

Supporting Information

Development of Potent and Selective Coactivator-associated Arginine Methyltransferase 1 (CARM1) Degraders

Haibo Xie,^{1‡} Megan S Bacabac,^{2‡} Min Ma,¹ Eui-Jun Kim,² Yidan Wang,² Wenxin Wu,³ Lingjun Li,^{1,3} Wei Xu^{2*} and Weiping Tang^{1,3*}

¹ Lachman Institute for Pharmaceutical Development, School of Pharmacy, University of Wisconsin-Madison, Madison, Wisconsin 53705, United States

² McArdle Laboratory for Cancer Research, University of Wisconsin-Madison, Madison, Wisconsin 53705, United States

³ Department of Chemistry, University of Wisconsin-Madison, Madison, Wisconsin 53706, United States

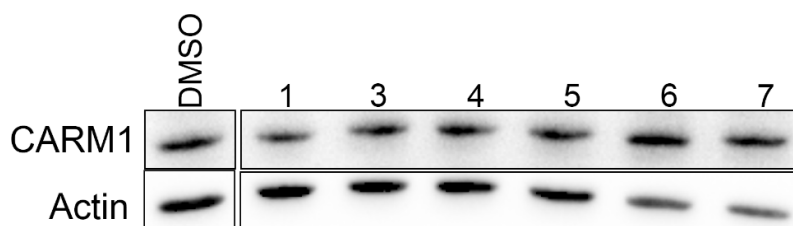
[‡] These authors contributed equally.

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Rapid-TAC VHL based PROTACs induced degradation of CARM1 in MCF7 cells.

A



B

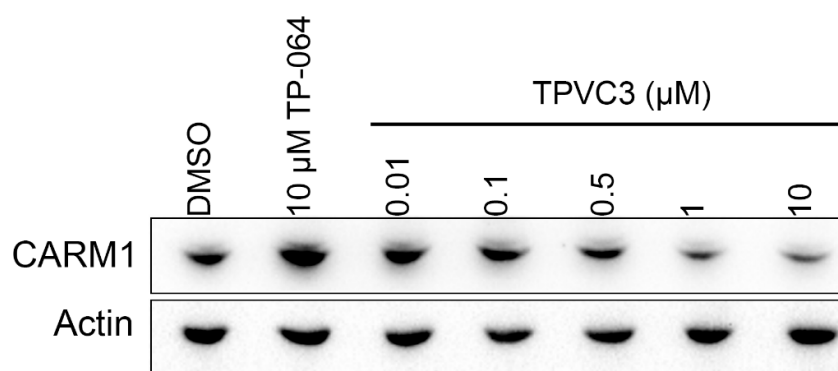


Figure S1

CARM1 degradation activity in MCF10A cells

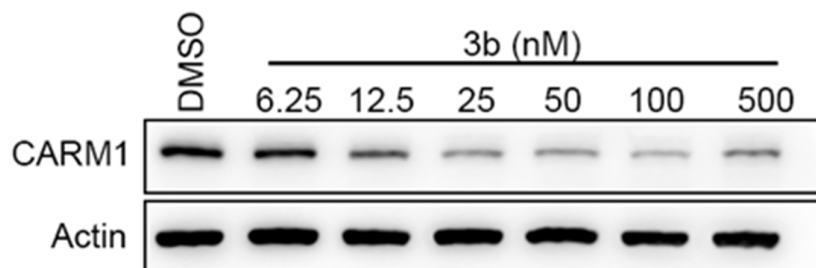
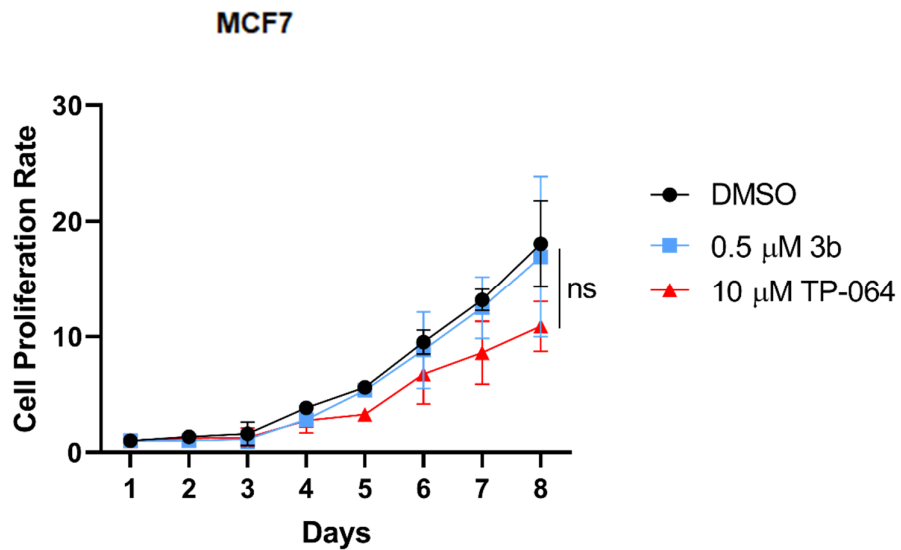


Figure S2

Compound 3b cell proliferation assay in MCF7 and MCF10A cells

A (MCF7 cells)



B (MCF10A cells)

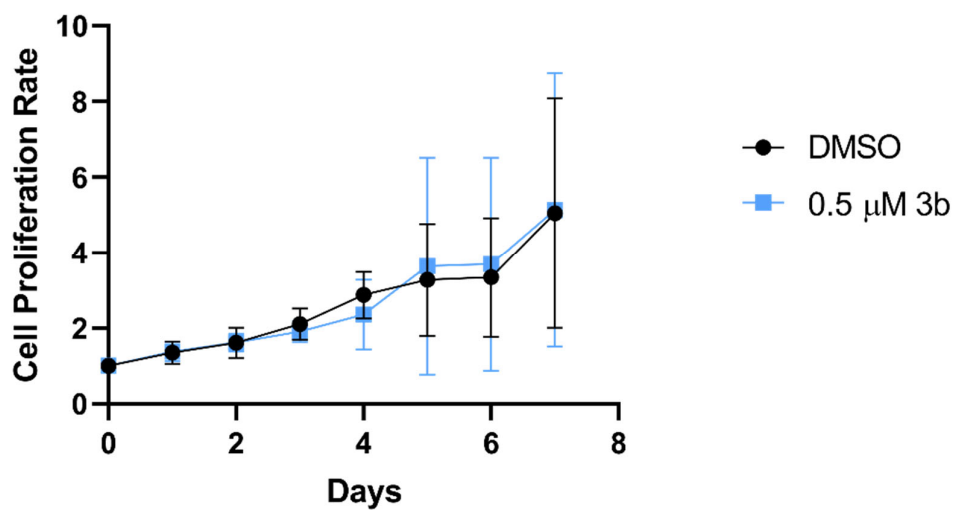


Figure S3

HPLC traces of compounds 2a-2e, 3a-3e and 3bN.

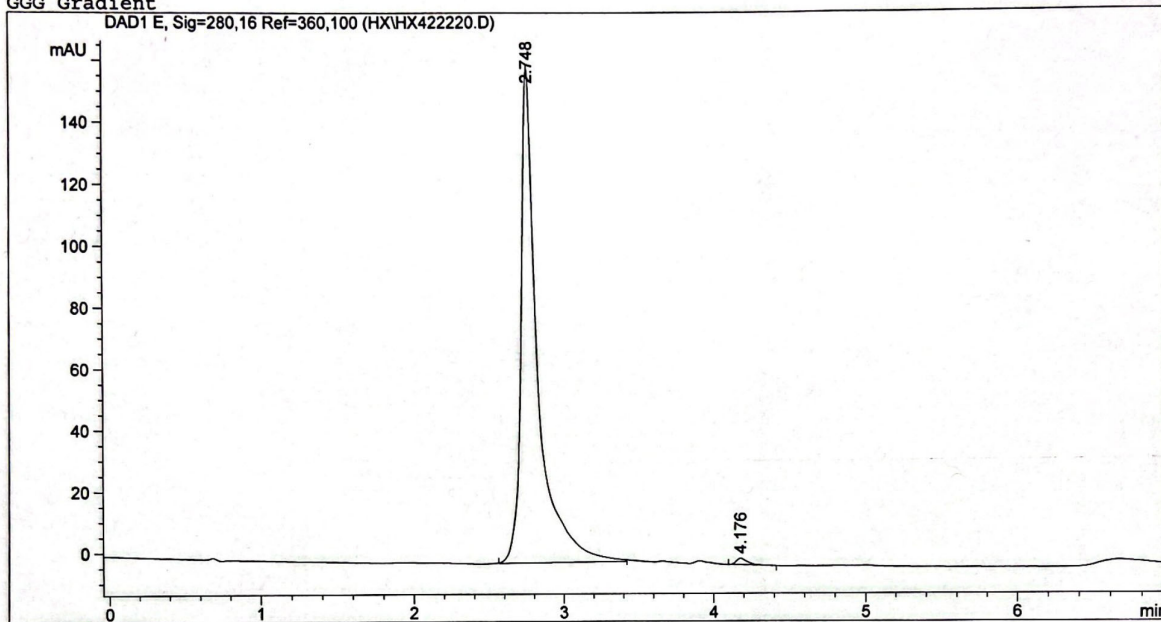
Data File D:\HPCHEM\1\DATA\HX\HX422220.D

Sample Name: HX4222

2a

```

=====
Injection Date : 5/11/23 2:12:40 PM      Seq. Line : 1
Sample Name    : HX4222                  Vial : 81
Acq. Operator  : HX                      Inj : 1
                                           Inj Volume : 10 µl
                                           Actual Inj Volume : 30 µl
Different Inj Volume from Sequence !
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.748	BB	0.1067	1258.18115	161.83586	99.1450
2	4.176	VP	0.0735	10.85085	2.12618	0.8550

Totals : 1269.03200 163.96204

Results obtained with enhanced integrator!

*** End of Report ***

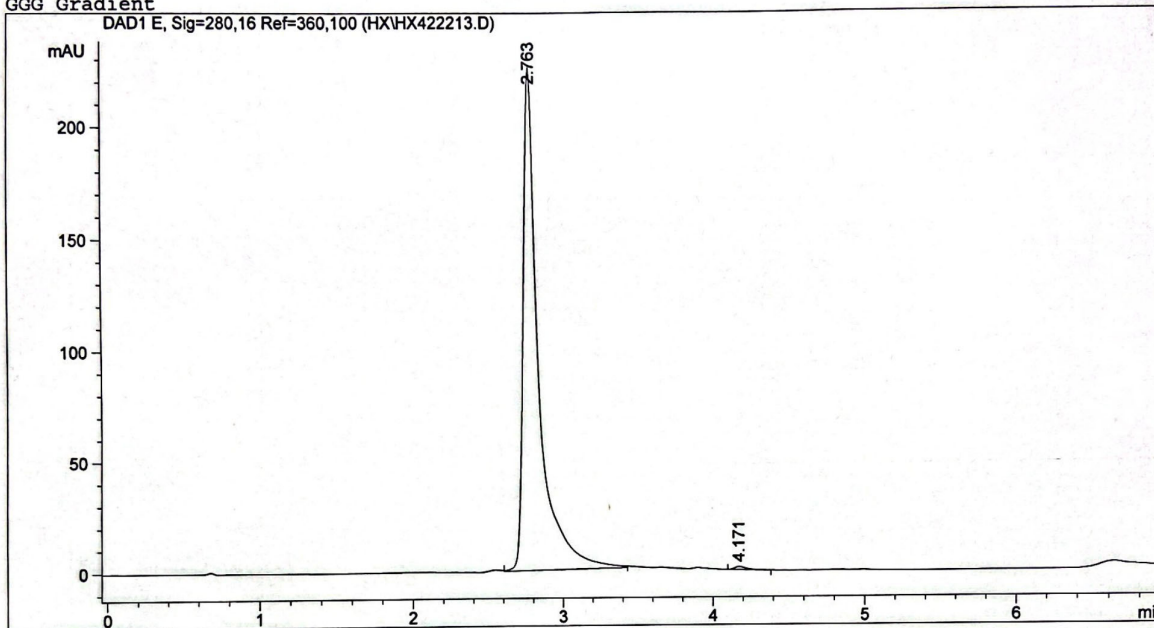
26

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=====
Injection Date : 5/11/23 1:36:32 PM      Seq. Line : 4
Sample Name    : HX4223                  Vial : 85
Acq. Operator  : HX                      Inj : 1
                                           Inj Volume : 10 µl

Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient

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                          Area Percent Report
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Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000

```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.763	VB	0.0993	1620.08325	226.95903	99.5673
2	4.171	VP	0.0765	7.04082	1.35826	0.4327

```
Totals :                      1627.12408  228.31729
```

Results obtained with enhanced integrator!

```

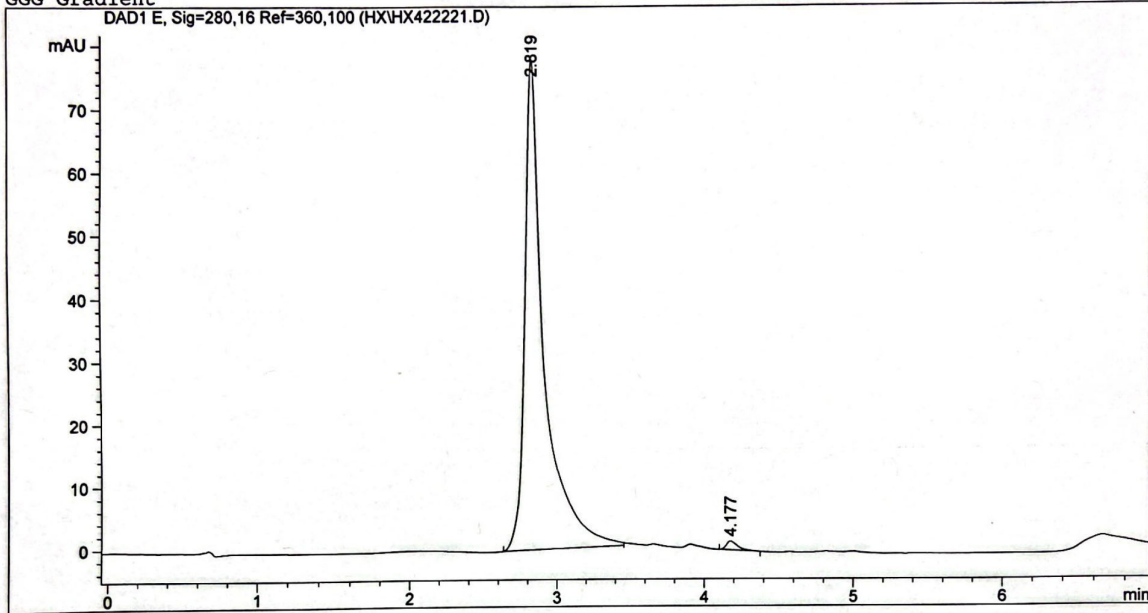
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*** End of Report ***

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Injection Date : 5/11/23 2:21:16 PM      Seq. Line : 2
Sample Name    : HX4224                   Vial      : 82
Acq. Operator  : HX                      Inj       : 1
                                           Inj Volume: 10 µl
                                           Actual Inj Volume: 30 µl
Different Inj Volume from Sequence !
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient

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                          Area Percent Report
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Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000

```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.819	BB	0.1246	717.02368	78.45081	98.9833
2	4.177	VP	0.0766	7.36514	1.41824	1.0167

```
Totals :                      724.38882  79.86904
```

Results obtained with enhanced integrator!

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*** End of Report ***

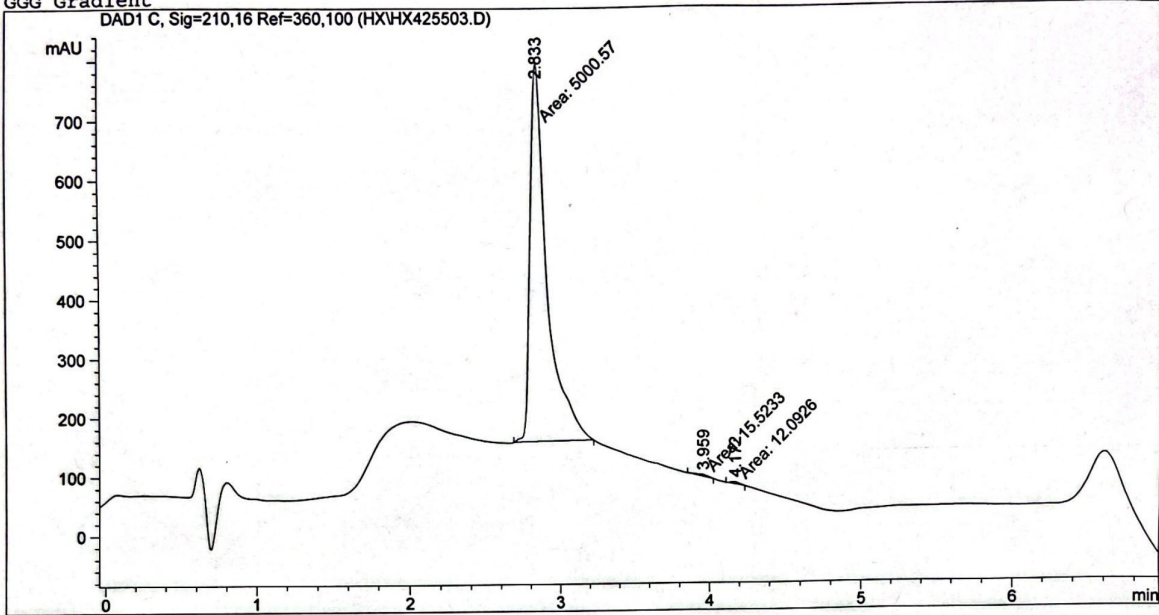
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2d

```

=====
Injection Date : 5/10/23 8:15:45 PM      Seq. Line : 4
Sample Name    : HX4255                  Vial : 82
Acq. Operator  : HX                      Inj : 1
                                           Inj Volume : 10 µl
                                           Actual Inj Volume : 6 µl
Different Inj Volume from Sequence !
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient
=====

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                          Area Percent Report
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Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000

```

Signal 1: DAD1 C, Sig=210,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.833	MM	0.1299	5000.56738	641.42169	99.4508
2	3.959	MM	0.0875	15.52326	2.95701	0.3087
3	4.172	MM	0.0611	12.09259	3.29925	0.2405

```
Totals :                      5028.18322  647.67796
```

Results obtained with enhanced integrator!

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*** End of Report ***
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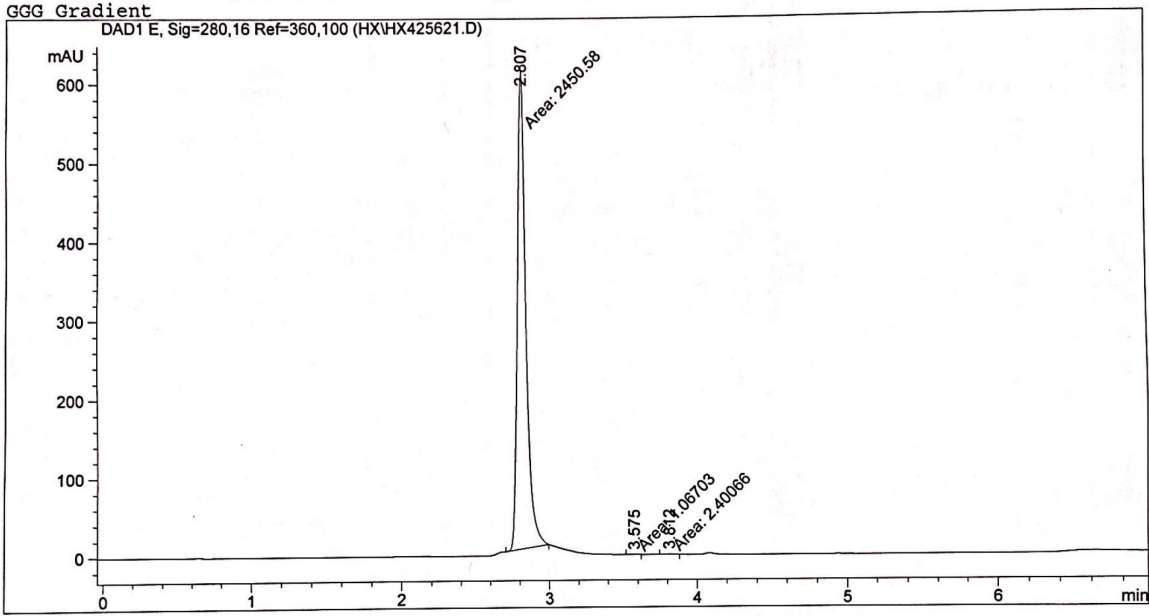
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2e

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=====
Injection Date : 5/4/23 12:14:38 PM      Seq. Line : 2
Sample Name   : HX4256-6                  Vial : 83
Acq. Operator : HX                        Inj : 1
                                           Inj Volume : 20 µl

Acq. Method   : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed  : 4/19/23 9:26:05 AM by hua
Analysis Method : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed  : 5/3/23 2:39:28 PM by Qihua
                (modified after loading)
    
```



Area Percent Report

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Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.807	MM T	0.0666	2450.57764	613.32916	99.8587
2	3.575	MM T	0.0511	1.06703	3.48046e-1	0.0435
3	3.812	MM T	0.0549	2.40066	7.28527e-1	0.0978

Totals : 2454.04532 614.40574

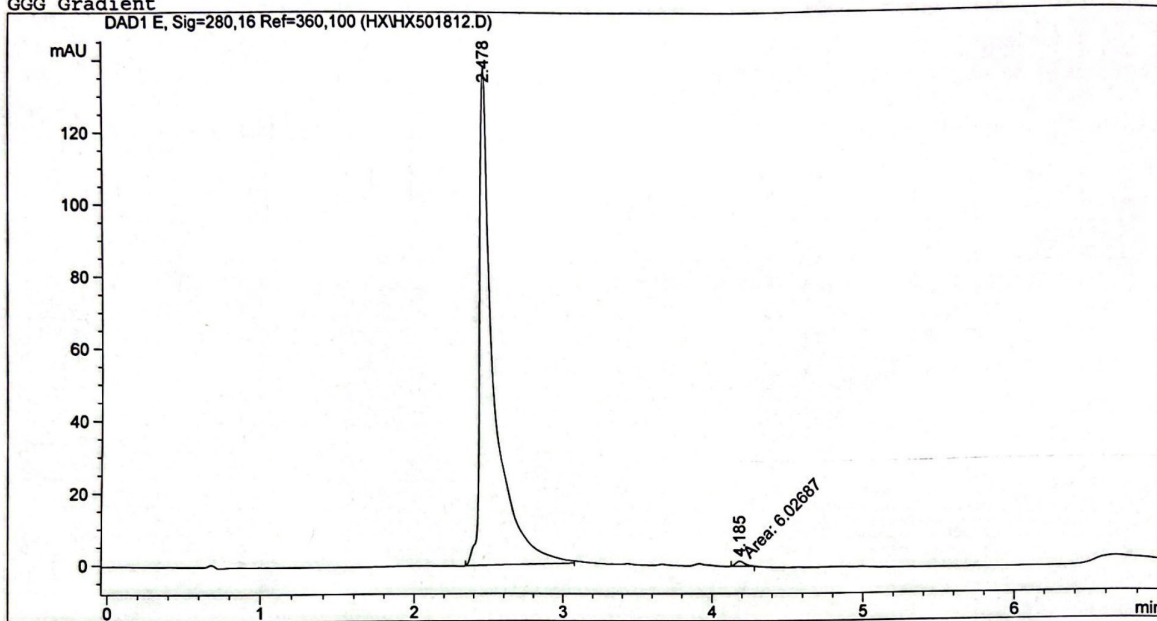
Results obtained with enhanced integrator!

*** End of Report ***

3a

