Supporting Information on

First catalyst-free CO_2 trapping of *N*-acyliminium ions at ambient conditions: Sustainable multicomponent synthesis of thia- and oxazolidinyl carbamates

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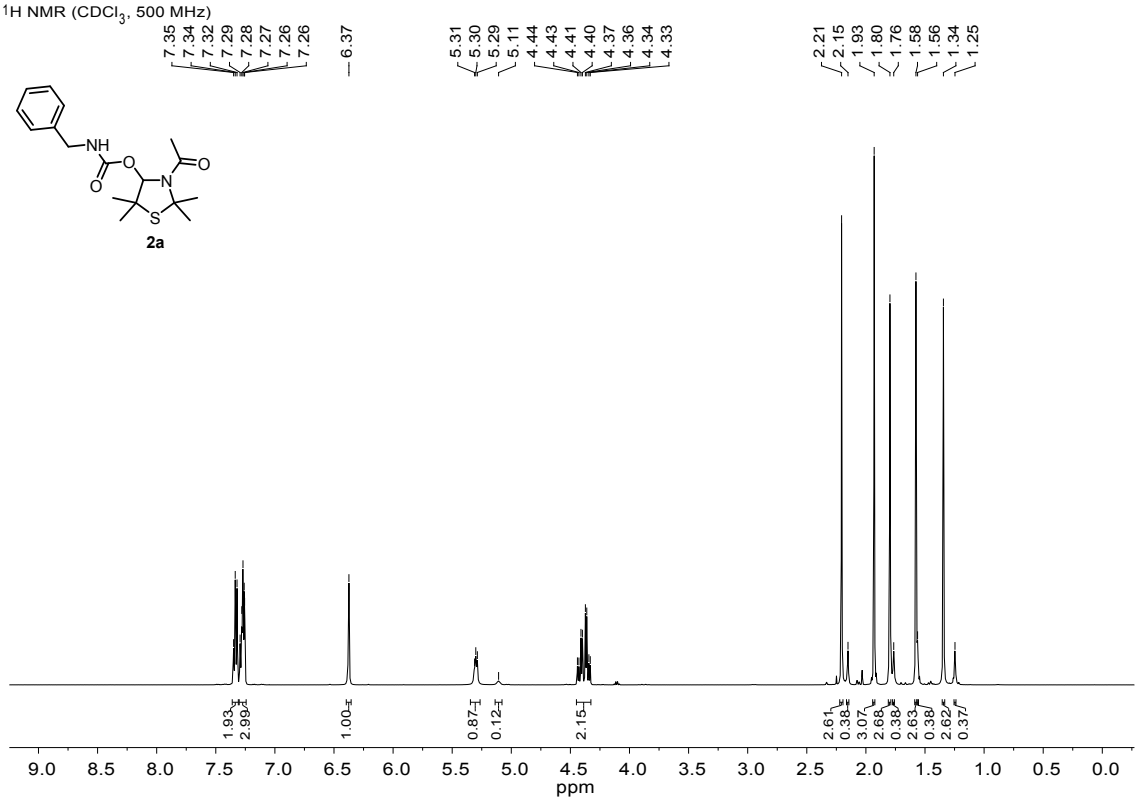
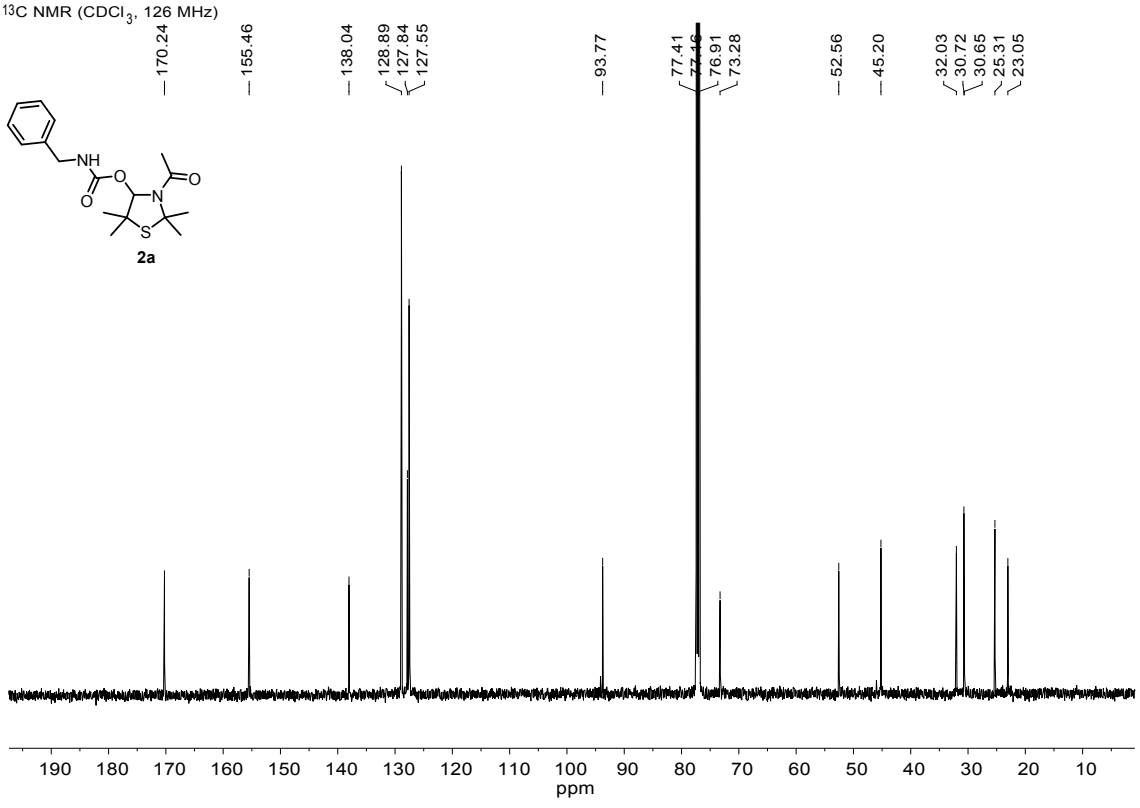
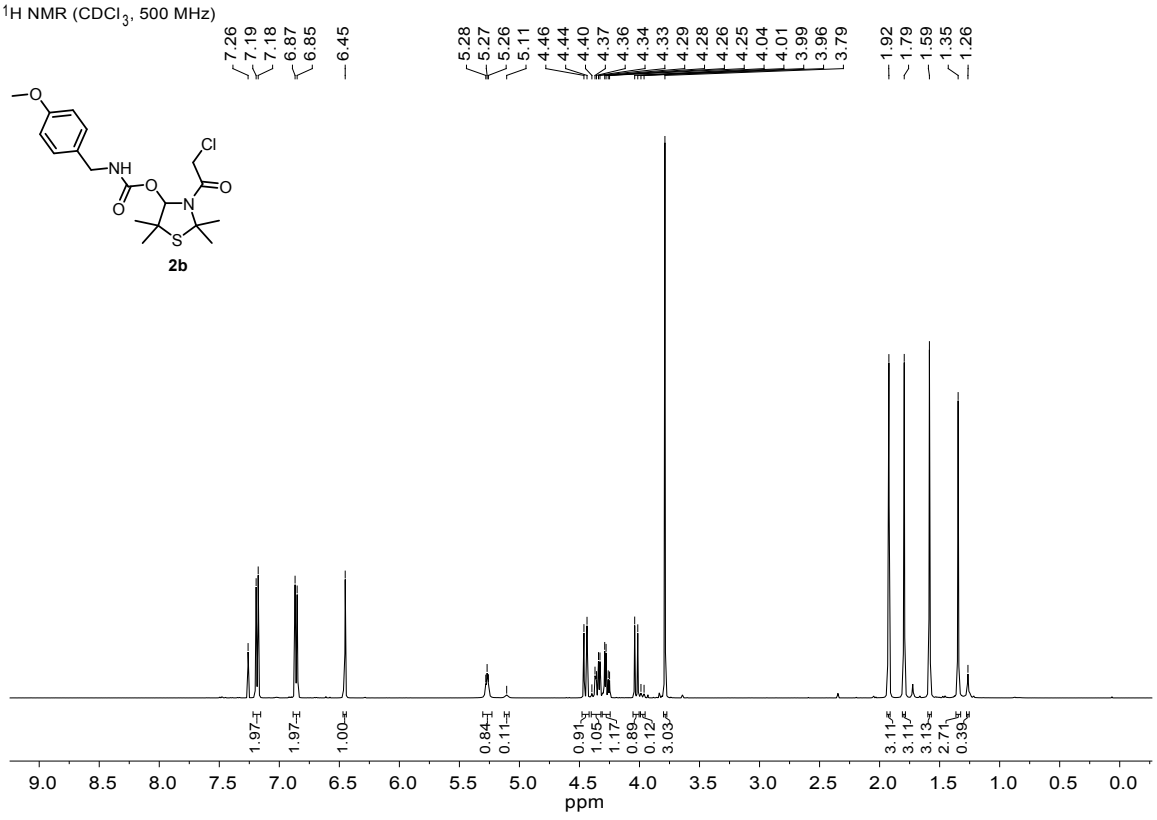
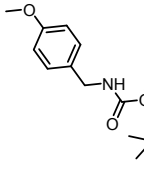
^{1}H and ^{13}C NMR spectra





^{1}H NMR ($CDCl_3$, 500 MHz)

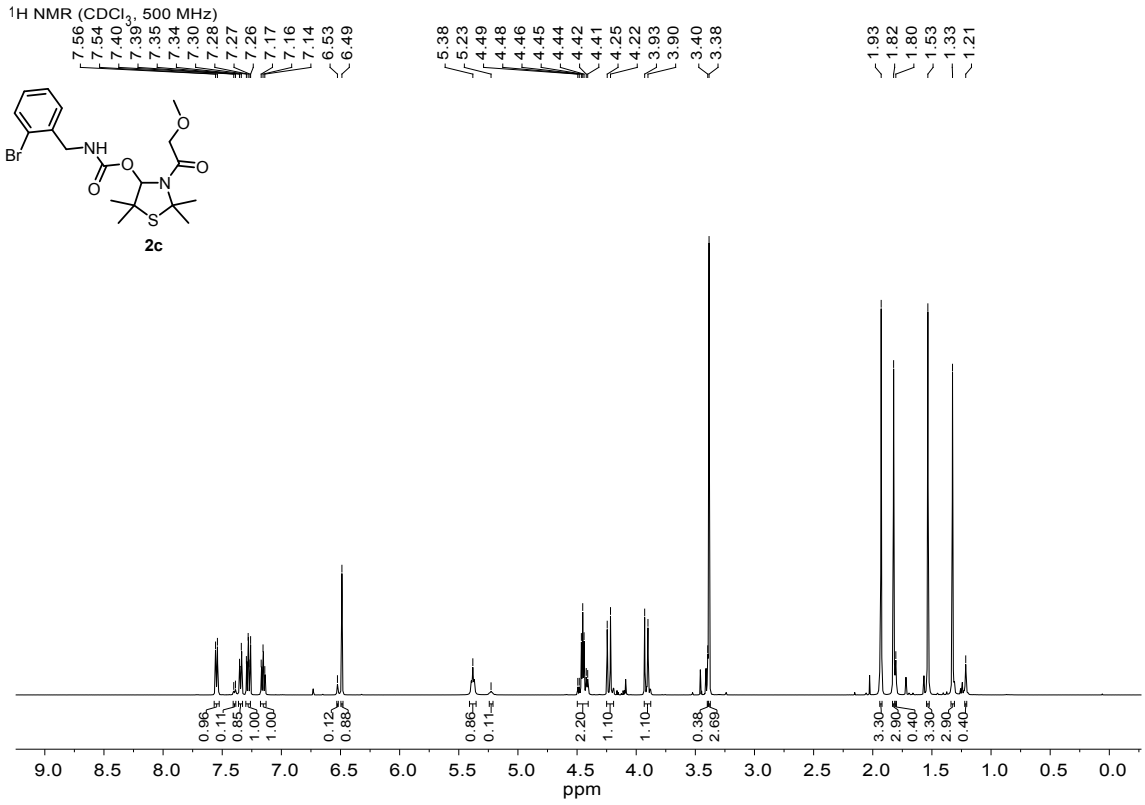


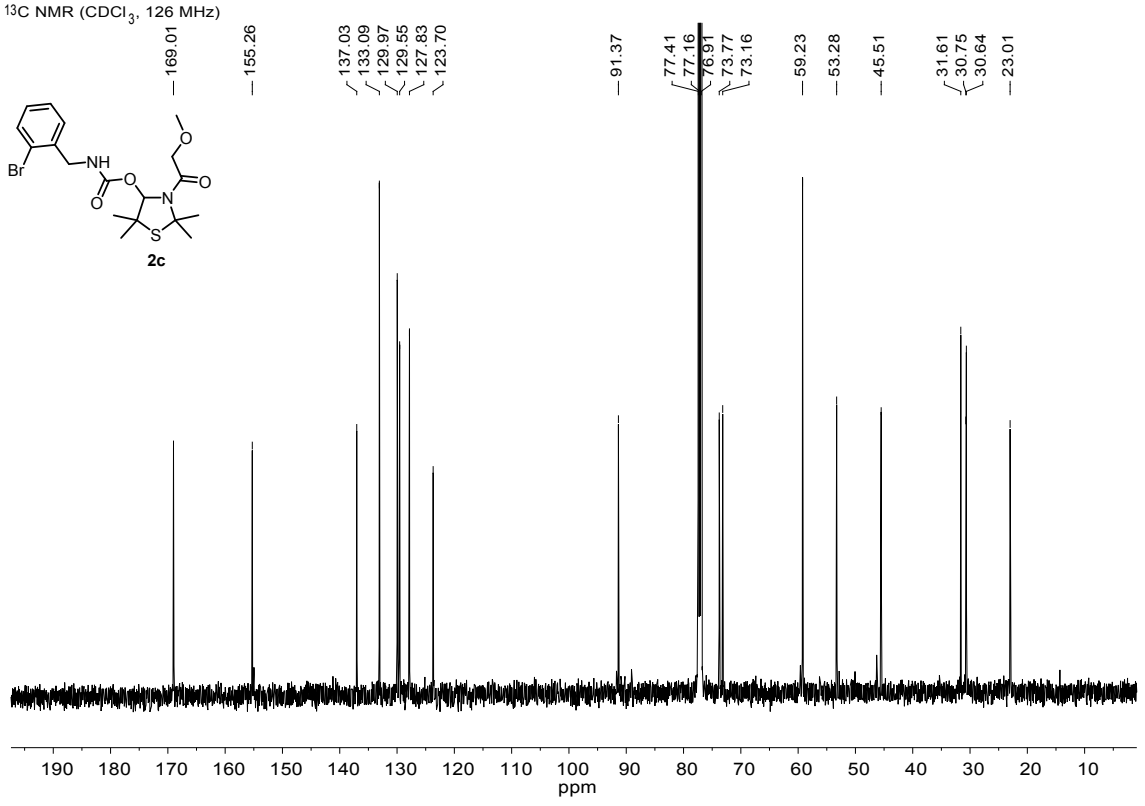


2b

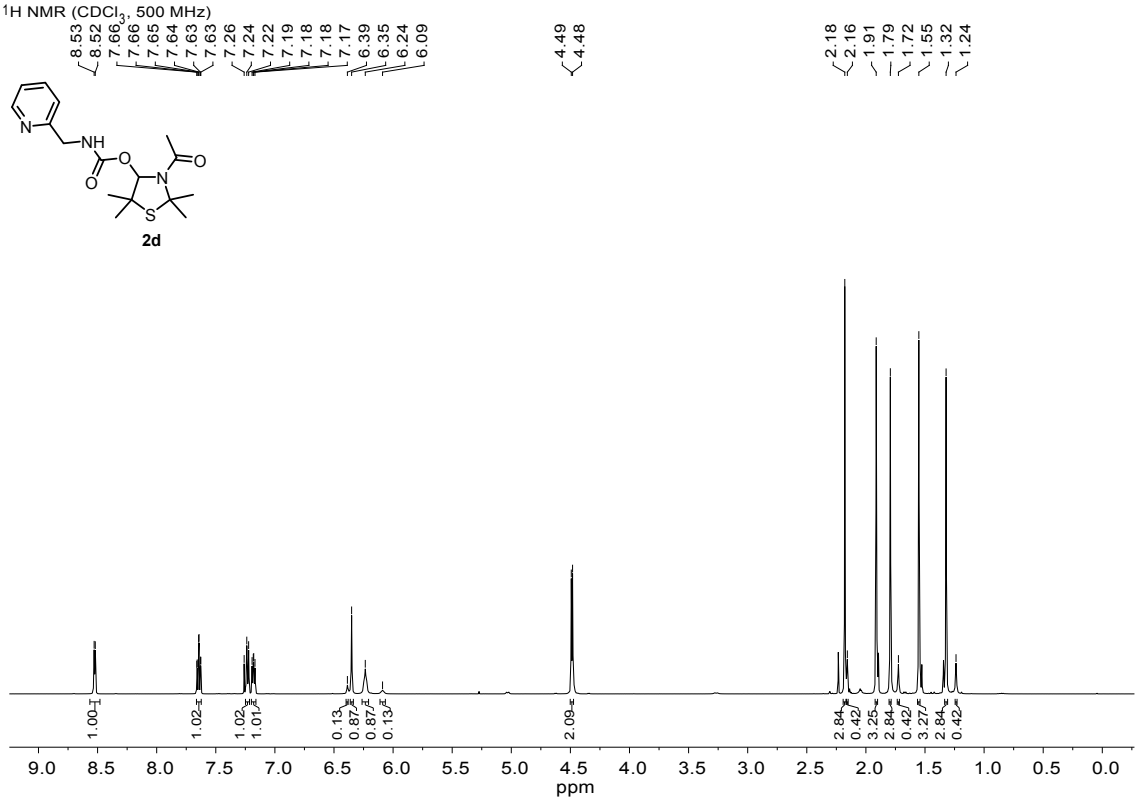
^{13}C NMR ($CDCl_3$, 126 MHz)

