

Supporting Information

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***N*-Substituted aziridine-2-phosphonic acids and their antibacterial activities**

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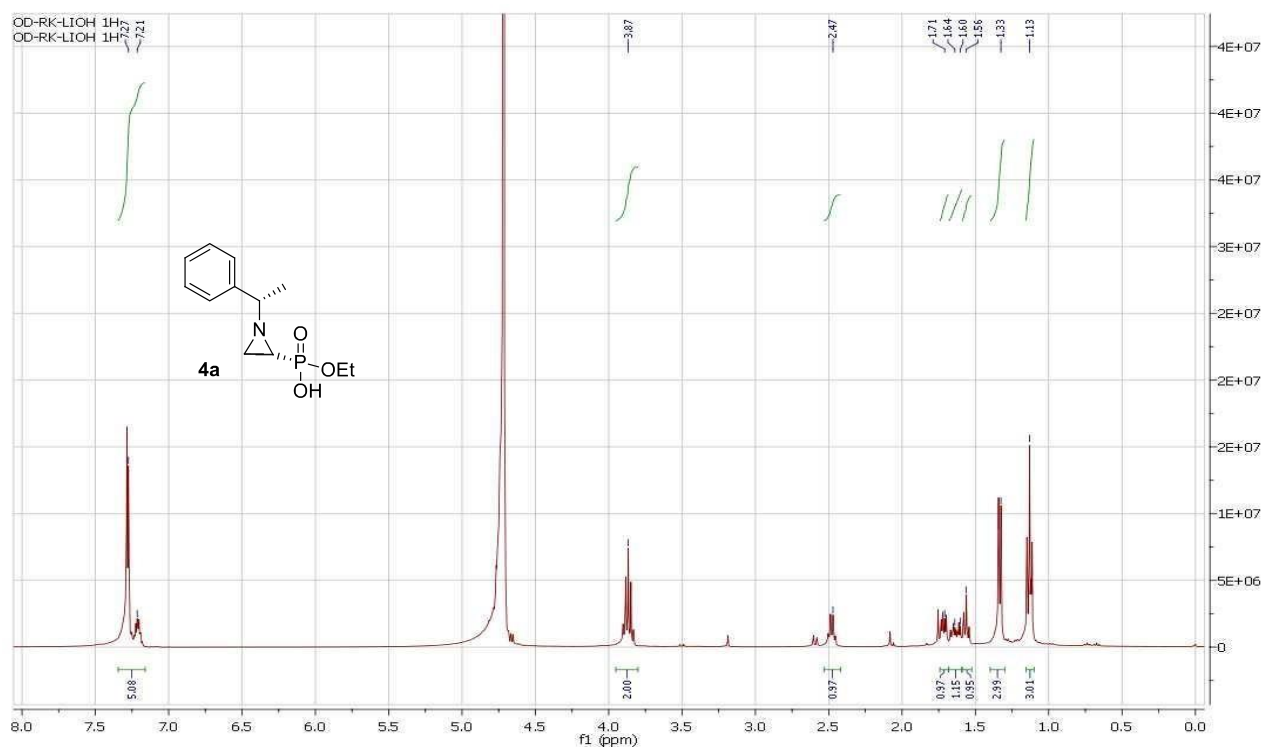


Figure S1: $^1\text{H-NMR}$ spectrum of compound **4a**

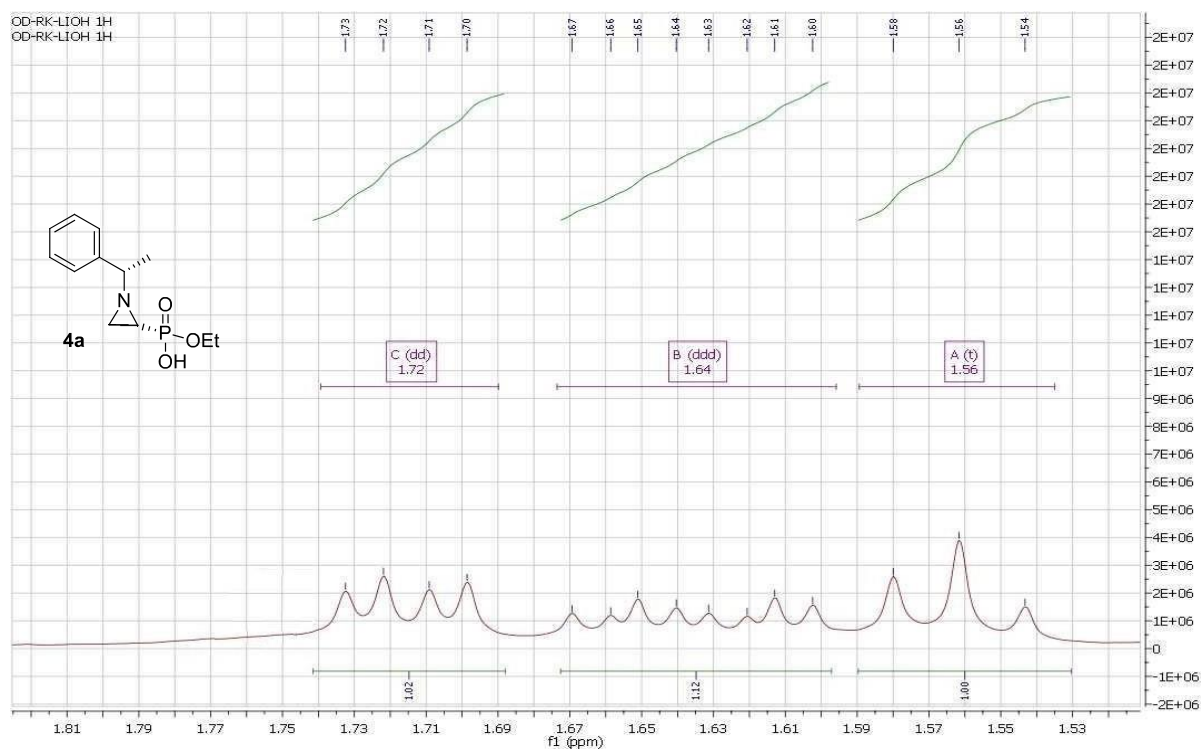


Figure S1a: Expanded region (δ 1.53-1.75) from $^1\text{H-NMR}$ Spectrum of compound **4a**

