

**SUPPORT INFORMATION: Part 1 (NMR spectra of synthetic compounds)**

**Liposomes of  $\alpha,\epsilon$ -N,N'-di-stearoyl lysine-derived amide lipid and phospholipid: Incorporation of lipid A-ligand for bacterial targeting and sialic acid as PEGylation alternative for phagocytosis resistance**

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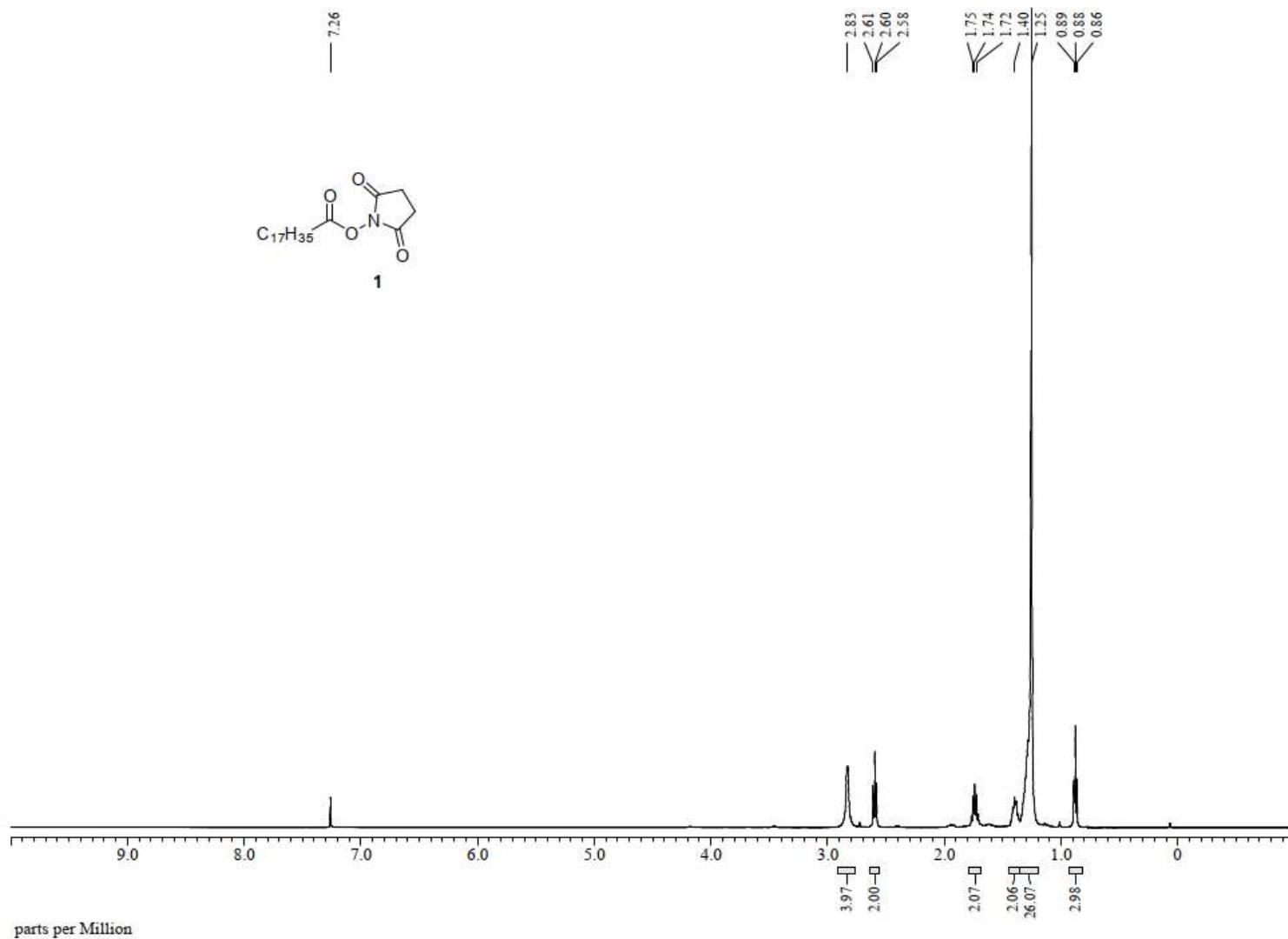
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<sup>b</sup> *Department of