Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

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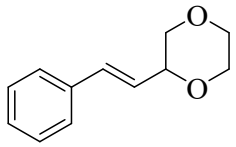
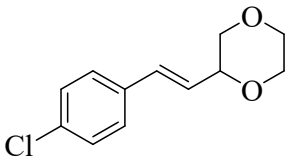
^{1}H and ^{13}C NMR analytical data:



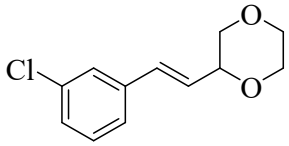
(*E*)-2-styryl-1,4-dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.63 – 7.34 (m, 2H), 7.34 – 7.27 (m, 2H), 7.27 – 7.09 (m, 1H), 6.68 (d, *J*=16, 1H), 6.07 (dd, *J*=16, 6, 1H), 4.26-4.21 (m, 1H), 3.92 – 3.77 (m, 3H), 3.75 – 3.72 (m, 1H), 3.68-3.61 (m, 1H), 3.41 (dd, *J*=11.5, 10.0, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 136.64, 132.86, 128.81, 128.15, 126.71, 125.34, 76.30, 71.20, 66.82, 66.52.



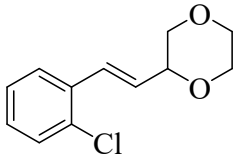
(*E*)-2-(4-chlorostyryl)-1,4-dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.60 – 7.02 (m, 5H), 6.63 (dd, *J*=16, 1H), 6.04 (dd, *J*=16, 6, 1H), 4.31 – 4.16 (m, 1H), 3.92 – 3.58 (m, 5H), 3.39 (dd, *J*=11, 10.0, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 134.97, 133.66, 131.46, 128.85, 127.79, 125.86, 75.97, 70.95, 66.69, 66.38.



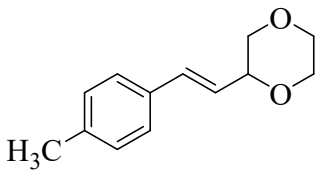
(*E*)-2-(3-chlorostyryl)-1,4
dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.39 – 7.34 (m, 1H), 7.25 – 7.19 (m, 3H), 6.63 (dd, J=16.0, 1.3, 1H), 6.09 (dd, J=16.0, 6.0, 1H), 4.30 – 4.20 (m, 1H), 3.93 – 3.71 (m, 4H), 3.65 (m, 1H), 3.40 (dd, J=11.5, 10.0, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 138.39, 134.63, 131.21, 129.89, 127.90, 126.77, 126.46, 124.81, 75.83, 70.96, 66.67, 66.39.



(*E*)-2-(2-chlorostyryl)-1,4-dioxane

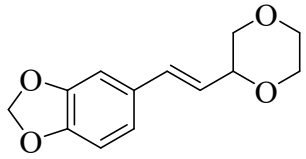
^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.57 – 7.45 (m, 1H), 7.38 – 7.31 (m, 1H), 7.24 – 7.14 (m, 2H), 7.07 (dd, *J*=16.2, 1.1, 1H), 6.07 (dd, *J*=16.0, 6.2, 1H), 4.31-4.26 (m, 1H), 3.94 – 3.71 (m, 4H), 3.71 – 3.62 (m, 1H), 3.43 (dd, *J*=11.5, 10.0, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 134.79, 133.48, 129.95, 129.07, 129.02, 128.33, 128.23, 127.05, 76.19, 71.05, 66.78, 66.50.



(*E*)-2-(4-methylstyryl)-1,4-dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.26 (d, *J*=8.4, 1H), 7.11 (d, *J*=8.0, 1H), 6.65 (d, *J*=16.1, 1H), 6.02 (dd, *J*=16.1, 6.3, 1H), 4.29 – 4.18 (m, 1H), 3.79 (m, *J*=12.1, 11.3, 6.9, 2.0, 2H), 3.65 (m, *J*=11.6, 10.4, 3.6, 1H), 3.41 (dd, *J*=11.5, 10.0, 1H), 2.33 (s, 1H).

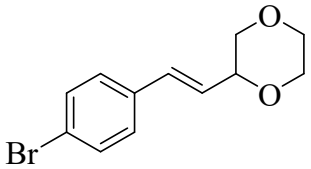
^{13}C NMR (100 MHz, $CDCl_3$) δ = 138.05, 133.84, 132.92, 129.51, 126.66, 124.24, 76.44, 71.24, 66.84, 66.53, 21.45.



(*E*)-5-(2-(1,4-dioxan-2-yl)vinyl)benzo[1,3]dioxole

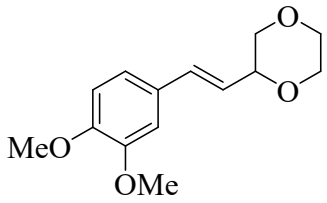
^{1}H NMR (400 MHz, $CDCl_3$) δ = 6.91 (d, *J*=1.7, 1H), 6.81 (dd, *J*=8.0, 1.6, 1H), 6.74 (d, *J*=8.0, 1H), 6.59 (dd, *J*=16.0, 1.2, 1H), 5.95 (s, 2H), 5.90 (dd, *J*=16.0, 6.3, 1H), 4.23-418 (m, 1H), 3.92 – 3.70 (m, 4H), 3.67-3.61 (m, 1H), 3.40 (dd, *J*=11.5, 10.0, 1H).

^{13}C NMR (100 MHz, $CDCl_3$) δ = 148.04, 147.52, 132.46, 130.87, 123.28, 121.40, 108.28, 105.72, 101.12, 76.12, 70.99, 66.61, 66.29.



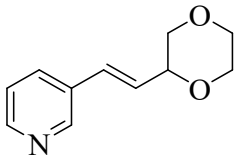
(*E*)-2-(4-bromostyryl)-1,4-dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 7.43 (dd, *J*=8.8, 2.1, 2H), 7.26 – 7.01 (m, 2H), 6.63 (d, *J*=16.6, 1H), 6.07 (dd, *J*=16.0, 6.2, 1H), 4.26-4.21 (m, 1H), 3.92 – 3.72 (m, 4H), 3.68-3.65 (m, 1H), 3.40 (dd, *J*=11.4, 10.1, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 135.55, 131.96, 131.62, 128.27, 126.10, 121.96, 76.10, 71.01, 66.83, 66.52.



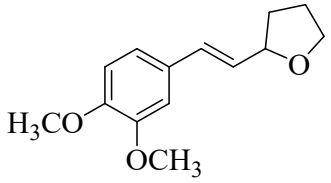
(*E*)-2-(3,4-dimethoxystyryl)-1,4-dioxane

^{1}H NMR (400 MHz, $CDCl_3$) δ = 6.97 – 6.84 (m, 2H), 6.79 (d, *J*=8.2, 1H), 6.60 (dd, *J*=16.1, 0.9, 1H), 5.93 (dd, *J*=16.0, 6.4, 1H), 4.34 – 4.11 (m, 1H), 3.87 (s 3H), 3.85 (s, 3H), 3.84 – 3.75 (m, 3H), 3.75 – 3.69 (m, 1H), 3.66 - 3.60 (m, 1H), 3.41 (dd, *J*=11.5, 10.0, 1H).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 149.27, 149.19, 132.81, 129.62, 123.25, 120.08, 111.22, 108.93, 76.35, 71.14, 66.78, 66.47, 56.02, 55.92.



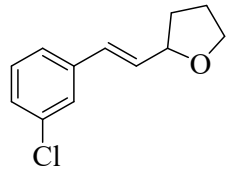
(*E*)-3-(2-(1,4-dioxan-2-yl)vinyl)pyridine

1H NMR (400 MHz, $CDCl_3$) δ = 8.60 (d, J=1.6, 1H), 8.48 (dd, J=4.8, 1.2, 1H), 7.80 – 7.57 (m, 1H), 7.27 – 7.23 (m, 1H), 6.69 (dd, J=16.0, 0.8, 1H), 6.17 (dd, J=16, 5.8, 1H), 4.30-4.25 (m, 1H), 3.88 – 3.73 (m, 4H), 3.69-3.65 (m, 1H), 3.41 (dd, J=11.4, 10, 1H).).
^{13}C NMR (100 MHz, $CDCl_3$) δ = 148.92, 148.41, 133.29, 132.26, 129.0, 127.80, 123.68, 75.90, 70.93, 66.81, 66.51



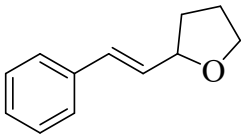
(*E*)-2-(3,4-dimethoxystyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ = 6.93 – 6.73 (m, 3H), 6.61 – 6.43 (m, 1H), 6.05 (dd, *J* = 15.8, 6.8 Hz, 1H), 4.43 (q, *J* = 7.0 Hz, 1H), 3.99 – 3.74 (m, 8H), 2.17 – 1.67 (m, 4H).
^{13}C NMR (100 Hz, $CDCl_3$) δ = 148.99, 148.77, 130.51, 129.91, 128.42, 119.82, 117.27, 111.10, 108.85, 79.96, 68.21, 55.91, 32.52, 26.06.



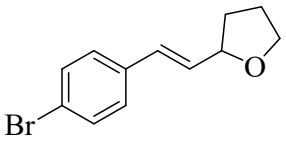
(*E*)-2-(3-chlorostyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ= 7.44 – 7.13 (m, 4H), 6.57 – 6.47 (m, 1H), 6.34 – 6.10 (m, 1H), 4.46 (m, *J* = 7.4, 1.1 Hz, 1H), 4.03 – 3.75 (m, 2H), 2.21 – 1.63 (m, 4H).
^{13}C NMR (100 Hz, $CDCl_3$) δ= 138.87, 134.53, 132.32, 130.15, 129.27, 127.48, 126.57, 124.81, 79.44, 68.33, 32.42, 25.96.



(*E*)-2-styryltetrahydrofuran

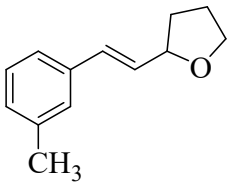
^{1}H NMR (400 MHz, $CDCl_3$) δ= 7.40 – 7.34 (m, 2H), 7.34 – 7.26 (m, 2H), 7.23 – 7.18 (m, 1H), 6.59 (t, *J* = 11.7 Hz, 1H), 6.26 – 6.15 (m, 1H), 4.46 (m, *J* = 7.6, 1.0 Hz, 1H), 4.01 – 3.92 (m, 1H), 3.82 (m, *J* = 14.0, 7.8, 3.9 Hz, 1H), 2.20 – 2.06 (m, 1H), 2.05 – 1.87 (m, 2H), 1.78 – 1.66 (m, 1H).
^{13}C NMR (100 Hz, $CDCl_3$) δ= 136.96, 130.66, 130.52, 128.63, 127.56, 126.50, 79.74, 68.25, 32.47, 25.99.



(*E*)-2-(4-bromostyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ 7.45 – 7.40 (m, 2H), 7.27 – 7.22 (m, 2H), 6.52 (d, *J* = 15.9 Hz, 1H), 6.23 – 6.17 (m, 1H), 4.46 (q, *J* = 6.8 Hz, 1H), 3.99 – 3.82 (m, 2H), 2.17 – 1.60 (m, 6H).

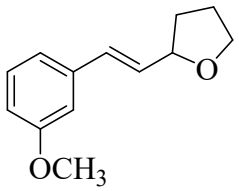
^{13}C NMR (100 Hz, $CDCl_3$) δ= 135.84, 131.62, 131.40, 129.21, 128.00, 121.23, 79.47, 68.24, 32.34, 25.92.



(*E*)-2-(3-methylstyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ= 7.39 – 6.94 (m, 4H), 6.57 (t, *J* = 15.4 Hz, 1H), 6.31 – 6.01 (m, 1H), 4.46 (q, *J* = 6.9 Hz, 1H), 4.09 – 3.75 (m, 2H), 2.33 (s, 3H), 2.24 – 1.63 (m, 4H).

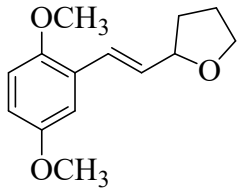
^{13}C NMR (100 Hz, $CDCl_3$) δ= 138.12, 136.89, 130.64, 130.39, 128.53, 128.39, 127.32, 123.71, 79.95, 68.55, 32.50, 25.87, 21.91.



(*E*)-2-(3-methoxystyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ= 7.28 – 6.73 (m, 4H), 6.54 (d, *J* = 15.8 Hz, 1H), 6.18 (m, *J* = 18.7, 12.1, 7.6 Hz, 1H), 4.46 (m, *J* = 7.6, 1.0 Hz, 1H), 4.01 – 3.80 (m, 2H), 3.80 – 3.76 (m, 3H), 2.24 – 1.66 (m, 4H).

^{13}C NMR (100 Hz, $CDCl_3$) δ= 159.95, 138.46, 130.95, 130.94, 129.59, 119.56, 113.81, 112.12, 79.94, 68.27, 55.39, 32.91, 25.88.