```

=====
Injection Date   : 5/13/23 12:08:58 PM      Seq. Line :    3
Sample Name     : HX5018-18                Vial      :   63
Acq. Operator   : HX                      Inj       :    1
                                           Inj Volume: 10 µl
                                           Actual Inj Volume: 40 µl
Differnt Inj Volume from Sequence !
Method          : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed    : 5/5/23 3:21:03 PM by HX
GGG Gradient
    
```



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 Area Percent Report
 =====

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Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.478	PB	0.0914	920.10443	138.75764	99.3492
2	4.185	MM	0.0694	6.02687	1.44702	0.6508

Totals : 926.13130 140.20467

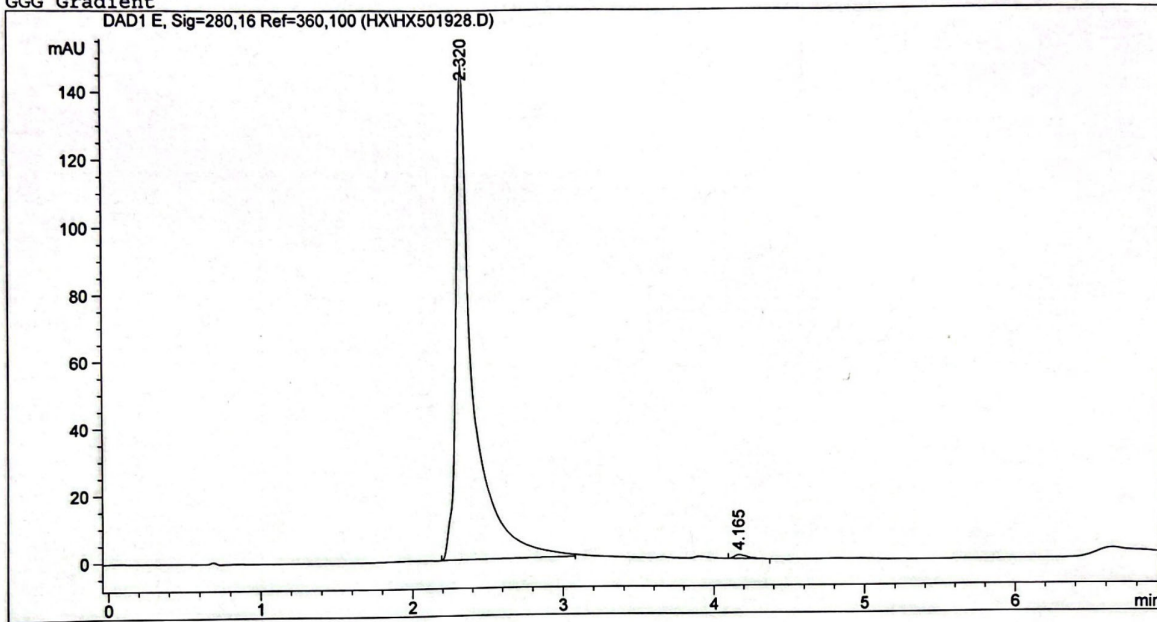
Results obtained with enhanced integrator!

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 *** End of Report ***

3b

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=====
Injection Date   : 5/17/23 10:17:50 AM      Seq. Line   :    6
Sample Name     : HX5019-11                Vial        :   62
Acq. Operator   : HX                      Inj         :    1
                                           Inj Volume  : 10 µl
                                           Actual Inj Volume : 30 µl
Different Inj Volume from Sequence !
Method          : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed    : 5/5/23 3:21:03 PM by HX
GGG Gradient
    
```



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Area Percent Report
=====

```

Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.320	PB	0.1089	1156.88538	148.41745	99.3787
2	4.165	VP	0.0959	7.23271	1.20791	0.6213

Totals : 1164.11808 149.62536

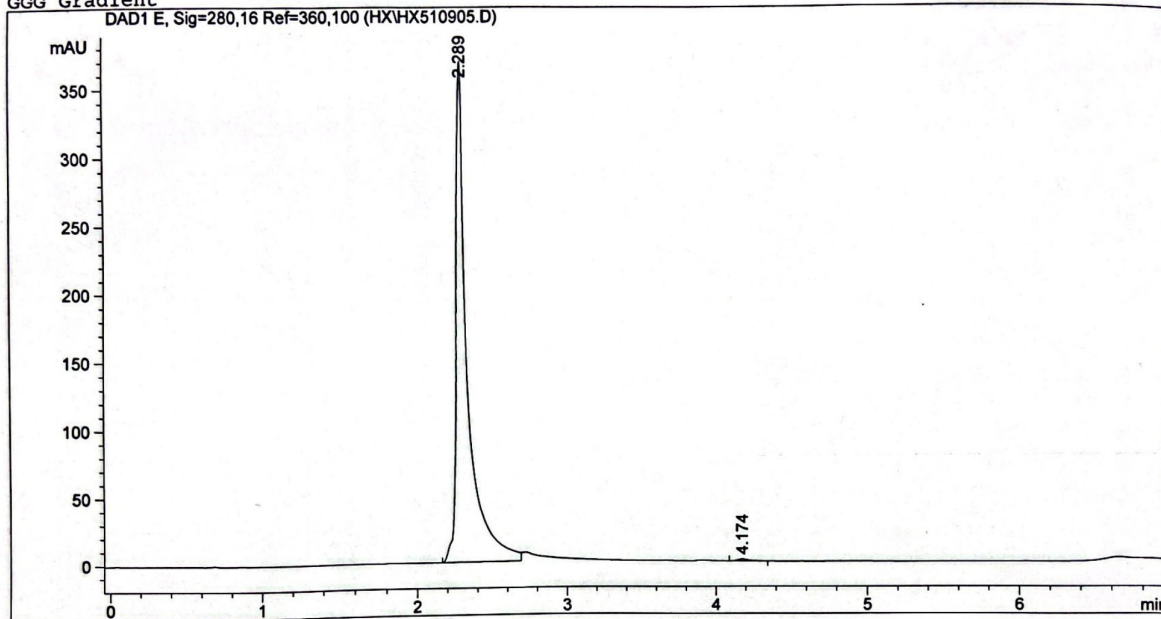
Results obtained with enhanced integrator!

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

30

```

=====
Injection Date : 5/13/23 4:05:57 PM      Seq. Line : 3
Sample Name    : HX5109-38                Vial : 63
Acq. Operator  : HX                      Inj : 1
                                           Inj Volume : 10 µl
                                           Actual Inj Volume : 20 µl
Different Inj Volume from Sequence 1
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.289	PV	0.0752	1960.18494	373.84650	99.6084
2	4.174	BB	0.0749	7.70619	1.52534	0.3916

Totals : 1967.89113 375.37184

Results obtained with enhanced integrator!

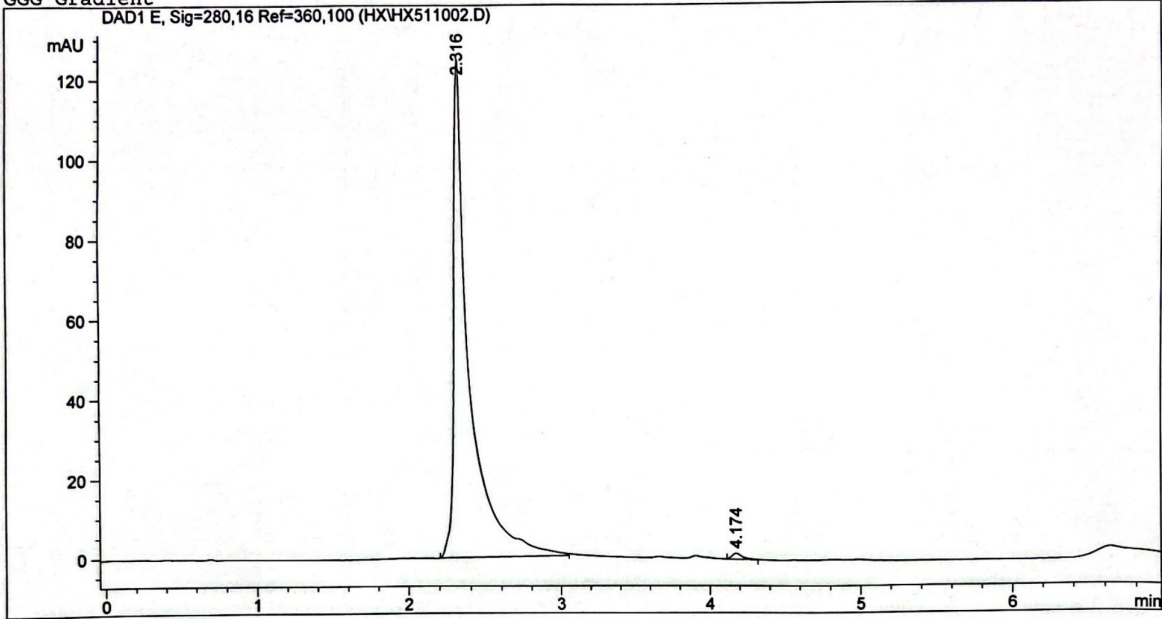
*** End of Report ***

3d

```

=====
Injection Date : 5/13/23 5:58:32 PM      Seq. Line : 3
Sample Name    : HX5110-87                Vial       : 63
Acq. Operator  : HX                      Inj        : 1
                                           Inj Volume : 10 µl
                                           Actual Inj Volume : 20 µl
Different Inj Volume from Sequence !
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 5/5/23 3:21:03 PM by HX
GGG Gradient

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                          Area Percent Report
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```

Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000

```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.316	PB	0.0974	900.70917	126.01842	99.1198
2	4.174	BB	0.0749	7.99829	1.58513	0.8802

```
Totals :                      908.70746  127.60356
```

Results obtained with enhanced integrator!

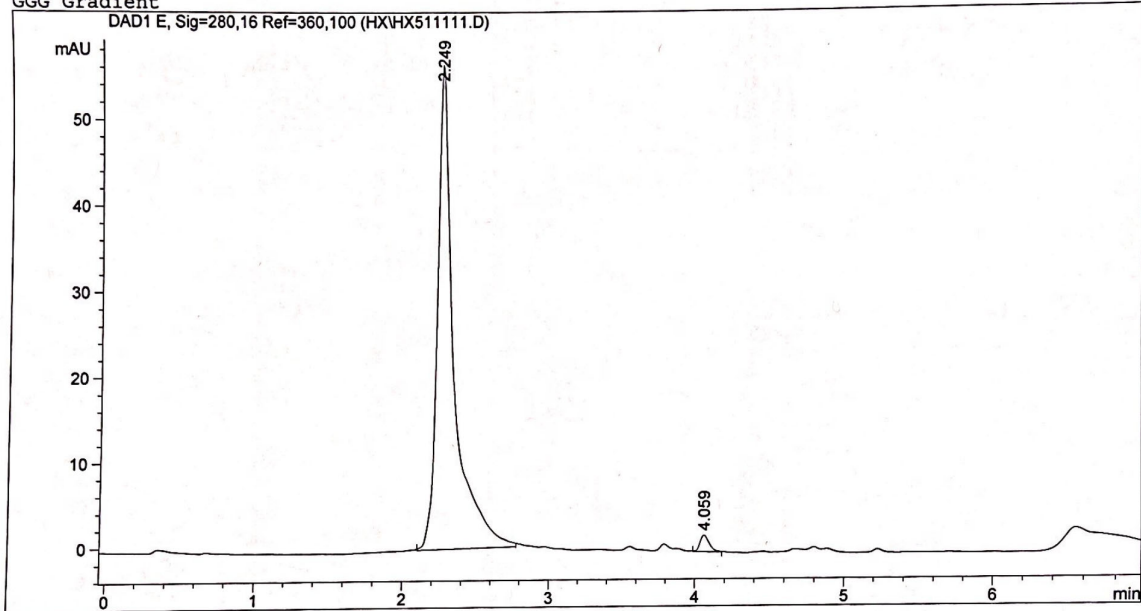
```

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*** End of Report ***

```

```

=====
Injection Date : 5/2/23 2:09:09 PM          Seq. Line : 2
Sample Name    : HX5111-rmBoc              Vial       : 81
Acq. Operator  : HX                       Inj        : 1
                                                Inj Volume : 20 µl
                                                Actual Inj Volume : 5 µl
Different Inj Volume from Sequence !
Method         : D:\HPCHEM\1\METHODS\G GRADRP.M
Last changed   : 4/19/23 9:26:05 AM by hua
GGG Gradient
    
```



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

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: DAD1 E, Sig=280,16 Ref=360,100

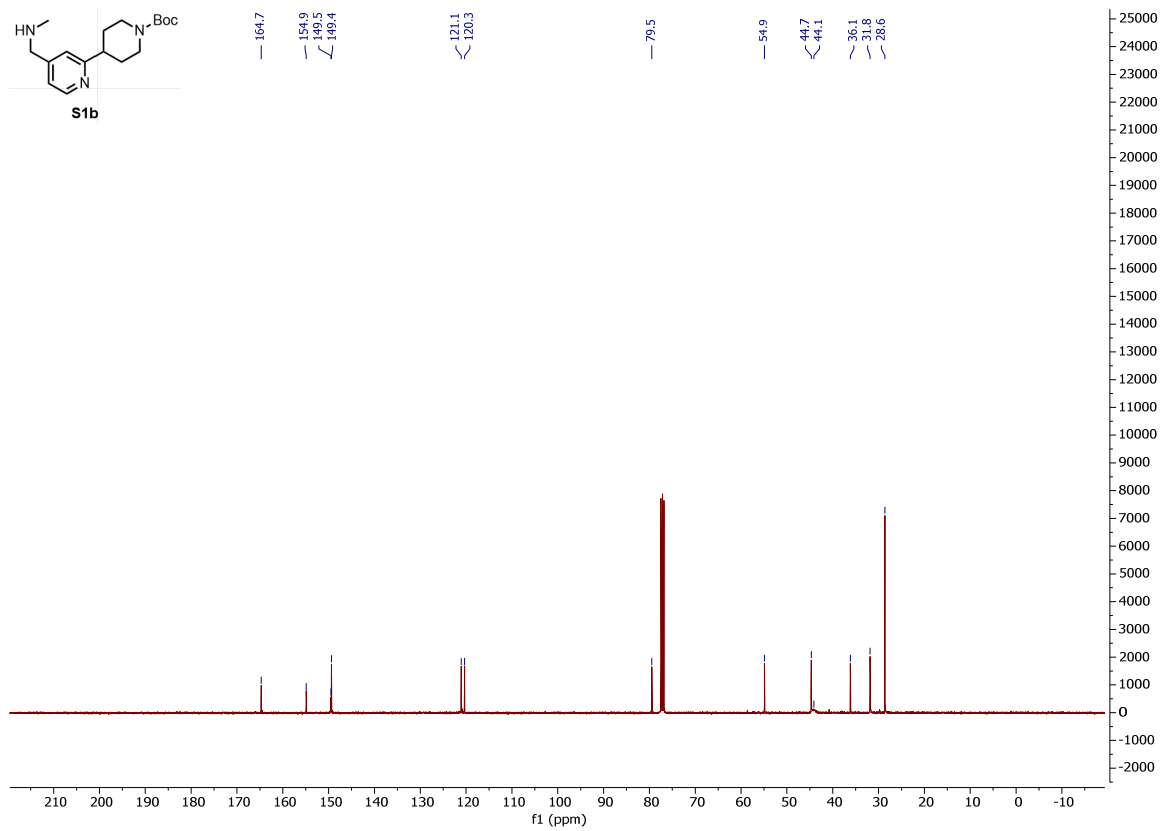
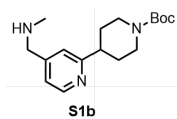
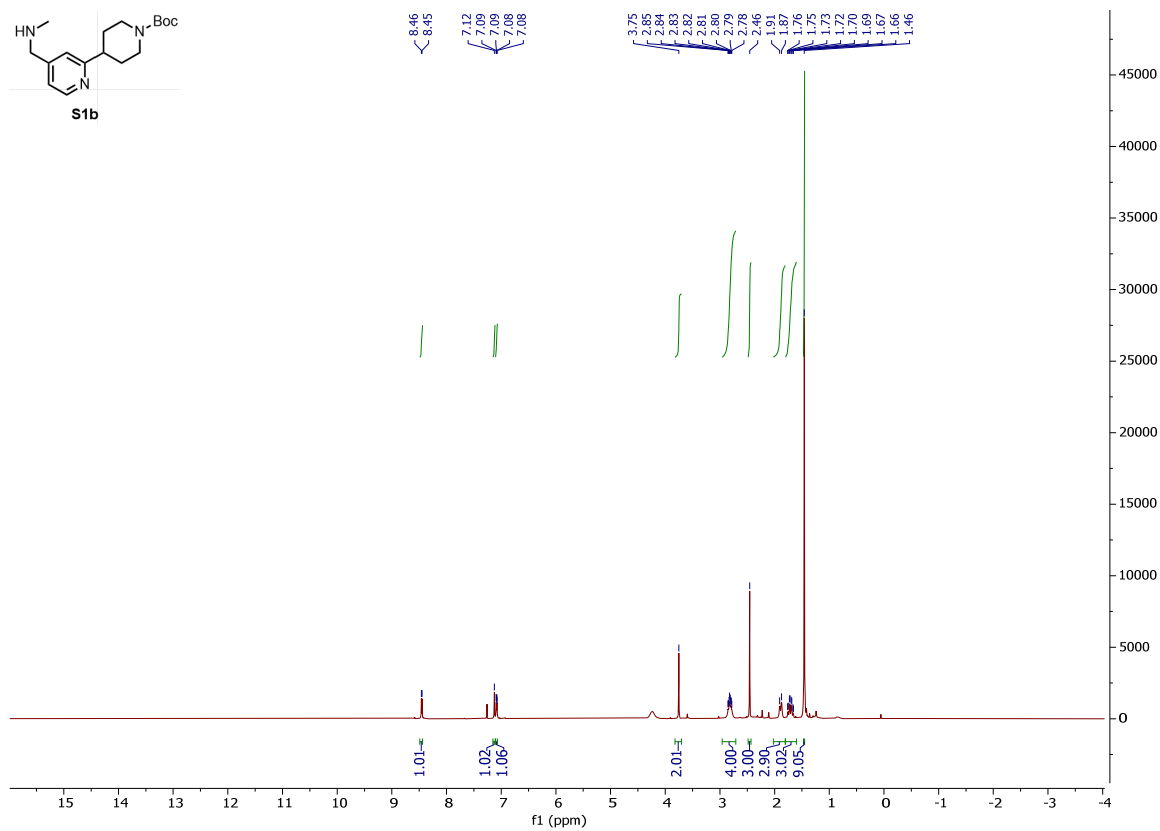
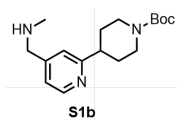
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.249	BB	0.1053	443.41479	56.67936	98.1224
2	4.059	BB	0.0663	8.48492	1.96818	1.8776

