

Supporting Information

Microwave assisted synthesis and QSAR study of novel NSAID acetaminophen conjugates with amino acid linkers

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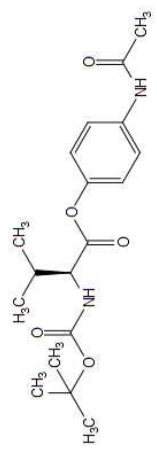
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21589, Saudi Arabia*

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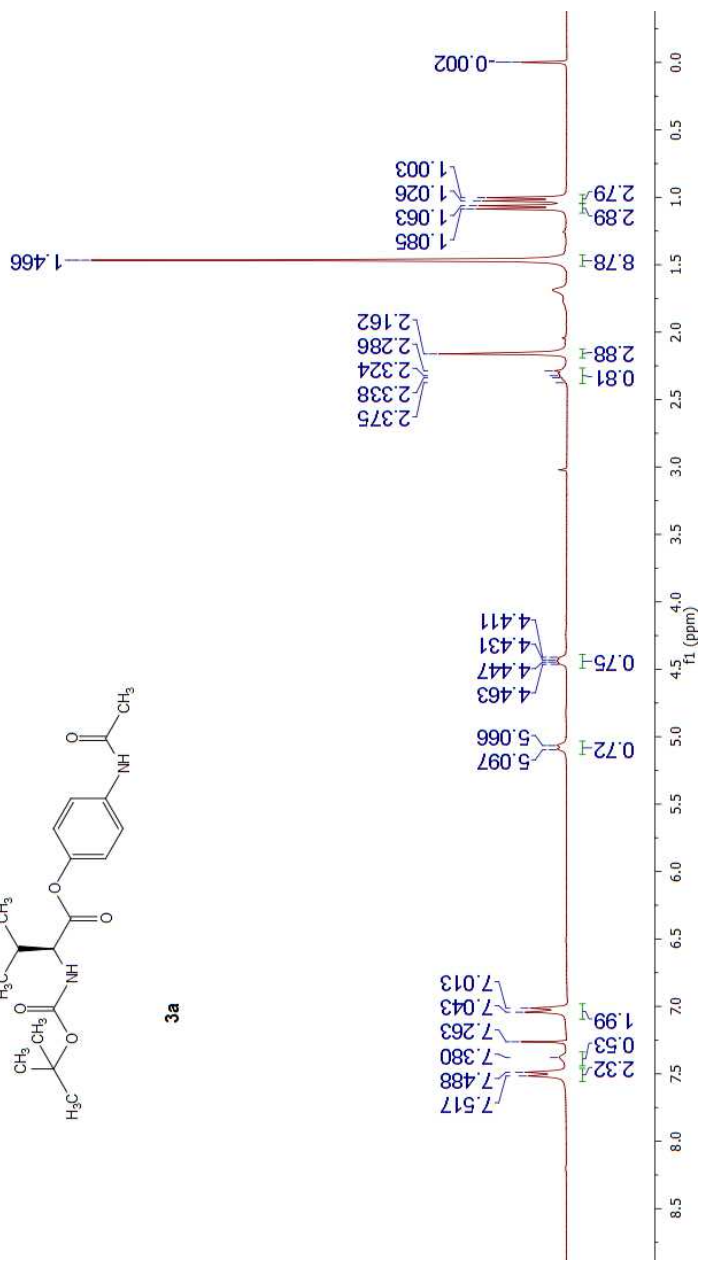
E-mail: sspanda12@gmail.com, charlesdennishall@gmail.com

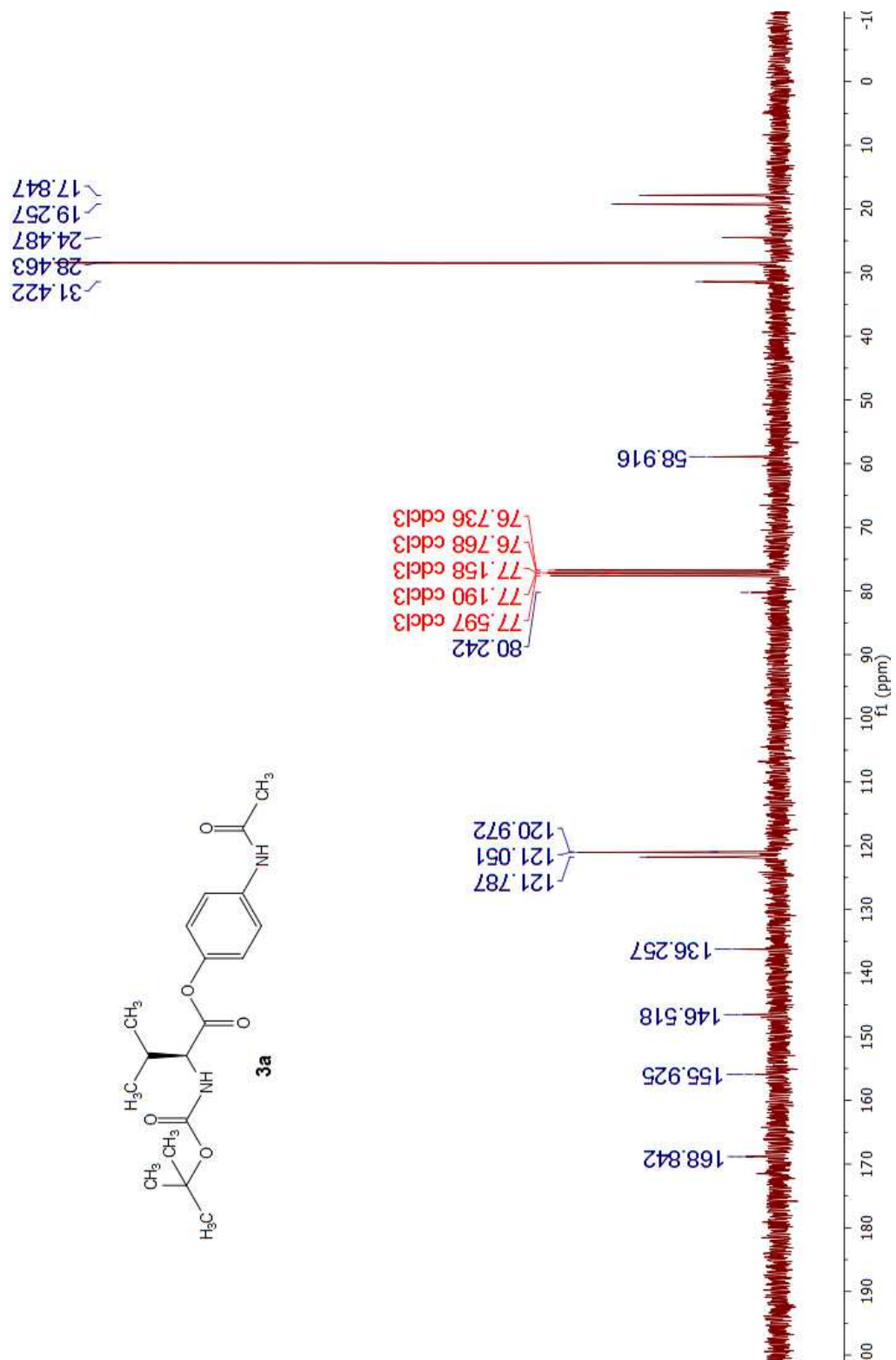
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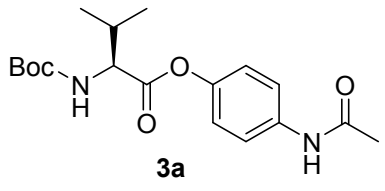
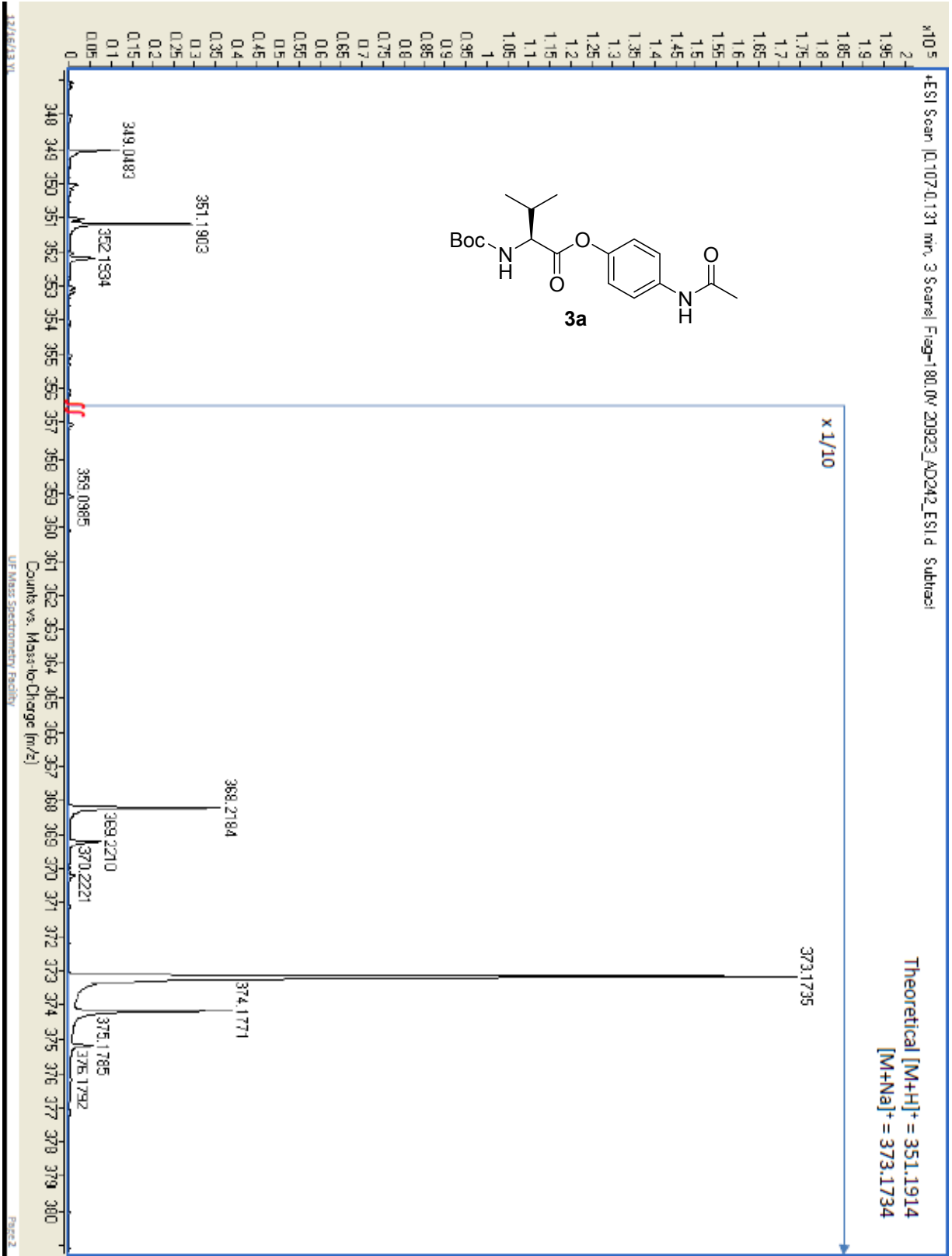
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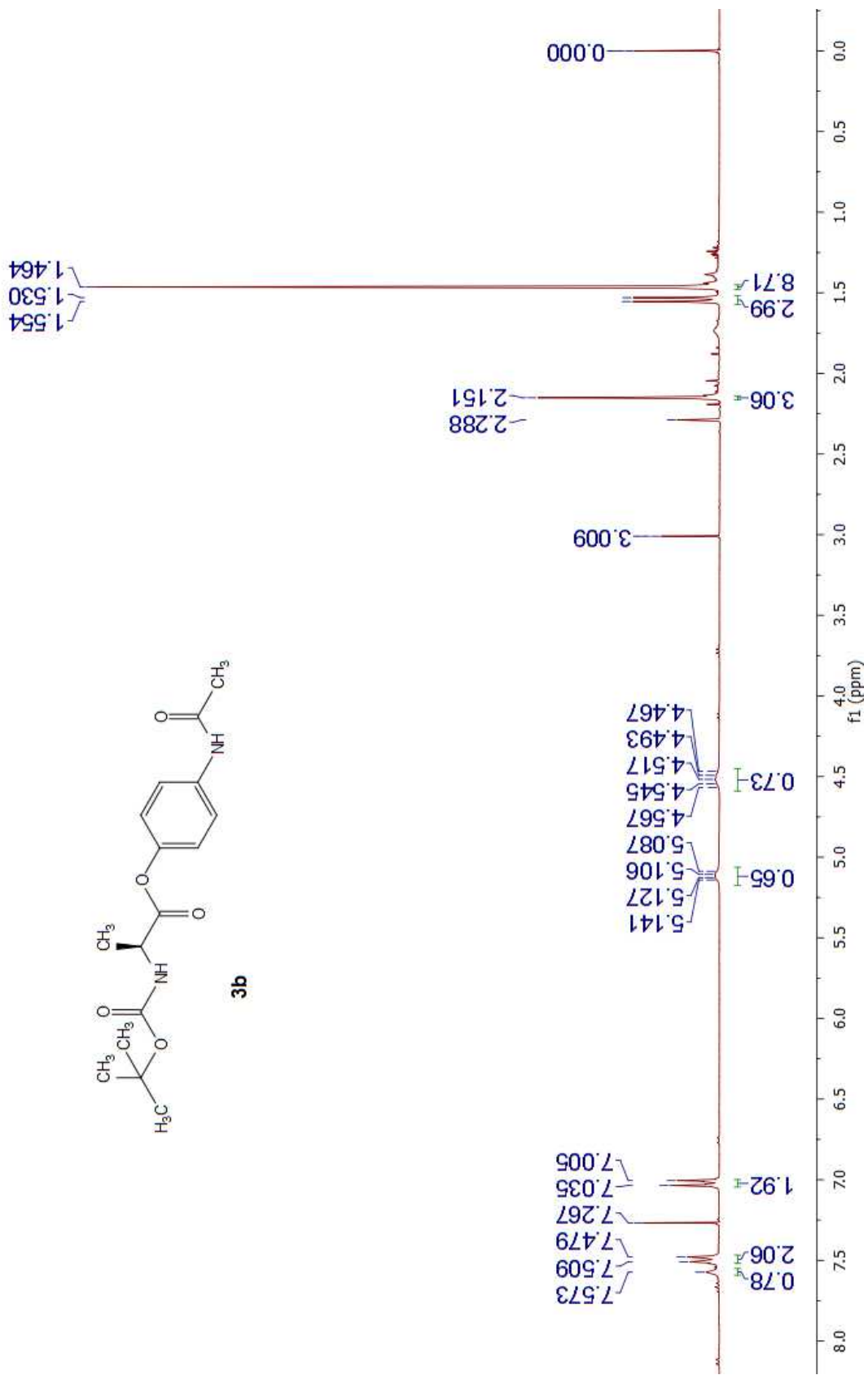
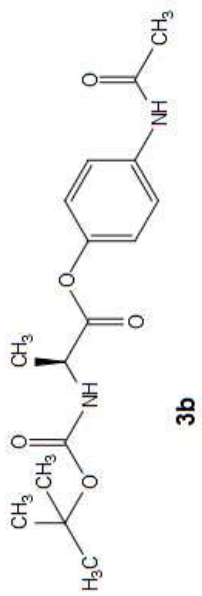


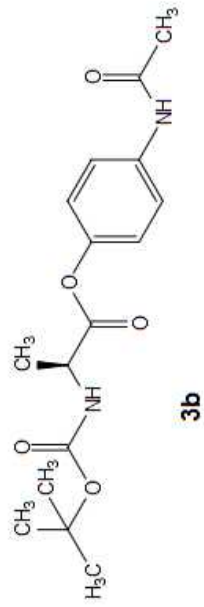
3a











28.307
24.357
18.326

80.177
77.443 cdcl3
77.020 cdcl3
76.597 cdcl3

121.867
121.588
120.885

135.955

146.478

154.824
155.098
155.223

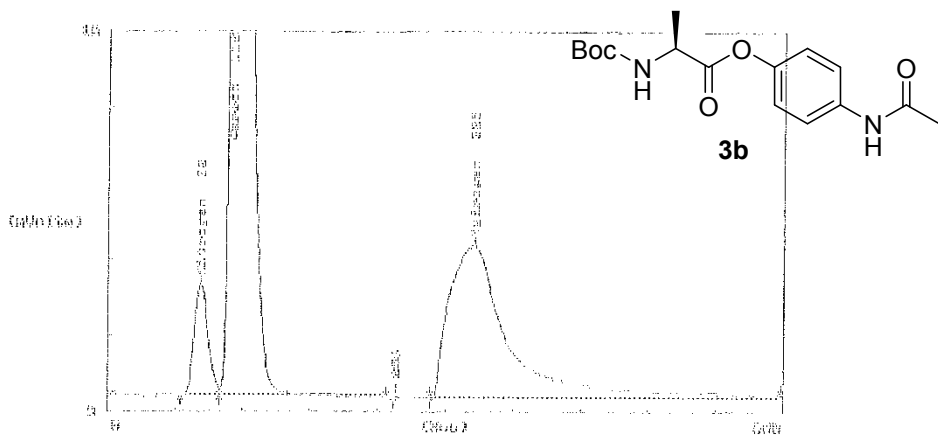
168.626
172.306

49.467

180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10

EAGER 200 Stripchart

Sample Ident. : 12 AD198 Filename : 282712
 Analysed : 10-15-13 10:15:19 Printed : 10-15-2013 10:25:21



EAGER 200 Peak Integration Report

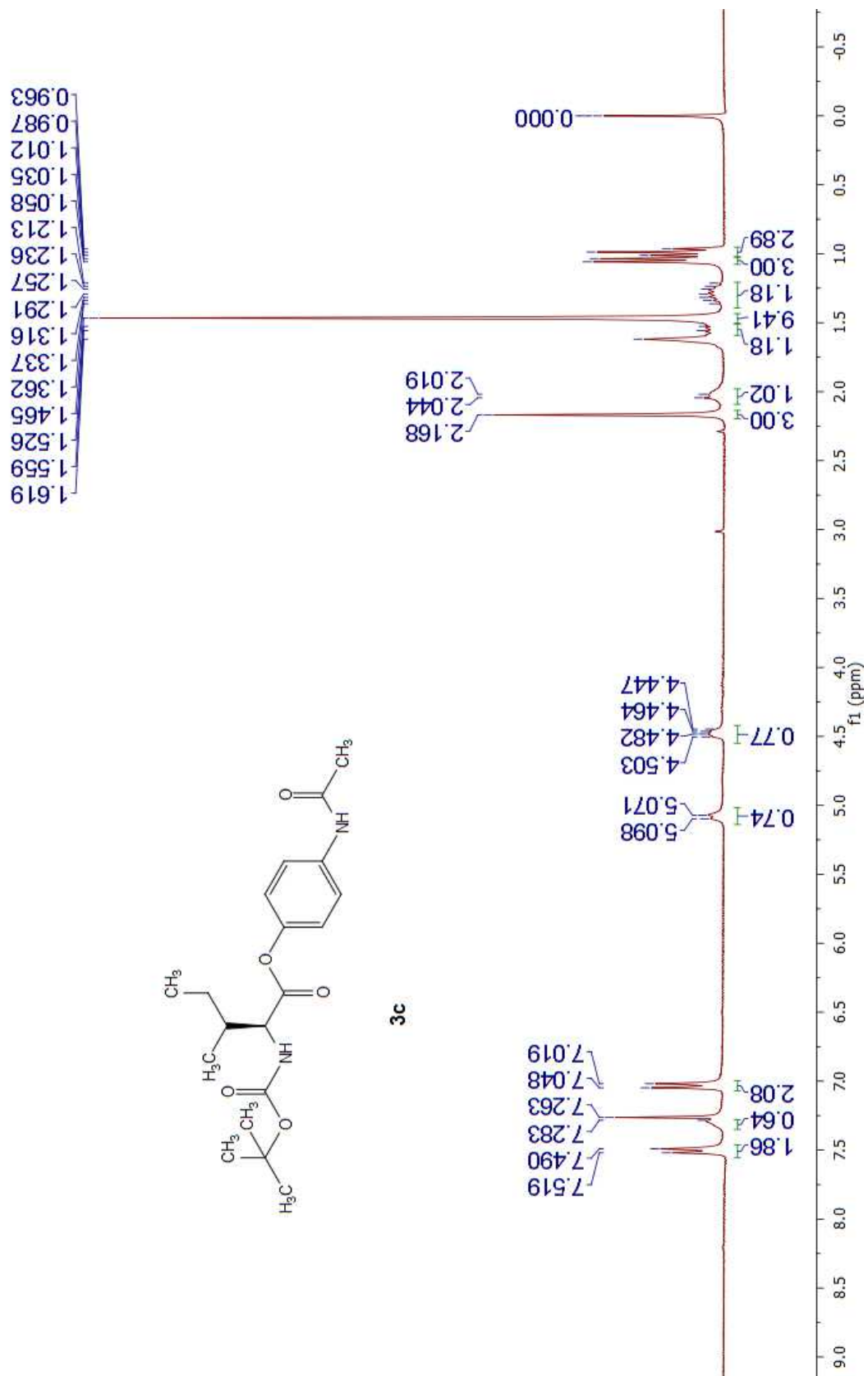
Instrument name : Instrument #1 Bline drift (fV): 17.5
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 10:15:19 Printed : 10-15-2013 10:25:22
 Sample Ident. : 12 AD198 Filename : 282712
 Sample Weight : 2.135 Calc.method: using 'K. Factors'

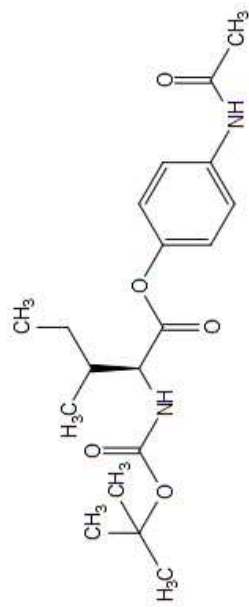
No. (#)	Type	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	65	100	82	2890.6	38910	3.85	Nitrogen
2	FU	100	248	110	49474.4	737682	73.03	Carbon
3	RS	254	287	256	5.1	74	0.01	
4	RS	287	598	325	3932.2	233497	23.11	Hydrogen
							1010164	100.00

