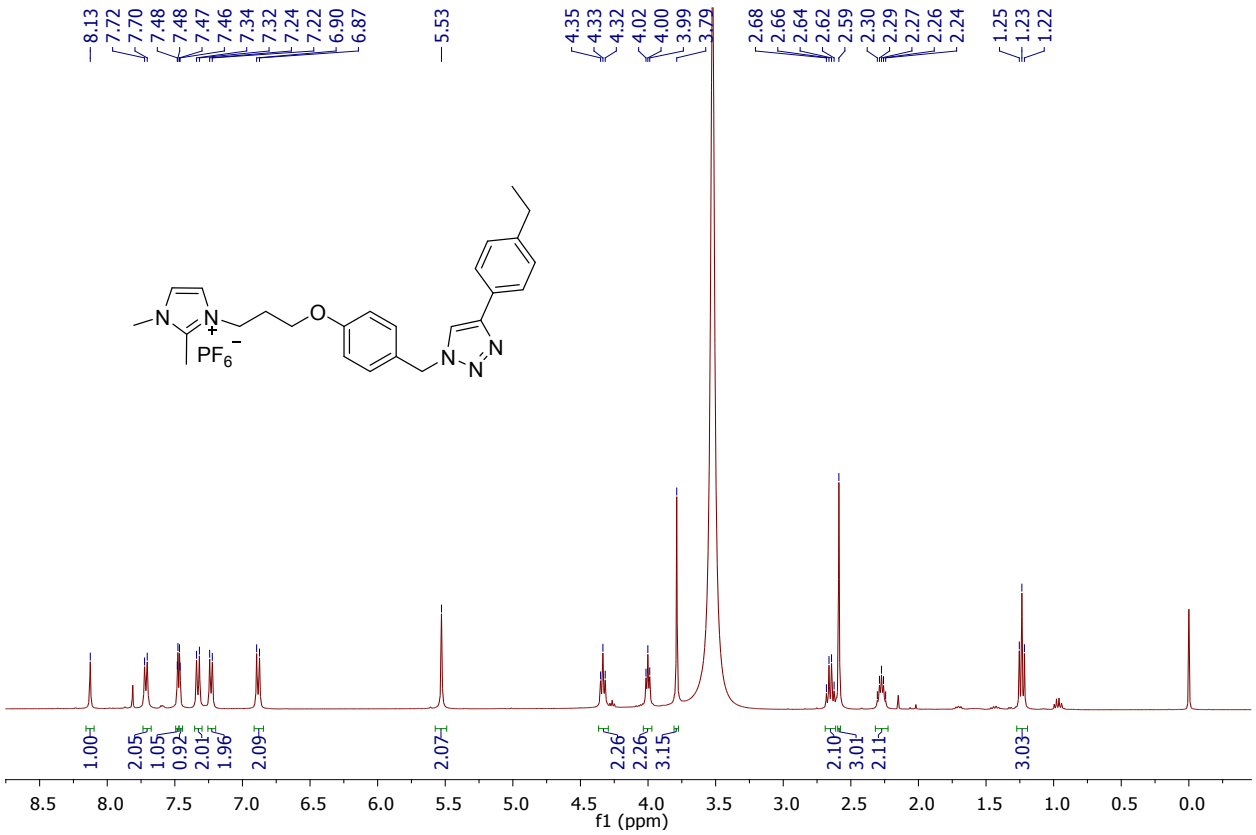
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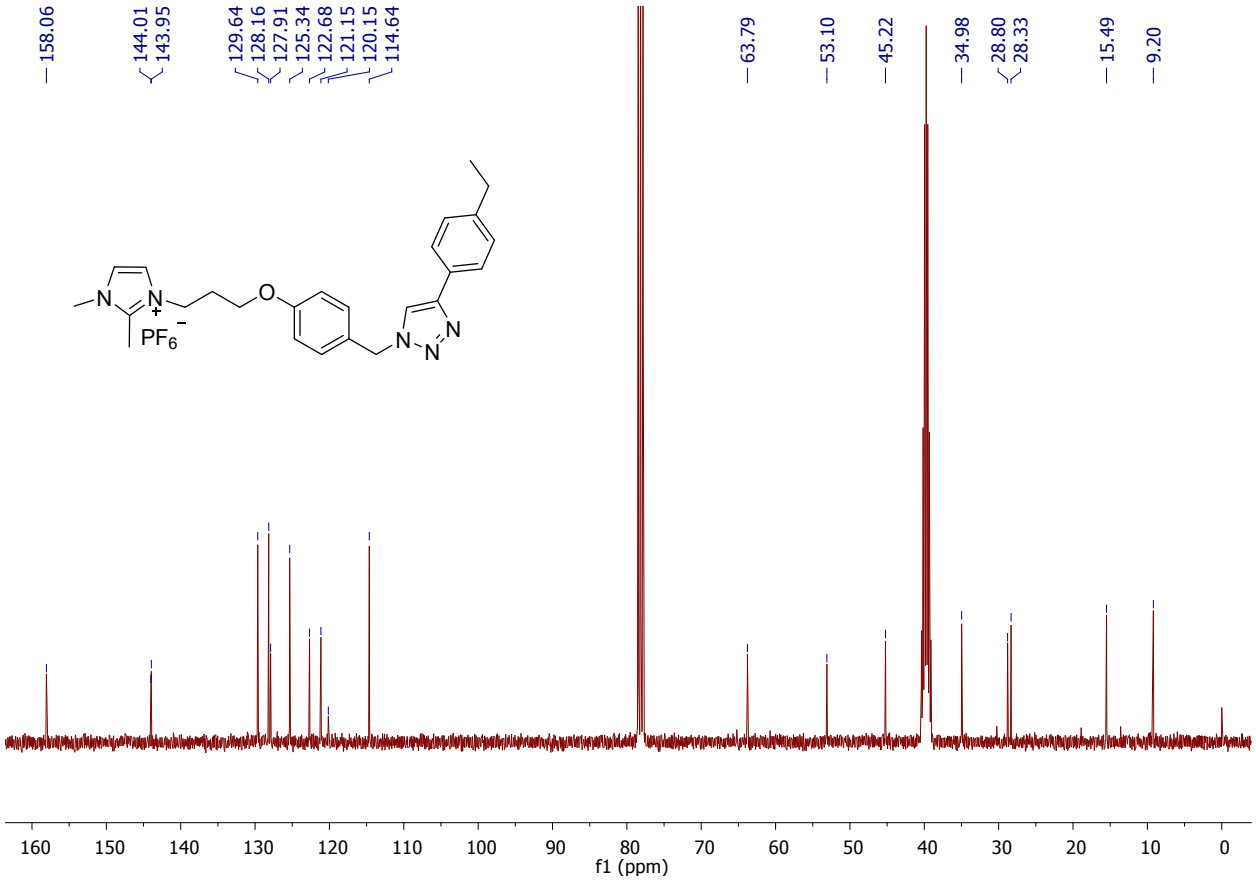
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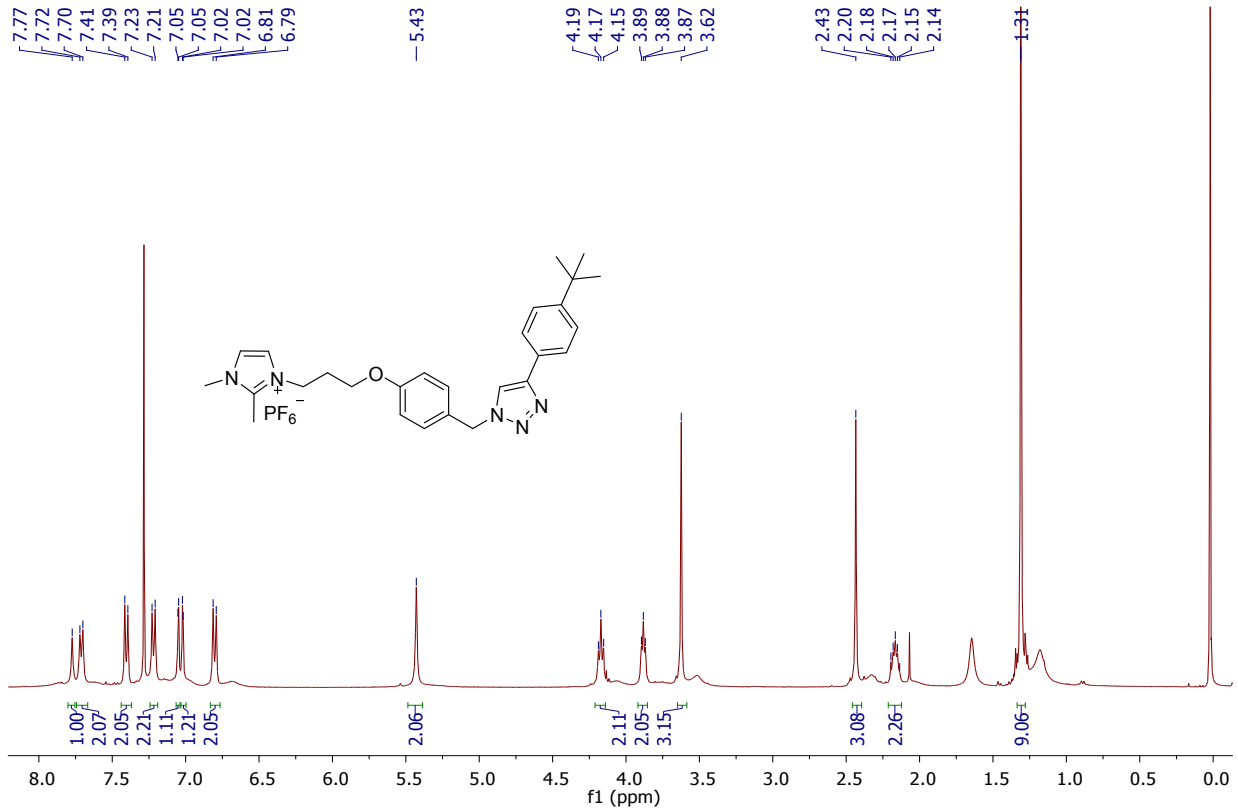
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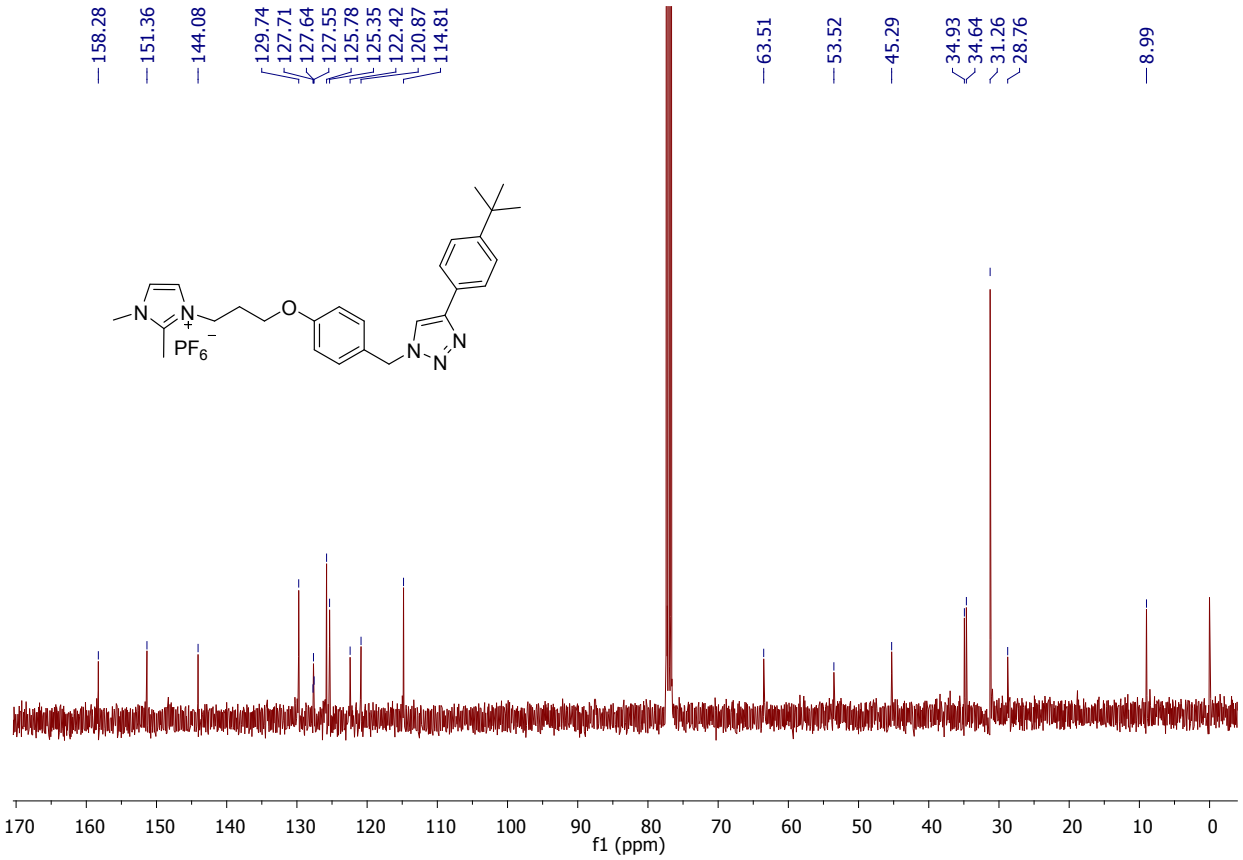
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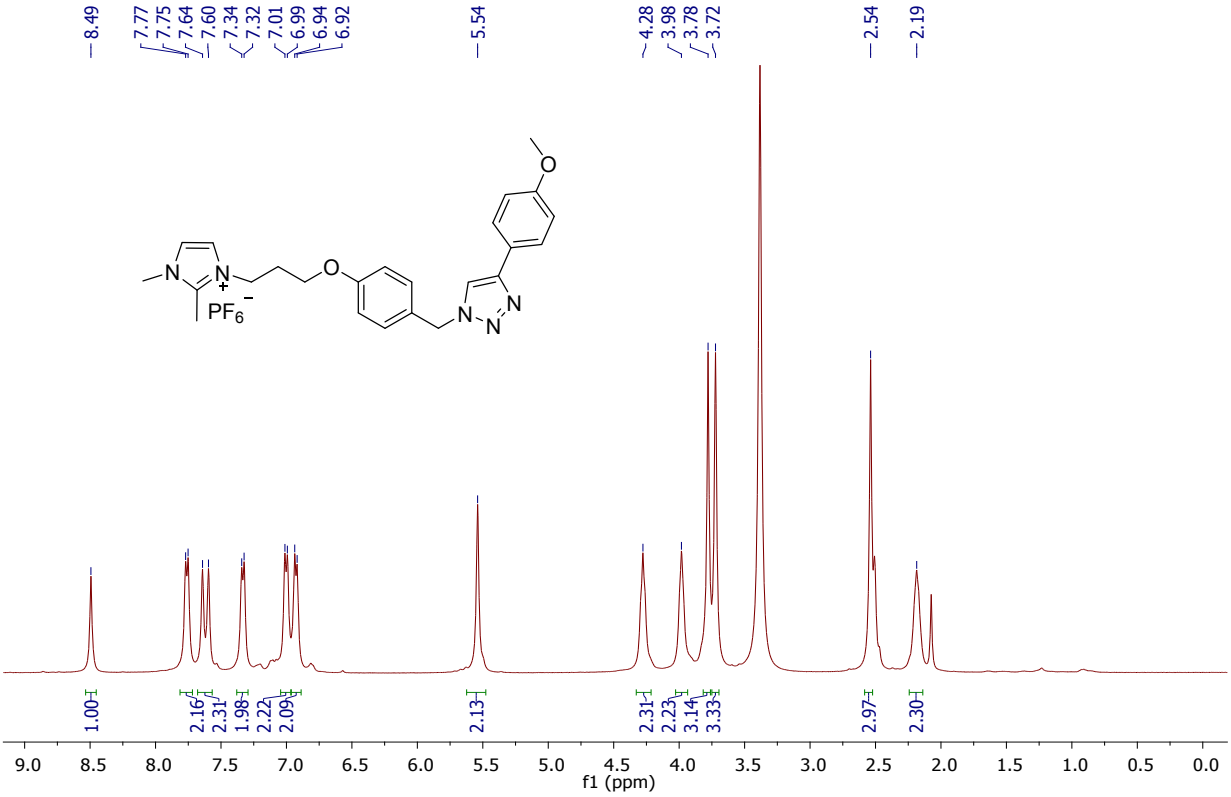