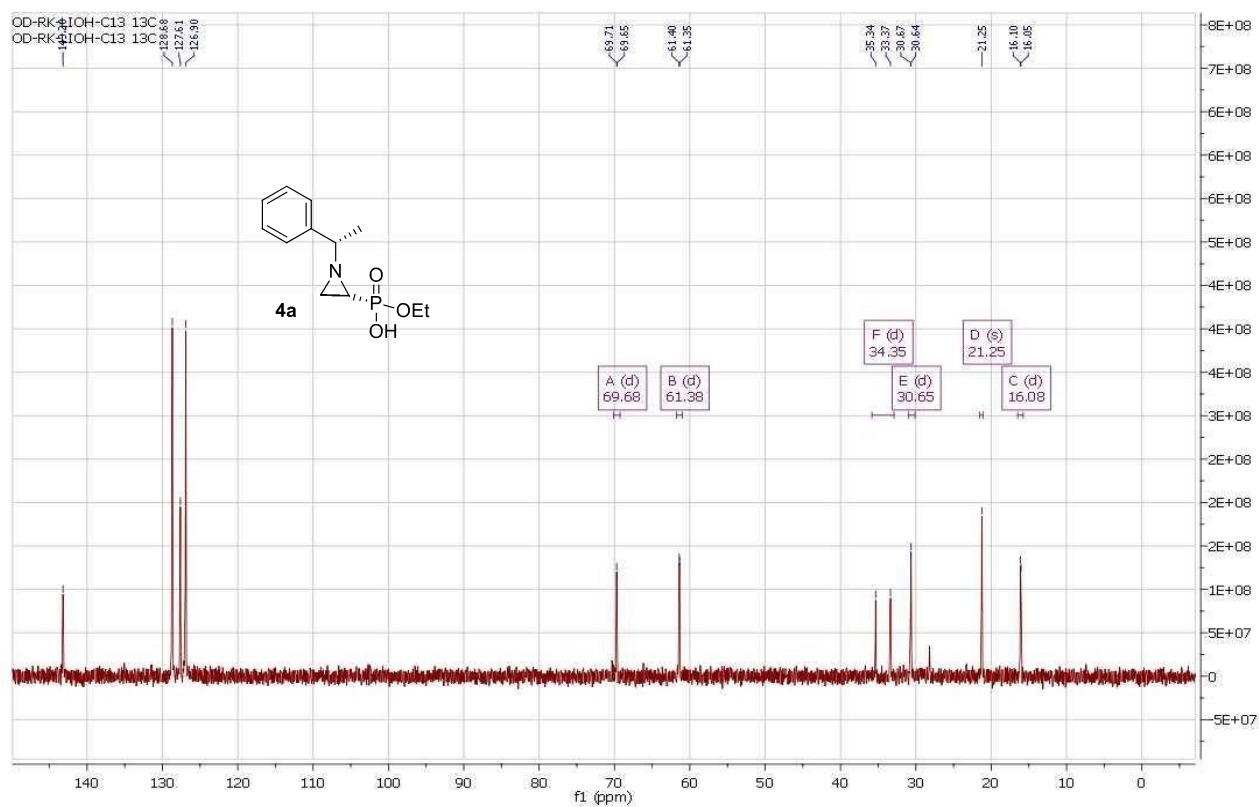


Figure S2: ^{13}C -NMR spectrum of compound 4a

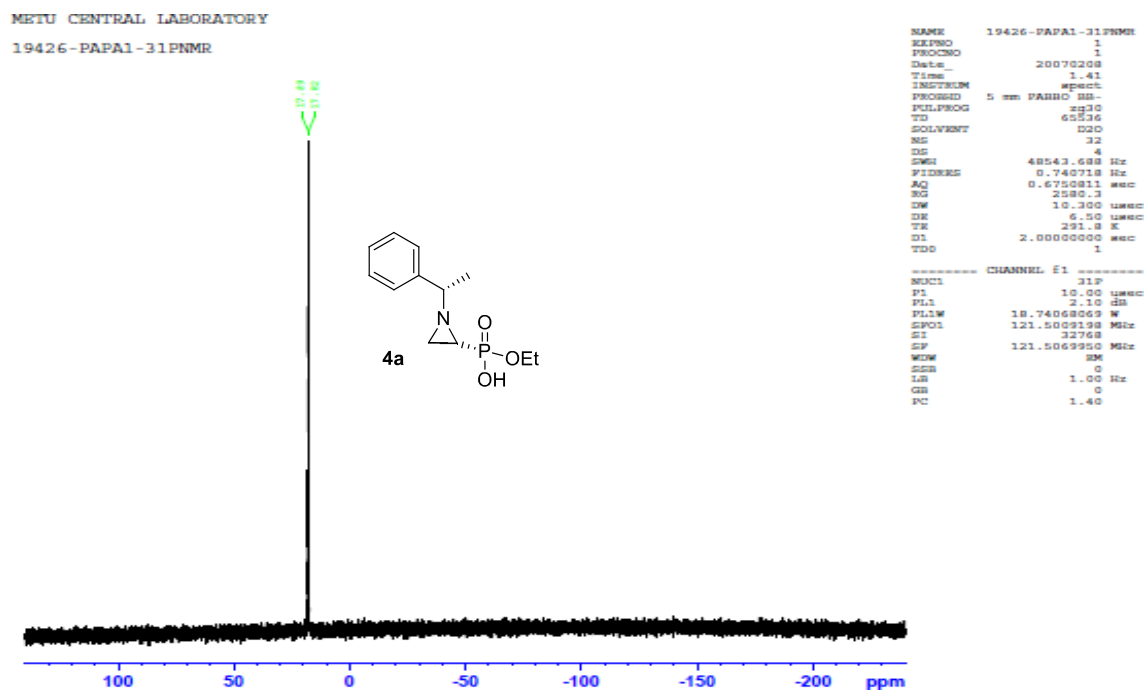


Figure S3: ^{31}P -NMR spectrum of compound 4a

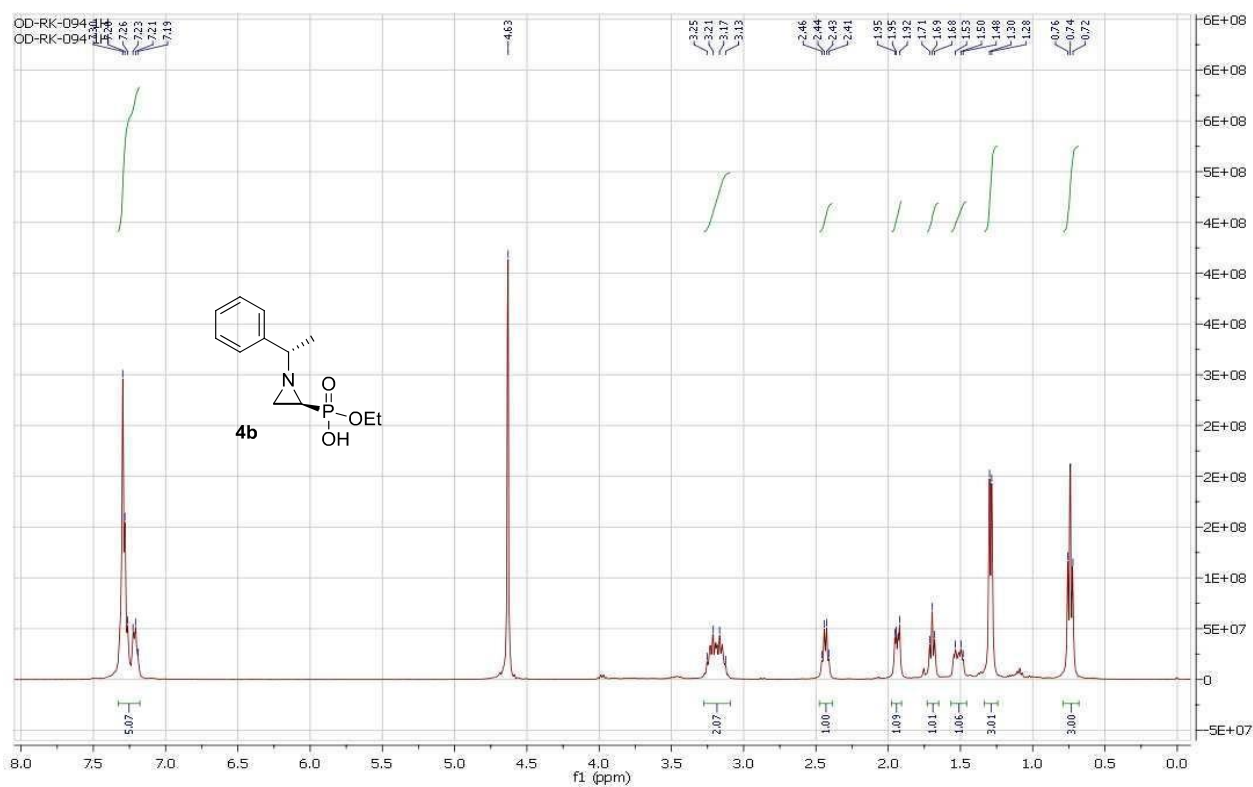


Figure S4: $^1\text{H-NMR}$ spectrum of compound **4b**

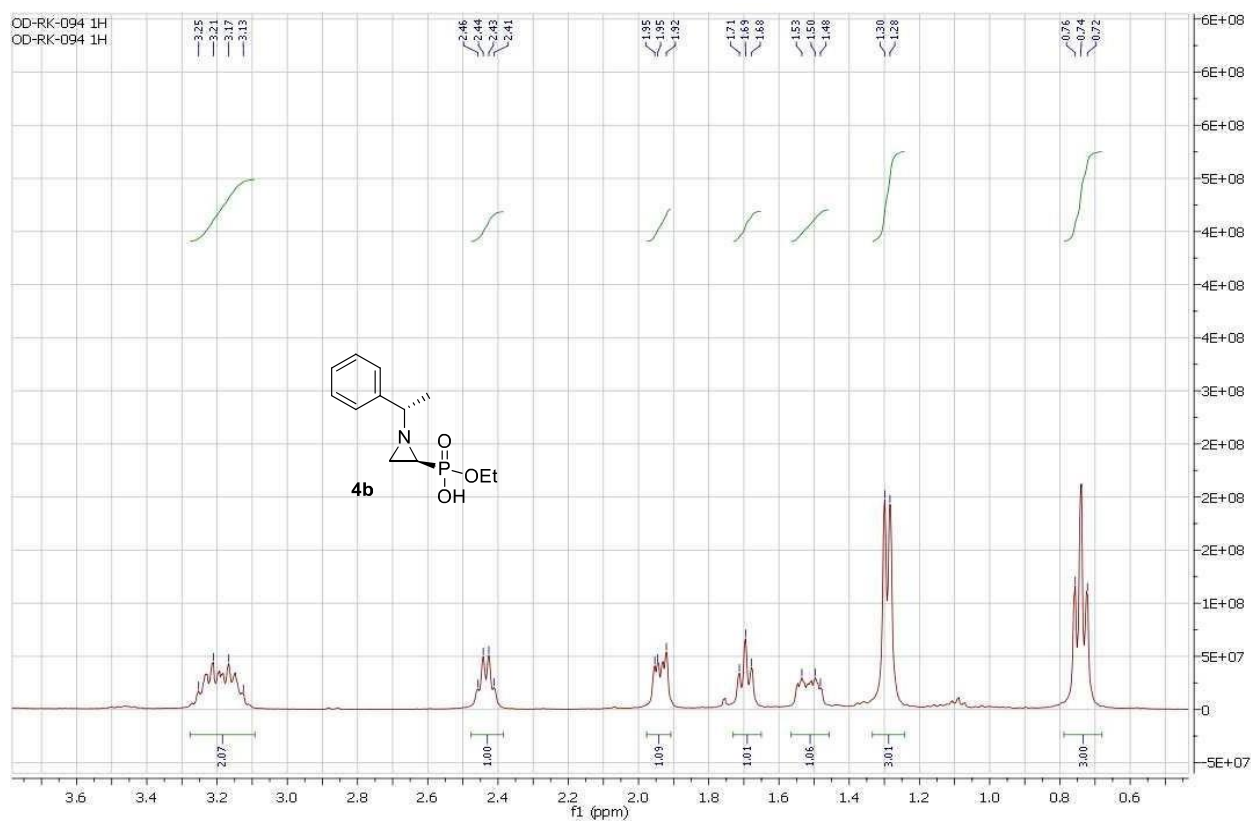


Figure S4a: Expanded region (δ 0.6-3.4) from $^1\text{H-NMR}$ Spectrum of compound **4b**

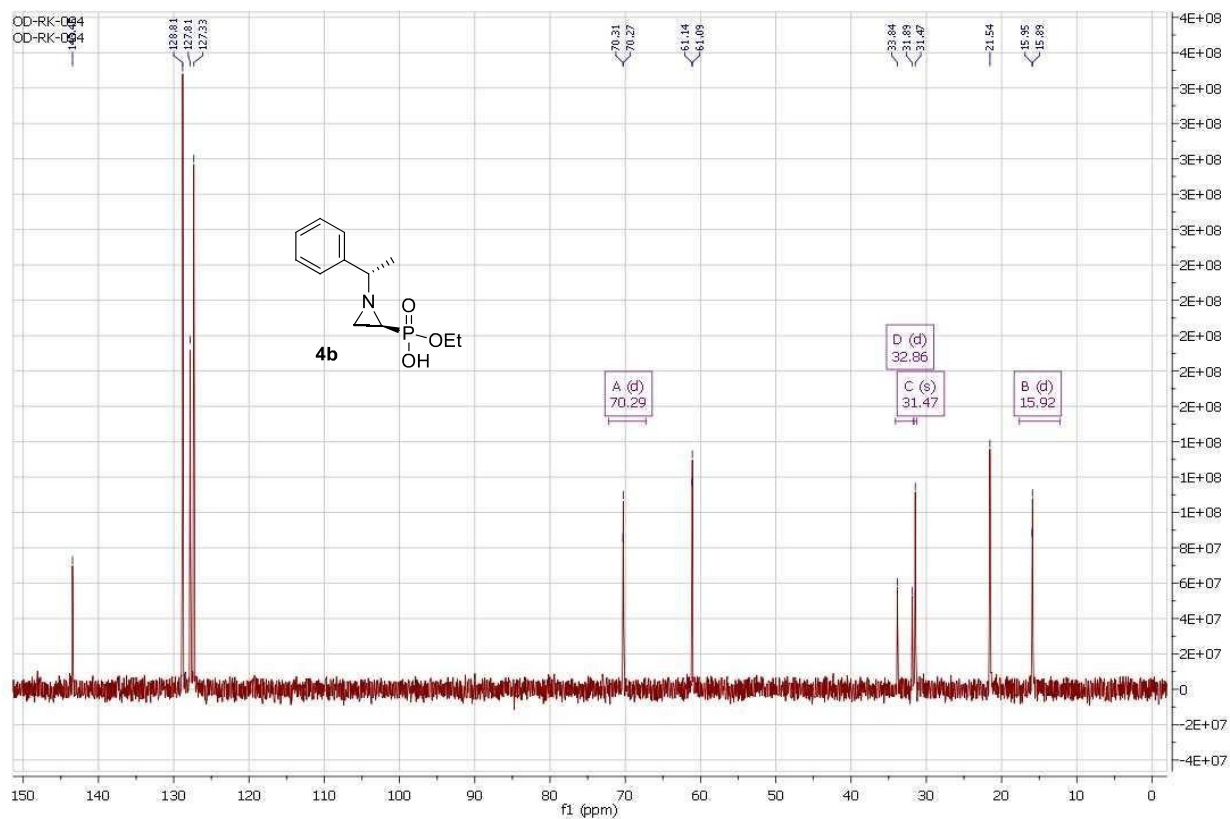
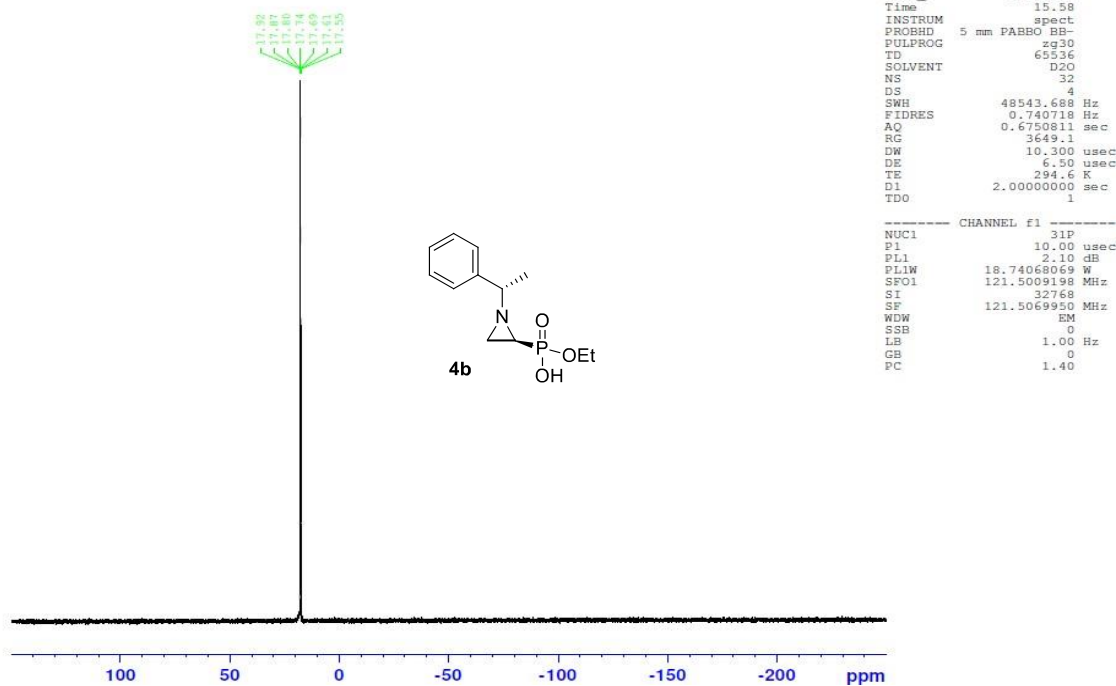


Figure S5: ^{13}C -NMR spectrum of compound **4b**

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21081-OD-RK-0094



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NAME      21081-OD-RK-094
EXPNO    1
PROCNO   1
Date_    20060815
Time     15.58
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD        65536
SOLVENT  D2O
NS        32
DS        4
SWH       48543.688 Hz
FIDRES    0.740718 Hz
AQ        0.6750811 sec
RG        3649.1
DW        10.300 usec
DE        6.50 usec
TE        294.6 K
D1        2.00000000 sec
TDO       1