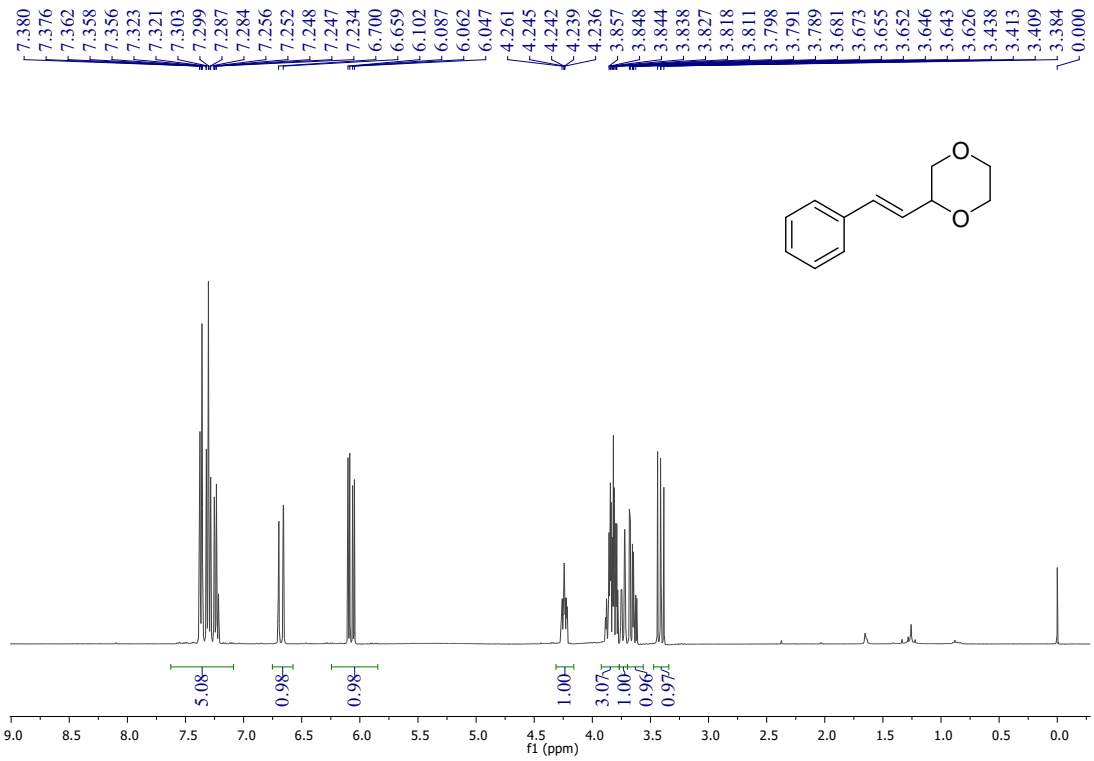


(*E*)-2-(2,5-dimethoxystyryl)tetrahydrofuran

^{1}H NMR (400 MHz, $CDCl_3$) δ= 6.99 (d, *J* = 2.8 Hz, 1H), 6.92 – 6.70 (m, 3H), 6.31 – 6.10 (m, 1H), 4.45 (q, *J* = 7.1 Hz, 1H), 3.95 (m, *J* = 14.5, 7.4 Hz, 1H), 3.85 – 3.78 (m, 1H), 3.77 (s, 3H), 3.75 (s, 3H), 2.18 – 1.64 (m, 4H).

^{13}C NMR (100 Hz, $CDCl_3$) δ= 153.92, 151.40, 131.57, 126.83, 125.38, 113.82, 112.35, 112.14, 112.07, 80.20, 68.36, 56.27, 32.55, 25.97.