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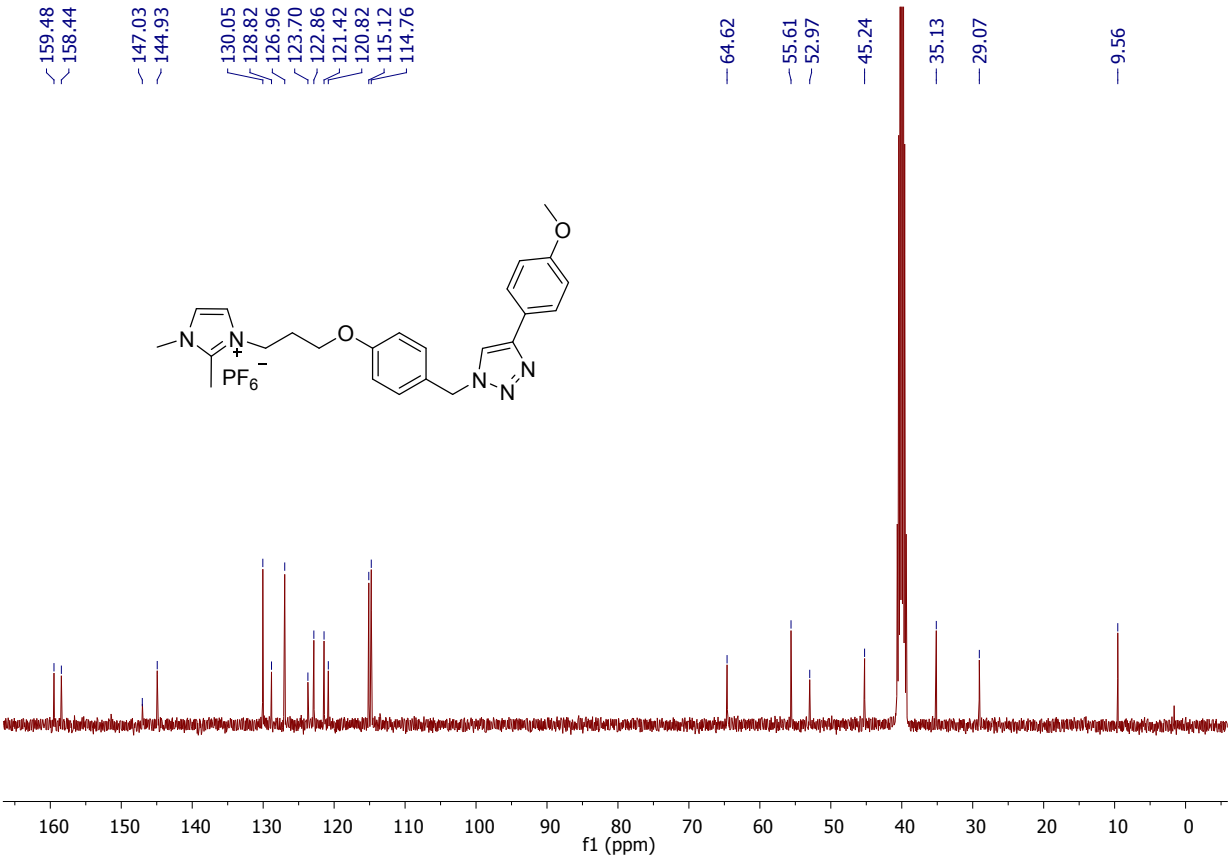
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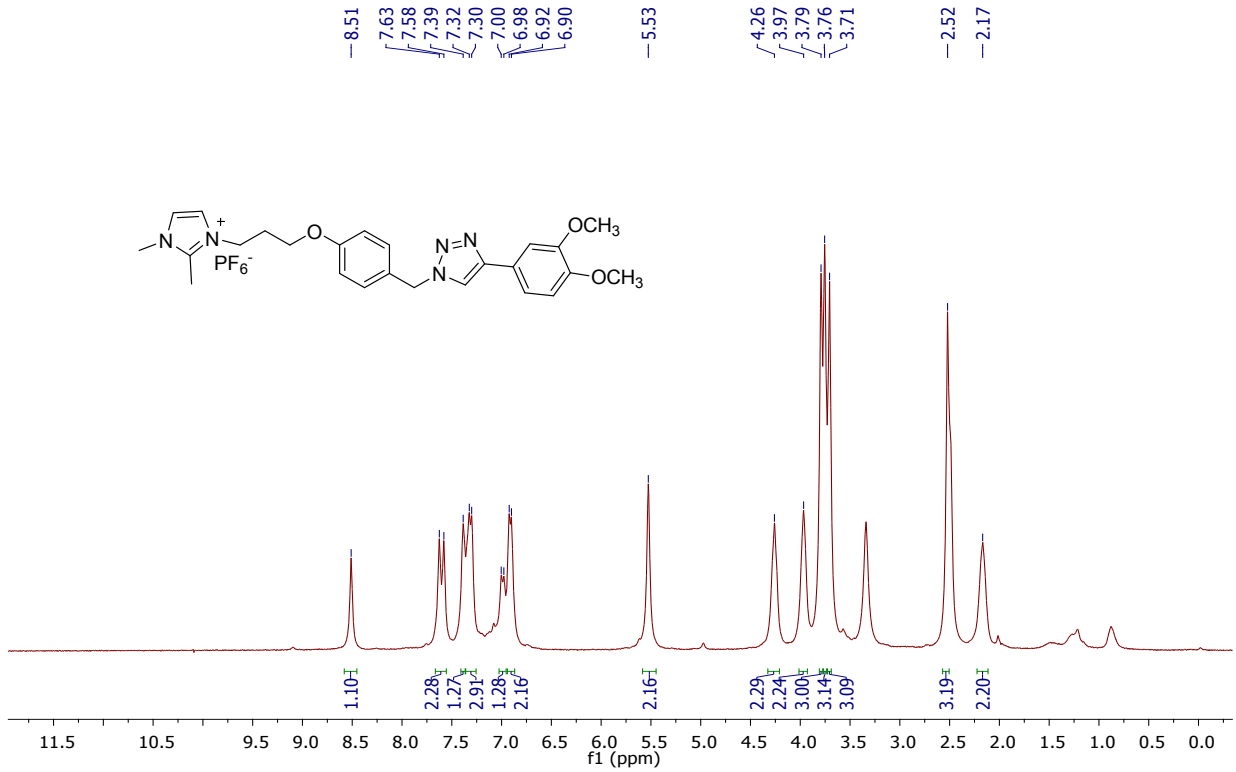
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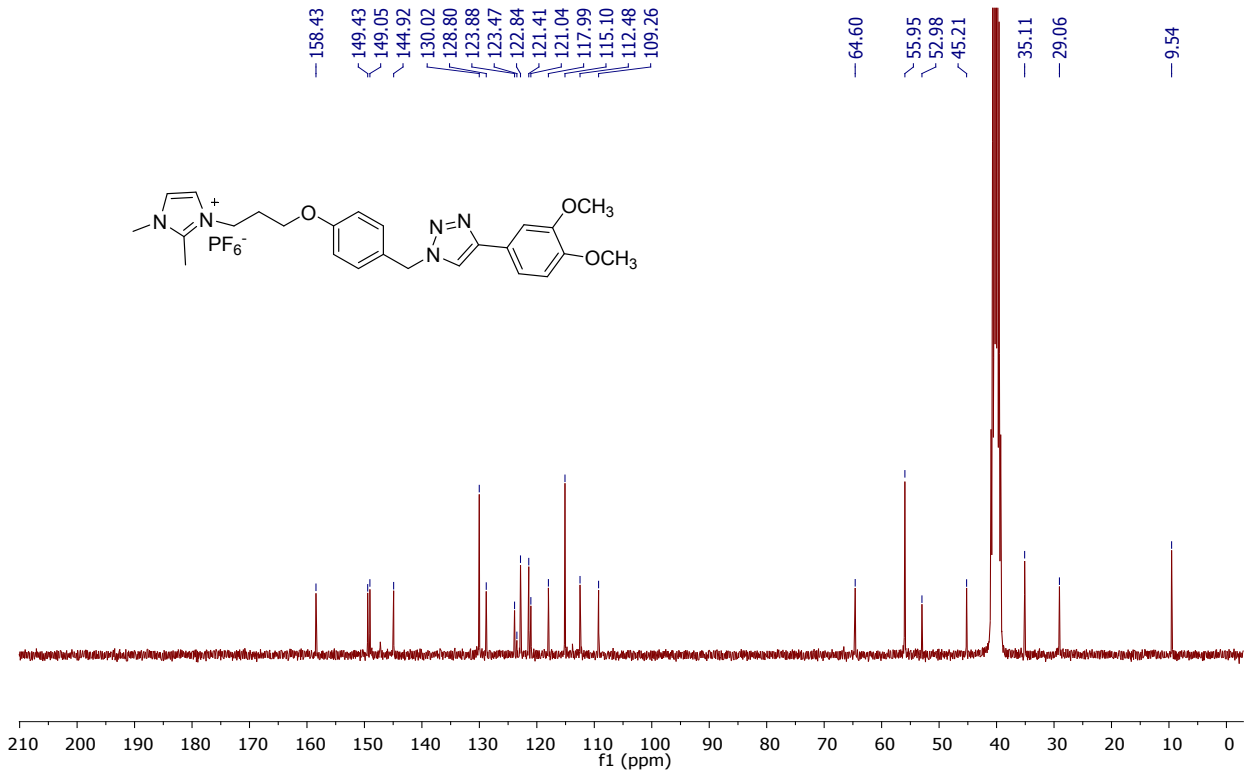
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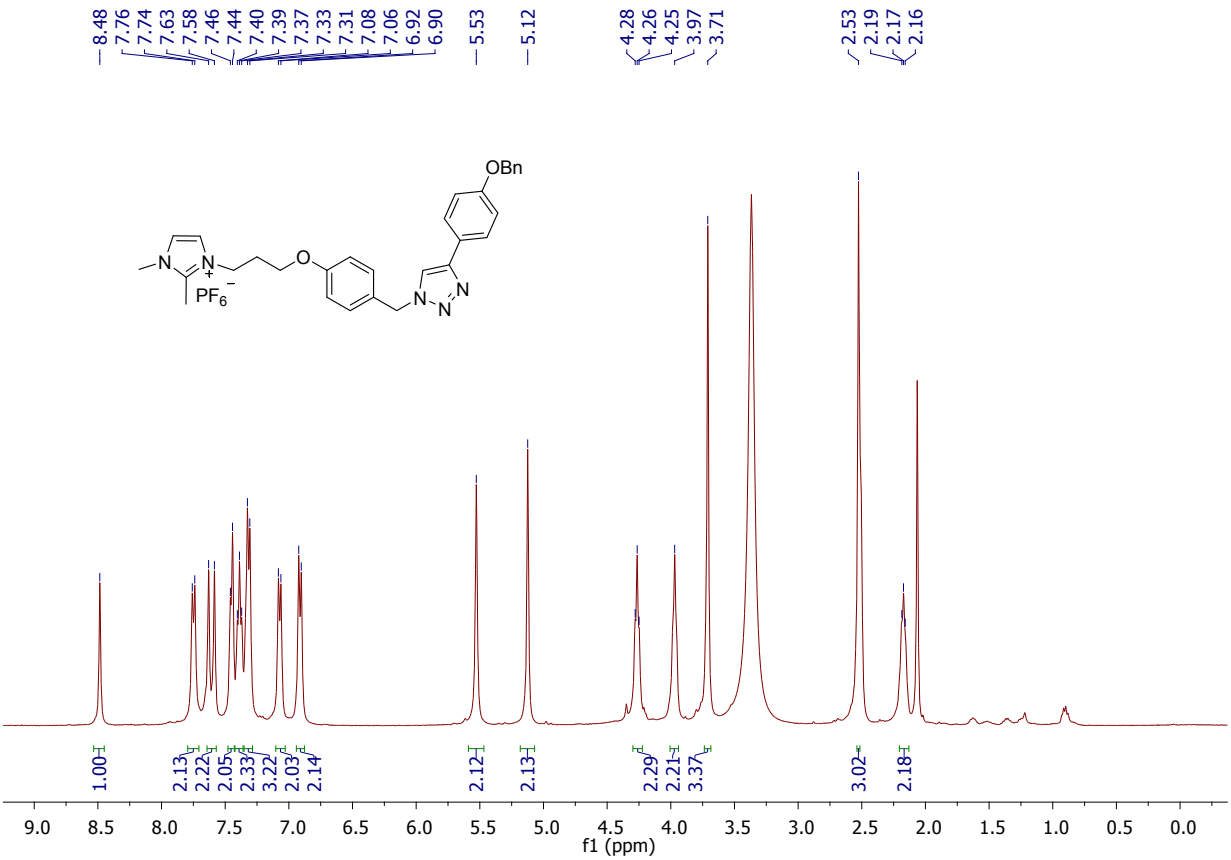
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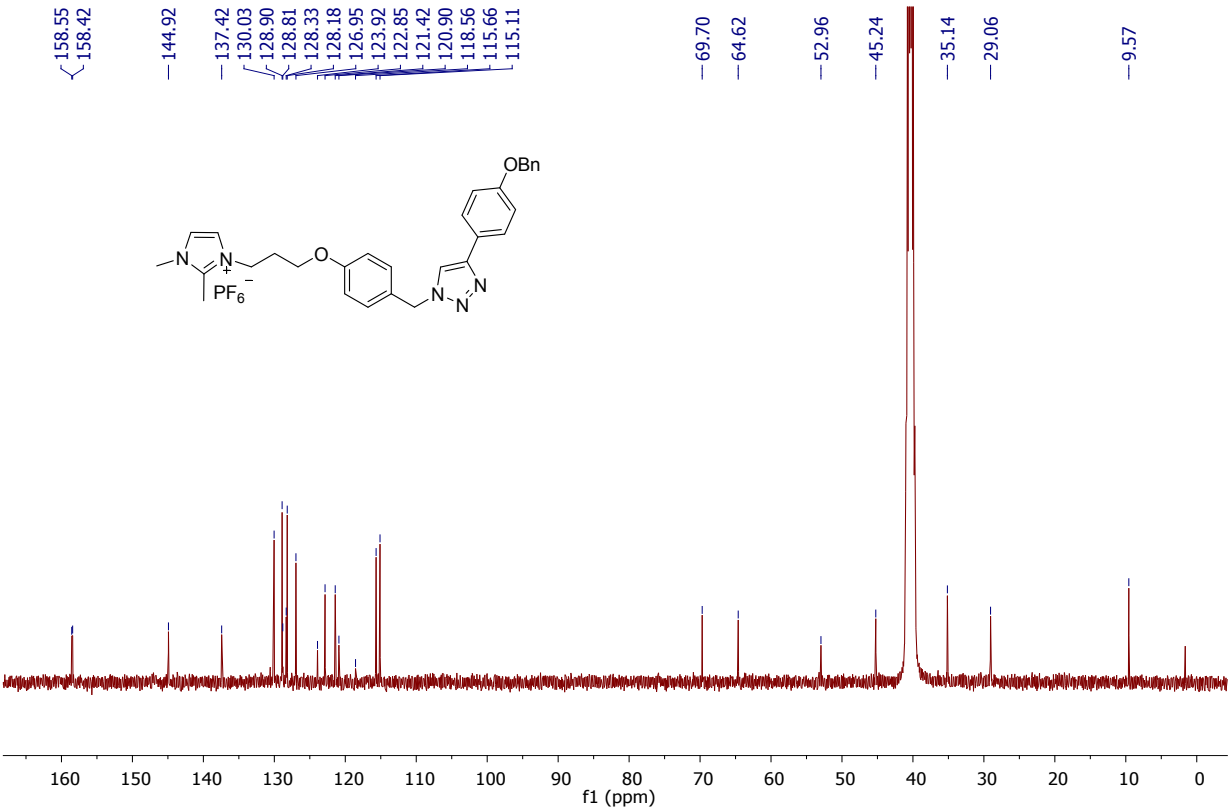
