

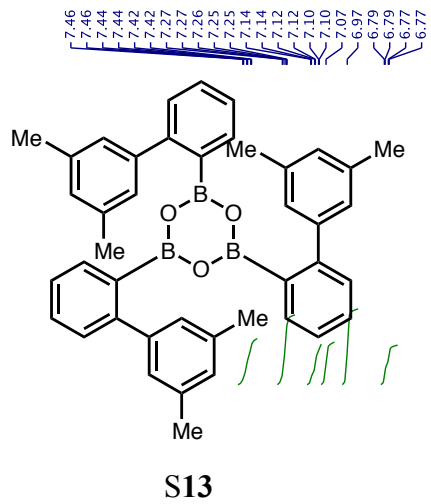
# **Intramolecular Chirality Transfer [2+2] Cycloadditions of Allenates and Alkenes**

Yao Xu<sup>§</sup>, Young J. Hong<sup>#</sup>, Dean J. Tantillo<sup>#</sup> and M. Kevin Brown<sup>§\*</sup>

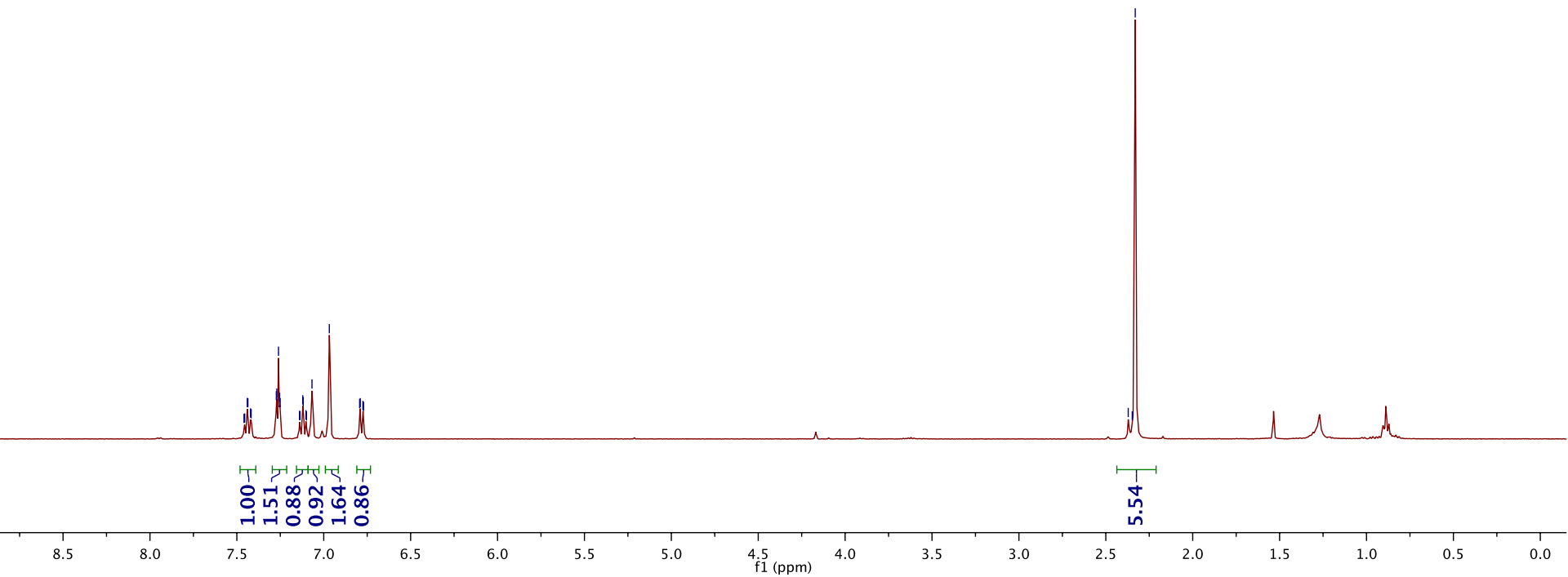
*<sup>§</sup>Indiana University Bloomington, Department of Chemistry, 800 E.  
Kirkwood Ave., Bloomington, IN 47405*

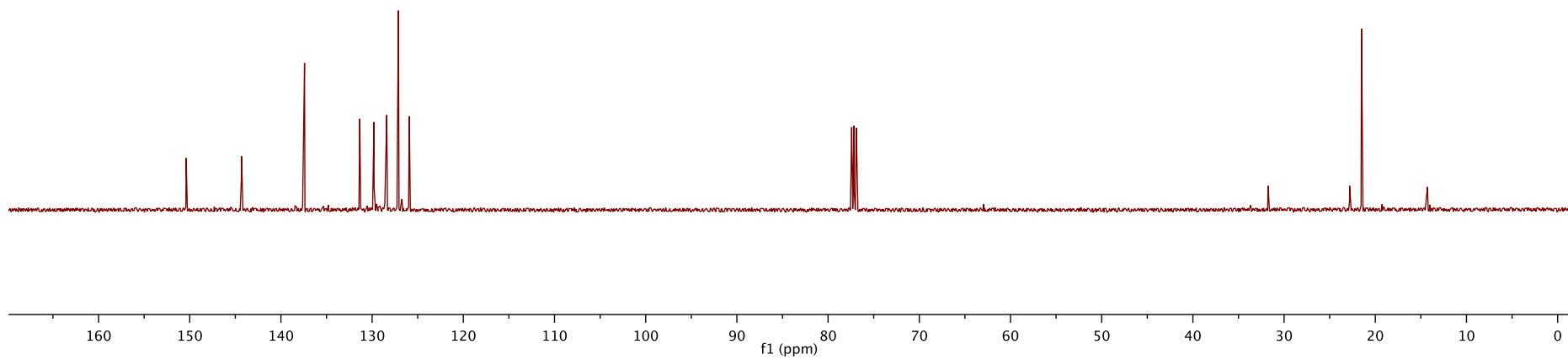
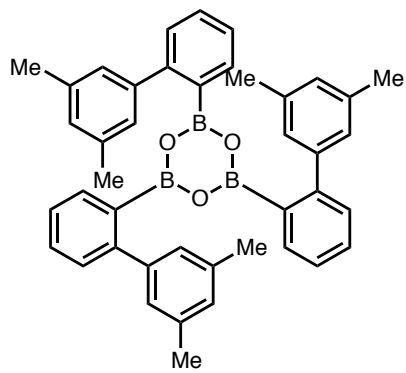
*<sup>#</sup>University of California, Davis, Department of Chemistry, 1 Shields  
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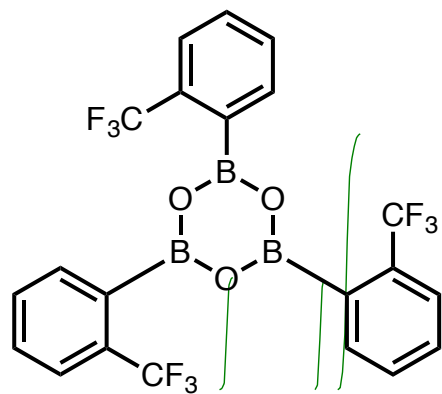
**SUPPORTING INFORMATION: PART B**



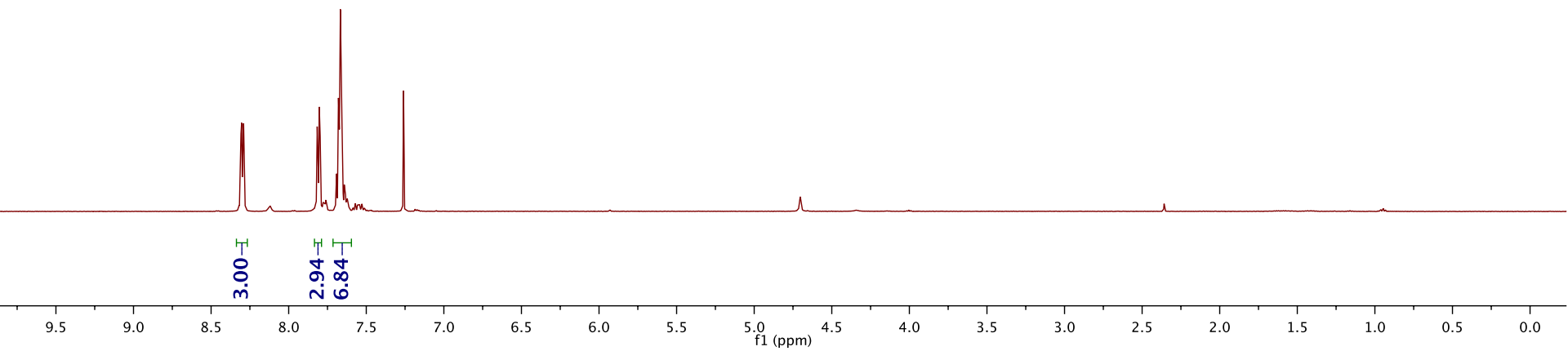
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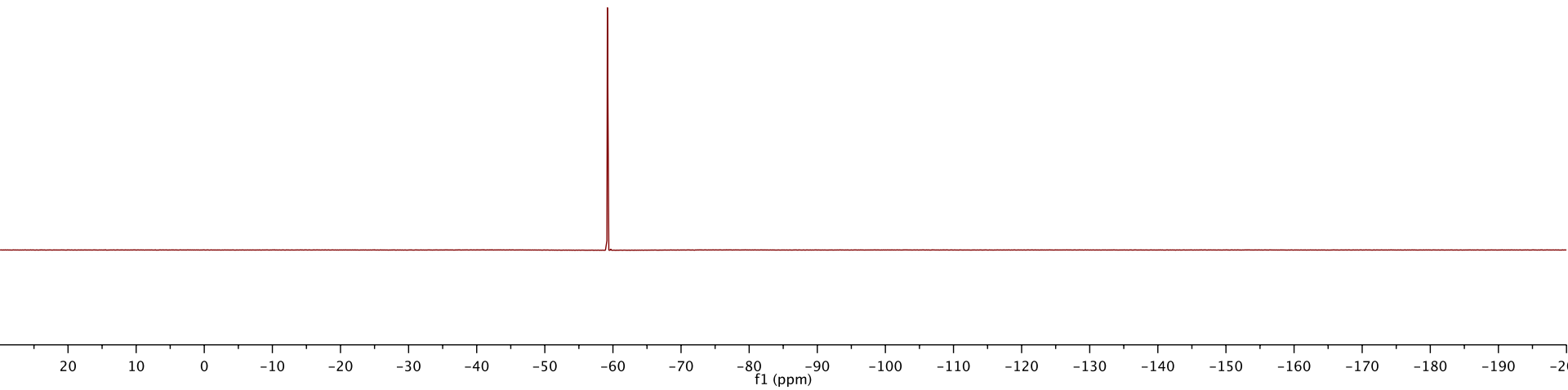
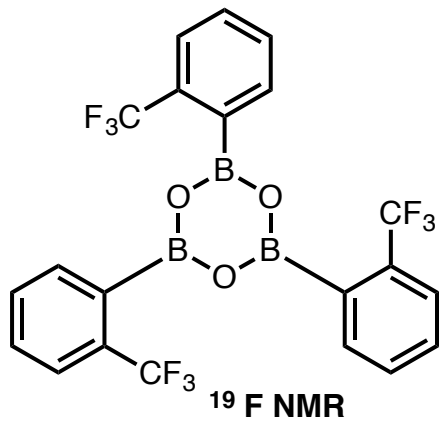


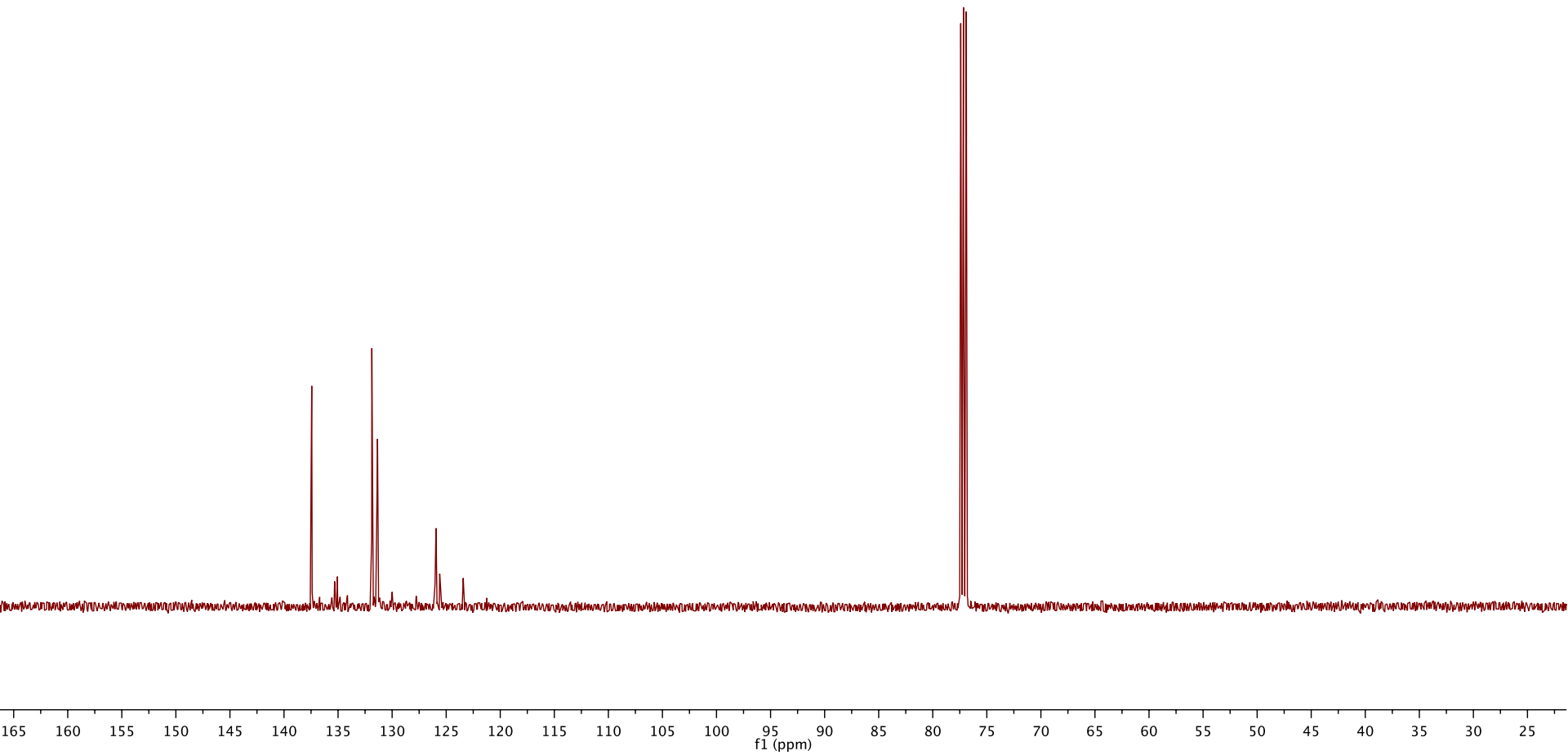
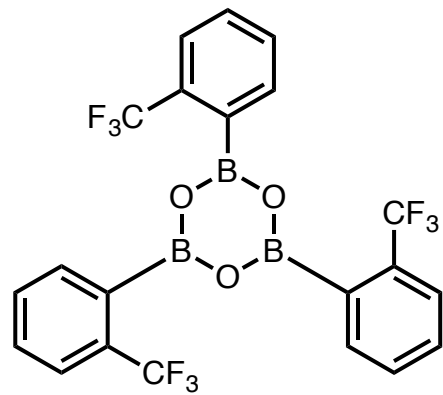


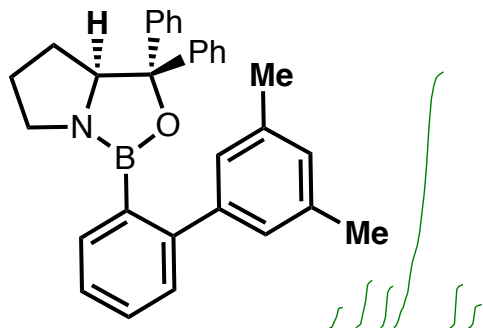


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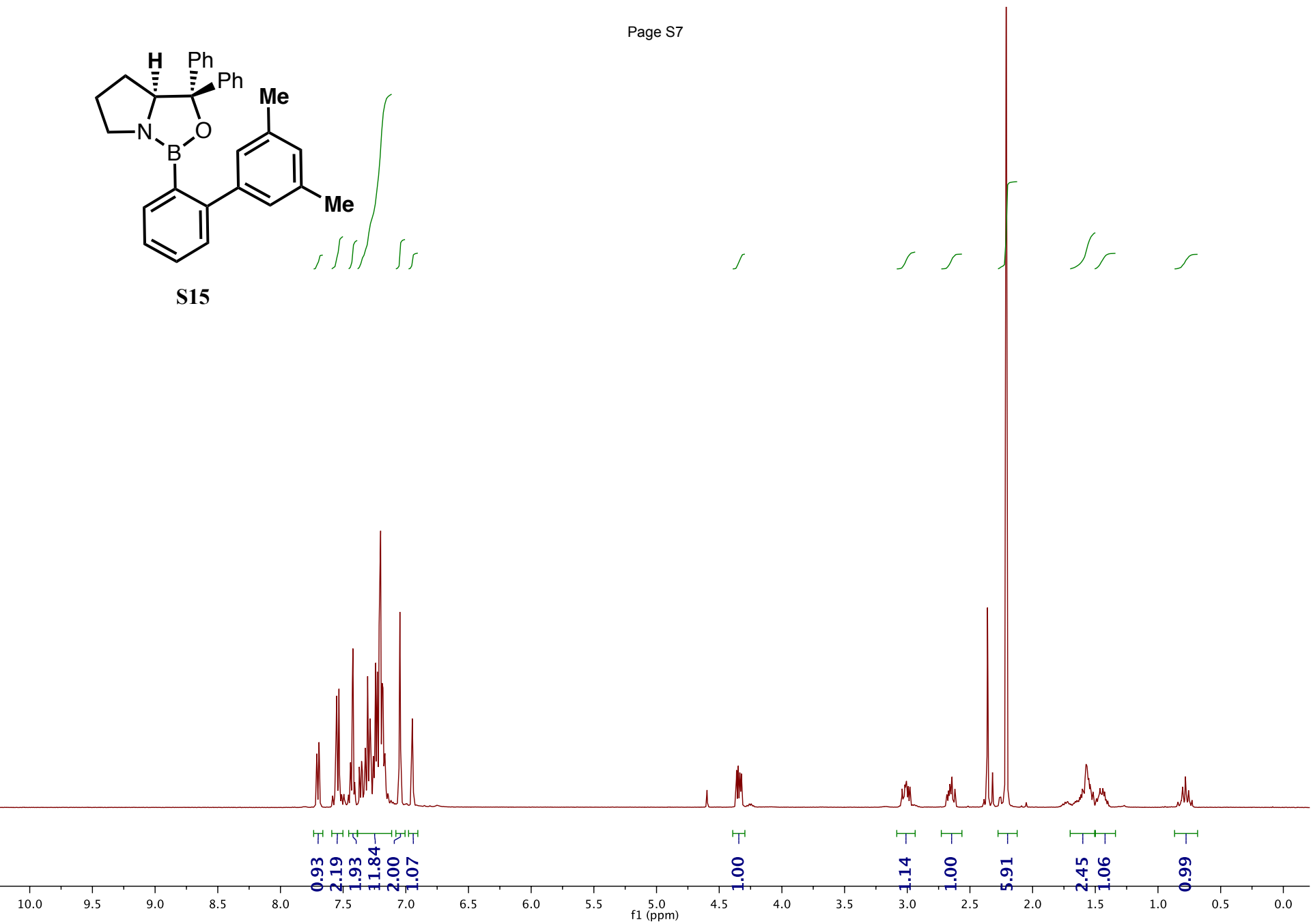


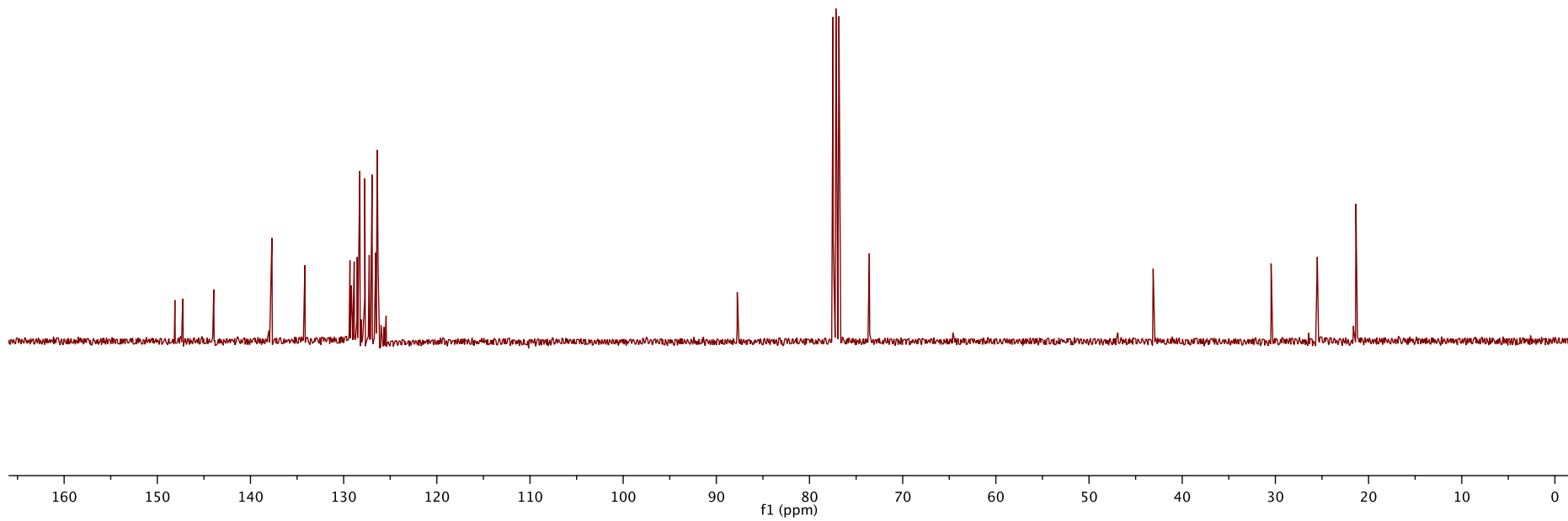
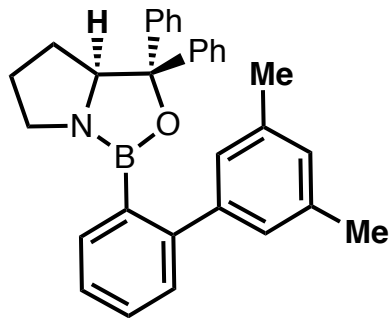




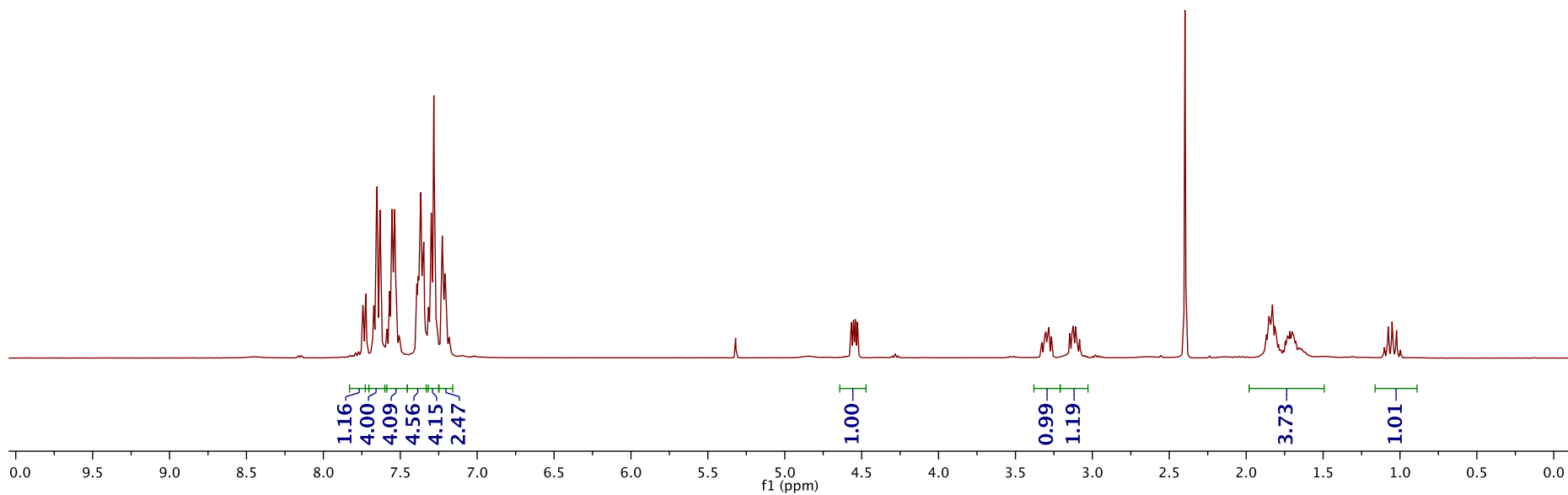
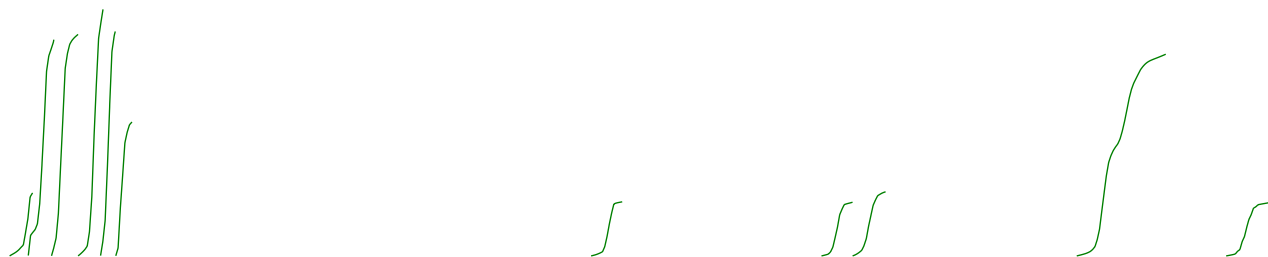
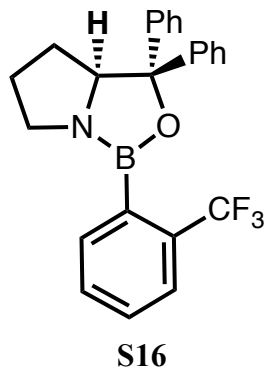


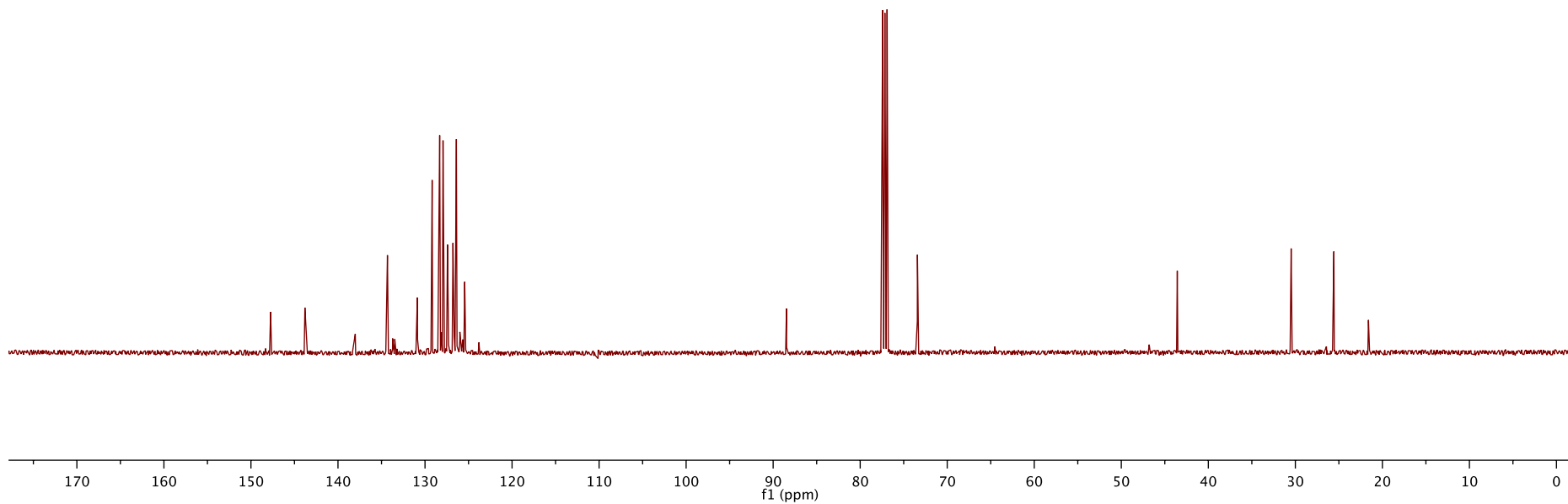
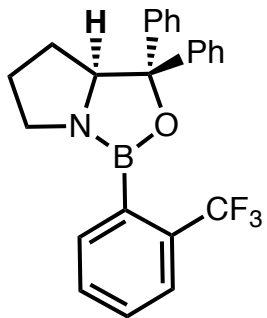
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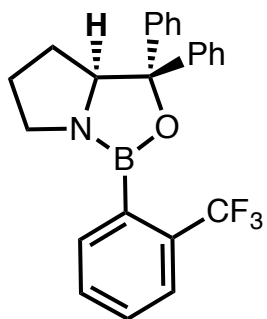




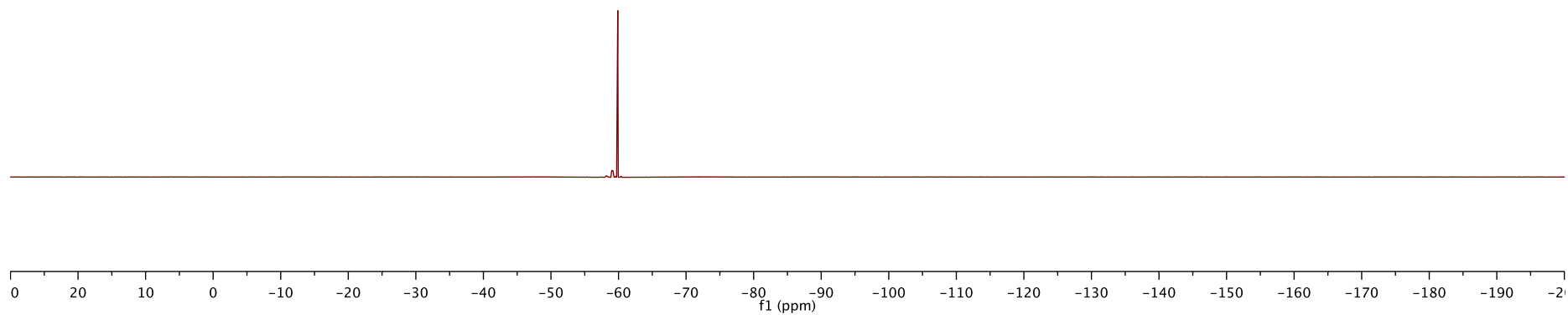


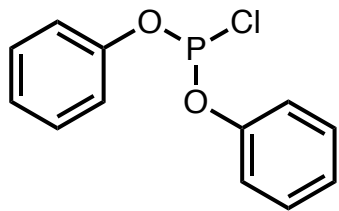




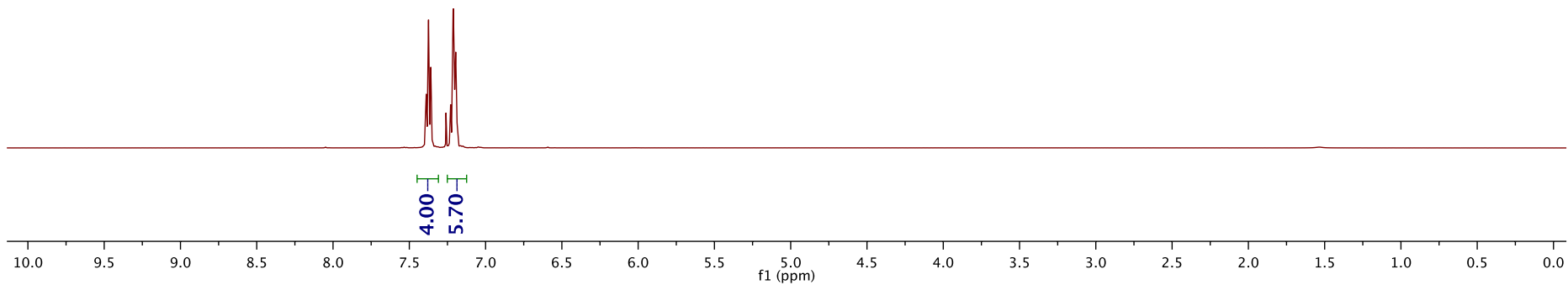
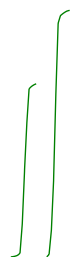


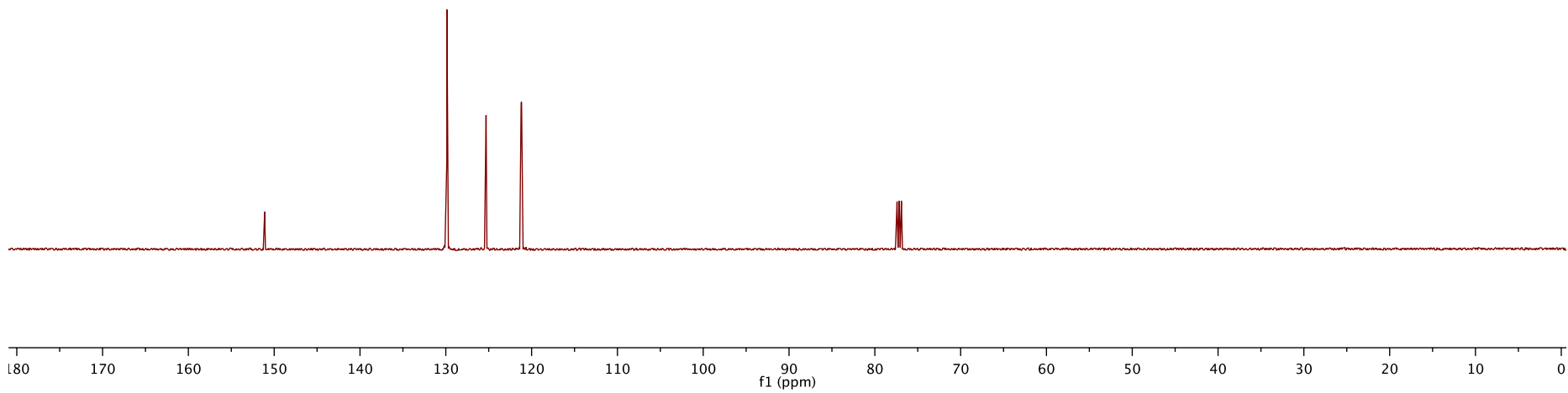
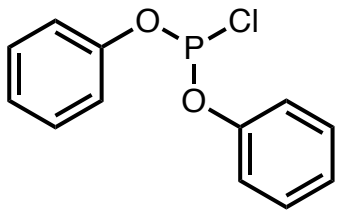
**<sup>19</sup>F NMR**

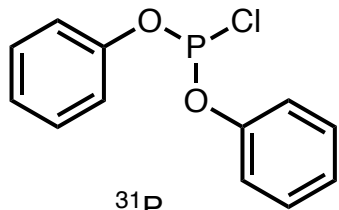




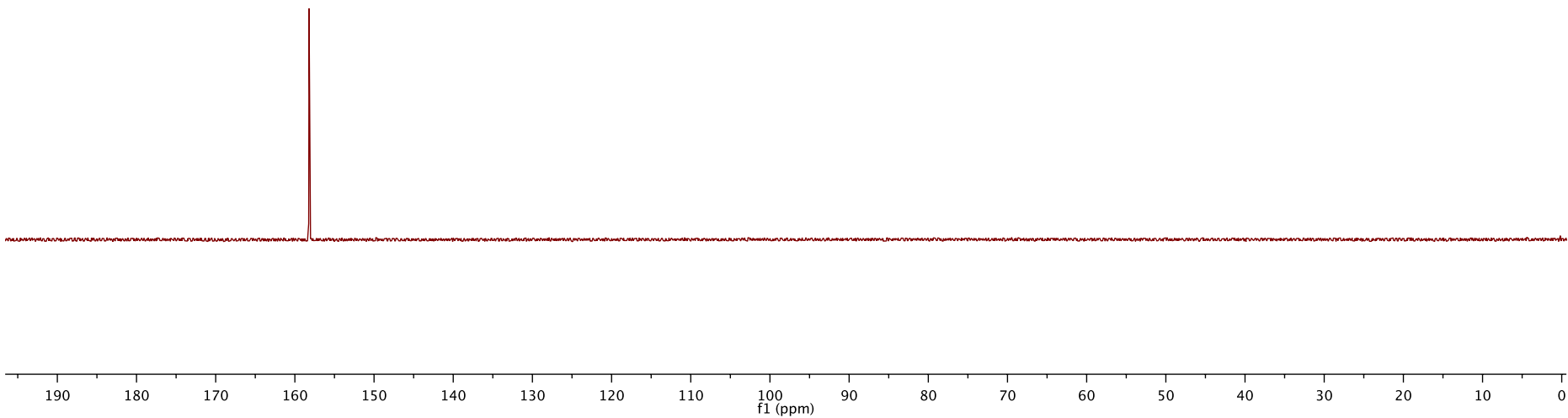
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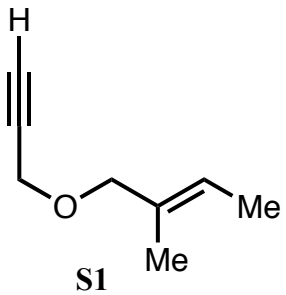






$^{31}\text{P}$





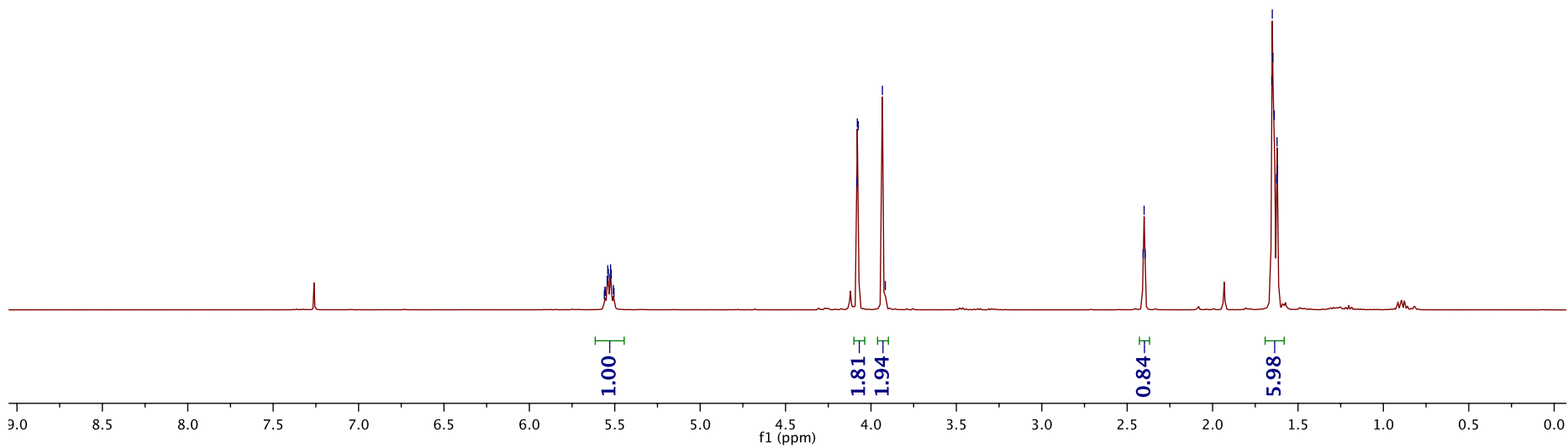
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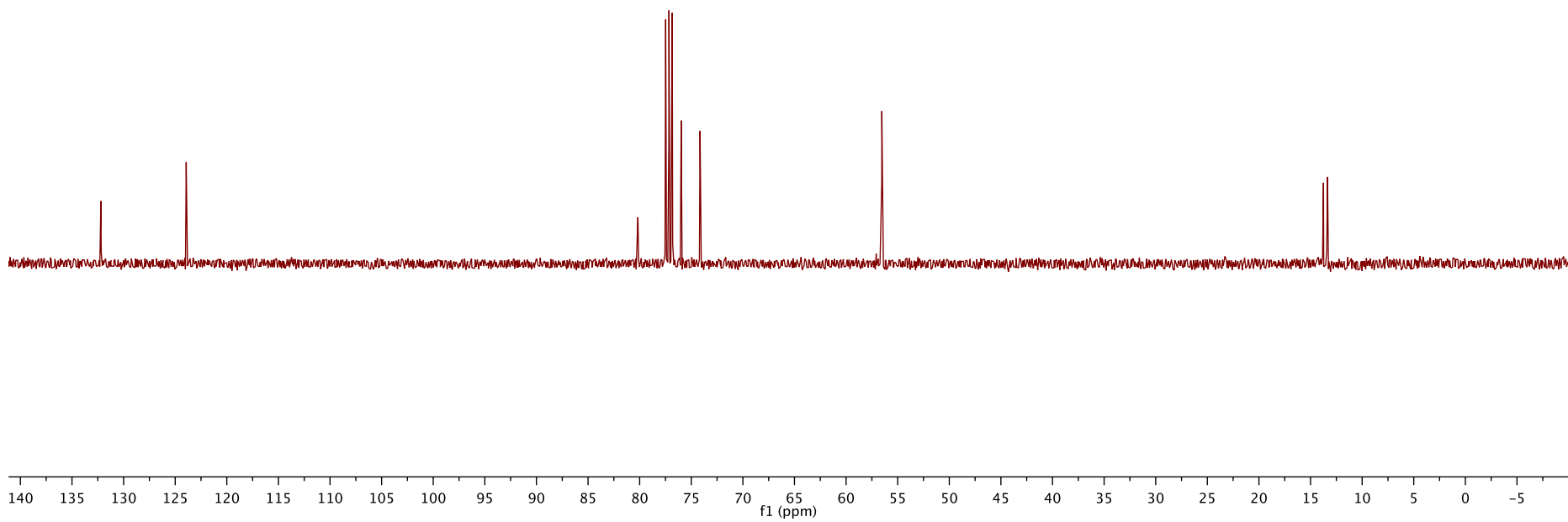
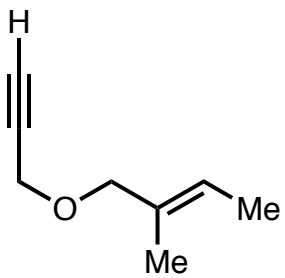
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5.54  
5.54  
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5.52  
5.51  
5.50

4.08  
4.08  
4.07  
3.95  
3.92

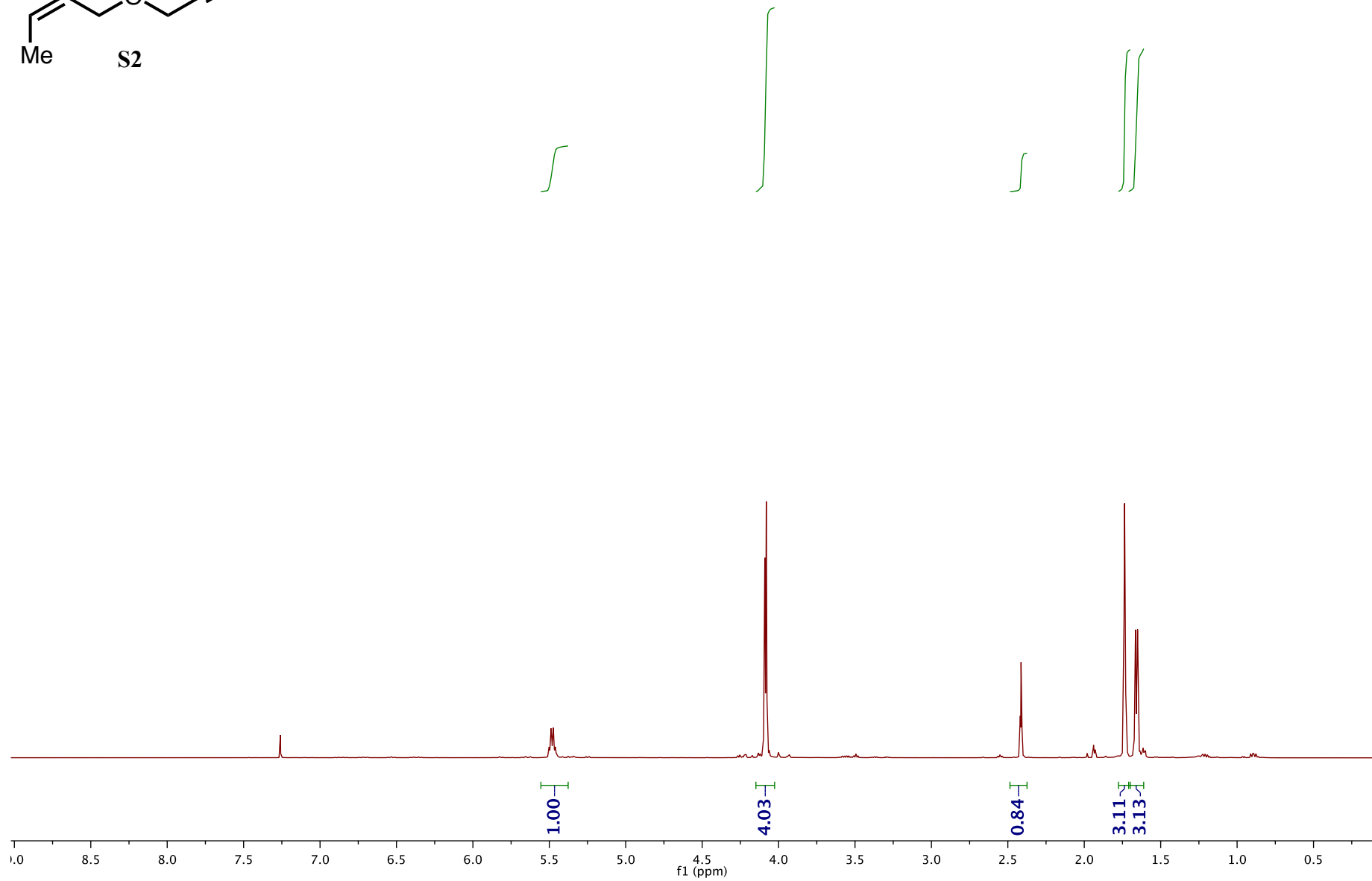
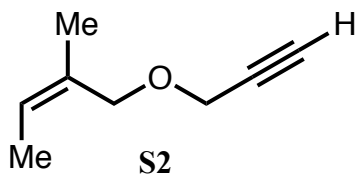
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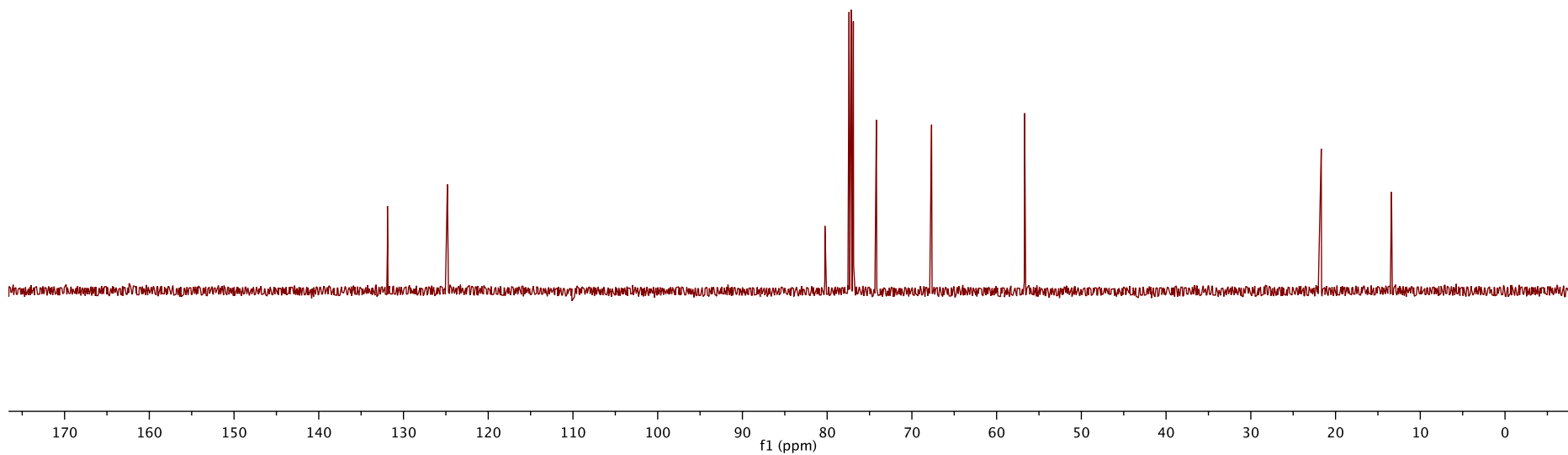
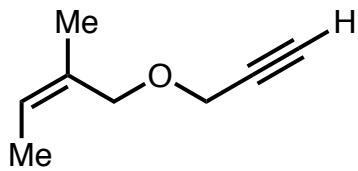
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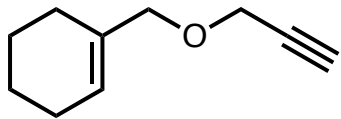




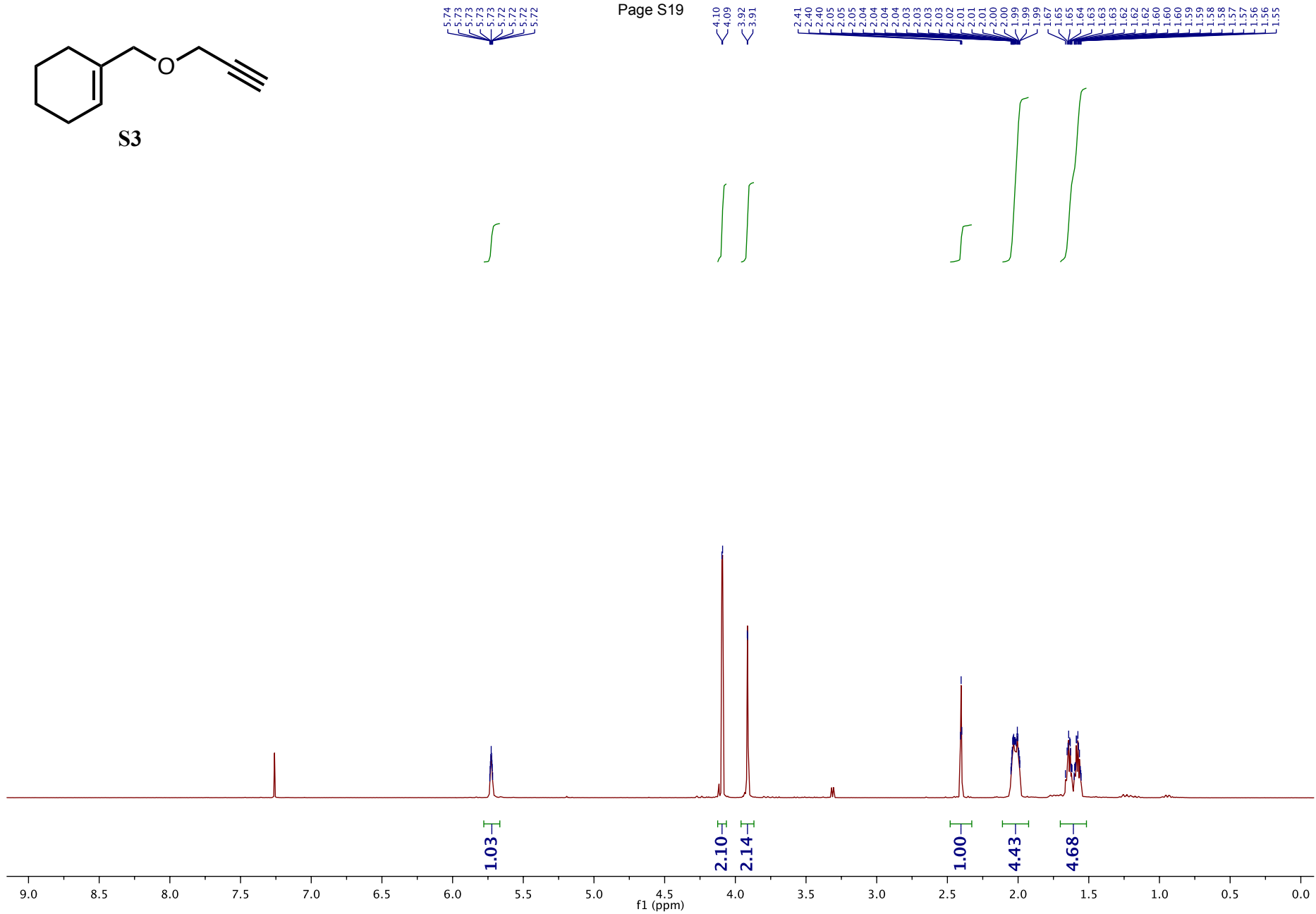


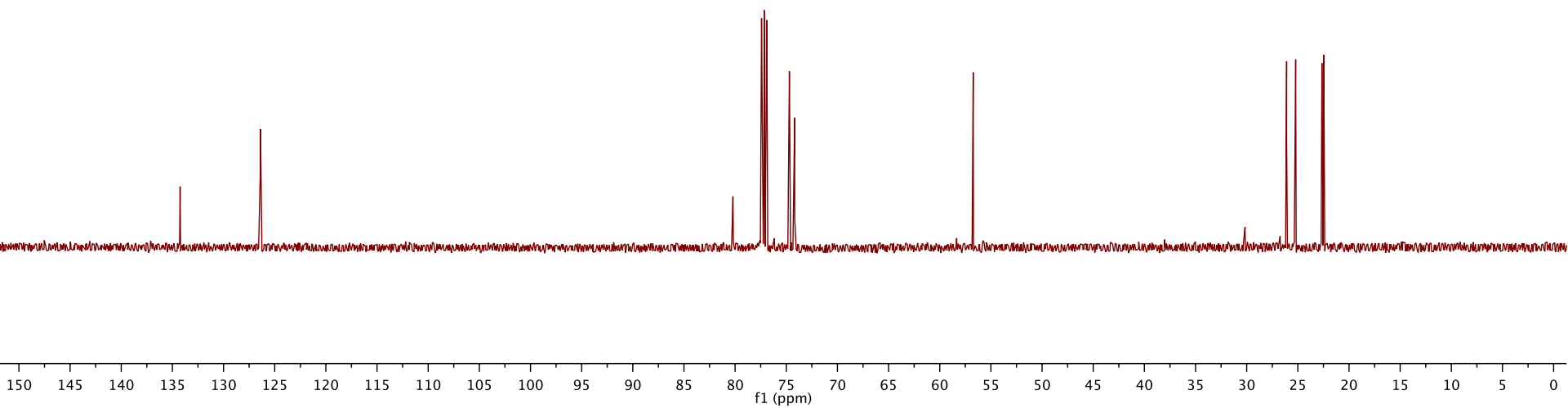
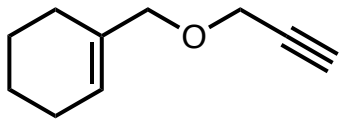


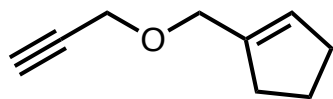




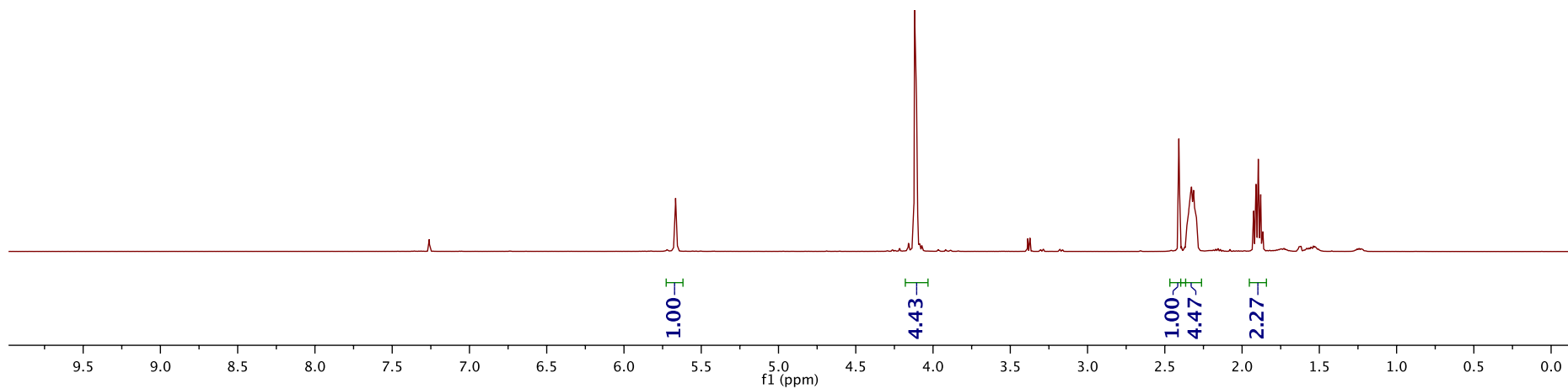
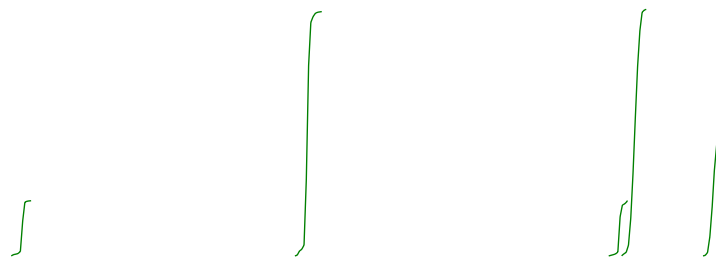
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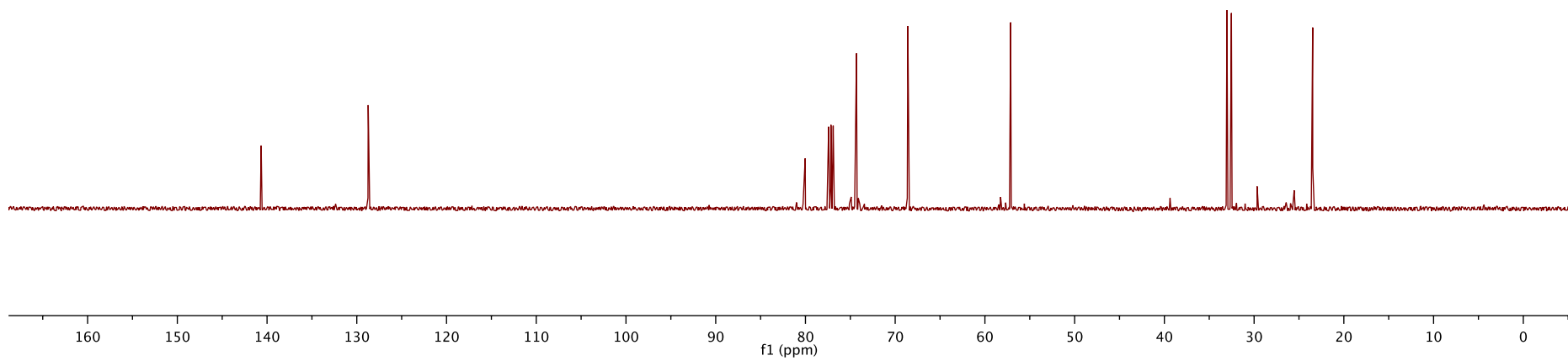
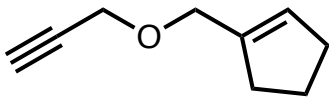


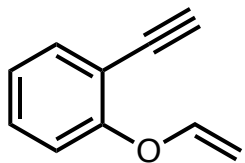




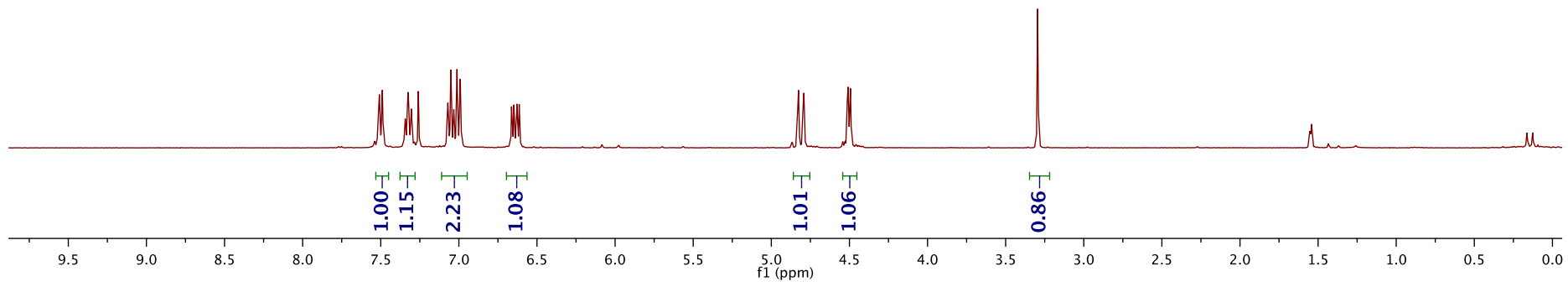
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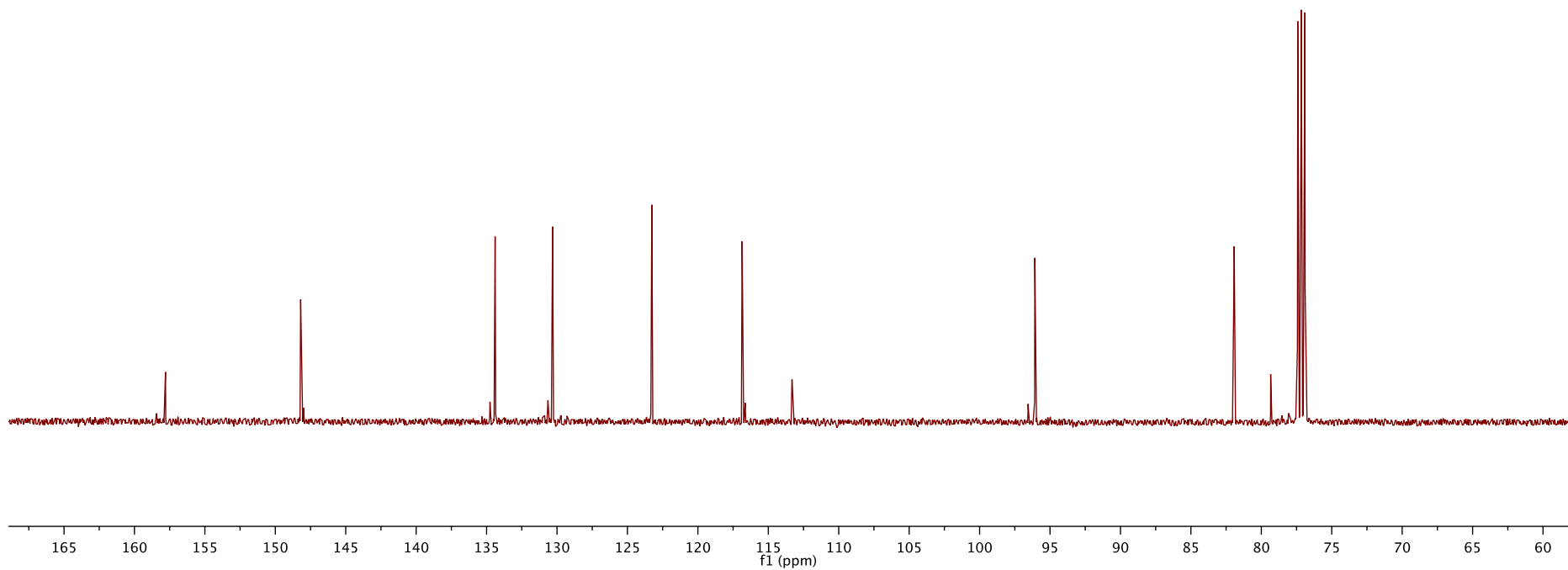
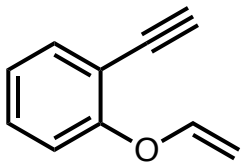




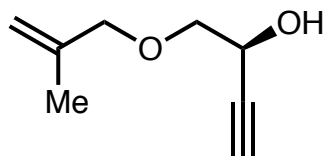


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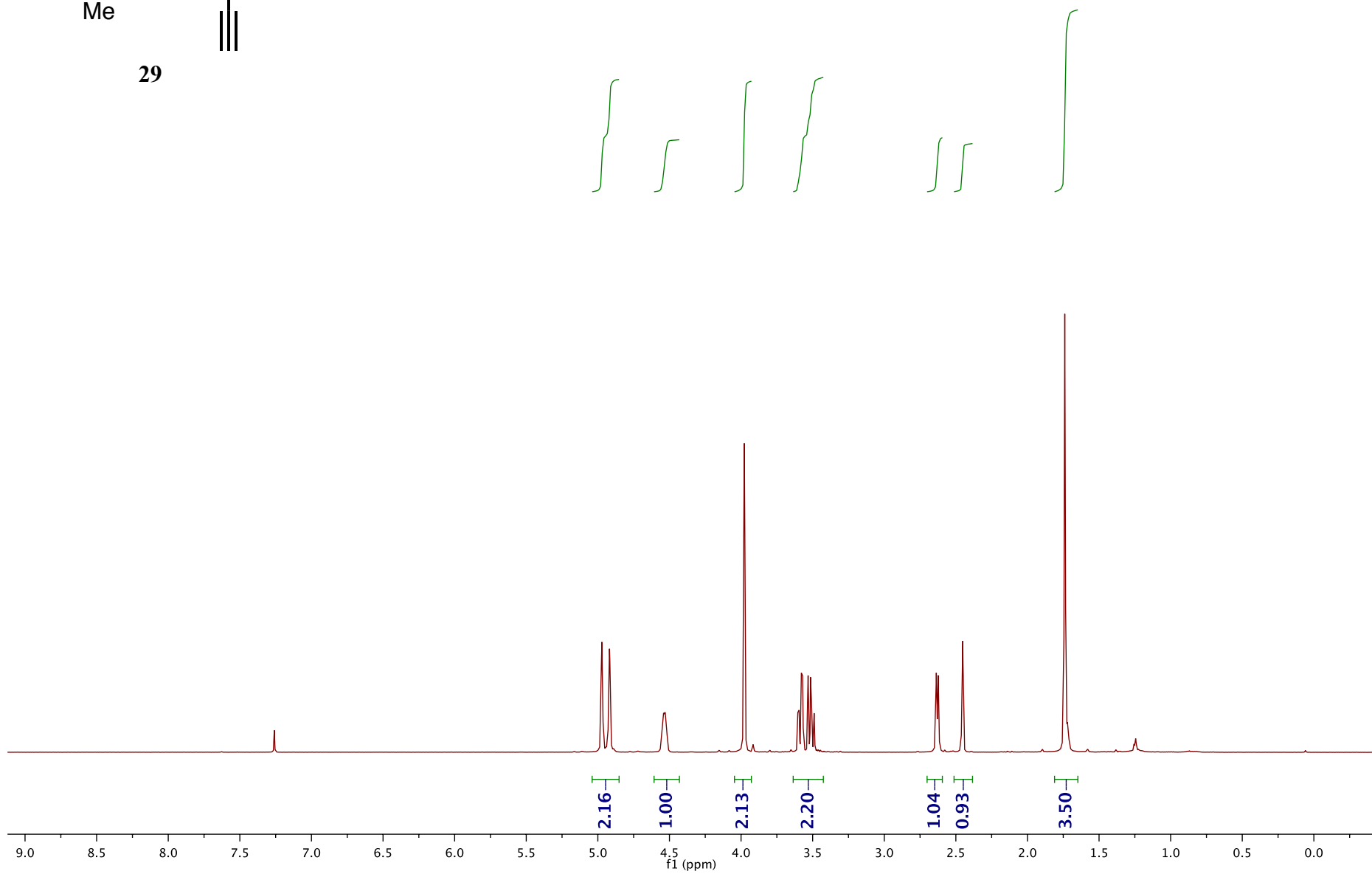


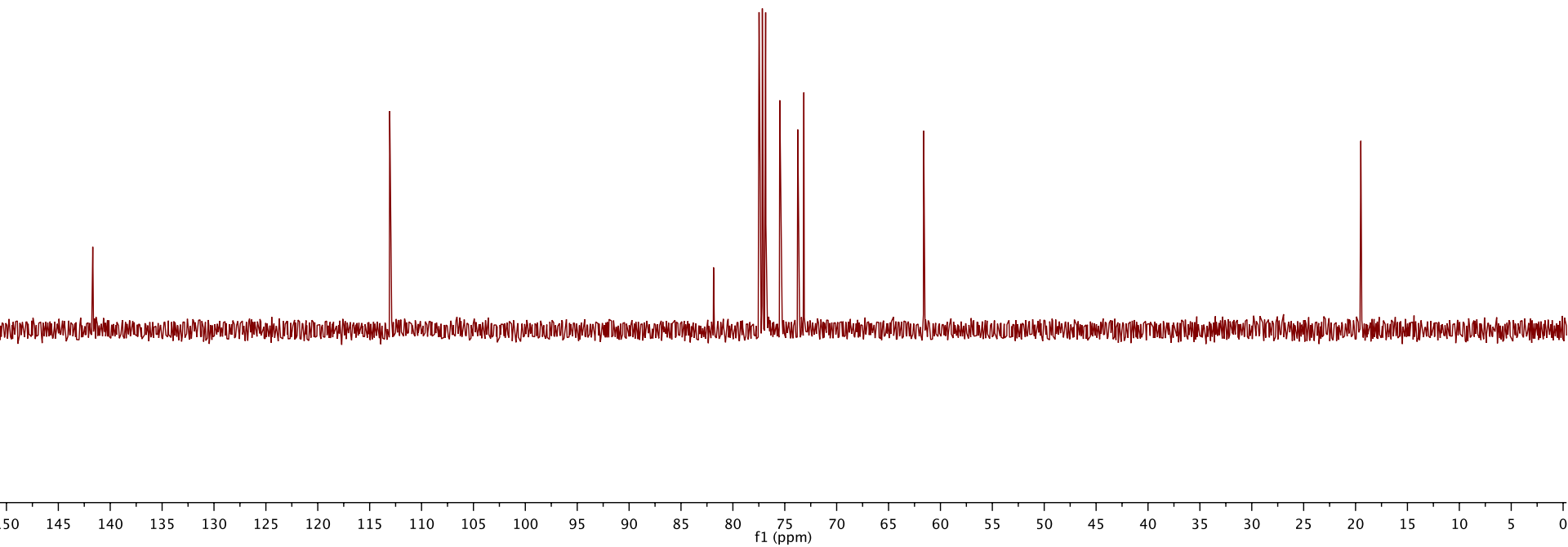
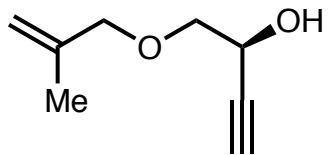