NMR Spectra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0.000
O
O
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3.07
1.00
0.96
0.97
9.0 8.5 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
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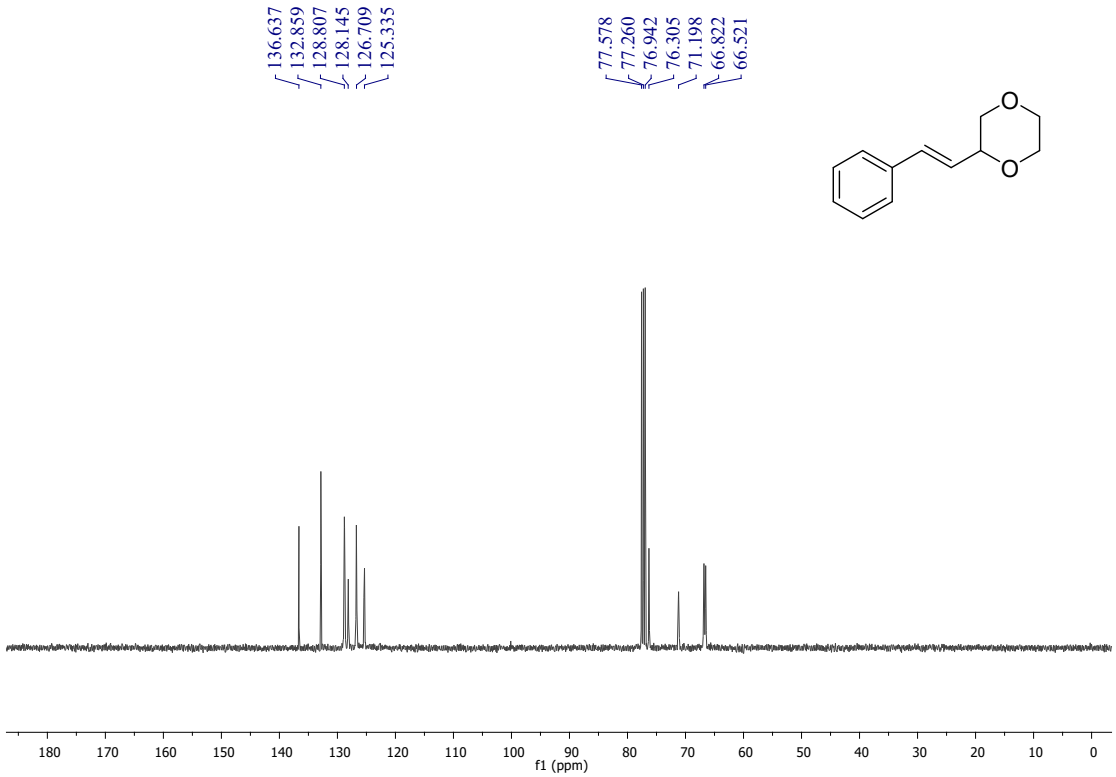
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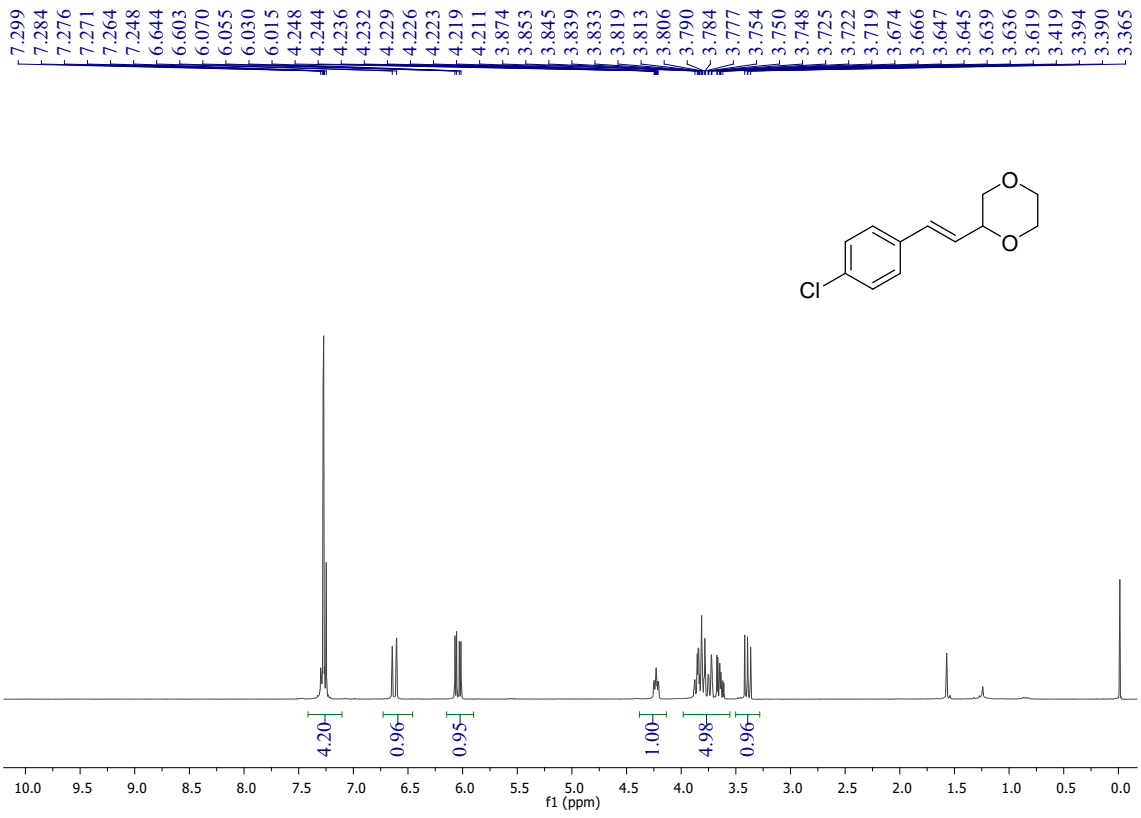
O
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)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3.390
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Cl
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0.95
1.00
4.98
0.96
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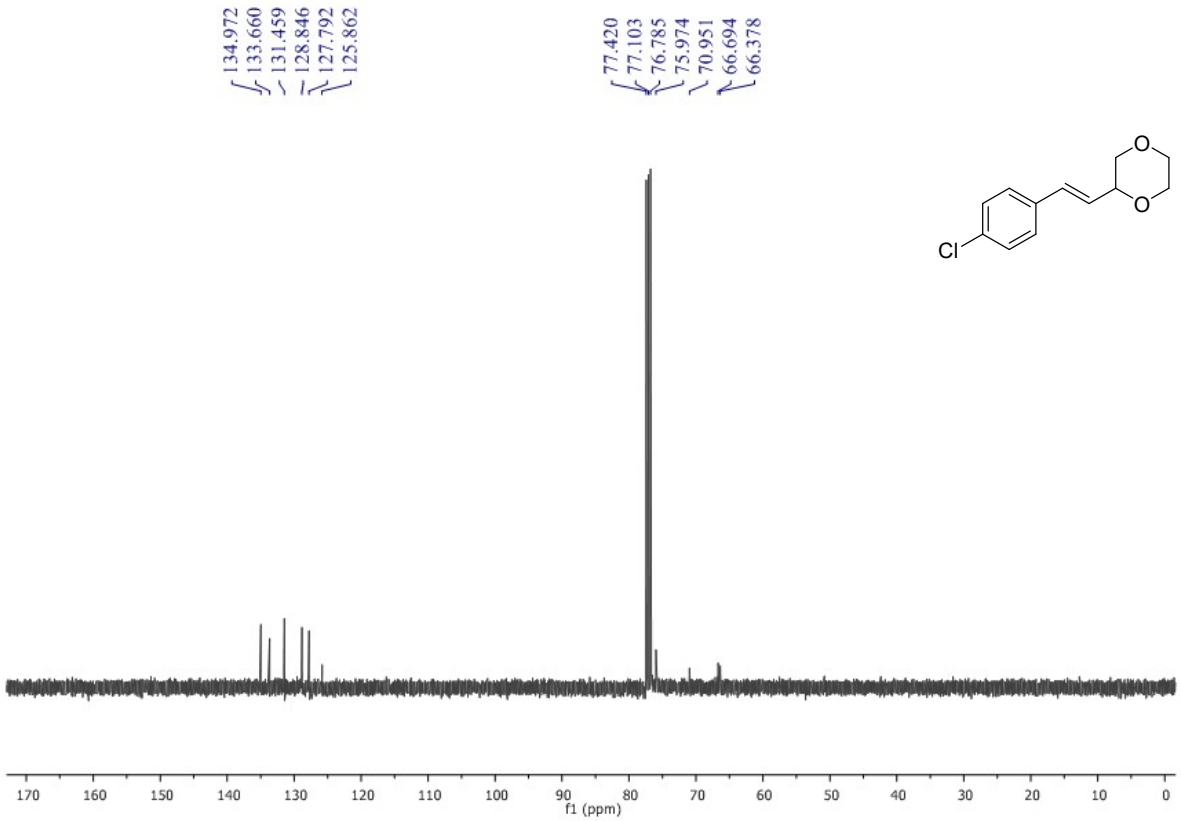
f1 (ppm)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Cl
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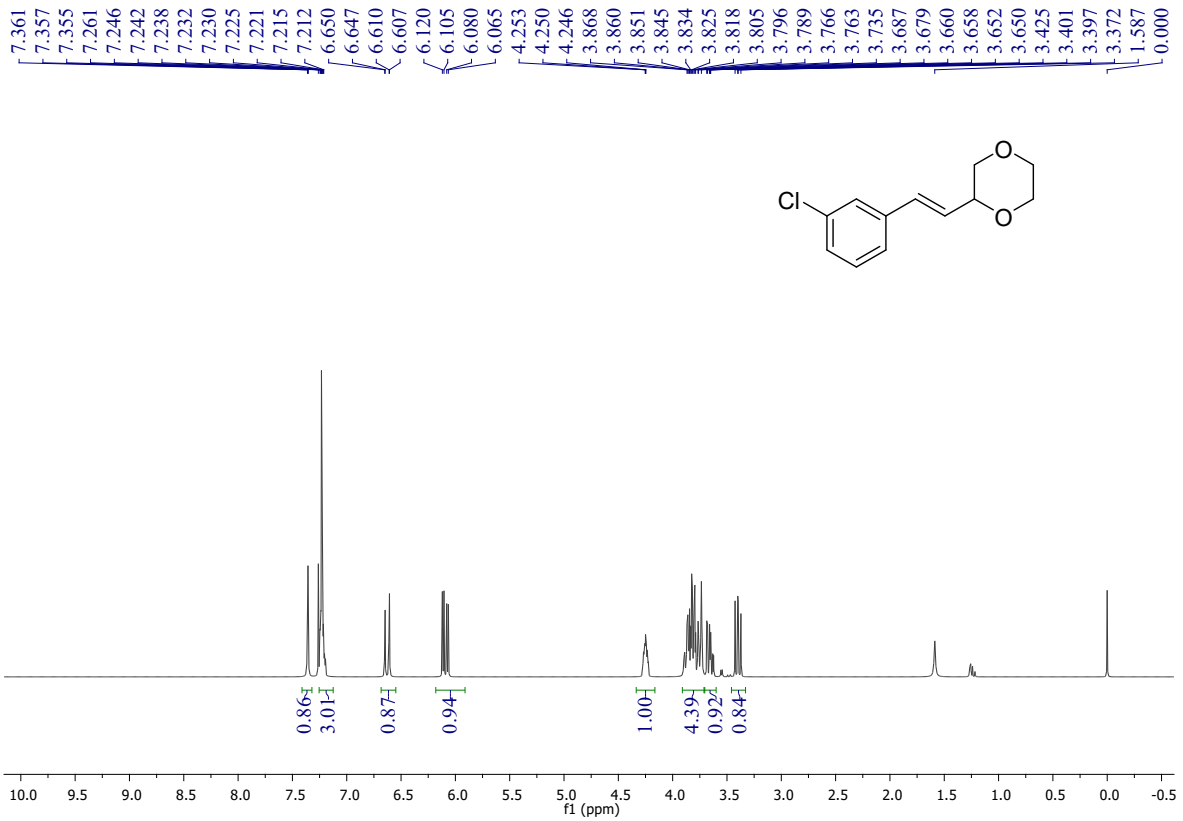
f1 (ppm)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9.0
8.5
8.0
7.5
7.0
6.5
6.0
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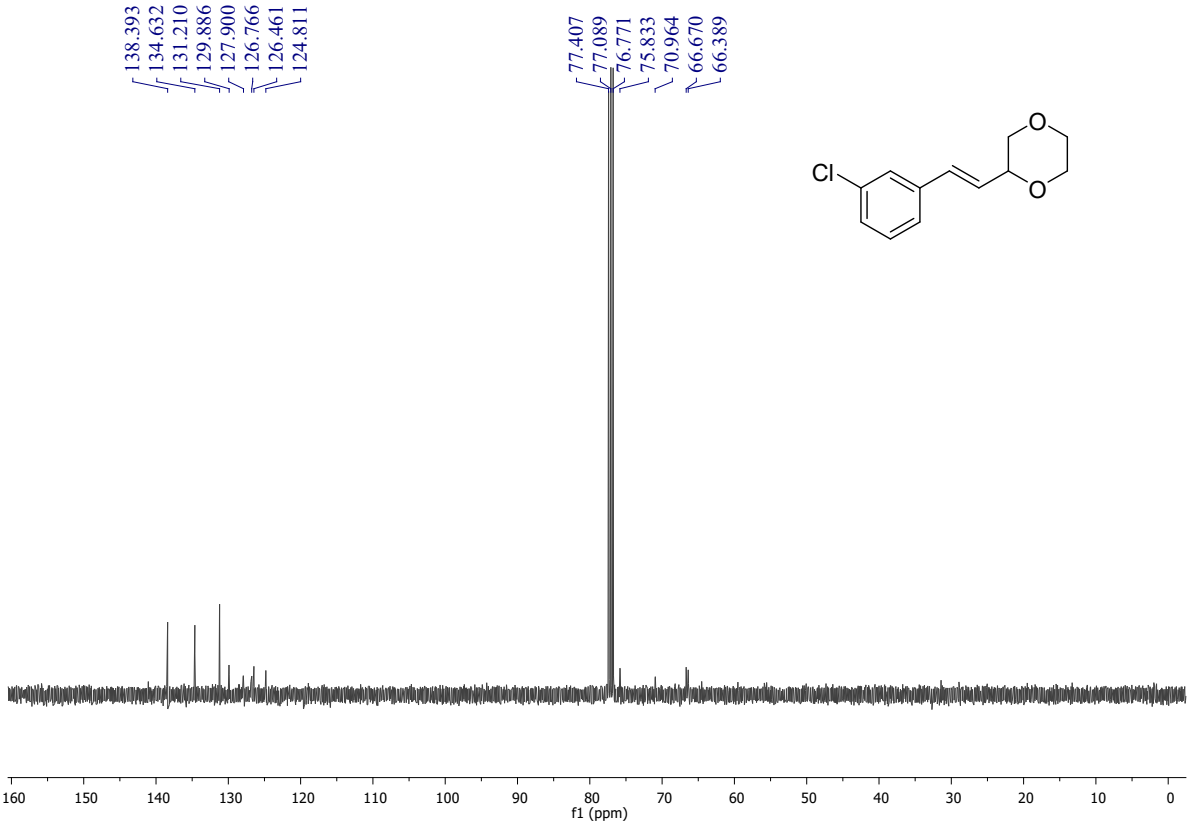
f1 (ppm)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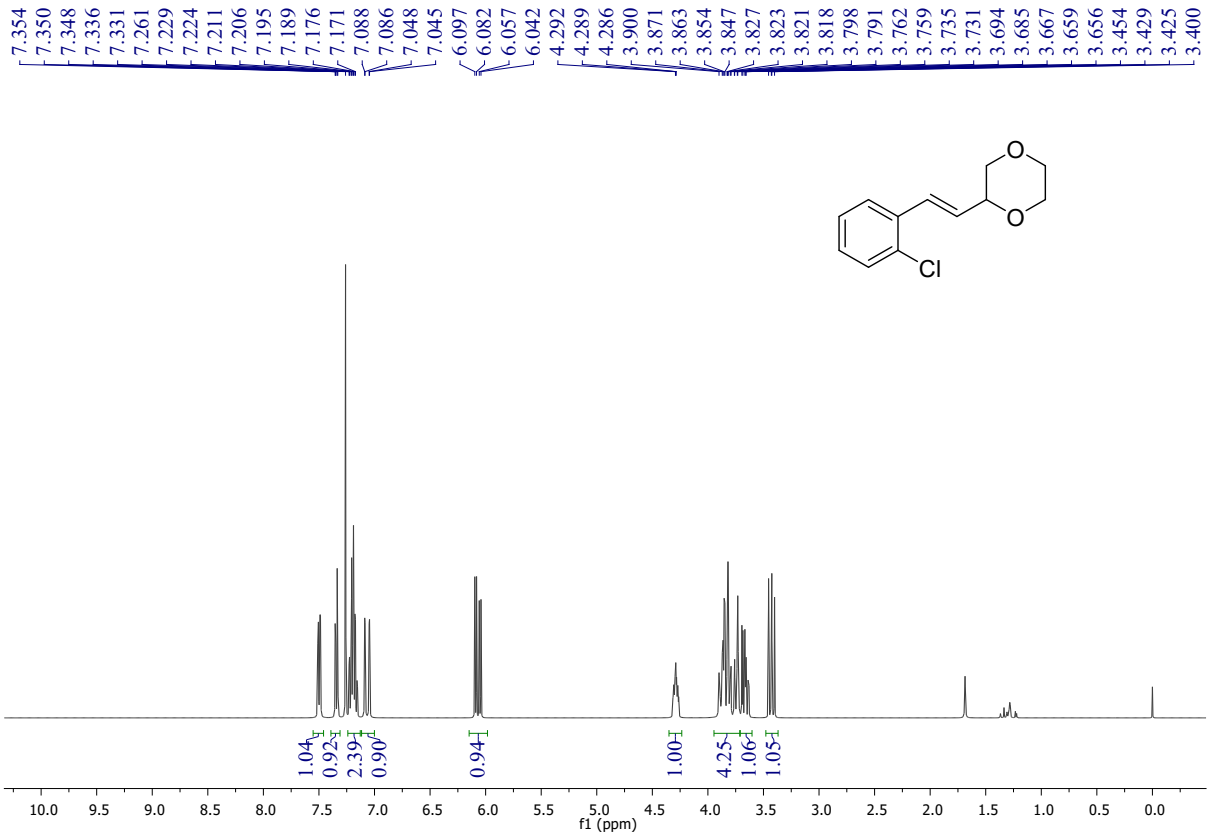
O
O
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
f1 (ppm)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7.224
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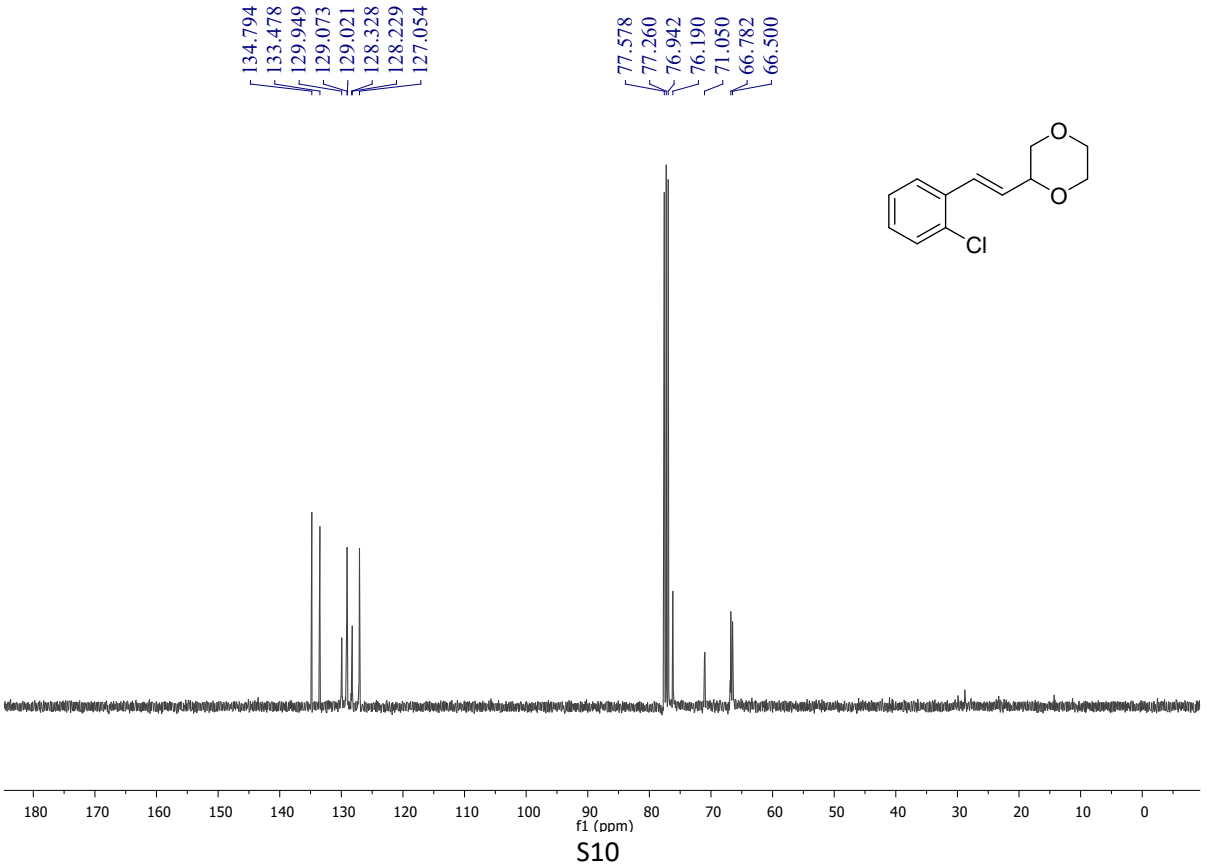
7.206
7.195
7.189
7.176
7.171
7.088
7.086
7.048
7.045
6.097
6.082
6.057
6.042
4.292
4.289
4.286
3.900
3.871
3.863
3.854
3.847
3.827
3.823
3.821
3.818
3.798
3.791
3.762
3.759
3.735
3.731
3.694
3.685
3.667
3.659
3.656
3.454
3.429
3.425
3.400
O
O
Cl
1.04
0.92
2.39
0.90
0.94
1.00
4.25
1.06
1.05
10.0 9.5 9.0 8.5 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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133.478
129.949
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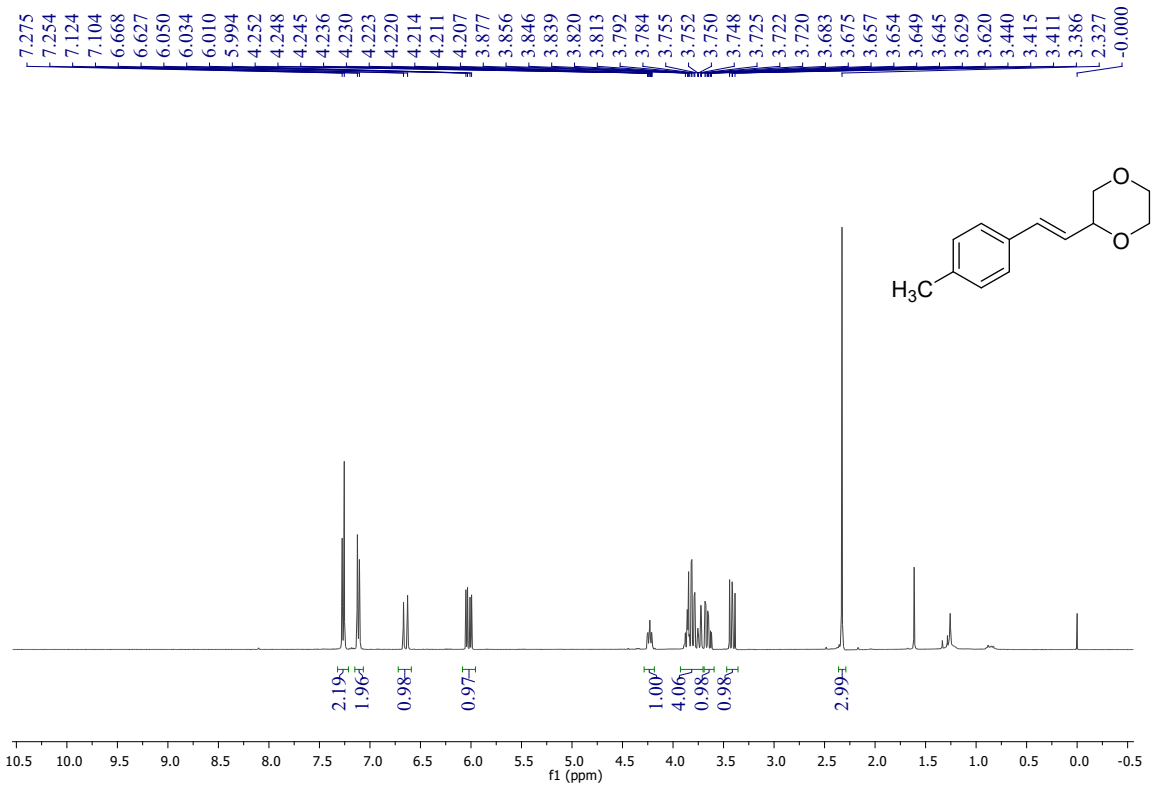
129.021
128.328
128.229
127.054
77.578
77.260
76.942
76.190
71.050
66.782
66.500
O
O
Cl
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)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6.034
6.010
5.994
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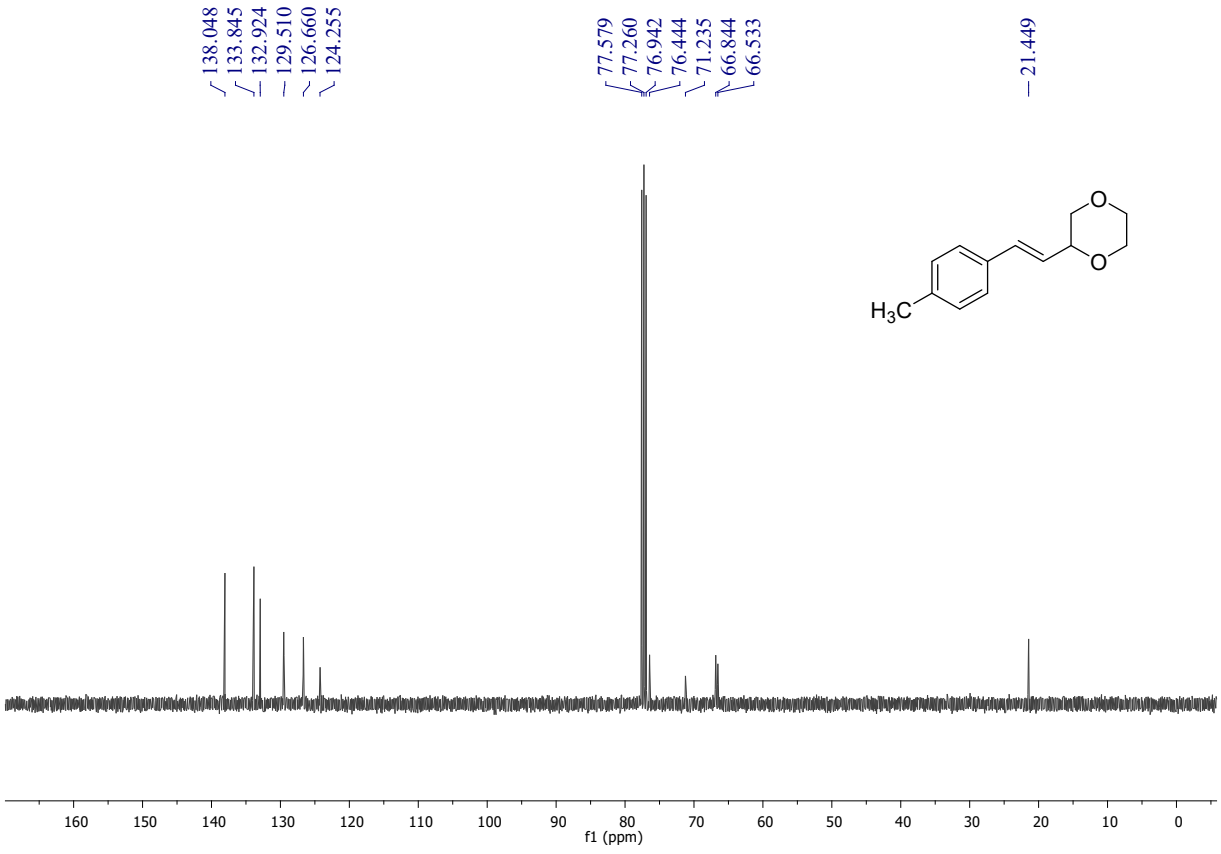
4.248
4.245
4.236
4.230
4.223
4.220
4.214
4.211
4.207
3.877
3.856
3.846
3.839
3.820
3.813
3.792
3.784
3.755
3.752
3.750
3.748
3.725
3.722
3.720
3.683
3.675
3.657
3.654
3.649
3.645
3.629
3.620
3.440
3.415
3.411
3.386
2.327
-0.000
O
O
H3C
2.19
1.96
0.98
0.97
1.00
4.06
0.98
0.98
2.99
10.5 10.0 9.5 9.0 8.5 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 -0.5
f1 (ppm)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133.845
132.924
129.510
126.660
124.255
77.579
77.260
76.942
