Supporting Information

A second generation synthesis of the cruentaren A core structure based on oxetane and oxirane opening reactions

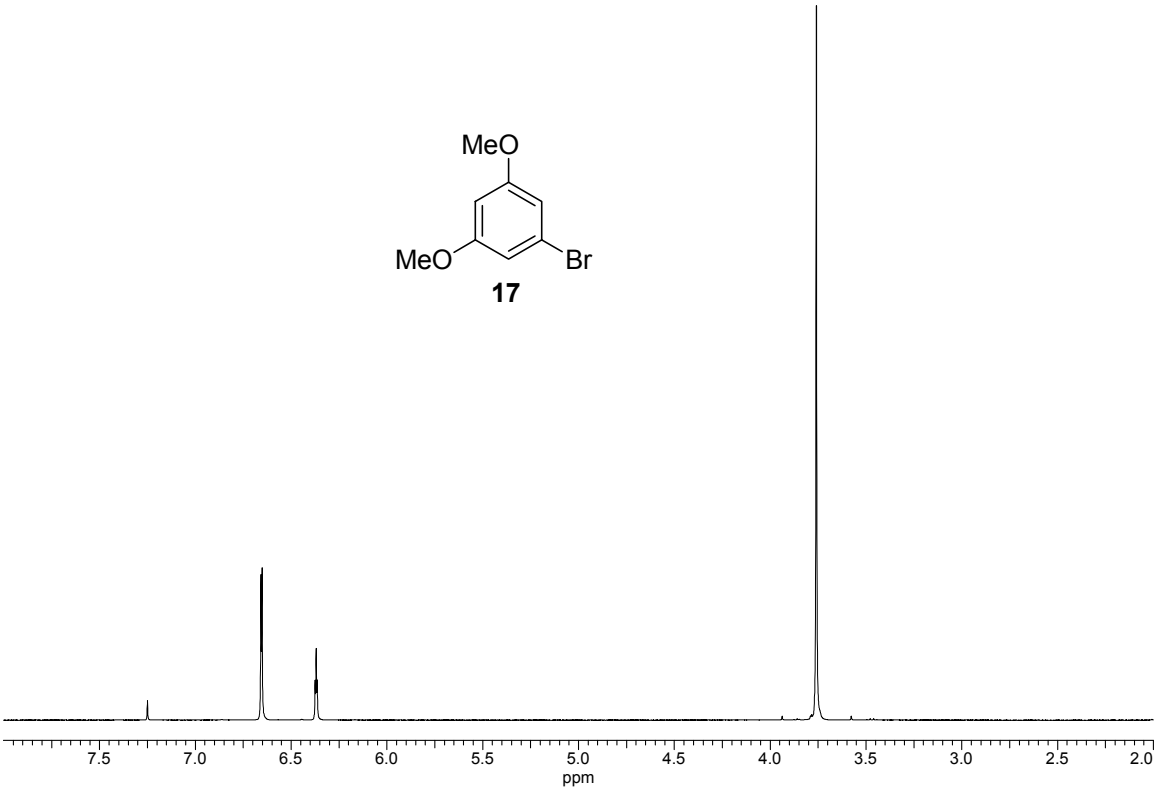
Martin E. Maier* and Jan Ritschel

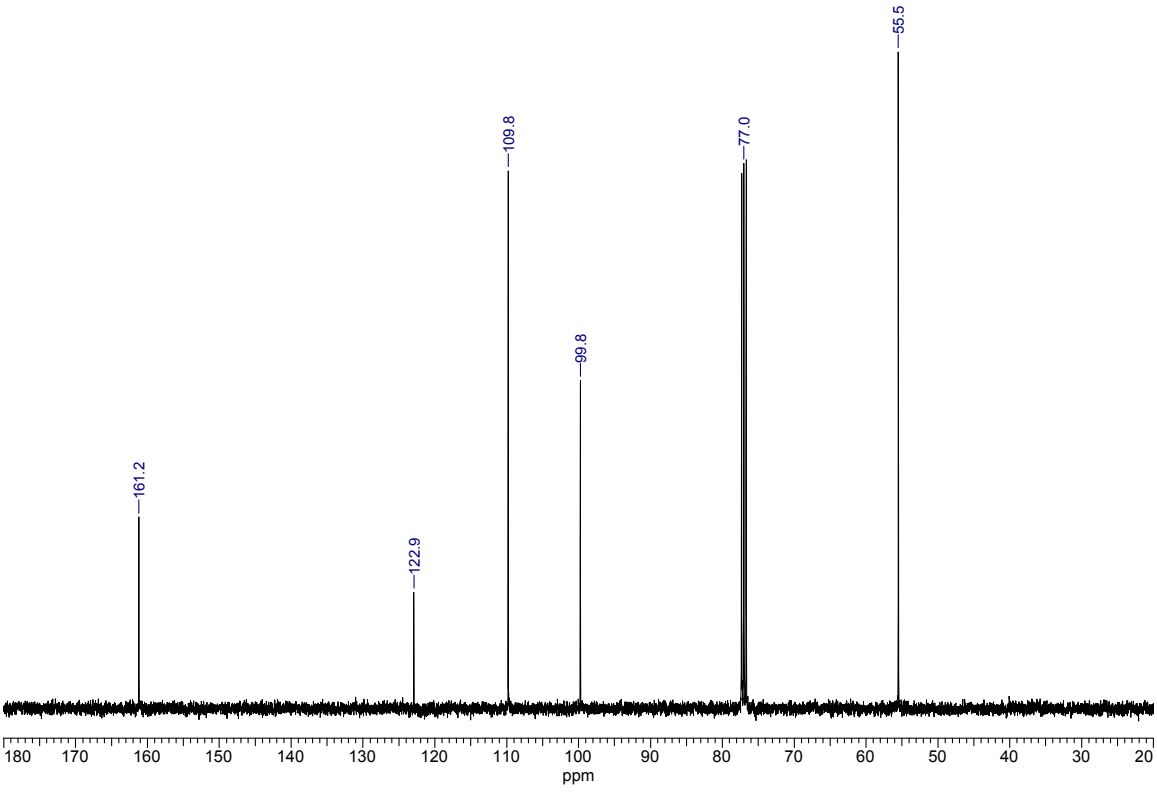
Institut für Organische Chemie, Universität Tübingen, Auf der Morgenstelle 18, 72076 Tübingen, Germany
E-mail: martin.e.maier@uni-tuebingen.de

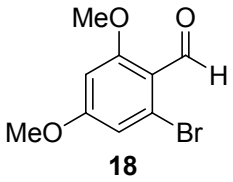
Dedicated to Prof. Johann Mulzer on the occasion of his 65th birthday

Contents

^{1}H- and ^{13}C-NMR spectra of important intermediates S2

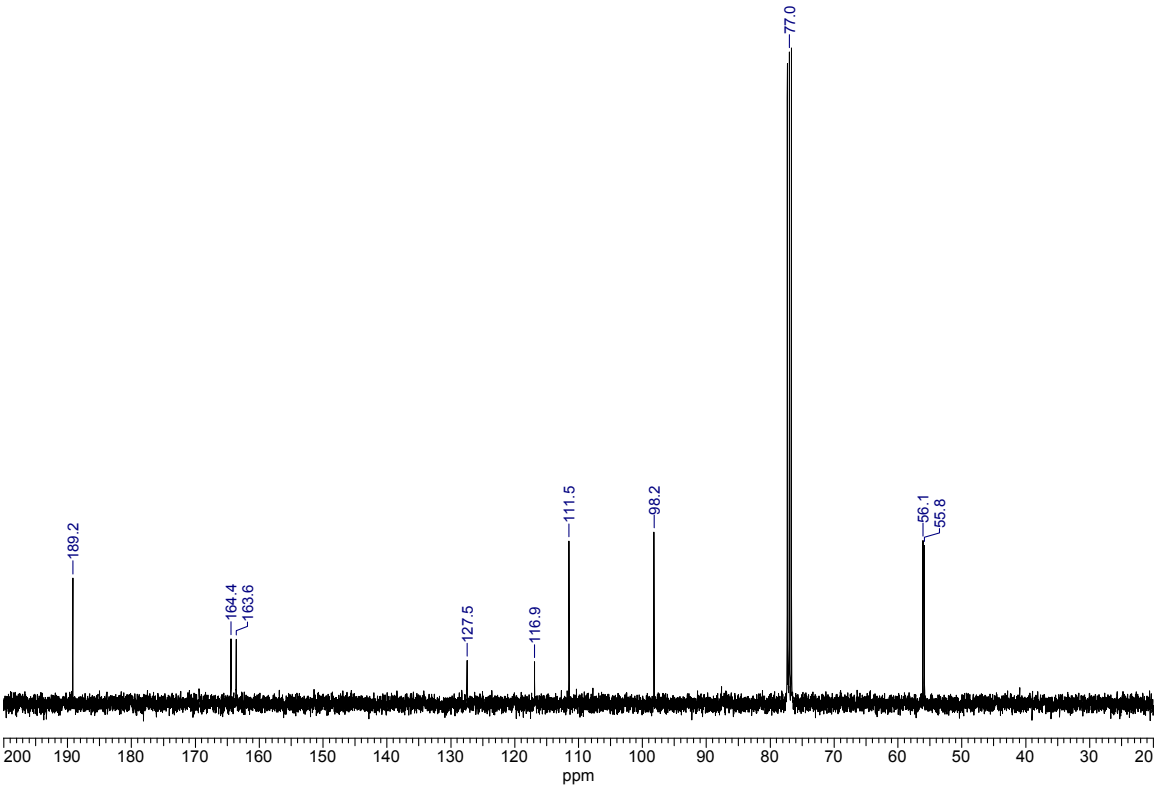

MeO
MeO
Br
17
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7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
ppm