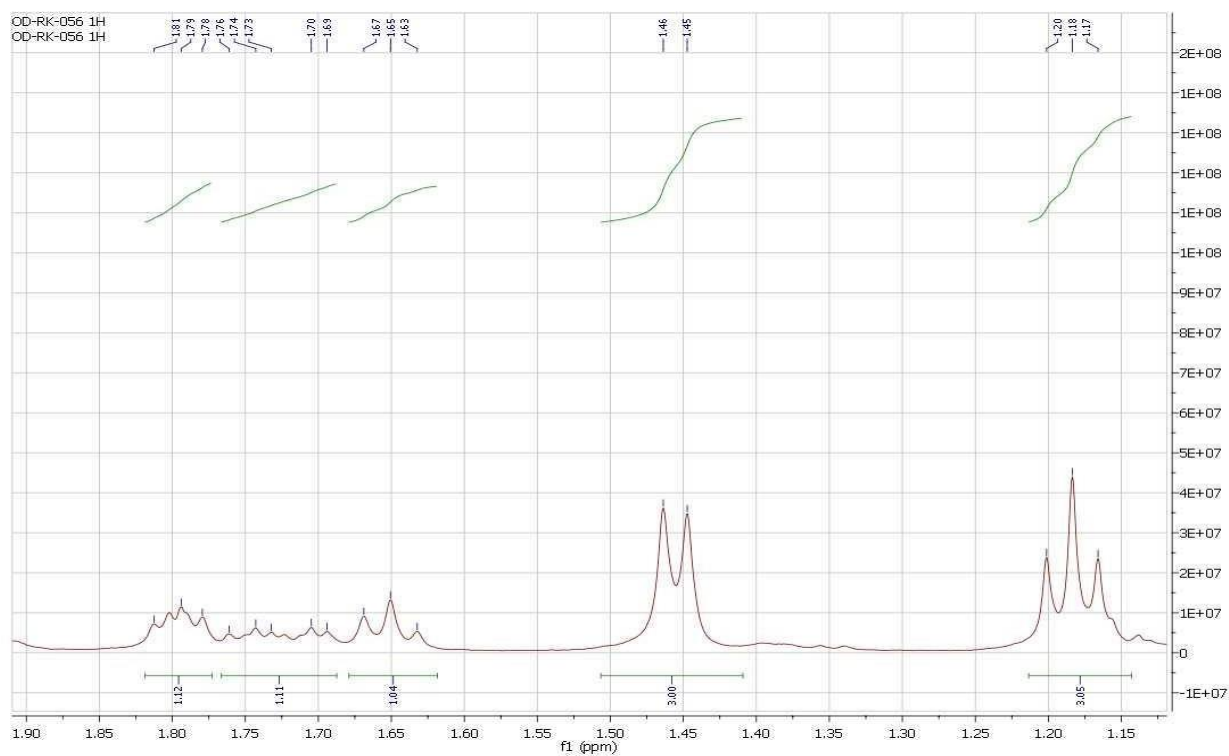
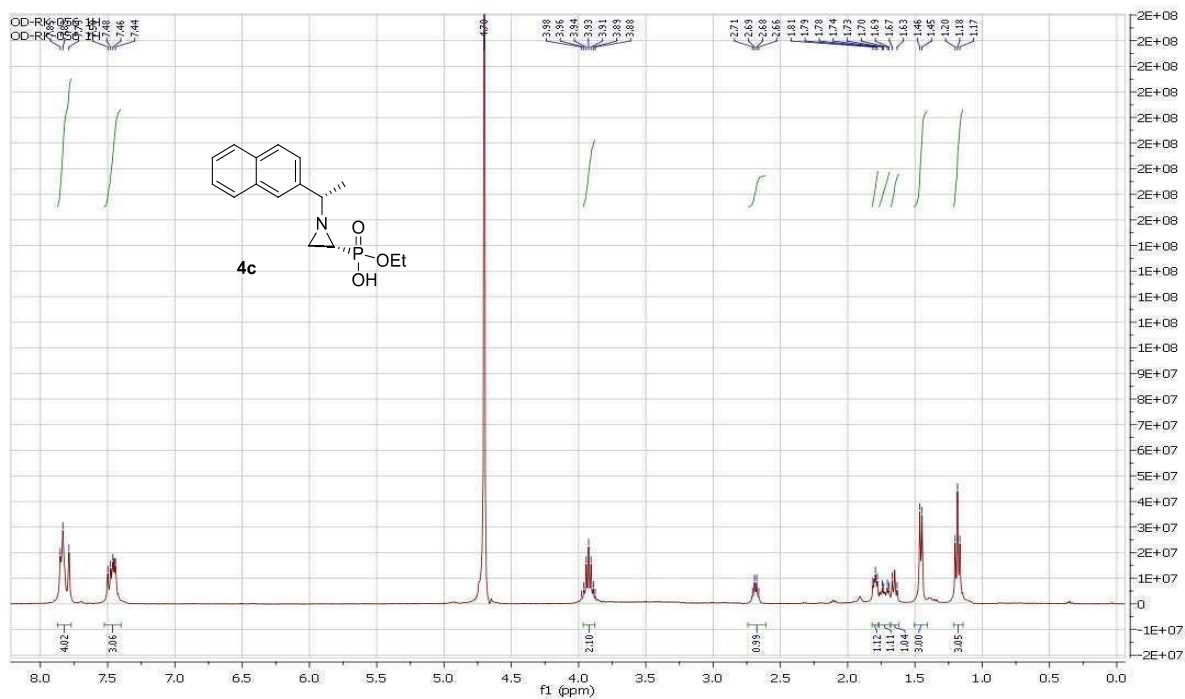
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----- CHANNEL f1 -----
NUC1     31P
P1       10.00 usec
PL1      2.10 dB
PL1W     18.74068069 W
SFO1     121.5009198 MHz
SI       32768
SF       121.5069950 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40

```

Figure S6: ^{31}P -NMR spectrum of compound **4b**



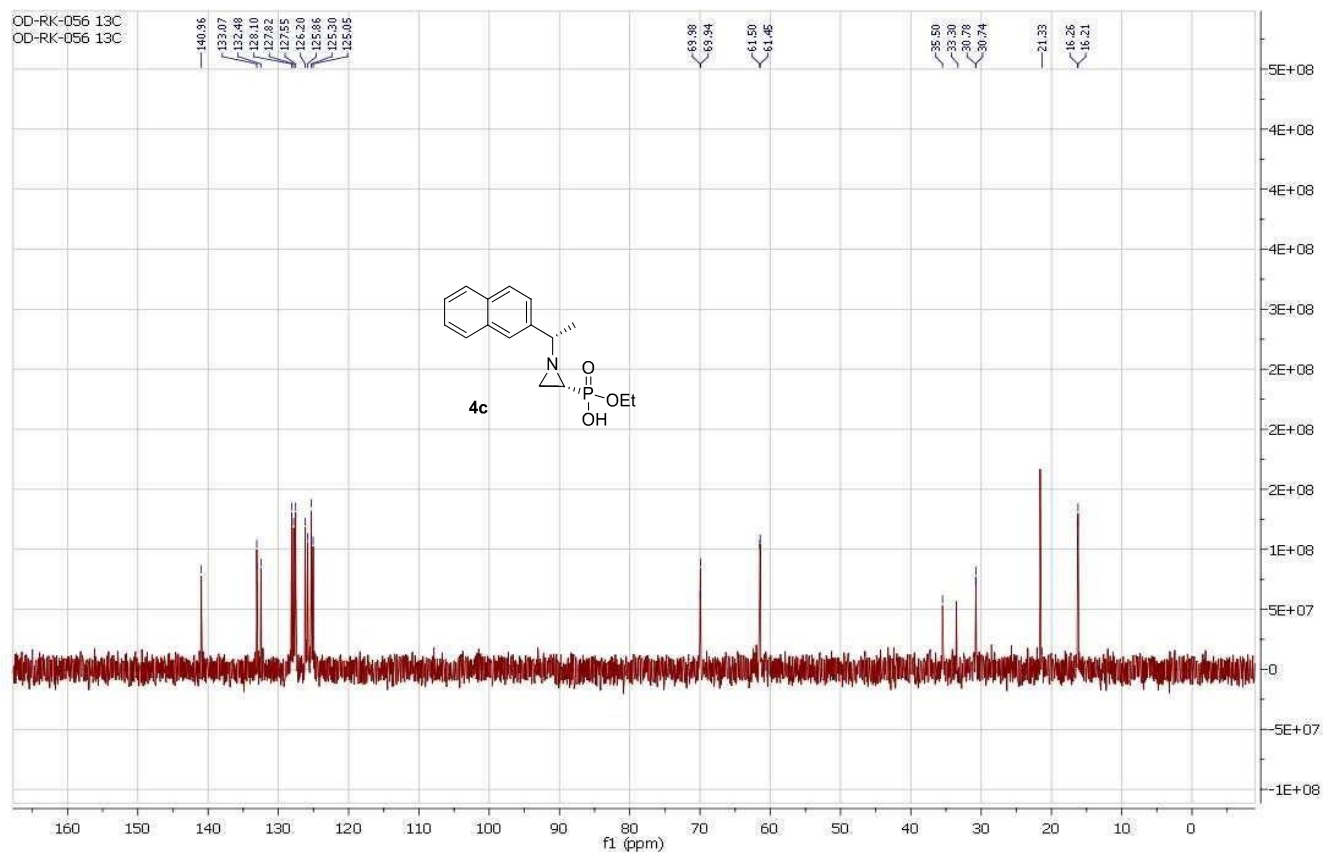


Figure S8: ^{13}C -NMR spectrum of compound **4c**

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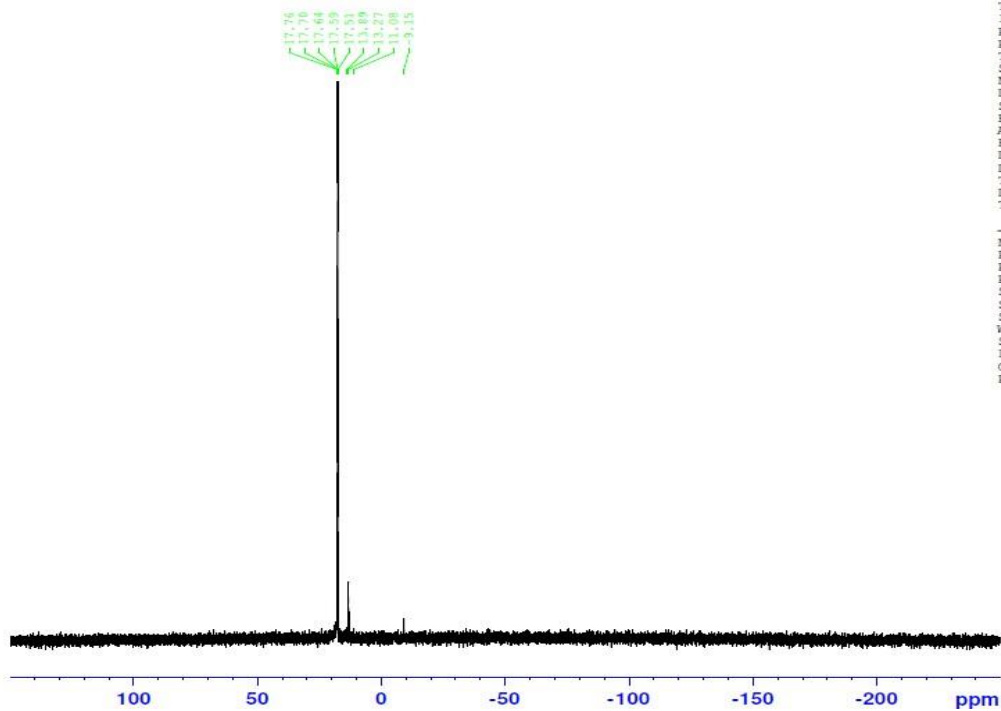


Figure S9: ^{31}P -NMR spectrum of compound **4c**

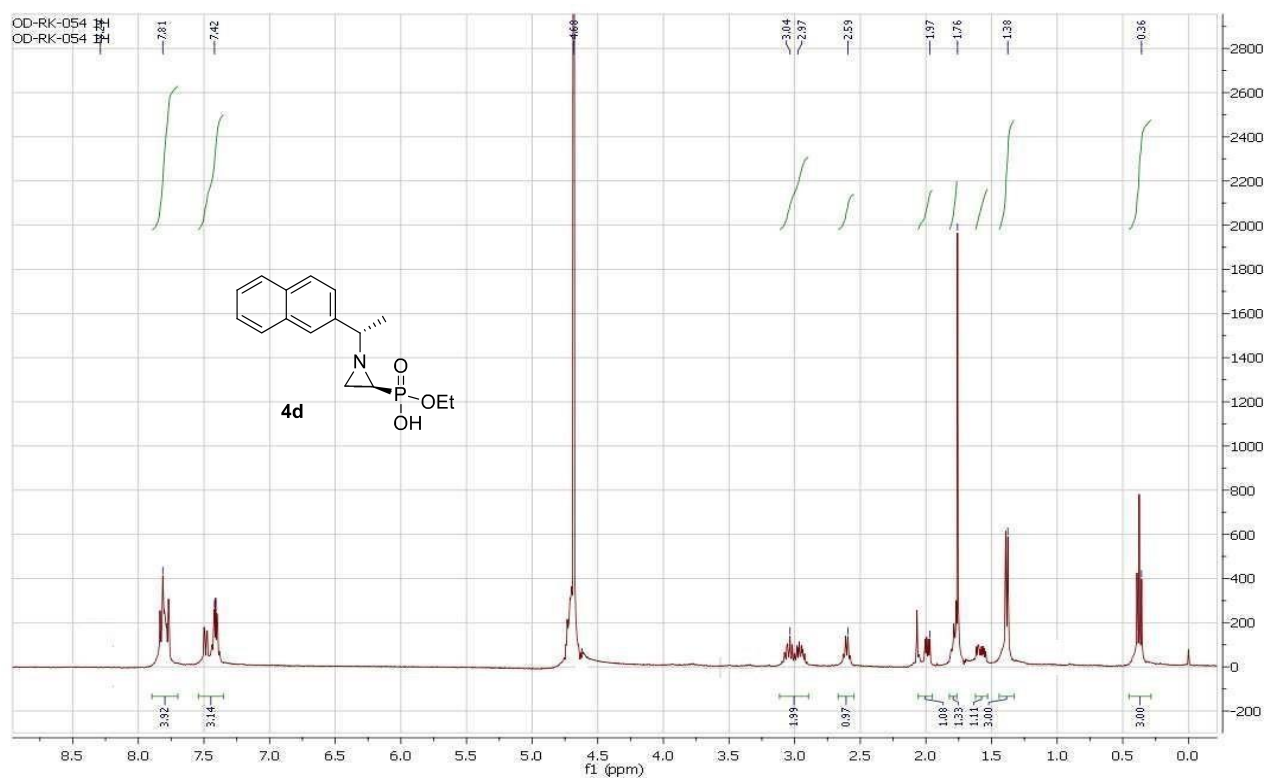


