

Supporting Information

Aziridine Derived Electrophilic Handle for Asparatic Ligation

Kiran Bajaj,^{*a} Devesh S. Agarwal,^a Rajeev Sakhuja^a and Girinath G. Pillai^b

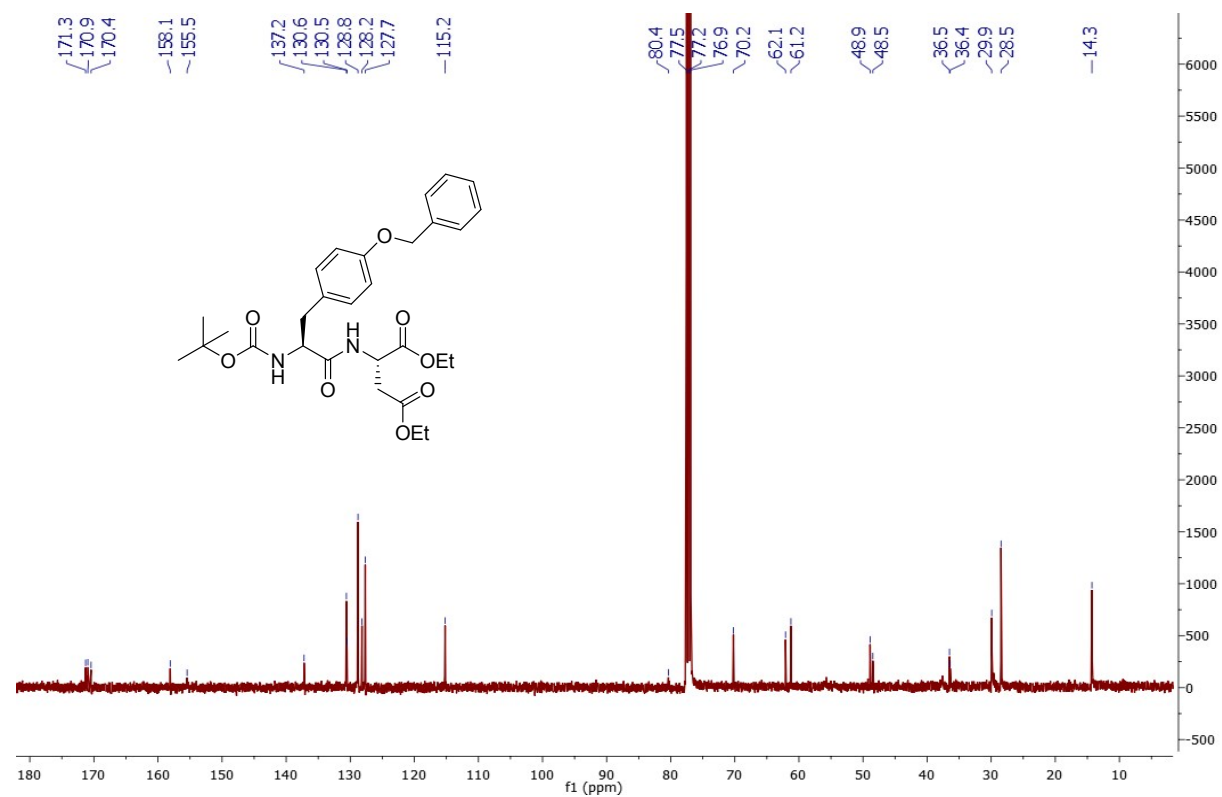
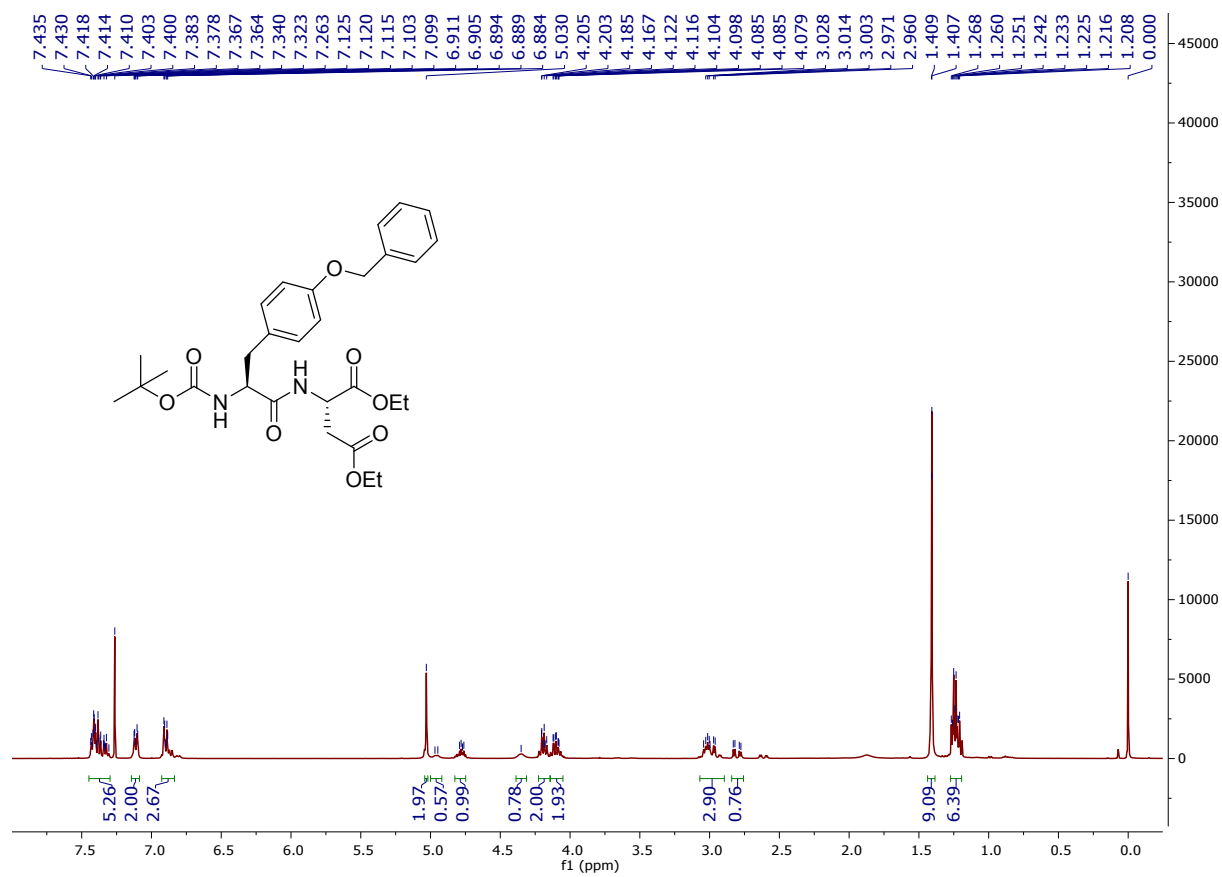
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^b*Computational Chemistry Division, Zastr Innovations Pvt. Ltd., Kalyan Nagar, Bengaluru 560043, Karnataka, India*

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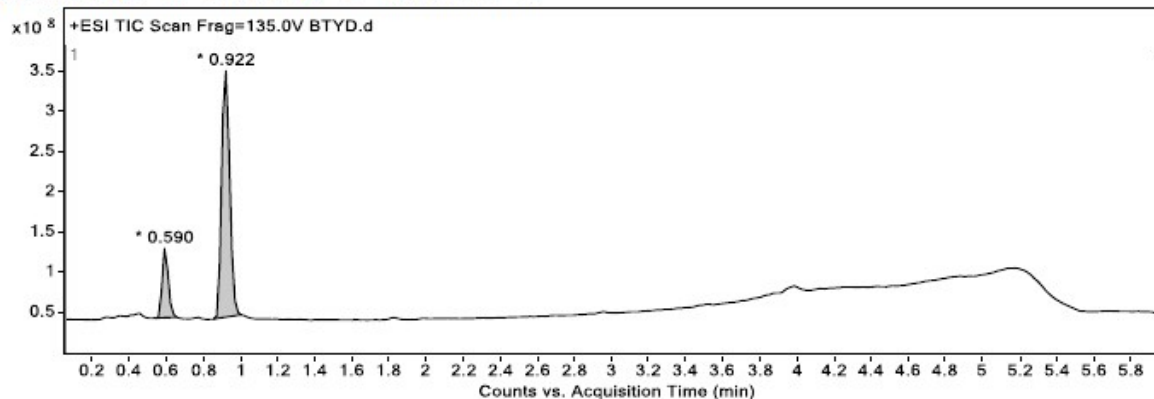
1. Spectral data of compound 5c-g, 6a-c, 7a-g, 8
2. 2D NMRs of 7f



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 5c

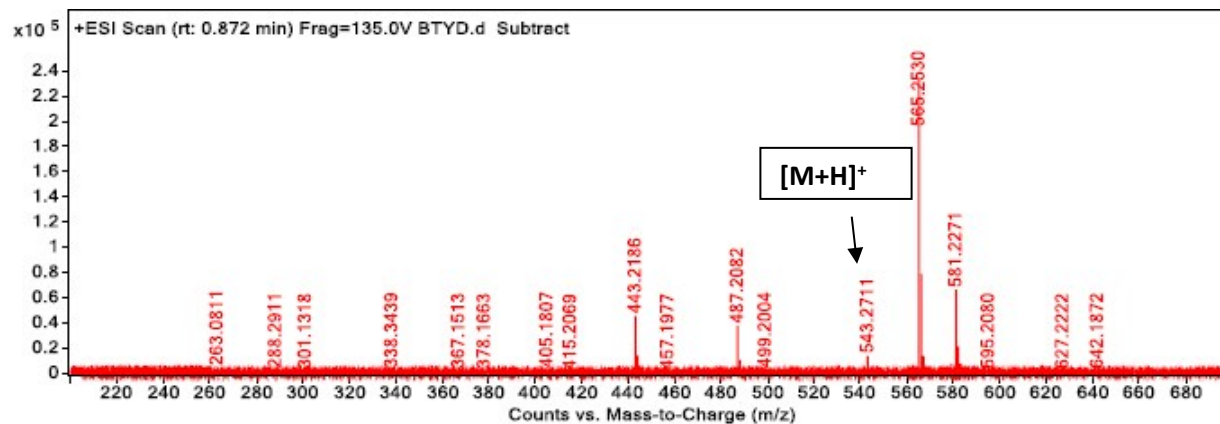
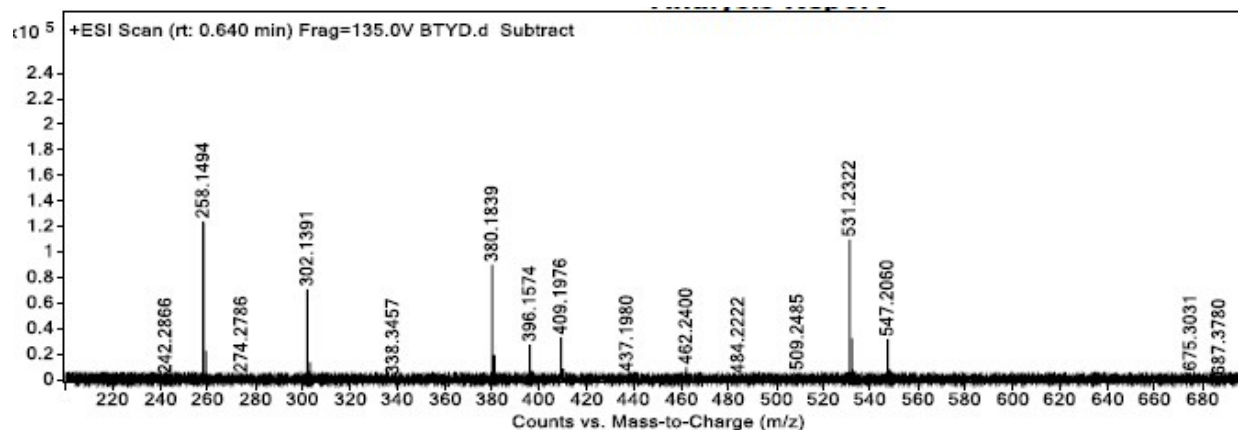
User Chromatograms