EAGER 200 Unk Report

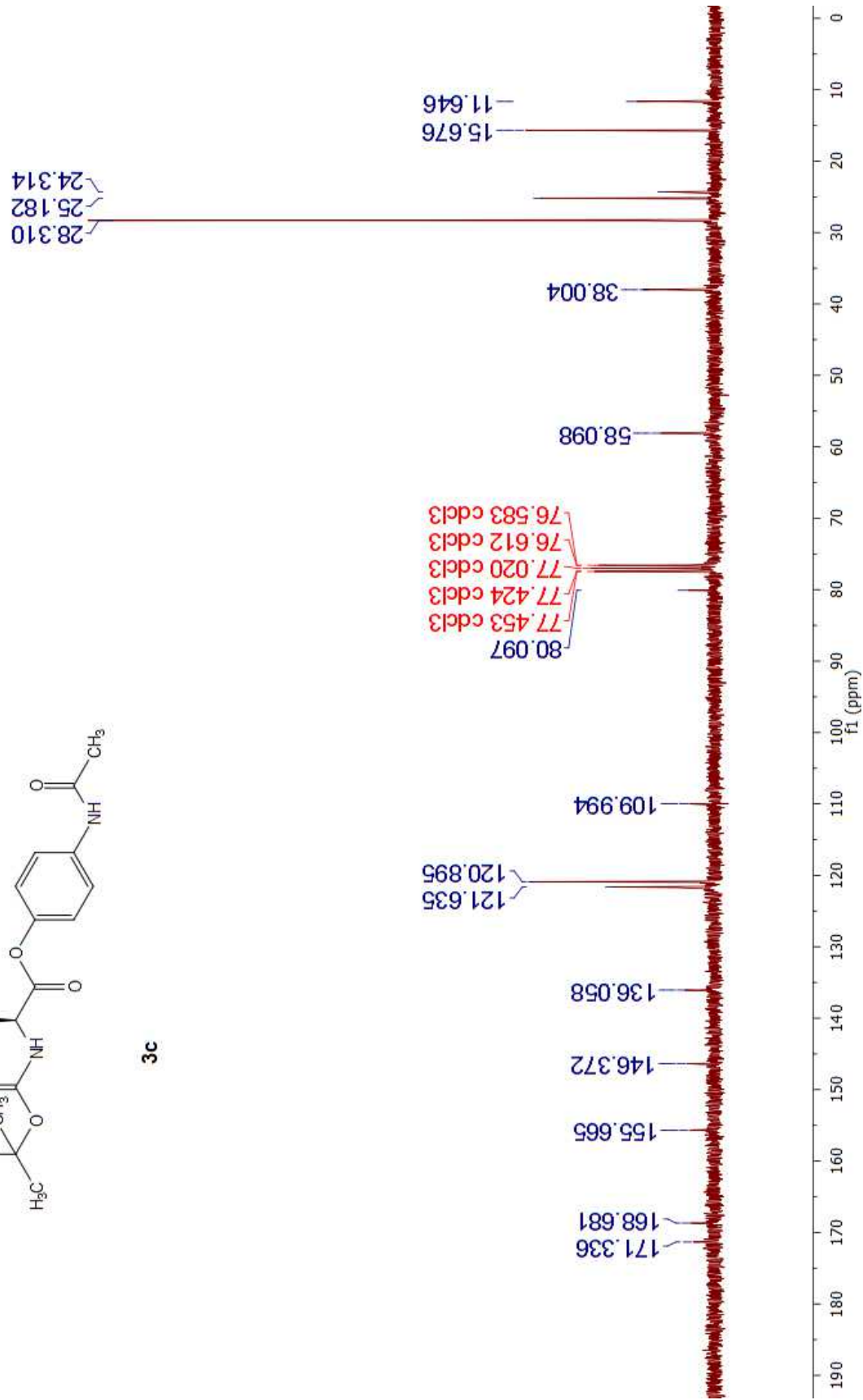
Instrument name : Instrument #1 Bline drift (fV): 17.5
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 10:15:19 Printed : 10-15-2013 10:25:22
 Sample Ident. : 12 AD198 Filename : 282712
 Sample Weight : 2.135 Calc.method: using 'K. Factors'

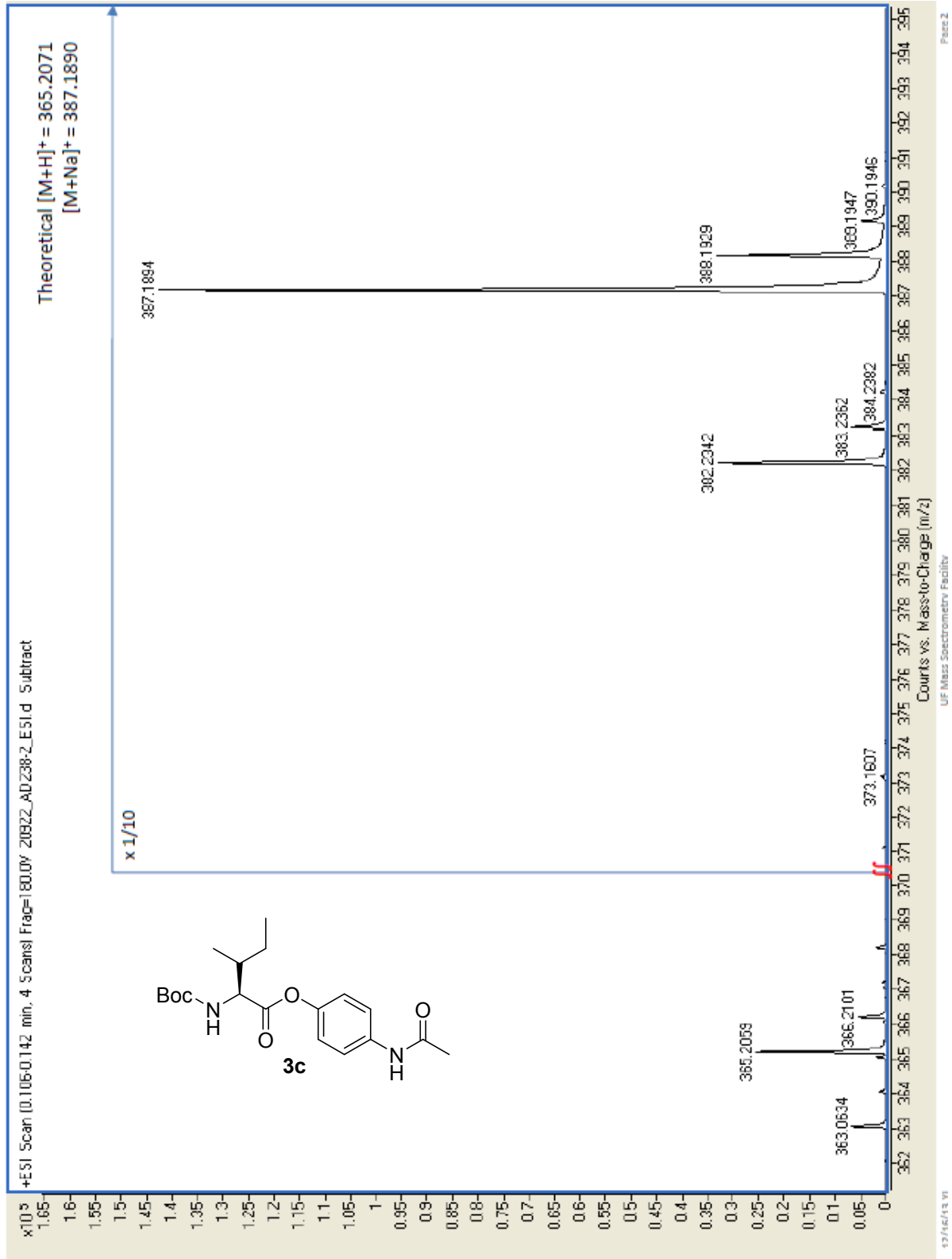
Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	82	38910	8.773	.189585E+02	Nitrogen
2	110	737682	59.623	.100000E+01	Carbon
4	325	233497	7.190	.315929E+01	Hydrogen

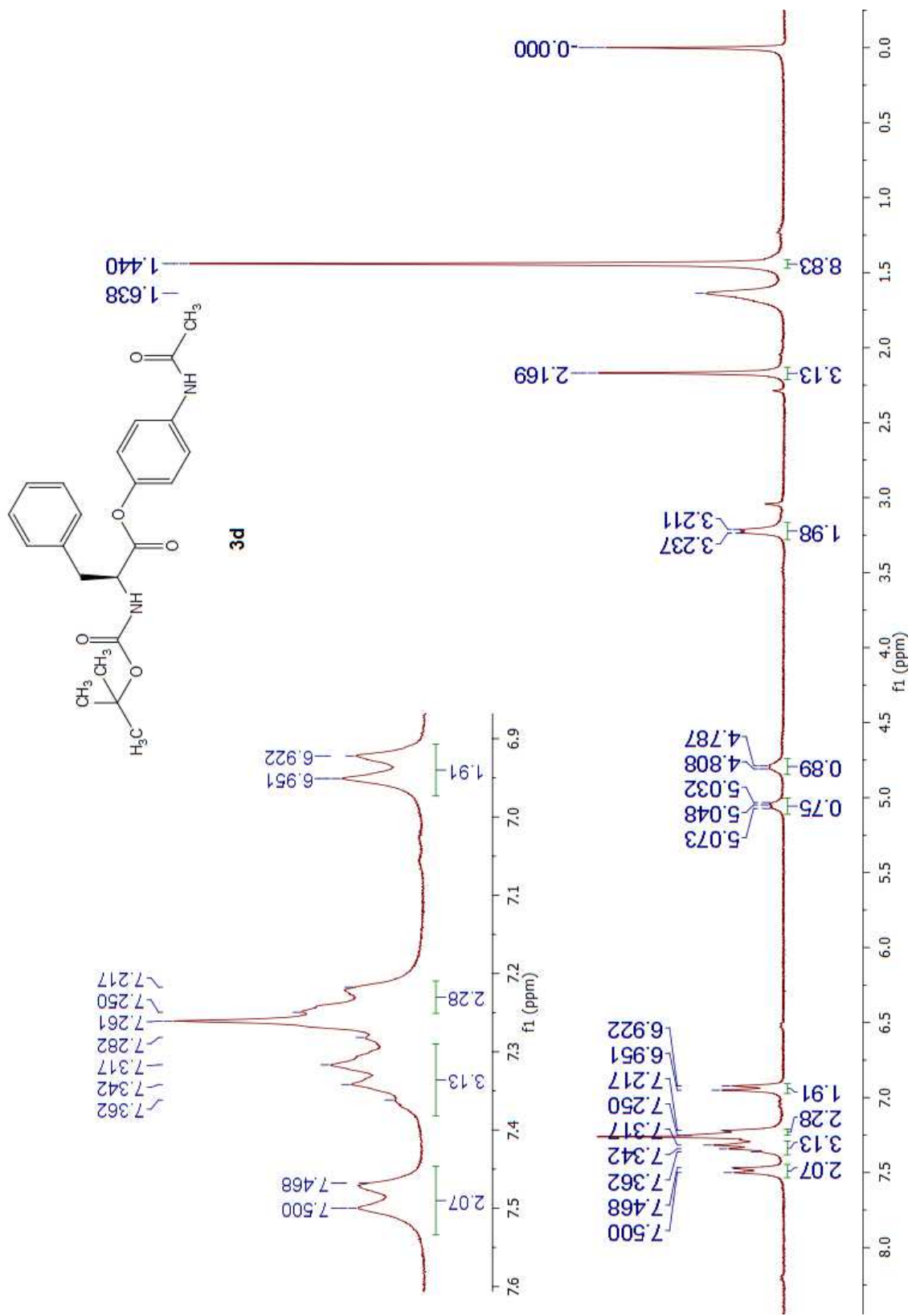


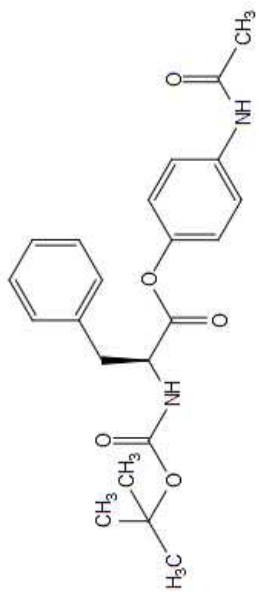


3c

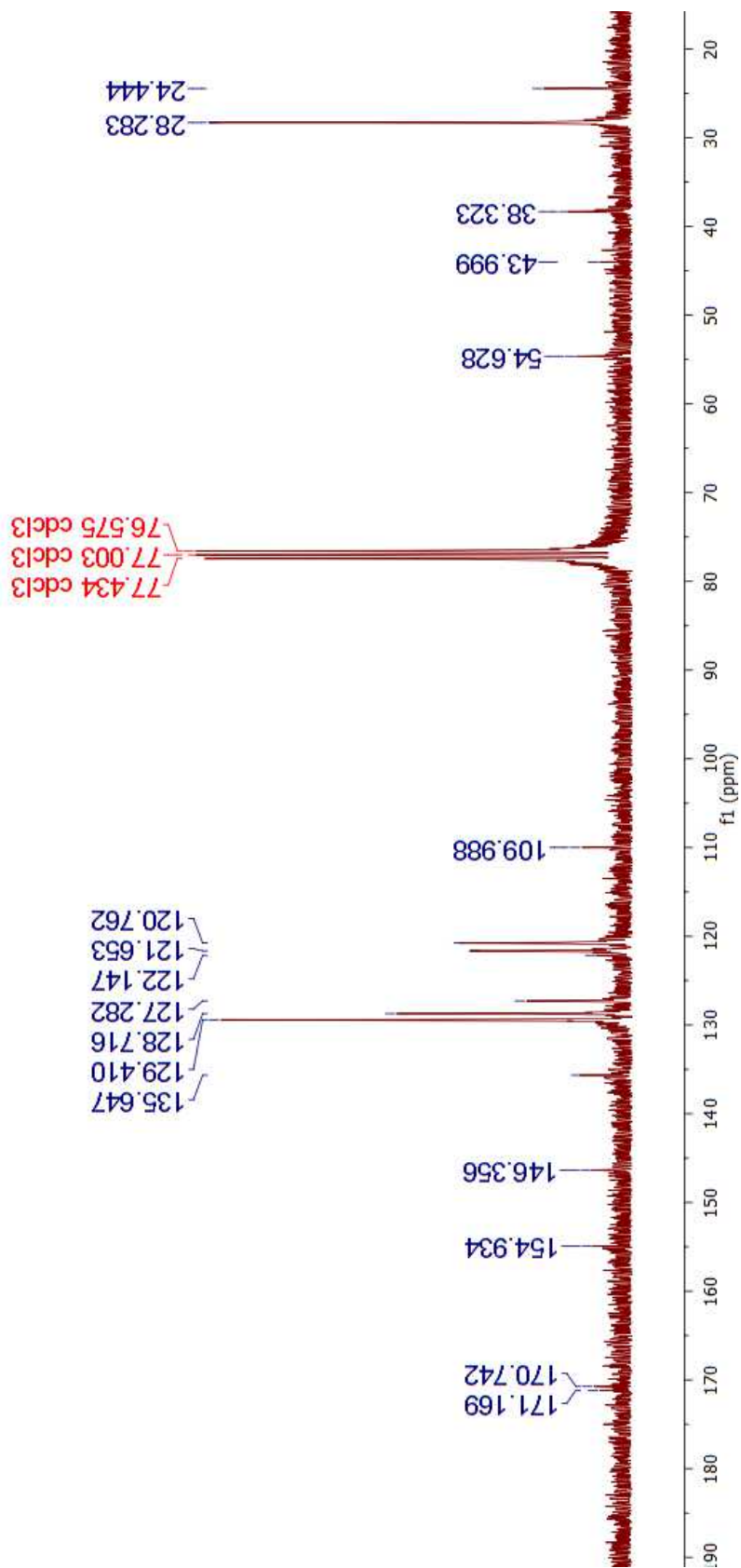






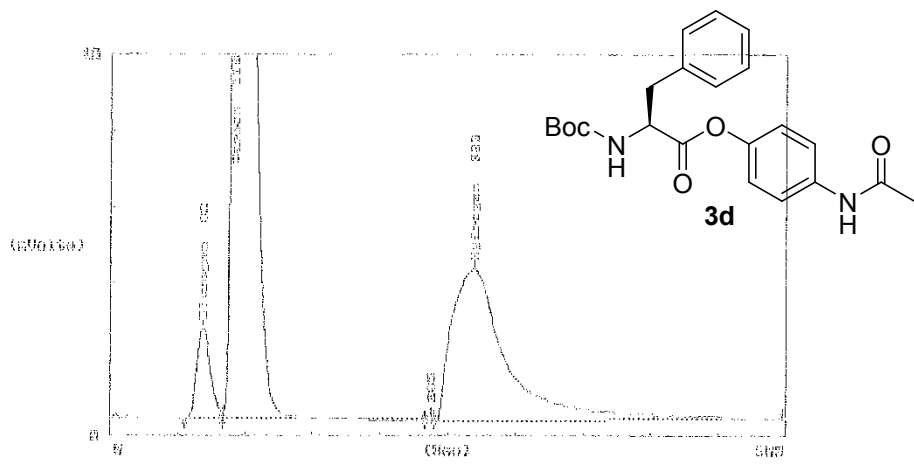


3d



EAGER 200 Stripchart

Sample Ident. : 15 AD239 Filename : 282715
 Analysed : 10-15-13 10:45:40 Printed : 10-15-2013 16:28:03



EAGER 200 Peak Integration Report

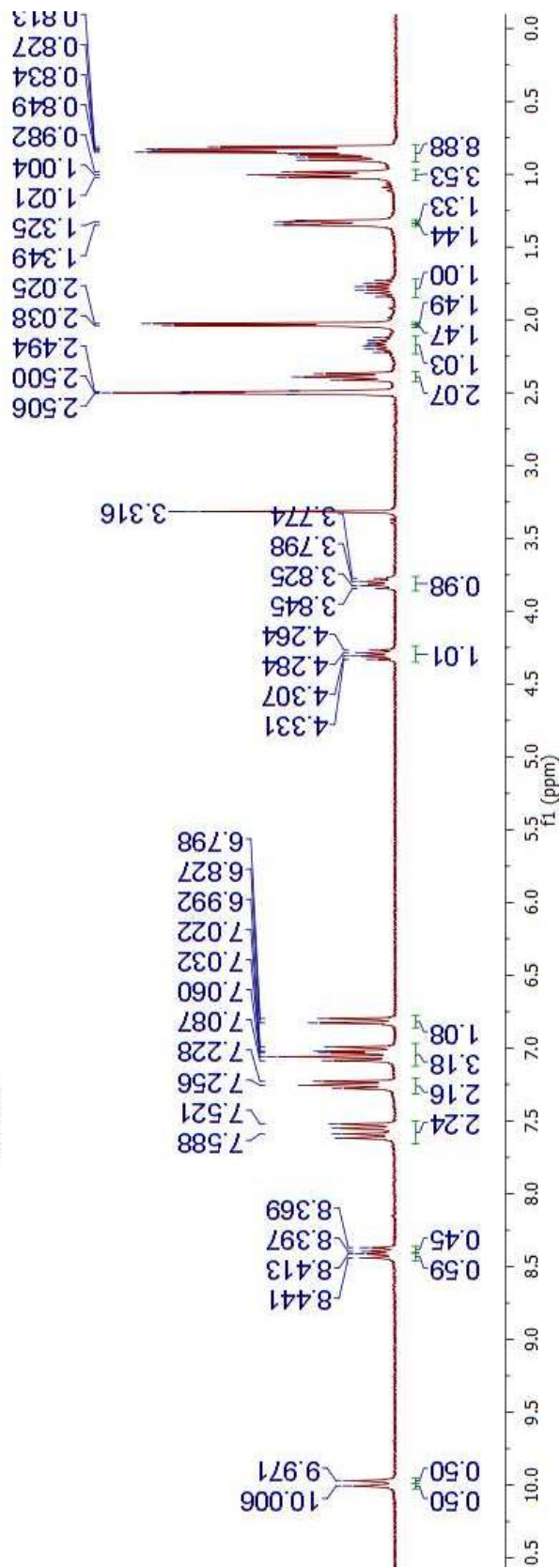
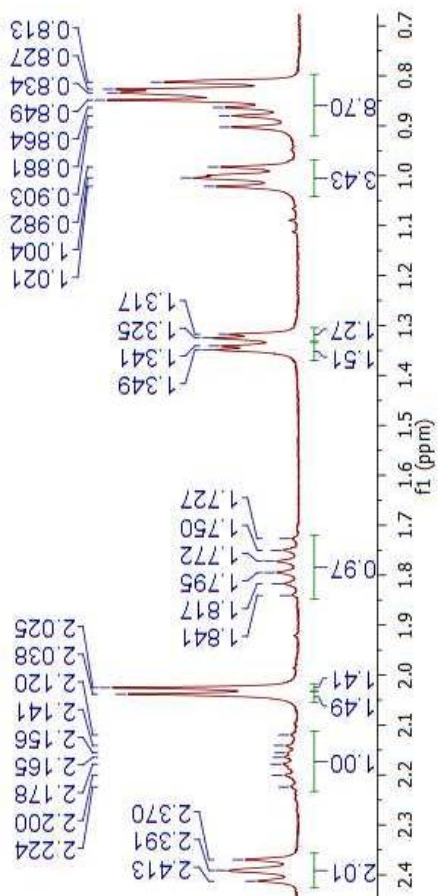
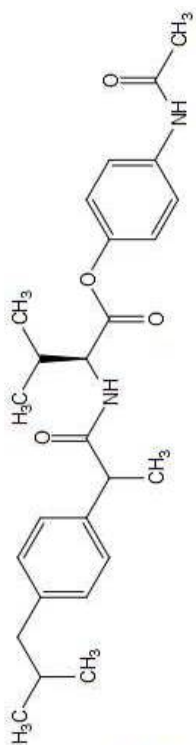
Instrument name : Instrument #1 Bline drift (fV): -1.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 10:45:40 Printed : 10-15-2013 16:28:04
 Sample Ident. : 15 AD239 Filename : 282715
 Sample Weight : 2.106 Calc.method: using 'K. Factors'

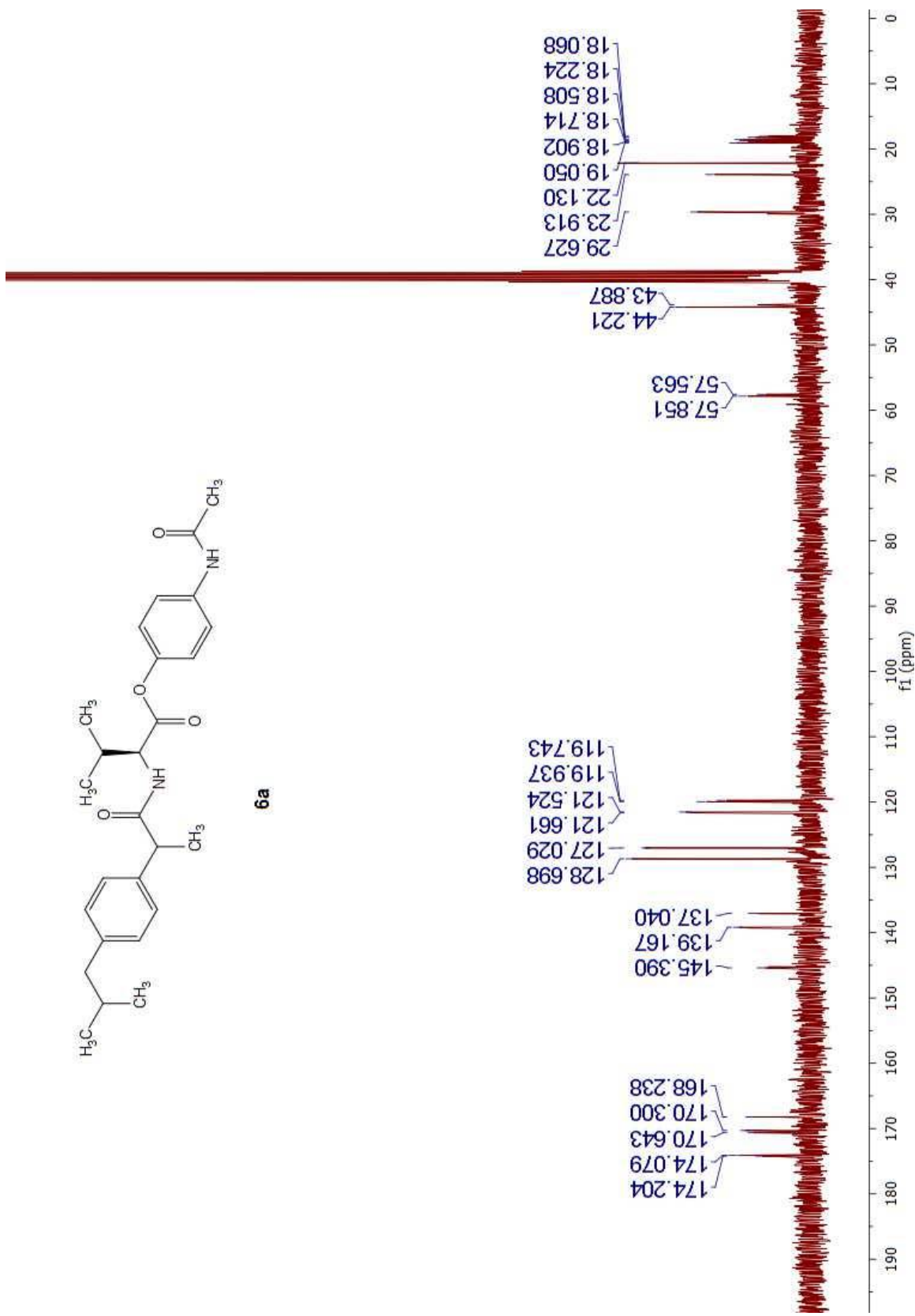
No. (#)	Type (#)	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	66	100	82	2351.7	31533	2.97	Nitrogen
2	FU	100	280	110	53762.4	805720	75.95	Carbon
3	FU	280	288	285	1.9	15	0.00	
4	FU	288	598	323	3909.8	223568	21.07	Hydrogen
						1060837	100.00	