76.444
71.235
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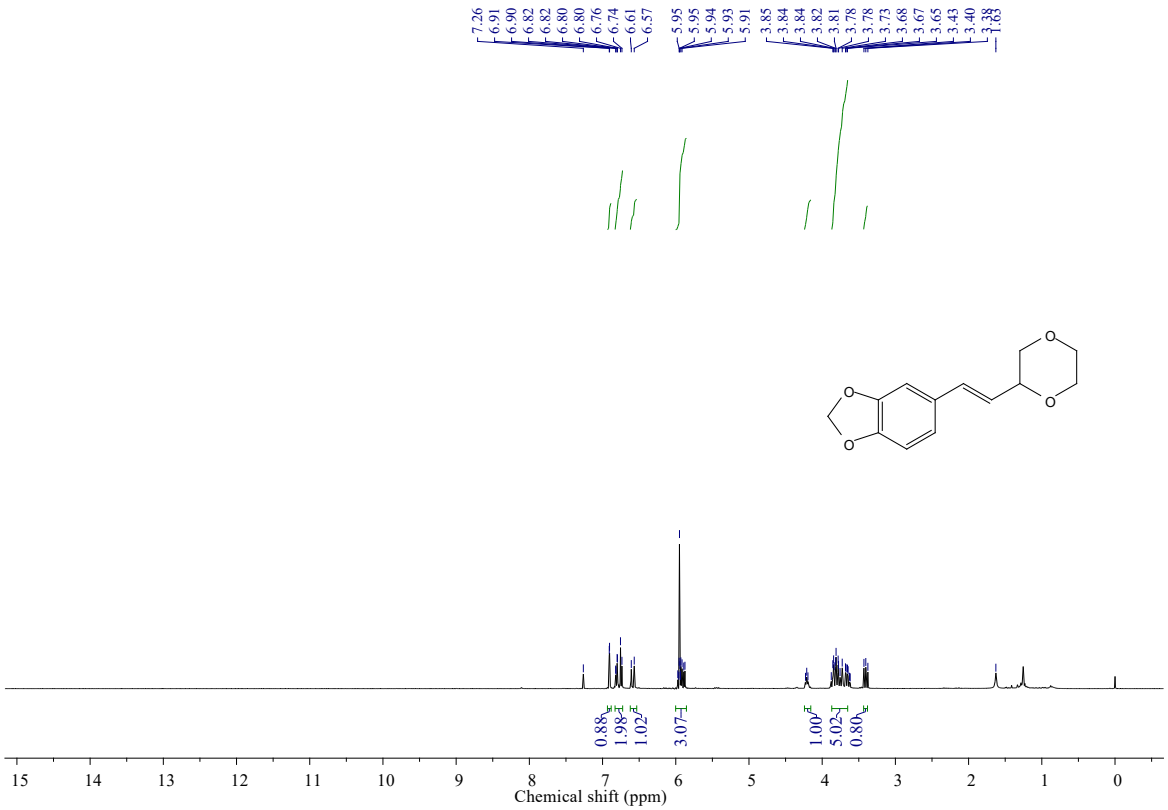
66.533
21.449
O
O
H3C
160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)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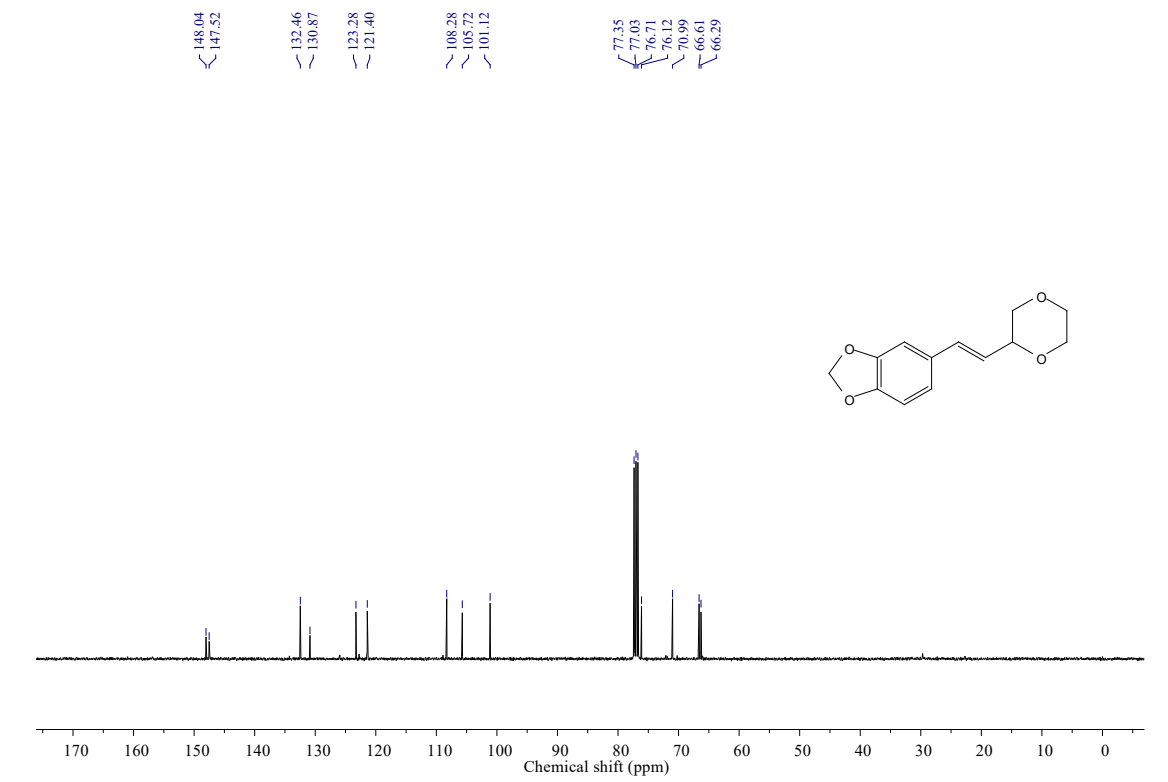
6.91
6.90
6.82
6.82
6.80
6.80
6.76
6.74
6.61
6.57
5.95
5.95
5.94
5.93
5.91
3.85
3.84
3.84
3.82
3.81
3.78
3.78
3.73
3.68
3.67
3.65
3.43
3.40
3.38
1.63
0.88
1.98
1.02
3.07
1.00
5.02
0.80
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
Chemical shift (ppm)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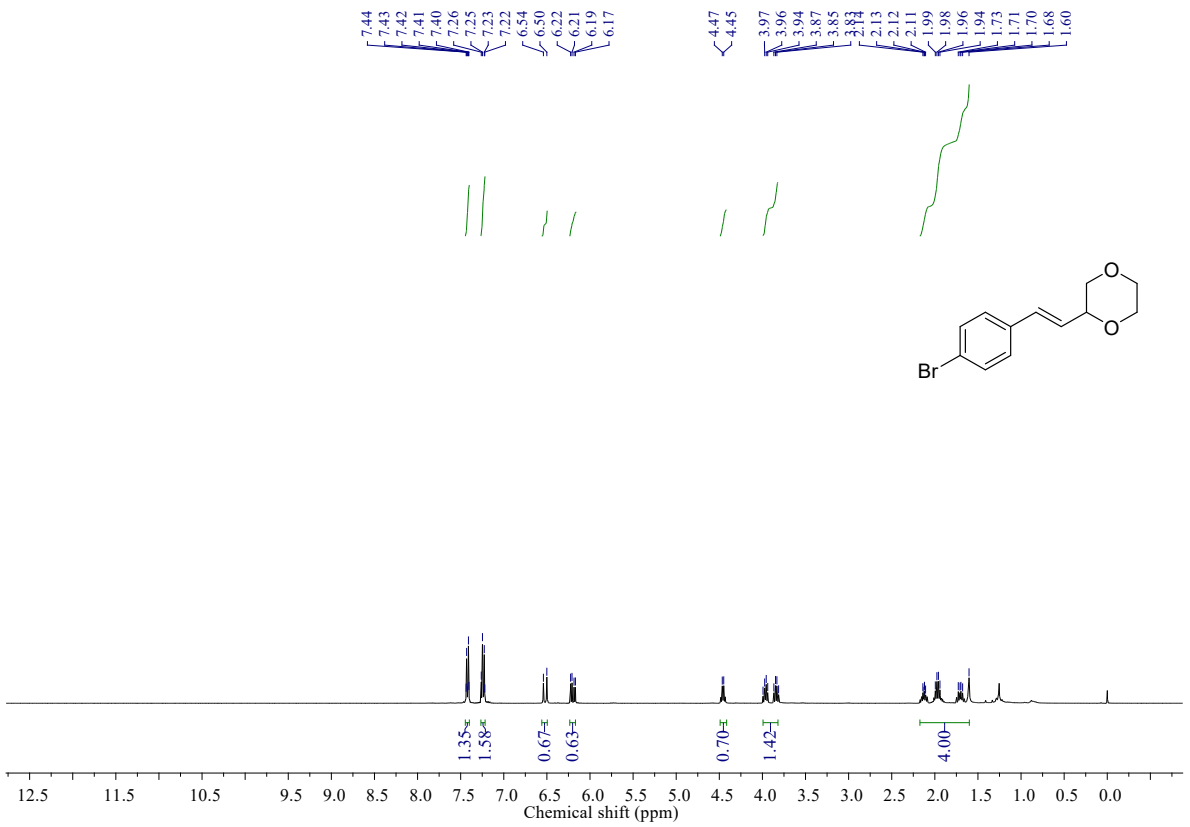
147.52
132.46
130.87
123.28
121.40
108.28
105.72
101.12
77.35
77.03
76.71
76.12
70.99
66.61
66.29
170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift (ppm)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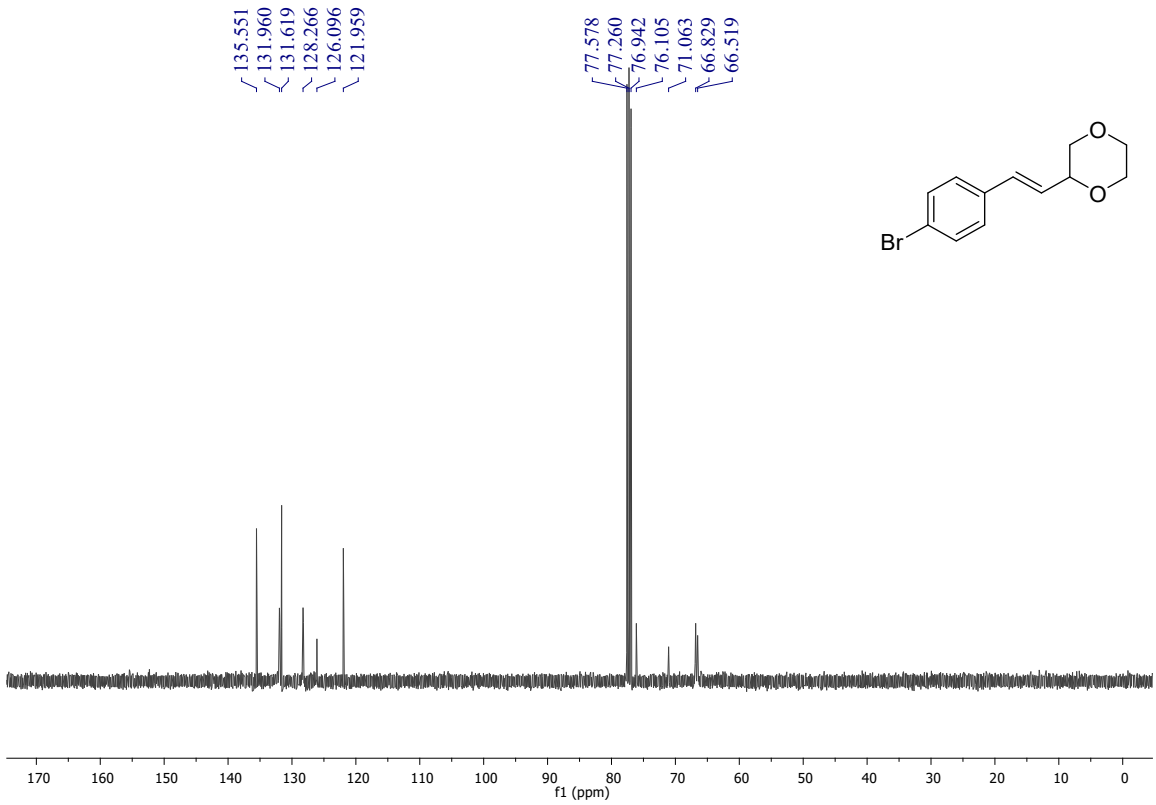
7.43
7.42
7.41
7.40
7.26
7.25
7.23
7.22
6.54
6.50
6.22
6.21
6.19
6.17
4.47
4.45
3.97
3.96
3.94
3.87
3.85
2.13
2.12
2.11
1.99
1.98
1.96
1.94
1.73
1.71
1.70
1.68
1.60
O
O
Br
1.35
1.58
0.67
0.63
0.70
1.42
4.00
12.5
11.5
10.5
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Chemical shift (ppm)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121.959
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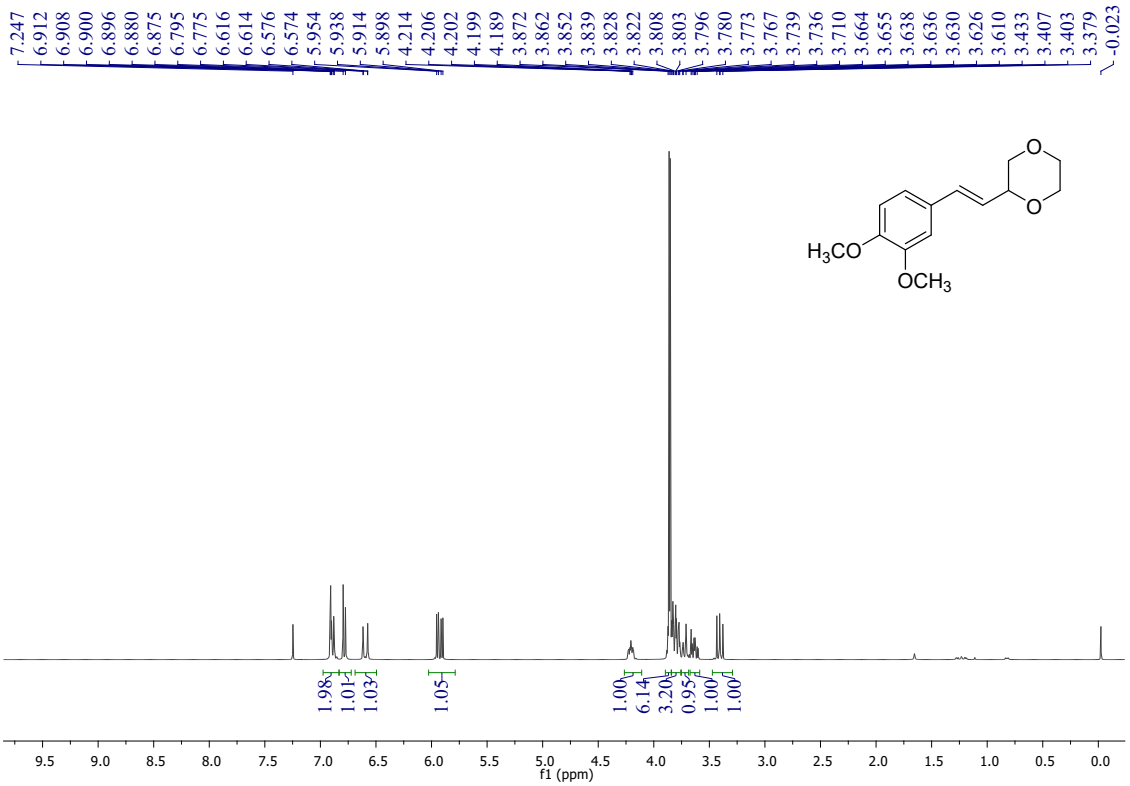
77.260
76.942
76.105
71.063
66.829
66.519
O
O
Br
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
f1 (ppm)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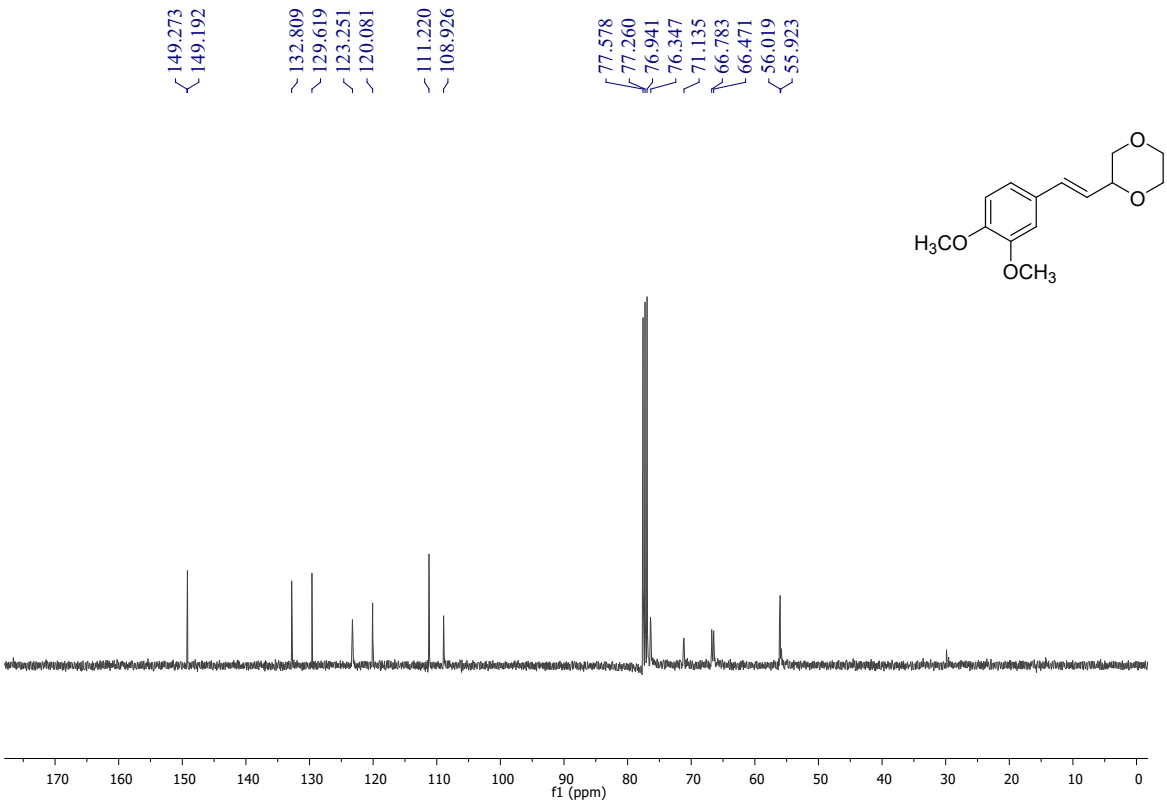
6.900
6.896
6.880
6.875
6.795
6.775
6.616
6.614
6.576
6.574
5.954
5.938
5.914
5.898
4.214
4.206
4.202
4.199
4.189
3.872
3.862
3.852
3.839
3.828
3.822
3.808
3.803
3.796
3.780
3.773
3.767
3.739
3.736
3.710
3.664
3.655
3.638
3.636
3.630
3.626
3.610
3.433
3.407
3.403
3.379
-0.023
O
O
H3CO
OCH3
1.98
1.01
1.03
1.05
1.00
6.14
3.20
0.95
1.00
1.00
9.5 9.0 8.5 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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149.192
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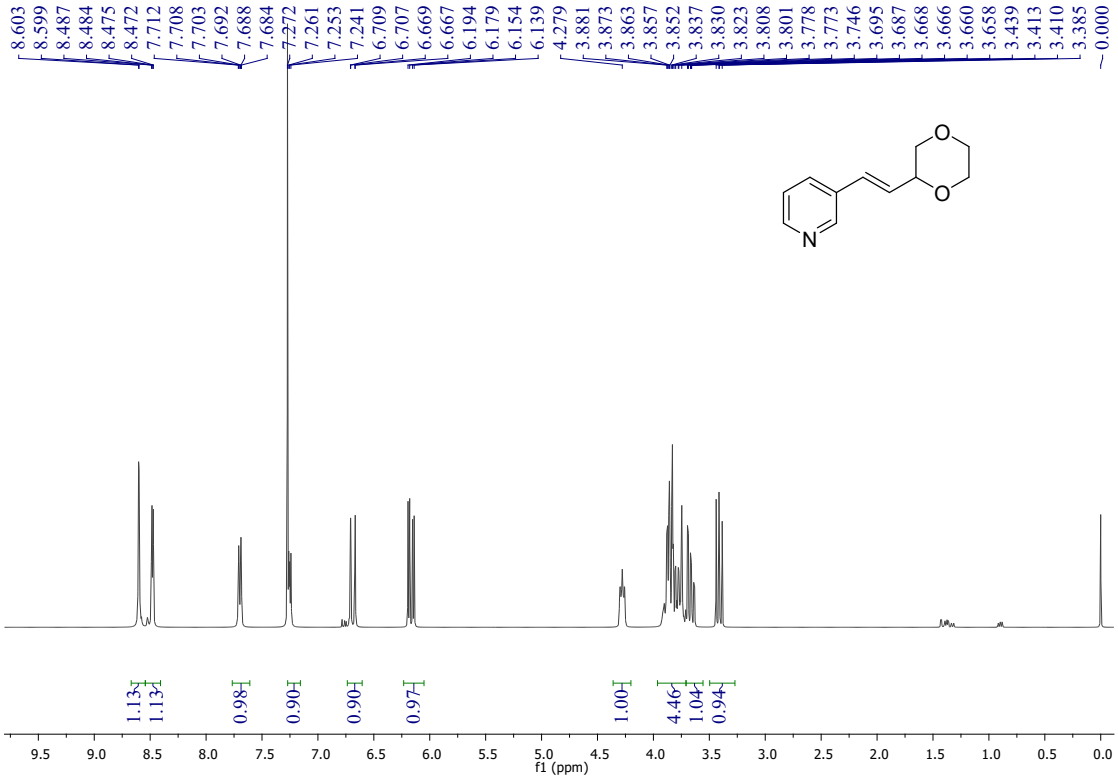
123.251
120.081
111.220
108.926
77.578
77.260
76.941
76.347
71.135
66.783
66.471
56.019
55.923
O
O
H3CO
OCH3
170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)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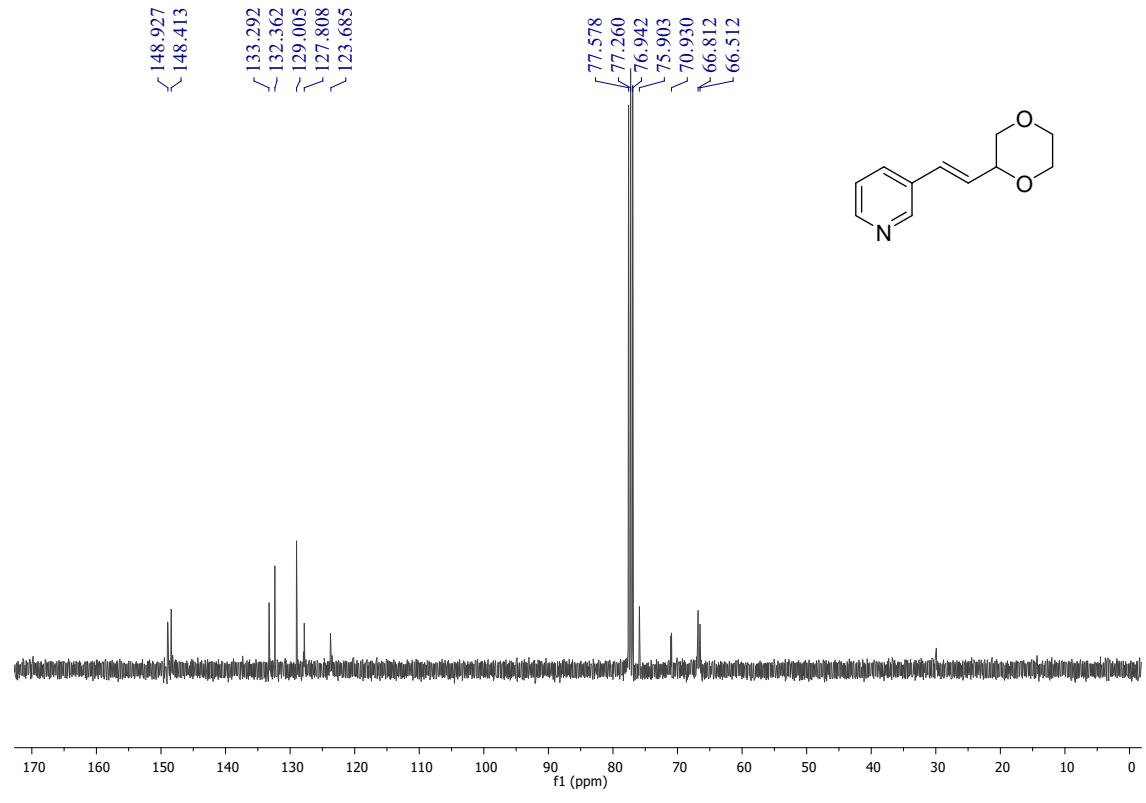
8.487
8.484
8.475
8.472
7.712
7.708
7.703
7.692
7.688
7.684
7.272
7.261
7.253
7.241
6.709
6.707
6.669
6.667
6.194
6.179
6.154
6.139
4.279
3.881
3.873
3.863
3.857
3.852
3.837
3.830
3.823
3.808
3.801
3.778
3.773
3.746
3.695
3.687
3.668
3.666
3.660
3.658
3.439
3.413
3.410
3.385
0.000
1.13
1.13
0.98
0.90
0.90
0.97
1.00
4.46
1.04
0.94
f1 (ppm)