Fragmentor Voltage 135 Collision Energy 0 Ionization Mode ESI

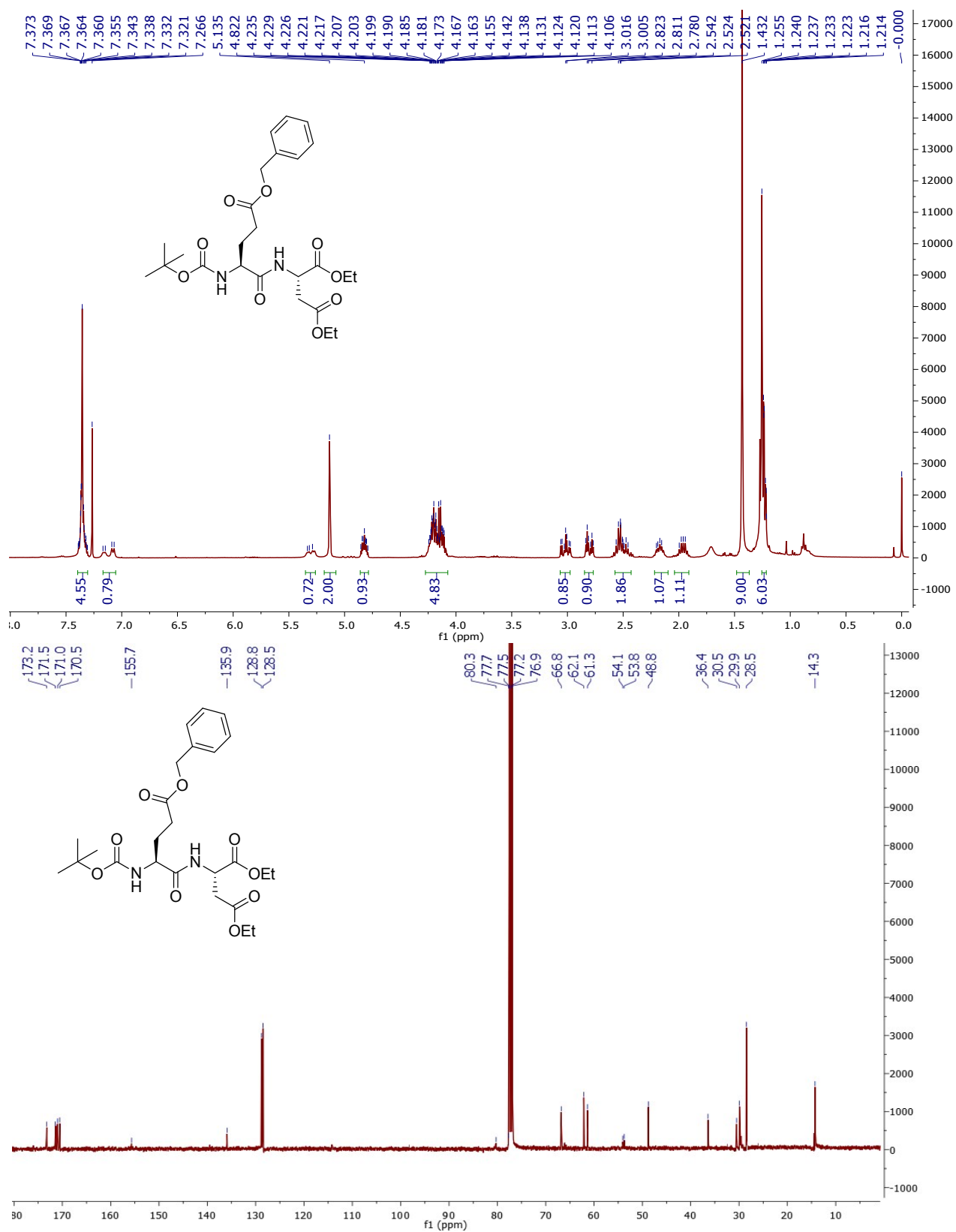


Integration Peak List

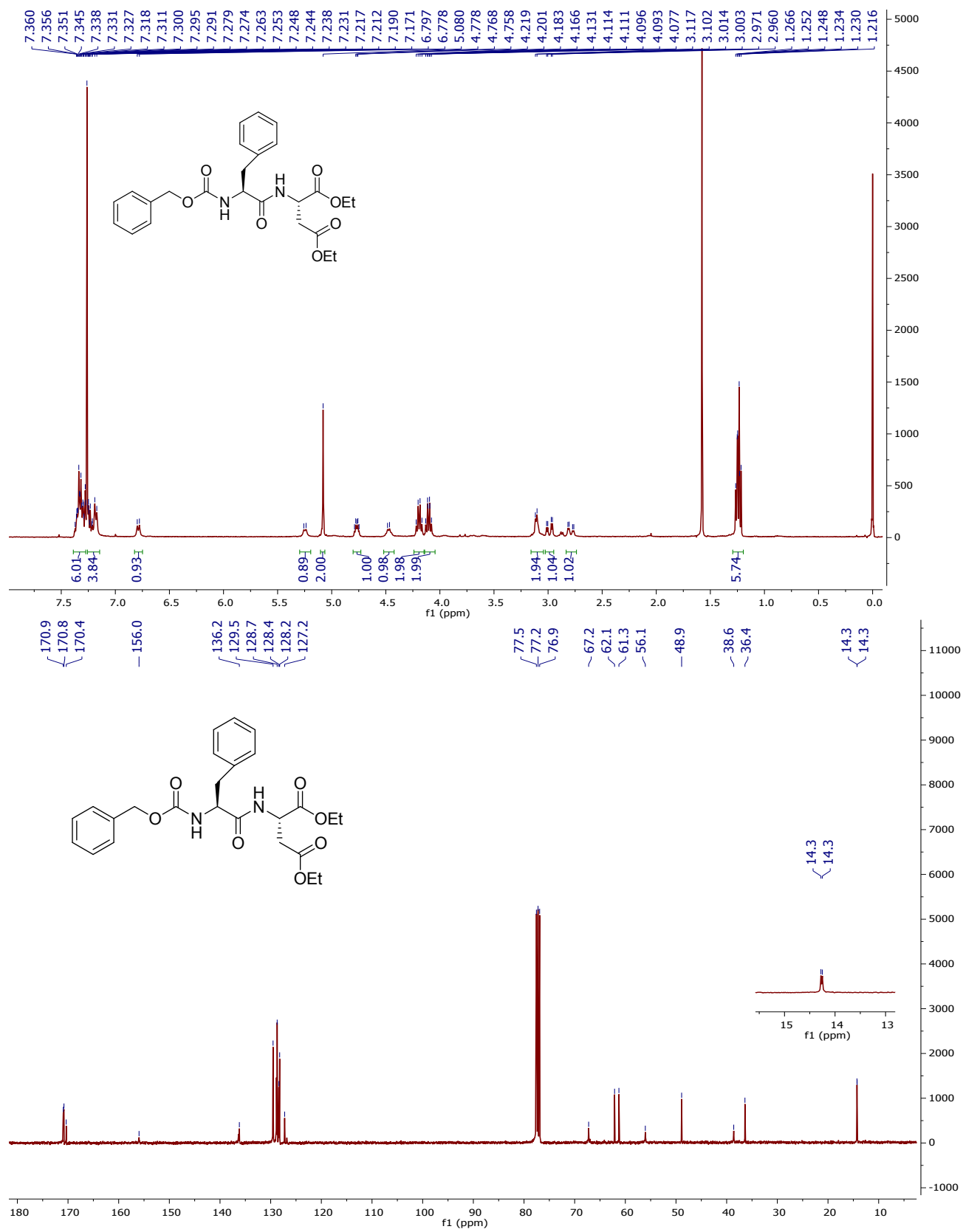
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2	0.855	0.922	1.004	307146976	939319964	100



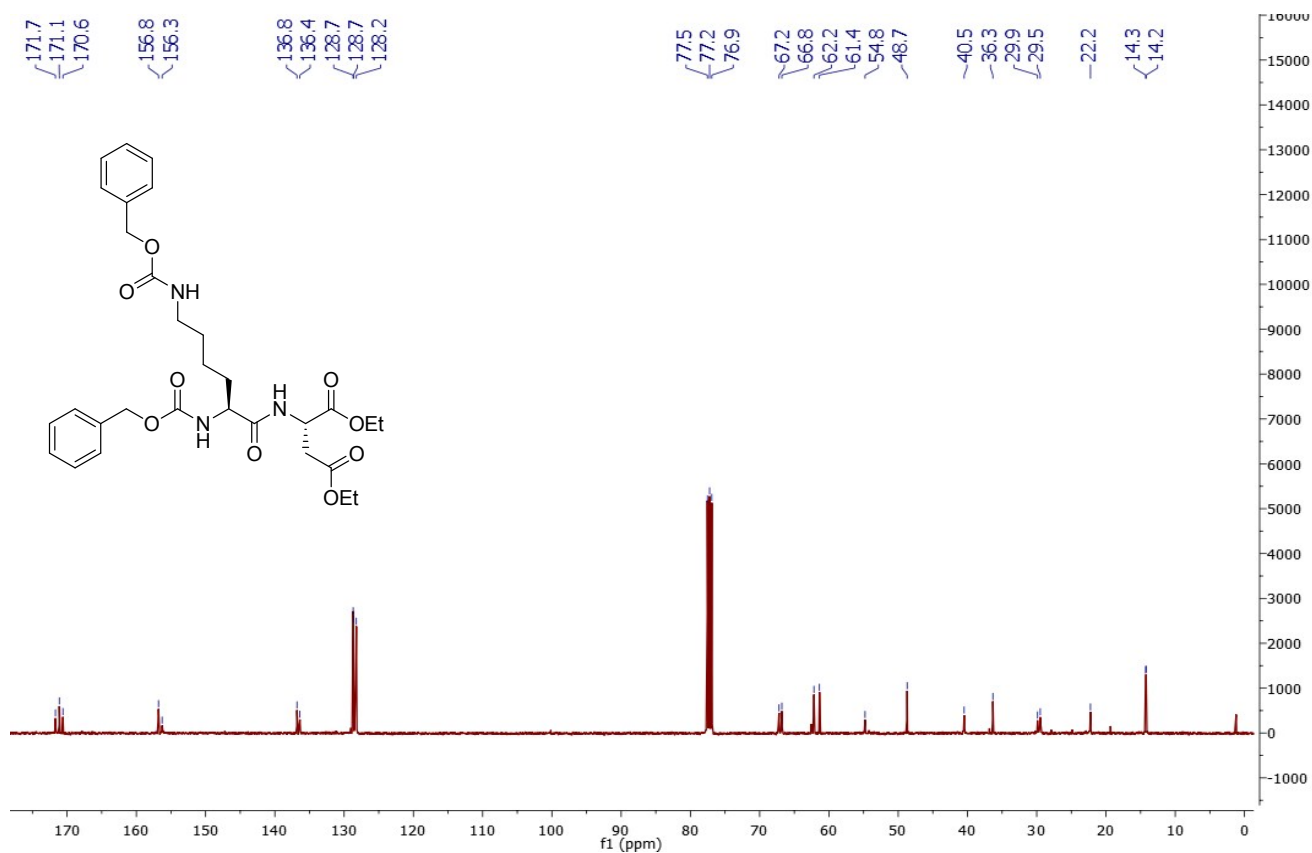
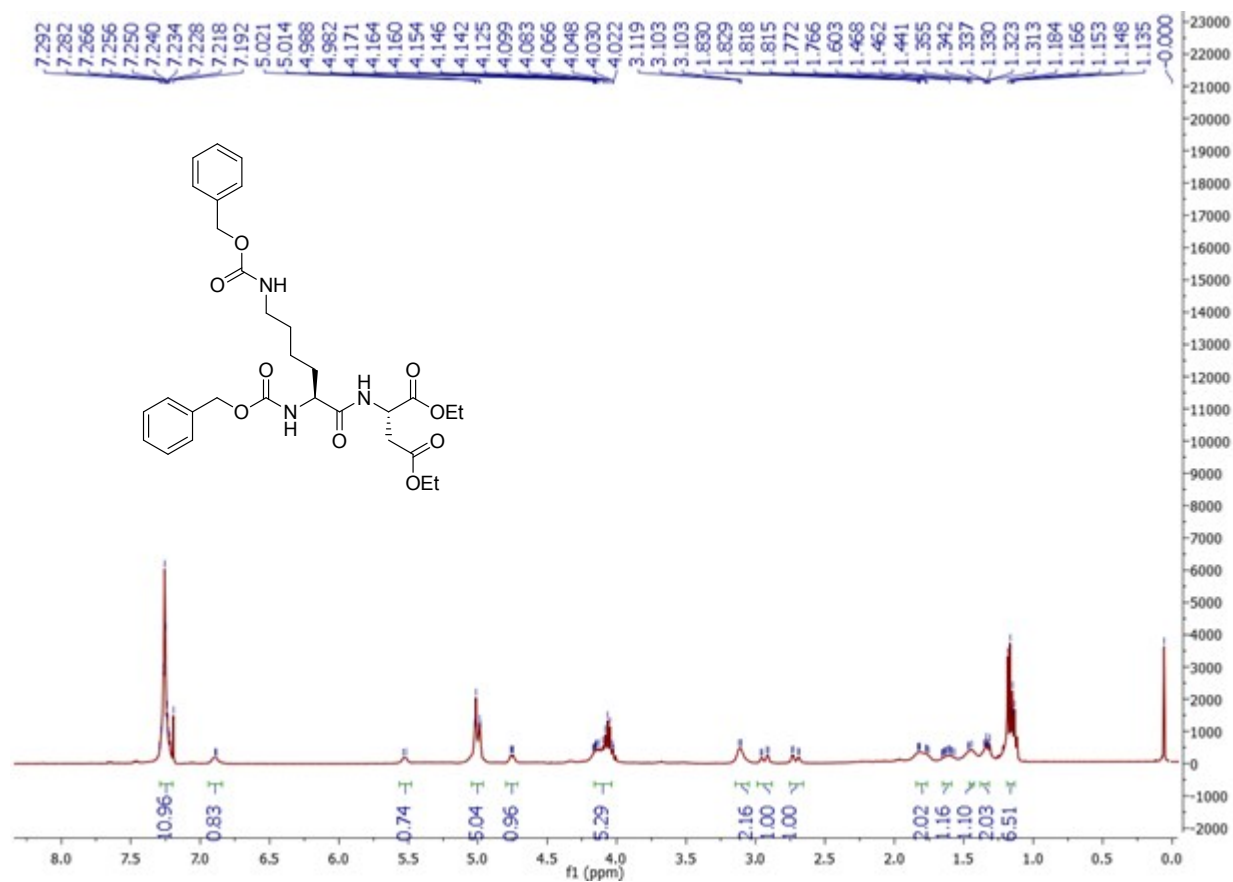
LC-HRMS of compound 5c



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **5d**



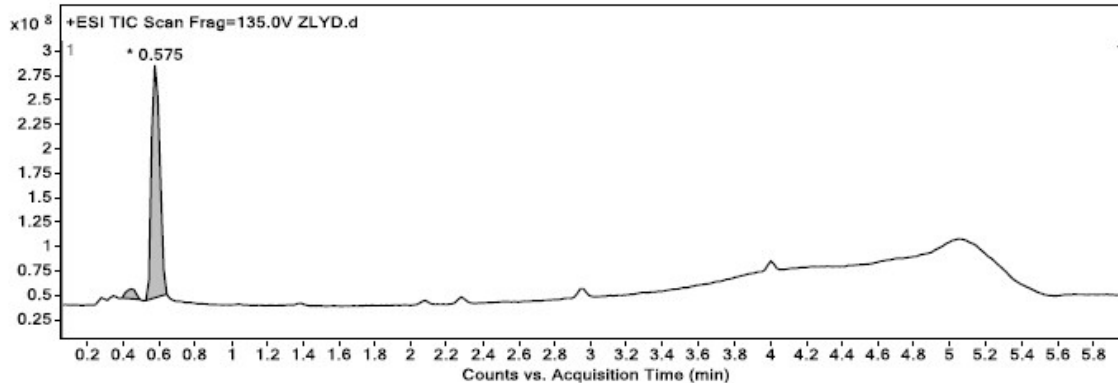
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **5e**