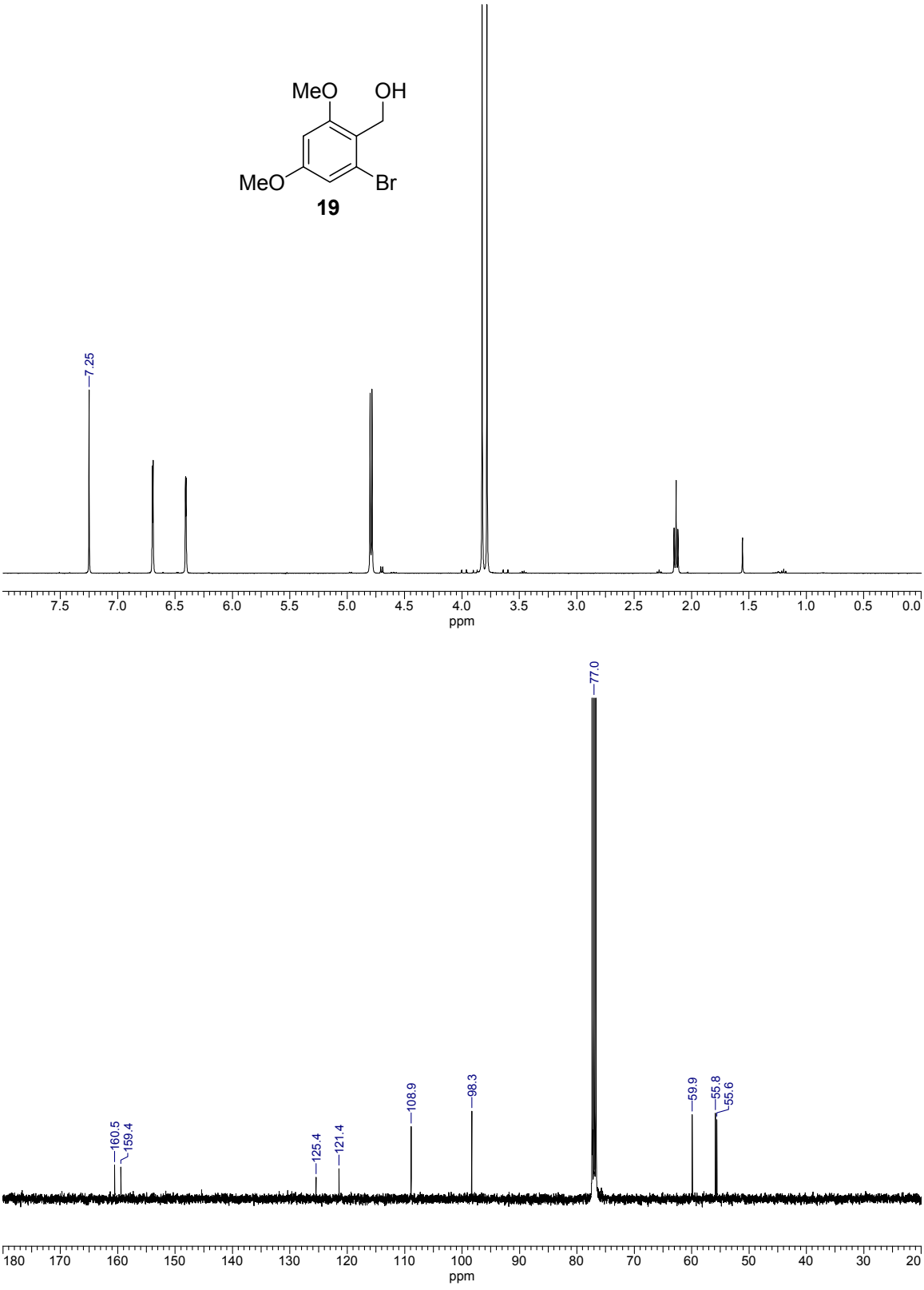

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122.9
109.8
99.8
77.0
55.5
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170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

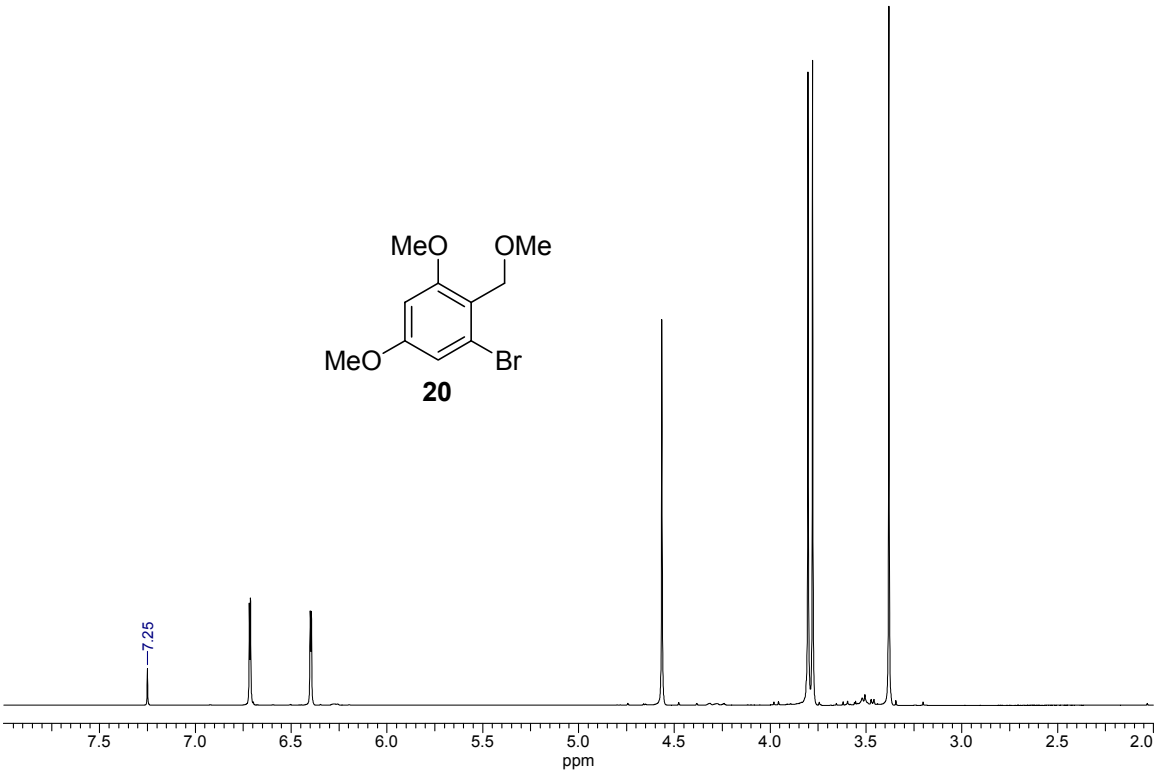

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O
H
MeO
Br

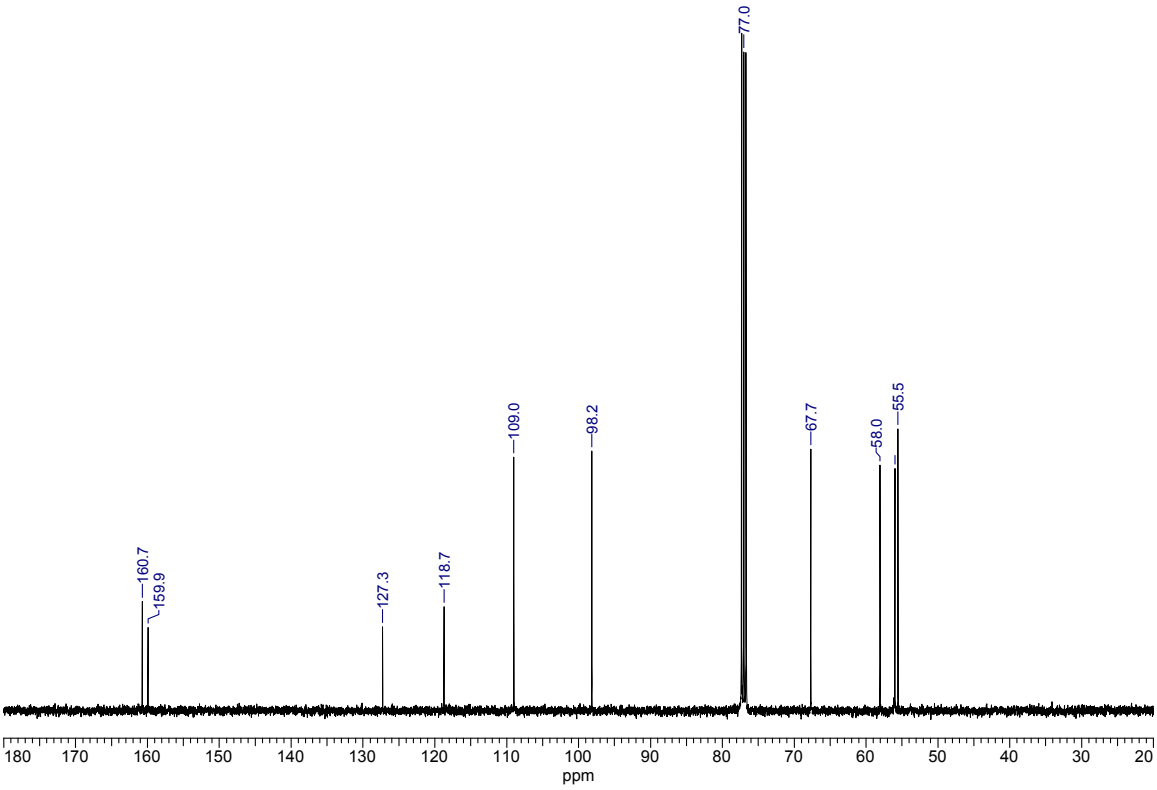
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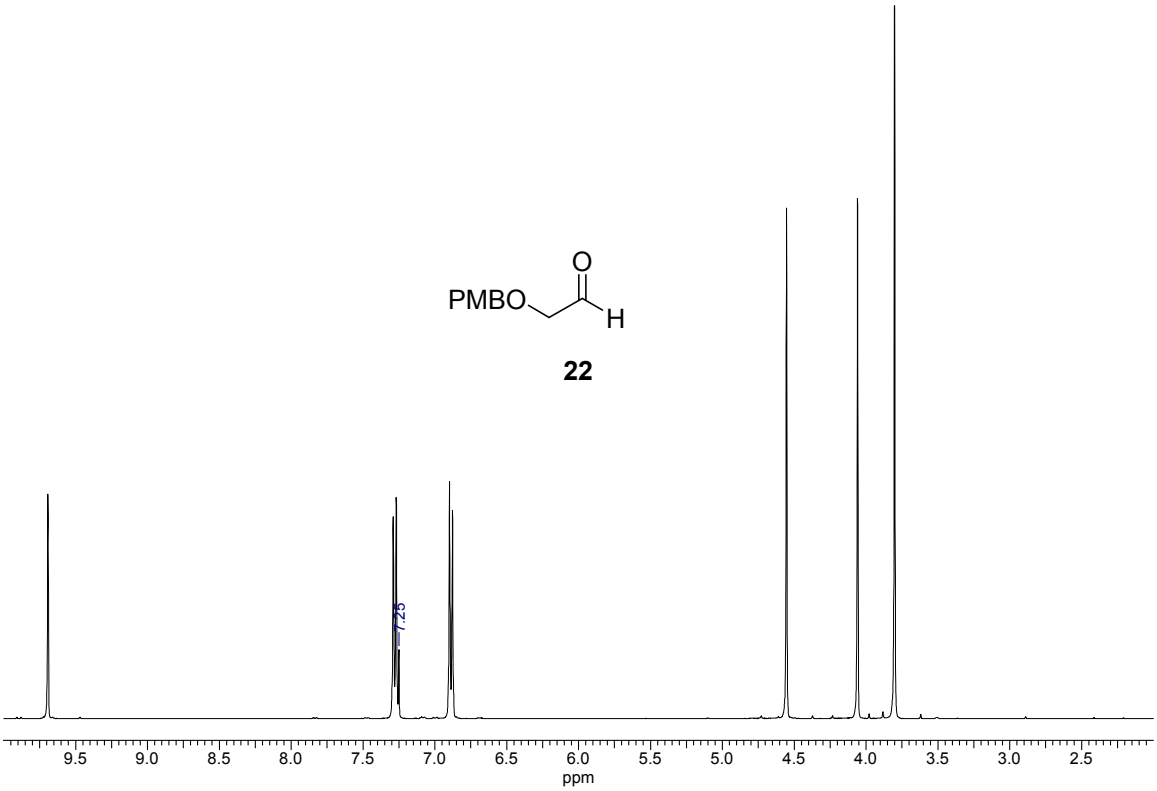
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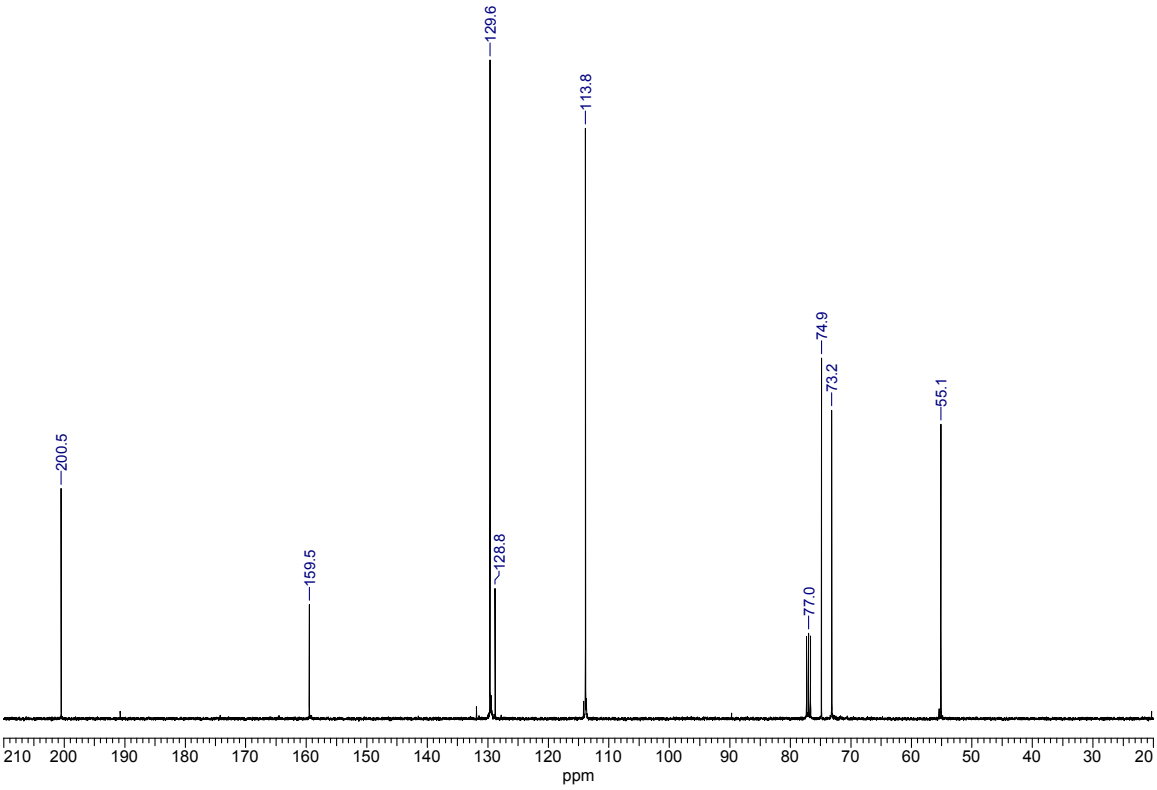