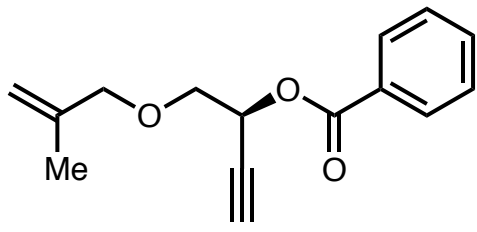




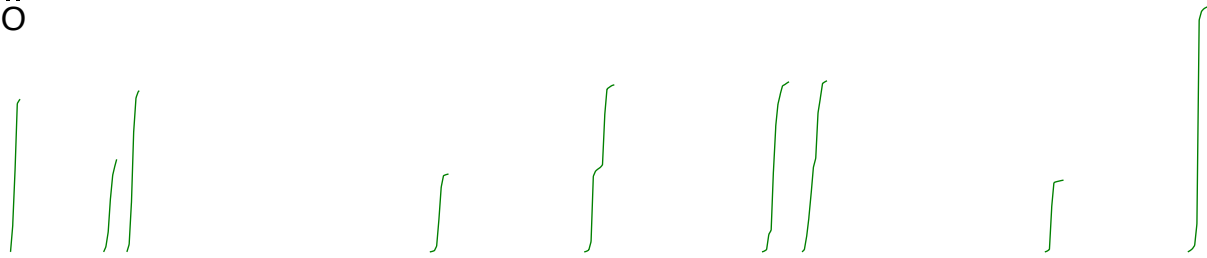
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S21



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1.19

2.07

1.00

2.14

2.18

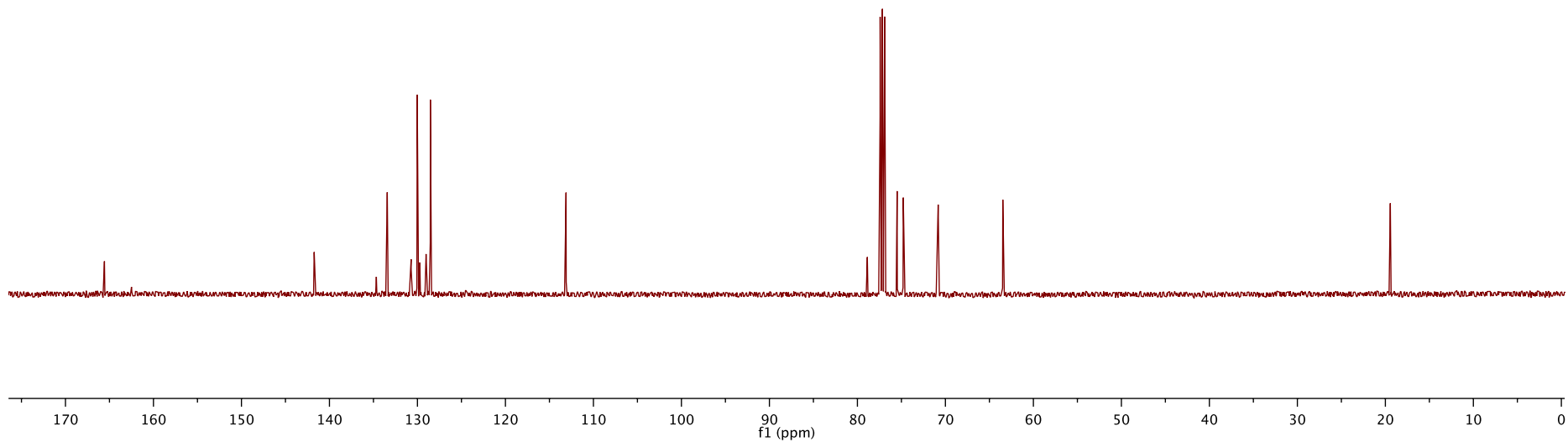
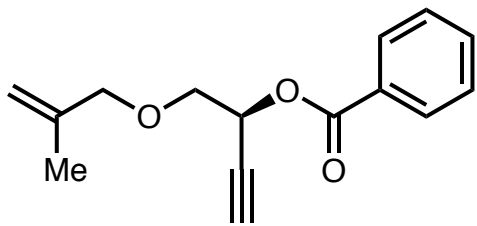
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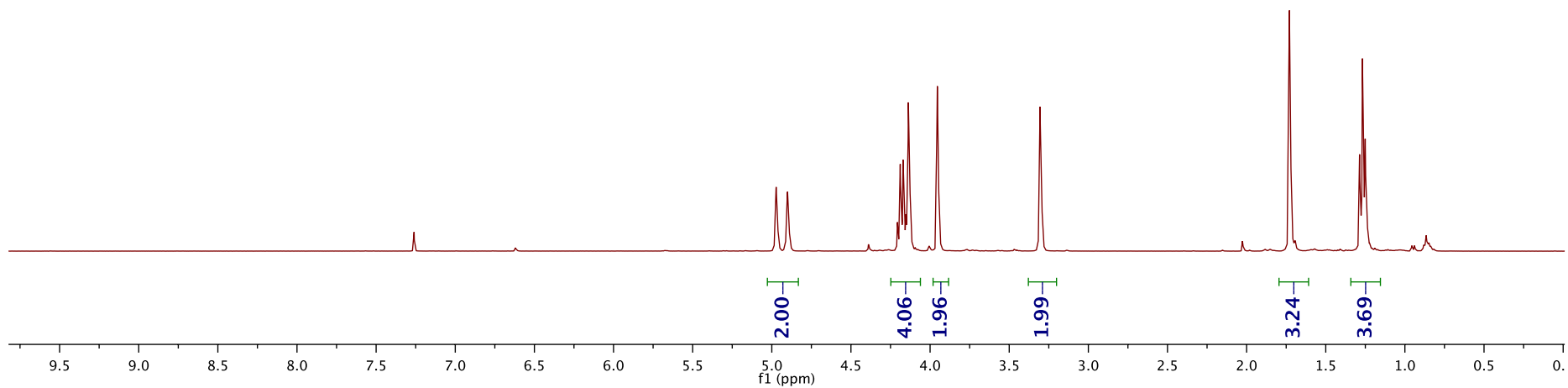
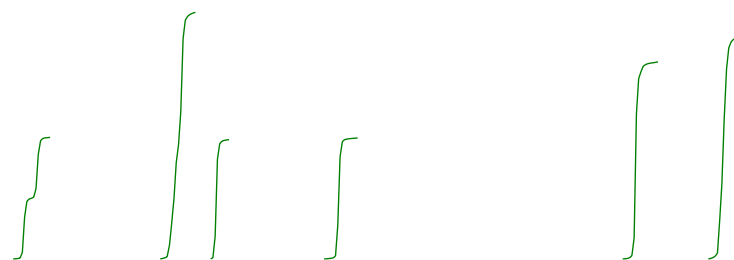
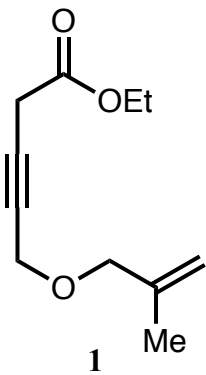
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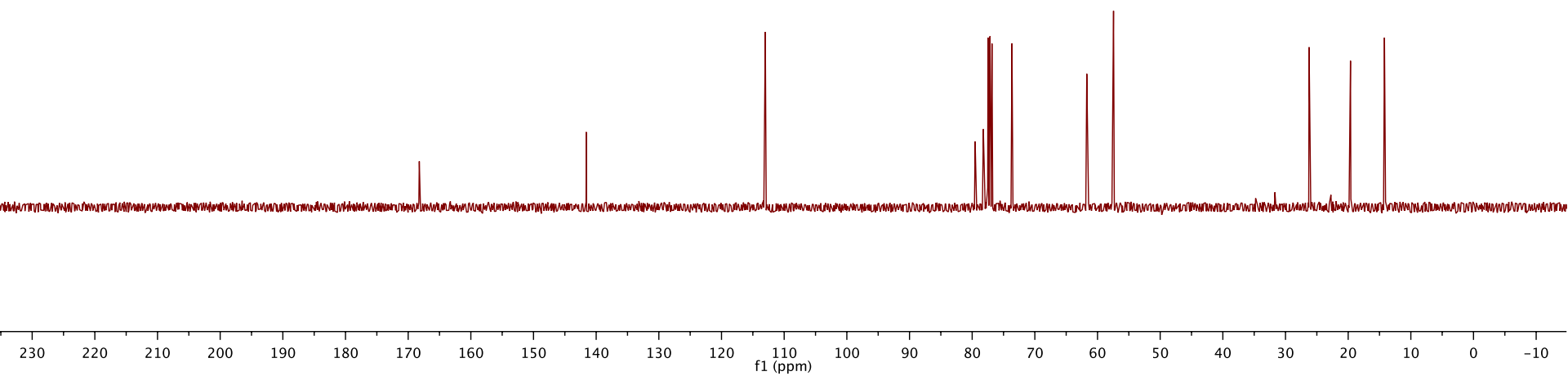
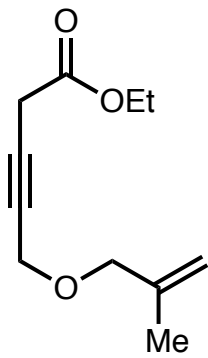
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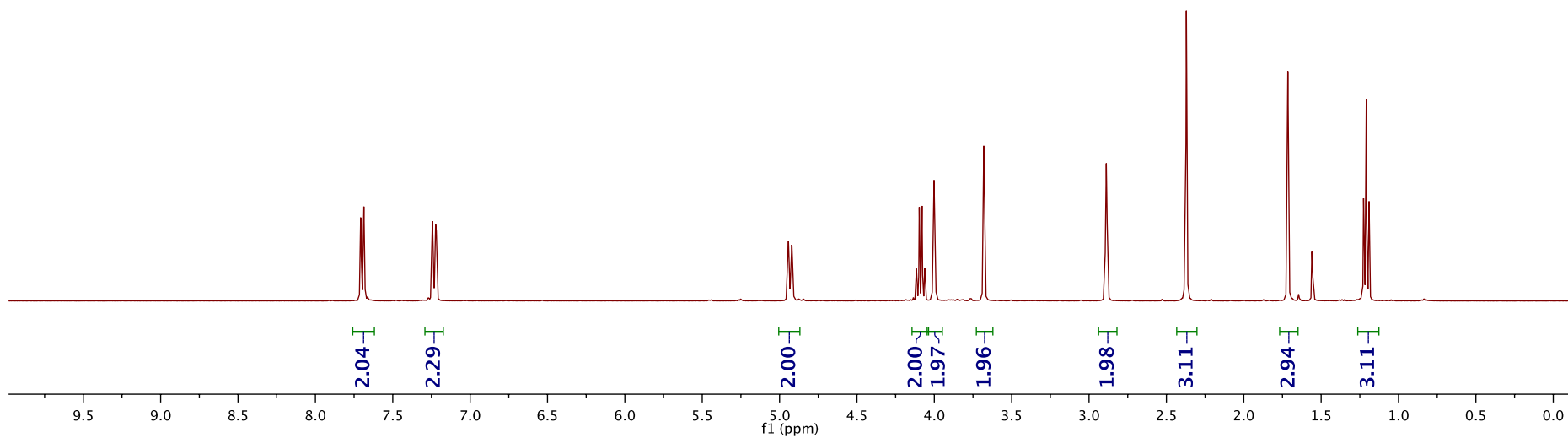
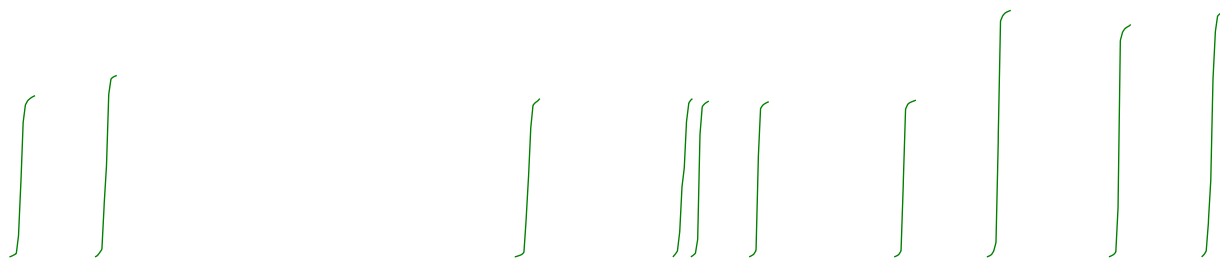
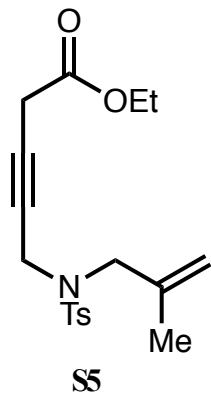
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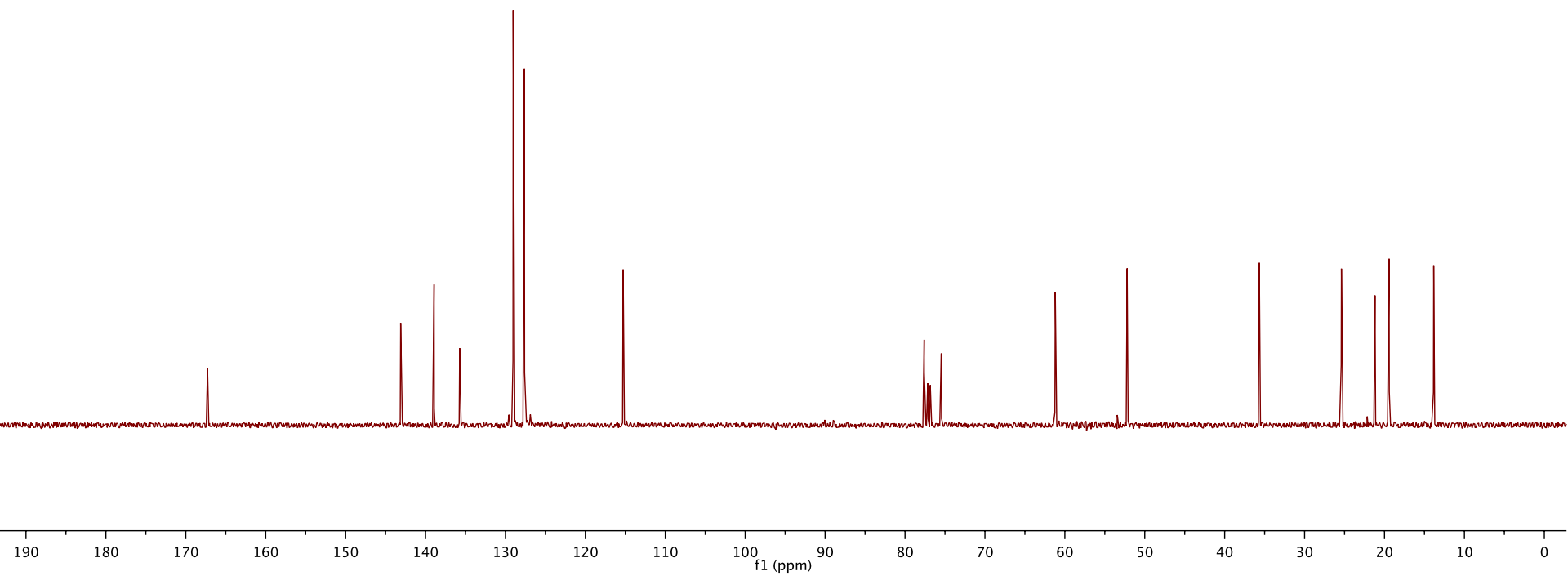
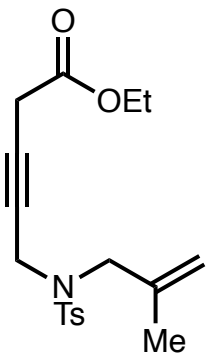
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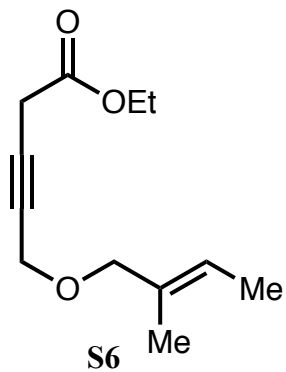










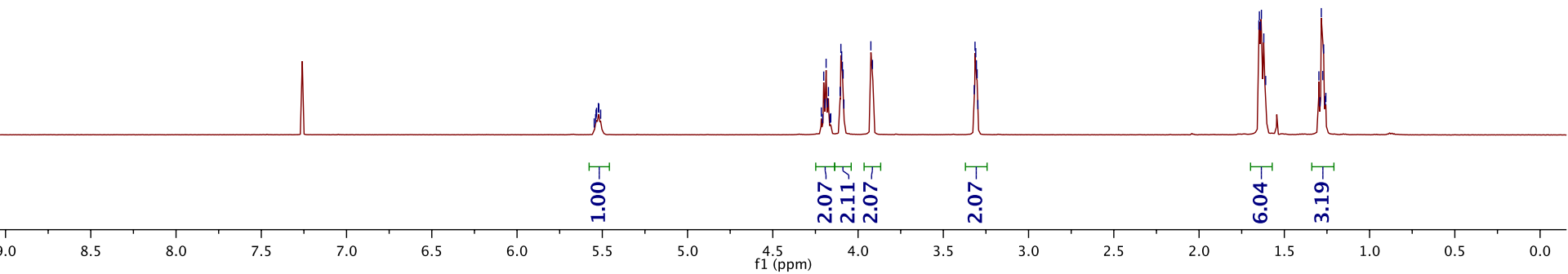


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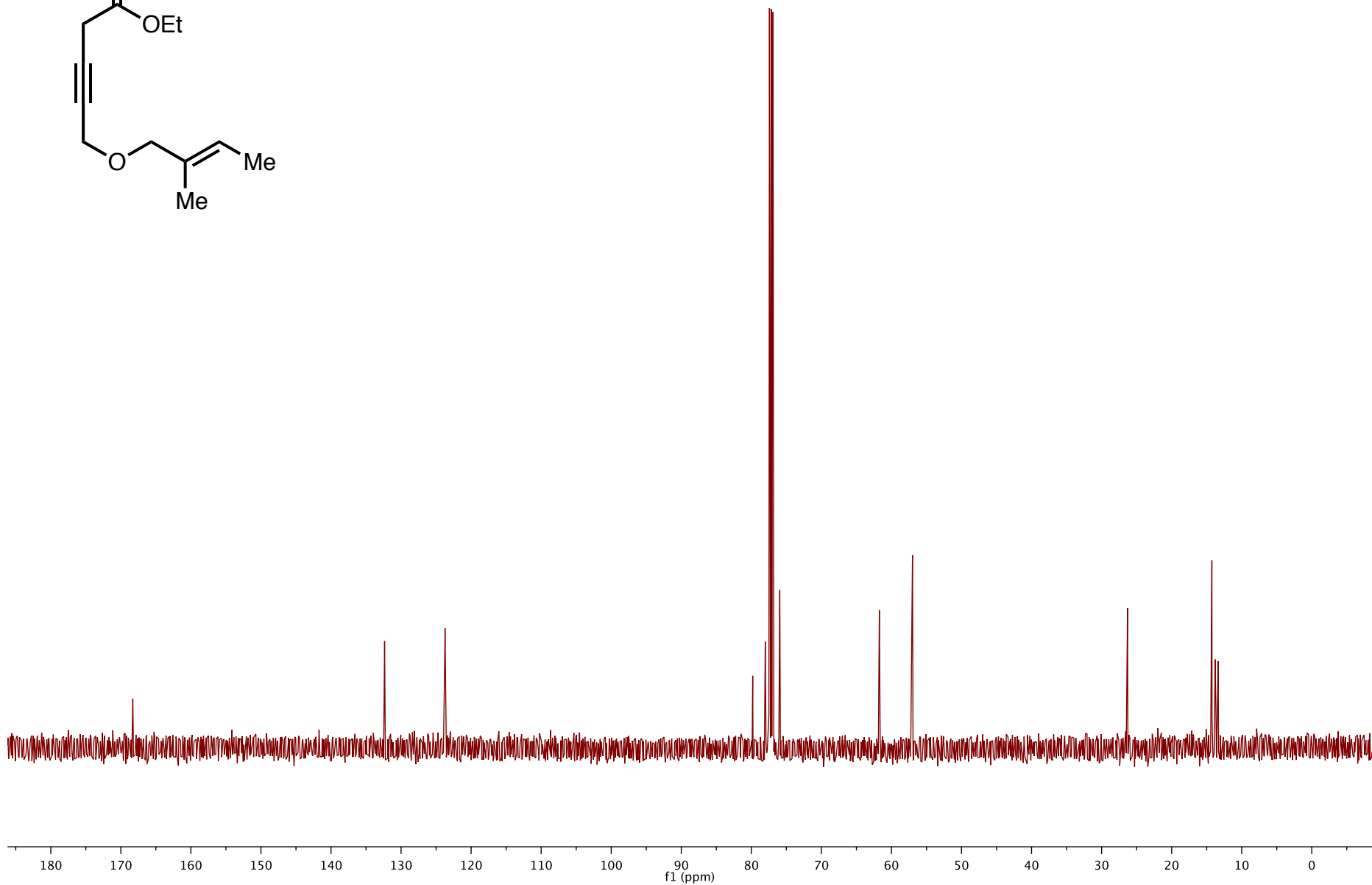
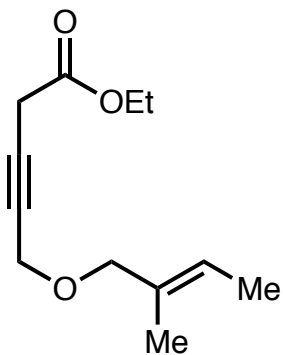
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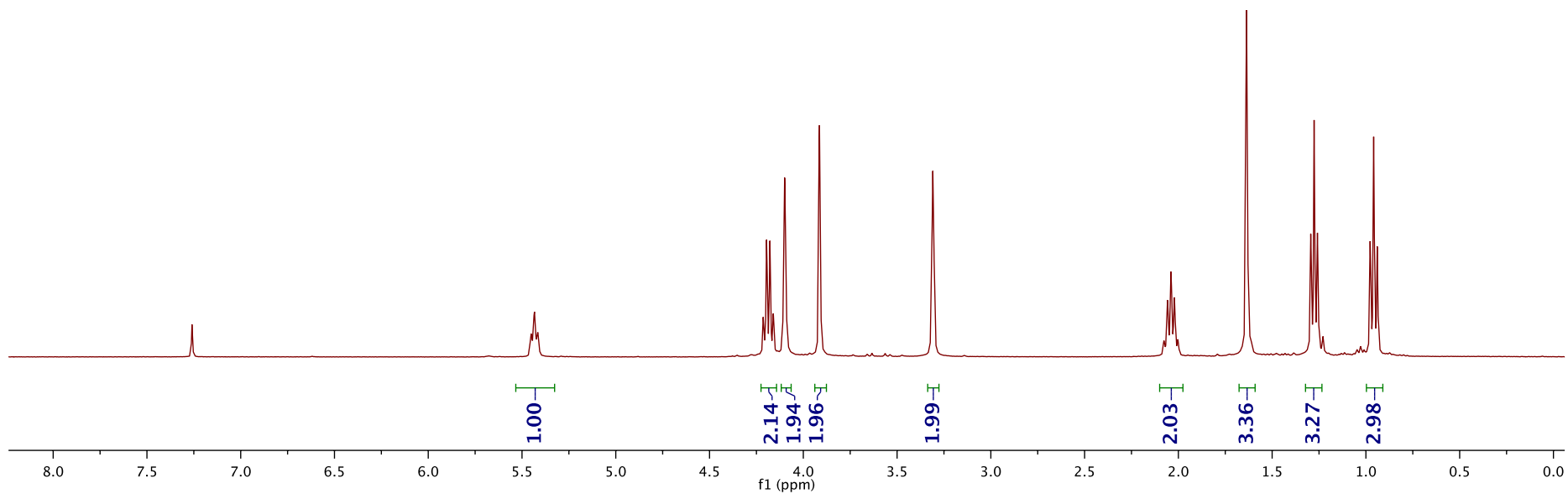
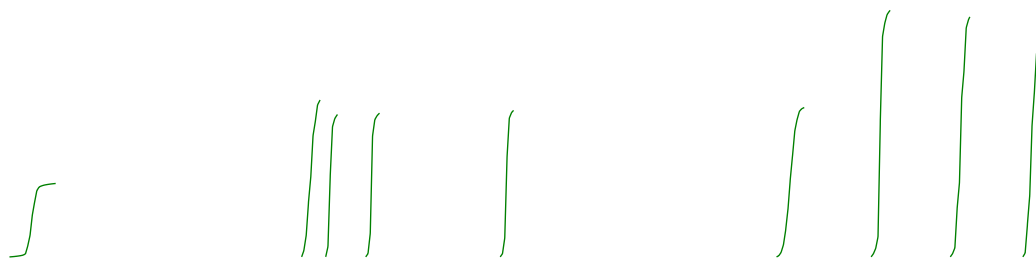
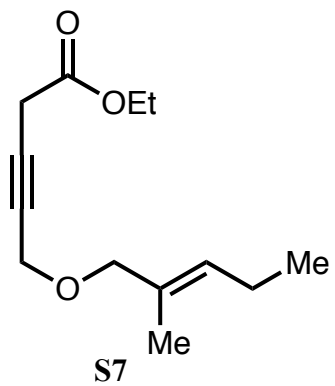
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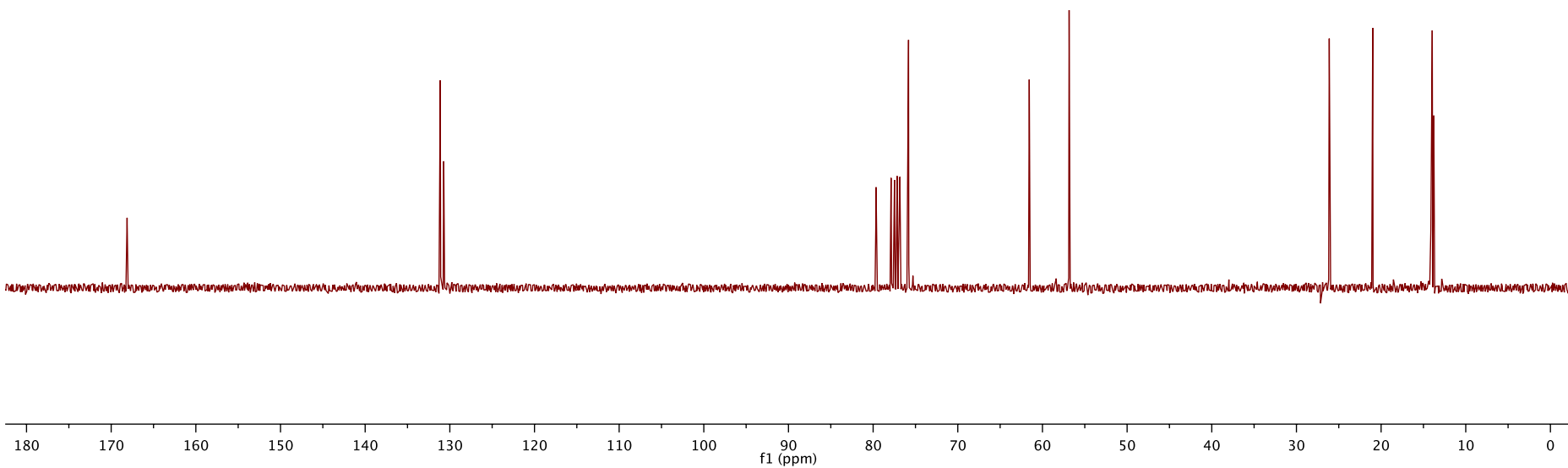
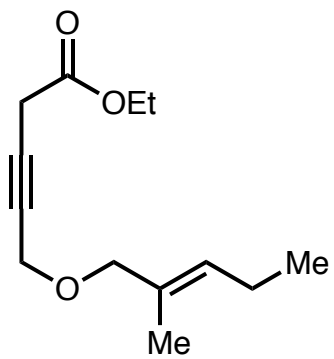


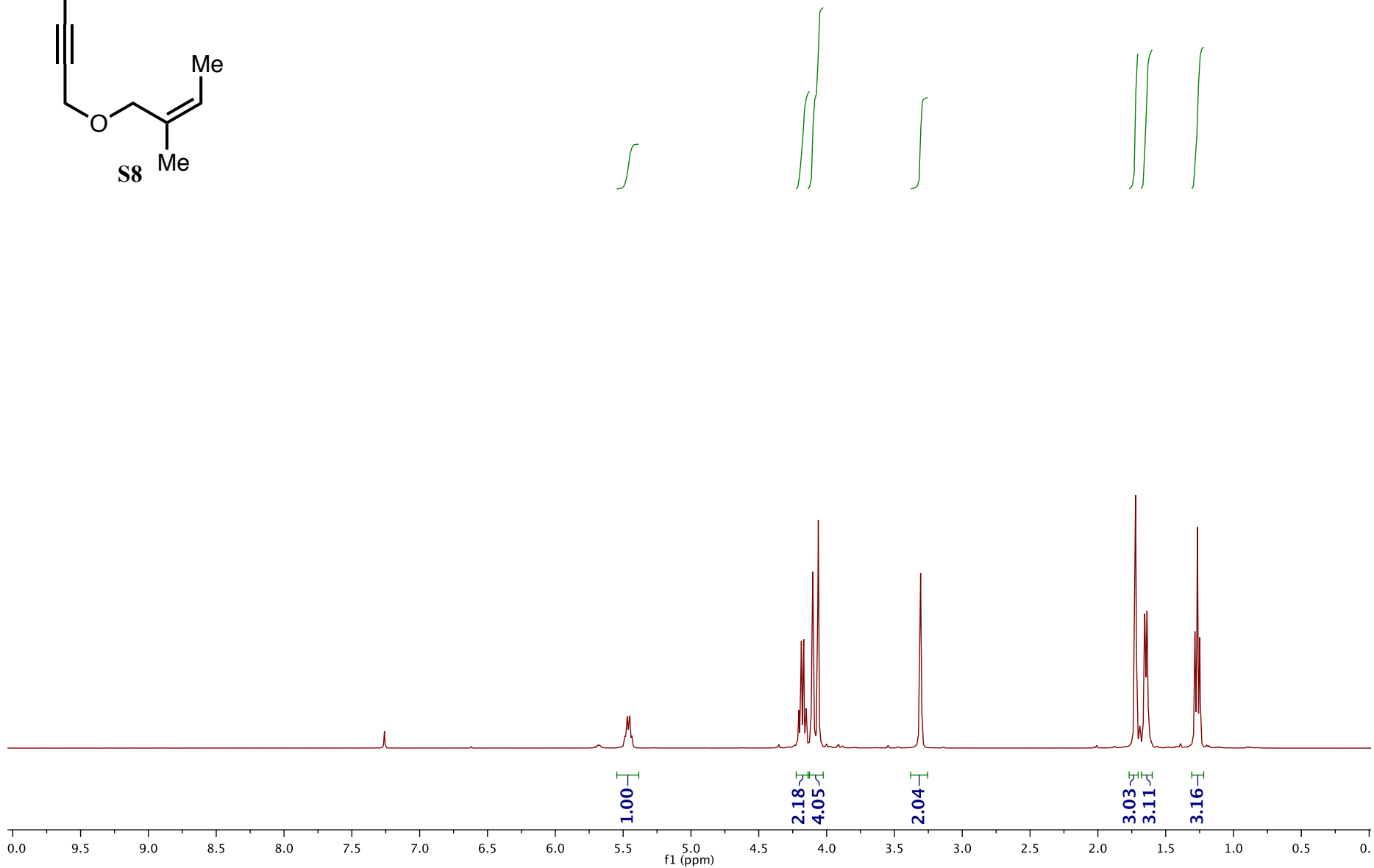
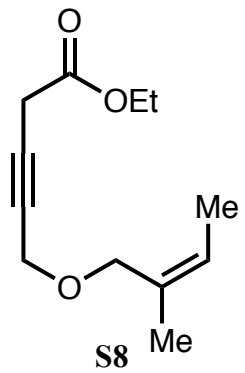
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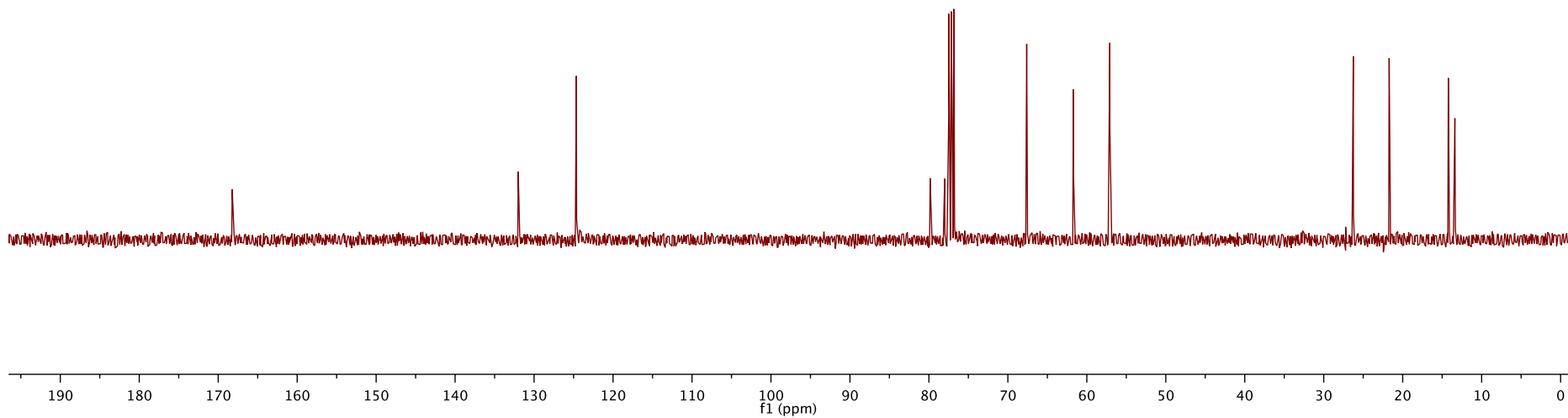
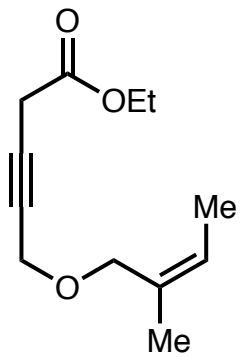
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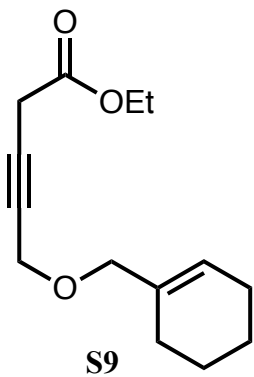




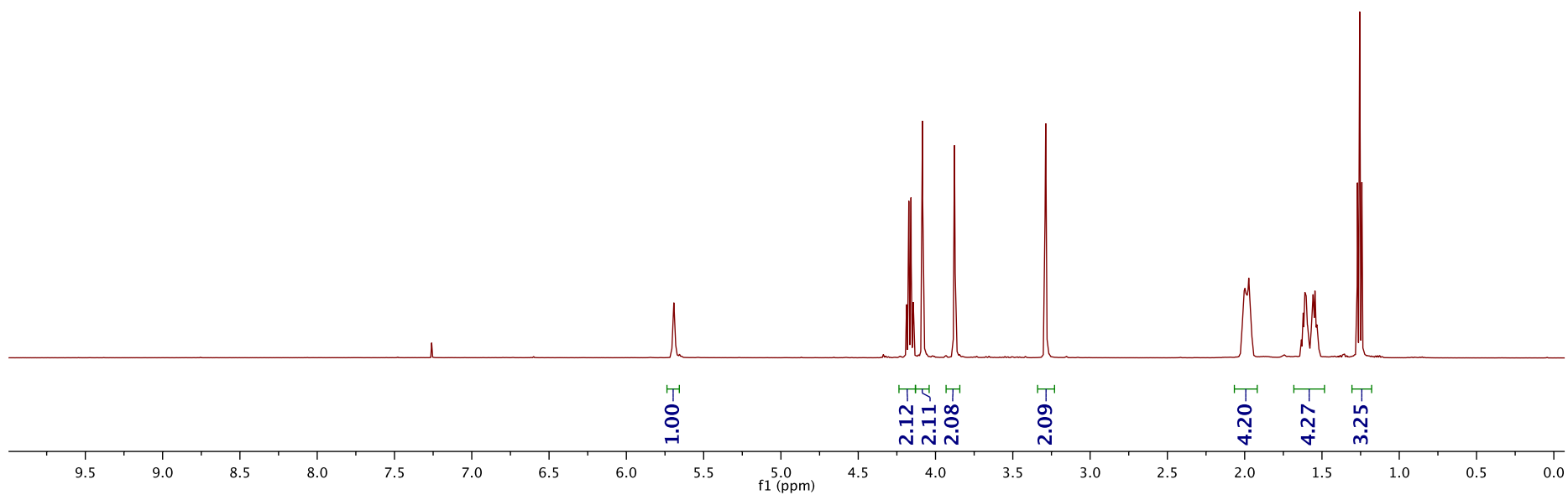
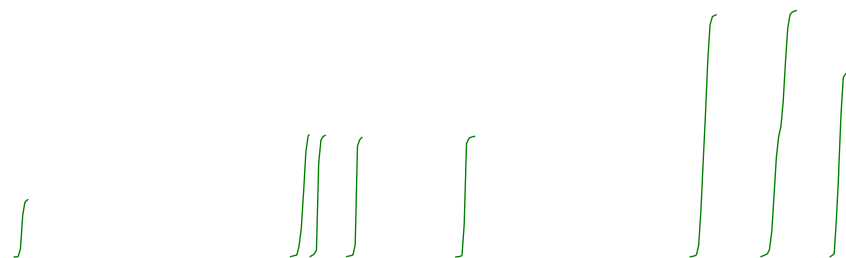


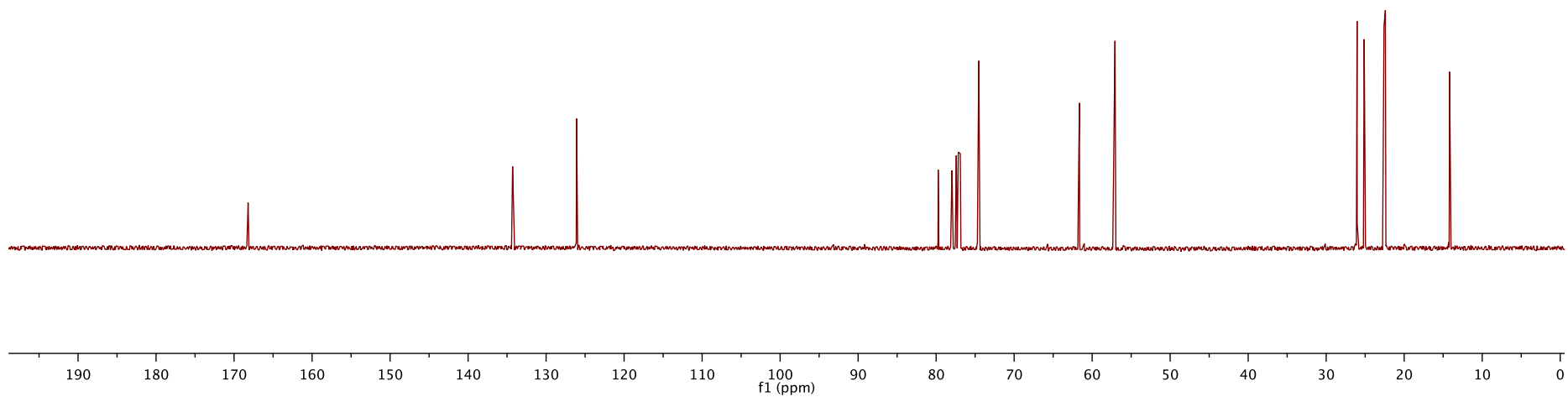
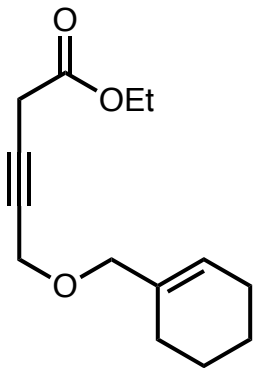




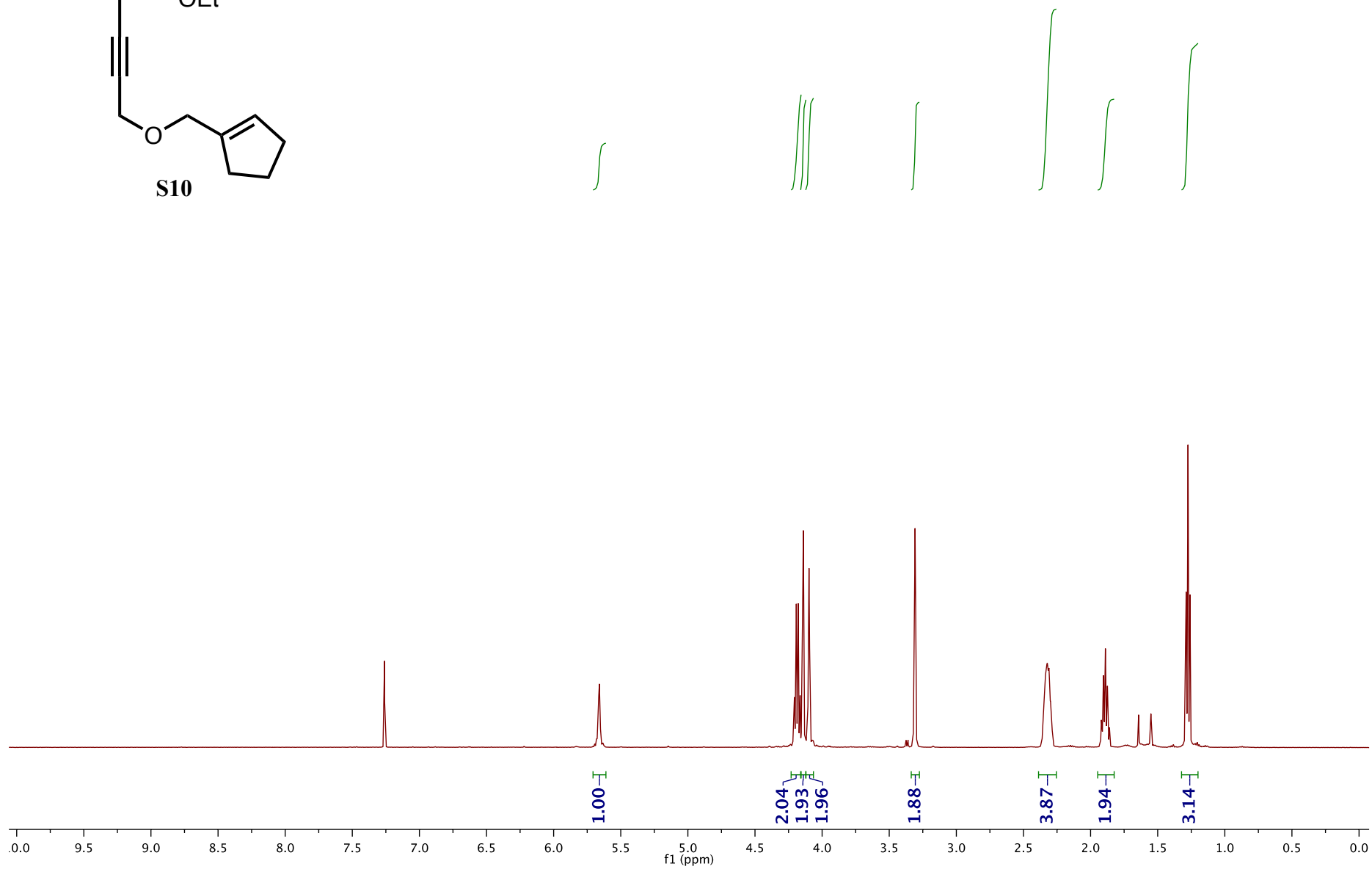
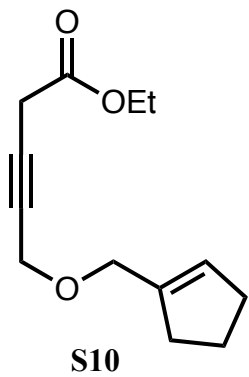


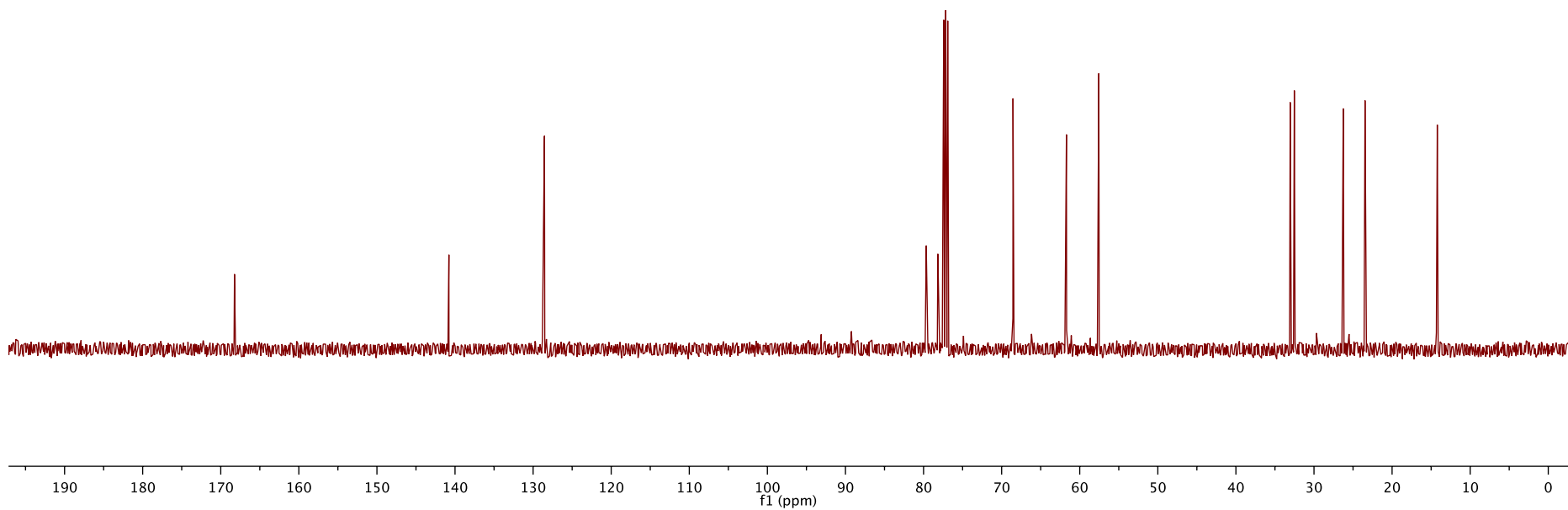
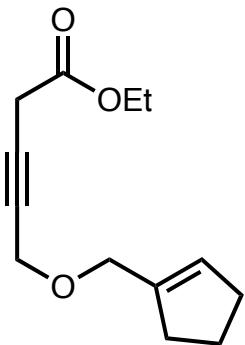
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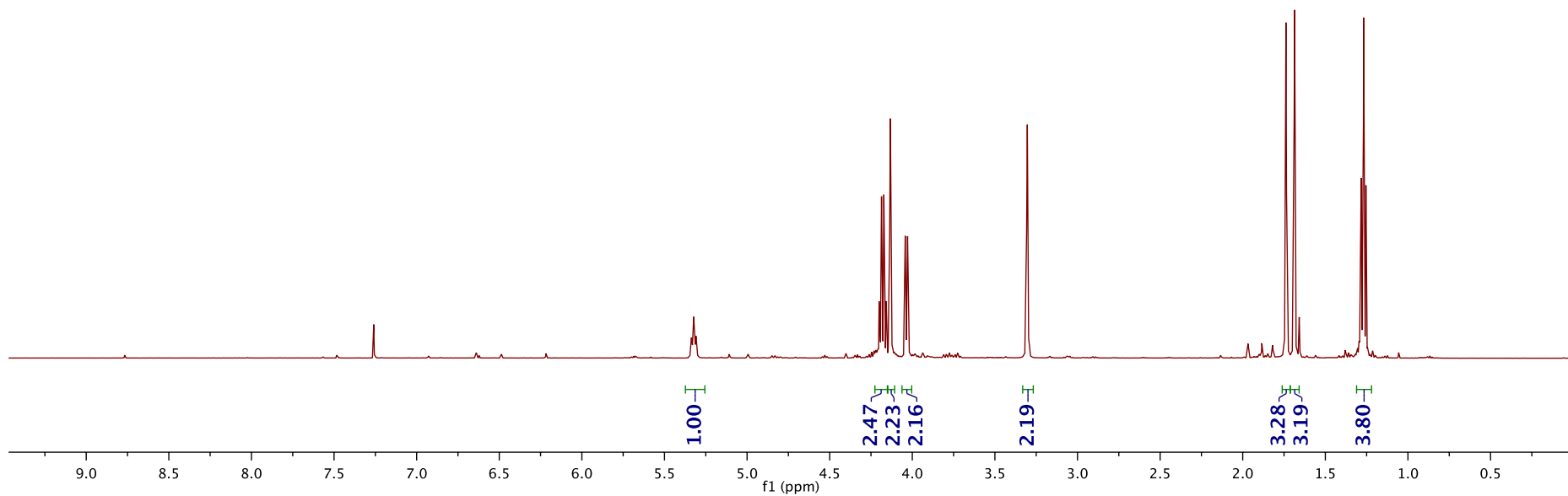
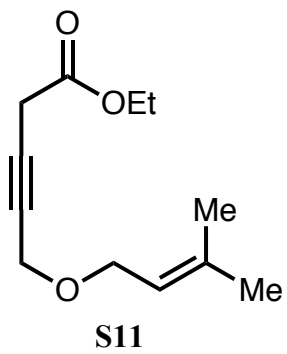


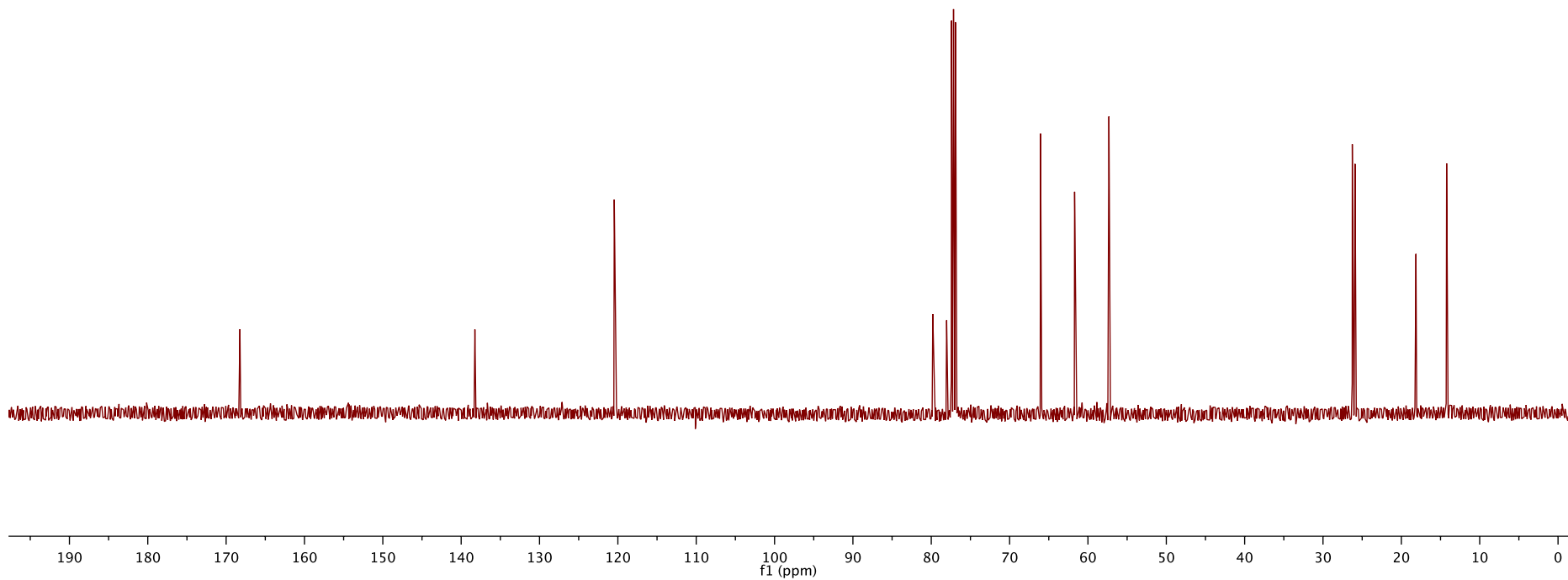
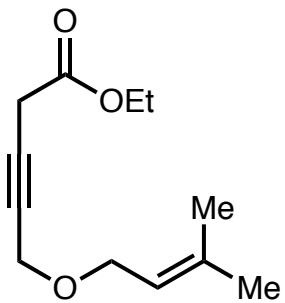


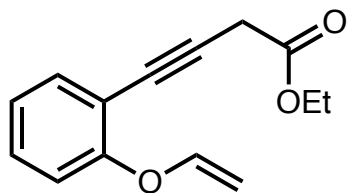




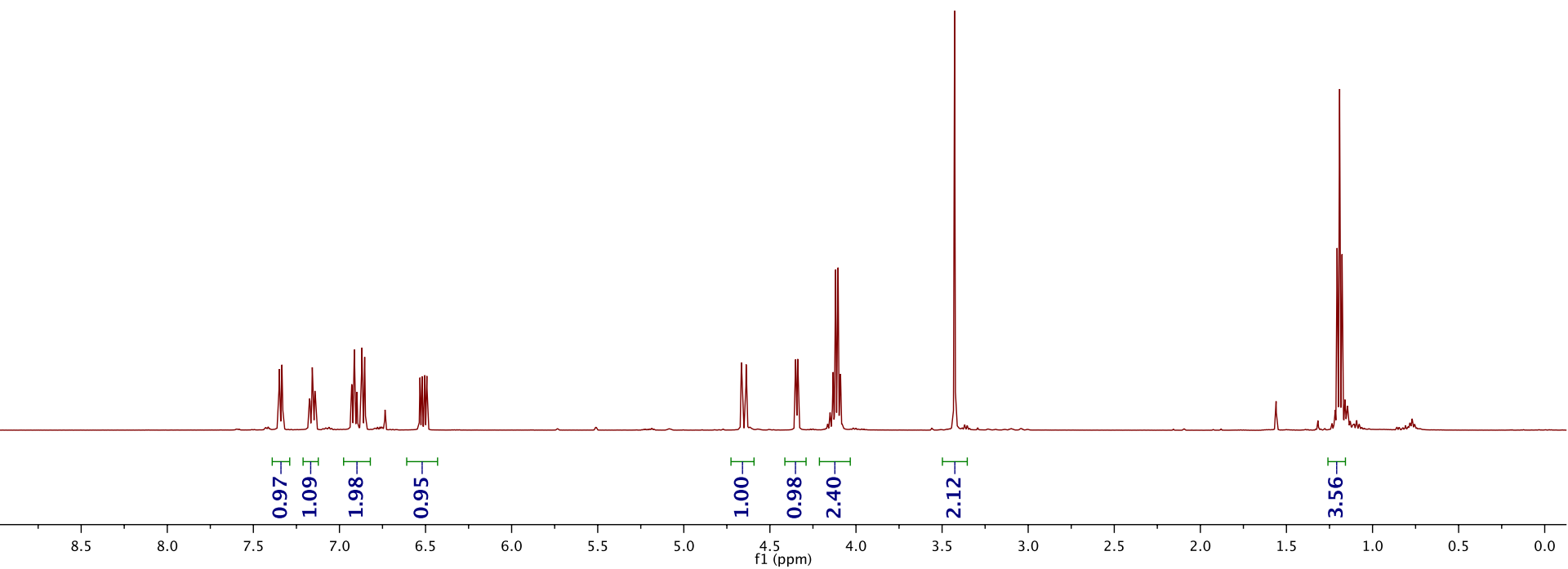
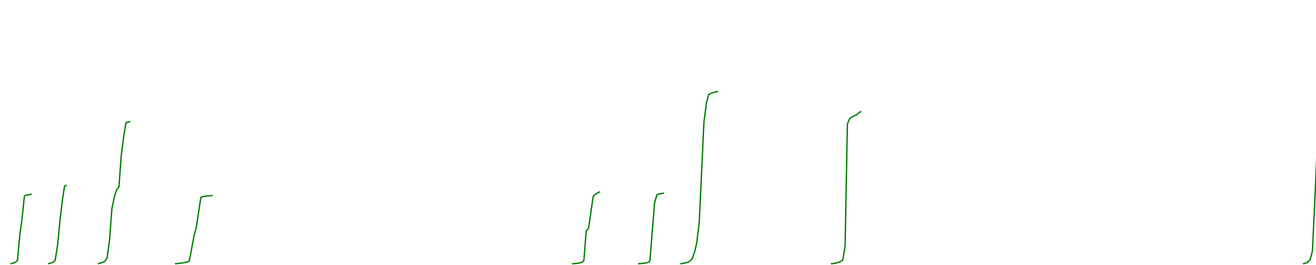


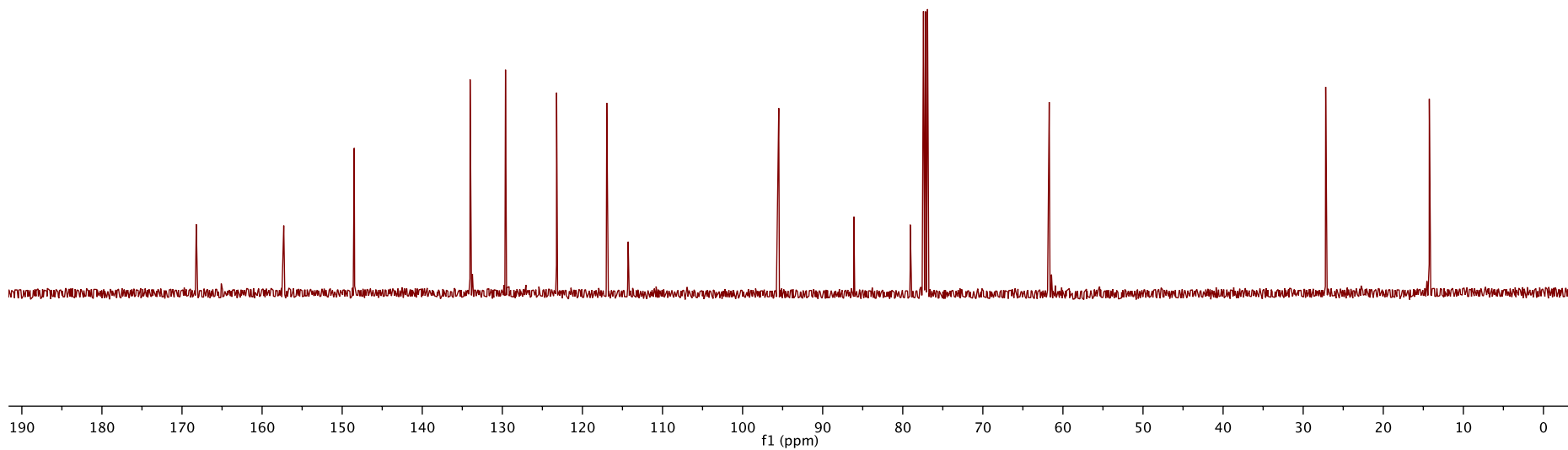
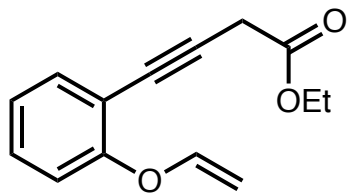


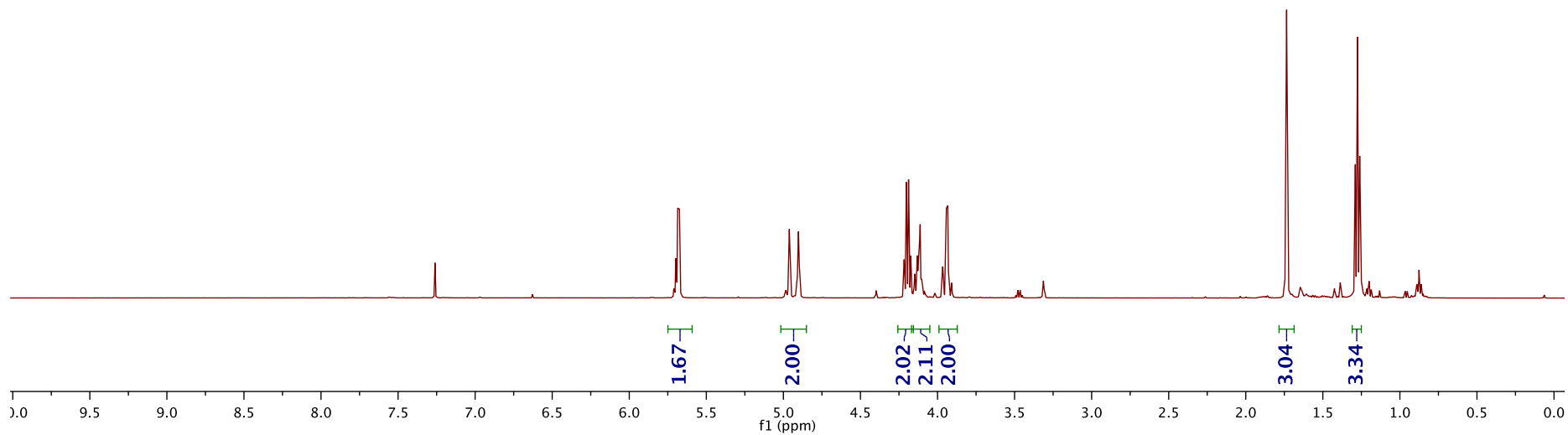
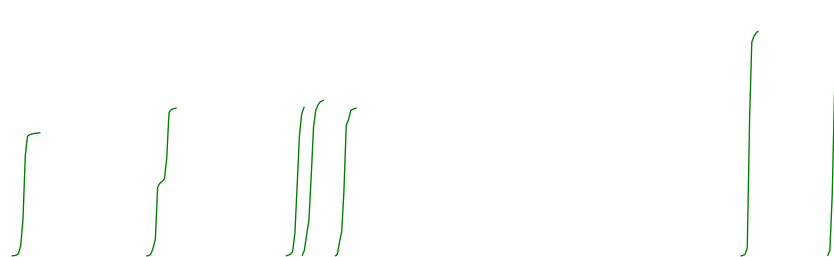
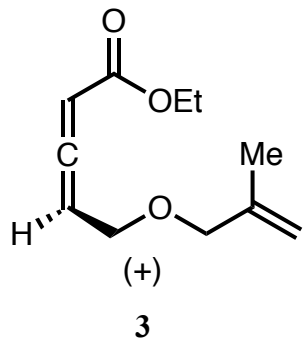


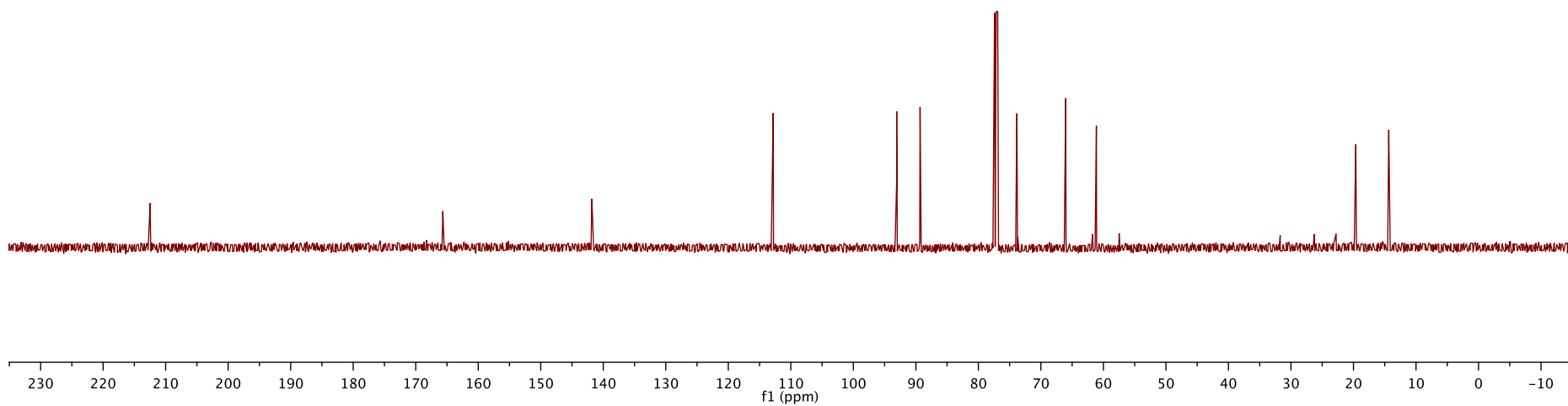
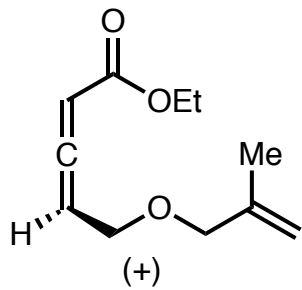


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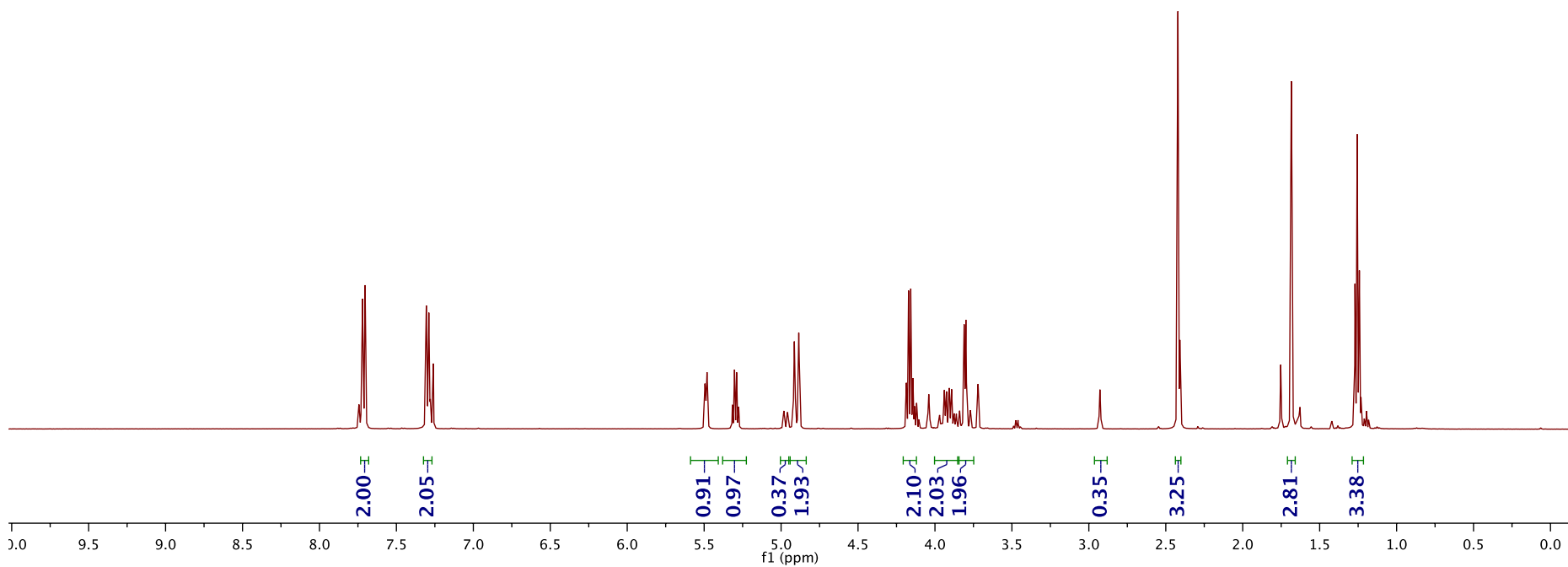
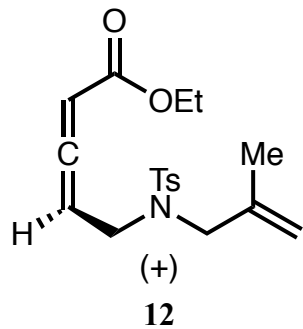


