

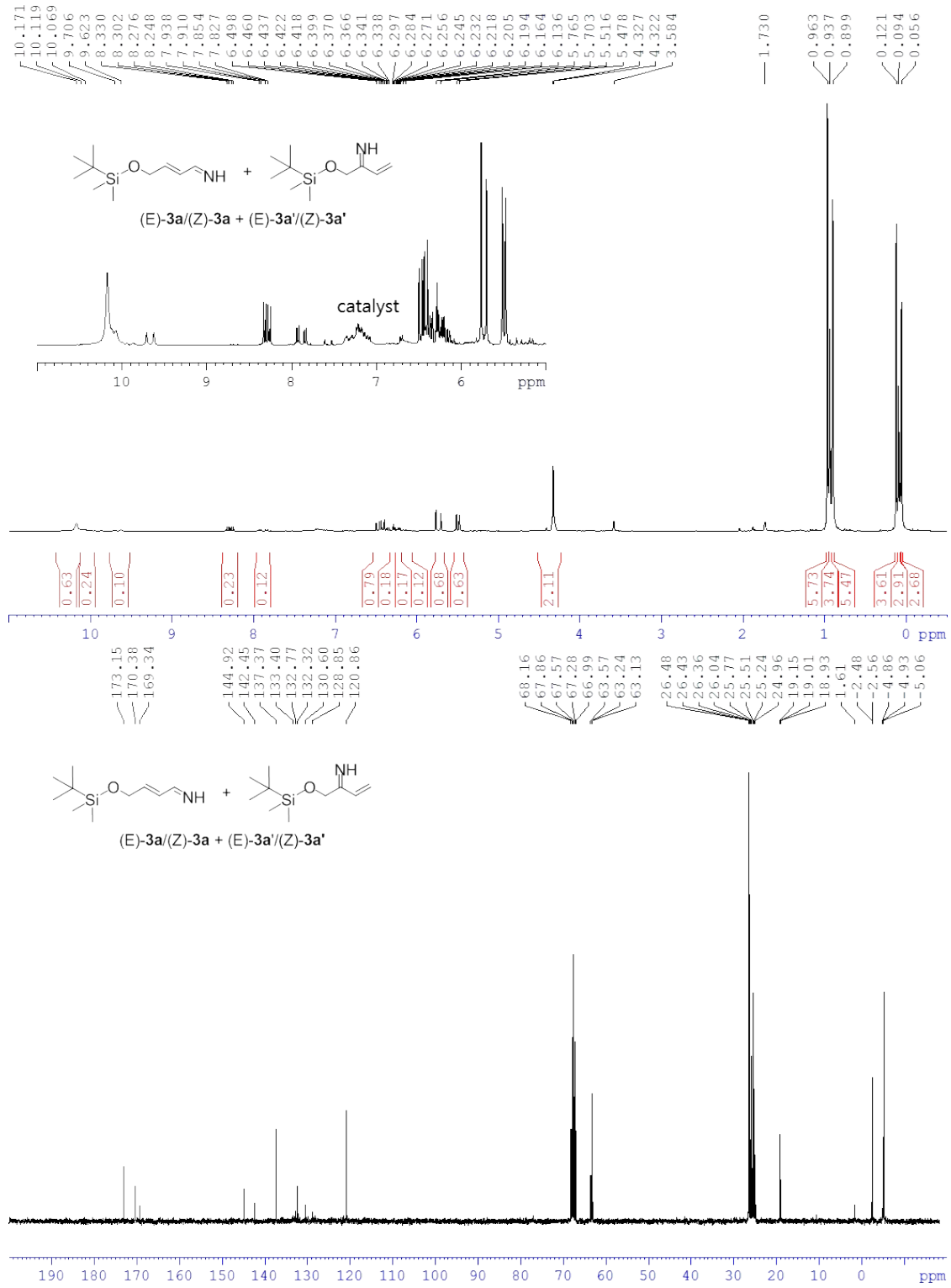
## **Supporting Information**

### **Synthesis of 1*H*-azadienes and application to one-pot organic transformations**

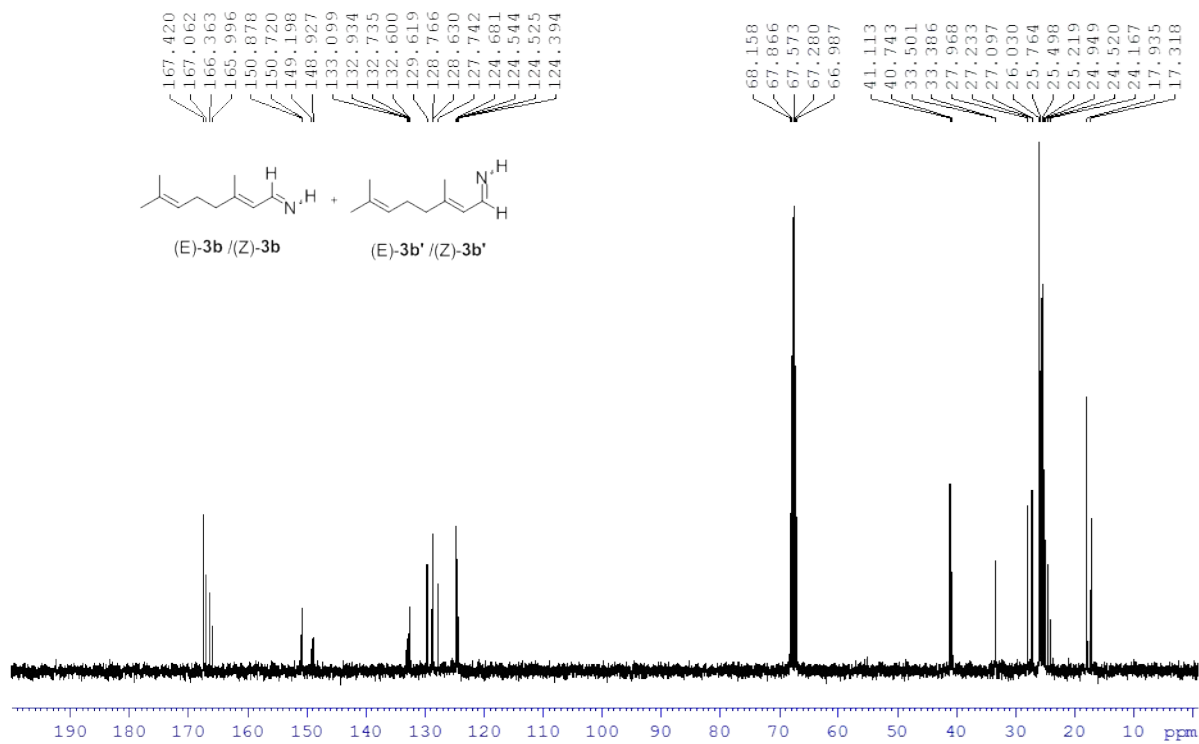
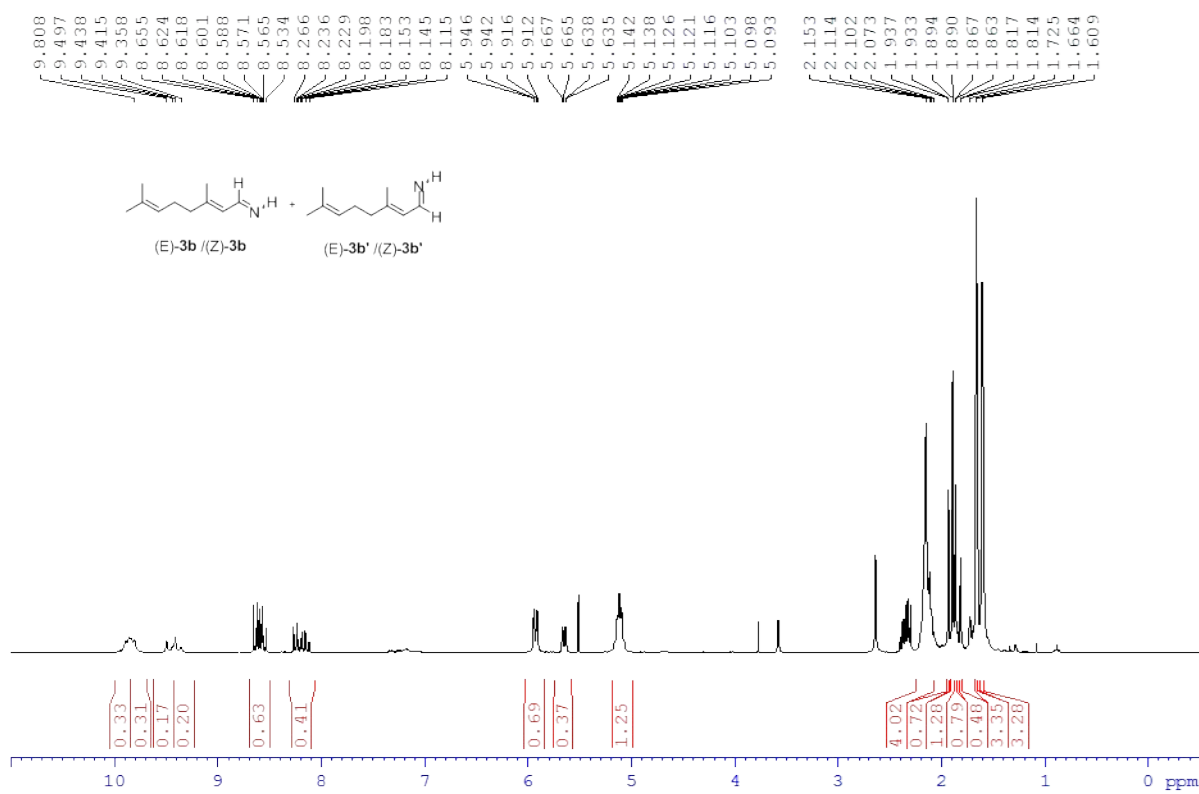
Yearang Kwon, Mina Jeon, Jinyong Park, Young Ho Rhee\*, and Jaiwook Park\*

# NMR spectrum

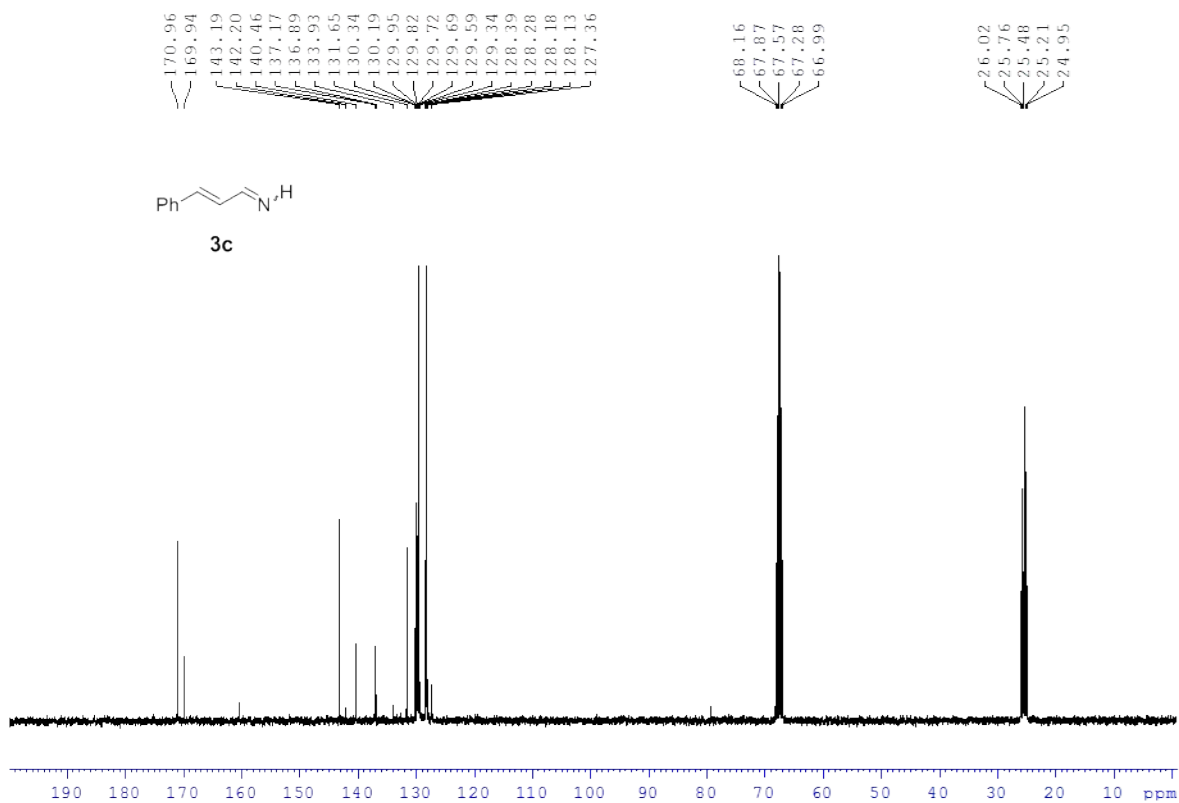
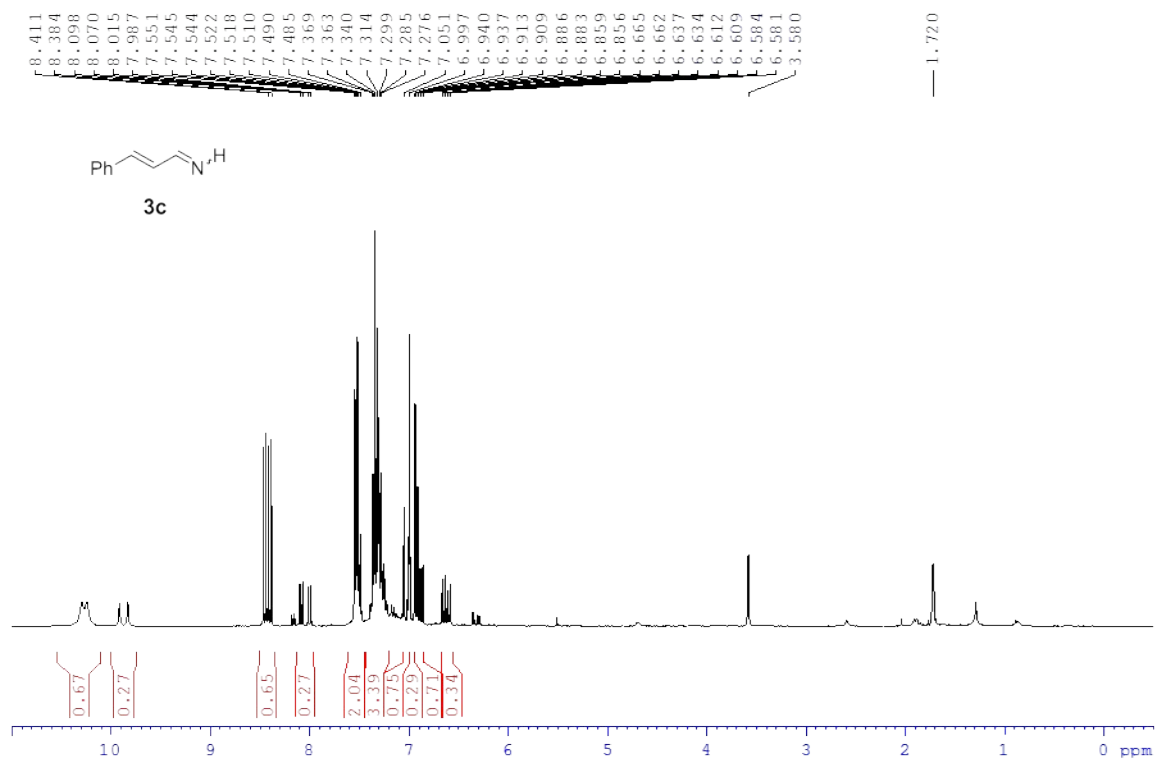
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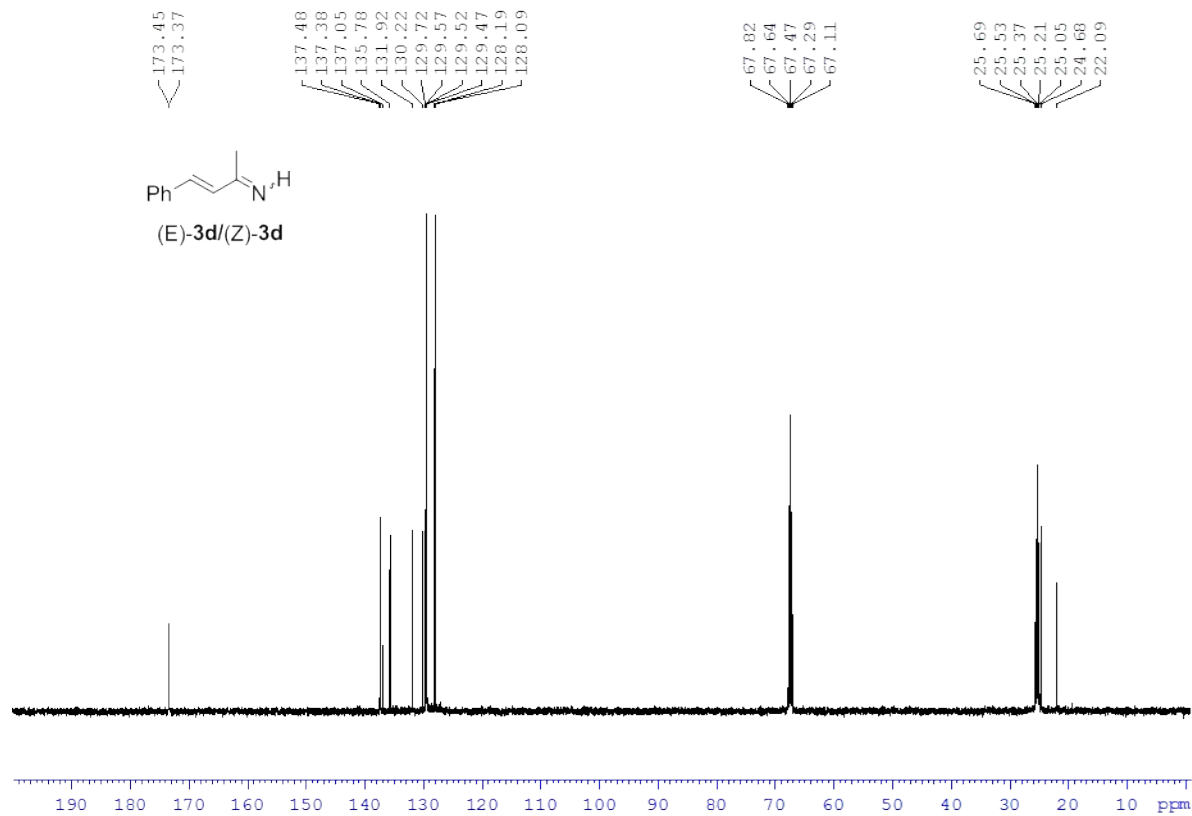
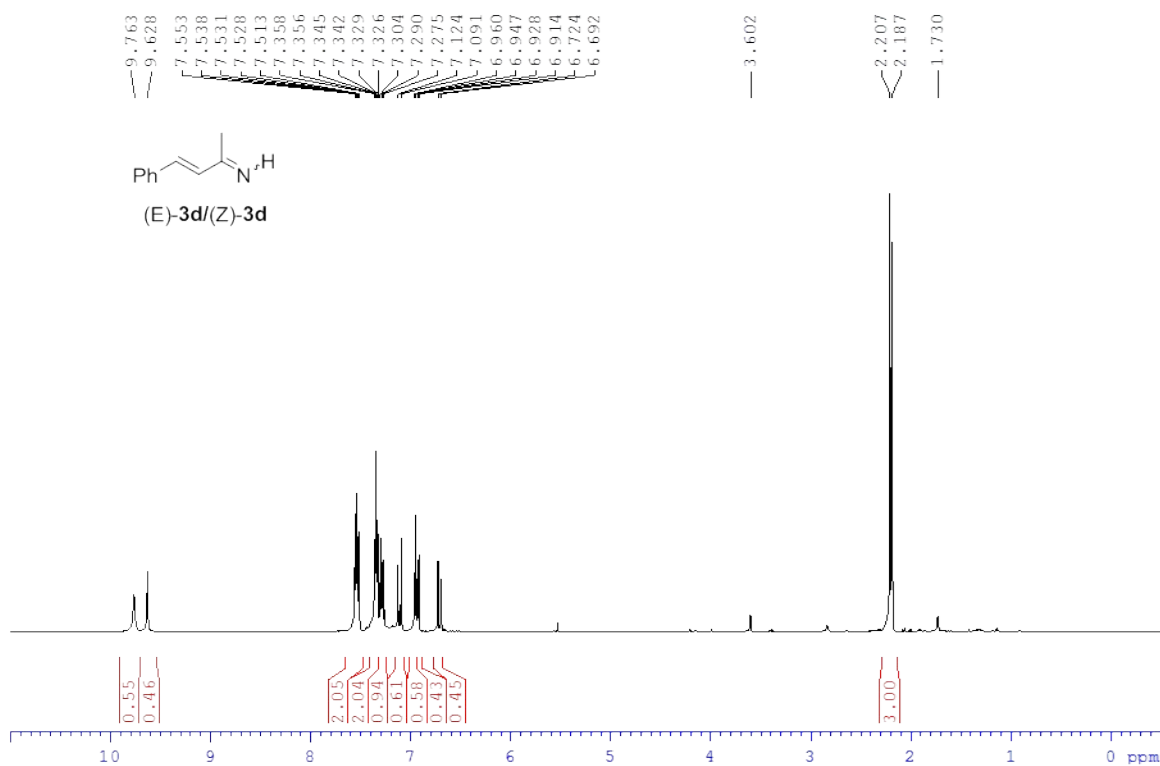
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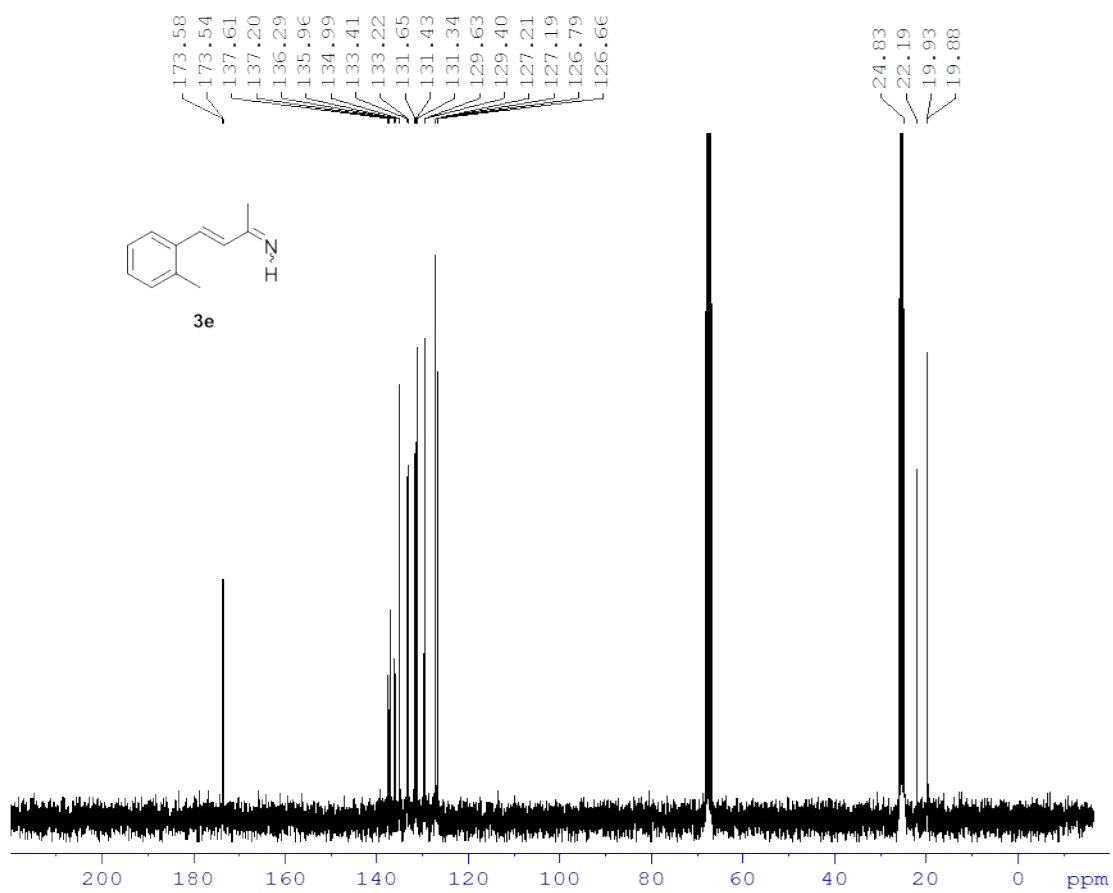
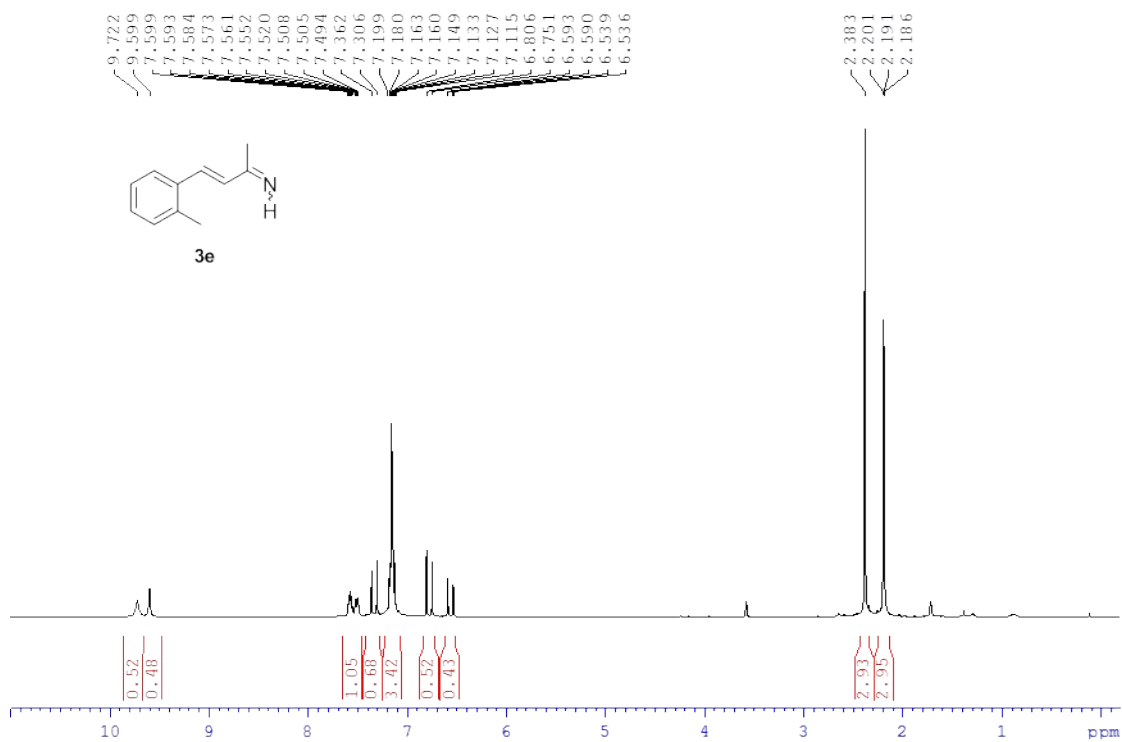
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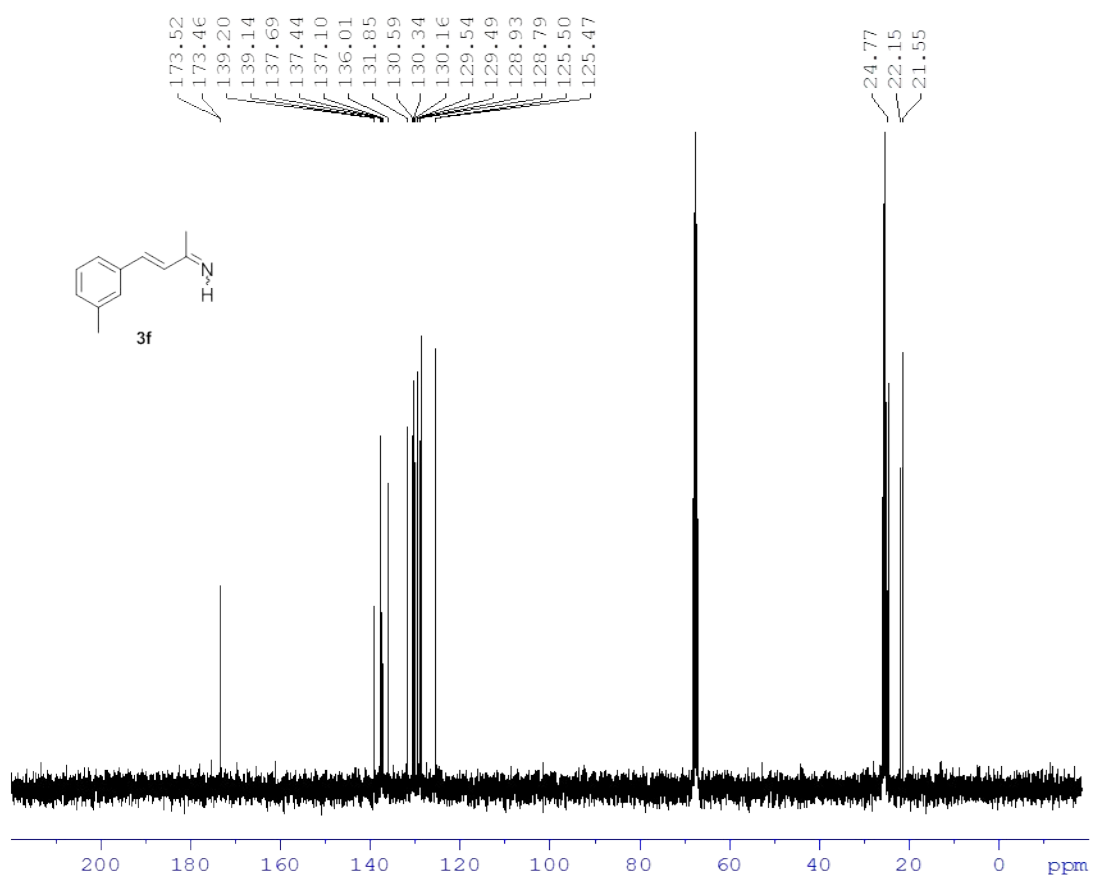
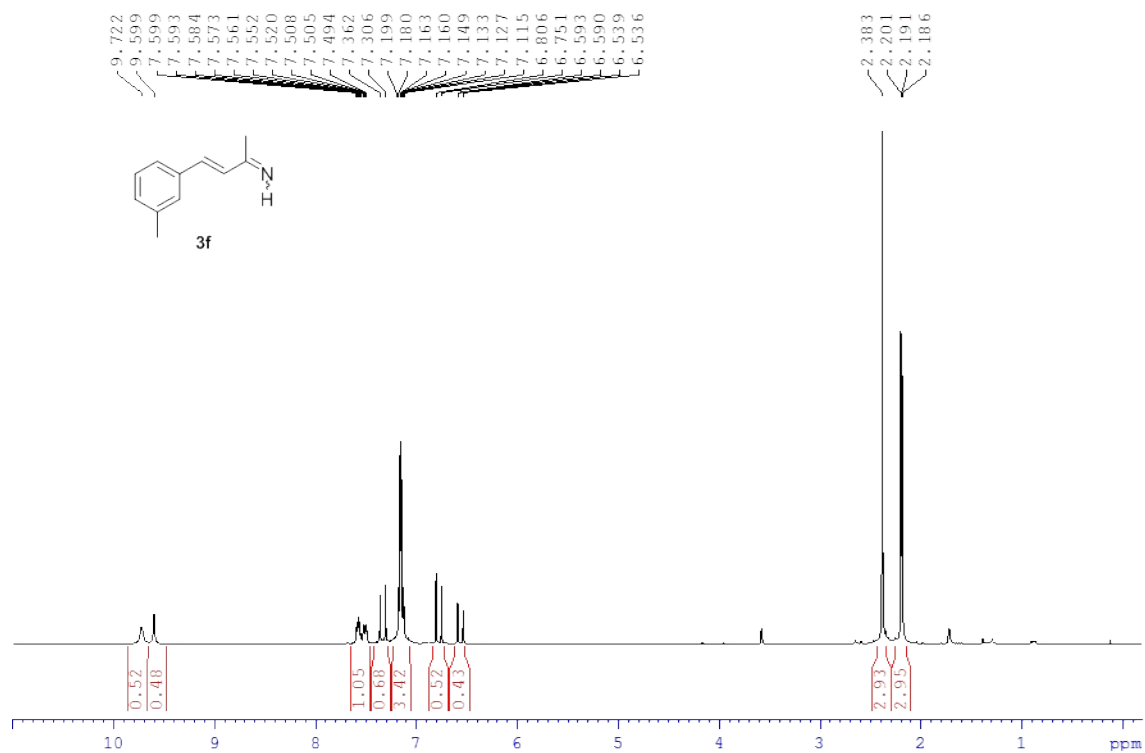
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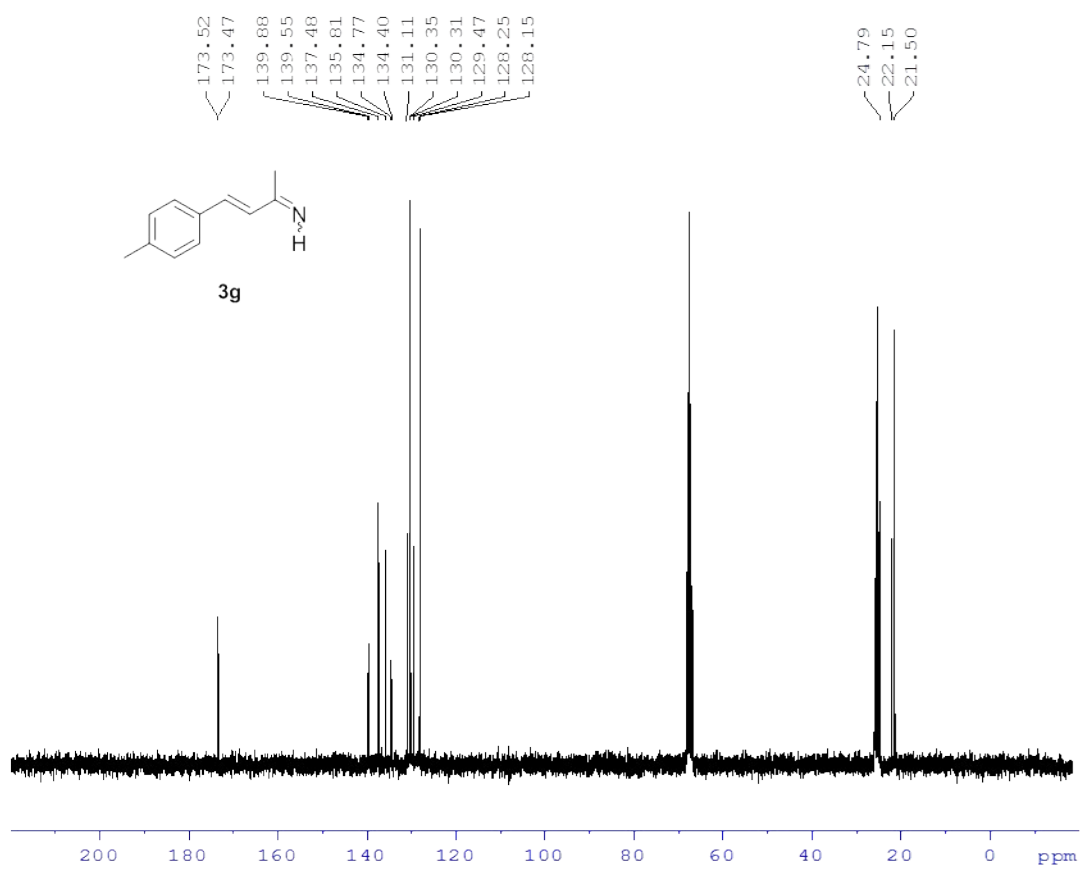
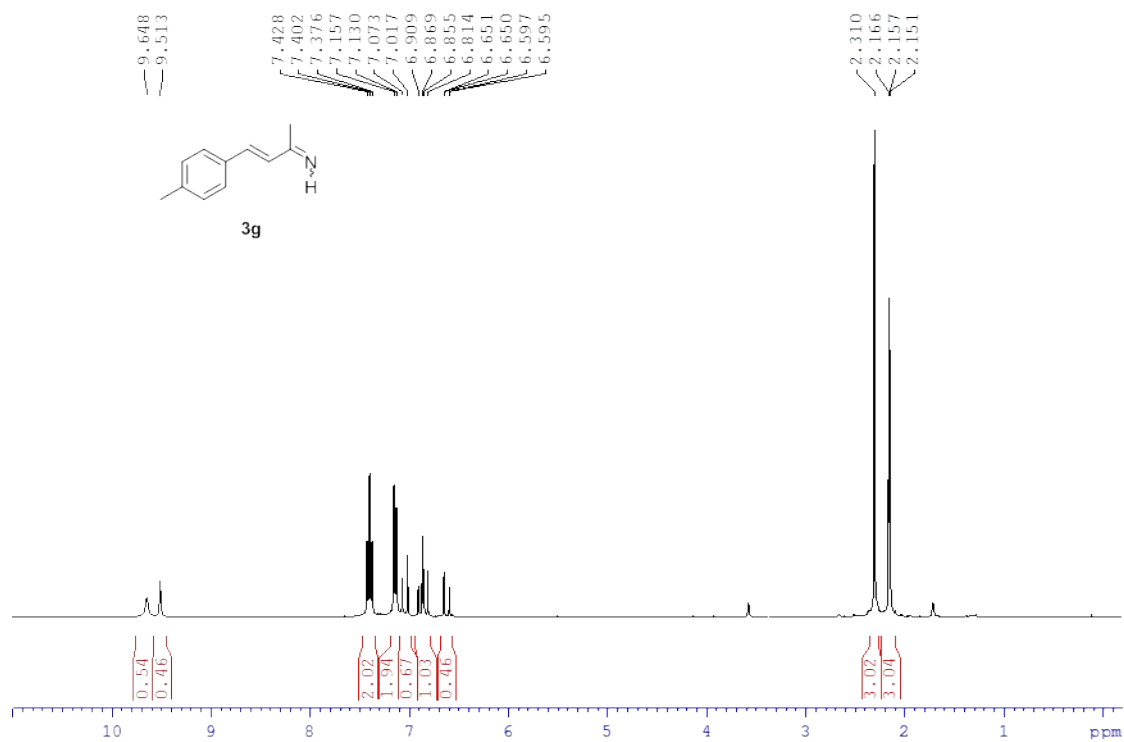
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3f)