148.927
148.413
133.292
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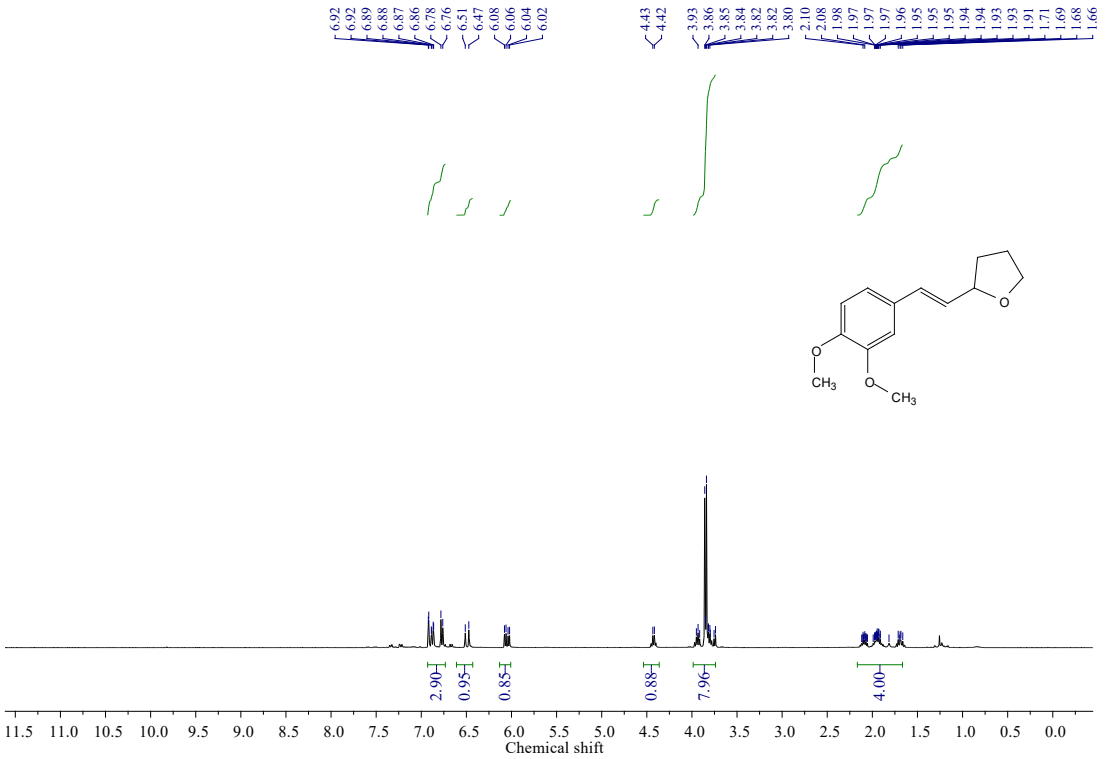
123.685
77.578
77.260
76.942
75.903
70.930
66.812
66.512
f1 (ppm)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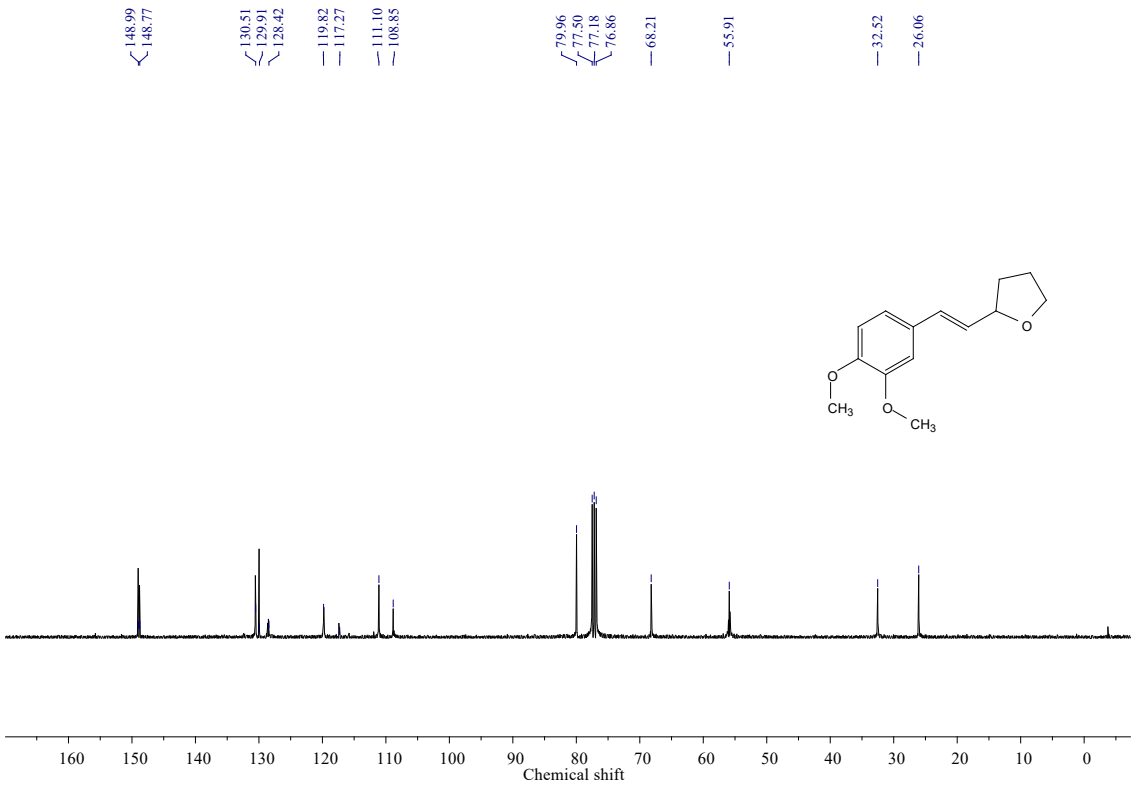
6.88
6.87
6.86
6.78
6.76
6.51
6.47
6.08
6.06
6.04
6.02
4.43
4.42
3.93
3.86
3.85
3.84
3.82
3.82
3.80
2.10
2.08
1.98
1.97
1.97
1.97
1.96
1.95
1.95
1.95
1.94
1.94
1.93
1.93
1.91
1.71
1.69
1.68
1.66
O
O
CH3
O
CH3
2.90
0.95
0.85
0.88
7.96
4.00
11.5 11.0 10.5 10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
Chemical shift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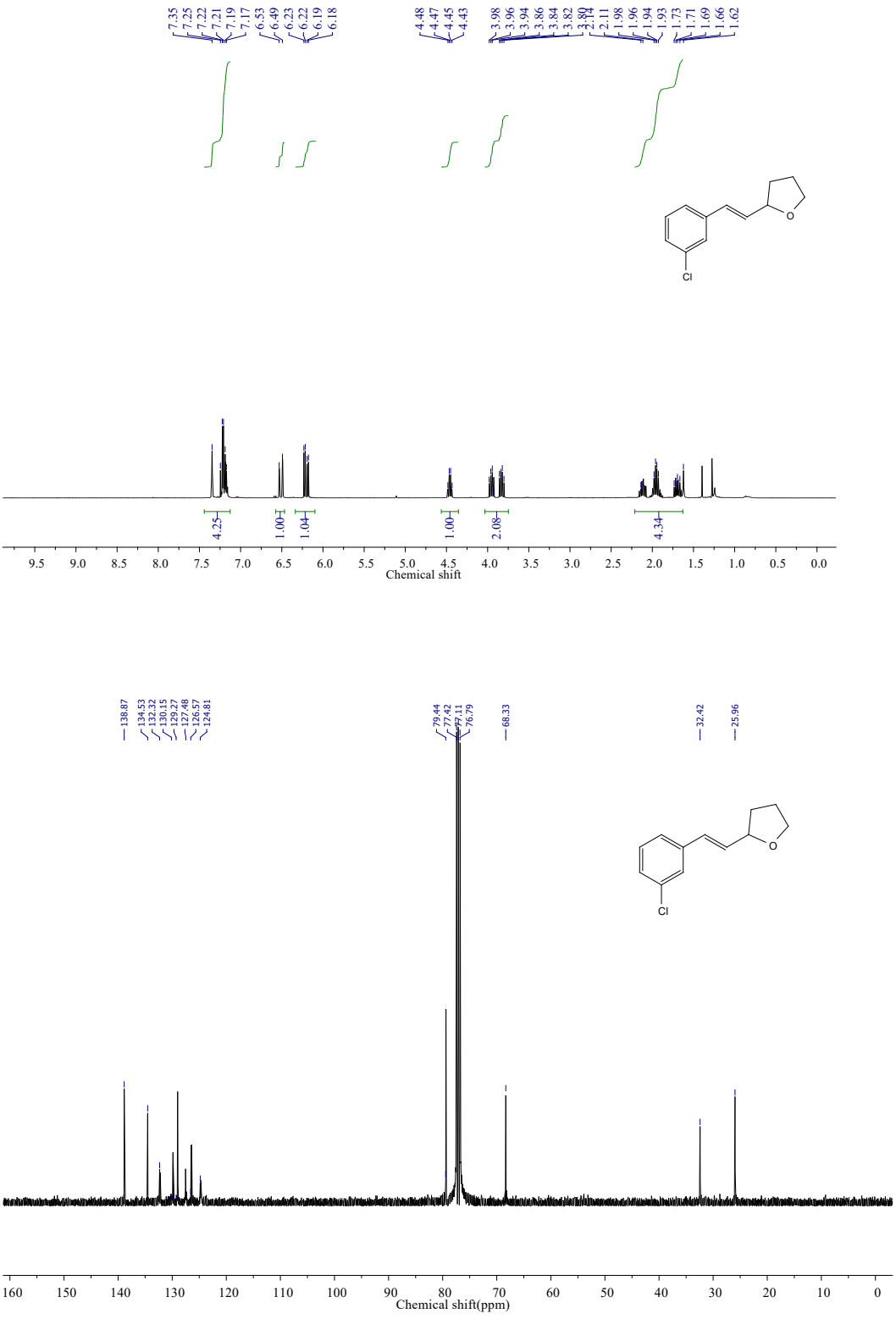
117.27
111.10
108.85
79.96
77.50
77.18
76.86
68.21
55.91
32.52
26.06
O
O
CH3
O
CH3
160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift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7.17
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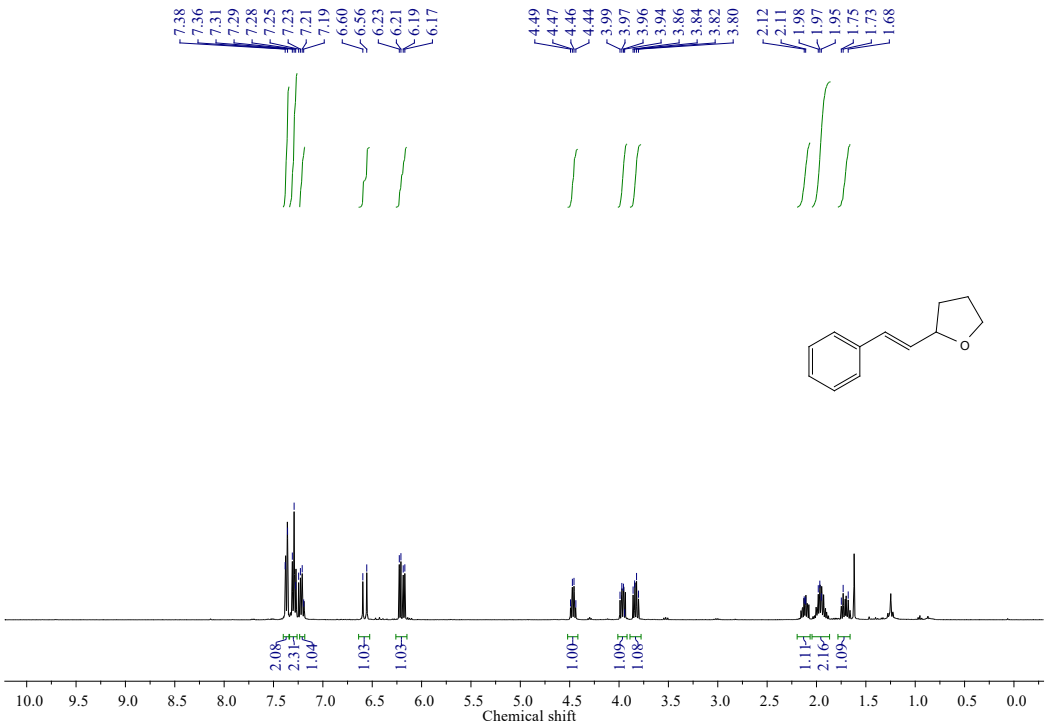
6.49
6.23
6.22
6.19
6.18
4.48
4.47
4.45
4.43
3.98
3.96
3.94
3.86
3.84
3.82
3.80
2.14
2.11
1.98
1.96
1.94
1.93
1.73
1.71
1.69
1.66
1.62
O
Cl
4.25
1.00
1.04
1.00
2.08
4.34
Chemical shift
138.87
134.53
132.32
130.15
129.27
127.48
126.57
124.81
79.44
77.42
77.11
76.79
68.33
32.42
25.96
O
Cl
Chemical shift(ppm)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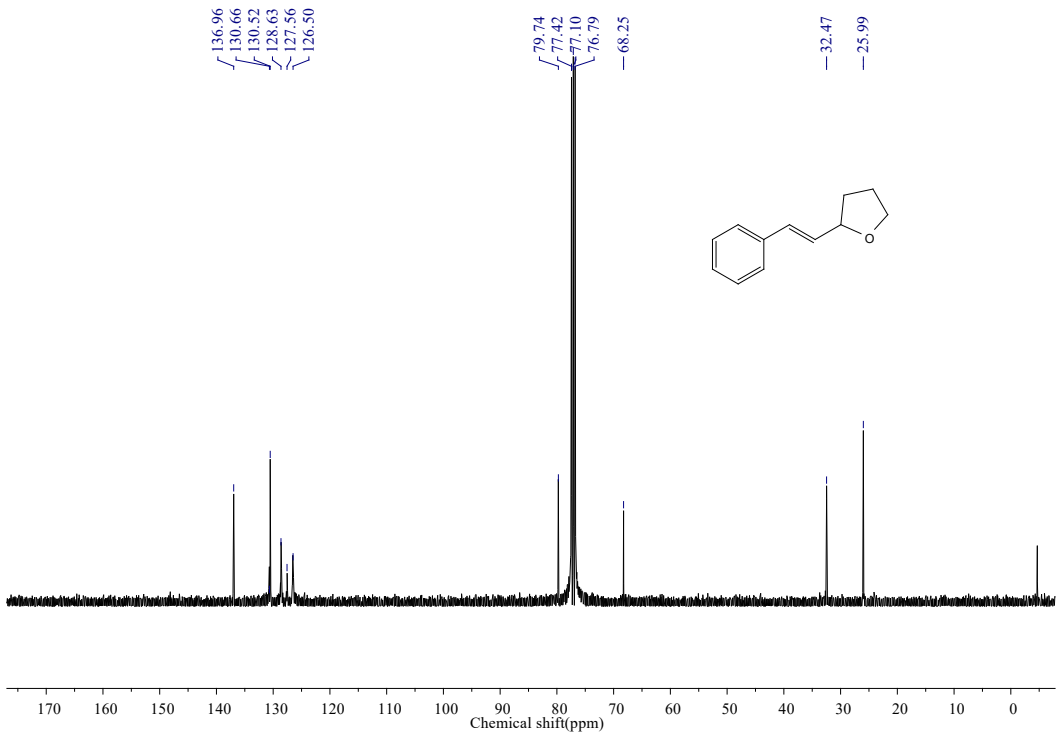
7.21
7.19
6.60
6.56
6.23
6.21
6.19
6.17
4.49
4.47
4.46
4.44
3.99
3.97
3.96
3.94
3.86
3.84
3.82
3.80
2.12
2.11
1.98
1.97
1.95
1.75
1.73
1.68
O
2.08
2.31
1.04
1.03
1.03
1.00
1.09
1.08
1.11
2.16
1.09
10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
Chemical shift