2b


1H NMR (CDCl3, 500 MHz)
7.56 7.54 7.40 7.39 7.35 7.34 7.30 7.28 7.27 7.26 7.17 7.16 7.14 6.53 6.49
5.38 5.23 4.49 4.48 4.46 4.45 4.44 4.42 4.41 4.25 4.22 3.93 3.90 3.40 3.38
1.93 1.82 1.80 1.53 1.33 1.21
Br
NH
O
N
S
2c
0.96 0.11 0.85 1.00 1.00 0.12 0.88 0.86 0.11 2.20 1.10 1.10 0.38 2.69 3.30 2.90 0.40 3.30 2.90 0.40
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
ppm


13C NMR (CDCl3, 126 MHz)
169.01 155.26 137.03 133.09 129.97 129.55 127.83 123.70 91.37 77.41 77.16 76.91 73.77 73.16 59.23 53.28 45.51 31.61 30.75 30.64 23.01
Br
NH
O
N
S
2c
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10
ppm

^{1}H NMR ($CDCl_3$, 500 MHz)



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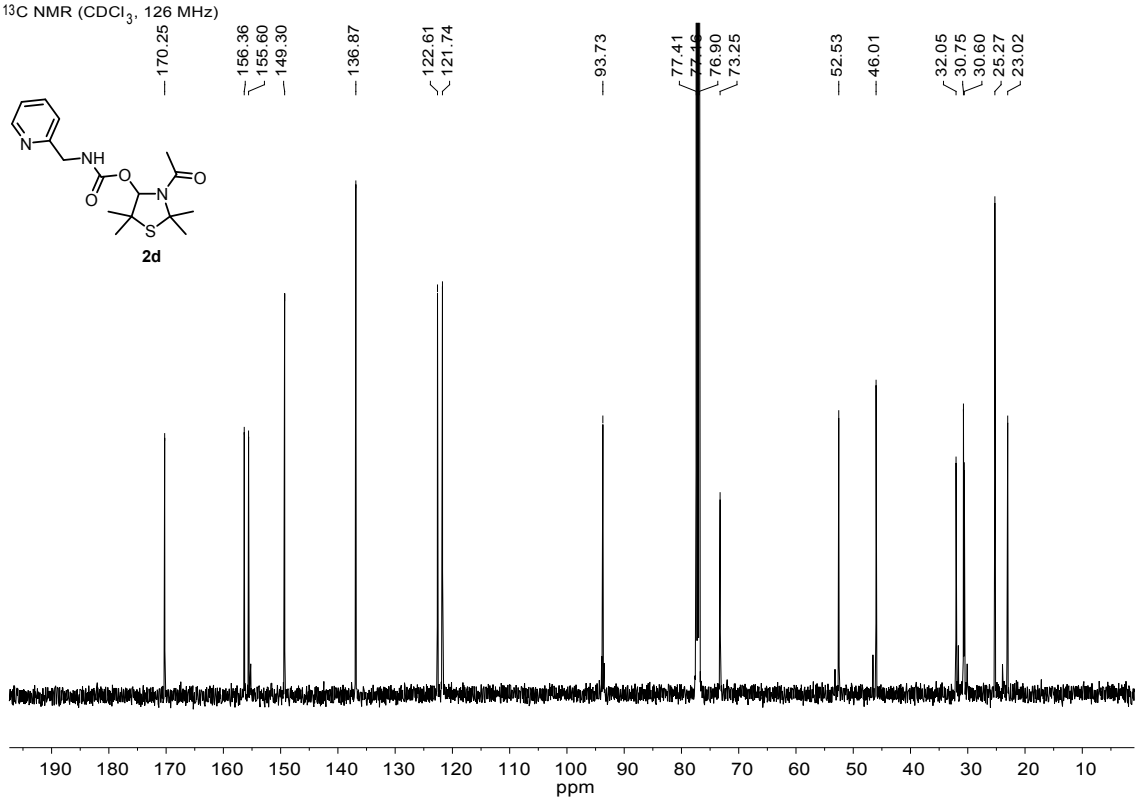
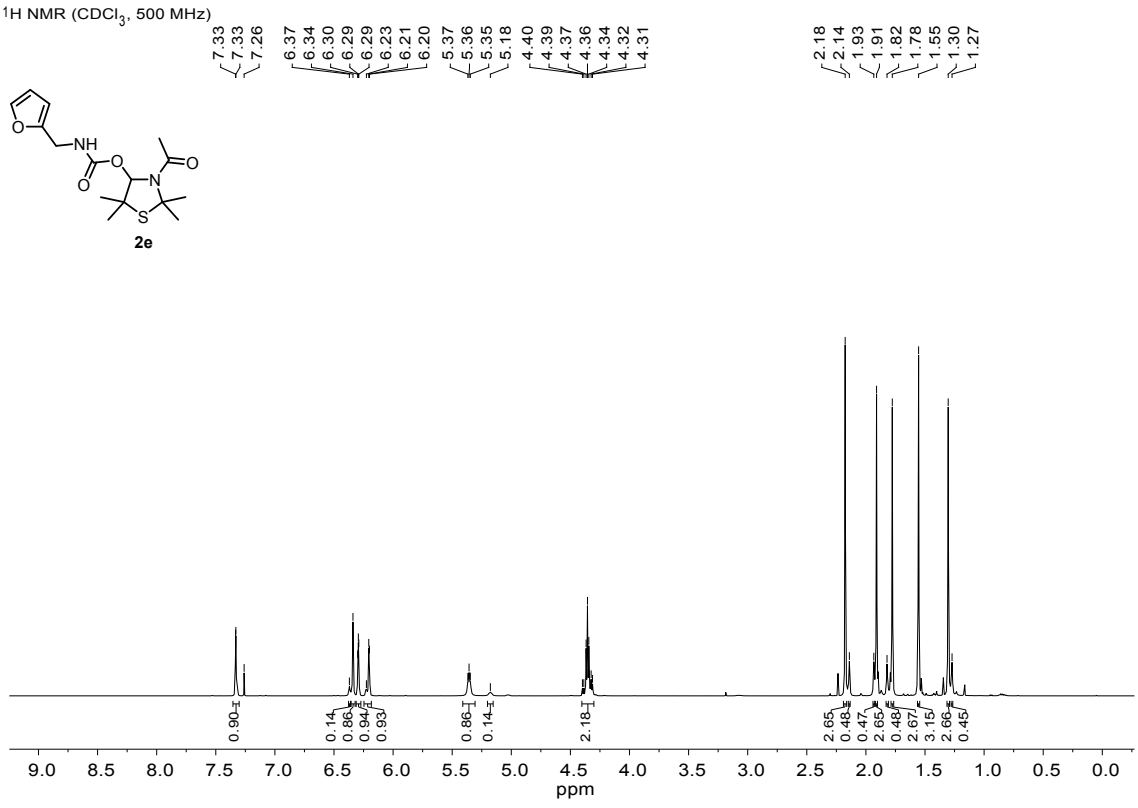


^{1}H NMR ($CDCl_3$, 500 MHz)



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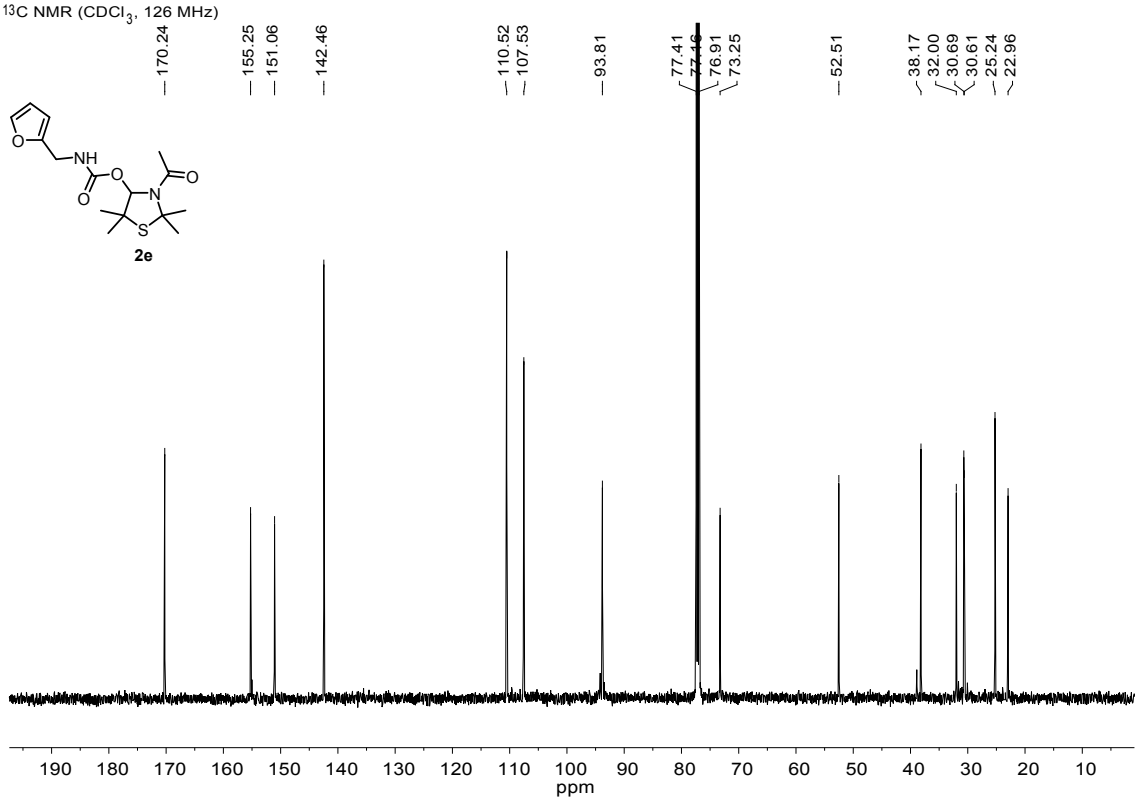

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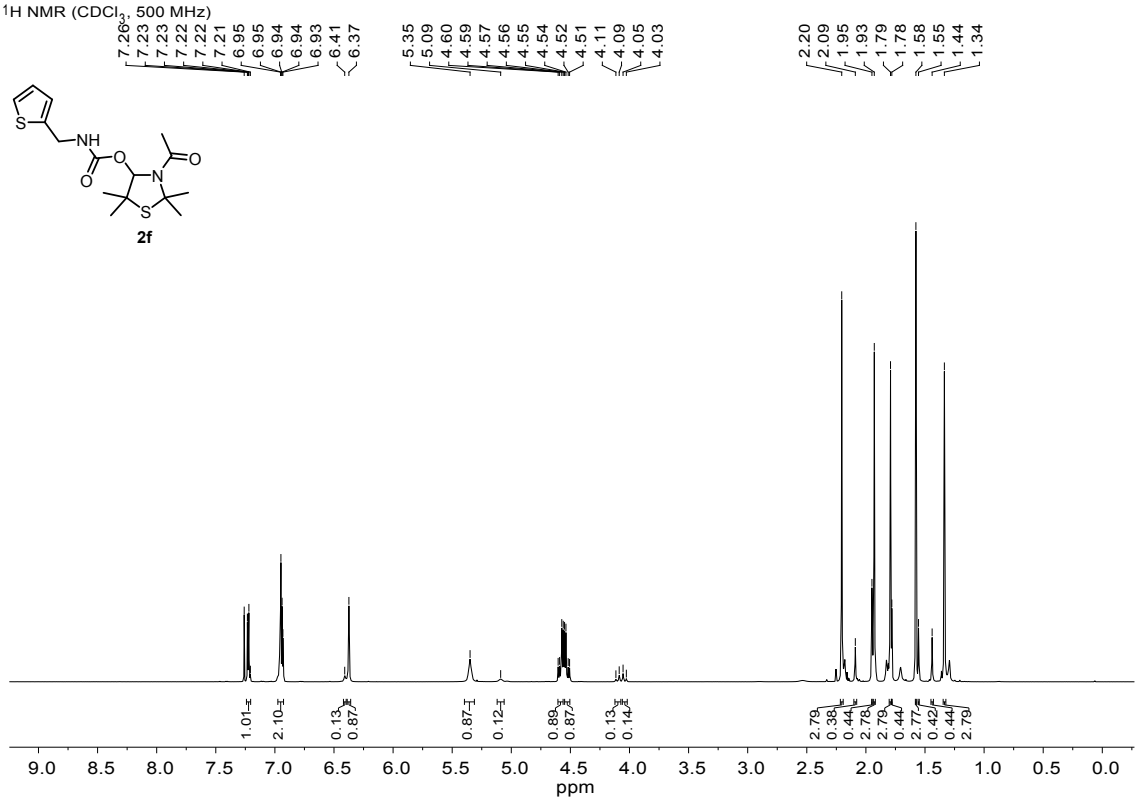
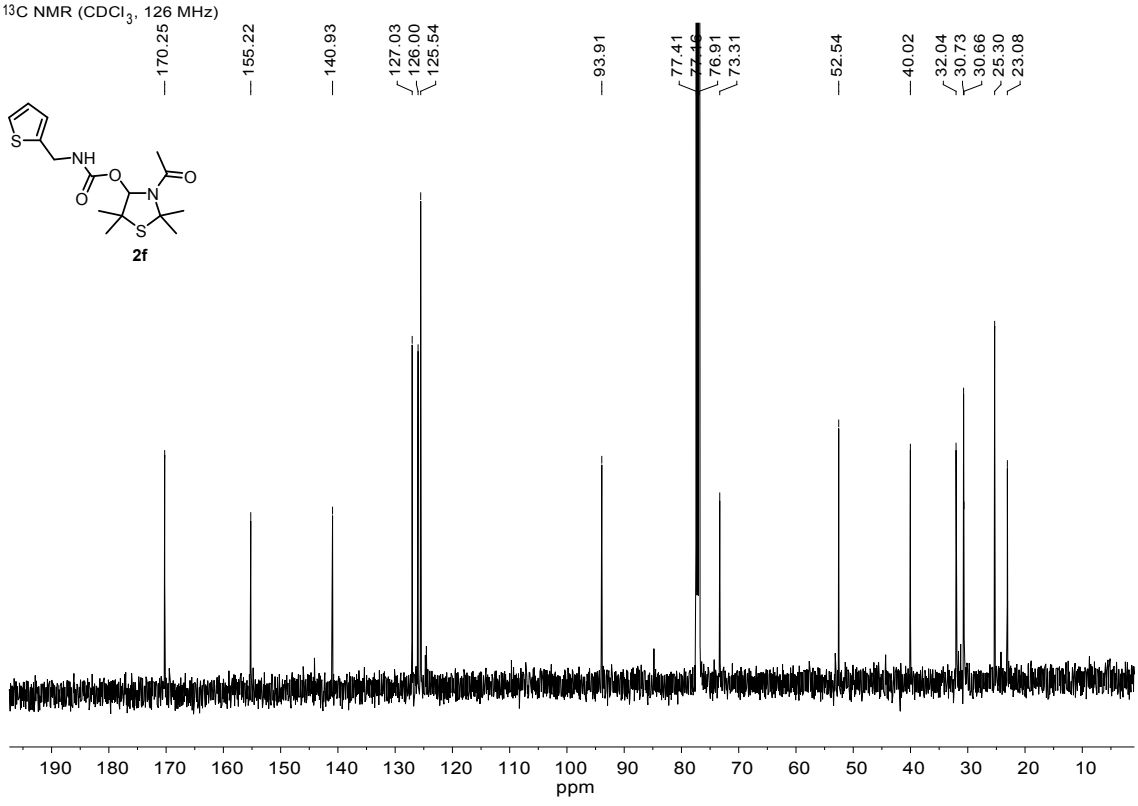
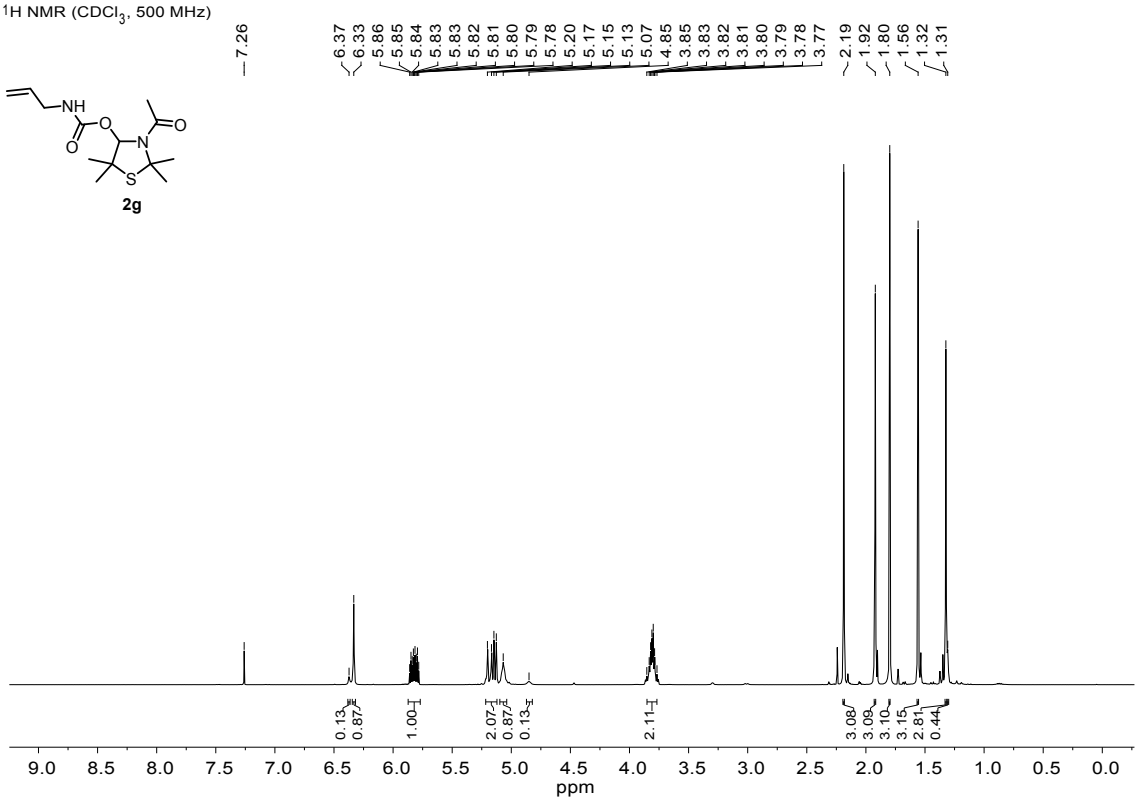