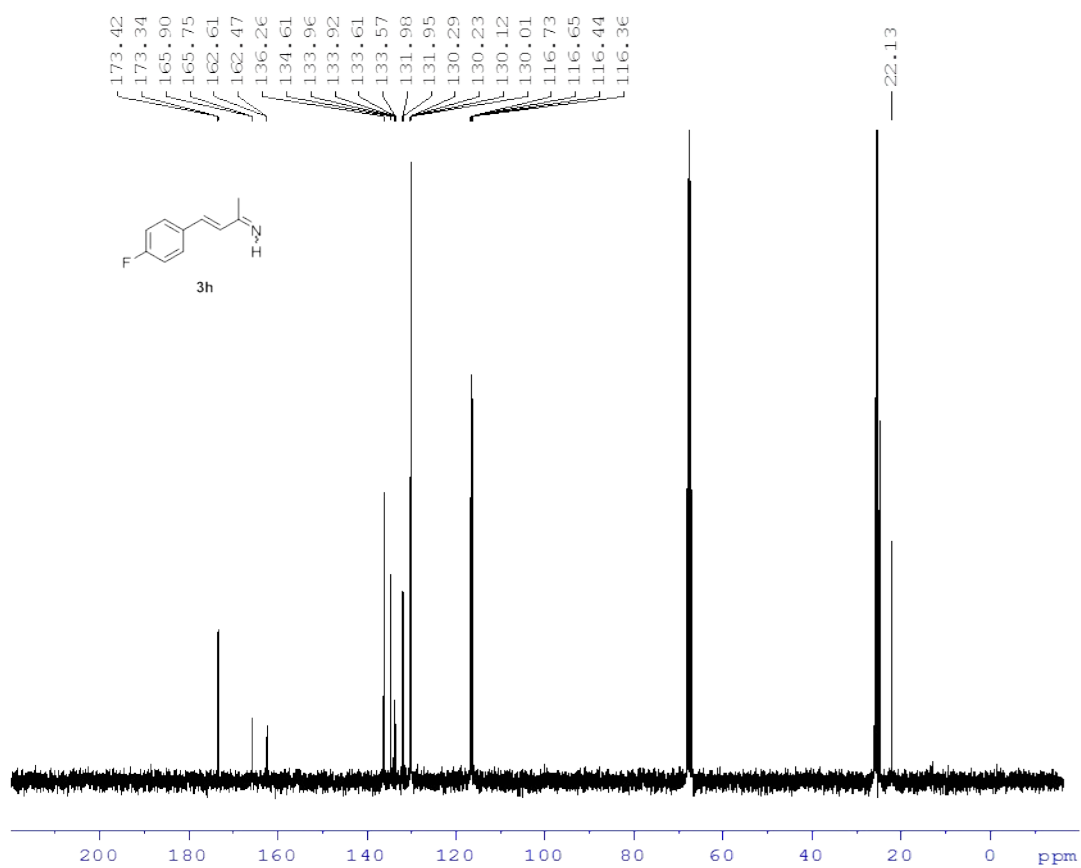
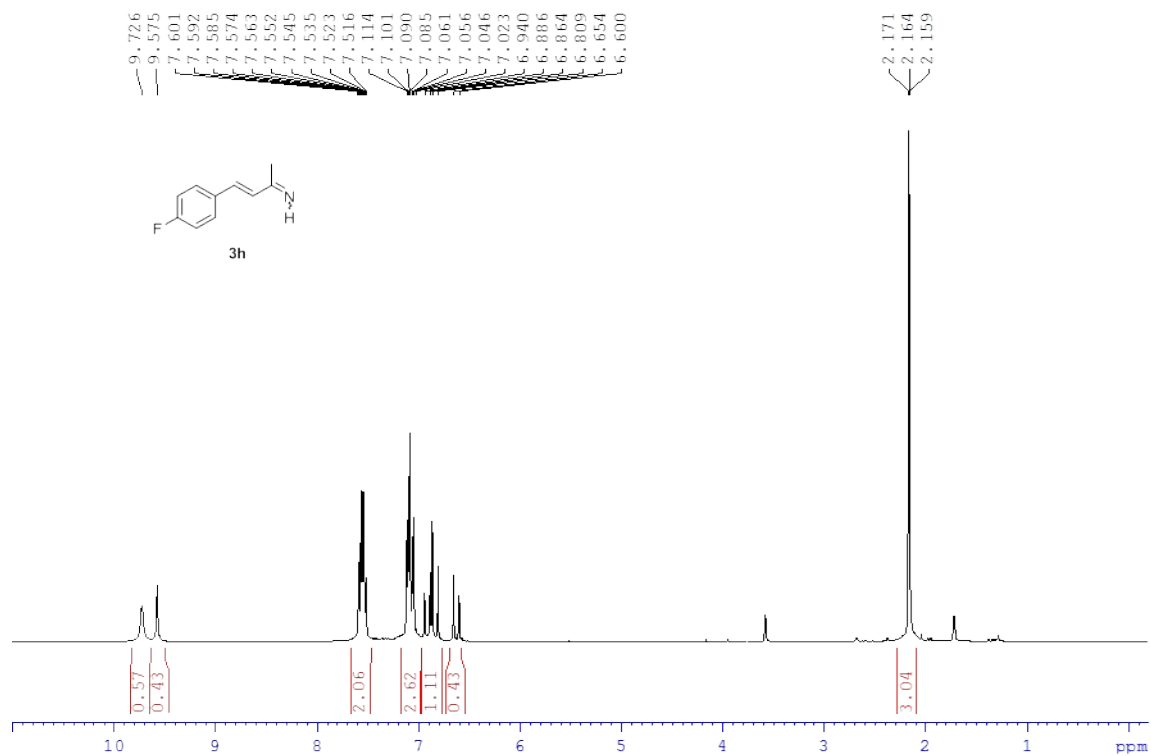


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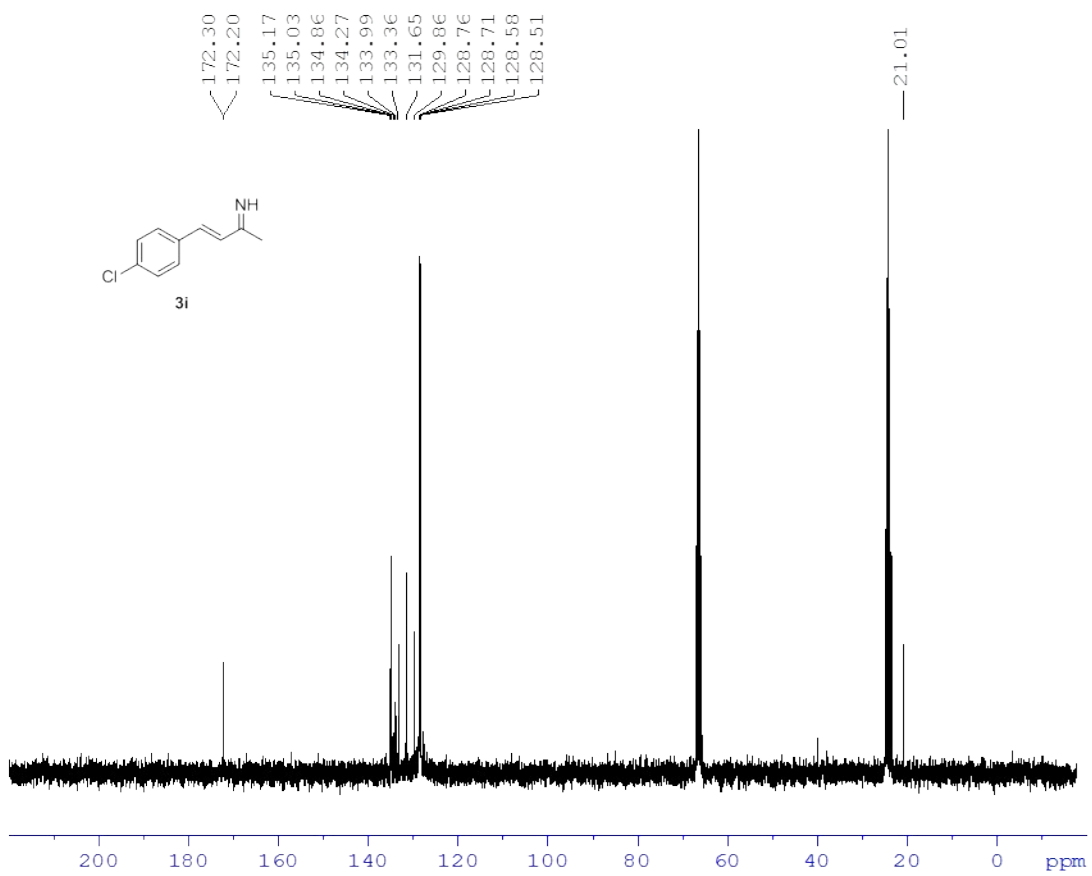
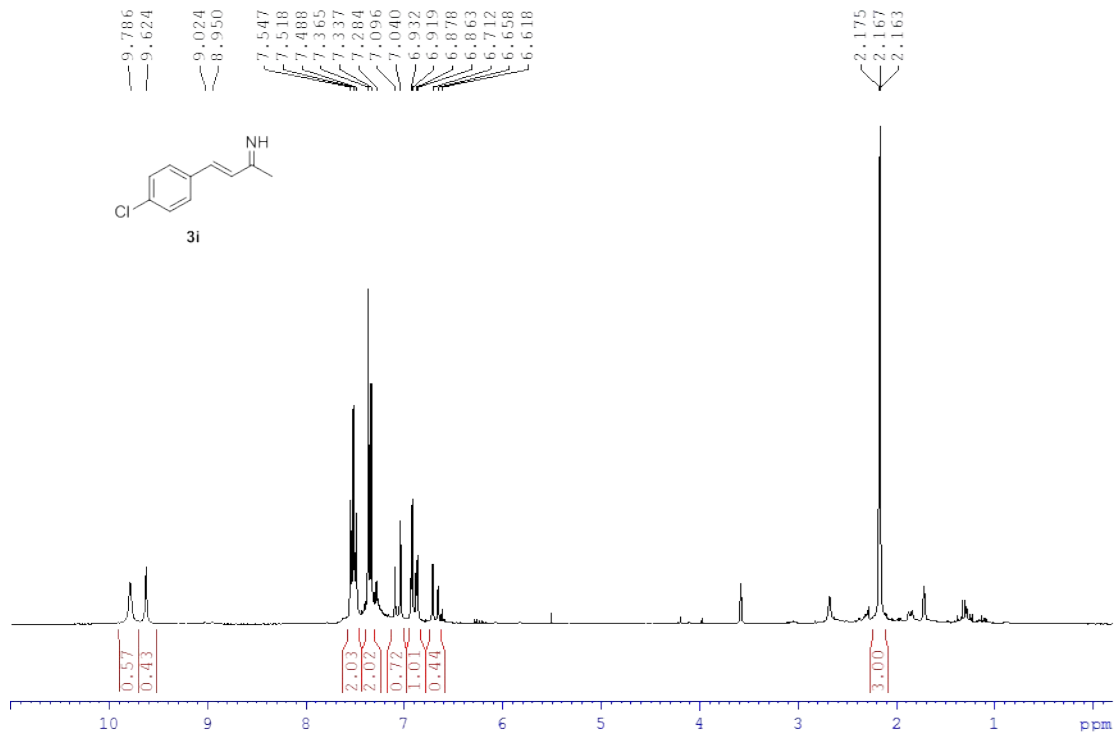