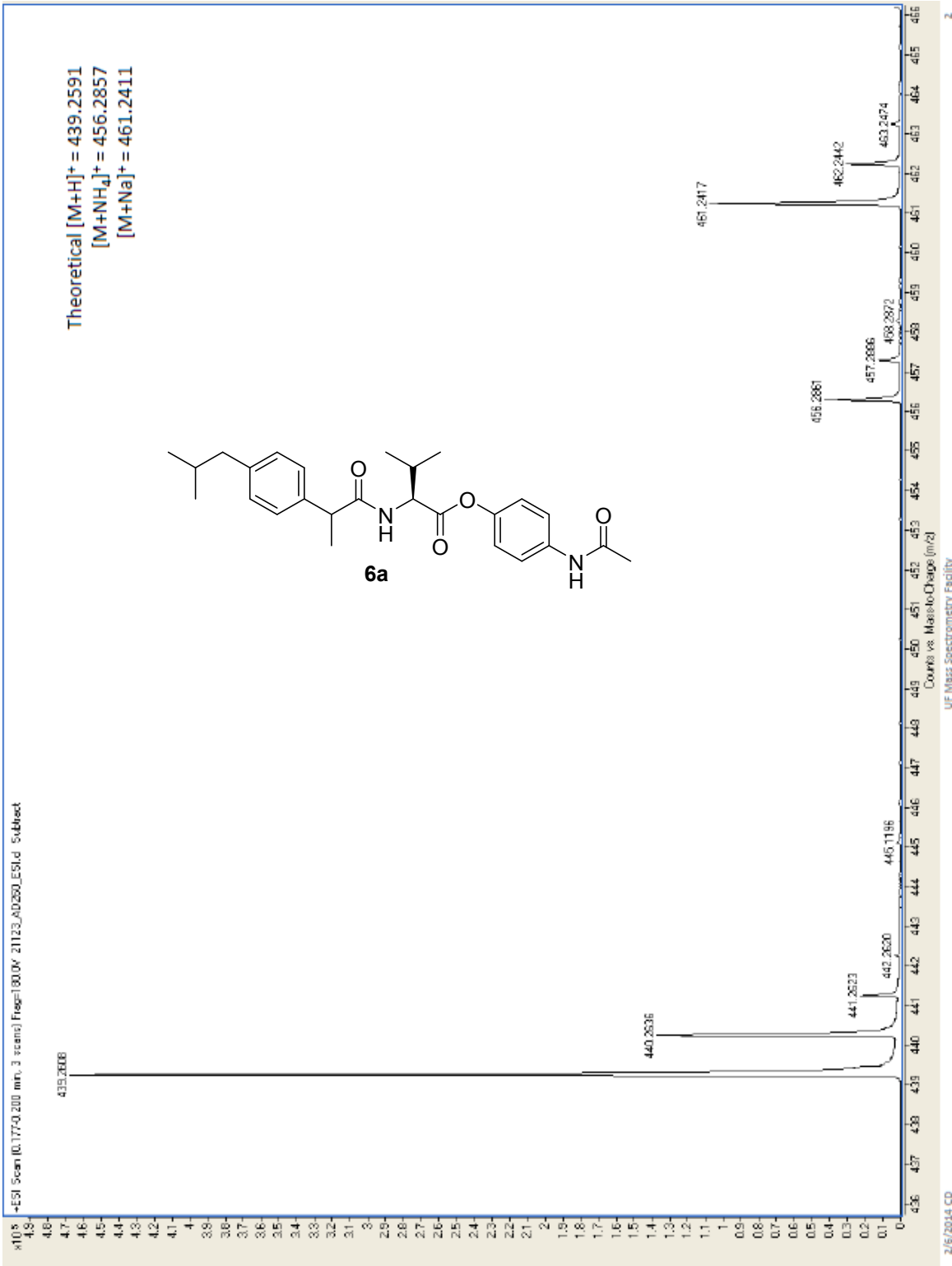
EAGER 200 Unk Report

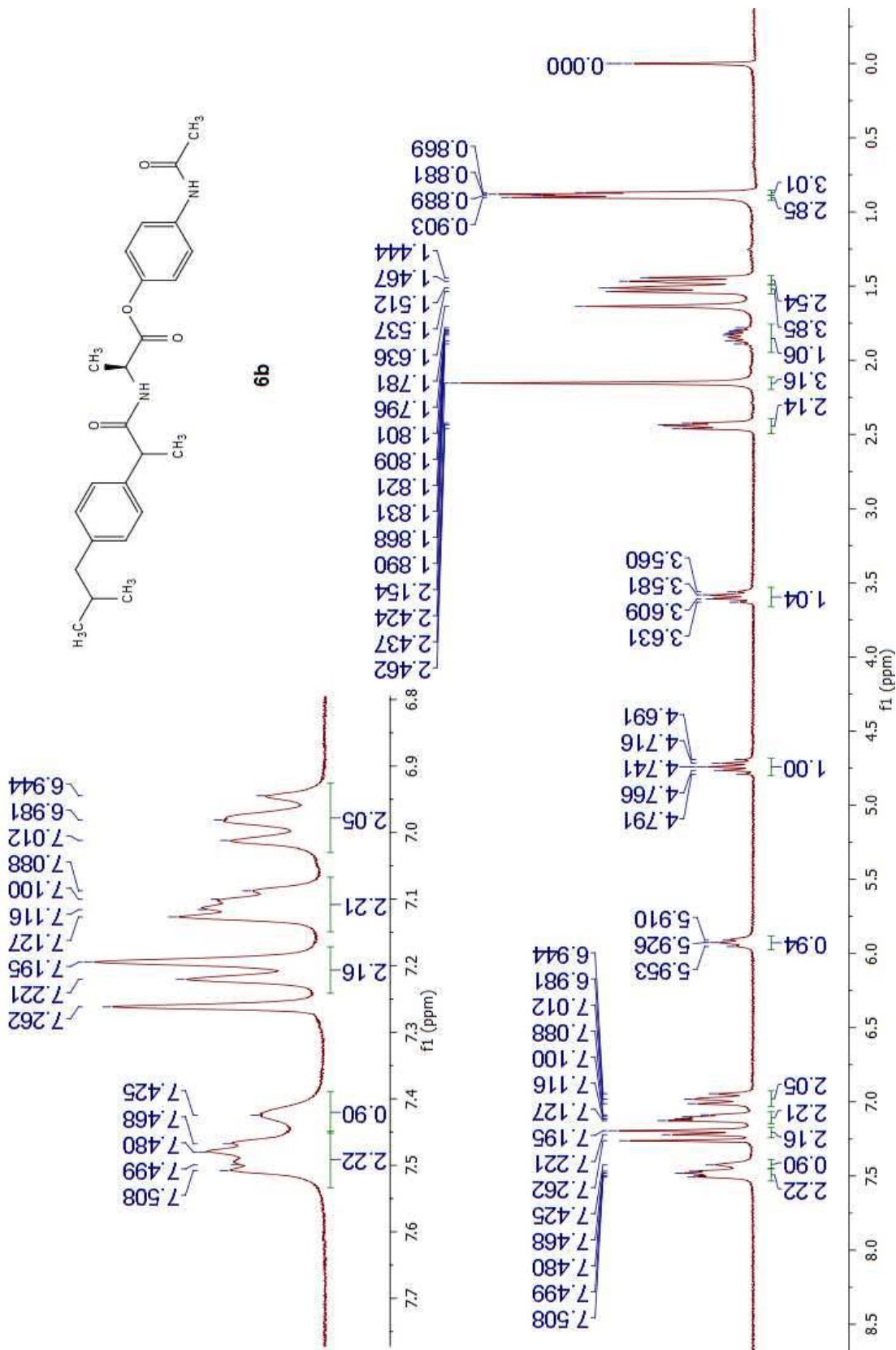
Instrument name : Instrument #1 Bline drift (fV): -1.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 10:45:40 Printed : 10-15-2013 16:28:04
 Sample Ident. : 15 AD239 Filename : 282715
 Sample Weight : 2.106 Calc.method: using 'K. Factors'

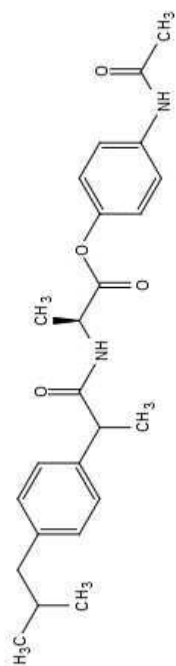
Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	82	31533	7.207	.255518E+02	Nitrogen
2	110	805720	66.019	.100000E+01	Carbon
4	323	223568	6.980	.360392E+01	Hydrogen



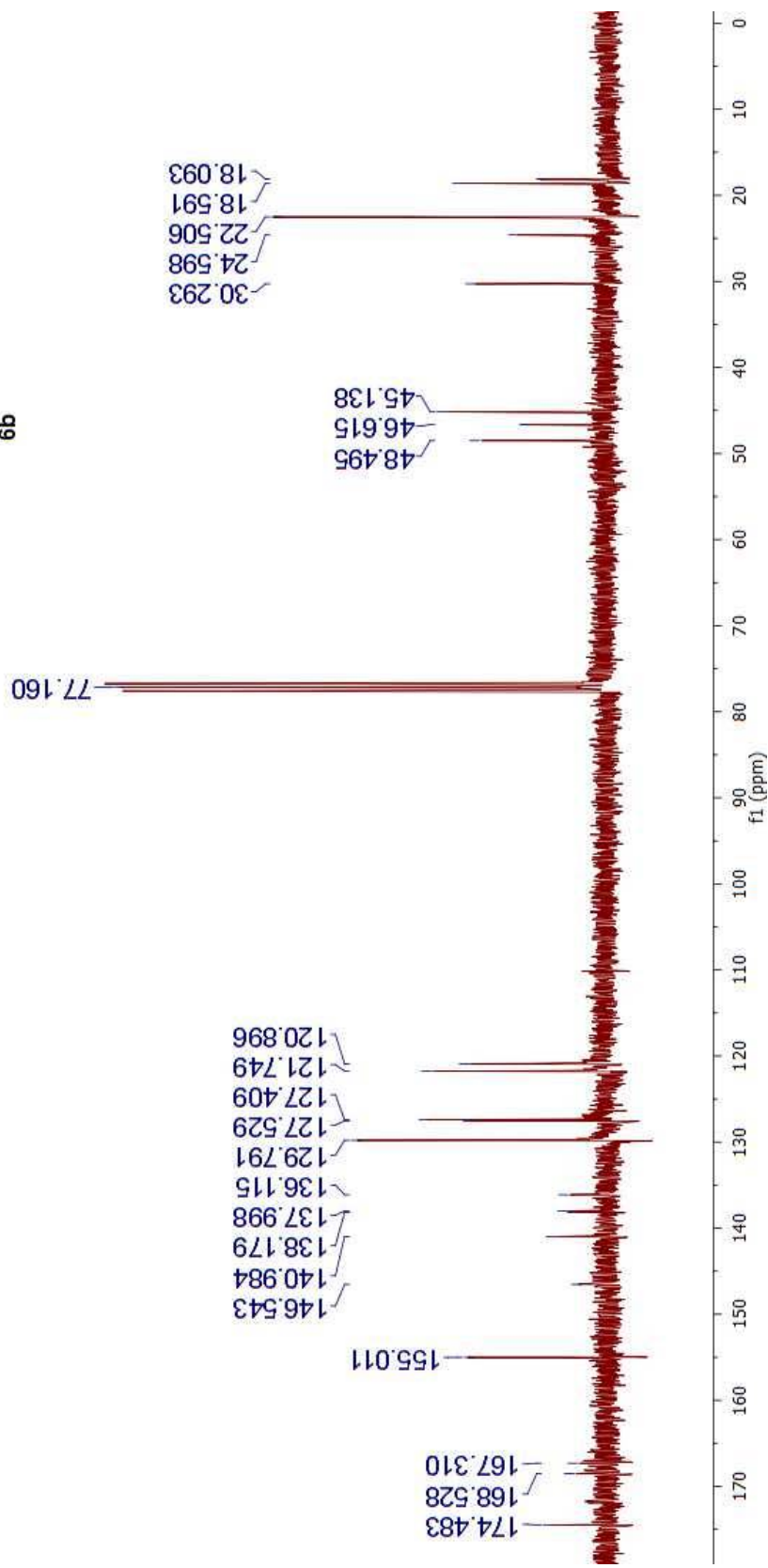






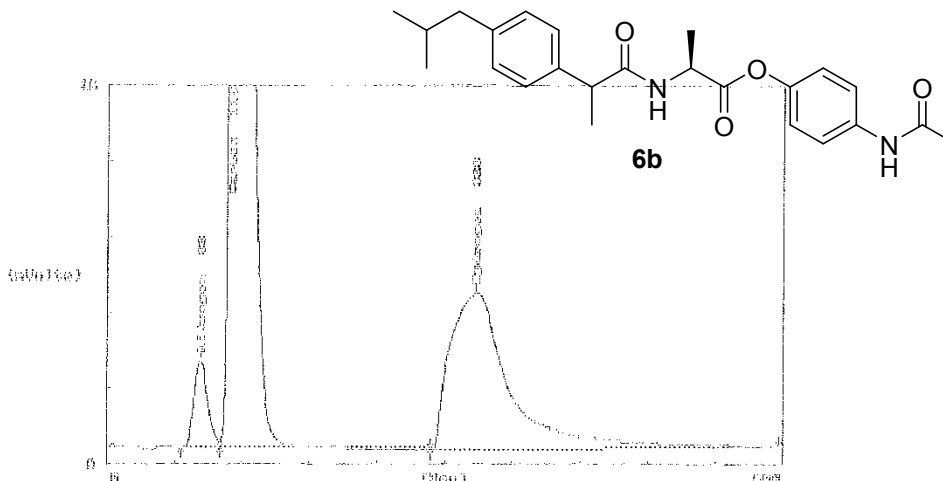


9b



EAGER 200 Stripchart

Sample Ident. : 10 AD208 Filename : 282710
 Analysed : 10-15-13 09:55:14 Printed : 10-15-2013 16:27:51



EAGER 200 Peak Integration Report

Instrument name : Instrument #1 Bline drift (fV): 24.1
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 09:55:14 Printed : 10-15-2013 16:27:51
 Sample Ident. : 10 AD208 Filename : 282710
 Sample Weight : 2.152 Calc.method: using 'K. Factors'

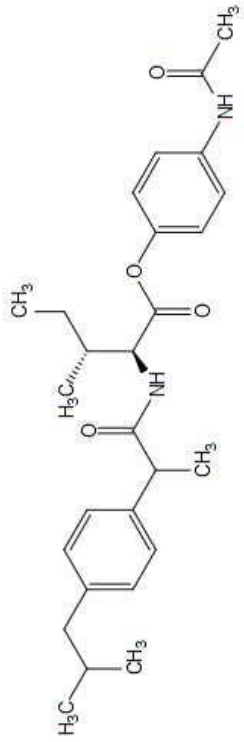
No. (#)	Type (#)	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	66	101	83	2305.3	30846	2.67	Nitrogen
2	FU	101	288	110	57586.8	871445	75.56	Carbon
3	RS	288	597	328	4067.0	251098	217.77	Hydrogen

1153389 100.00

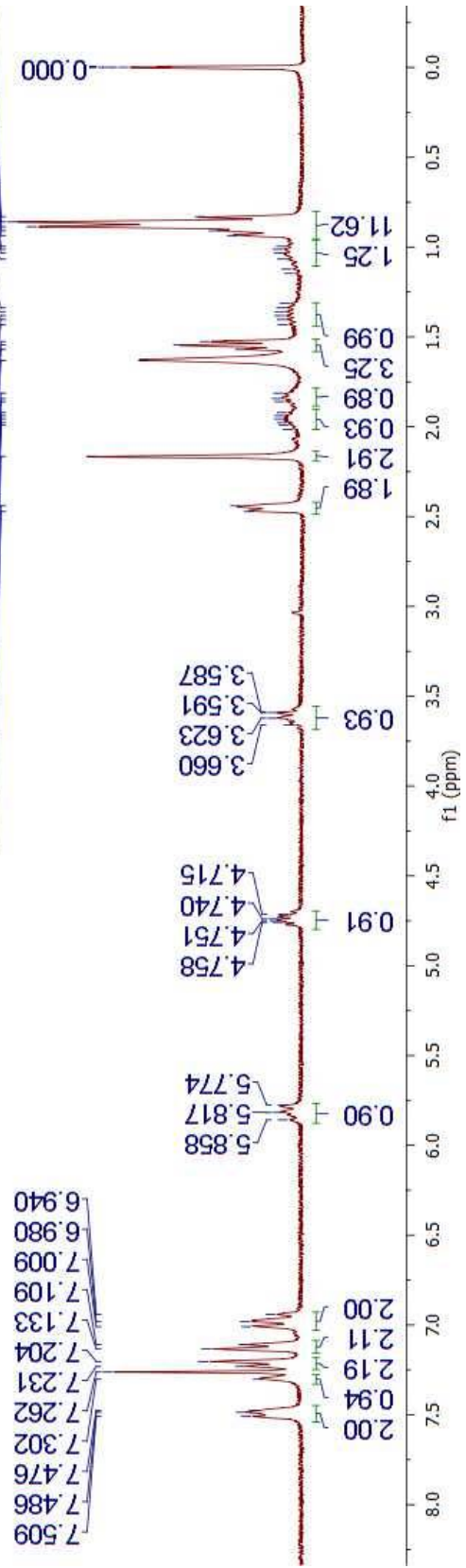
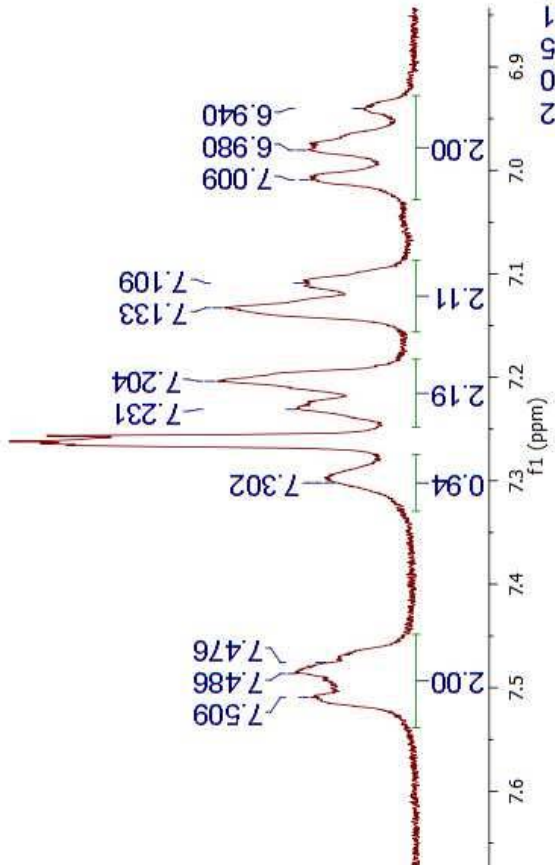
EAGER 200 Unk Report

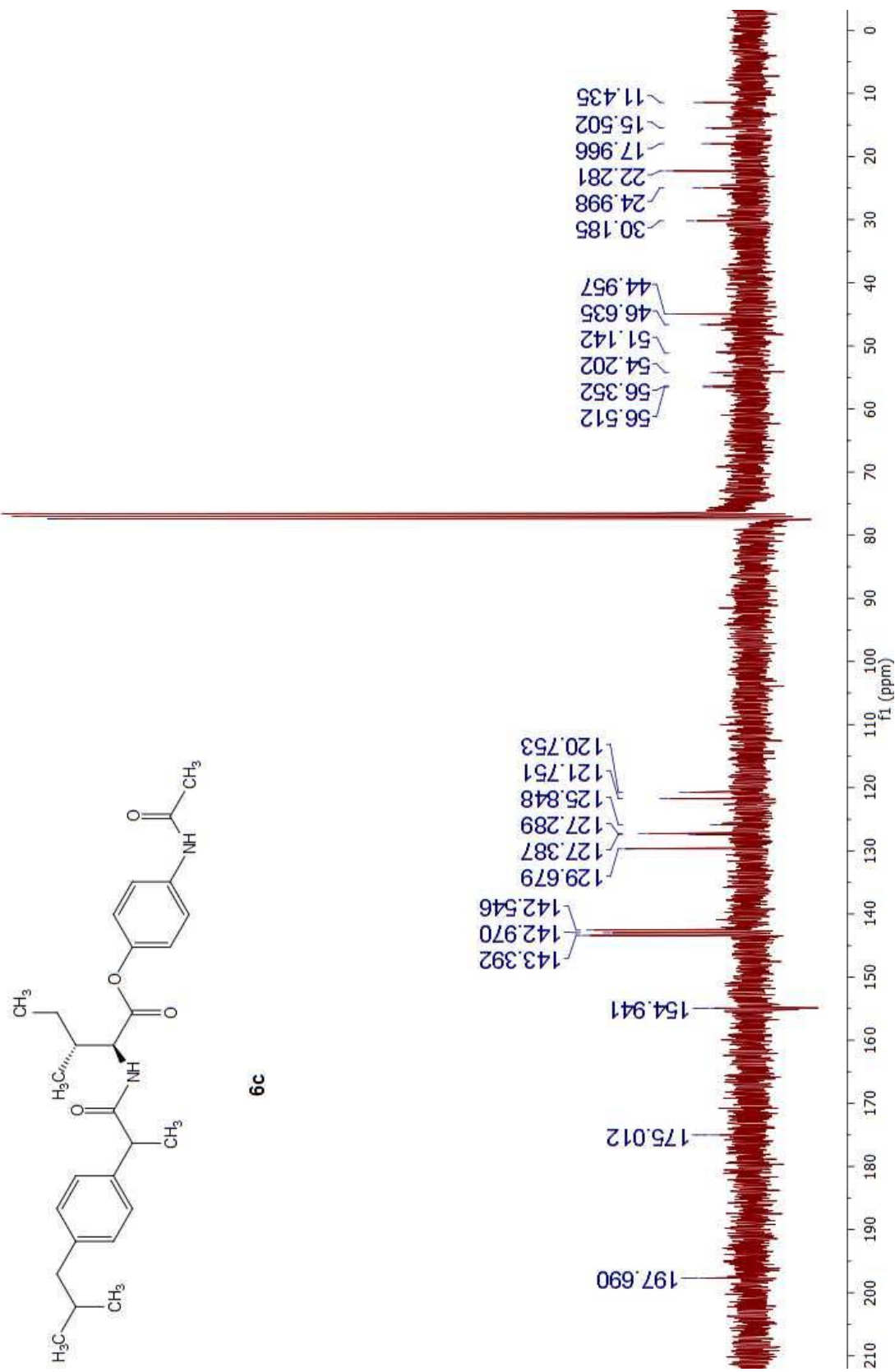
Instrument name : Instrument #1 Bline drift (fV): 24.1
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-15-13 09:55:14 Printed : 10-15-2013 16:27:51
 Sample Ident. : 10 AD208 Filename : 282710
 Sample Weight : 2.152 Calc.method: using 'K. Factors'