^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) of compound **5f**

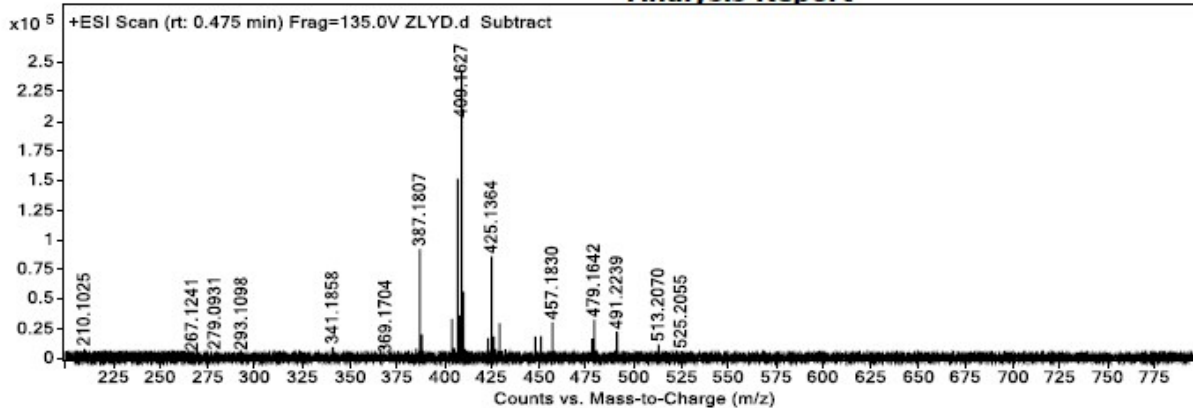
User Chromatograms

Fragmentor Voltage 135 Collision Energy 0 Ionization Mode ESI

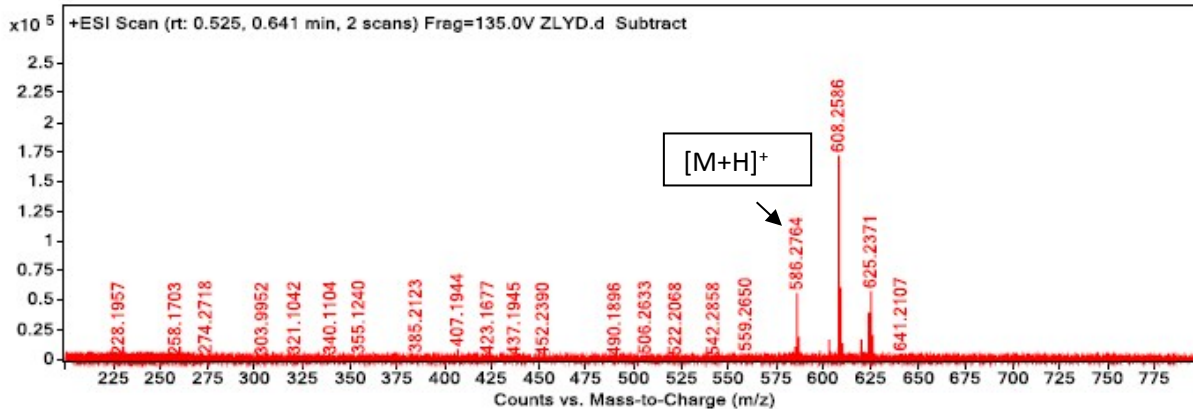


Integration Peak List

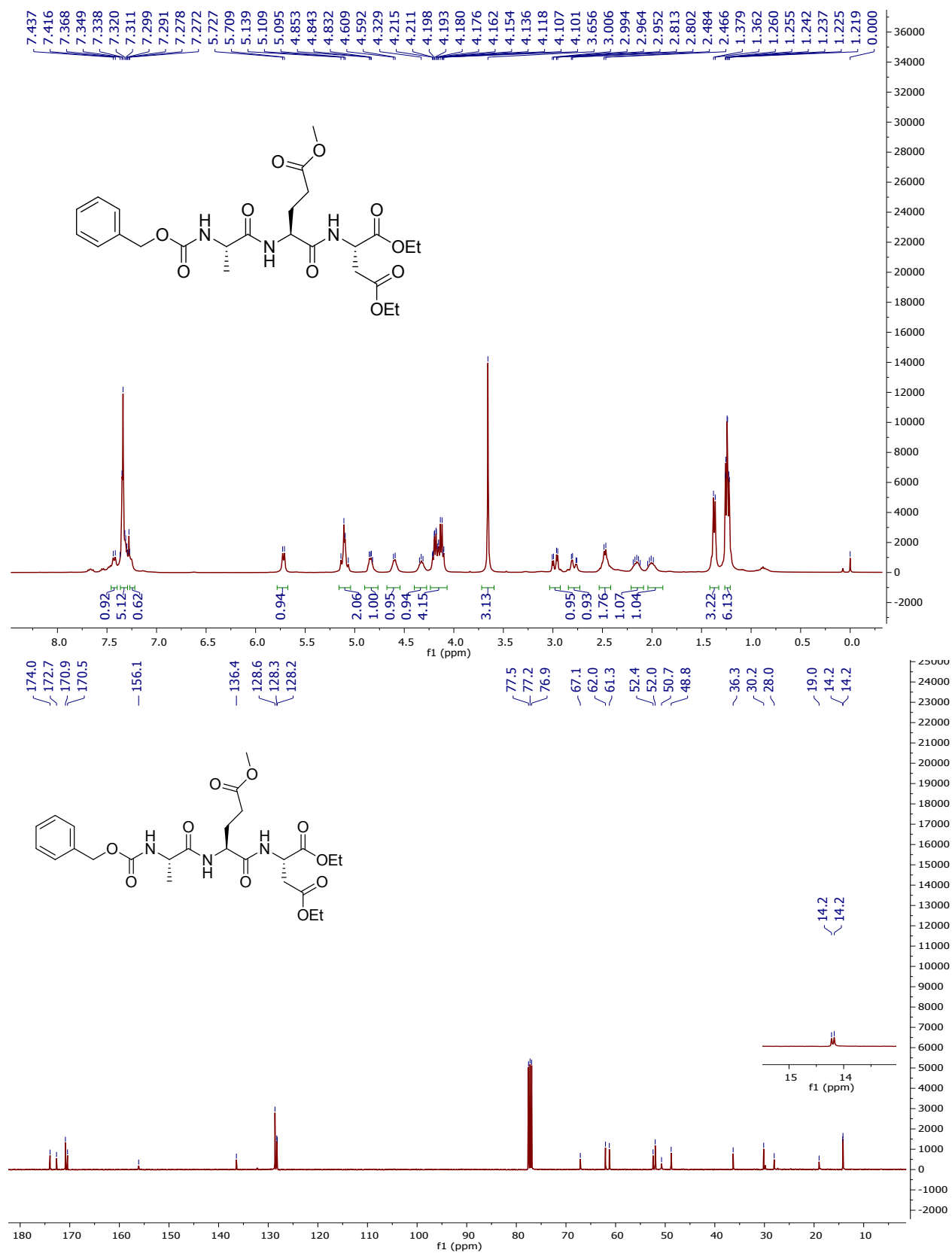
Peak	Start	RT	End	Height	Area	Area %
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2	0.525	0.575	0.641	237358035	763546149	100



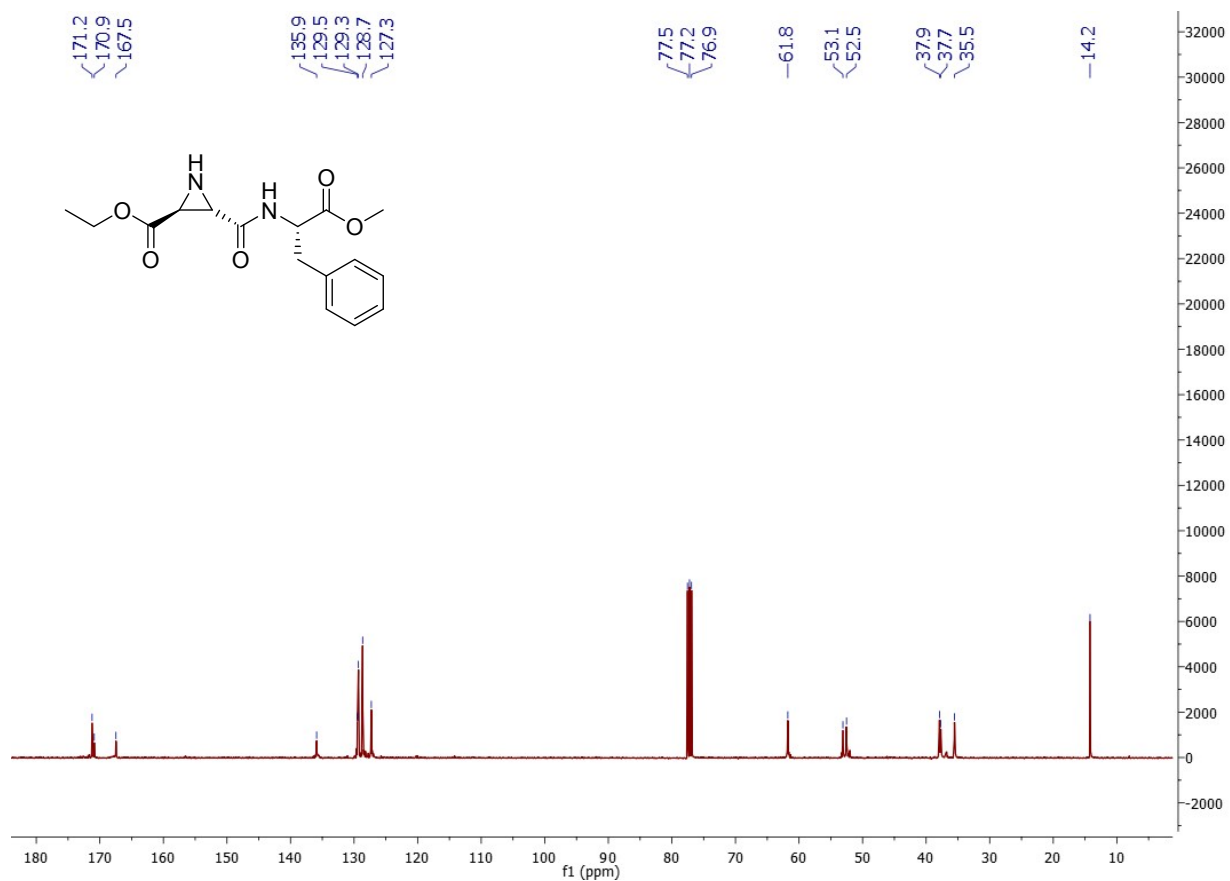
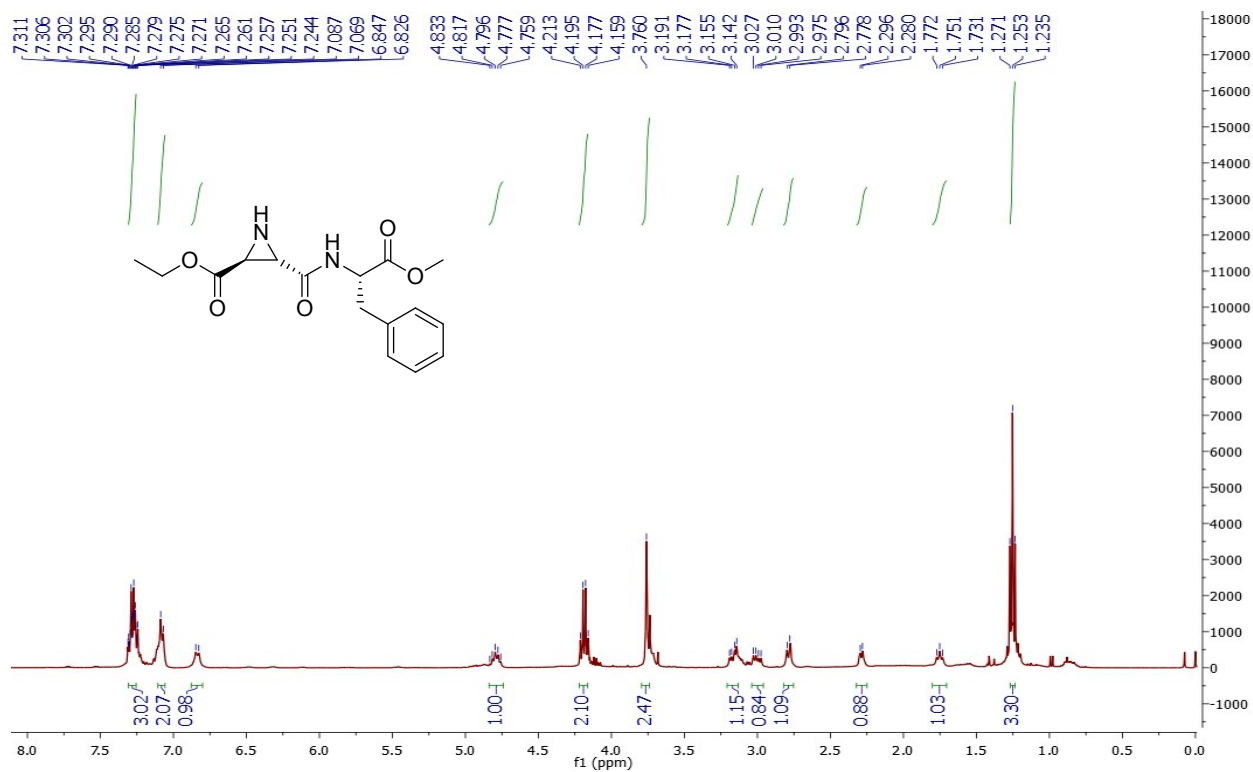
Spectrum Source Peak (2) in "+ TIC Scan" Fragmentor Voltage 135 Collision Energy 0 Ionization Mode ESI