^{13}C NMR ($CDCl_3$, 126 MHz)

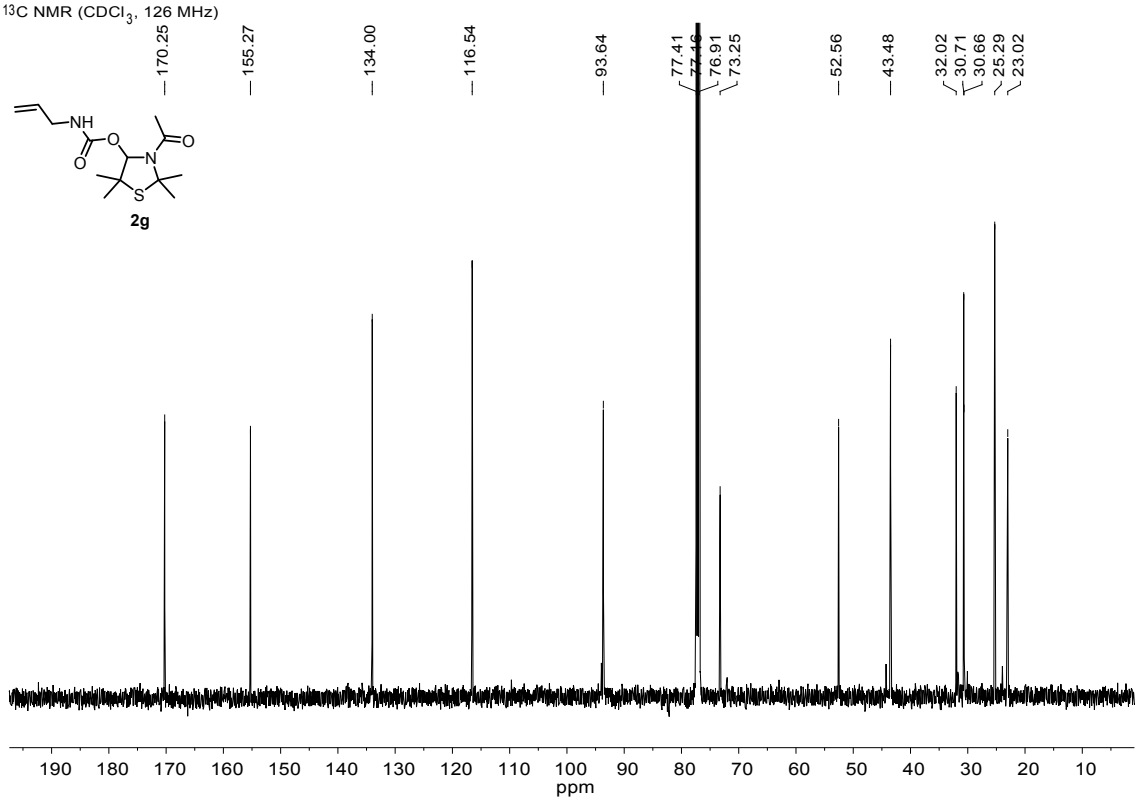


^{1}H NMR ($CDCl_3$, 500 MHz)



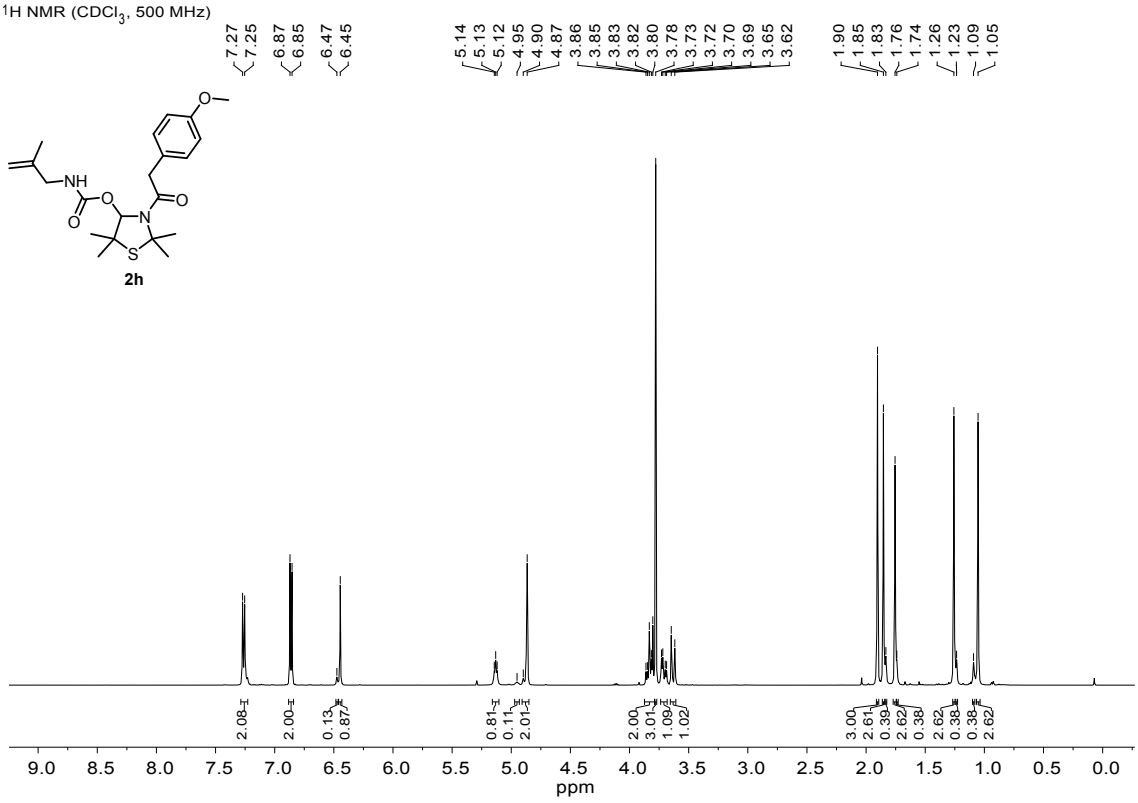
2g

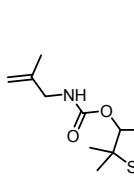
^{13}C NMR ($CDCl_3$, 126 MHz)



2g

^{1}H NMR ($CDCl_3$, 500 MHz)



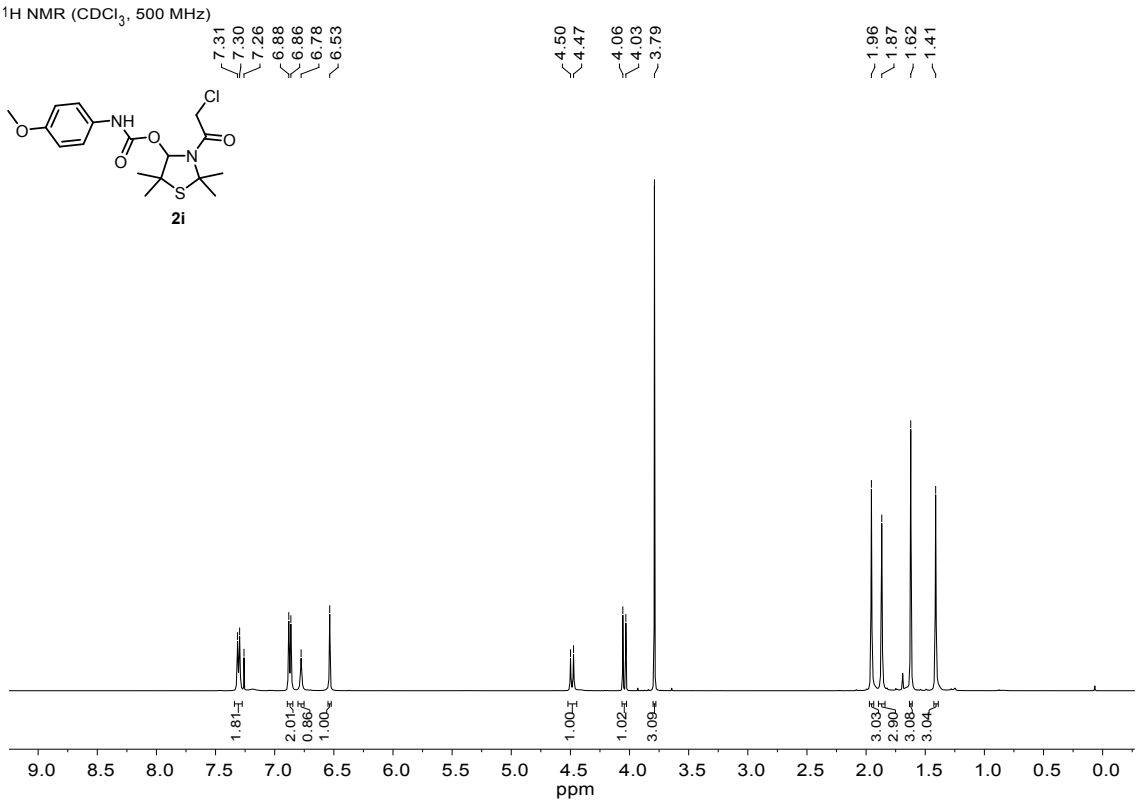


2h

^{13}C NMR ($CDCl_3$, 126 MHz)

2h

^{1}H NMR ($CDCl_3$, 500 MHz)



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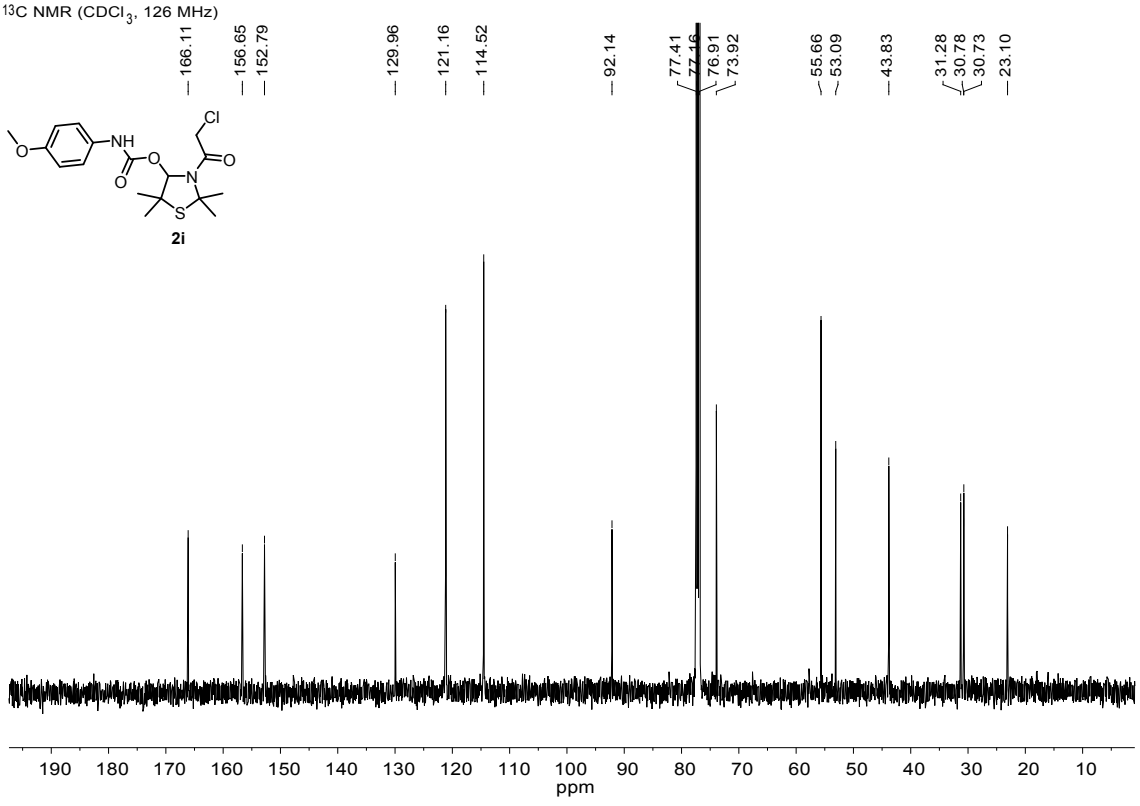

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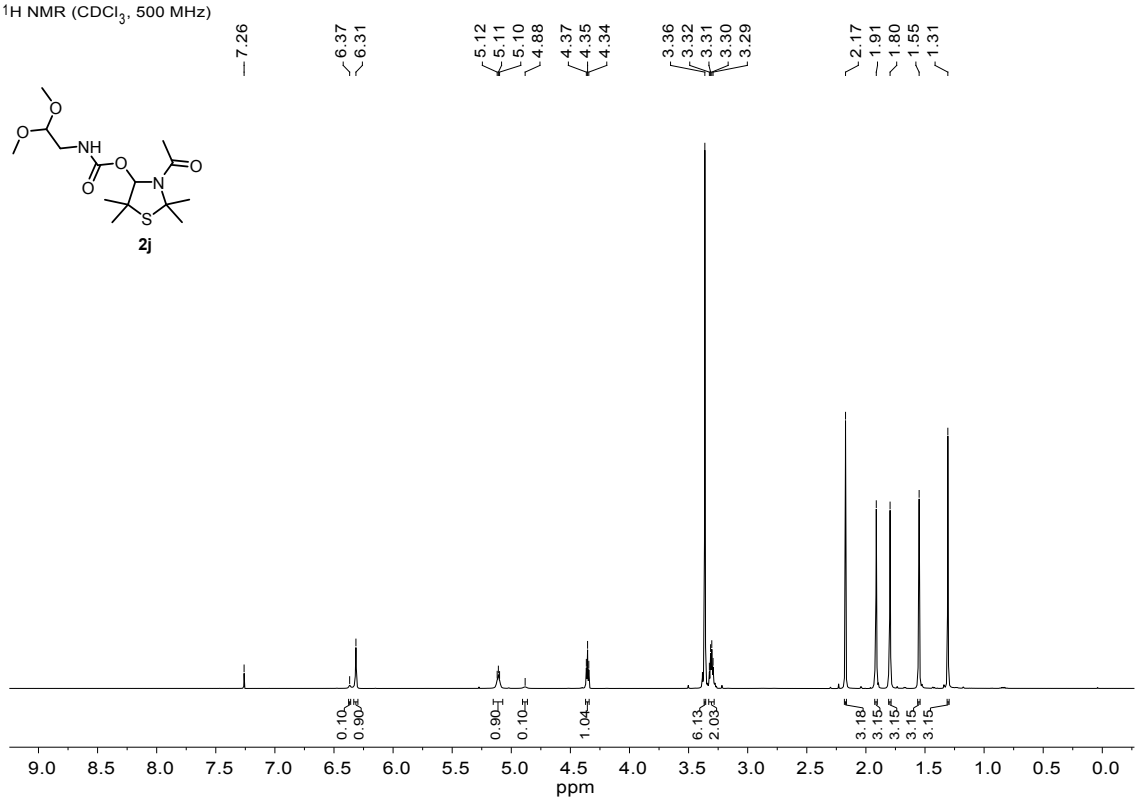