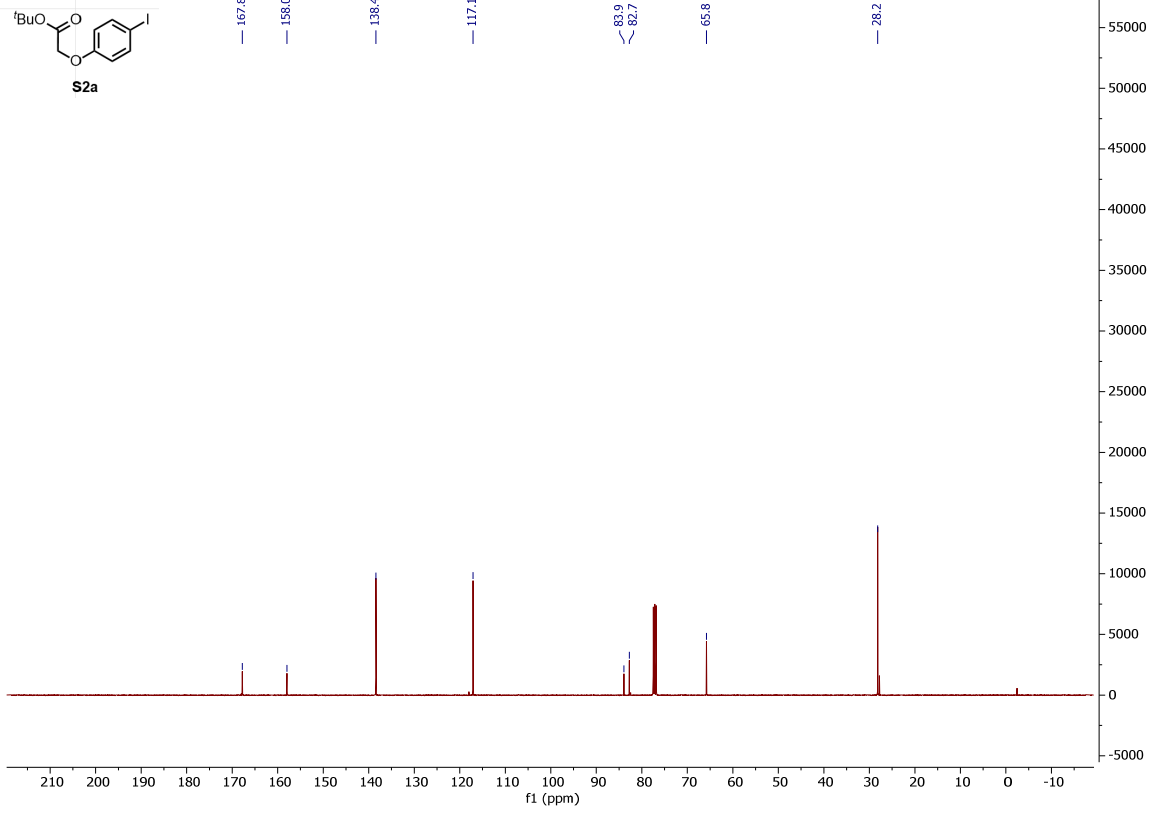
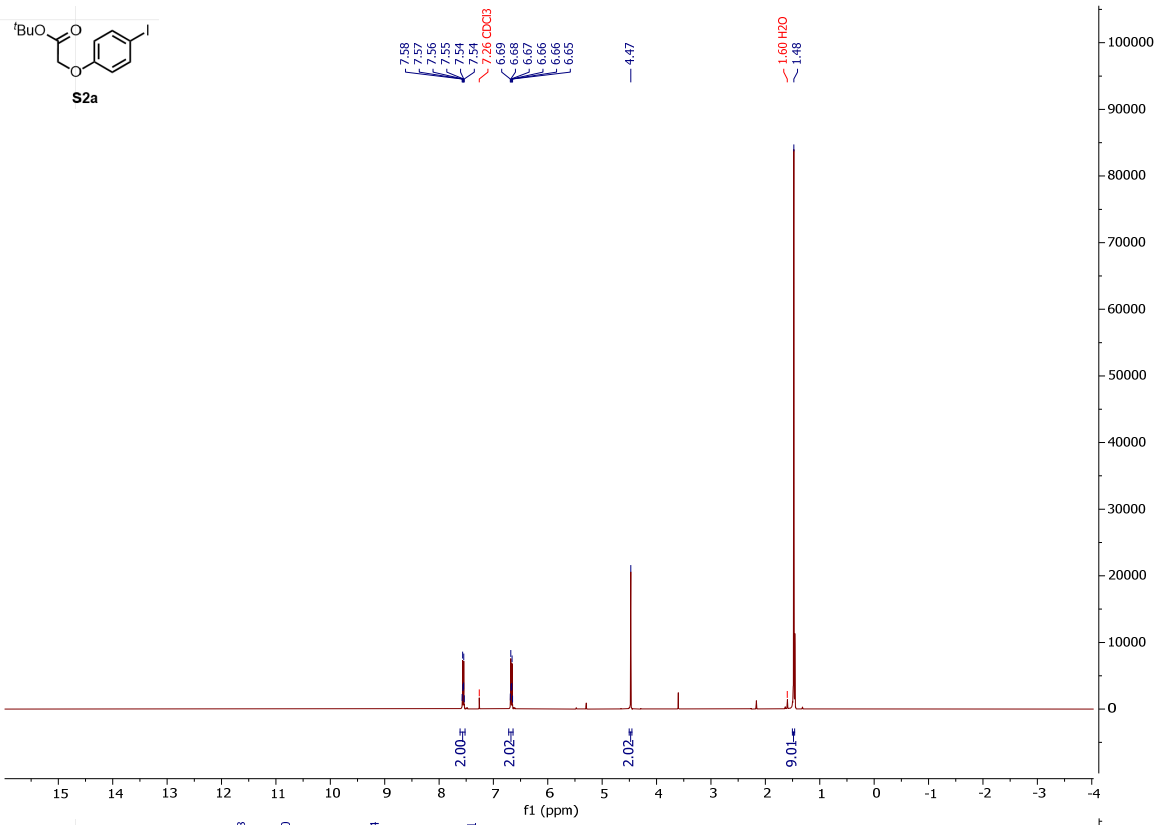
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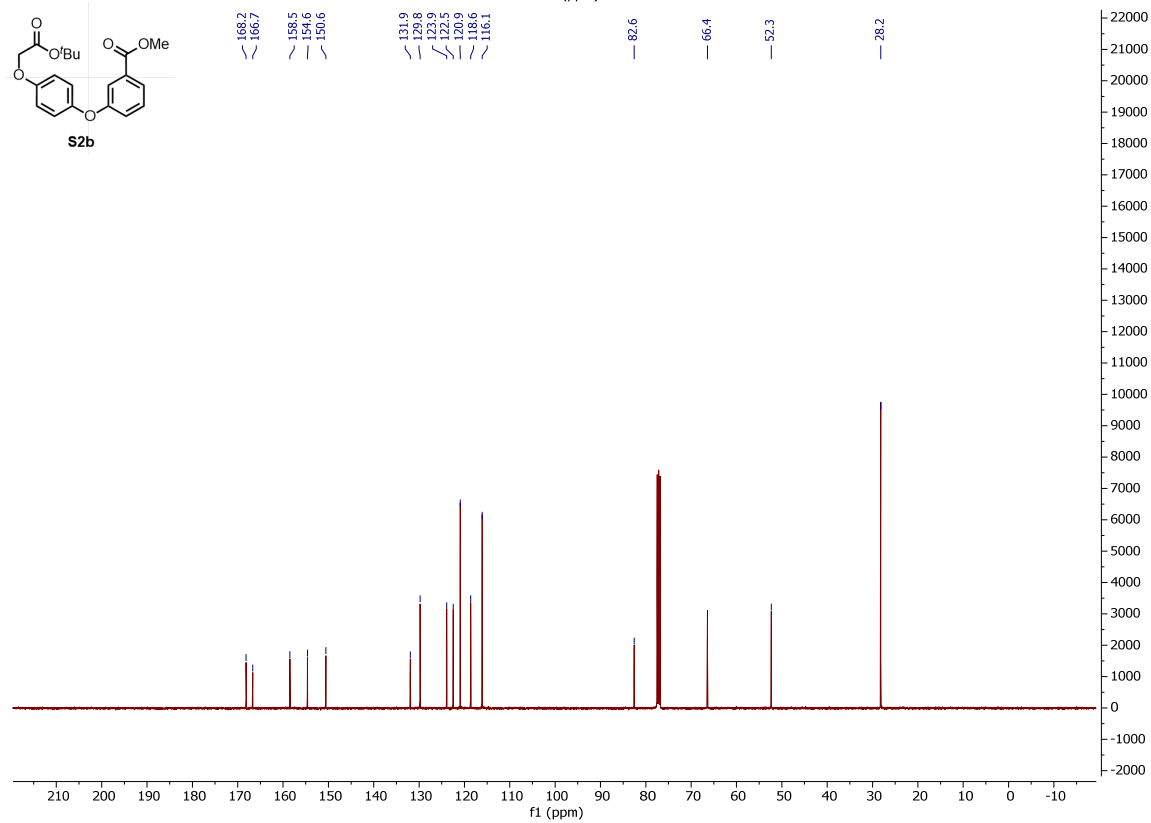
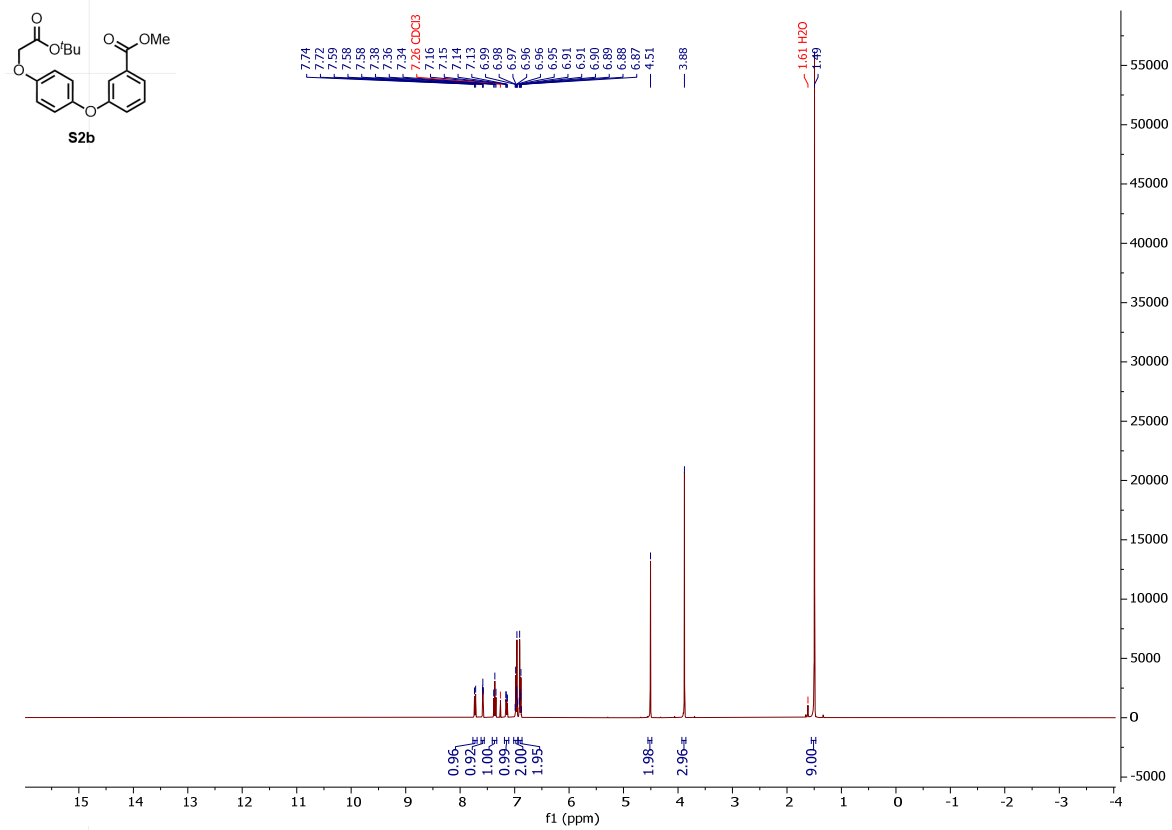
Results obtained with enhanced integrator!

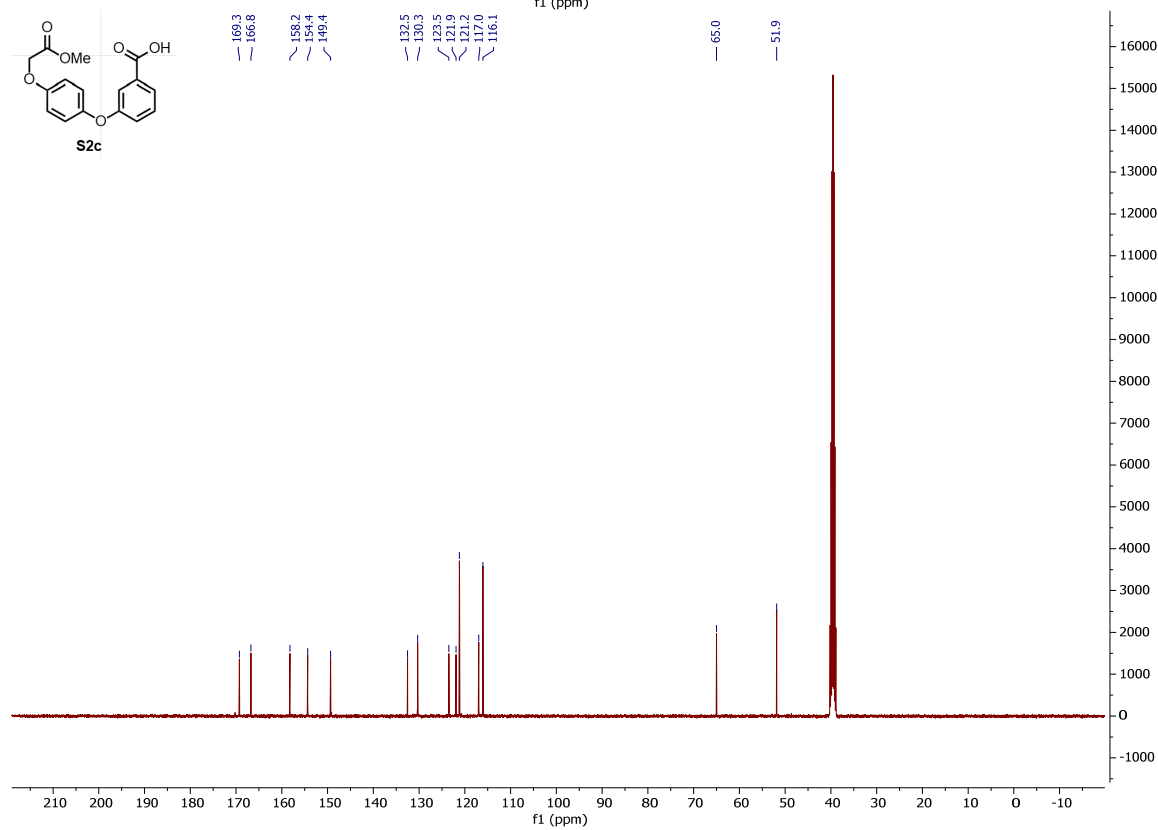
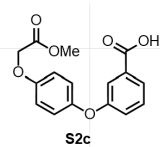
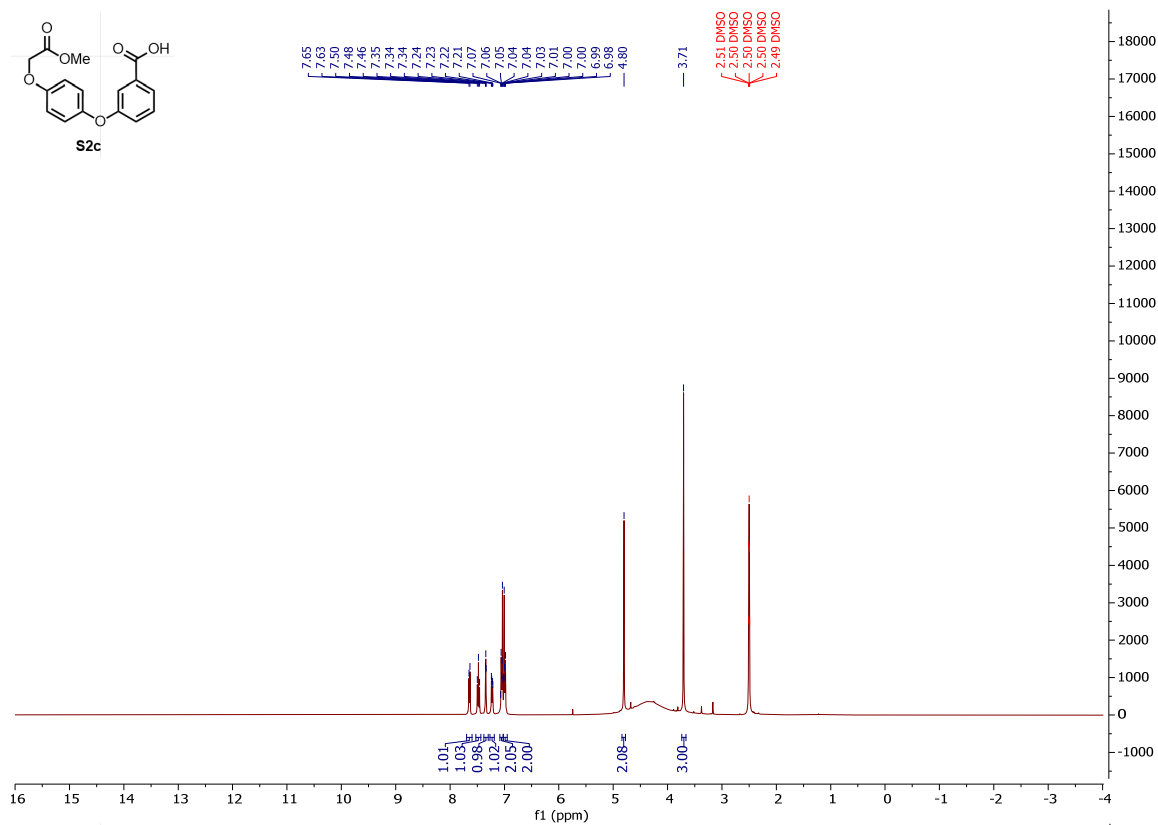
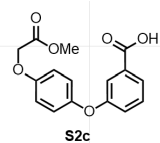
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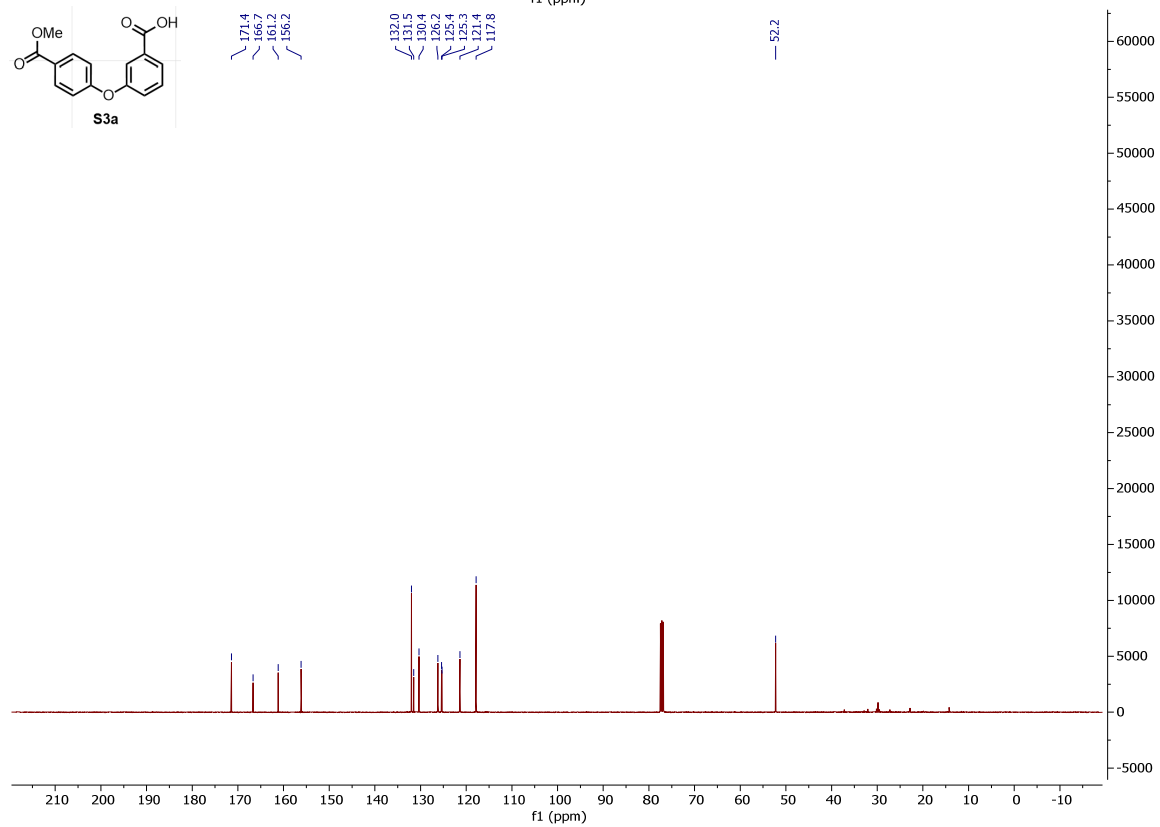
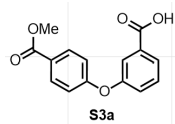
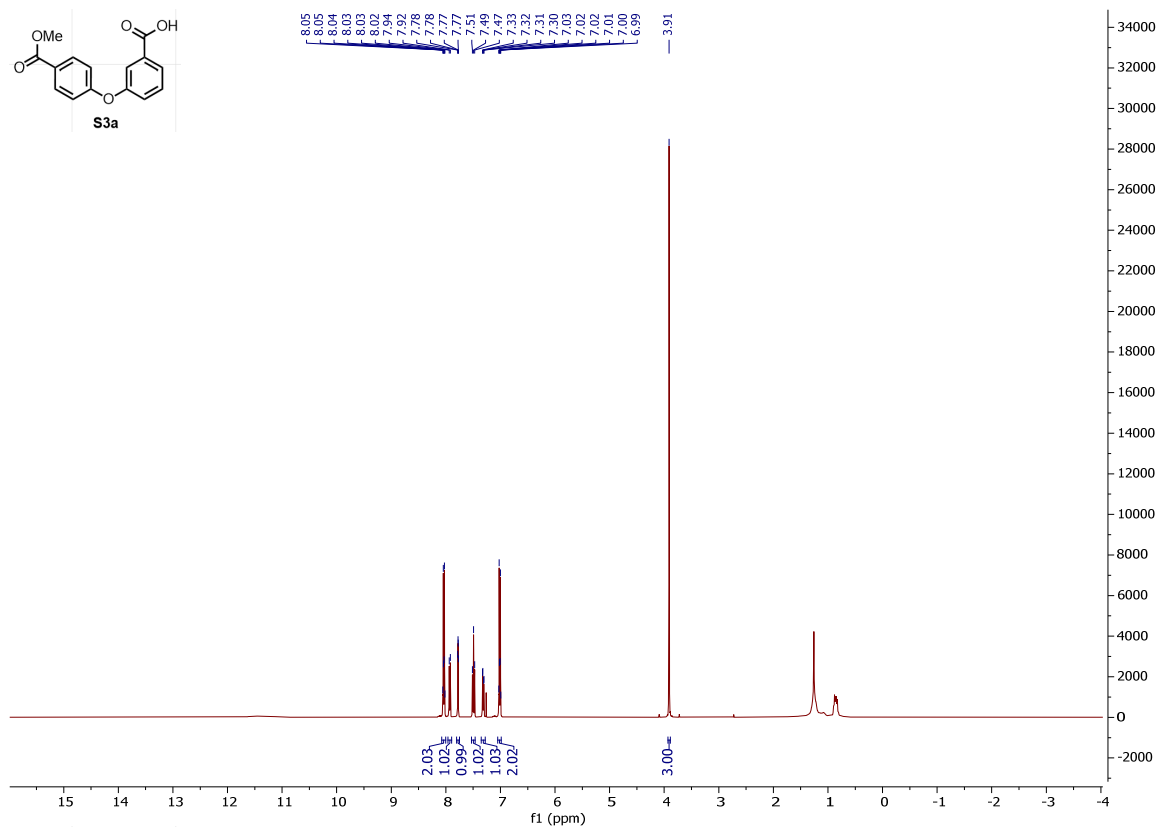
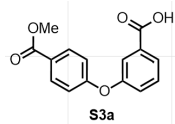
¹H and ¹³C NMR spectrum

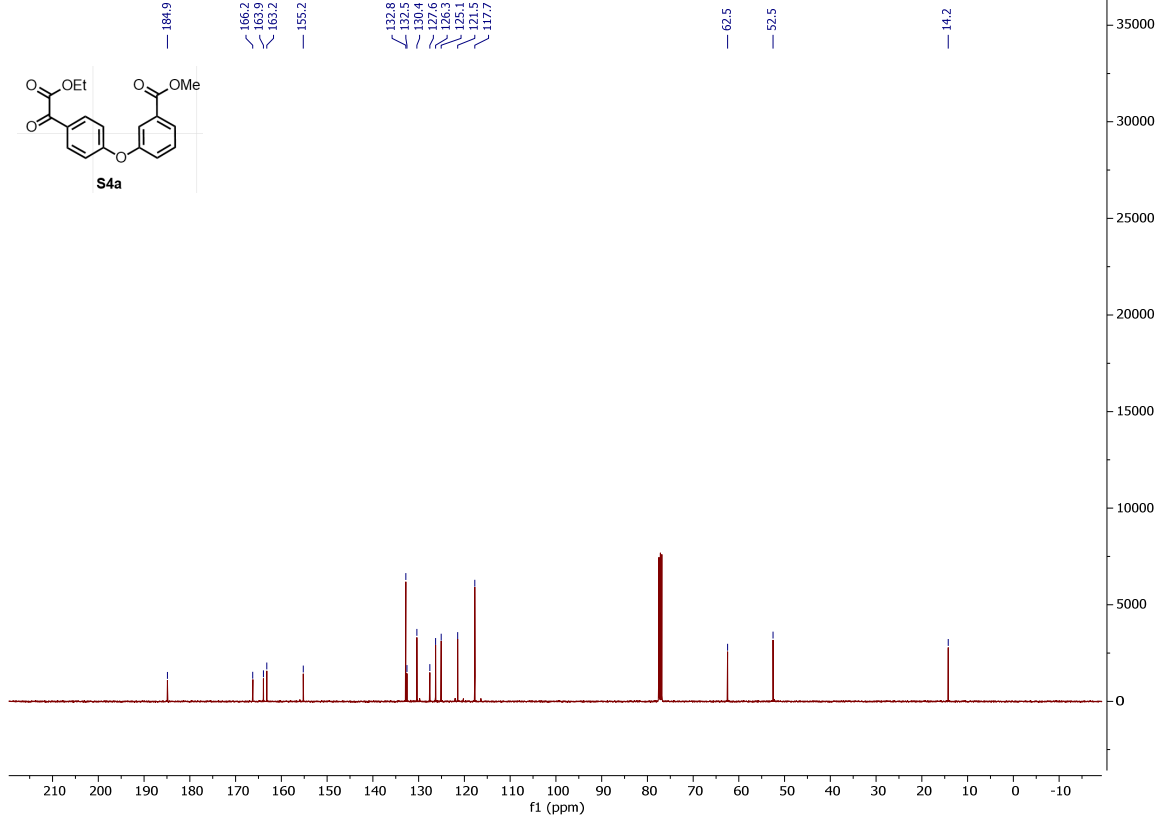
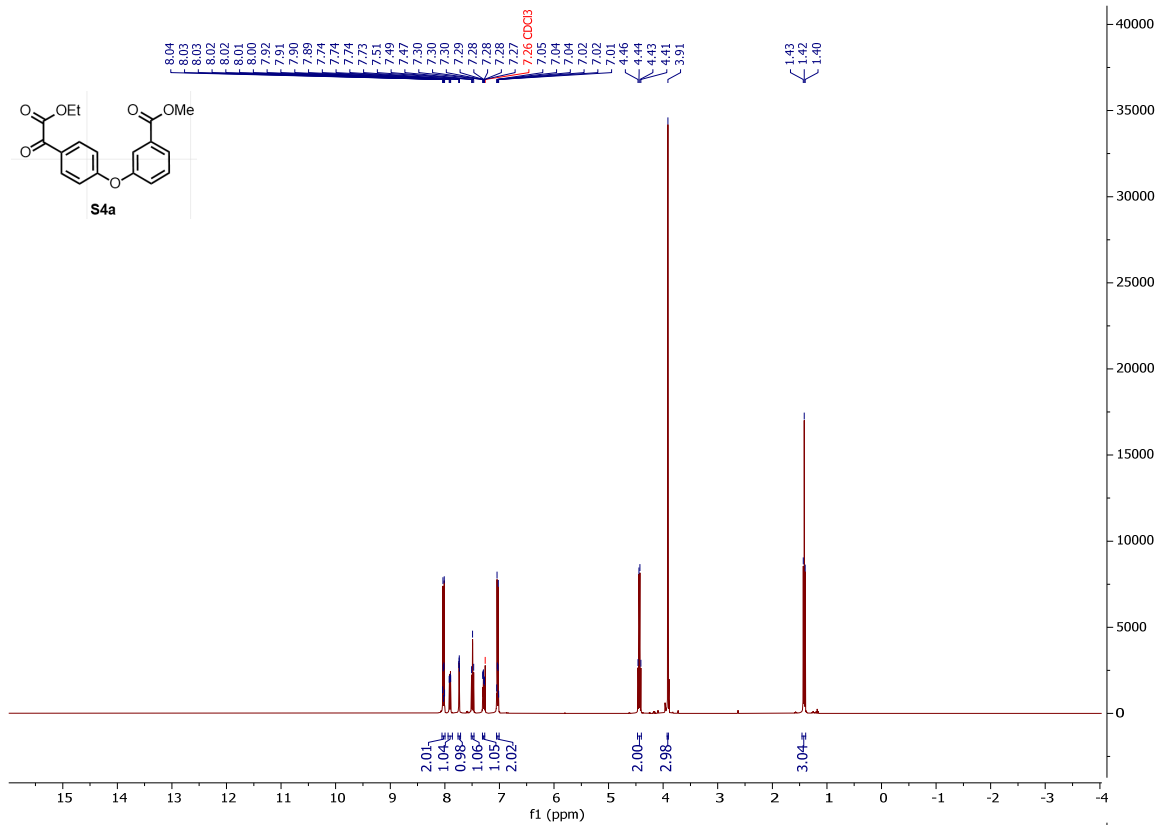