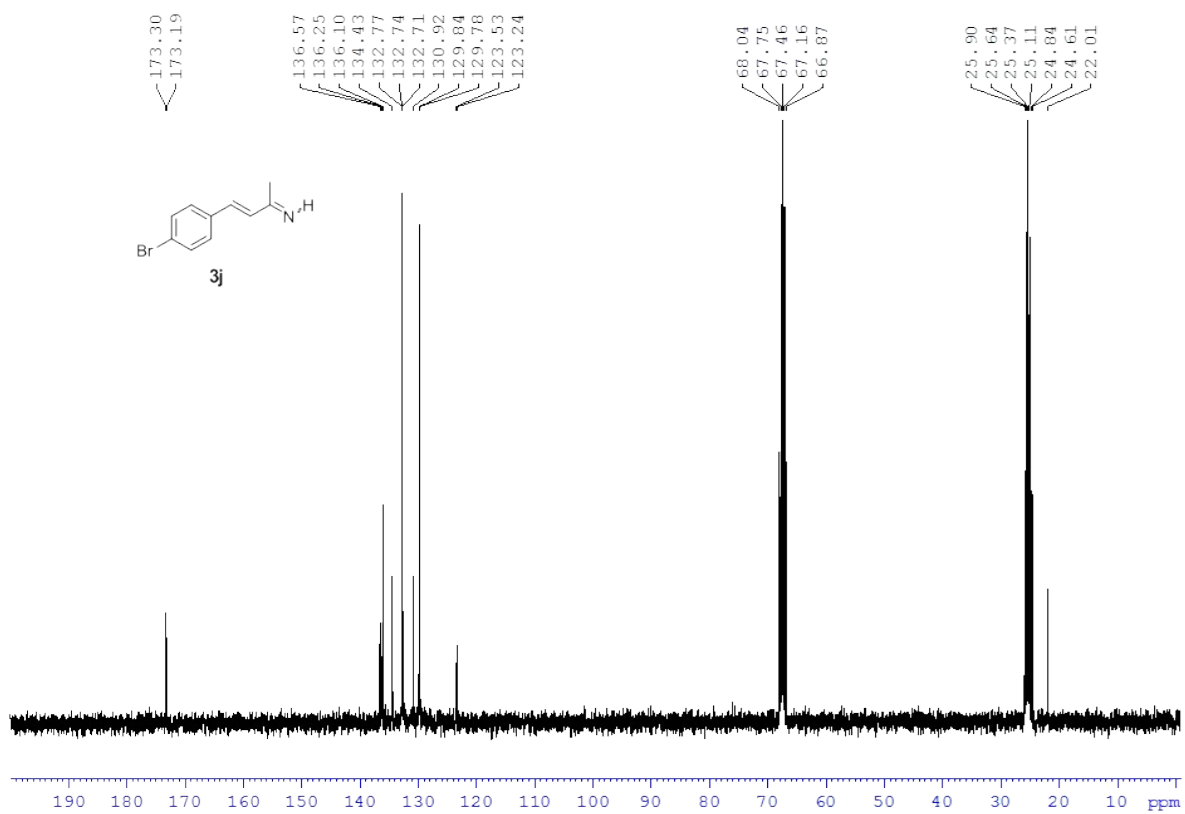
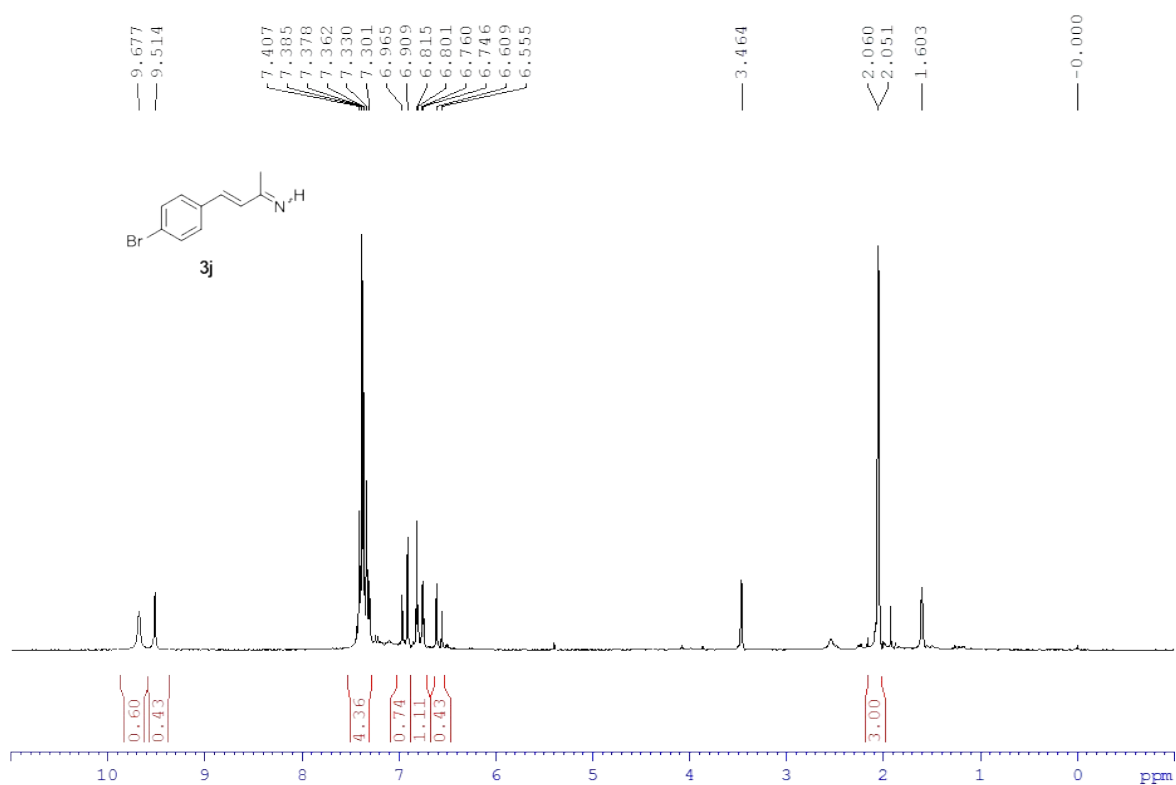
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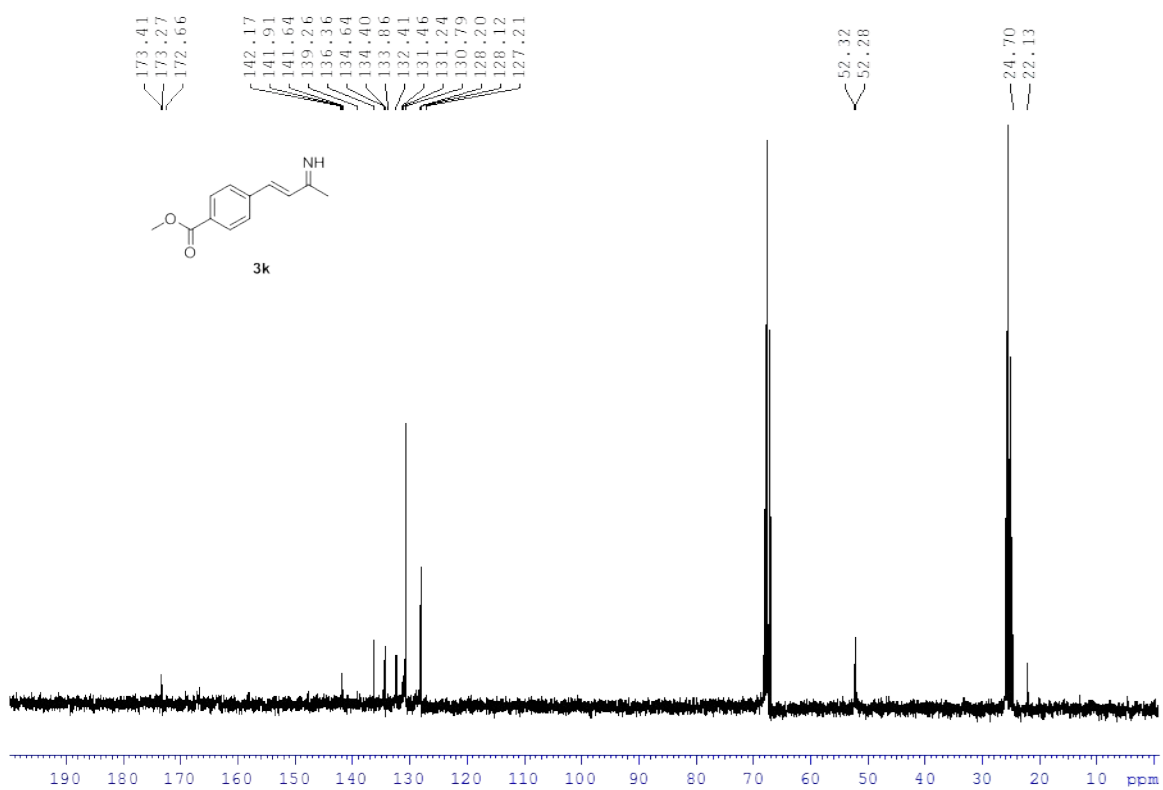
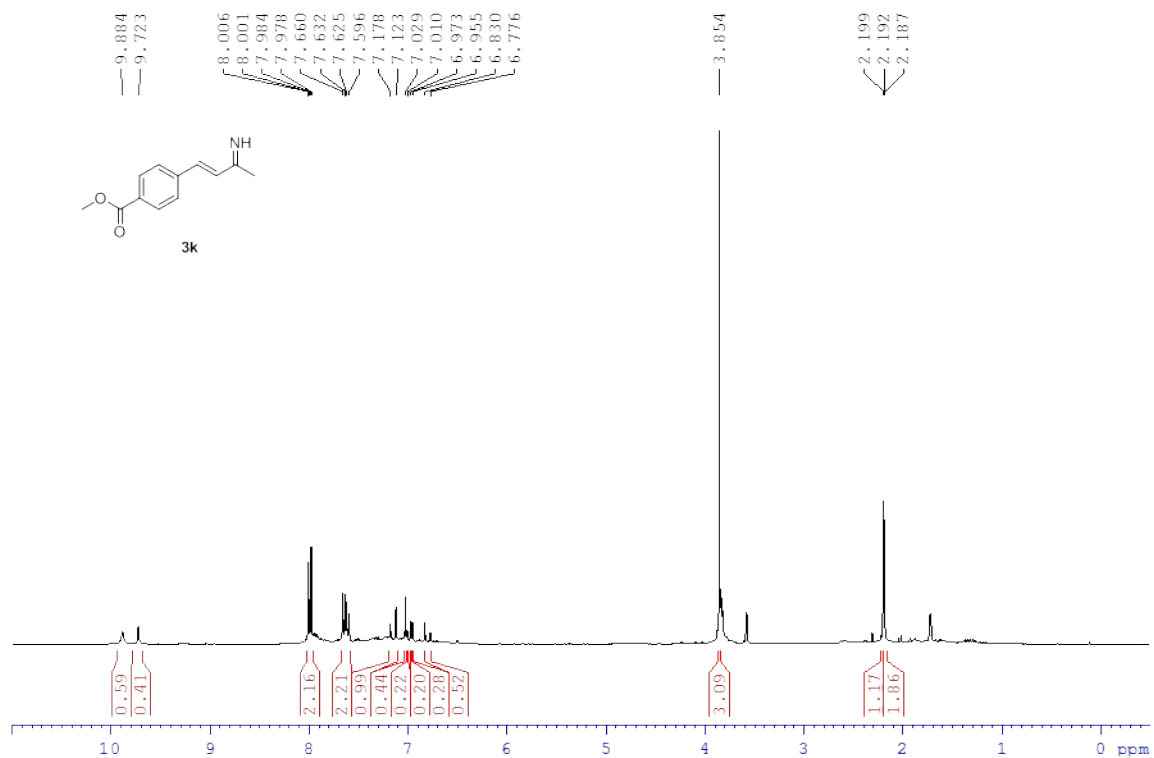
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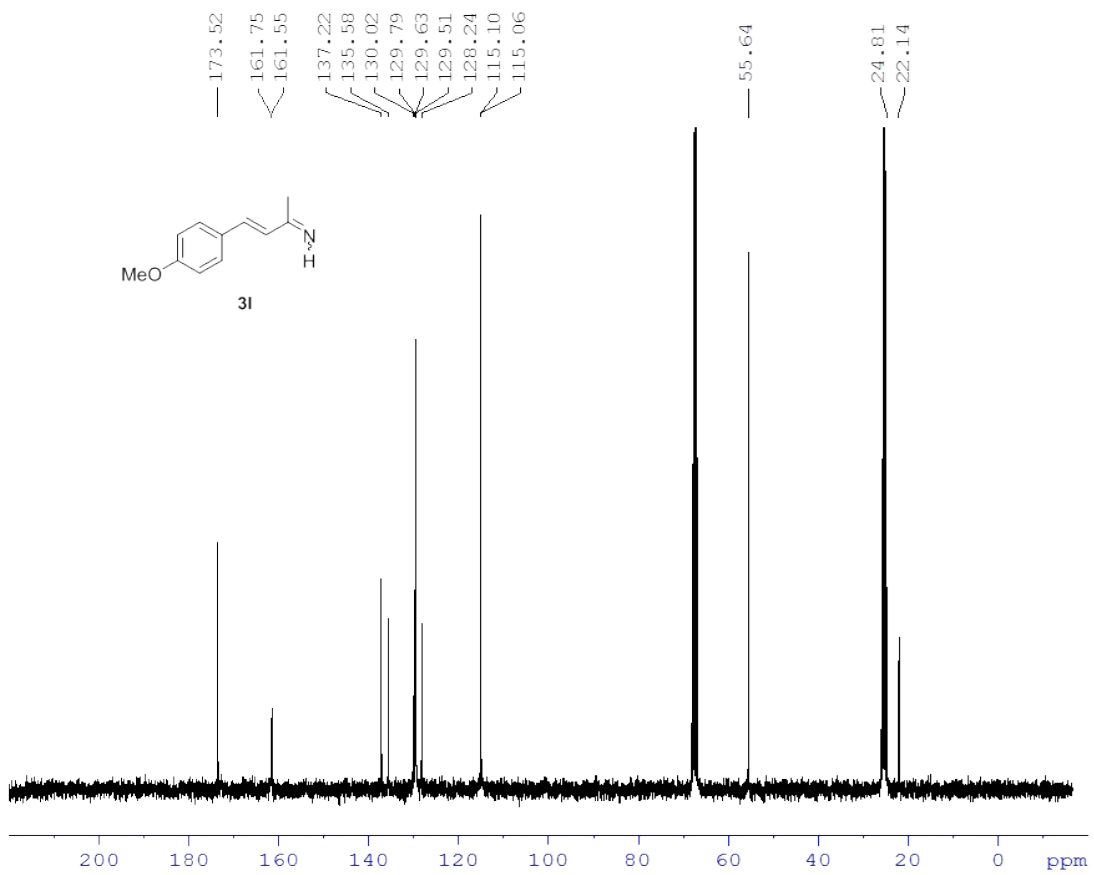
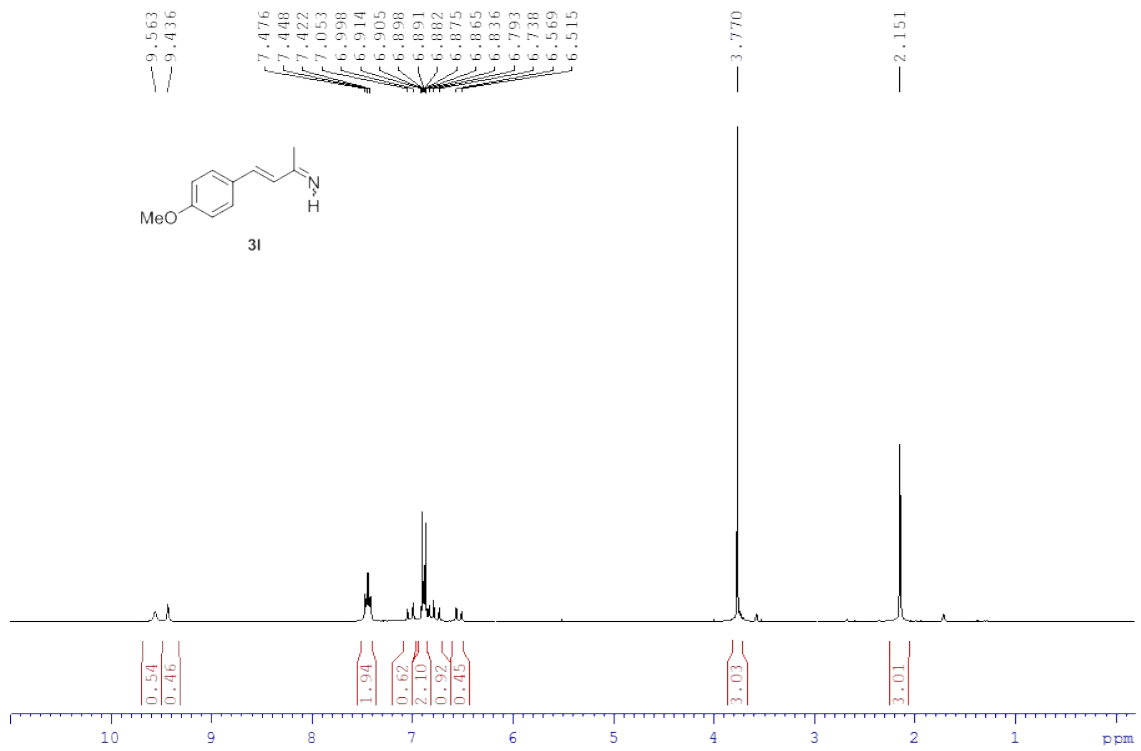
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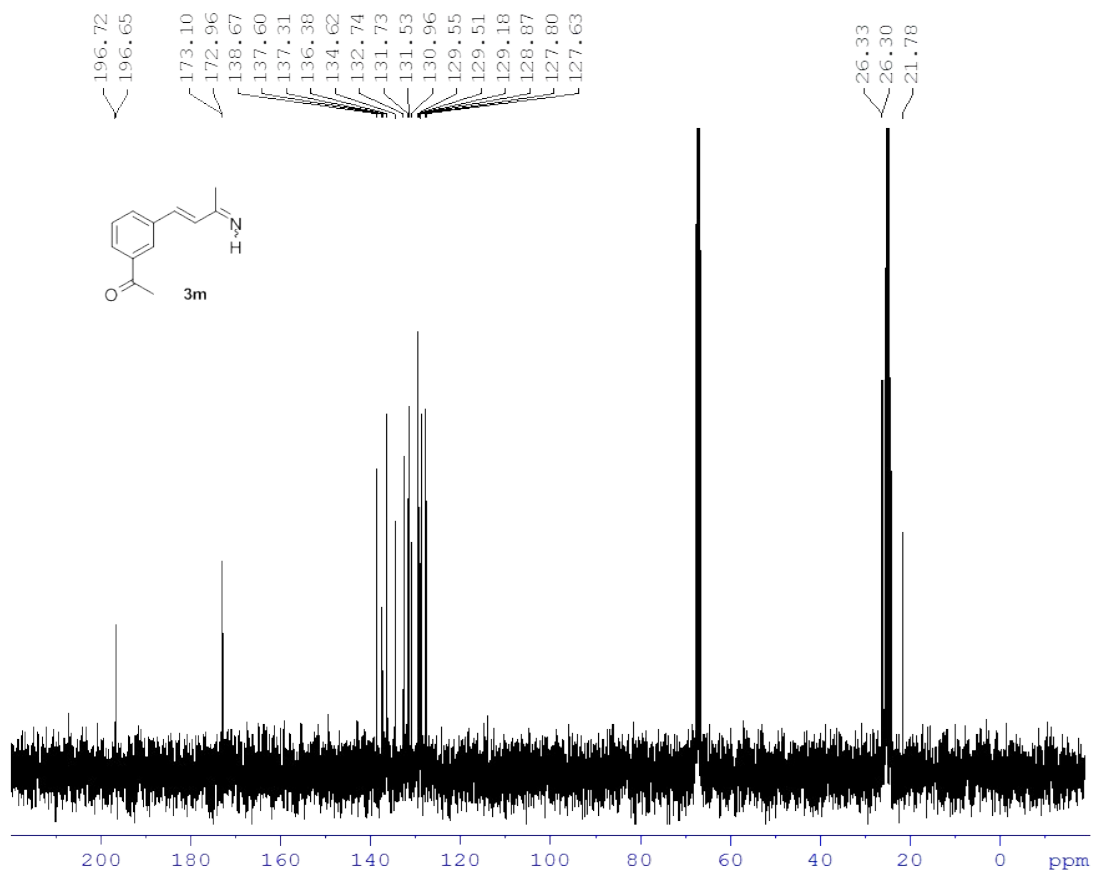
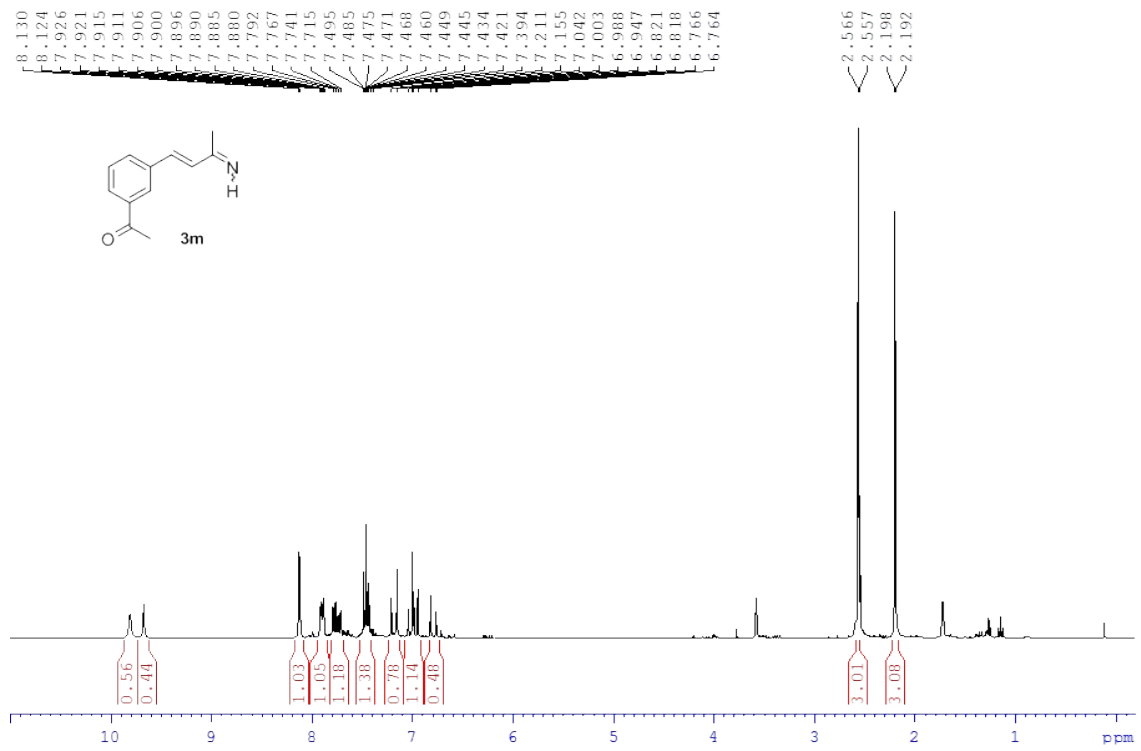
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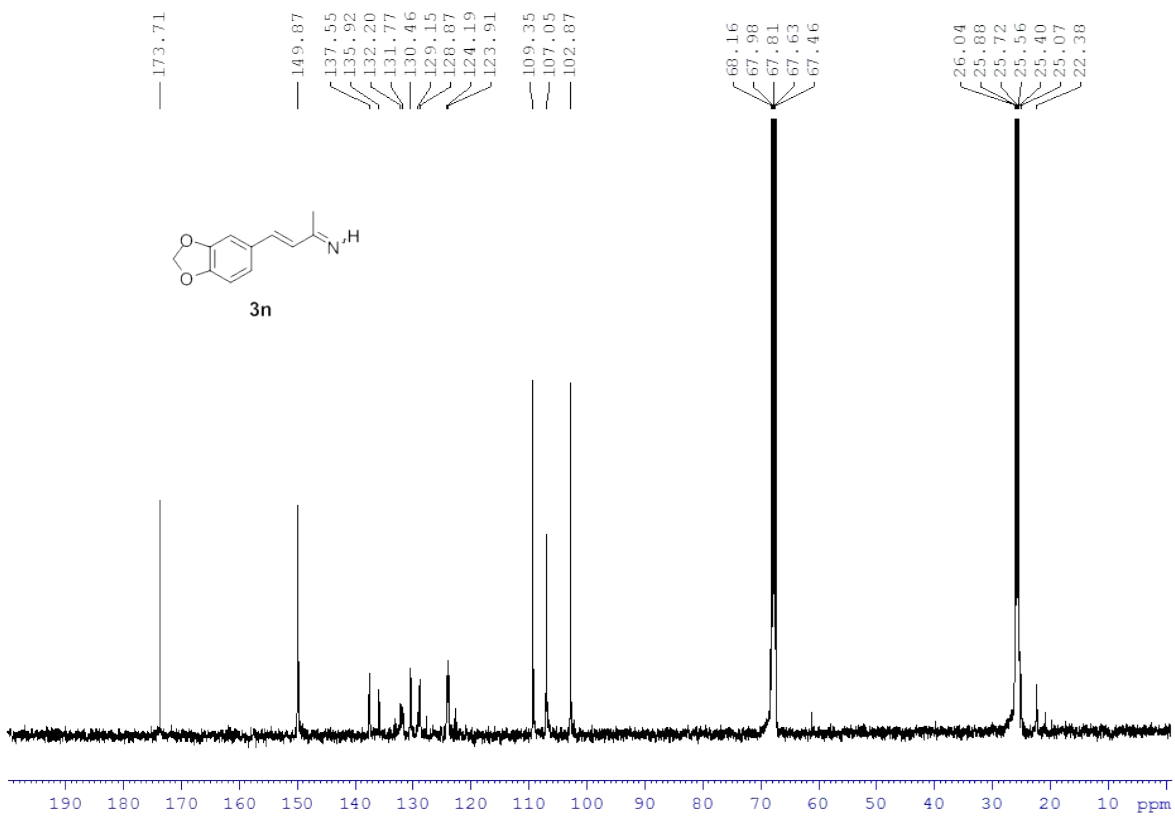
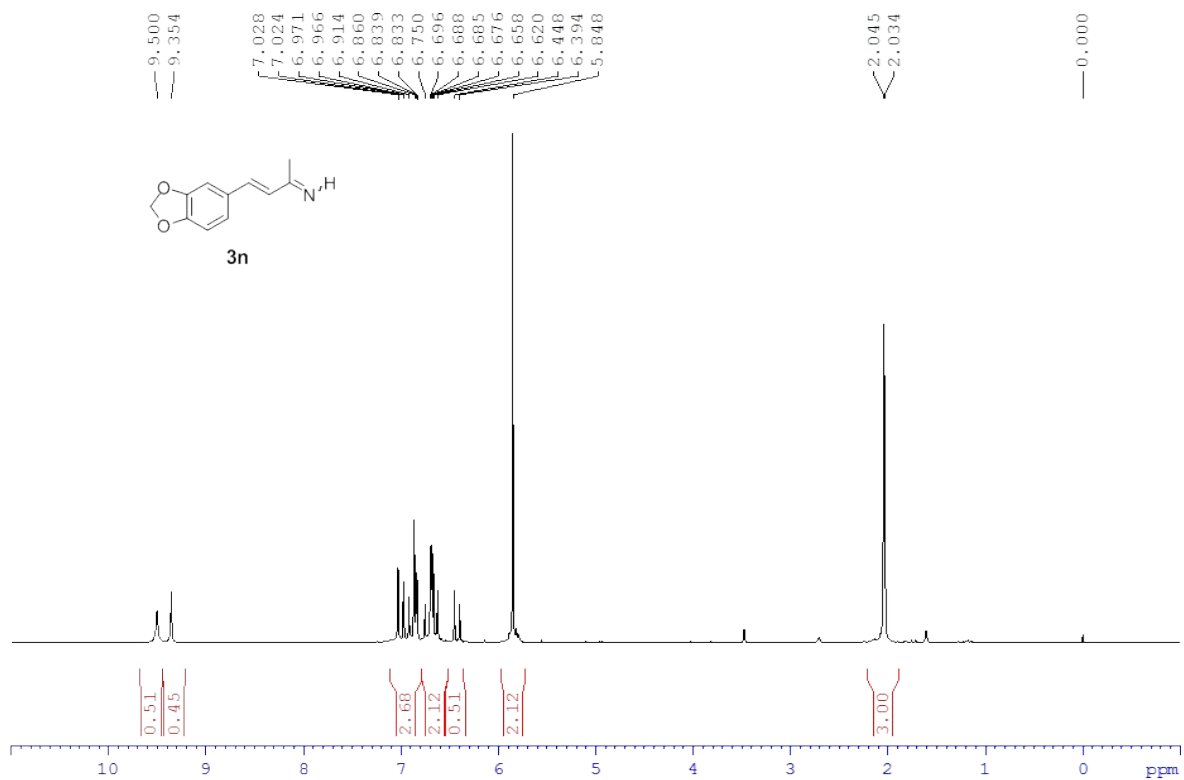
31)