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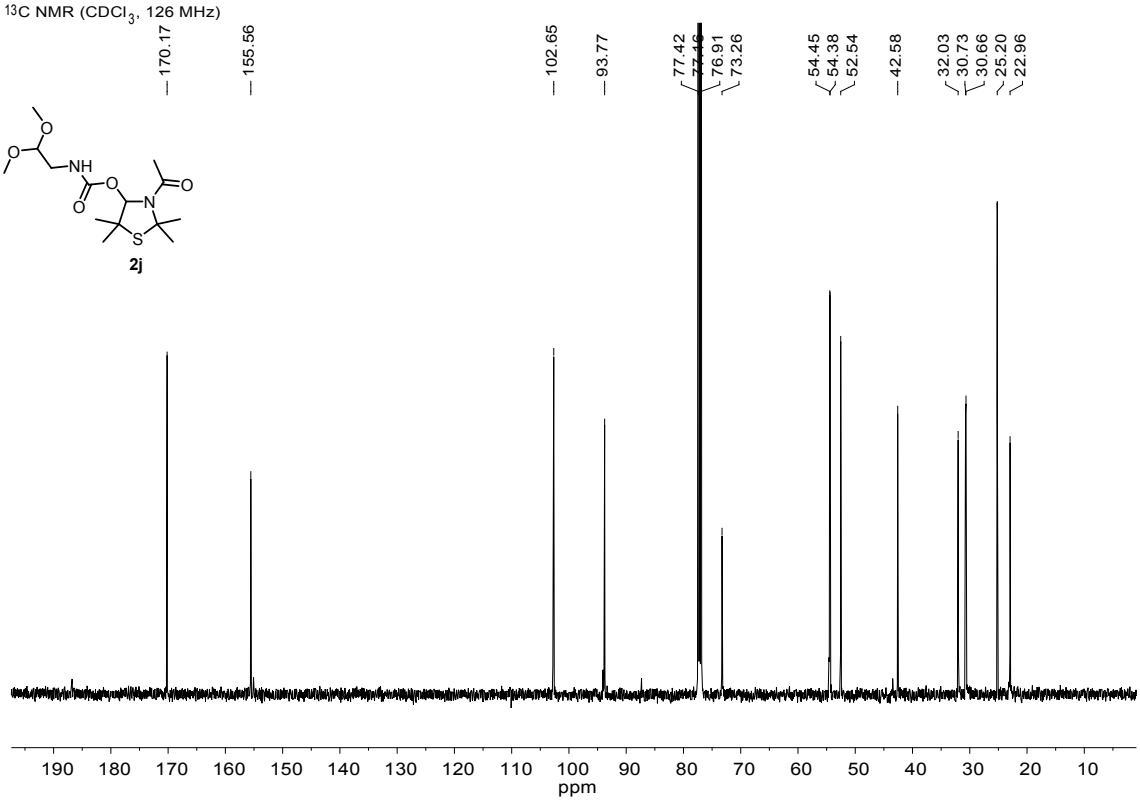
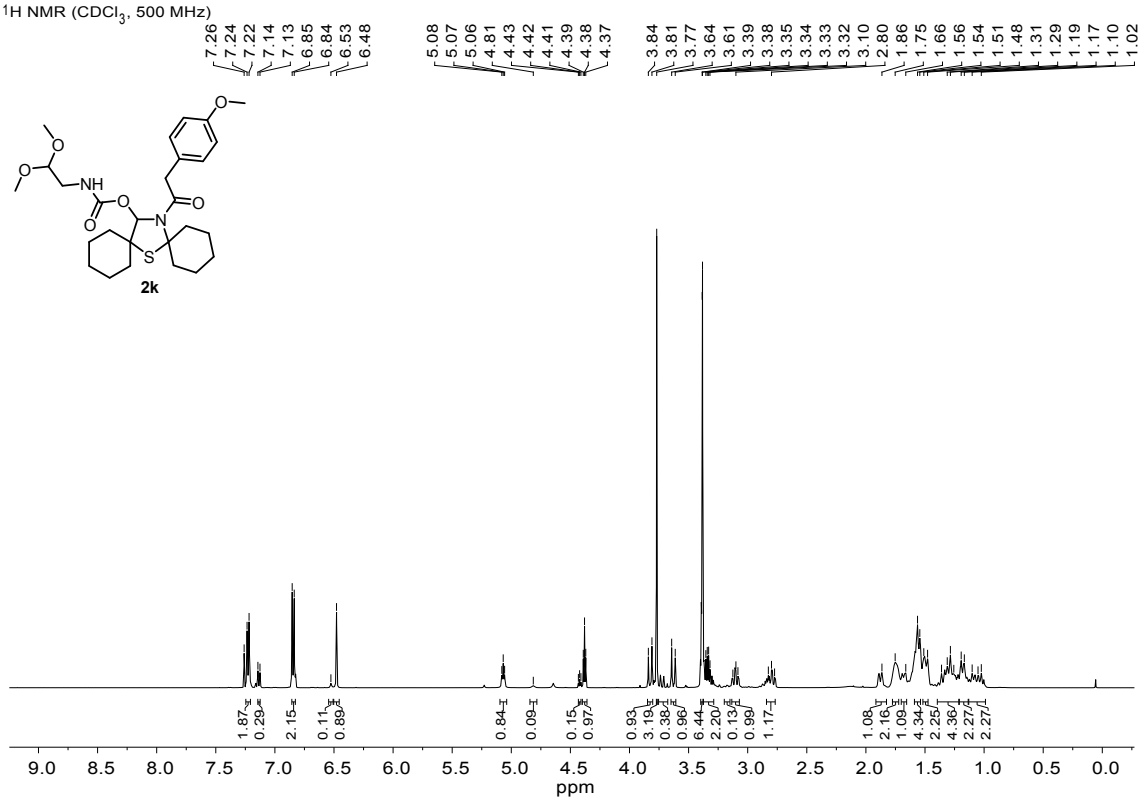


2j

^{1}H NMR ($CDCl_3$, 500 MHz)



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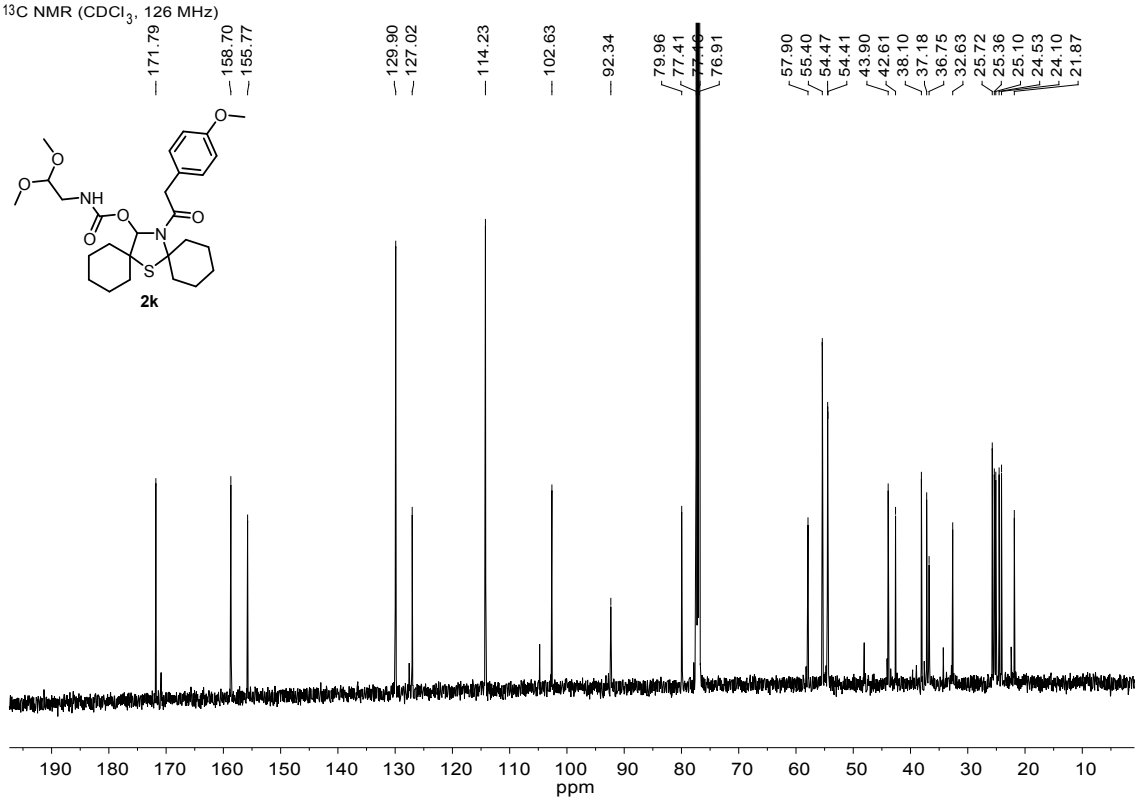
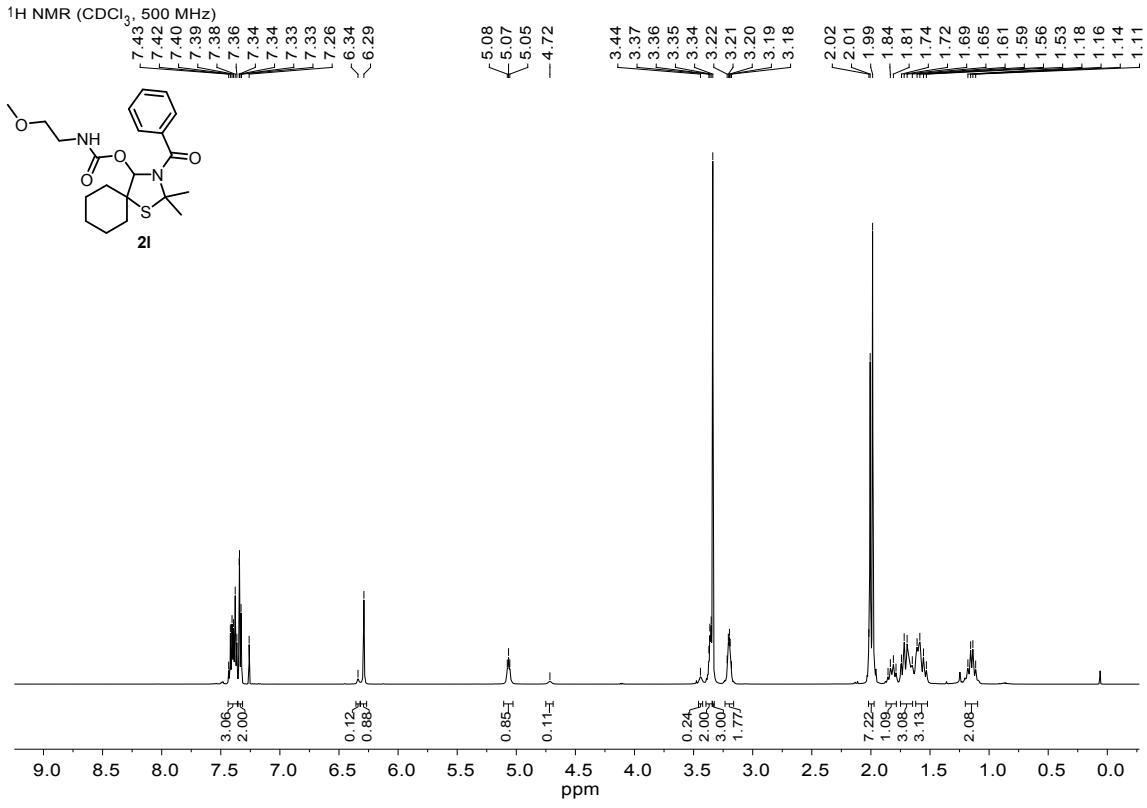
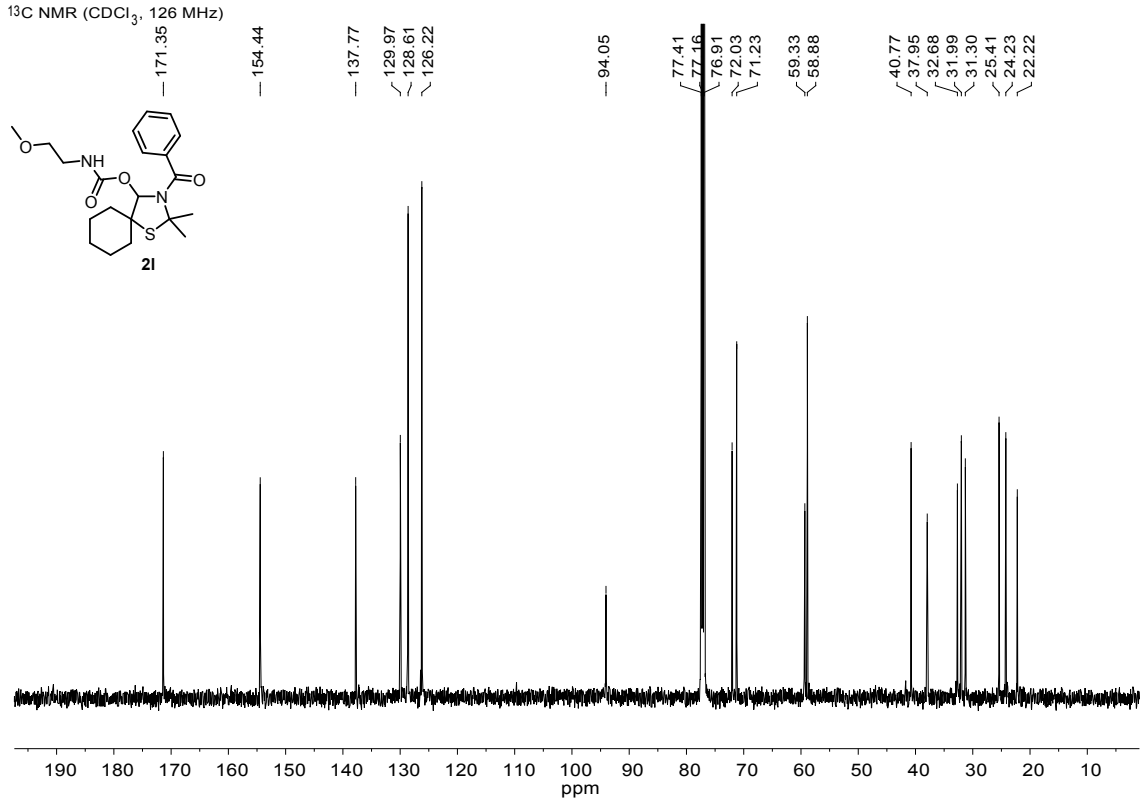
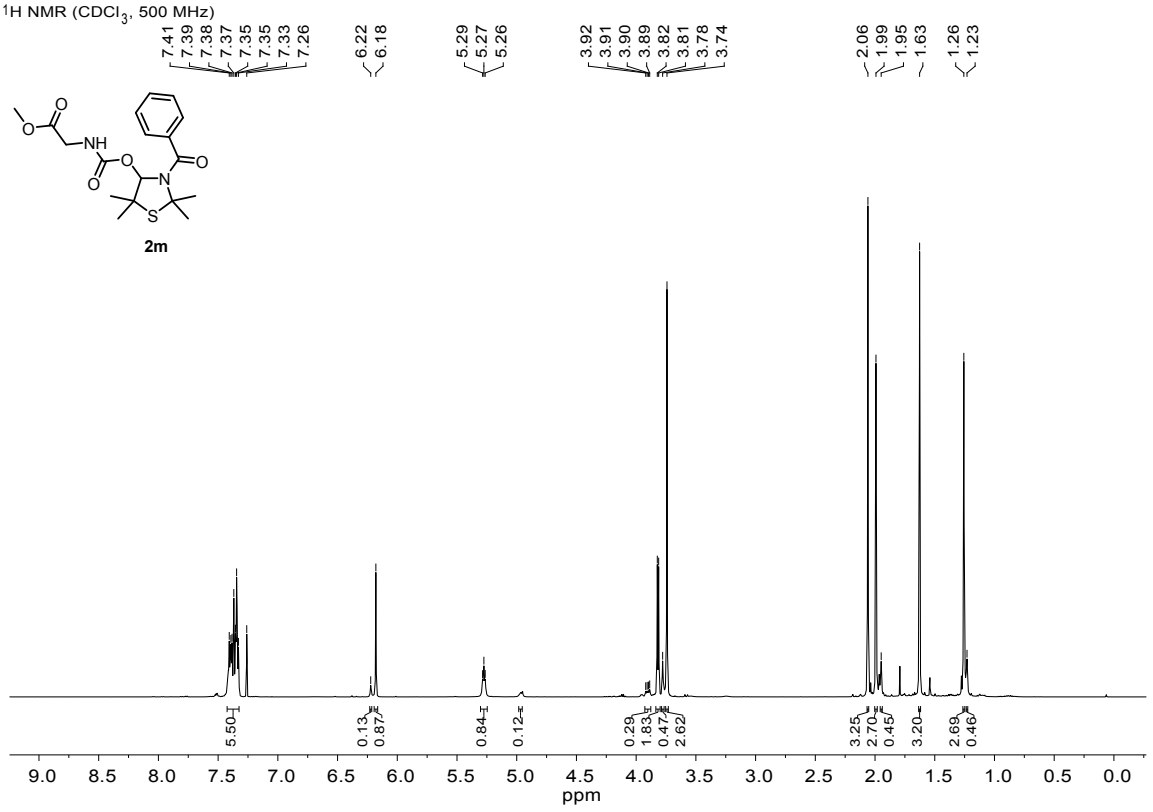