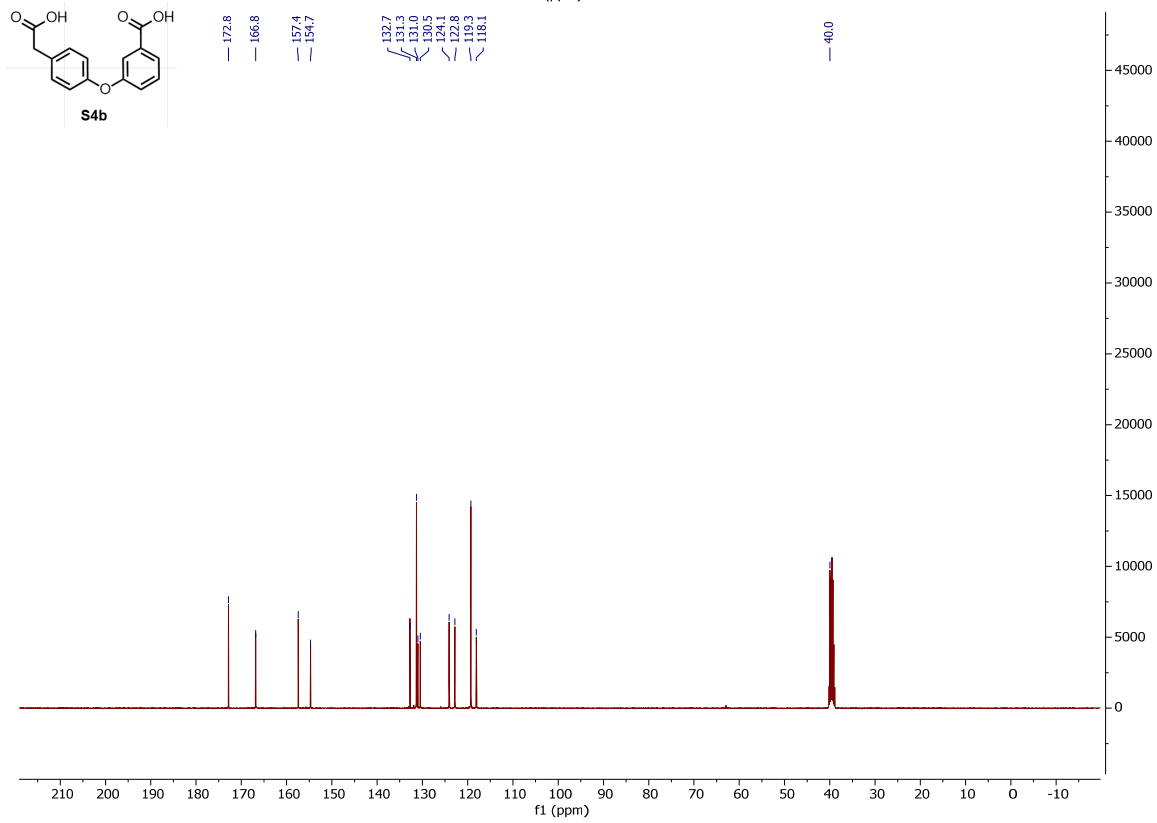
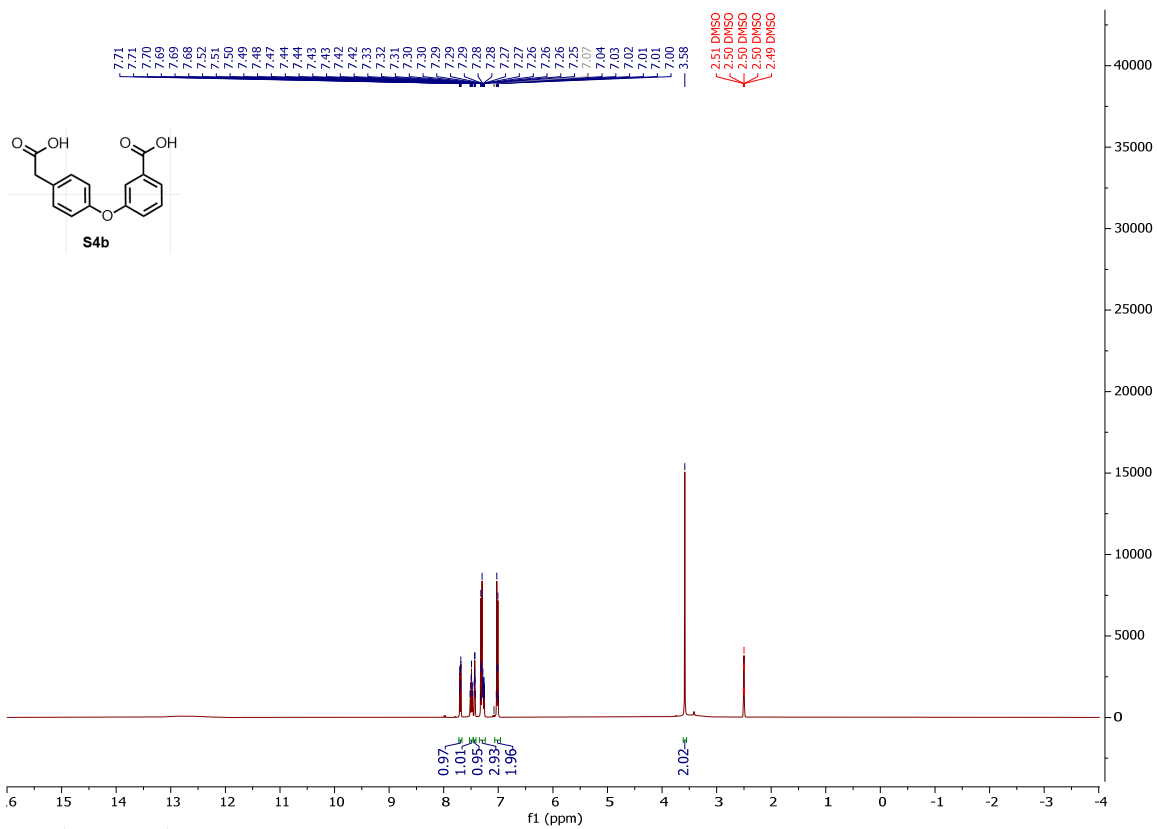


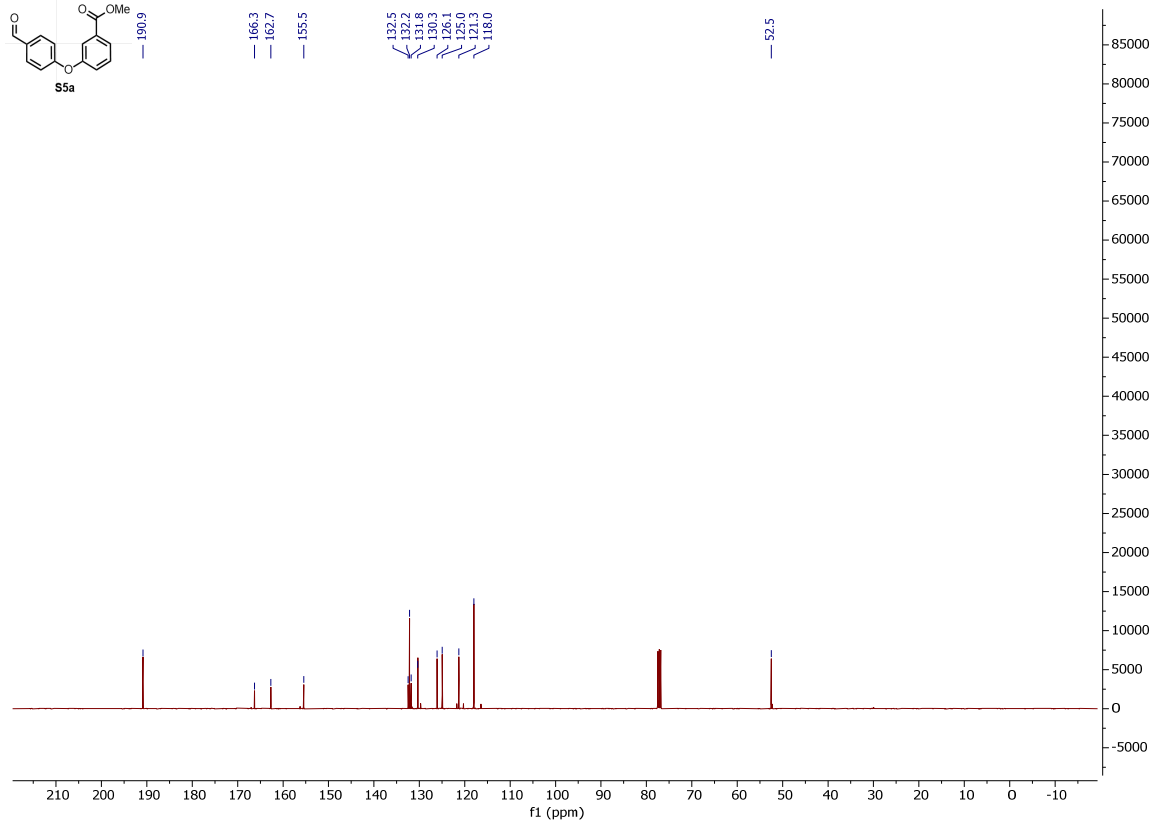
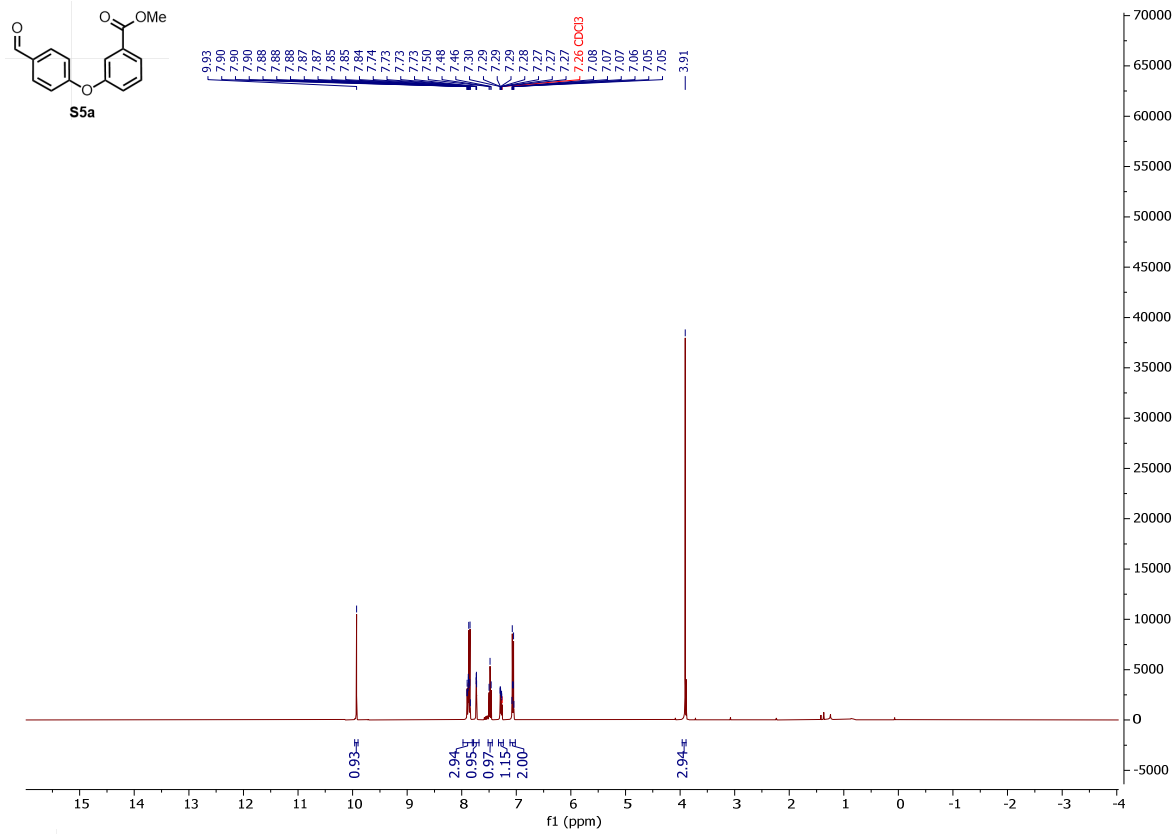


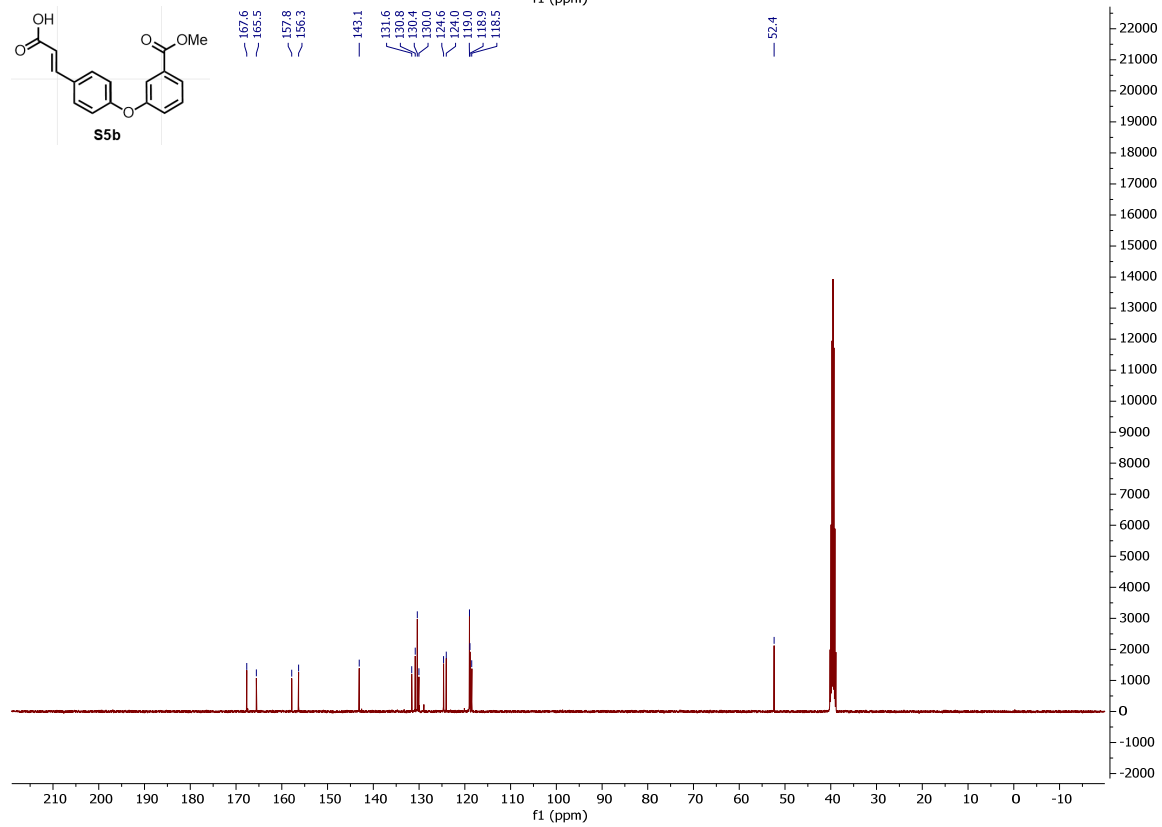
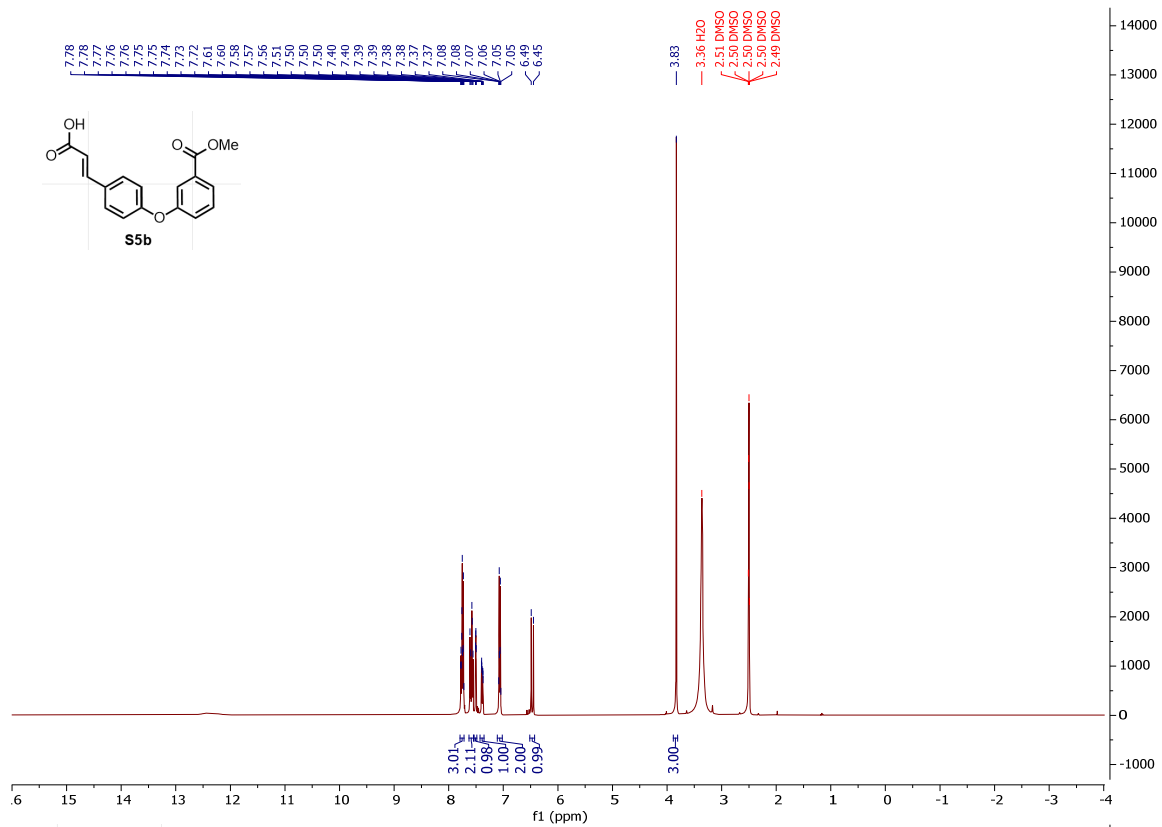


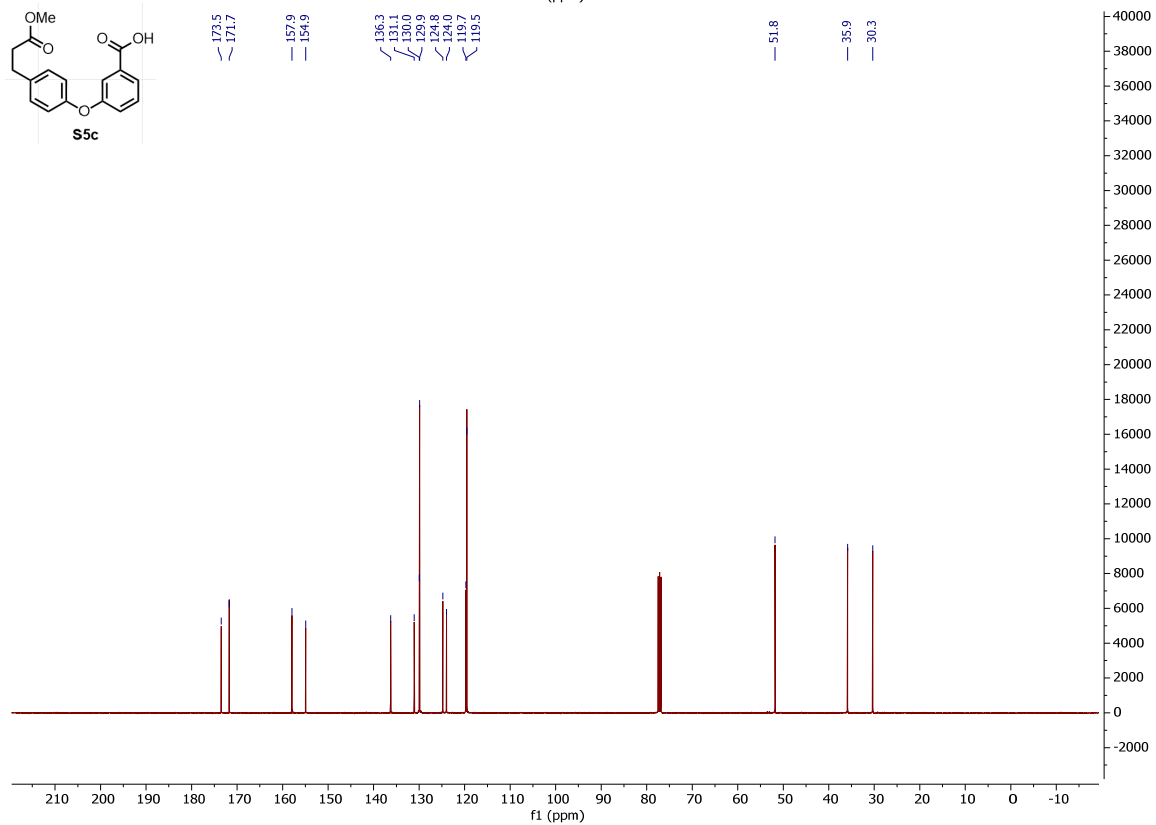
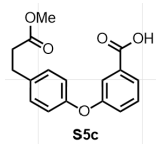
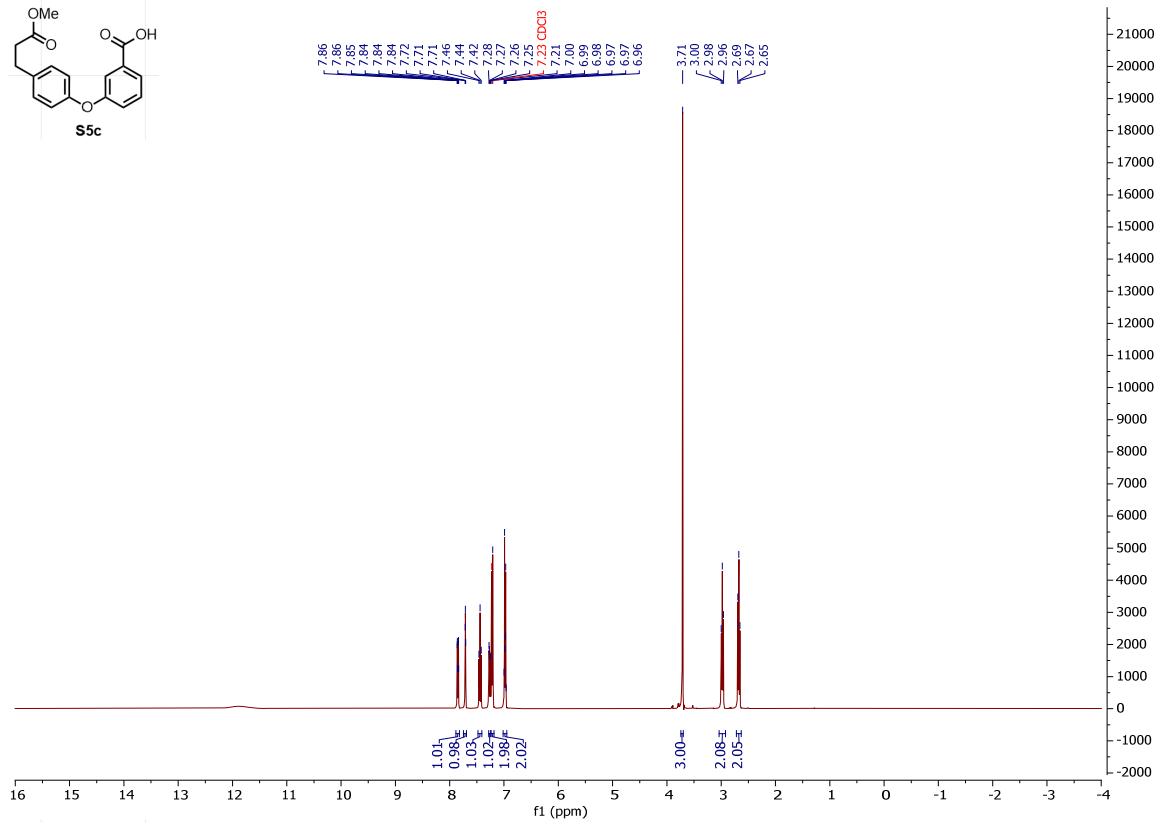
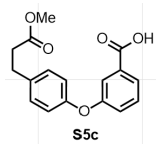