136.96
130.66
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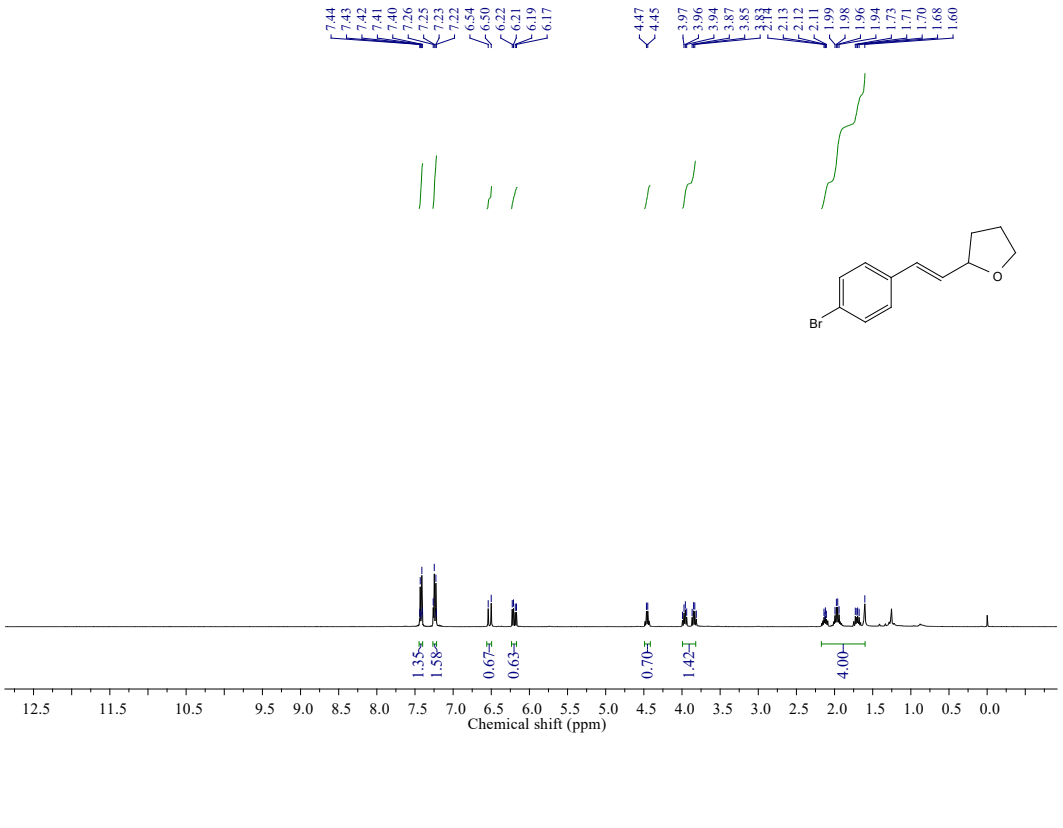
128.63
127.56
126.50
79.74
77.42
77.10
76.79
68.25
32.47
25.99
O
170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift(ppm)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7.43
7.42
7.41
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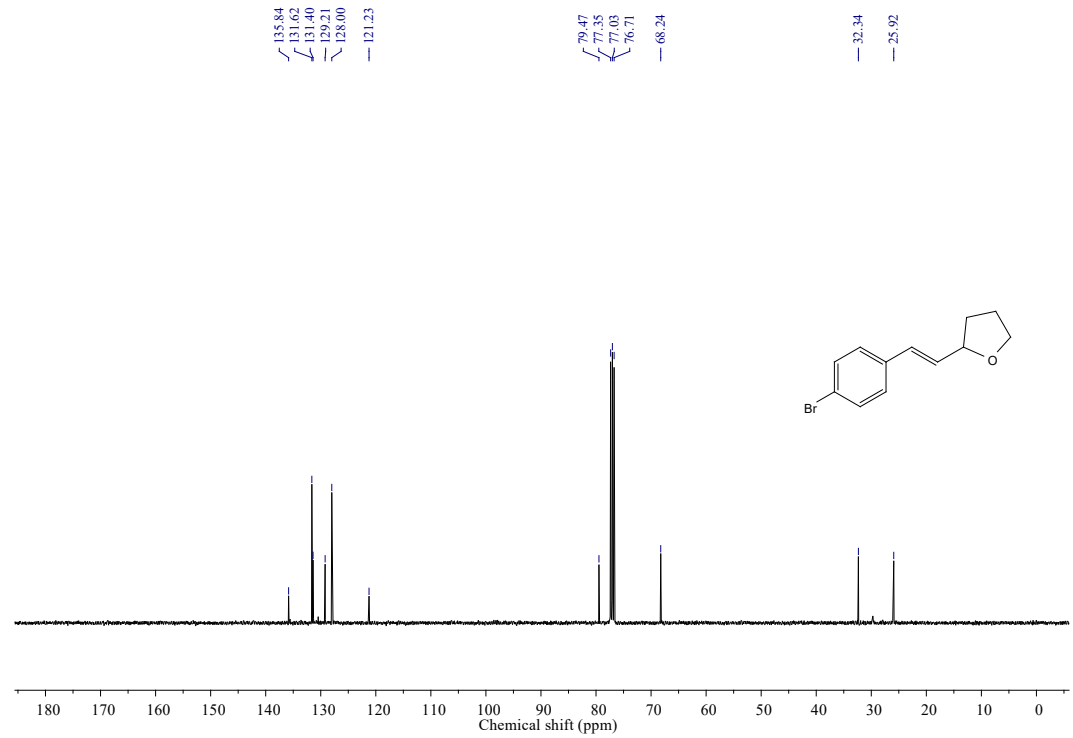
7.23
7.22
6.54
6.50
6.22
6.21
6.19
6.17
4.47
4.45
3.97
3.96
3.94
3.87
3.85
2.13
2.12
2.11
1.99
1.98
1.96
1.94
1.73
1.71
1.70
1.68
1.60
Br
O
1.35
1.58
0.67
0.63
0.70
1.42
4.00
12.5 11.5 10.5 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
Chemical shift (ppm)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128.00
121.23
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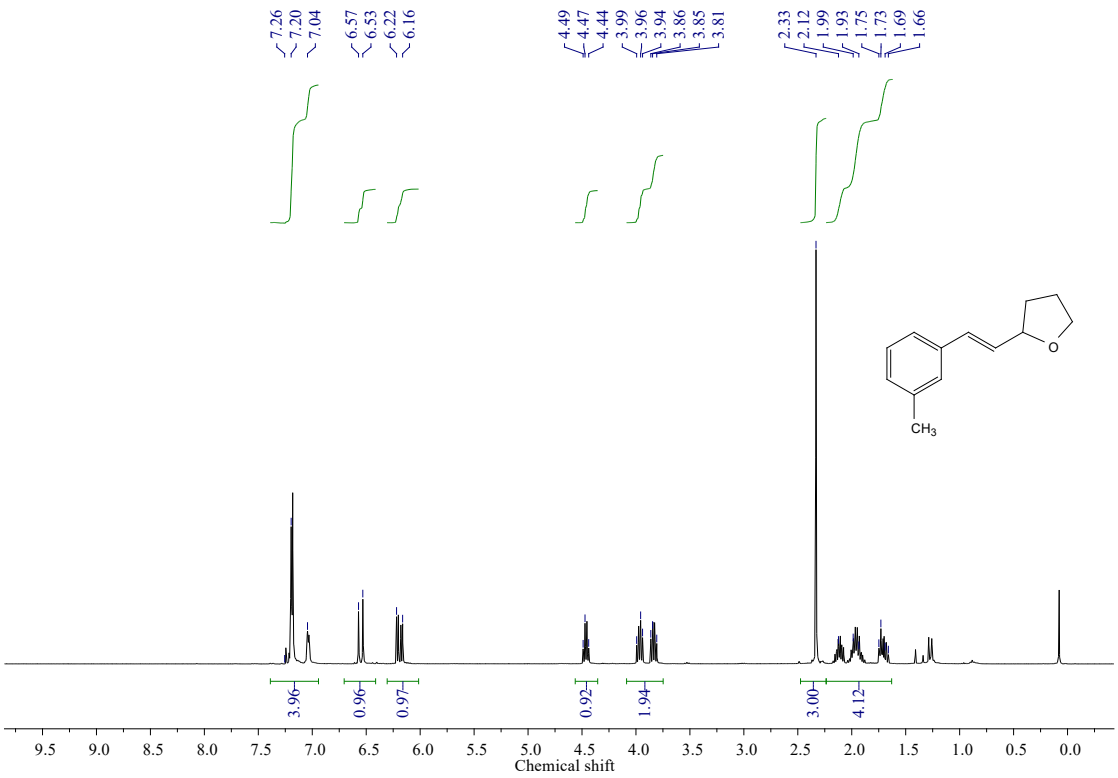
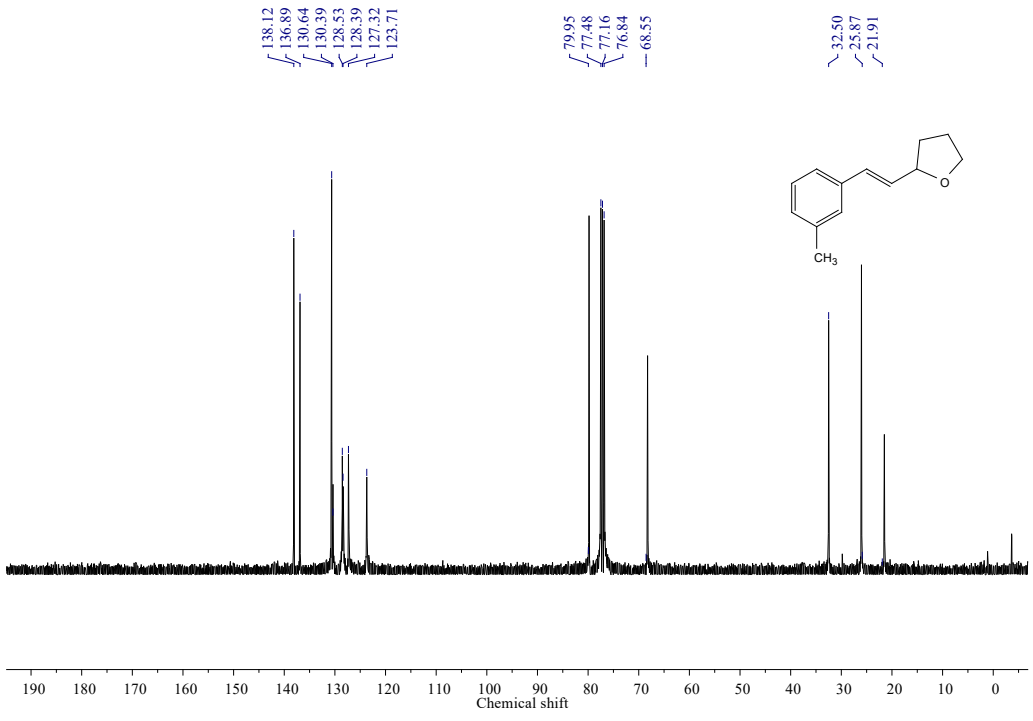
77.35
77.03
76.71
68.24
32.34
25.92
Br
O
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift (ppm)