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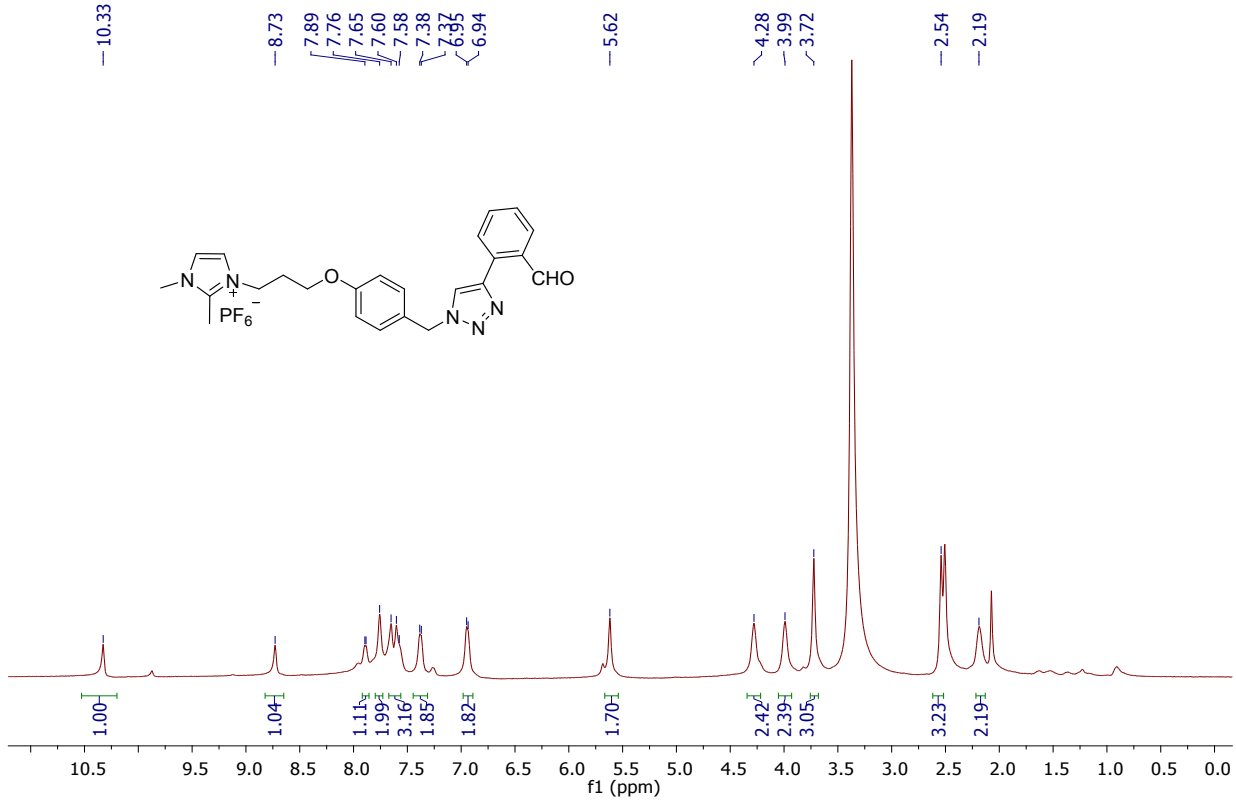
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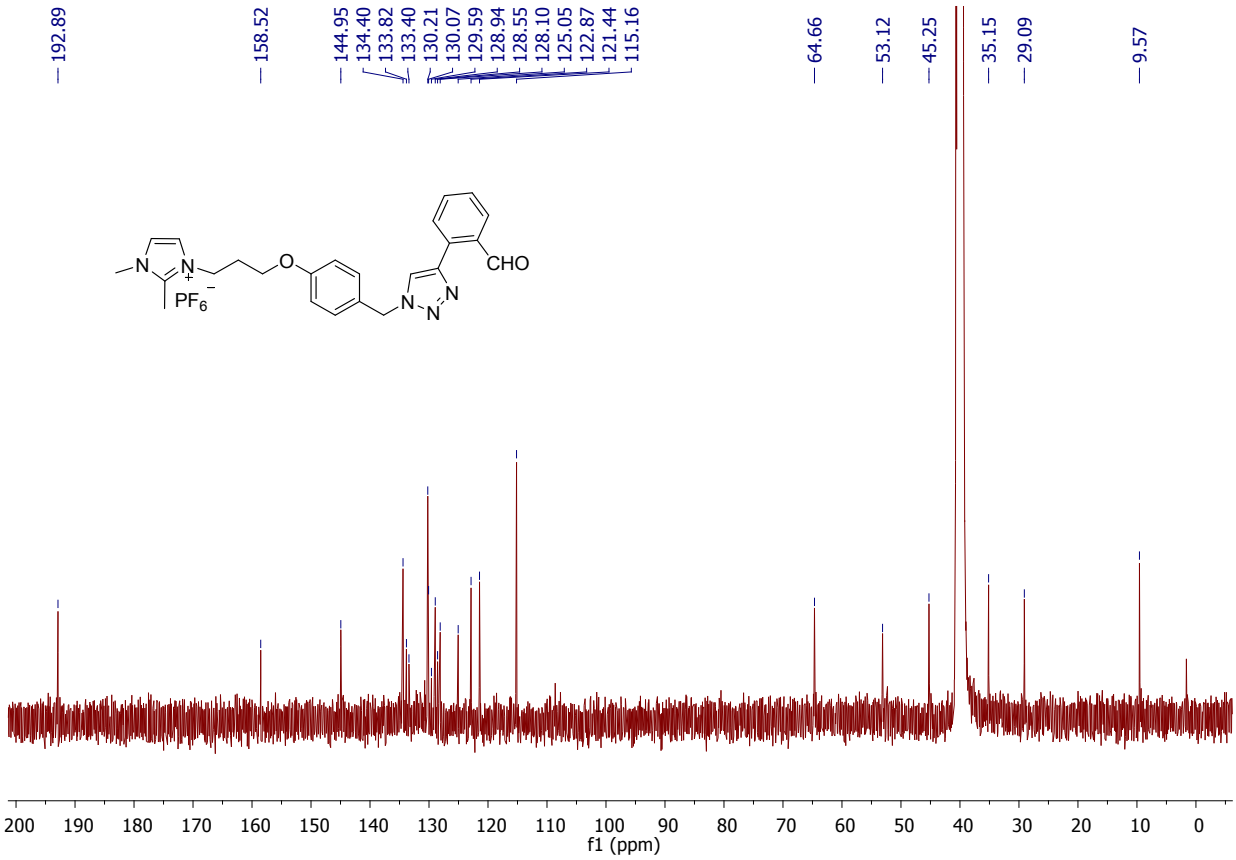
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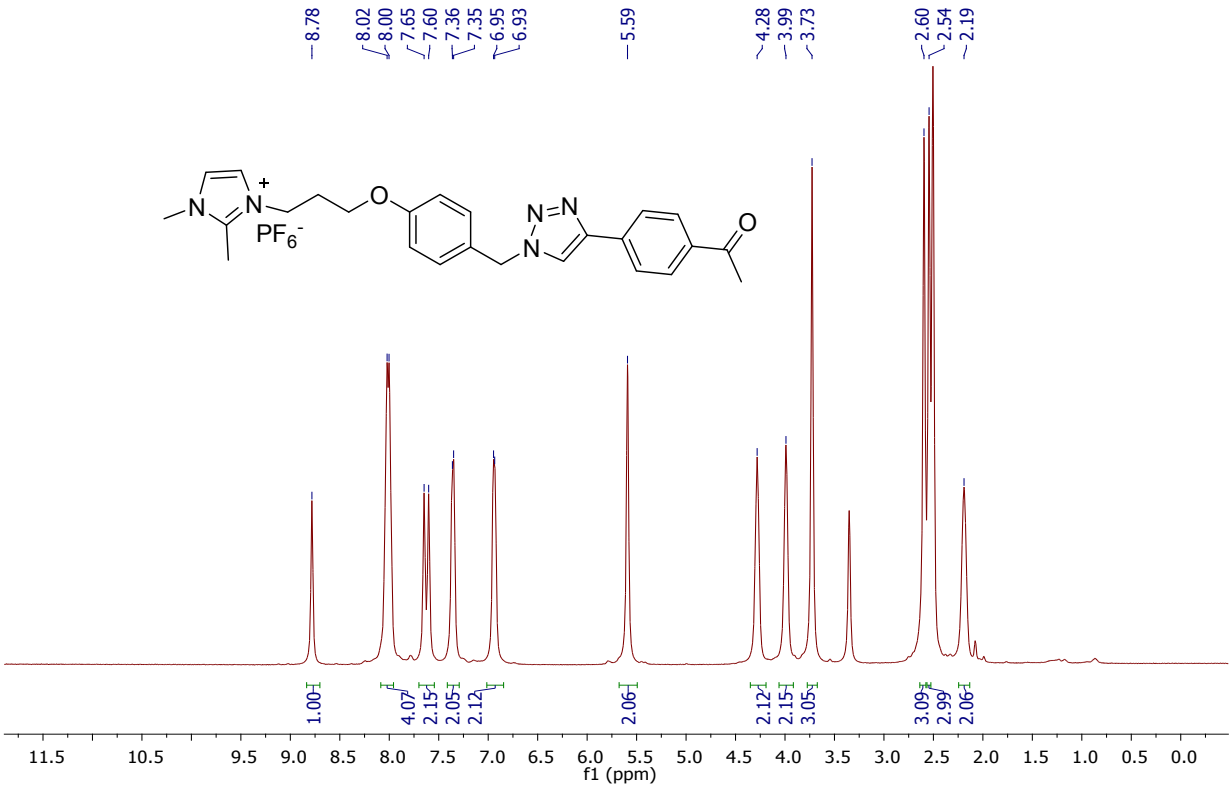
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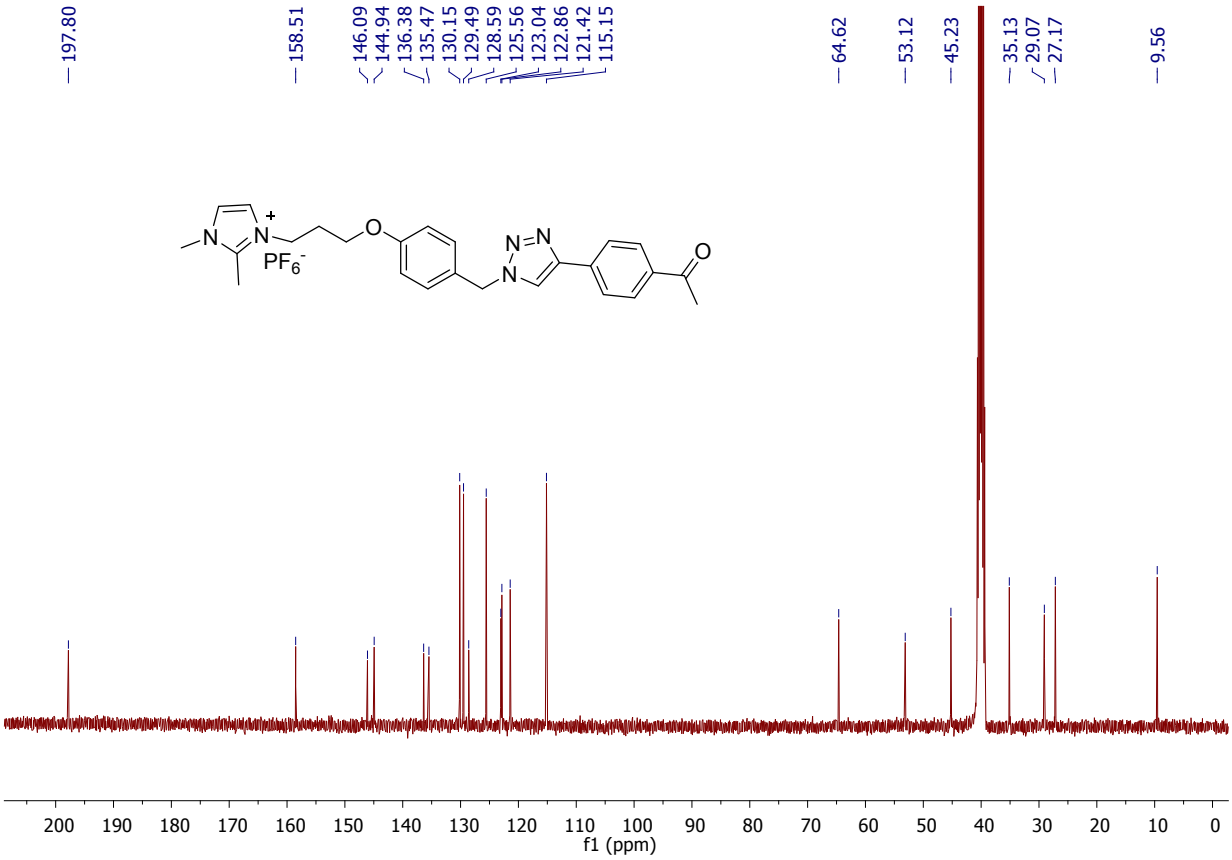
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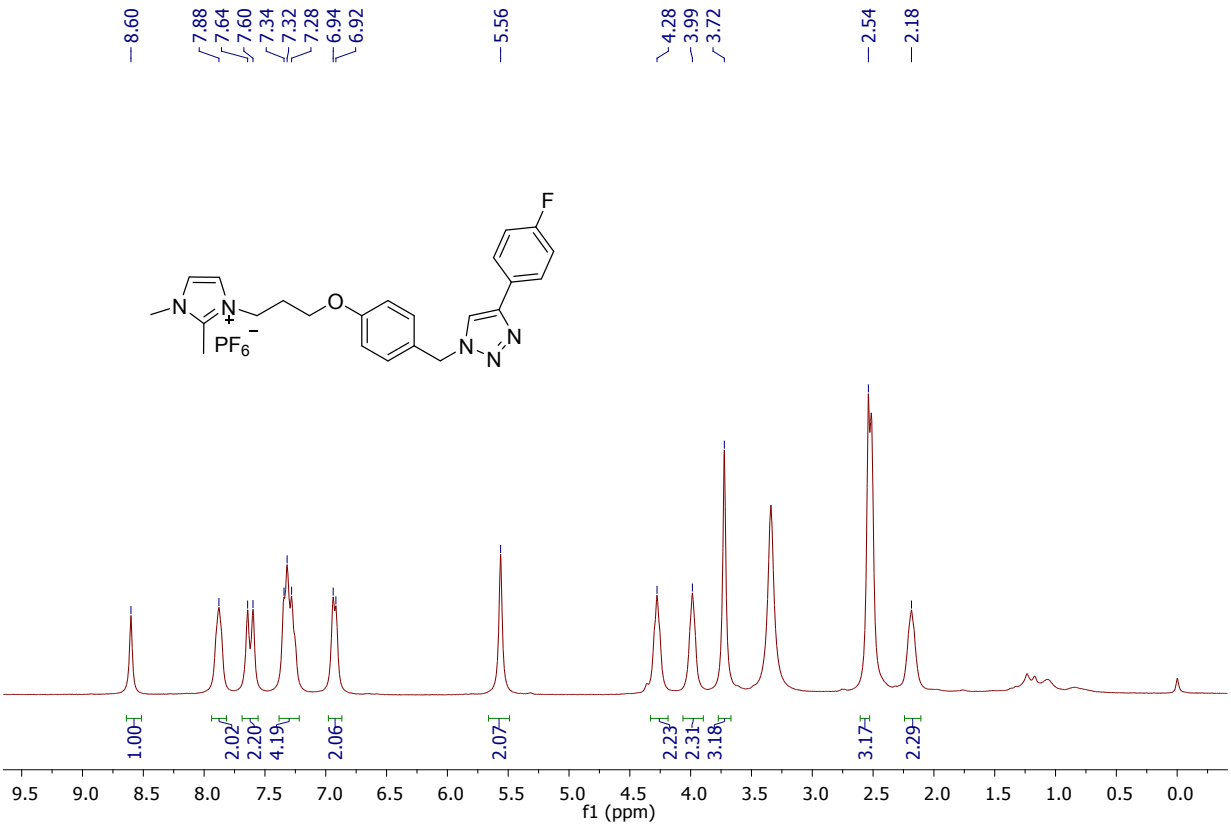