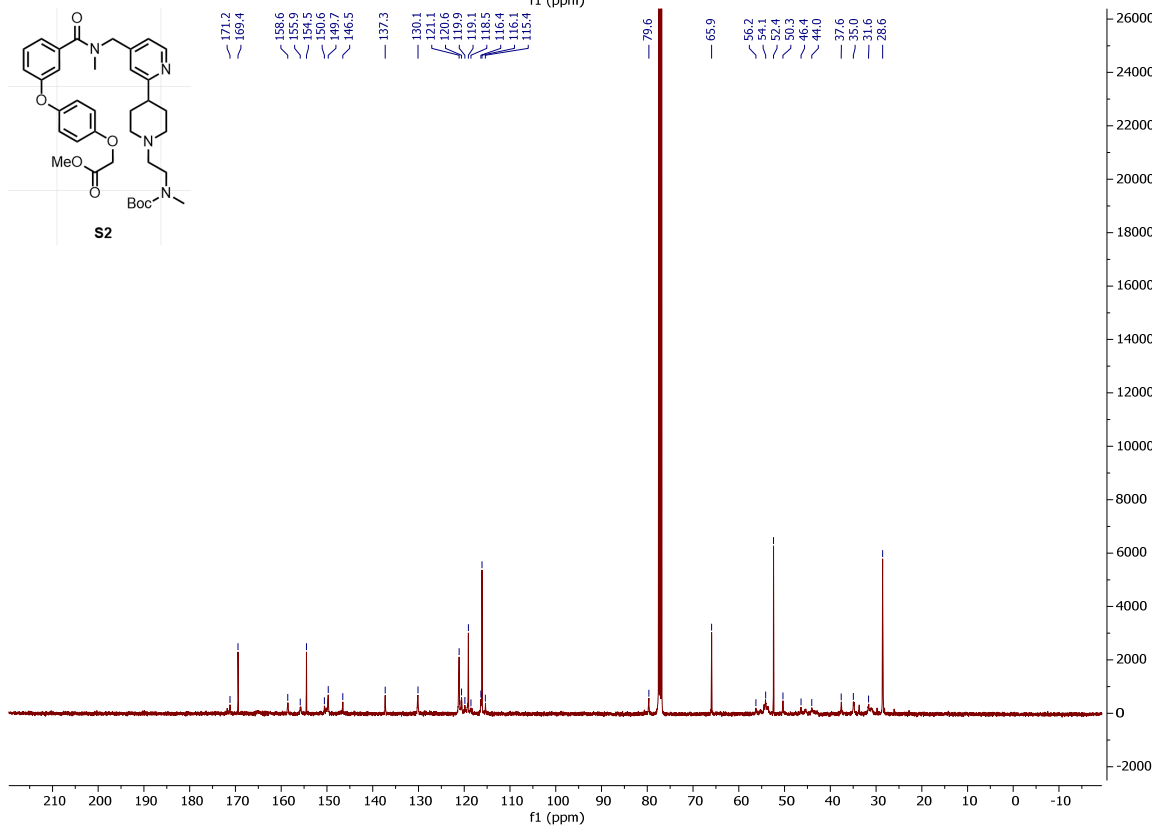
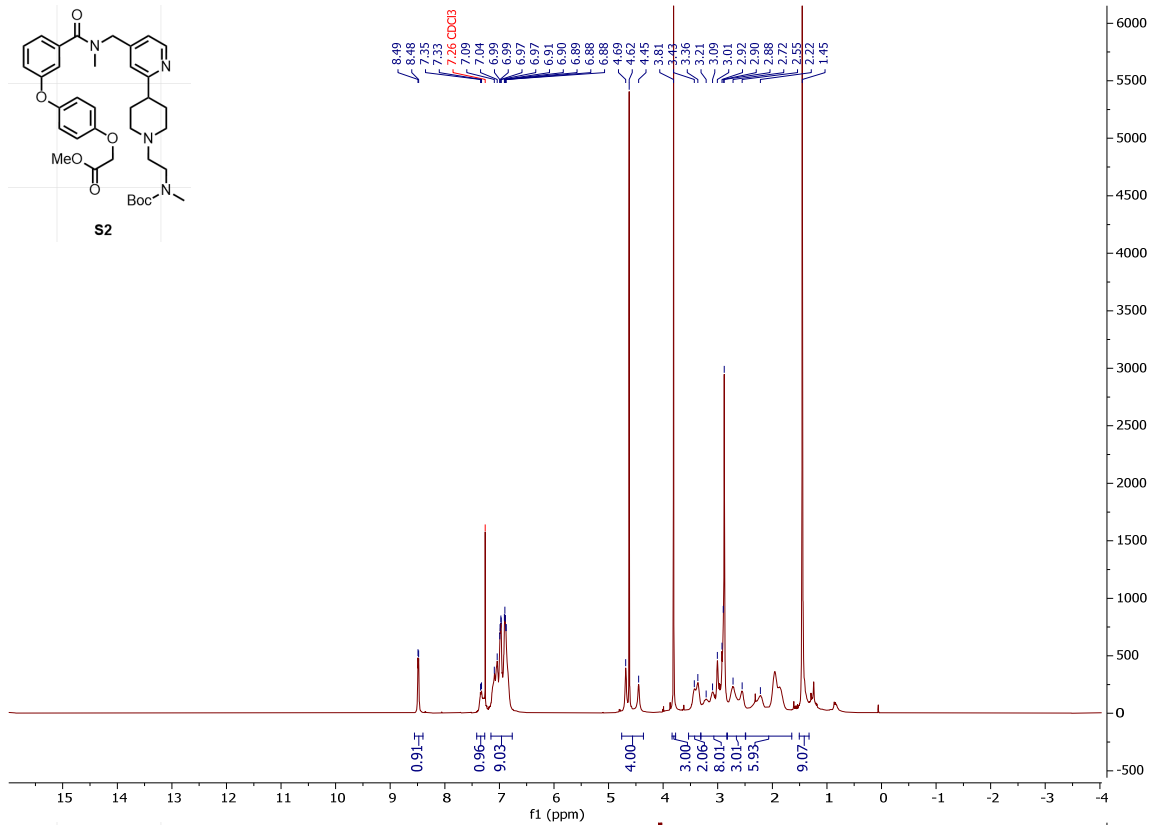


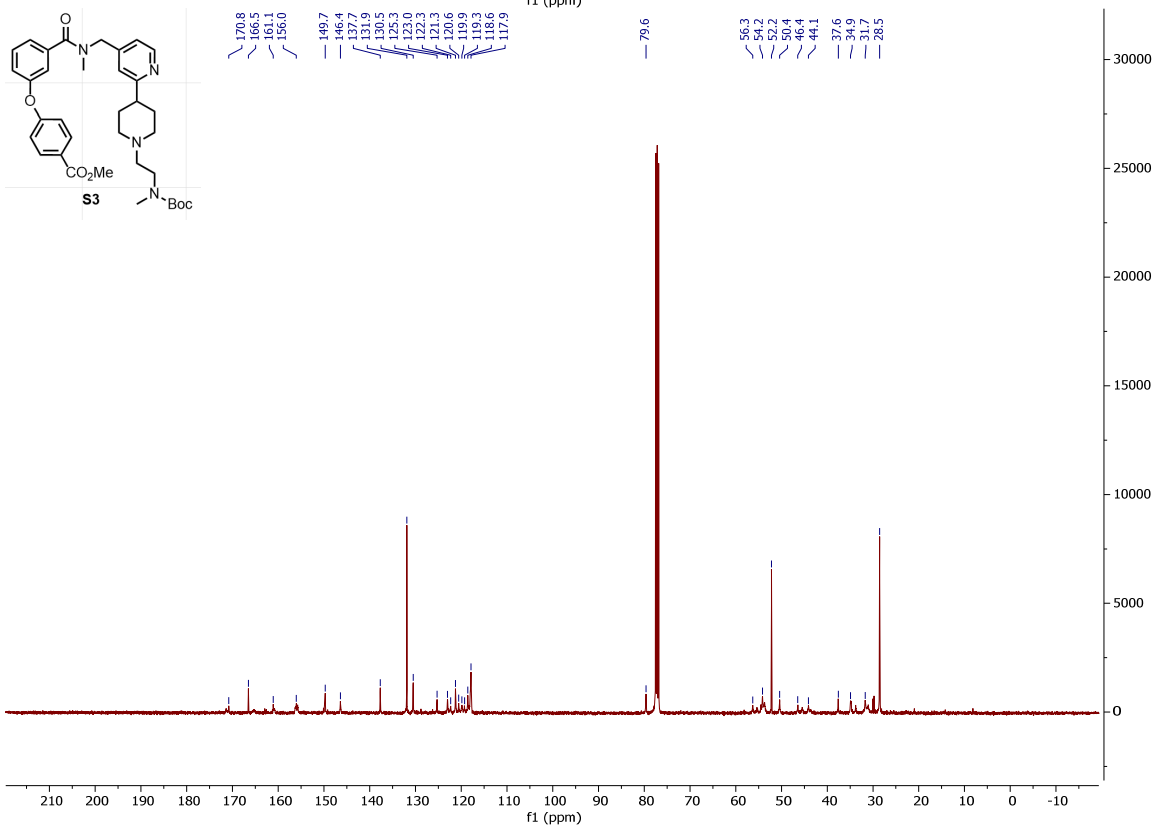
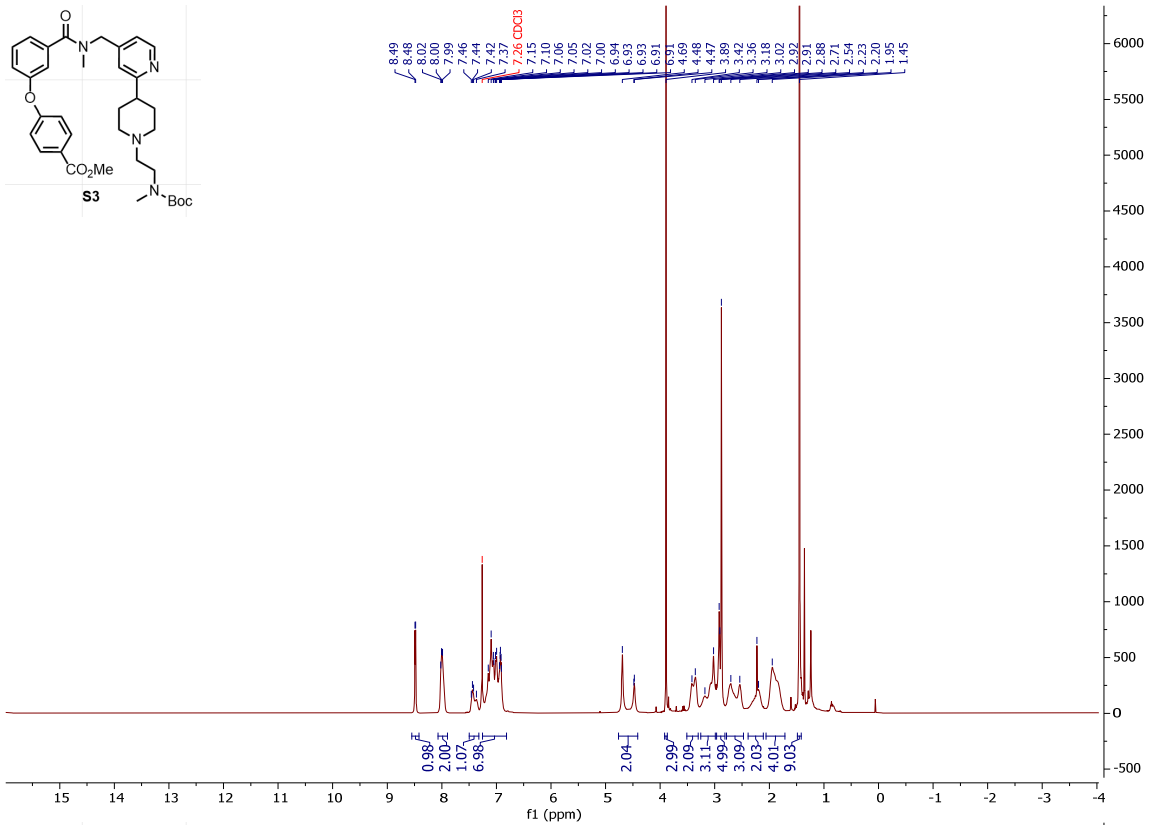


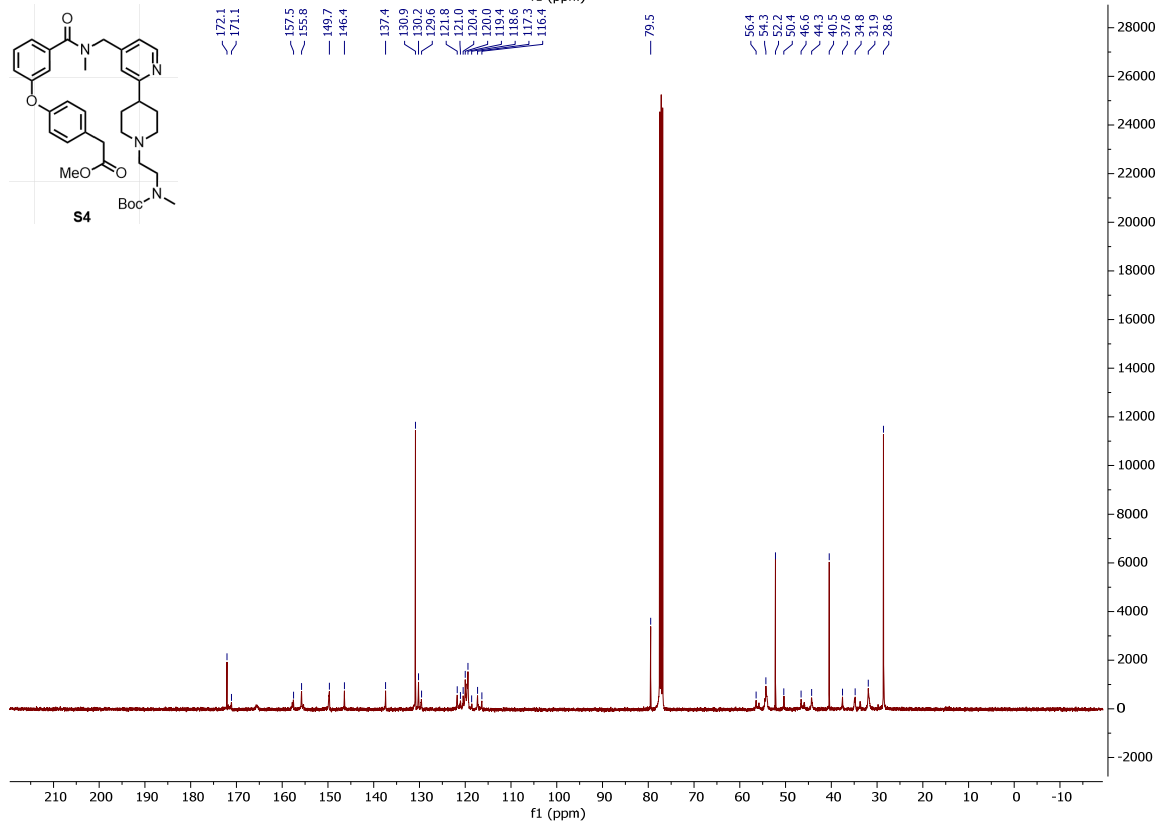
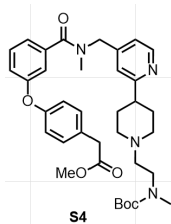
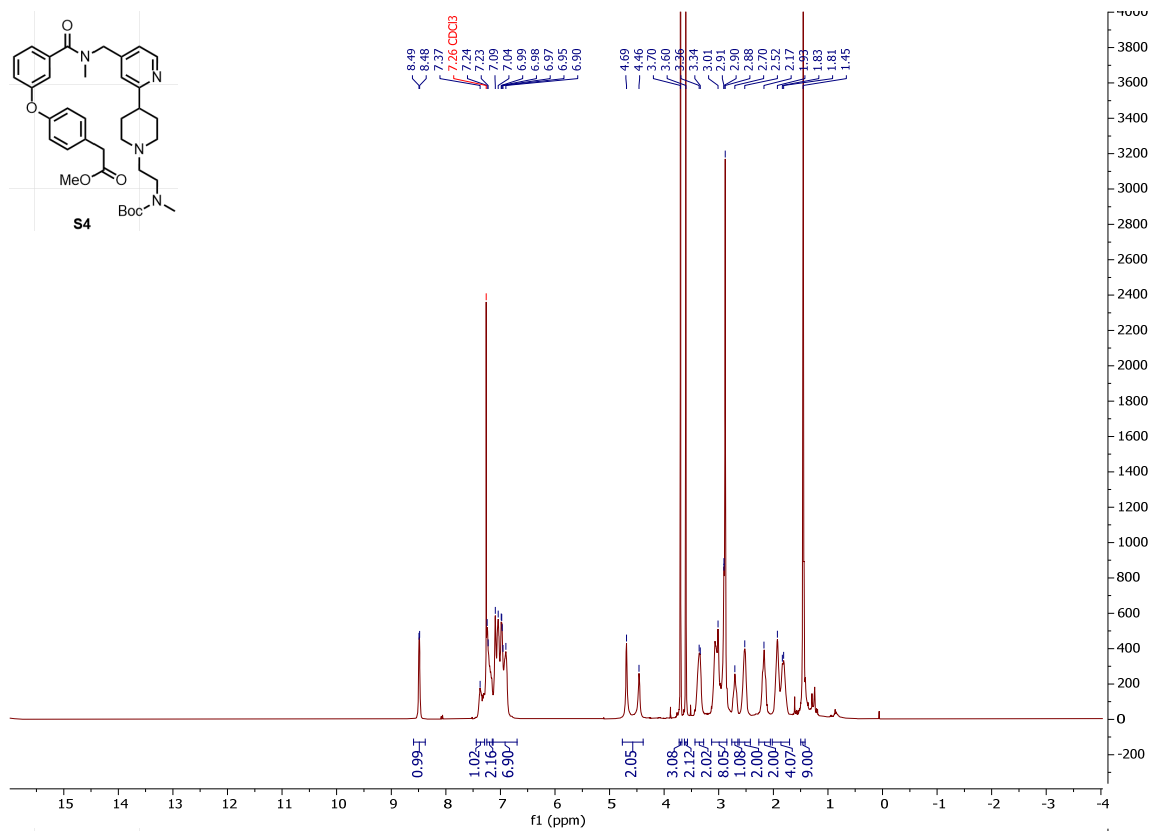
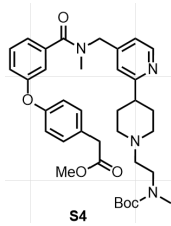