Figure S10: $^1\text{H-NMR}$ spectrum of compound **4d**

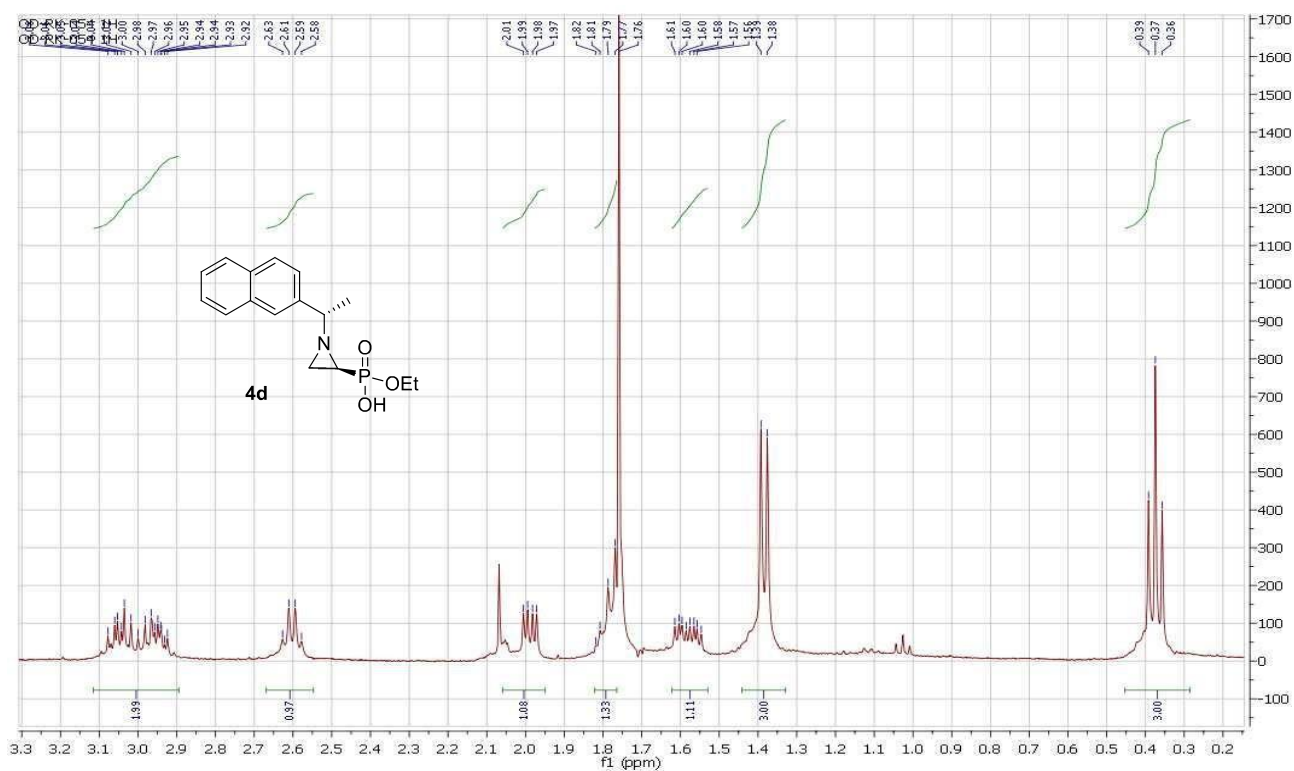


Figure S10a: Expanded region (δ 0.2-3.2) from $^1\text{H-NMR}$ Spectrum of compound **4d**

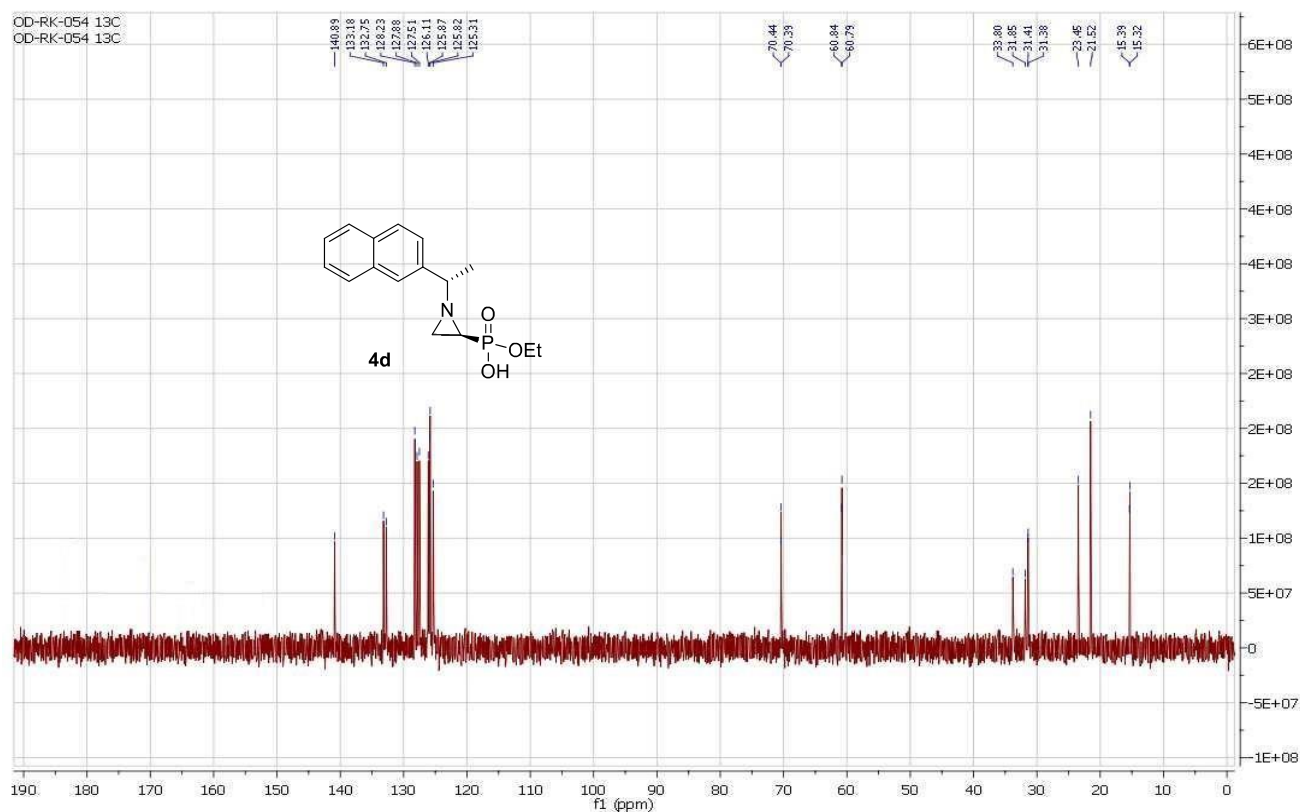


Figure S11: ^{13}C -NMR spectrum of compound 4d

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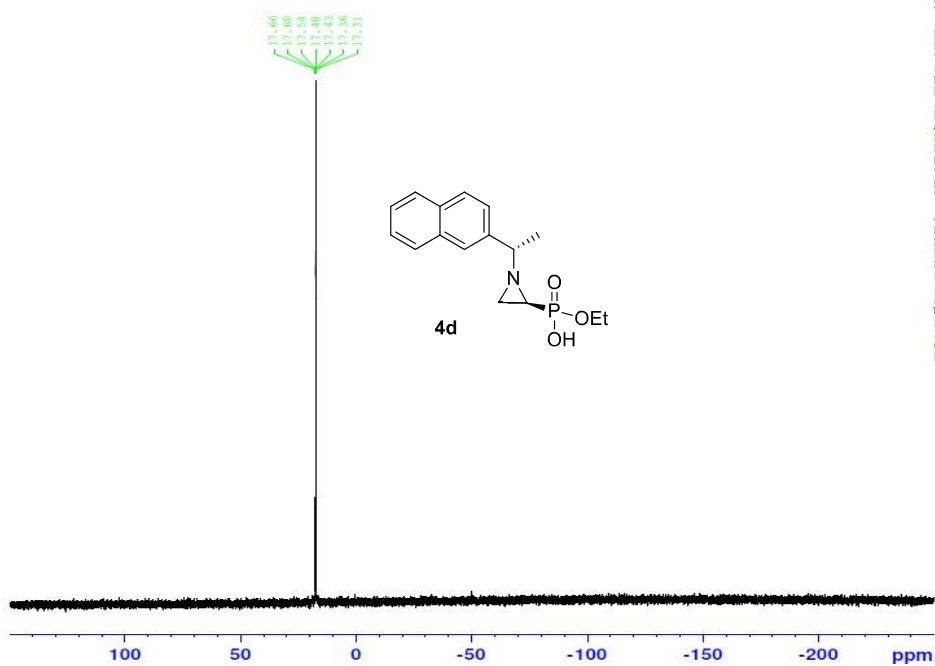


Figure S12: ^{31}P -NMR spectrum of compound 4d

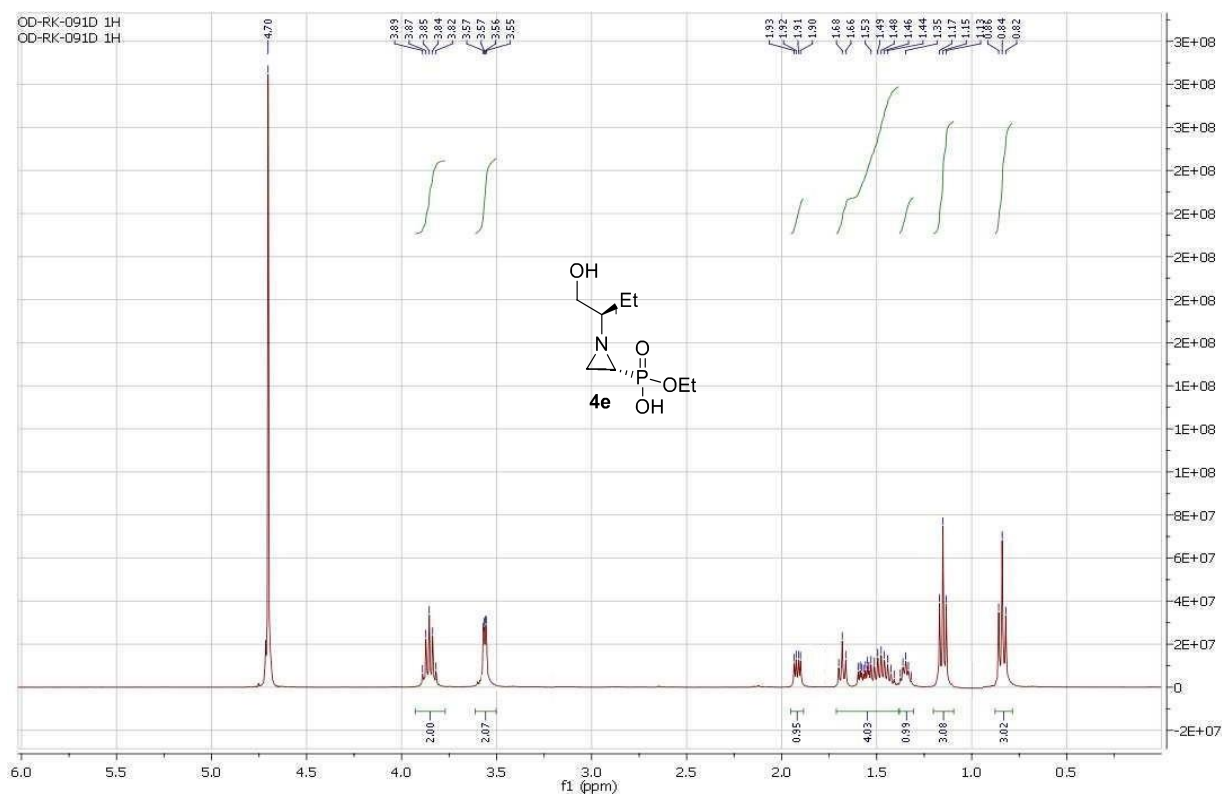


Figure S13: $^1\text{H-NMR}$ spectrum of compound **4e**

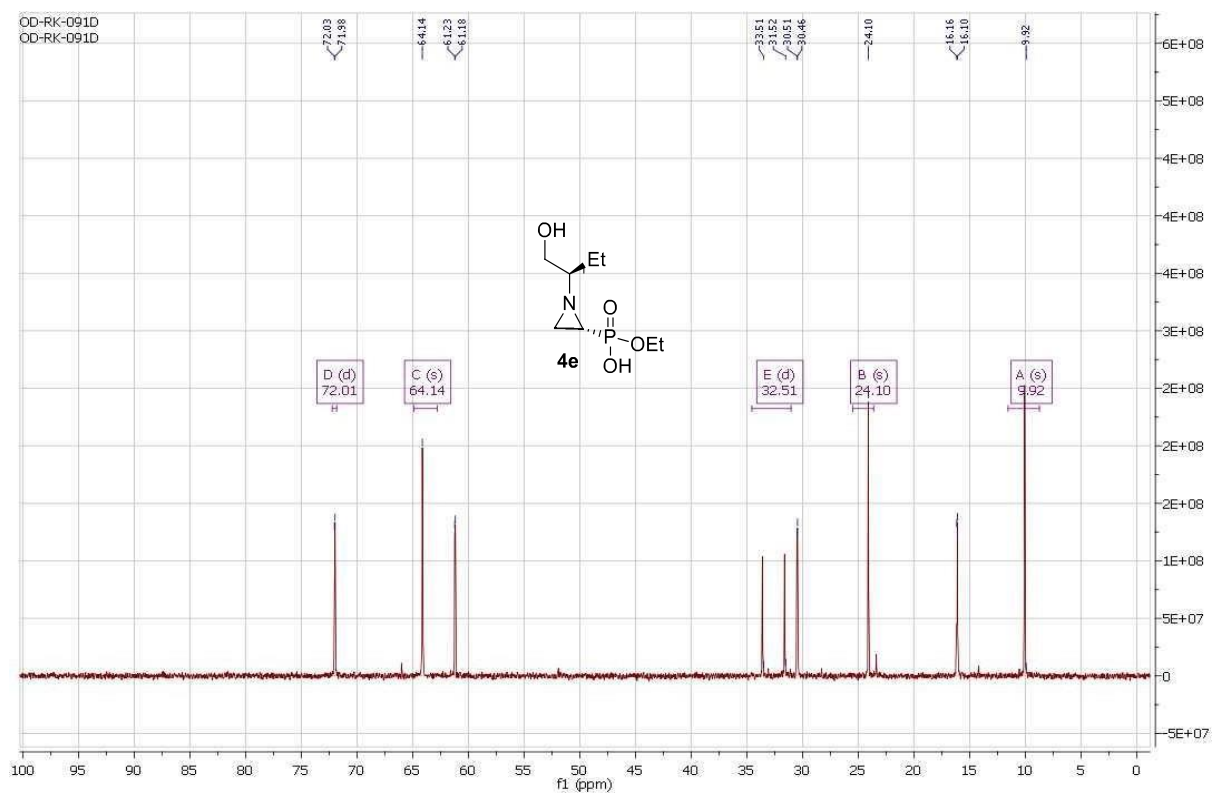


Figure S14: $^{13}\text{C-NMR}$ spectrum of compound **4e**