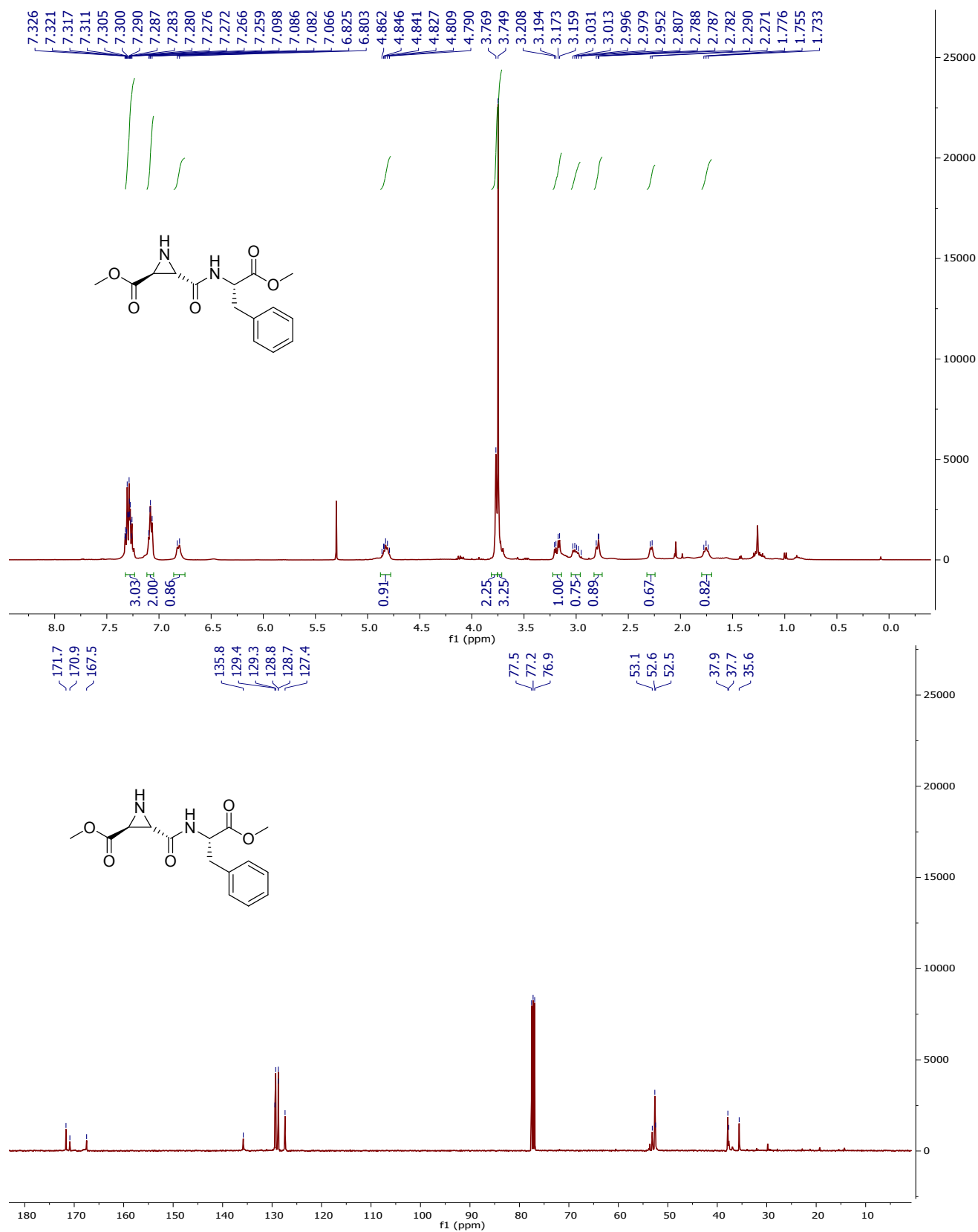
LC-HRMS of compound **5f**



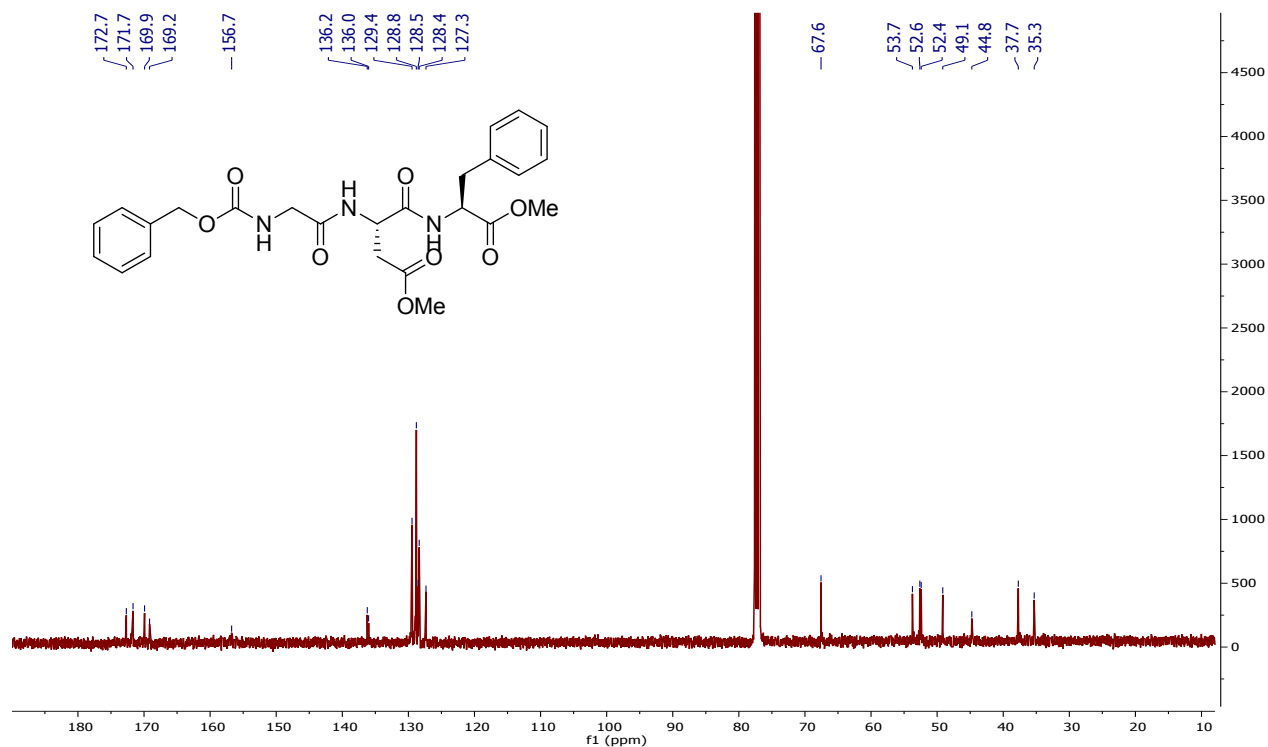
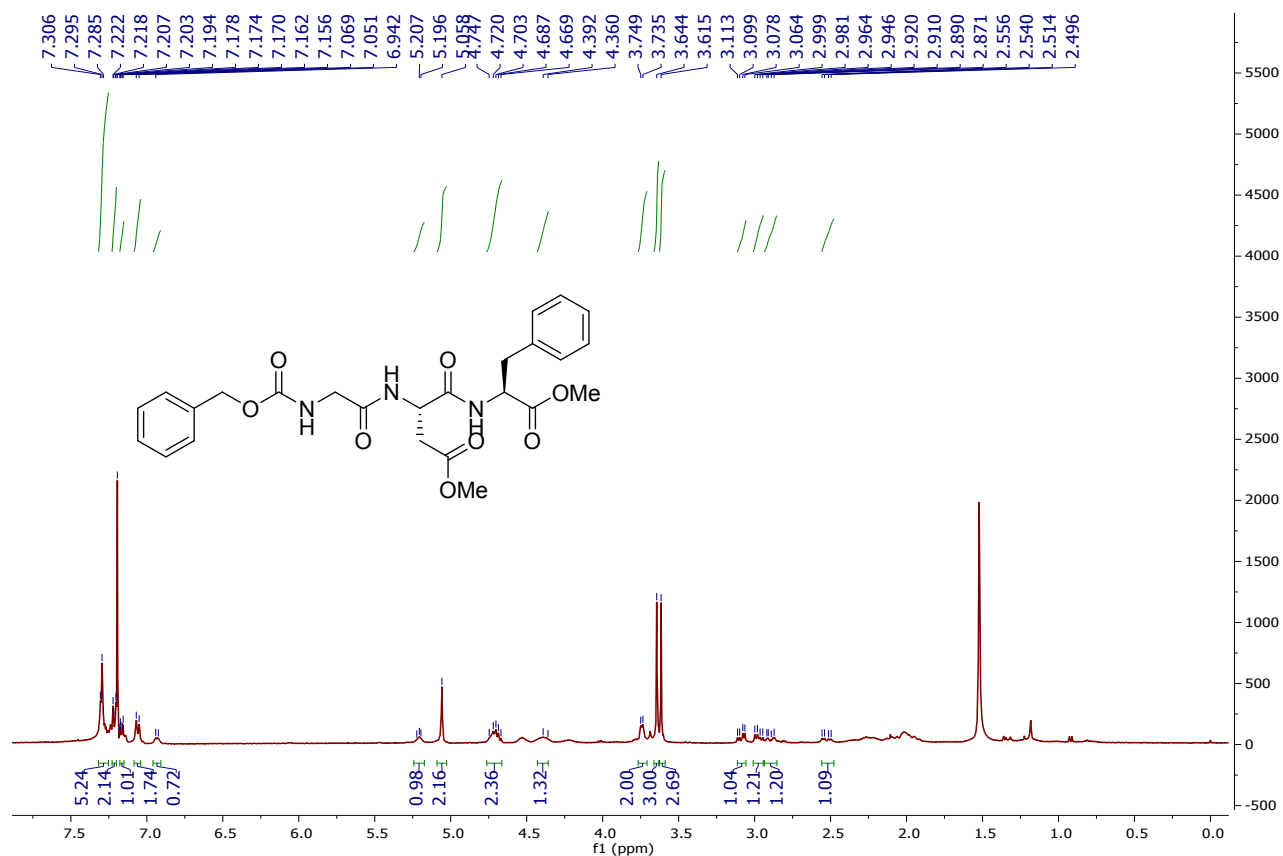
^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) of compound **5g**



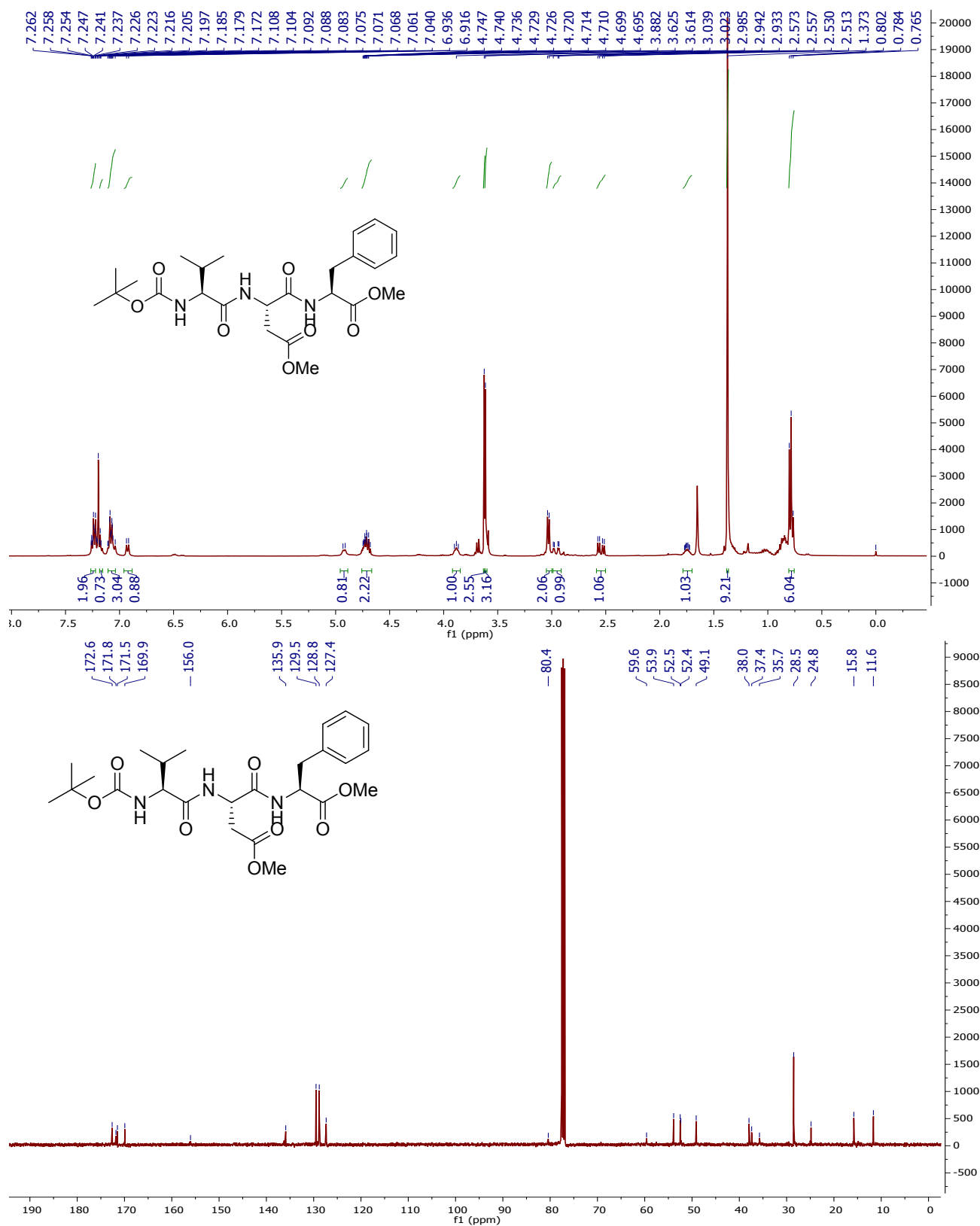
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 6a