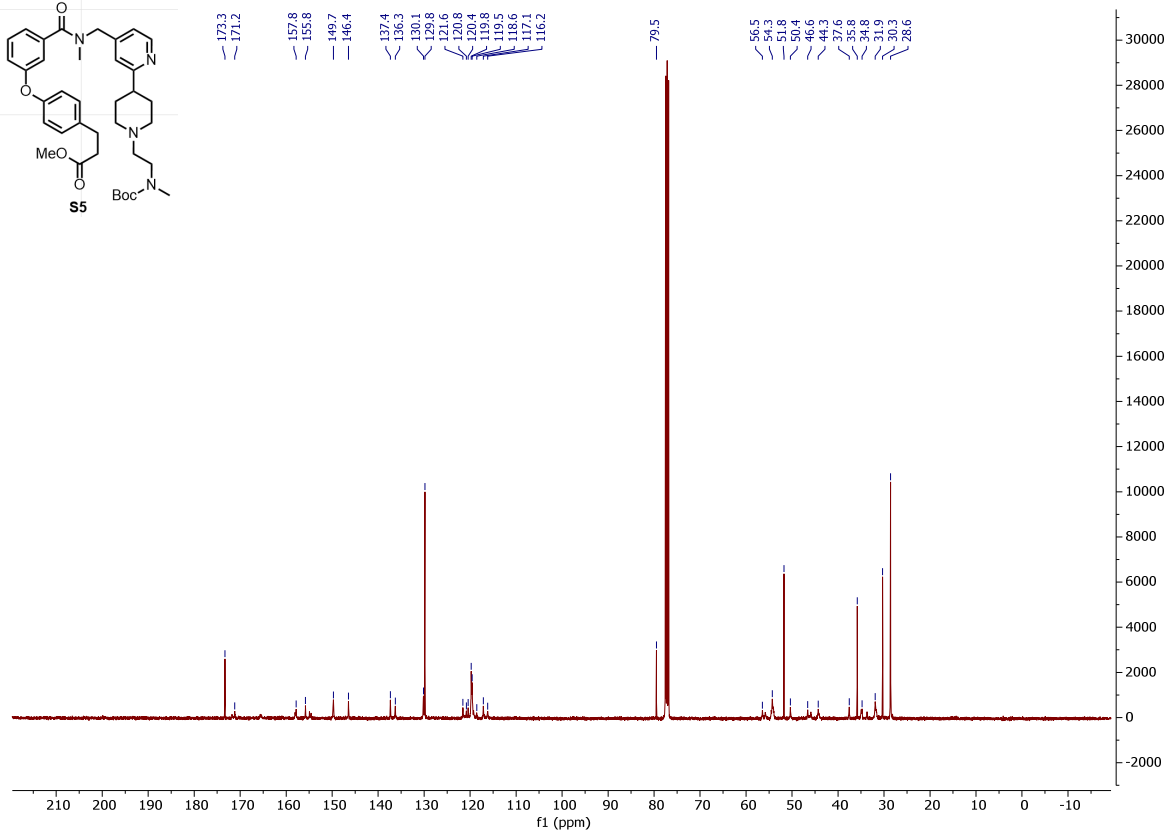
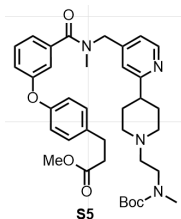
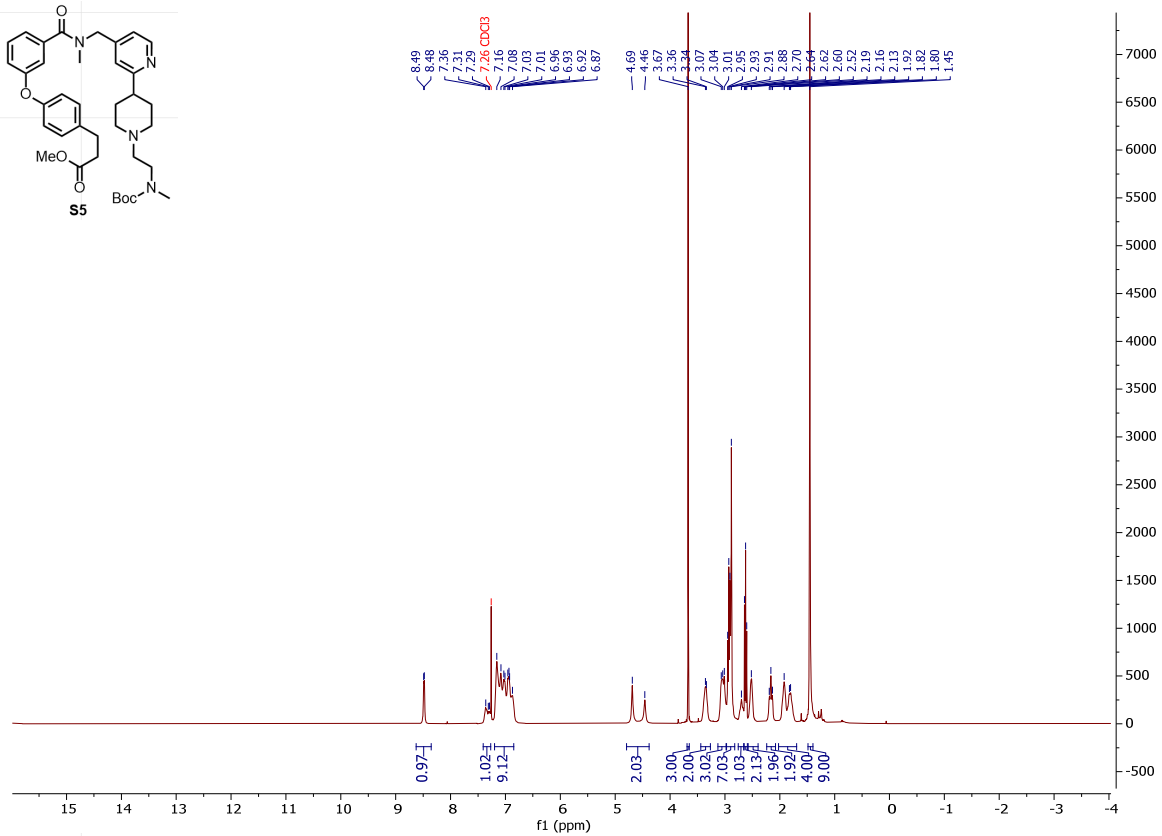
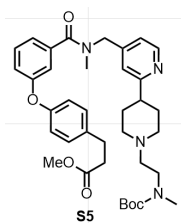


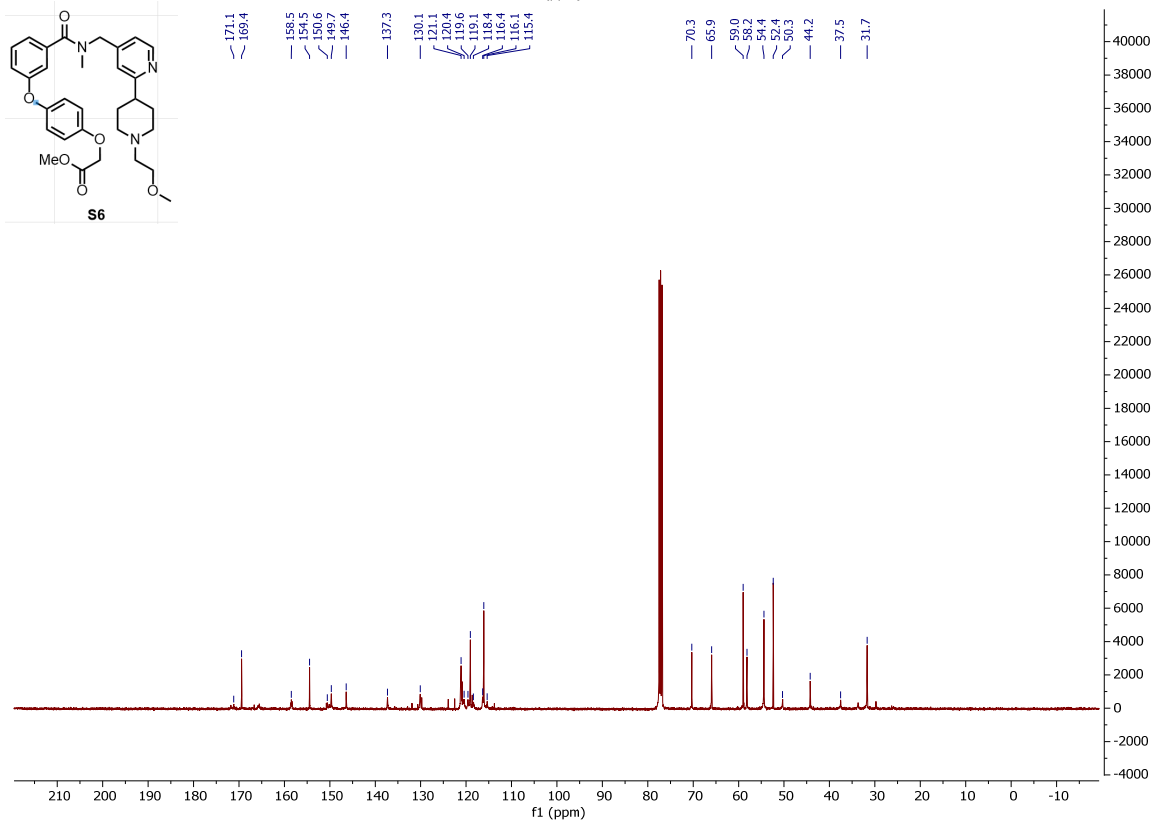
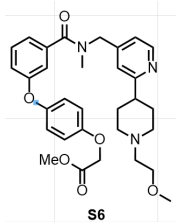
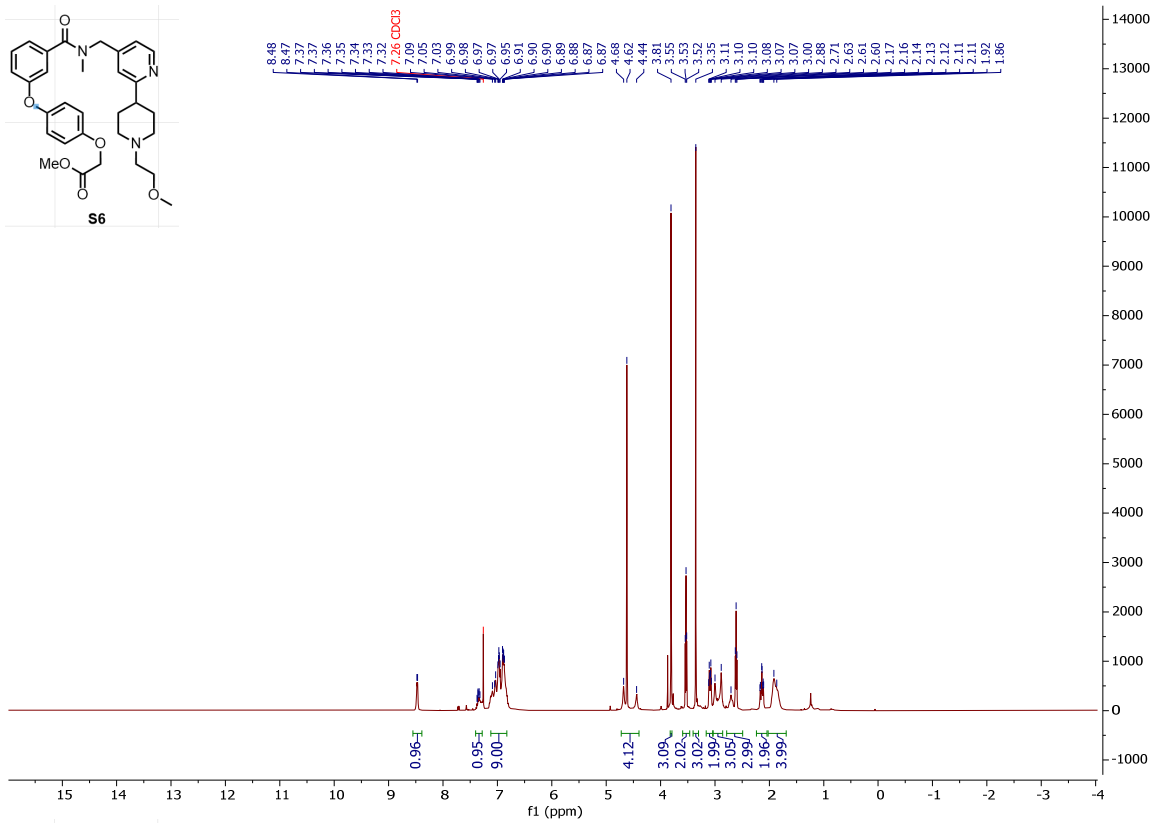
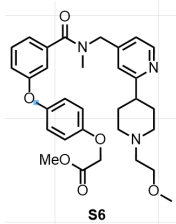


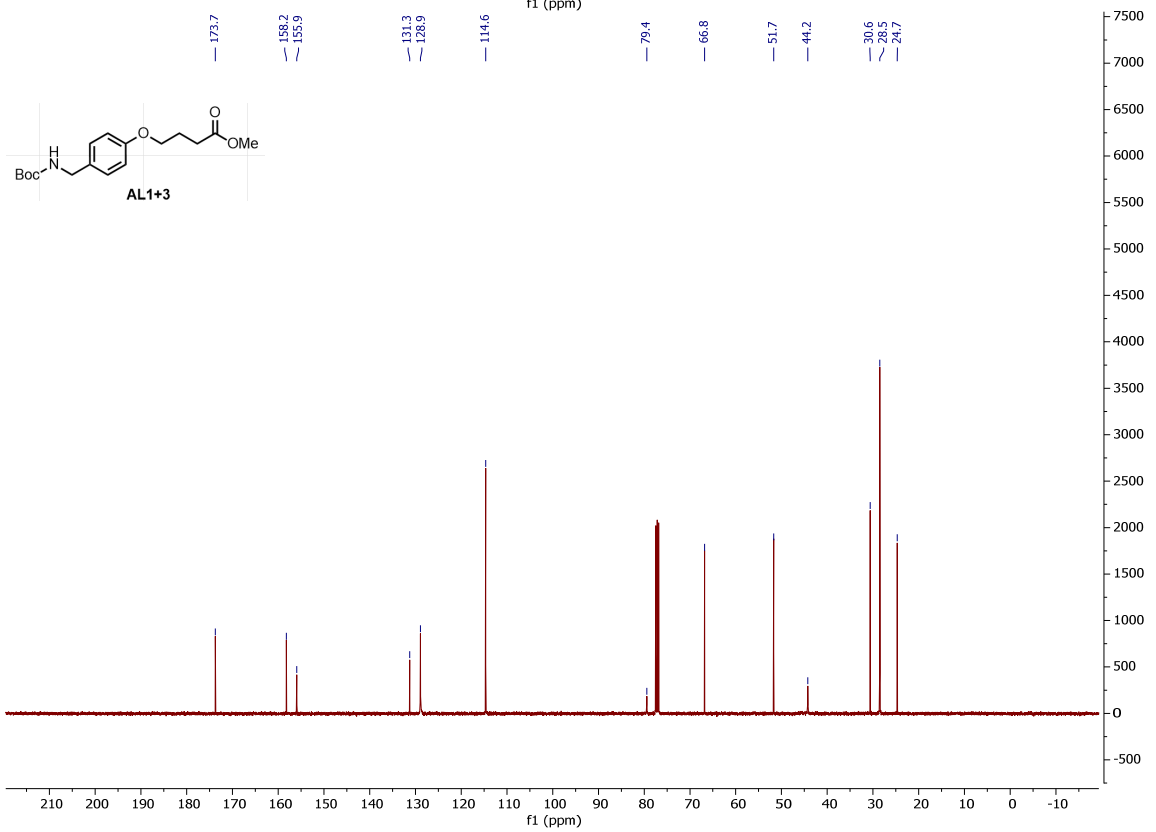
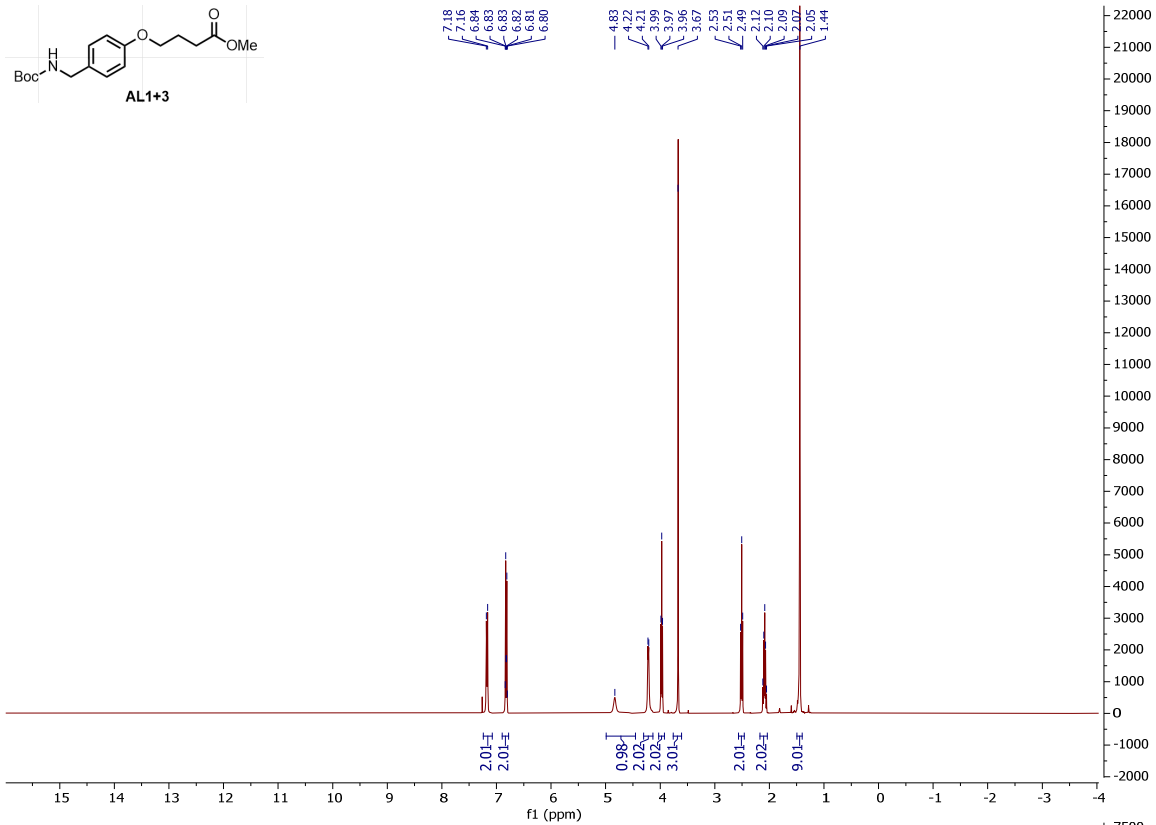


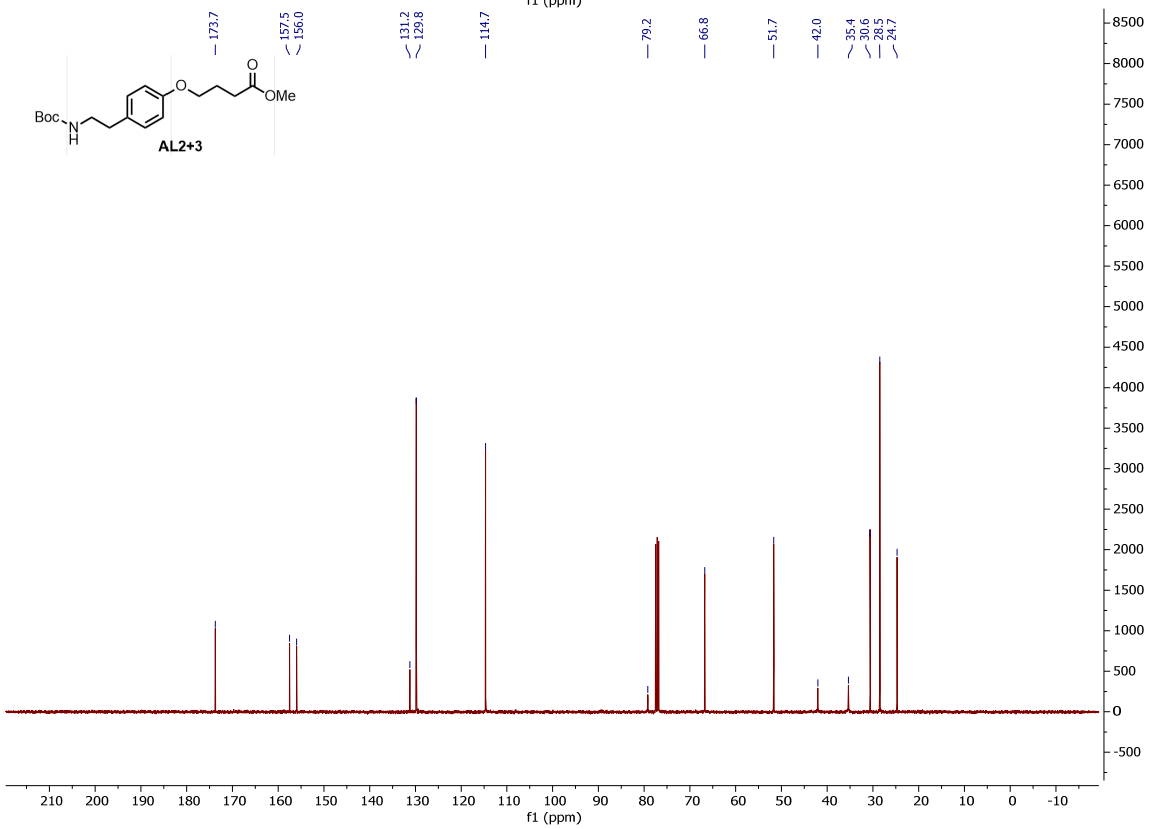
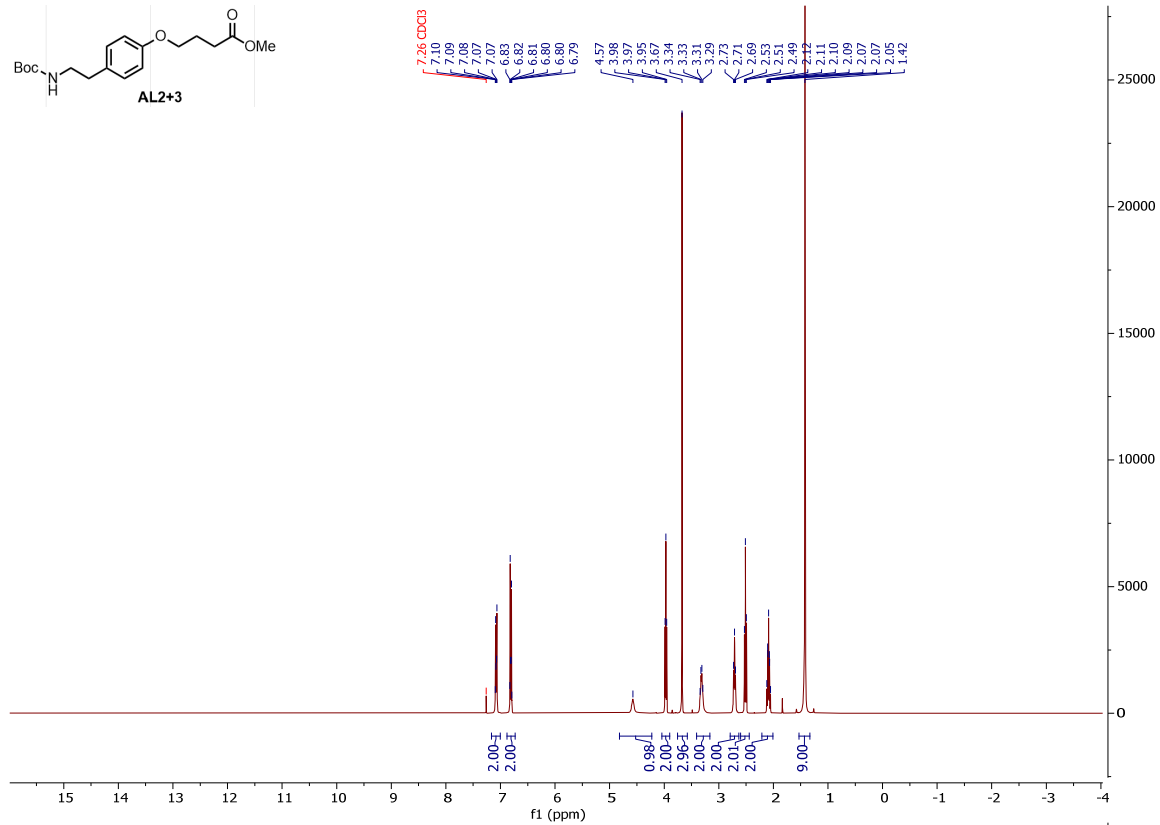
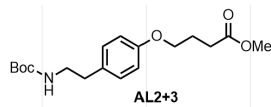