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164.4
163.6
127.5
116.9
111.5
98.2
77.0
56.1
55.8
200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20
ppm

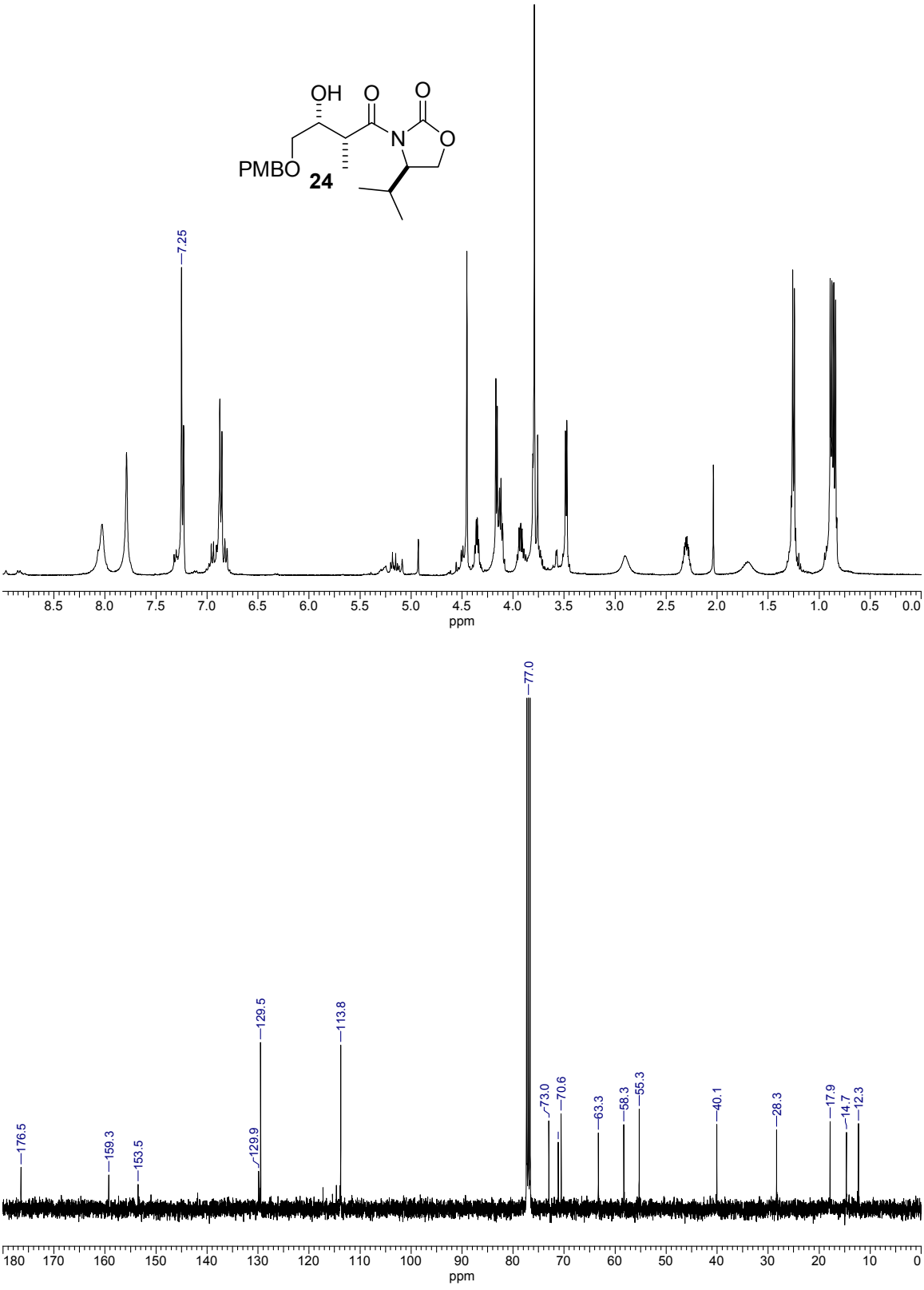

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OH
MeO
Br
19
7.25
7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
ppm
77.0
160.5
159.4
125.4
121.4
108.9
98.3
59.9
55.8
55.6
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20
ppm