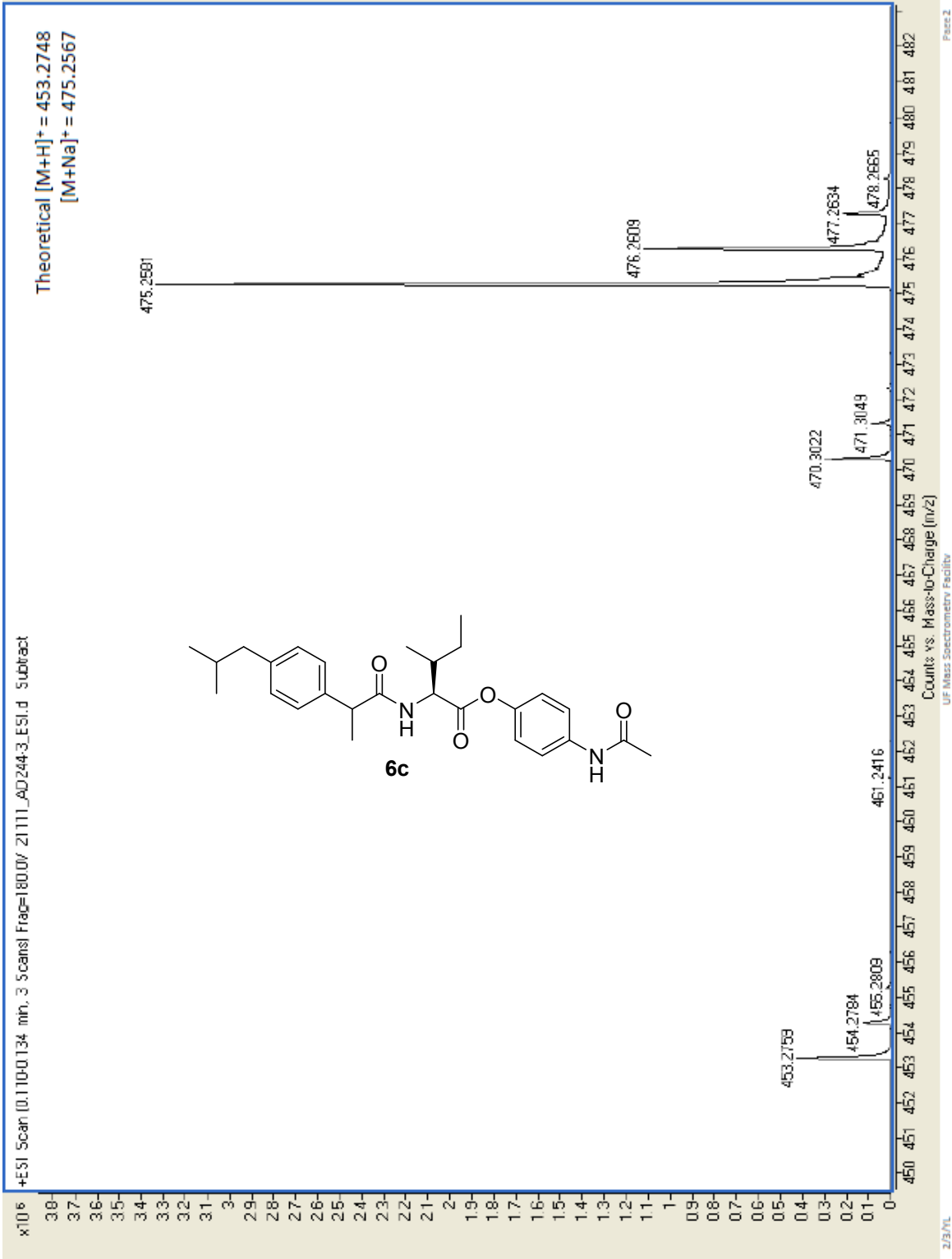
Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	83	30846	6.899	.282517E+02	Nitrogen
2	110	871445	69.879	.100000E+01	Carbon
3	328	251098	7.671	.347054E+01	Hydrogen

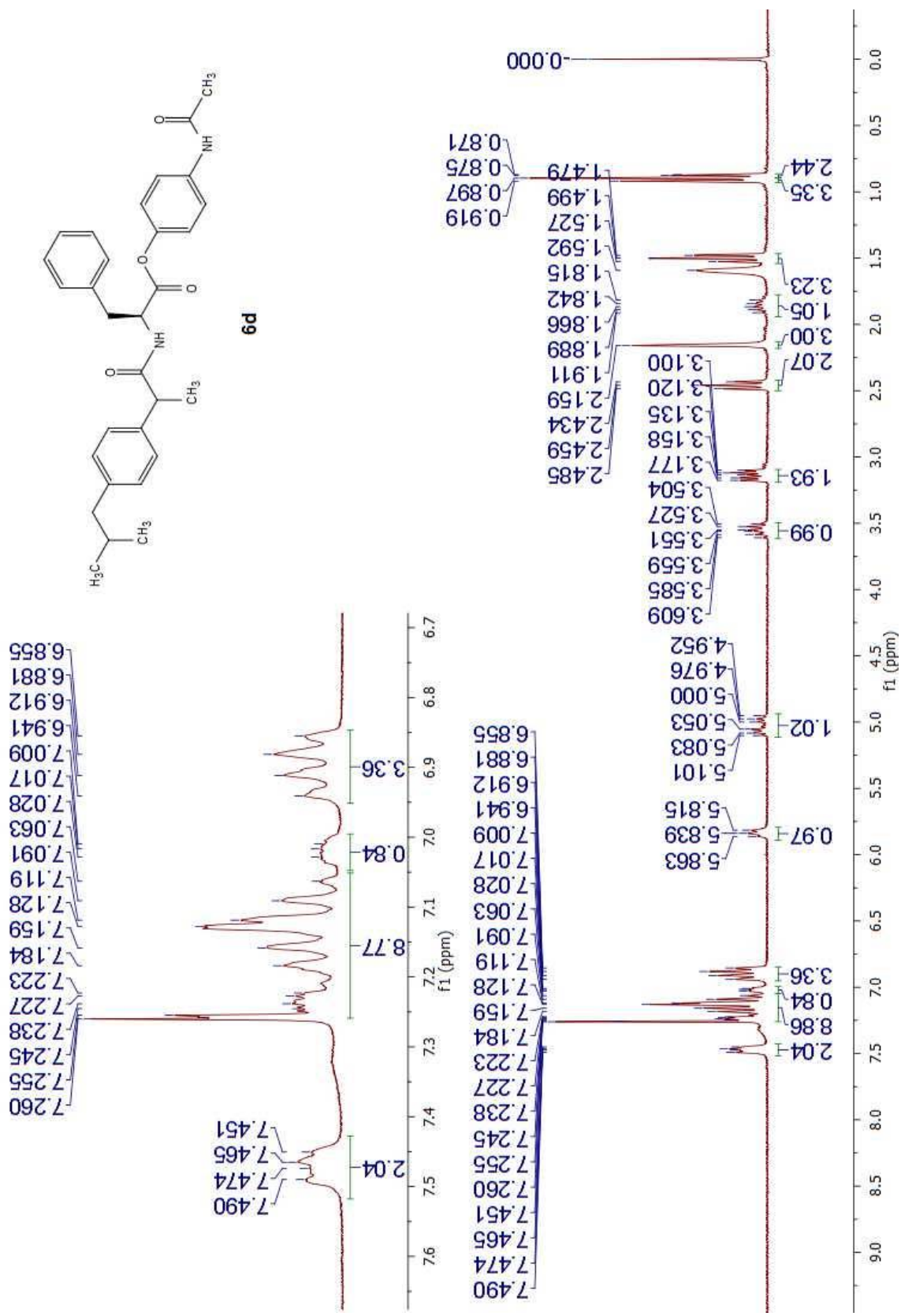


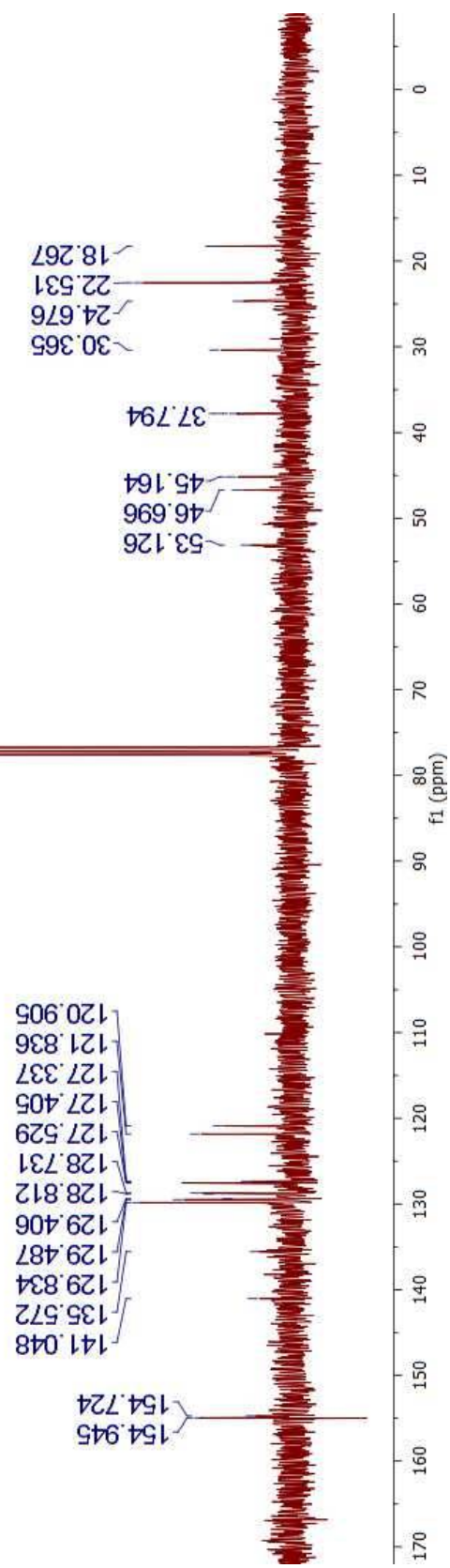
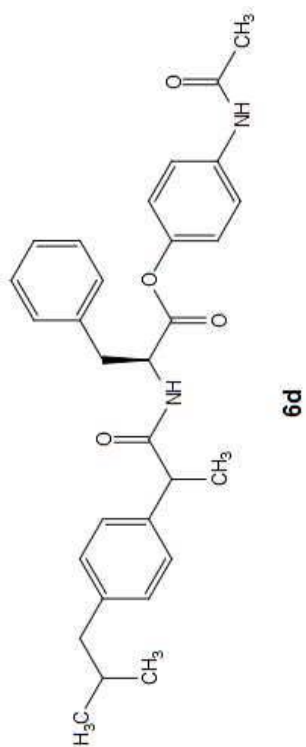
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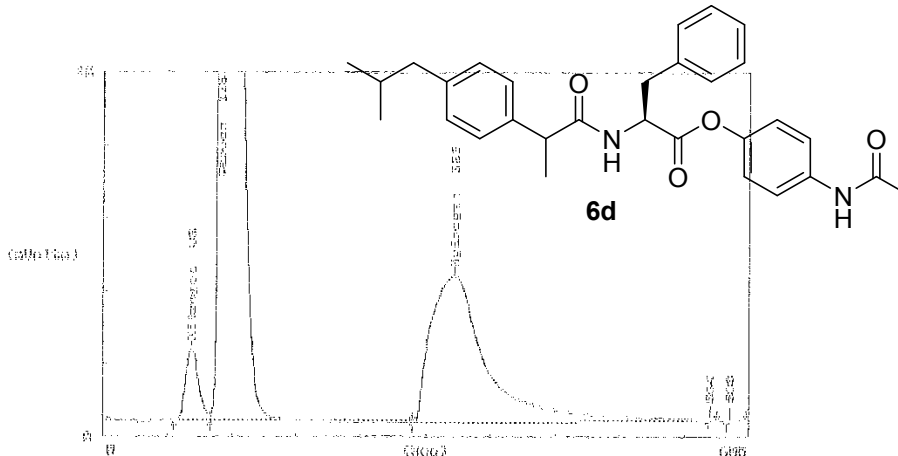






EAGER 200 Stripchart

Sample Ident. : 10 AD220 Filename : 282610
 Analysed : 10-10-13 10:15:33 Printed : 10-10-2013 12:21:59



EAGER 200 Peak Integration Report

Instrument name : Instrument #1 Bline drift (fV): 22.8
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-10-13 10:15:33 Printed : 10-10-2013 12:22:00
 Sample Ident. : 10 AD220 Filename : 282610
 Sample Weight : 2.173 Calc.method: using 'K. Factors'

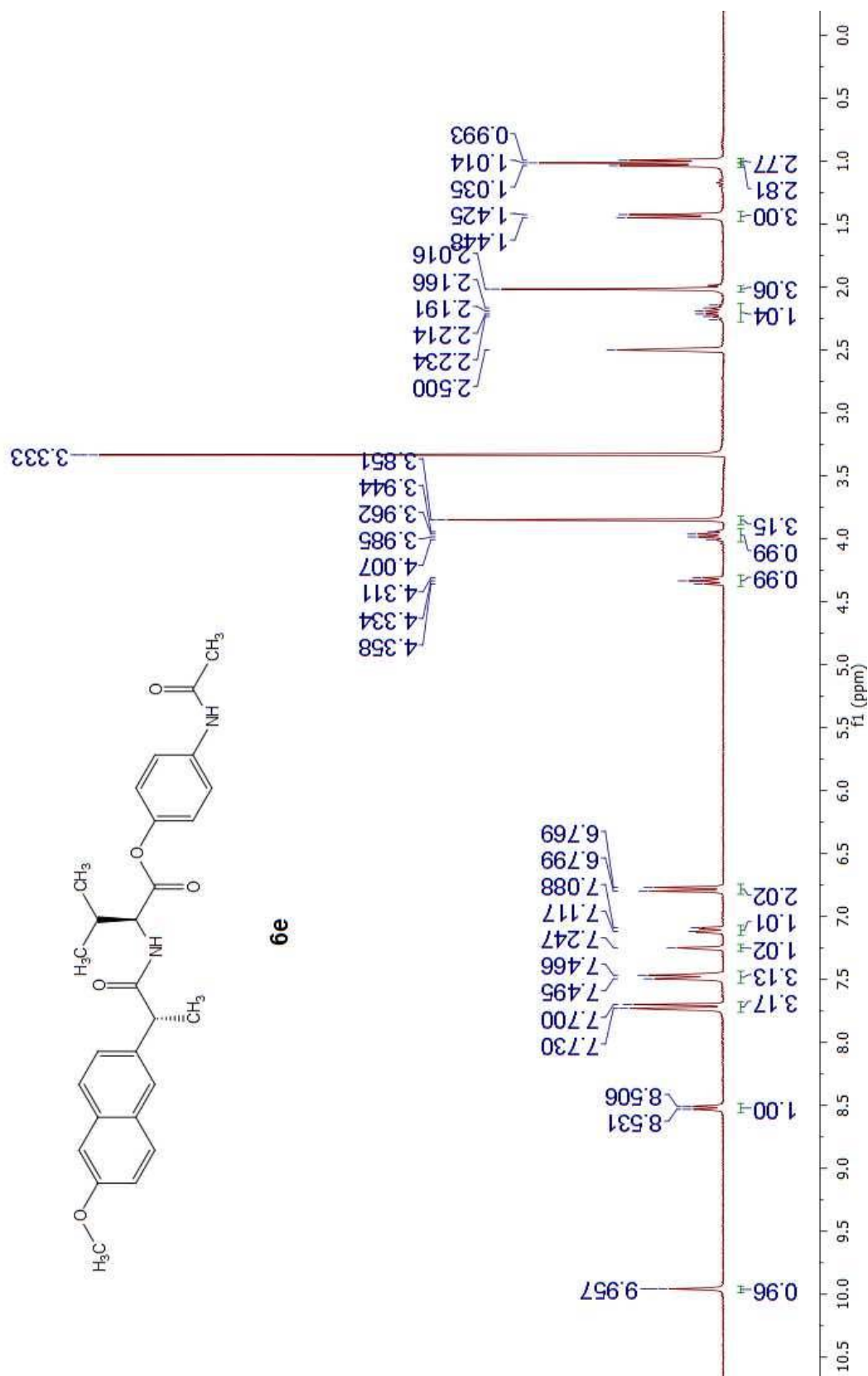
No. (#)	Type	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	66	100	82	1972.4	26249	2.20	Nitrogen
2	FU	100	288	109	61016.1	924536	77.66	Carbon
3	TL	288	598	326	3974.5	239705	20.13	Hydrogen
4	CR	562	571	564	1.6	11	0.00	
5	CR	580	598	583	1.9	21	0.00	

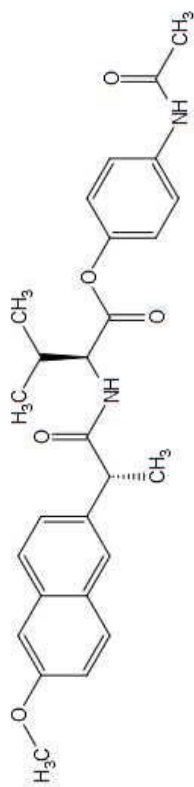
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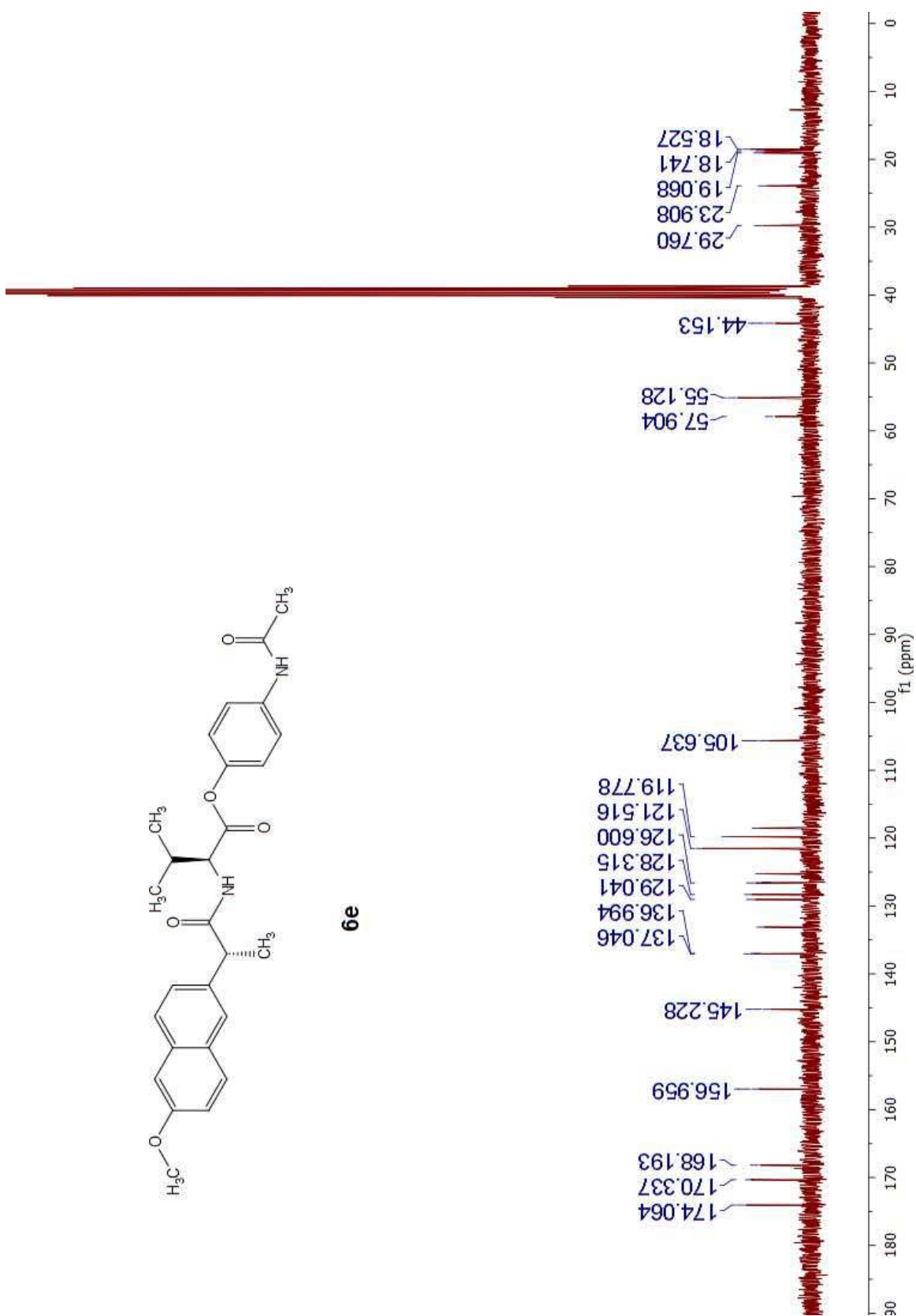
Instrument name : Instrument #1 Bline drift (fV): 22.8
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 10-10-13 10:15:33 Printed : 10-10-2013 12:22:00
 Sample Ident. : 10 AD220 Filename : 282610
 Sample Weight : 2.173 Calc.method: using 'K. Factors'

Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	82	26249	5.824	352219E+02	Nitrogen
2	109	924536	73.749	100000E+01	Carbon
3	326	239705	7.184	335698E+01	Hydrogen



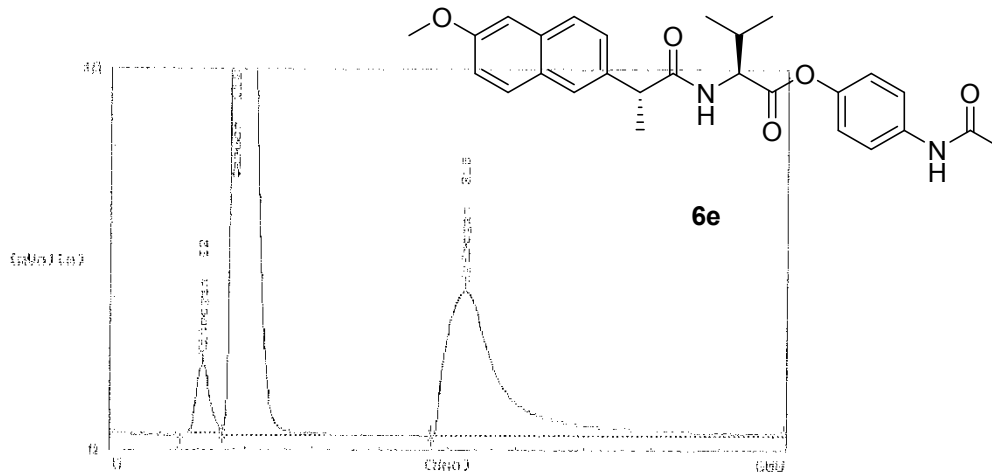


6e



EAGER 200 Stripchart

Sample Ident. : 15 AD261 Filename : 283315
 Analysed : 11-13-13 11:39:31 Printed : 11-13-2013 11:49:32