7.26
7.20
7.04
6.57
6.53
6.22
6.16
4.49
4.47
4.44
3.99
3.96
3.94
3.86
3.85
3.81
2.33
2.12
1.99
1.93
1.75
1.73
1.69
1.66
O
CH3
3.96
0.96
0.97
0.92
1.94
3.00
4.12
9.5 9.0 8.5 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
Chemical shift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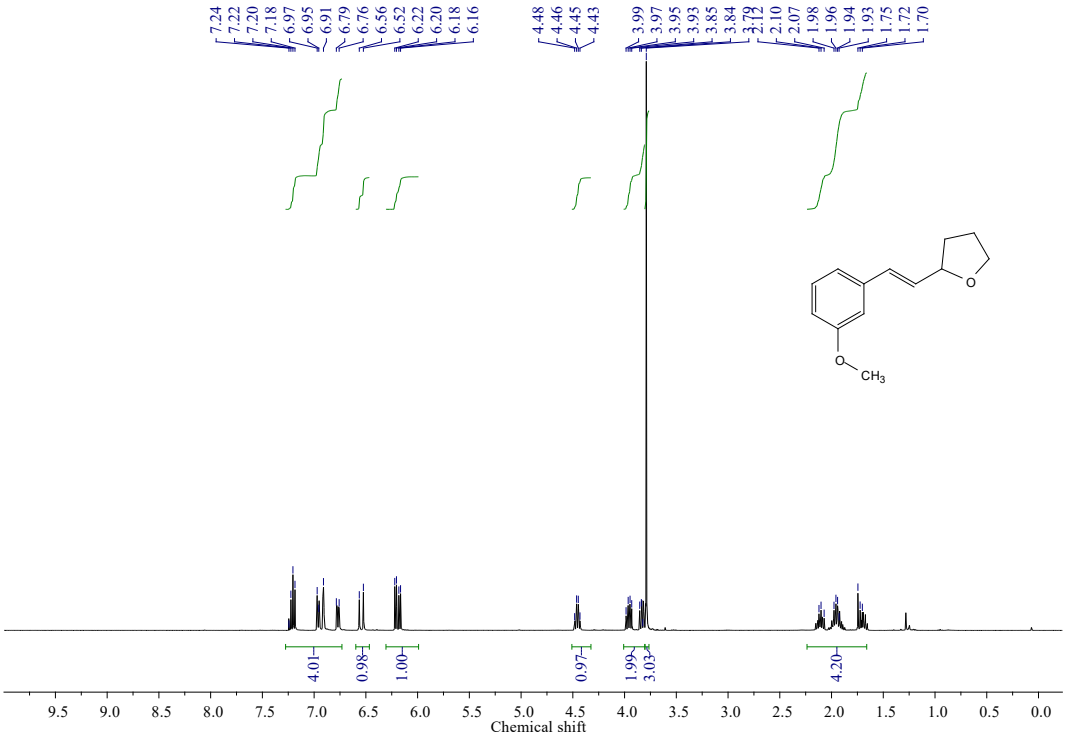
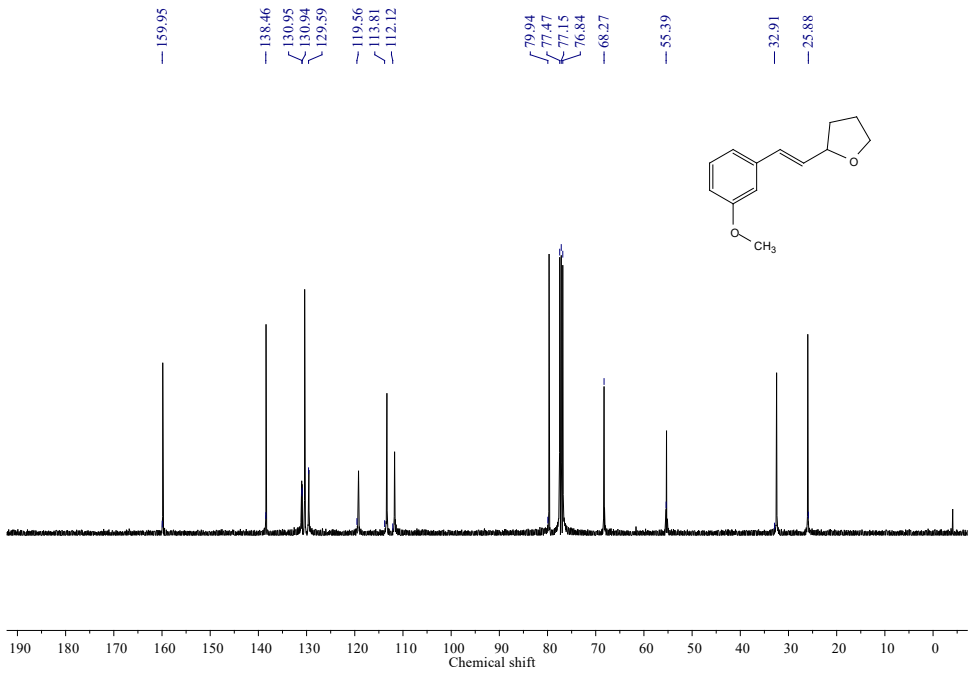
130.39
128.53
128.39
127.32
123.71
79.95
77.48
77.16
76.84
68.55
32.50
25.87
21.91
O
CH3
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift