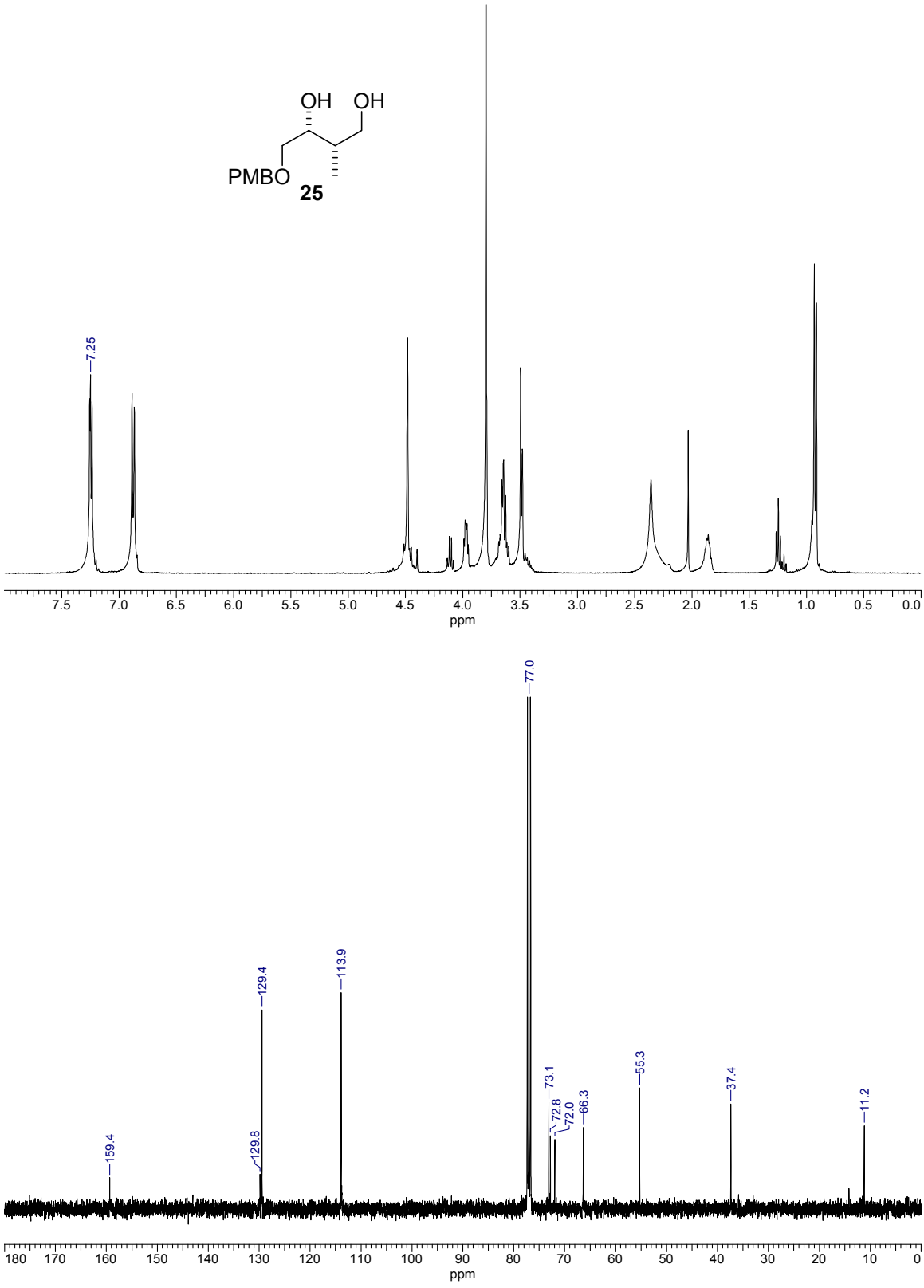

MeO
OMe
MeO
Br
20
7.25
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
ppm

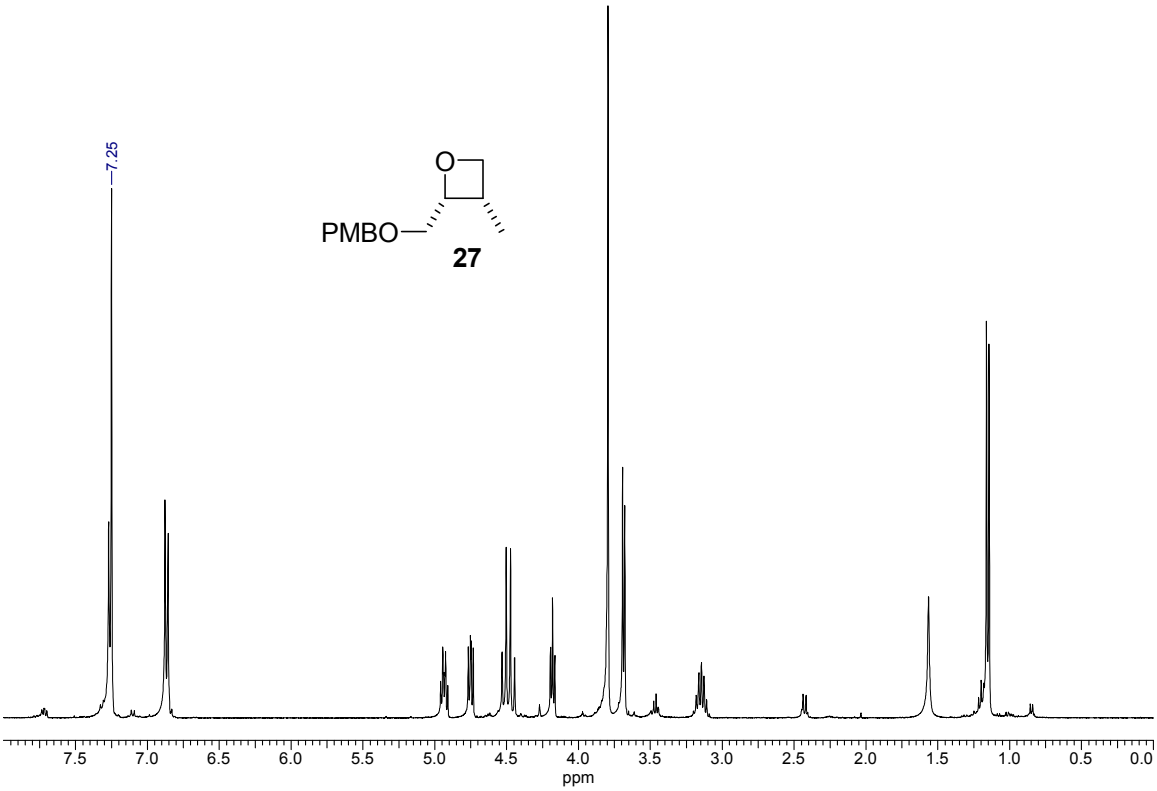

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160.7
159.9
127.3
118.7
109.0
98.2
67.7
58.0
55.5
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

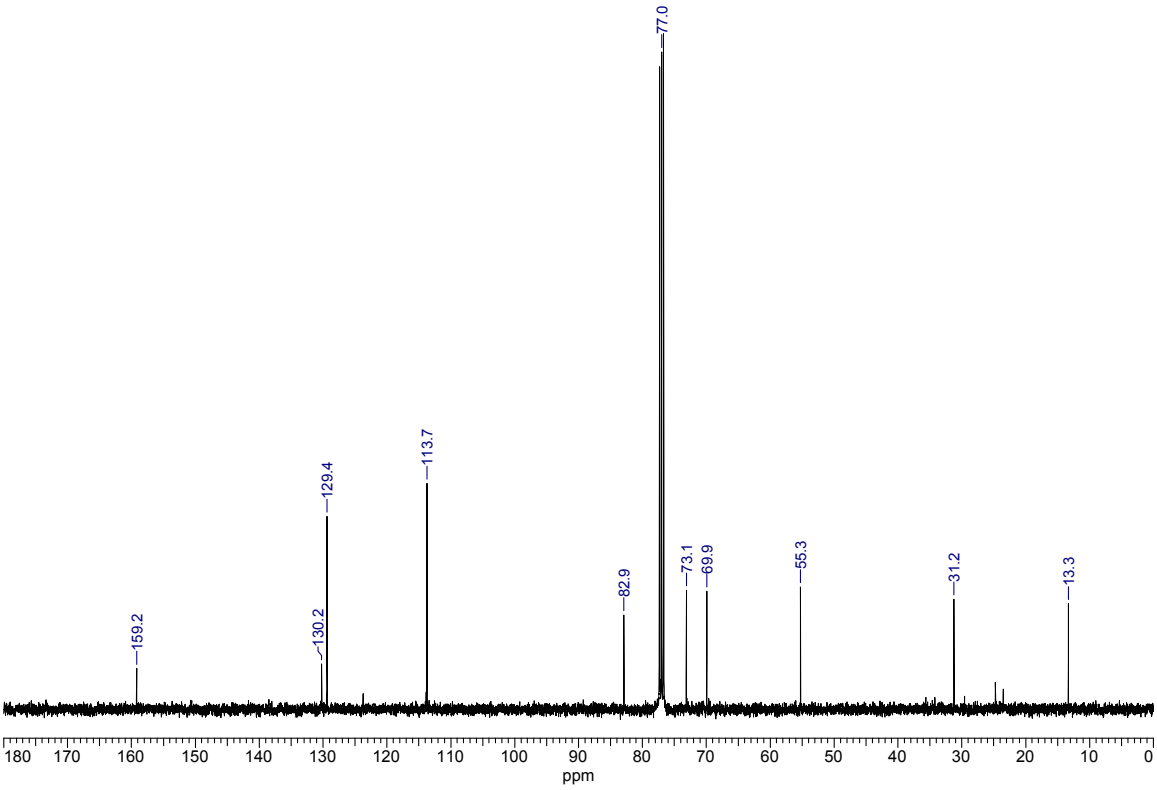

PMBO
O
H
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7.25
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
ppm

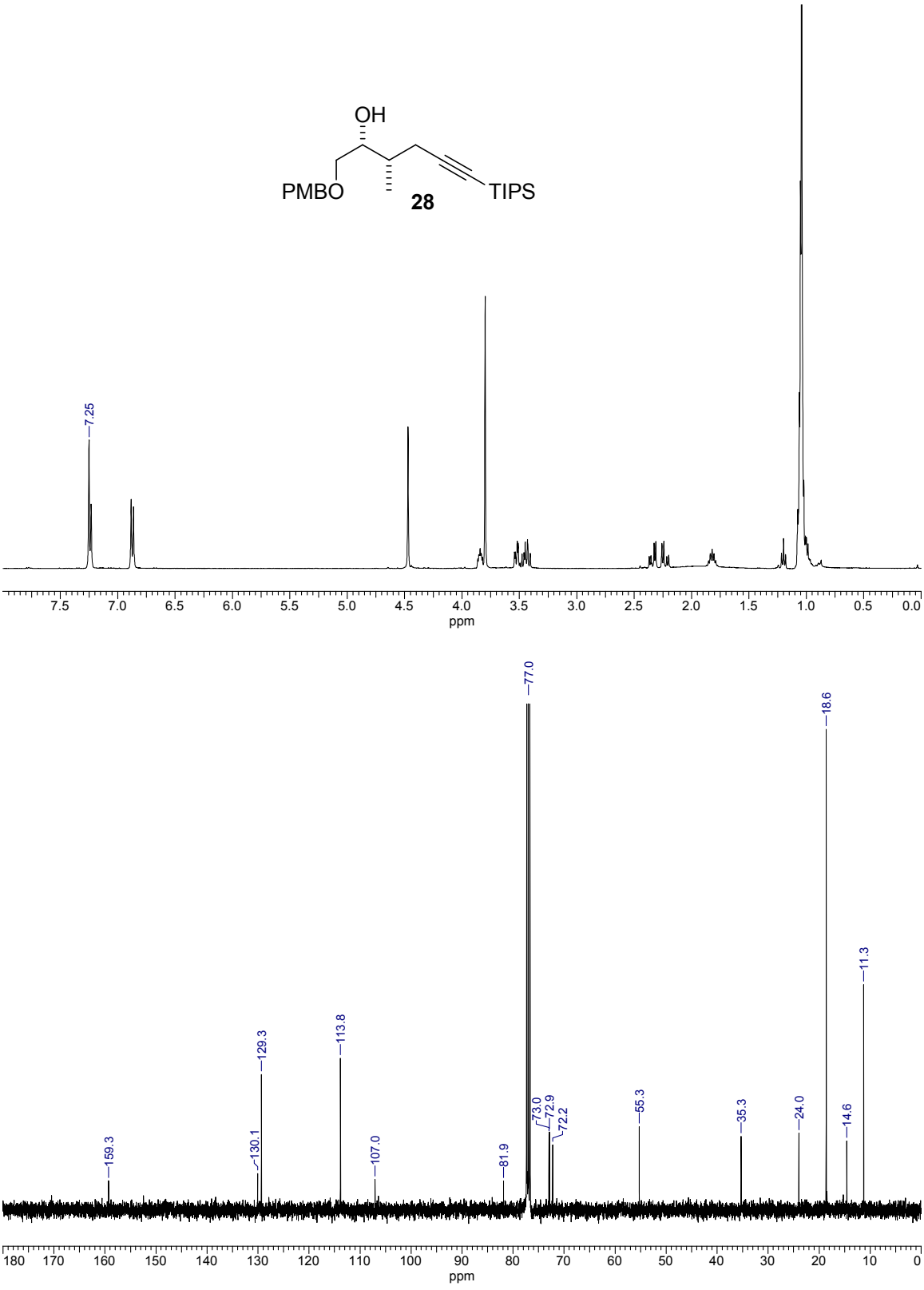

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129.6
128.8
113.8
77.0
74.9
73.2
55.1
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200
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160
150
140
130
120
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100
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80
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40
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20
ppm