EAGER 200 Peak Integration Report

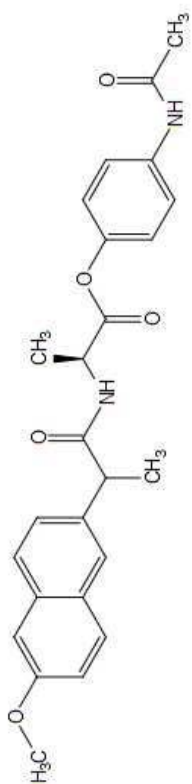
Instrument name : Instrument #1 Bline drift (fV): 11.8
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-13-13 11:39:31 Printed : 11-13-2013 11:49:33
 Sample Ident. : 15 AD261 Filename : 283315
 Sample Weight : 1.97 Calc.method: using 'K. Factors'

No. (#)	Type (#)	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	63	100	62	1804.8	24235	2.38	Nitrosan
2	FU	100	285	110	52736.7	788864	77.54	Carbon
3	RS	285	598	315	3734.5	204246	20.08	Hydrogen
						1017345	100.00	

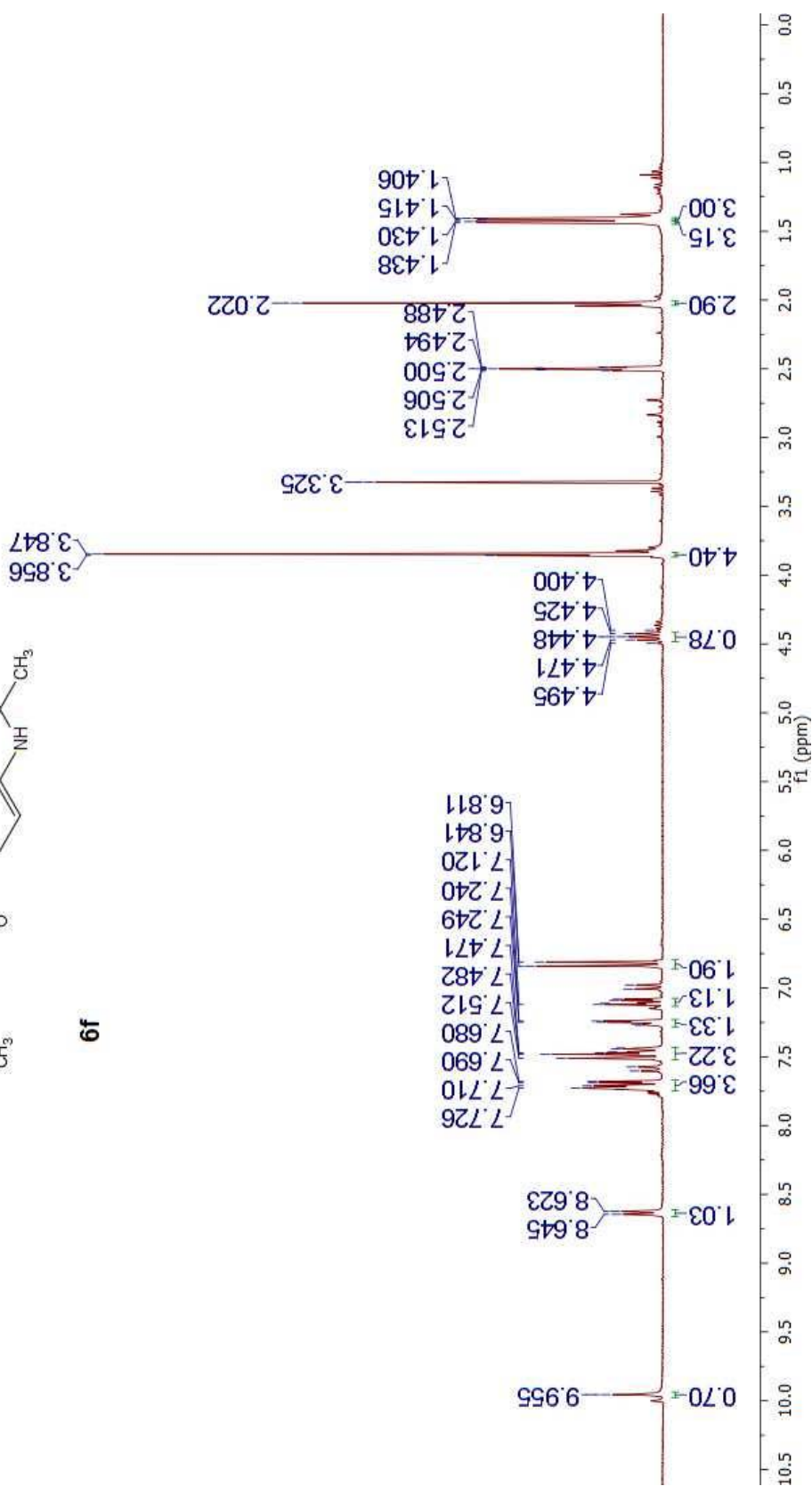
EAGER 200 Unk Report

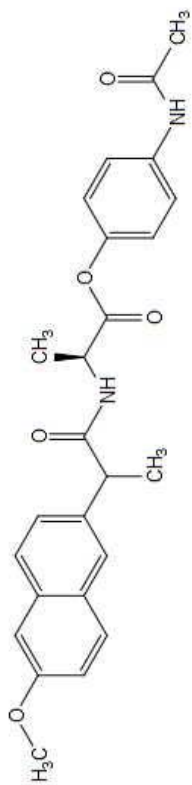
Instrument name : Instrument #1 Bline drift (fV): 11.8
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-13-13 11:39:31 Printed : 11-13-2013 11:49:33
 Sample Ident. : 15 AD261 Filename : 283315
 Sample Weight : 1.97 Calc.method: using 'K. Factors'

Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	62	24235	5.970	.325512E+02	Nitrosan
2	110	788864	70.139	.100000E+01	Carbon
3	315	204246	6.864	.386232E+01	Hydrogen

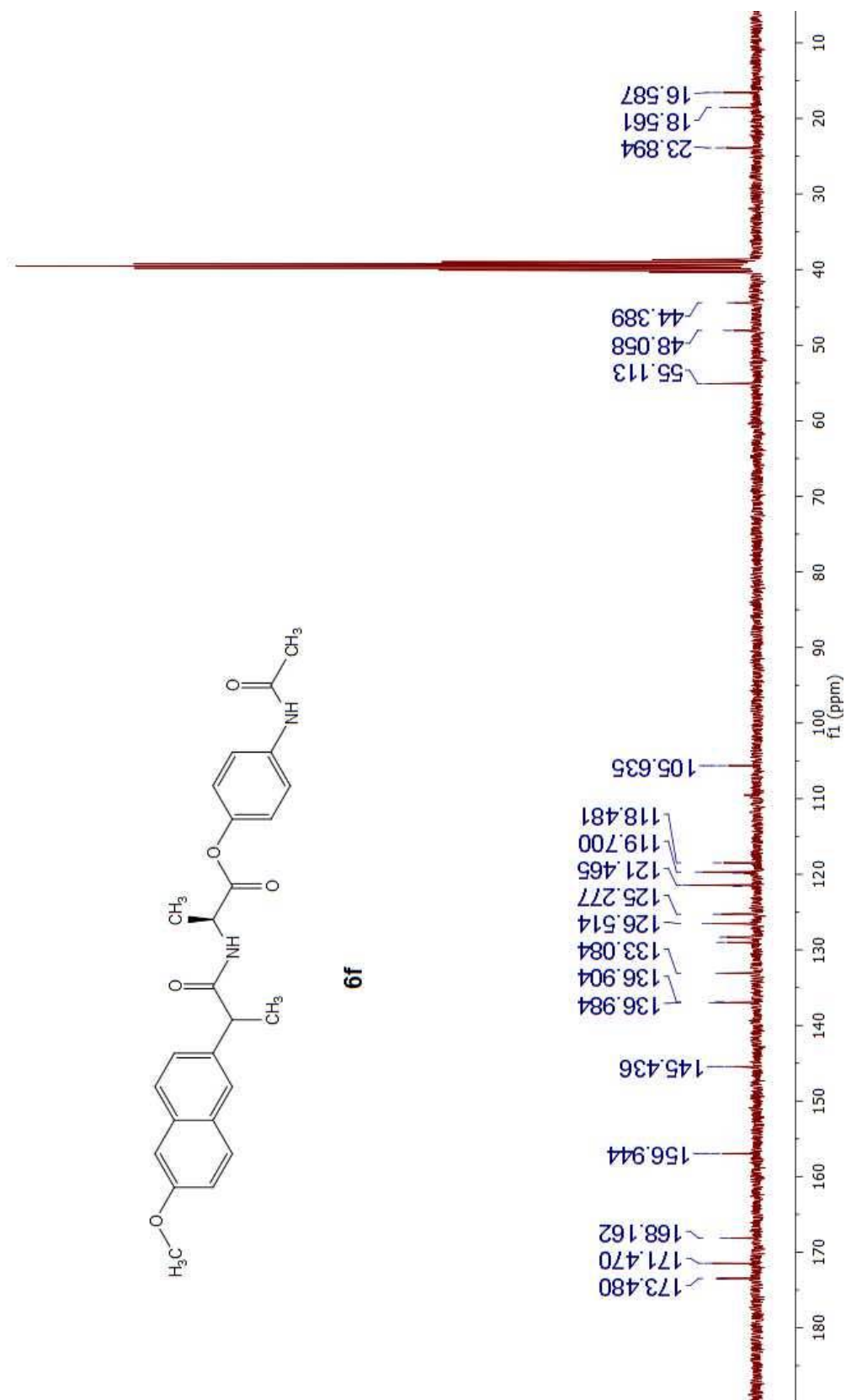


19



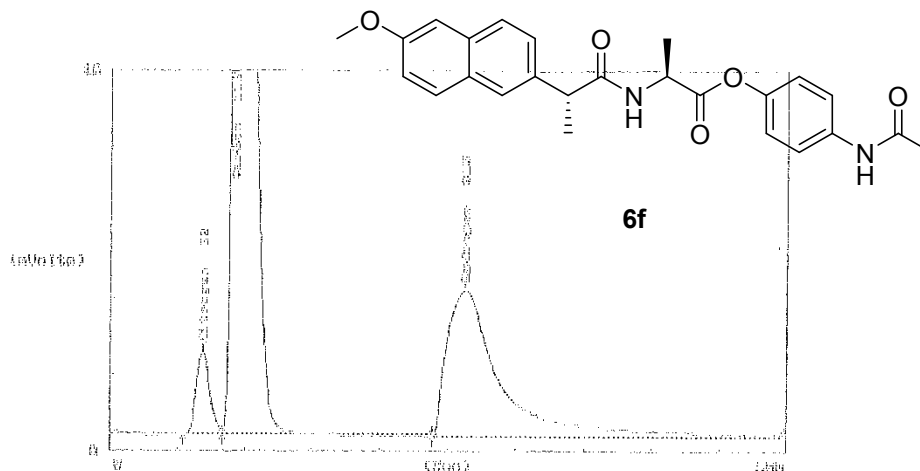


6f



EAGER 200 Stripchart

Sample Ident. : 17 AD256 Filename : 283317
 Analysed : 11-13-13 11:59:36 Printed : 11-13-2013 16:03:18



EAGER 200 Peak Integration Report

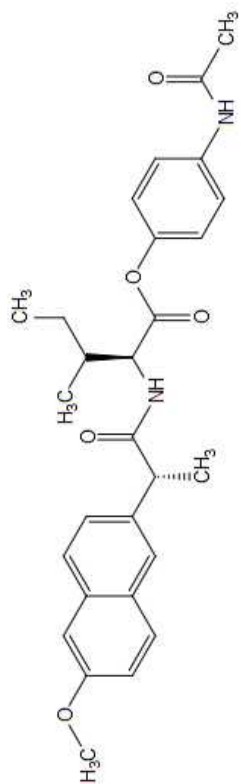
Instrument name : Instrument #1 Bline drift (fV):-5.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-13-13 11:59:36 Printed : 11-13-2013 16:03:18
 Sample Ident. : 17 AD256 Filename : 283317
 Sample Weight : 2.098 Calc.method: using 'K. Factors'

No. (#)	Type (#)	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	65	100	82	2139.9	28602	2.70	Nitrogen
2	FU	100	286	110	54653.6	824730	77.97	Carbon
3	RS	286	598	315	3776.9	204449	19.33	Hydrogen
							1057780	100.00

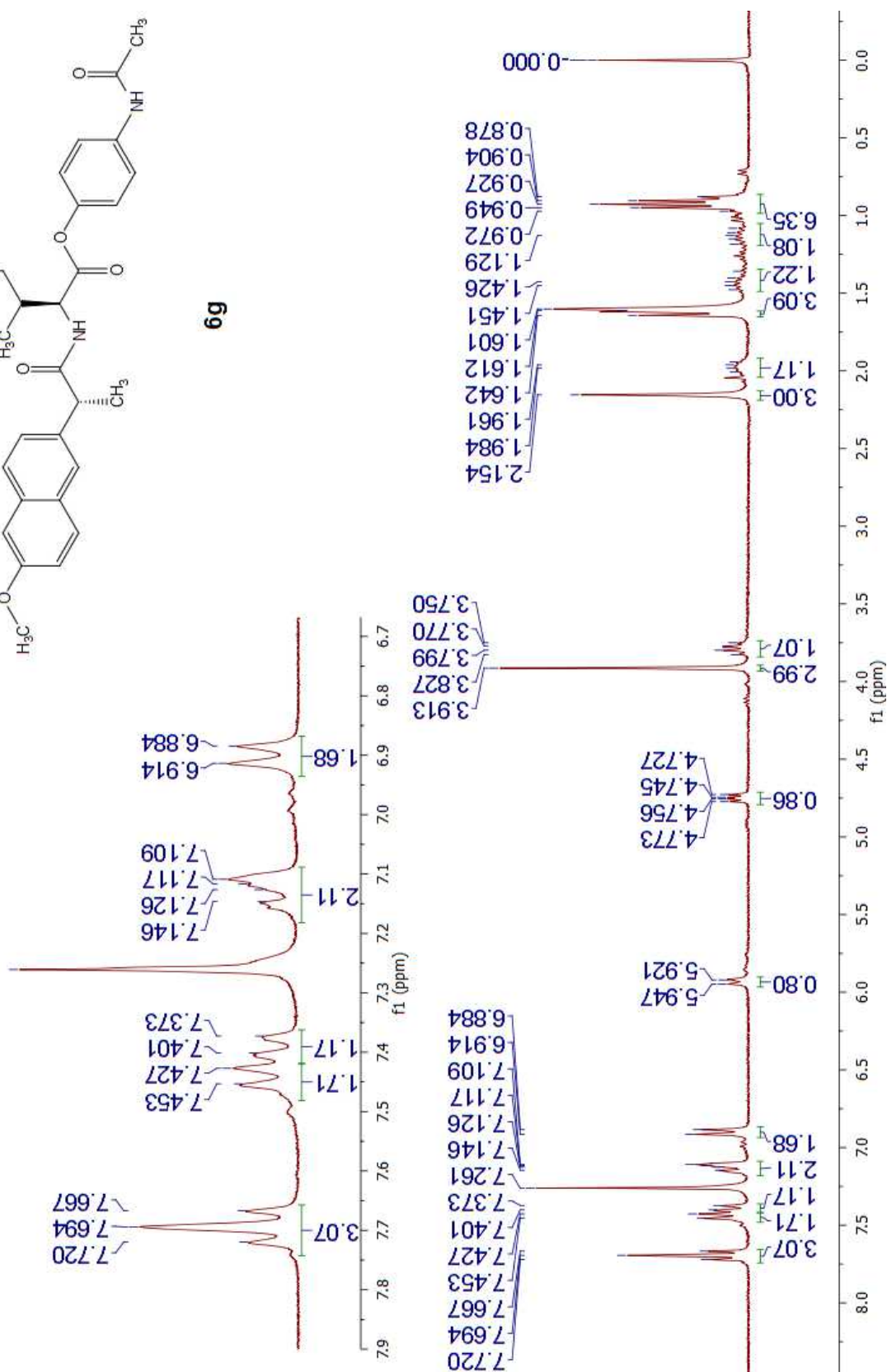
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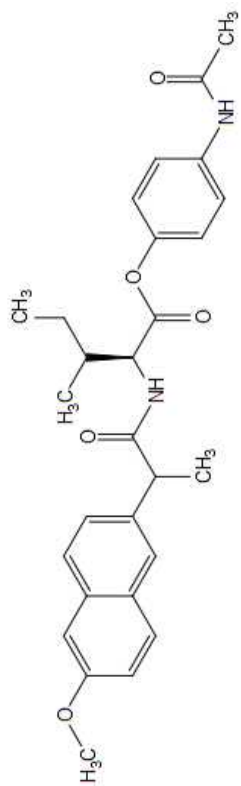
Instrument name : Instrument #1 Bline drift (fV):-5.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-13-13 11:59:36 Printed : 11-13-2013 16:03:18
 Sample Ident. : 17 AD256 Filename : 283317
 Sample Weight : 2.098 Calc.method: using 'K. Factors'

Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	82	28602	6.618	.288350E+02	Nitrogen
2	110	824730	68.854	.100000E+01	Carbon
3	315	204449	6.452	.403392E+01	Hydrogen