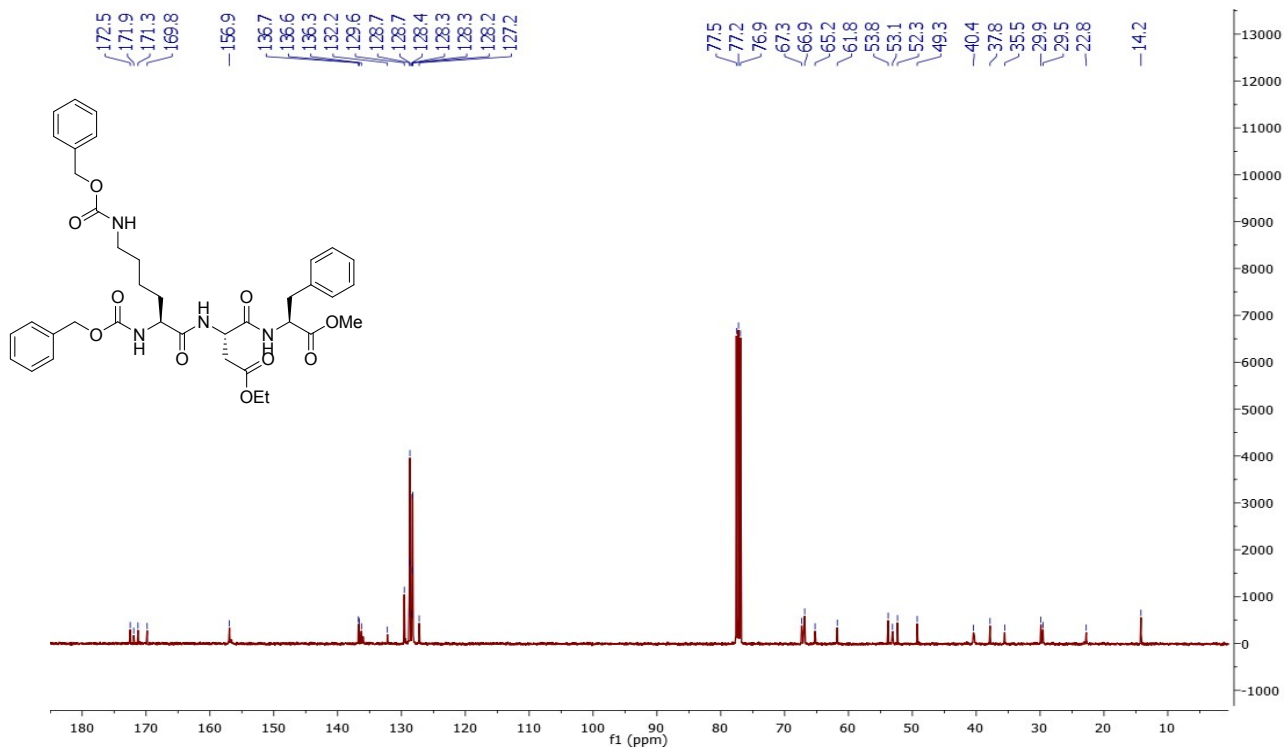
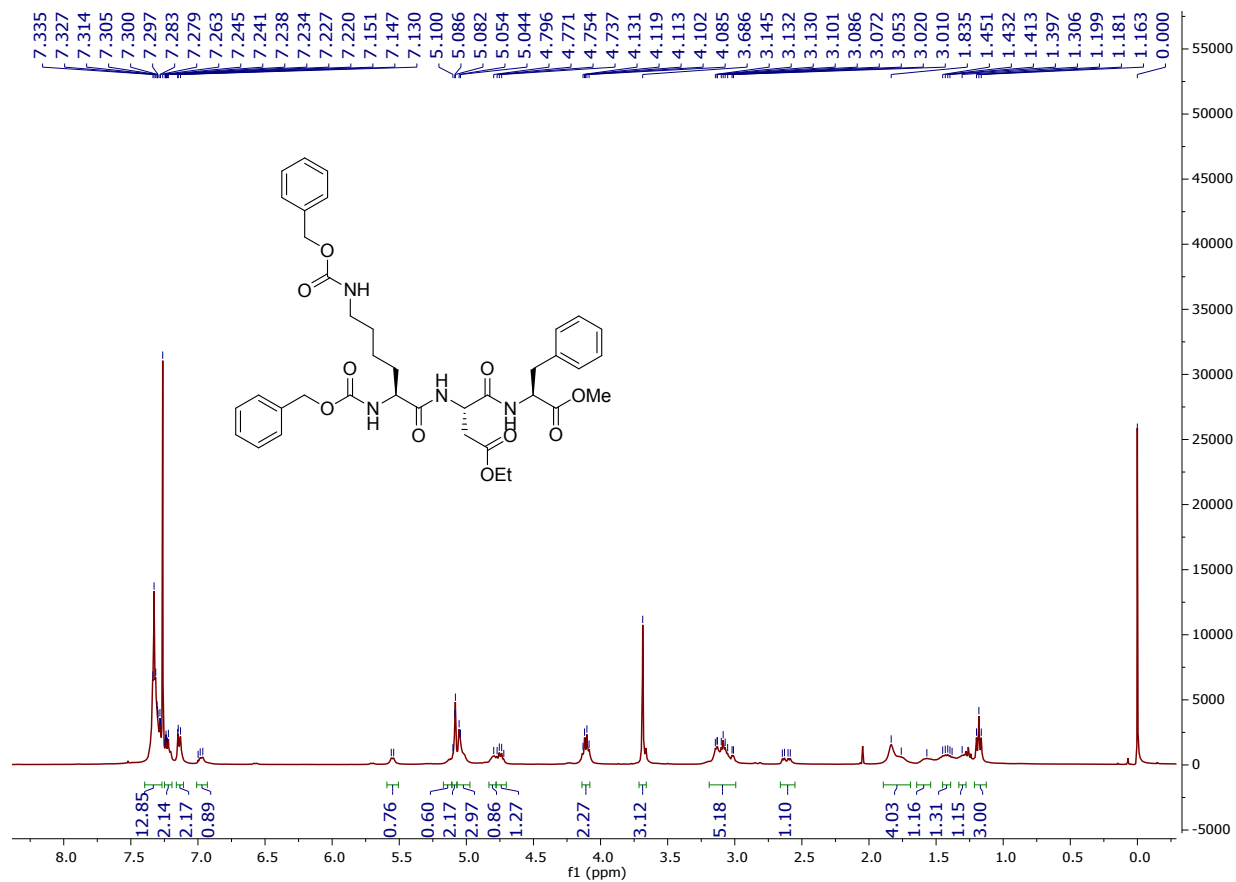
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **6b**



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **7a**



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **7b**

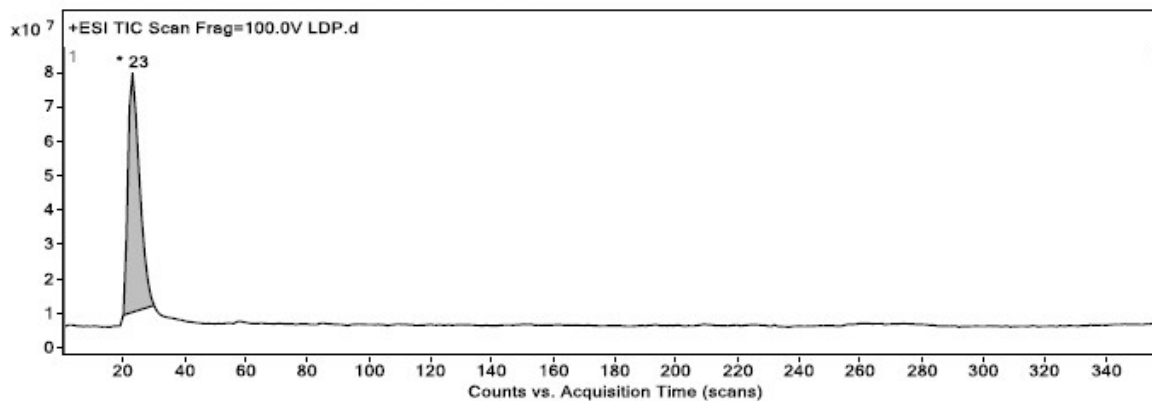


¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 7c

Data Filename	LDP.d	Sample Name	LDP
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Acq Method	ACNisocratic.m	Acquired Time	5/12/2018 5:26:57 PM
IRM Calibration Status	Success	DA Method	PROCESSNEW.m
Comment			
Sample Group	Info.		
Stream Name	LC 1	Acquisition SW	6200 series TOF/6500 series
		Version	Q-TOF B.06.01 (B6172 SP1)

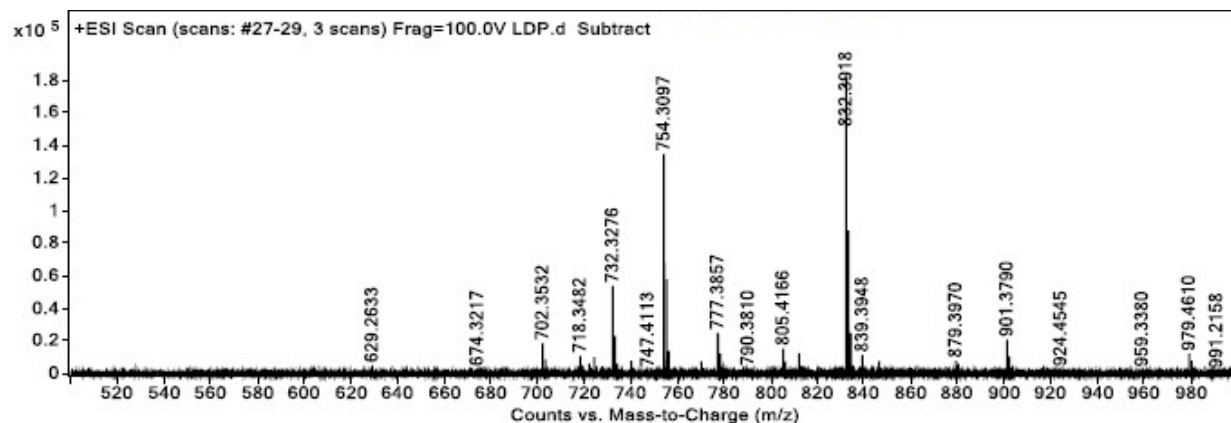
User Chromatograms

Fragmentor Voltage 100 Collision Energy 0 Ionization Mode ESI

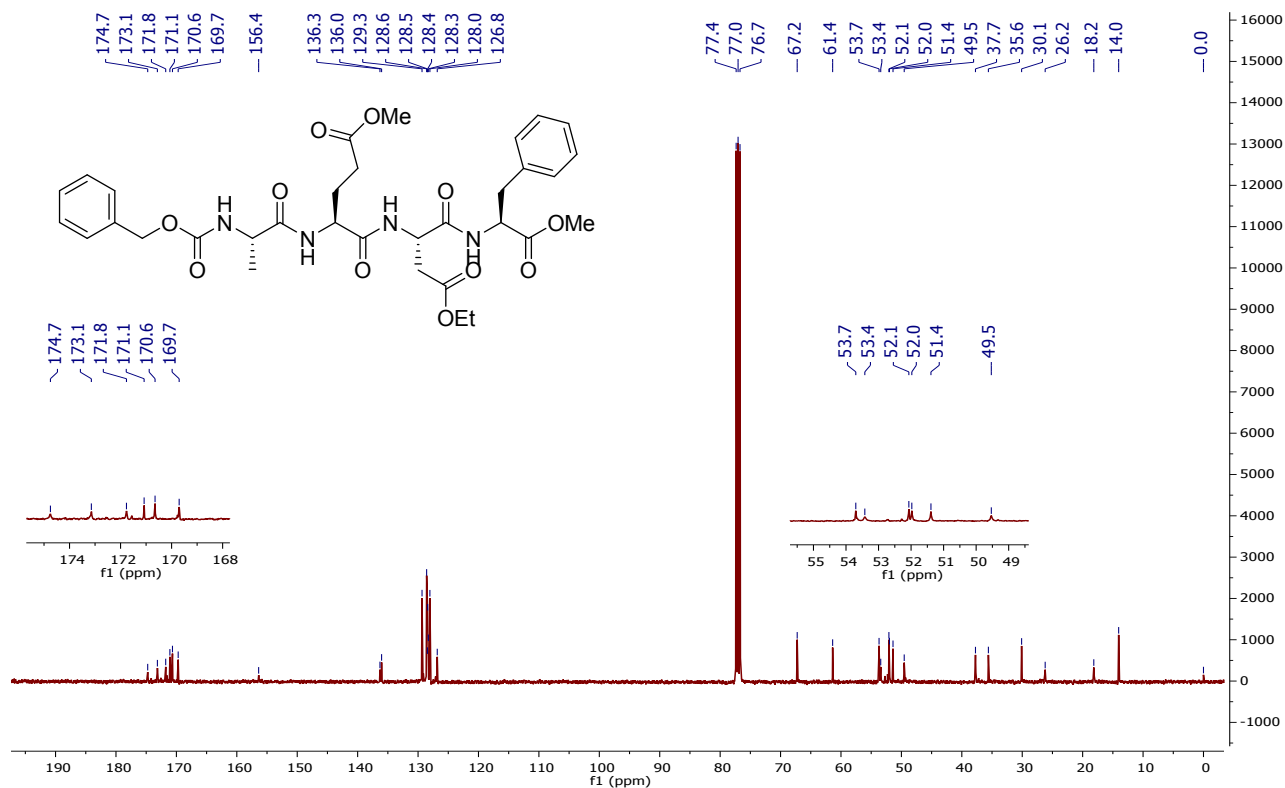
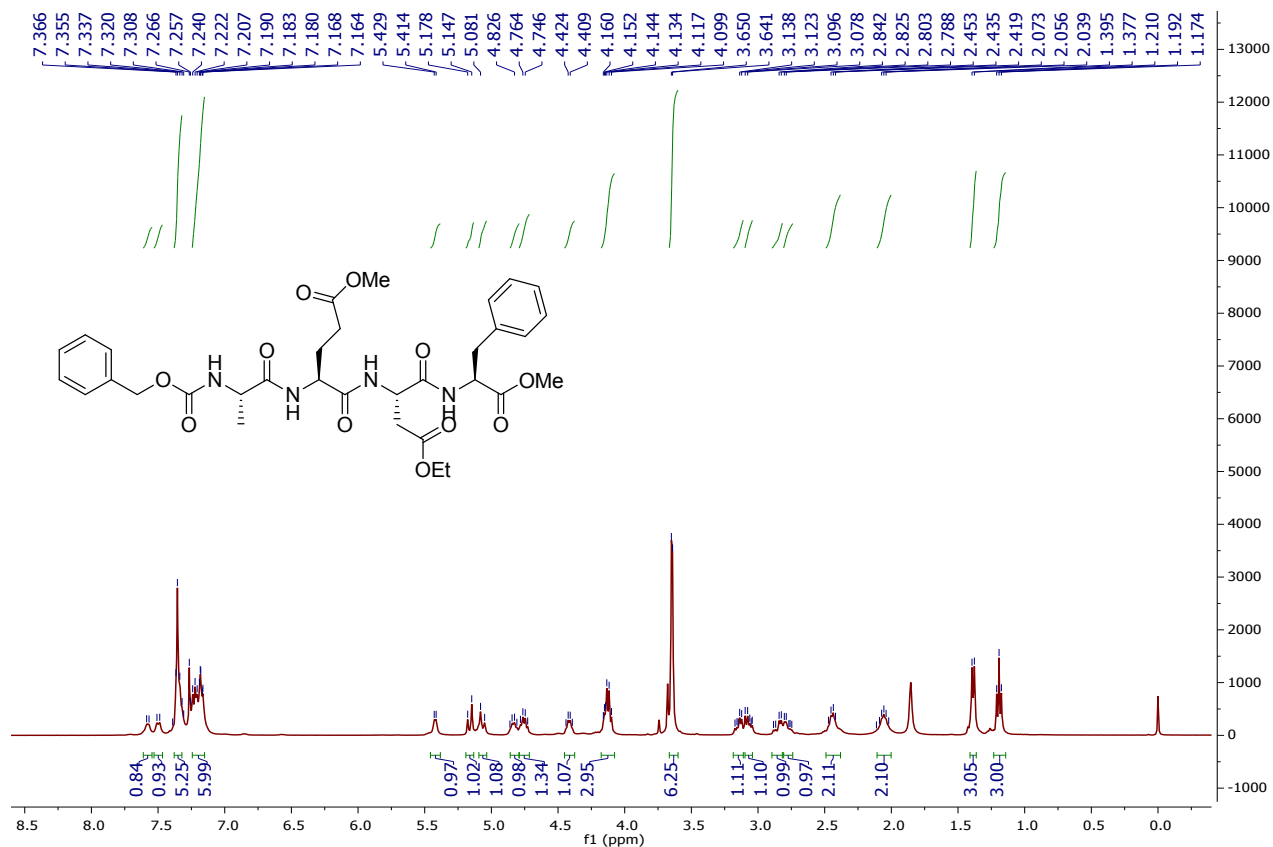