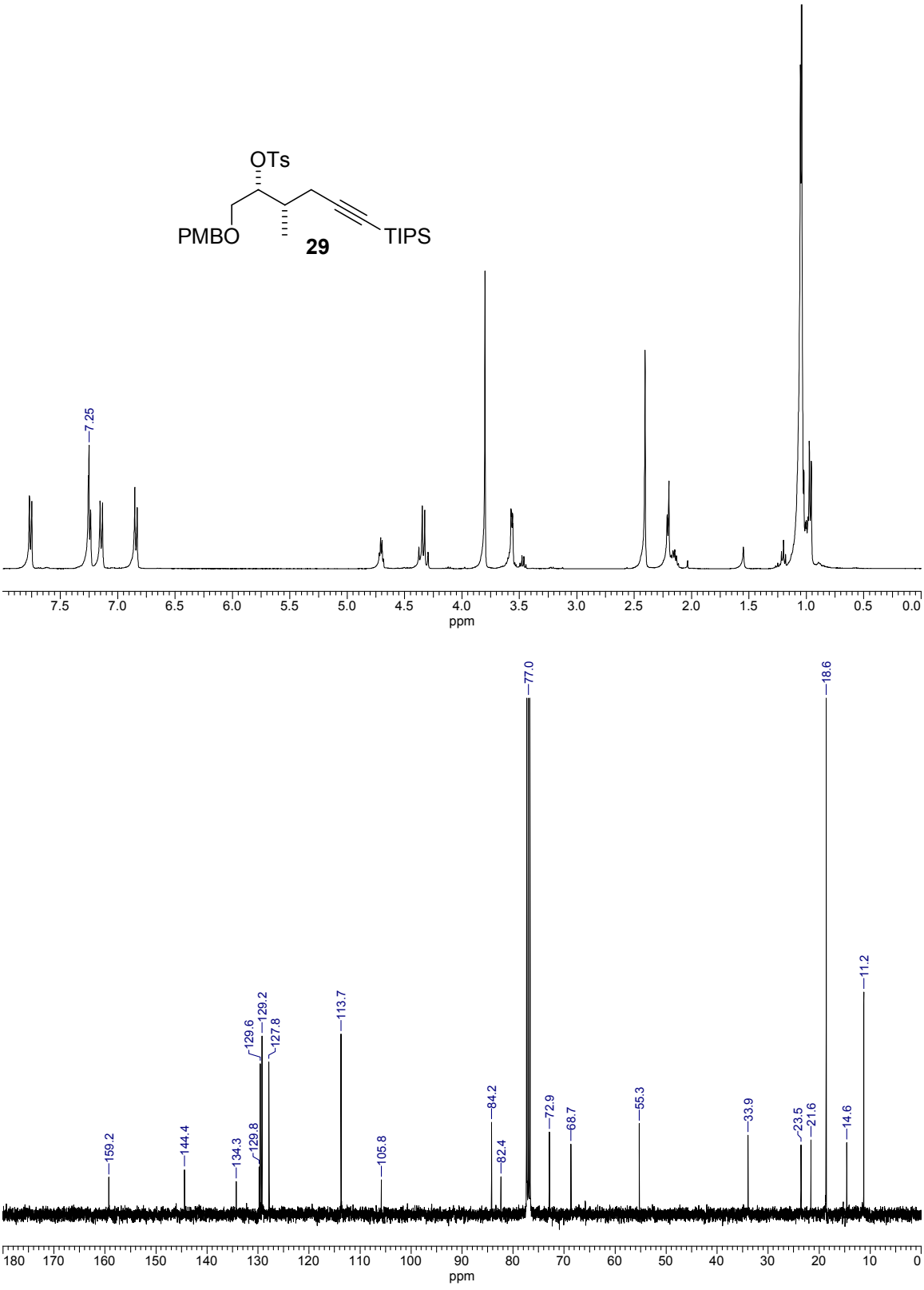

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O
N
O
PMBO
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113.8
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159.3
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58.3
55.3
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28.3
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14.7
12.3
ppm

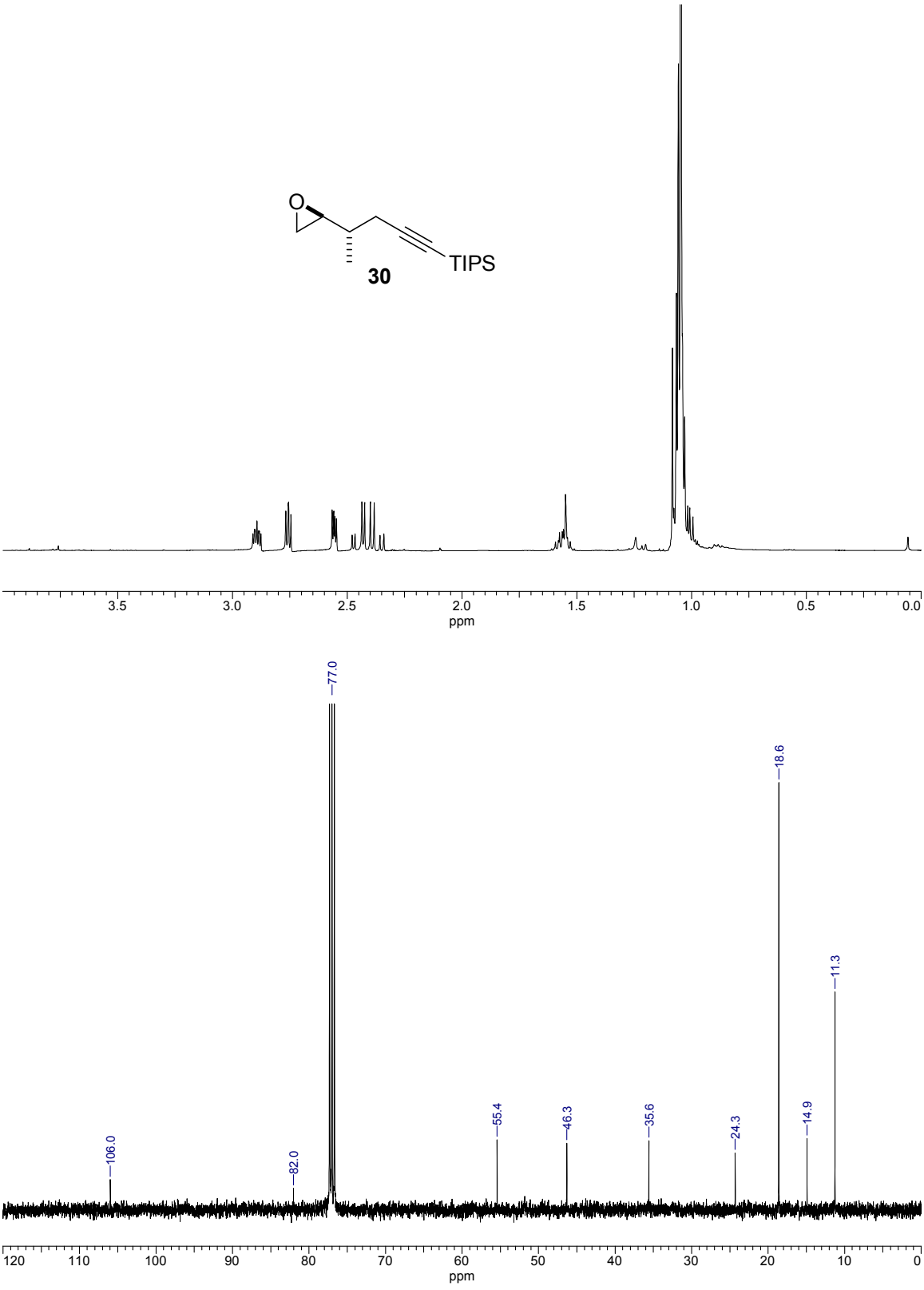

OH
OH
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ppm
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159.4
129.8
ppm