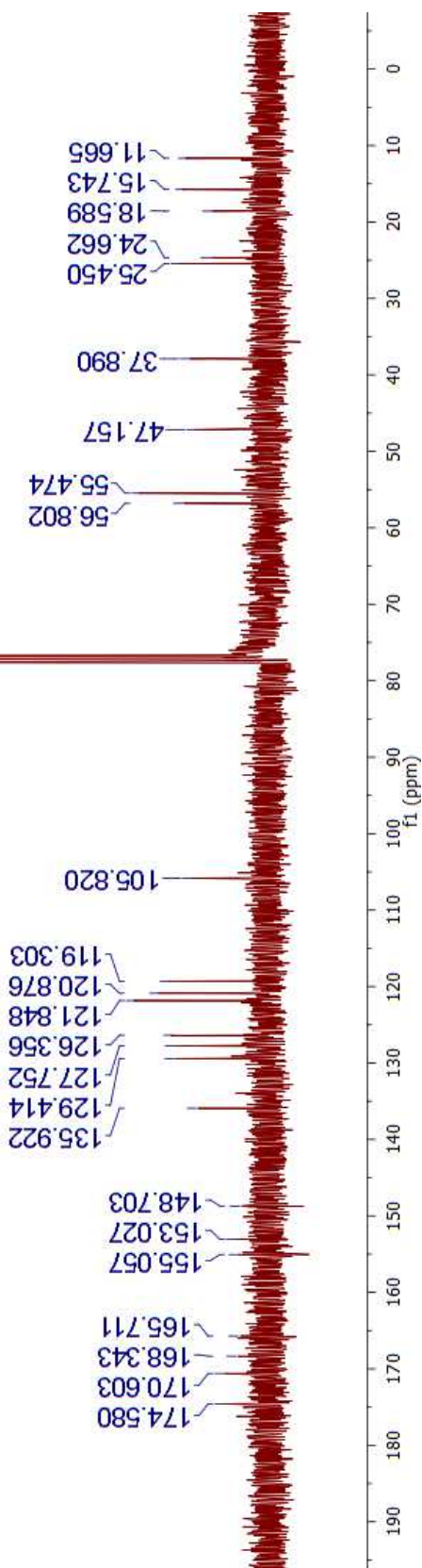


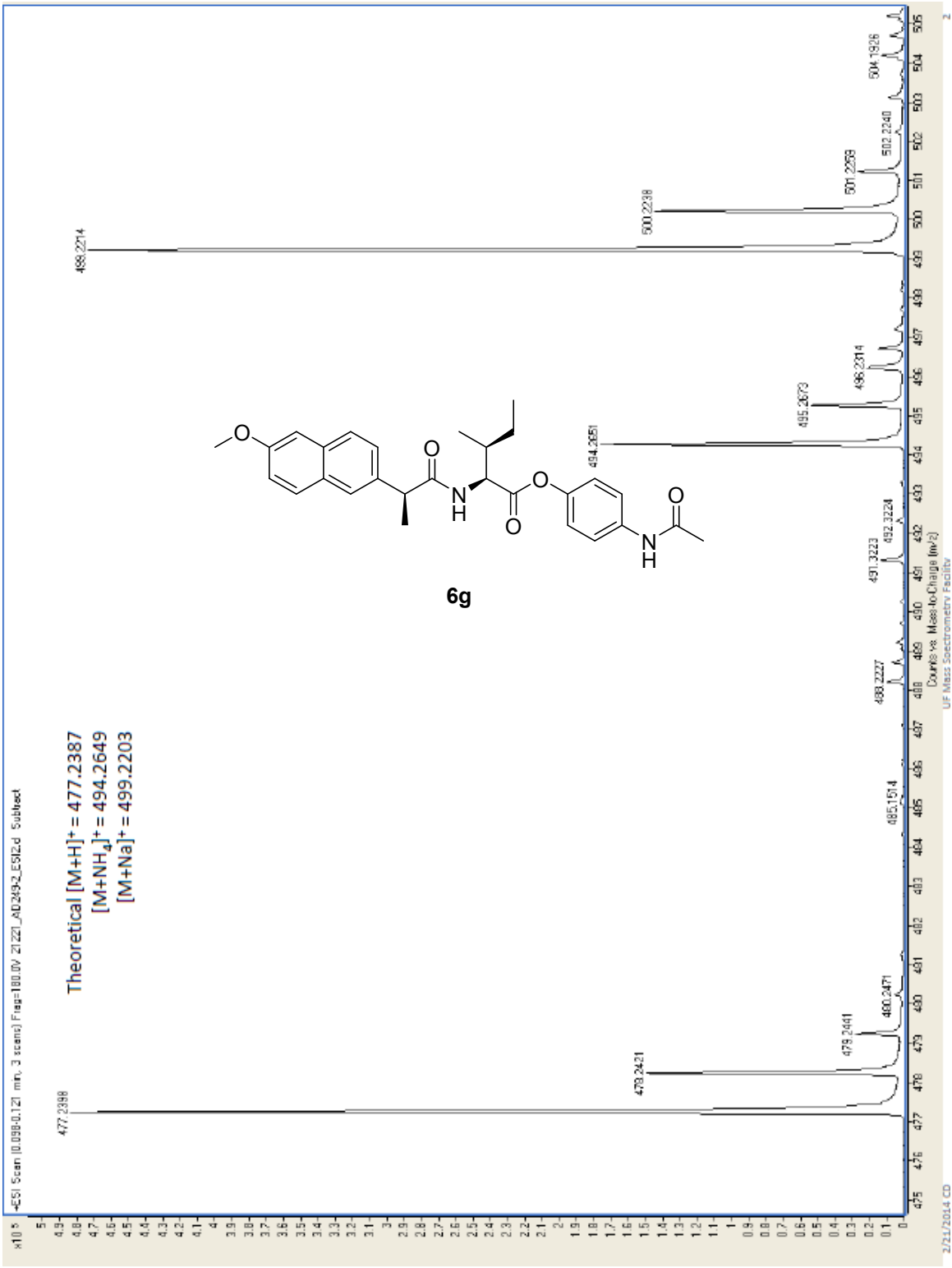
6g

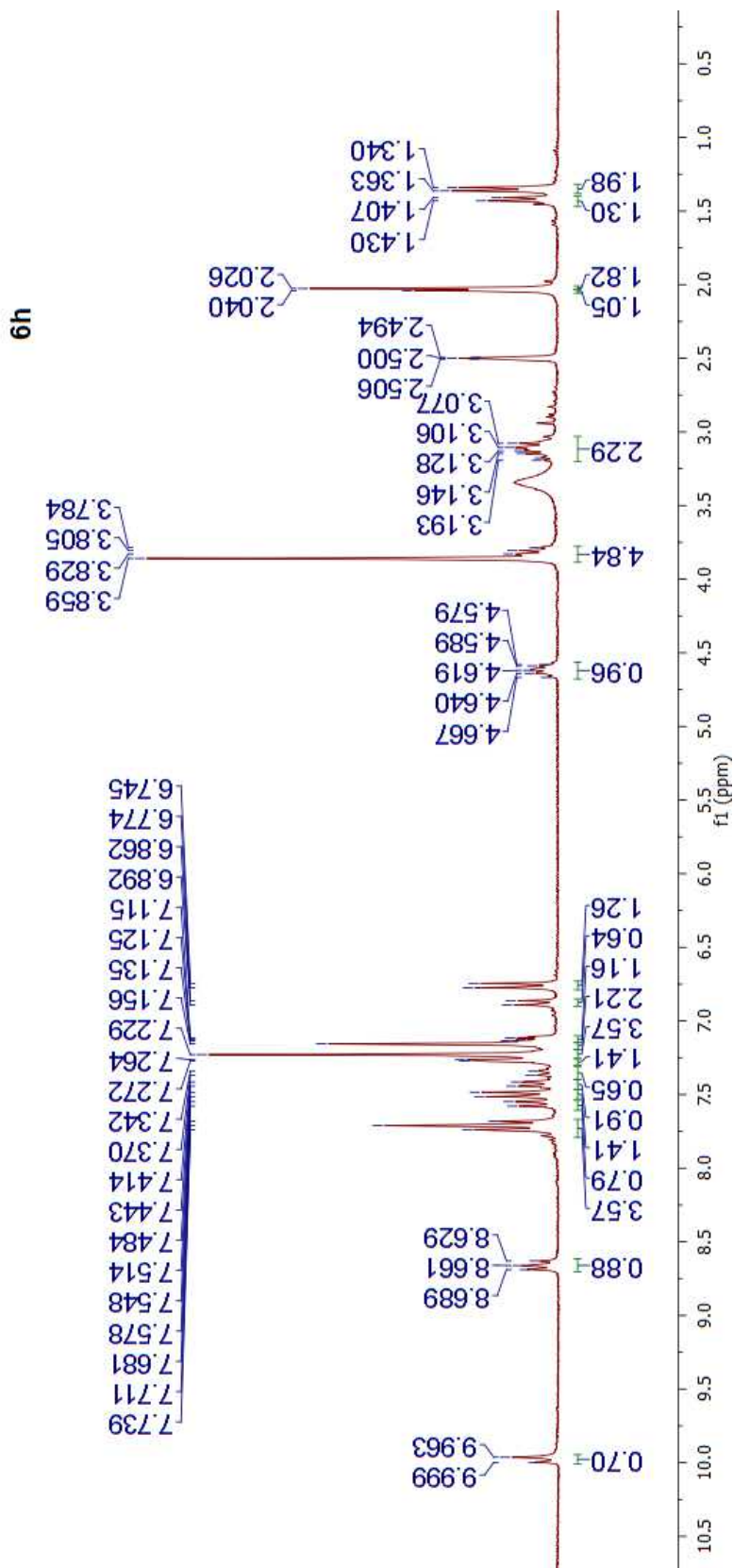
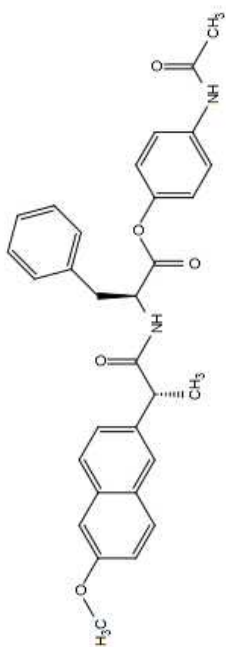


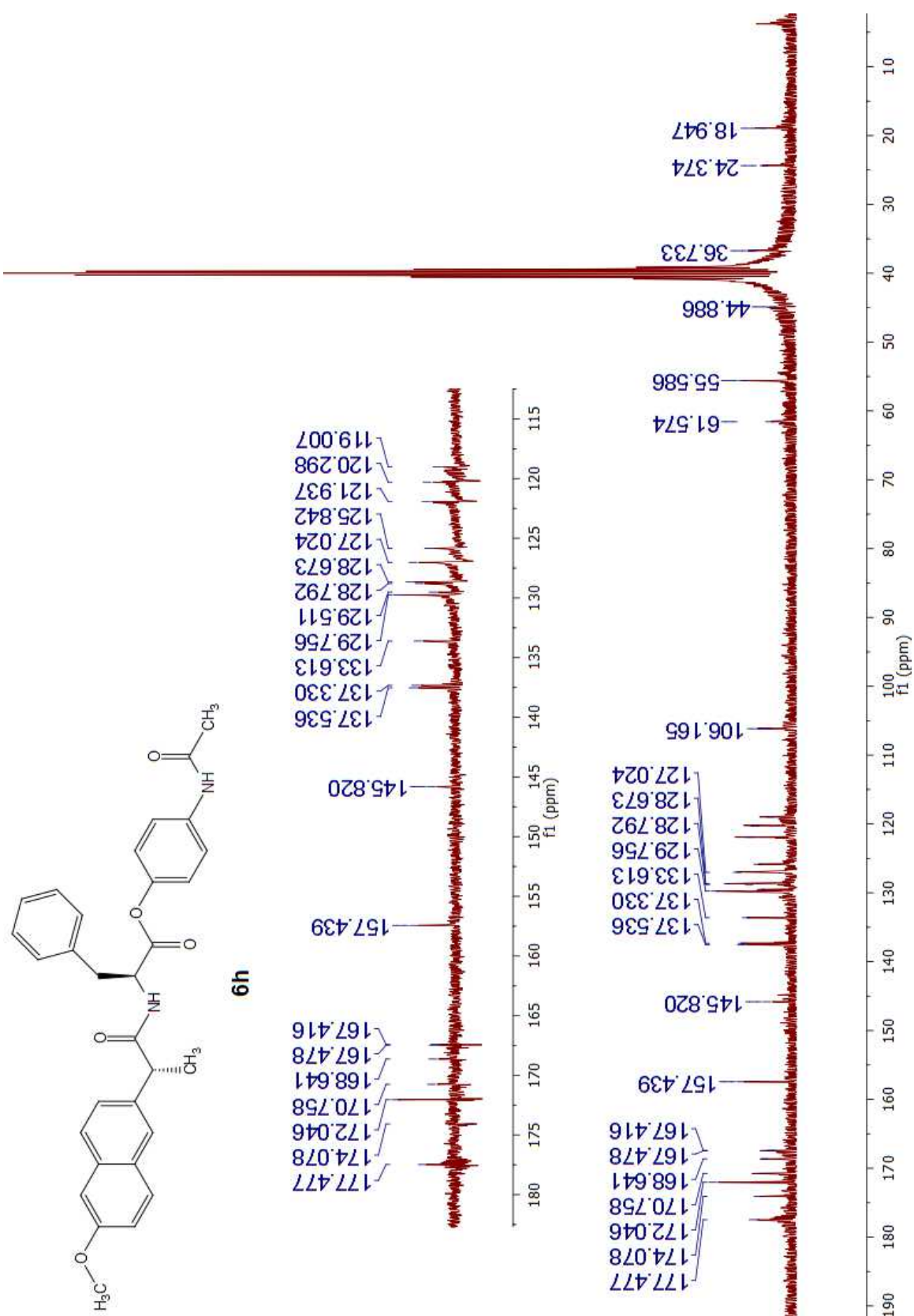


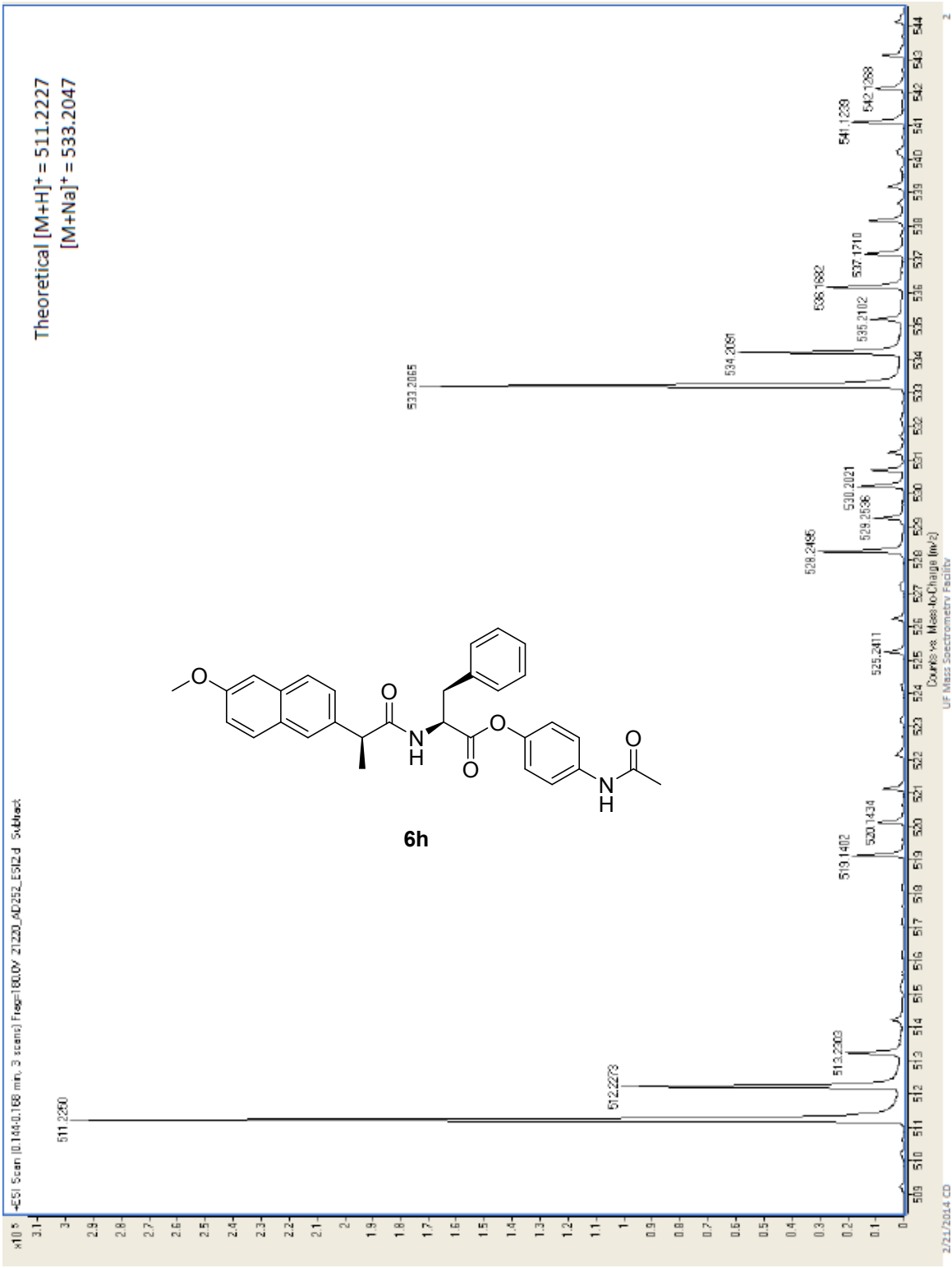
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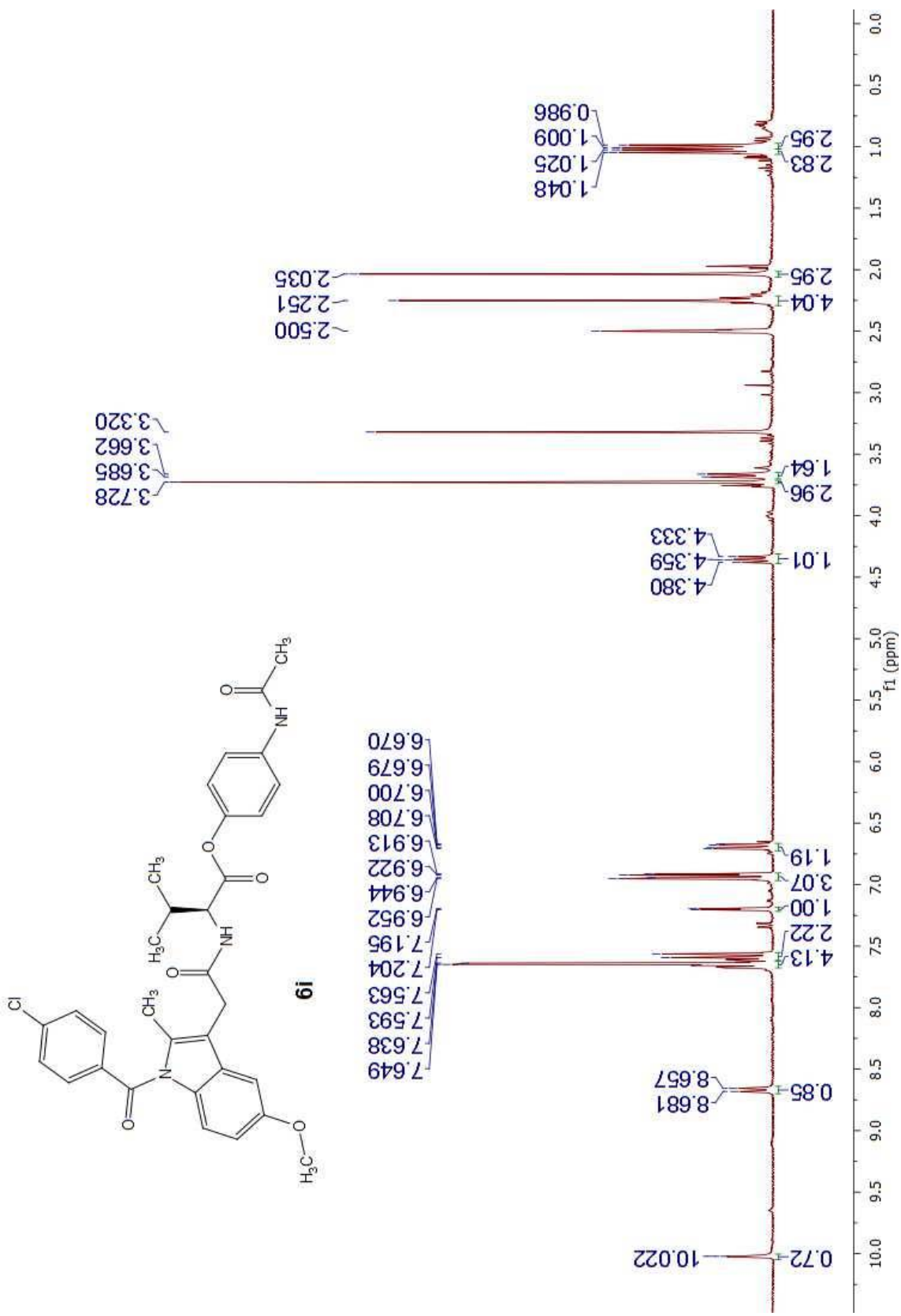


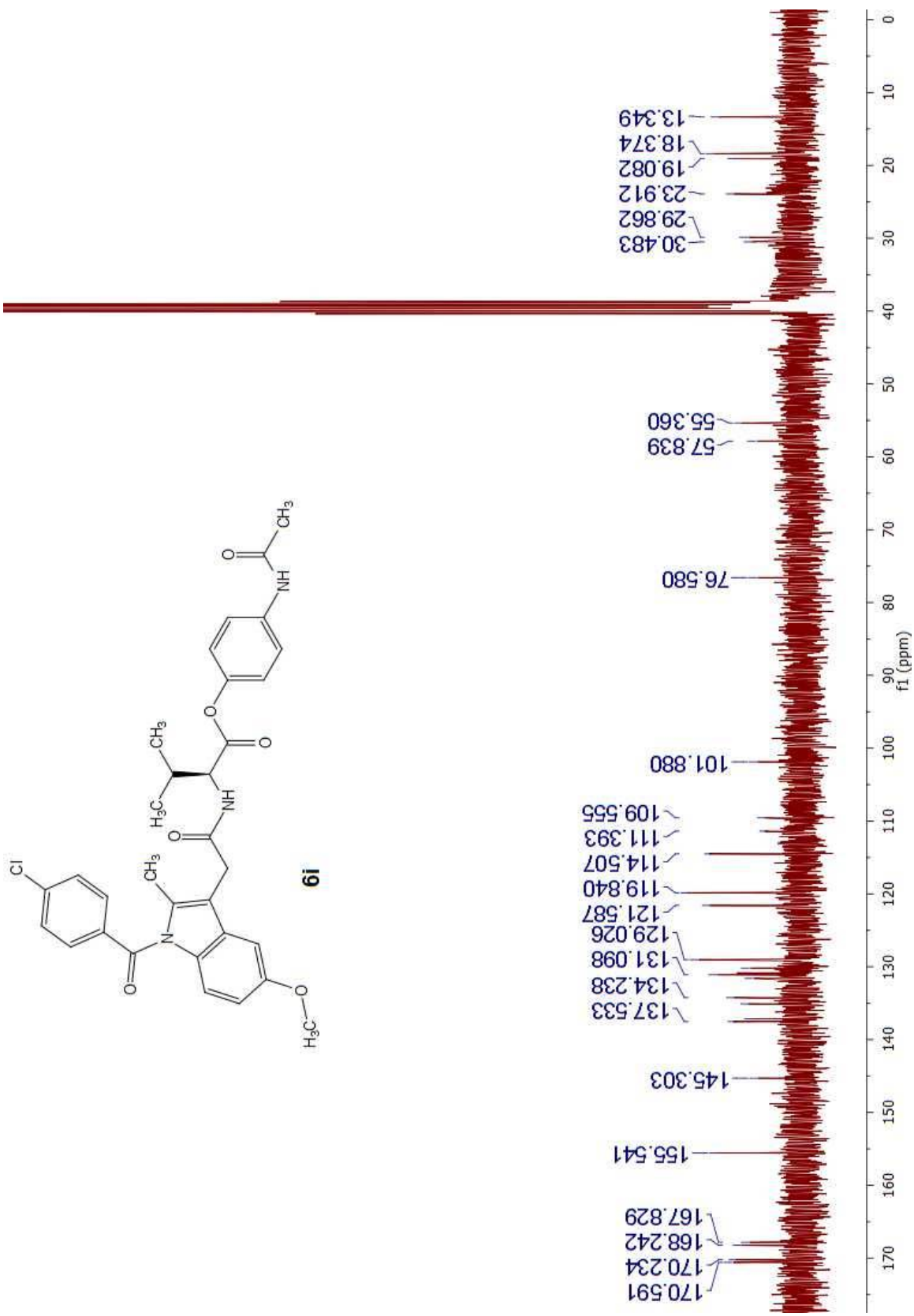
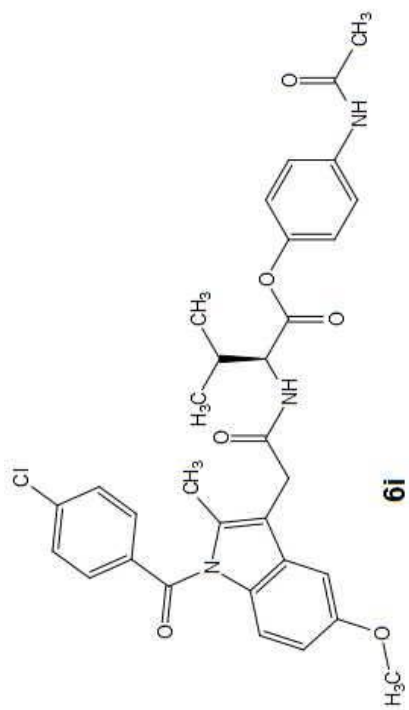


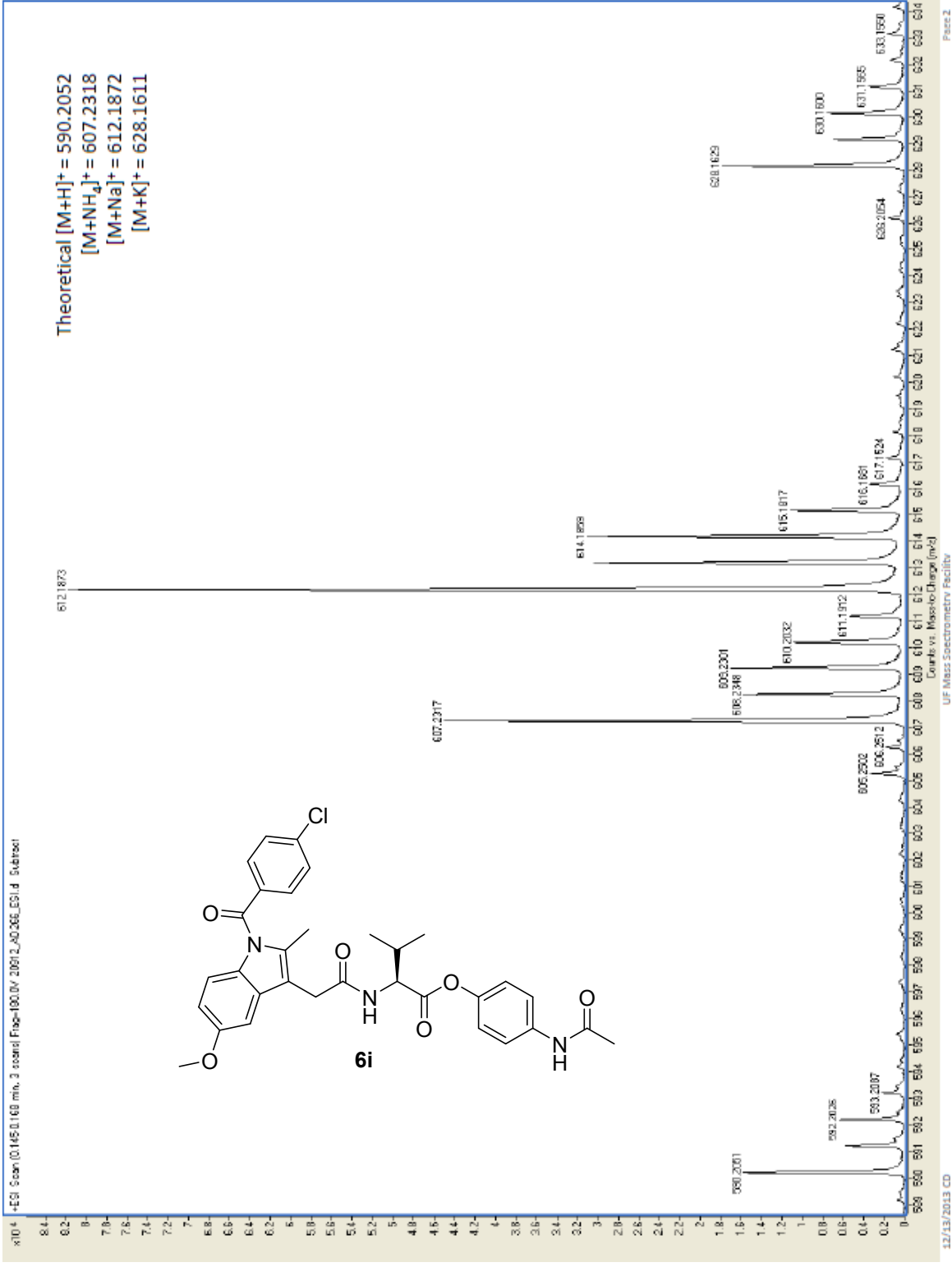


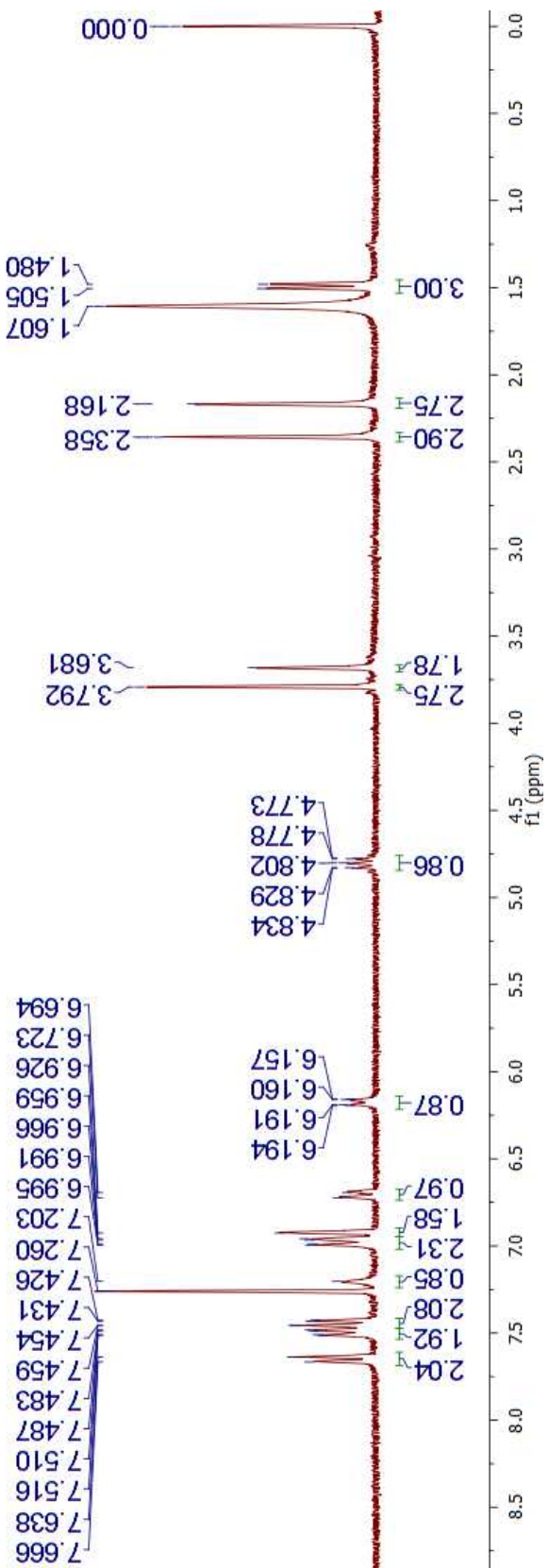
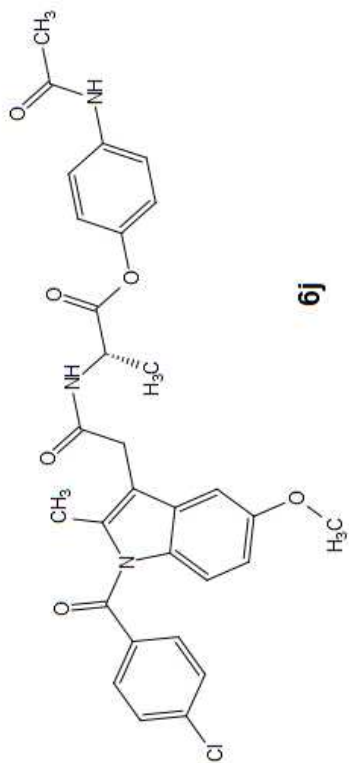