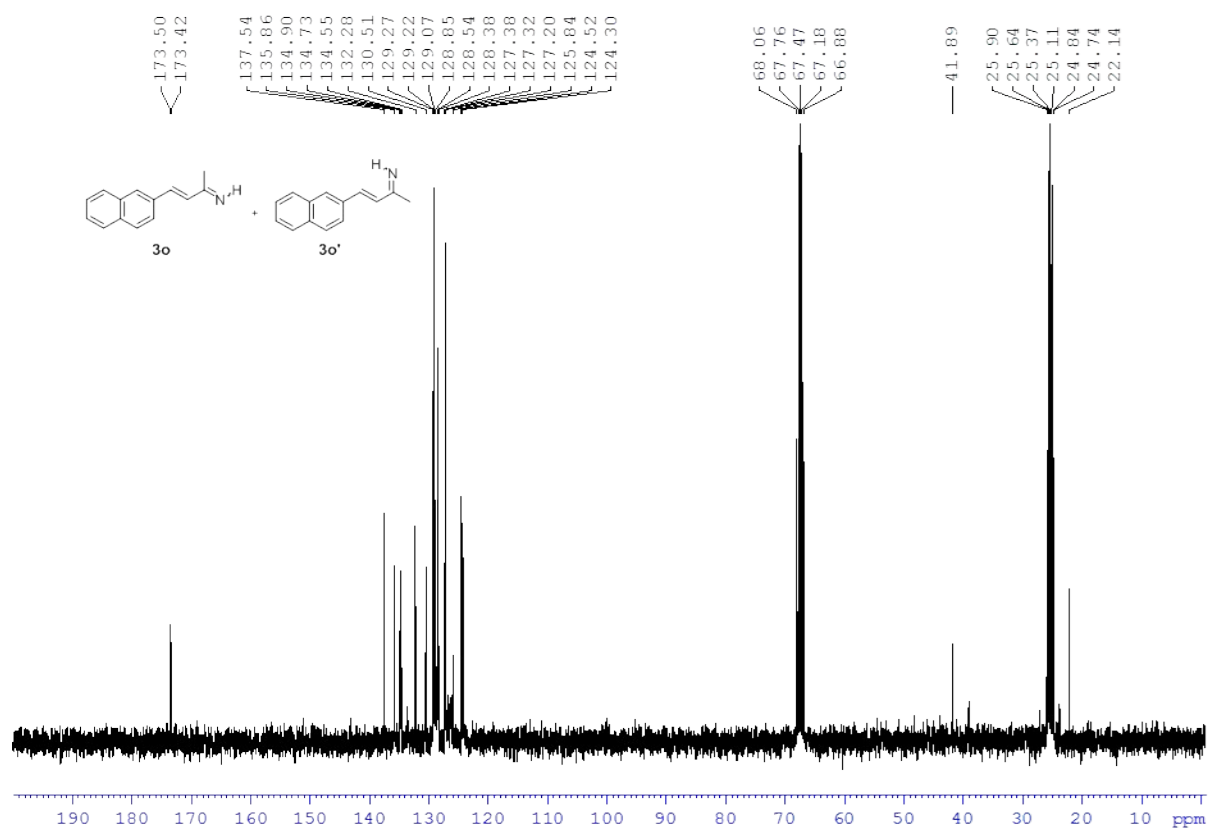
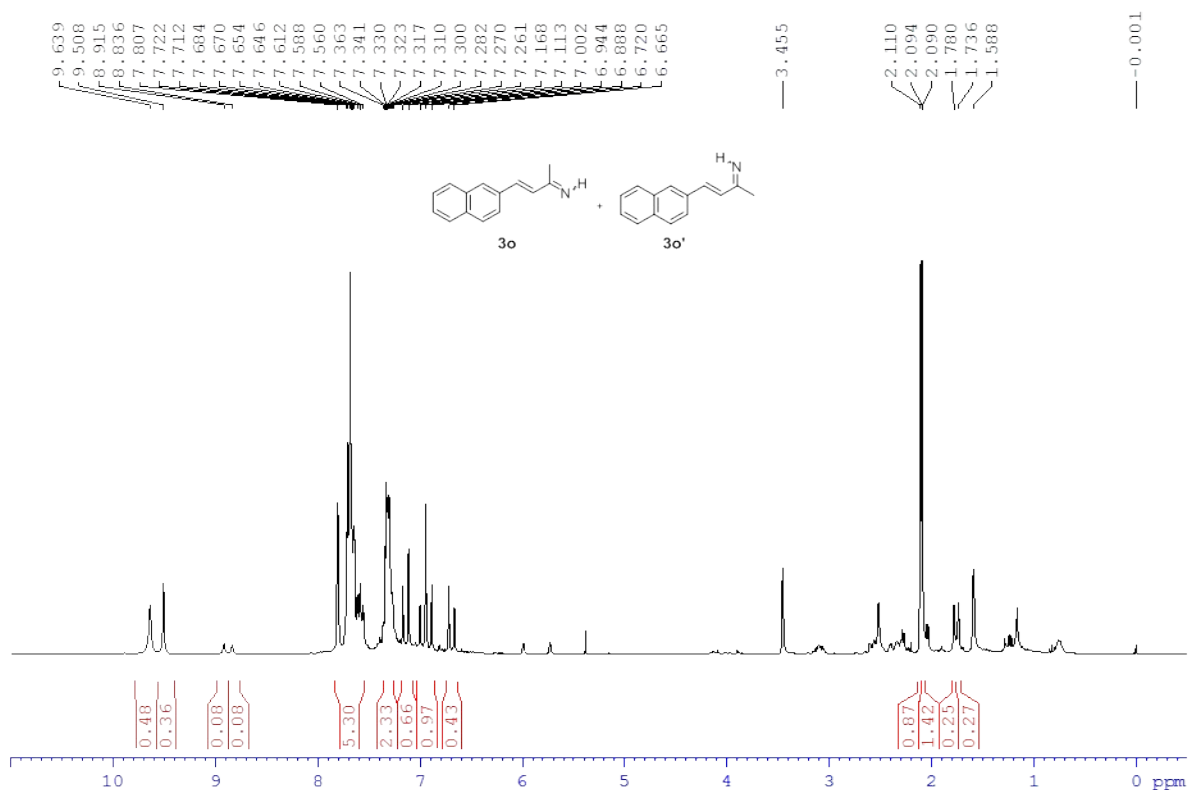
3m)



3n)

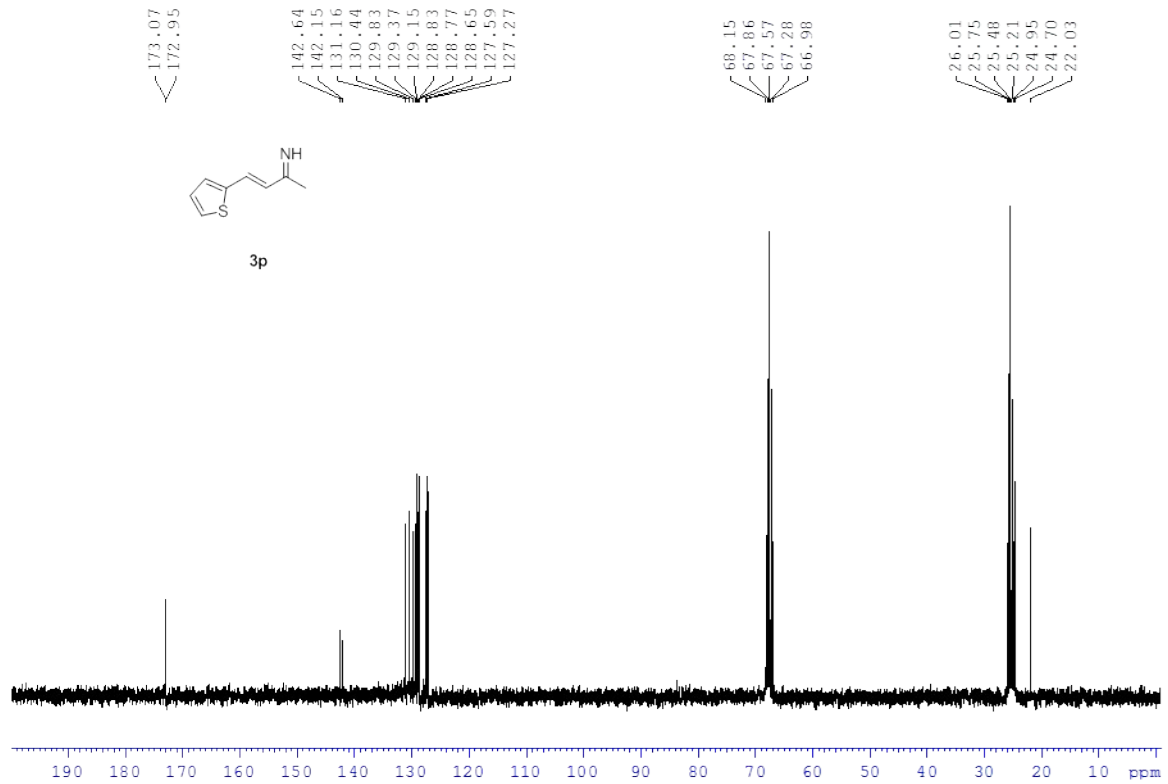
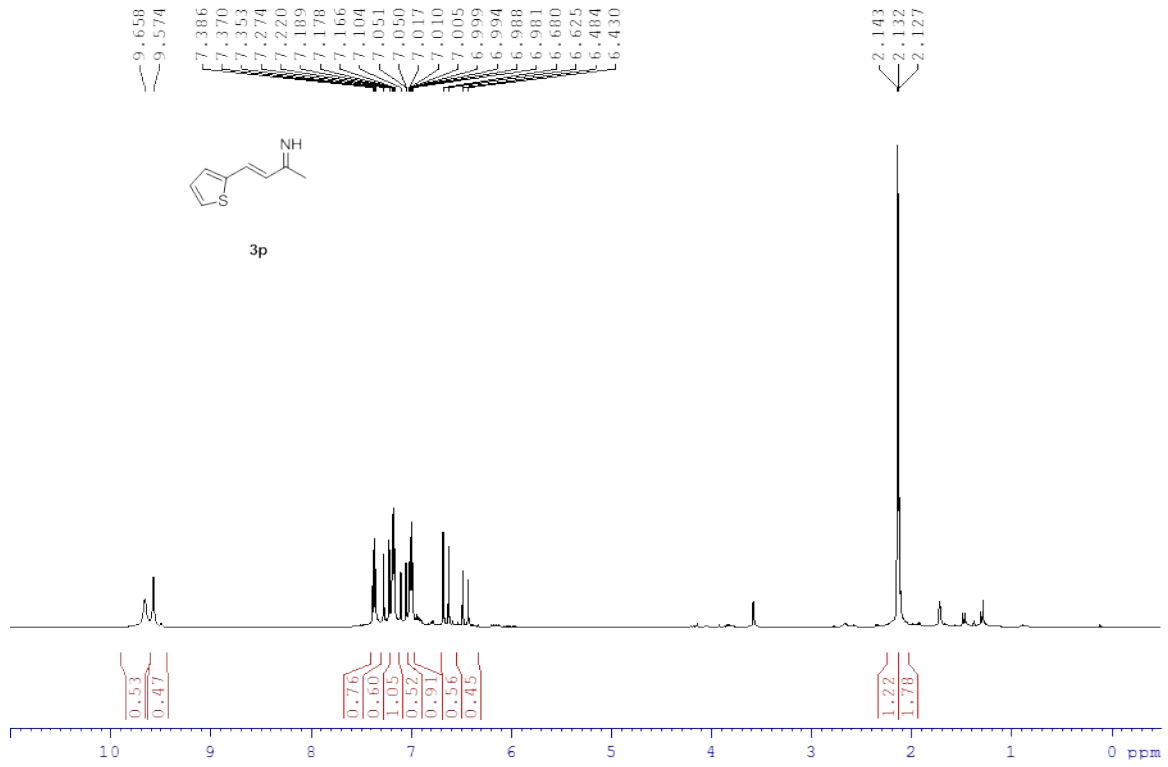


30)

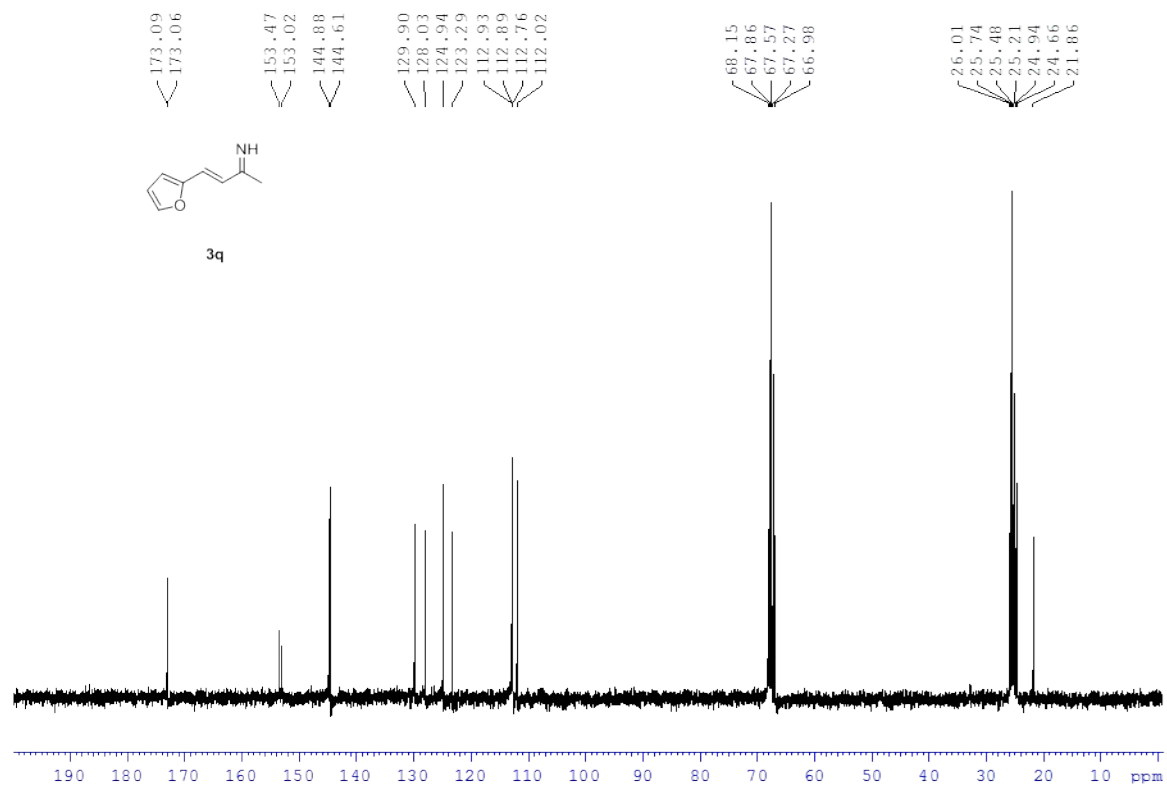
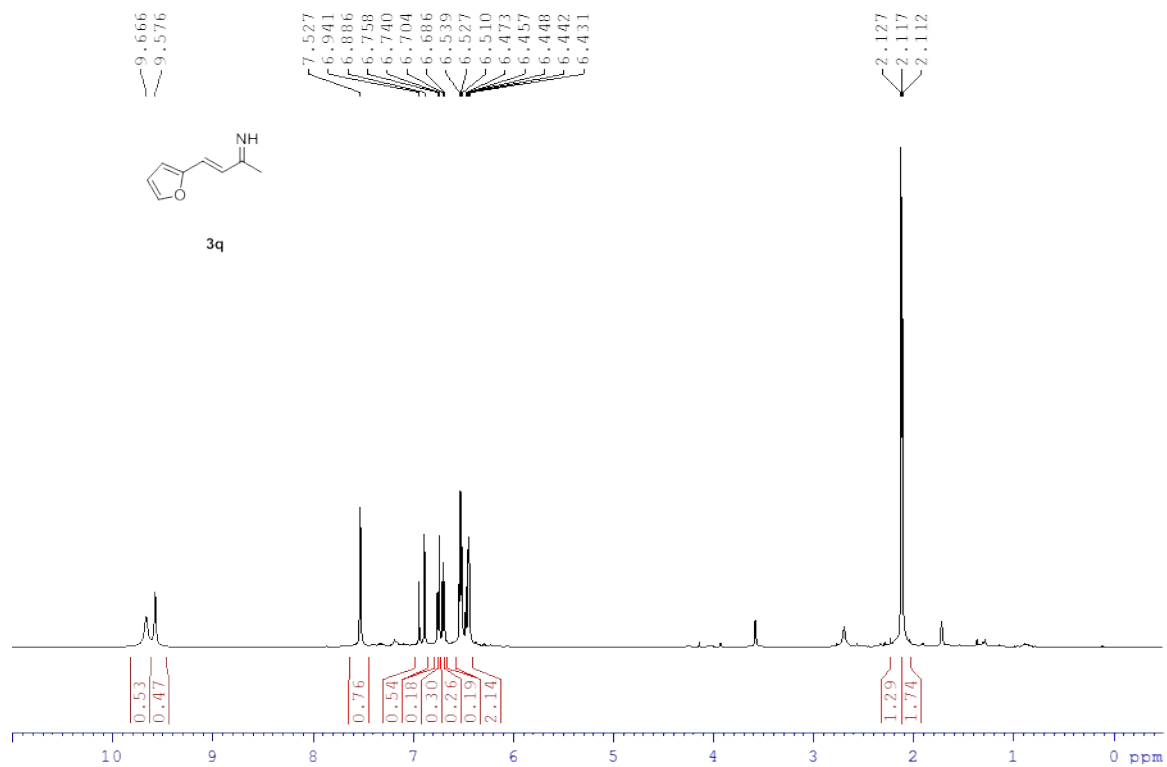




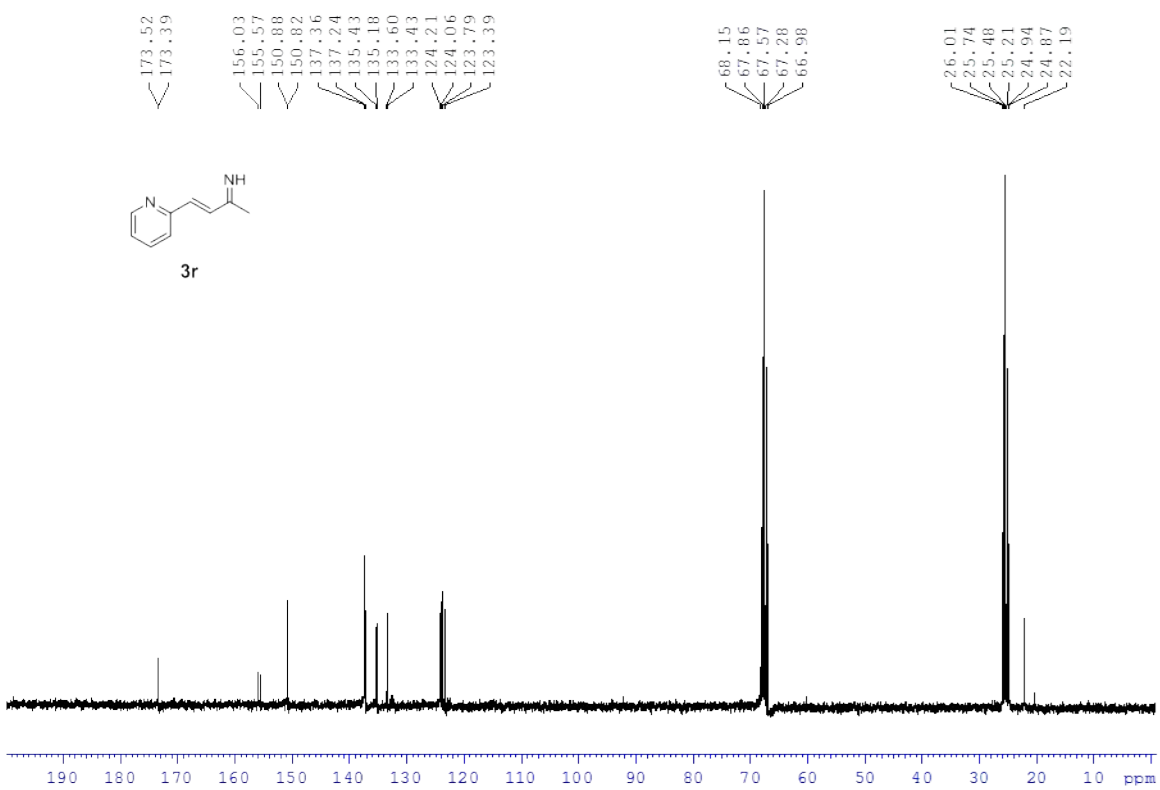
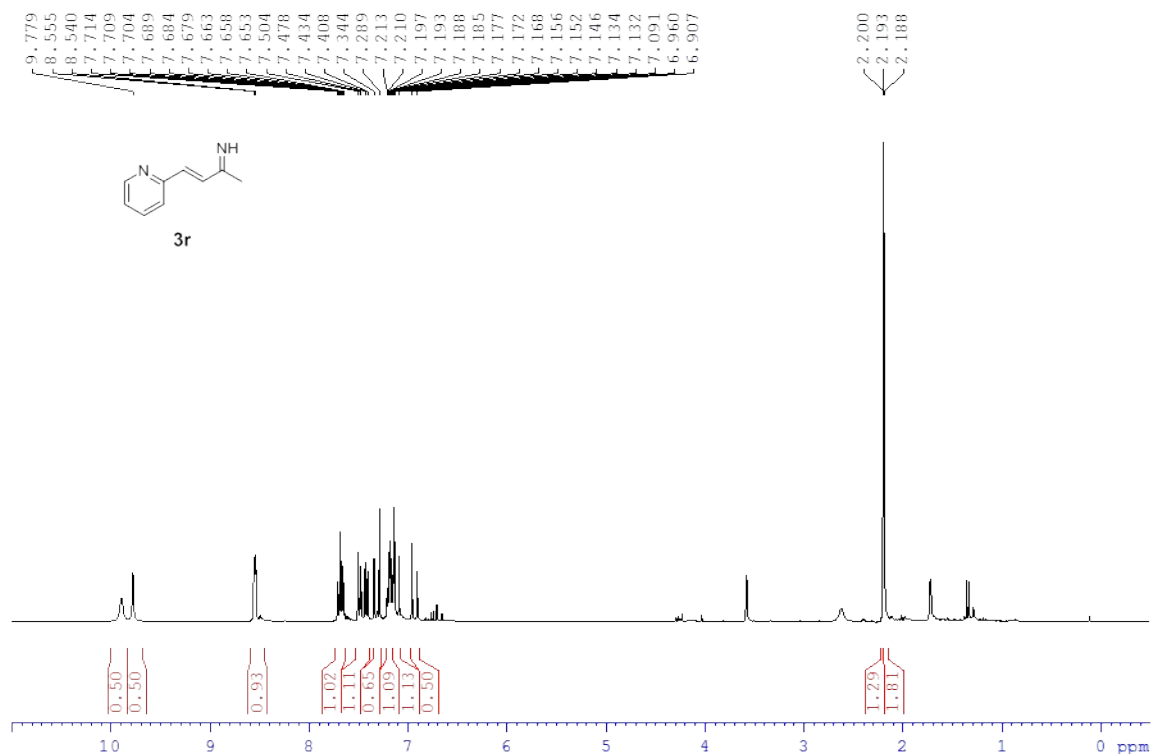
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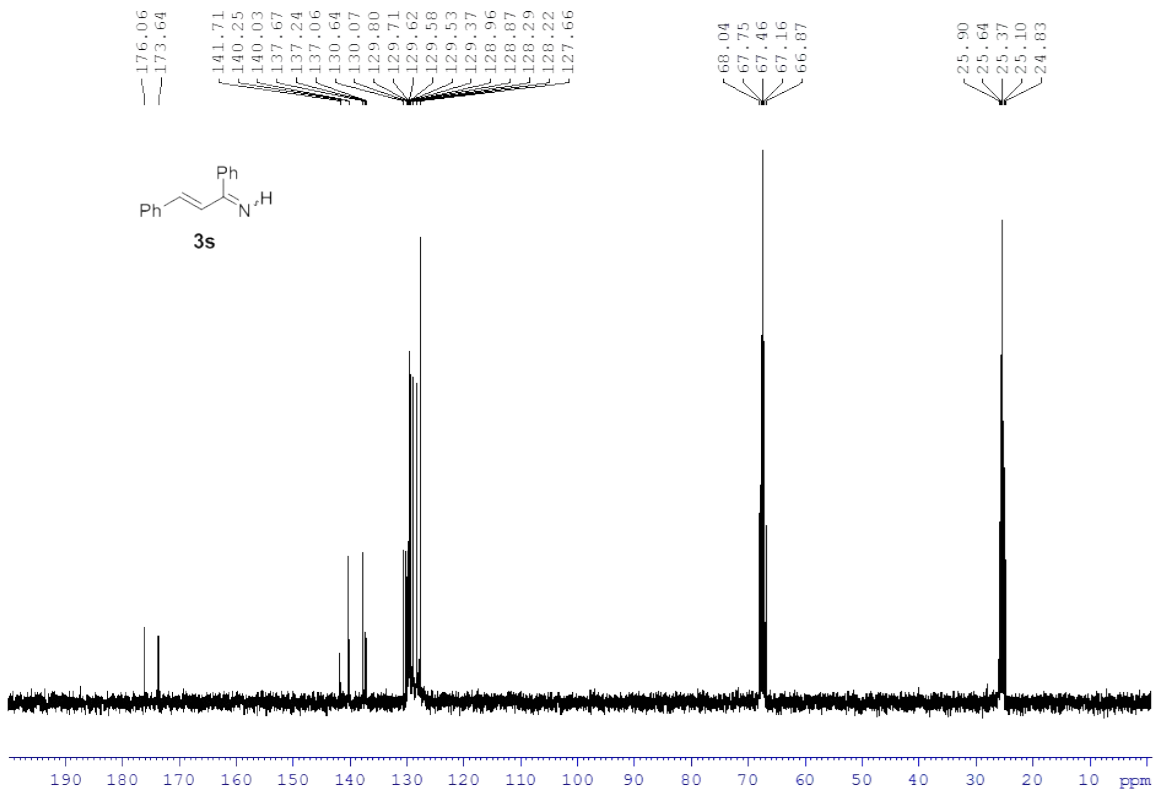
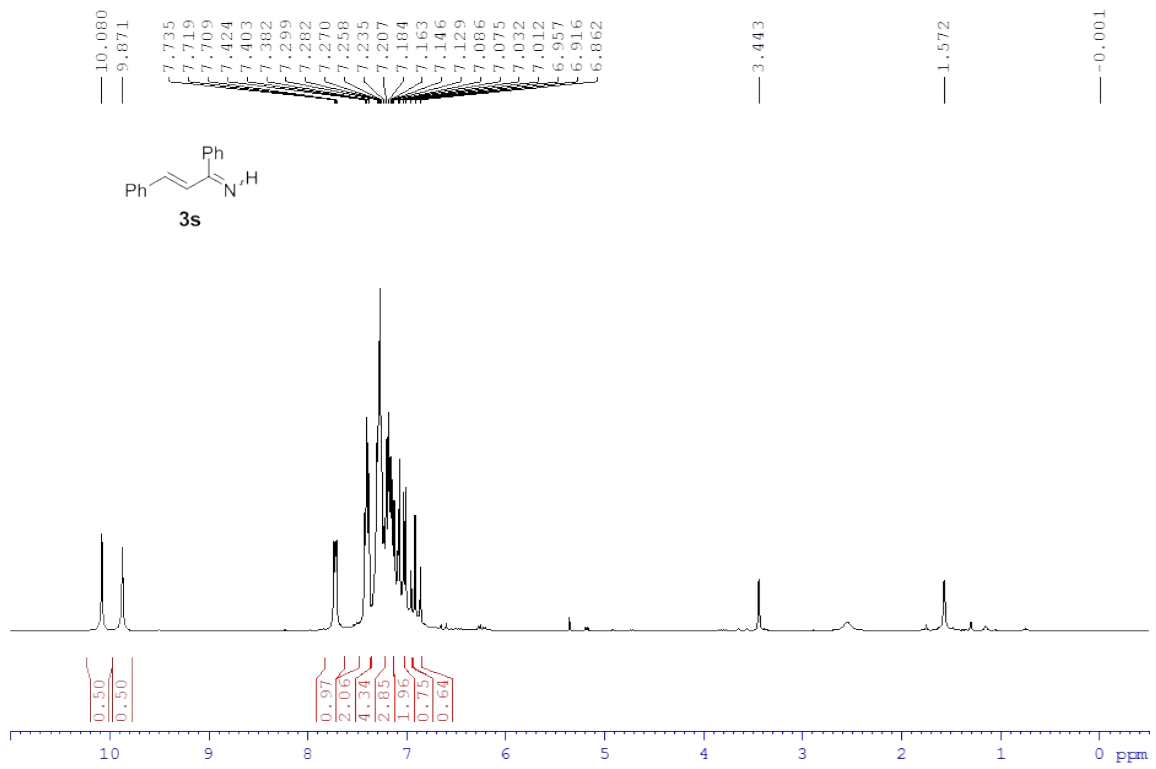
3q)