1H NMR (CDCl3, 500 MHz)
7.43
7.42
7.40
7.39
7.38
7.36
7.34
7.34
7.33
7.33
7.26
6.34
6.29
5.08
5.07
5.05
4.72
3.44
3.37
3.36
3.35
3.34
3.22
3.21
3.20
3.19
3.18
2.02
2.01
1.99
1.84
1.81
1.74
1.72
1.69
1.65
1.61
1.59
1.56
1.53
1.18
1.16
1.14
1.11
2l
3.06
2.00
0.12
0.88
0.85
0.11
0.24
2.00
3.00
1.77
7.22
1.09
3.08
3.13
2.08
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
ppm

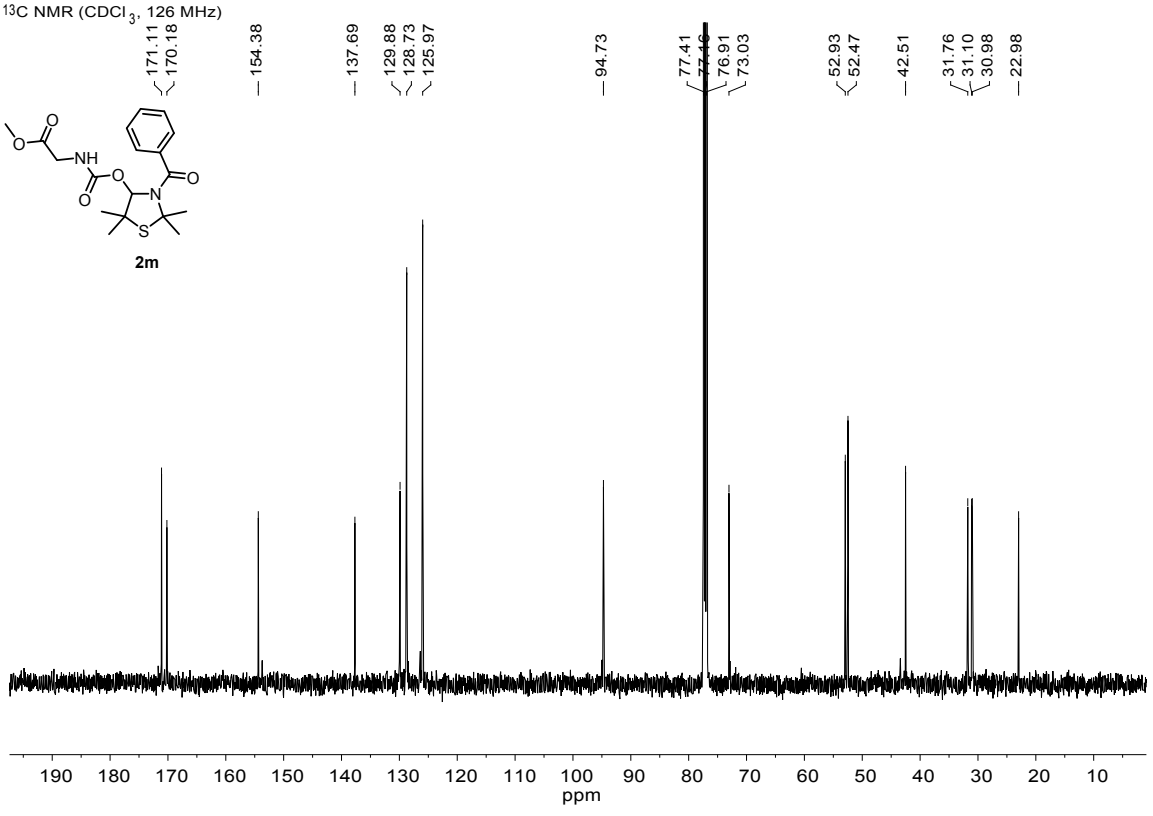

13C NMR (CDCl3, 126 MHz)
171.35
154.44
137.77
129.97
128.61
126.22
94.05
77.41
77.16
76.91
72.03
71.23
59.33
58.88
40.77
37.95
32.68
31.99
31.30
25.41
24.23
22.22
2l
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10
ppm

^{1}H NMR ($CDCl_3$, 500 MHz)



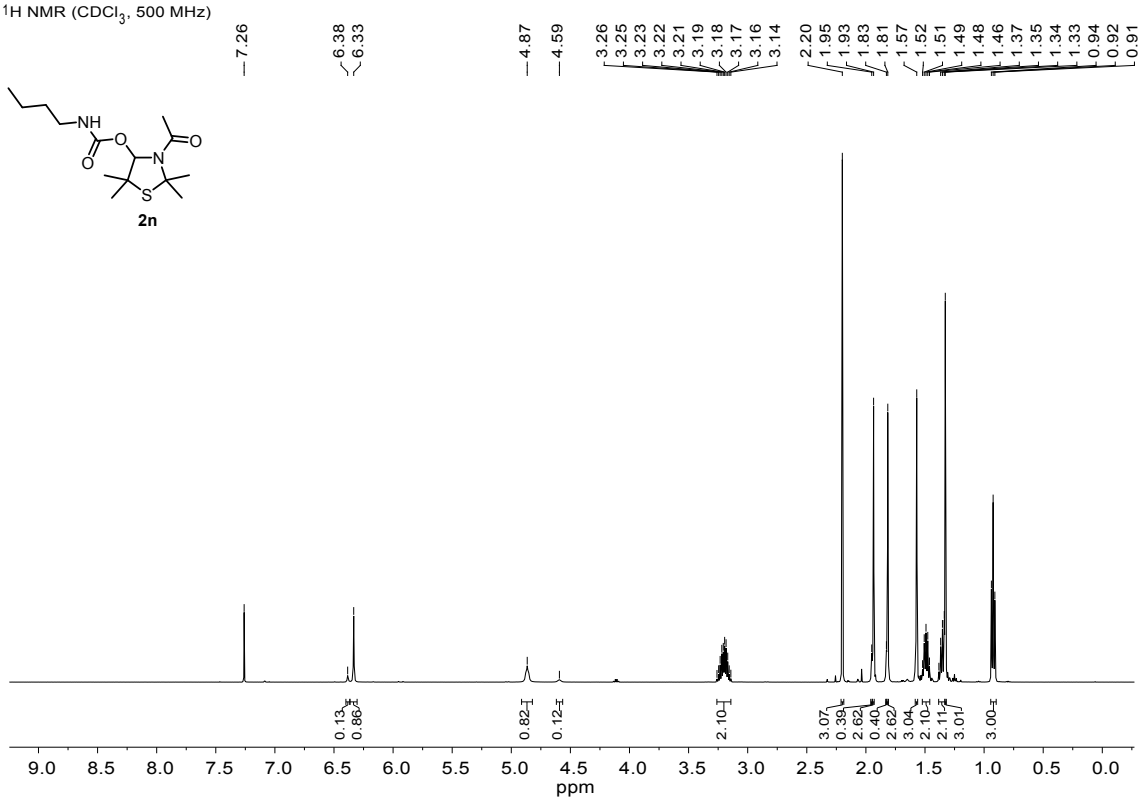
2m

^{13}C NMR ($CDCl_3$, 126 MHz)

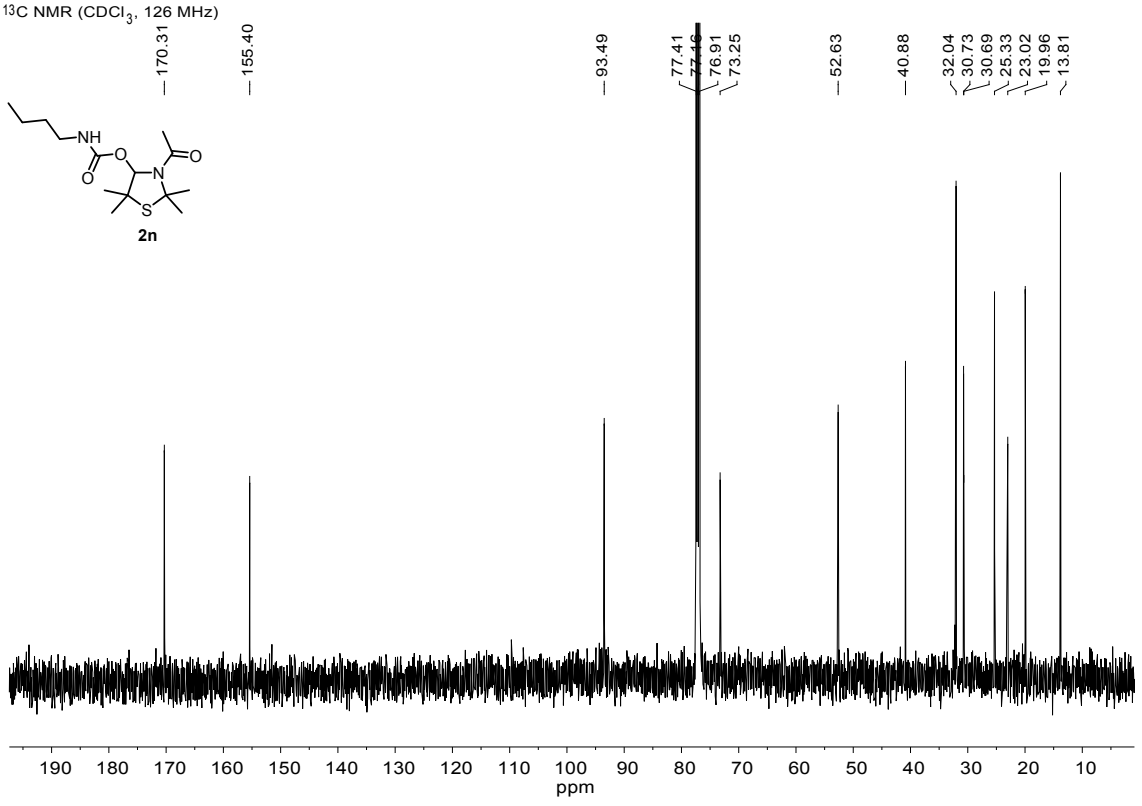


2m

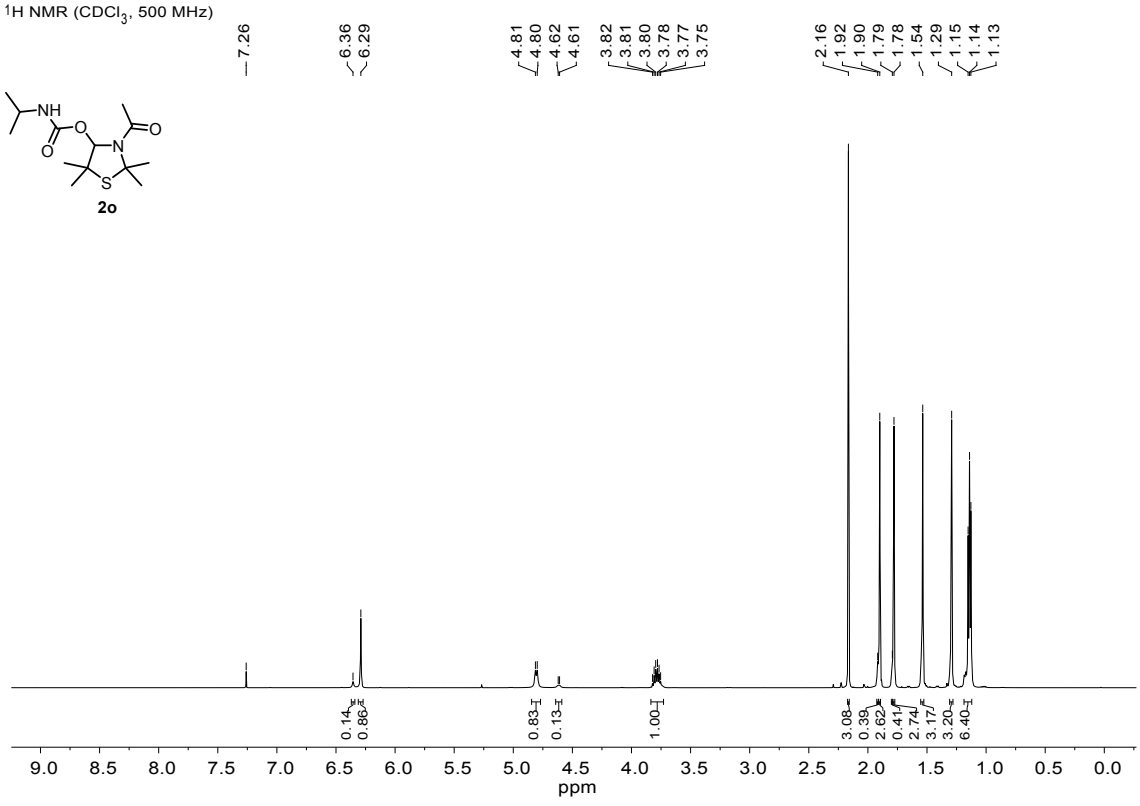
^{1}H NMR ($CDCl_3$, 500 MHz)

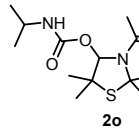


^{13}C NMR ($CDCl_3$, 126 MHz)



^{1}H NMR ($CDCl_3$, 500 MHz)



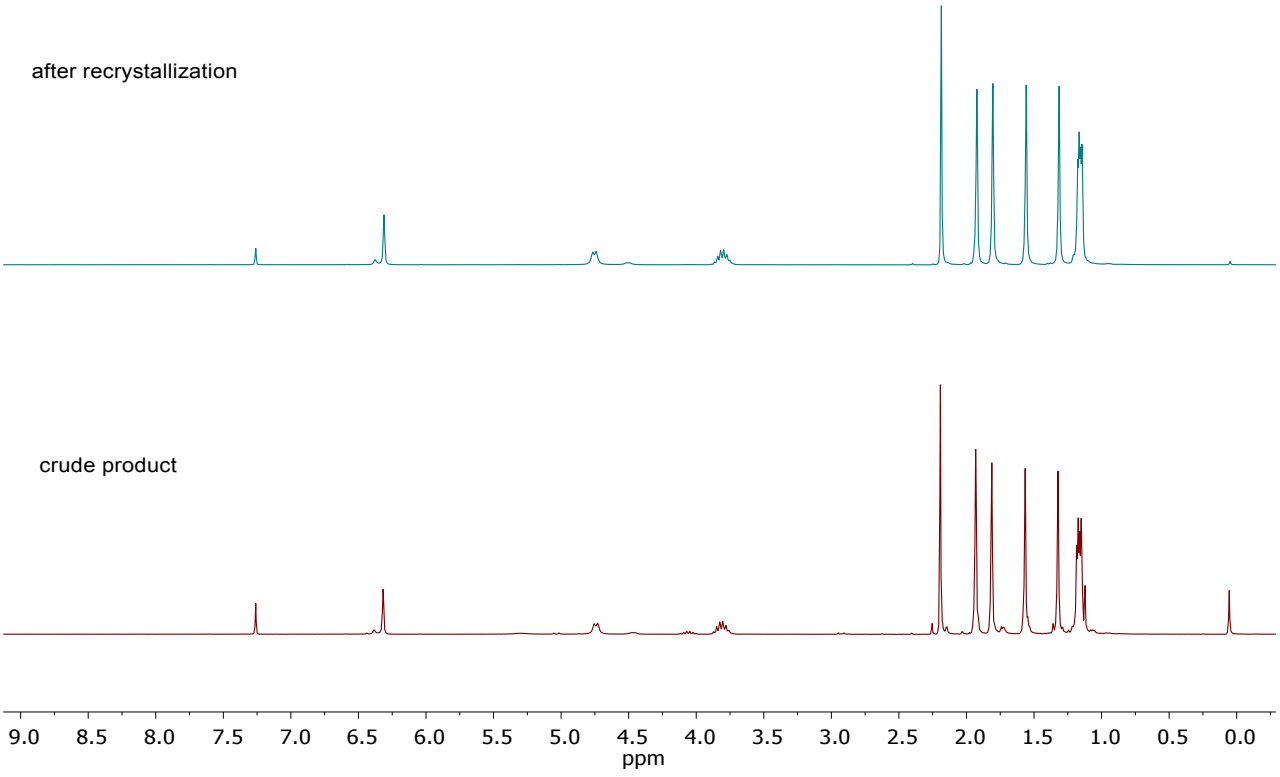


2o

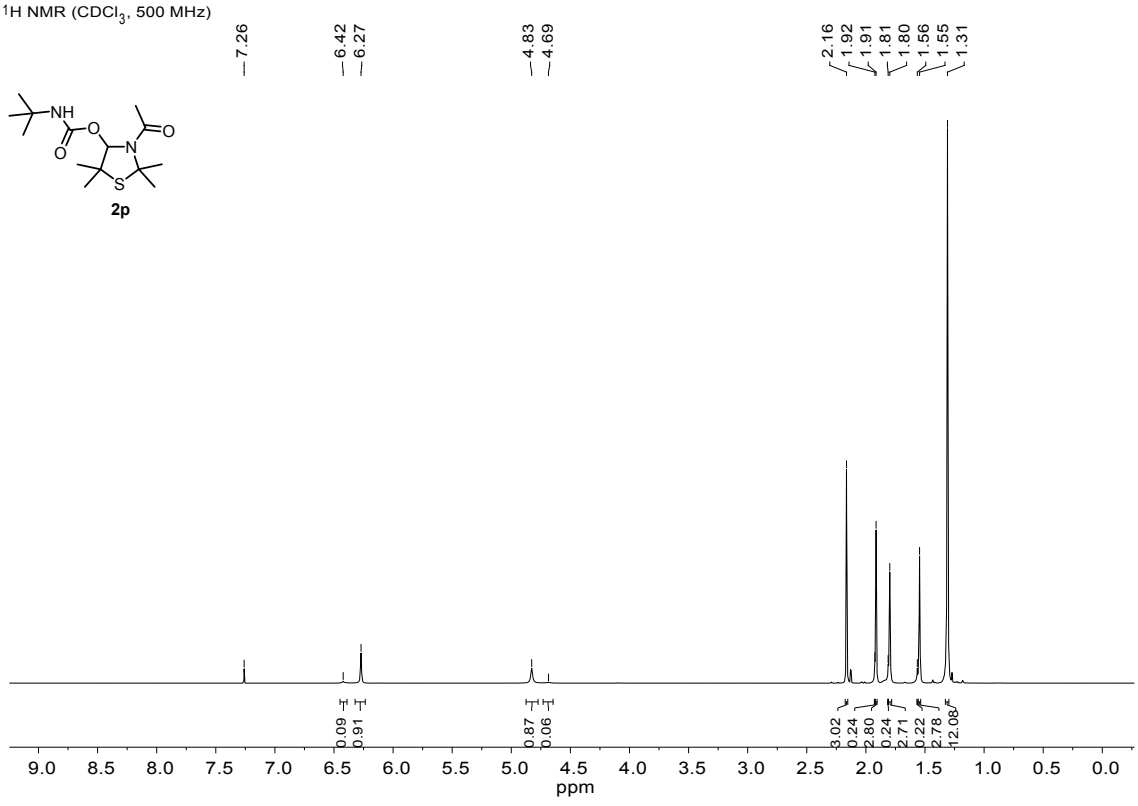
^{13}C NMR ($CDCl_3$, 126 MHz)