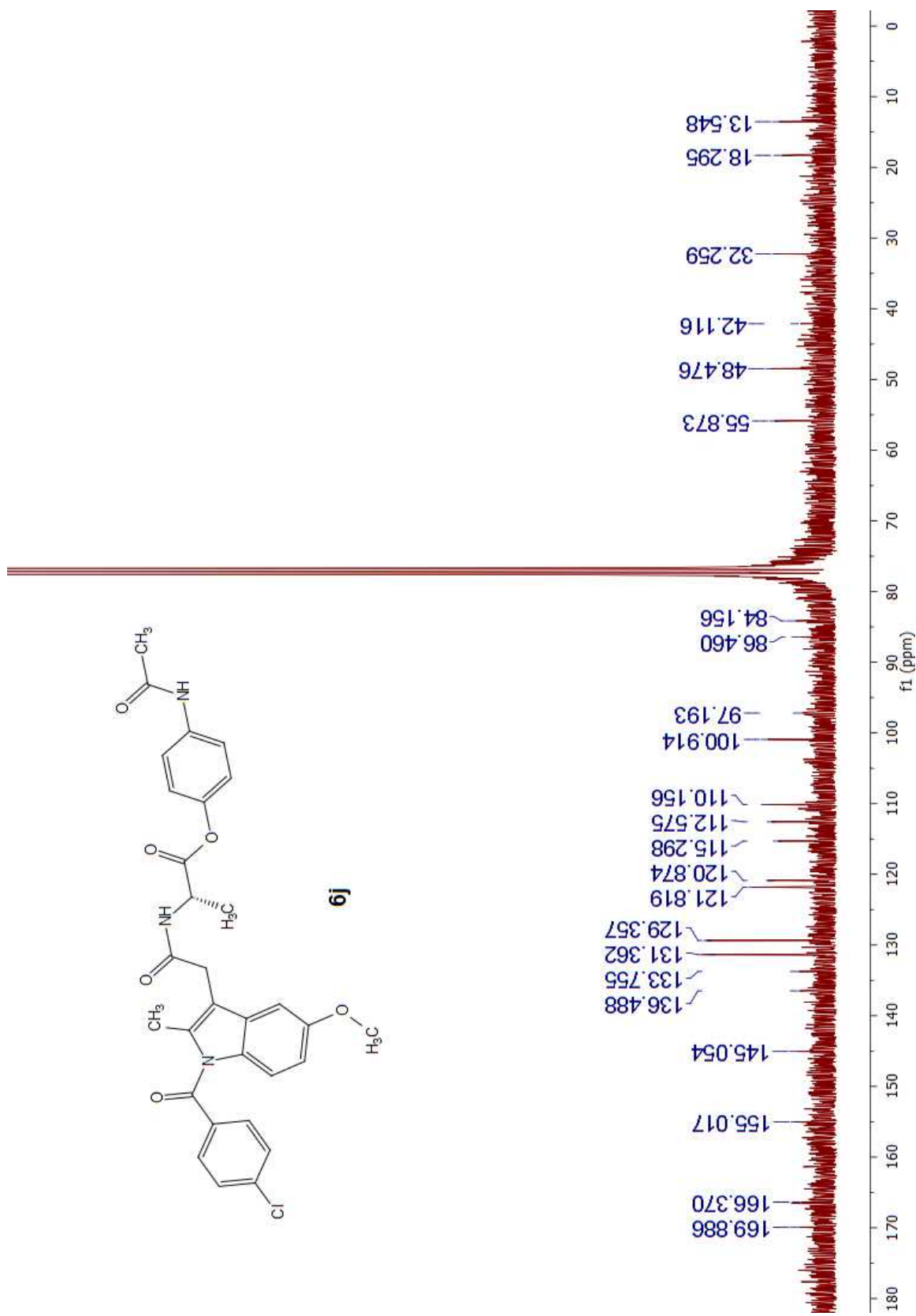


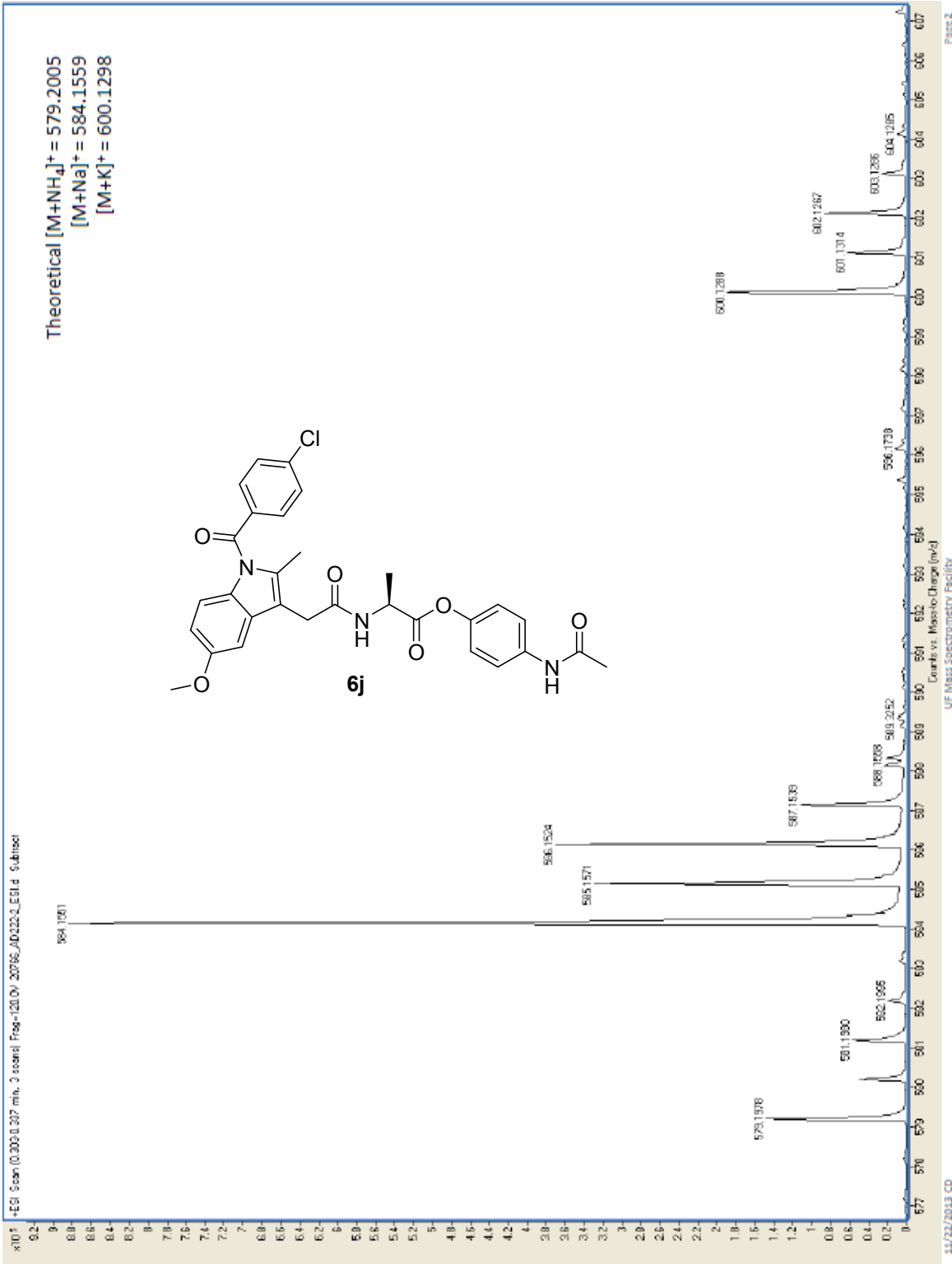


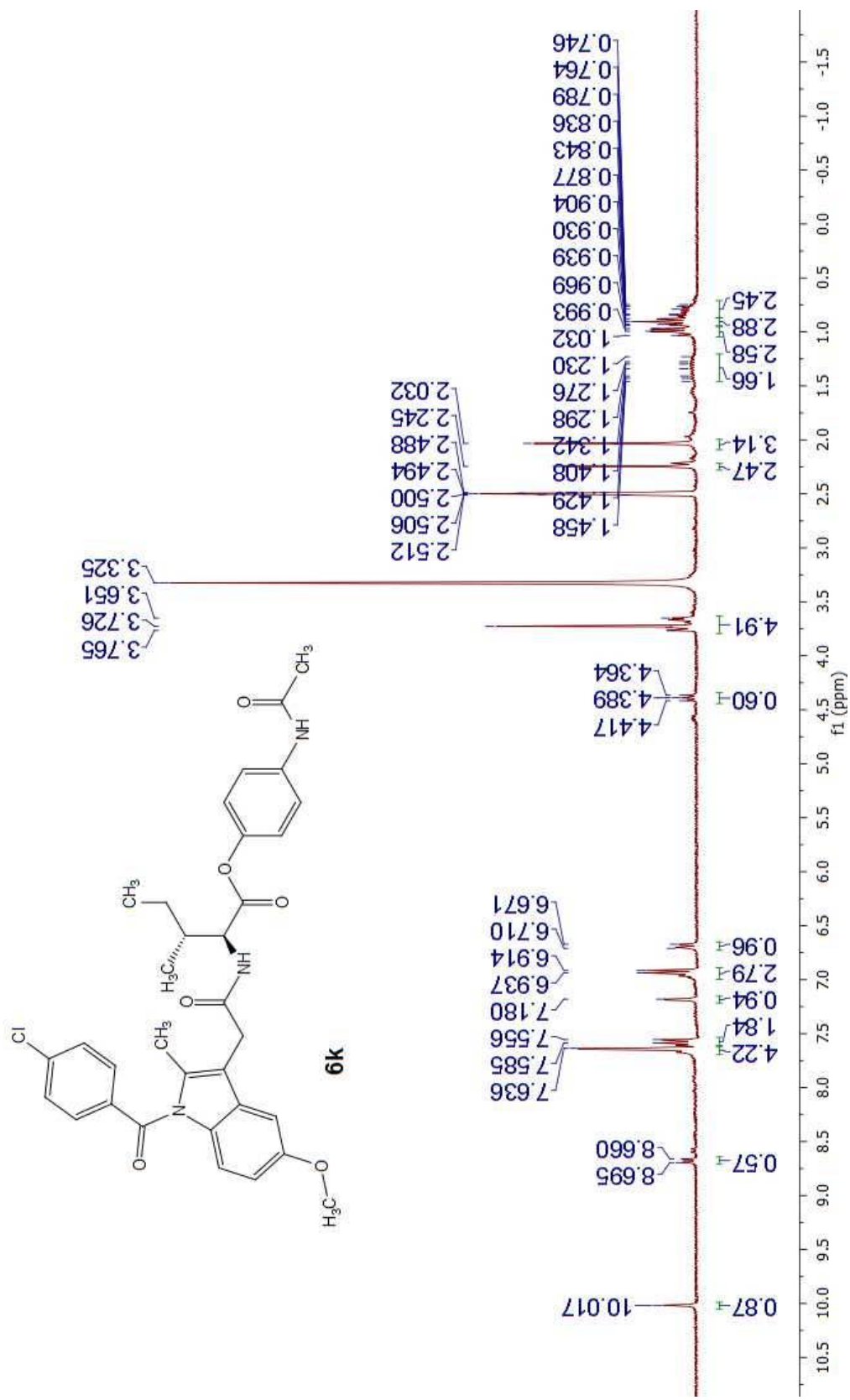


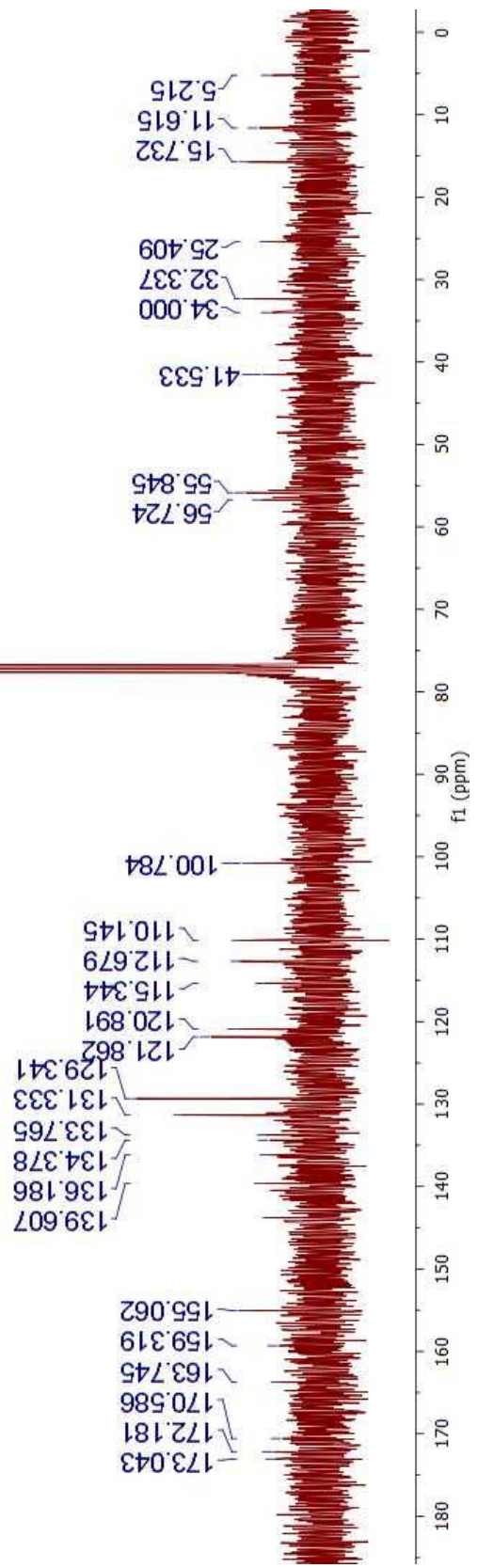
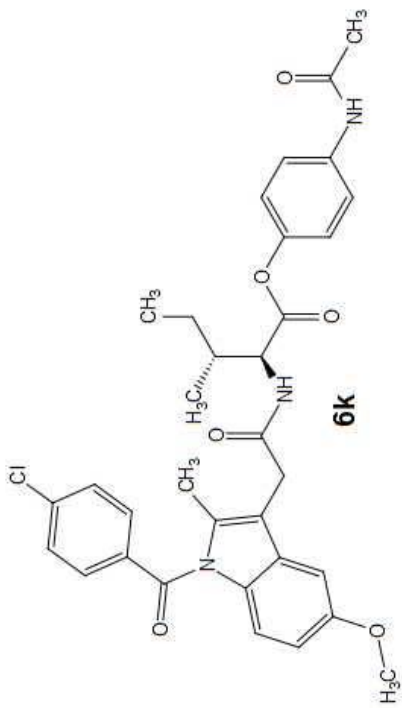




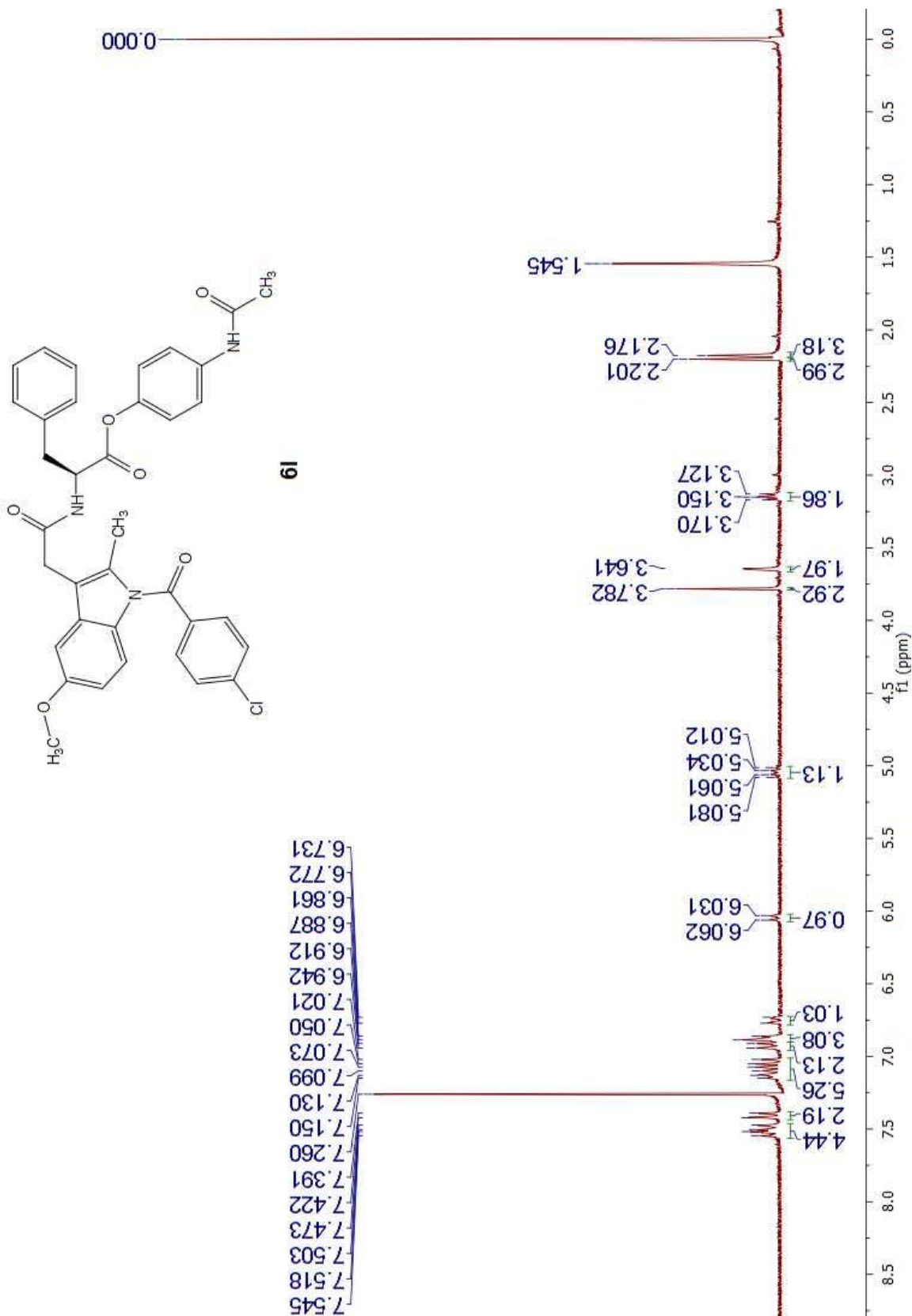


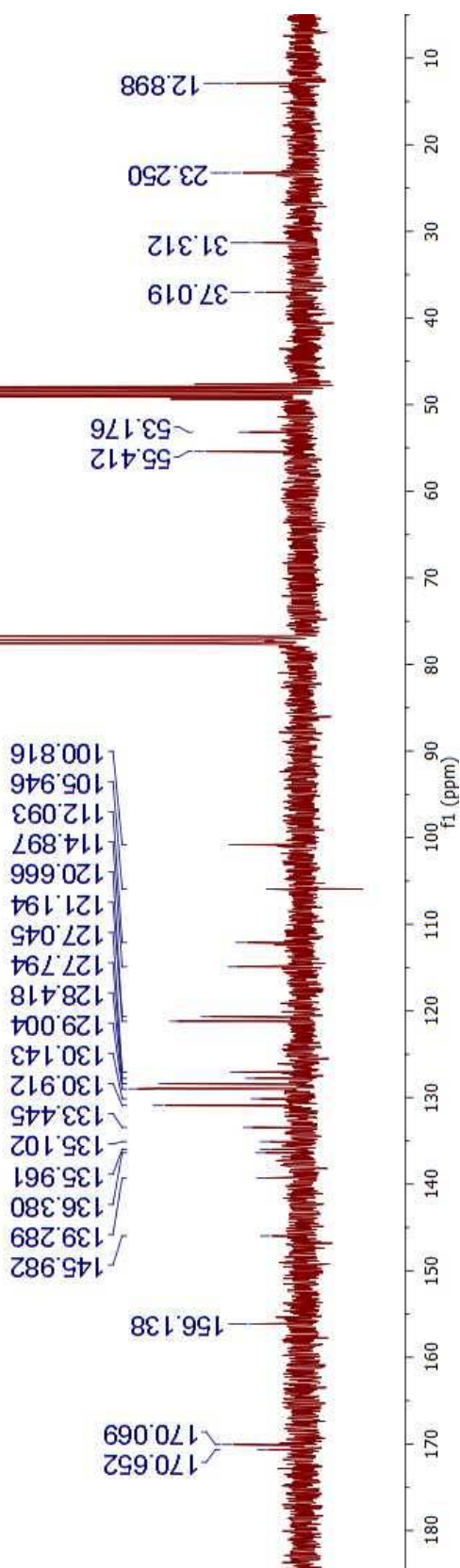
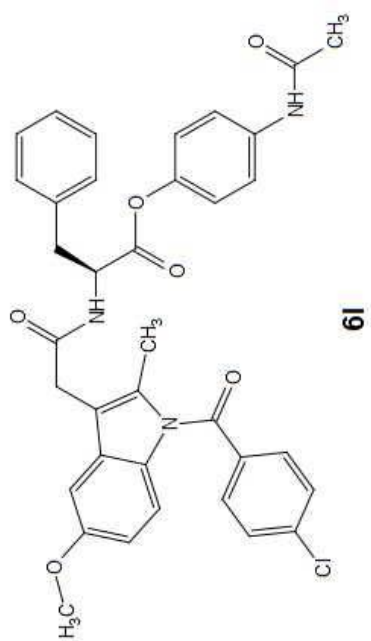