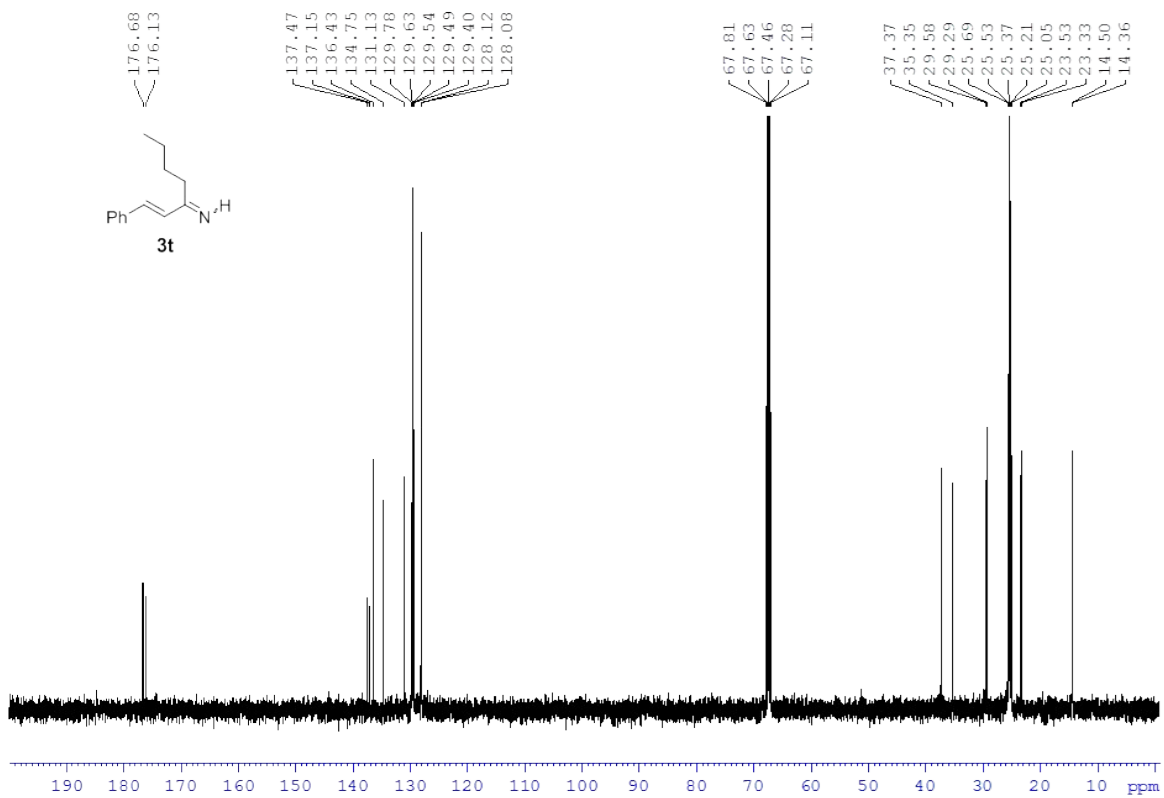
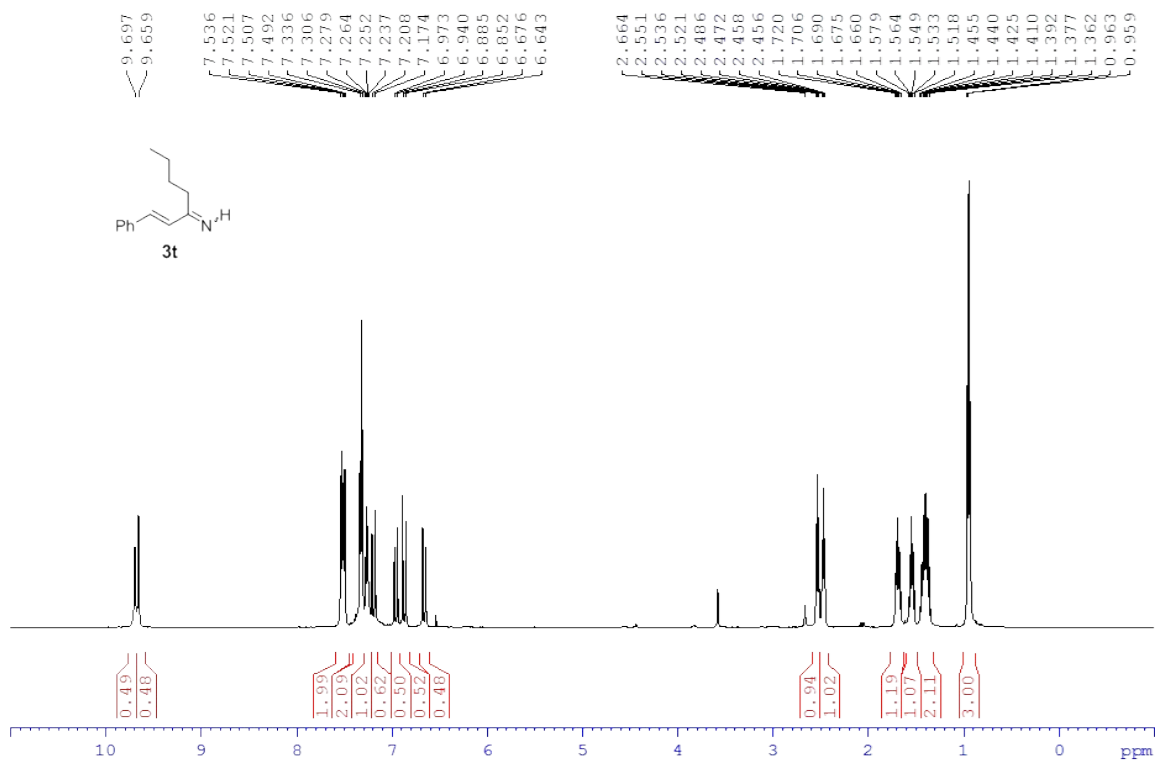
3r)



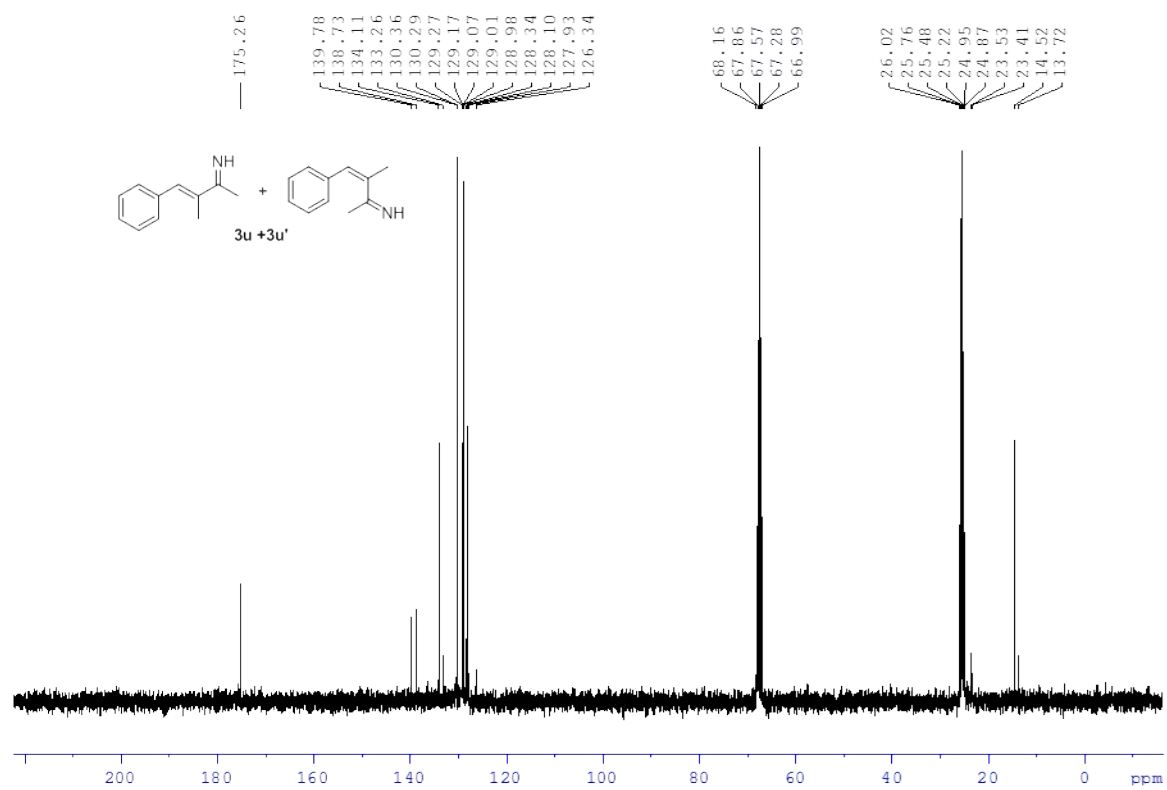
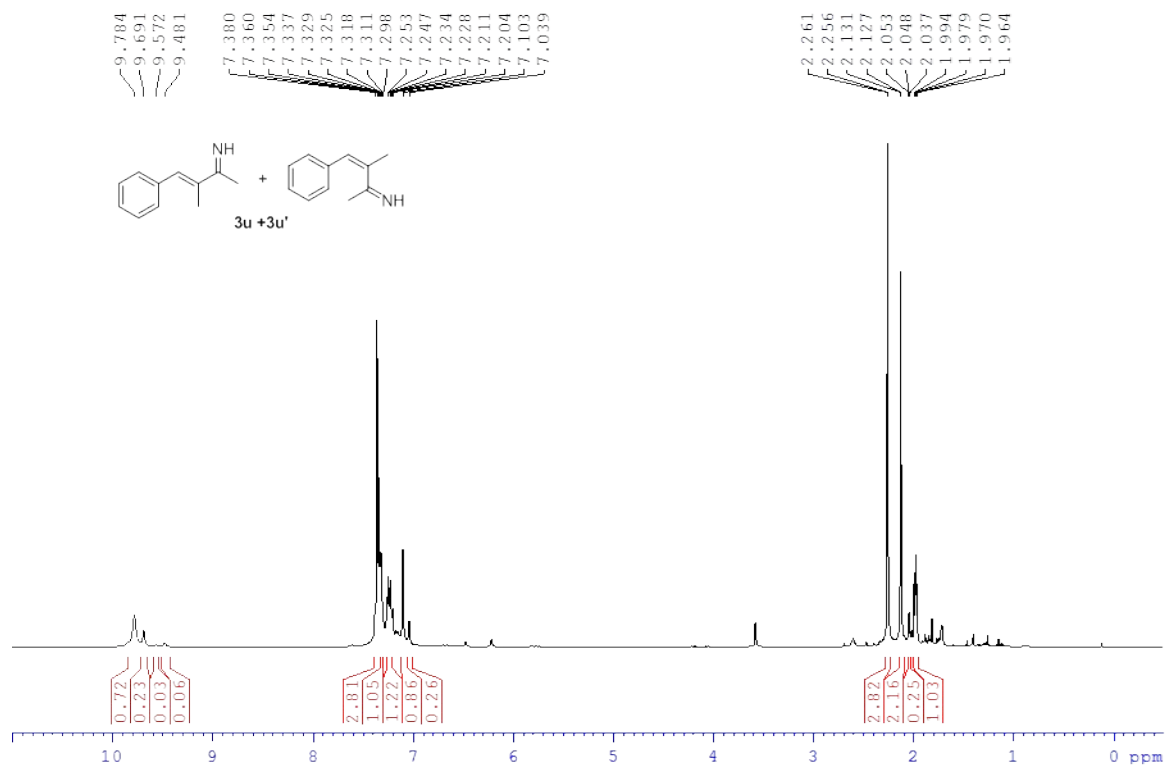
3s)



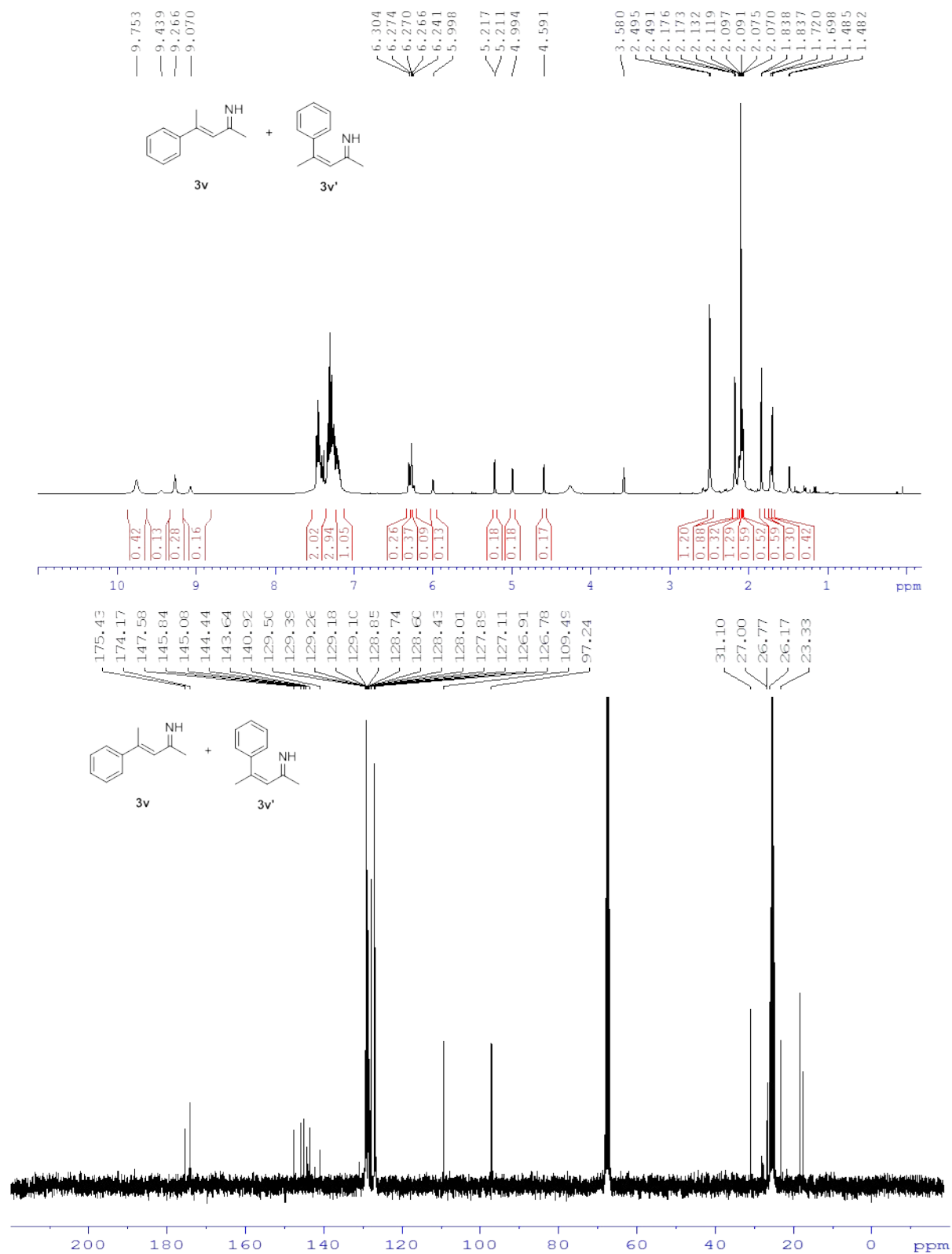
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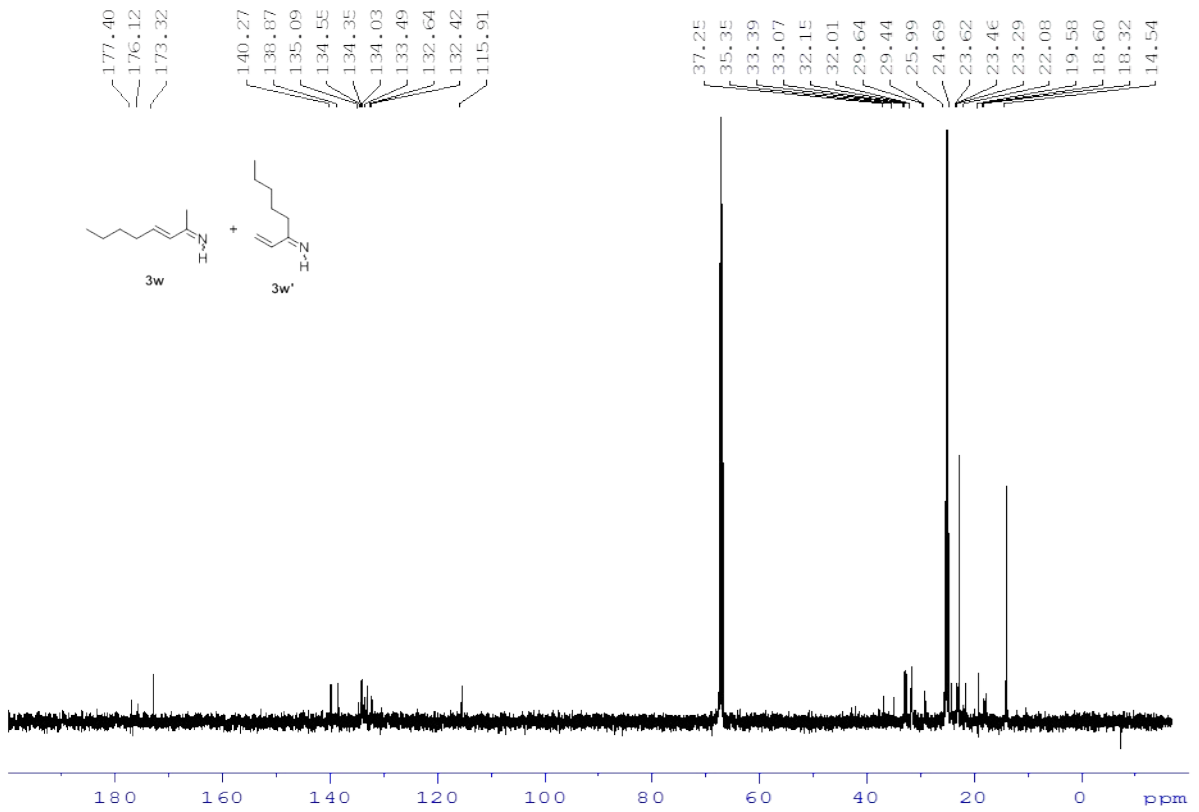
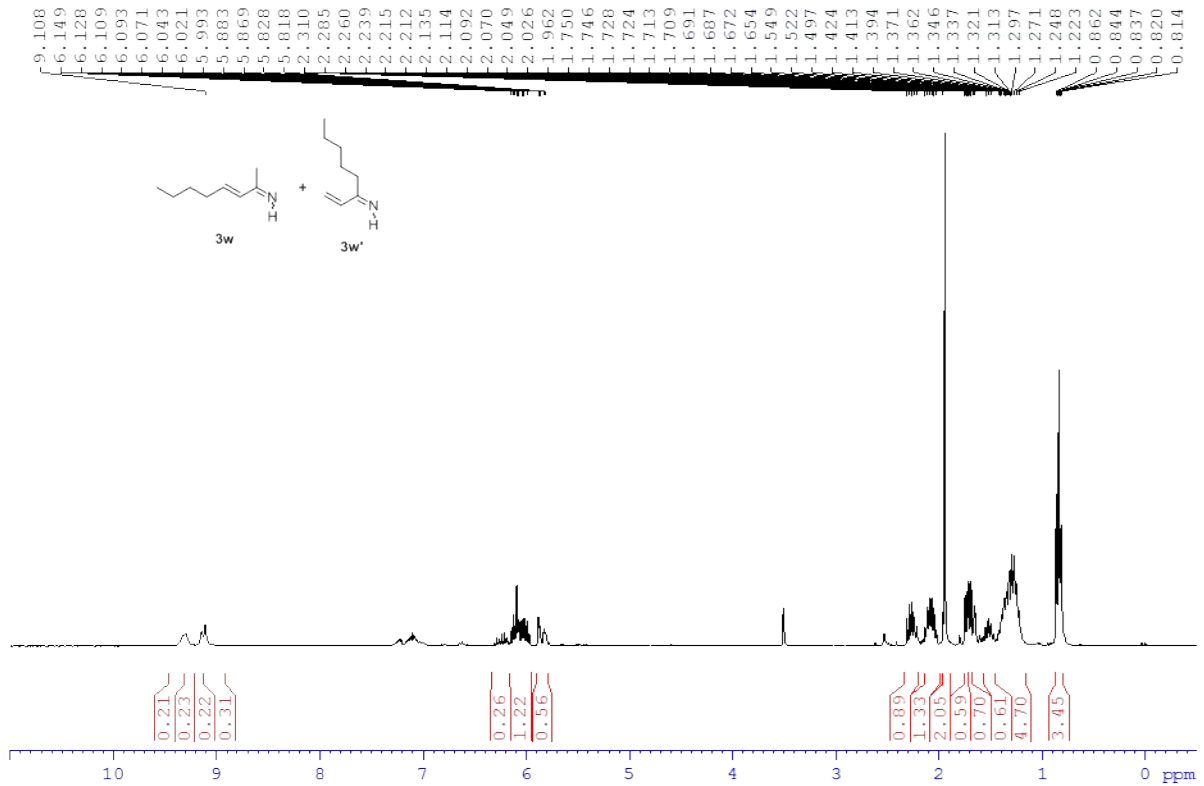
3u)