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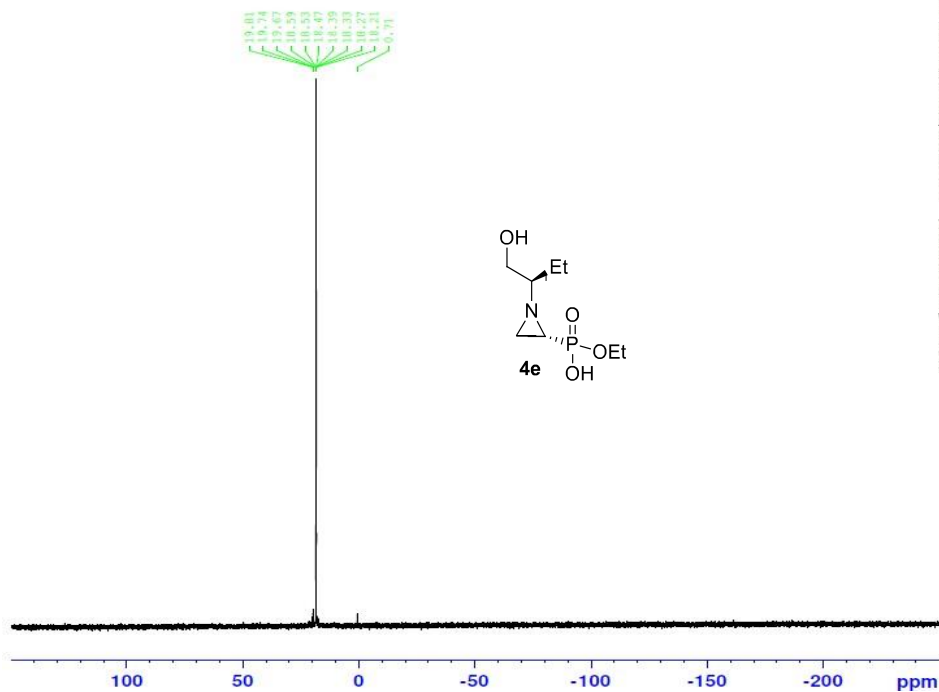


Figure S15: ³¹P-NMR spectrum of compound 4e

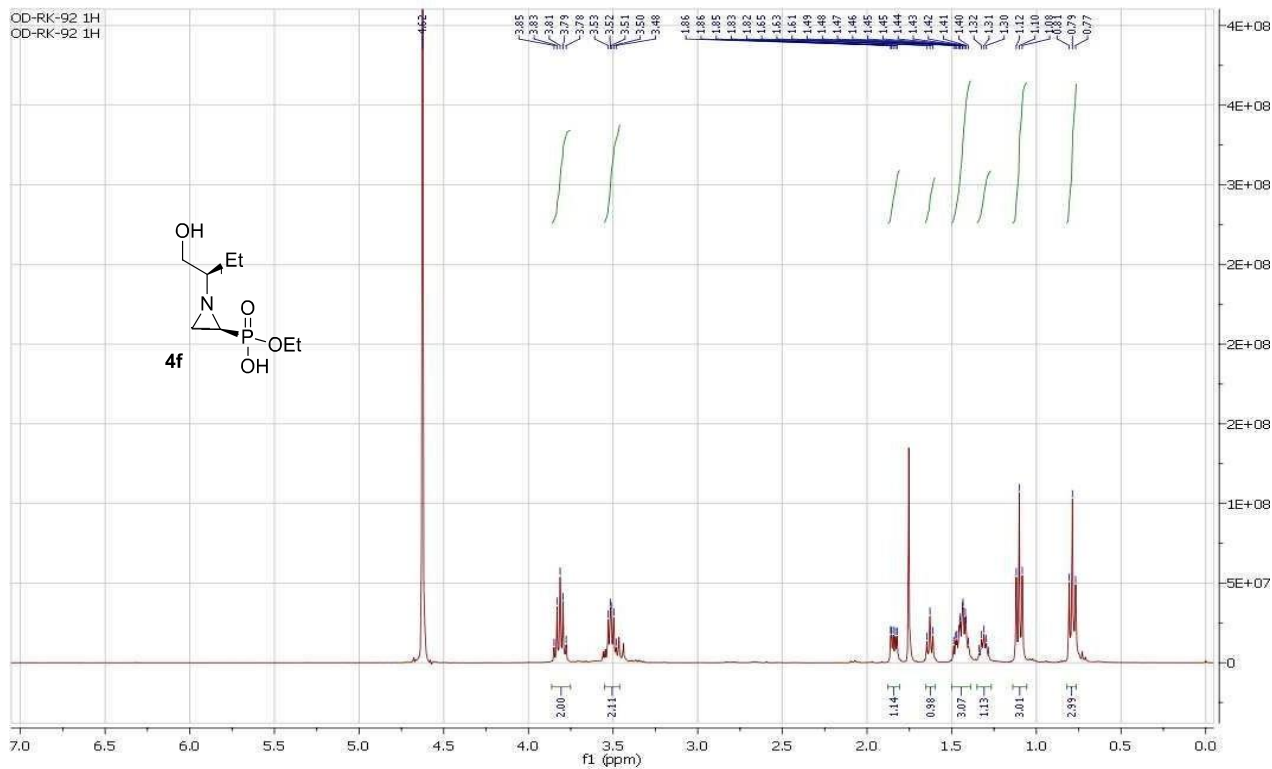


Figure S16: ¹H-NMR spectrum of compound 4f

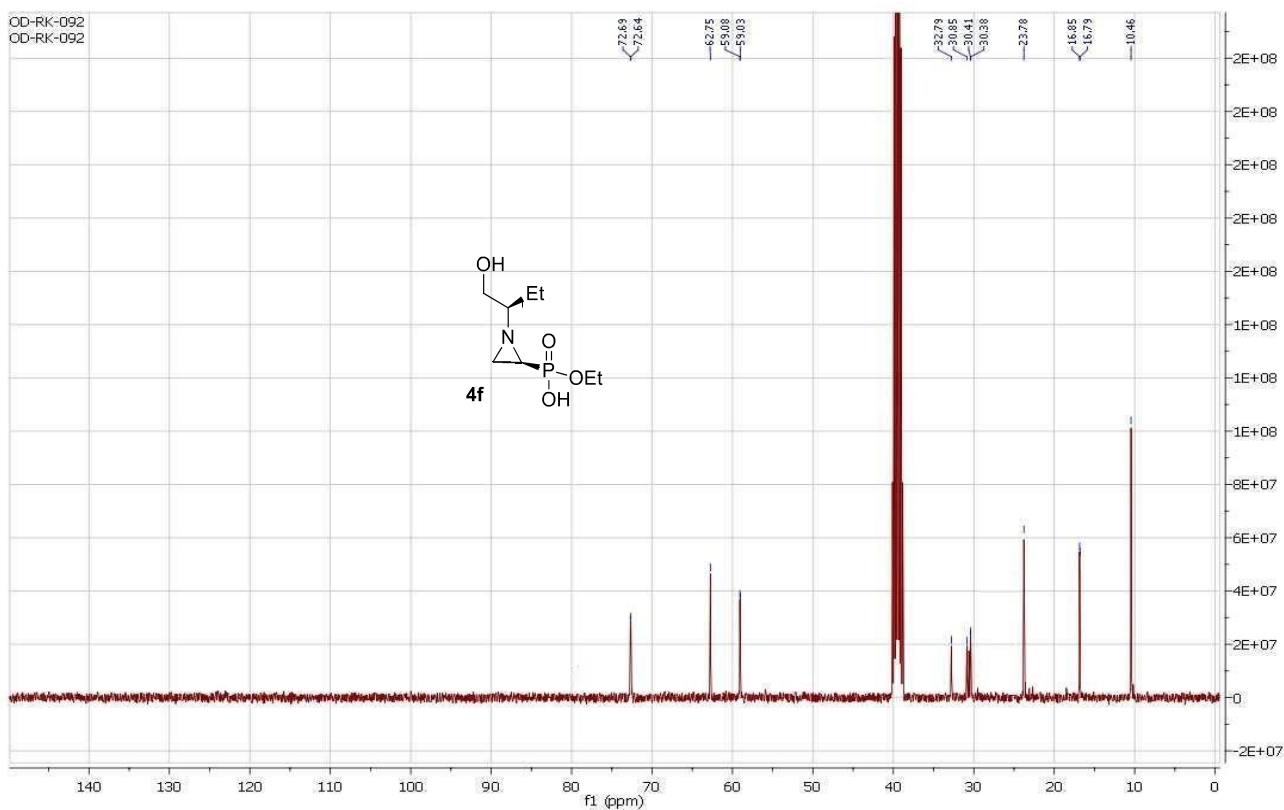


Figure S17: ^{13}C -NMR spectrum of compound **4f**

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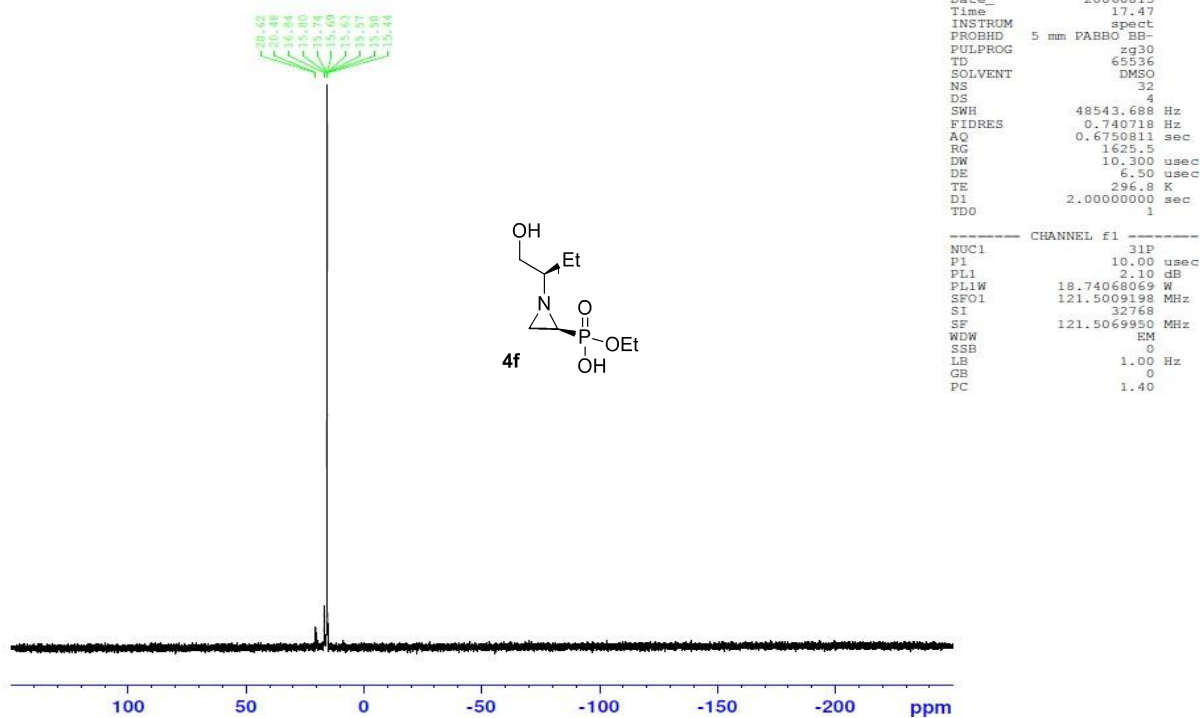


Figure S18: ^{31}P -NMR spectrum of compound **4f**

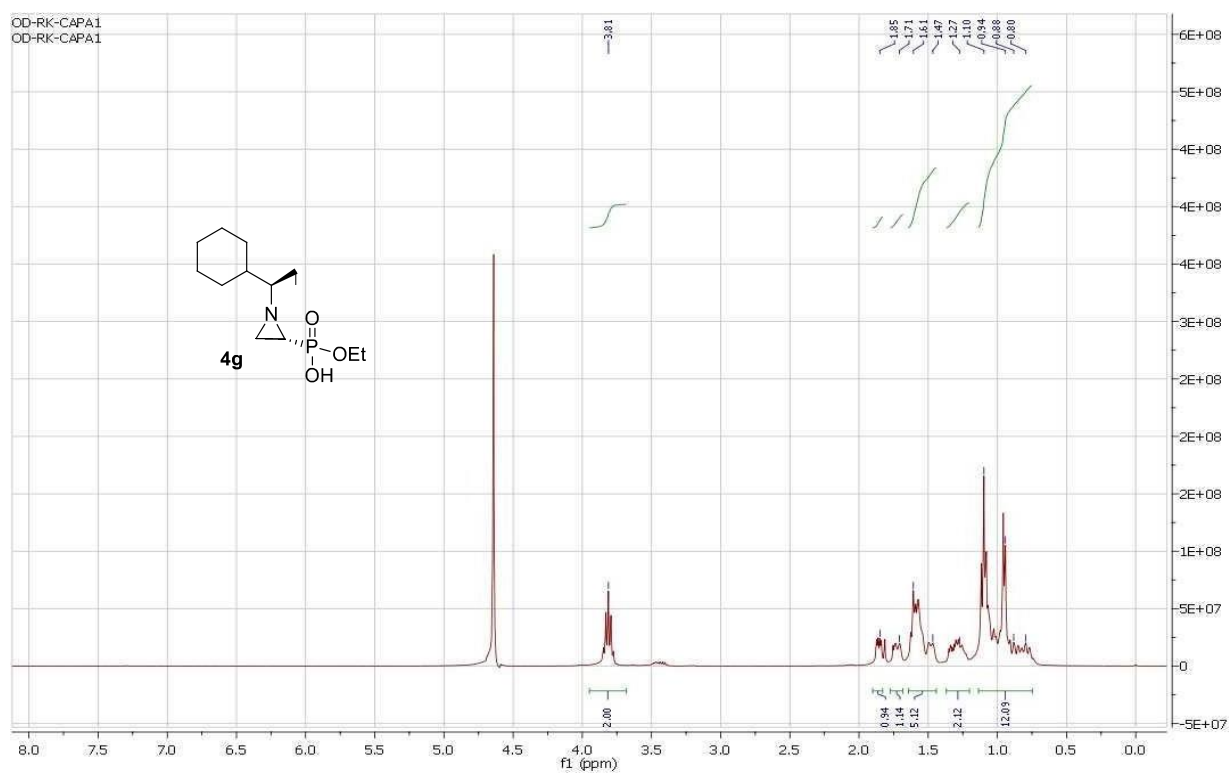


Figure S19: ^1H -NMR spectrum of compound **4g**

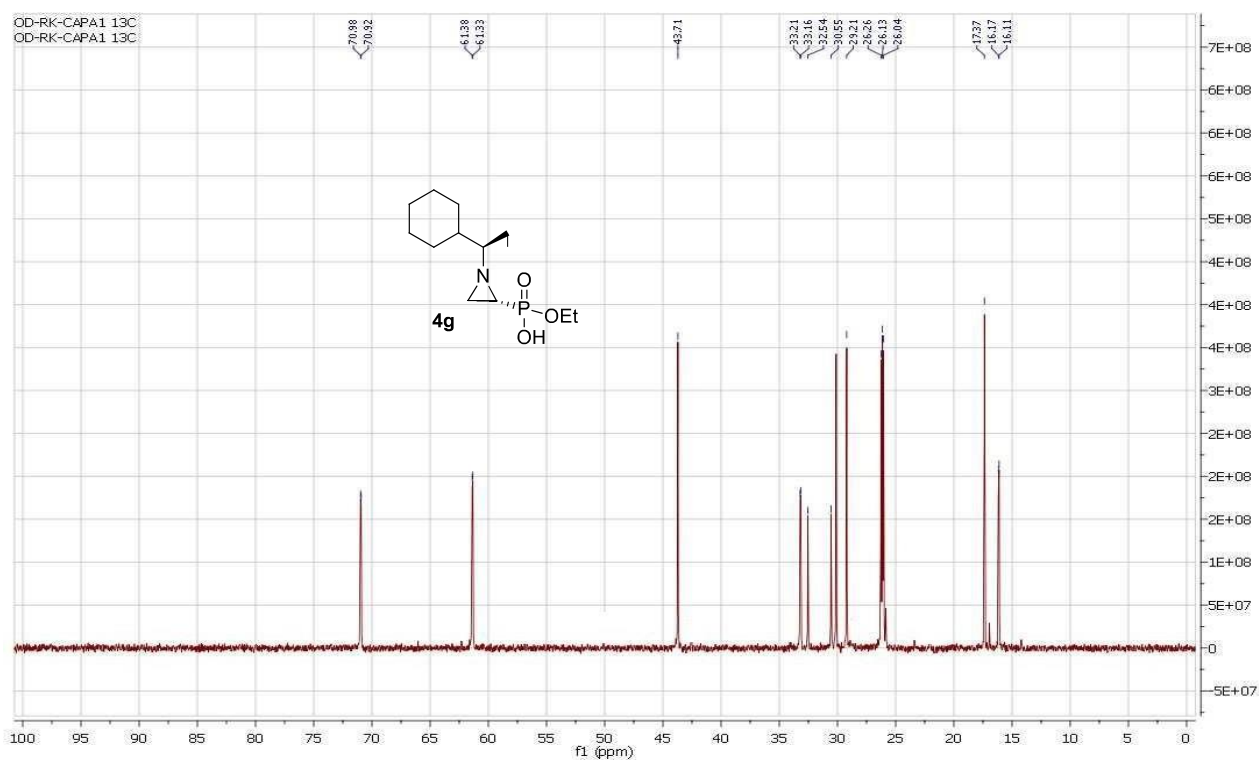
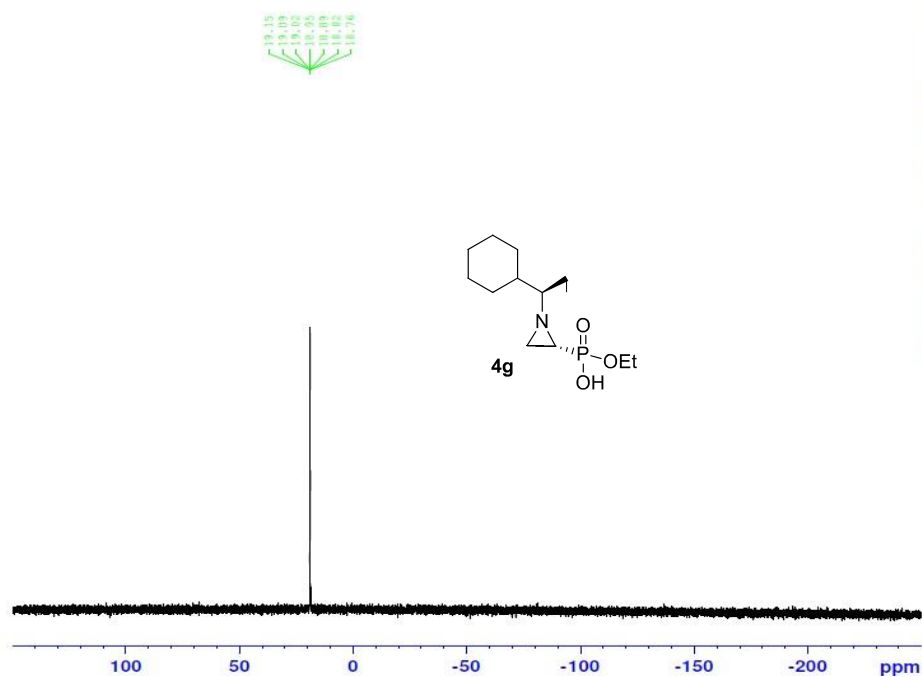


Figure S20: ^{13}C -NMR spectrum of compound **4g**