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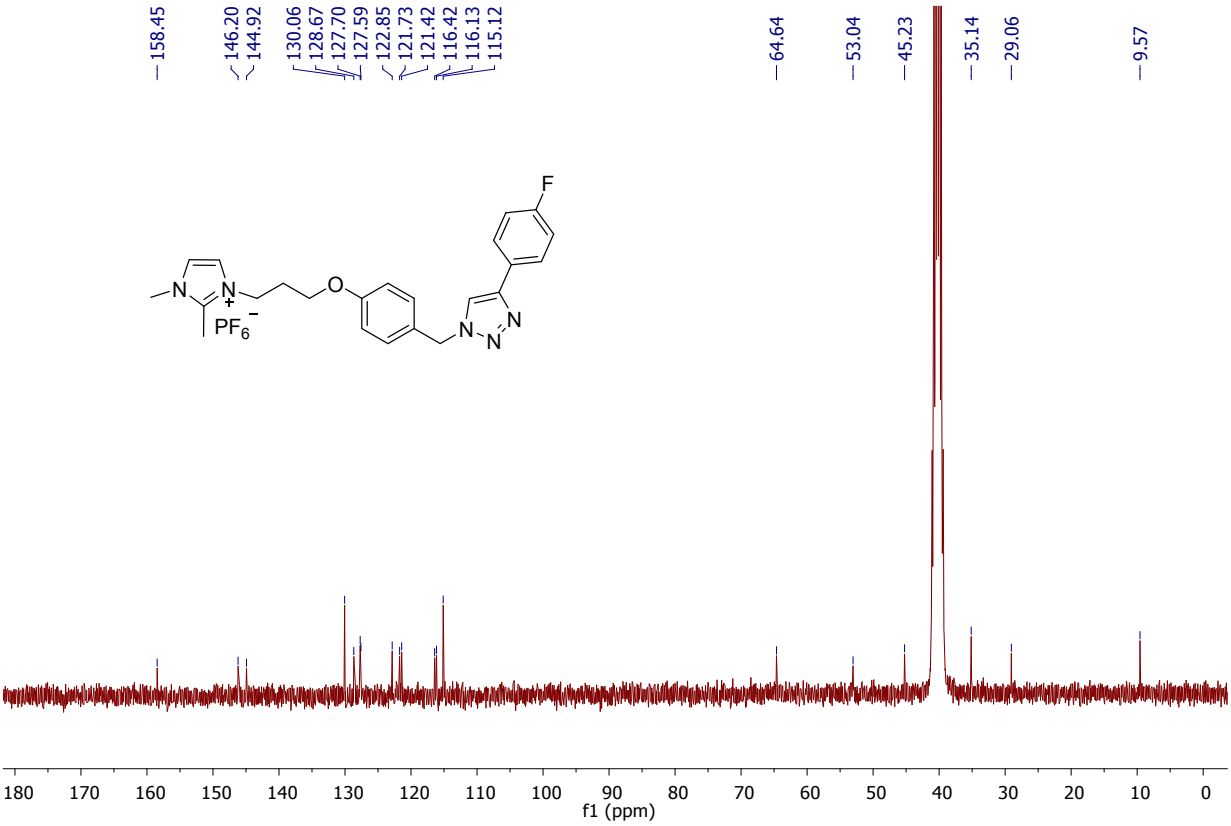
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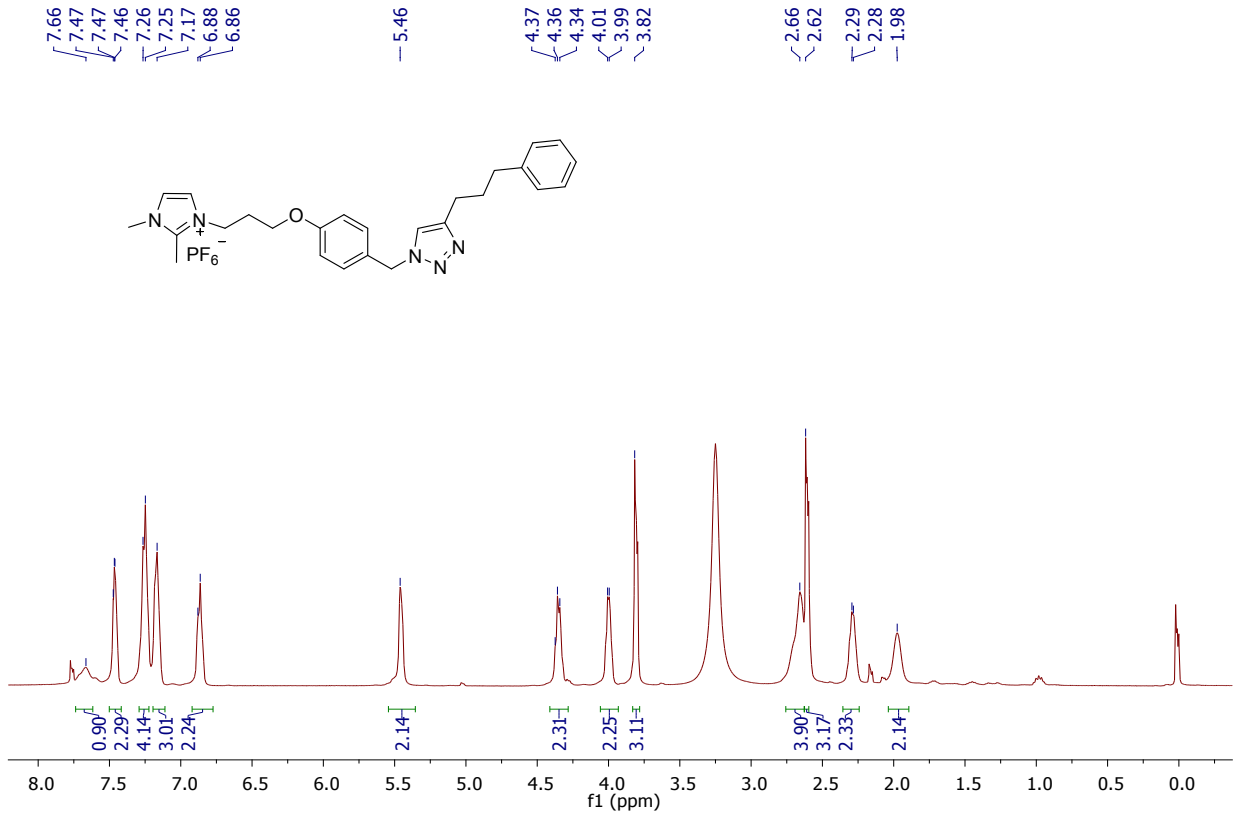
f1 (ppm)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7.47
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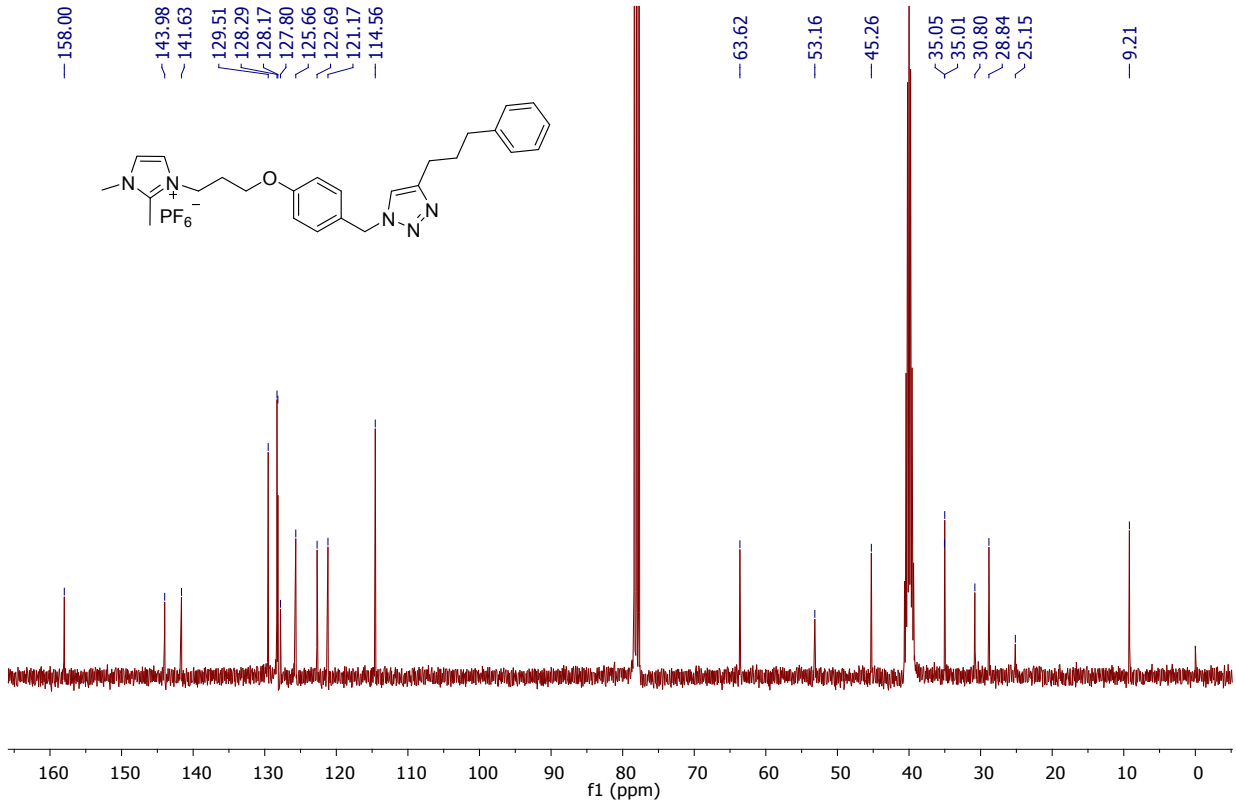
7.26
7.25
7.17
6.88
6.86
5.46
4.37
4.36
4.34
4.01
3.99
3.82
2.66
2.62
2.29
2.28
1.98
0.90
2.29
4.14
3.01
2.24
2.14
2.31
2.25