2o

^{1}H NMR ($CDCl_3$, 300 MHz)
scale-up compound **2o**

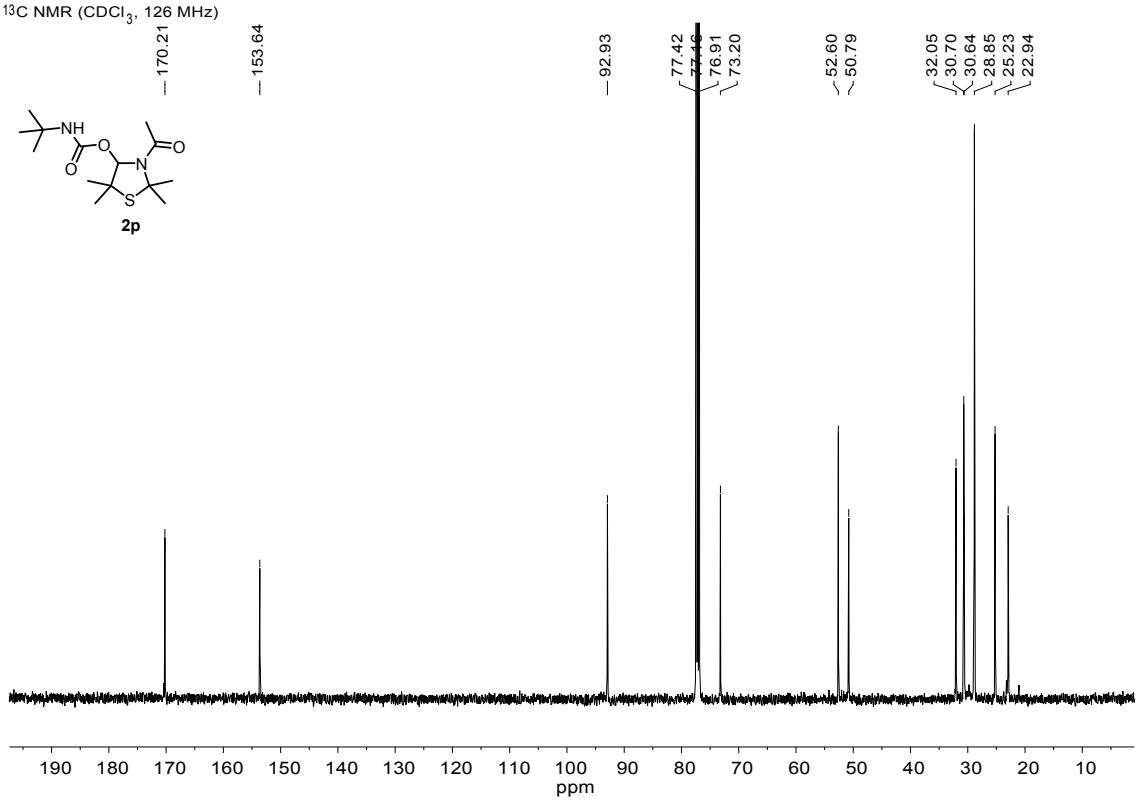


^{1}H NMR ($CDCl_3$, 500 MHz)



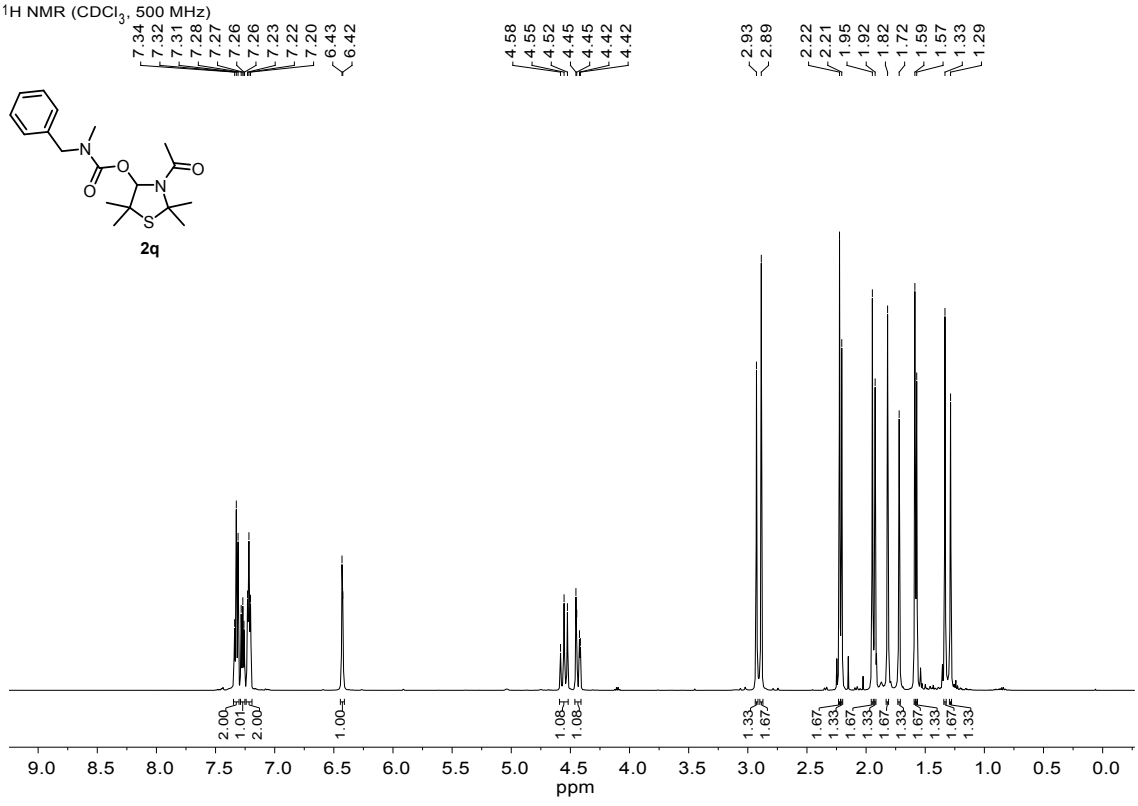
2p

^{13}C NMR ($CDCl_3$, 126 MHz)



2p

^{1}H NMR ($CDCl_3$, 500 MHz)



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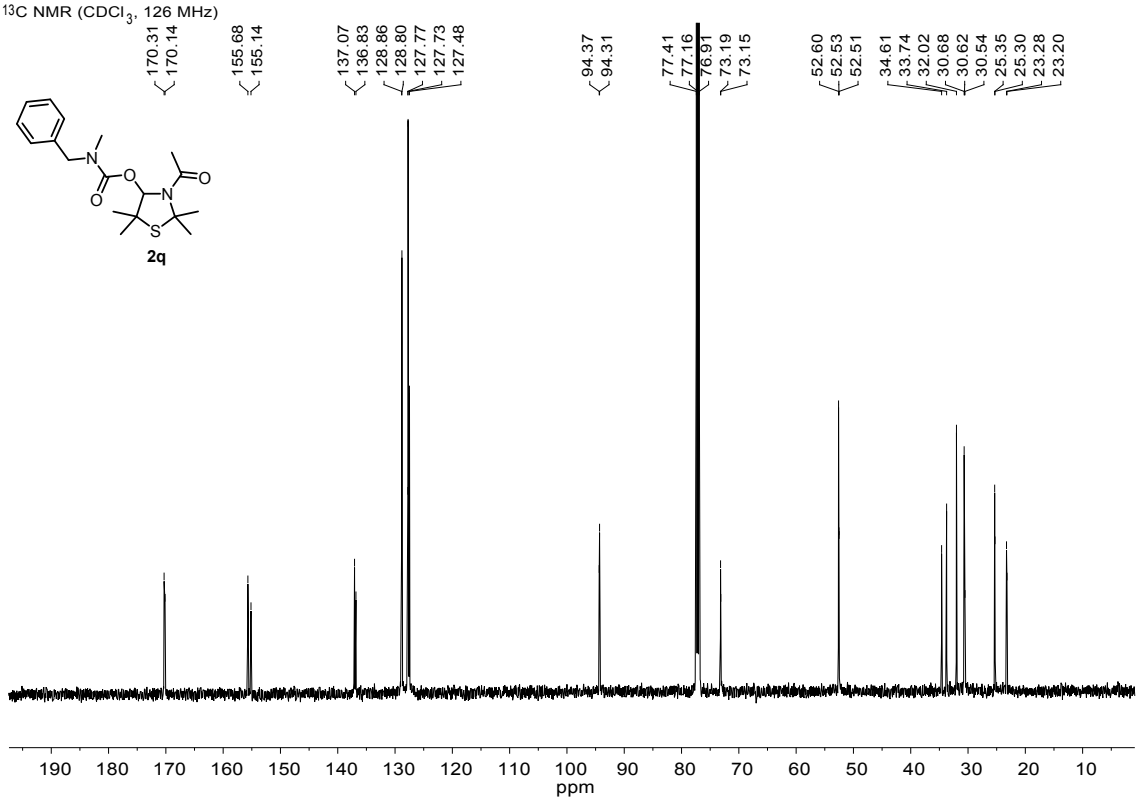
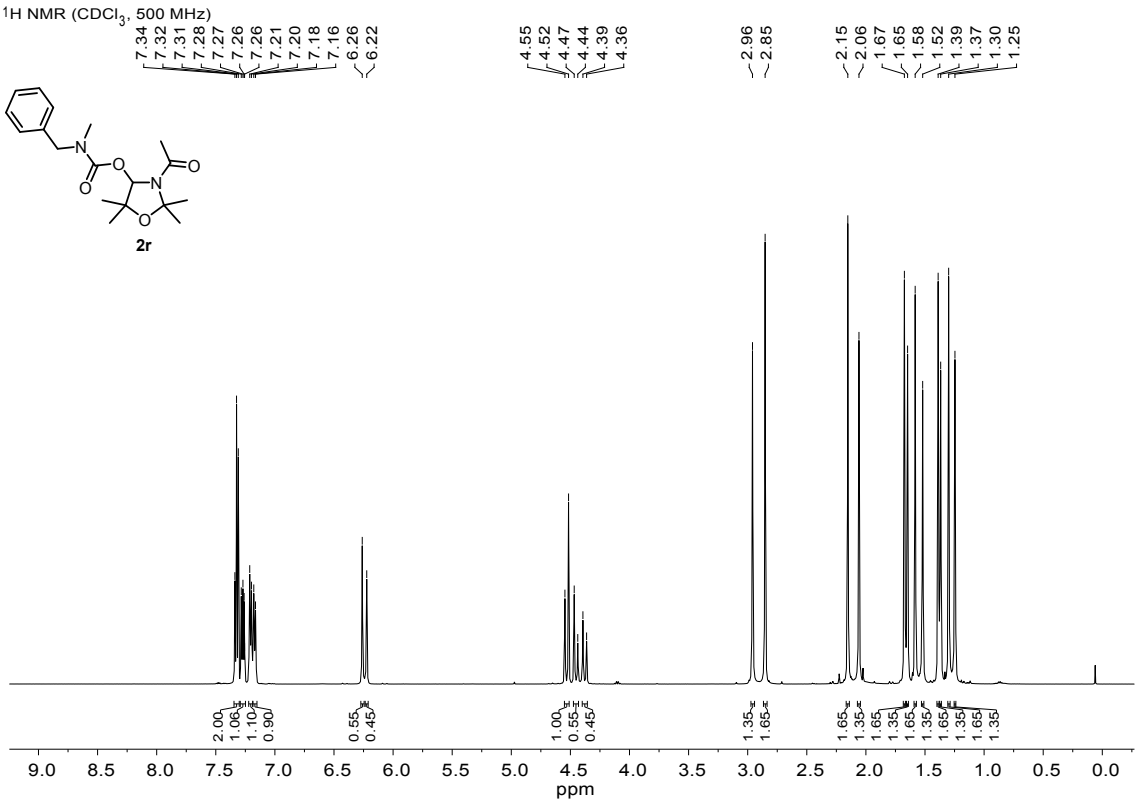


2q


1H NMR (CDCl3, 500 MHz)
7.34
7.32
7.31
7.28
7.27
7.26
7.26
7.21
7.20
7.18
7.16
6.26
6.22
4.55
4.52
4.47
4.44
4.39
4.36
2.96
2.85
2.15
2.06
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1.65
1.58
1.52
1.39
1.37
1.30
1.25
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0.55
0.45
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1.65
1.65
1.35
1.65
1.35
1.65
1.35
1.65
1.35
1.65
1.35
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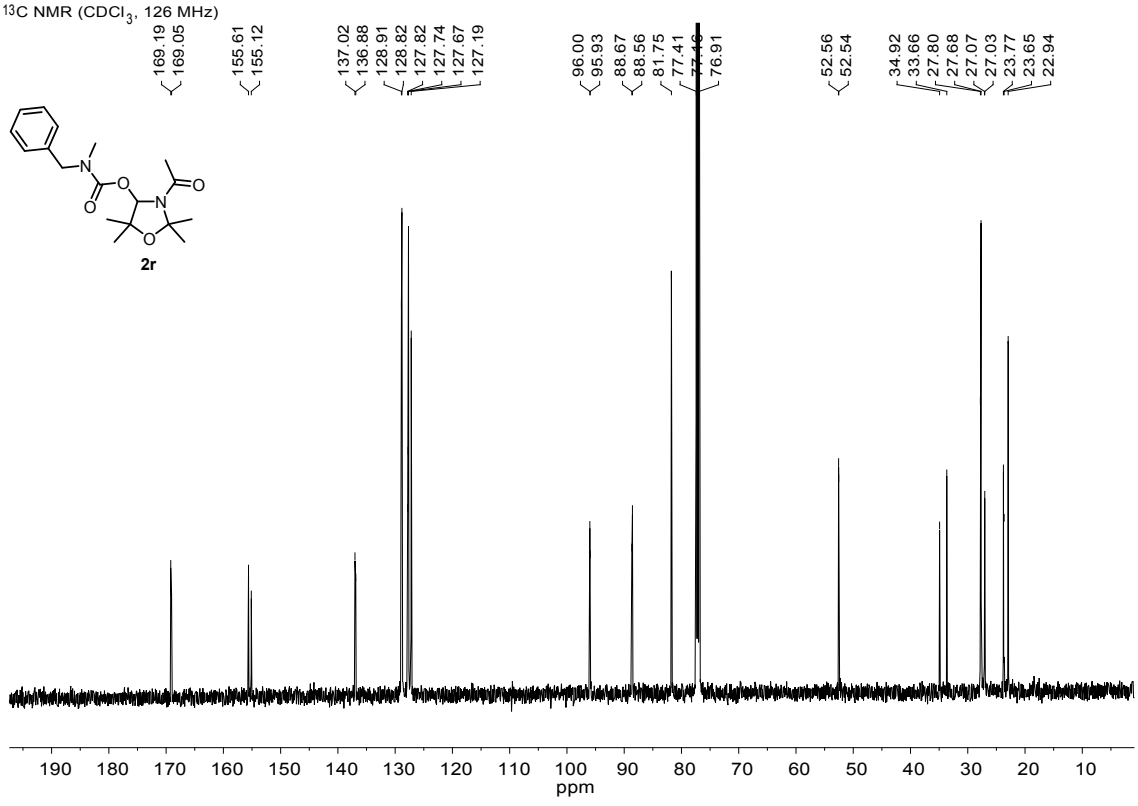
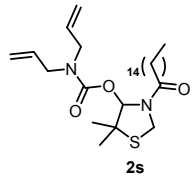
ppm