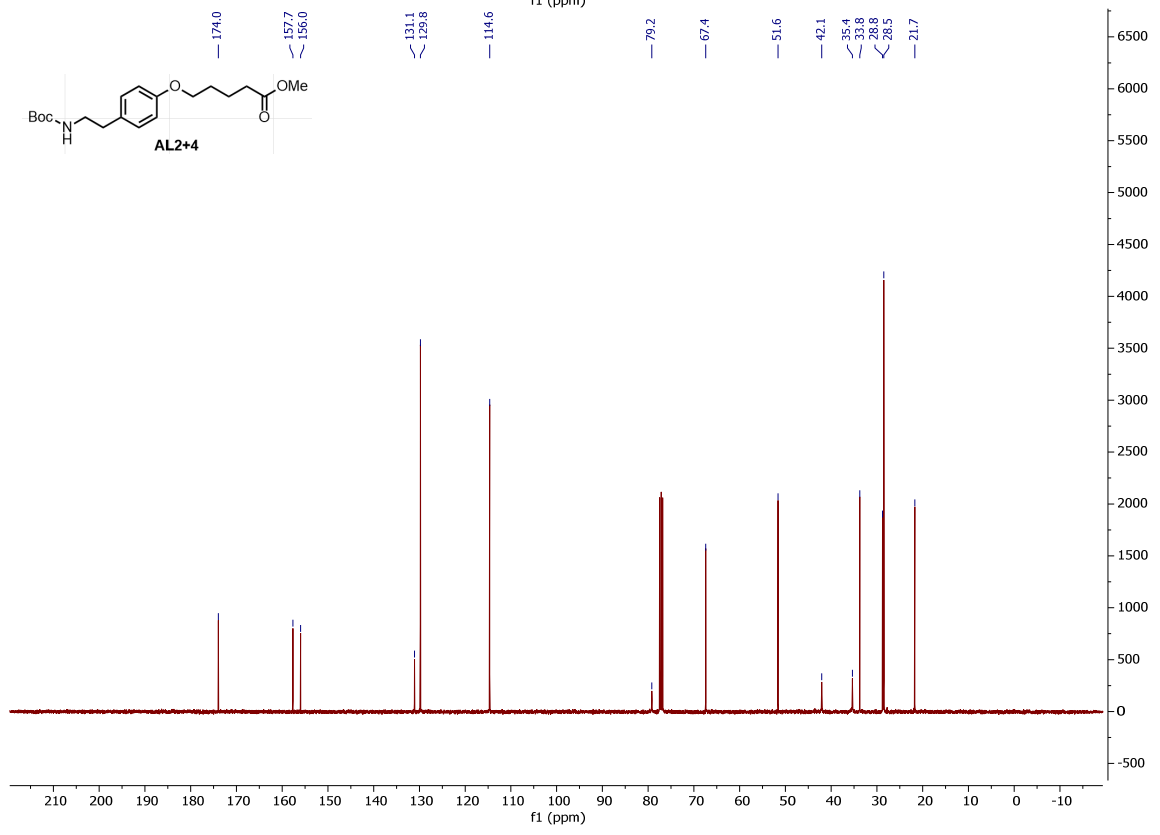
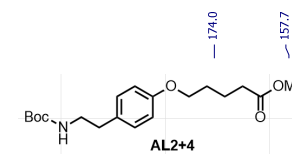
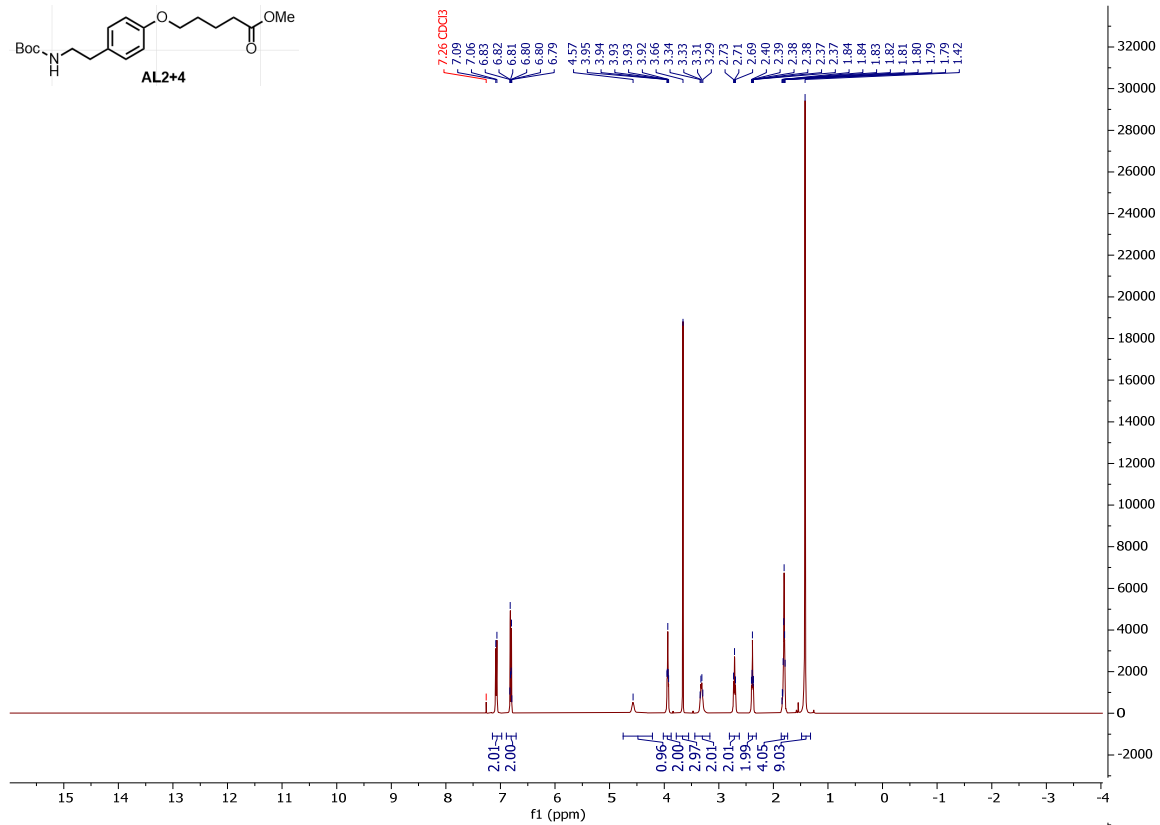
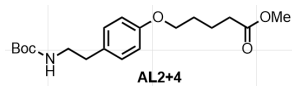


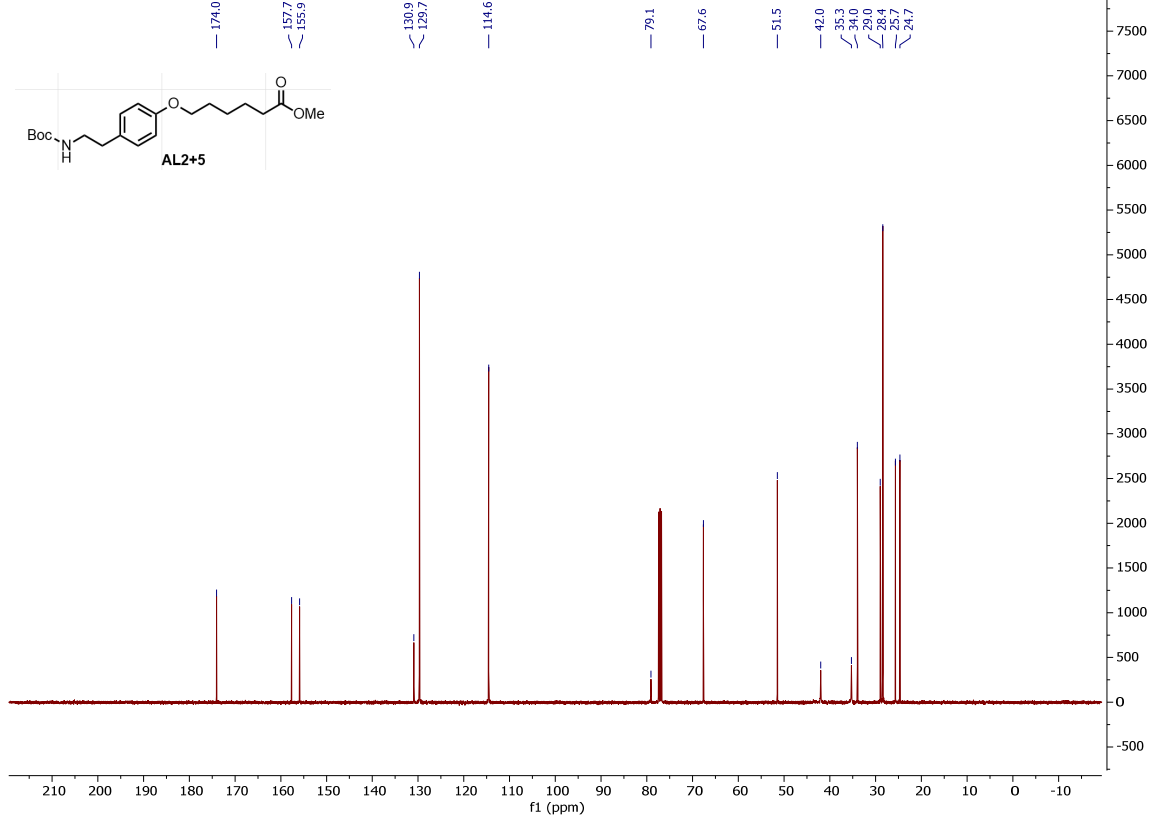
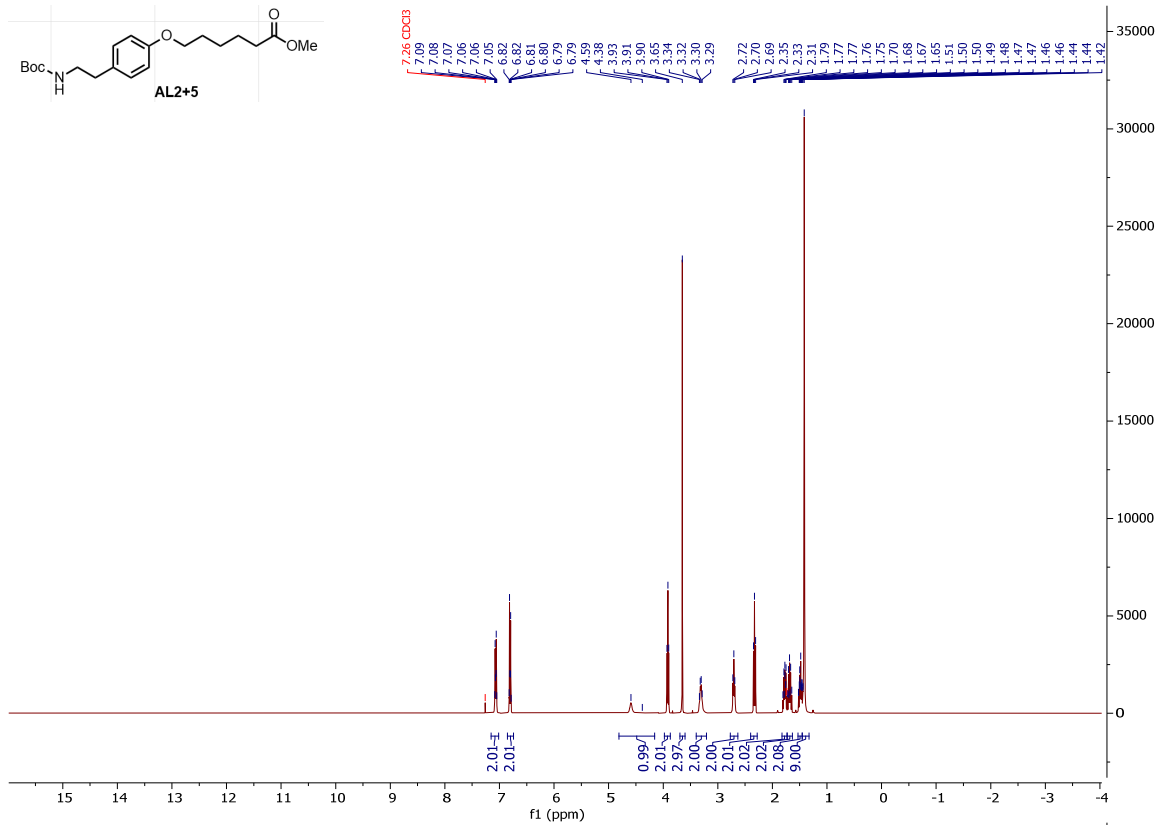


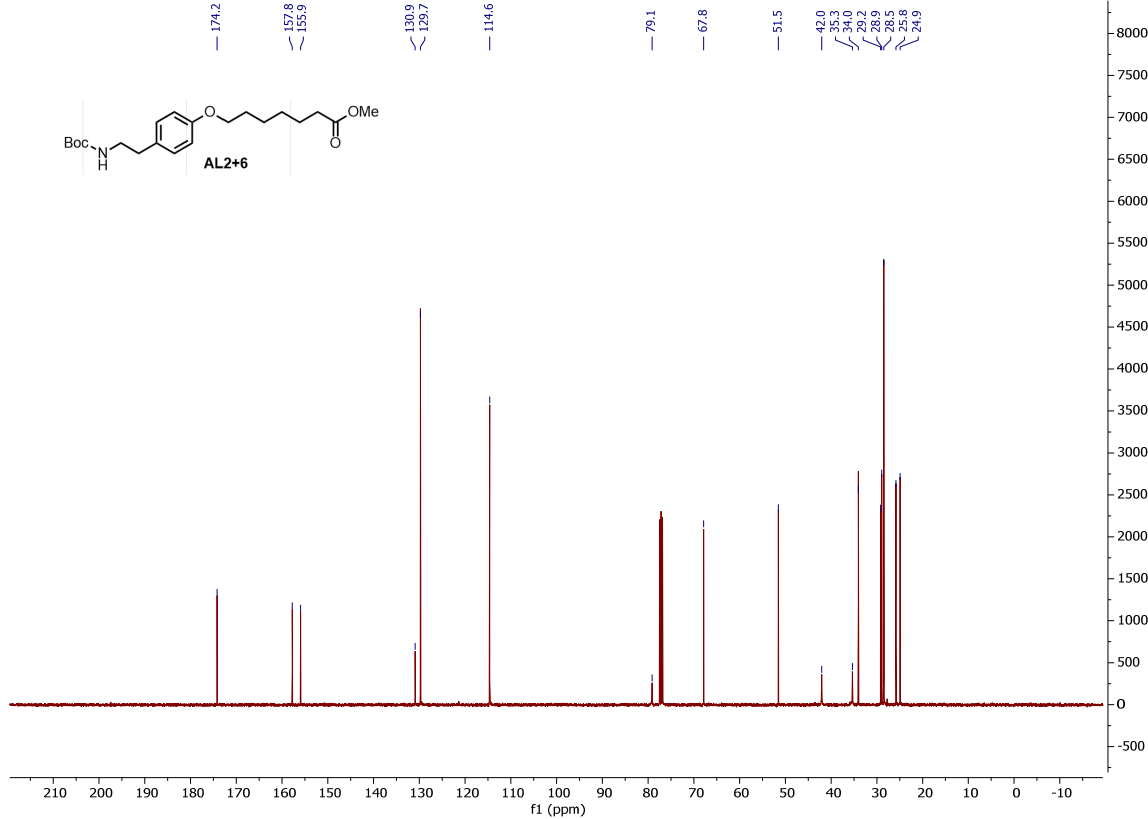
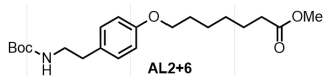
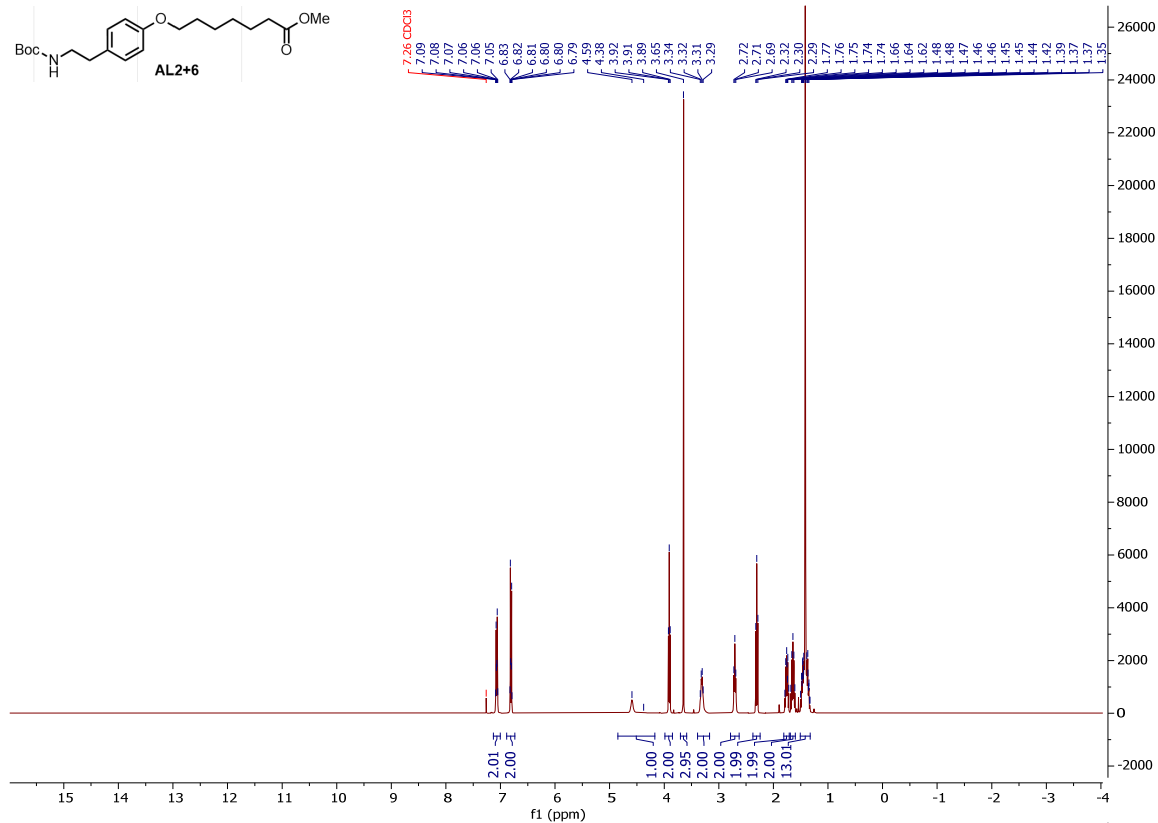
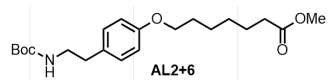


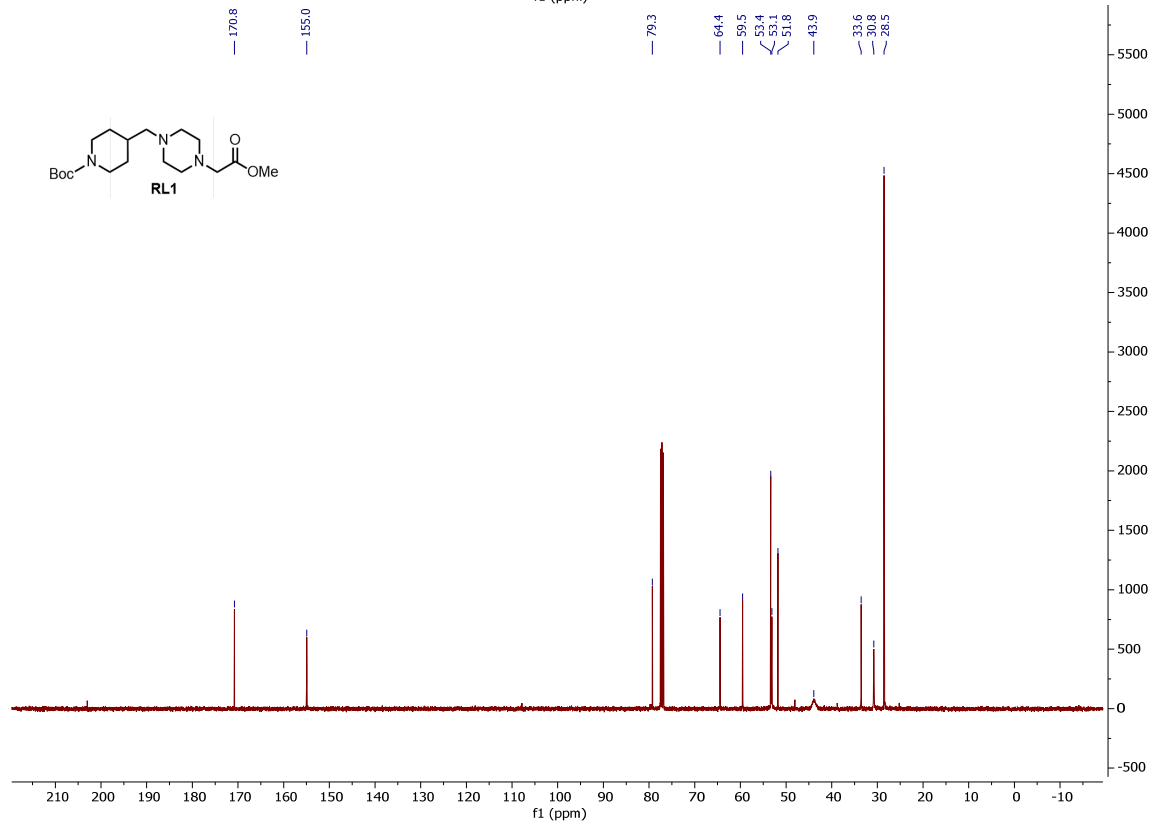
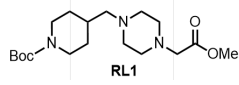
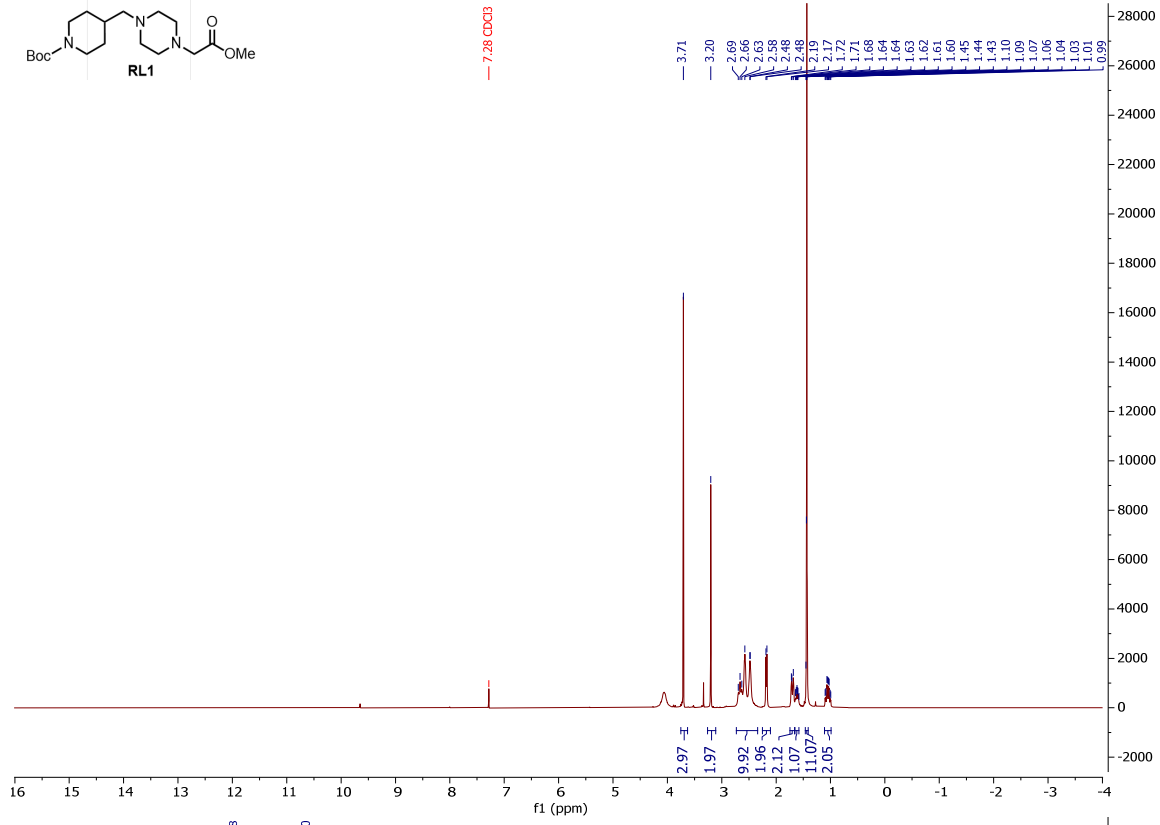
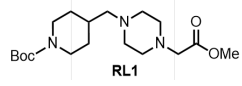