3.11
3.90
3.17
2.33
2.14
8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)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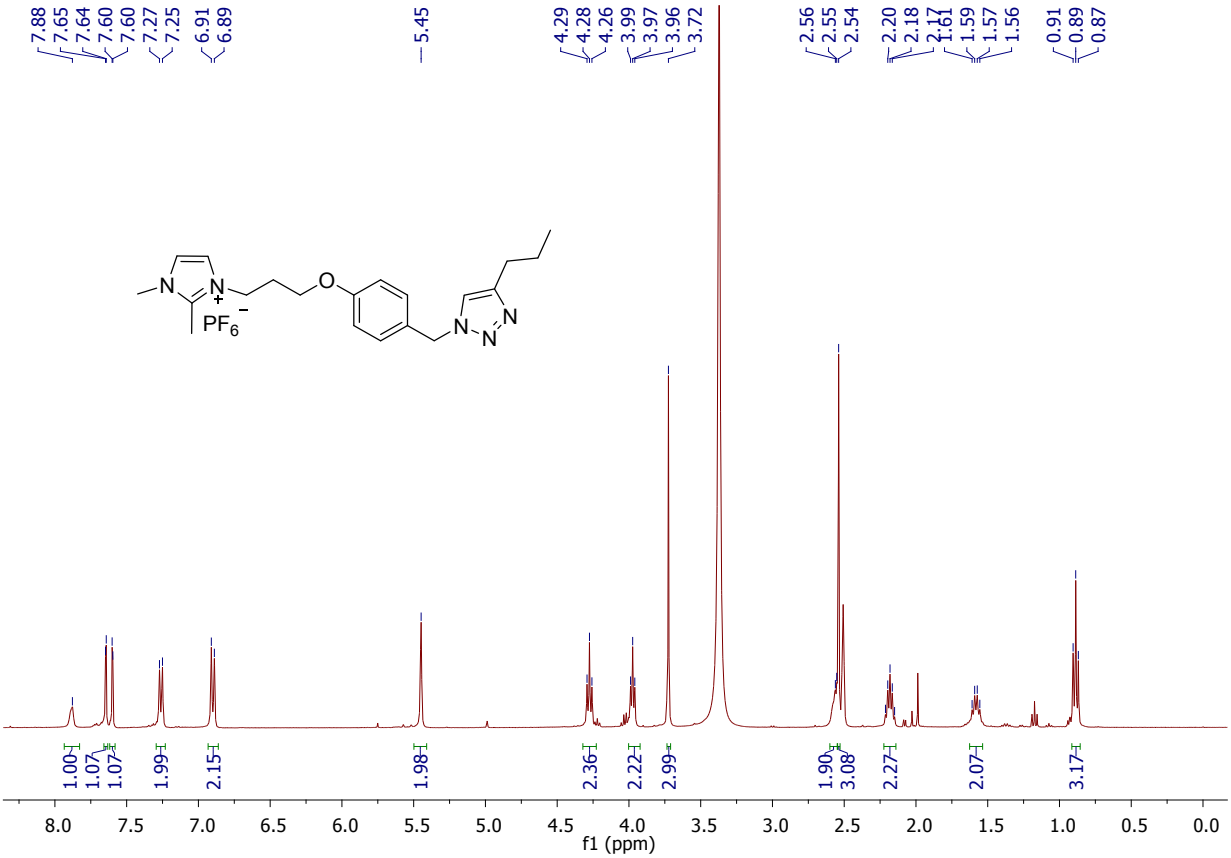
143.98
141.63
129.51
128.29
128.17
127.80
125.66
122.69
121.17
114.56
63.62
53.16
45.26
35.05
35.01
30.80
28.84
25.15
9.21
160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)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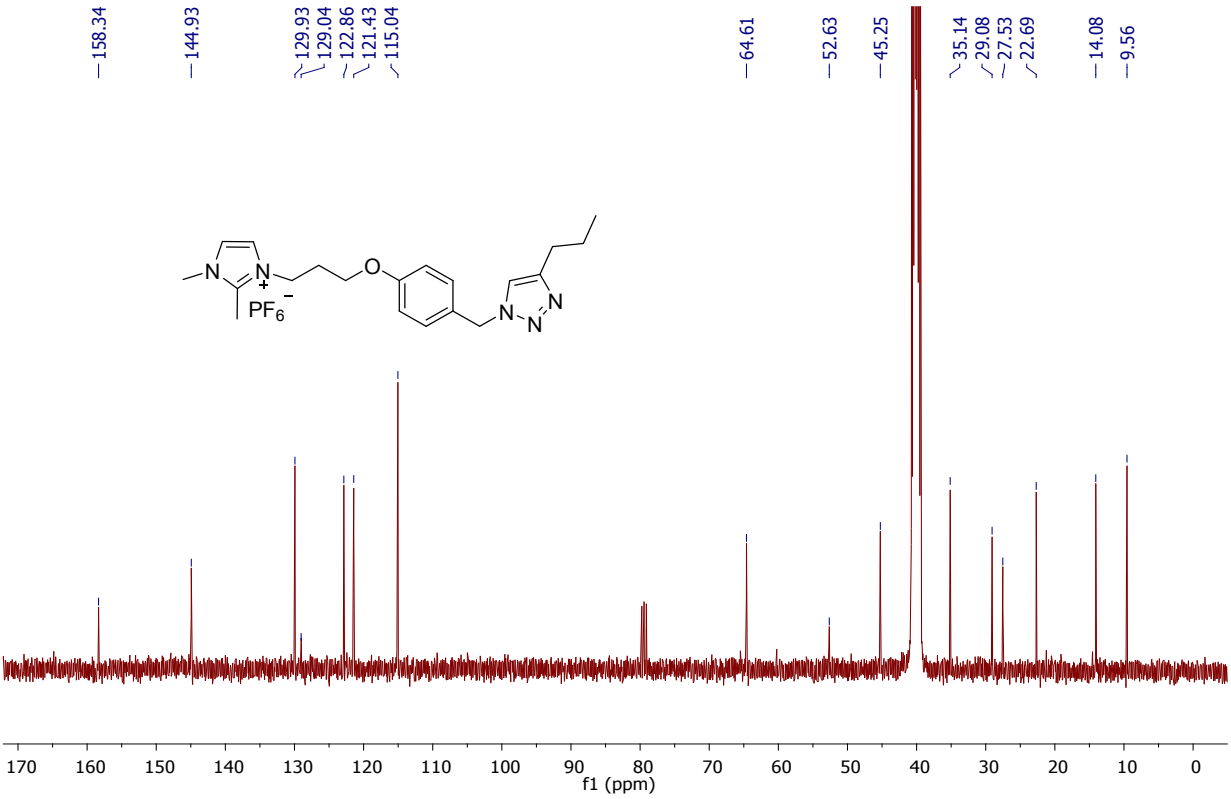
7.65
7.64