Chemistry and Centre for Biotechnology, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, Ontario, Canada L2S 3A1*

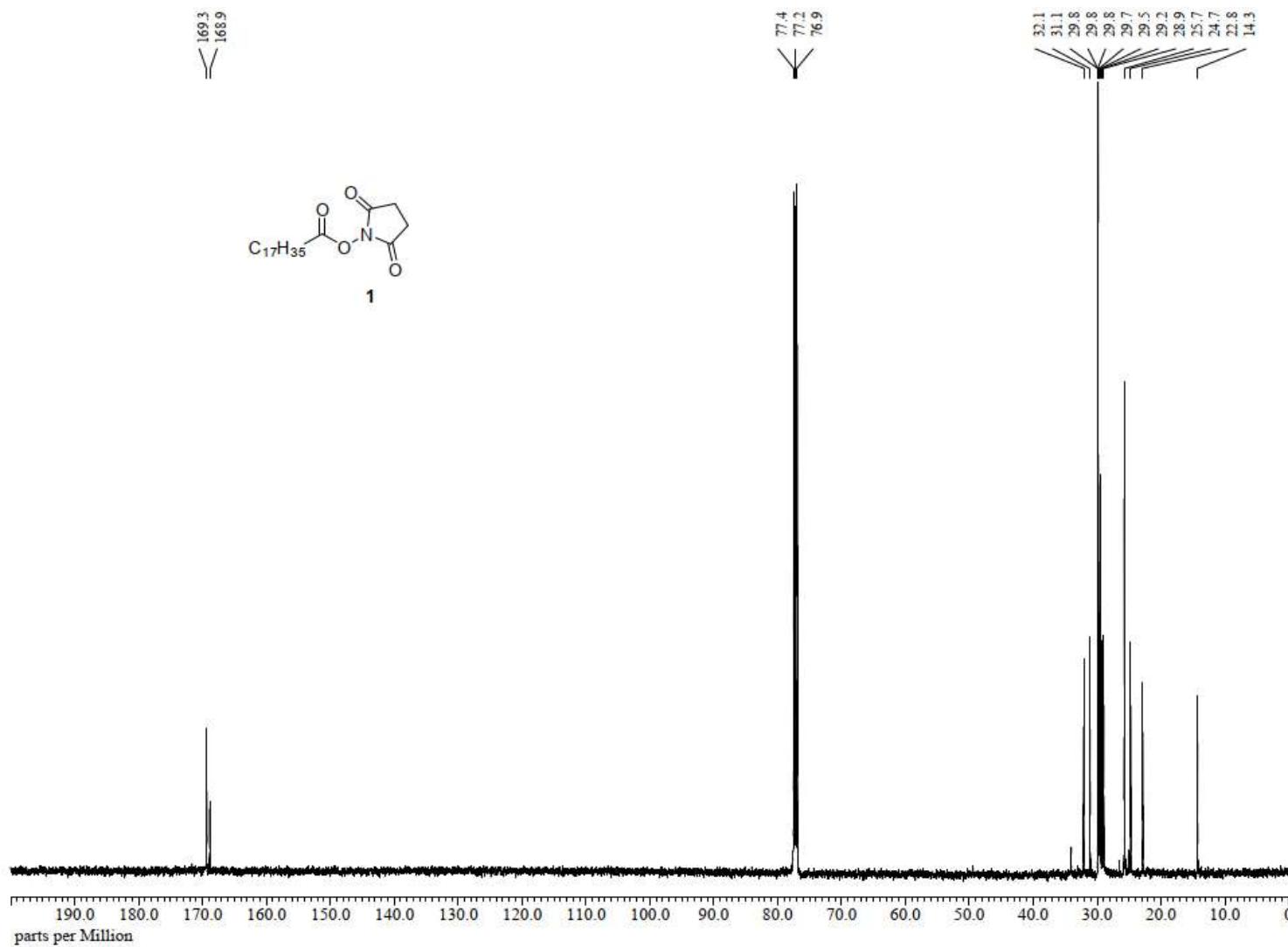
<sup>c</sup> *Department of Biological Science, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