```

NAME      21081-OD-RK-CAPA1
EXPNO     1
PROCNO    1
Date_     20060815
Time      17.27
INSTRUM   spect
PROBHD    5 mm PABBO BE-
PULPROG   zg30
TD         65536
SOLVENT   D2O
NS         32
DS         4
SWH        48543.688 Hz
FIDRES     0.740718 Hz
AQ         0.6750811 sec
RG         2580.3
DW         10.300 usec
DE         6.50 usec
TE         296.5 K
D1         2.0000000 sec
TDO        1
    
```

```

----- CHANNEL f1 -----
NUC1      31P
P1         10.00 usec
PL1        2.10 dB
PL1W       18.74068069 W
SFO1       121.5009198 MHz
SI         32768
SF         121.5069950 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
    
```

Figure S21: ³¹P-NMR spectrum of compound **4g**

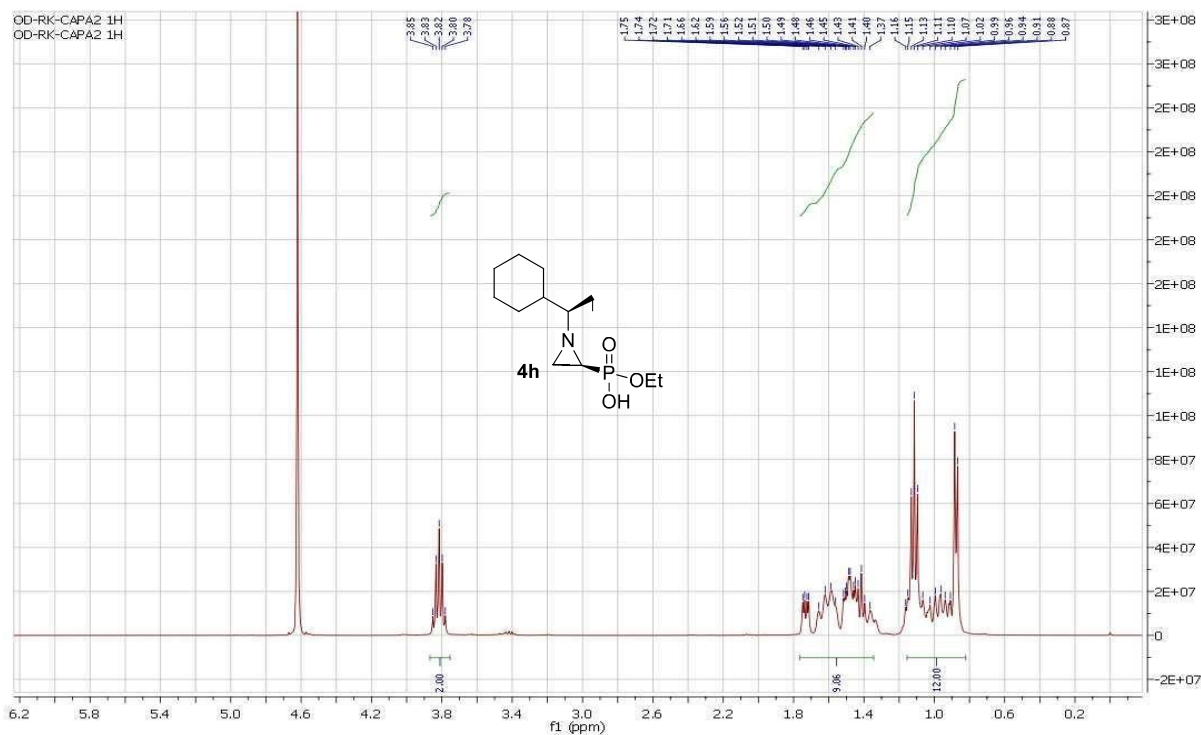


Figure S22: ¹H-NMR spectrum of compound **4h**

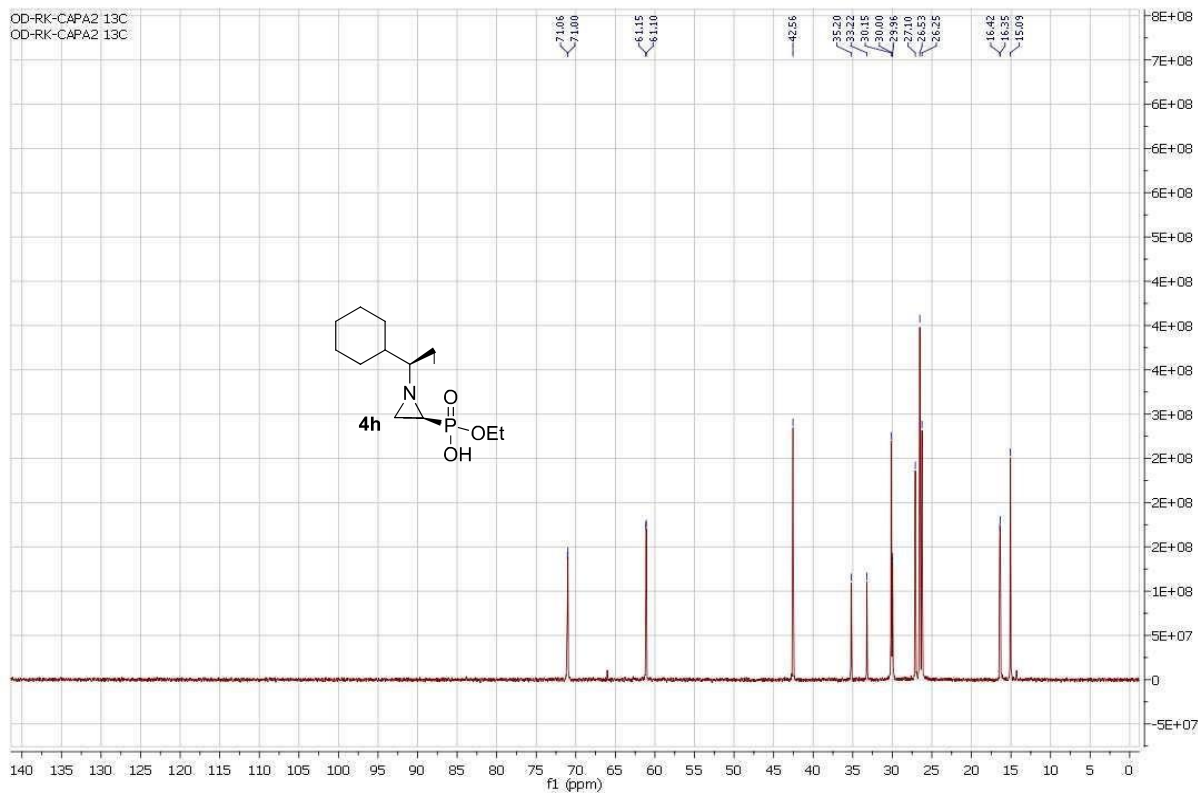


Figure S23: ^{13}C -NMR spectrum of compound 4h

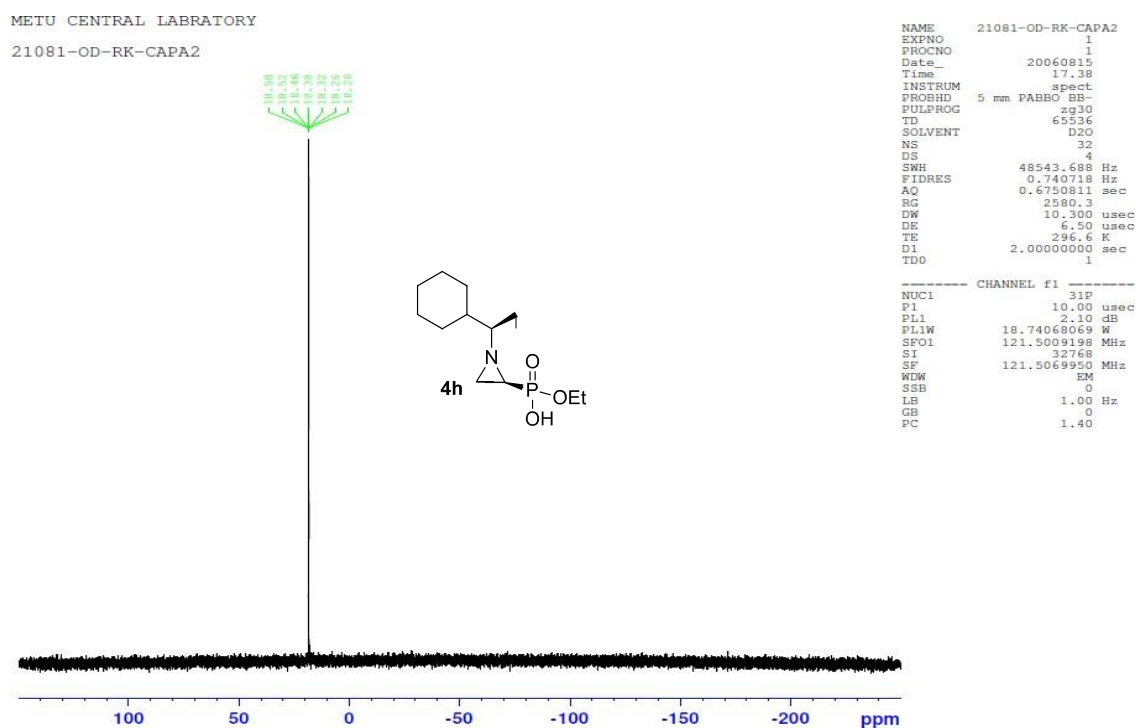


Figure S24: ^{31}P -NMR spectrum of compound 4h

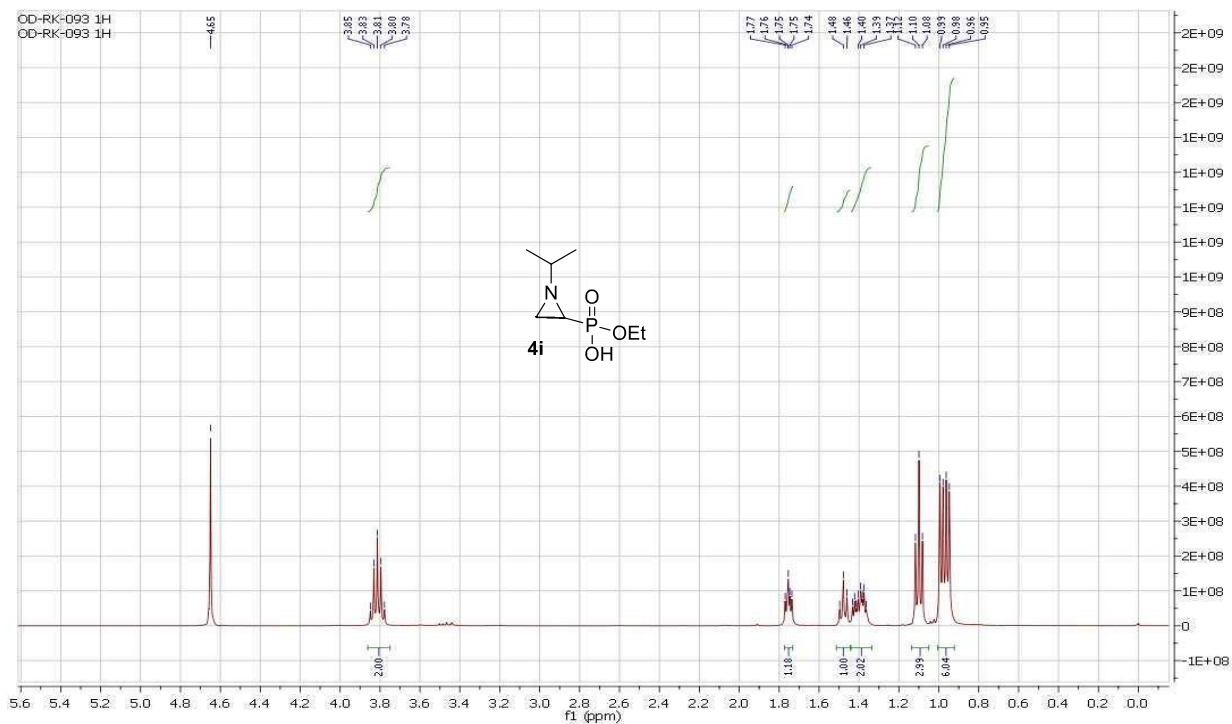


Figure S25: ^1H -NMR spectrum of compound **4i**

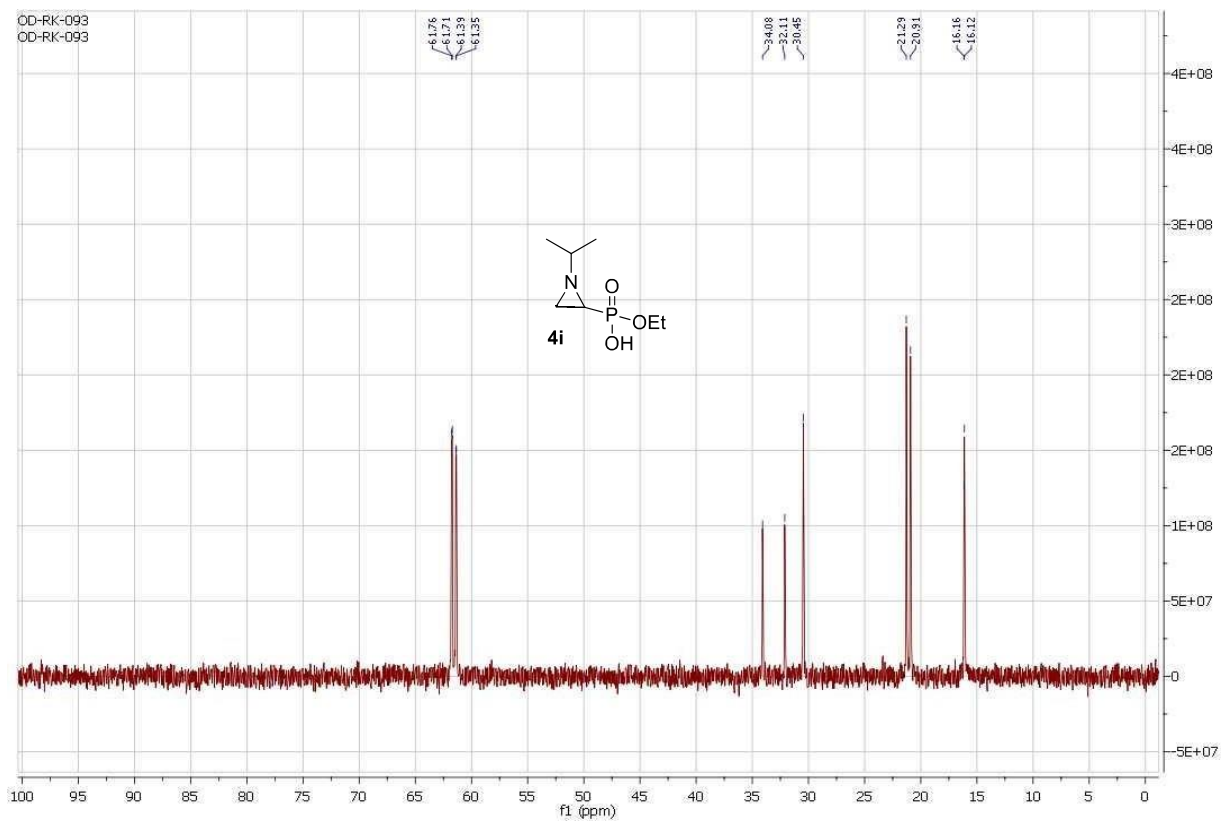
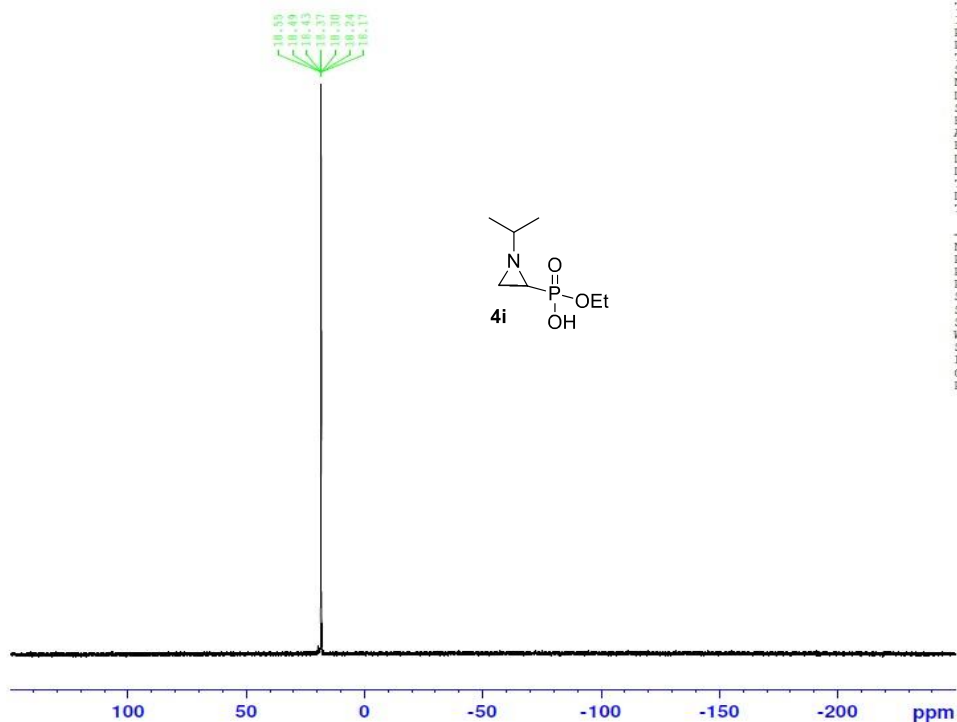


Figure S26: ^{13}C -NMR spectrum of compound **4i**