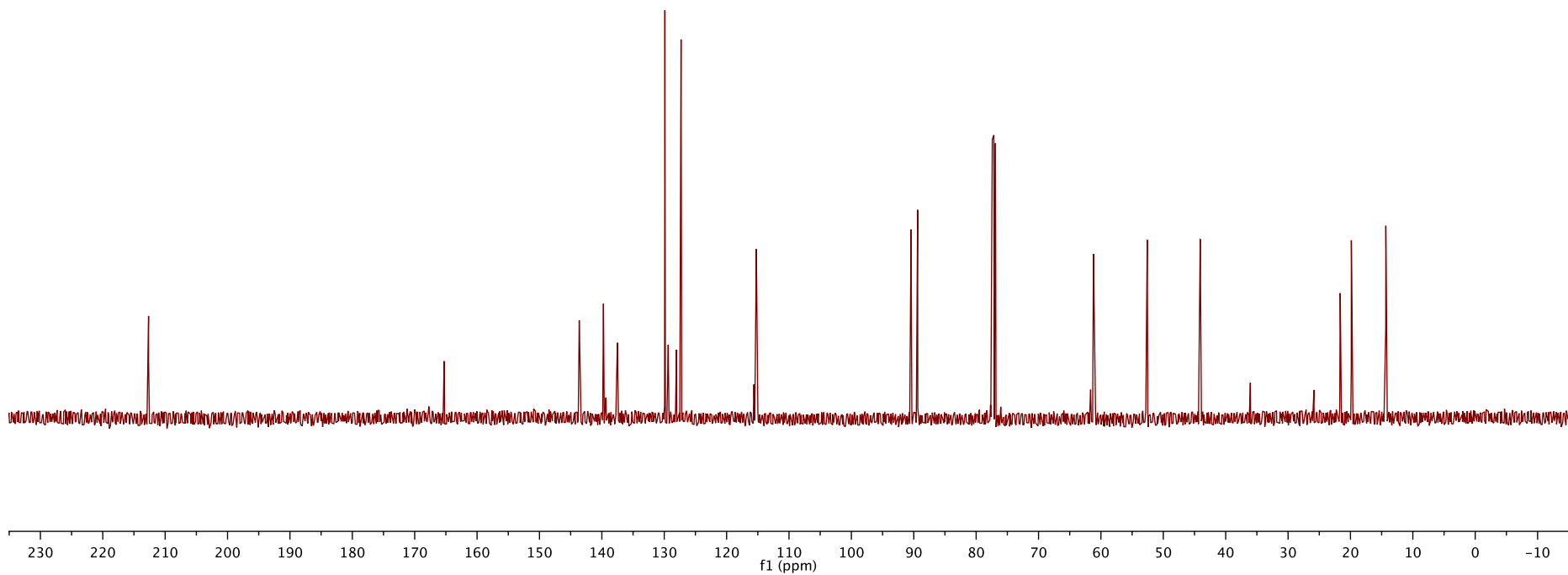
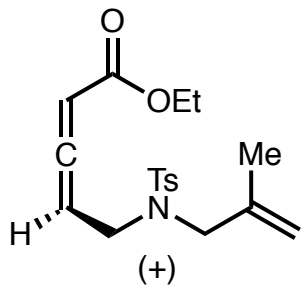


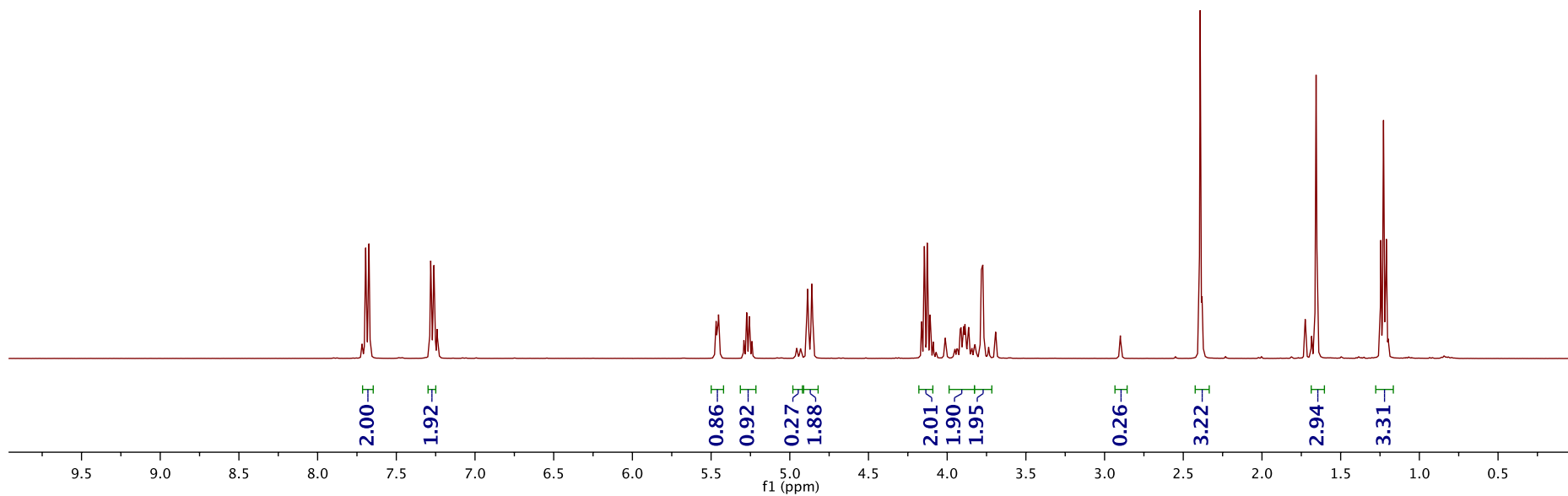
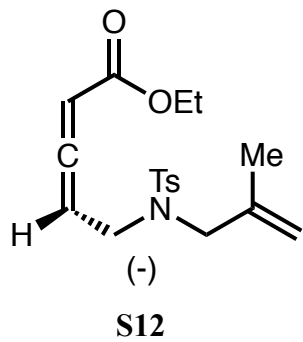


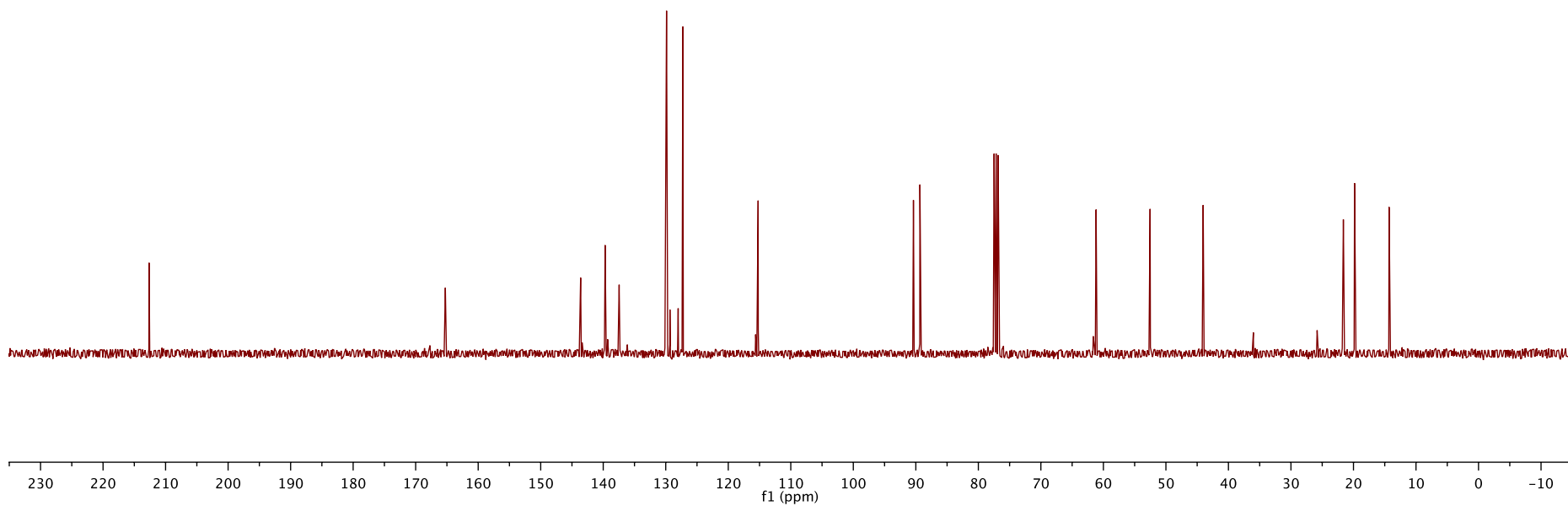
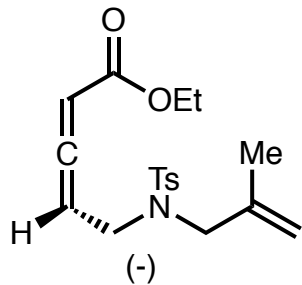


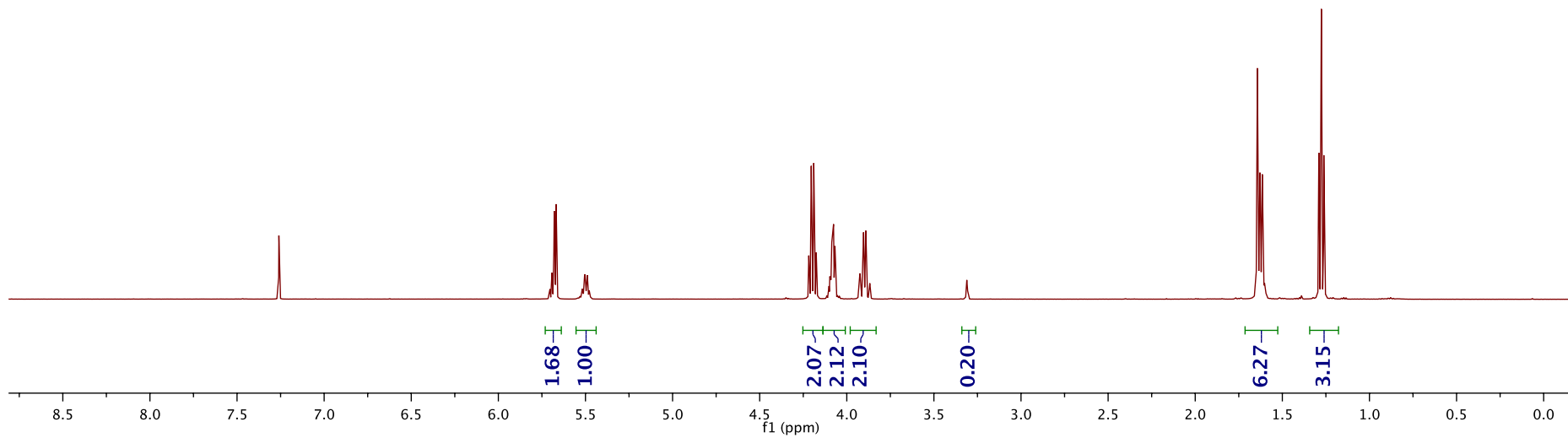
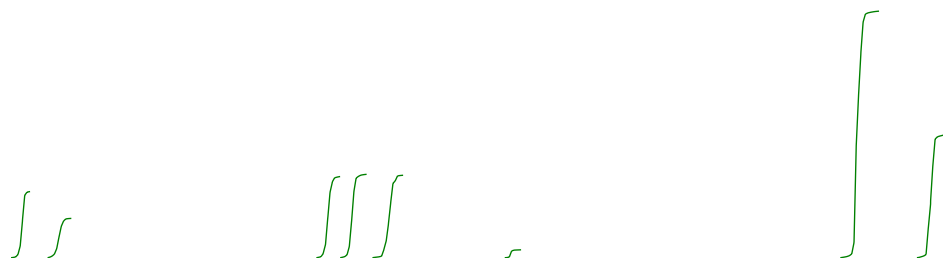
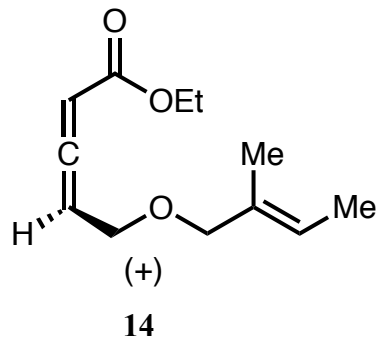


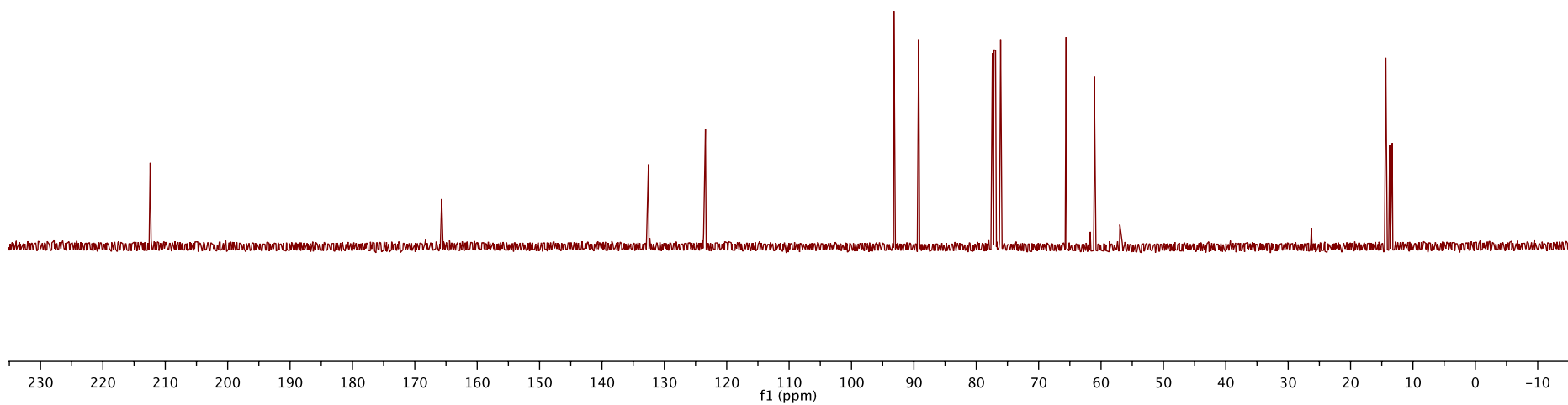
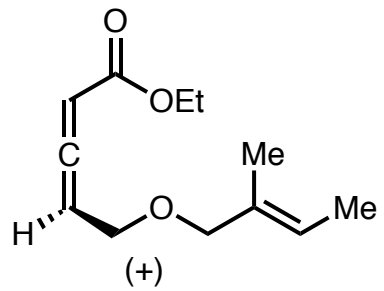


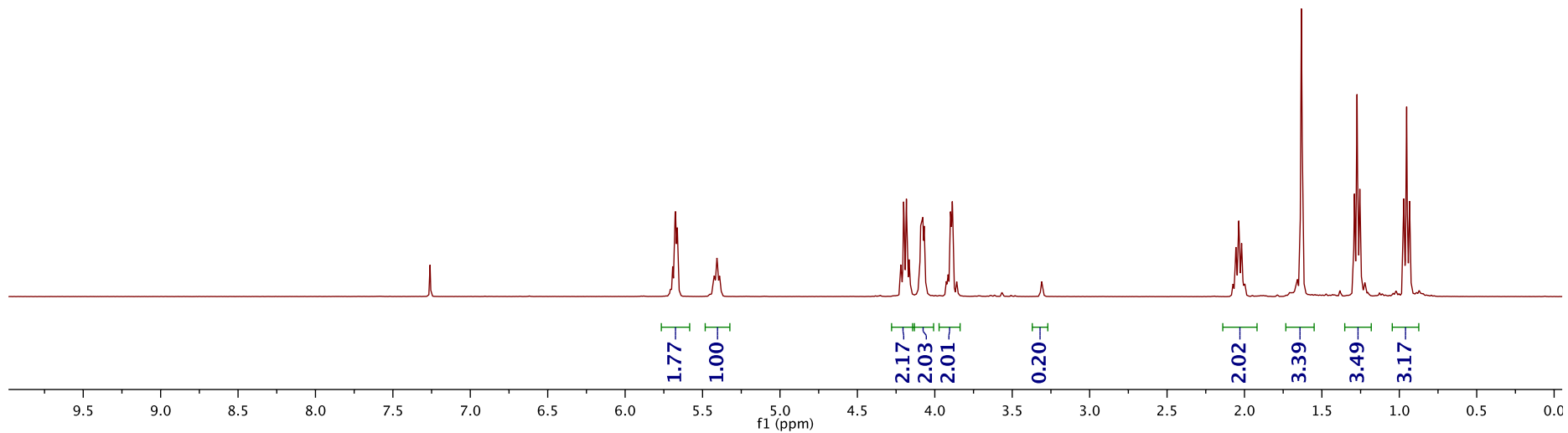
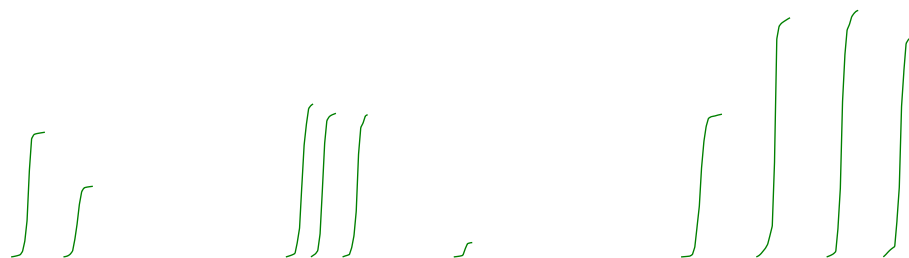
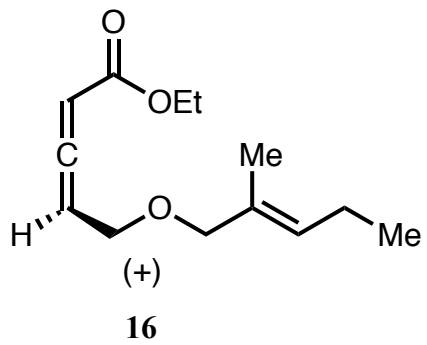


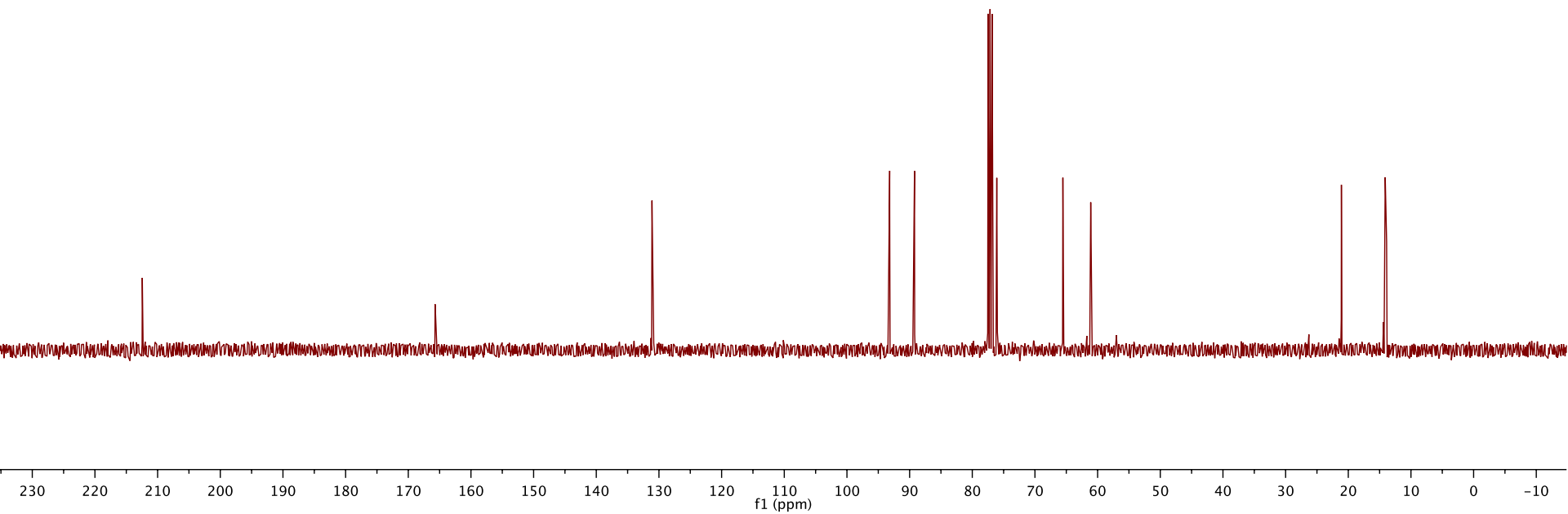
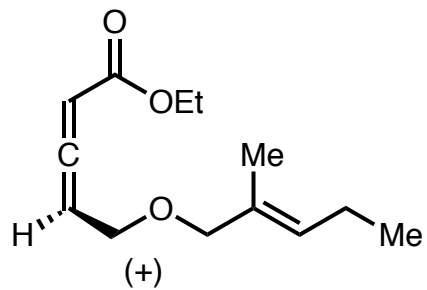




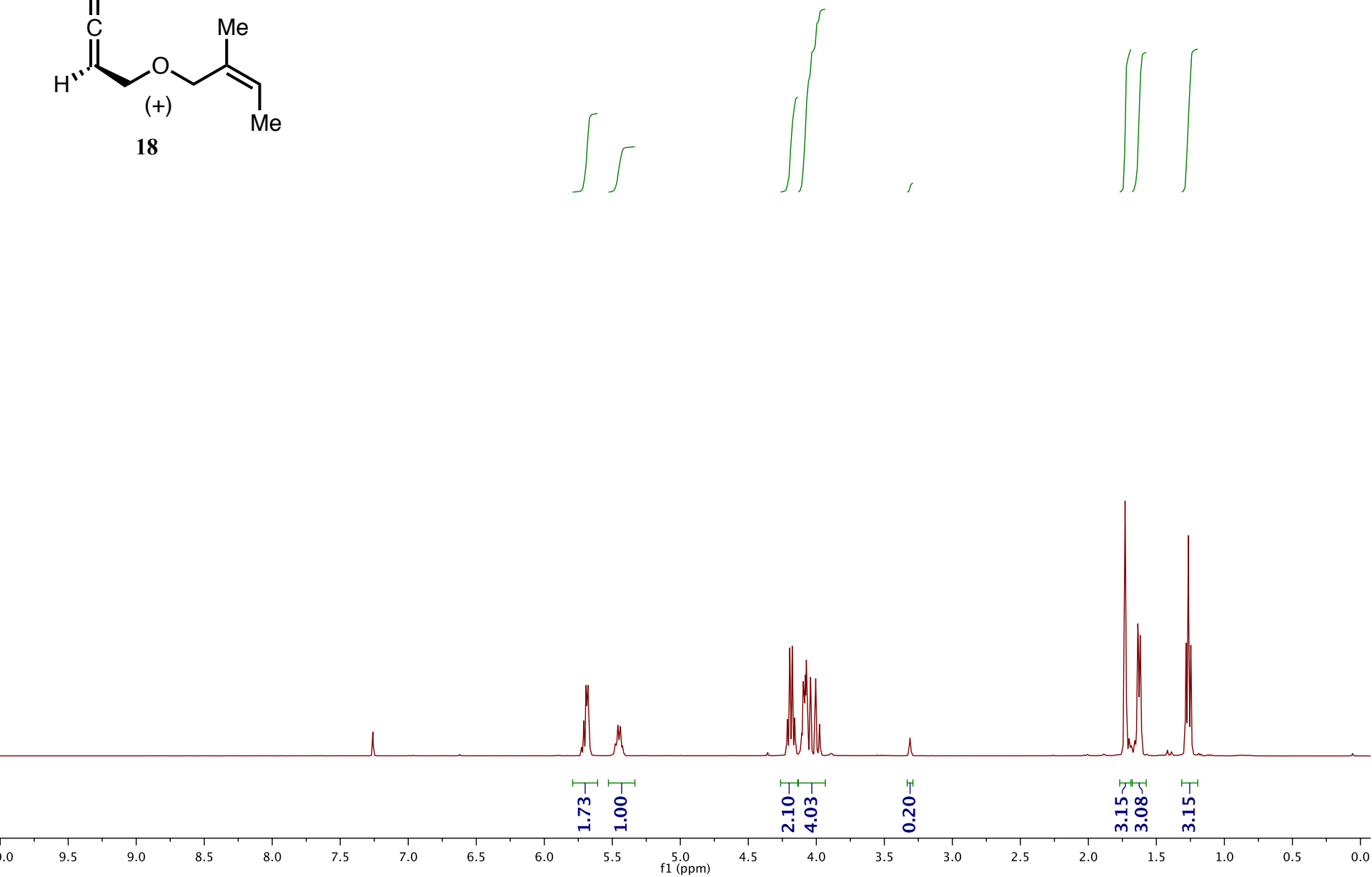
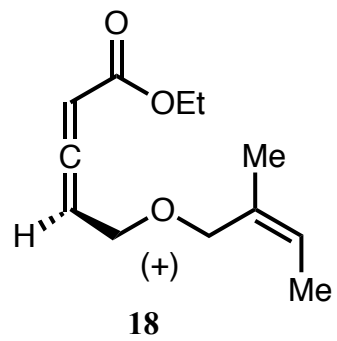


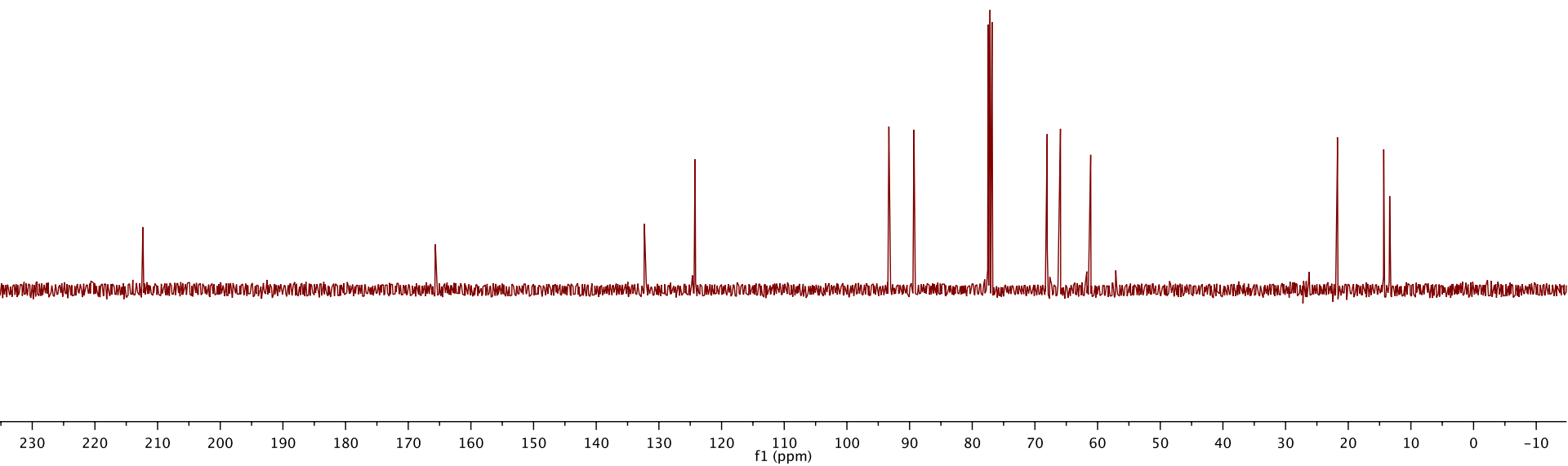
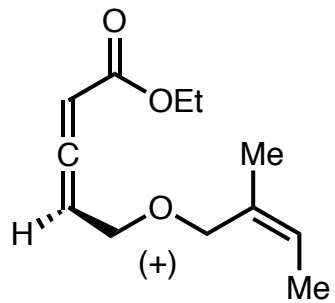


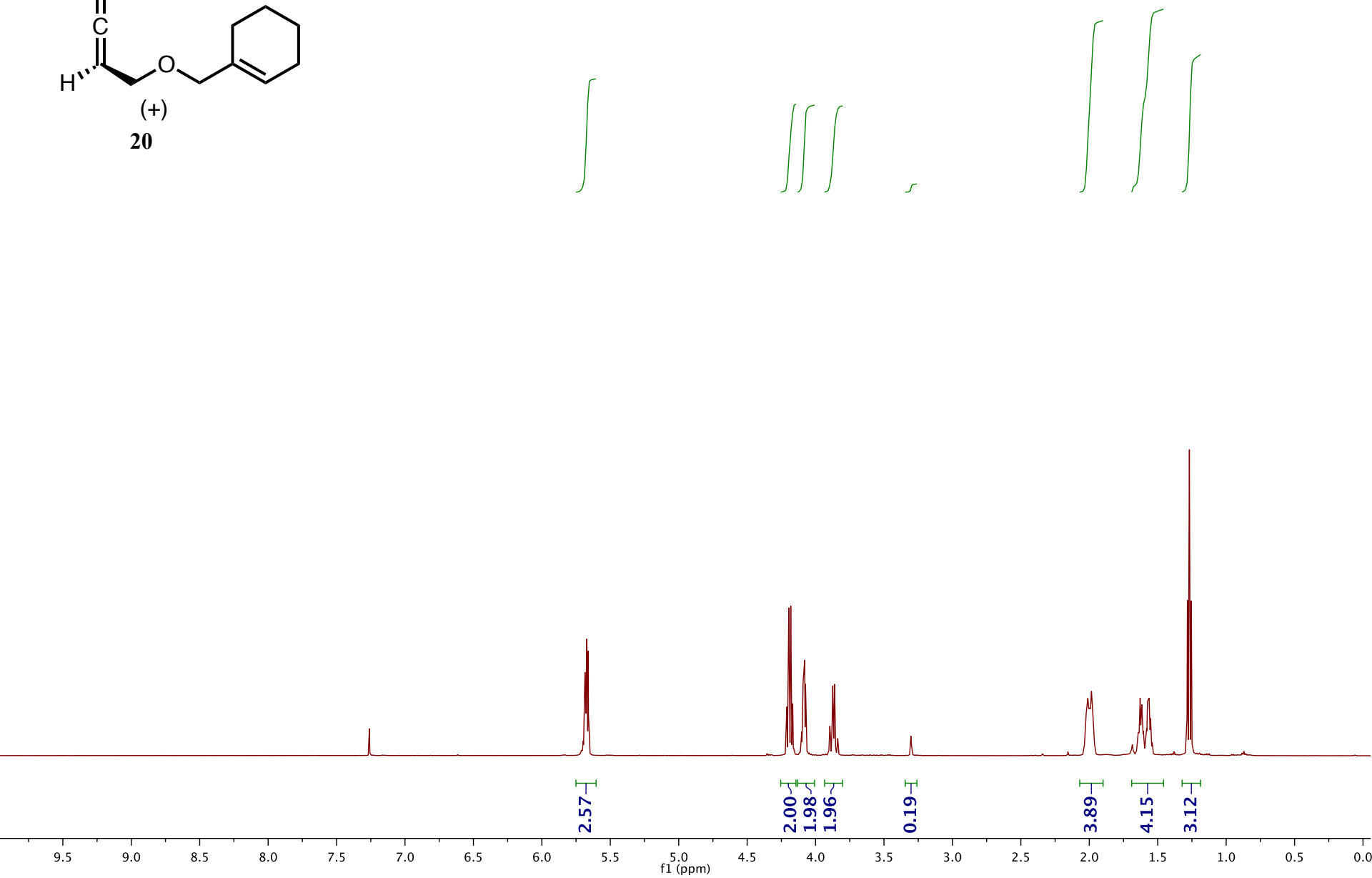
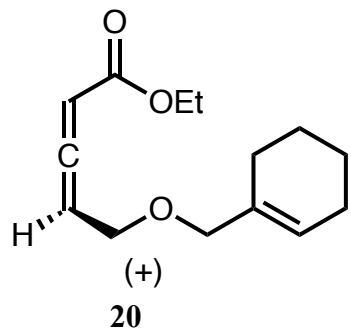


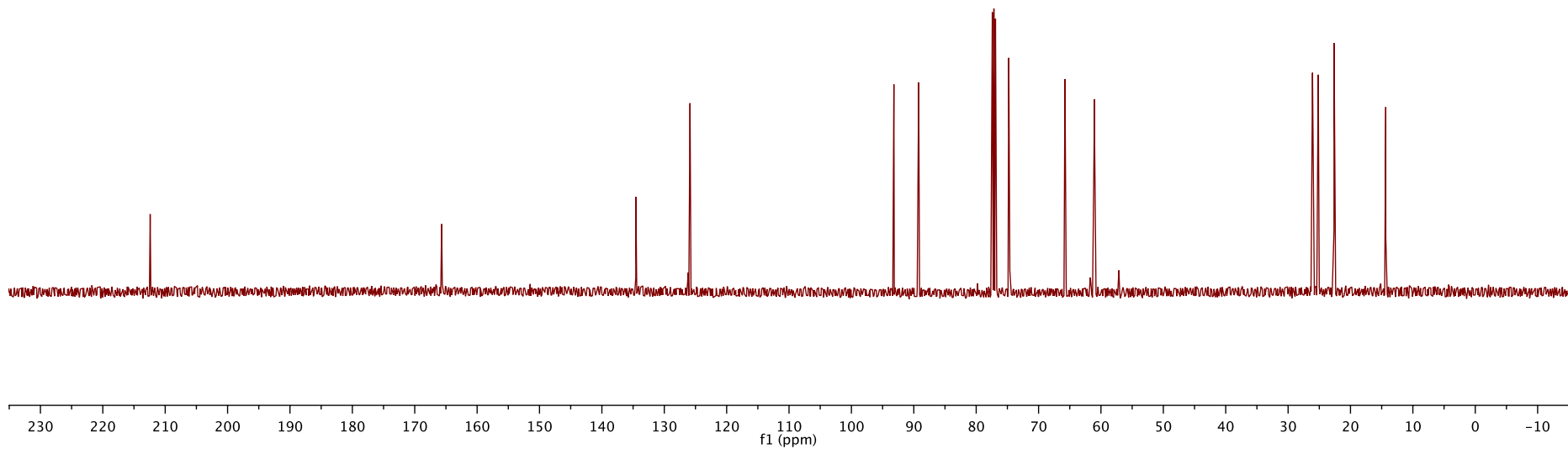
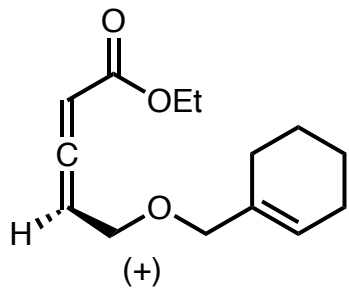


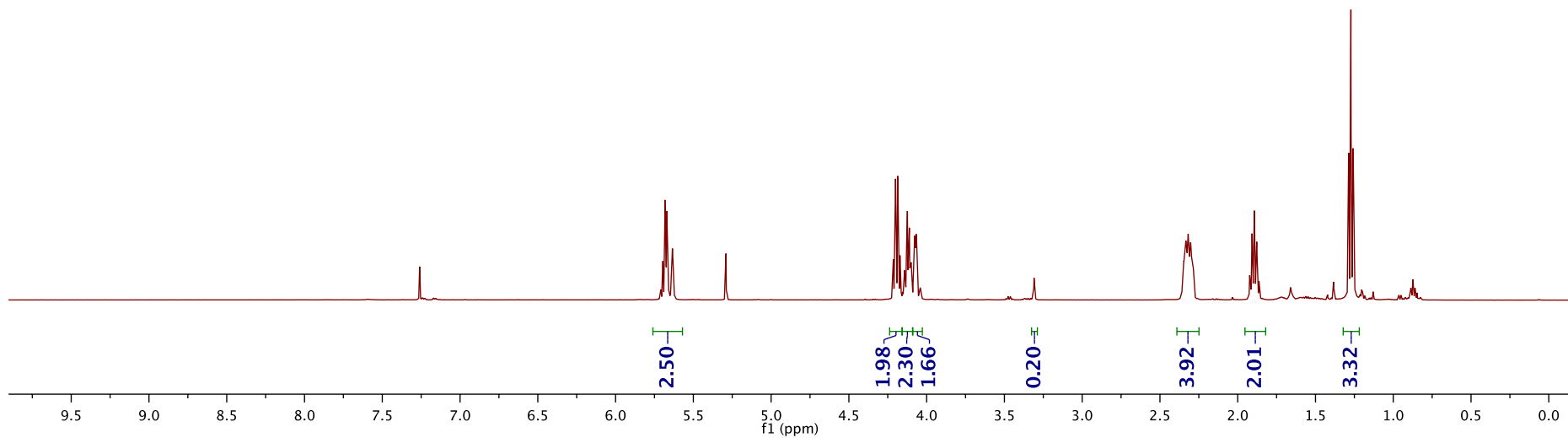
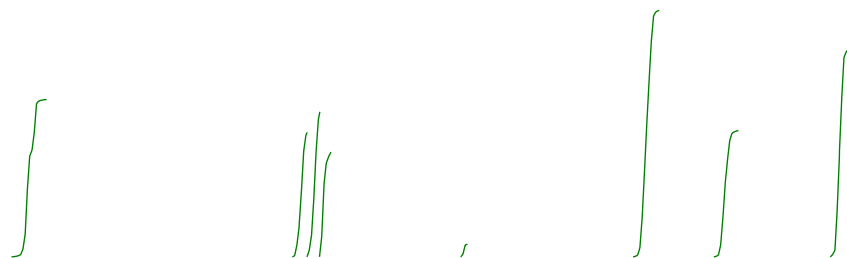
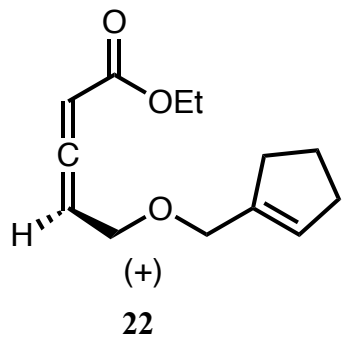


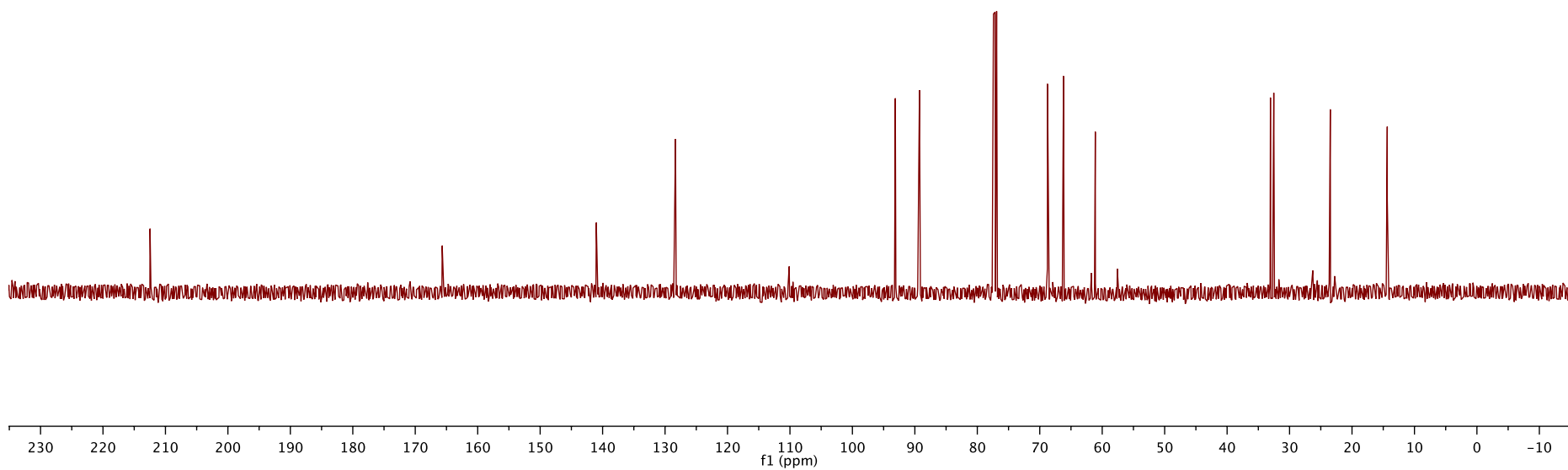
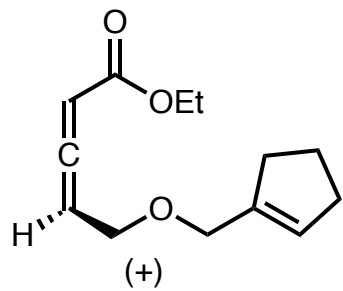


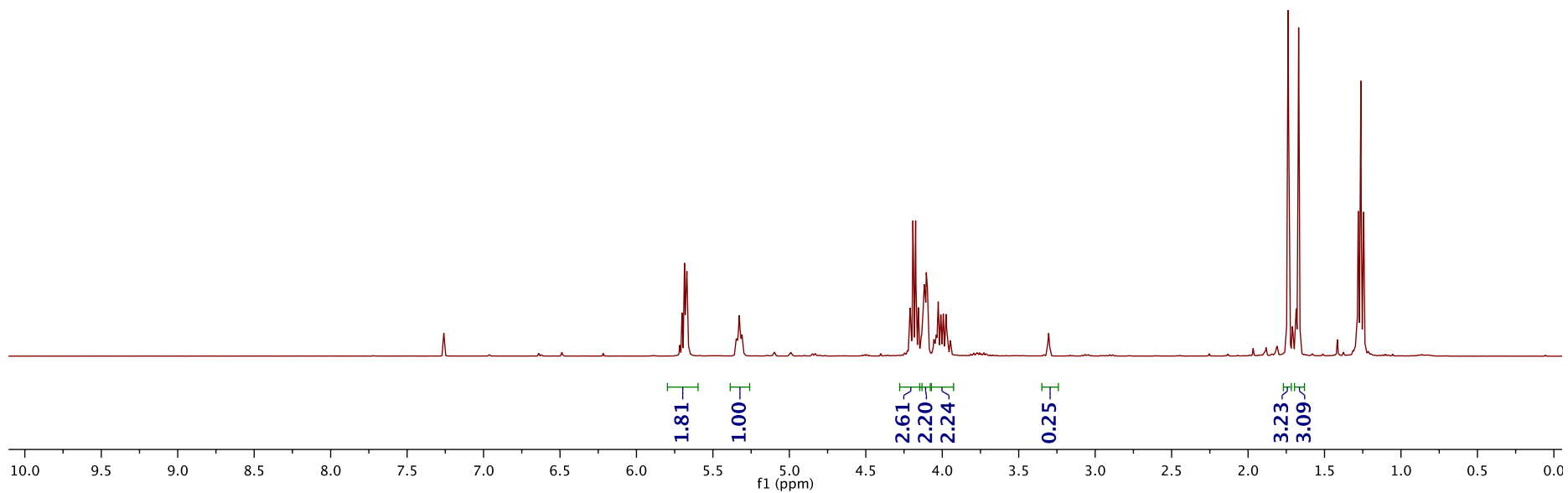
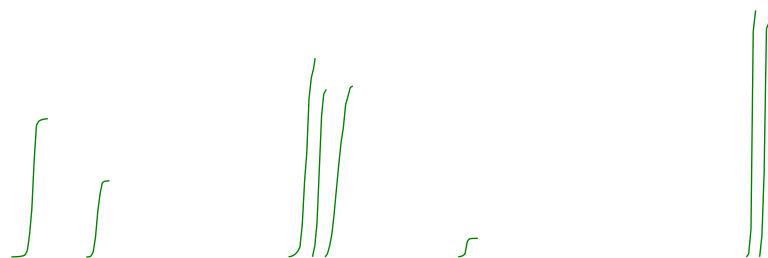
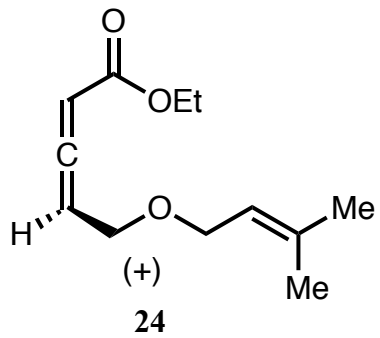


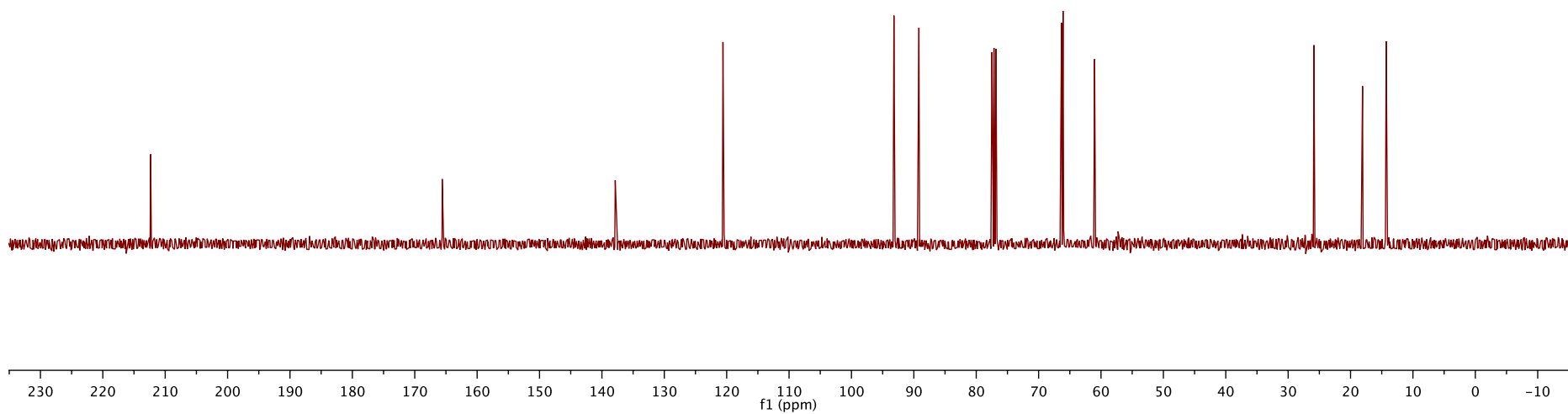
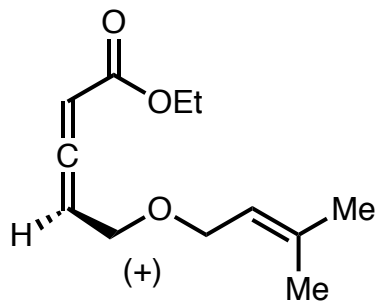




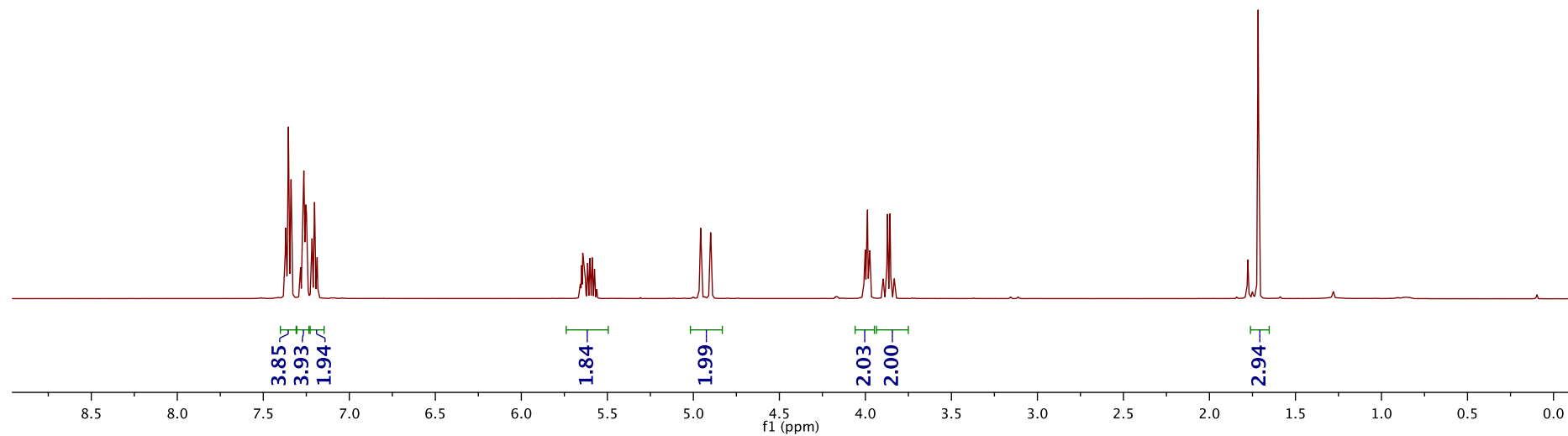
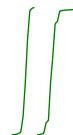
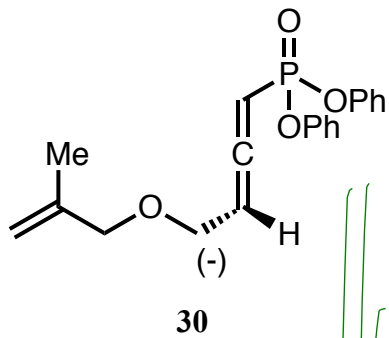


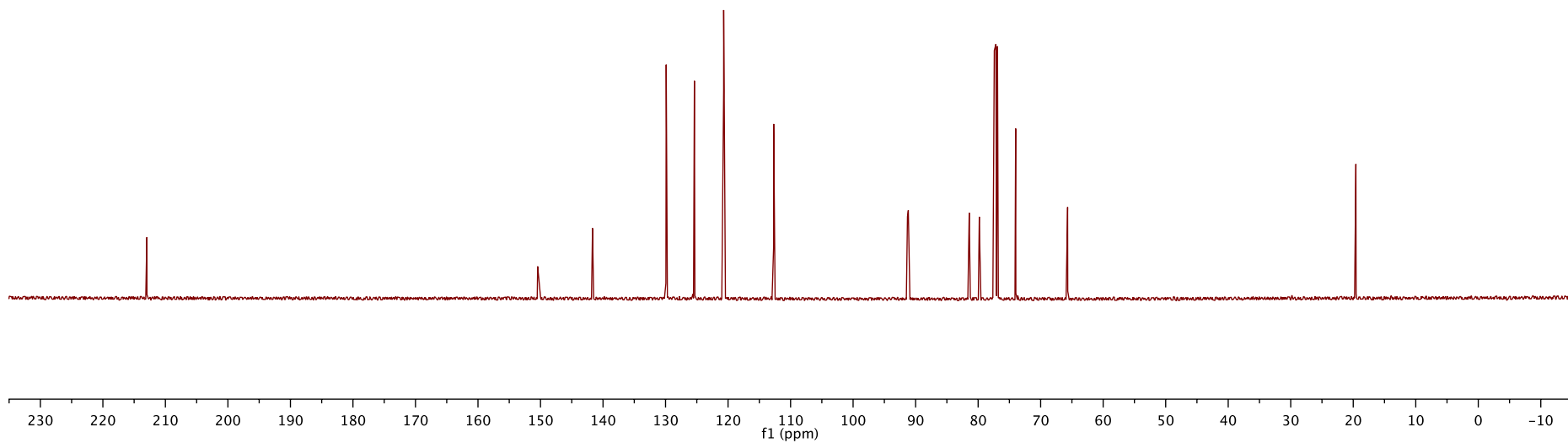
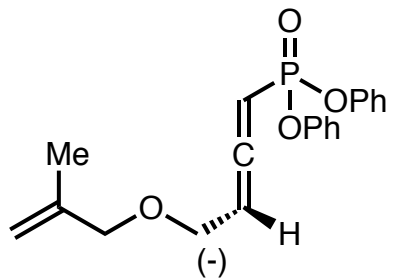


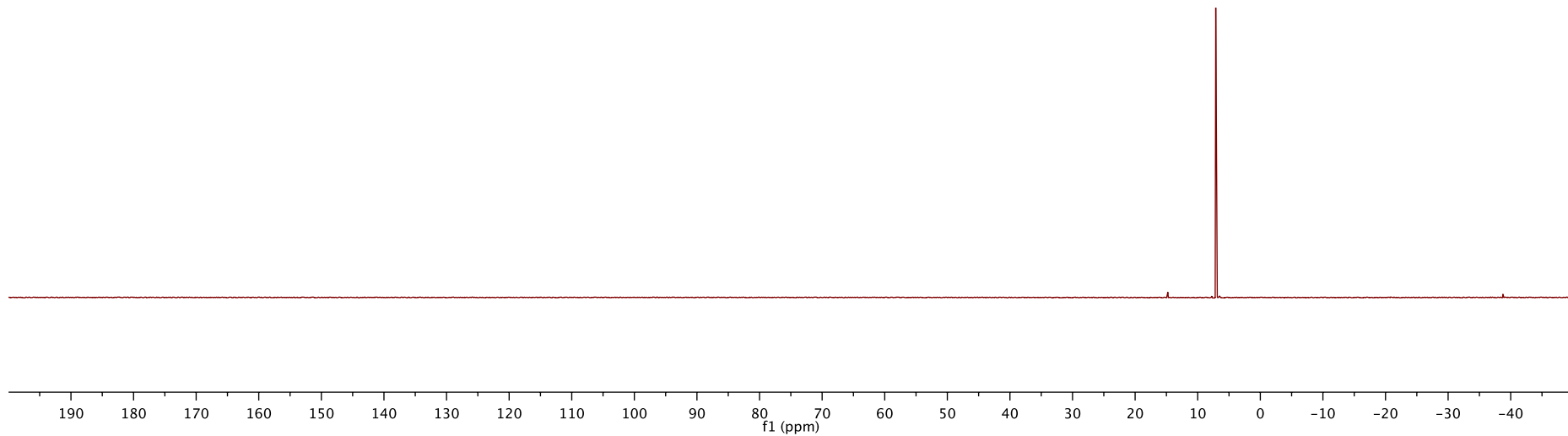
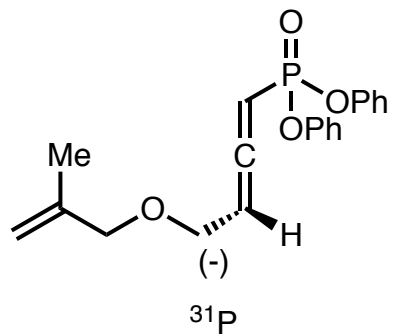


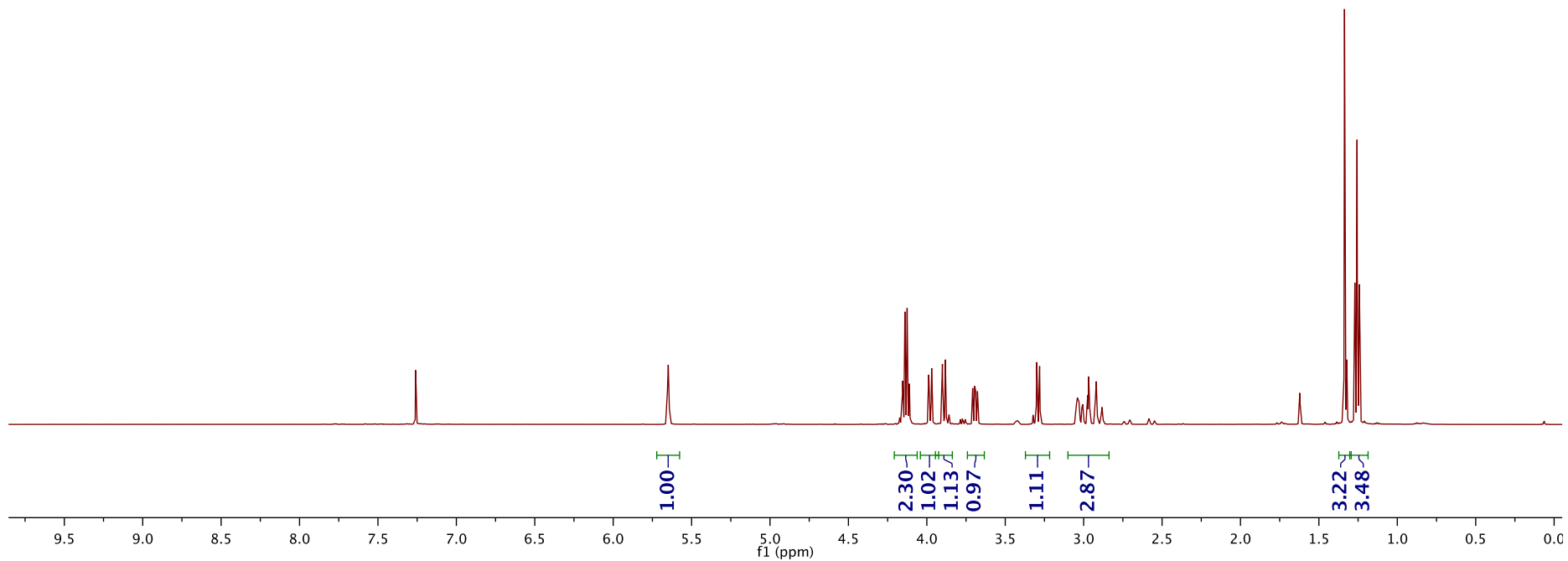
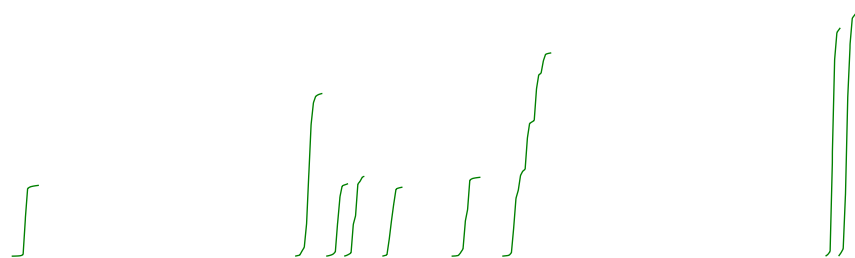
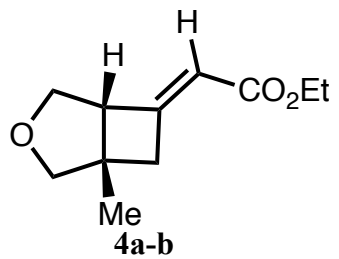


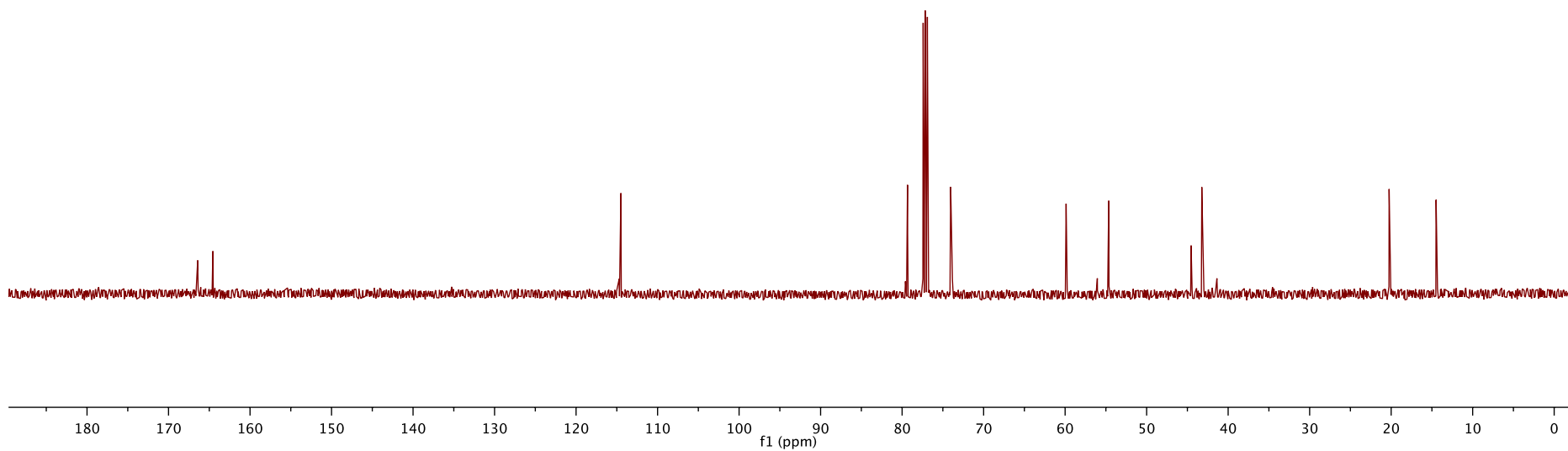
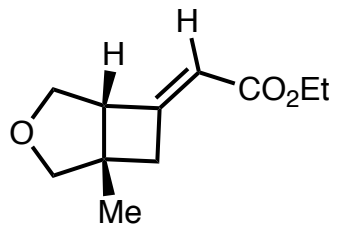


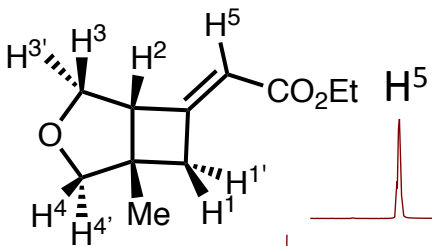




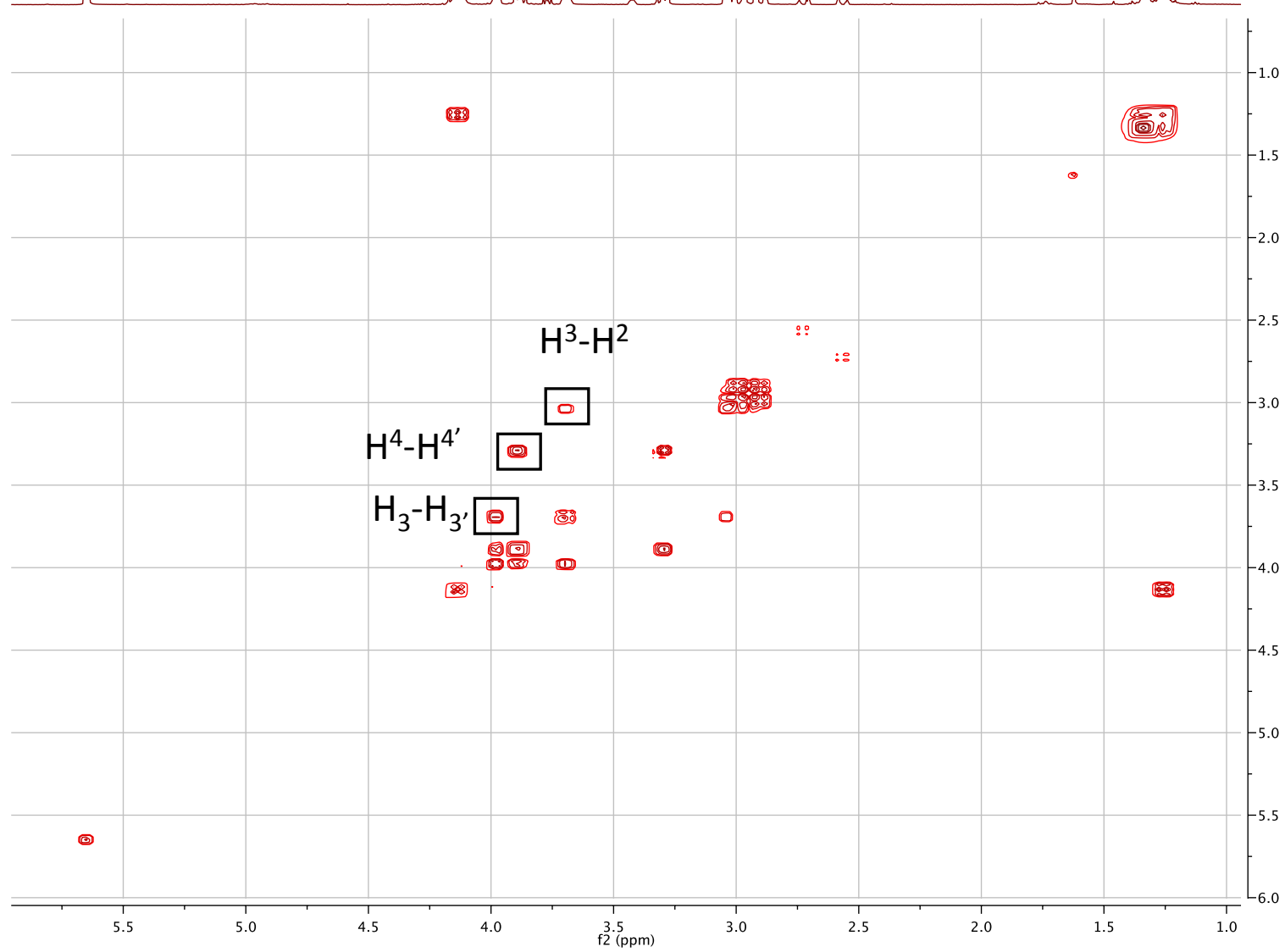


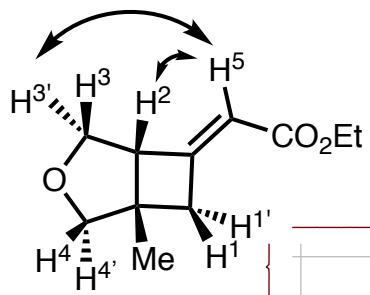




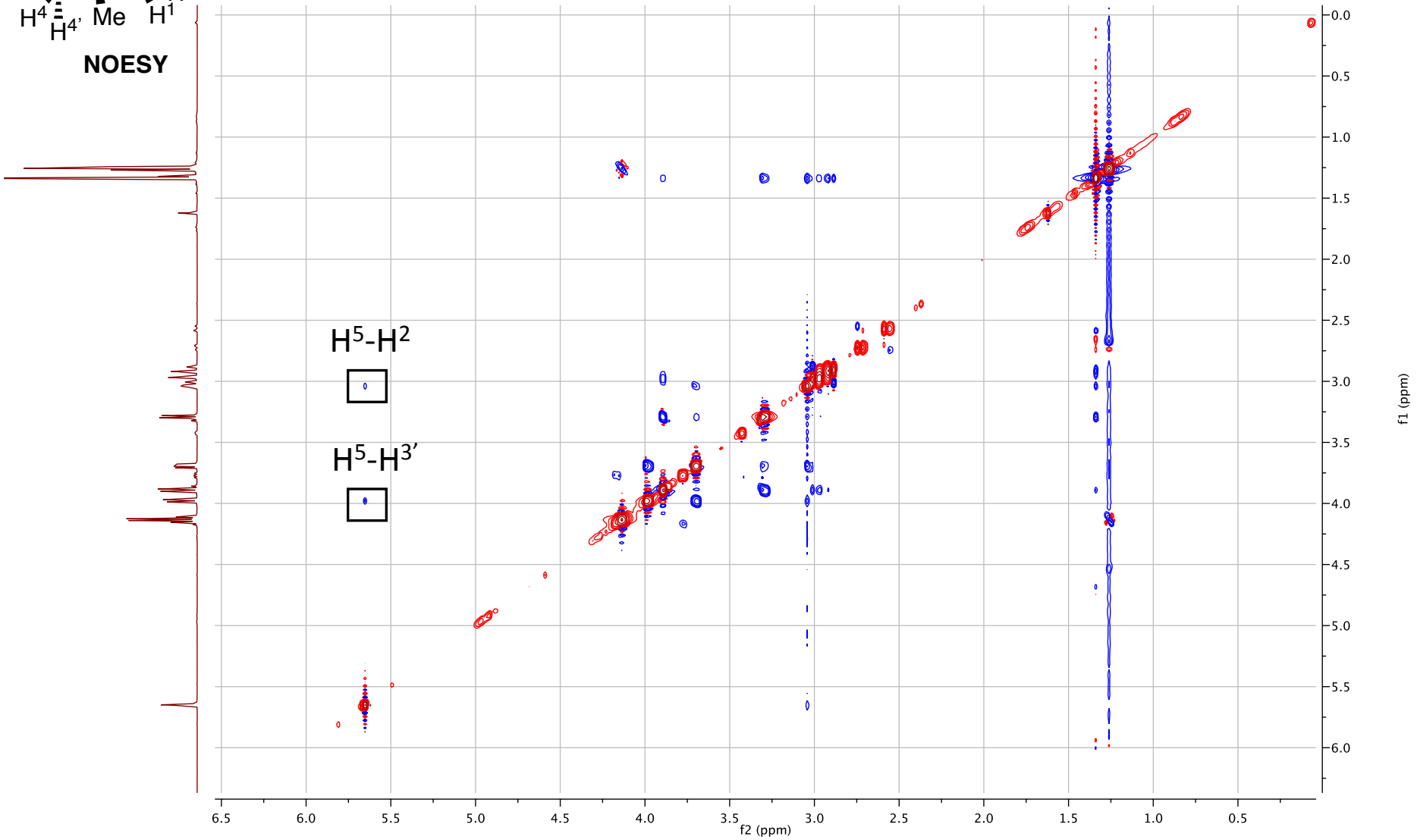


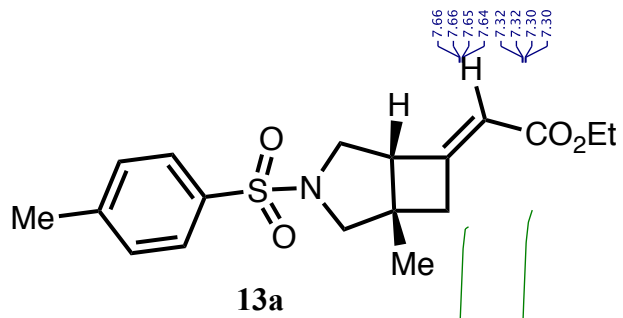
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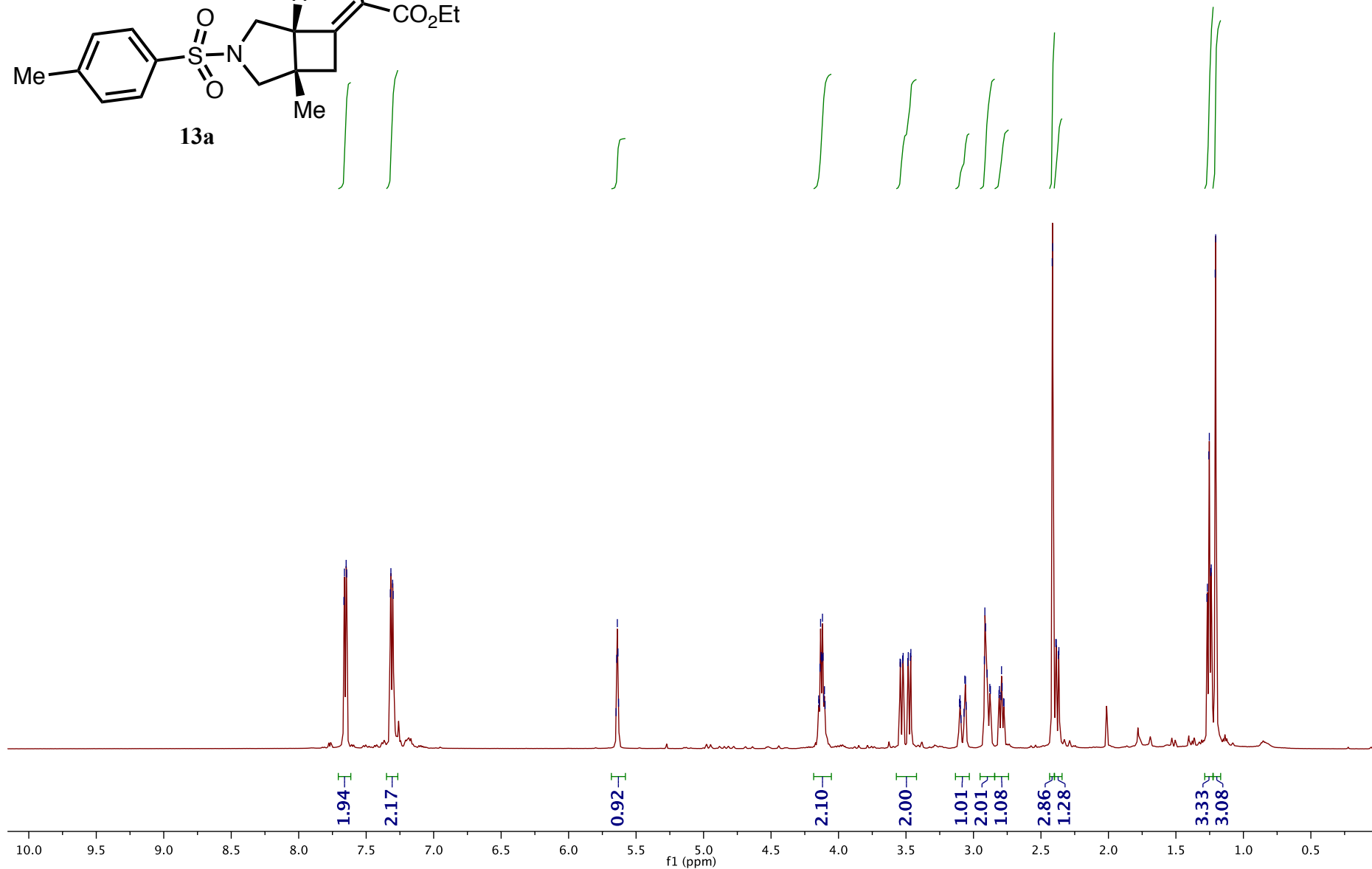