, Ontario, Canada L2S 3A1*

<sup>d</sup> *Nanotechnology Research Center, National Research Council Canada, 11421 Saskatchewan Dr NW, Edmonton, AB T6G 2M9*

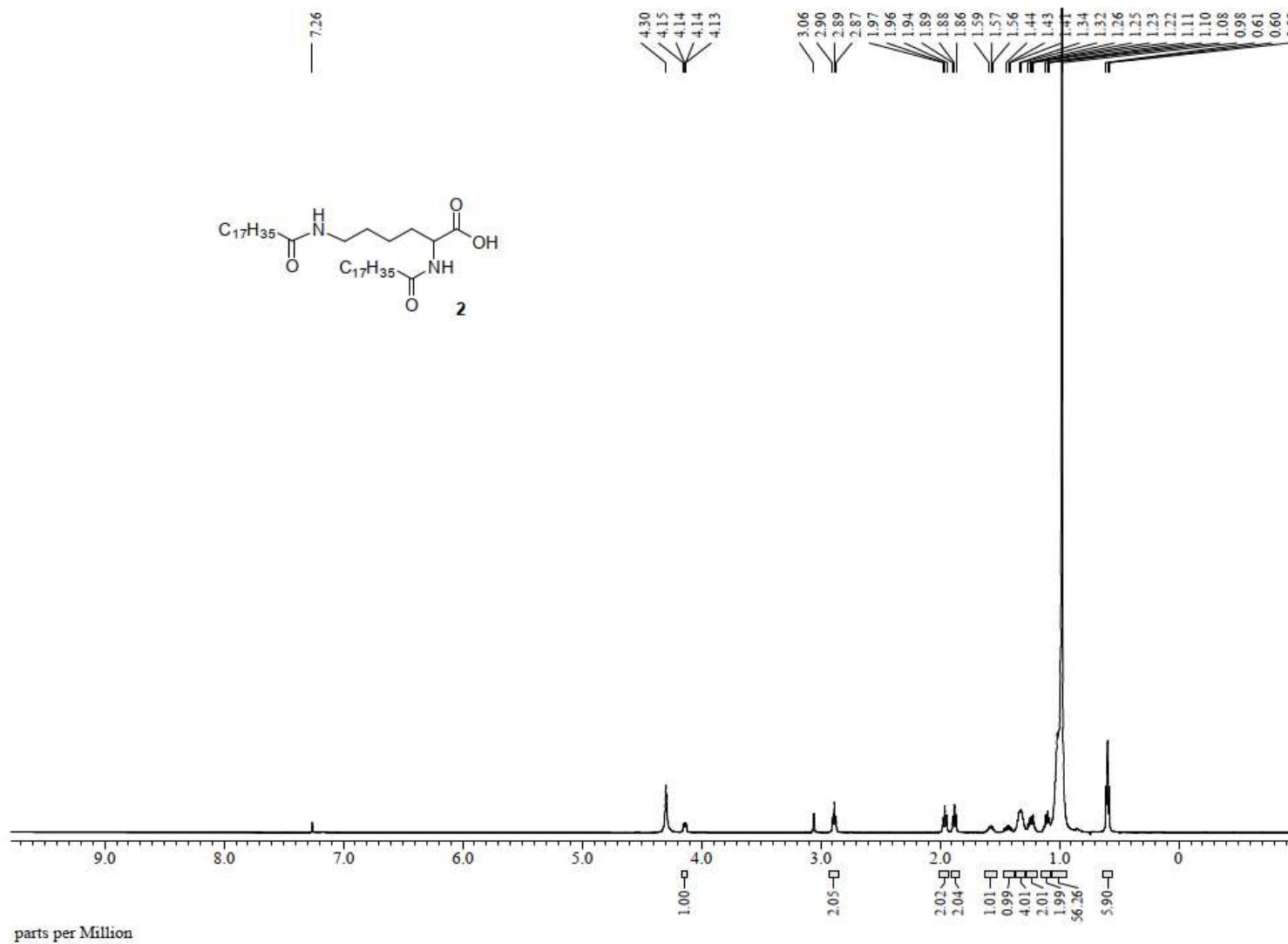
<sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound **1**



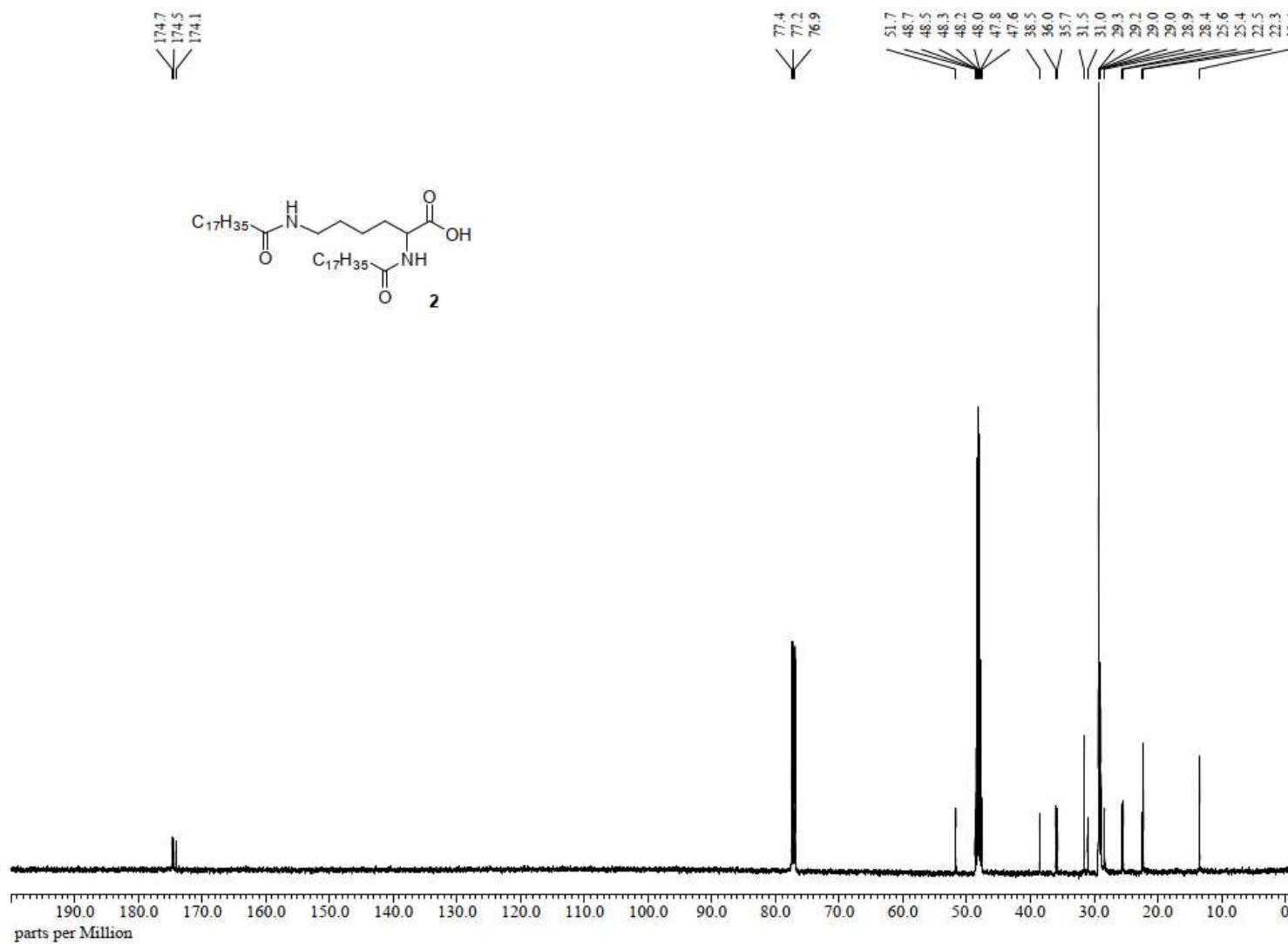
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of compound **1**



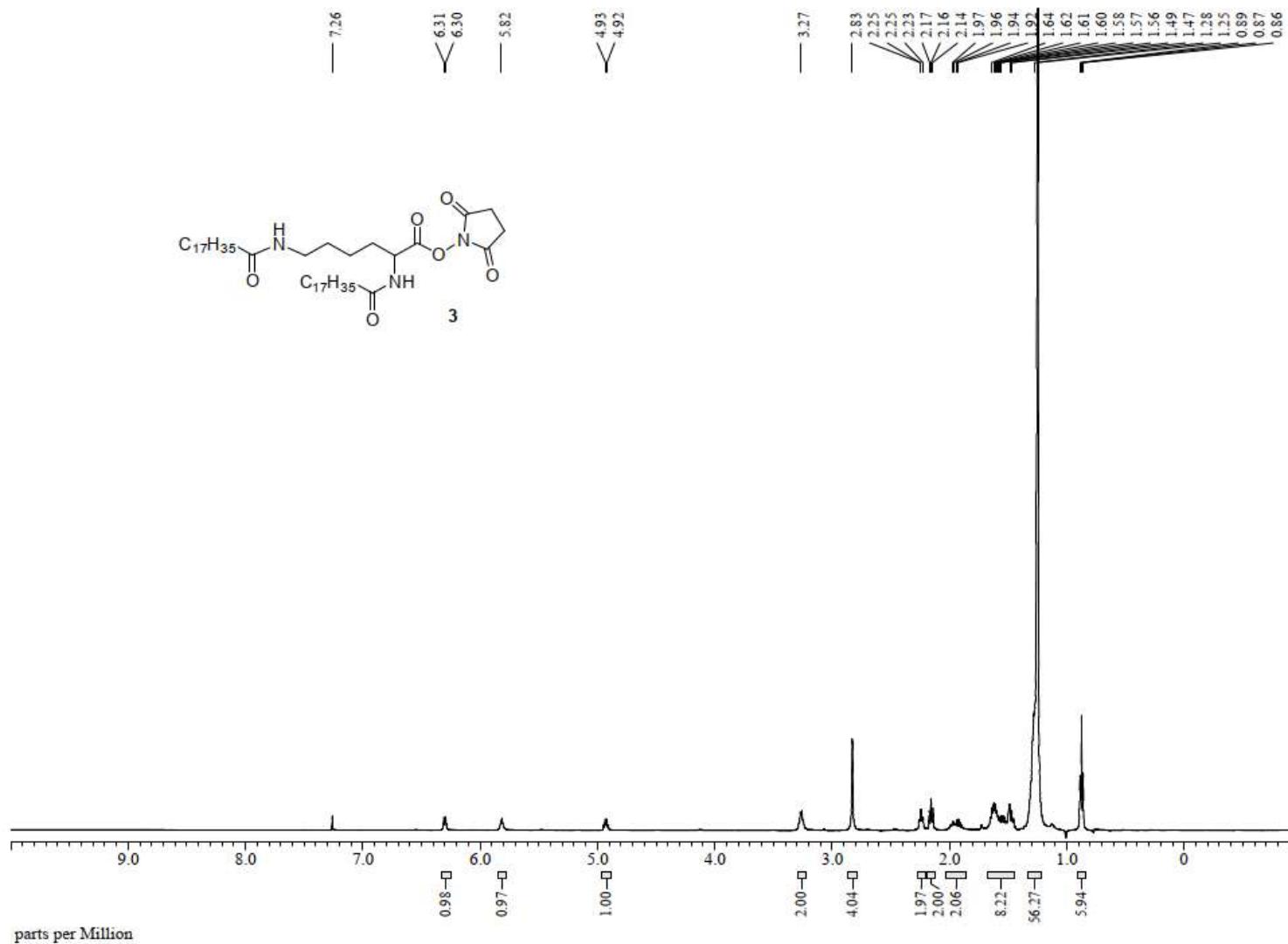