Integration Peak List

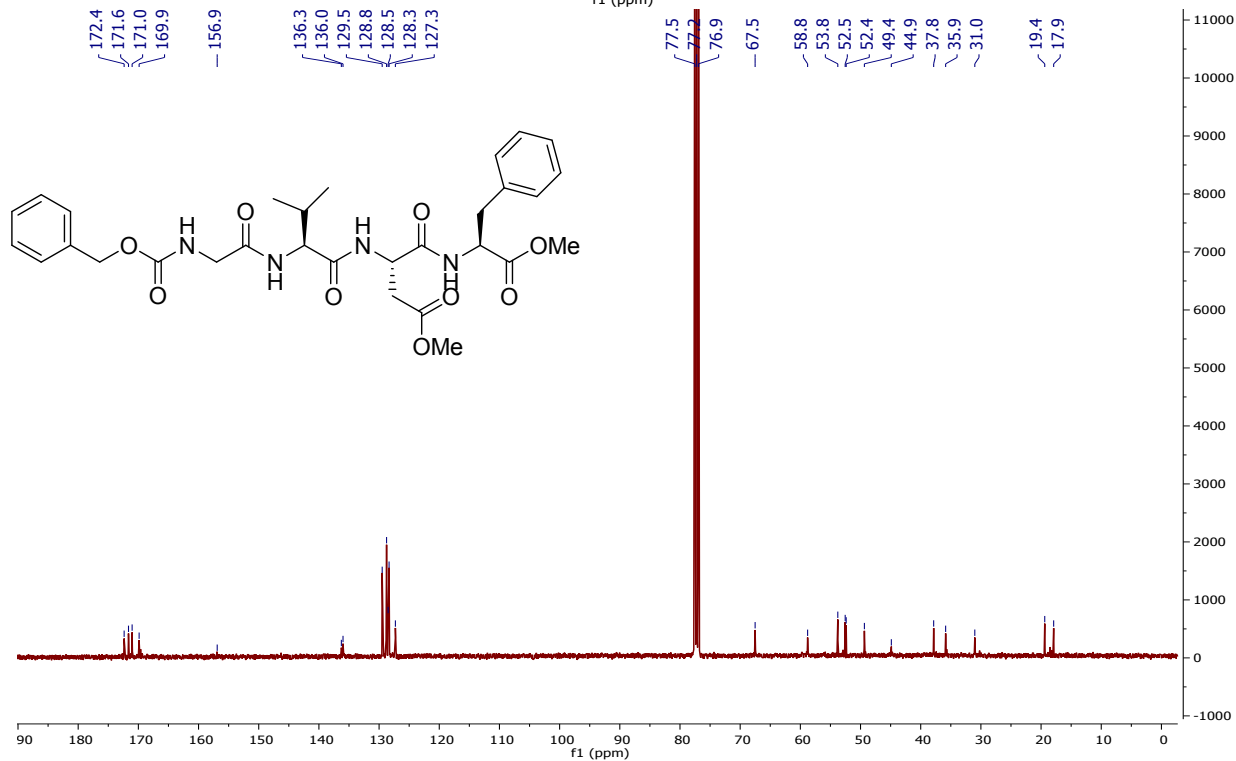
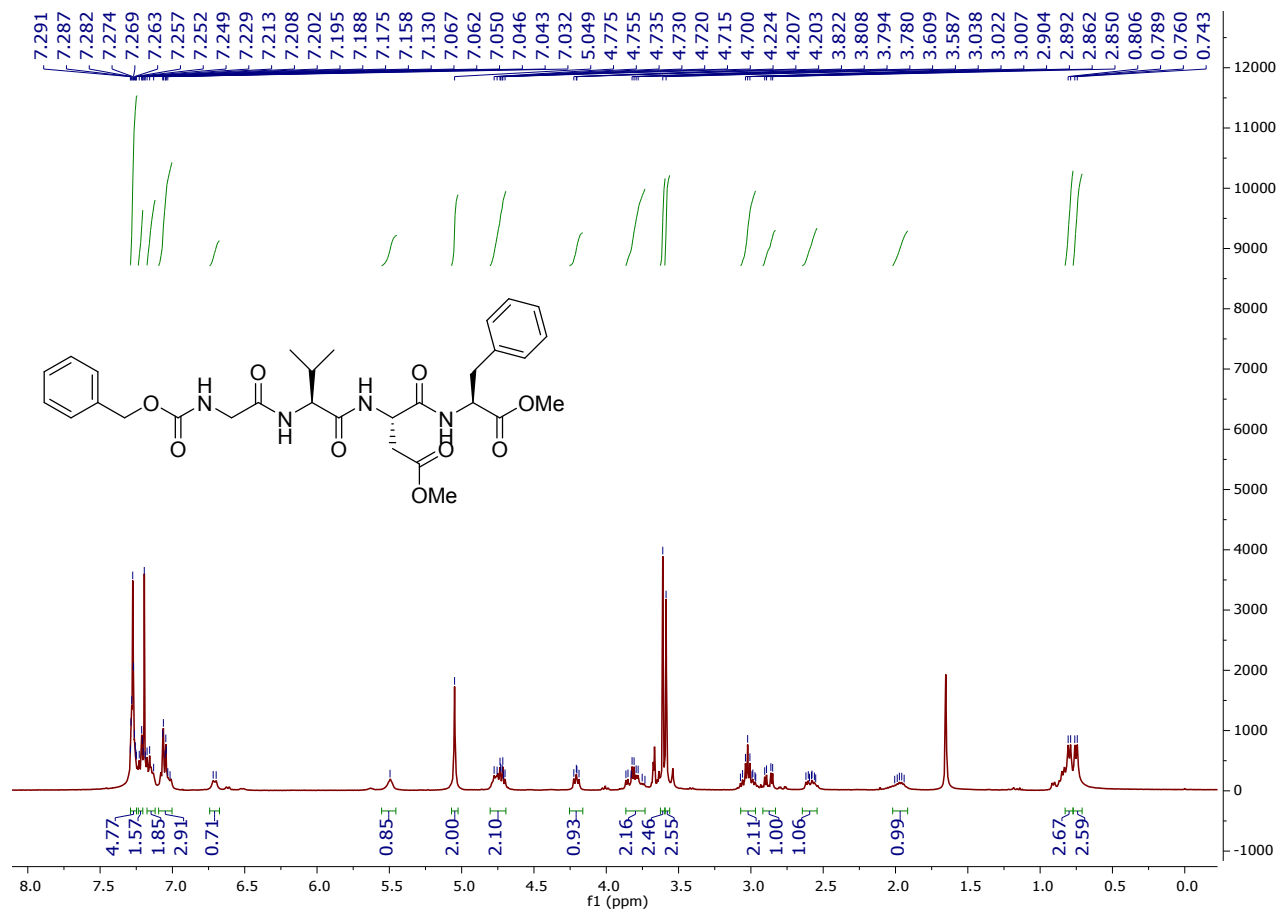
Peak	Start	RT	End	Height	Area	Area %
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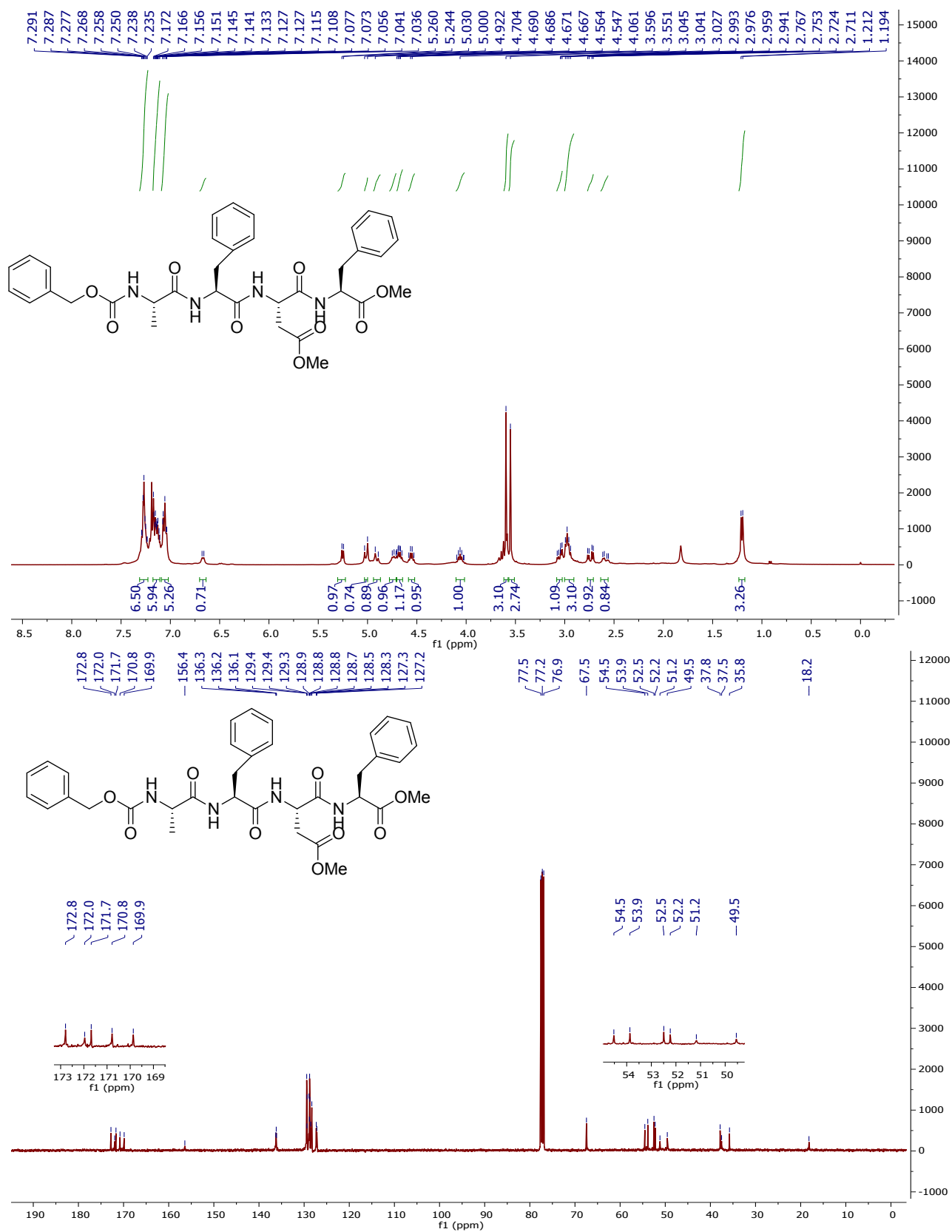
HPLC- of compound **7c**