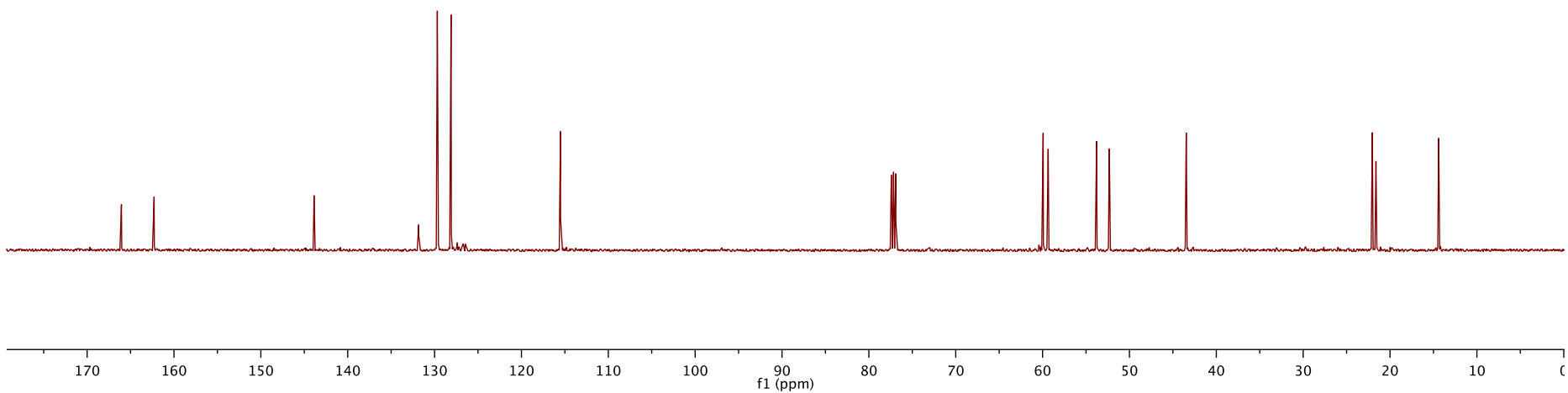
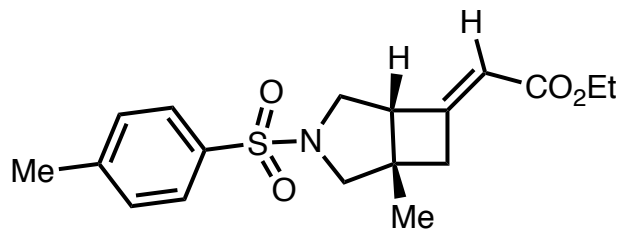
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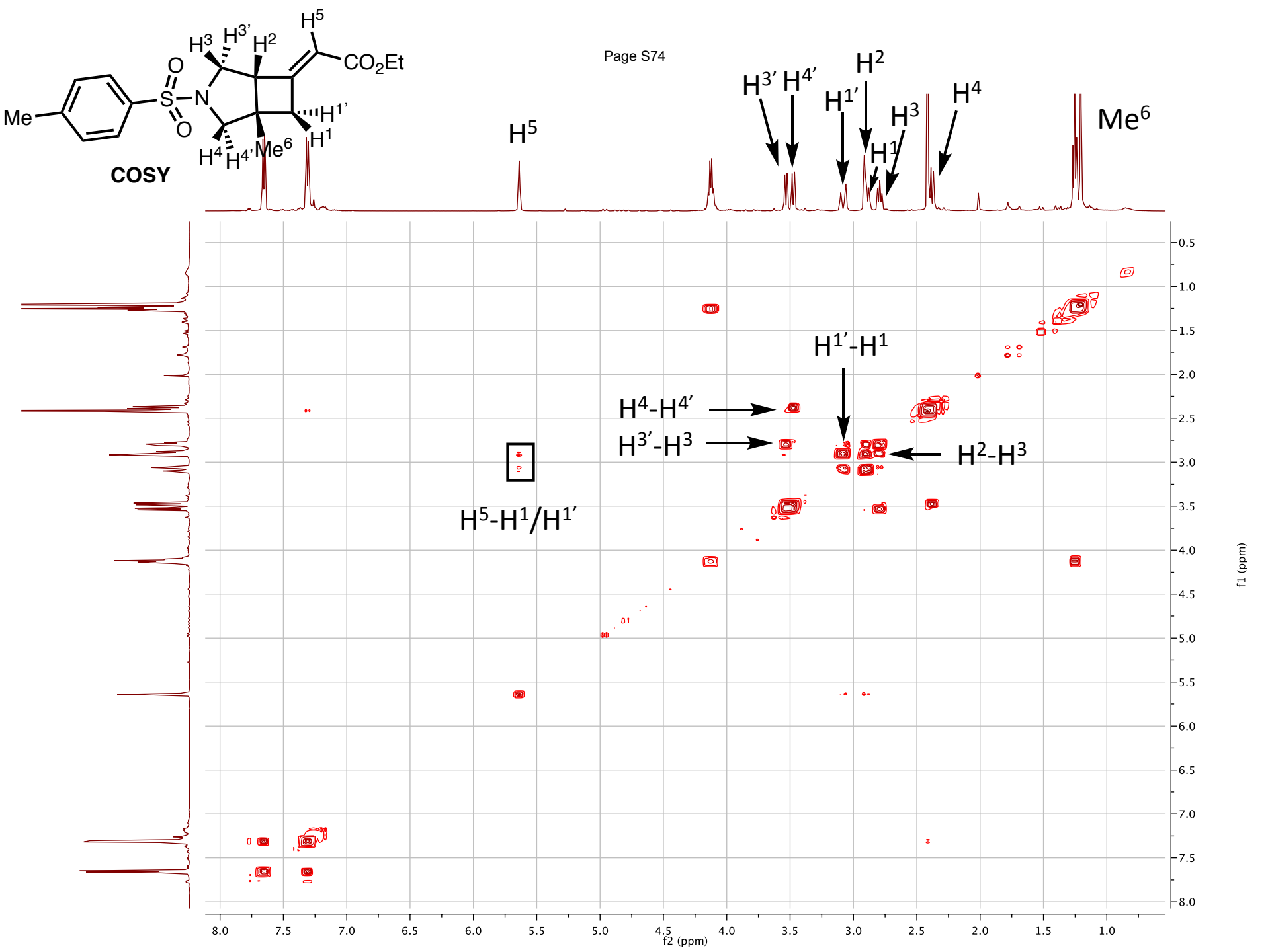
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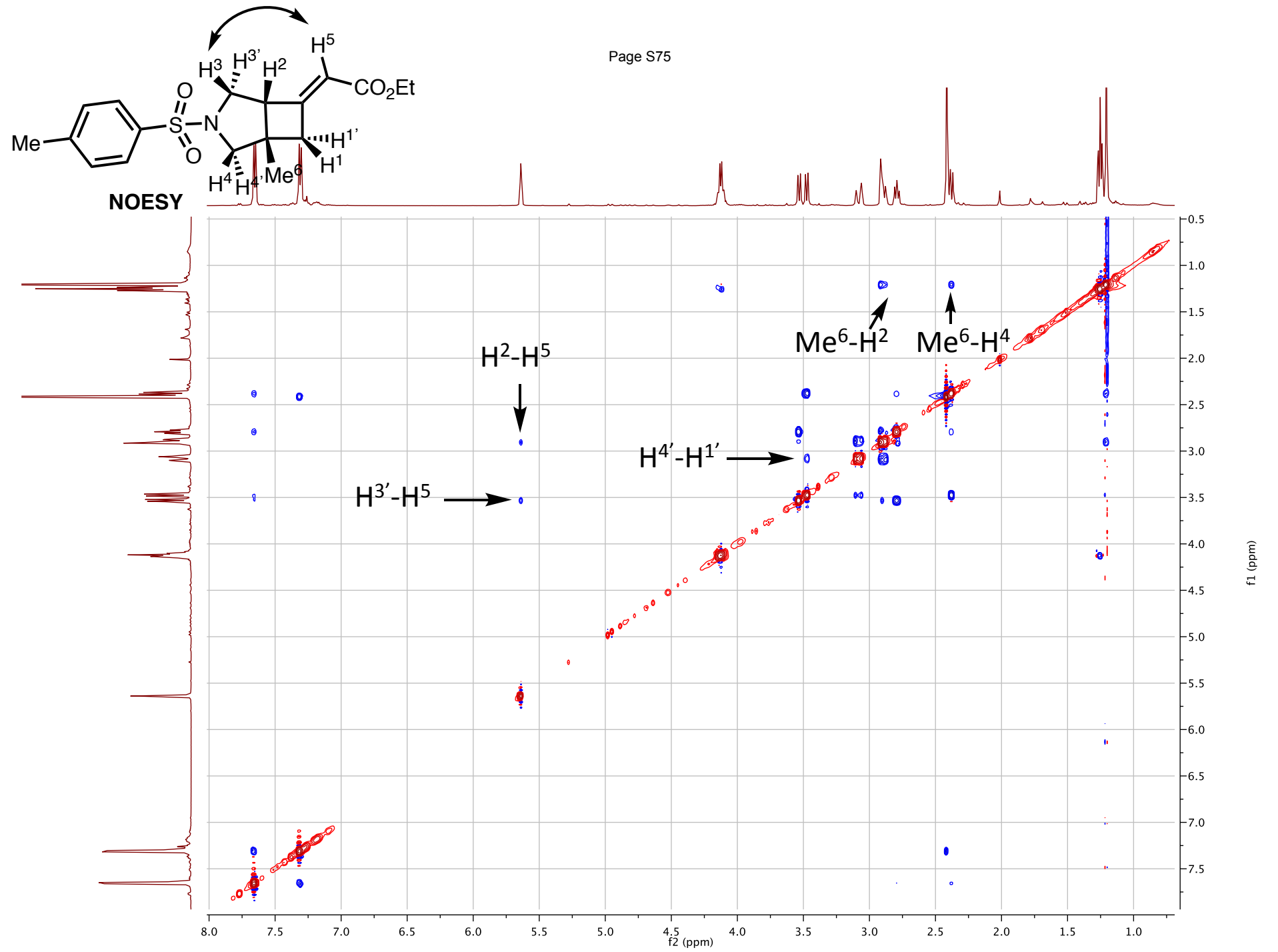
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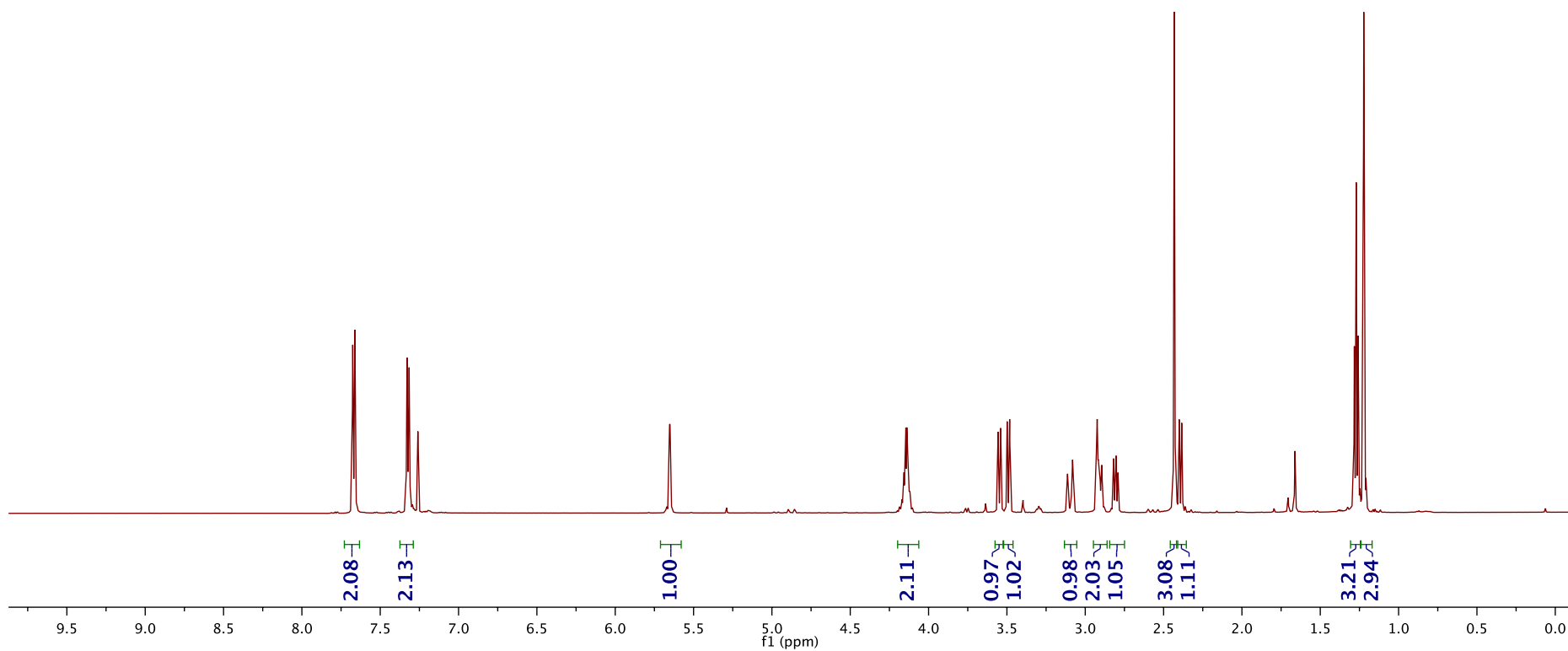
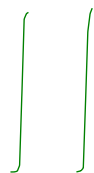
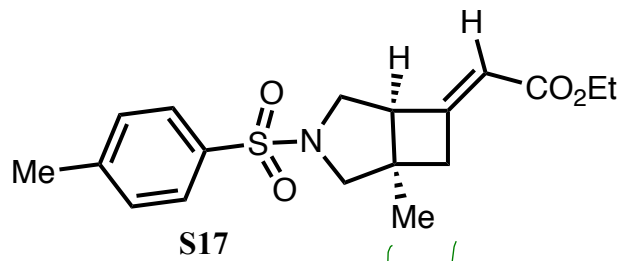


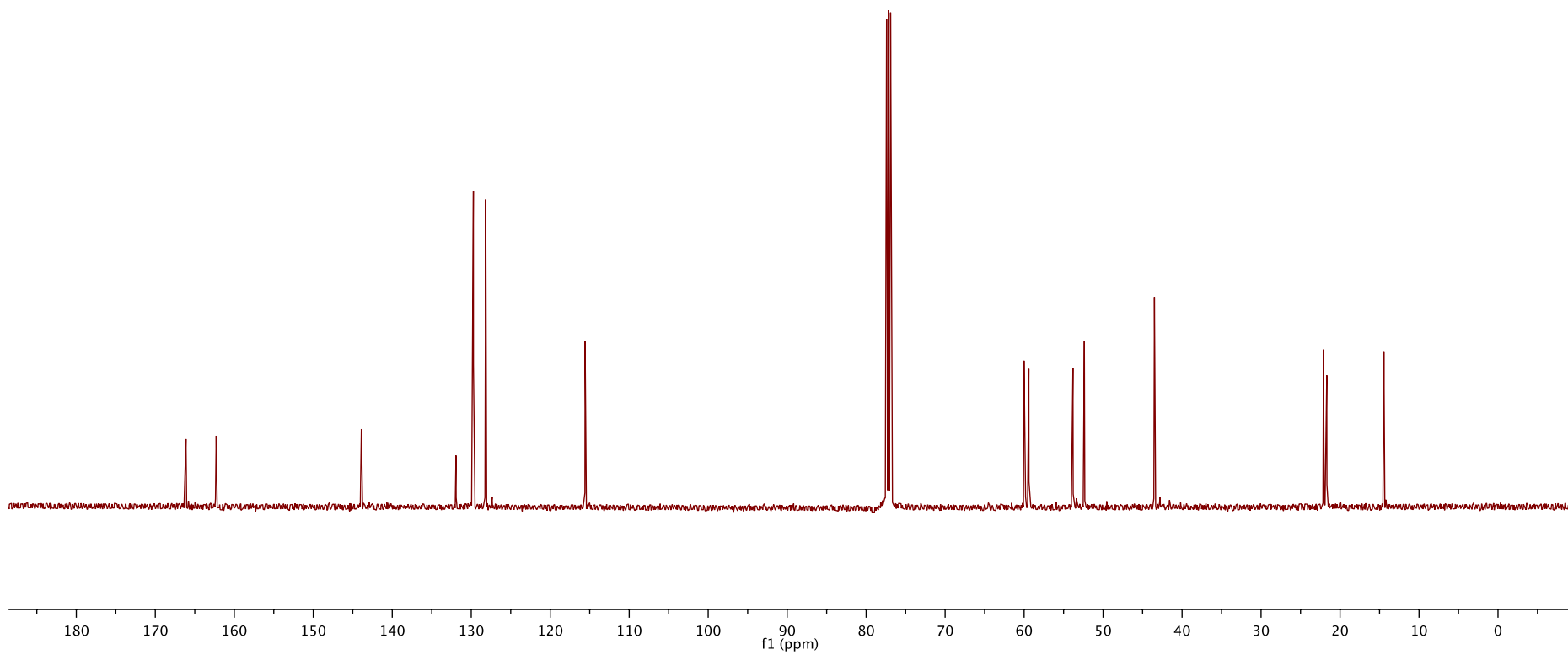
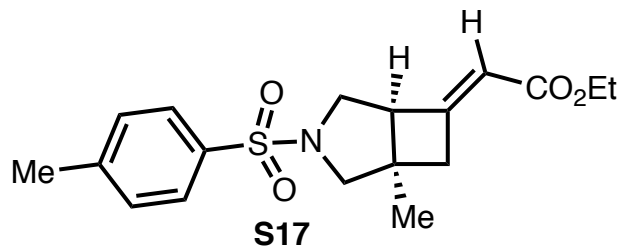


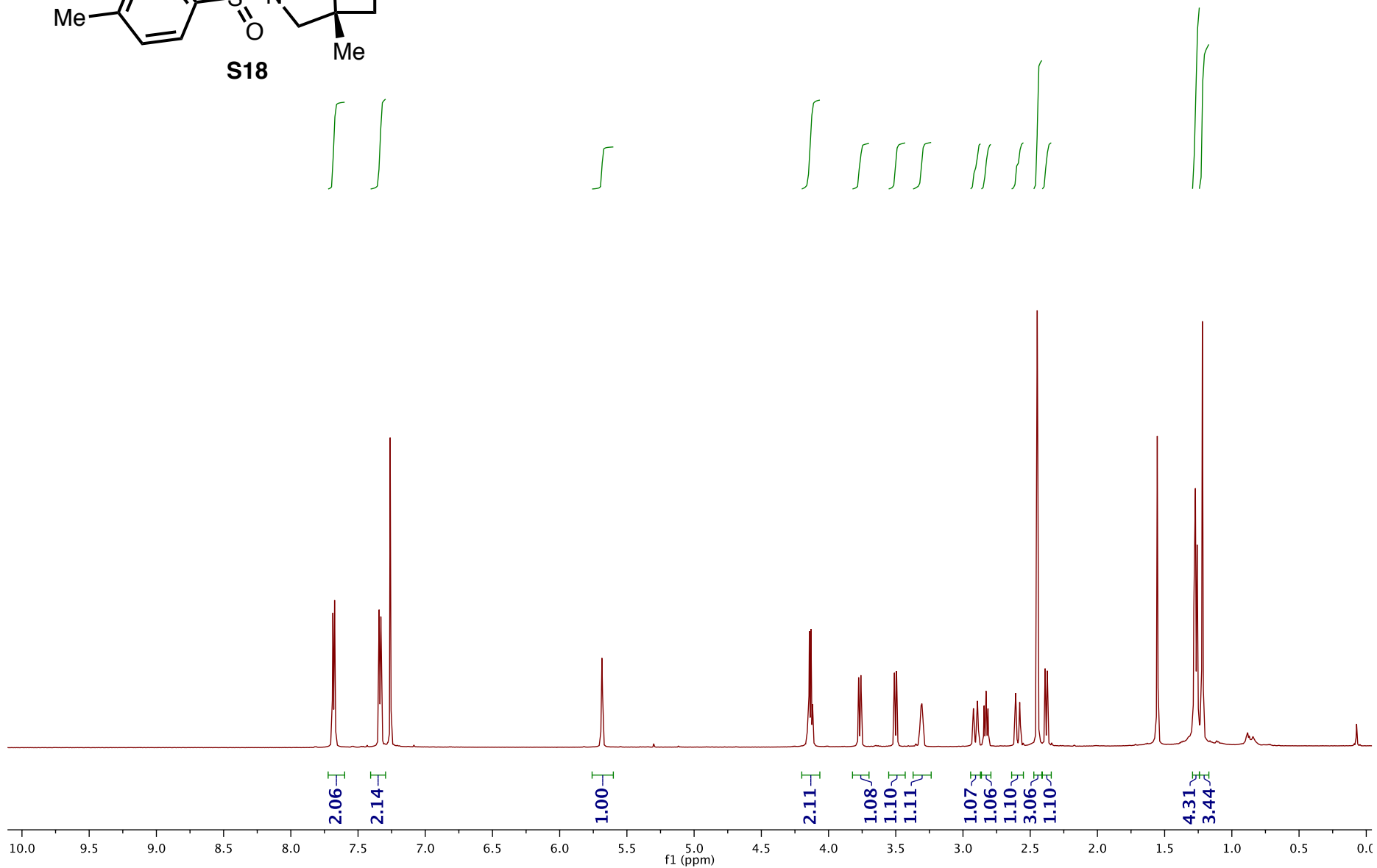
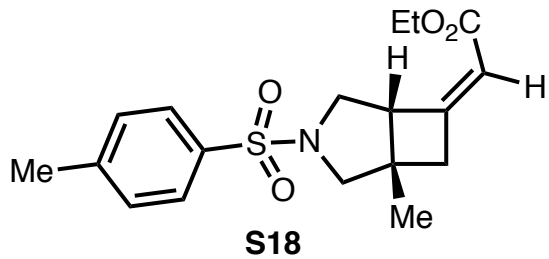


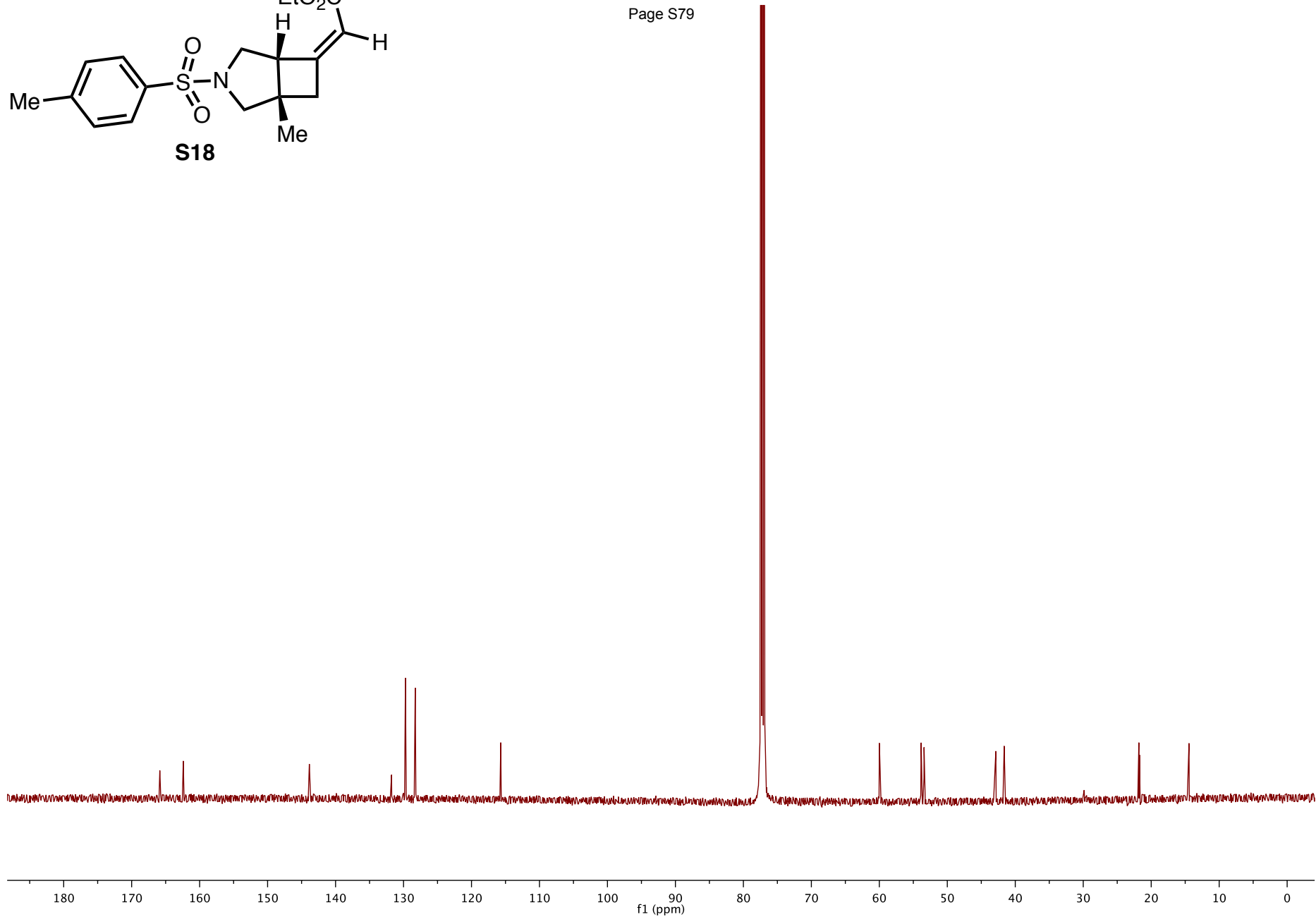
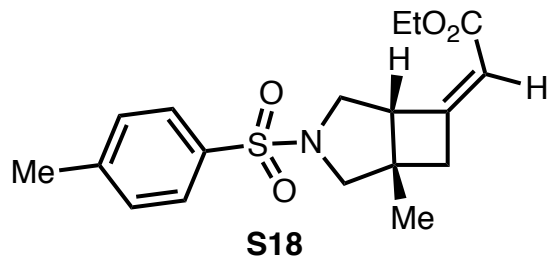


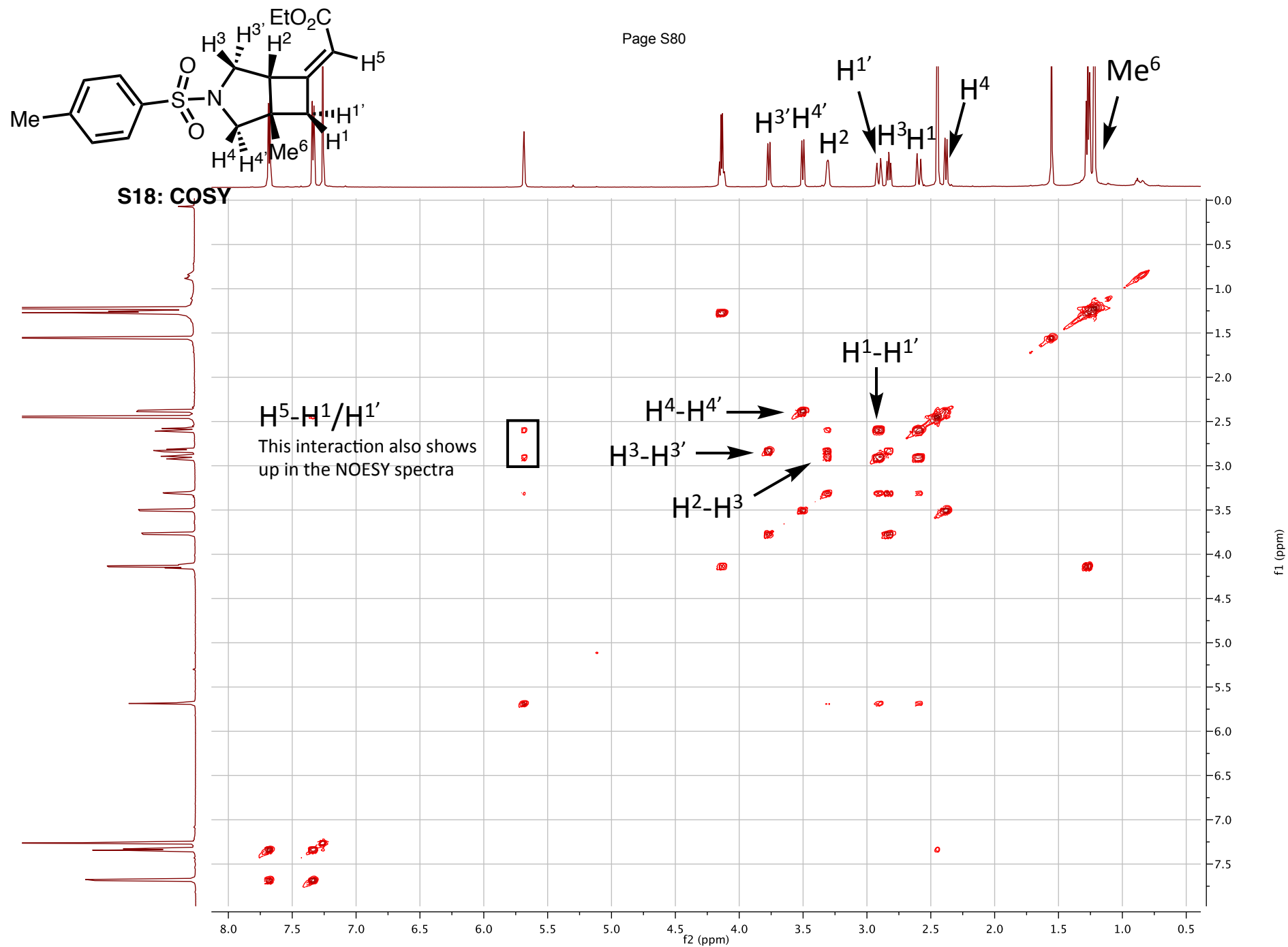




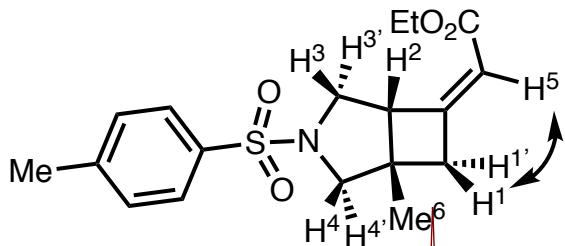




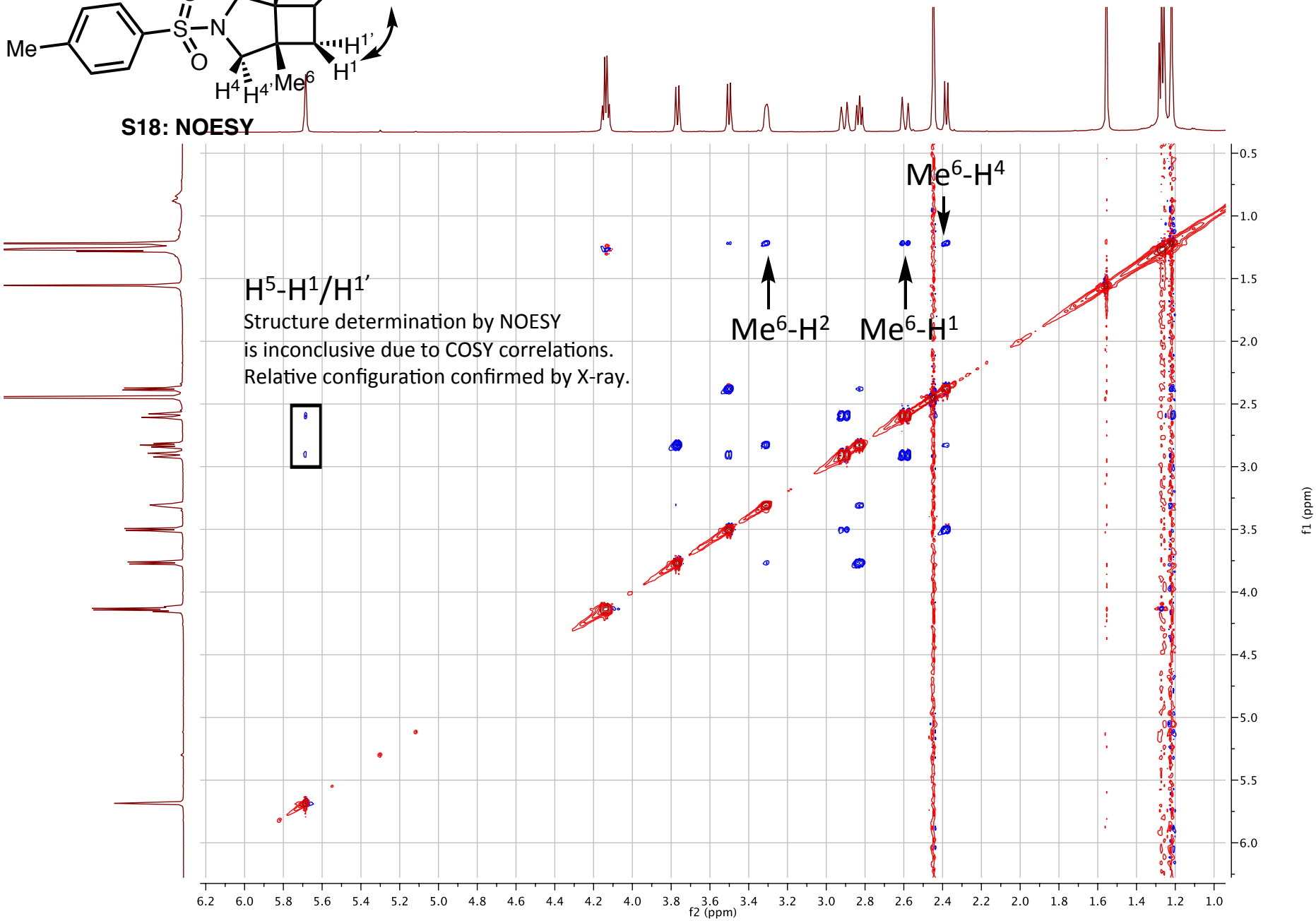


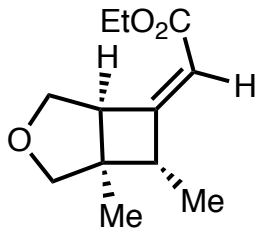




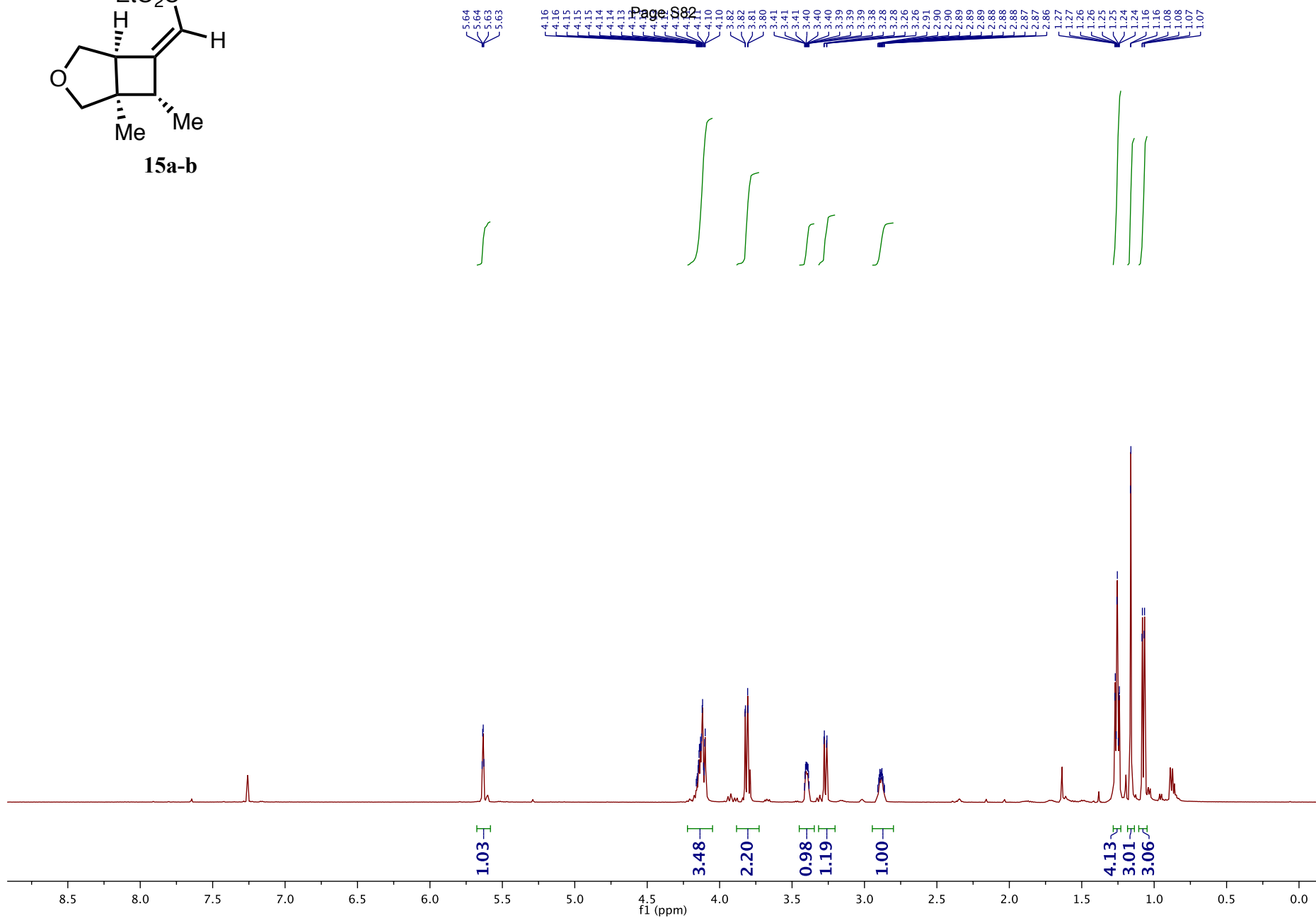


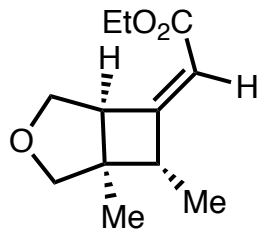
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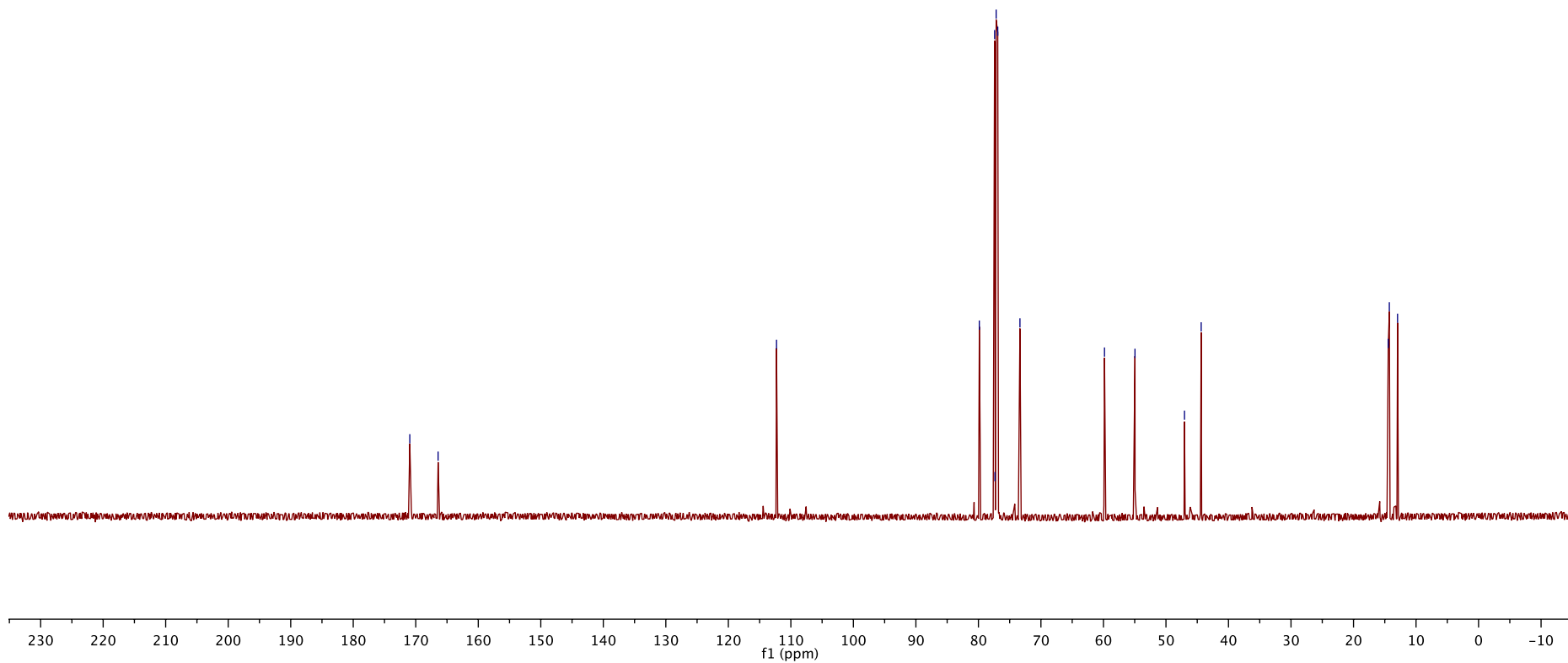
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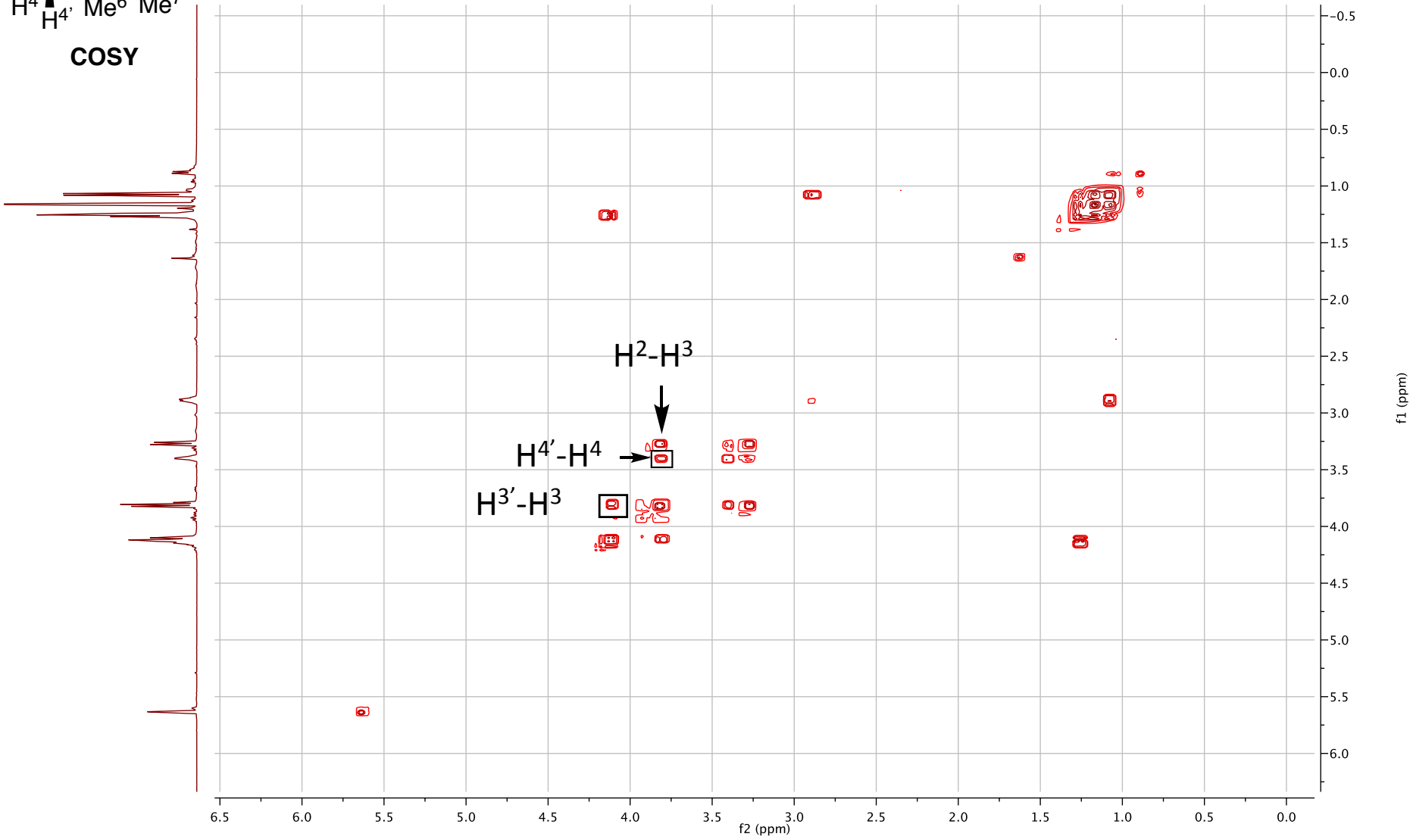
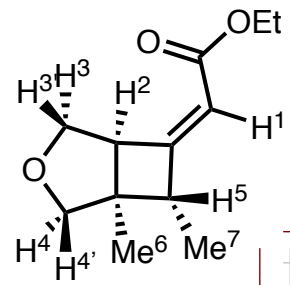
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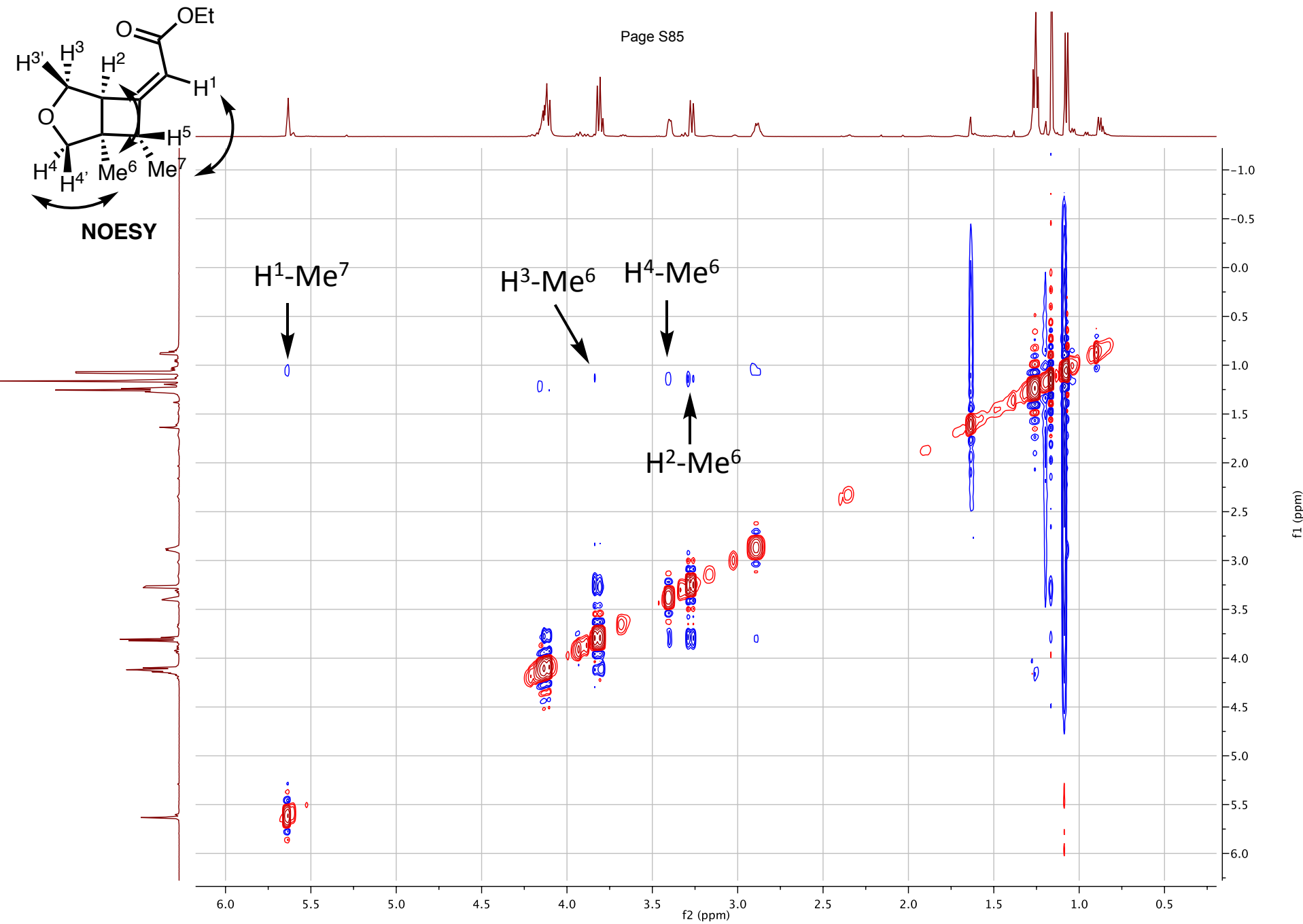
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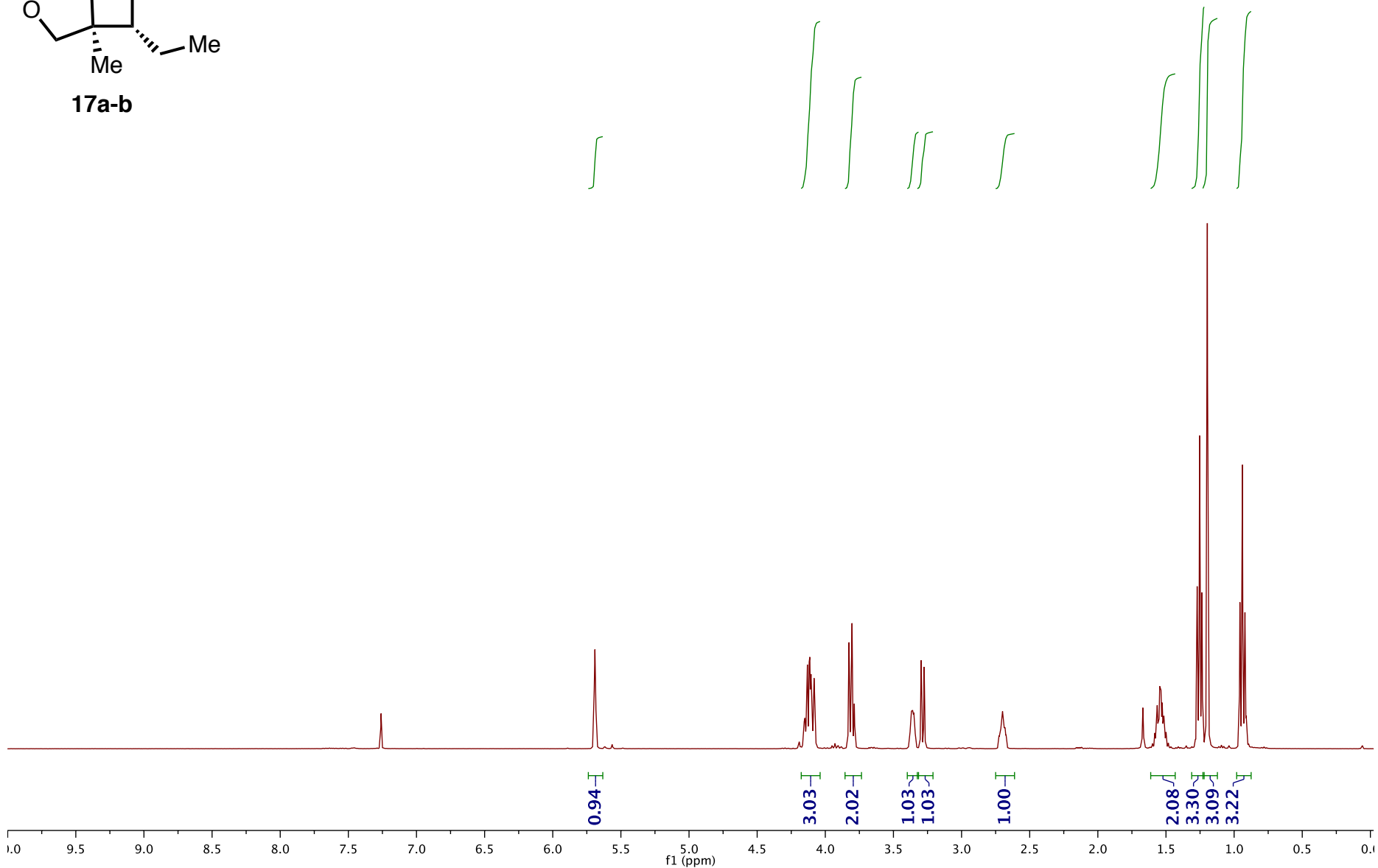
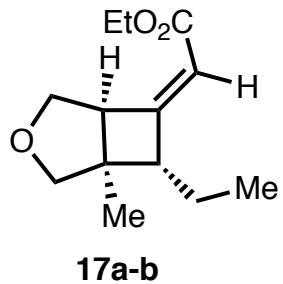
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— 44.37

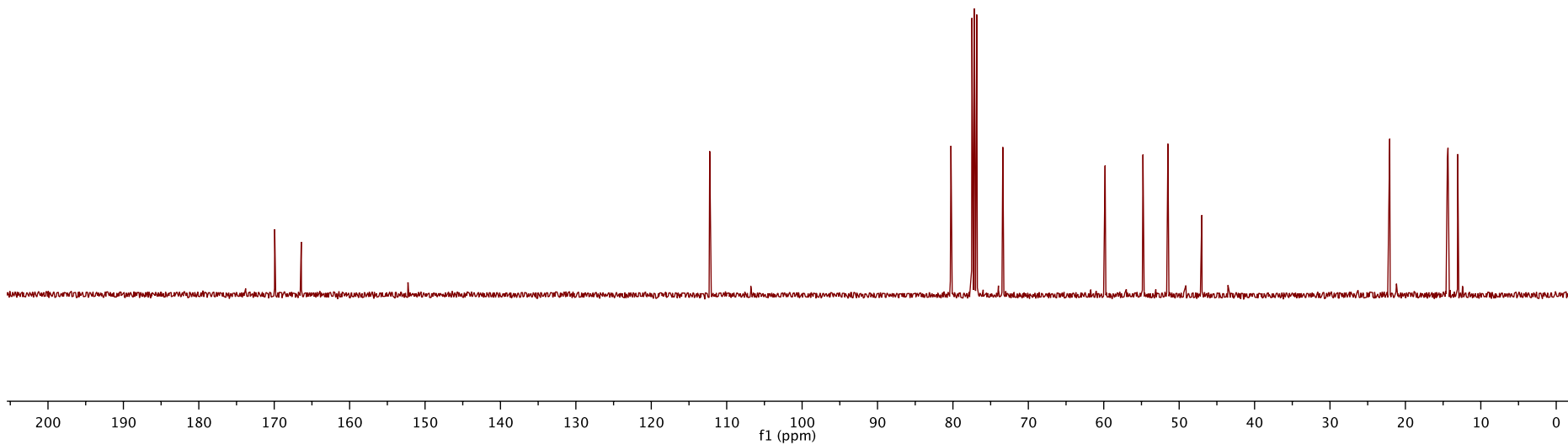
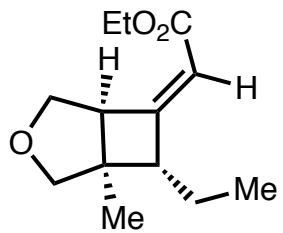
14.44  
14.27  
12.96

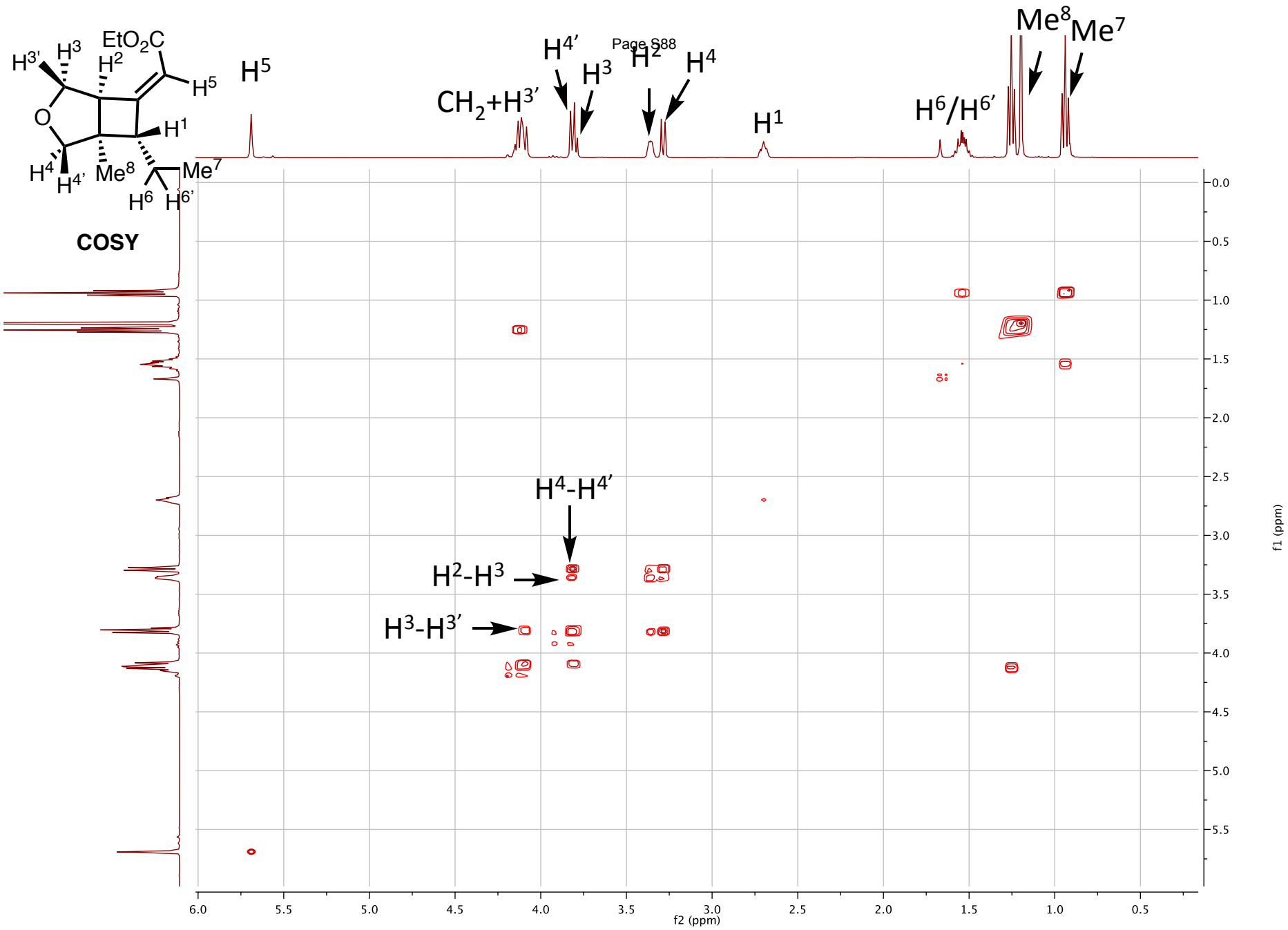




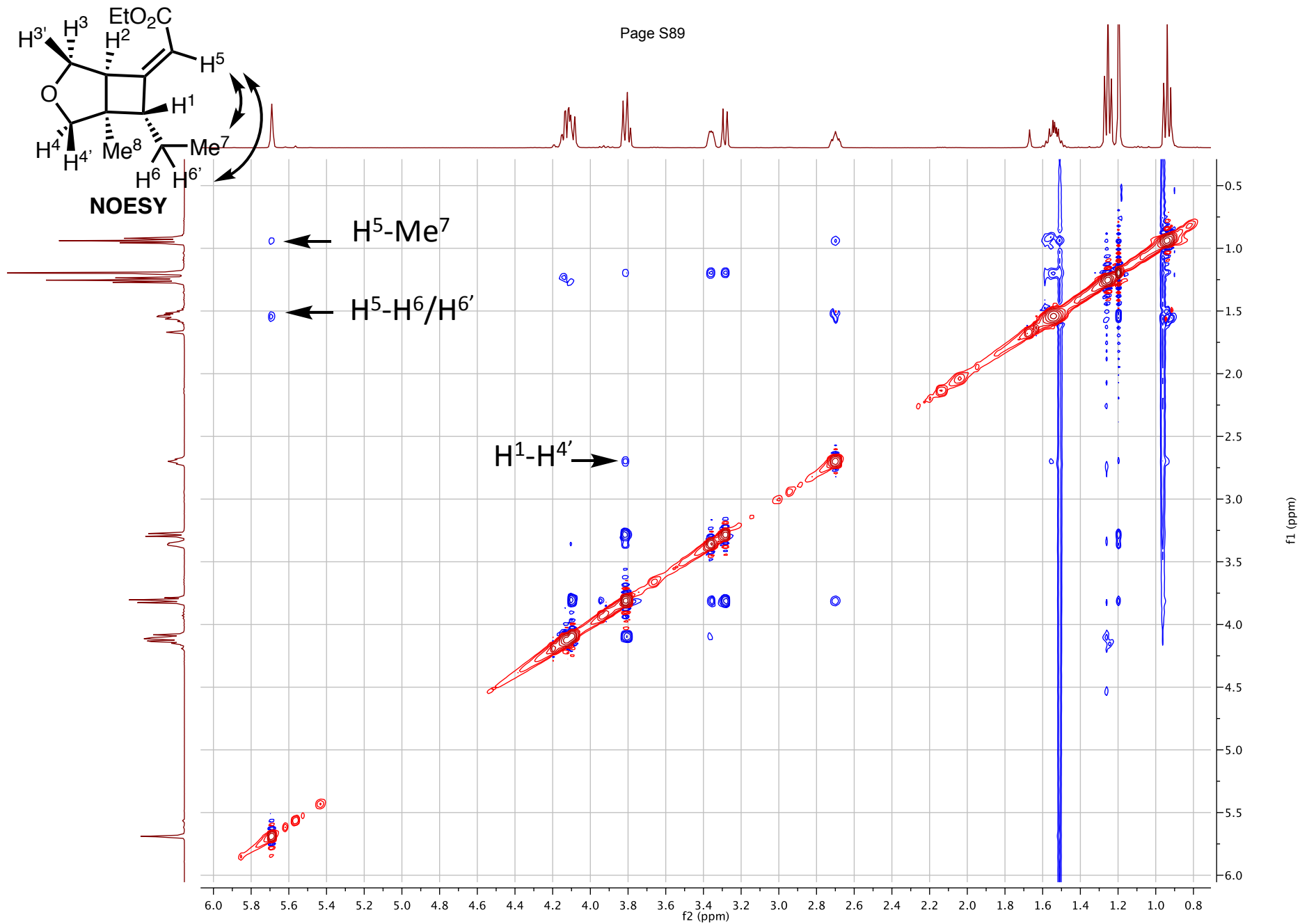


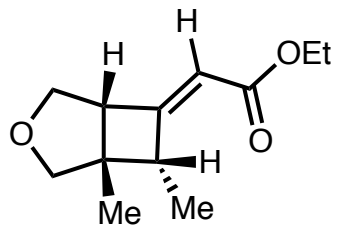




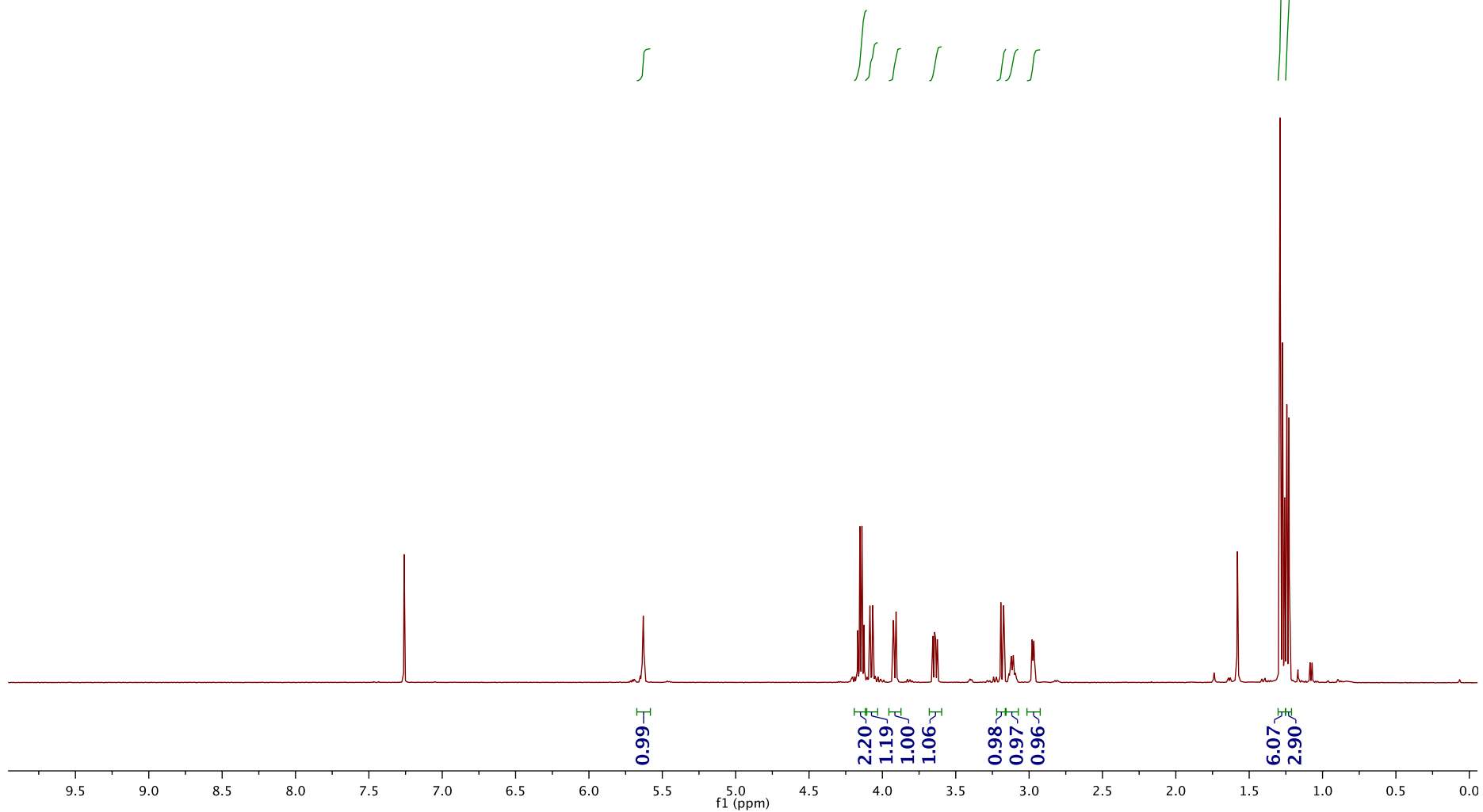


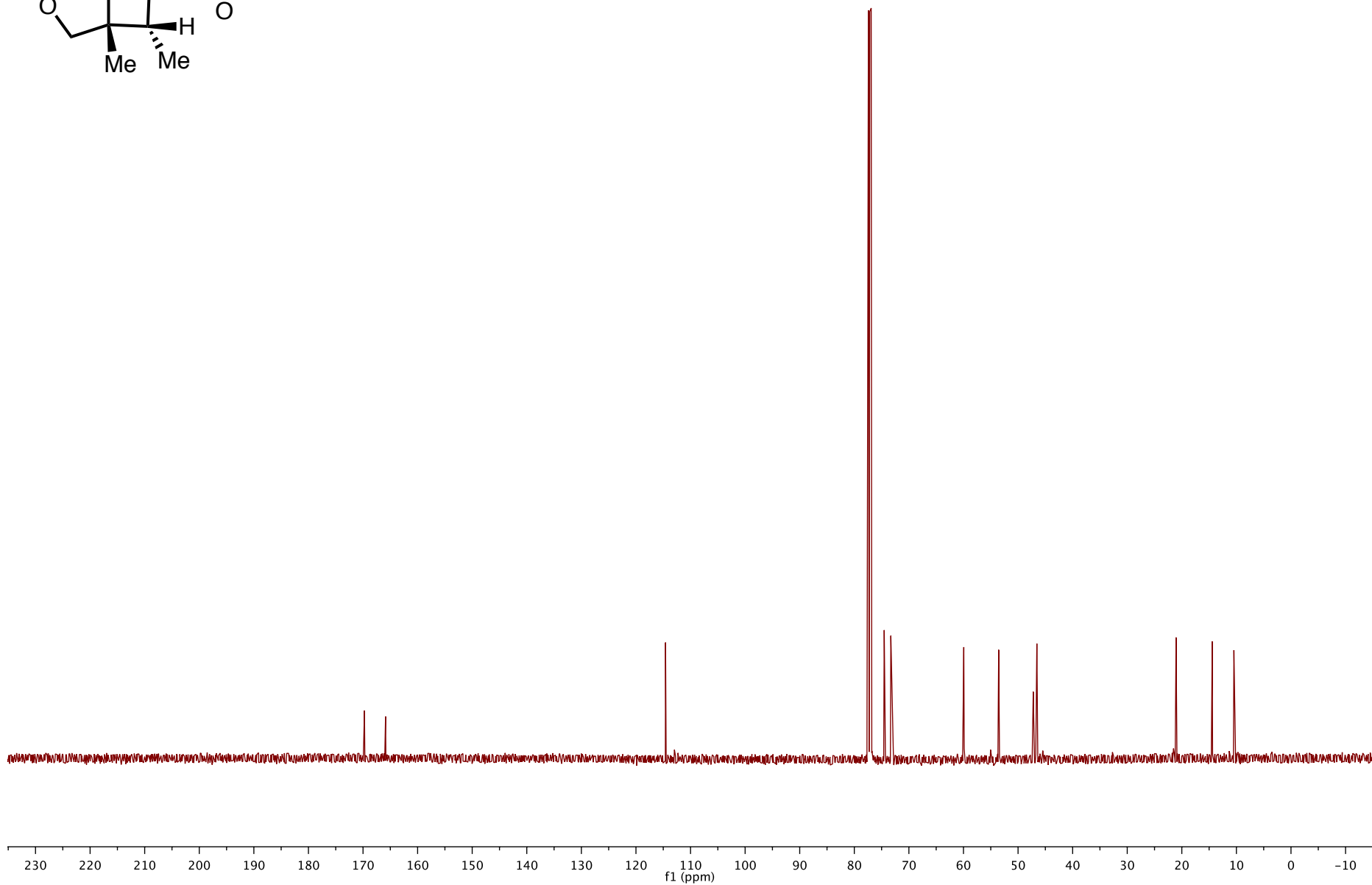
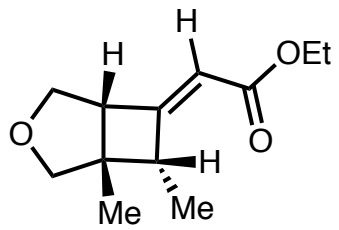