```

NAME      21081-OD-RK-093
EXPNO    1
PROCNO   1
Date_    20060815
Time     17.18
INSTRUM  spect
PROBHD   5 mm PABBO BB-
PULPROG  zg30
TD       65536
SOLVENT  D2O
NS       32
DS       4
SWH      48543.688 Hz
FIDRES   0.740718 Hz
AQ       0.6750811 sec
RG       2580.3
DW       10.300 usec
DE       6.50 usec
TE       296.3 K
D1       2.0000000 sec
TDO      1

----- CHANNEL f1 -----
NUC1     31P
P1       10.00 usec
PL1      2.10 dB
PL1W     18.74068069 W
SFO1     121.5009198 MHz
SI       32768
SF       121.5069950 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
```

Figure S27: ³¹P-NMR spectrum of compound **4i**

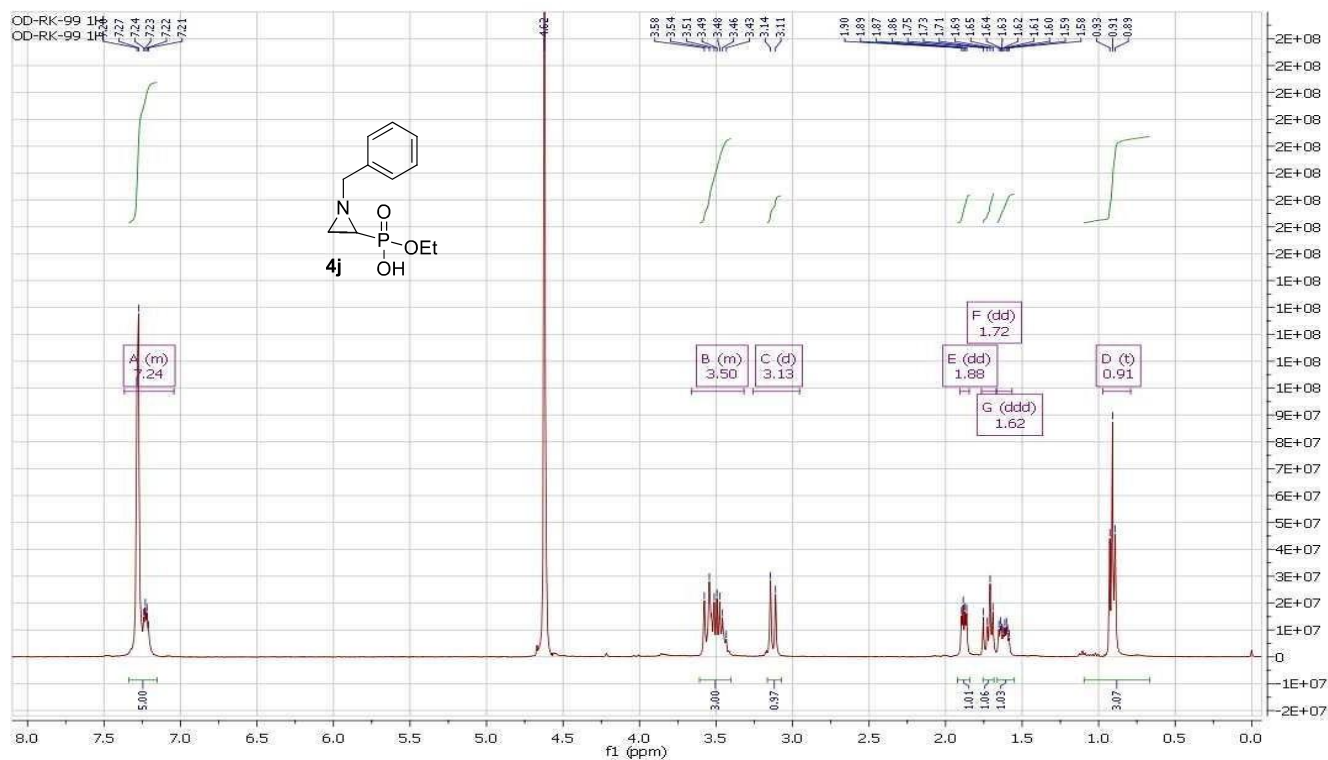


Figure S28: ¹H-NMR spectrum of compound **4j**

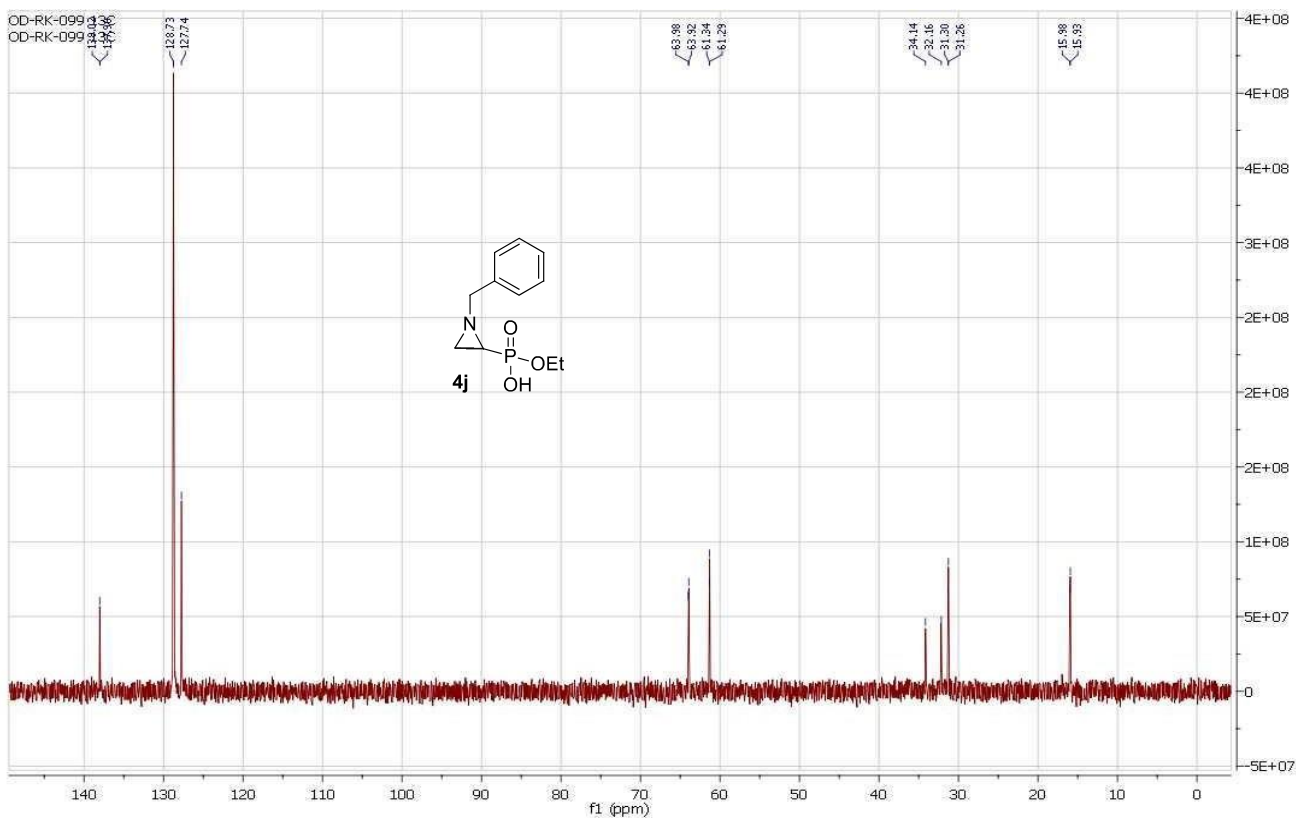


Figure S29: ^{13}C -NMR spectrum of compound **4j**

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21081-OD-RK-099

18.03
18.03
17.97
17.90
17.83
17.77
17.71

NAME 21081-OD-RK-099
EXPNO 1
PROCNO 1
Date_ 20060915
Time 16.08
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 32
DS 4
SWH 48543.688 Hz
FIDRES 0.740718 Hz
AQ 0.6750811 sec
RG 4096
DW 10.300 usec
DE 6.50 usec
TE 294.8 K
D1 2.0000000 sec
TDO 1

----- CHANNEL f1 -----
NUC1 31P
P1 10.00 usec
PL1 2.10 dB
PL1W 18.74068069 W
SF01 121.5009198 MHz
SI 32768
SF 121.5069950 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

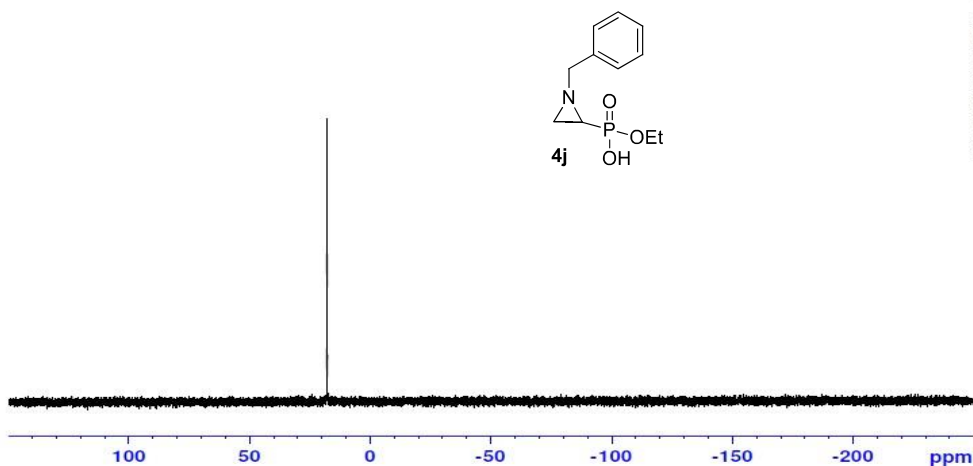


Figure S30: ^{31}P -NMR spectrum of compound **4j**

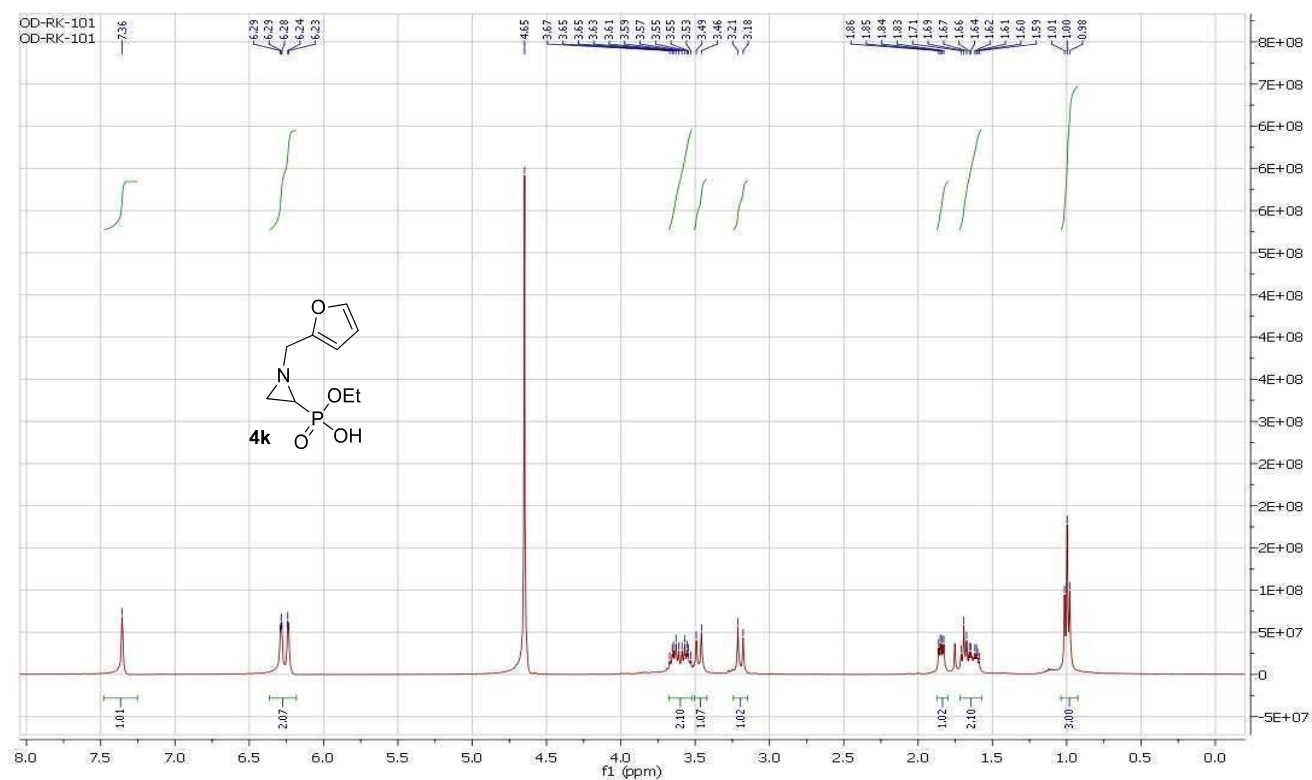


Figure S31: $^1\text{H-NMR}$ spectrum of compound **4k**

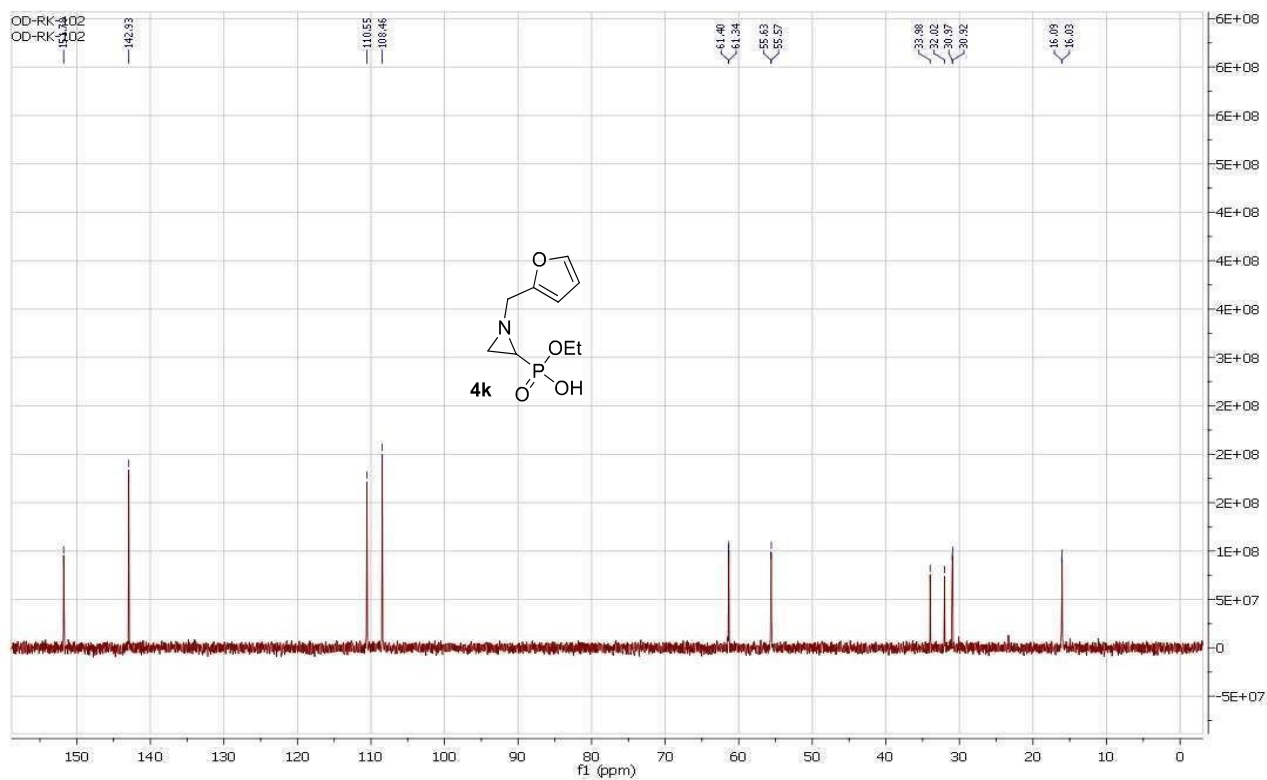
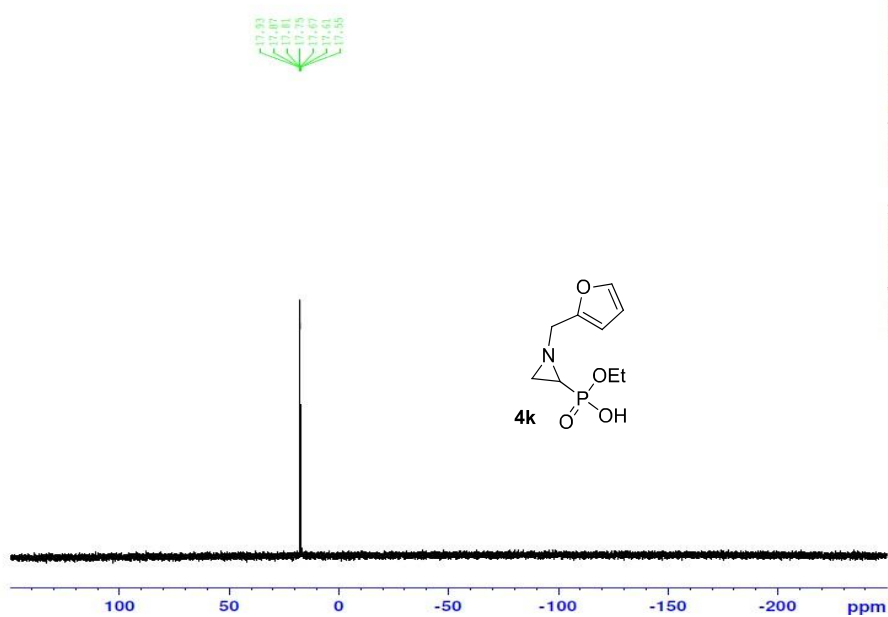


Figure S32: $^{13}\text{C-NMR}$ spectrum of compound **4k**

METU CENTRAL LABORATORY
21081-OD-RK-102