7.24
7.22
7.20
7.18
6.97
6.95
6.91
6.79
6.76
6.56
6.52
6.22
6.20
6.18
6.16
4.48
4.46
4.45
4.43
3.99
3.97
3.95
3.93
3.85
3.84
2.12
2.10
2.07
1.98
1.96
1.94
1.93
1.75
1.72
1.70
O
O
CH3
4.01
0.98
1.00
0.97
1.99
3.03
4.20
9.5 9.0 8.5 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
Chemical shift


159.95
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130.95
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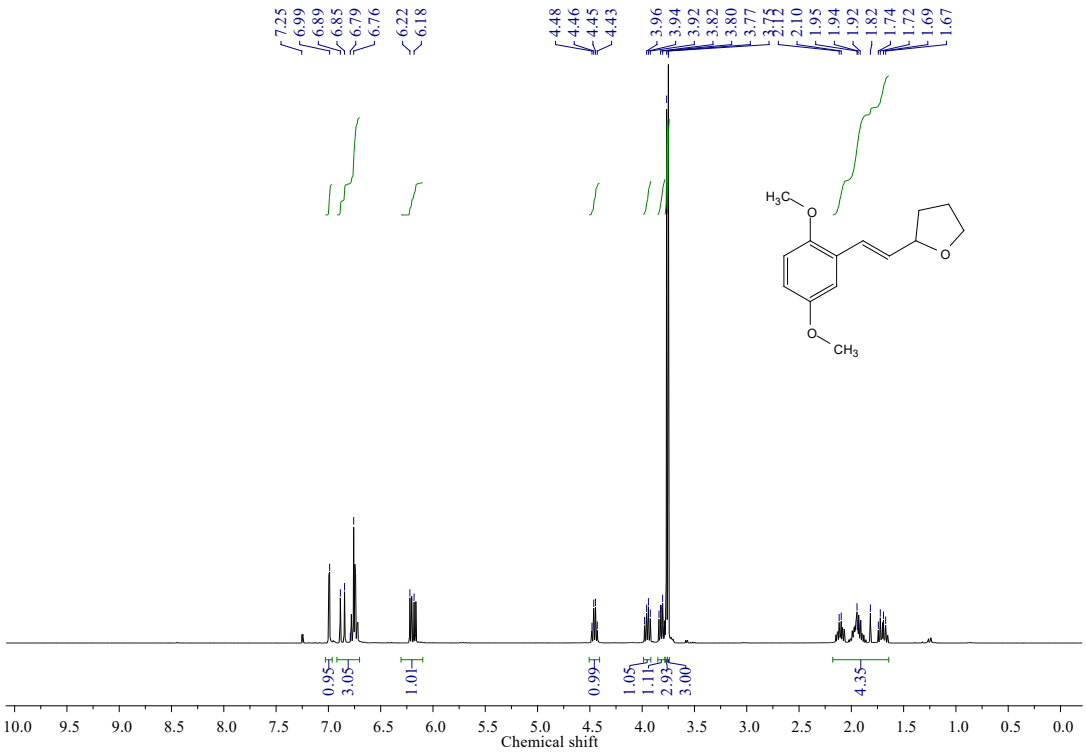
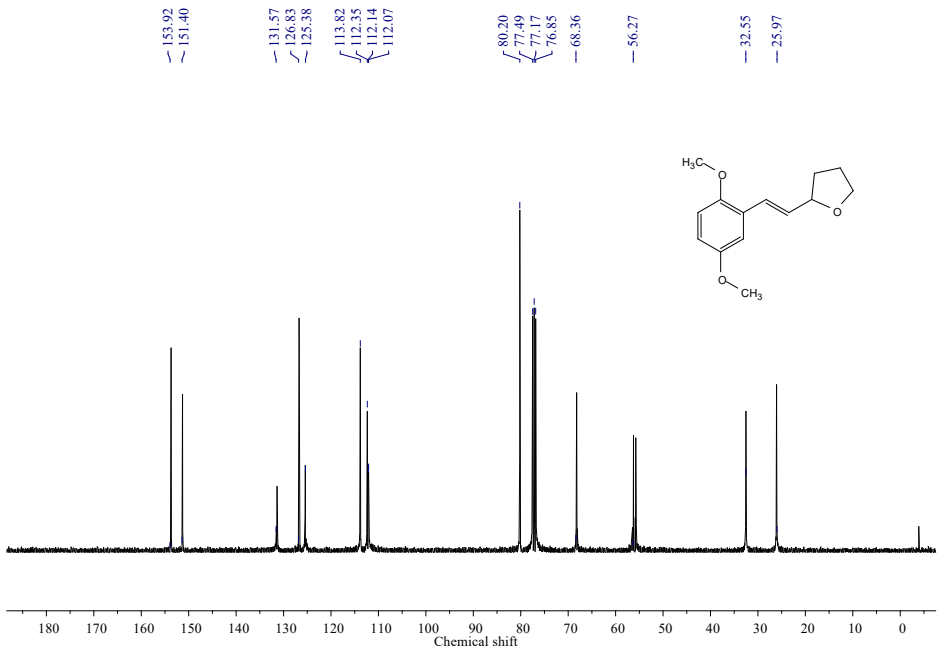
129.59
119.56
113.81
112.12
79.94
77.47
77.15
76.84
68.27
55.39
32.91
25.88
O
O
CH3
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
Chemical shift


7.25
6.99
6.89
6.85
6.79
6.76
6.22
6.18
4.48
4.46
4.45
4.43
3.96
3.94
3.92
3.82
3.80
3.77
2.10
1.95
1.94
1.92
1.82
1.74
1.72
1.69
1.67
0.95
3.05
1.01
0.99
1.05
1.11
2.93
3.00
4.35
Chemical shift


153.92
151.40
131.57
126.83
125.38
113.82
112.35
112.14
112.07
80.20
77.49
77.17
76.85
68.36
56.27
32.55
25.97
Chemical shift