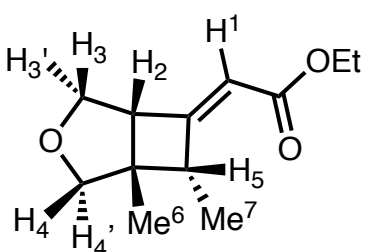




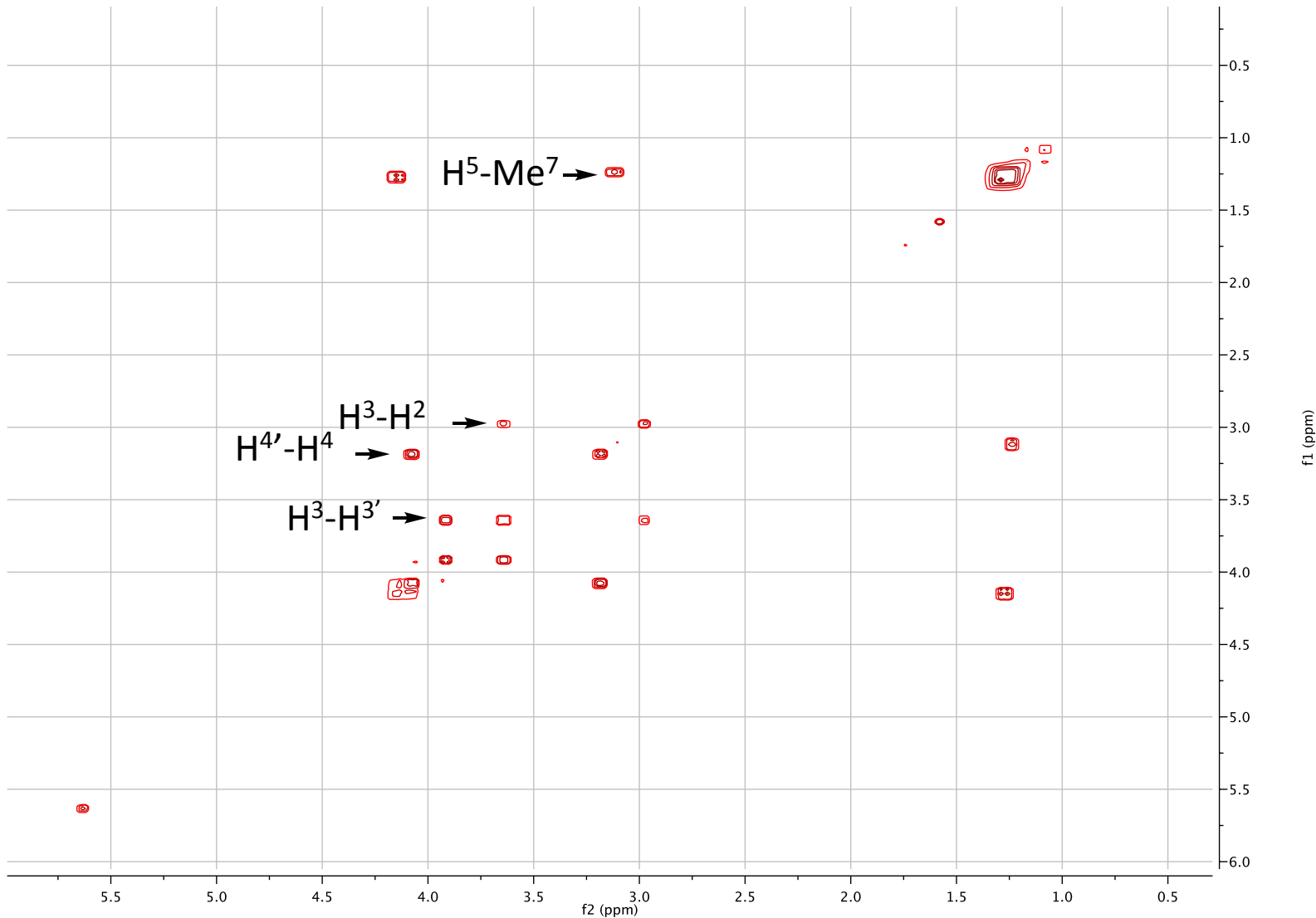
19a-b

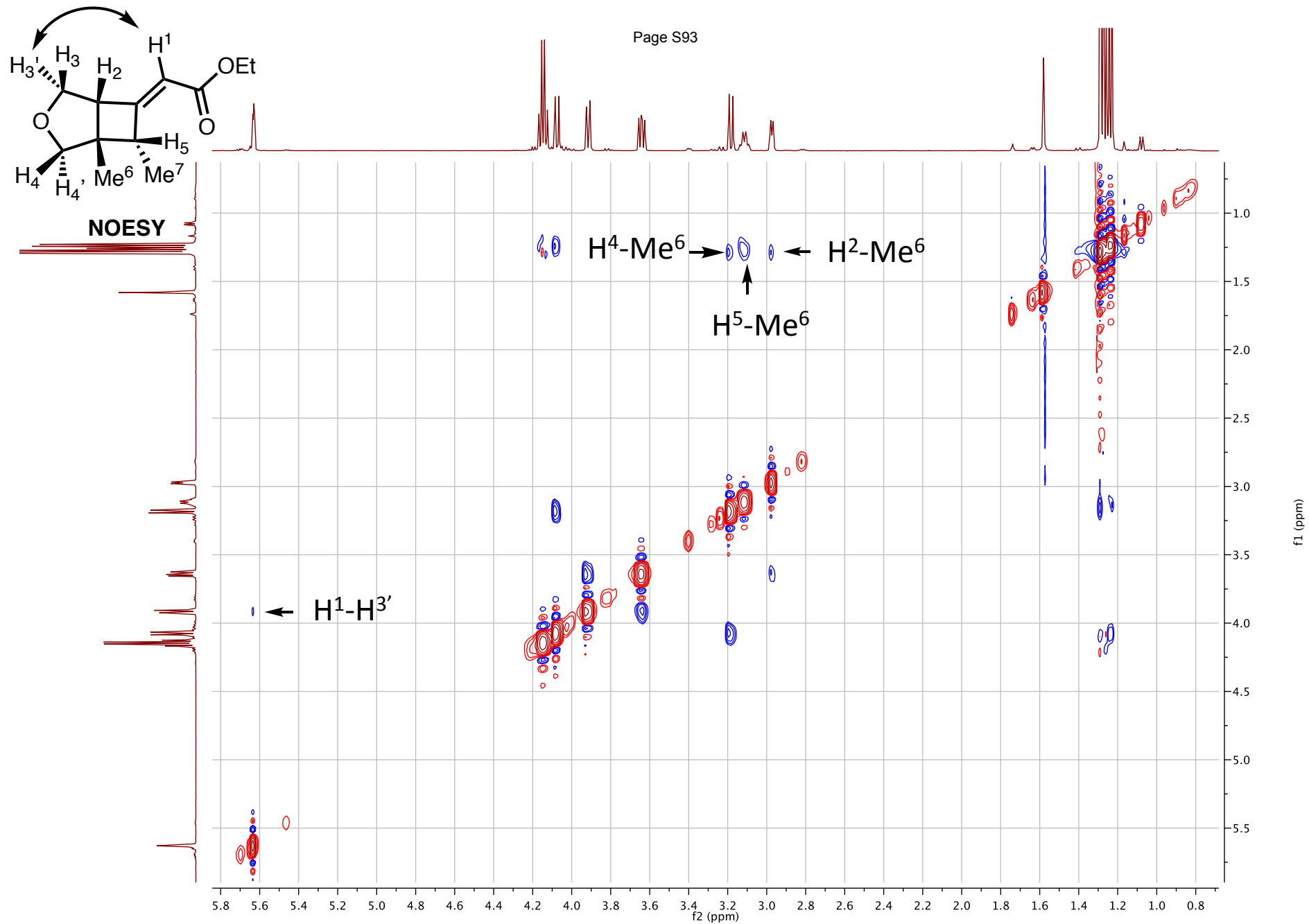


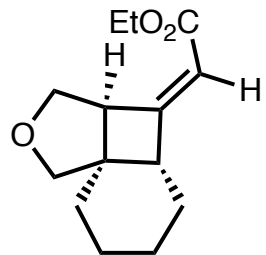




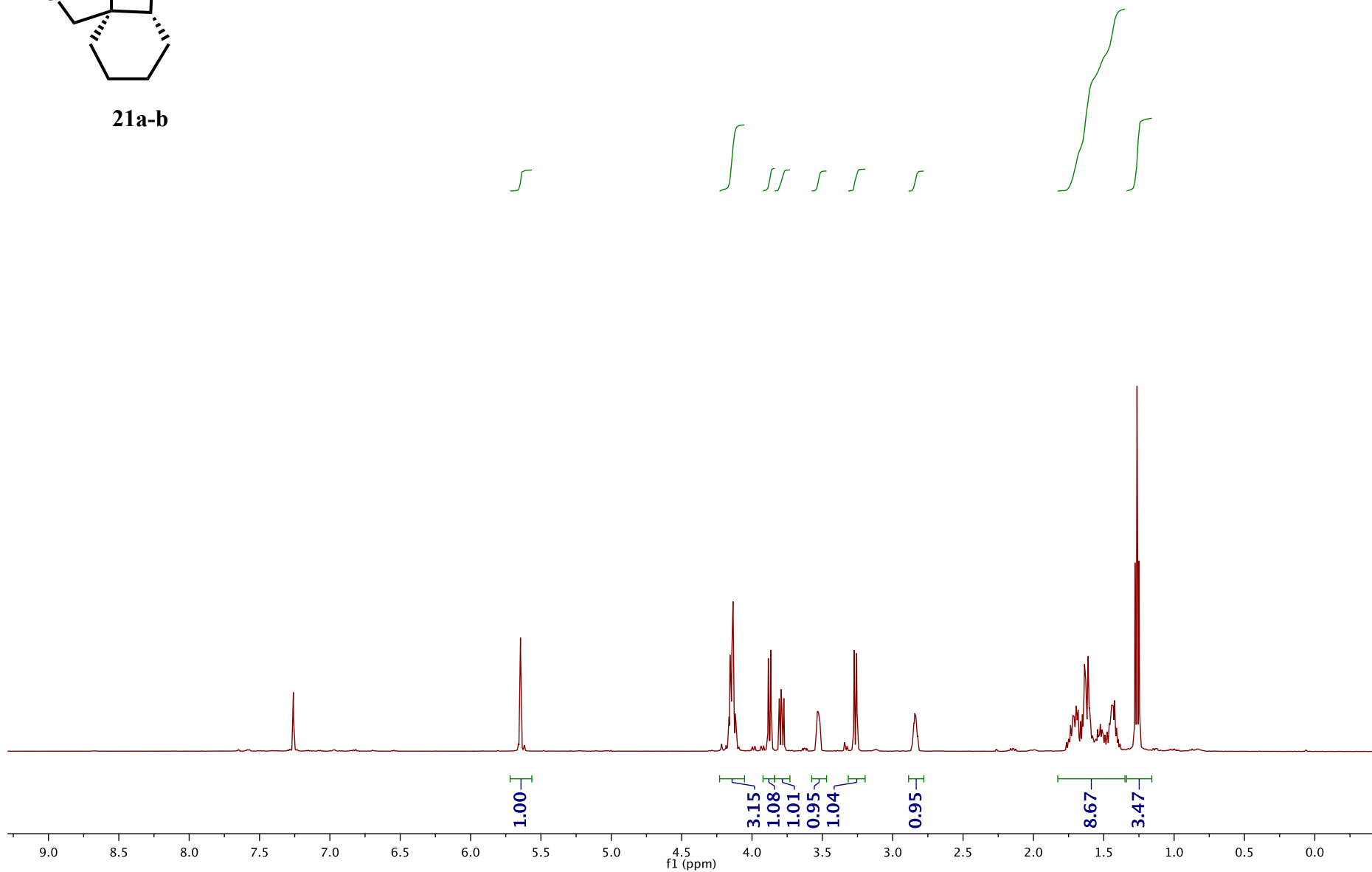
COSY

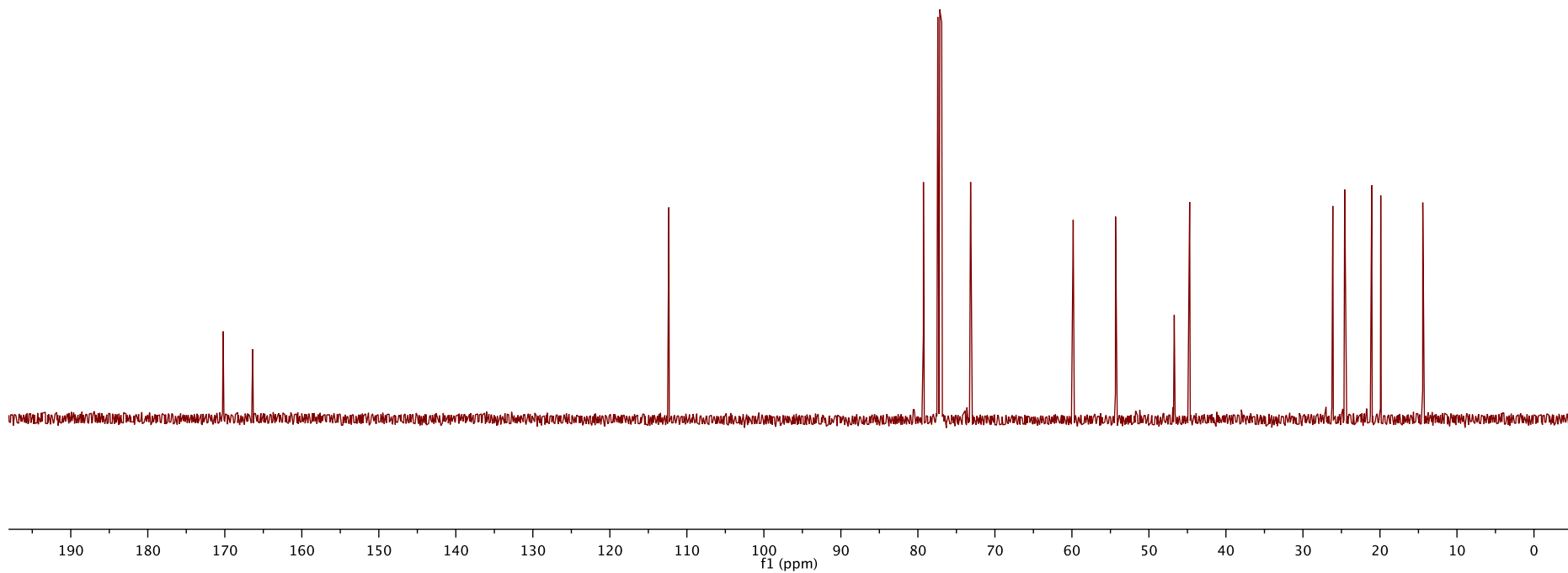
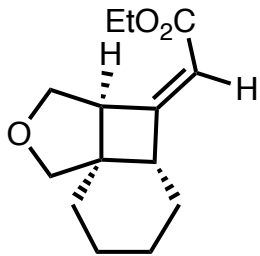


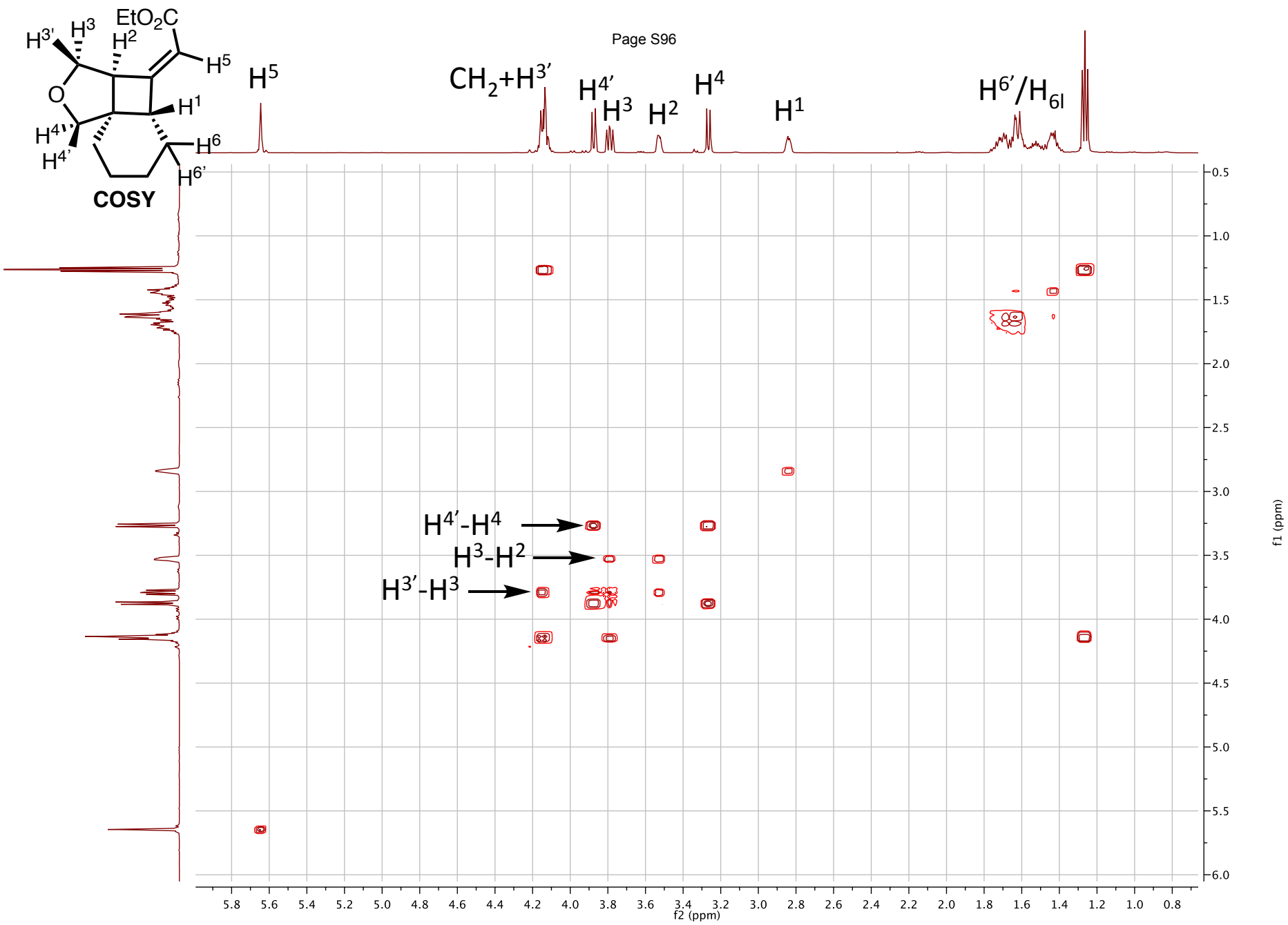




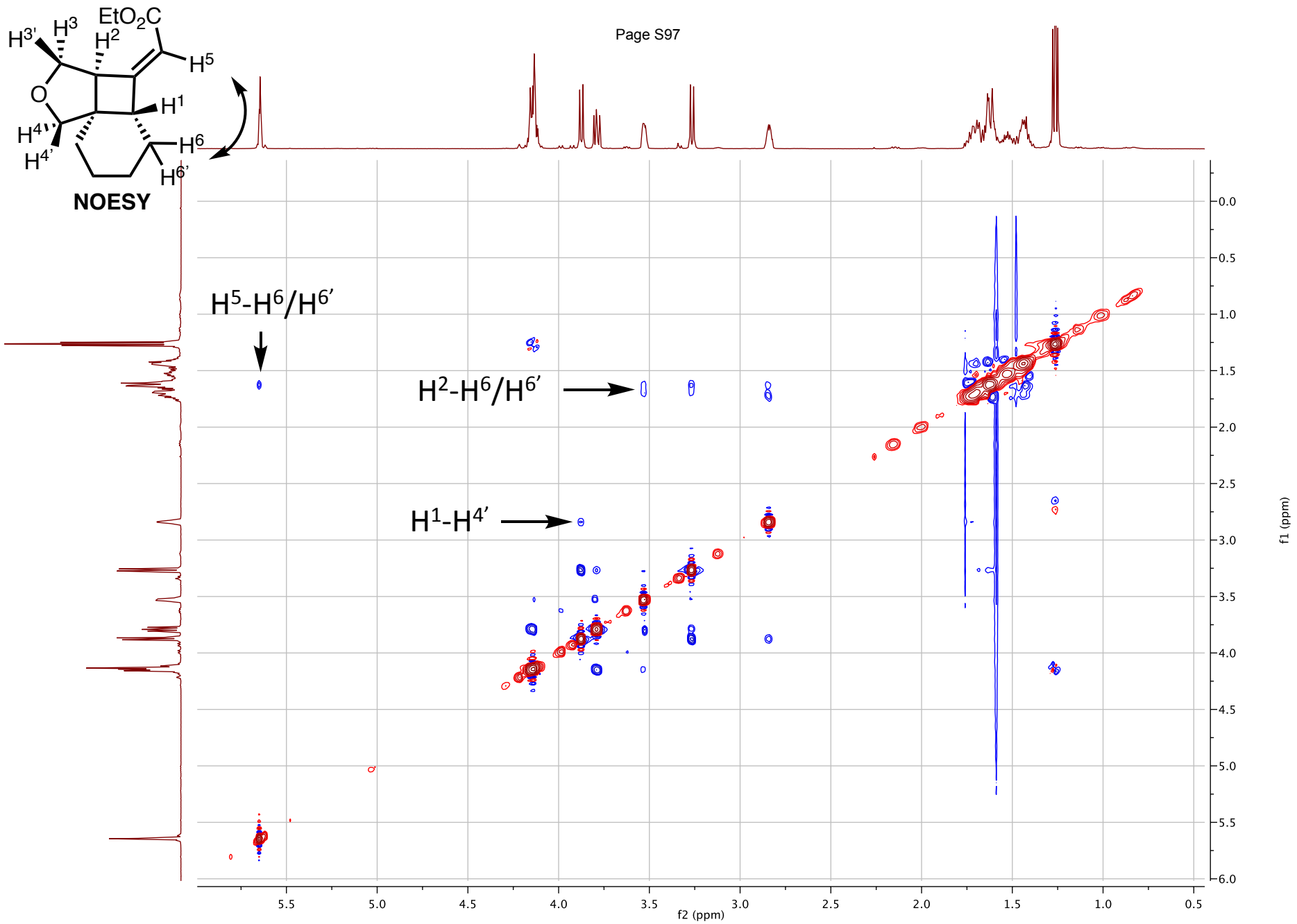
21a-b

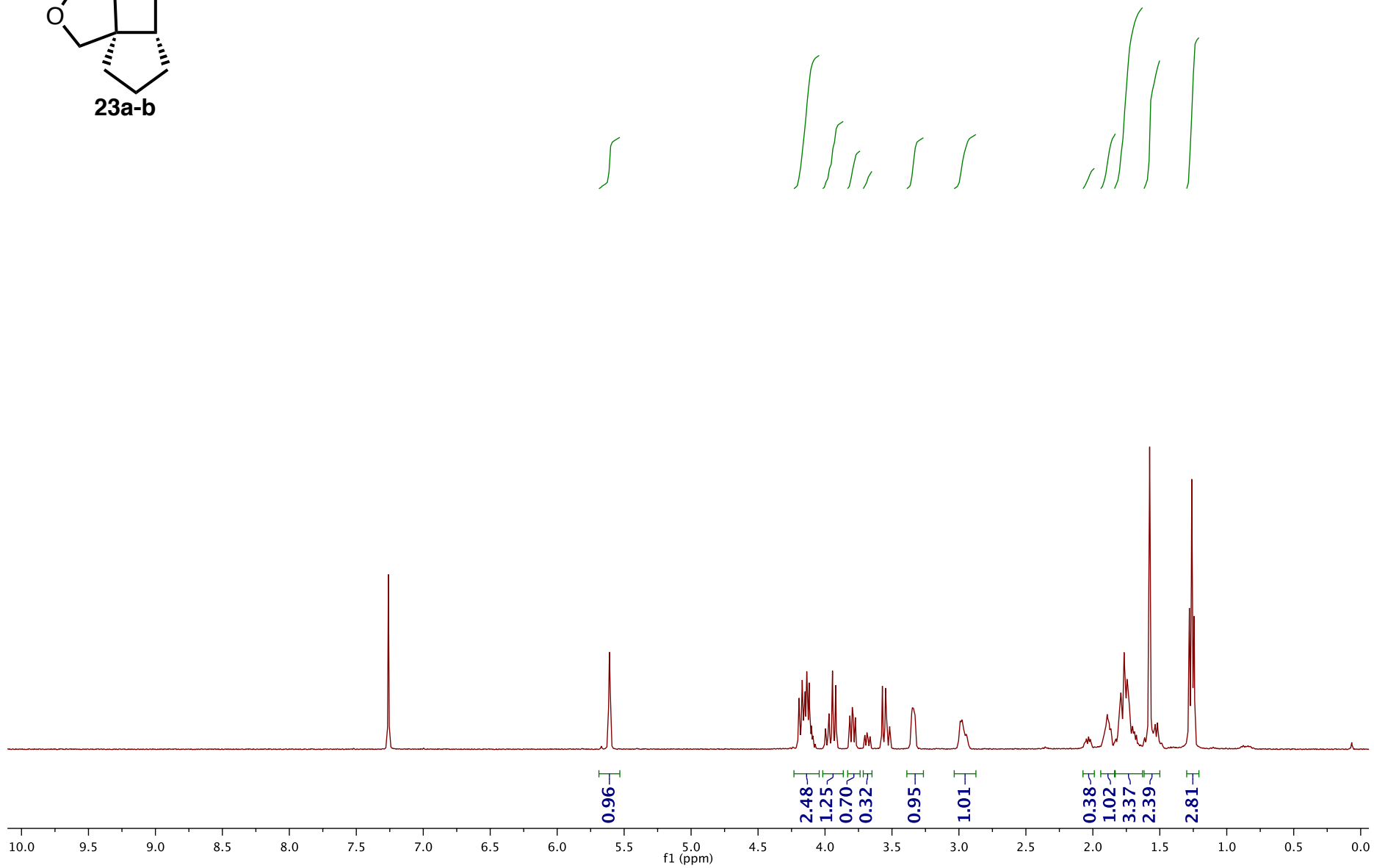
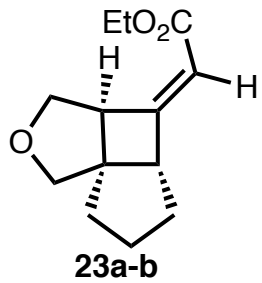


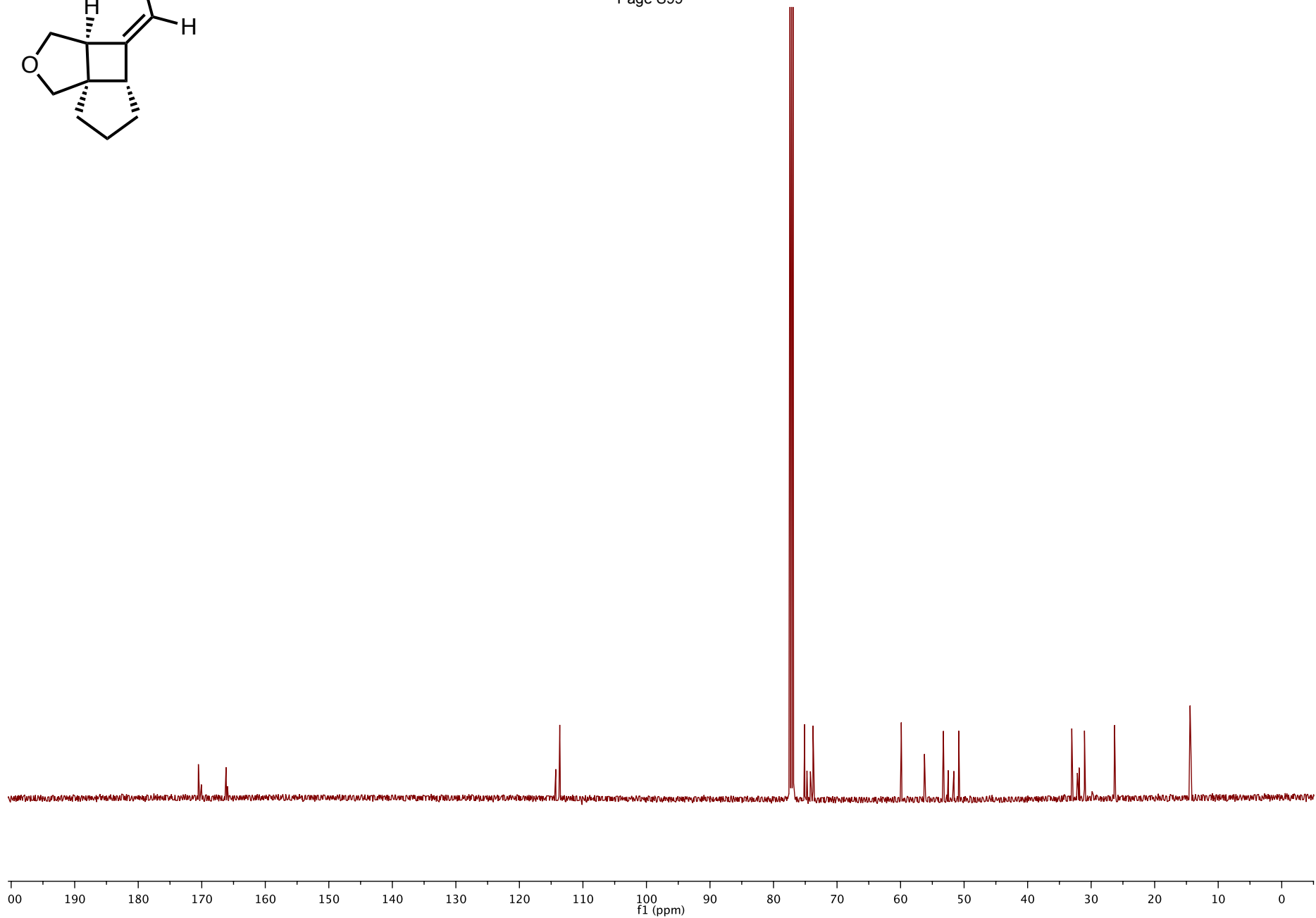
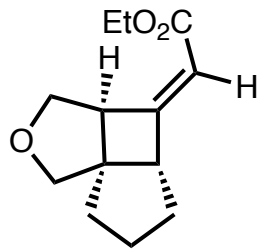


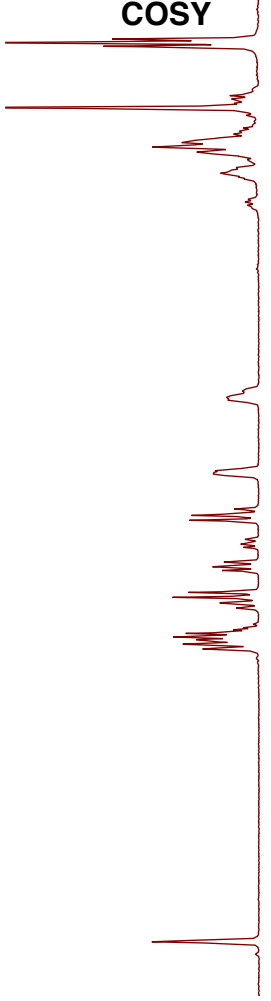
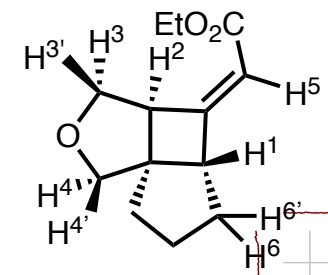




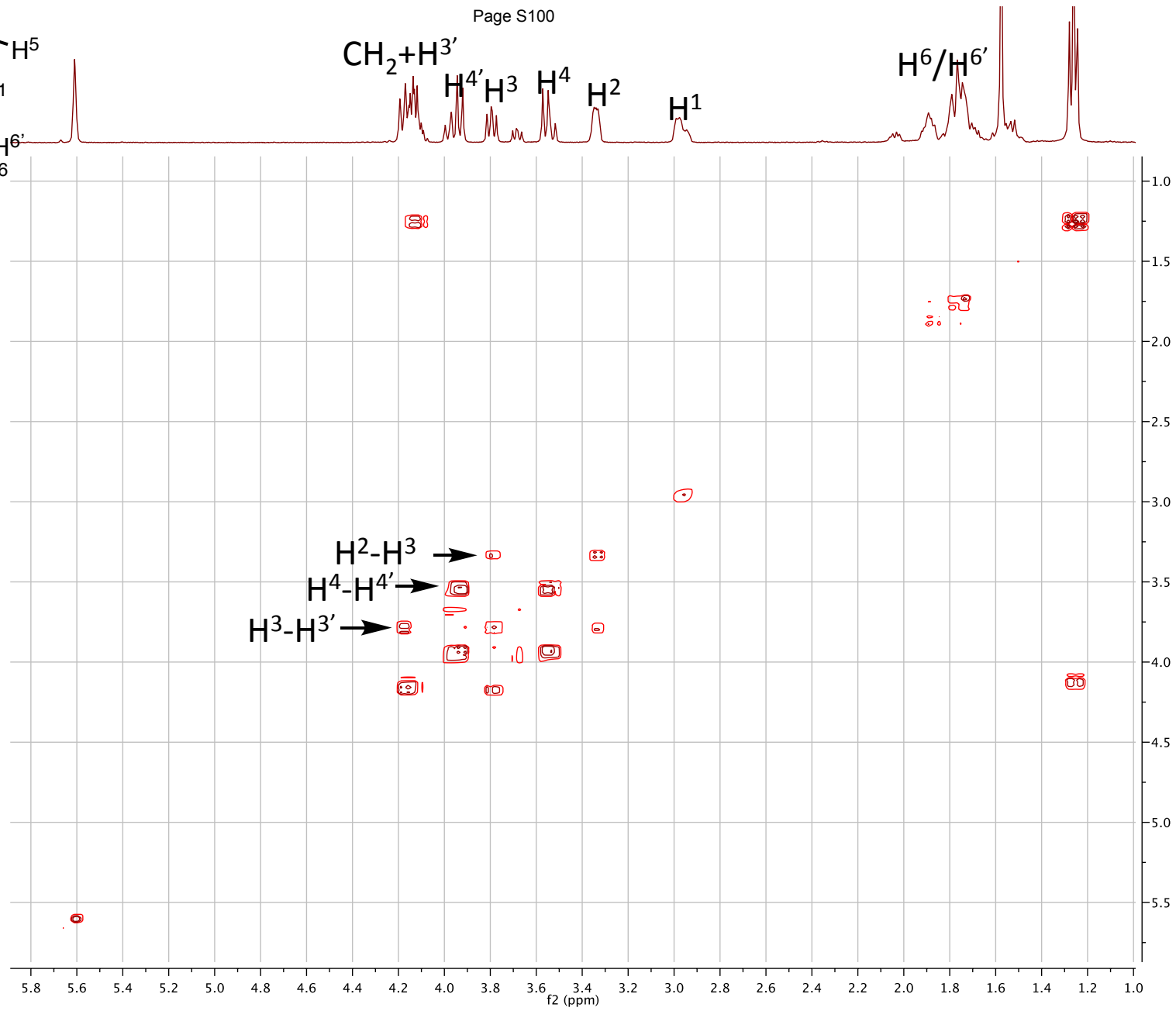






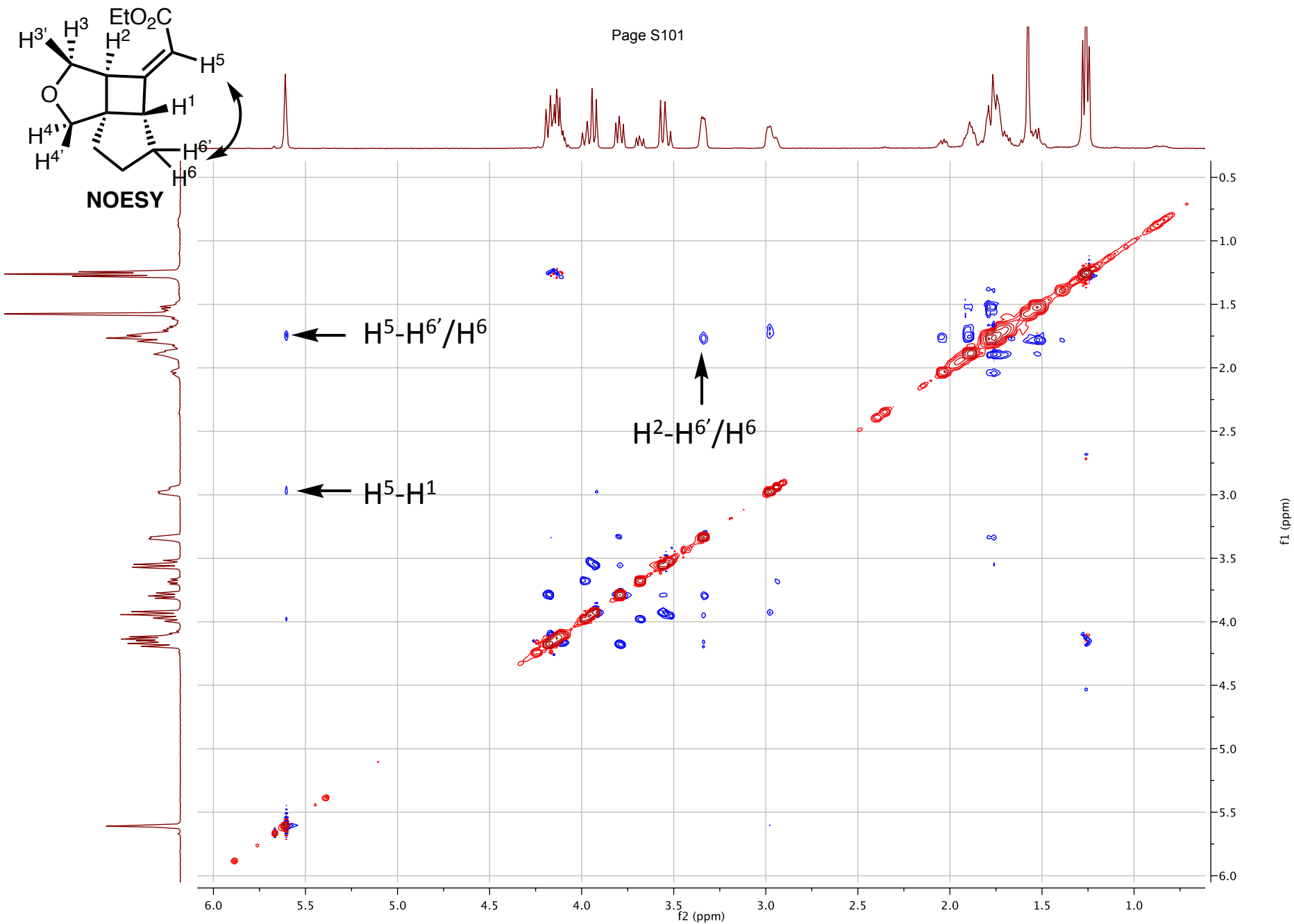


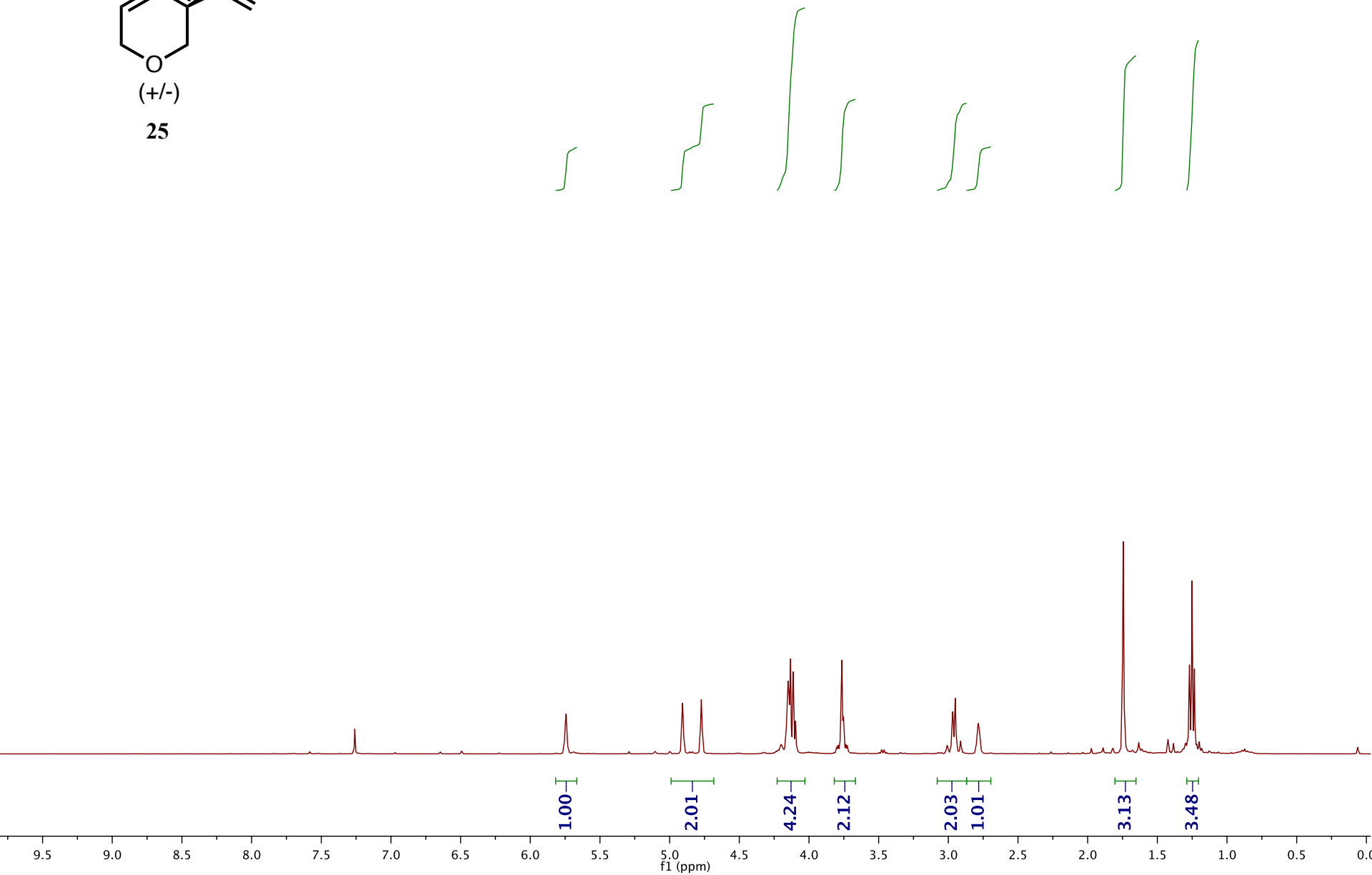
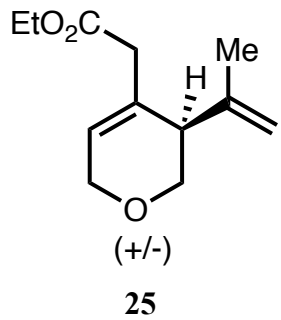
COSY

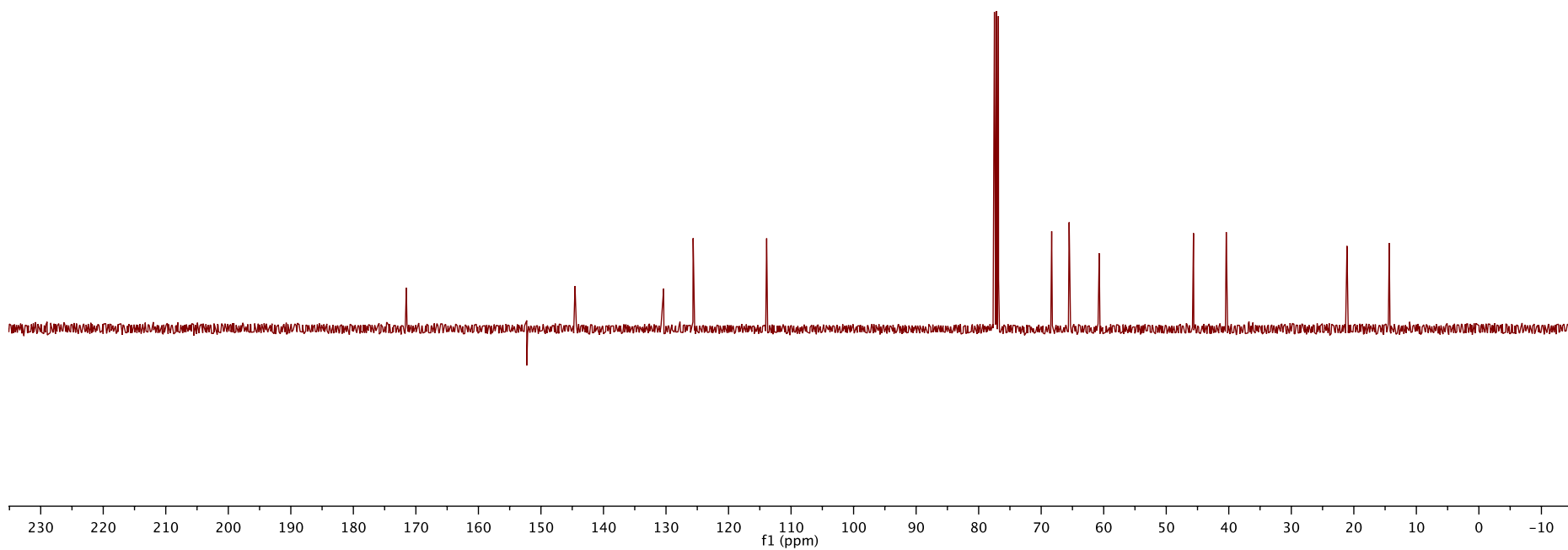
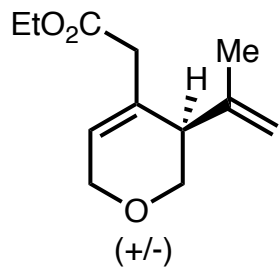


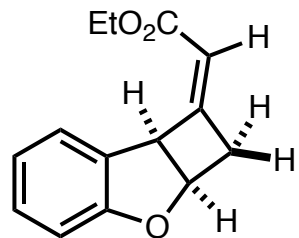
f1 (ppm)

f2 (ppm)



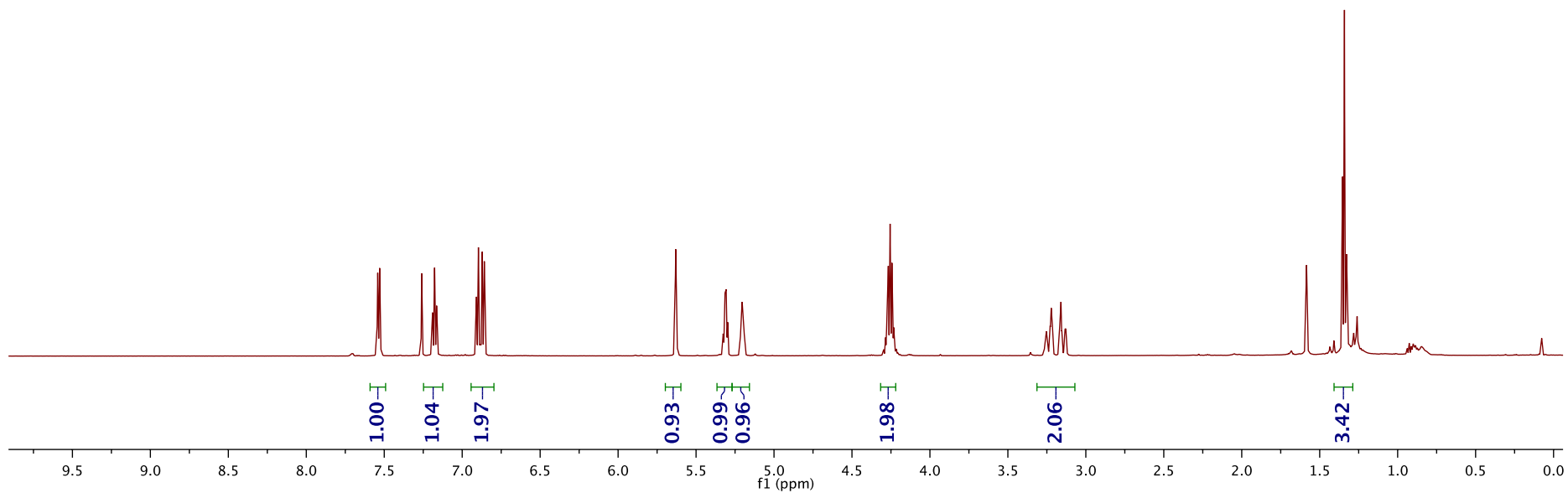
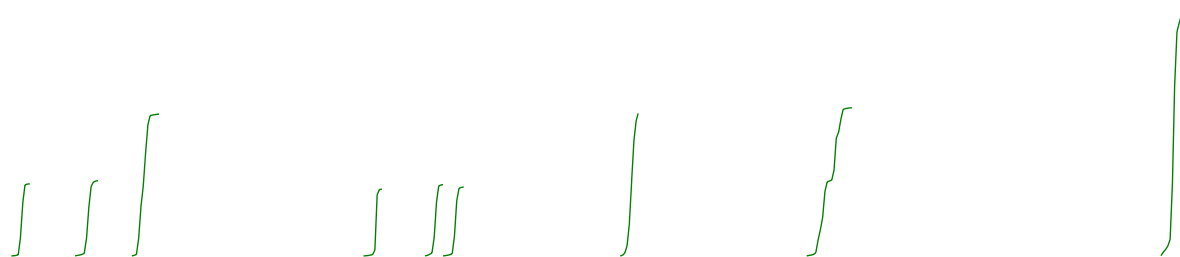




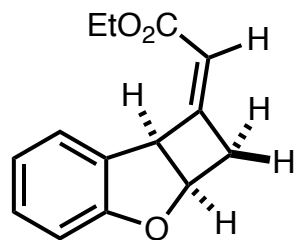


Spot 1  
minor diastereomer

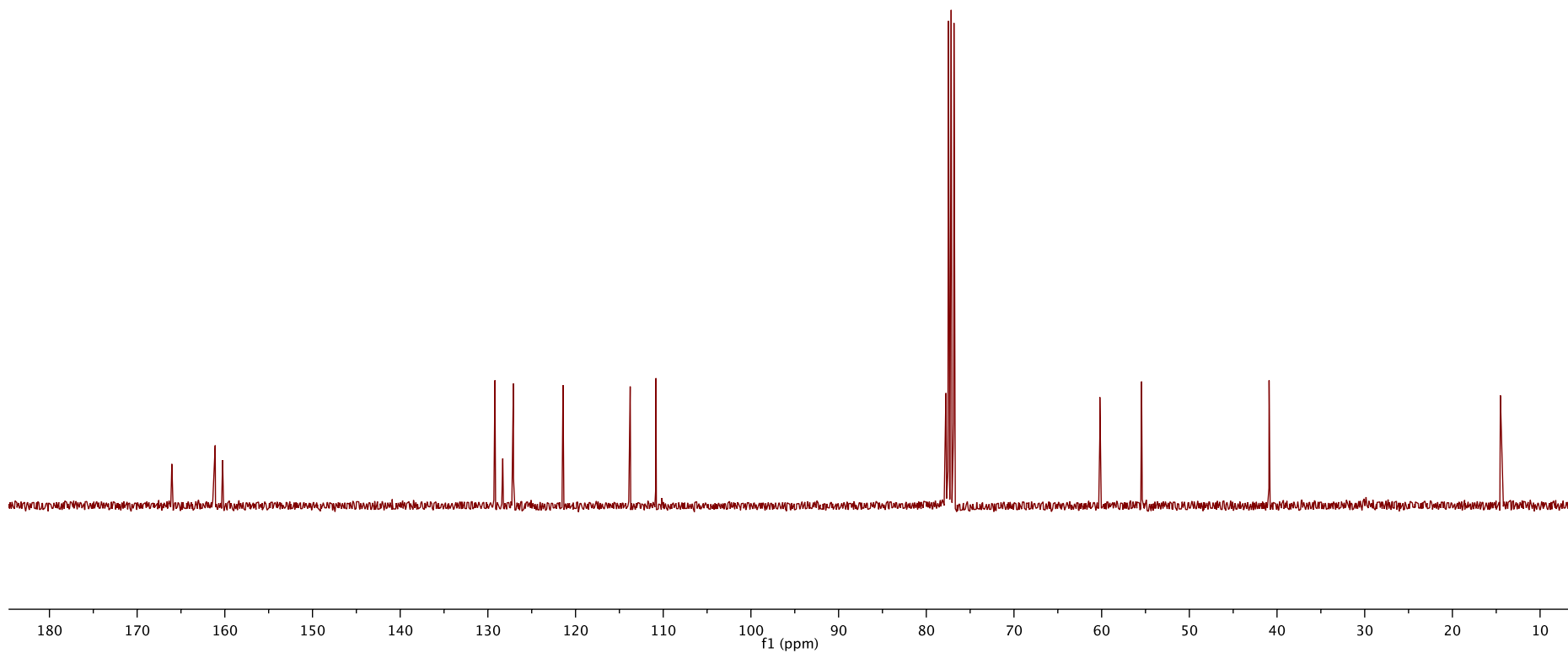
27

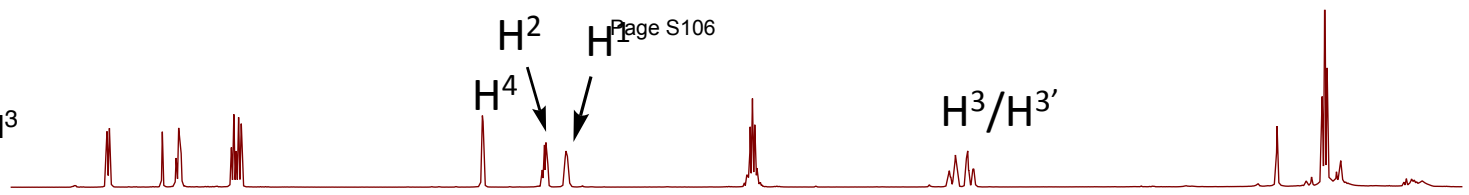
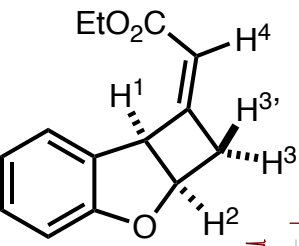




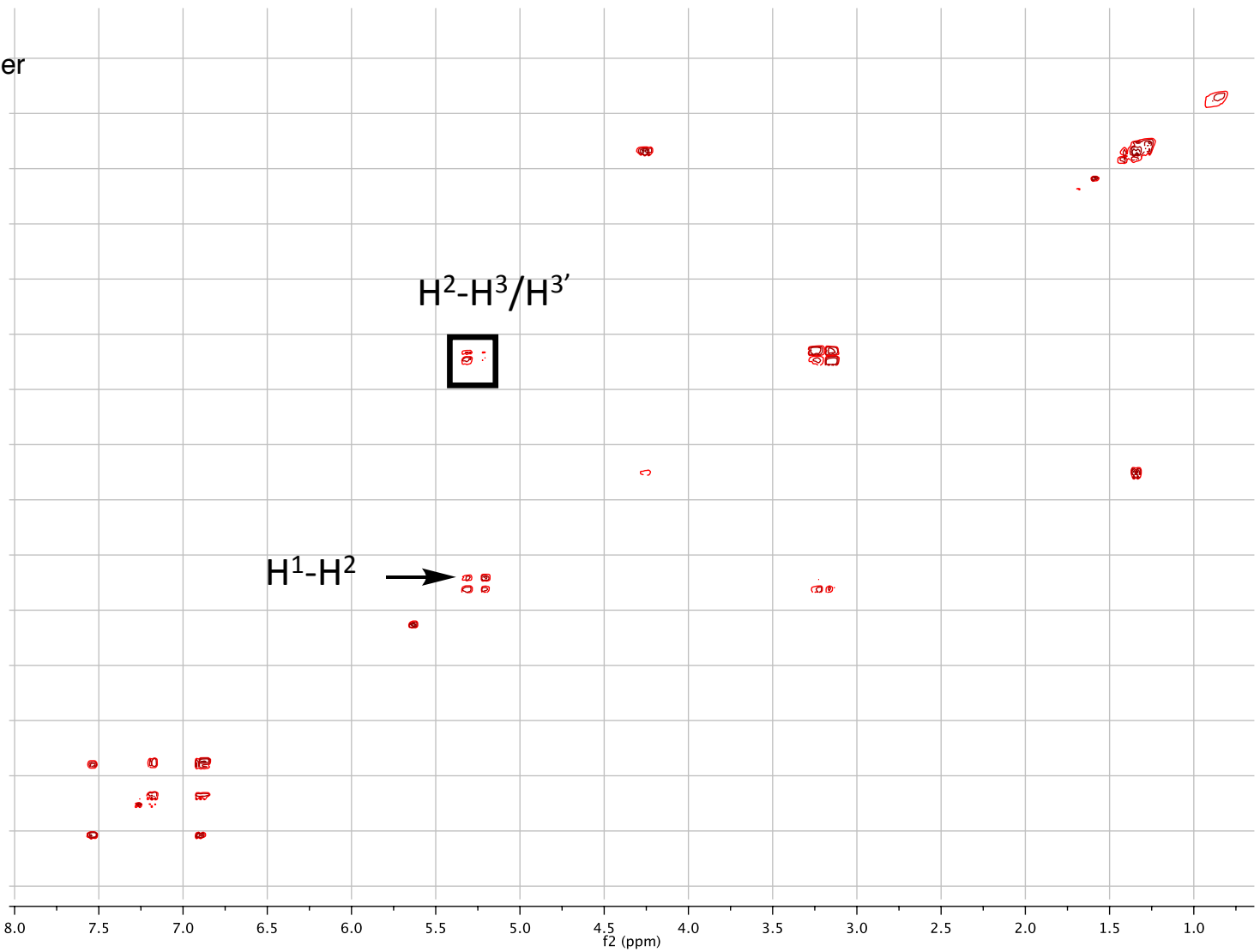


Spot 1  
minor diastereomer



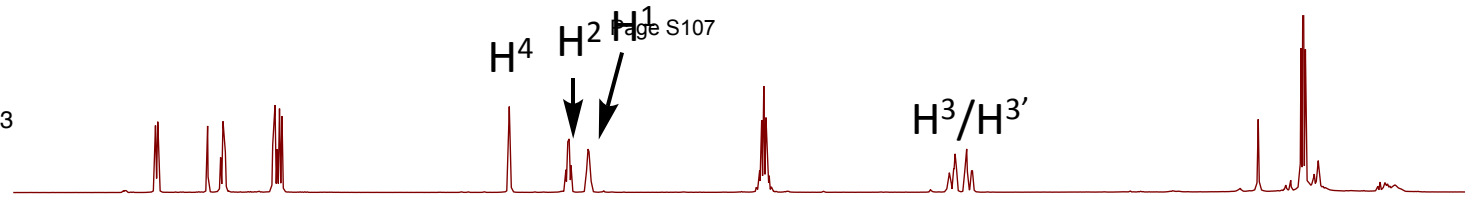
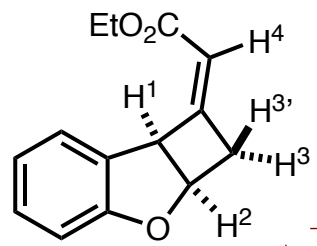


Spot 1  
minor diastereomer  
COSY

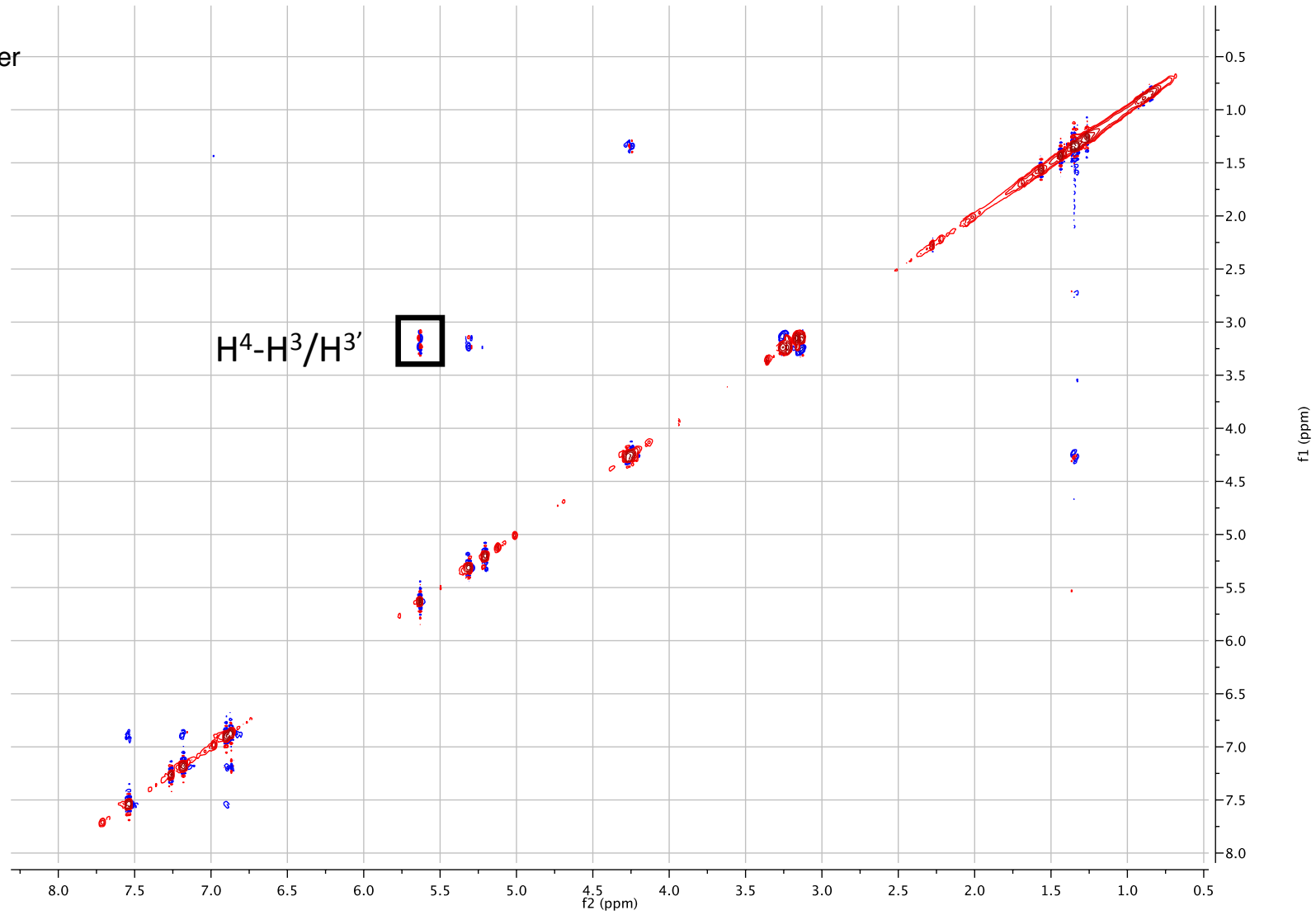


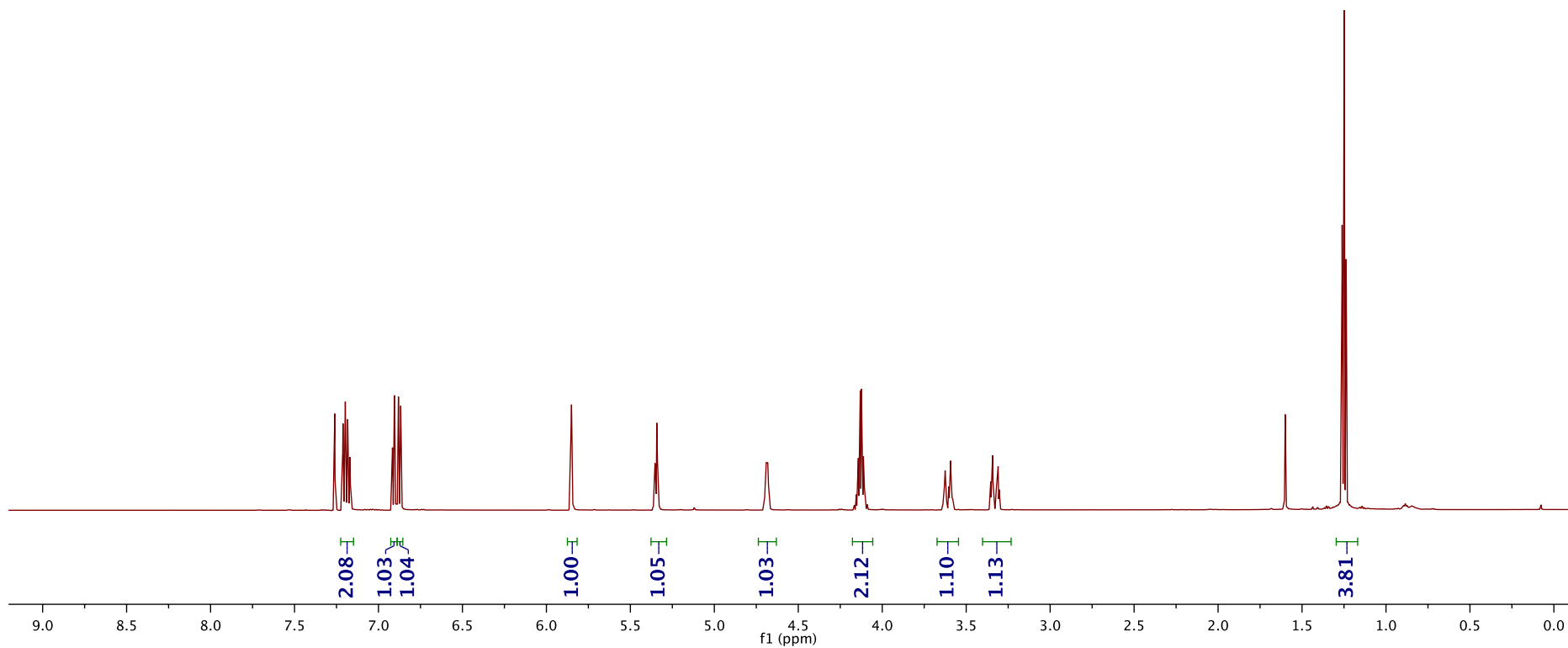
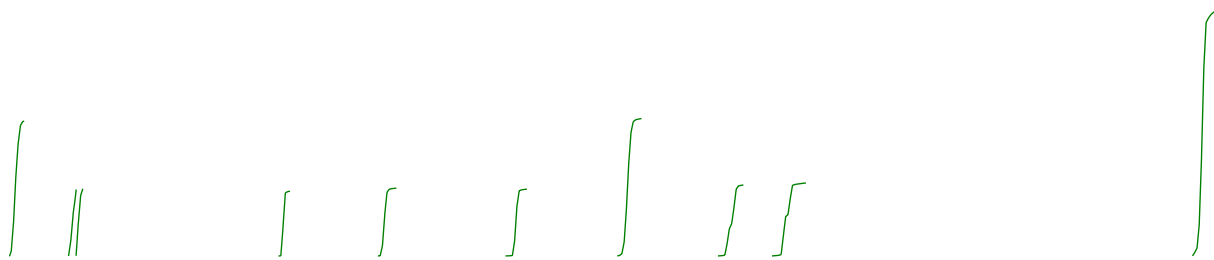
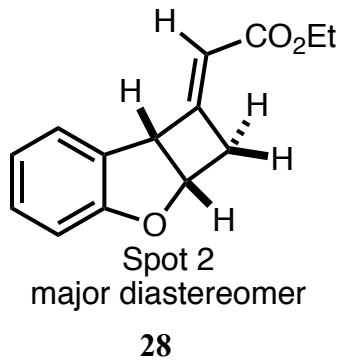
f1 (ppm)