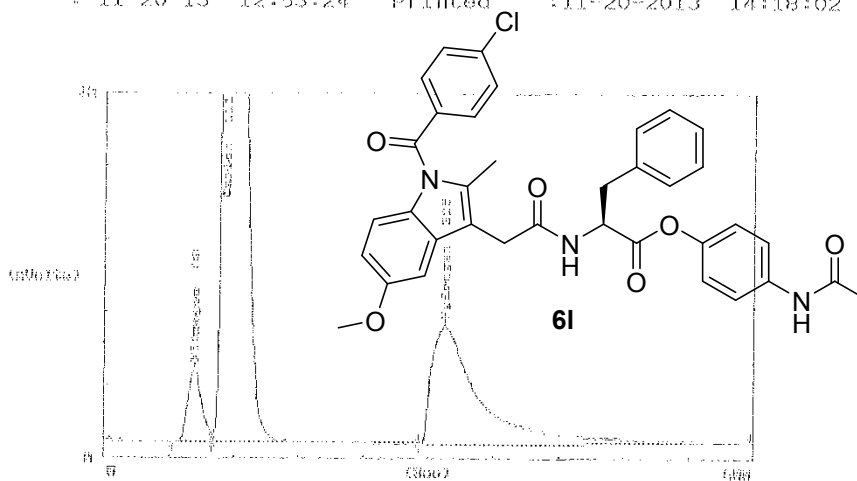






EAGER 200 Stripchart

Sample Ident. : 23 AD253_2 Filename : 283623
 Analysed : 11-20-13 12:53:24 Printed : 11-20-2013 14:18:02



EAGER 200 Peak Integration Report

Instrument name : Instrument #1 Bline drift (fV):-3.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-20-13 12:53:24 Printed : 11-20-2013 14:18:03
 Sample Ident. : 23 AD253_2 Filename : 283623
 Sample Weight : 2.074 Calc.method: using 'K. Factors'

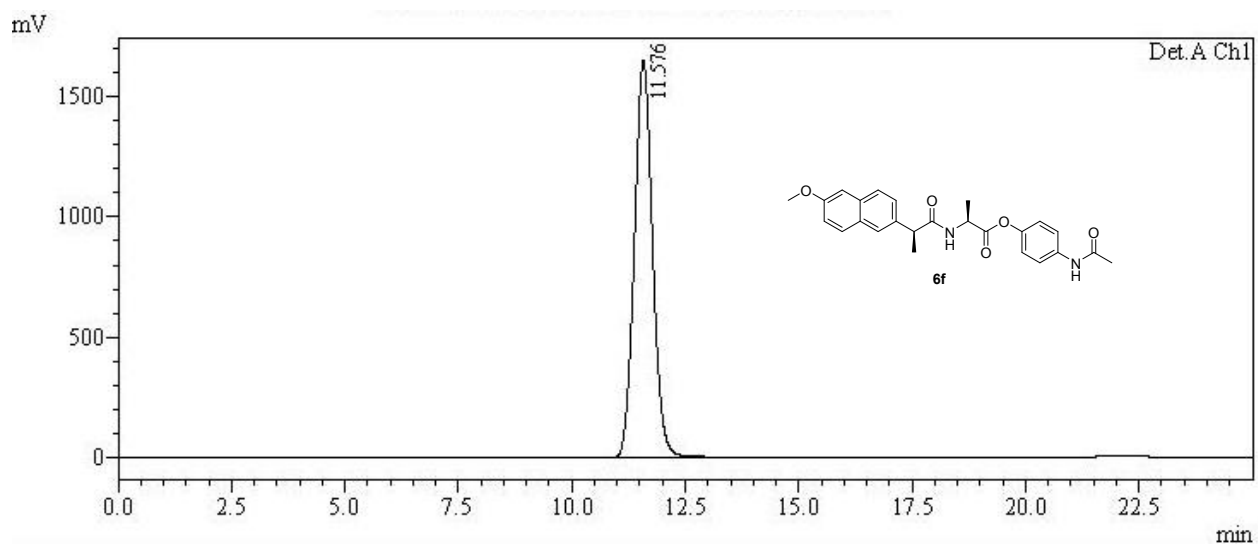
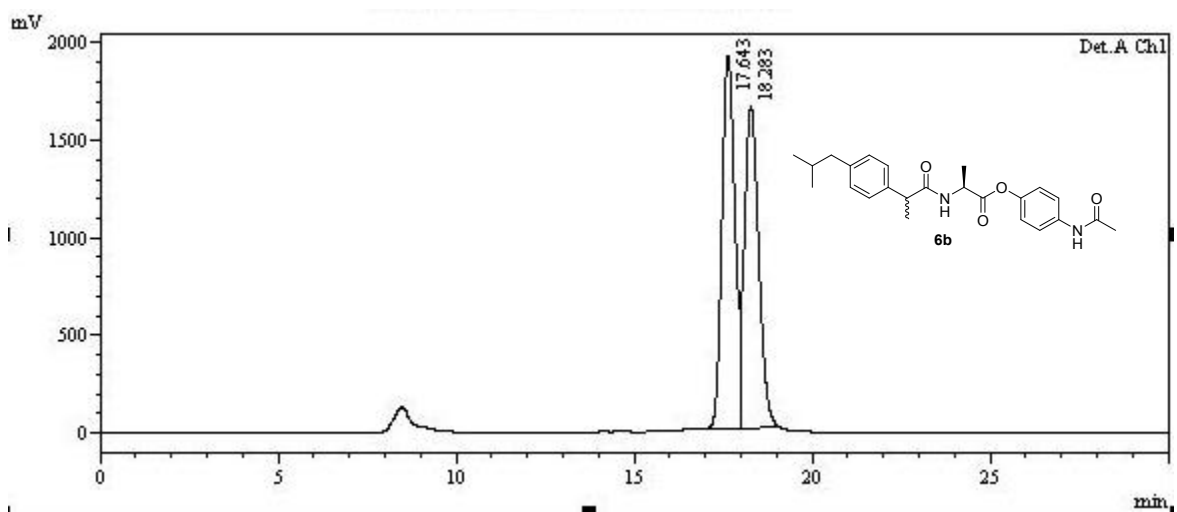
No. (#)	Type (#)	Start (Sec)	End (Sec)	Ret Time (Sec)	Height (fV)	Area (fV*Sec)	Area % (%)	Name
1	FU	63	100	83	1955.2	28013	2.76	Nitrogen
2	FU	100	291	111	52544.8	817847	80.72	Carbon
3	RS	291	598	315	3143.0	167314	16.51	Hydrogen
						1013174	100.00	

EAGER 200 Unk Report

Instrument name : Instrument #1 Bline drift (fV):-3.7
 Company Name : U of Florida Operator Ident. : KOU
 Analysed : 11-20-13 12:53:24 Printed : 11-20-2013 14:18:03
 Sample Ident. : 23 AD253_2 Filename : 283623
 Sample Weight : 2.074 Calc.method: using 'K. Factors'

Pk. (#)	Ret Time (Sec)	Area (fV*Sec)	Element % (%)	Area Ratio	Name
1	83	28013	6.460	.221953E+02	Nitrogen
2	111	817847	68.036	.100000E+01	Carbon
3	315	167314	5.345	.488310E+01	Hydrogen

HPLC of compound **6b** and **6f**



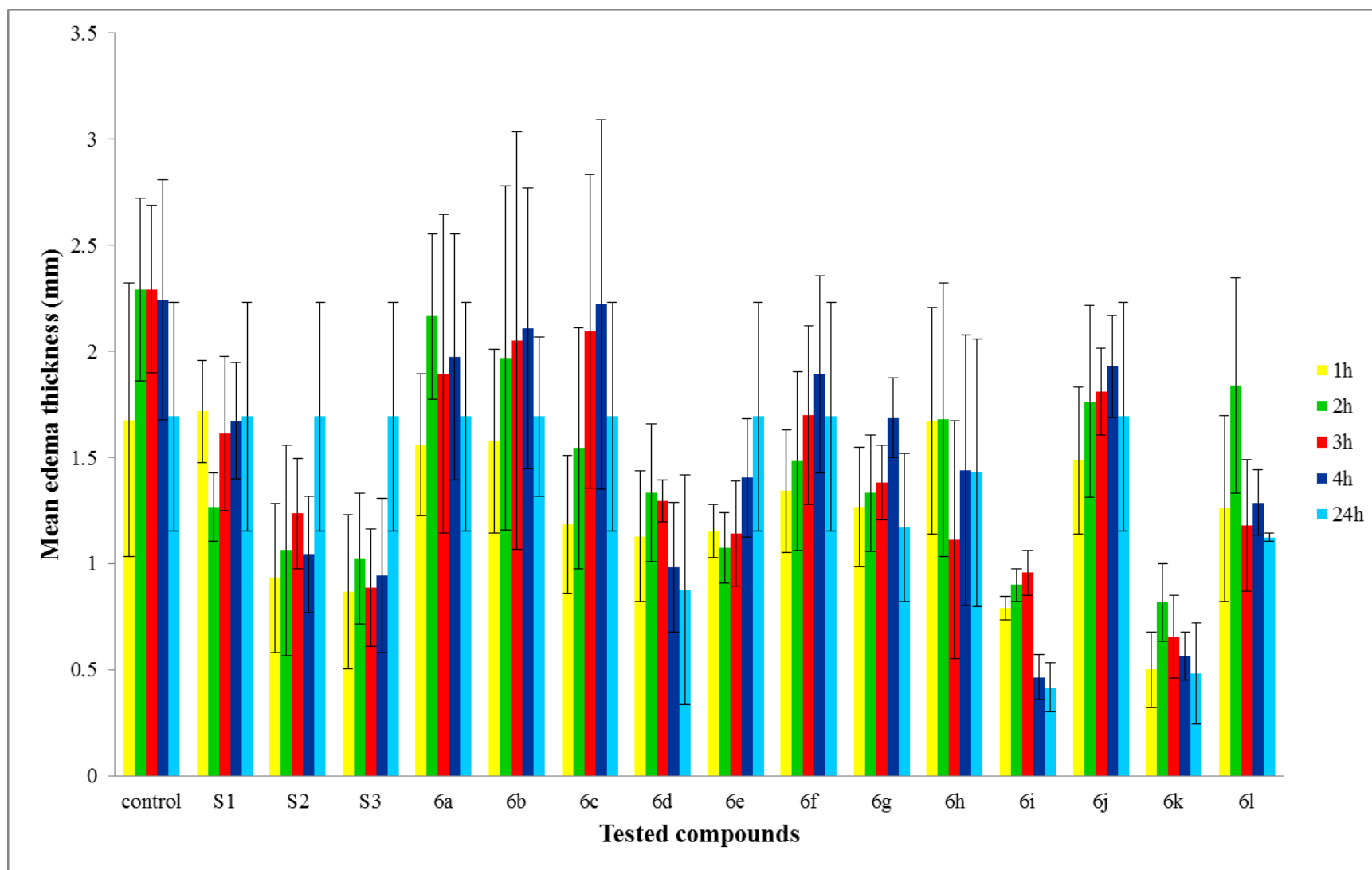


Figure S1. Mean edema thickness (mm) of the tested compounds at successive time intervals.

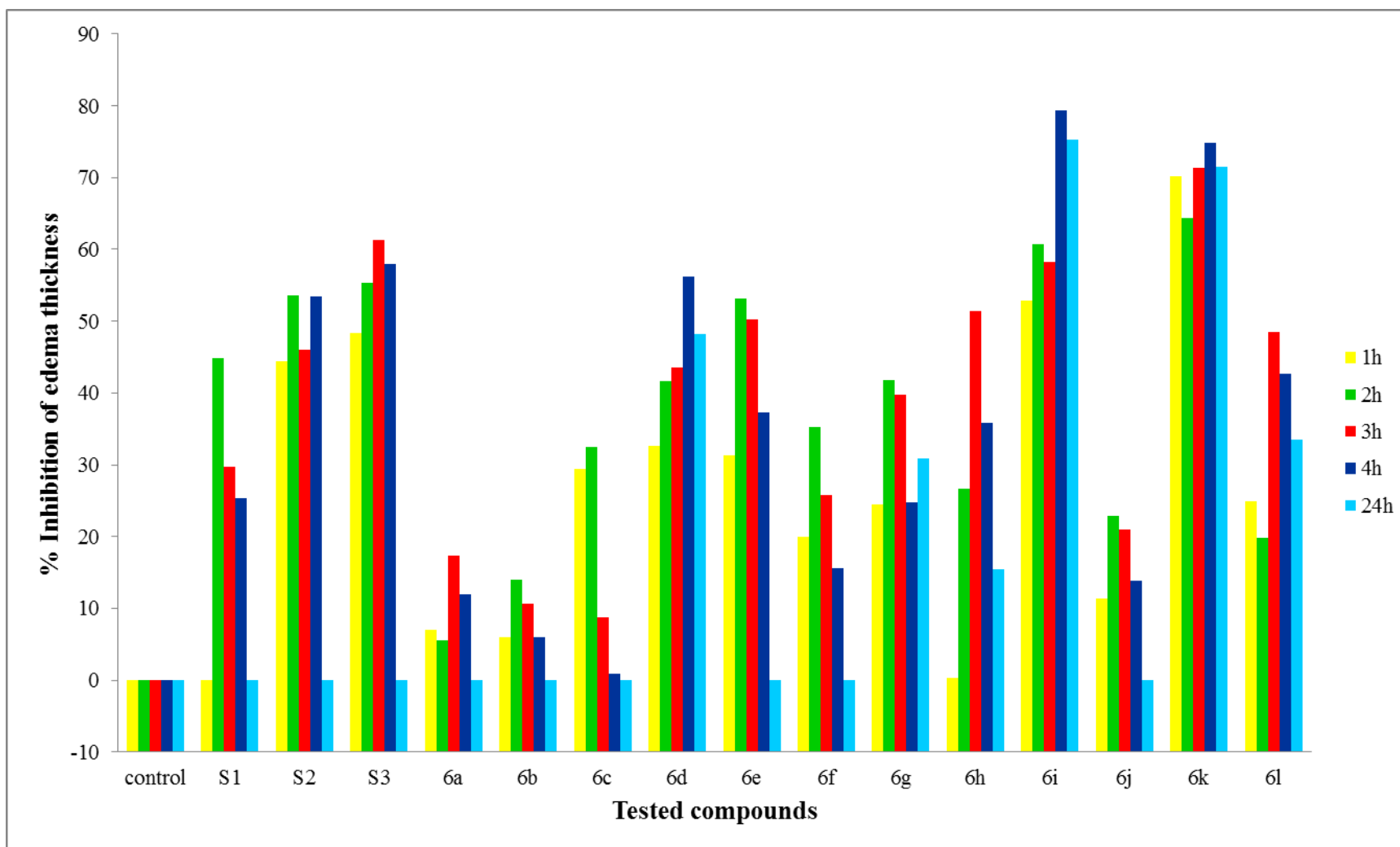


Figure S2. % Inhibition of edema for the tested compounds.

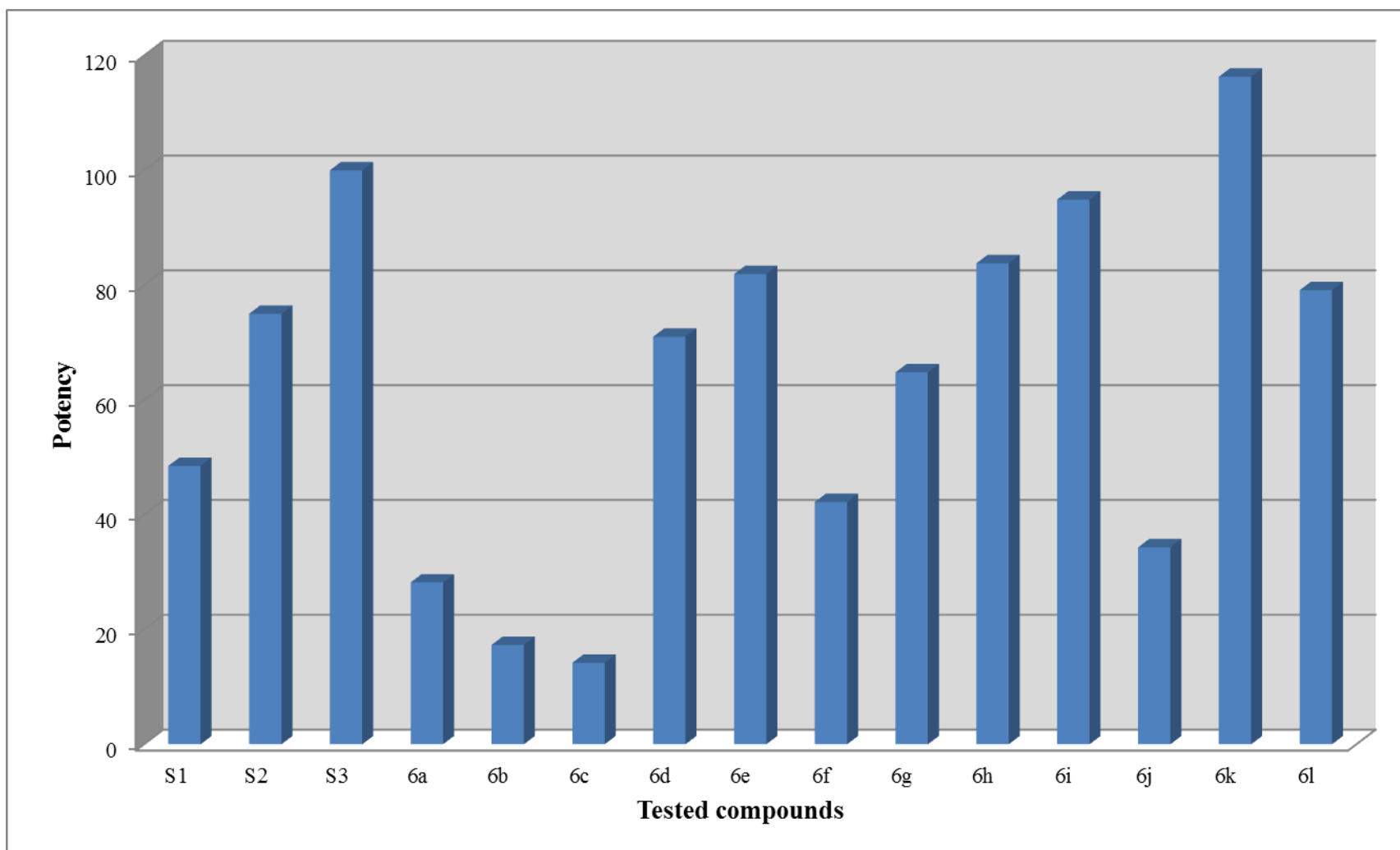


Figure S3. Anti-inflammatory potency of the tested compounds.

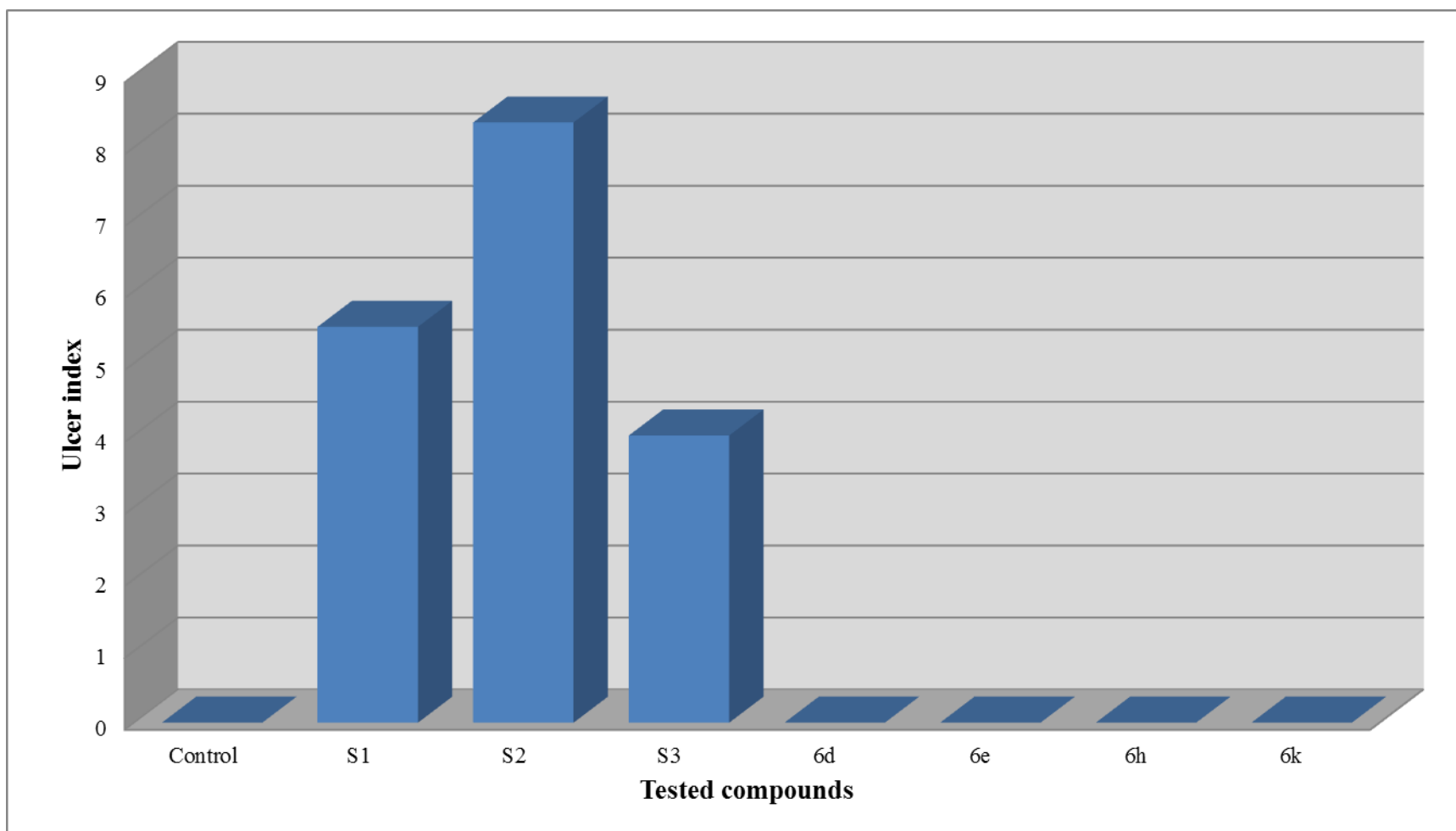


Figure S4. Ulcer index of the most promising anti-inflammatory active agents.