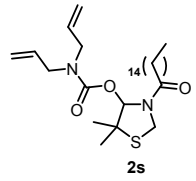

13C NMR (CDCl3, 126 MHz)
169.19
169.05
155.61
155.12
137.02
136.88
128.91
128.82
127.82
127.74
127.67
127.19
96.00
95.93
88.67
88.56
81.75
77.41
77.16
76.91
52.56
52.54
34.92
33.66
27.80
27.68
27.07
27.03
23.77
23.65
22.94
2r
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10
ppm

^{1}H NMR ($CDCl_3$, 500 MHz)



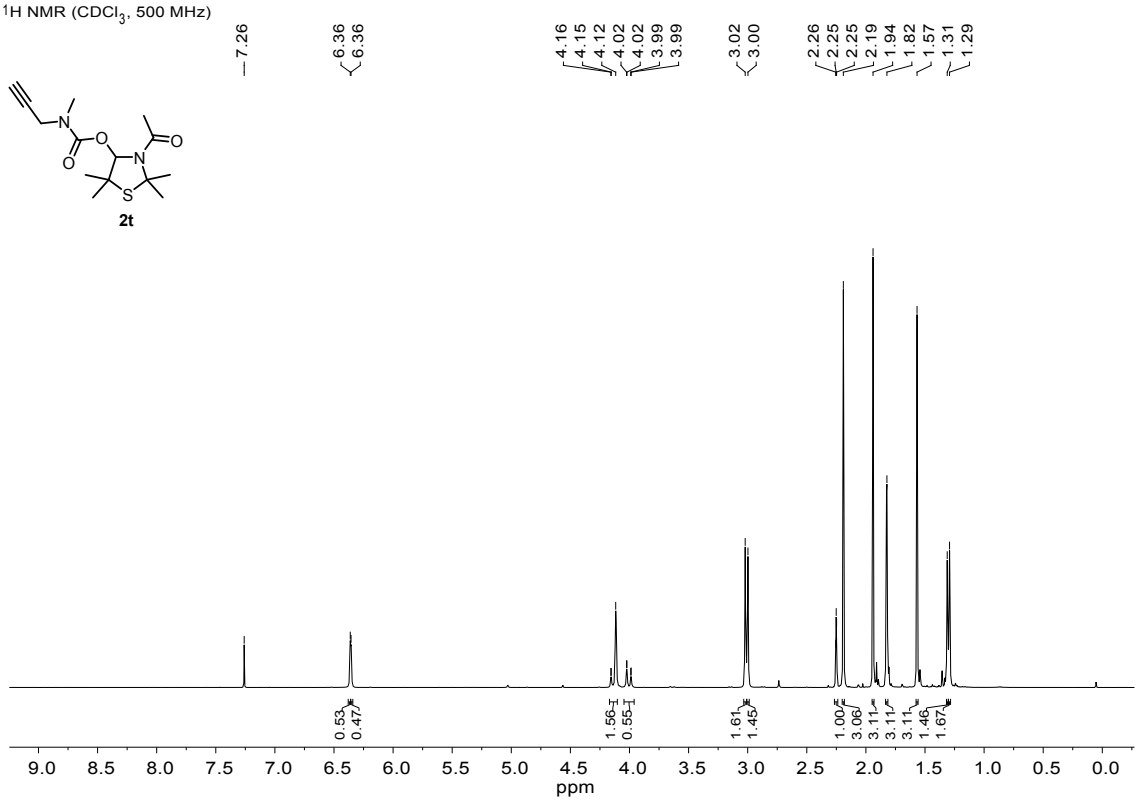
2s

^{13}C NMR ($CDCl_3$, 126 MHz)



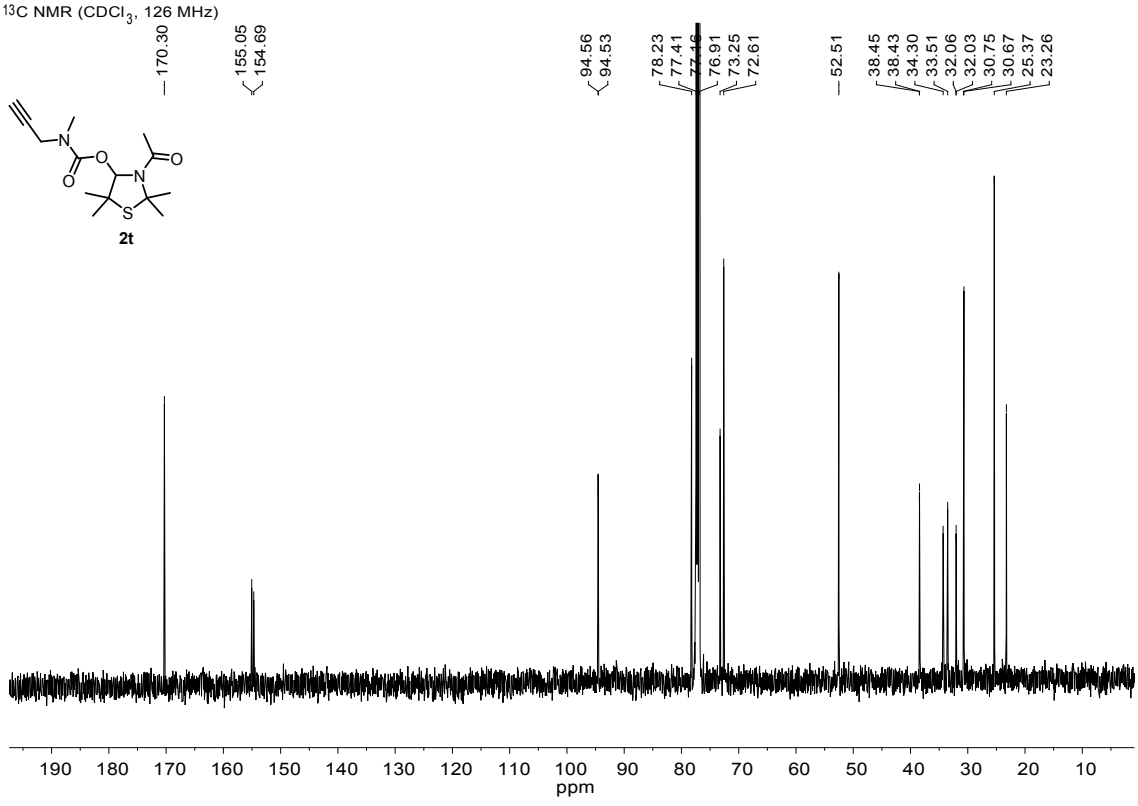
2s

^{1}H NMR ($CDCl_3$, 500 MHz)



2t

^{13}C NMR ($CDCl_3$, 126 MHz)



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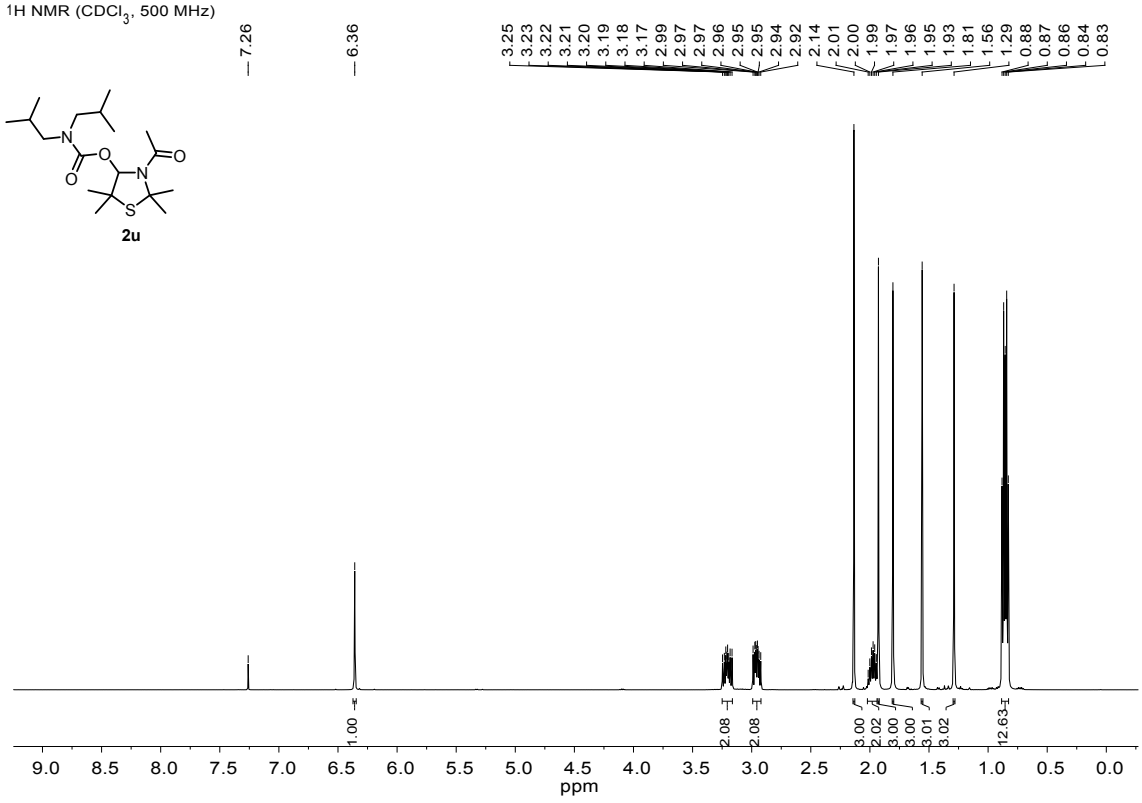
^{1}H NMR ($CDCl_3$, 500 MHz)



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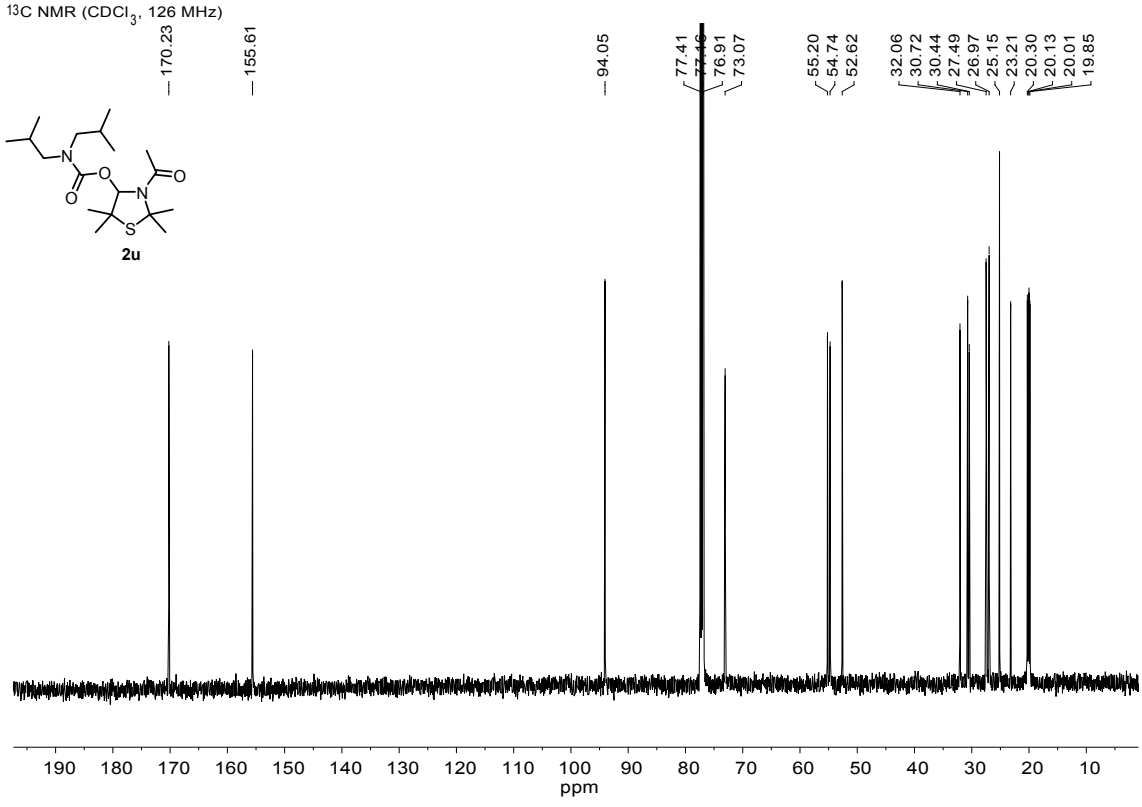

2u

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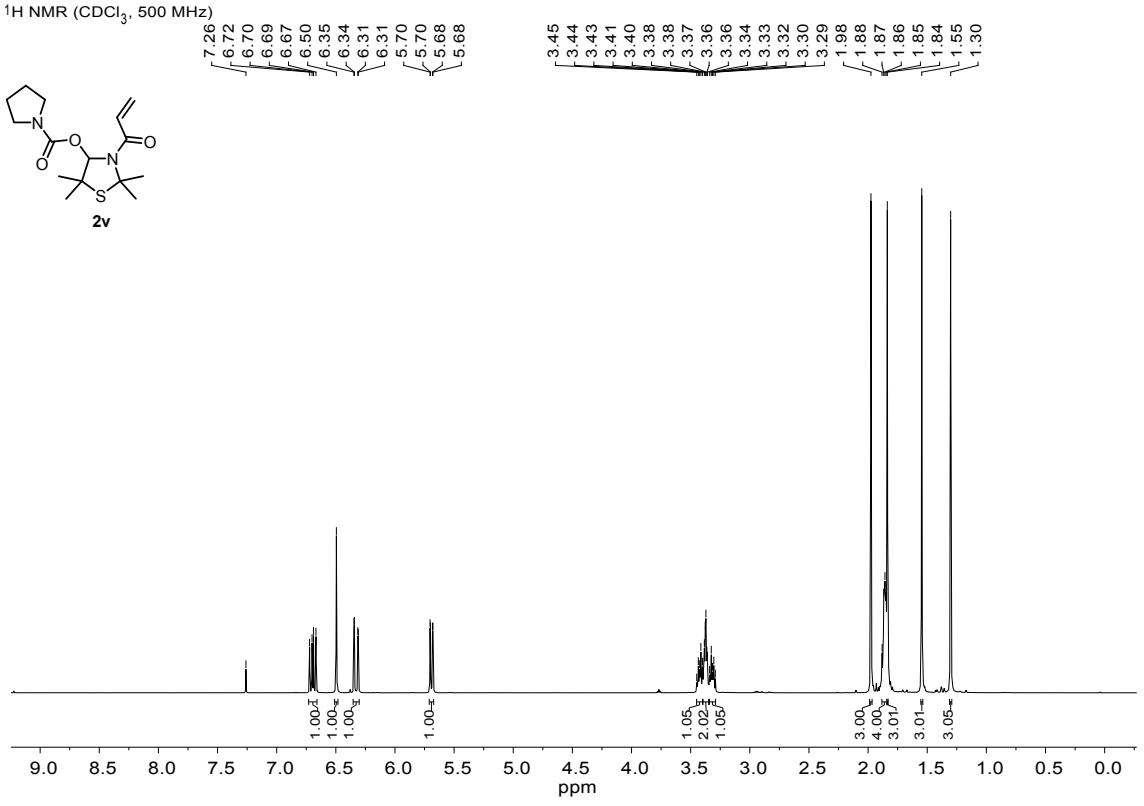