```
NAME 21081-OD-RK-102
EXPNO 1
PROCNO 1
Date_ 20060815
Time 16.40
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 32
DS 4
SWH 48543.688 Hz
FIDRES 0.740718 Hz
AQ 0.6750811 sec
RG 2580.3
DW 10.300 usec
DE 6.50 usec
TE 295.5 K
DL 2.0000000 sec
TDO 1

----- CHANNEL f1 -----
NUC1 31P
PI 10.00 usec
PL1 2.10 dB
PL1W 18.74068069 W
SFOL 121.5009198 MHz
SI 32768
SF 121.5069950 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
```

Figure S33: ^{31}P -NMR spectrum of compound **4k**

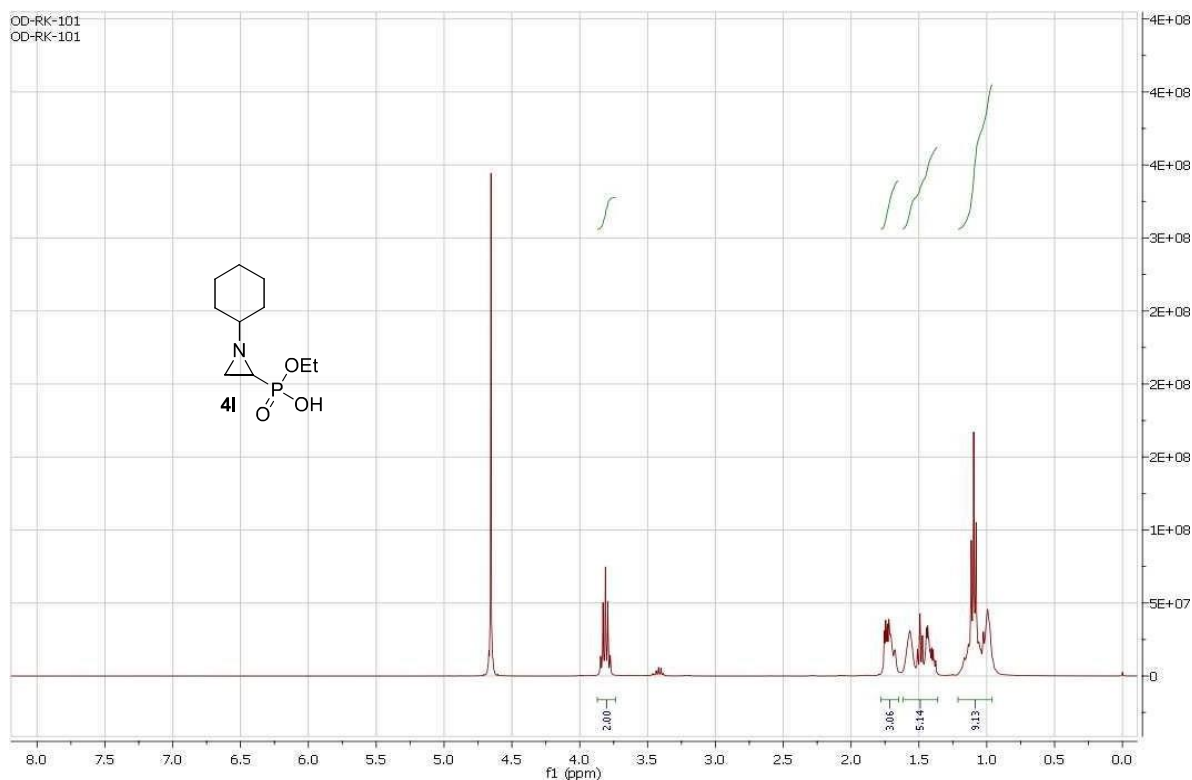


Figure S34: ^1H -NMR spectrum of compound **4l**

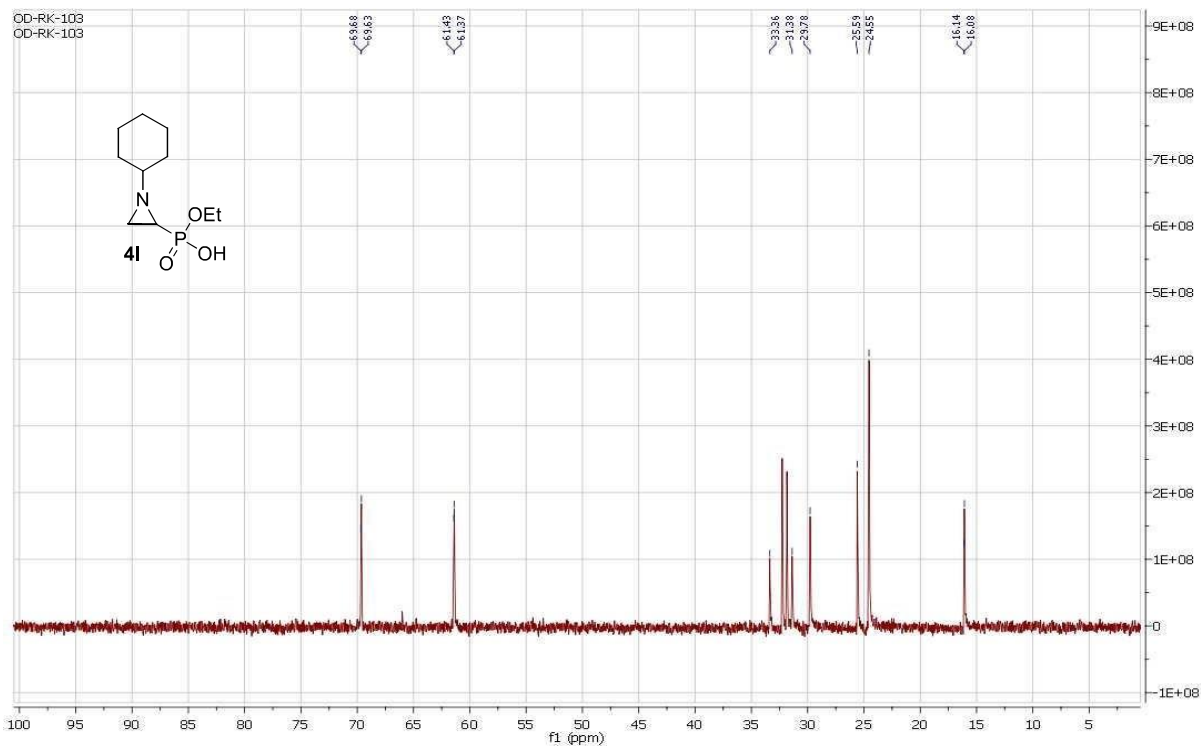


Figure S35: ^{13}C -NMR spectrum of compound **4I**

METU CENTRAL LABORATORY
21081-OD-RK-103

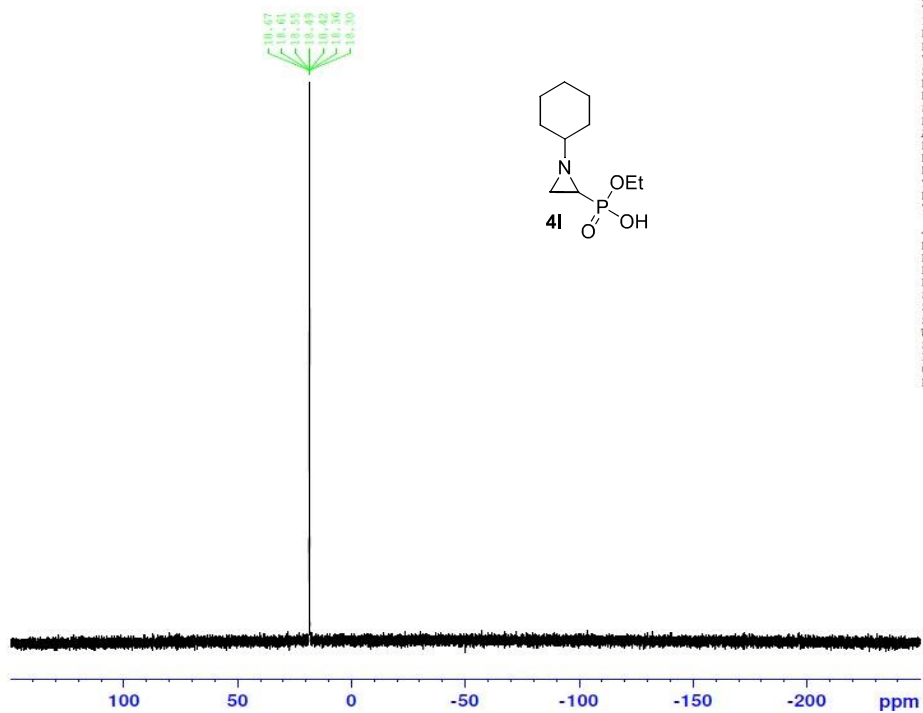


Figure S36: ^{31}P -NMR spectrum of compound **4I**