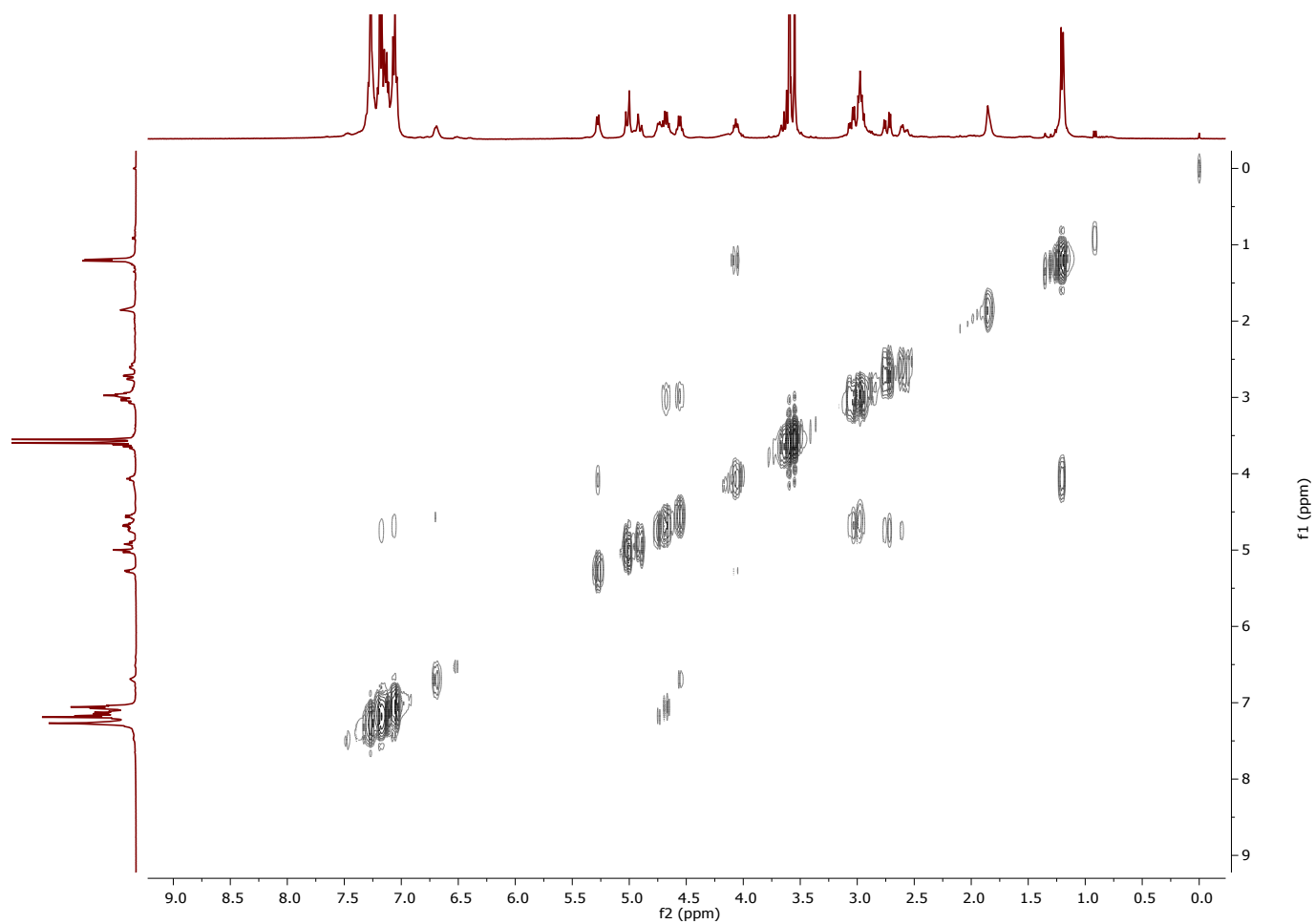
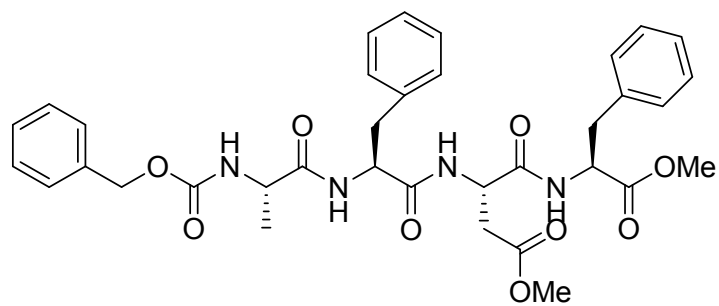
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 7d



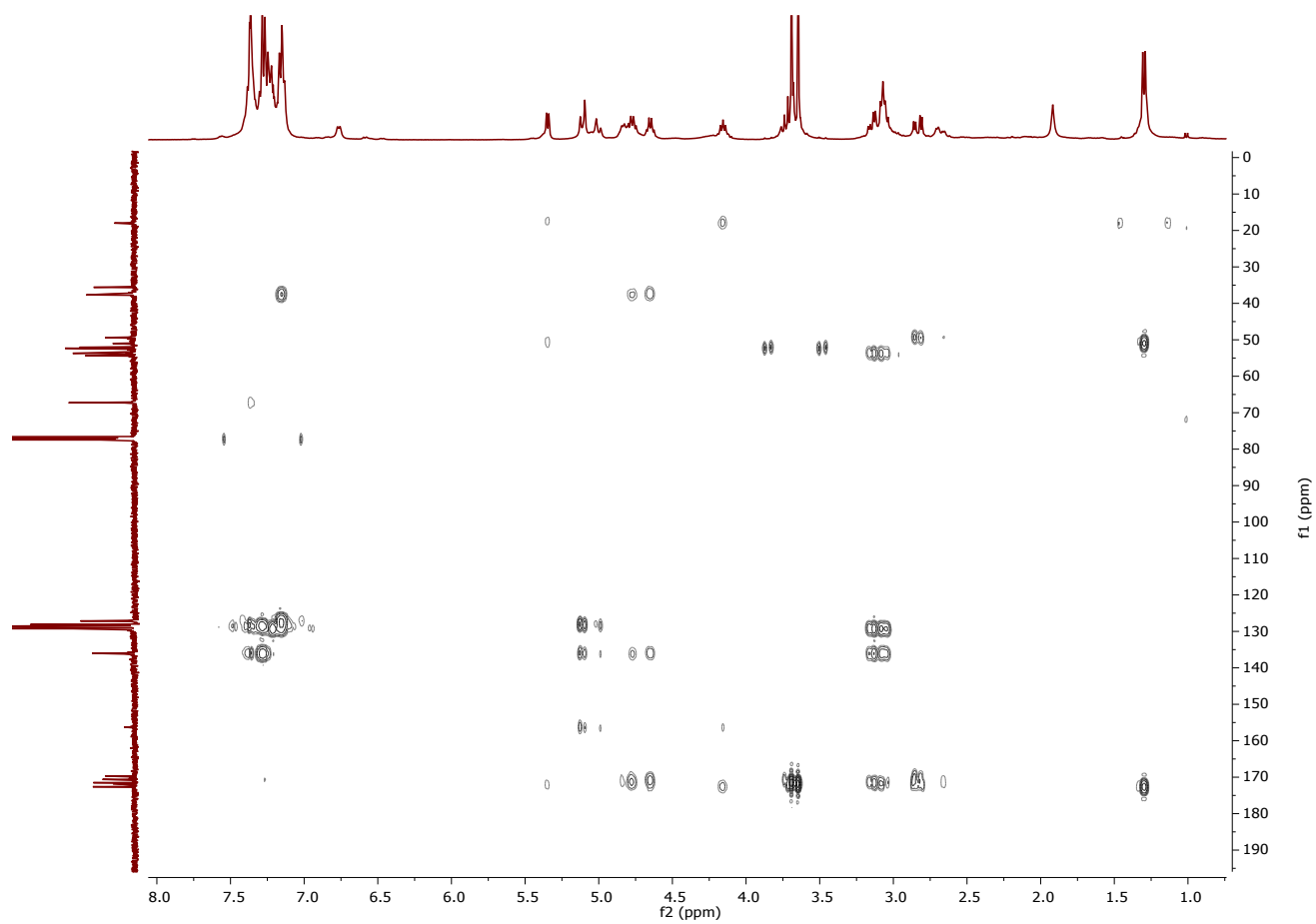
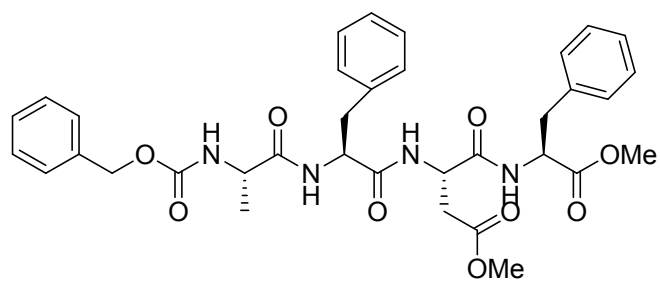
¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 7e



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **7f**

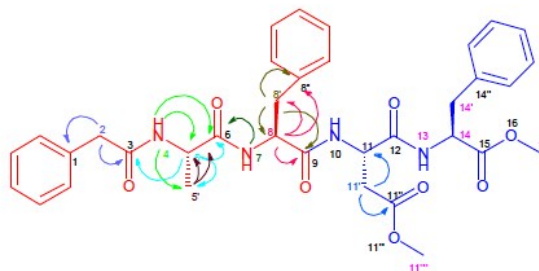


COSY NMR of compound **7f**

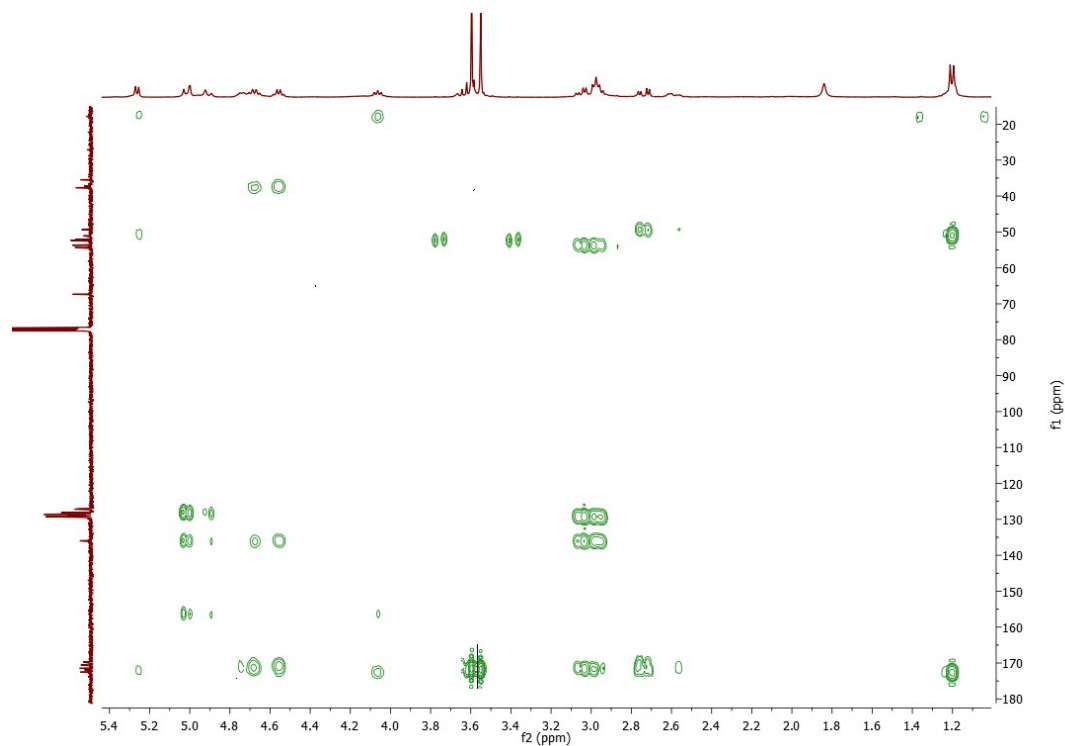


HSQC NMR of compound **7f**

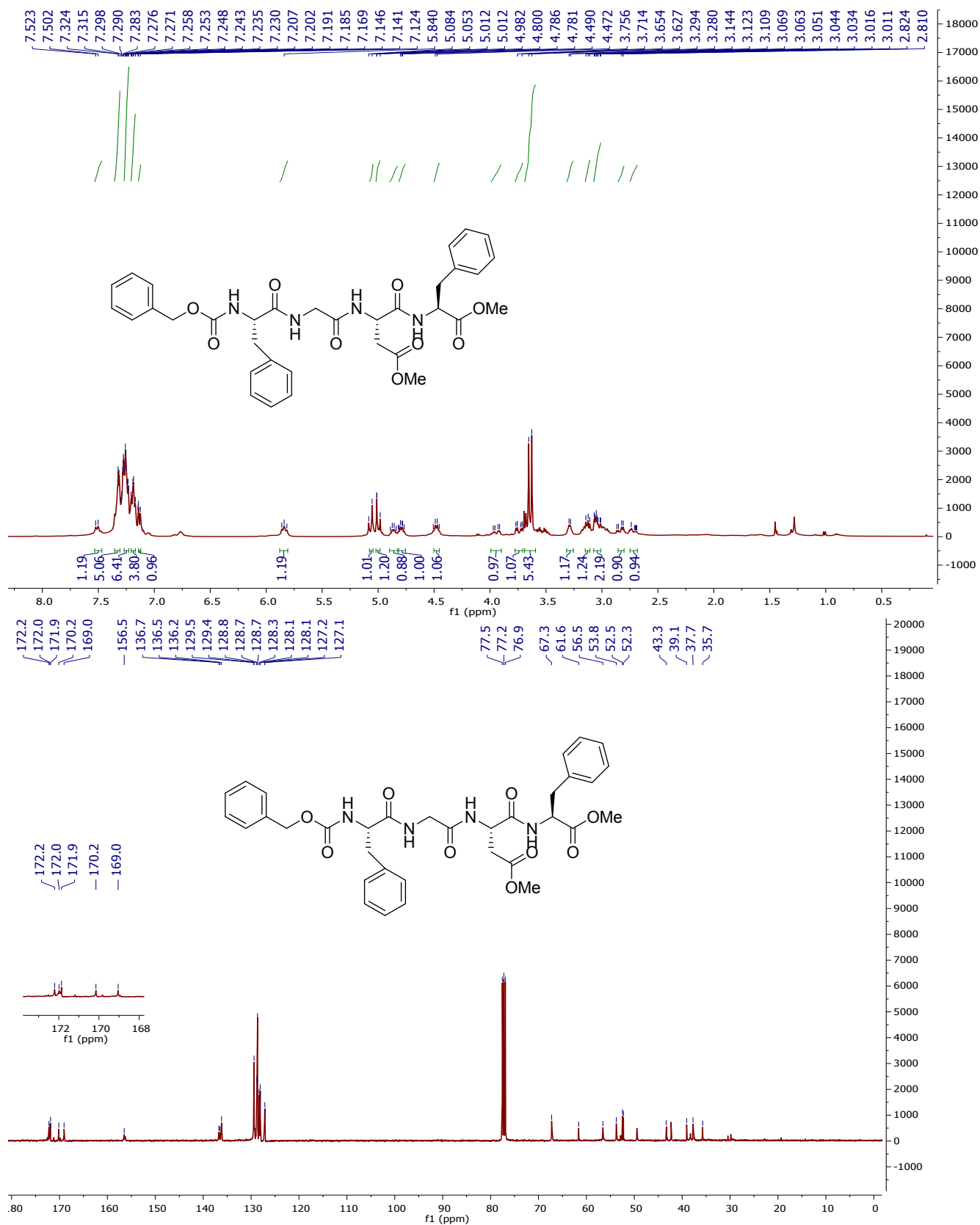
Atom No.	¹ H NMR	¹³ C NMR	HMBC
1	-	136.2	-
2	4.91, 5.02	67.5	C-1, C-3
3	-	156.4	-
4	5.28	-	C-5', C-6, C-5
5	4.06	51.2	C-5', C-3, C-6
5'	1.21	18.2	C-5, C-6
6	-	172.8	-
7	6.69	-	C-6
8	4.55	53.9	C-8', C-8'', C-9
8'	2.98	37.5	C-8, C-8'', C-9, correlations with C-8'' (b-g)
8''	-	136.9	-
8''-(b-f)	Overlapped signals between 7.00-7.29		Multiple correlations
9	-	169.9	-
10	7.17	-	C-9
11	4.74	49.4	C-11', C-12
11'	2.58, 2.73	35.8	C-11, C-11''
11''	-	171.5	
11'''	-	-	
11''''	3.59	52.2	C-11''
12	-	170.8	-
13	7.06	-	C-14', C-12
14	4.67	54.5	C-15, C-14', C-14''
14'	3.02	37.8	C-14, C-14'', C-15
14''	-	135.9	-
14'' (b-f)	Overlapped signals between 7.00-7.29		Multiple correlations
15	-	171.8	-
16	-	-	
17	3.55	52.5	C-15