2v

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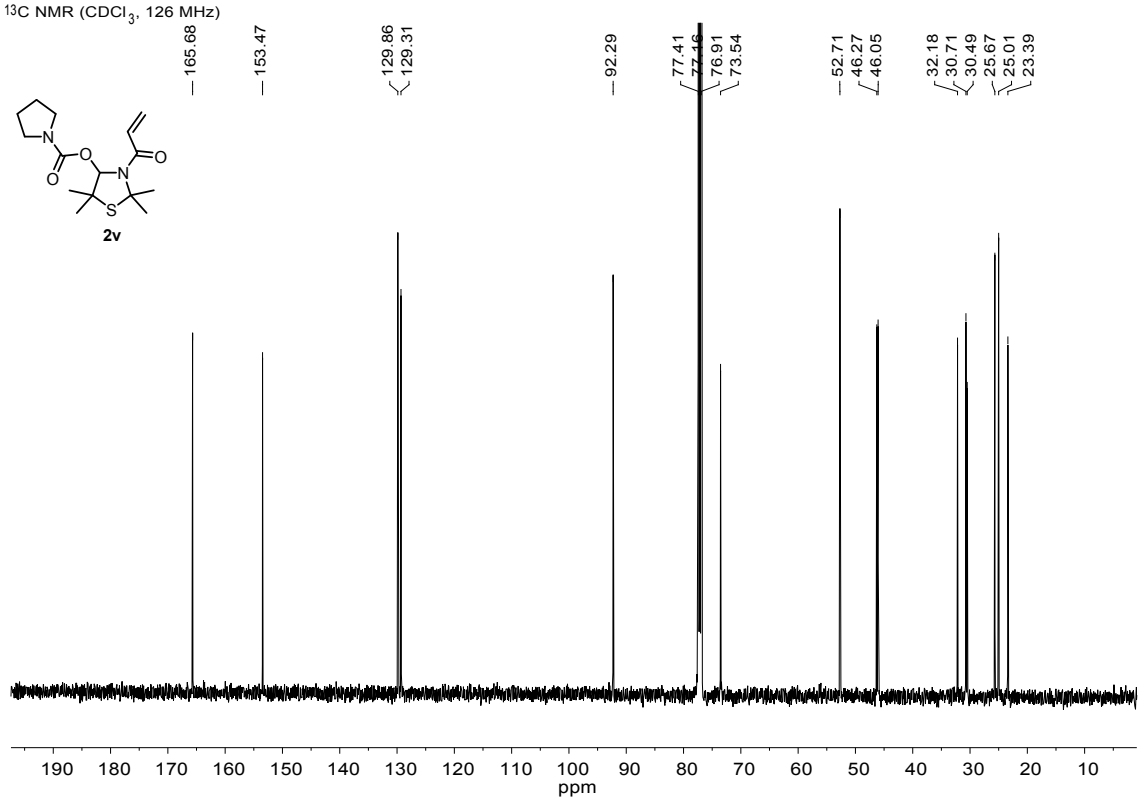
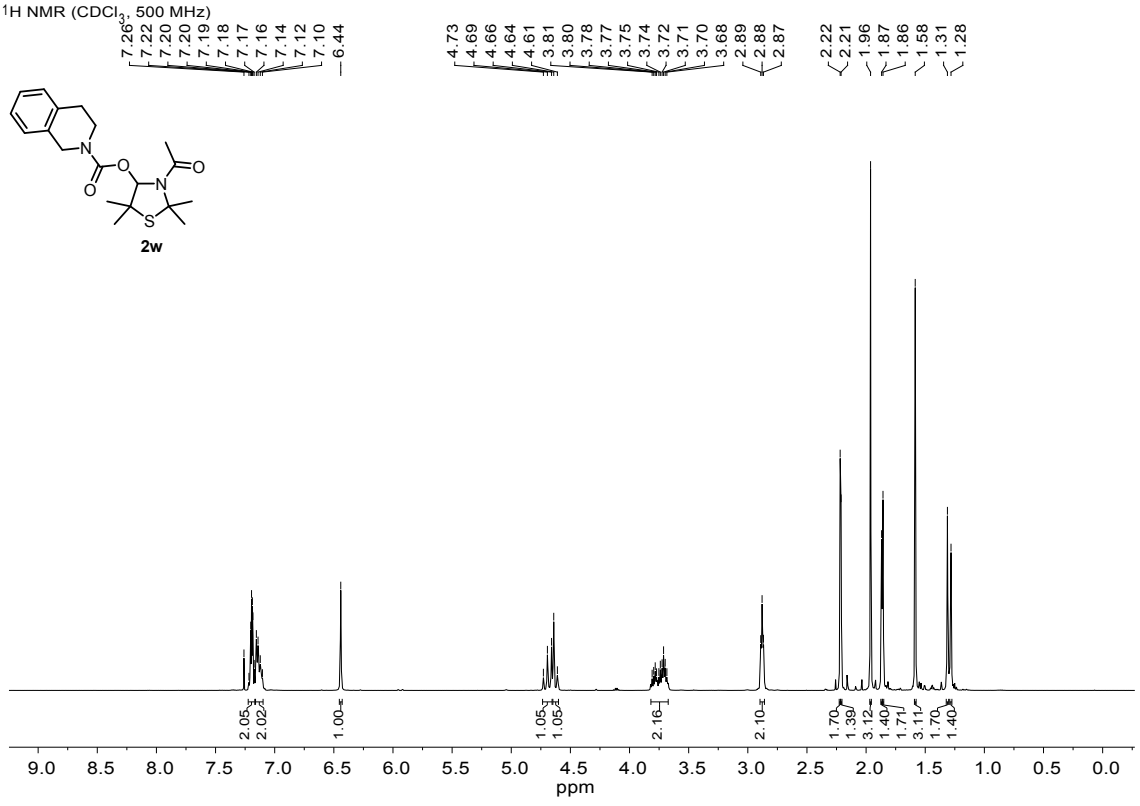


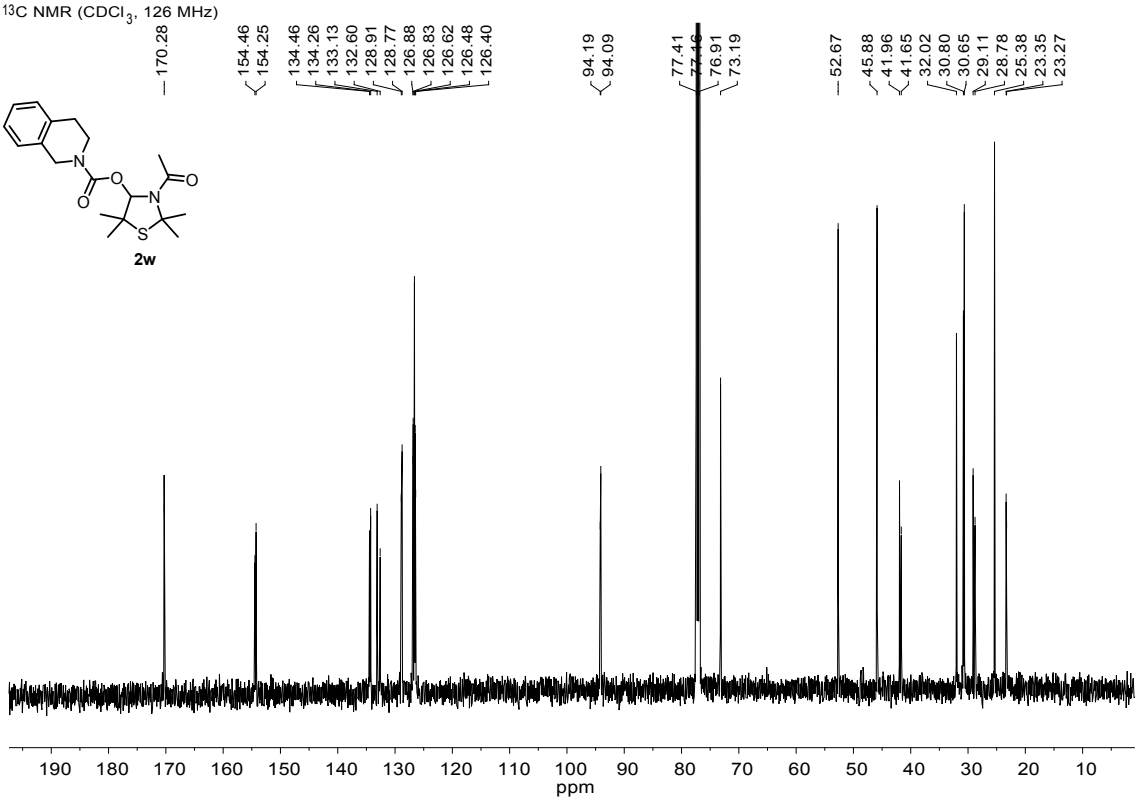
2v

^{1}H NMR ($CDCl_3$, 500 MHz)



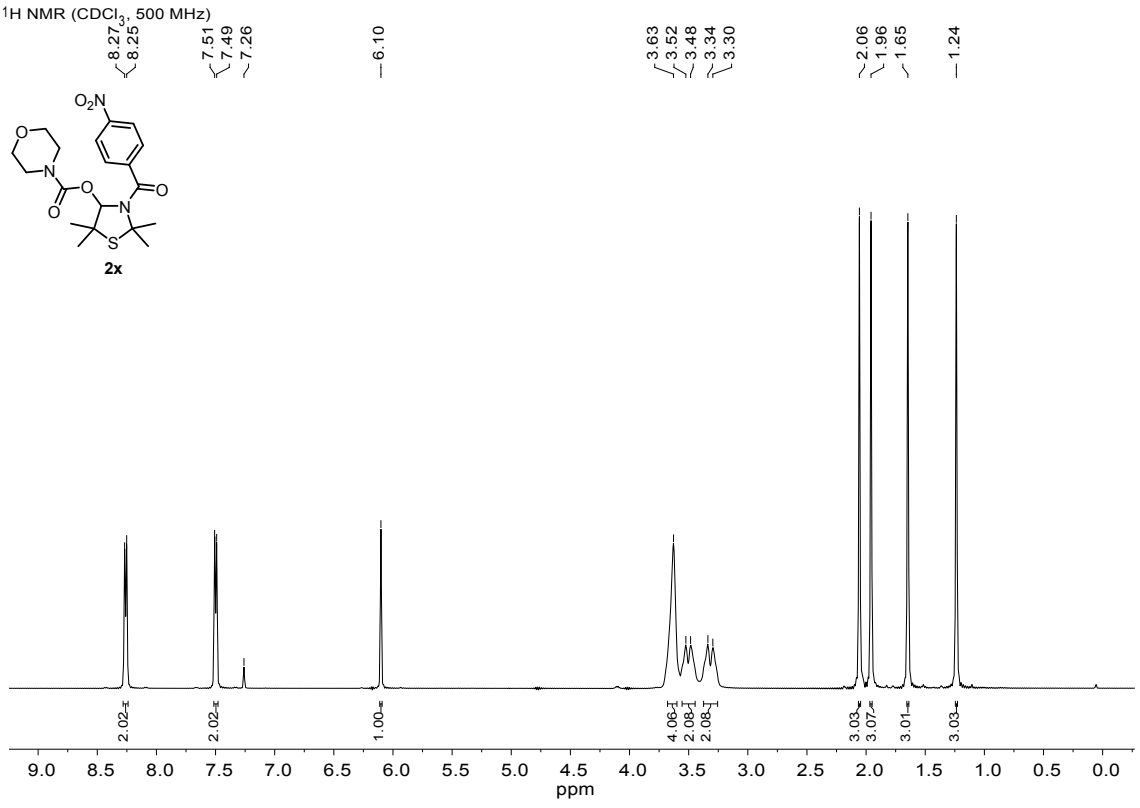
2w

^{13}C NMR ($CDCl_3$, 126 MHz)



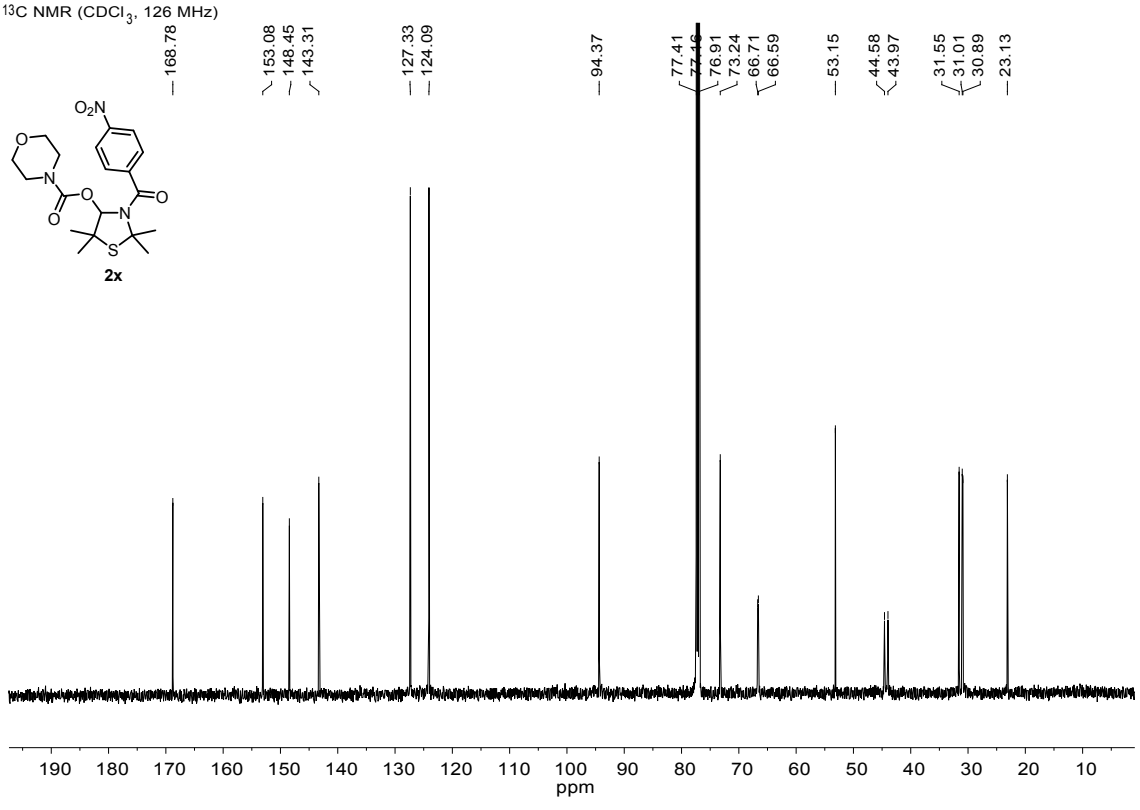
2w

^{1}H NMR ($CDCl_3$, 500 MHz)



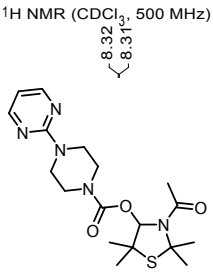
2x

^{13}C NMR ($CDCl_3$, 126 MHz)



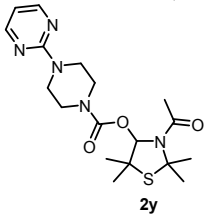
2x

^{1}H NMR ($CDCl_3$, 500 MHz)



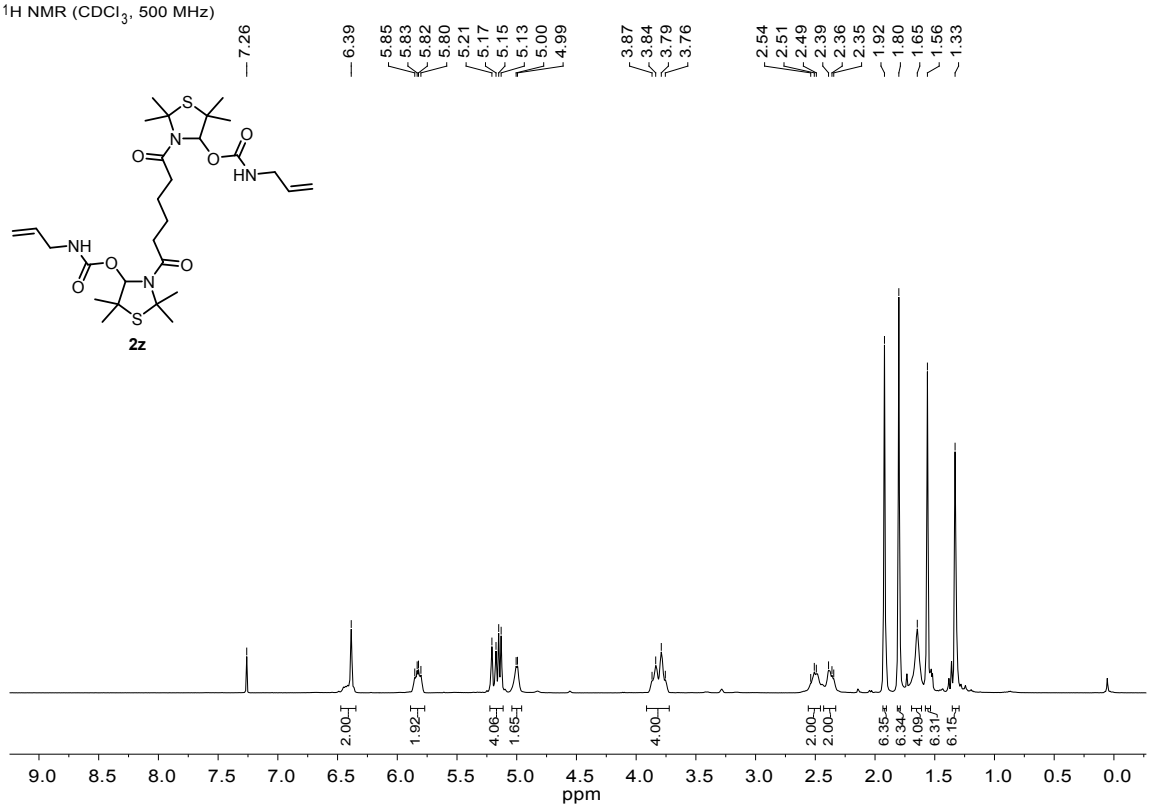
2y

^{13}C NMR ($CDCl_3$, 126 MHz)



2y

^{1}H NMR ($CDCl_3$, 500 MHz)



^{13}C NMR ($CDCl_3$, 126 MHz)