7.60
7.60
7.27
7.25
6.91
6.89
5.45
4.29
4.28
4.26
3.99
3.97
3.96
3.72
2.56
2.55
2.54
2.20
2.18
2.17
1.61
1.59
1.57
1.56
0.91
0.89
0.87
1.00
1.07
1.07
1.99
2.15
1.98
2.36
2.22
2.99
1.90
3.08
2.27
2.07
3.17
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)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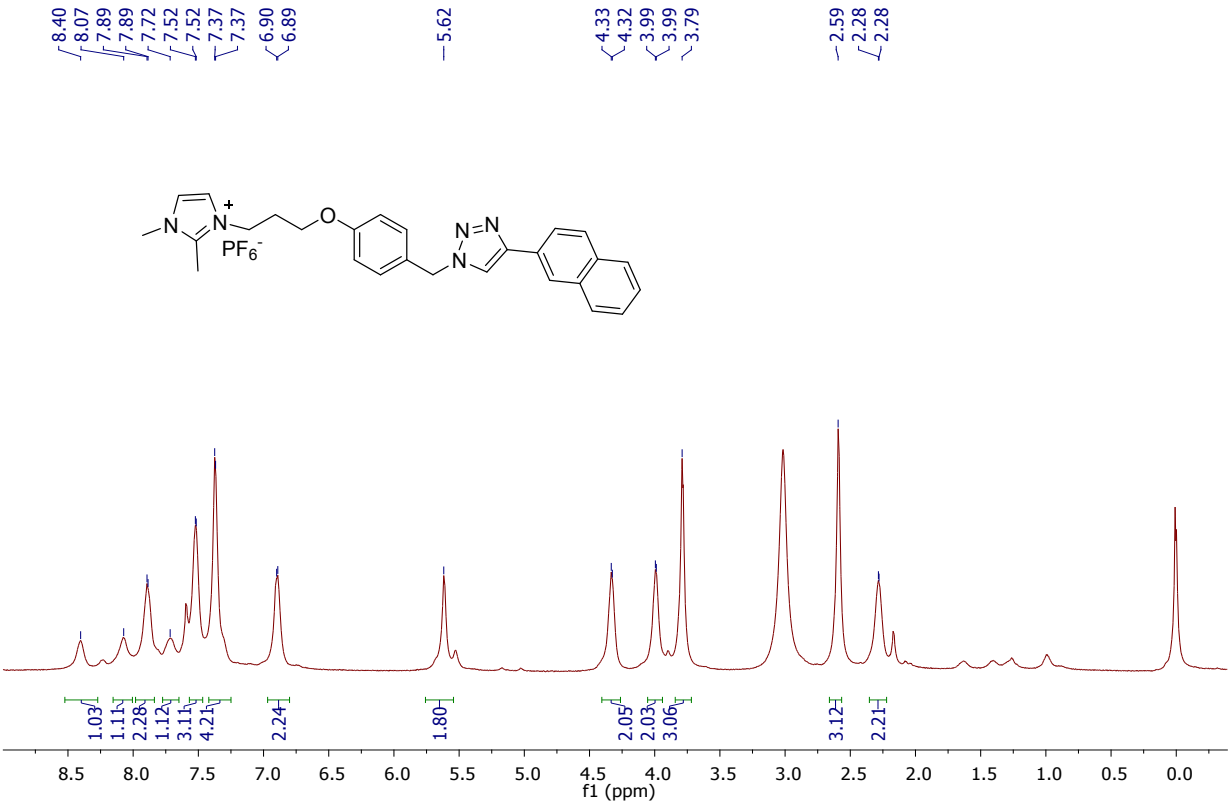
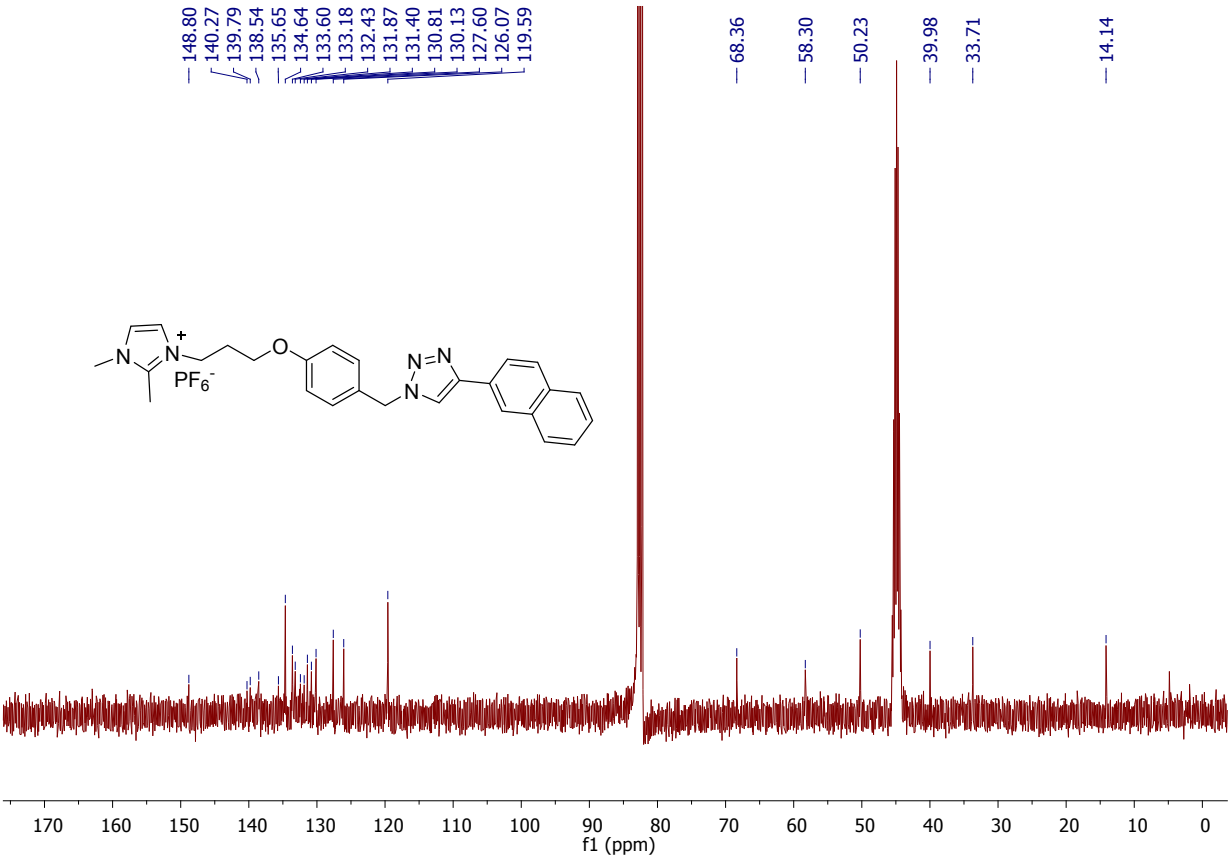
129.93
129.04
122.86
121.43
115.04
64.61
52.63
45.25
35.14
29.08