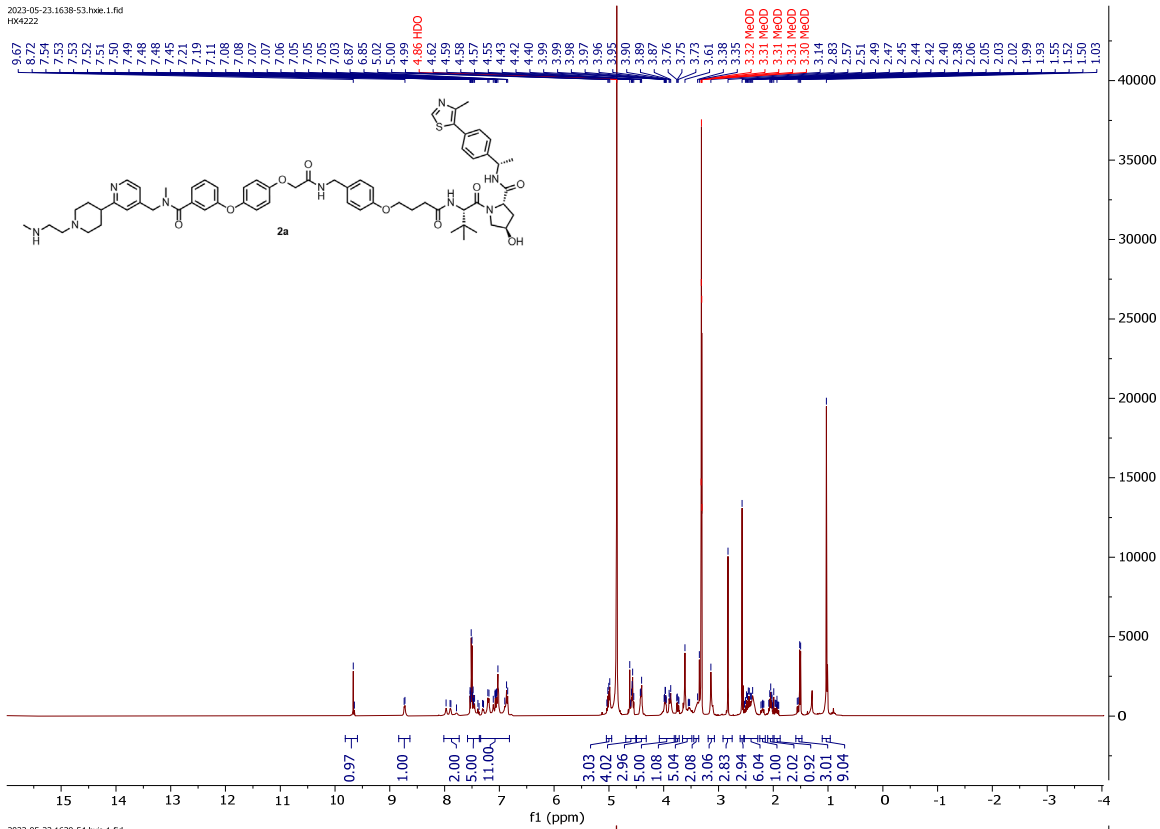




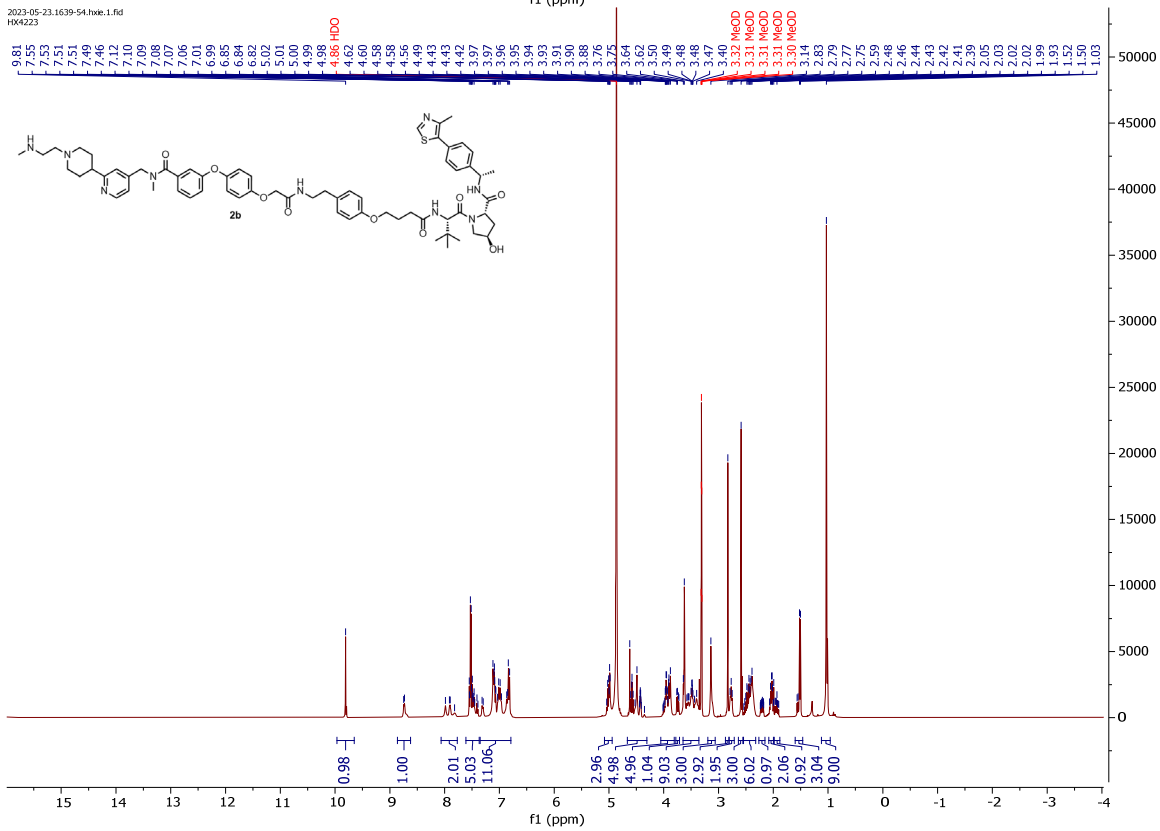




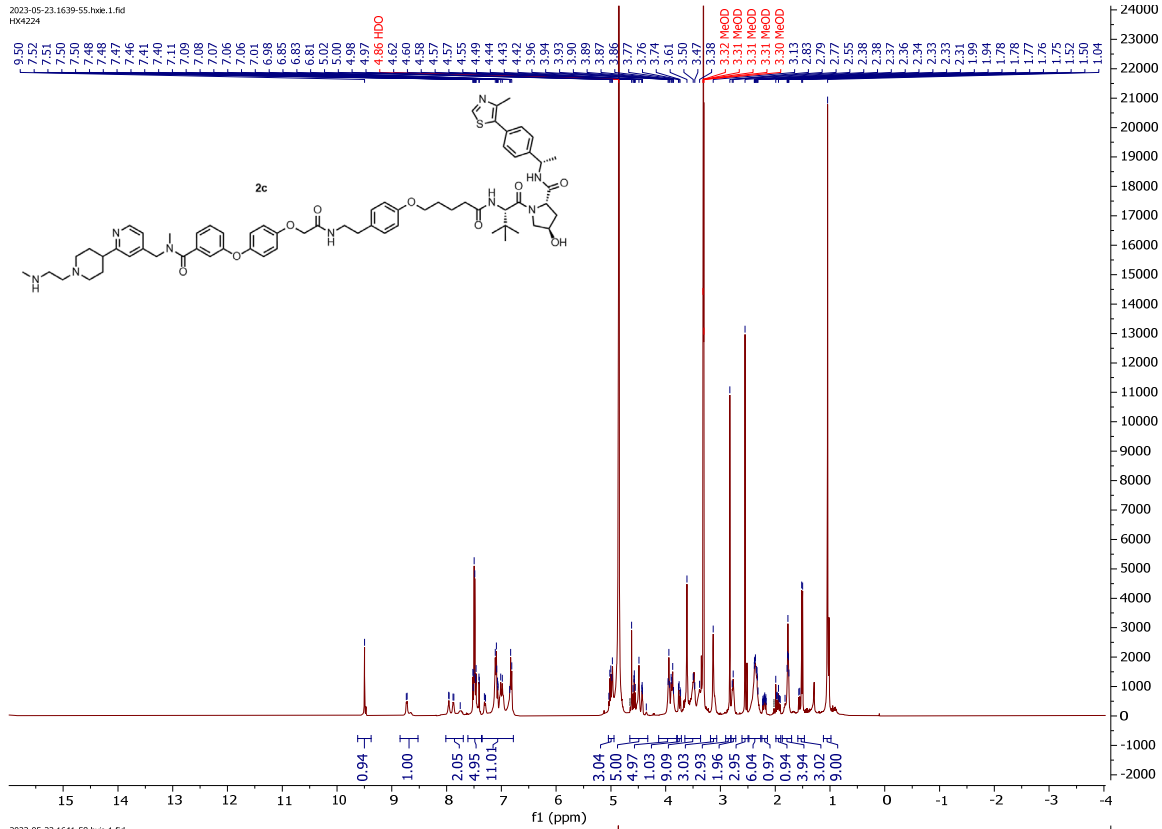
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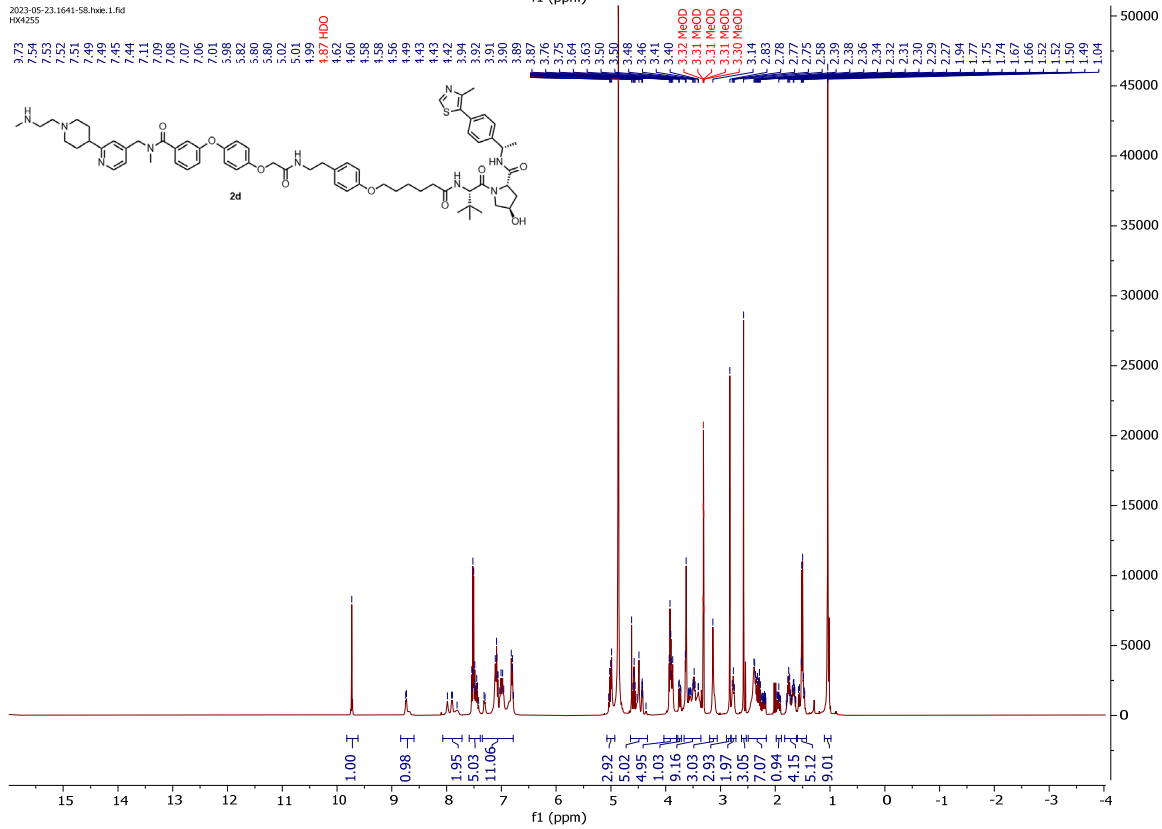
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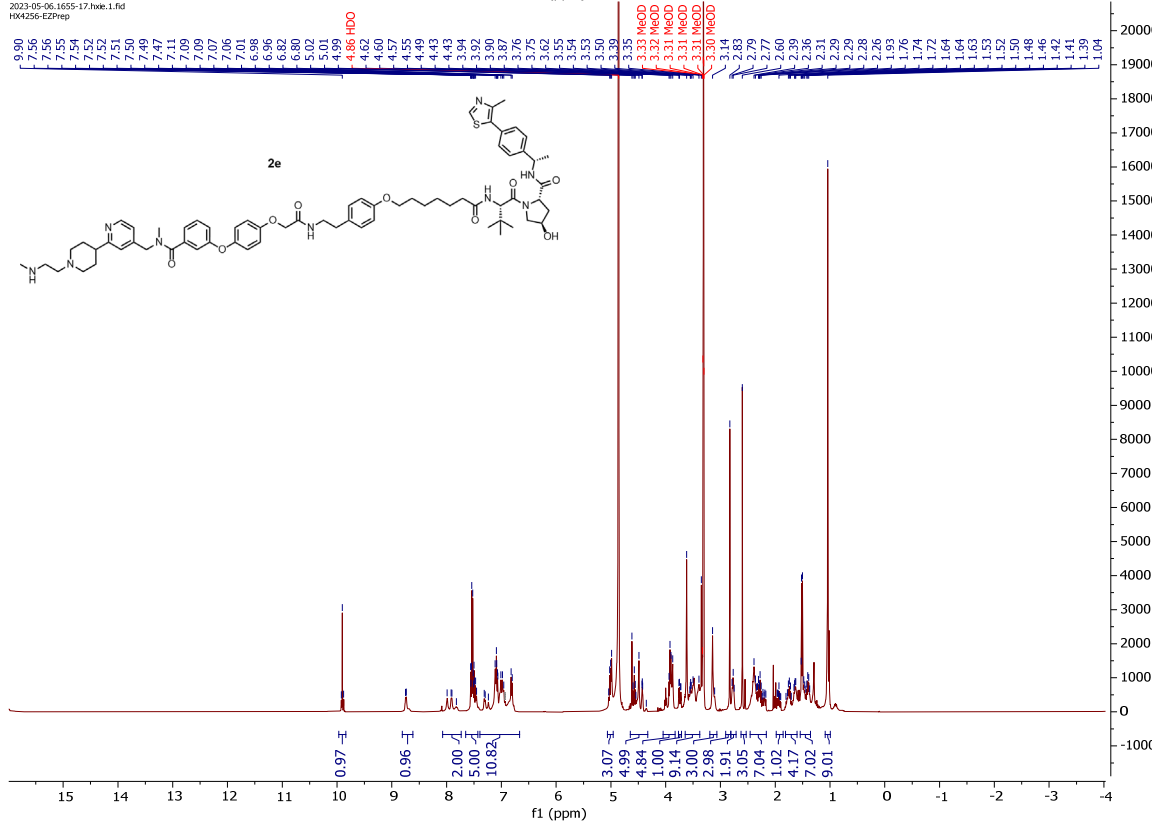
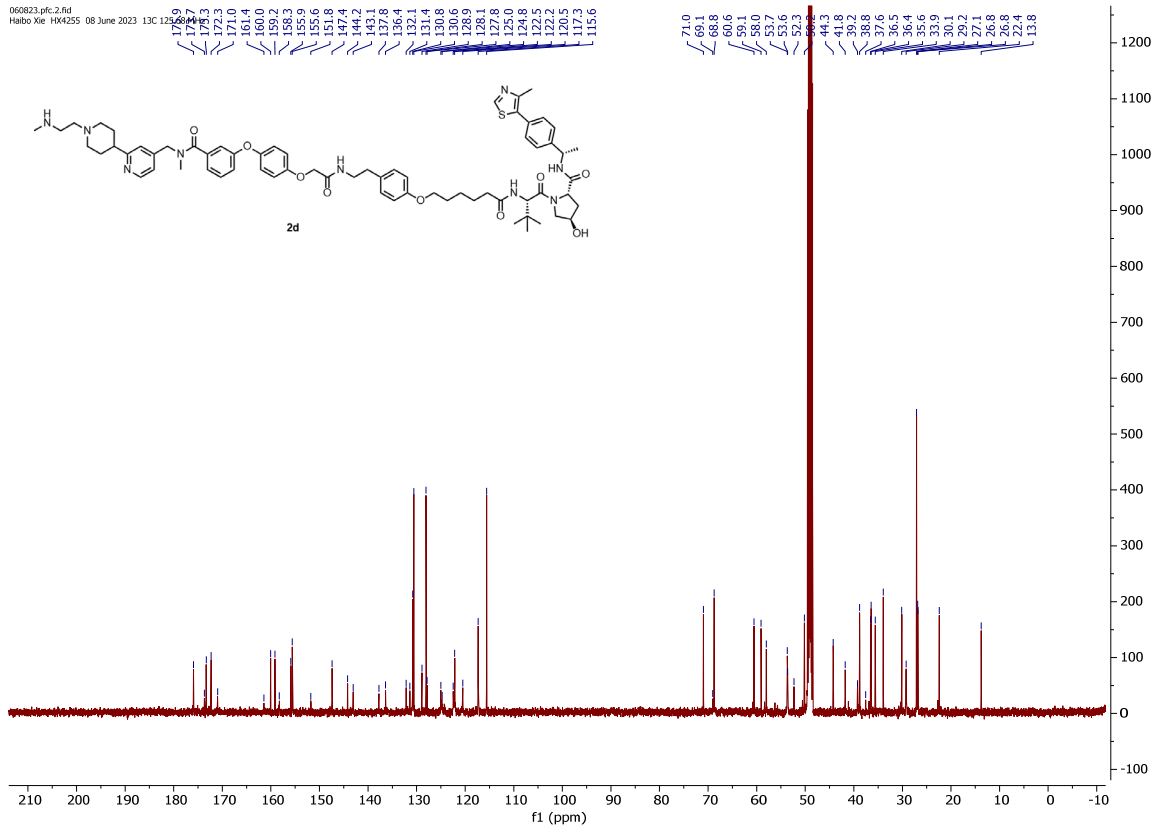
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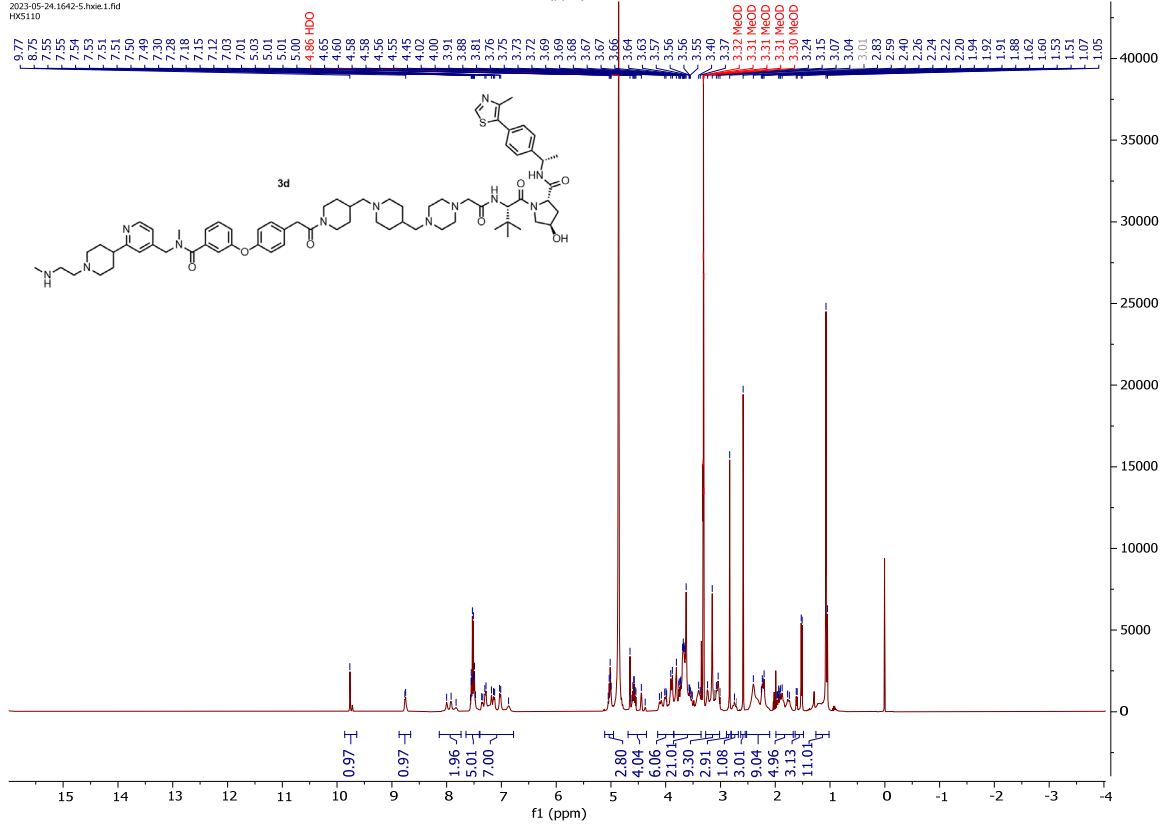
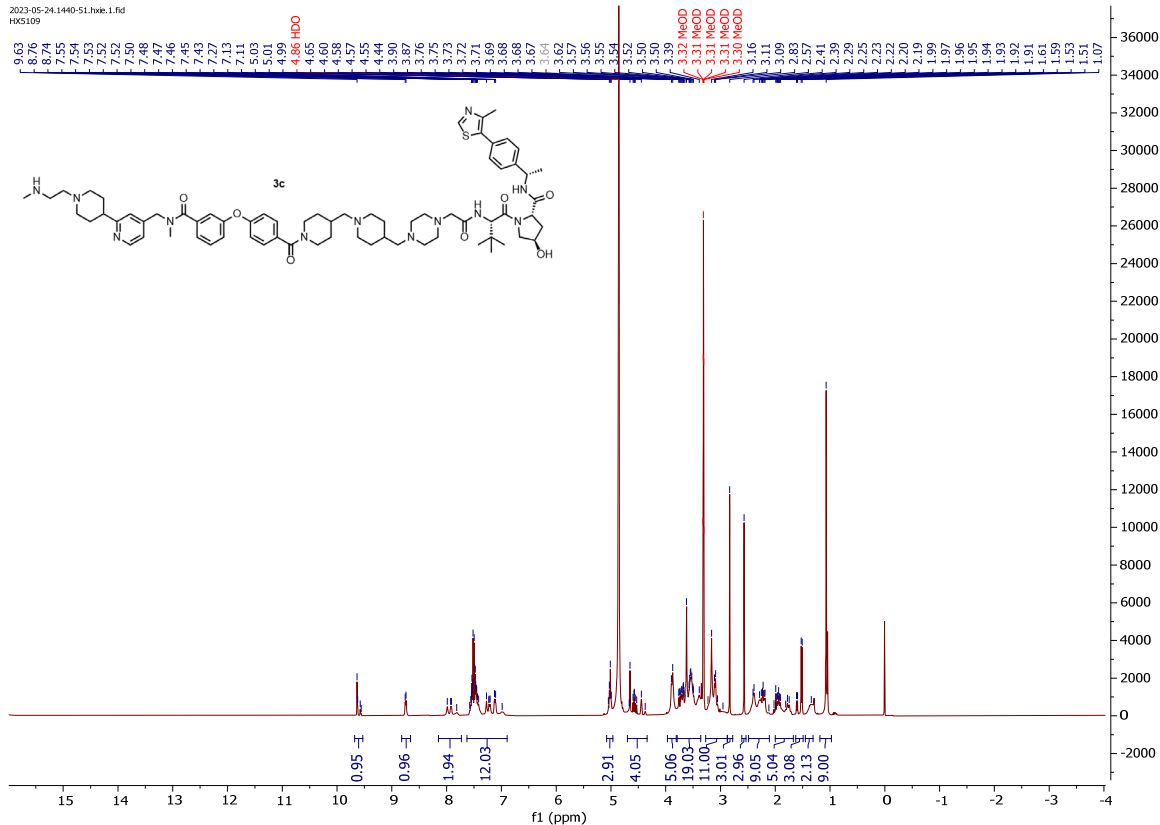


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