3v)

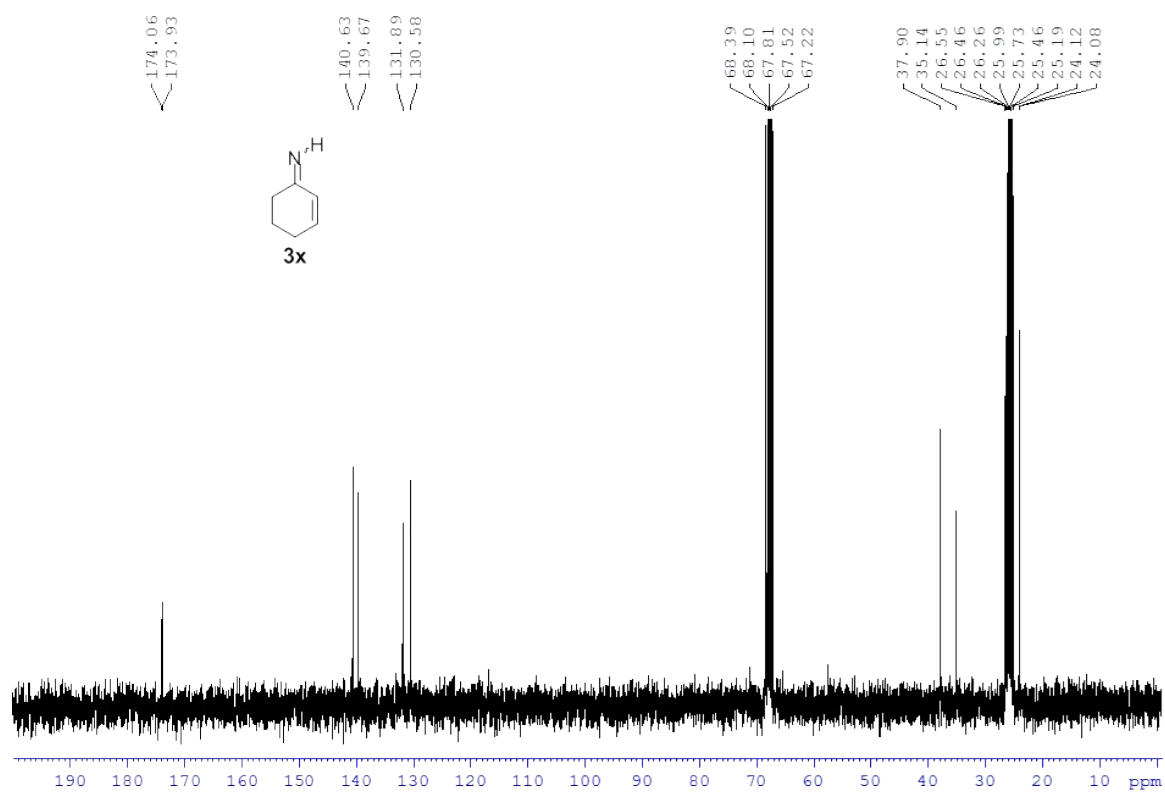
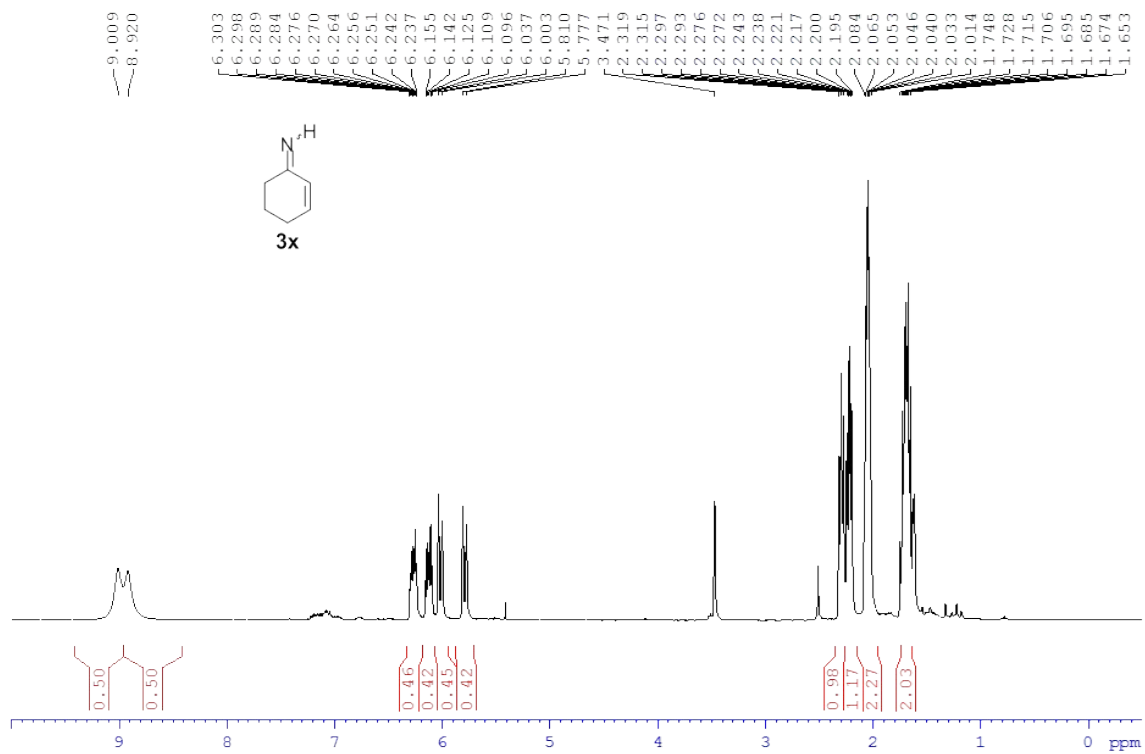


3w)

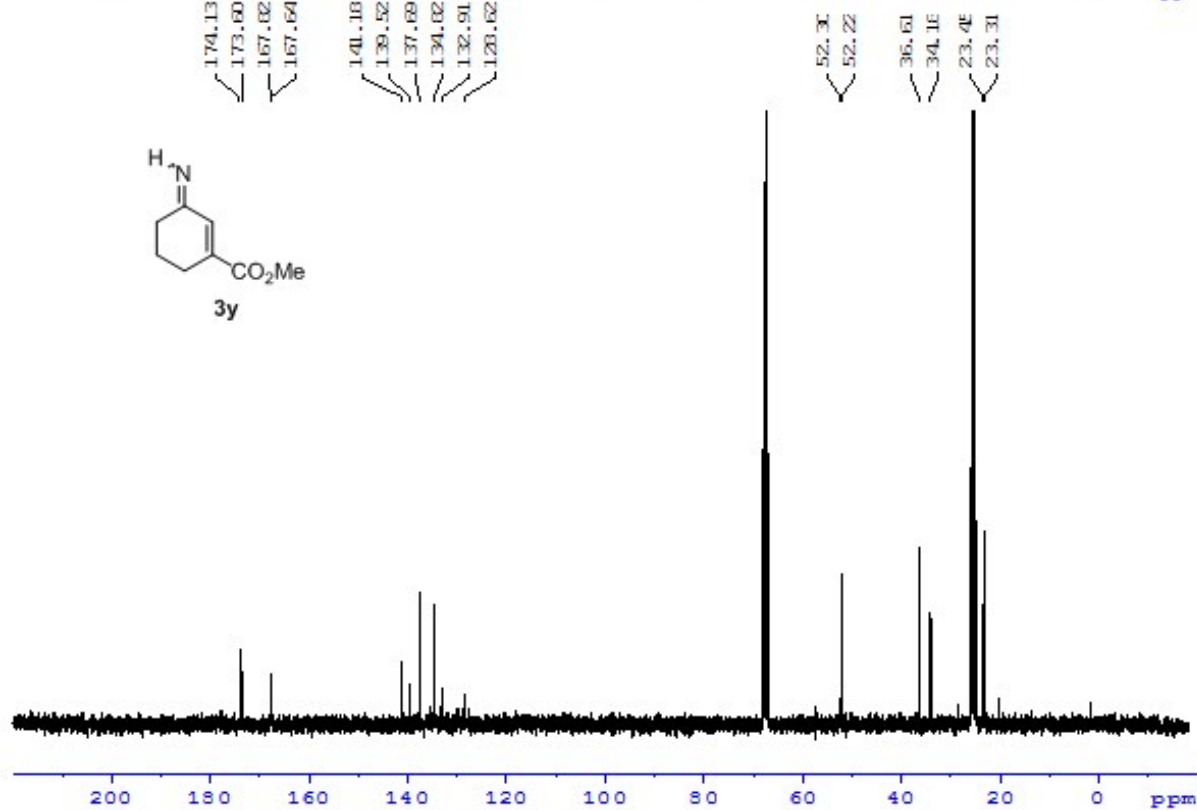
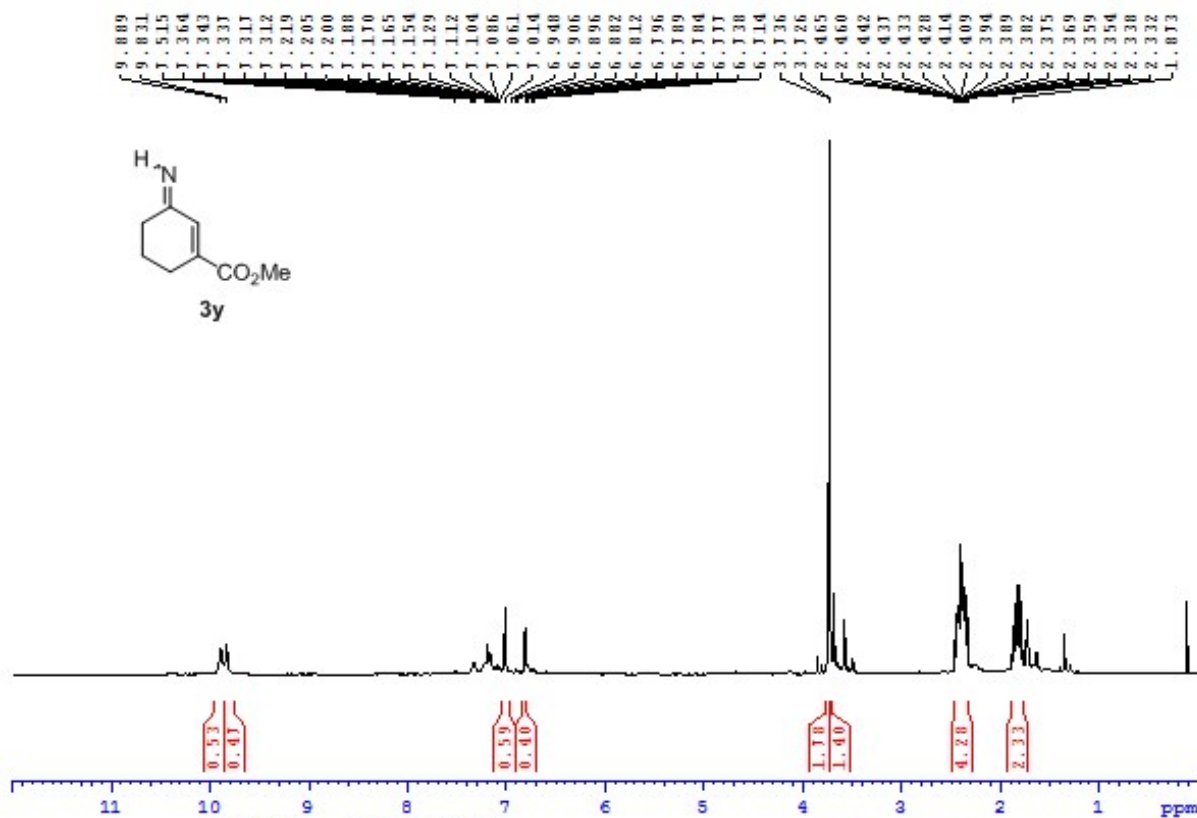




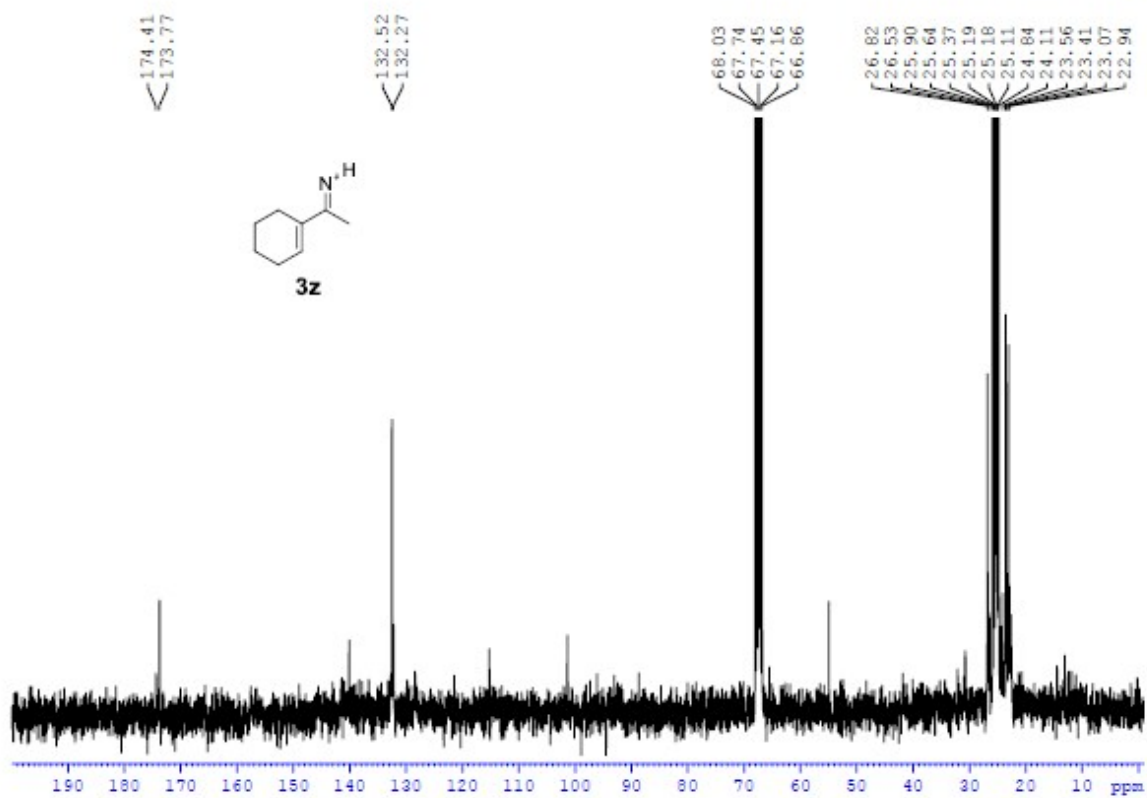
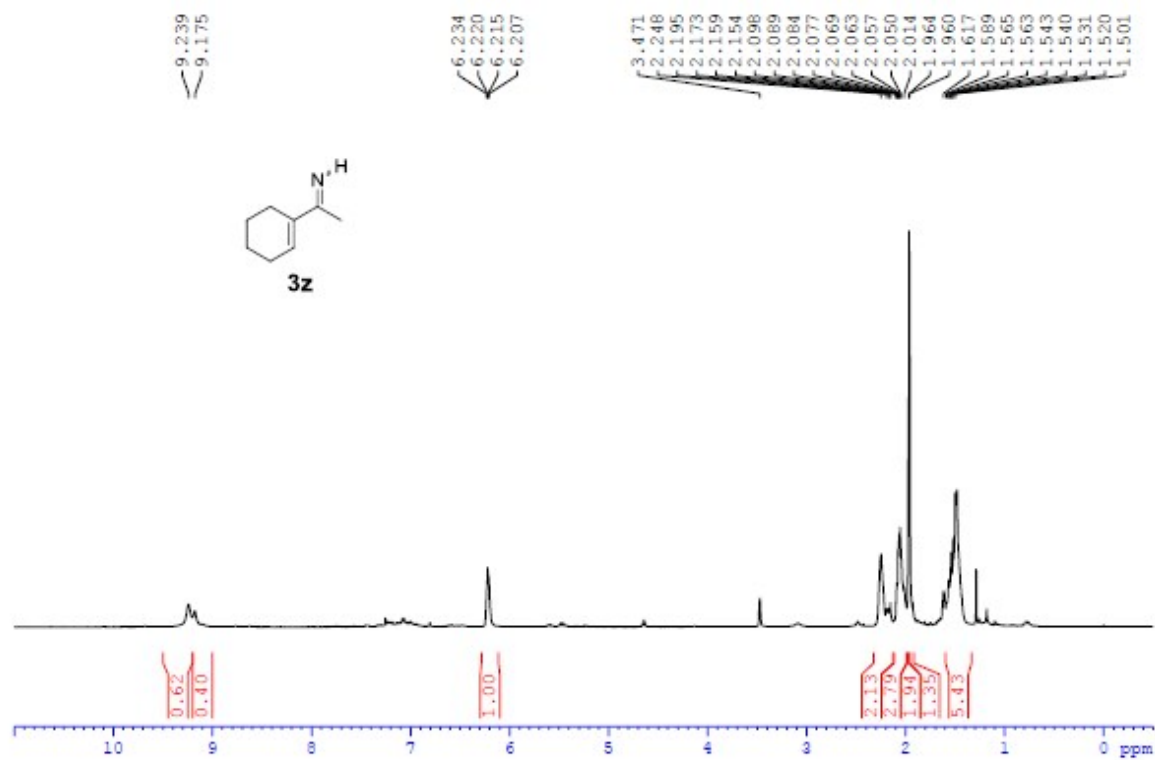
3x)



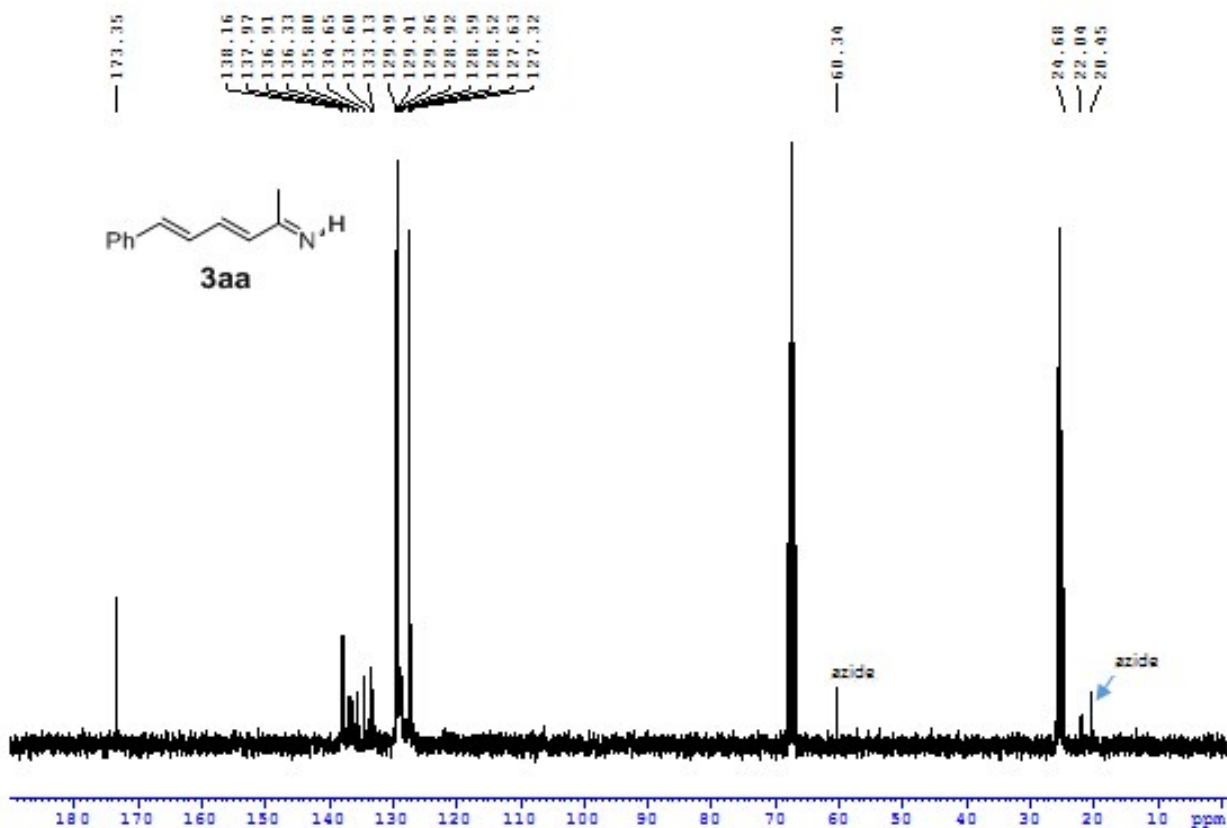
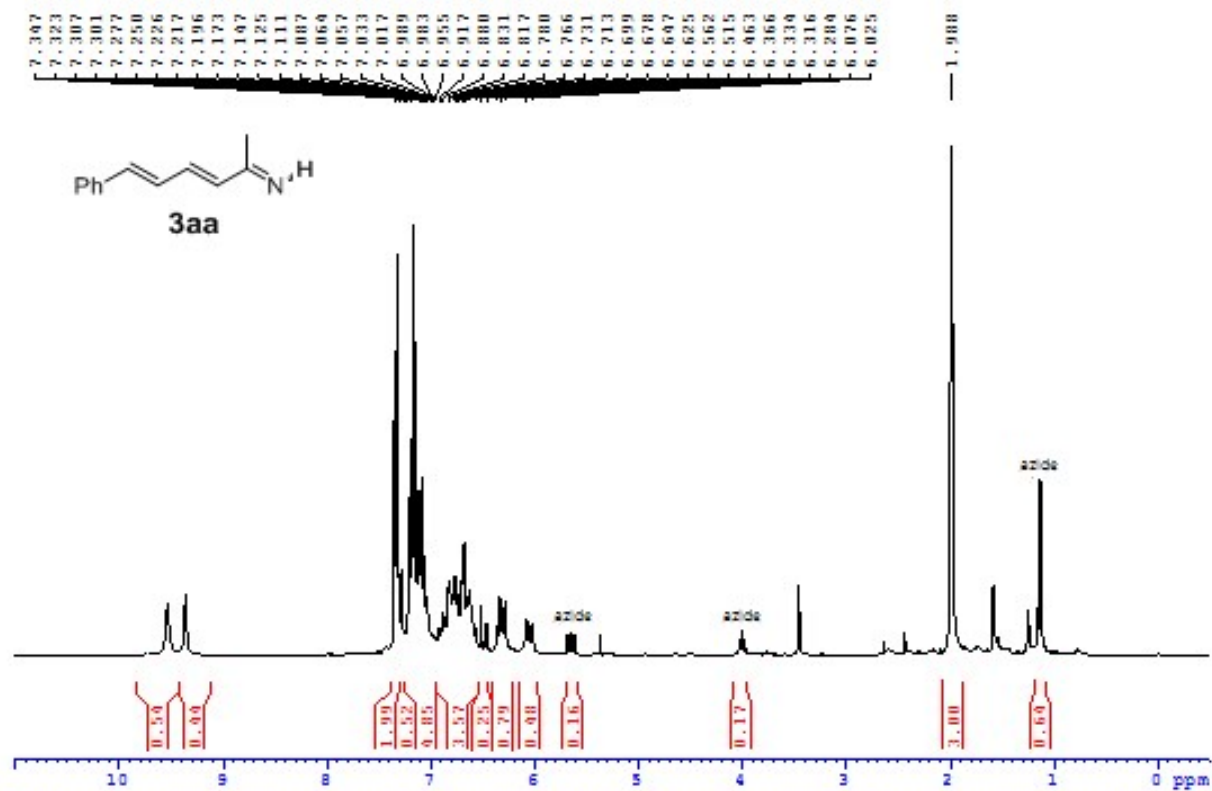
3y)