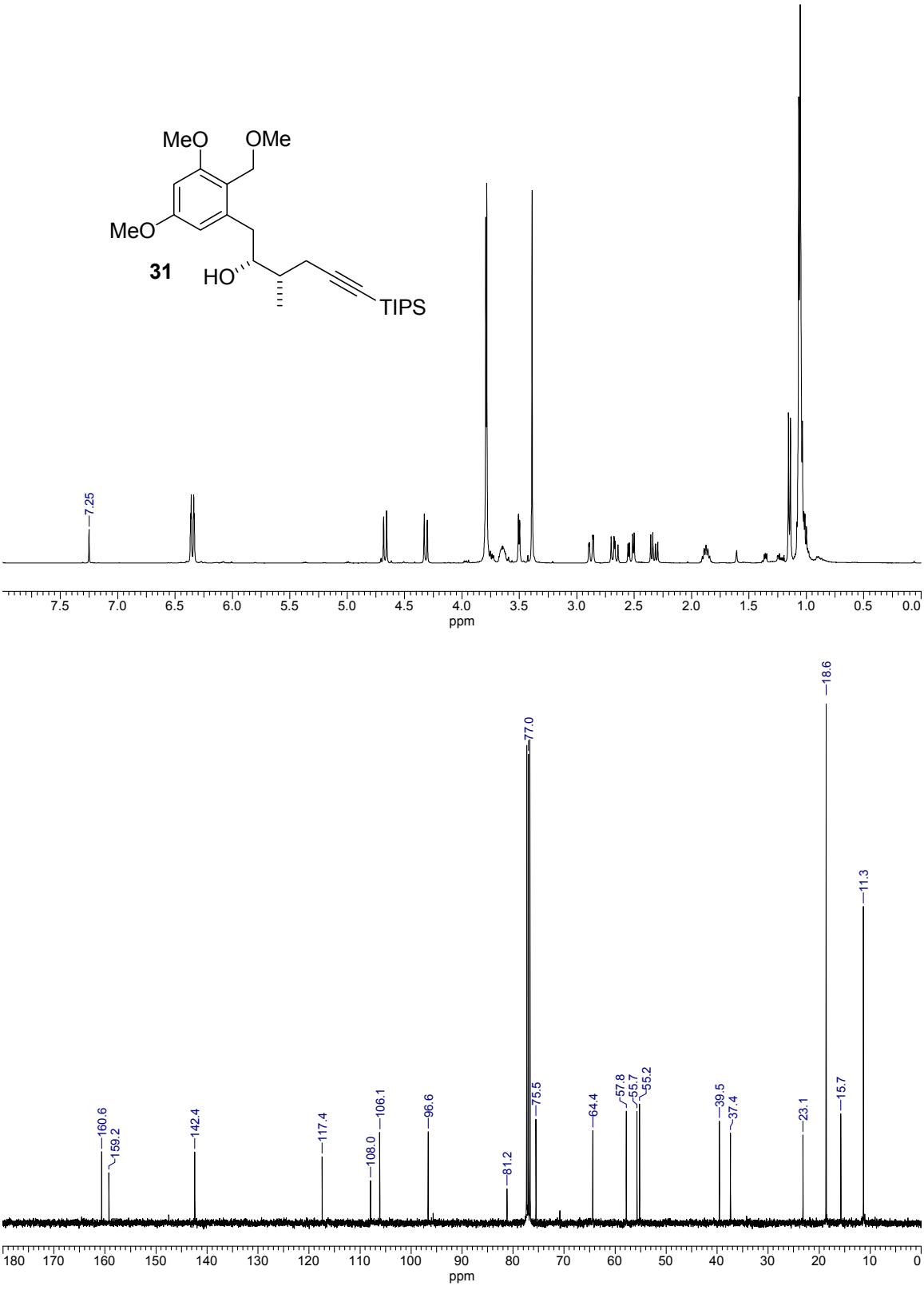

7.25
O
PMBO
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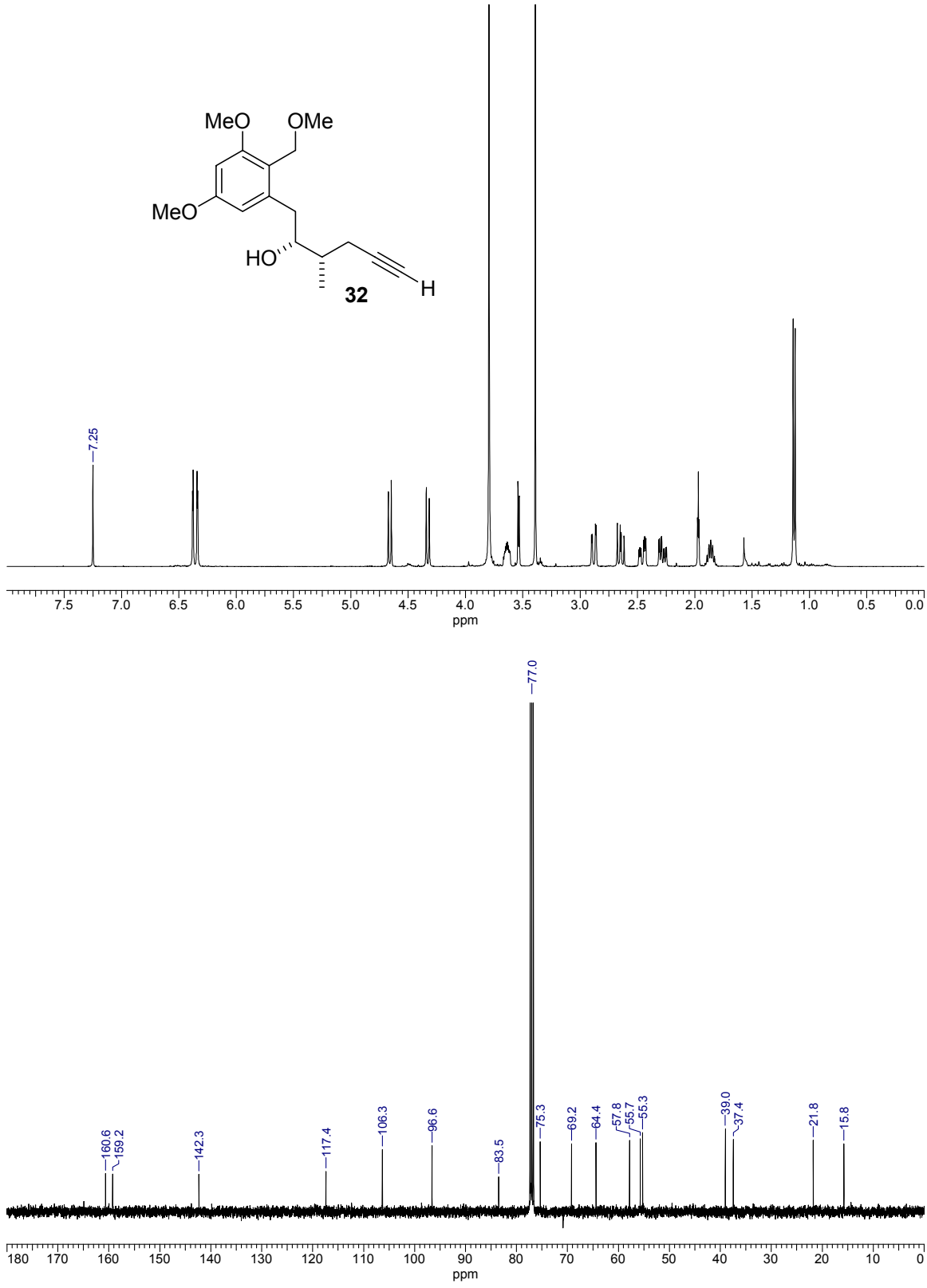

77.0
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130.2
129.4
113.7
82.9
73.1
69.9
55.3
31.2
13.3
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ppm

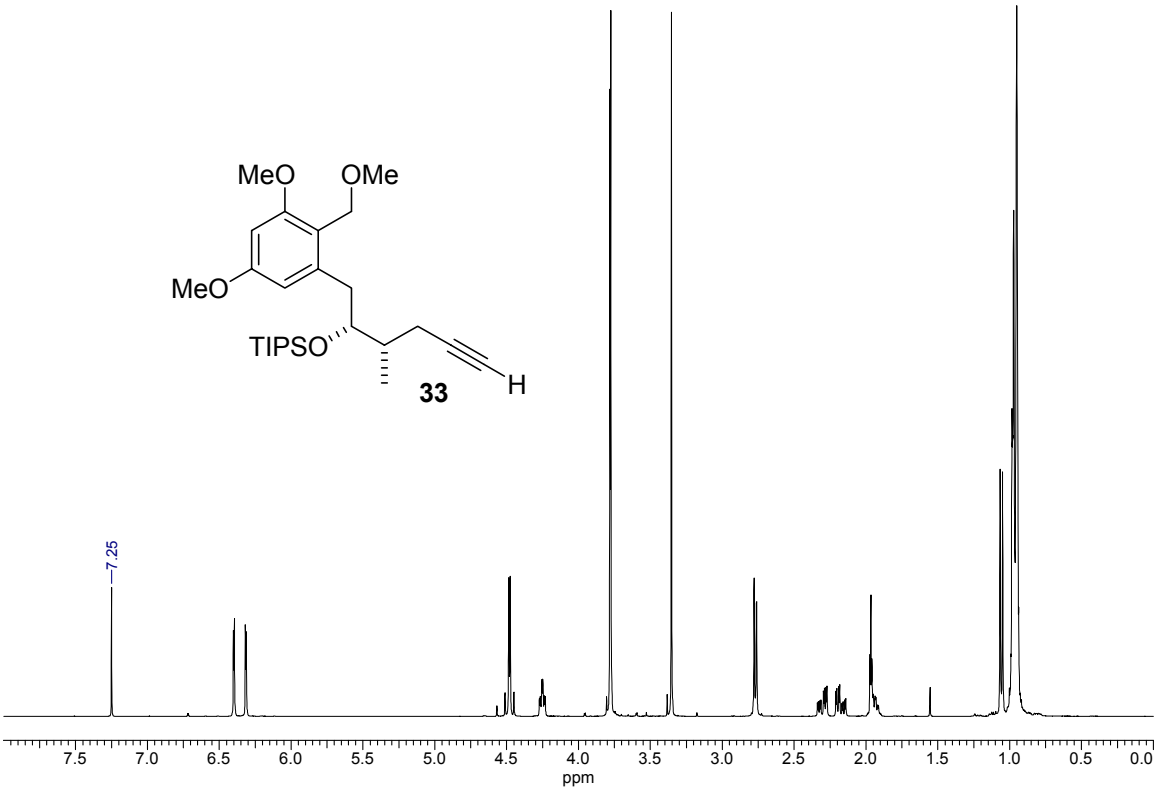

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PMBO
TIPS
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ppm
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129.3
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72.9
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24.0
14.6
ppm