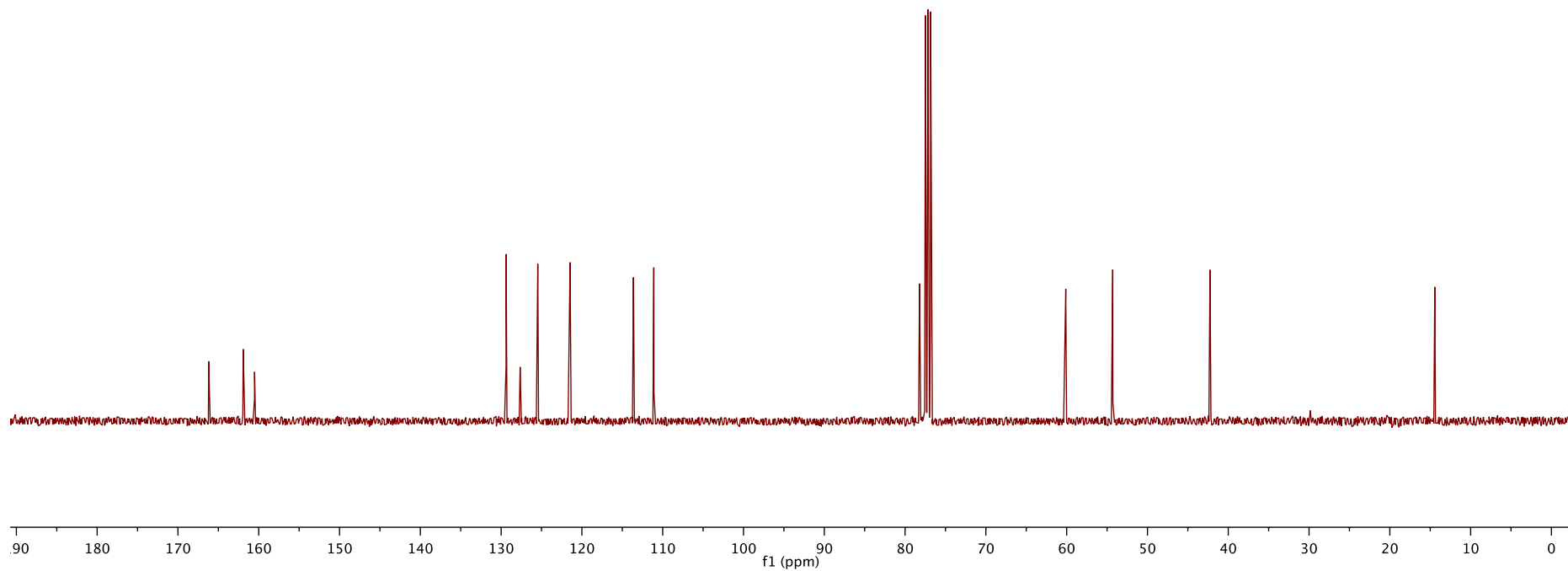
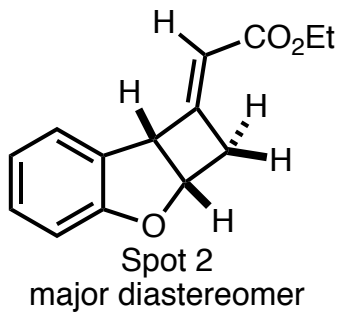
f2 (ppm)

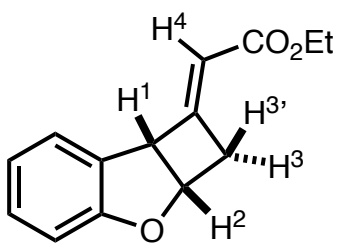


Spot 1  
minor diastereomer  
NOESY

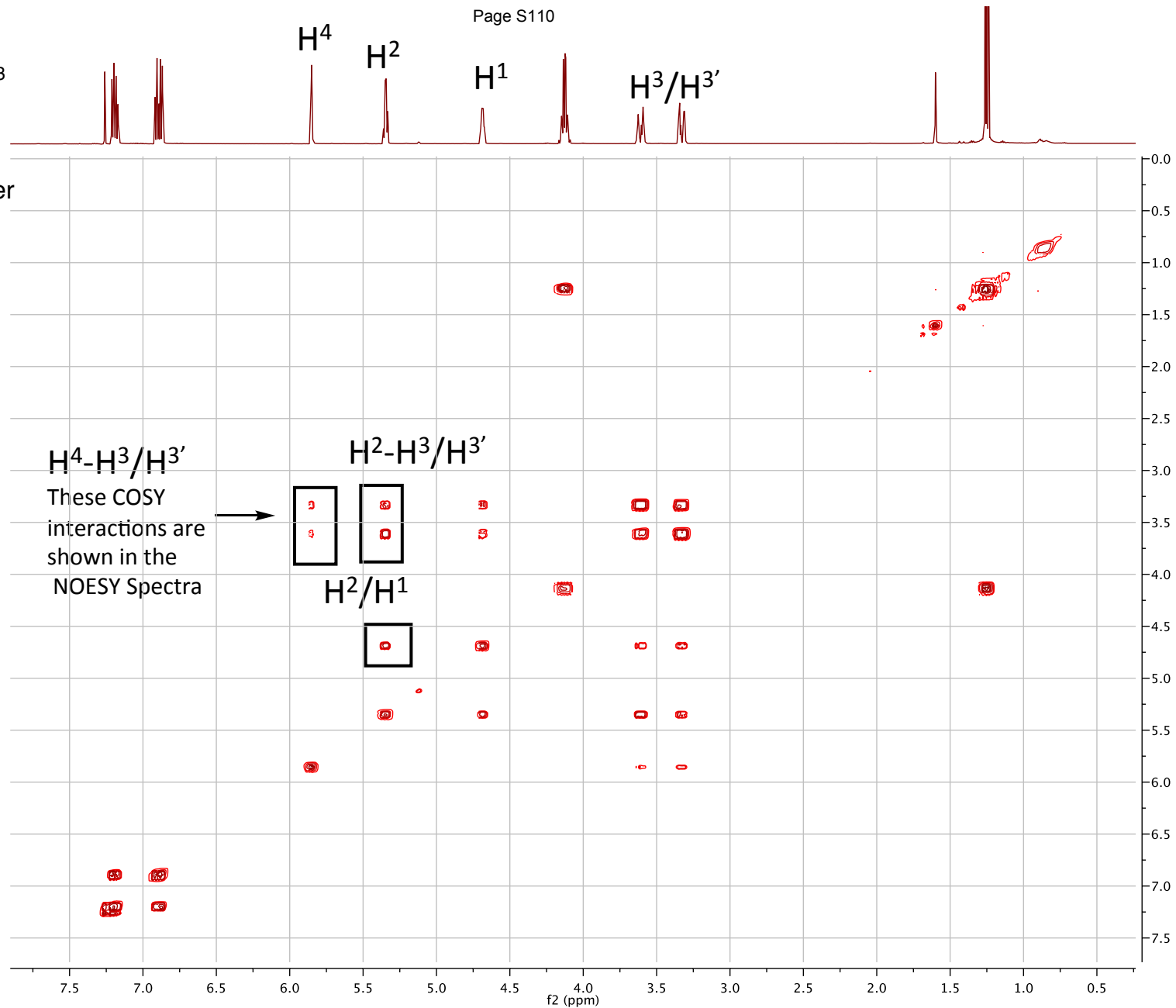


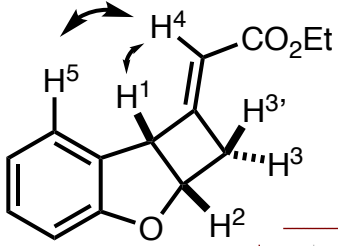






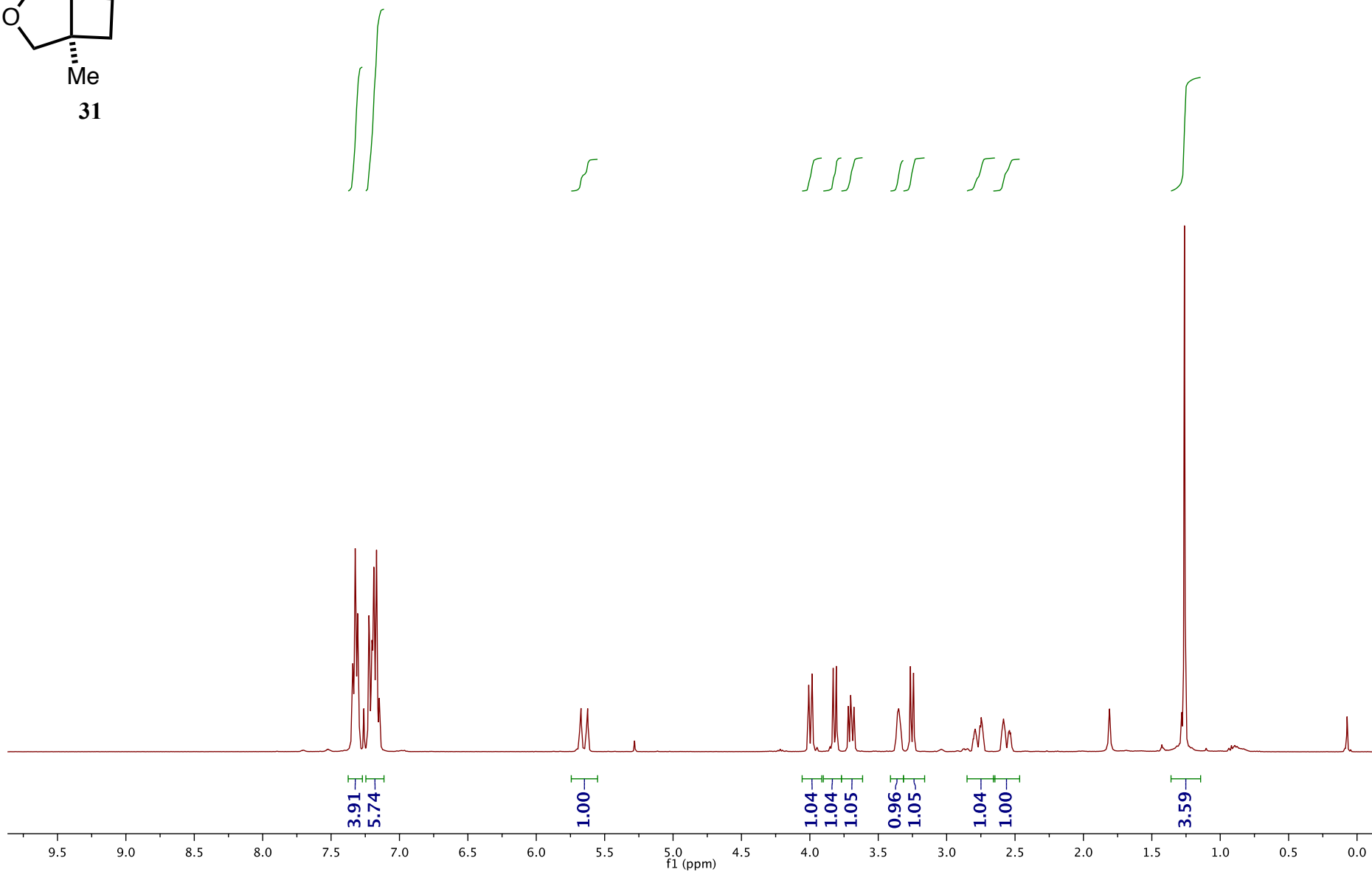
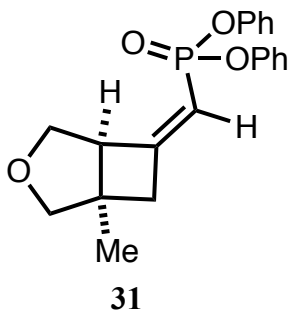
Spot 2  
major diastereomer  
COSY



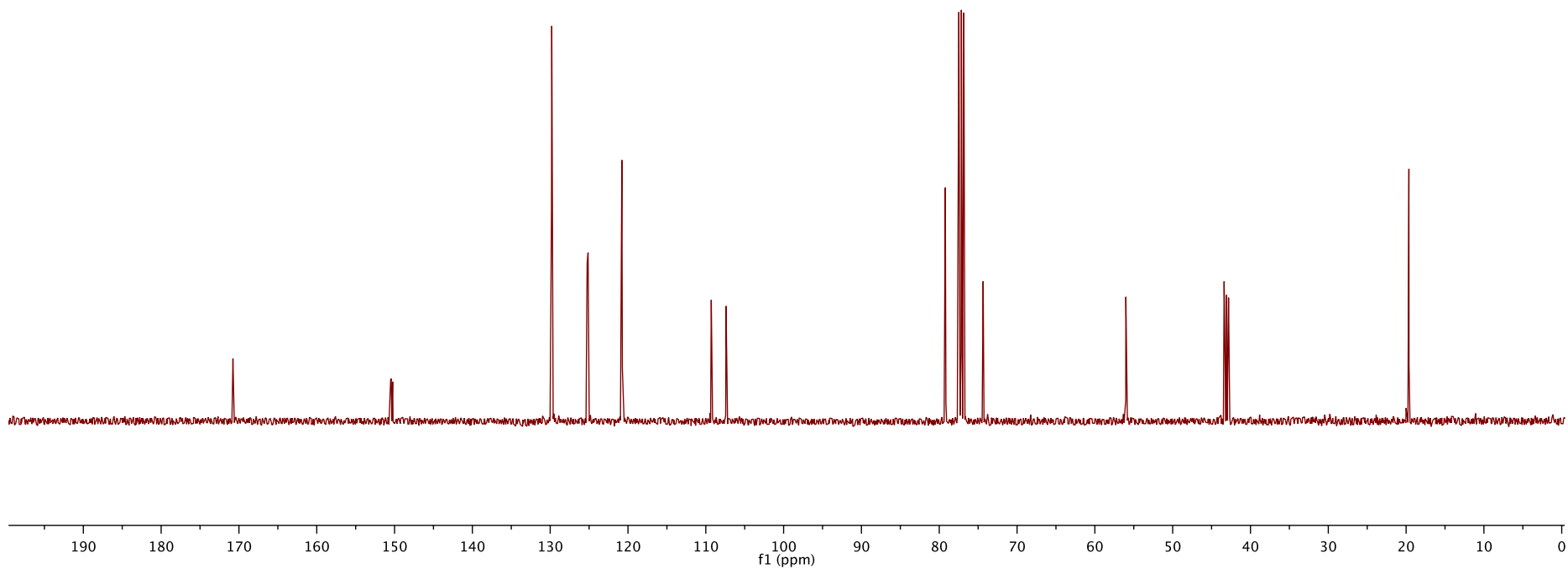
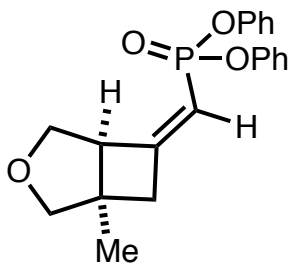


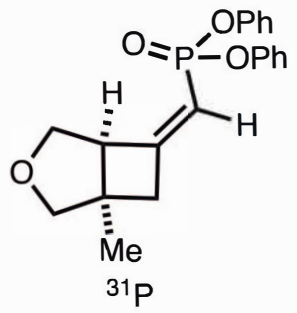
Spot 2  
major diastereomer  
NOESY



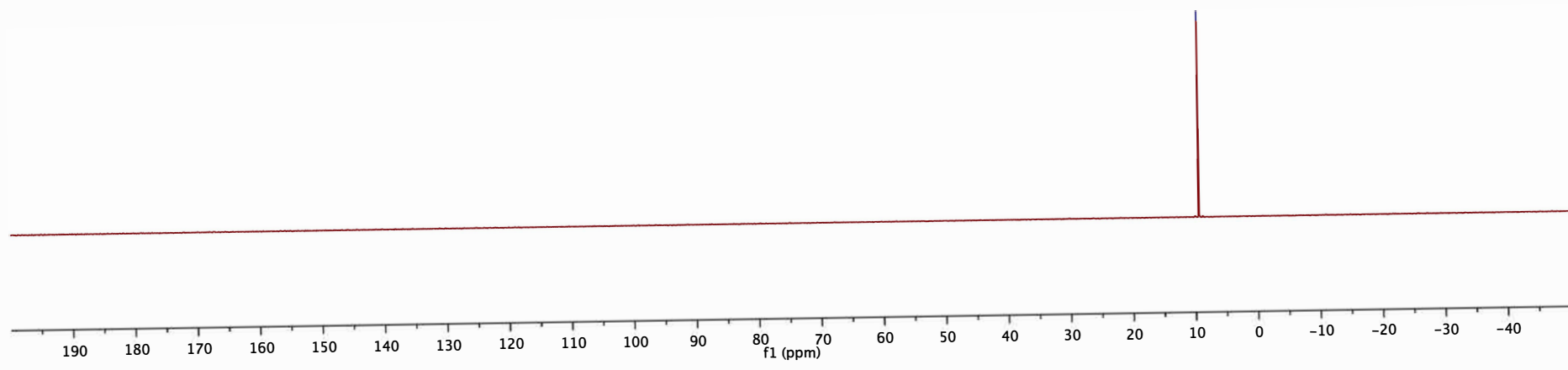


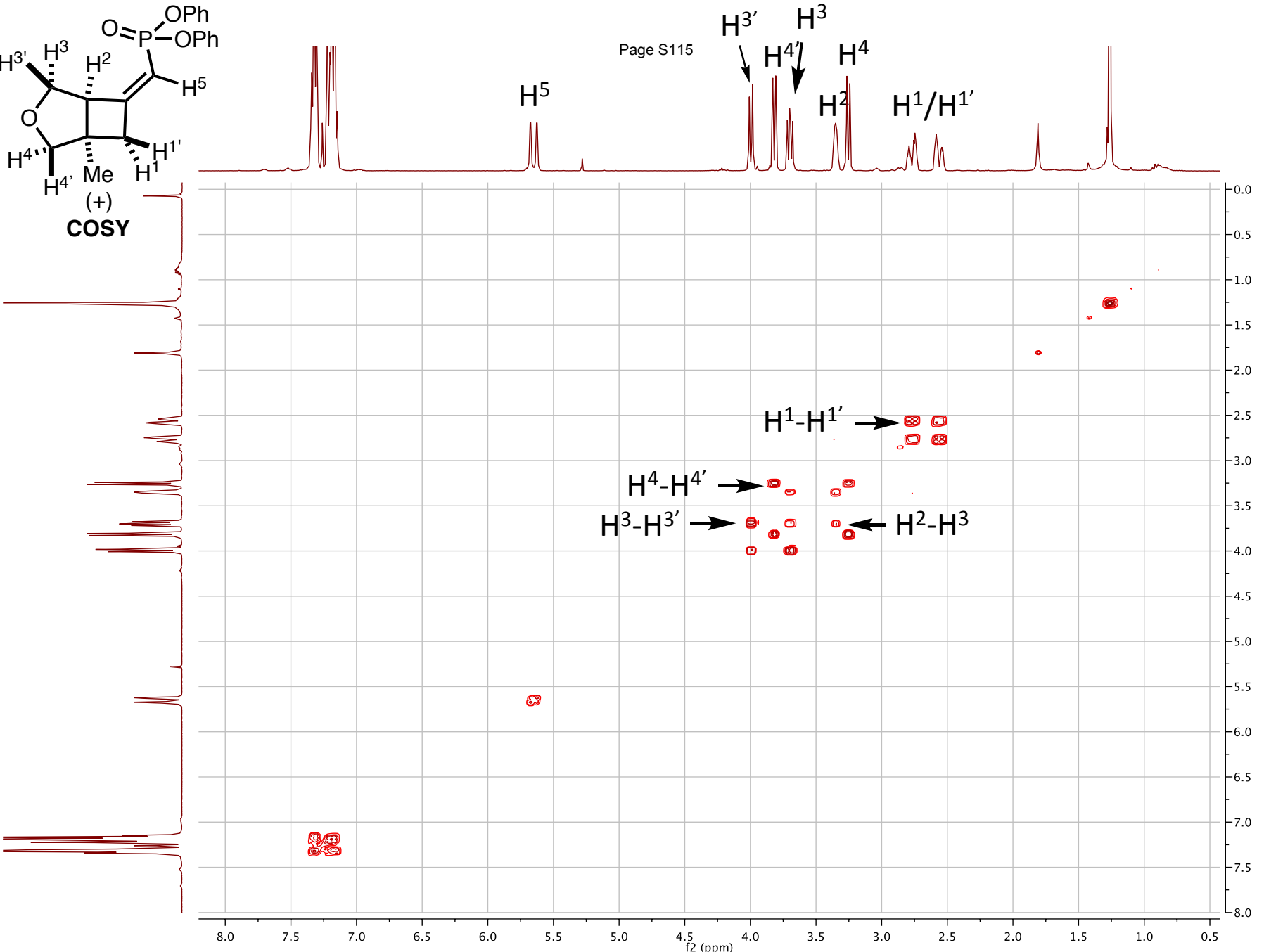
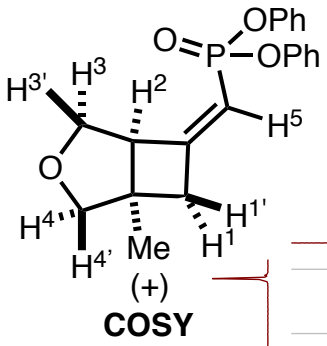






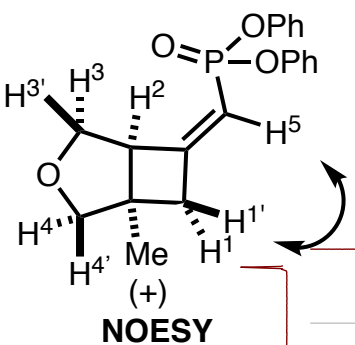
9.44



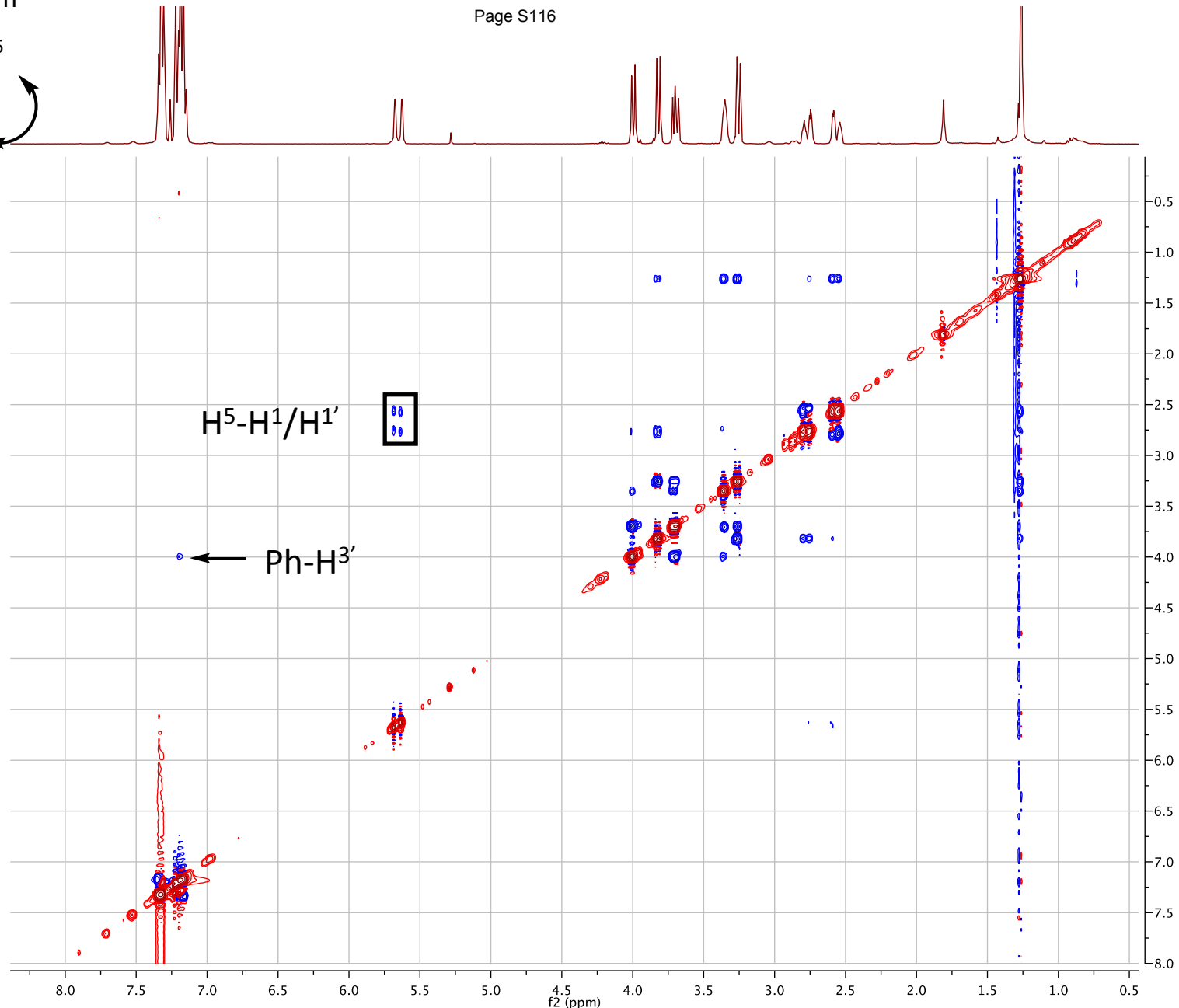


f1 (ppm)

f2 (ppm)



NOESY



f1 (ppm)

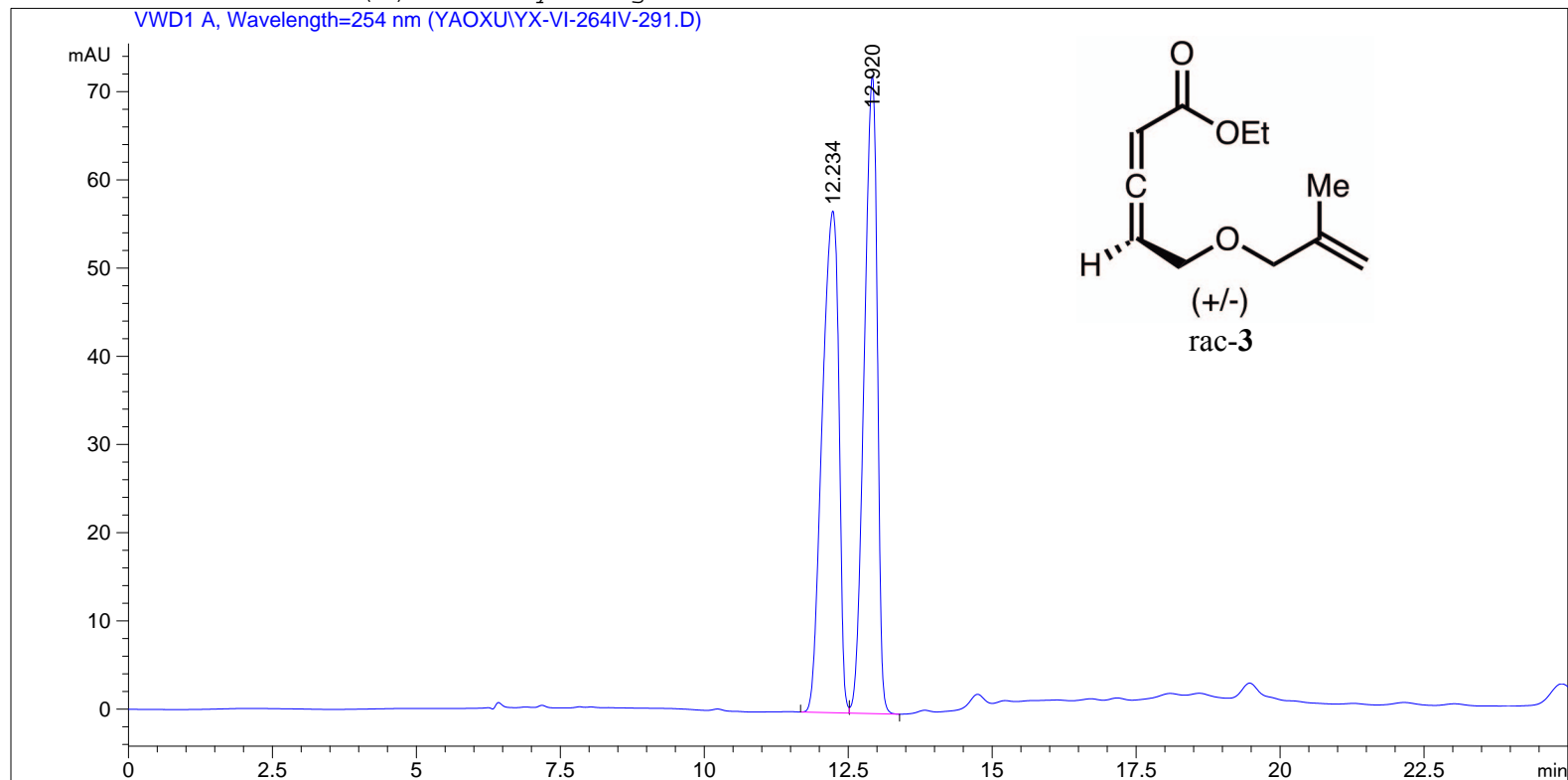
f2 (ppm)

=====

Acq. Operator     : SYSTEM   Seq. Line :   1  
Acq. Instrument   : 1220 HPLC   Location : Vial 69  
Injection Date    : 1/5/2017 12:40:18 PM    Inj :    1  
  Inj Volume : 10.000 µl

Acq. Method       : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed      : 1/5/2017 12:19:28 PM by SYSTEM  
Analysis Method   : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed      : 12/6/2016 1:32:42 PM by SYSTEM  
Sample Info       : Chirlapak IA PG024 99.5:0.5 Hex:IPA. 0.5mL/min. 254 nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By                 :       Signal  
Multiplier:                :       1.0000  
Dilution:                  :       1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	12.234	BV	0.3383	1142.22229	56.87540	50.0681
2	12.920	VB	0.2528	1139.11414	72.30820	49.9319

Totals :   2281.33643   129.18360

=====  
\*\*\* End of Report \*\*\*

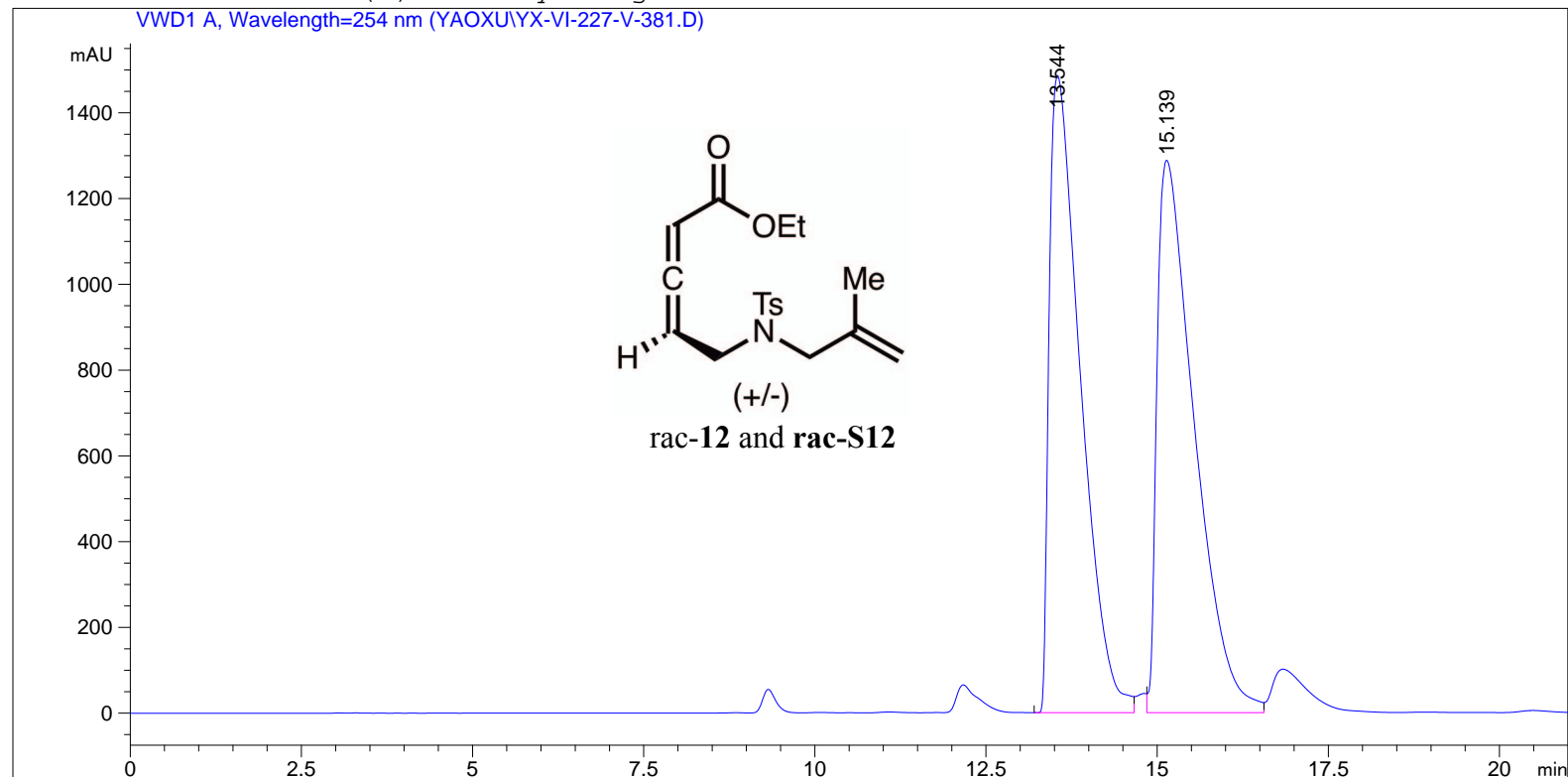


```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                   Location  : Vial 78
Injection Date  : 12/2/2016 2:14:20 PM       Inj       :    1
                                                Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\YX-98_2_HEX-IPA_1ML-MIN_254NM.M
Last changed    : 12/2/2016 1:58:31 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 11/28/2016 4:18:36 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 98:2 Hex/IPA, 1ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.544	BV	0.4765	4.70563e4	1485.67712	49.0823
2	15.139	VV	0.5632	4.88160e4	1287.78540	50.9177

Totals :                                    9.58722e4   2773.46252

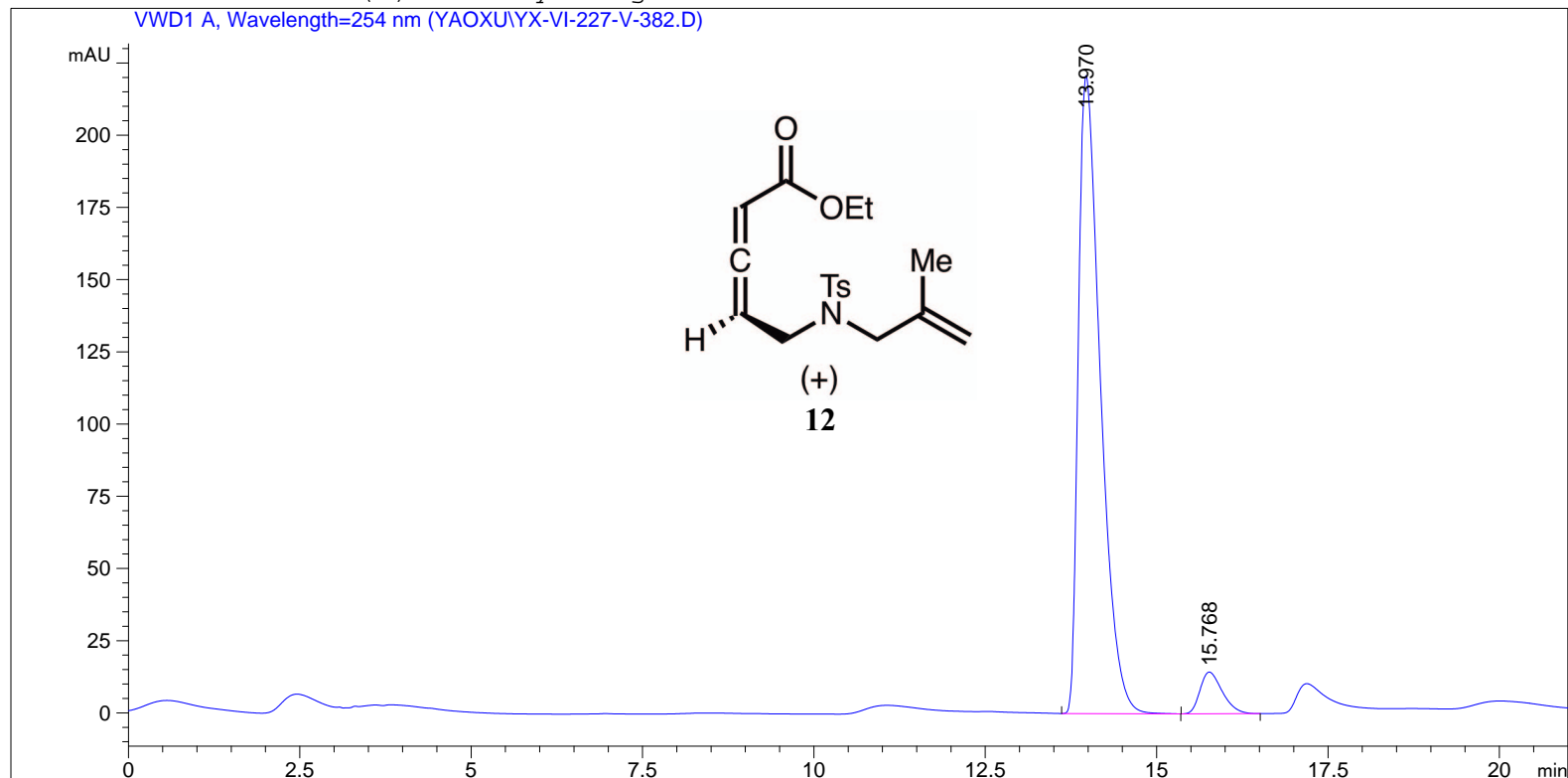
=====  
 \*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 2
Acq. Instrument	: 1220 HPLC	Location	: Vial 79
Injection Date	: 12/2/2016 2:36:12 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\YX-98\_2\_HEX-IPA\_1ML-MIN\_254NM.M  
Last changed : 12/2/2016 1:58:31 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 11/28/2016 4:18:36 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1 98:2 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.970	BB	0.3430	4940.63477	220.84840	93.7942
2	15.768	BB	0.3480	326.89285	14.44441	6.2058

Totals : 5267.52762 235.29282

=====  
\*\*\* End of Report \*\*\*

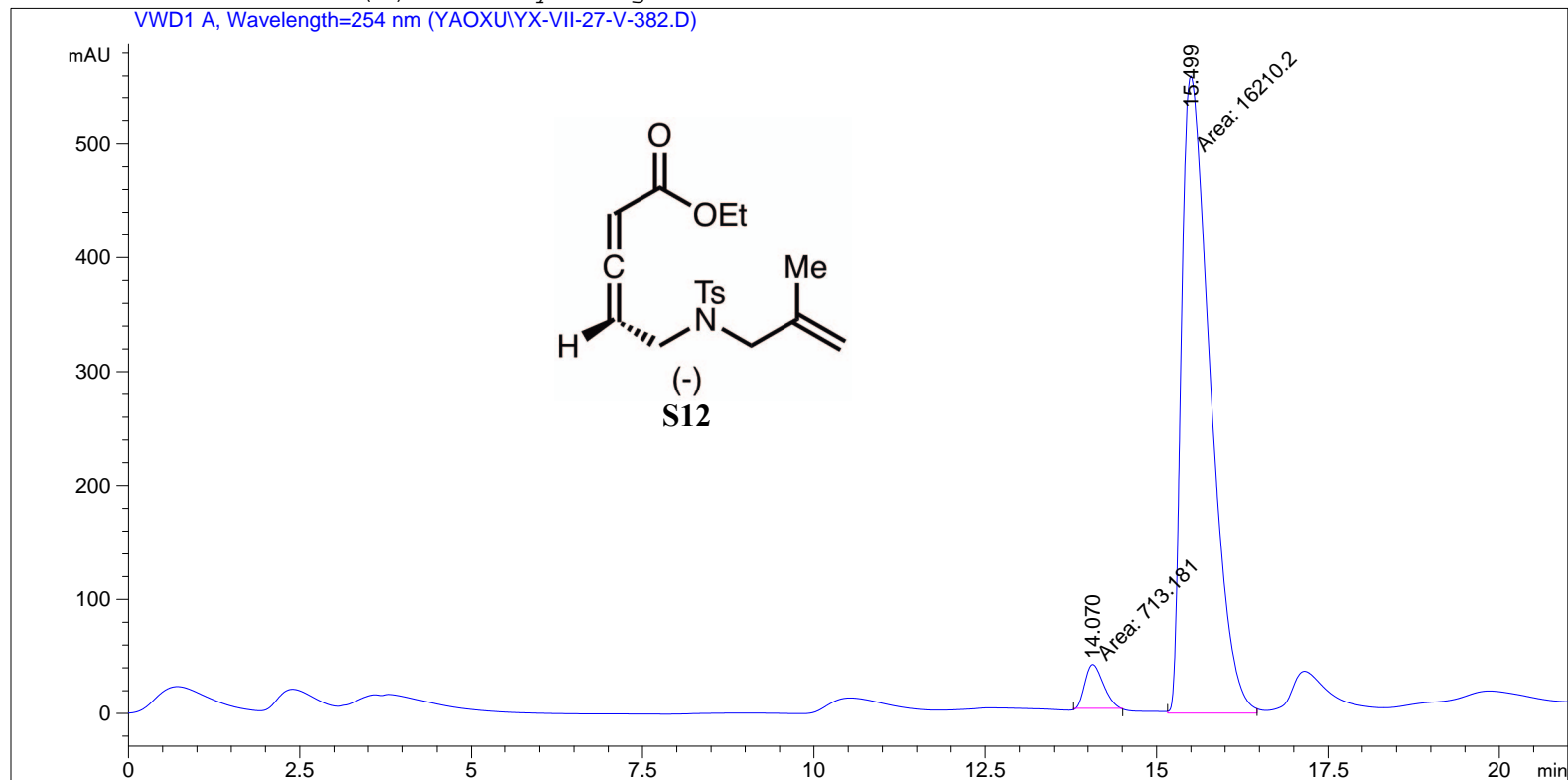


=====

Acq. Operator : SYSTEM	Seq. Line : 2
Acq. Instrument : 1220 HPLC	Location : Vial 87
Injection Date : 2/28/2017 2:58:40 PM	Inj : 1
	Inj Volume : 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\YX-98\_2\_HEX-IPA\_1ML-MIN\_254NM.M  
 Last changed : 2/28/2017 2:10:58 PM by SYSTEM  
 Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
 Last changed : 3/20/2017 1:24:46 AM by SYSTEM  
 Sample Info : Lux 3u Cellulose-1 98:2 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

Sorted By : Signal  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.070	MM	0.3086	713.18121	38.51493	4.2142
2	15.499	MM	0.4829	1.62102e4	559.48883	95.7858

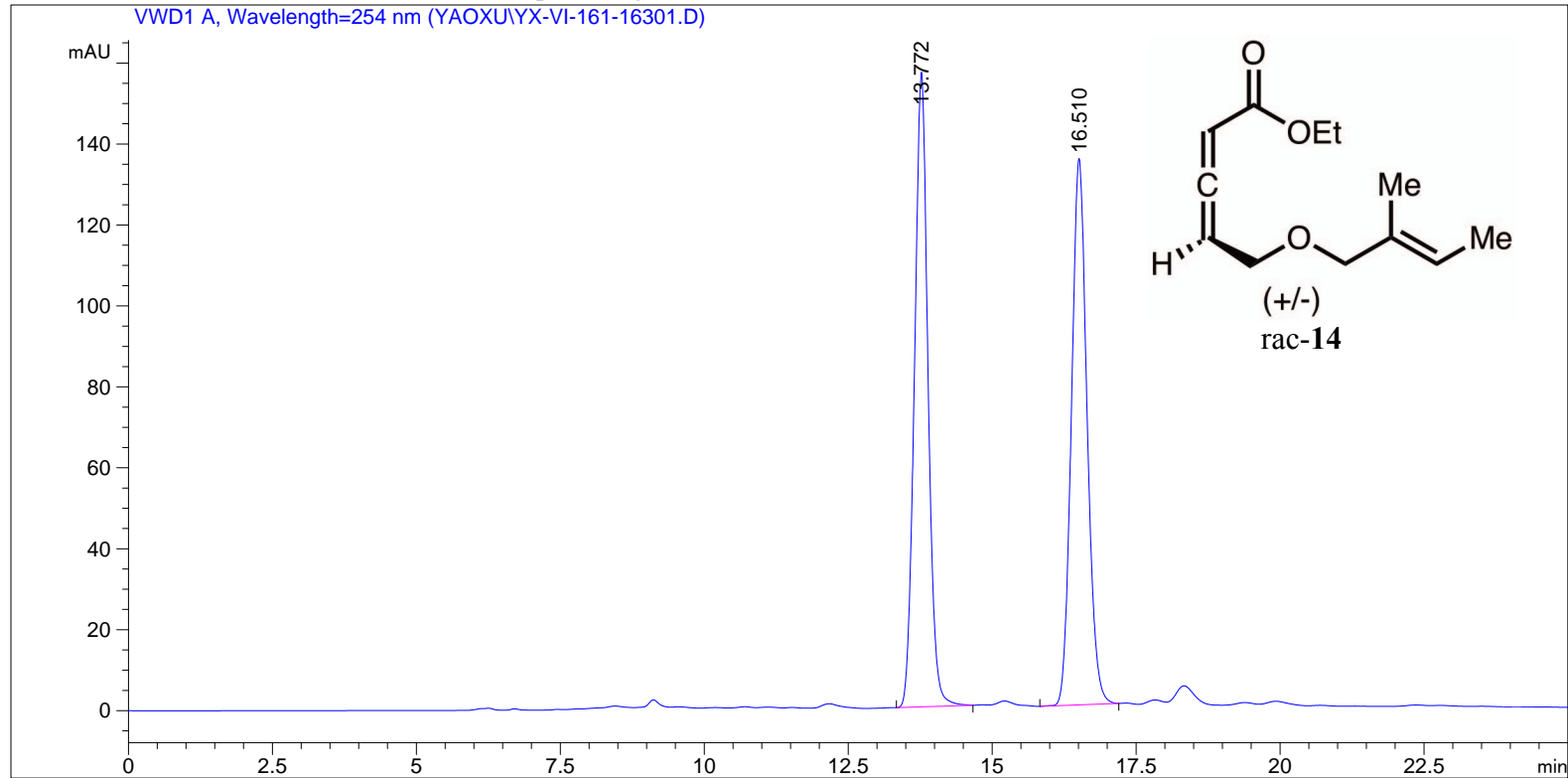
Totals : 1.69234e4 598.00376

=====  
 \*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 94
Injection Date	: 10/29/2016 5:14:44 PM	Inj	: 1
		Inj Volume	: 10.000 µl
Acq. Method	: C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M		
Last changed	: 10/21/2016 12:24:23 PM by SYSTEM		
Analysis Method	: C:\CHEM32\2\METHODS\DEF_LC.M		
Sample Info	: Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm		

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

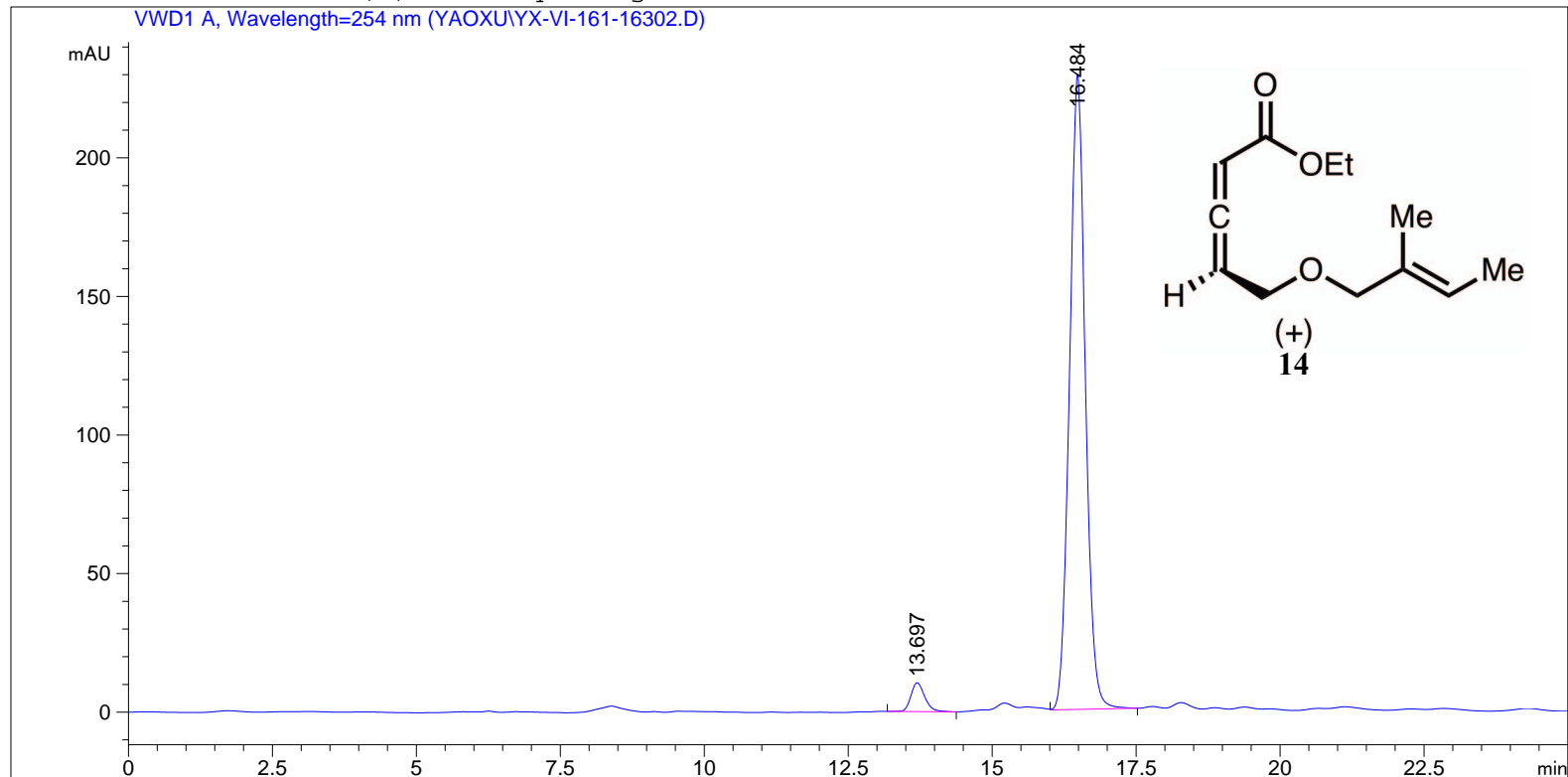
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.772	BB	0.2463	2557.84814	156.79839	50.0744
2	16.510	BB	0.2884	2550.24609	134.98282	49.9256

Totals : 5108.09424 291.78120

=====  
\*\*\* End of Report \*\*\*

```
=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 95
Injection Date  : 10/29/2016 5:40:38 PM      Inj       :    1
                                              Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 10/21/2016 12:24:23 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
=====
```

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.697	BB	0.2557	173.66200	10.40682	3.8357
2	16.484	VB	0.2876	4353.86426	229.20427	96.1643

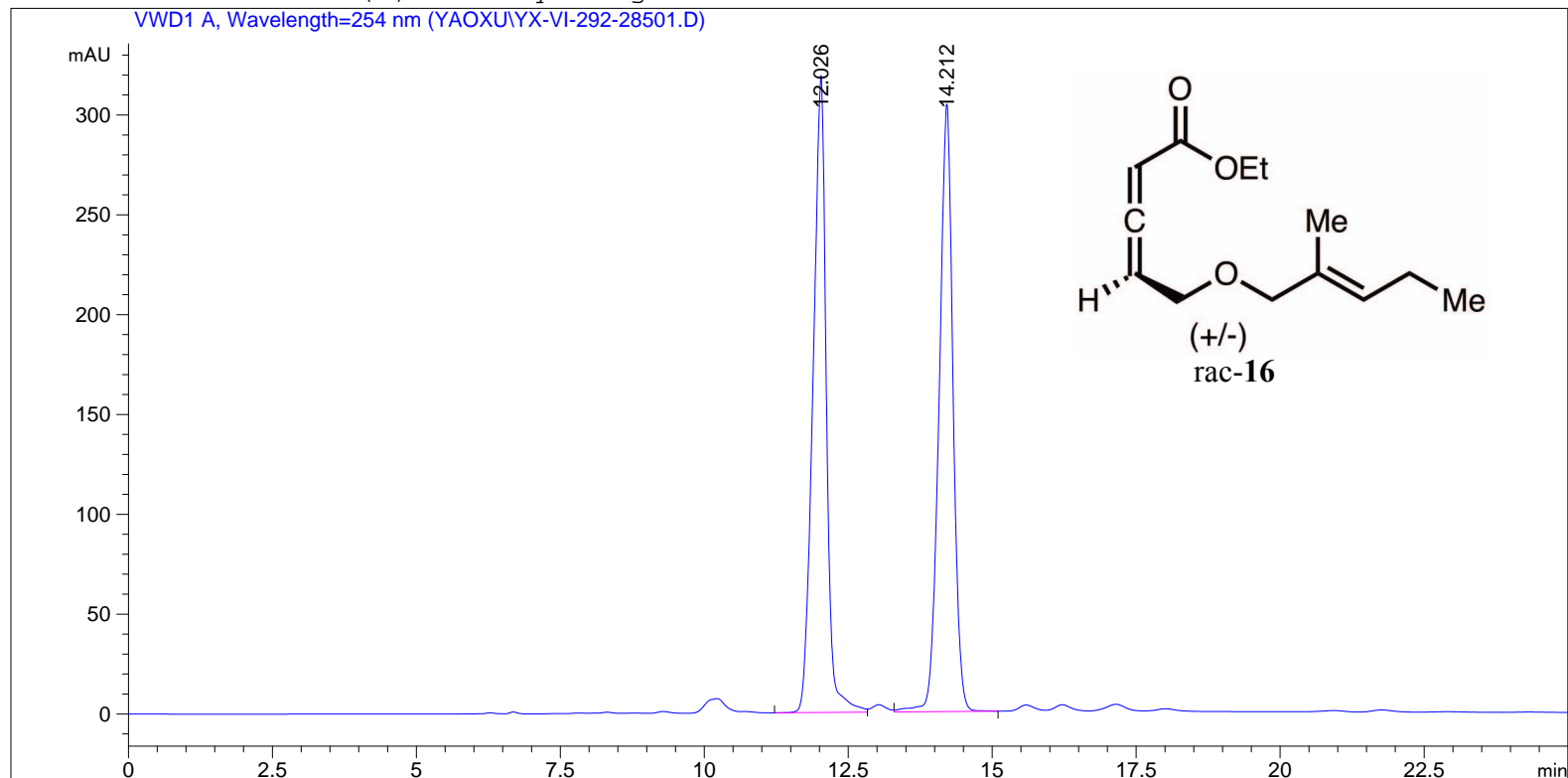
Totals : 4527.52626 239.61109

=====  
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 93
Injection Date	: 1/26/2017 2:09:13 PM	Inj	: 1
		Inj Volume	: 10.000 µl
Acq. Method	: C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M		
Last changed	: 1/26/2017 1:48:21 PM by SYSTEM		
Analysis Method	: C:\CHEM32\2\METHODS\DEF_LC.M		
Last changed	: 12/6/2016 1:32:42 PM by SYSTEM		
Sample Info	: Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm		

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

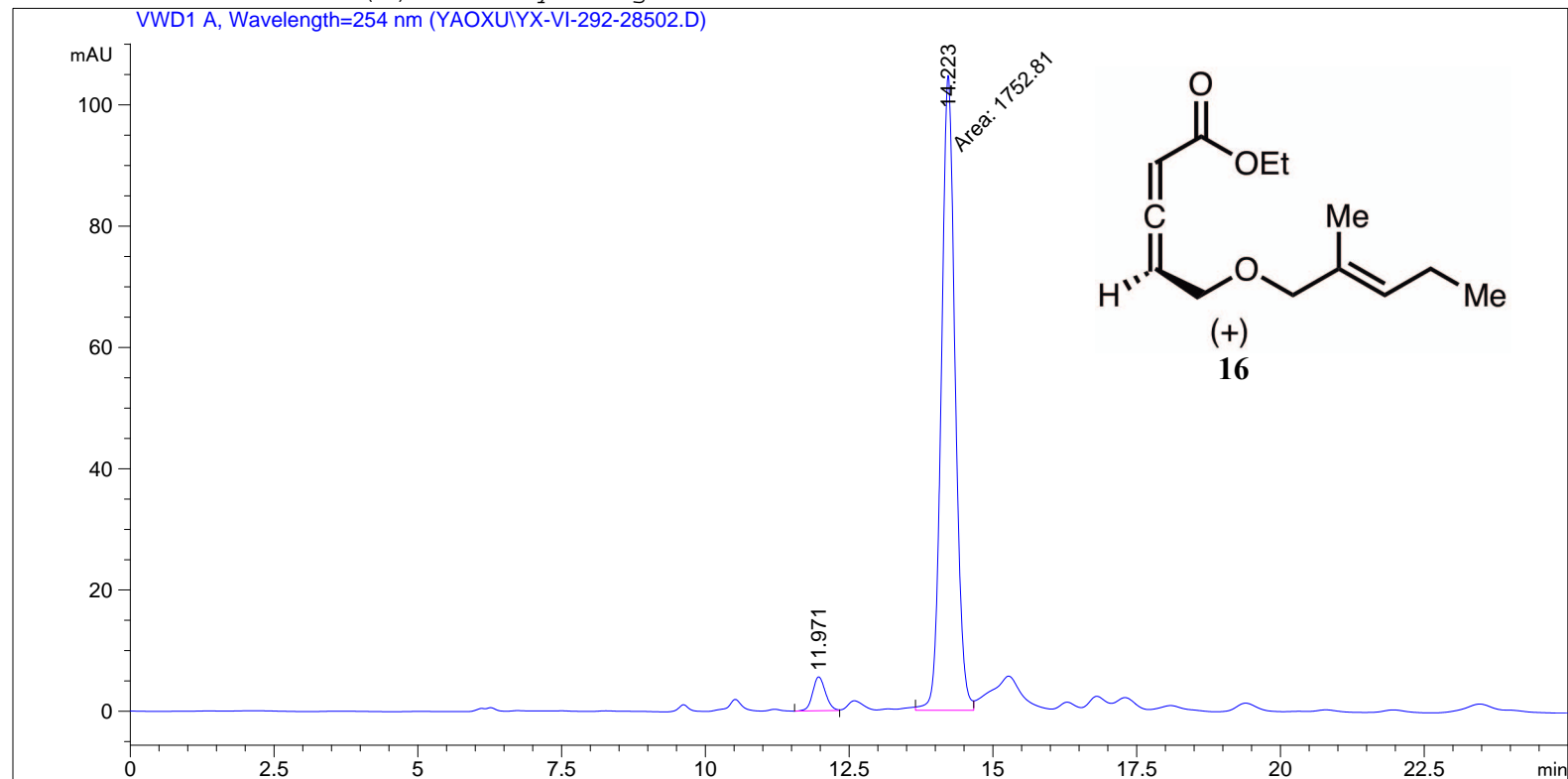
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	12.026	BV	0.2369	5109.71924	318.99051	49.8410
2	14.212	VB	0.2531	5142.32324	304.36188	50.1590

Totals : 1.02520e4 623.35239

=====  
\*\*\* End of Report \*\*\*

=====  
Acq. Operator : SYSTEM   Seq. Line :    2  
Acq. Instrument : 1220 HPLC    Location : Vial 94  
Injection Date : 1/26/2017 2:35:06 PM                                Inj :        1  
  Inj Volume : 10.000 µl  
Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed : 1/26/2017 1:48:21 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 12/6/2016 1:32:42 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	11.971	BV	0.2400	86.70005	5.58882	4.7132
2	14.223	MM	0.2791	1752.81226	104.68245	95.2868

Totals :                                1839.51231   110.27127

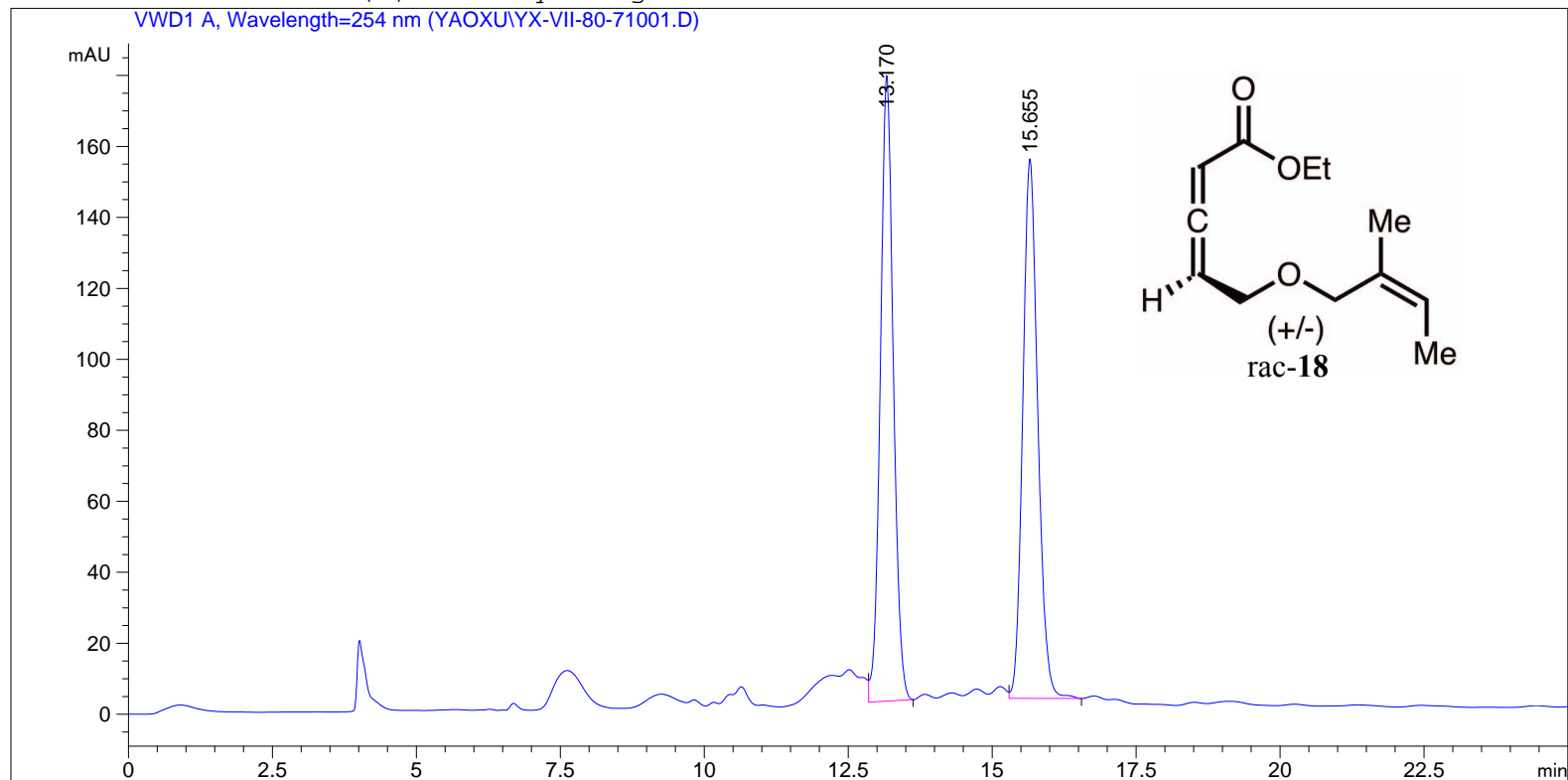
=====  
\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                    Location  : Vial 79
Injection Date  : 4/21/2017 4:16:46 PM         Inj       :    1
                                                Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 4/21/2017 3:55:55 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 3/20/2017 1:24:46 AM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.170	VB	0.2382	2768.07764	176.24934	50.0826
2	15.655	VB	0.2778	2758.95020	152.00424	49.9174

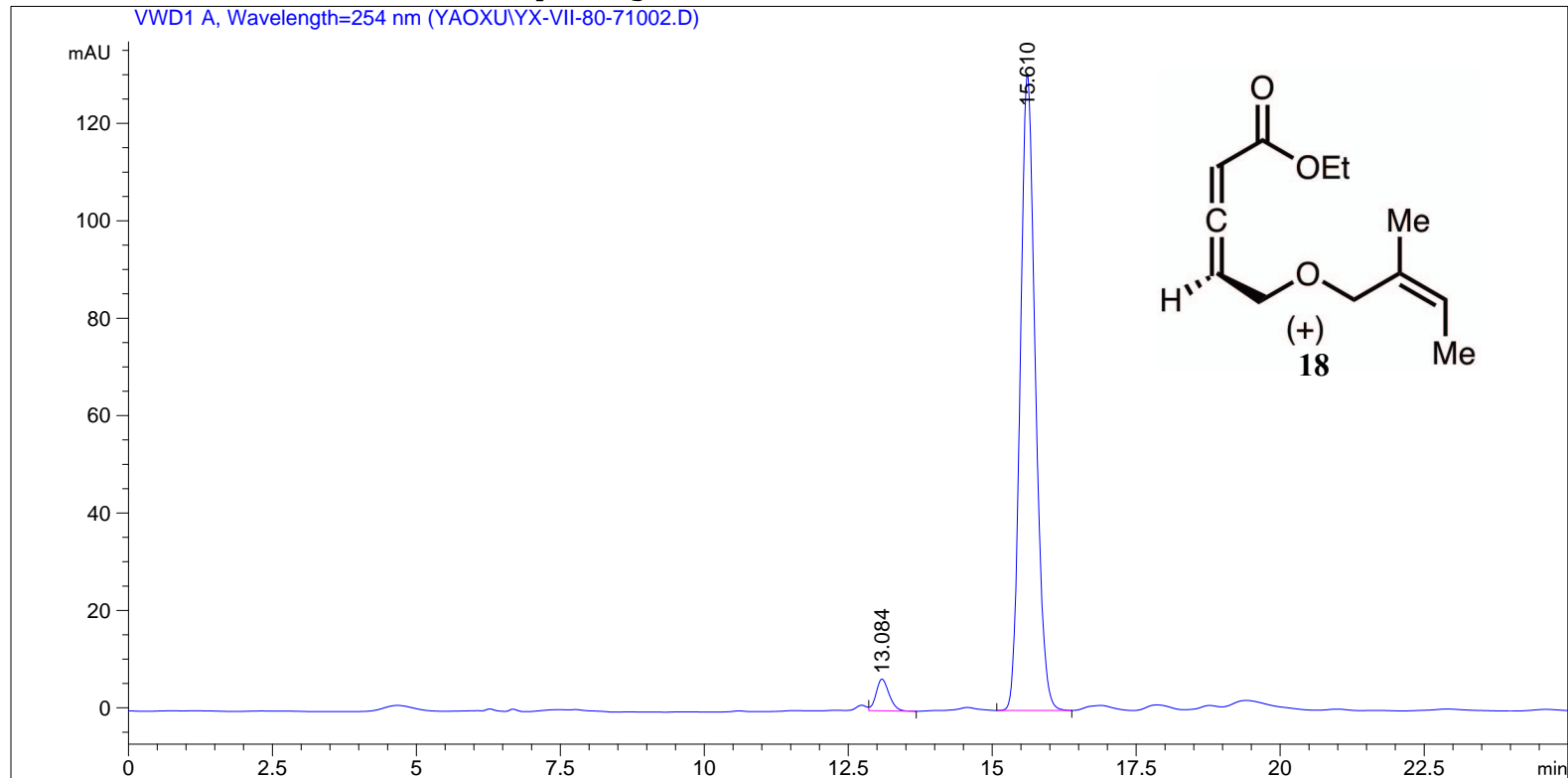
Totals :                      5527.02783    328.25359

\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                   Location  : Vial 80
Injection Date  : 4/21/2017 4:42:39 PM      Inj       :    1
                                                Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 4/21/2017 3:55:55 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 3/20/2017 1:24:46 AM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

```

Sorted By           :      Signal
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.084	VB	0.2408	102.66872	6.51574	4.1331
2	15.610	BB	0.2785	2381.38989	130.74098	95.8669