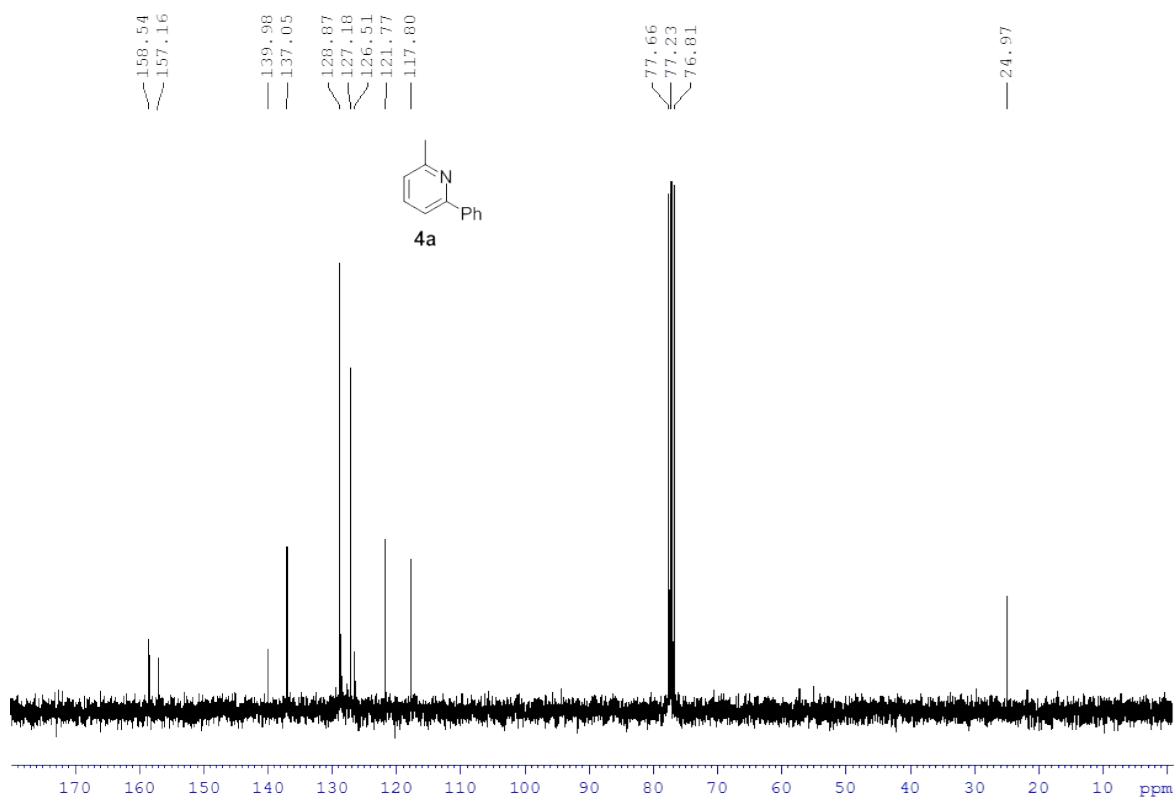
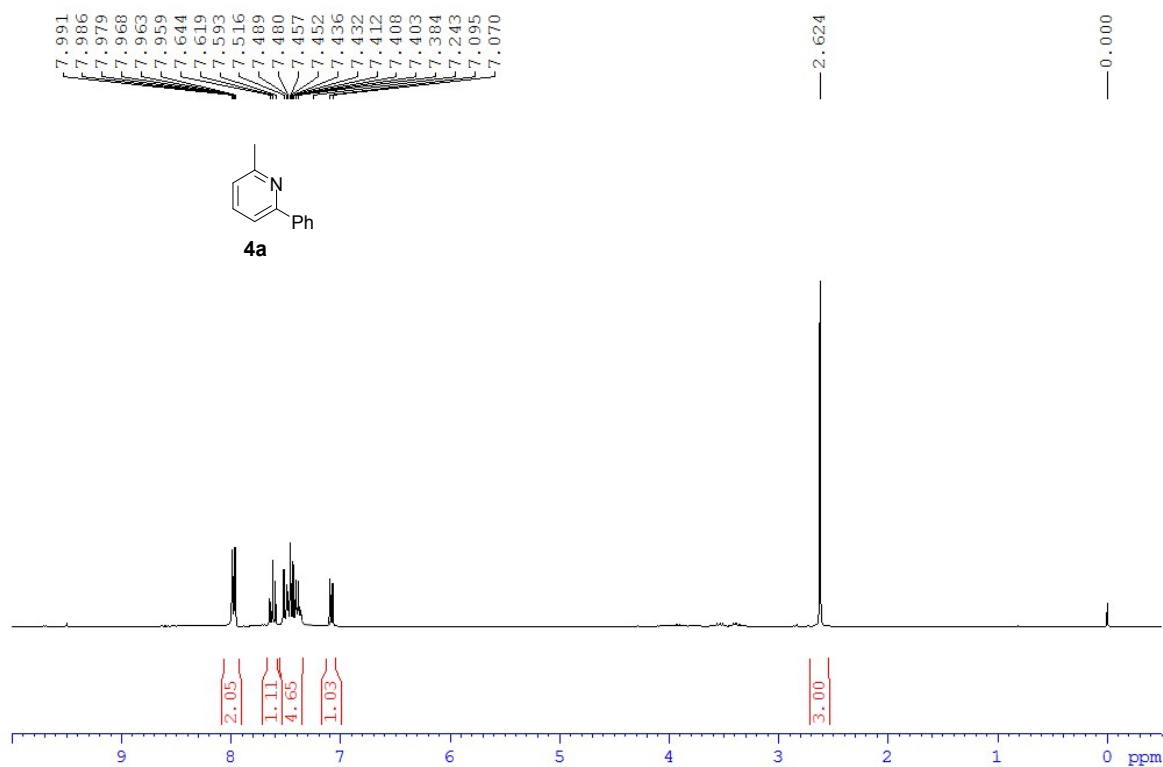
3z)



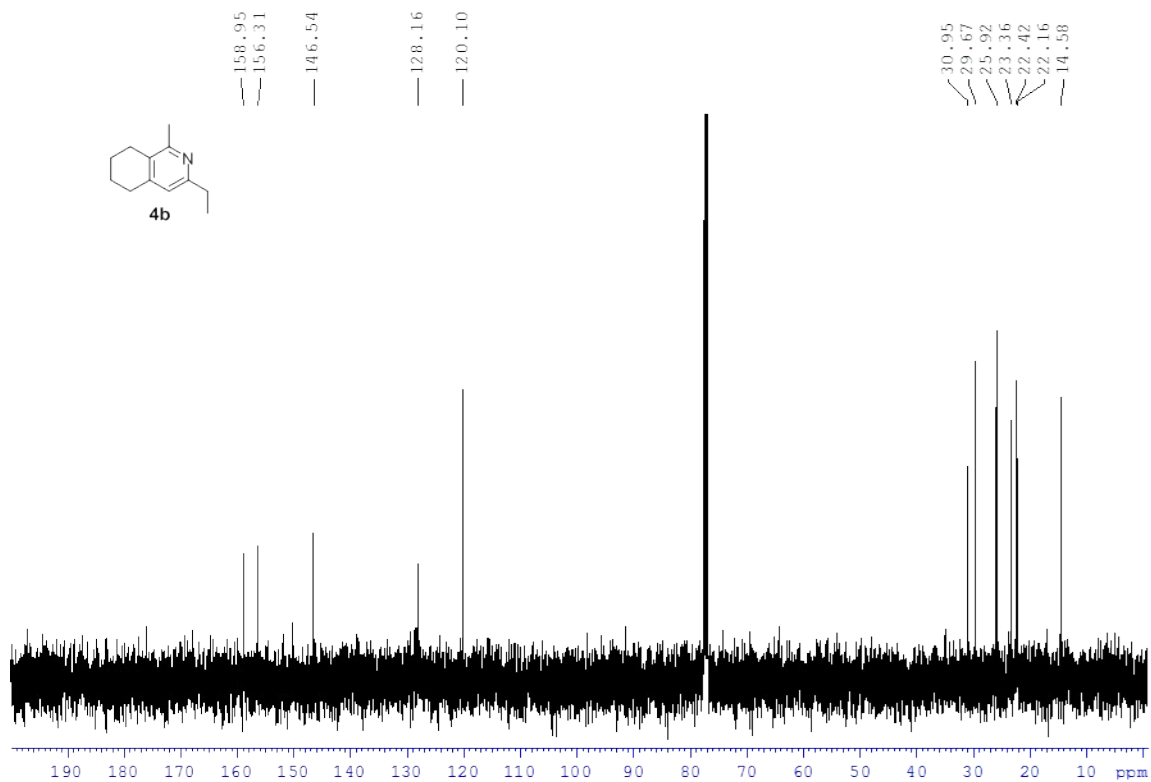
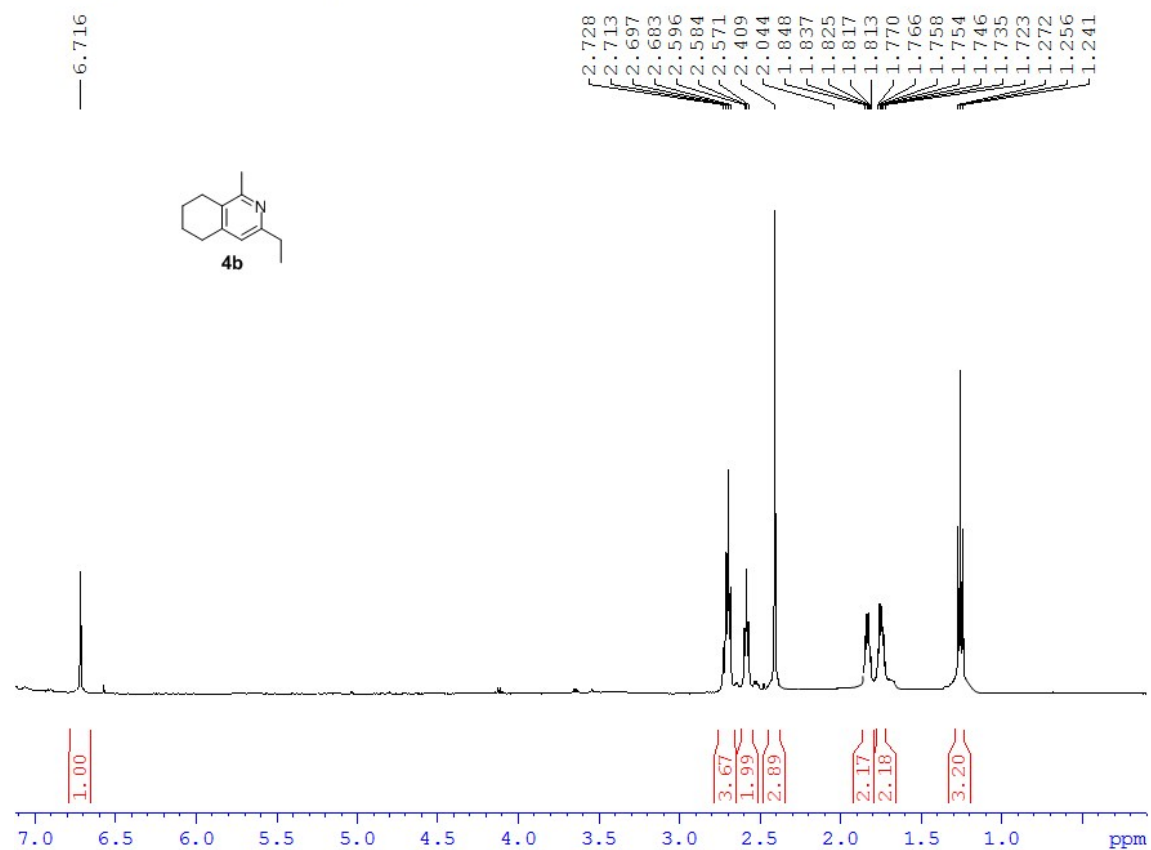
3aa) 14 % of azide was remained



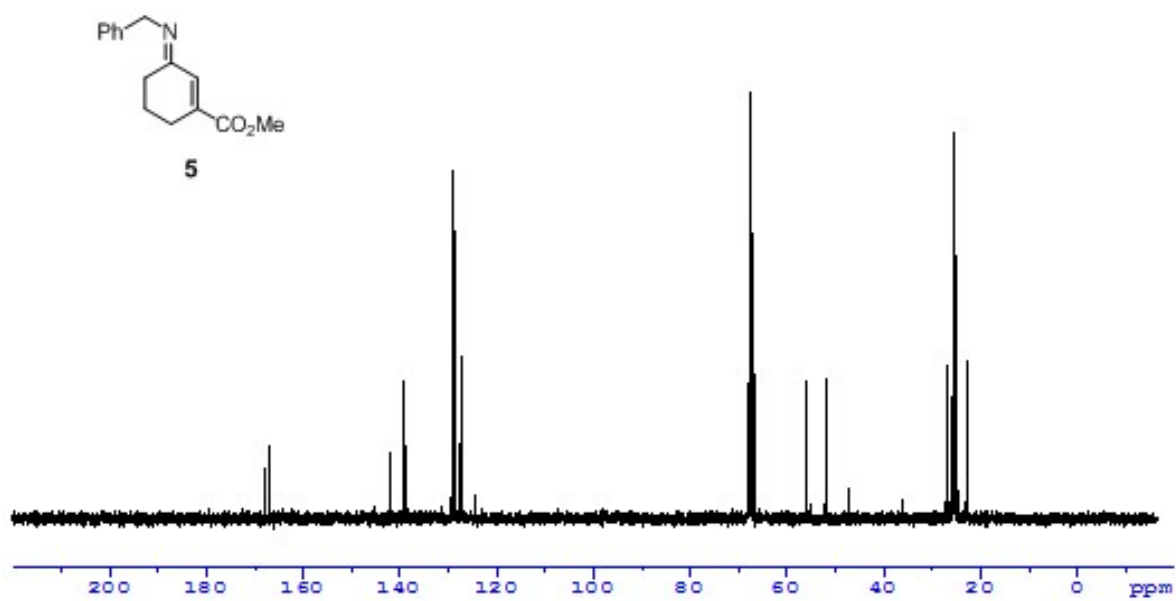
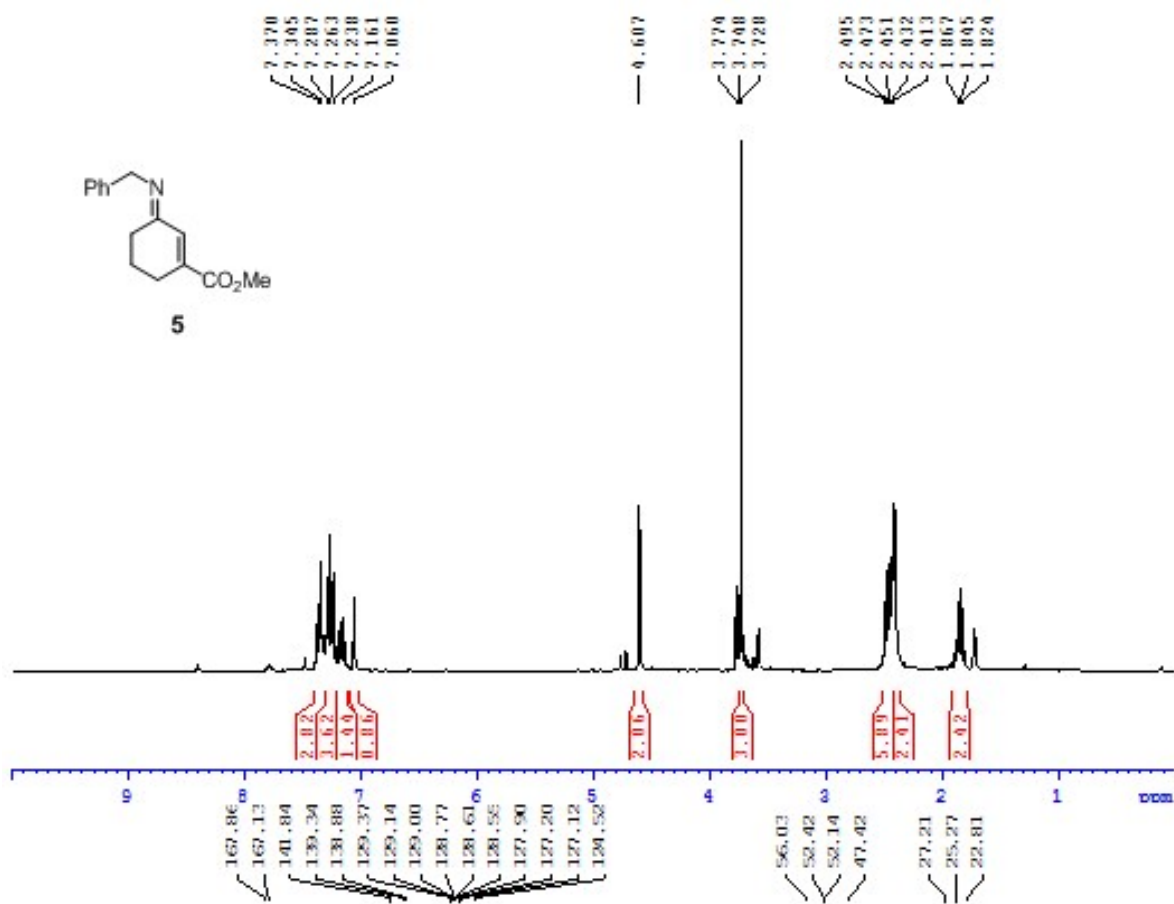
4a)



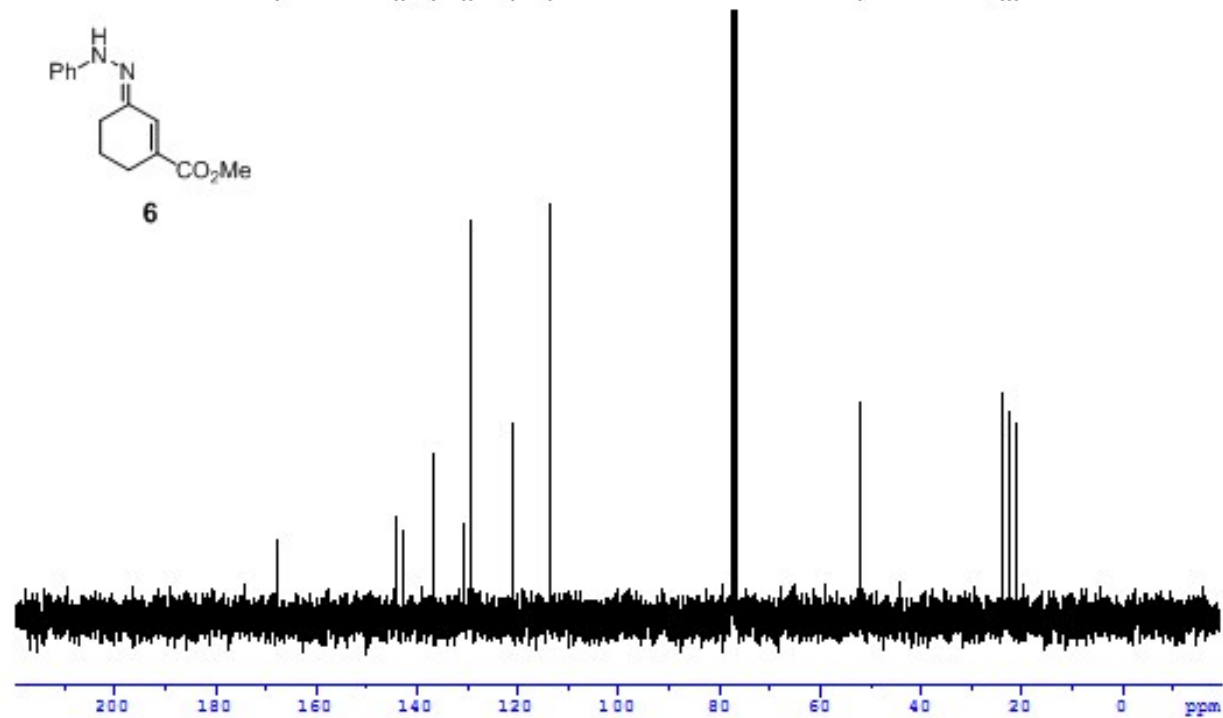
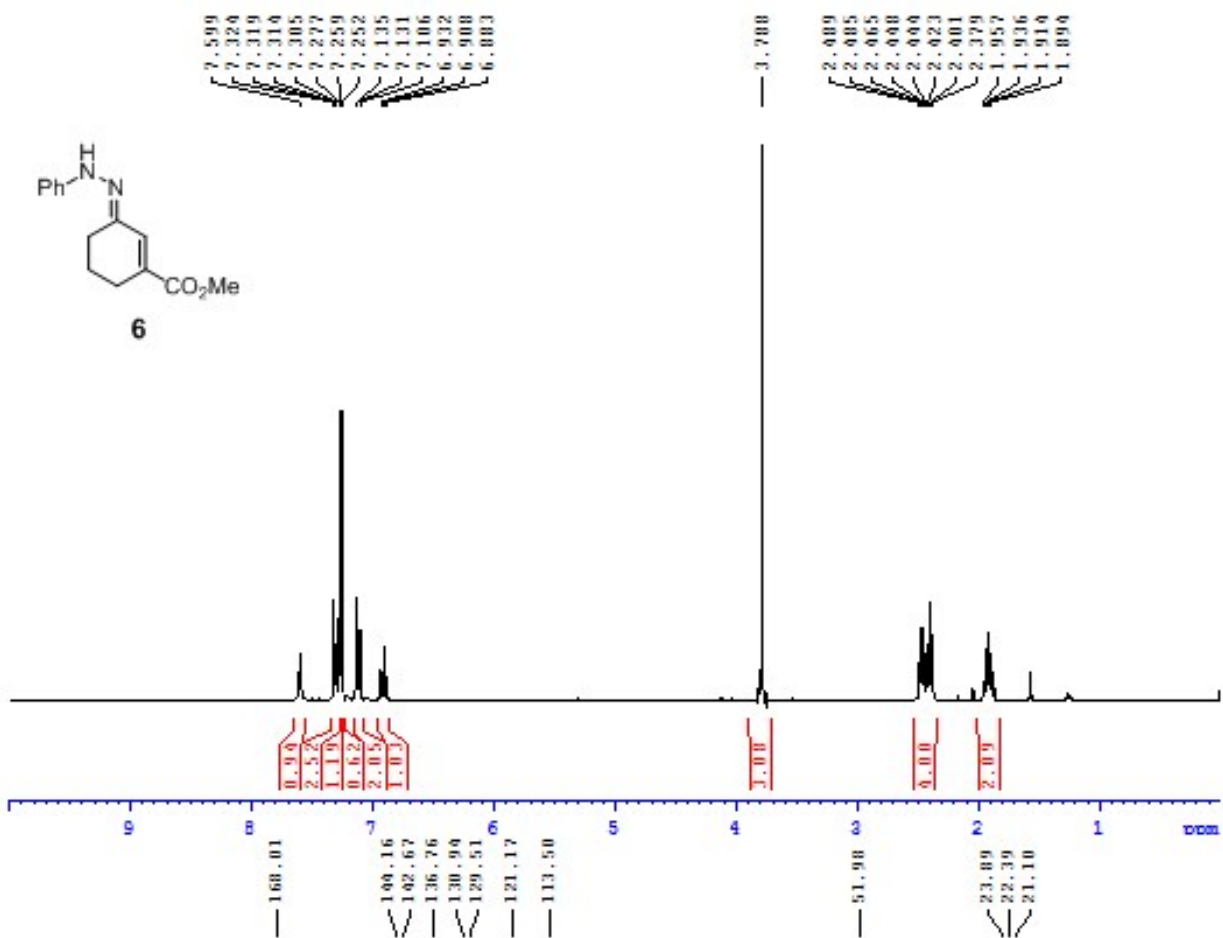
4b)