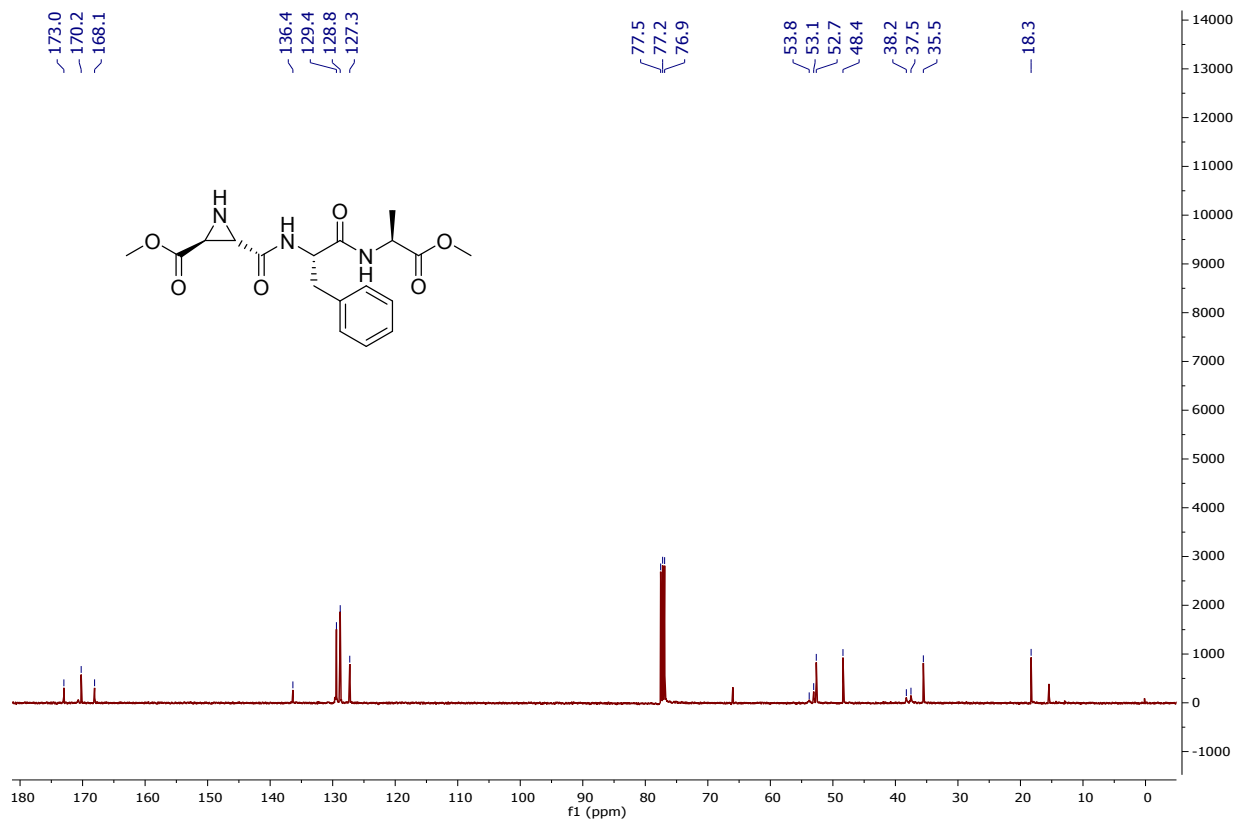
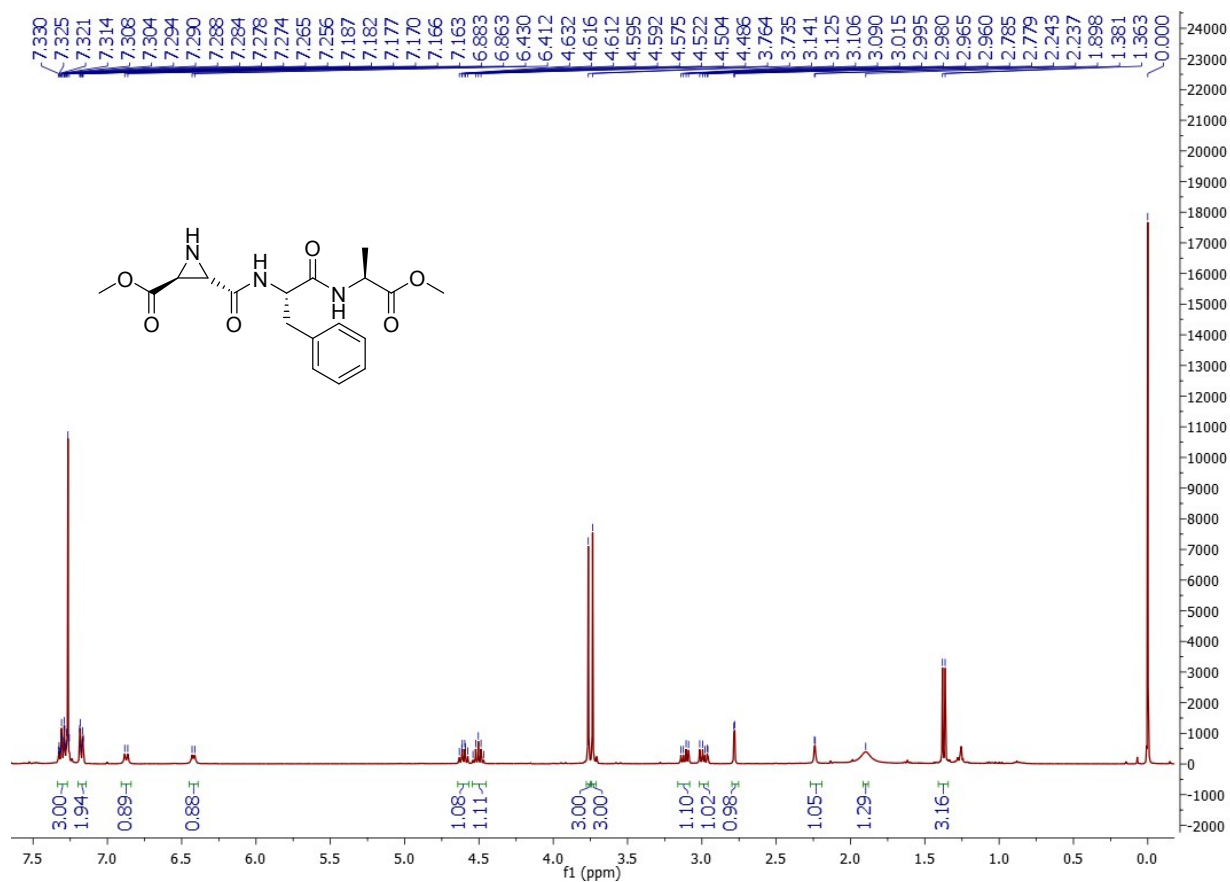
Isomer 1: α -tetrapeptide: Cbz-L-Ala-L-Phe-L-Asp(OMe)-L-Phe-OMe



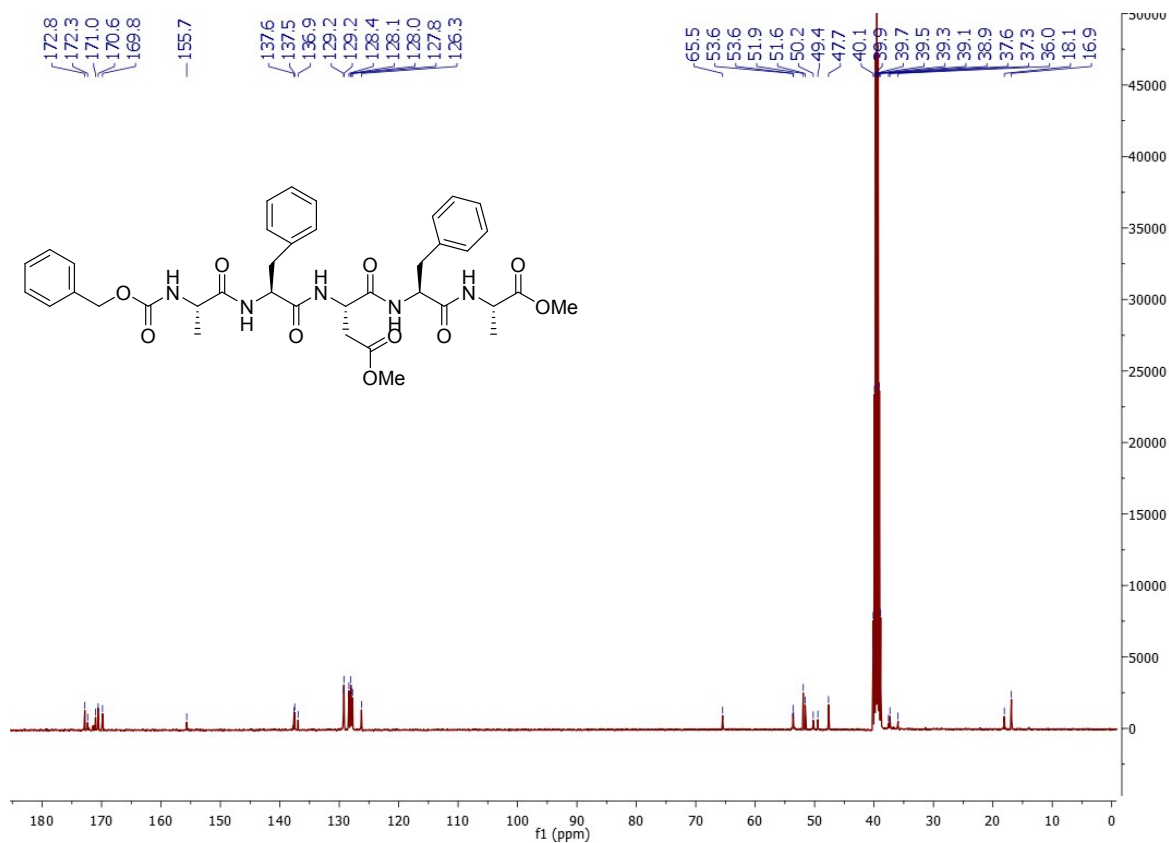
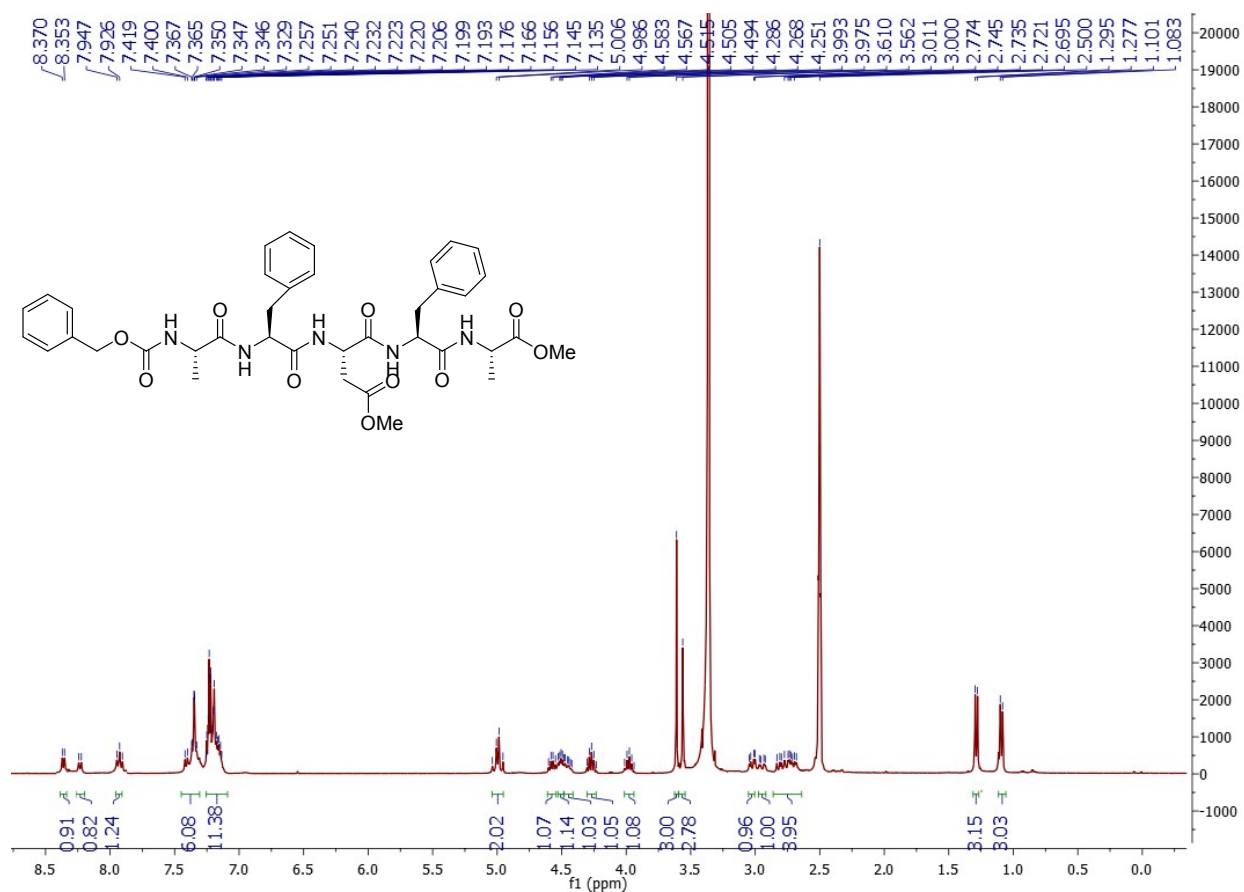
HMBC NMR of compound **7f**



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **7g**



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound 6c



¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) of compound **8**