27.53
22.69
14.08
9.56
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
f1 (ppm)


8.40
8.07
7.89
7.89
7.72
7.52
7.52
7.37
7.37
6.90
6.89
5.62
4.33
4.32
3.99
3.99
3.79
2.59
2.28
2.28
PF6-
1.03
1.11
2.28
1.12
3.11
4.21
2.24
1.80
2.05
2.03
3.06
3.12
2.21
f1 (ppm)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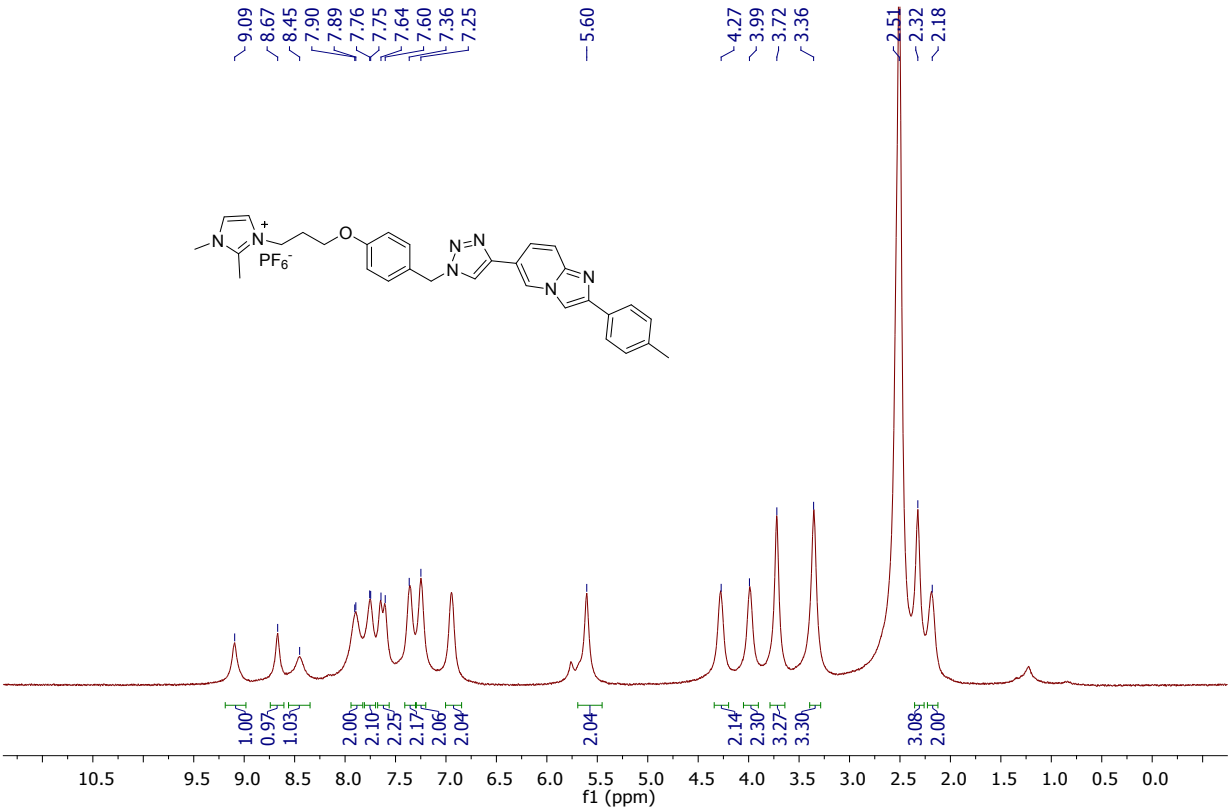
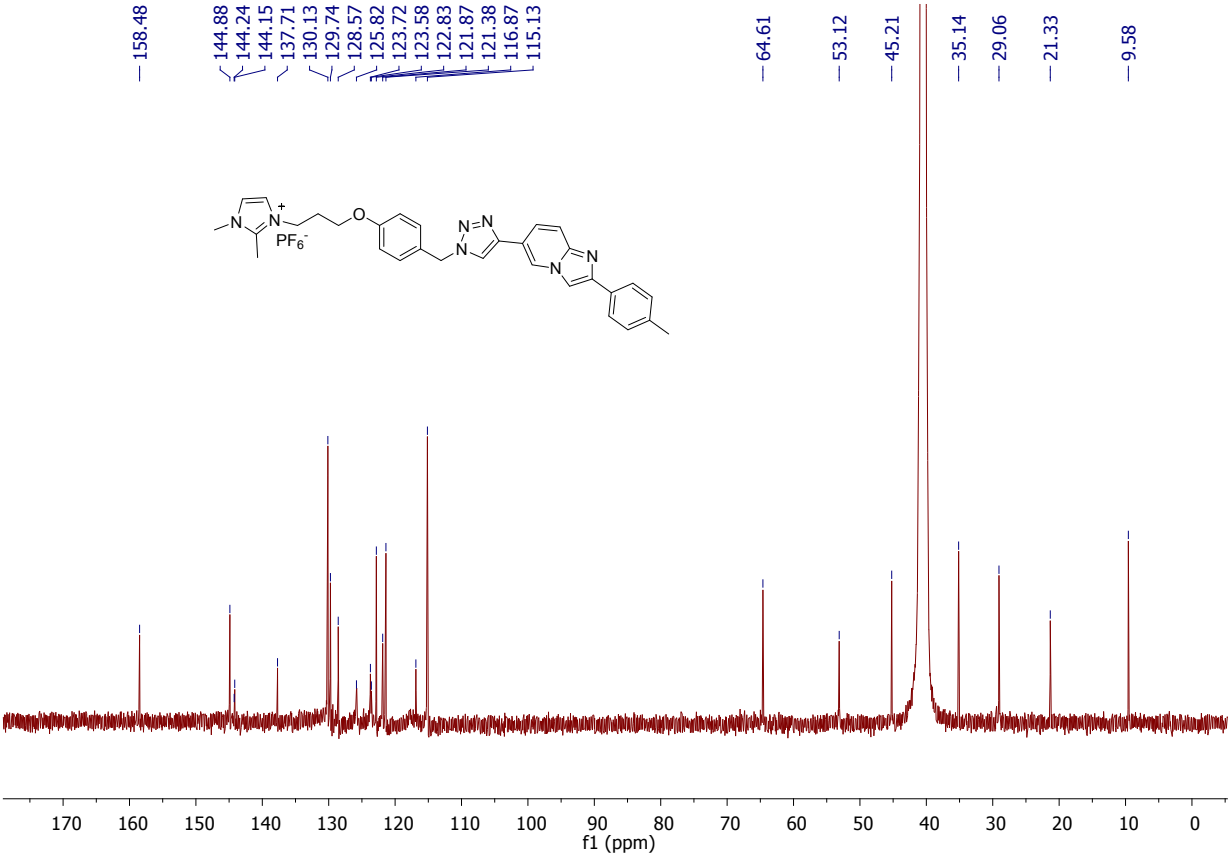
134.64
133.60
133.18
132.43
131.87
131.40
130.81
130.13
127.60
126.07
119.59
68.36
58.30
50.23
39.98
33.71
14.14
PF6-
f1 (ppm)


9.09
8.67
8.45
7.90
7.89
7.76
7.75
7.64
7.60
7.36
7.25
5.60
4.27
3.99
3.72
3.36
2.51
2.32
2.18
1.00
0.97
1.03
2.00
2.10
2.25
2.17
2.06
2.04
2.04
2.14
2.30
3.27
3.30
3.08
2.00
f1 (ppm)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144.24
144.15
137.71
130.13
129.74
128.57
125.82
123.72
123.58
122.83
121.87
121.38
116.87
115.13
64.61
53.12
45.21
35.14
29.06
21.33
9.58
f1 (ppm)