5) Crude mixture

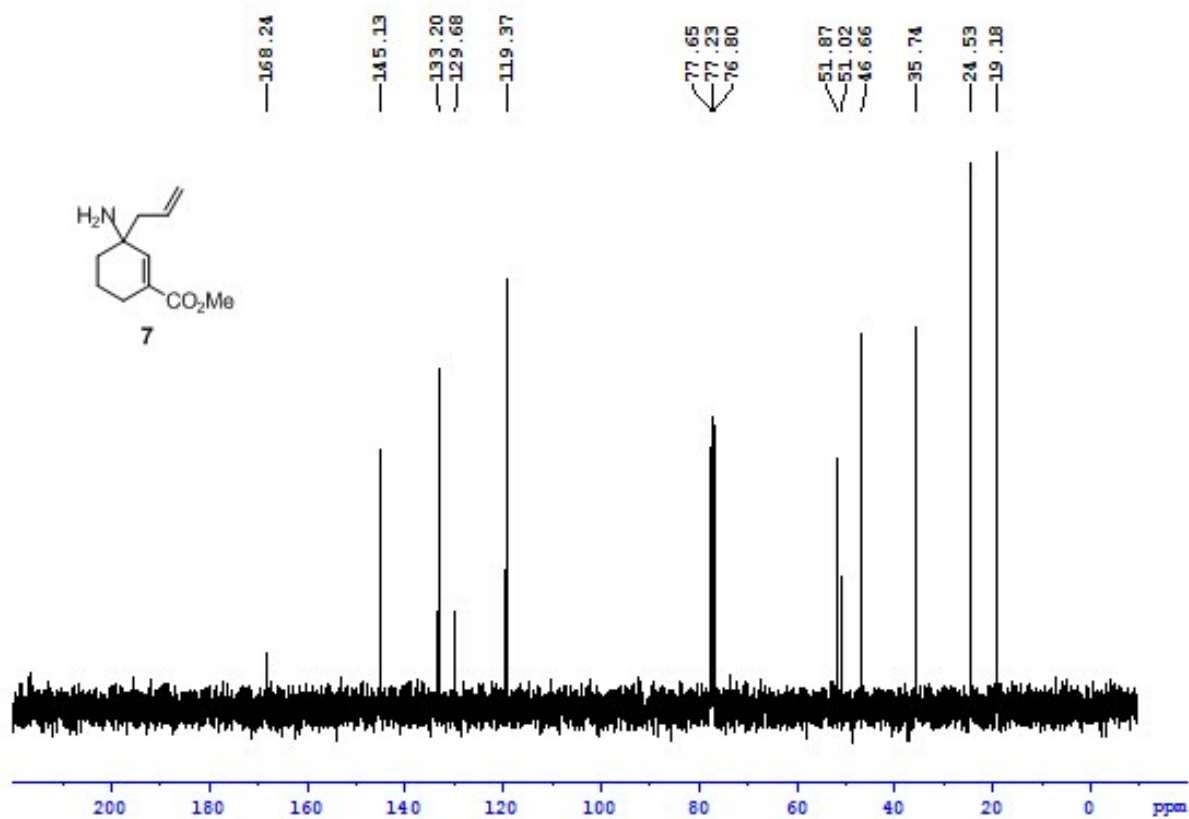
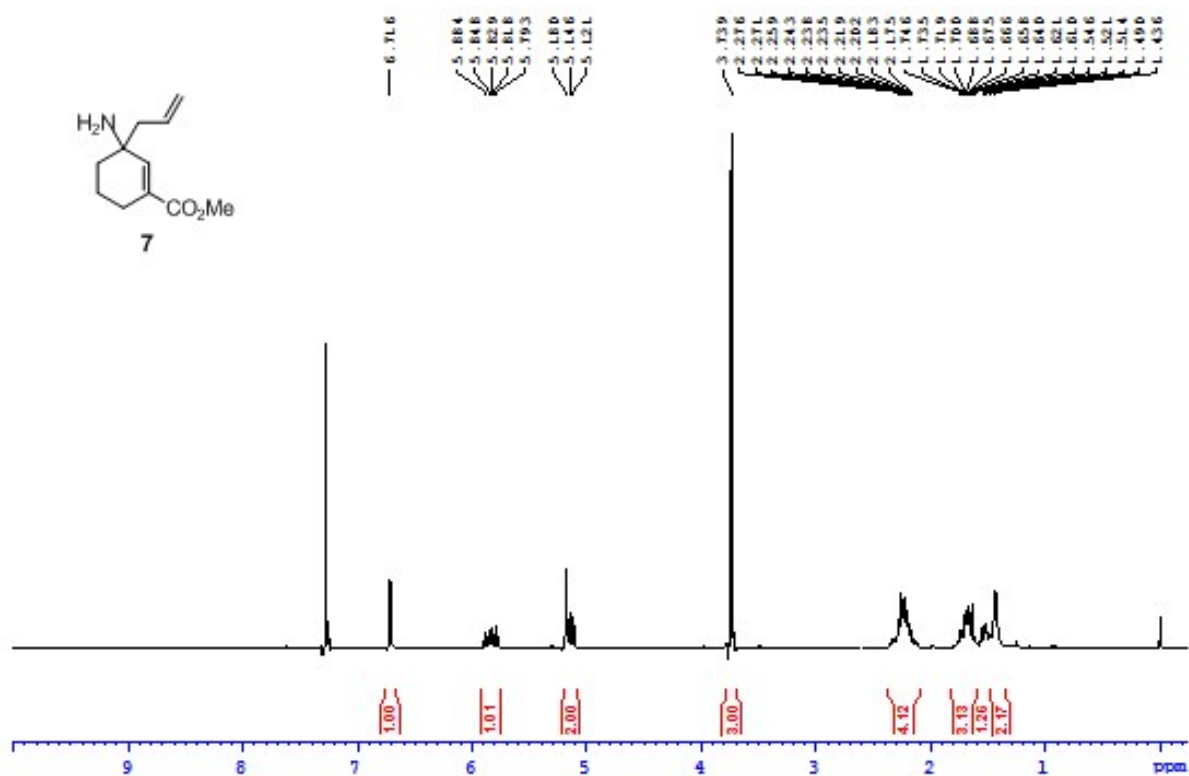


6)

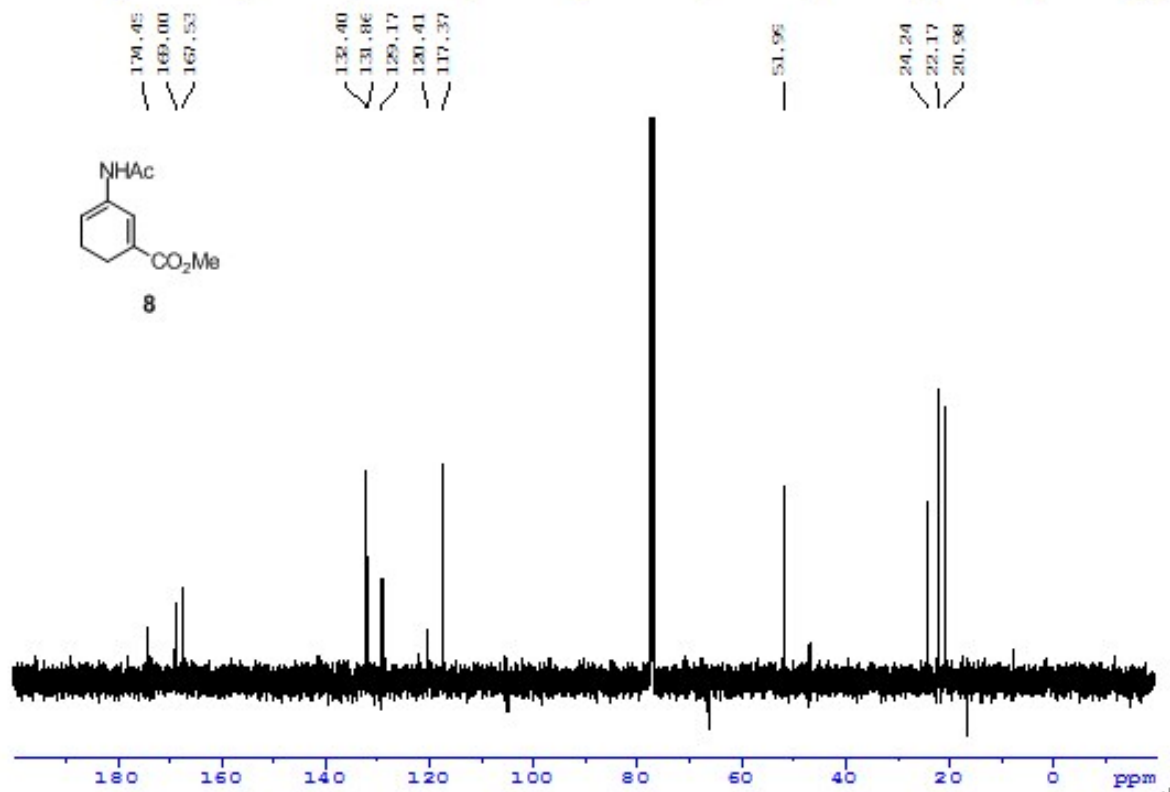
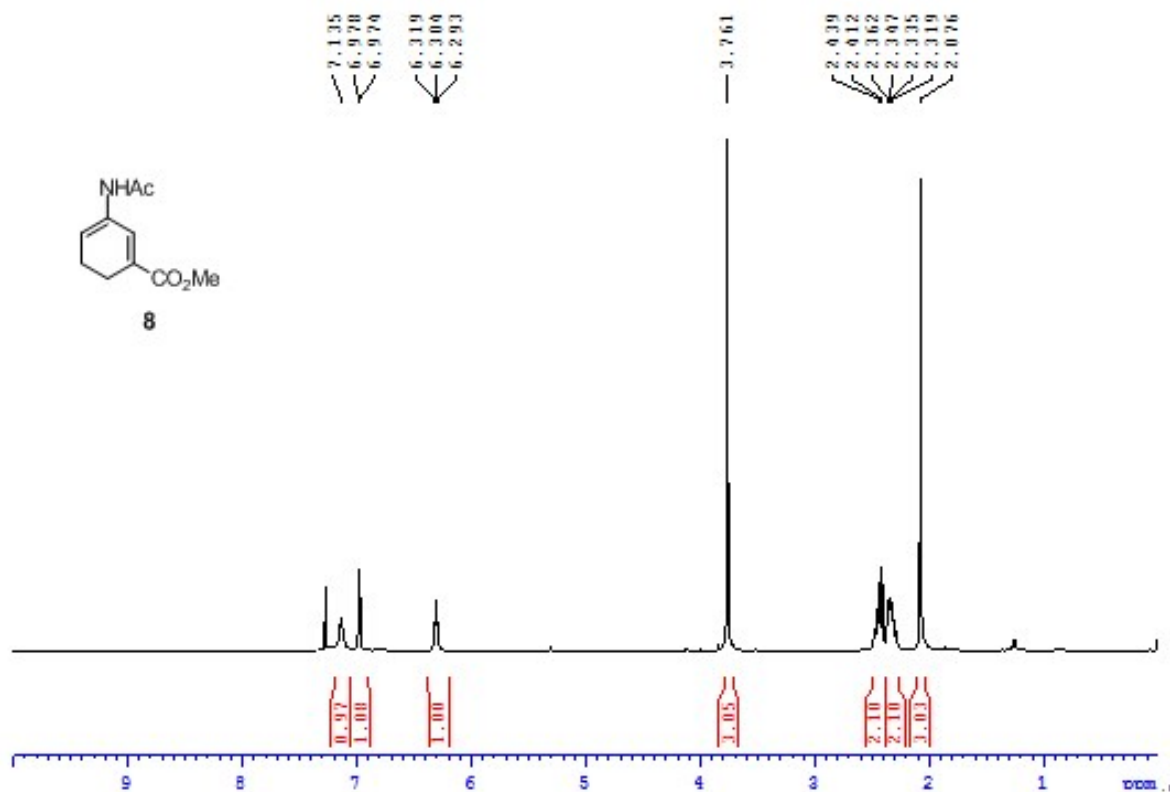




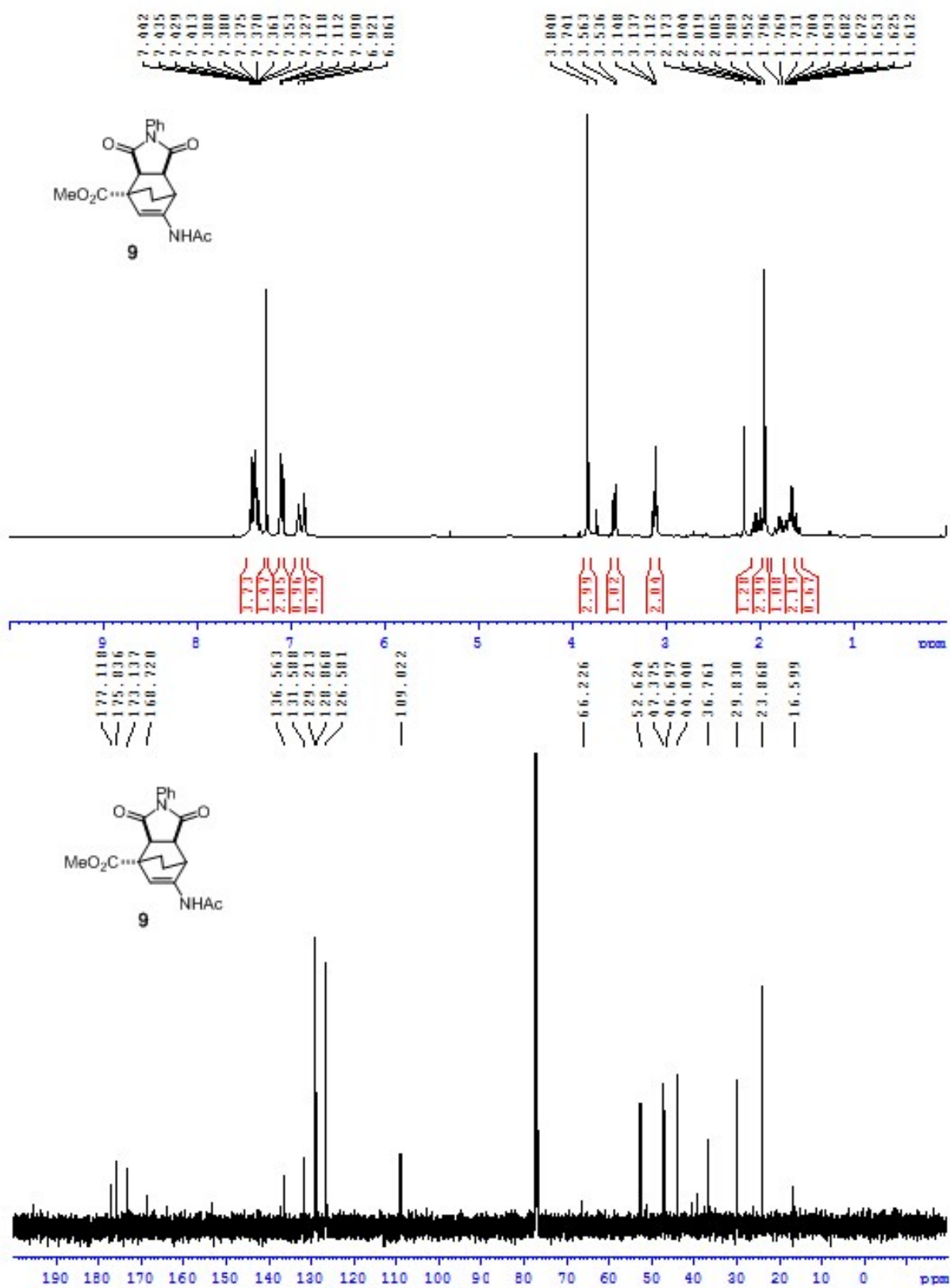
7)



8)



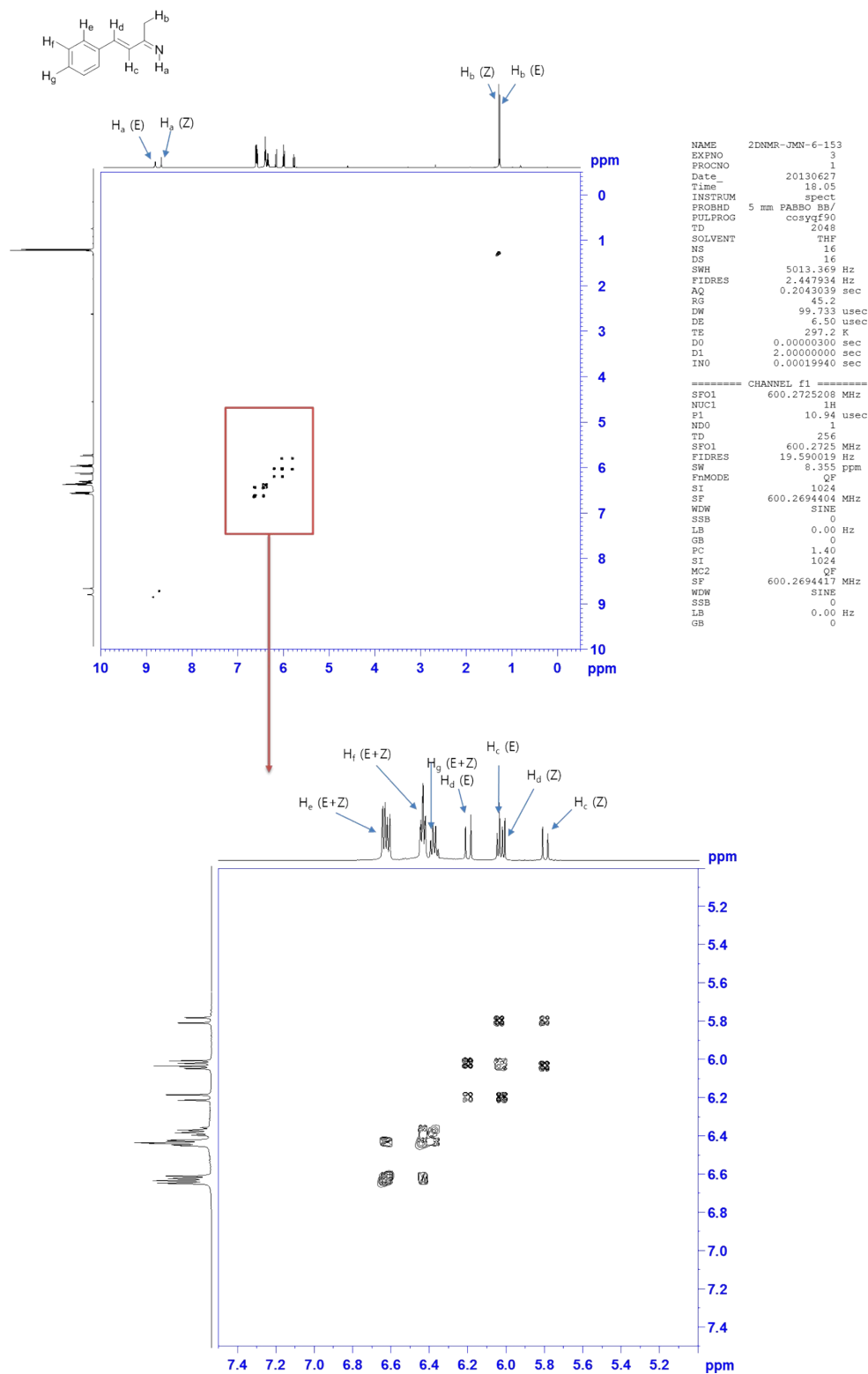
9)



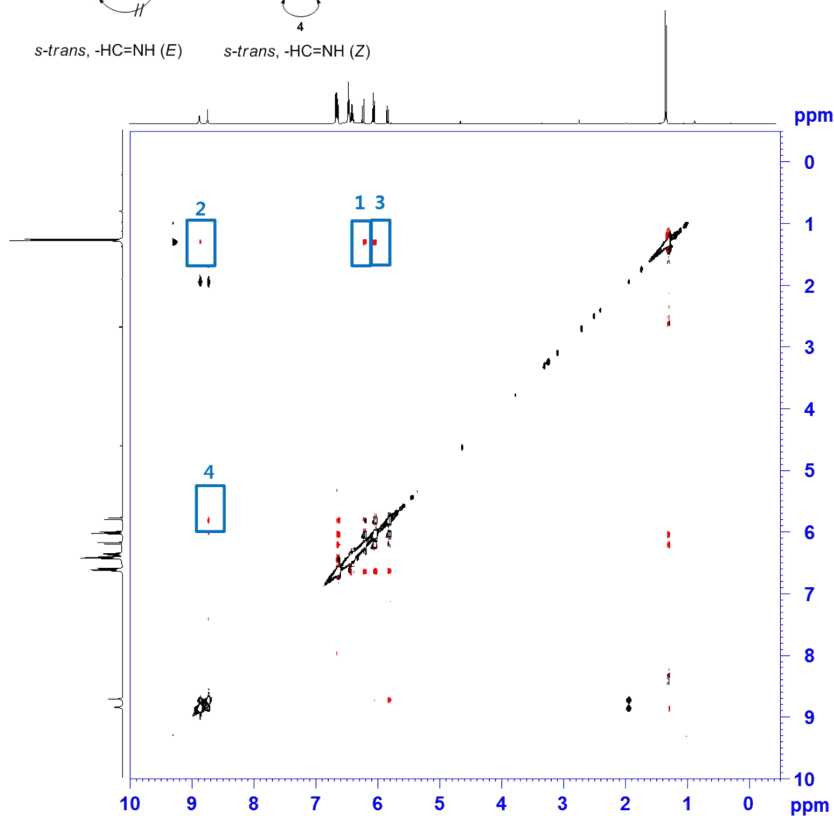
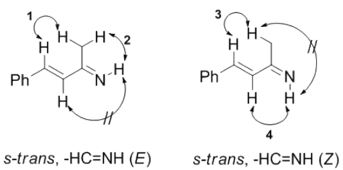
<2D NMR experiment>

1. Confirm the structure of 3d

<COSY>



<NOESY>



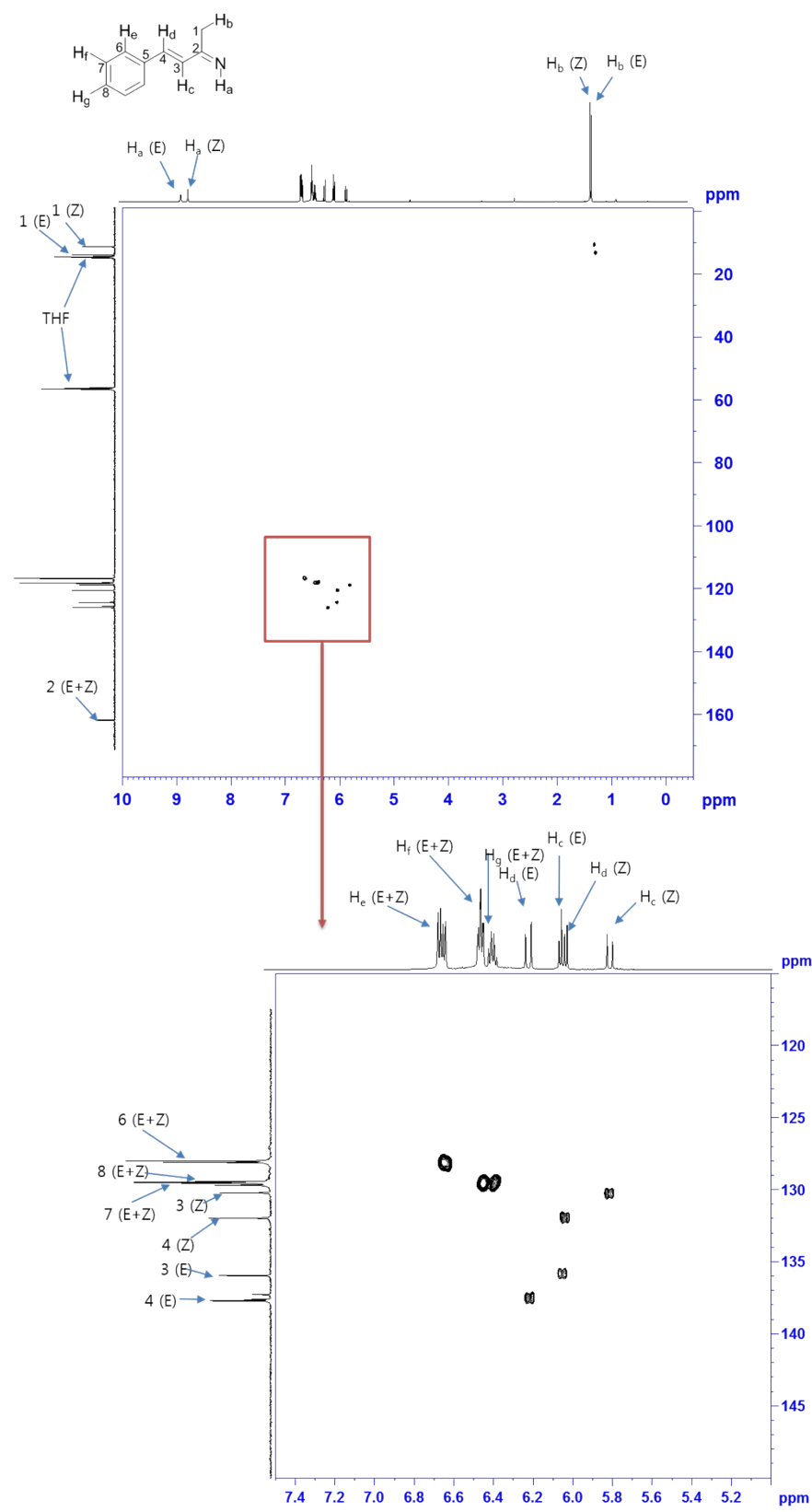
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EXPNO     4
PROCNO    1
Date_     20130627
Time      20.41
INSTRUM   spect
PROBHD    5 mm PABBO BB/
PULPROG   noesypphpp
TD         2048
SOLVENT   THF
NS         32
DS         32
SWH       5013.369 Hz
FIDRES    2.447934 Hz
AQ        0.2043039 sec
RG         64
DW        99.733 usec
DE        6.50 usec
TE        297.4 K
DO        0.00008577 sec
D1        2.00000000 sec
D8        0.80000001 sec
D11       0.03000000 sec
D12       0.00020000 sec
D16       0.00020000 sec
IN0       0.00019940 sec
    
```

```

===== CHANNEL f1 =====
SF01      600.2725208 MHz
NUC1      1H
P1        10.94 usec
P2        21.88 usec
P17       2500.00 usec
NDO       1
TD        256
SF01      600.2725 MHz
FIDRES    19.590019 Hz
SW        8.355 ppm
FrMODE    States-TPPI
SI        1024
SF        600.2694352 MHz
WDW       QSINE
SSB       2
LB        0.00 Hz
GB        0
PC        1.00
SI        1024
MC2       States-TPPI
SF        600.2694351 MHz
WDW       QSINE
SSB       2
LB        0.00 Hz
GB        0
    
```

<HSQC>



```

NAME      2DNMR-JMN-6-153
EXPNO     6
PROCNO    1
Date_     20130628
Time      10.26
INSTRUM   spect
PROBHD    5 mm PABBO BB/
PULPROG   hsqcedetgpp.3
TD         1024
SOLVENT   THF
NS         16
DS         32
SWH        5013.369 Hz
FIDRES     4.895869 Hz
AQ         0.1021769 sec
RG         2050
DW         99.733 usec
DE         6.50 usec
TE         297.7 K
CNST2     145.000000
D0         0.00000300 sec
D1         2.00000000 sec
D4         0.00172414 sec
D11        0.03000000 sec
D16        0.00020000 sec
D21        0.00360000 sec
IN0        0.00001900 sec

===== CHANNEL f1 =====
SFO1      600.2725208 MHz
NUC1      1H
P1         10.88 usec
P2         21.76 usec
PZ8       1000.00 usec
ND0        2
TD         256
SFO1      150.9526 MHz
FIDRES    102.796051 Hz
SW         174.332 ppm
F1MODE    Echo-Antiecho
SI         1024
SF         600.2694289 MHz
WDW        QSINE
SSB        2
LB         0.00 Hz
GB         0
PC         1.40
SI         1024
MC2       echo-antiecho
SF         150.9392940 MHz
WDW        QSINE
SSB        2
LB         0.00 Hz
GB         0
    
```

2) Determine the stereochemistry of 9

<NOESY >