Totals :                                    2484.05861    137.25672

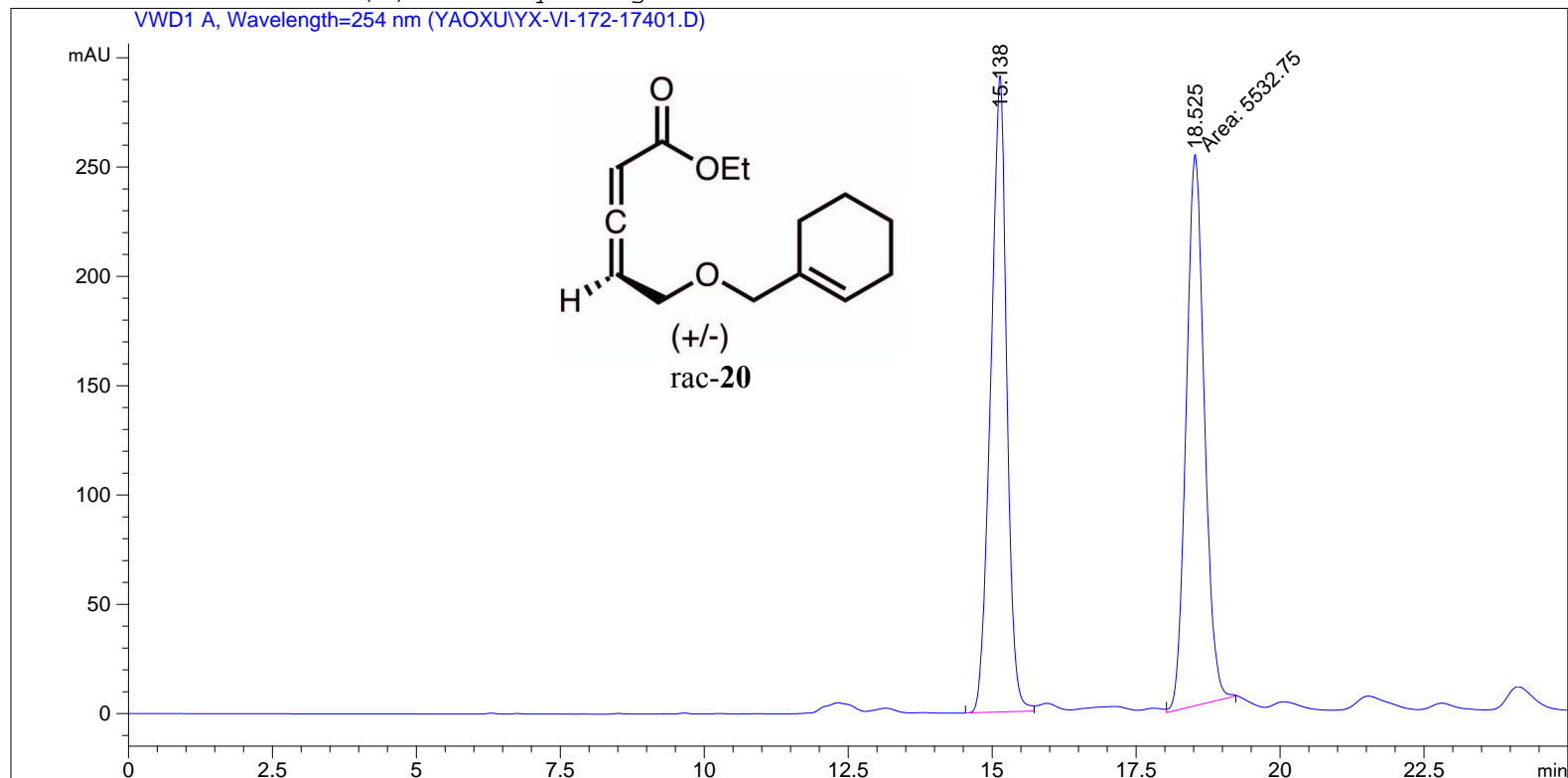
=====  
 \*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 97
Injection Date	: 11/4/2016 1:14:19 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed : 11/4/2016 1:38:40 PM by SYSTEM  
(modified after loading)  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Sample Info : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	15.138	BV	0.2860	5614.05078	291.08856	50.3647
2	18.525	MM	0.3657	5532.74805	252.16696	49.6353

Totals : 1.11468e4 543.25552

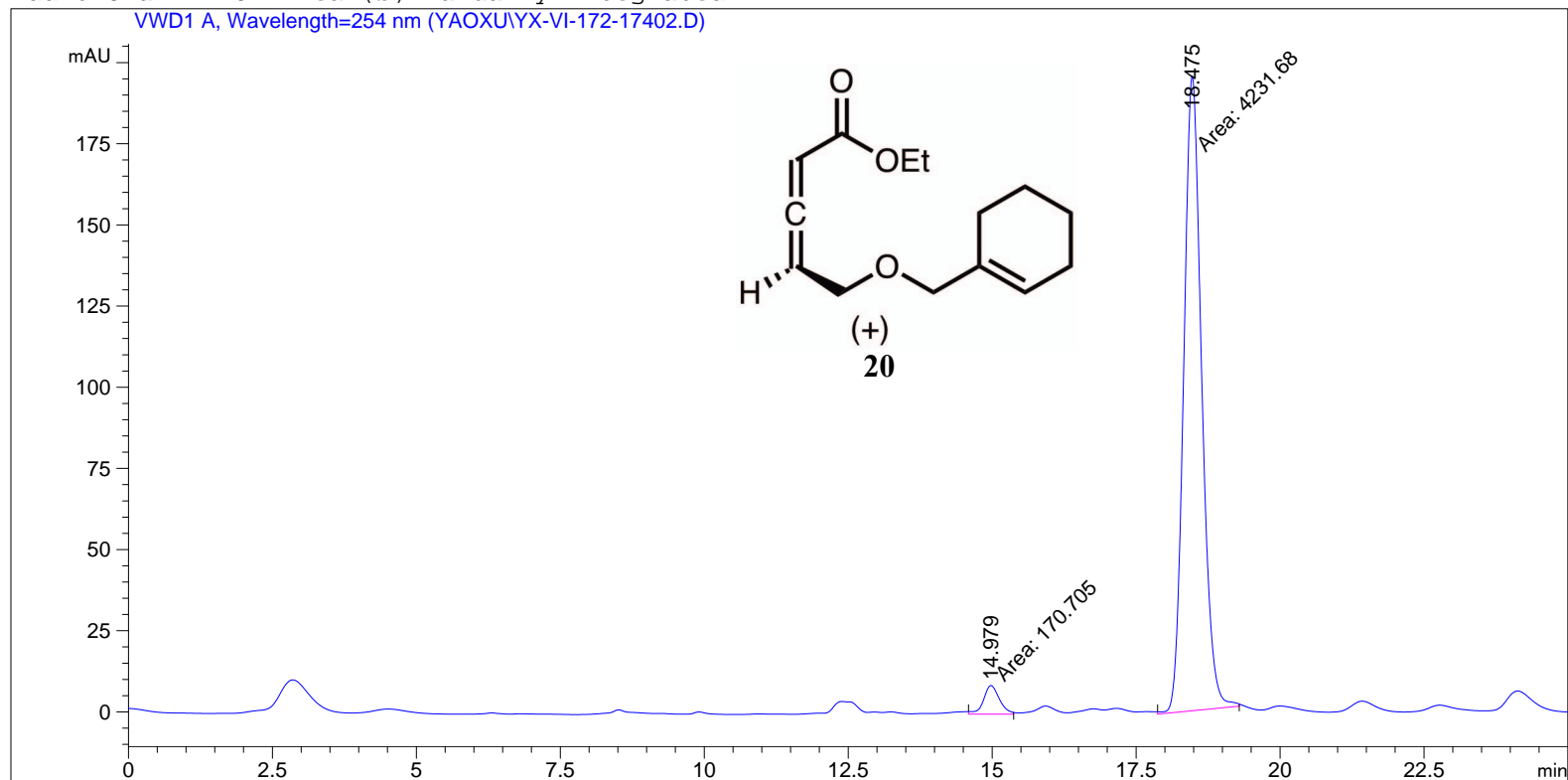
=====  
\*\*\* End of Report \*\*\*



```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 98
Injection Date  : 11/4/2016 1:40:13 PM      Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 11/4/2016 1:38:40 PM by SYSTEM
                 (modified after loading)
Analysis Method  : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

=====
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

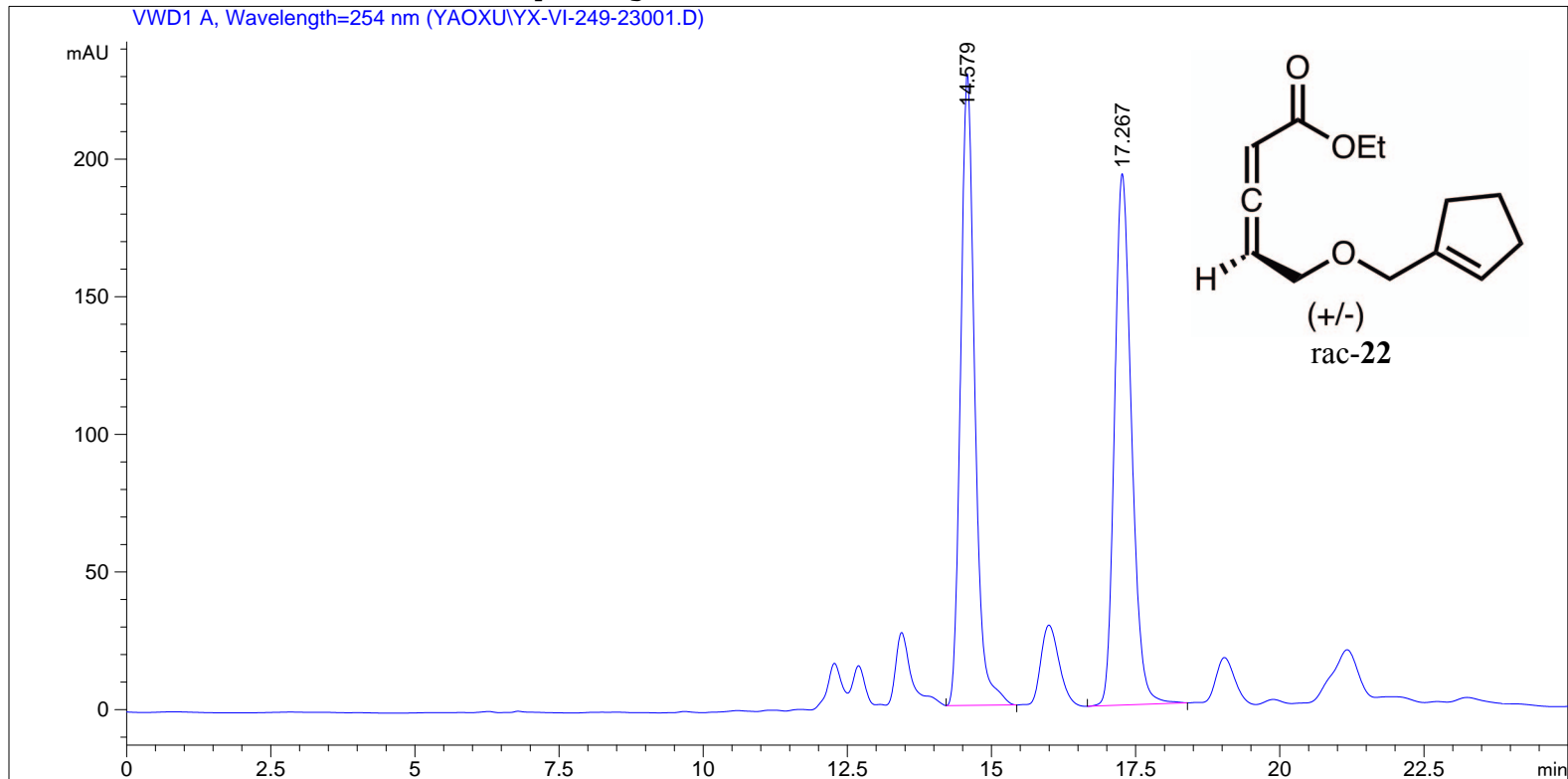
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.979	MM	0.3225	170.70538	8.82323	3.8776
2	18.475	MM	0.3607	4231.67529	195.51846	96.1224

Totals : 4402.38068 204.34169

\*\*\*End of Report \*\*\*

=====
Acq. Operator : SYSTEM
Acq. Instrument : 1220 HPLC
Injection Date : 12/13/2016 1:13:50 PM
Seq. Line : 1
Location : Vial 66
Inj : 1
Inj Volume : 10.000 µl
Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M
Last changed : 12/13/2016 1:03:01 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M
Last changed : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ML/MIN, 254NM
=====

Additional Info : Peak(s) manually integrated



Area Percent Report

Sorted By : Signal
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

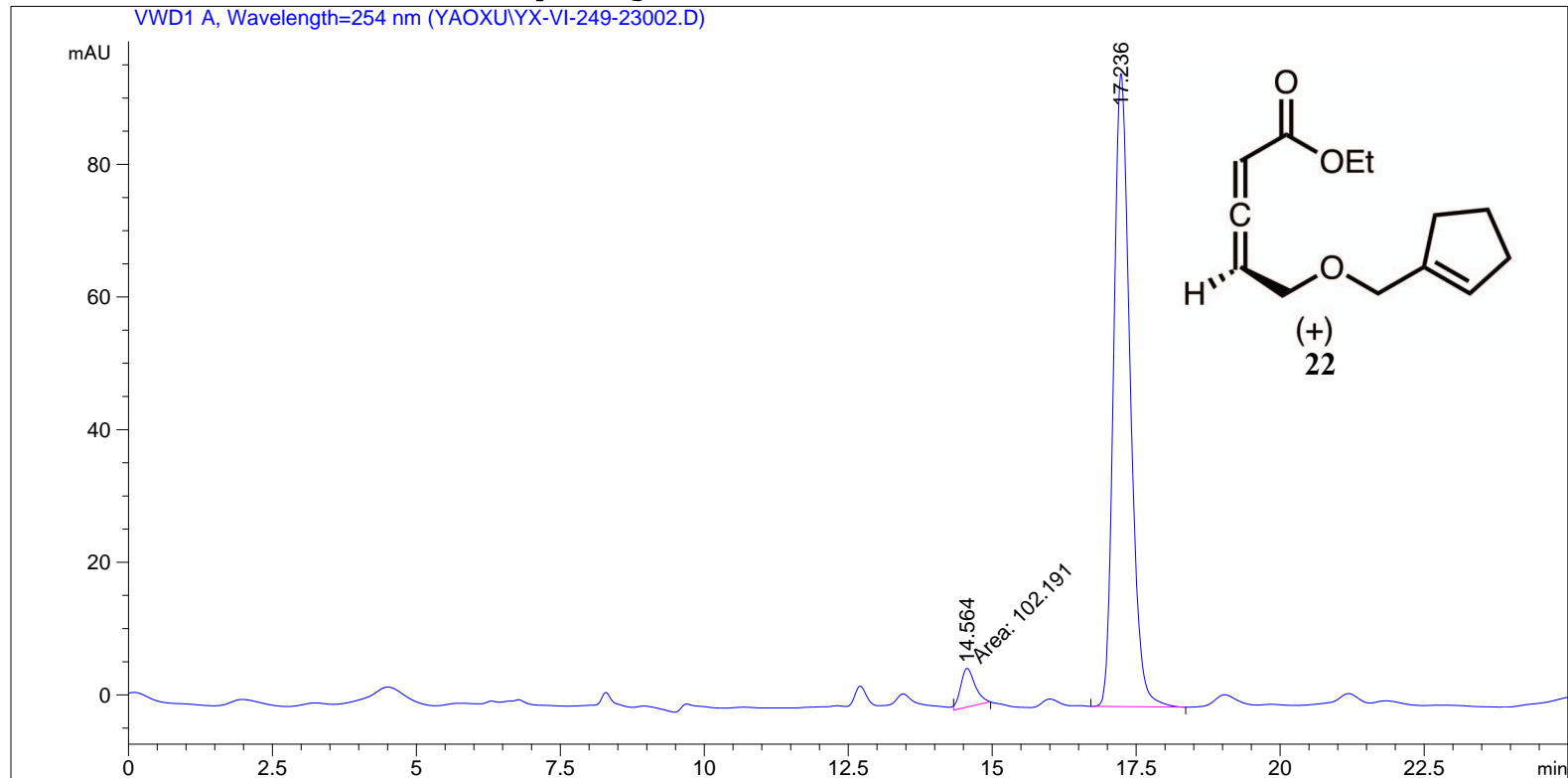
Table with 7 columns: Peak #, RetTime [min], Type, Width [min], Area [mAU\*s], Height [mAU], Area %. It lists two peaks at retention times 14.579 and 17.267 minutes.

Totals : 7882.98755 422.54387

\*\*\* End of Report \*\*\*

```
=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 67
Injection Date  : 12/13/2016 1:39:43 PM      Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 12/13/2016 1:03:01 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ML/MIN, 254NM
=====
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.564	MM	0.2914	102.19089	5.84469	5.1007
2	17.236	BB	0.3074	1901.26331	95.44495	94.8993

Totals :                    2003.45419   101.28965

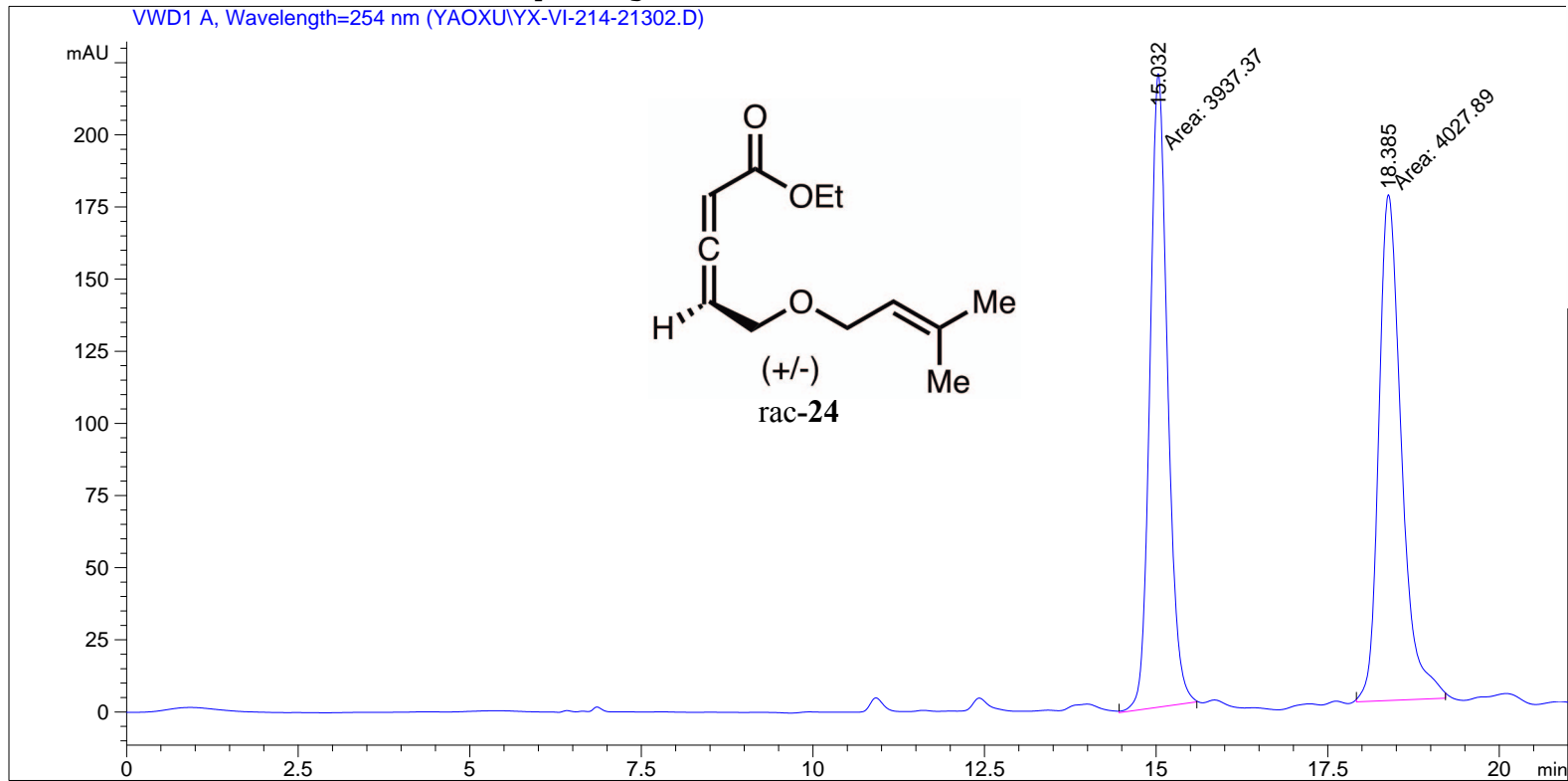
\*\*\* End of Report \*\*\*

Sample Name: YX-VI-213

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                  Location  : Vial 89
Injection Date  : 11/23/2016 5:15:50 PM     Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed    : 11/23/2016 3:56:28 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 11/14/2016 1:23:16 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
=====
    
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

=====
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

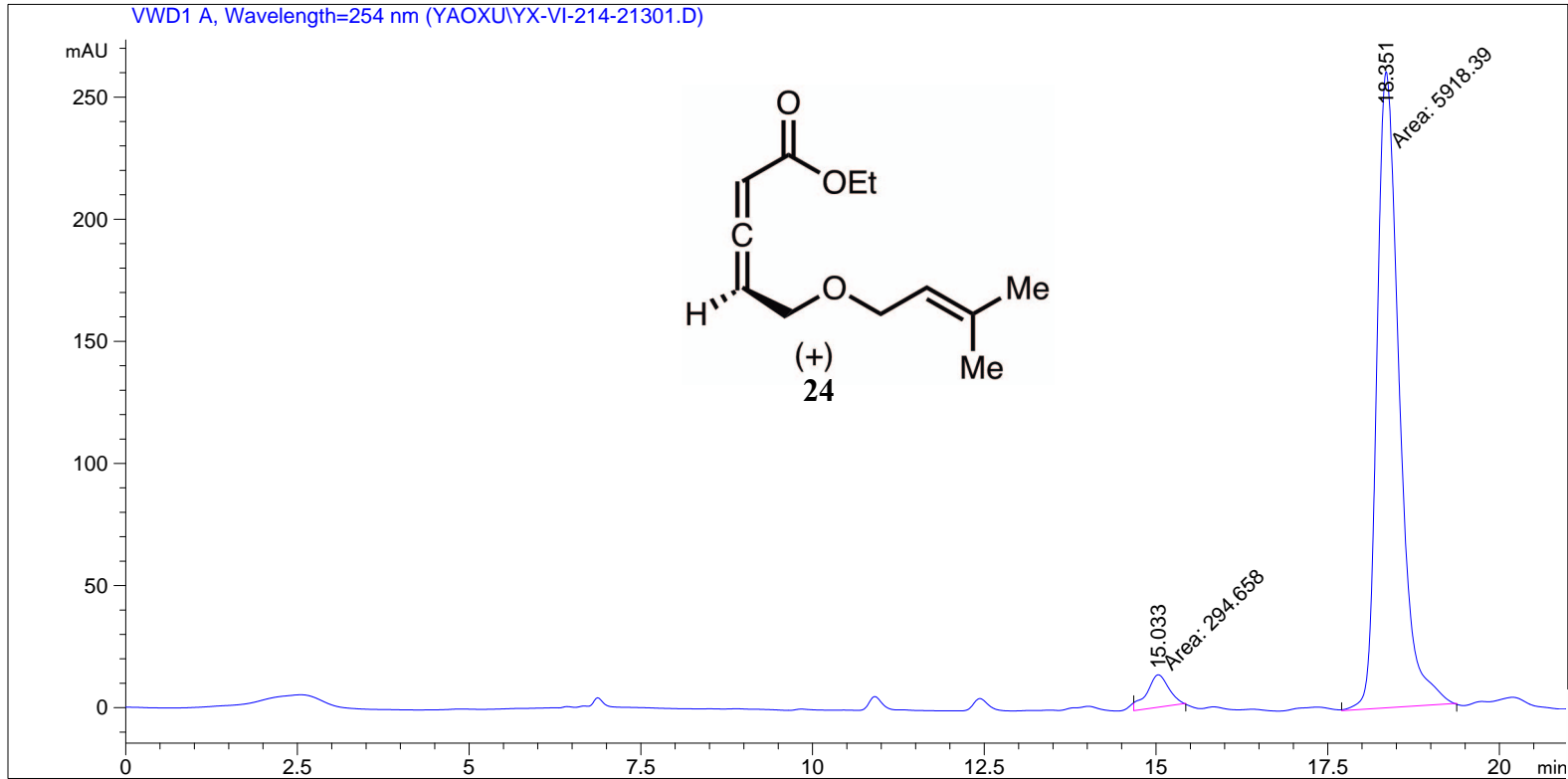
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	15.032	MM	0.2989	3937.36621	219.53625	49.4318
2	18.385	MM	0.3829	4027.88770	175.30659	50.5682

Totals : 7965.25391 394.84285

\*\*\* End of Report \*\*\*

=====  
Acq. Operator : SYSTEM Seq. Line : 1  
Acq. Instrument : 1220 HPLC Location : Vial 88  
Injection Date : 11/23/2016 4:02:17 PM Inj : 1  
Inj Volume : 10.000 µl  
Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed : 11/23/2016 3:56:28 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 11/14/2016 1:23:16 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm  
=====

Additional Info : Peak(s) manually integrated  
VWD1 A, Wavelength=254 nm (YAOXU\YX-VI-214-21301.D)



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	15.033	MM	0.3700	294.65845	13.27302	4.7426
2	18.351	MM	0.3787	5918.39404	260.44778	95.2574

Totals : 6213.05249 273.72080

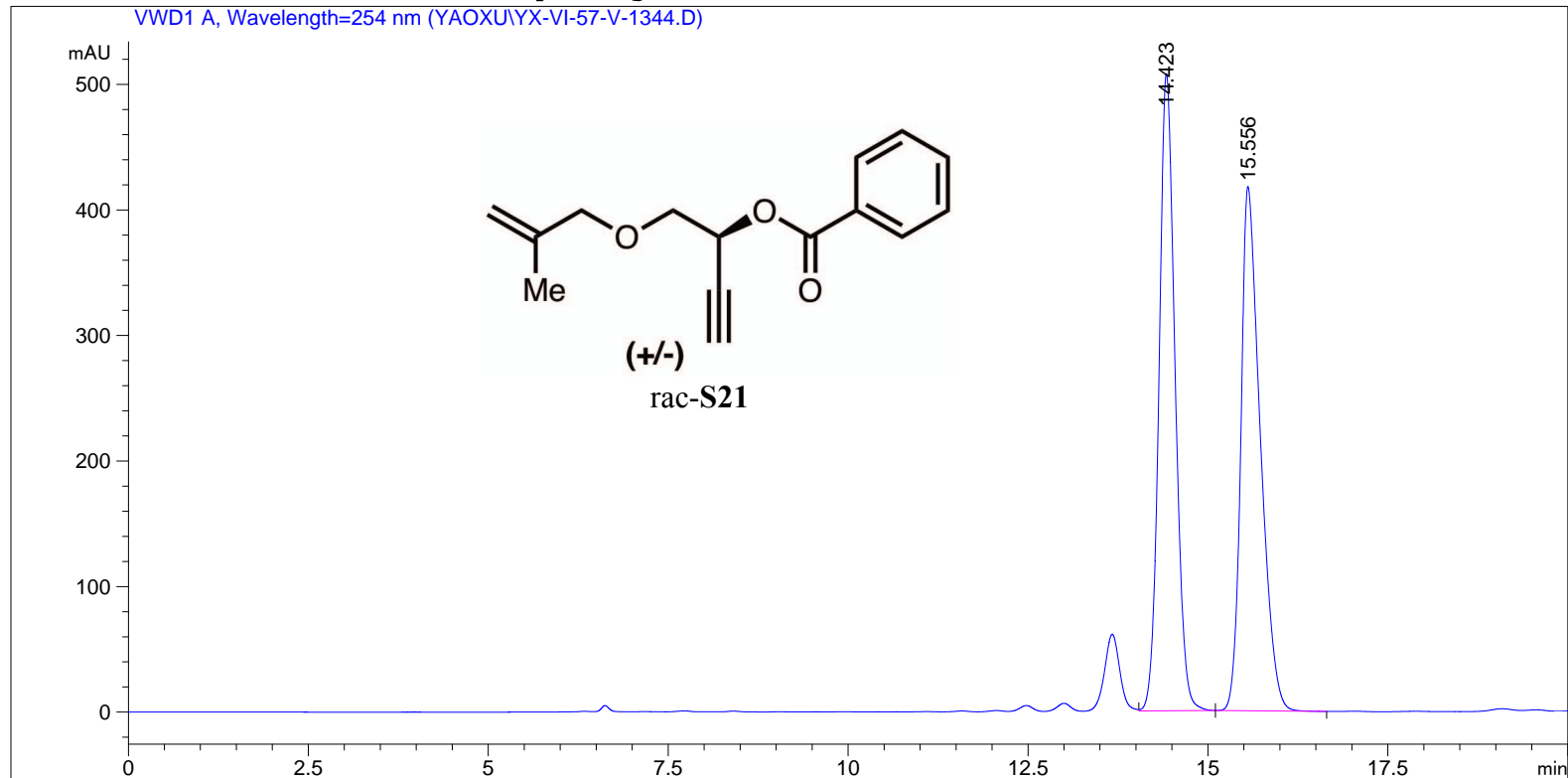
=====  
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 74
Injection Date	: 2/9/2017 4:01:59 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\MLC-99-1\_HEX-IPA\_0.5ML-MIN.M  
 Last changed : 2/9/2017 3:46:05 PM by SYSTEM  
 Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
 Last changed : 12/6/2016 1:32:42 PM by SYSTEM  
 Sample Info : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

Sorted By : Signal  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.423	VB	0.2343	7863.59717	507.51968	50.0971
2	15.556	BB	0.2773	7833.10889	417.59097	49.9029

Totals :                                  1.56967e4    925.11066

=====  
 \*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                  Location  : Vial 73
Injection Date  : 2/9/2017 3:24:22 PM       Inj       :    1
                                           Inj Volume: 10.000 µl

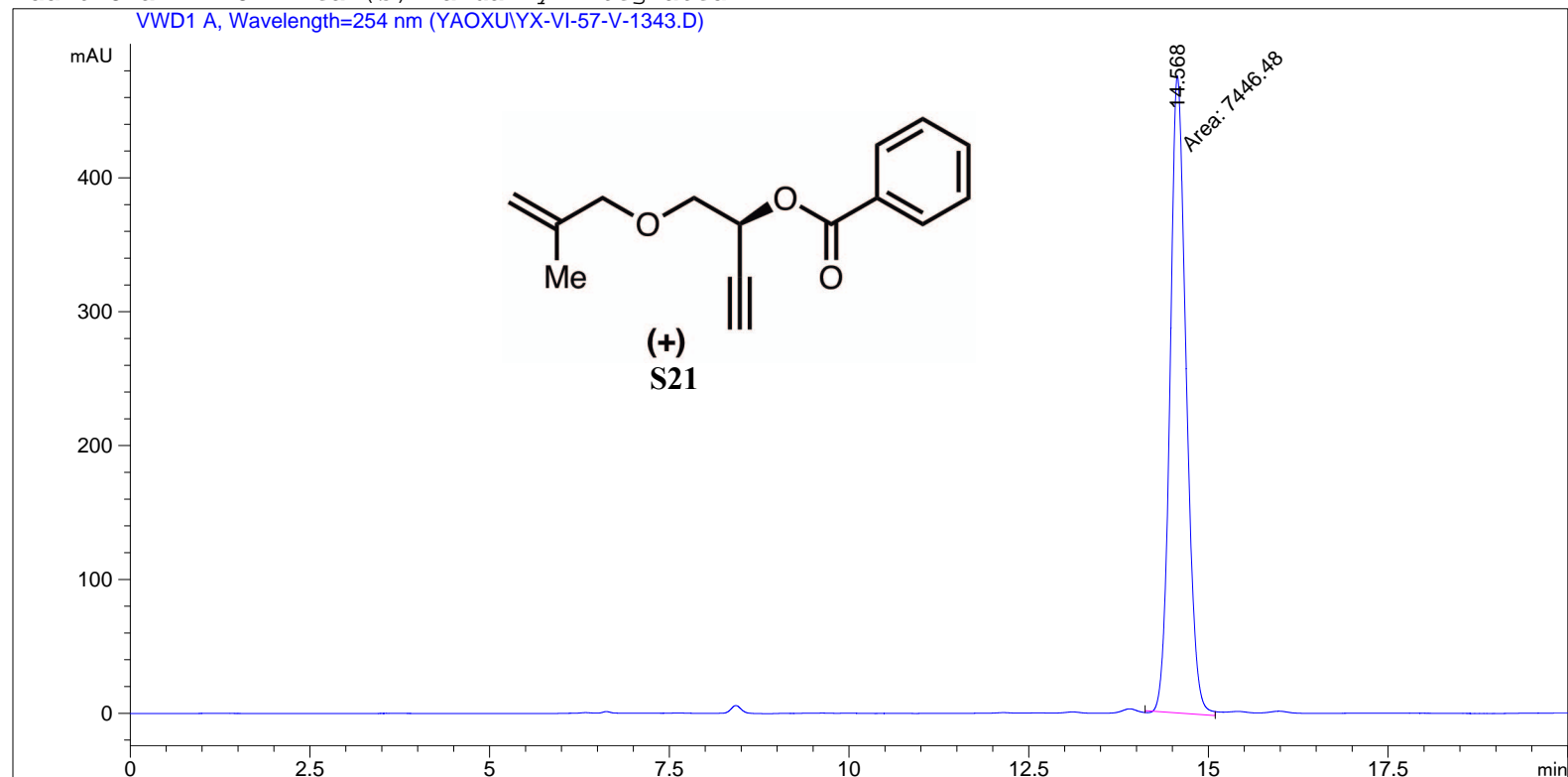
Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed   : 2/9/2017 3:39:53 PM by SYSTEM
               : (modified after loading)

Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info    : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ml/min, 254nm
=====

```

Additional Info : Peak(s) manually integrated

VWD1 A, Wavelength=254 nm (YAOXU\YX-VI-57-V-1343.D)



=====  
Area Percent Report  
=====

```

Sorted By          :      Signal
Multiplier:        :      1.0000
Dilution:          :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.568	MM	0.2608	7446.47705	475.86578	100.0000

Totals : 7446.47705 475.86578

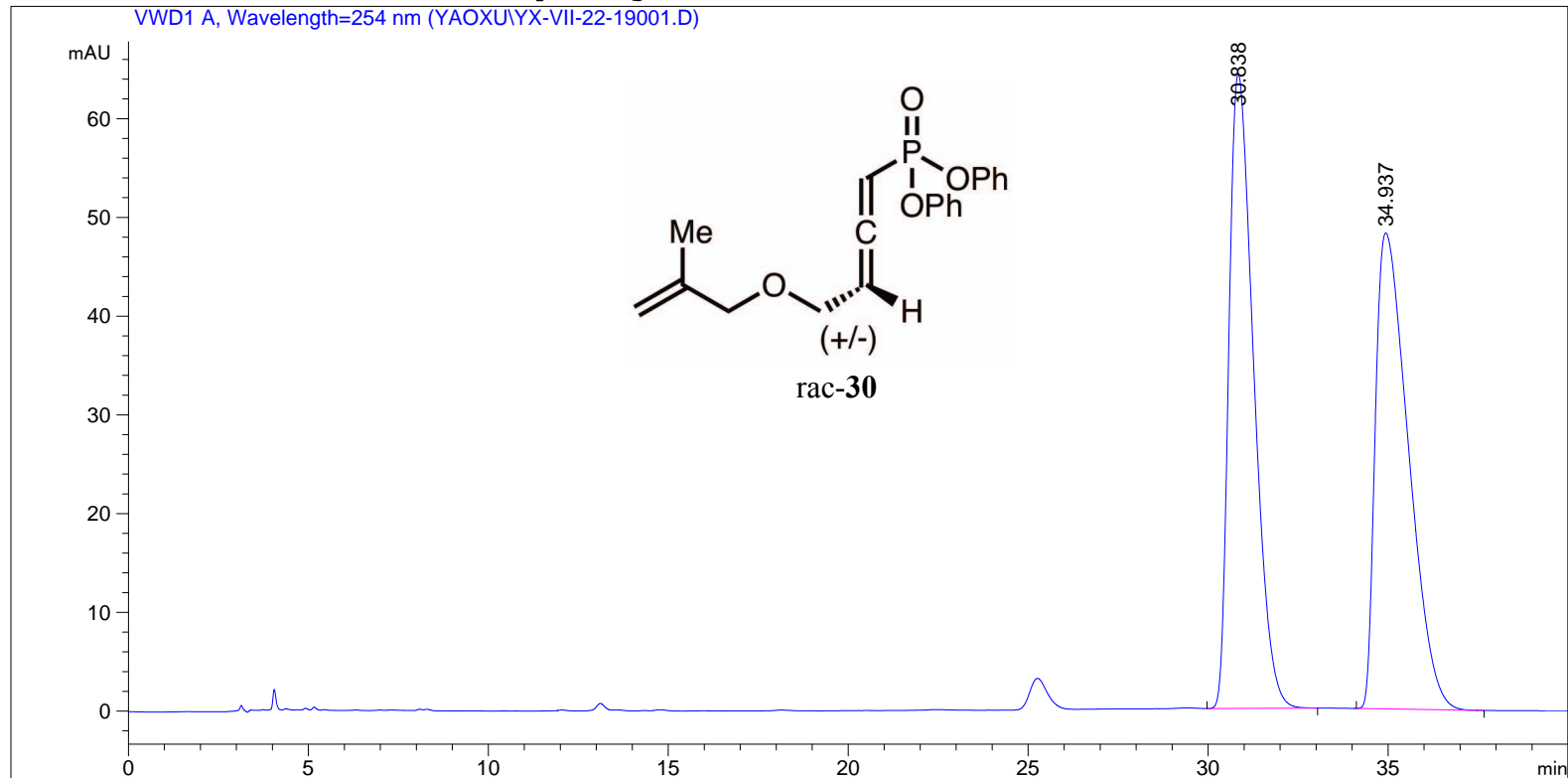
=====  
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 88
Injection Date	: 2/23/2017 12:42:45 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\YX\_96\_4\_HEX\_IPA\_1ML\_MIN\_254NM.M  
Last changed : 2/22/2017 10:34:51 AM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 2/16/2017 2:45:13 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1 96:4 Hex/IPA, 1ml/min. 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	30.838	BB	0.7448	3062.81128	64.29079	49.9482
2	34.937	BB	0.9647	3069.15894	48.21045	50.0518

Totals : 6131.97021 112.50123

=====  
\*\*\* End of Report \*\*\*

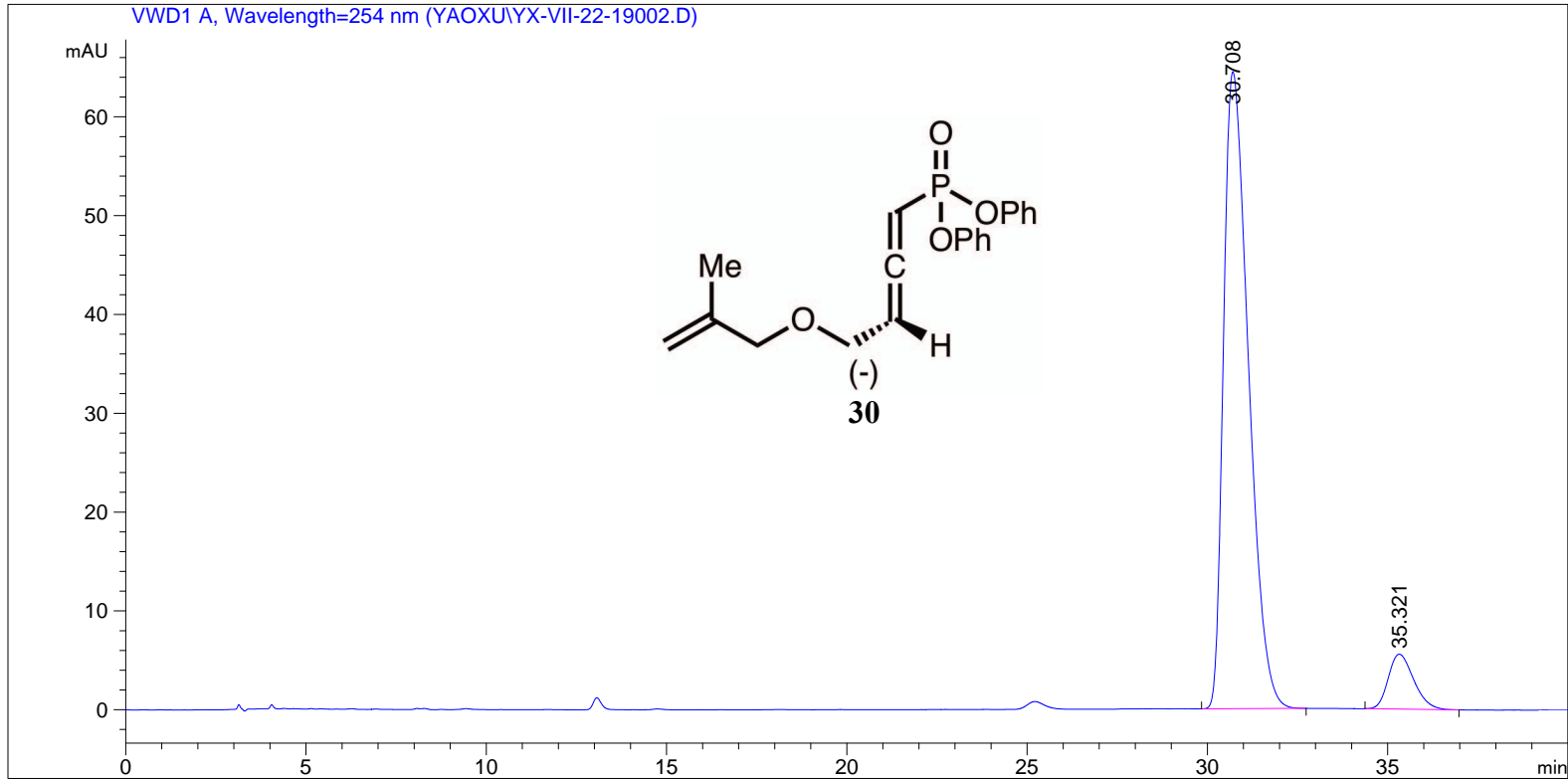


```

=====
Acq. Operator   : SYSTEM                               Seq. Line :    2
Acq. Instrument : 1220 HPLC                             Location  : Vial 89
Injection Date  : 2/23/2017 1:23:41 PM                 Inj       :    1
                                                    Inj Volume: 10.000 µl

Acq. Method    : C:\CHEM32\2\METHODS\YX_96_4_HEX_IPA_1ML_MIN_254NM.M
Last changed   : 2/22/2017 10:34:51 AM by SYSTEM
Analysis Method: C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info    : Lux 3u Cellulose-1 96:4 Hex/IPA, 1ml/min. 254nm
=====
  
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

Sorted By           :      Signal
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	30.708	BB	0.7513	3095.48901	64.45647	91.9020
2	35.321	BB	0.7456	272.76184	5.55795	8.0980

Totals :                      3368.25085    70.01442

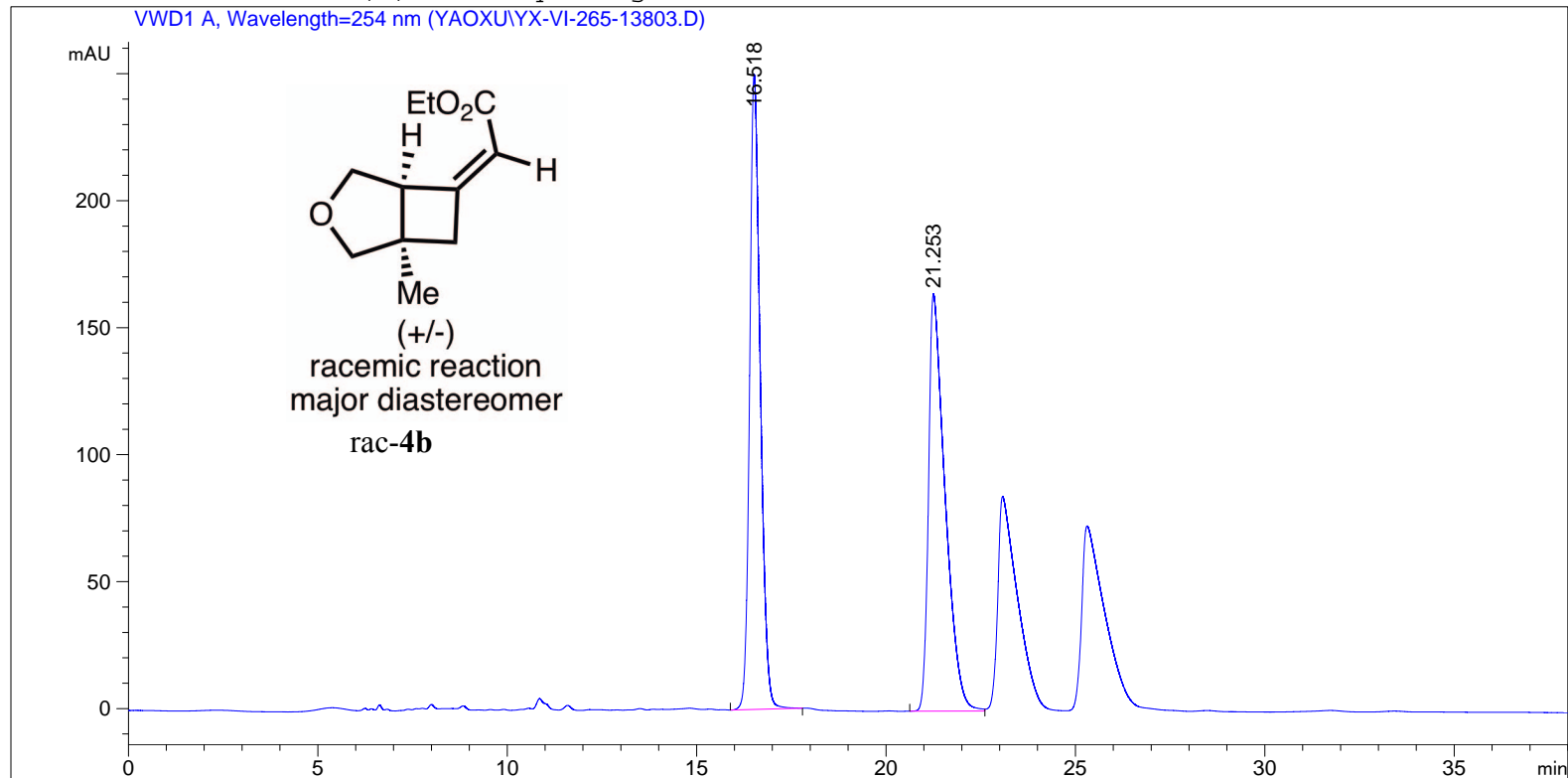
\*\*\* End of Report \*\*\*

```
=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                  Location  : Vial 65
Injection Date  : 1/7/2017 12:20:26 PM      Inj       :    1
                                           Inj Volume: 10.000 µl

Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed   : 1/7/2017 12:58:00 PM by SYSTEM
               (modified after loading)

Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info    : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ML/MIN, 254nm
=====
```

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

Sorted By : Signal  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	16.518	BB	0.2899	4866.85303	250.21080	49.3599
2	21.253	BV	0.4146	4993.07715	164.29343	50.6401

Totals : 9859.93018 414.50423

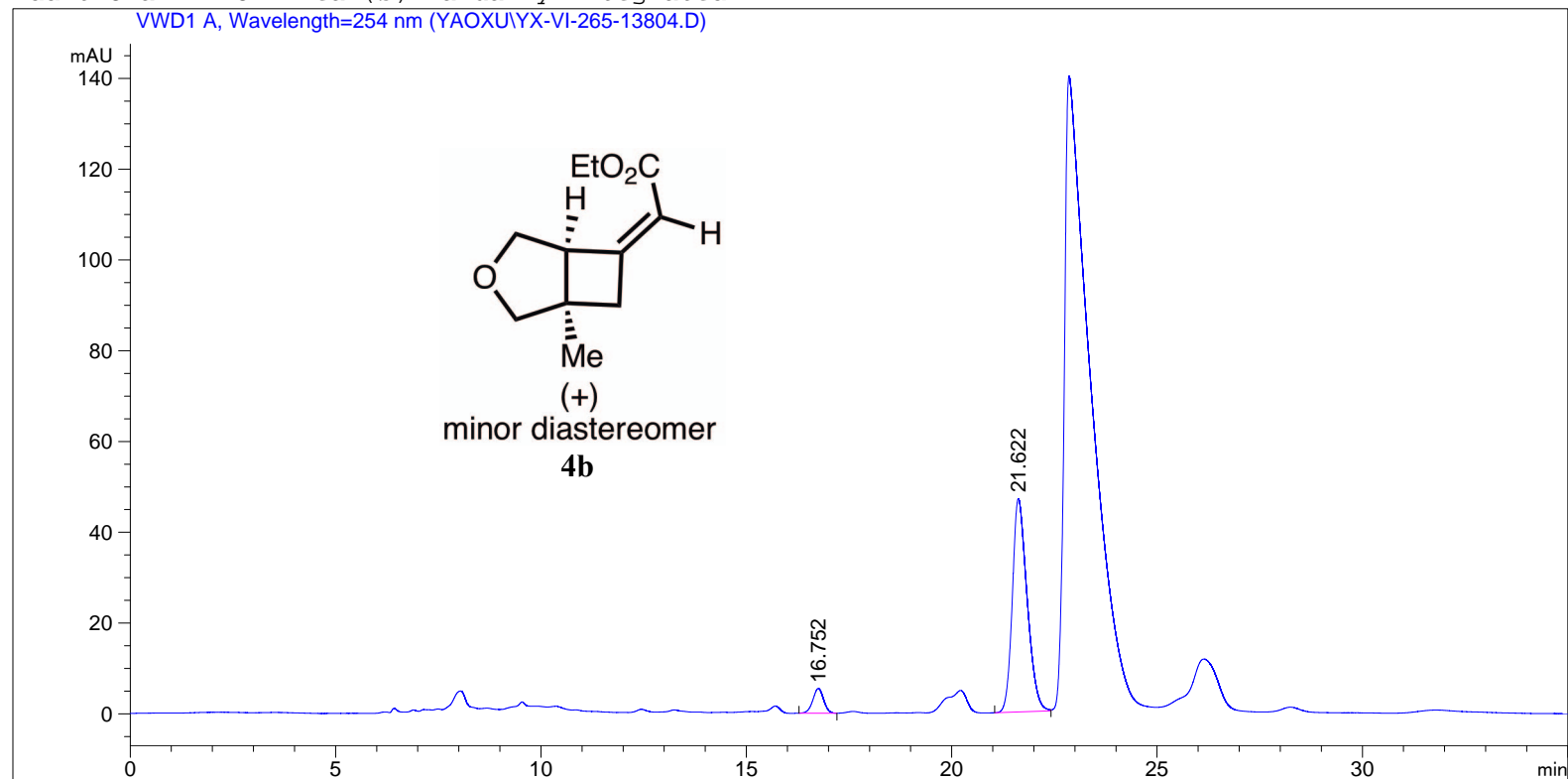
=====  
 \*\*\*End of Report \*\*\*

```
=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 66
Injection Date  : 1/7/2017 12:59:18 PM      Inj       :    1
                                                Inj Volume: 10.000 µl

Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed   : 1/7/2017 1:33:07 PM by SYSTEM
                (modified after loading)

Analysis Method: C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info    : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ML/MIN, 254nm
=====
```

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

```
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	16.752	BB	0.2149	99.53814	5.46616	7.8069
2	21.622	BV	0.3442	1175.46240	47.00769	92.1931

Totals :                   1275.00054   52.47386

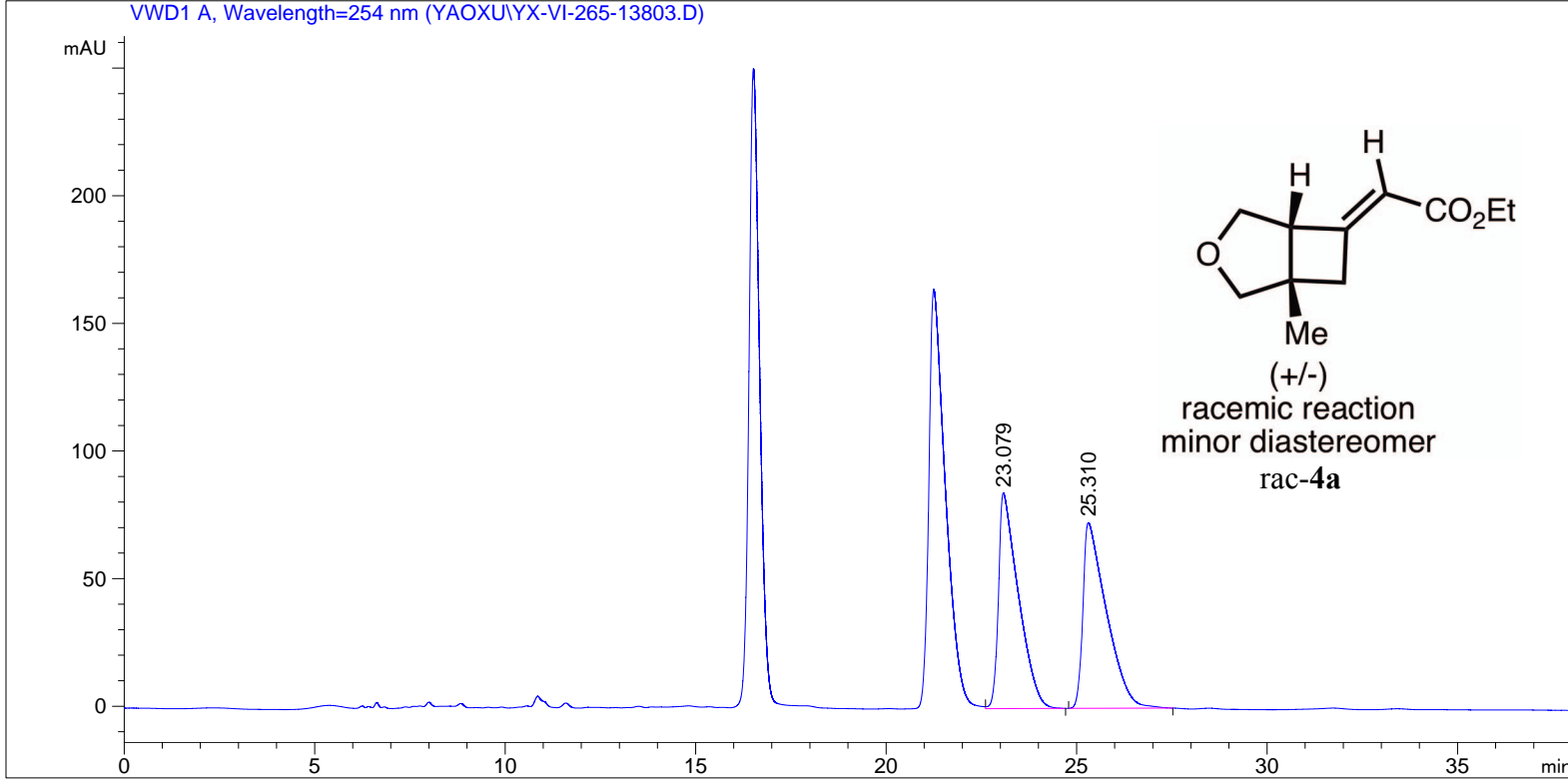
=====  
\*\*\*End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                   Seq. Line :    1
Acq. Instrument : 1220 HPLC                 Location  : Vial 65
Injection Date  : 1/7/2017 12:20:26 PM    Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed   : 1/7/2017 12:58:00 PM by SYSTEM
                (modified after loading)
Analysis Method: C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info    : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ML/MIN, 254nm
=====

```

Additional Info : Peak(s) manually integrated  
VWD1 A, Wavelength=254 nm (YAOXU\YX-VI-265-13803.D)



=====  
Area Percent Report  
=====

```

Sorted By           :      Signal
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	23.079	VB	0.4775	3074.14111	84.38940	49.6702
2	25.310	BB	0.5500	3114.96582	72.75870	50.3298

Totals :                          6189.10693    157.14809

=====  
\*\*\* End of Report \*\*\*

```

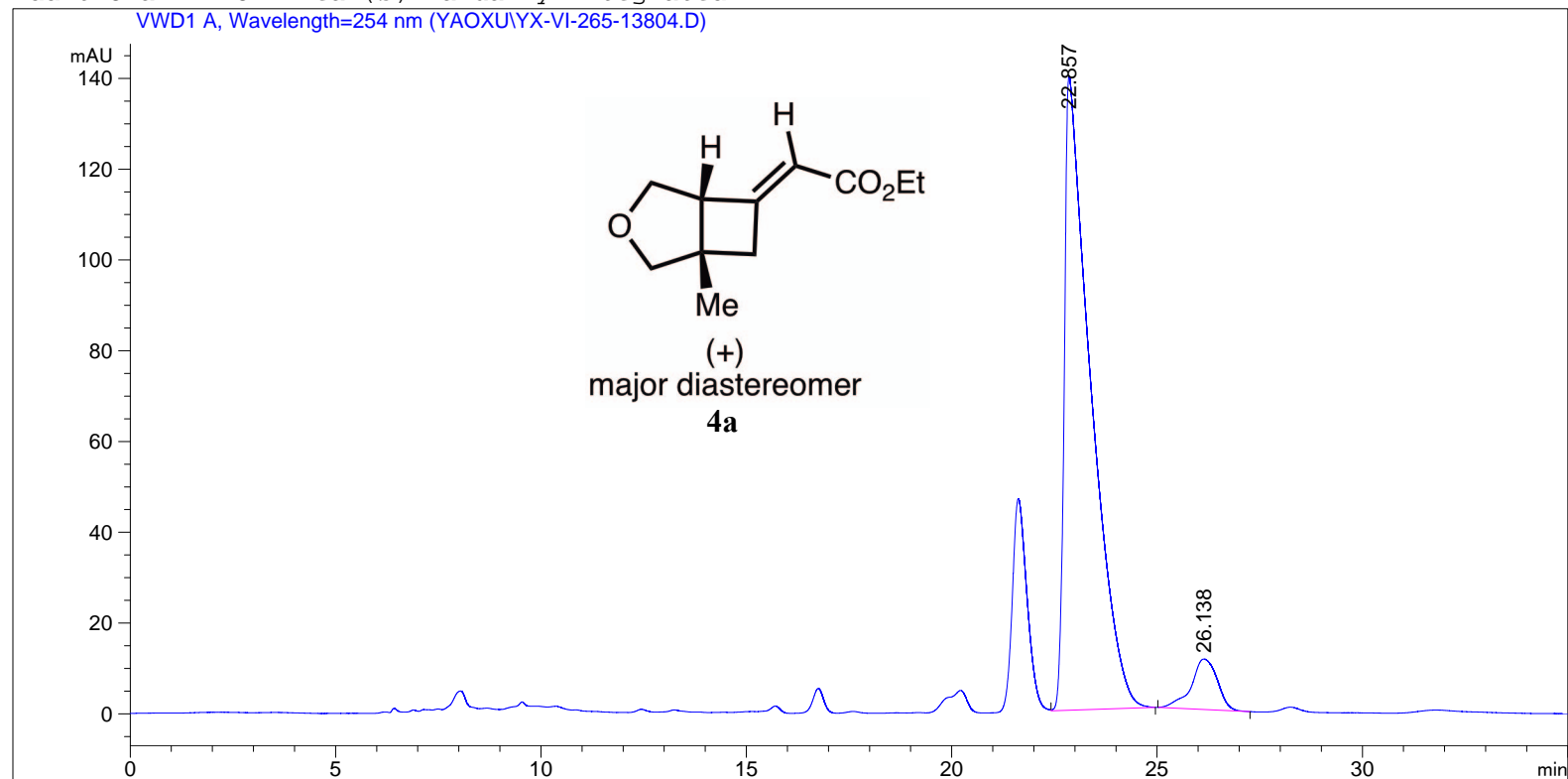
=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                   Location  : Vial 66
Injection Date  : 1/7/2017 12:59:18 PM       Inj       :    1
                                           Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed    : 1/7/2017 1:33:07 PM by SYSTEM
                  (modified after loading)

Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info     : Chiralpak IA PG024, 99:1 Hex/IPA, 0.5ML/MIN, 254nm
=====

```

Additional Info : Peak(s) manually integrated



```

=====
Area Percent Report
=====

```

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	22.857	VB	0.5633	6208.78564	139.76122	92.6354
2	26.138	BB	0.5221	493.60278	11.12510	7.3646

```
Totals :                      6702.38843  150.88631
```

```

=====
*** End of Report ***

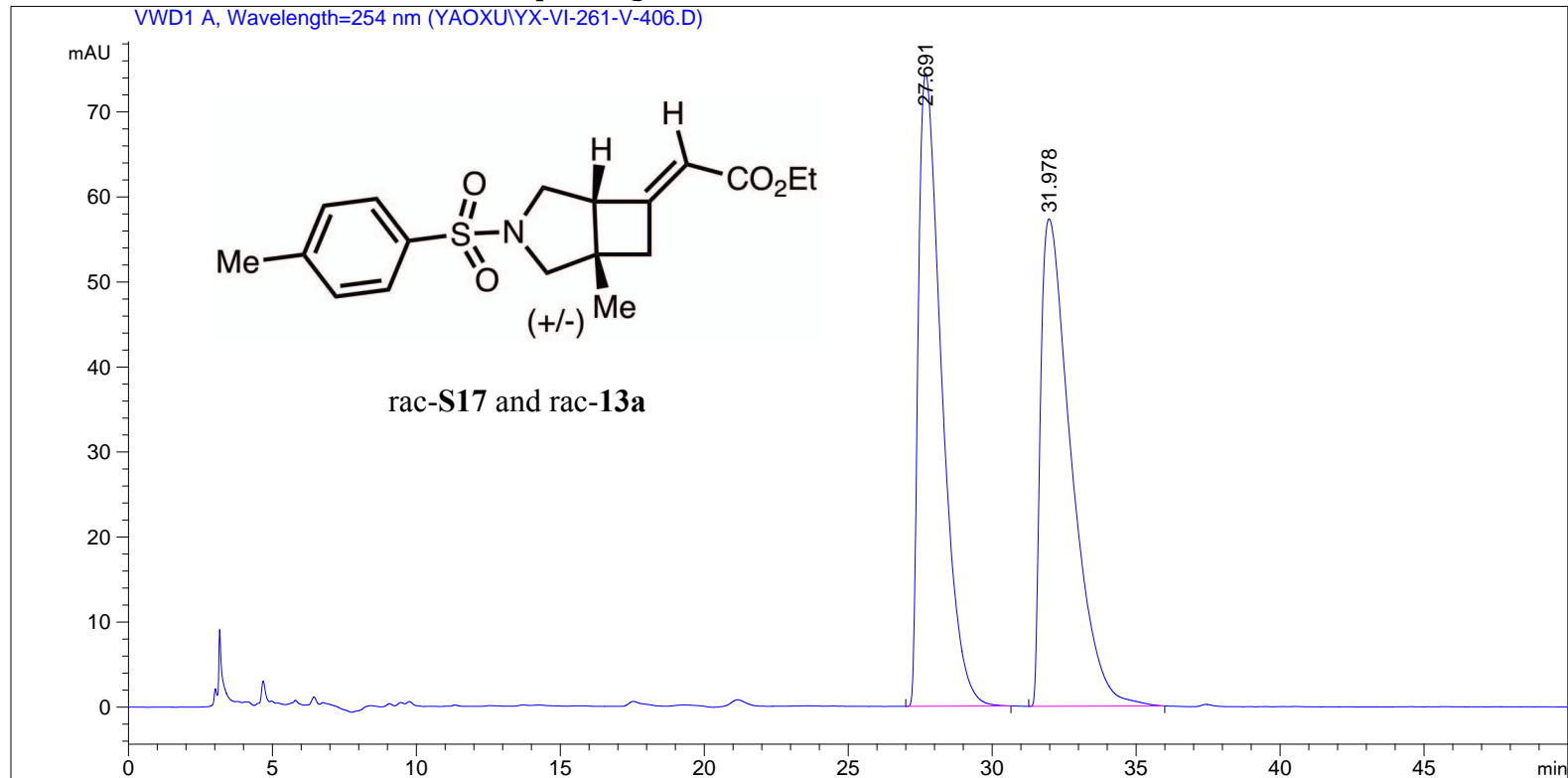
```

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                   Location  : Vial 97
Injection Date  : 2/6/2017 9:41:06 PM        Inj       :    1
                                                Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\YX_97_3_HEX_IPA_1MIN_254NM.M
Last changed    : 2/4/2017 8:59:05 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 97:3 Hex/IPA, 1ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

Sorted By          :      Signal
Multiplier:        :      1.0000
Dilution:          :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	27.691	BB	0.8670	4182.81641	74.39319	49.6290
2	31.978	BB	1.0942	4245.35742	57.31539	50.3710

Totals : 8428.17383 131.70858

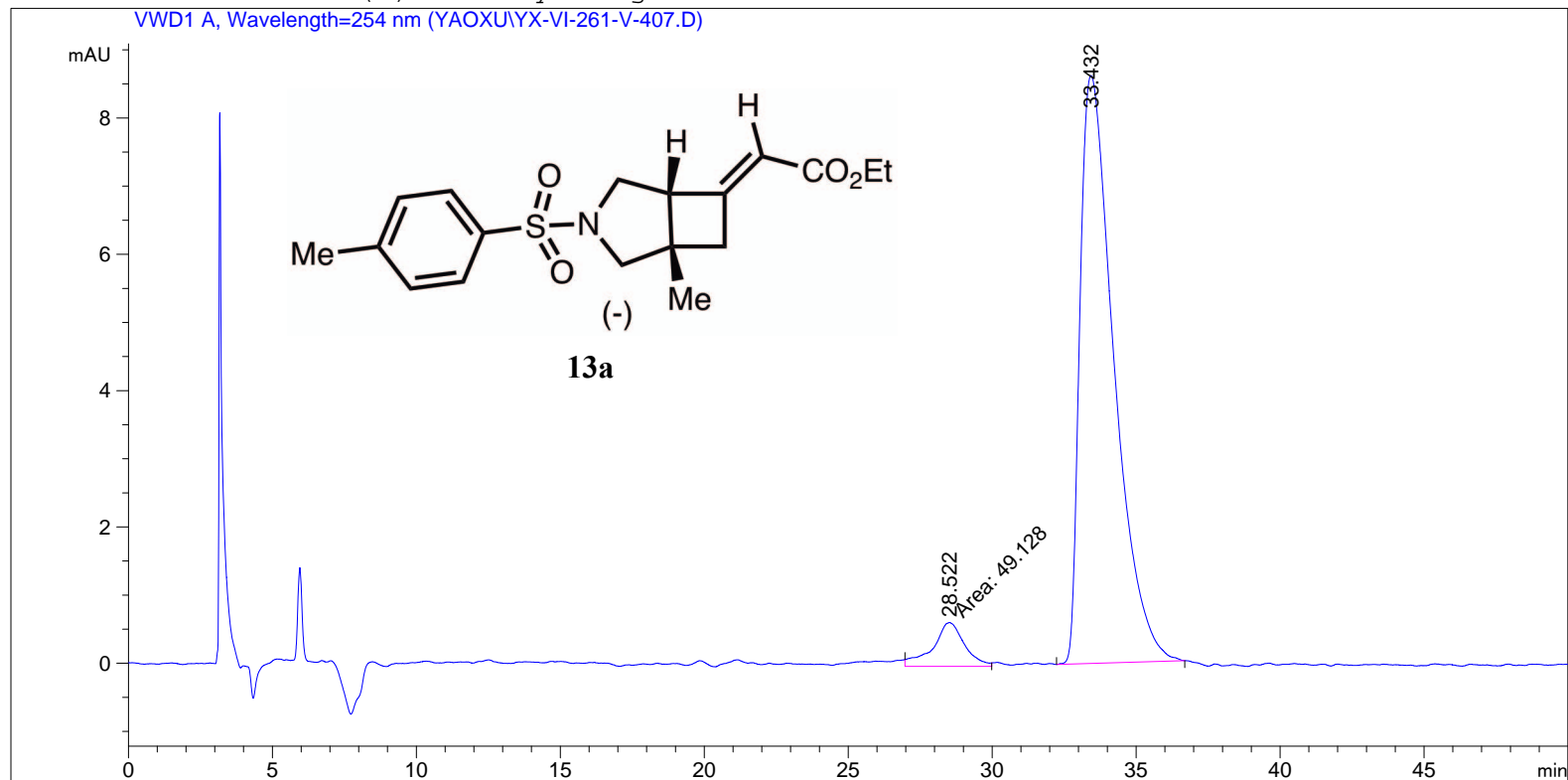
\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 100
Injection Date  : 2/6/2017 10:32:01 PM      Inj       :    1
                                           Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\YX_97_3_HEX_IPA_1MIN_254NM.M
Last changed    : 2/4/2017 8:59:05 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 12/6/2016 1:32:42 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 97:3 Hex/IPA, 1ml/min, 254nm
    
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	28.522	MM	1.2727	49.12797	6.43336e-1	6.4967
2	33.432	BB	1.1574	707.07648	8.62494	93.5033

Totals : 756.20445 9.26827

\*\*\* End of Report \*\*\*

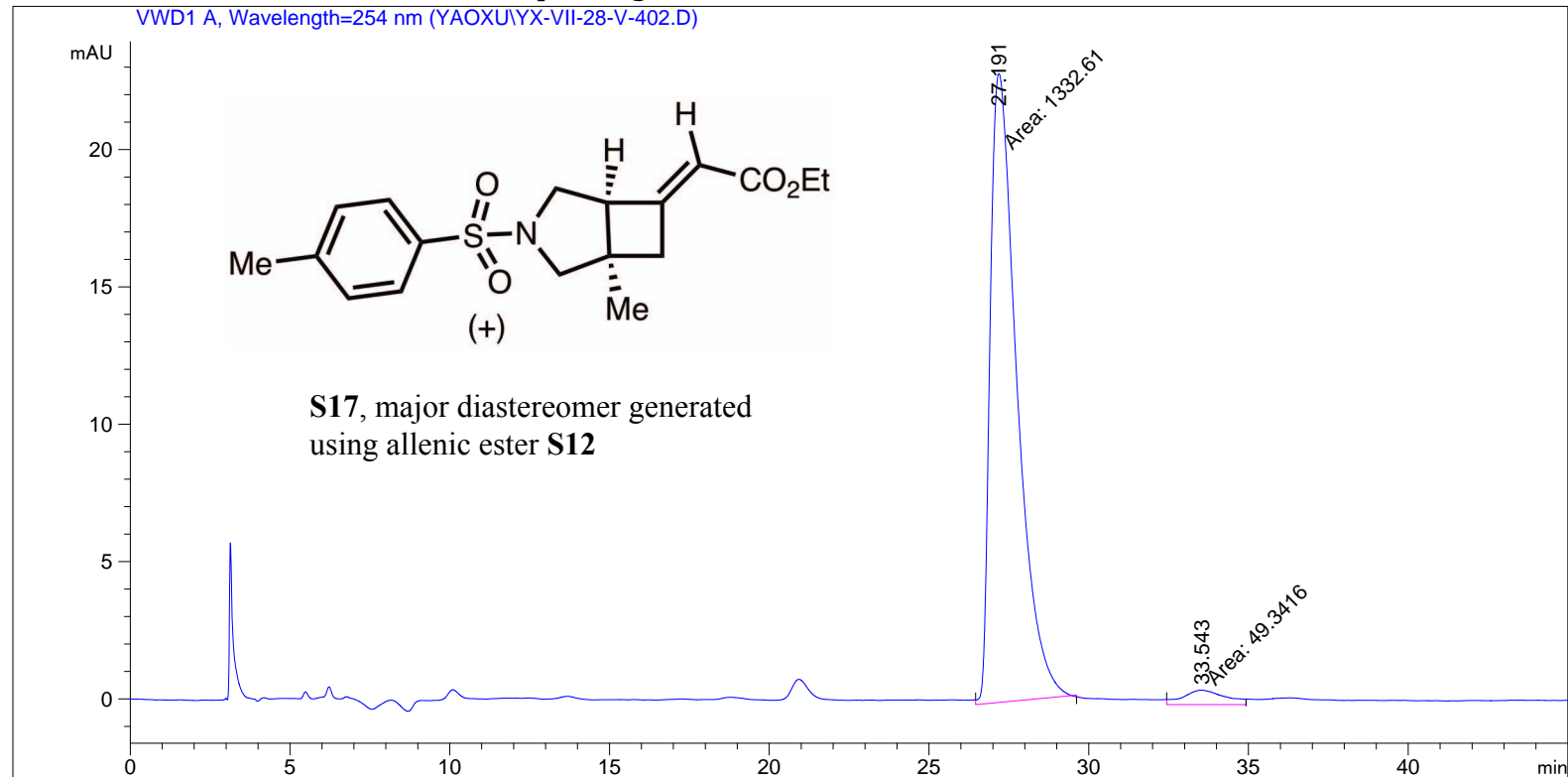
```

=====
Acq. Operator   : SYSTEM                      Seq. Line : 2
Acq. Instrument : 1220 HPLC                   Location  : Vial 87
Injection Date  : 3/3/2017 12:17:59 PM       Inj       : 1
                                                Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\YX_97_3_HEX_IPA_1MIN_254NM.M
Last changed    : 3/3/2017 11:16:13 AM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-1 97:3 Hex/IPA, 1ml/min, 254nm
=====
  
```

Additional Info : Peak(s) manually integrated

VWD1 A, Wavelength=254 nm (YAOXU\YX-VII-28-V-402.D)



```

=====
                          Area Percent Report
=====
  
```

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	27.191	MM	0.9700	1332.60522	22.89806	96.4296
2	33.543	MM	1.5507	49.34163	5.30315e-1	3.5704

Totals : 1381.94686 23.42838

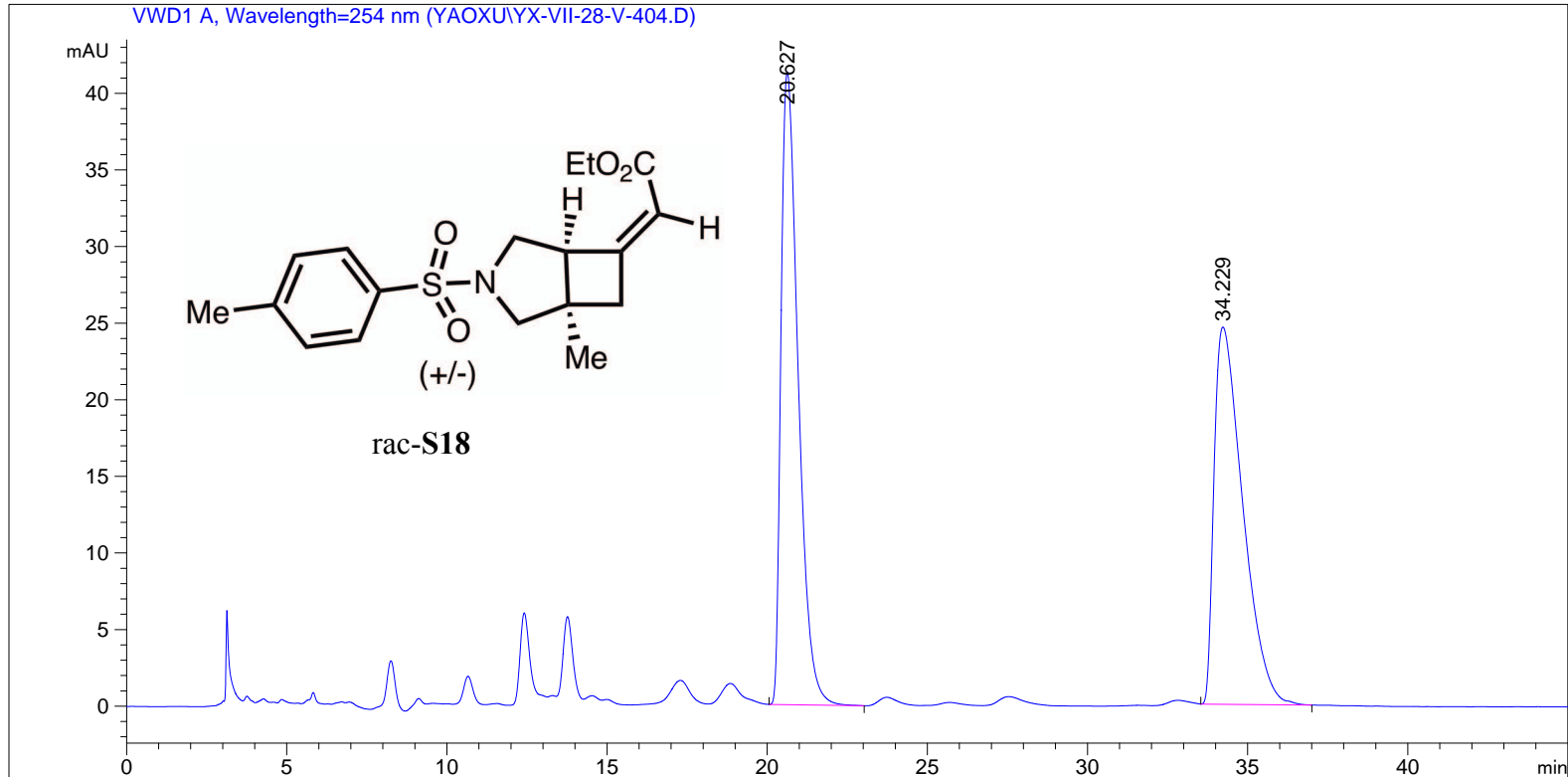
\*\*\* End of Report \*\*\*



Acq. Operator : SYSTEM Seq. Line : 4
Acq. Instrument : 1220 HPLC Location : Vial 96
Injection Date : 3/3/2017 1:49:42 PM Inj : 1
Inj Volume : 10.000 µl
Acq. Method : C:\CHEM32\2\METHODS\YX\_97\_3\_HEX\_IPA\_1MIN\_254NM.M
Last changed : 3/3/2017 11:16:13 AM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M
Last changed : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info : Lux 3u Cellulose-1 97:3 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated

VWD1 A, Wavelength=254 nm (YAOXU\YX-VII-28-V-404.D)



Area Percent Report

Sorted By : Signal
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Table with 7 columns: Peak #, RetTime [min], Type, Width [min], Area [mAU\*s], Height [mAU], Area %. Contains two rows of peak data.