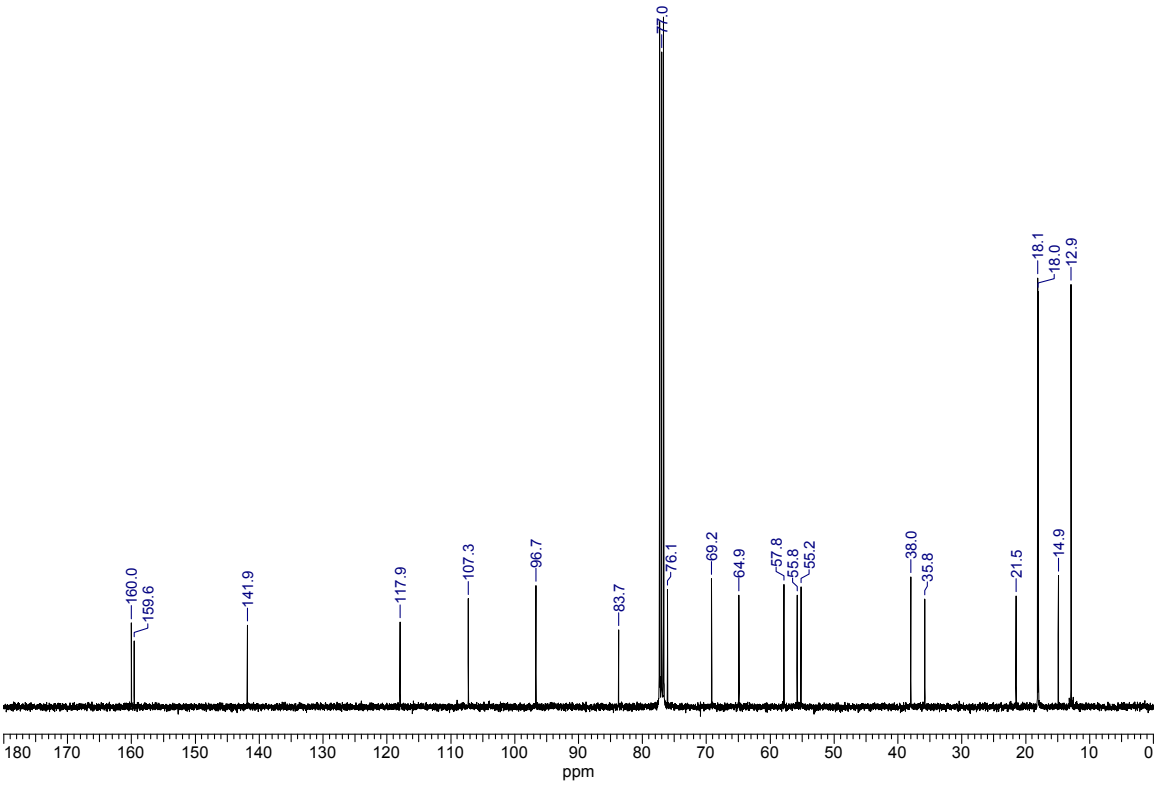

OTs
PMBO
TIPS
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ppm
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18.6
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144.4
134.3
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14.6
11.2
ppm

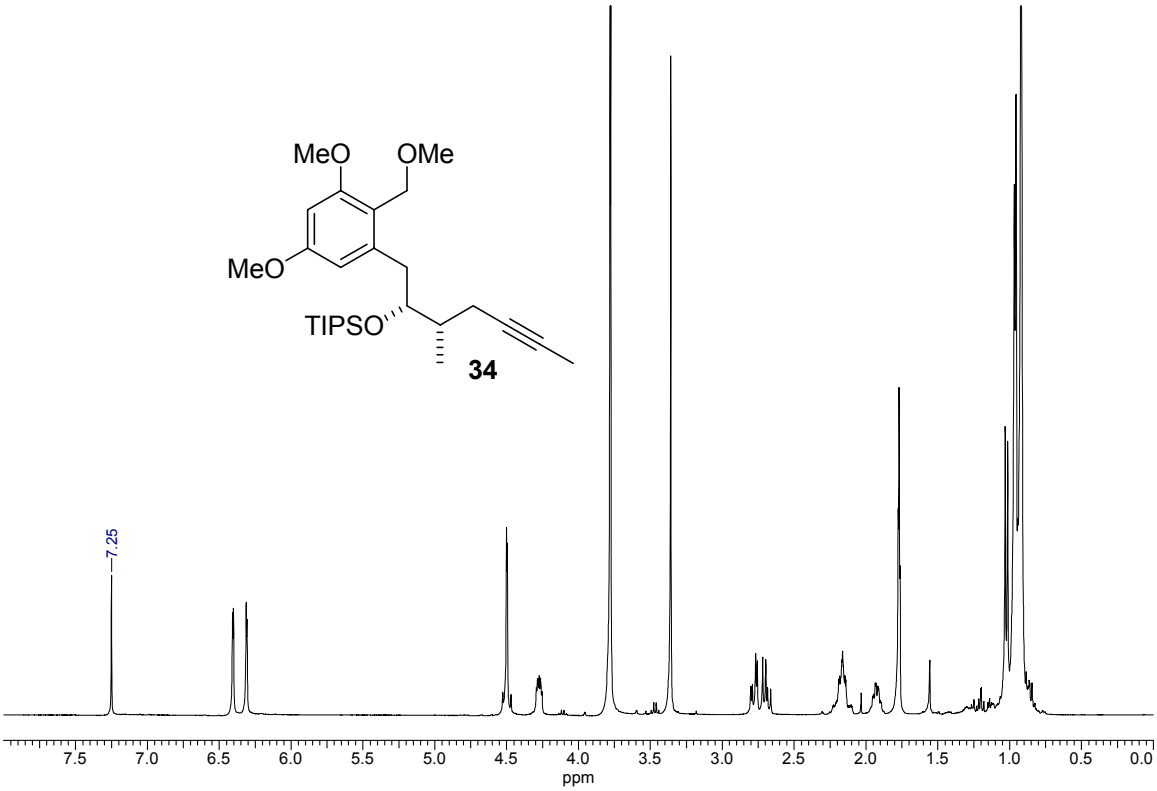

O
TIPS
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2.5
2.0
1.5
1.0
0.5
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ppm
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18.6
11.3
106.0
82.0
55.4
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35.6
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14.9
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110
100
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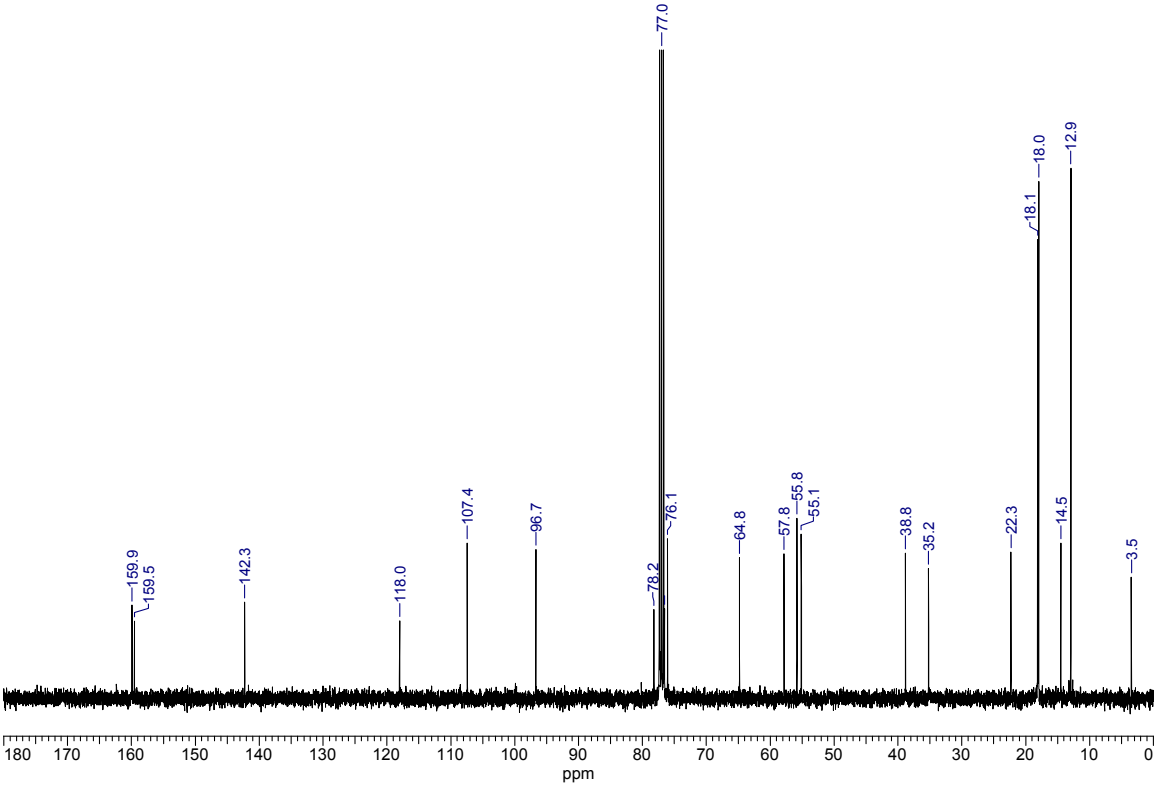

MeO
OMe
MeO
31
HO
TIPS
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77.0
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160.6
159.2
142.4
117.4
108.0
106.1
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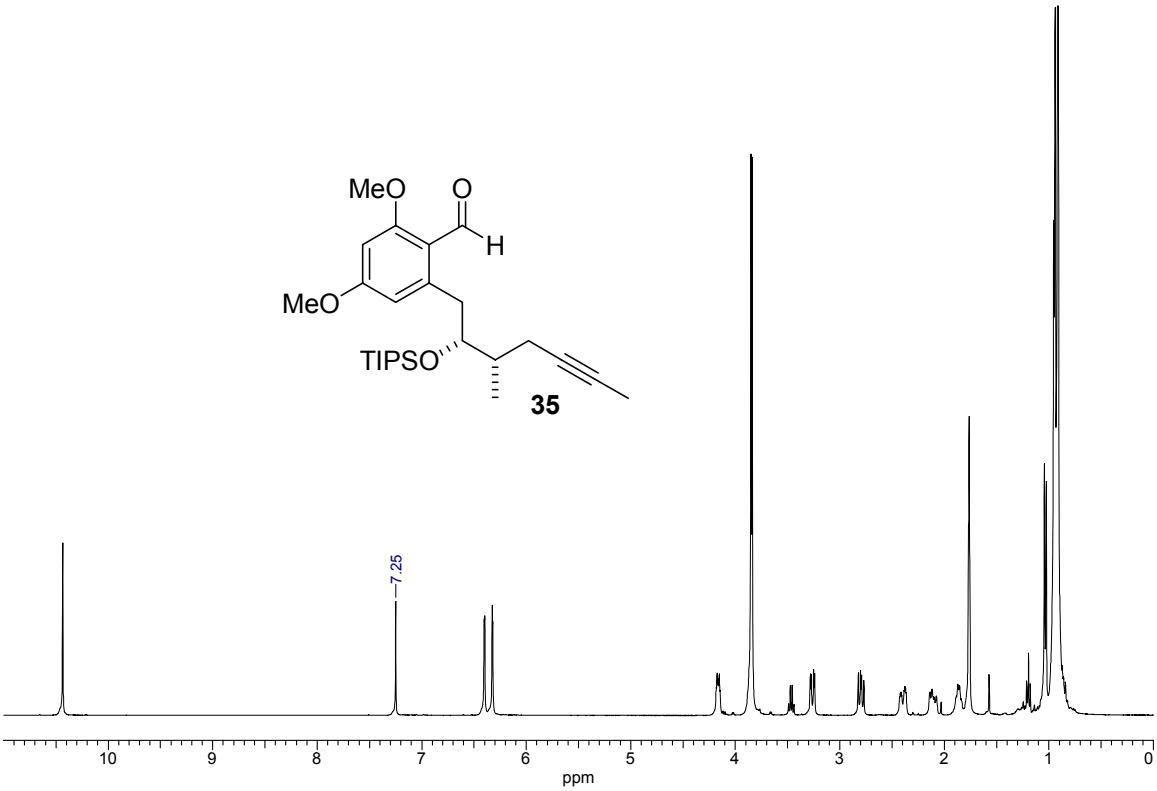