Totals : 3070.49072 65.93360

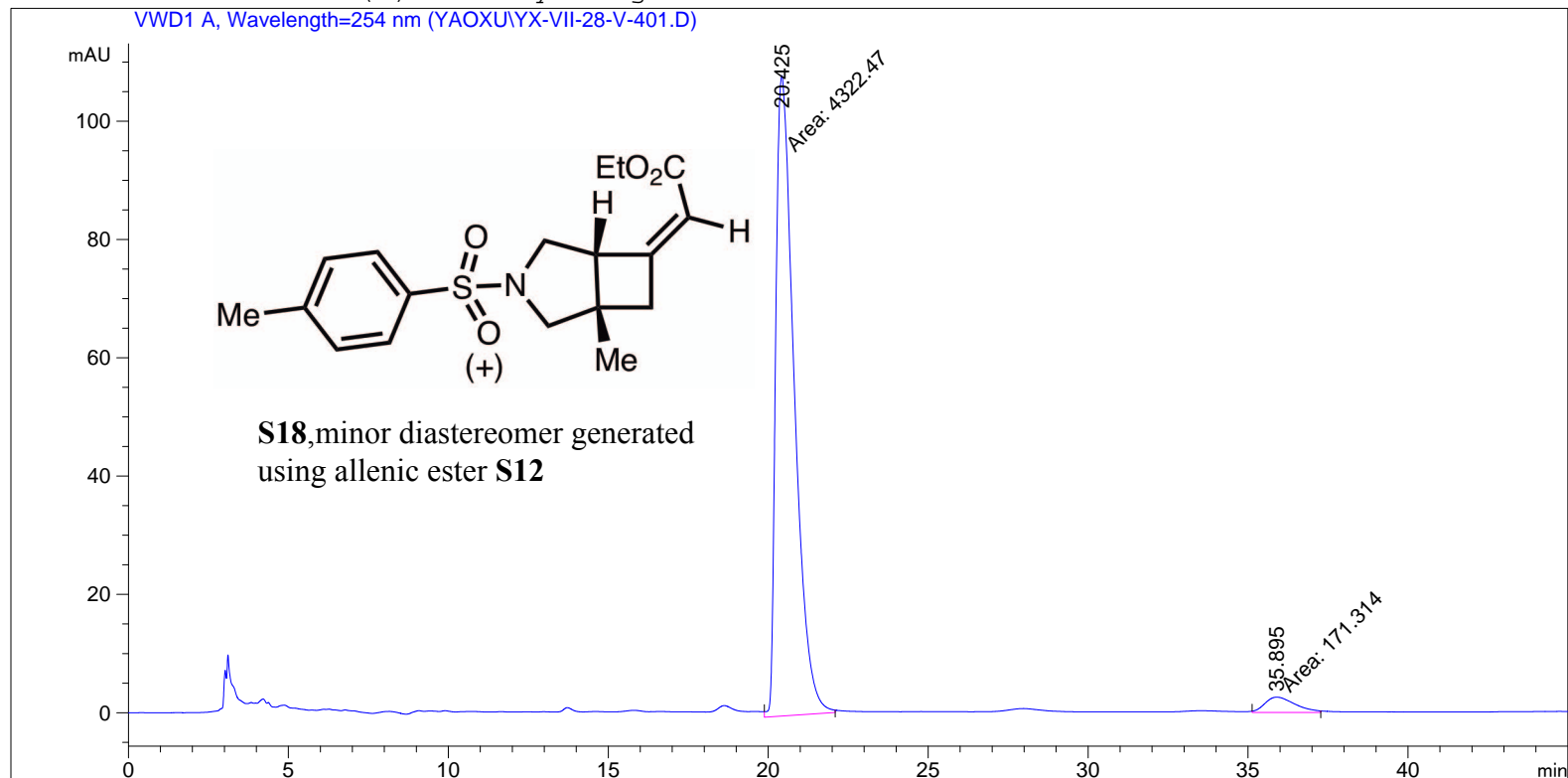
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 100
Injection Date	: 3/3/2017 11:32:06 AM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\YX\_97\_3\_HEX\_IPA\_1MIN\_254NM.M  
Last changed : 3/3/2017 11:16:13 AM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 2/16/2017 2:45:13 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1 97:3 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	20.425	MM	0.6654	4322.46924	108.27132	96.1878
2	35.895	MM	1.1063	171.31425	2.58085	3.8122

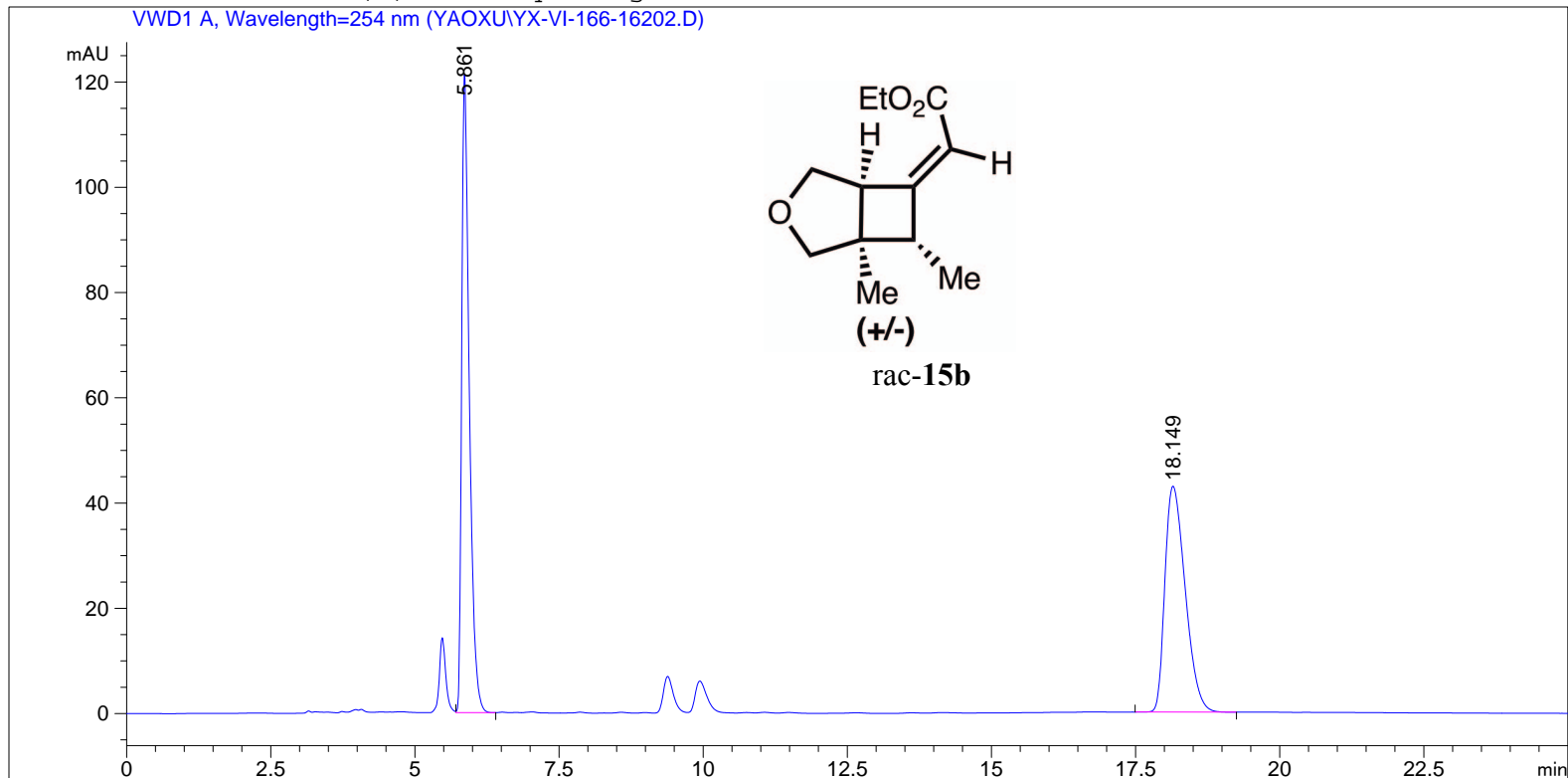
Totals : 4493.78349 110.85218

=====  
\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                  Location  : Vial 95
Injection Date  : 11/1/2016 4:46:38 PM      Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_1.0ML-MIN.M
Last changed   : 11/1/2016 4:09:54 PM by SYSTEM
Analysis Method: C:\CHEM32\2\METHODS\DEF_LC.M
Sample Info    : Lux 3u Cellulose-1, 99:1 Hex/IPA, 1ml/min, 254nm
=====
  
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.861	VB	0.1360	1112.28442	121.30591	51.4206
2	18.149	BB	0.3846	1050.82532	42.92686	48.5794

Totals : 2163.10974 164.23277

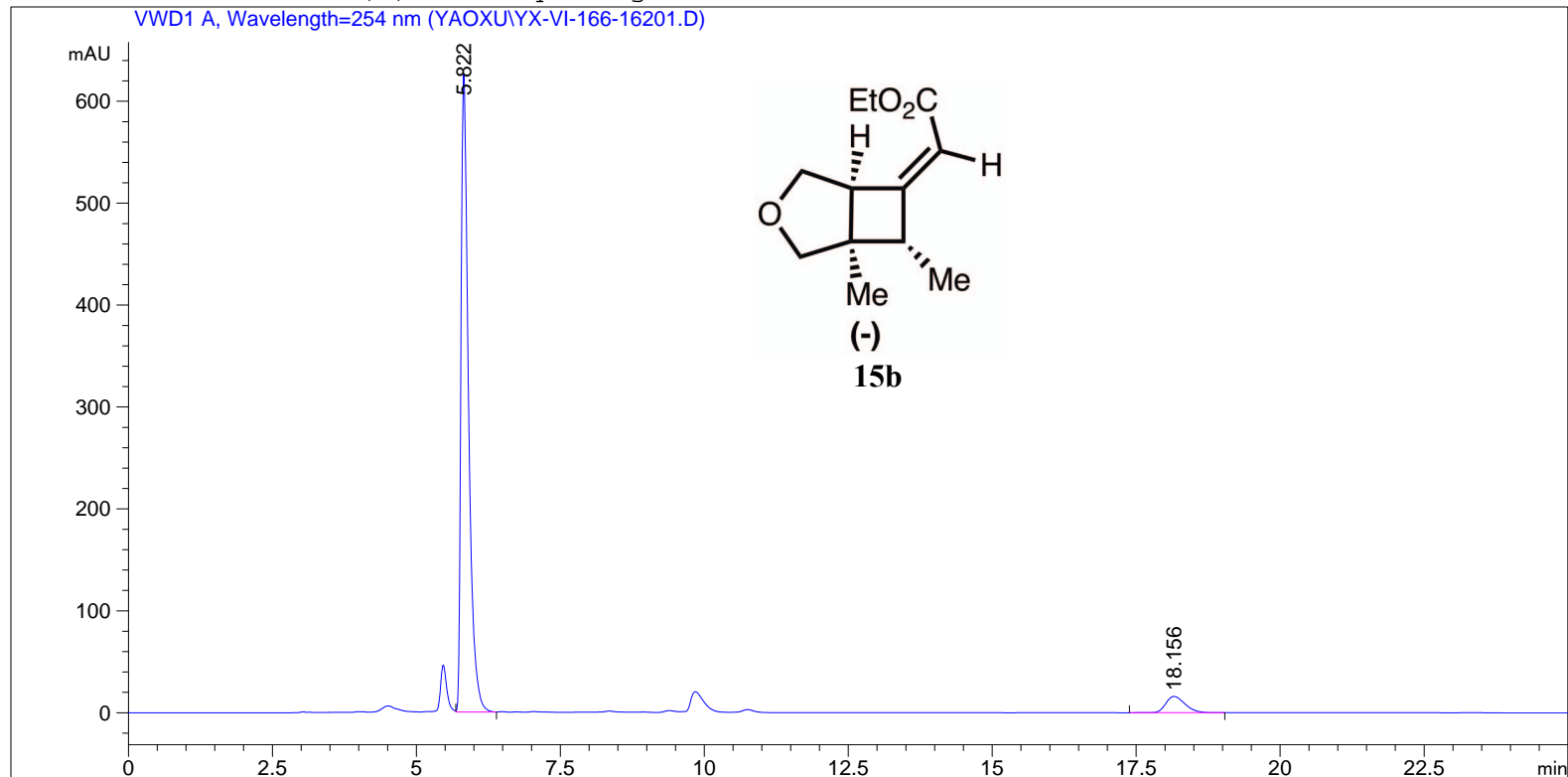
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 96
Injection Date	: 11/1/2016 4:20:44 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\MLC-99-1\_HEX-IPA\_1.0ML-MIN.M  
Last changed : 11/1/2016 4:09:54 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Sample Info : Lux 3u Cellulose-1, 99:1 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.822	VB	0.1380	5688.40039	625.86432	93.8905
2	18.156	BB	0.3592	370.14966	15.98212	6.1095

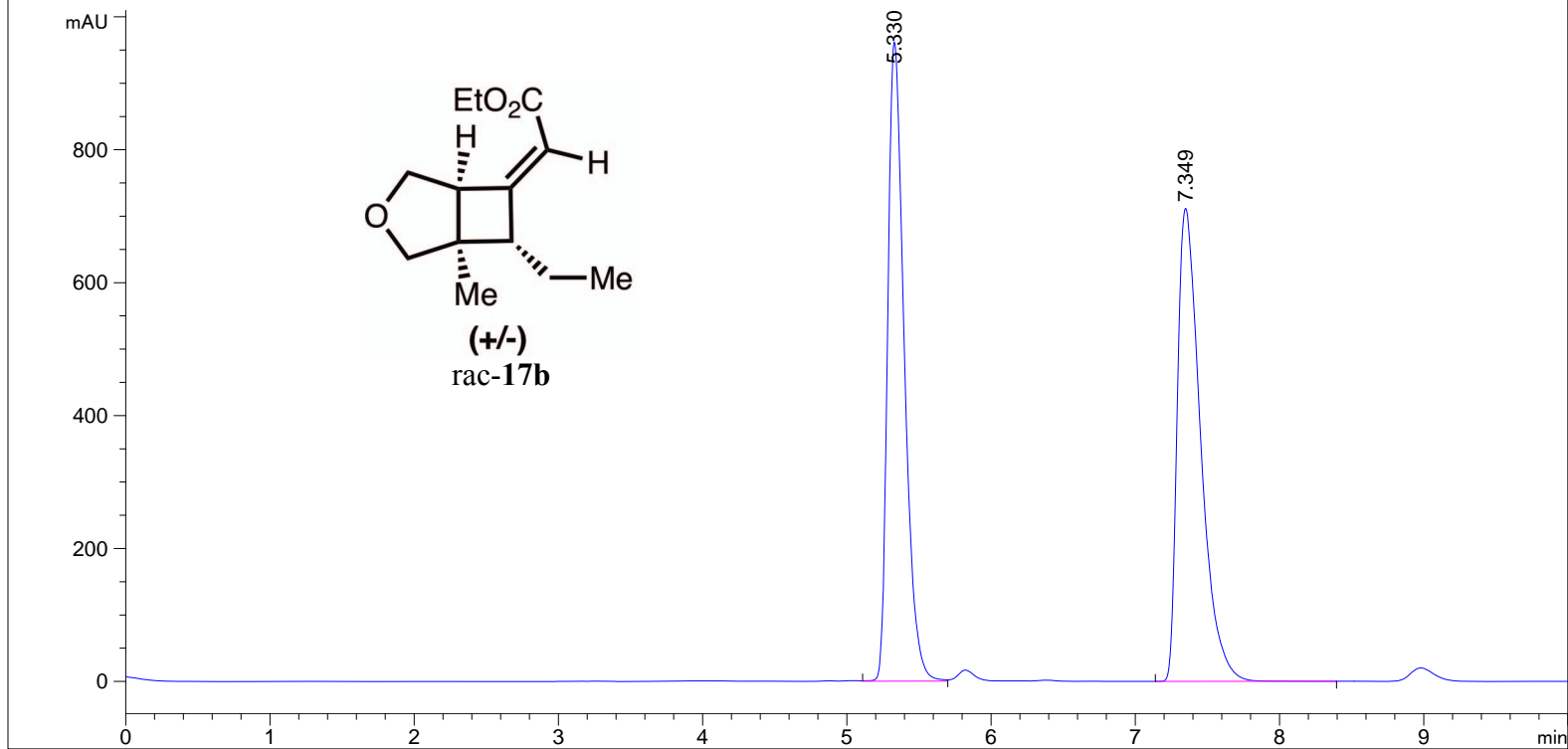
Totals : 6058.55005 641.84644

=====  
\*\*\* End of Report \*\*\*

=====  
 Acq. Operator : SYSTEM Seq. Line : 2  
 Acq. Instrument : 1220 HPLC Location : Vial 92  
 Injection Date : 1/28/2017 12:51:57 PM Inj : 1  
 Inj Volume : 10.000 µl  
 Acq. Method : C:\CHEM32\2\METHODS\MLC-99-1\_HEX-IPA\_1.0ML-MIN.M  
 Last changed : 1/28/2017 12:51:14 PM by SYSTEM  
 (modified after loading)  
 Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
 Last changed : 12/6/2016 1:32:42 PM by SYSTEM  
 Sample Info : Lux 3u Cellulose-1 99:1 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated

VWD1 A, Wavelength=254 nm (YAOXU\YX-VI-295-28802.D)



=====  
 Area Percent Report  
 =====

Sorted By : Signal  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.330	VV	0.1229	7652.45898	961.19727	49.0338
2	7.349	BB	0.1734	7954.02832	711.81793	50.9662

Totals : 1.56065e4 1673.01520

=====  
 \*\*\*End of Report \*\*\*



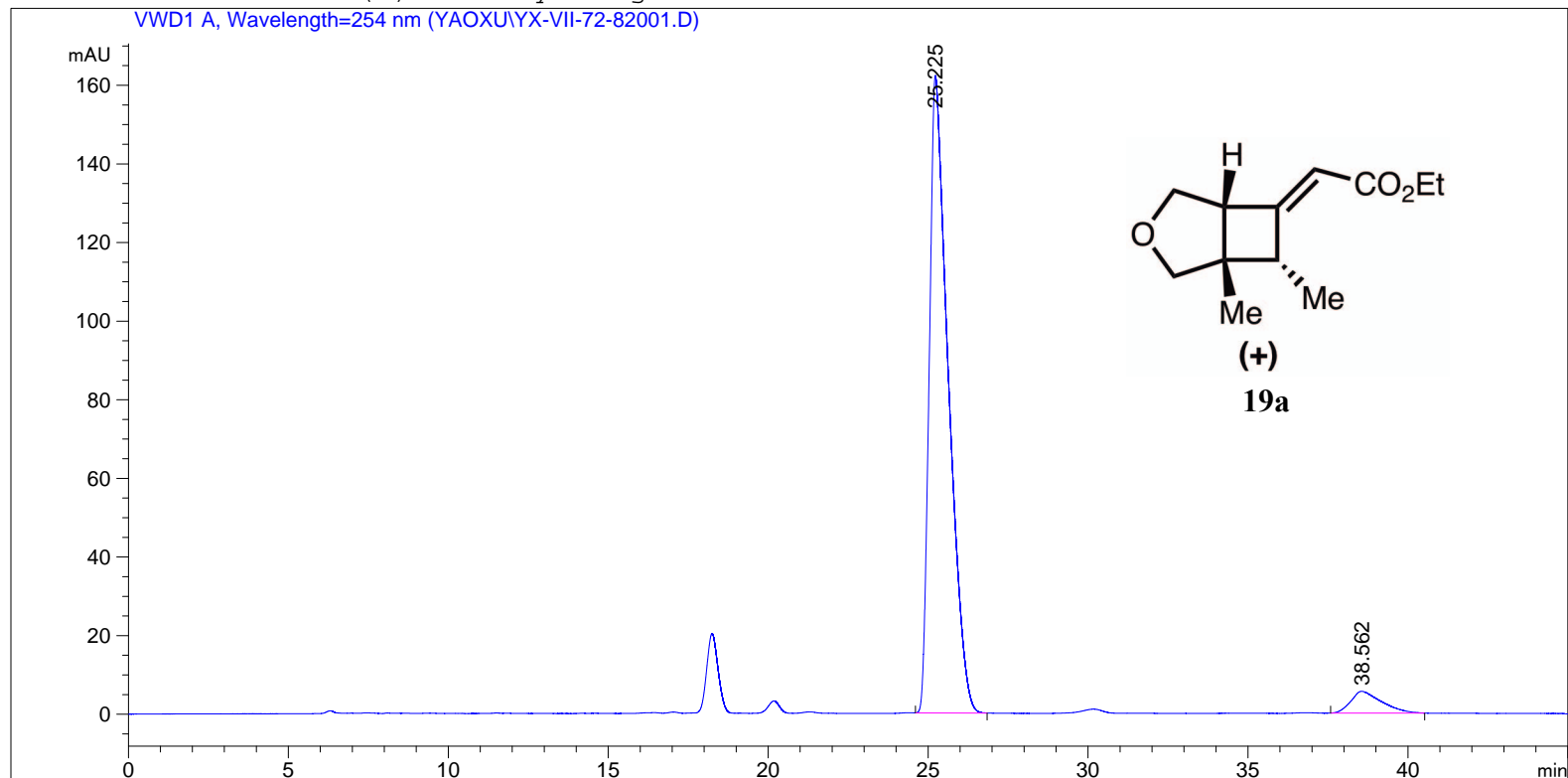


```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                   Location  : Vial 70
Injection Date  : 4/24/2017 2:27:03 PM       Inj       :    1
                                           Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_0.5ML-MIN.M
Last changed    : 4/24/2017 1:19:09 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed    : 4/22/2017 2:47:59 PM by SYSTEM
Sample Info     : Lux 3u Cellulose-2, 99:1 Hex/IPA, 0.5ml/min, 254nm
=====
  
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

=====
Sorted By           :      Signal
Multiplier          :      1.0000
Dilution           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
  
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	25.225	BB	0.5352	6685.90967	162.11046	94.7680
2	38.562	BB	0.7806	369.12155	5.53460	5.2320

Totals : 7055.03122 167.64506

\*\*\* End of Report \*\*\*

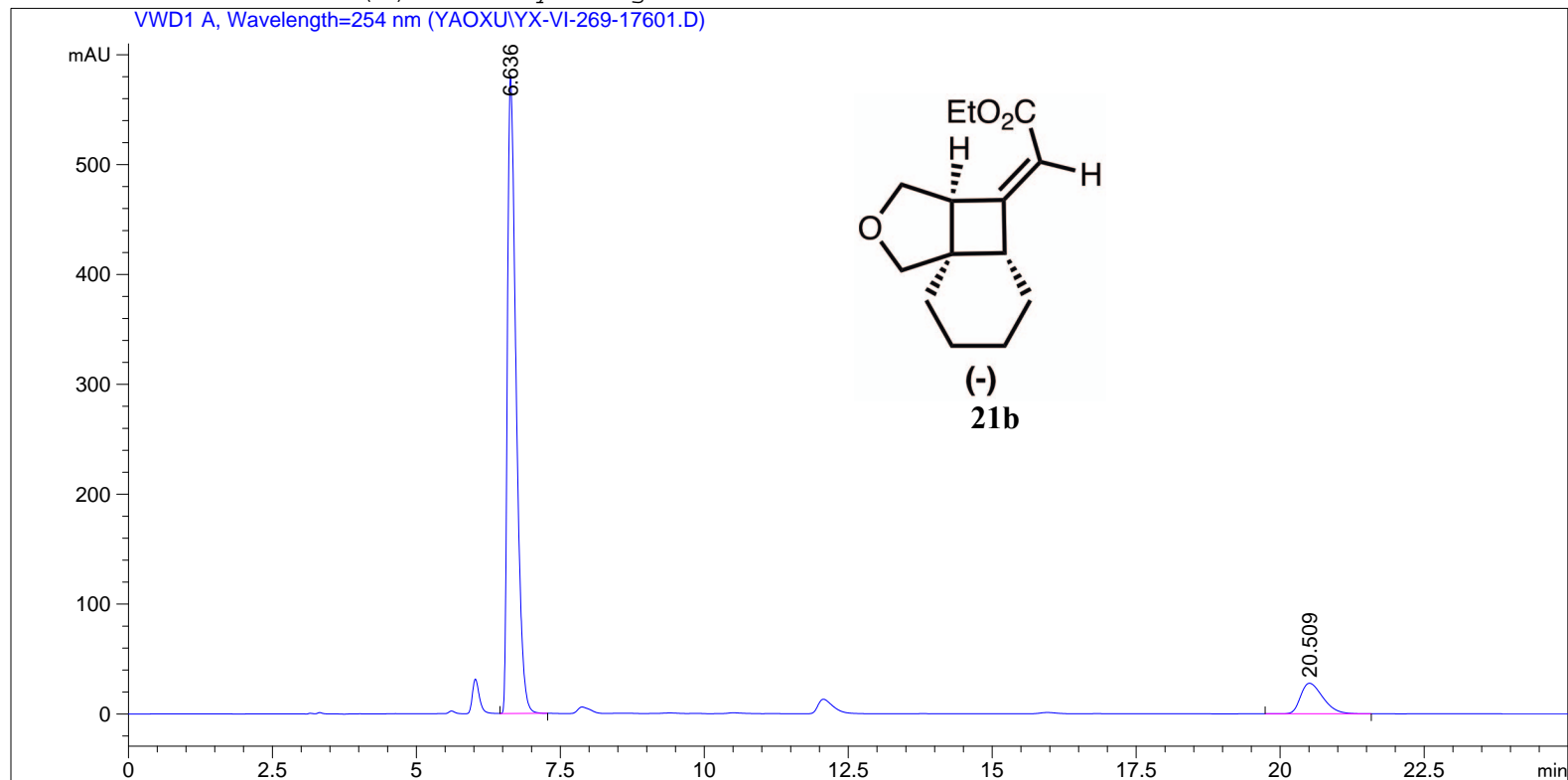




```
=====
Acq. Operator   : SYSTEM                               Seq. Line :    1
Acq. Instrument : 1220 HPLC                           Location  : Vial 70
Injection Date  : 1/7/2017 4:35:48 PM                 Inj       :    1
                                                    Inj Volume: 10.000 µl

Acq. Method    : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_1.0ML-MIN.M
Last changed   : 1/7/2017 4:32:56 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info    : Lux 3u Cellulose-1, 99:1 Hex/IPA, 1ML/MIN, 254nm
=====
```

Additional Info : Peak(s) manually integrated



Area Percent Report

```
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.636	VB	0.1613	6083.97510	580.55469	89.0483
2	20.509	BB	0.4202	748.24121	27.78066	10.9517

Totals :                              6832.21631   608.33535

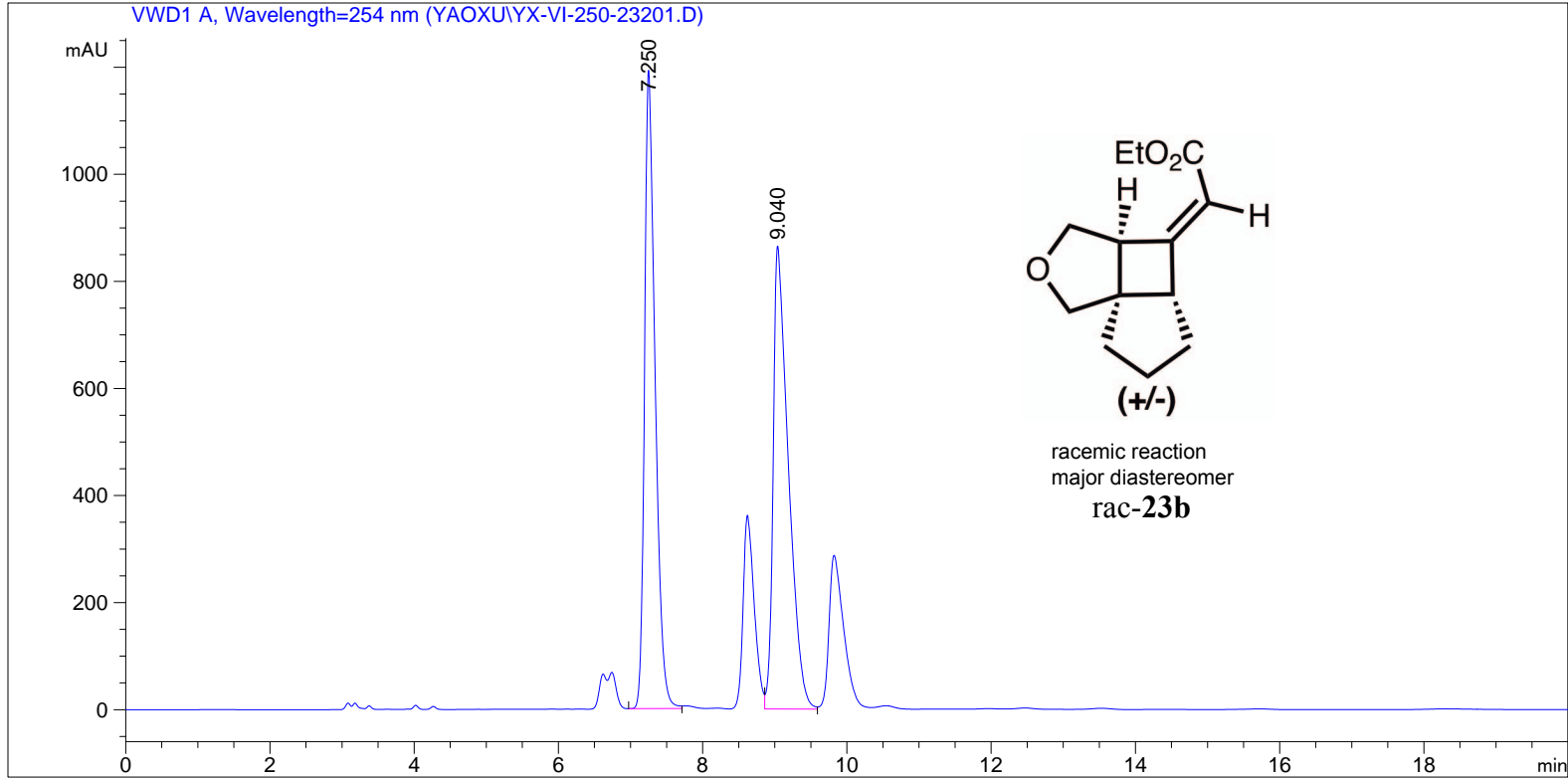
\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    1
Acq. Instrument : 1220 HPLC                   Location  : Vial 76
Injection Date  : 12/14/2016 7:59:13 PM      Inj       :    1
                                           Inj Volume: 10.000 µl

Acq. Method     : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_1.0ML-MIN.M
Last changed    : 12/14/2016 7:38:24 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Sample Info     : Chiralpak IA PG024, 99:1 Hex/IPA, 1ml/min, 254nm
  
```

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.250	BV	0.1535	1.22068e4	1192.17859	49.0477
2	9.040	VV	0.2131	1.26808e4	864.86273	50.9523

Totals :                      2.48875e4  2057.04132

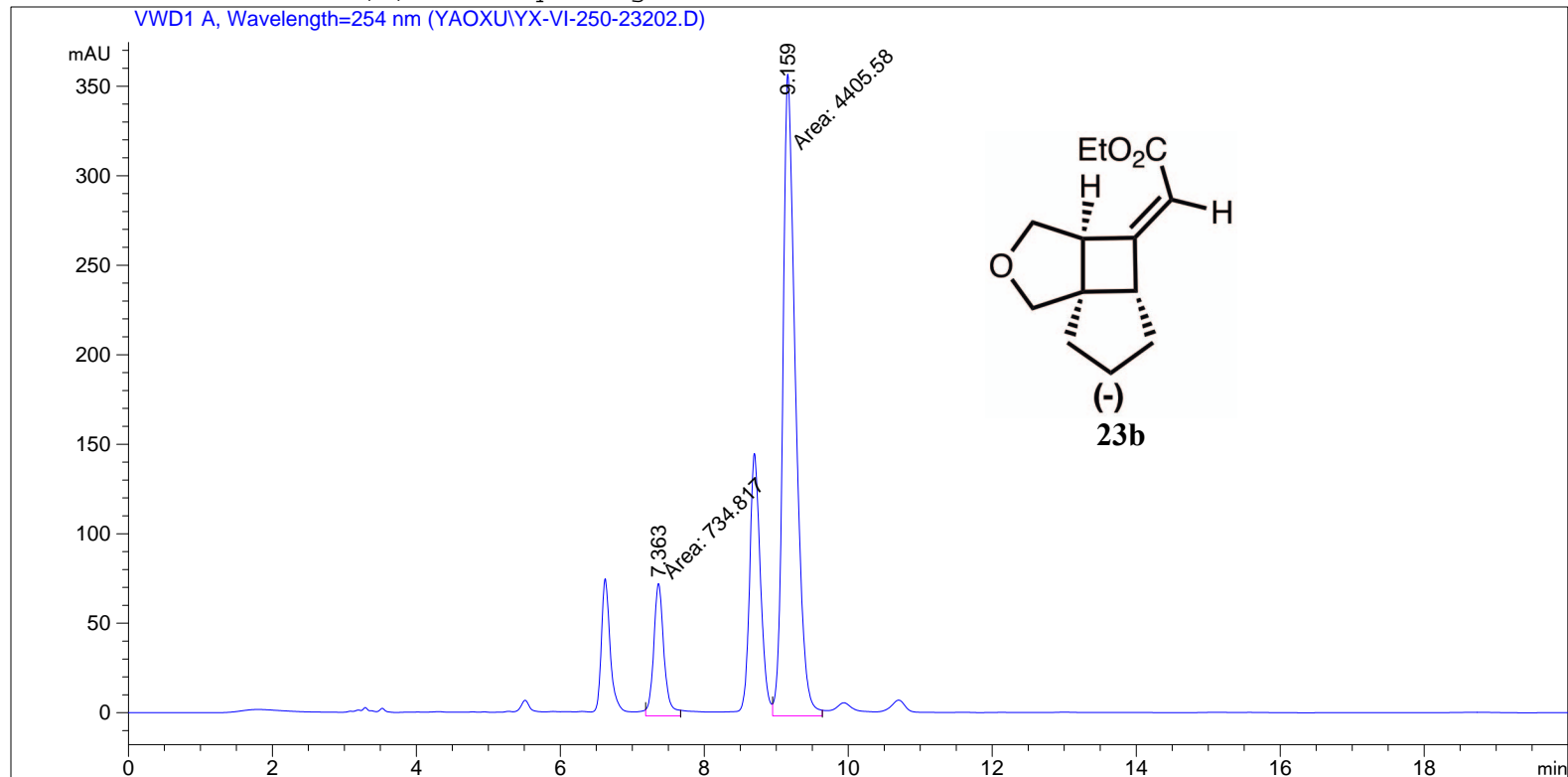
=====  
 \*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 2
Acq. Instrument	: 1220 HPLC	Location	: Vial 77
Injection Date	: 12/14/2016 8:20:05 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\MLC-99-1\_HEX-IPA\_1.0ML-MIN.M  
Last changed : 12/14/2016 7:38:24 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Sample Info : Chiralpak IA PG024, 99:1 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.363	MM	0.1657	734.81726	73.89751	14.2949
2	9.159	MM	0.2048	4405.58057	358.49142	85.7051

Totals : 5140.39783 432.38893

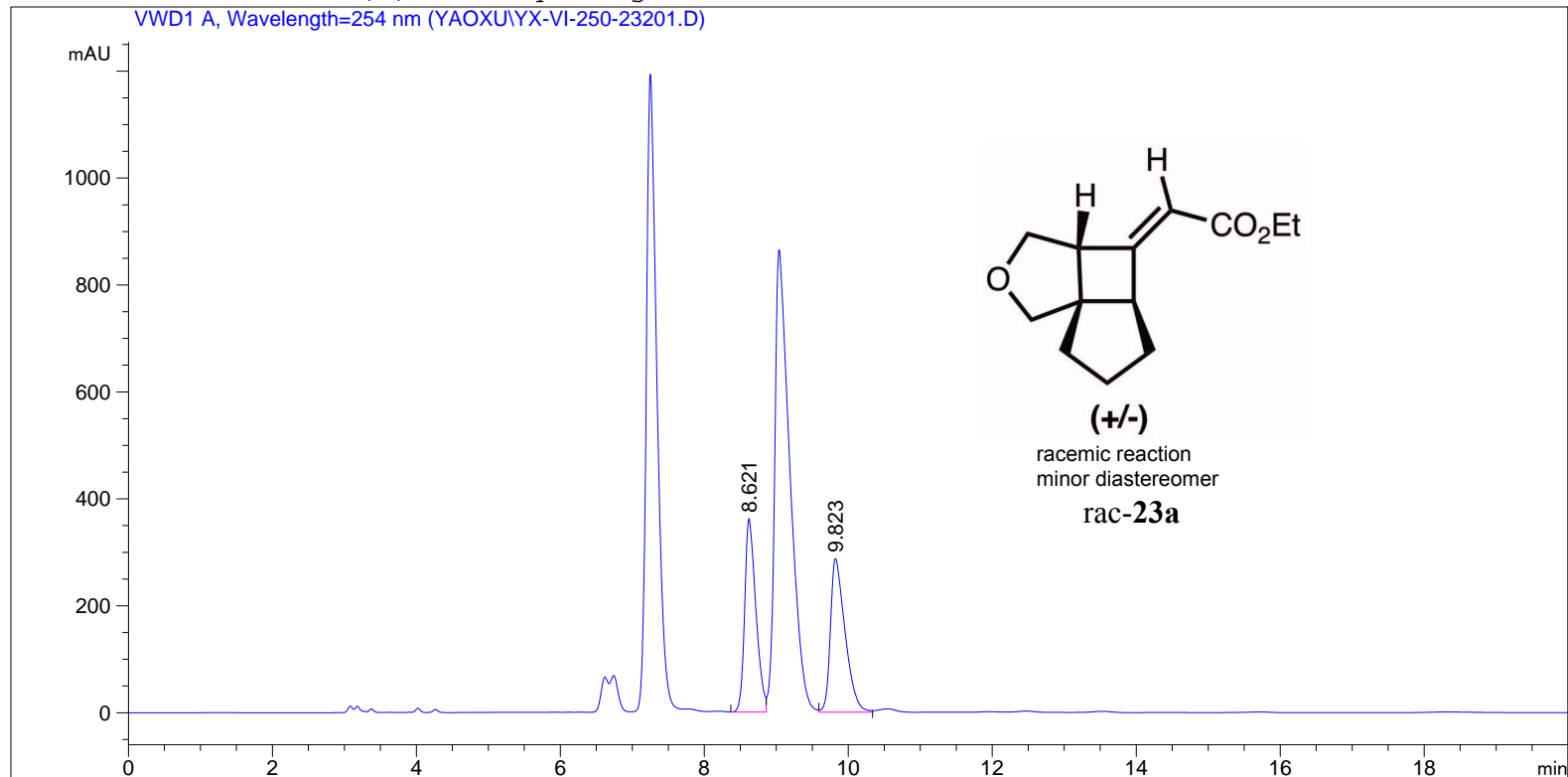
=====  
\*\*\* End of Report \*\*\*

=====

Acq. Operator	: SYSTEM	Seq. Line	: 1
Acq. Instrument	: 1220 HPLC	Location	: Vial 76
Injection Date	: 12/14/2016 7:59:13 PM	Inj	: 1
		Inj Volume	: 10.000 µl

Acq. Method : C:\CHEM32\2\METHODS\MLC-99-1\_HEX-IPA\_1.0ML-MIN.M  
Last changed : 12/14/2016 7:38:24 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Sample Info : Chiralpak IA PG024, 99:1 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	8.621	BV	0.1618	3901.63696	361.92337	48.9753
2	9.823	VV	0.2111	4064.90869	287.17010	51.0247

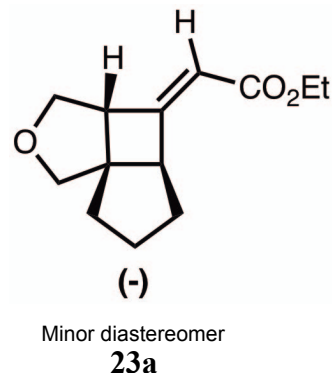
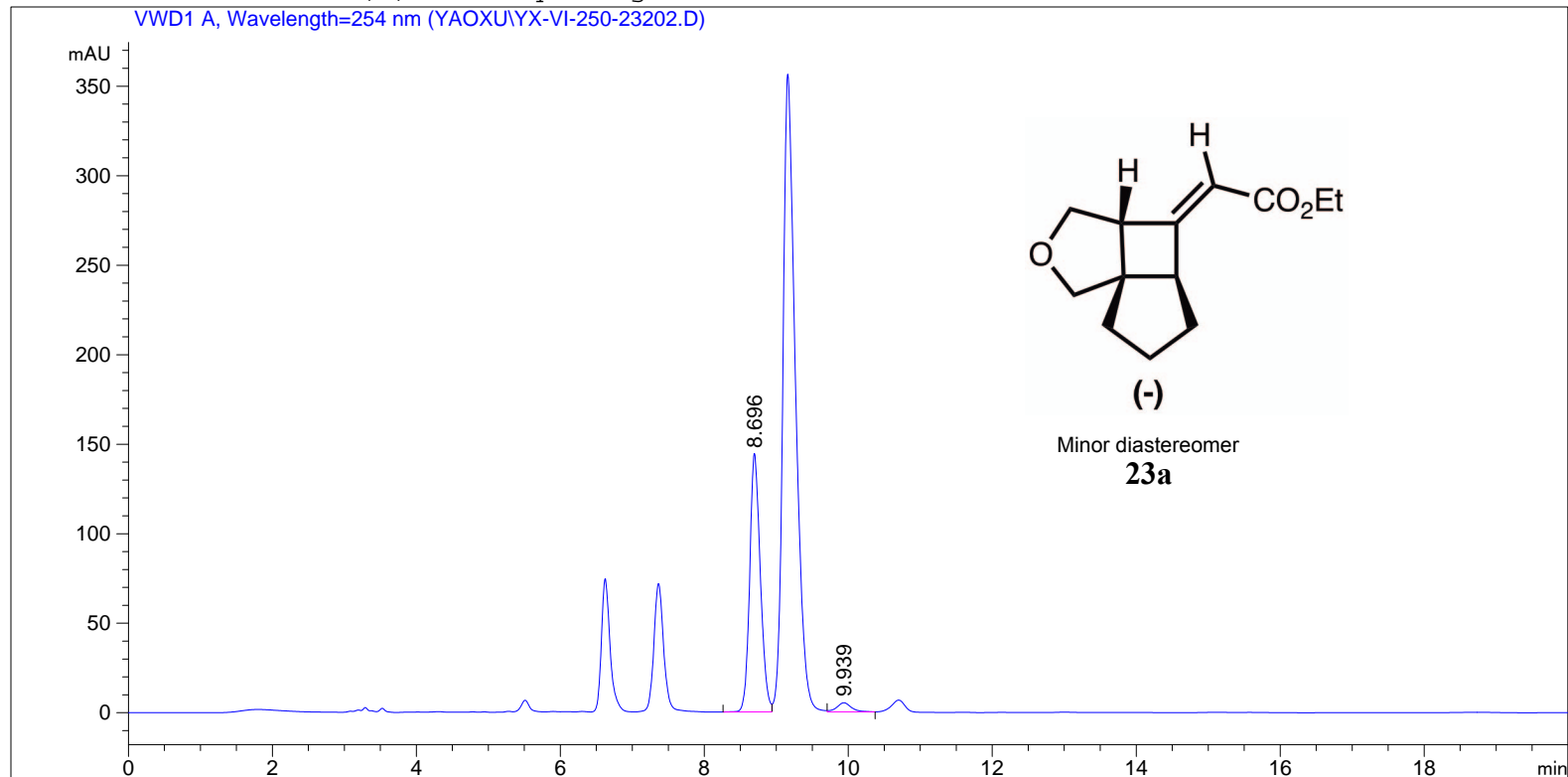
Totals : 7966.54565 649.09348

=====  
\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    2
Acq. Instrument : 1220 HPLC                   Location  : Vial 77
Injection Date  : 12/14/2016 8:20:05 PM      Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method     : C:\CHEM32\2\METHODS\MLC-99-1_HEX-IPA_1.0ML-MIN.M
Last changed    : 12/14/2016 7:38:24 PM by SYSTEM
Analysis Method : C:\CHEM32\2\METHODS\DEF_LC.M
Sample Info     : Chiralpak IA PG024, 99:1 Hex/IPA, 1ml/min, 254nm
=====
  
```

Additional Info : Peak(s) manually integrated



=====  
 Area Percent Report  
 =====

Sorted By : Signal  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	8.696	BV	0.1572	1487.97900	144.38254	95.3992
2	9.939	VB	0.2096	71.76052	5.08721	4.6008

Totals : 1559.73952 149.46975

=====  
 \*\*\* End of Report \*\*\*

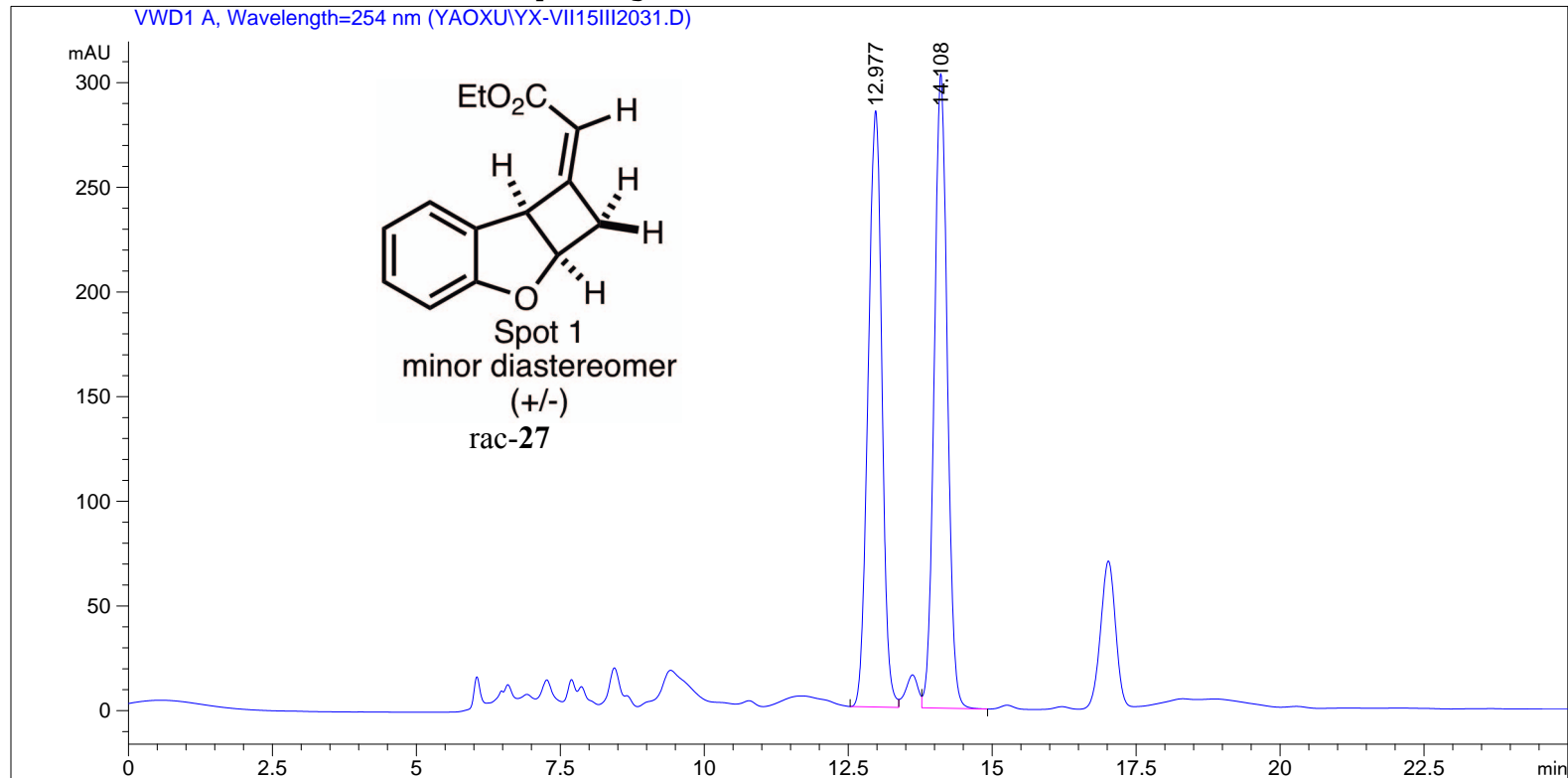






=====  
Acq. Operator : SYSTEM Seq. Line : 1  
Acq. Instrument : 1220 HPLC Location : Vial 82  
Injection Date : 2/15/2017 12:26:21 PM Inj : 1  
Inj Volume : 10.000 µl  
Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed : 2/15/2017 12:05:28 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 2/16/2017 2:45:13 PM by SYSTEM  
Sample Info : Chiralpak IA PG024, 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm  
=====

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

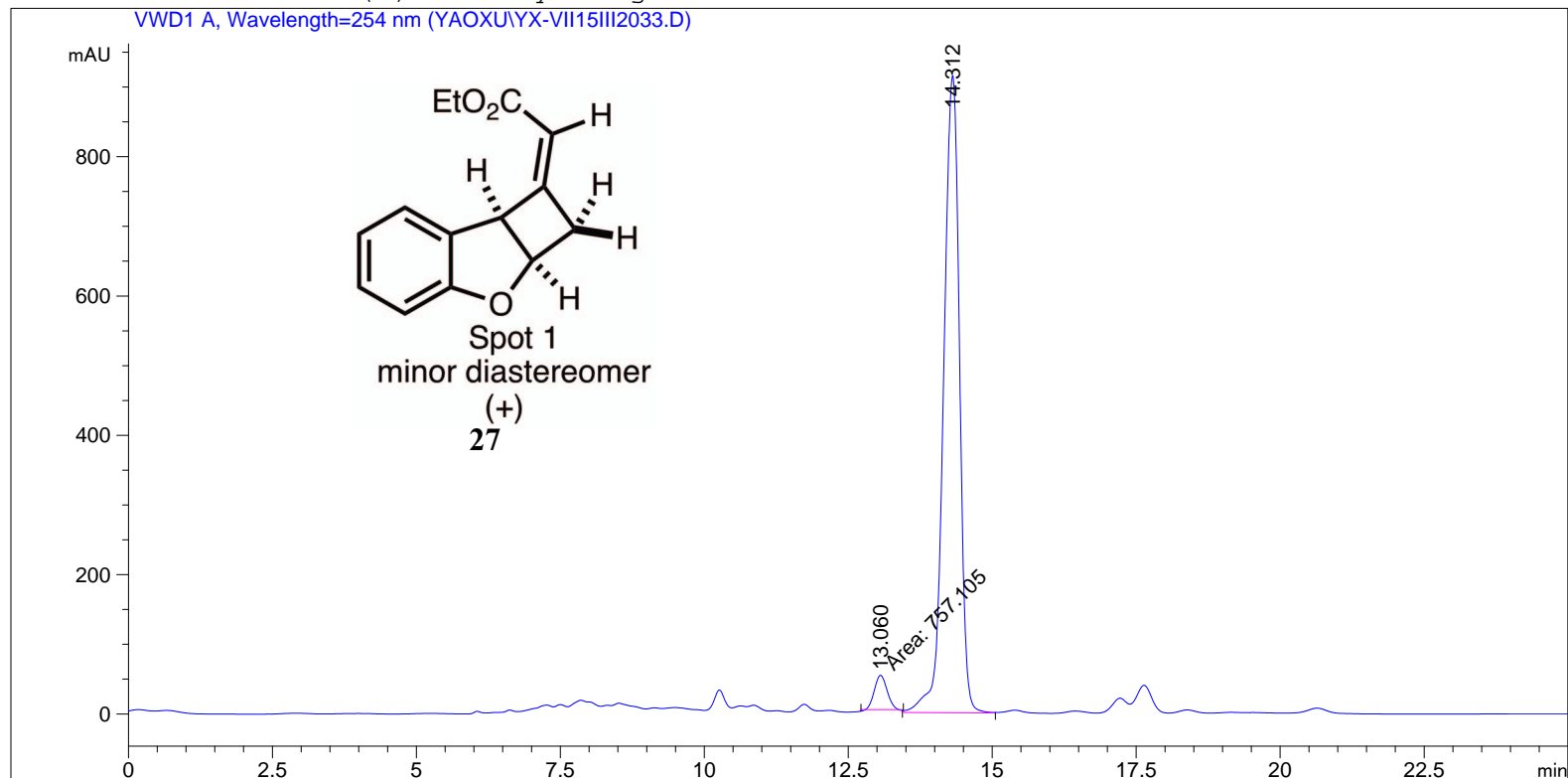
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	12.977	BV	0.2638	4755.60303	284.82263	49.7377
2	14.108	VB	0.2460	4805.75928	303.11380	50.2623

Totals : 9561.36230 587.93643

=====  
\*\*\* End of Report \*\*\*

=====  
Acq. Operator : SYSTEM                   Seq. Line : 3  
Acq. Instrument : 1220 HPLC                Location : Vial 84  
Injection Date : 2/15/2017 1:18:03 PM       Inj : 1  
  Inj Volume : 10.000 µl  
Acq. Method : C:\CHEM32\2\METHODS\WY\_99.5\_0.5\_HEX-IPA\_0.5ML-MIN\_254NM.M  
Last changed : 2/15/2017 12:05:28 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 2/16/2017 2:45:13 PM by SYSTEM  
Sample Info : Chiralpak IA PG024, 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.060	MM	0.2558	757.10498	49.32162	4.1560
2	14.312	VV	0.3037	1.74600e4	914.60095	95.8440

Totals :                                       1.82171e4   963.92258

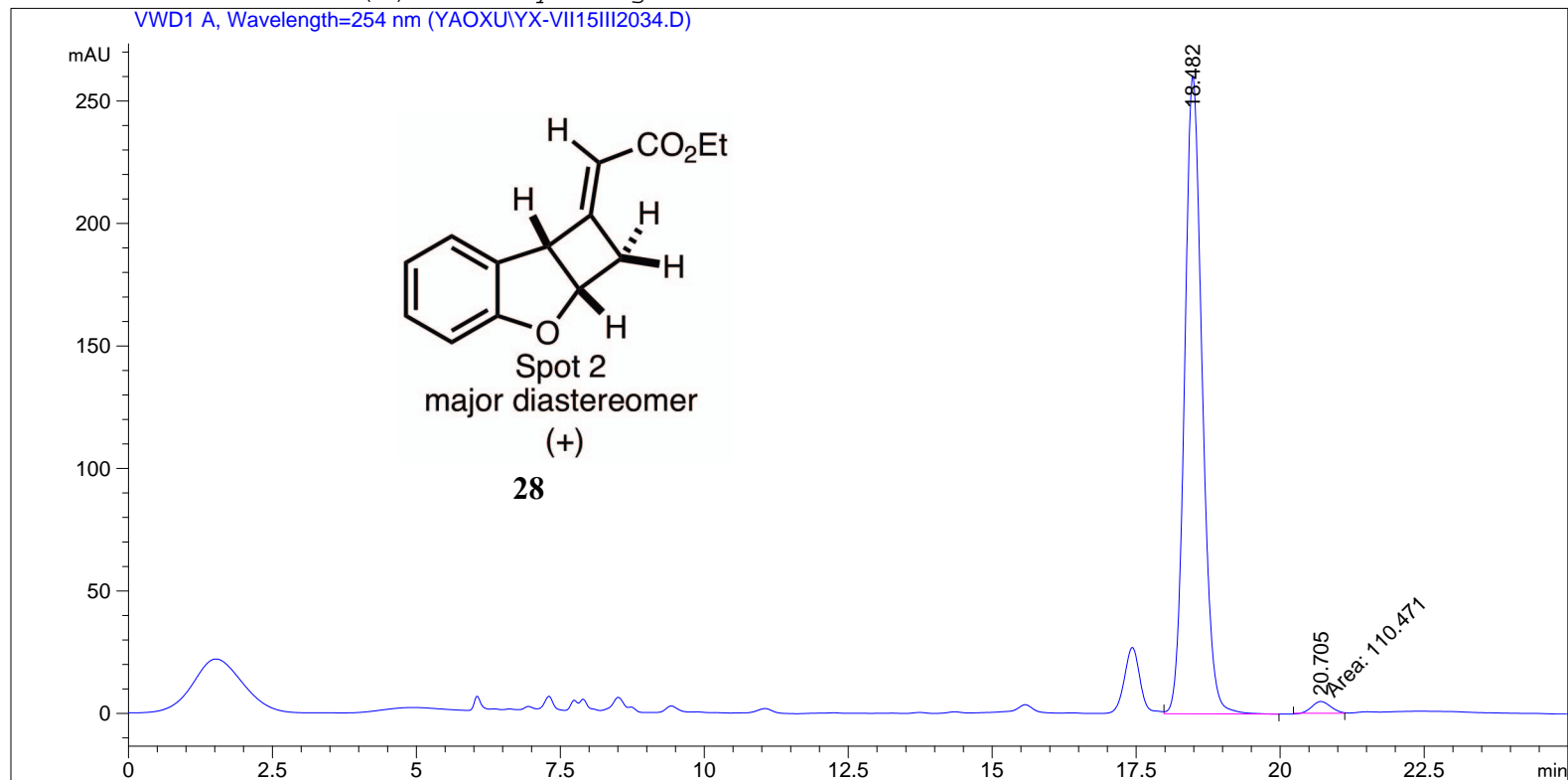
=====  
\*\*\* End of Report \*\*\*



```

=====
Acq. Operator   : SYSTEM                      Seq. Line :    4
Acq. Instrument : 1220 HPLC                   Location  : Vial 85
Injection Date  : 2/15/2017 1:43:55 PM       Inj       :    1
                                           Inj Volume: 10.000 µl
Acq. Method    : C:\CHEM32\2\METHODS\WY_99.5_0.5_HEX-IPA_0.5ML-MIN_254NM.M
Last changed   : 2/15/2017 12:05:28 PM by SYSTEM
Analysis Method: C:\CHEM32\2\METHODS\DEF_LC.M
Last changed   : 2/16/2017 2:45:13 PM by SYSTEM
Sample Info    : Chiralpak IA PG024, 99.5:0.5 Hex/IPA, 0.5ml/min, 254nm
=====
  
```

Additional Info : Peak(s) manually integrated



```

=====
                          Area Percent Report
=====
  
```

```

Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: VWD1 A, Wavelength=254 nm

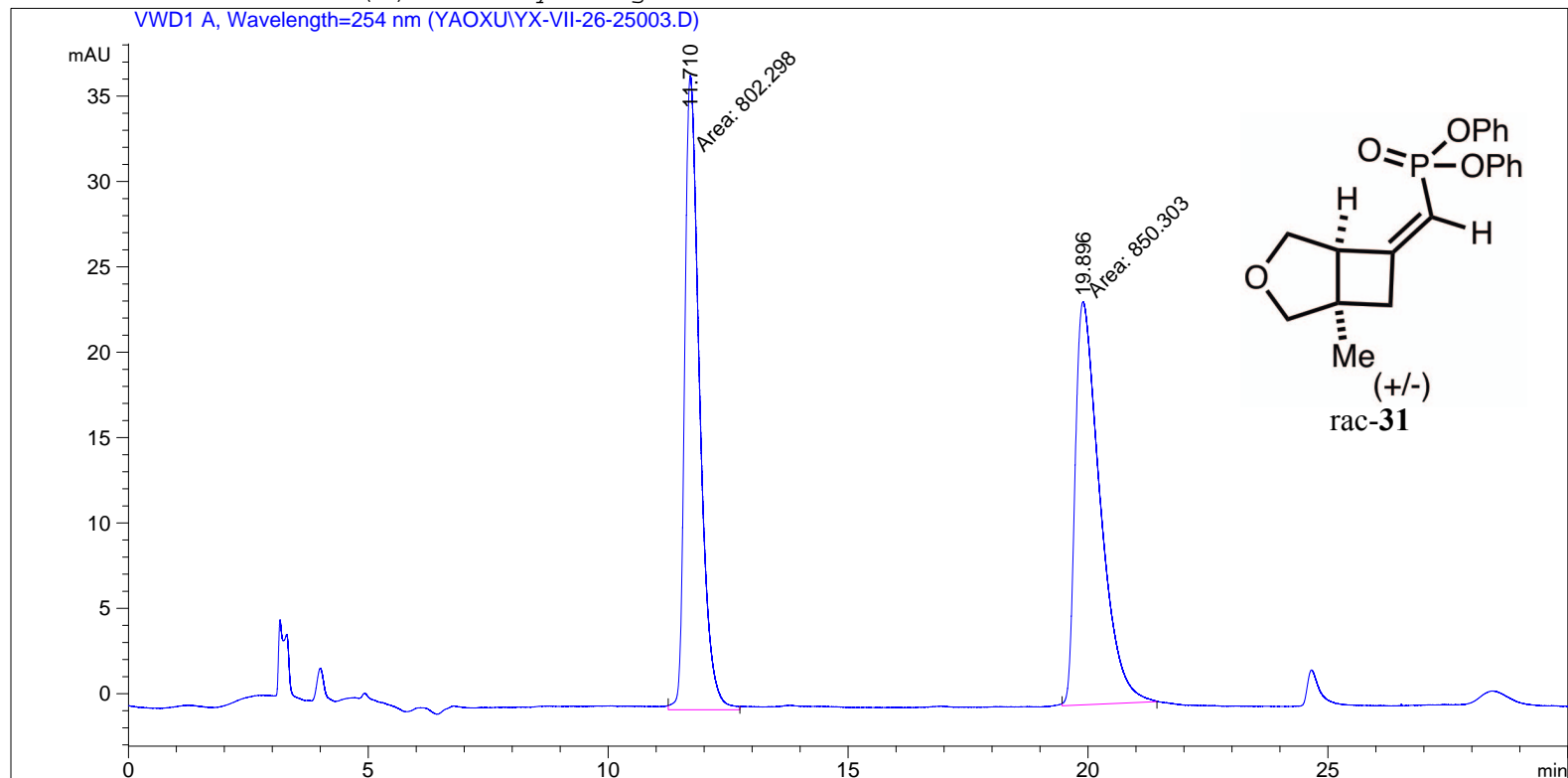
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.482	VB	0.3258	5532.97949	260.48871	98.0425
2	20.705	MM	0.3813	110.47052	4.82930	1.9575

```
Totals :                      5643.45001  265.31801
```

\*\*\* End of Report \*\*\*

=====  
Acq. Operator : SYSTEM                                       Seq. Line : 1  
Acq. Instrument : 1220 HPLC                                    Location : Vial 86  
Injection Date : 2/25/2017 7:18:45 PM                                 Inj : 1  
  Inj Volume : 10.000 µl  
Acq. Method : C:\CHEM32\2\METHODS\MLC-95-5\_HEX-IPA\_1.0ML-MIN.M  
Last changed : 2/25/2017 12:33:25 PM by SYSTEM  
Analysis Method : C:\CHEM32\2\METHODS\DEF\_LC.M  
Last changed : 2/16/2017 2:45:13 PM by SYSTEM  
Sample Info : Lux 3u Cellulose-1, 95:5 Hex/IPA, 1ml/min, 254nm

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	11.710	MM	0.3600	802.29846	37.14173	48.5476
2	19.896	MM	0.6005	850.30334	23.60053	51.4524

Totals :                                     1652.60181   60.74226

\*\*\* End of Report \*\*\*