MeO
OMe
MeO
HO
H
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ppm
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159.2
142.3
117.4
106.3
96.6
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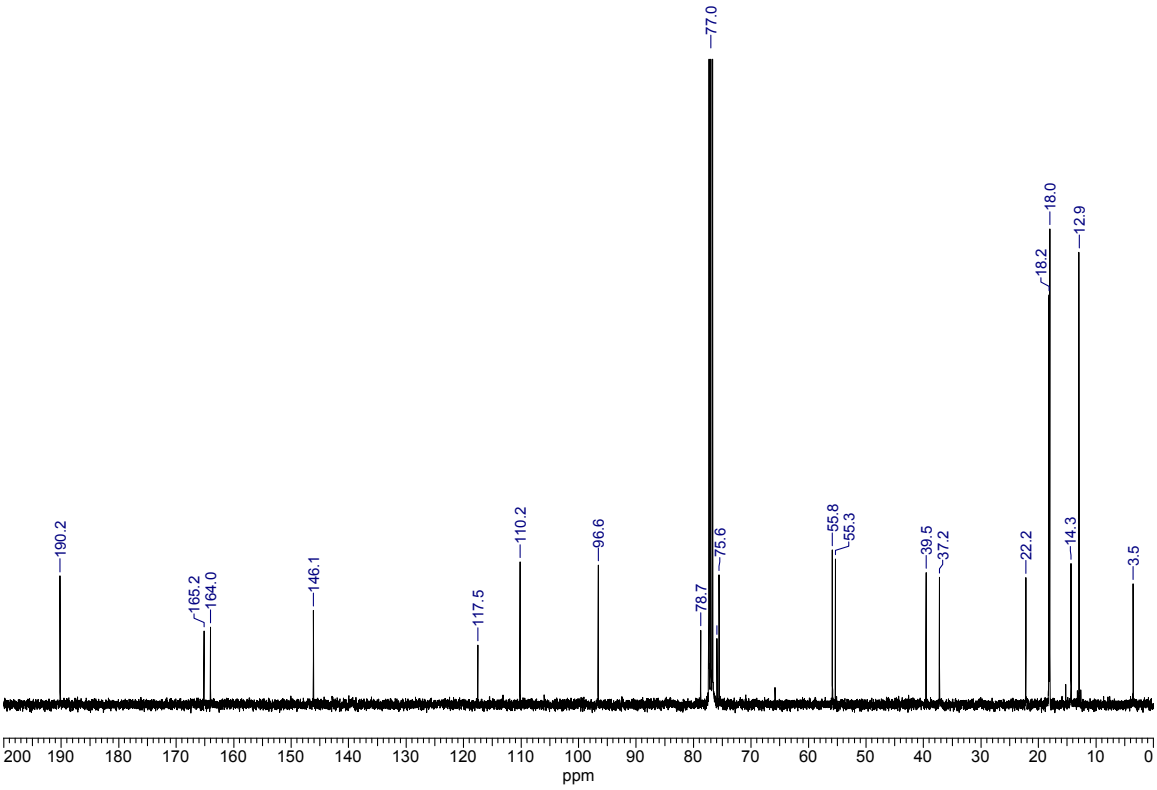

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OMe
MeO
TIPSO
H
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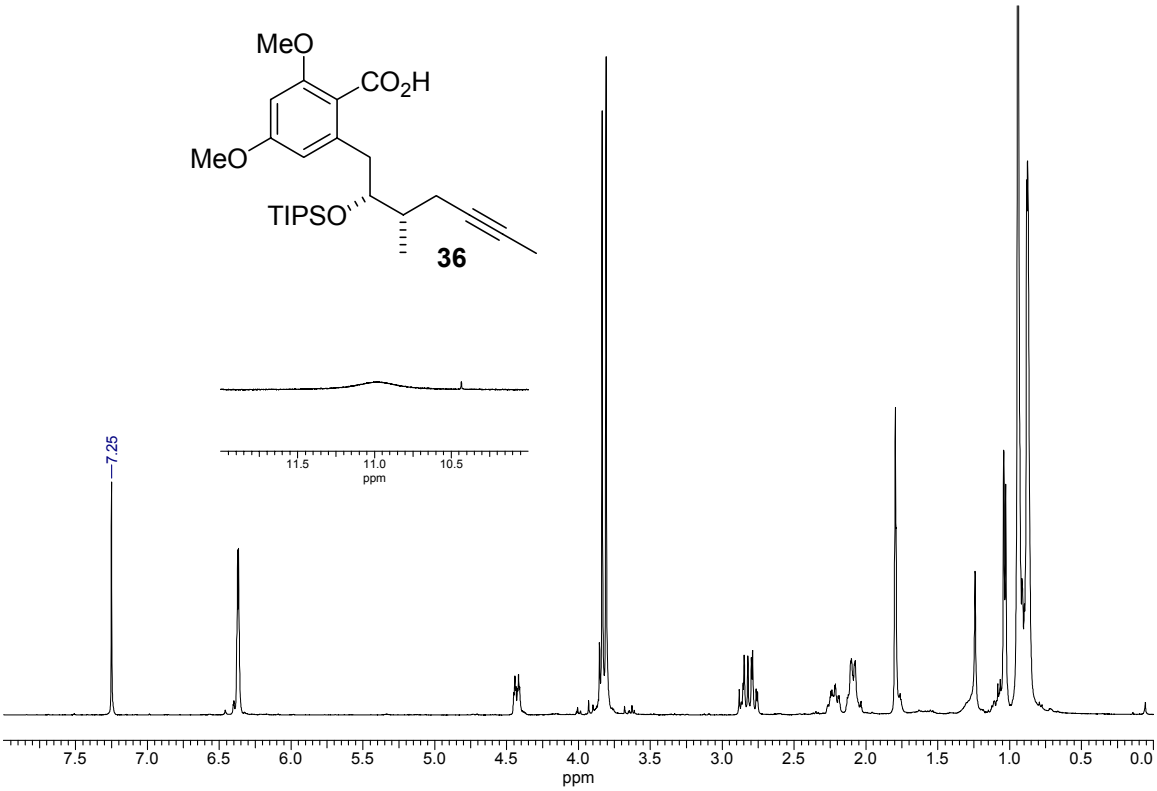

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117.9
107.3
96.7
83.7
76.1
69.2
64.9
57.8
55.8
55.2
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ppm

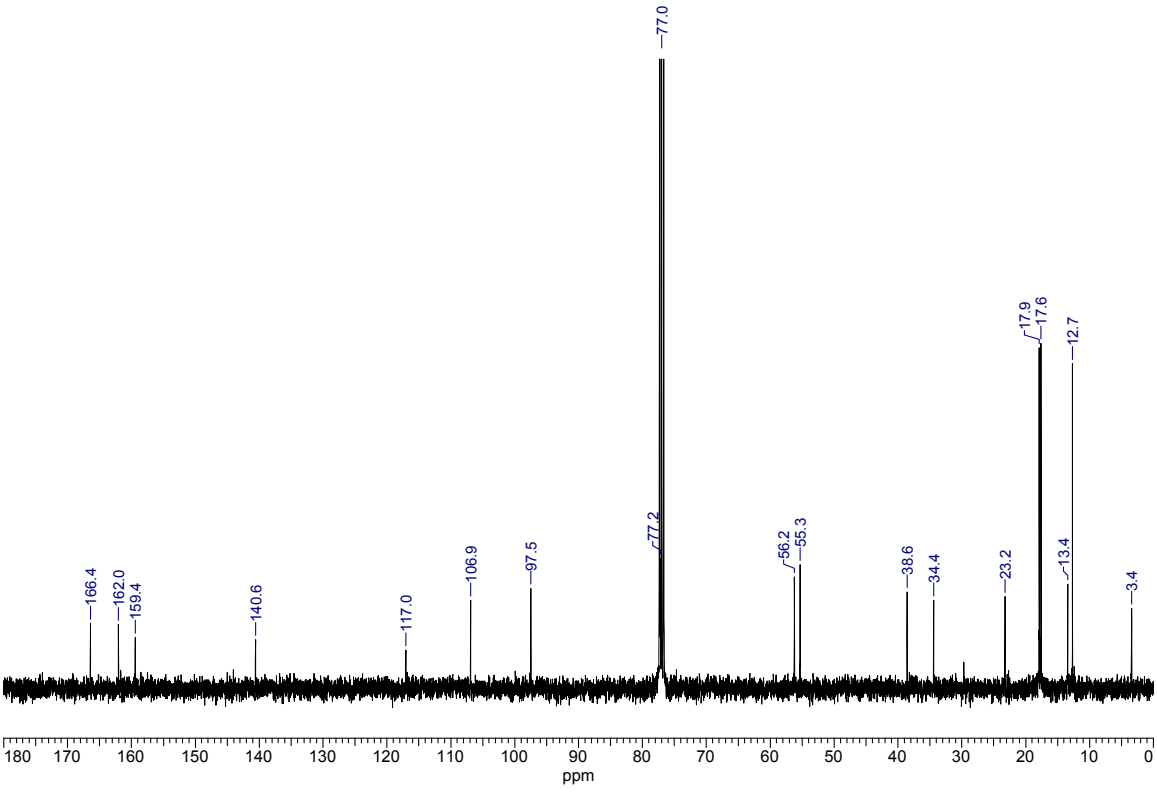

MeO
OMe
MeO
TIPSO
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ppm


77.0
18.0
12.9
18.1
159.9
159.5
142.3
118.0
107.4
96.7
78.2
76.1
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57.8
55.8
55.1
38.8
35.2
22.3
14.5
3.5
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
ppm


MeO
O
H
MeO
TIPSO
35
7.25
10
9
8
7
6
5
4
3
2
1
0
ppm


77.0
18.0
12.9
18.2
190.2
165.2
164.0
146.1
117.5
110.2
96.6
78.7
75.6
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ppm


MeO
CO2H
MeO
TIPSO
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6.0
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5.0
4.5
4.0
3.5
3.0
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ppm


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77.2
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159.4
140.6
117.0
106.9
97.5
56.2
55.3
38.6
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