<sup>1</sup>H NMR spectrum (500 MHz, 4:3 CDCl<sub>3</sub>:CD<sub>3</sub>OD) of compound **2**



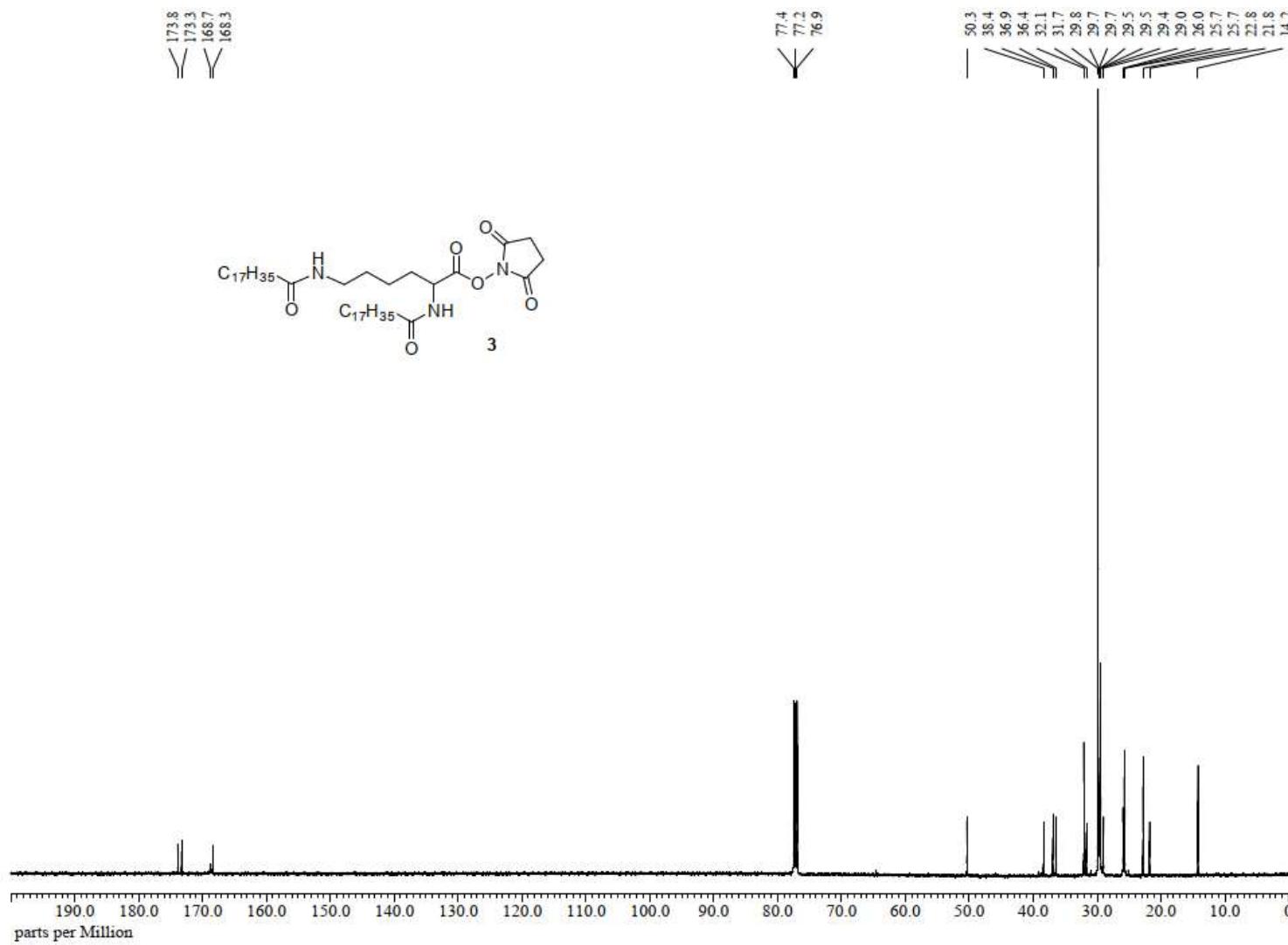
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (125 MHz, 4:3  $\text{CDCl}_3:\text{CD}_3\text{OD}$ ) of compound **2**



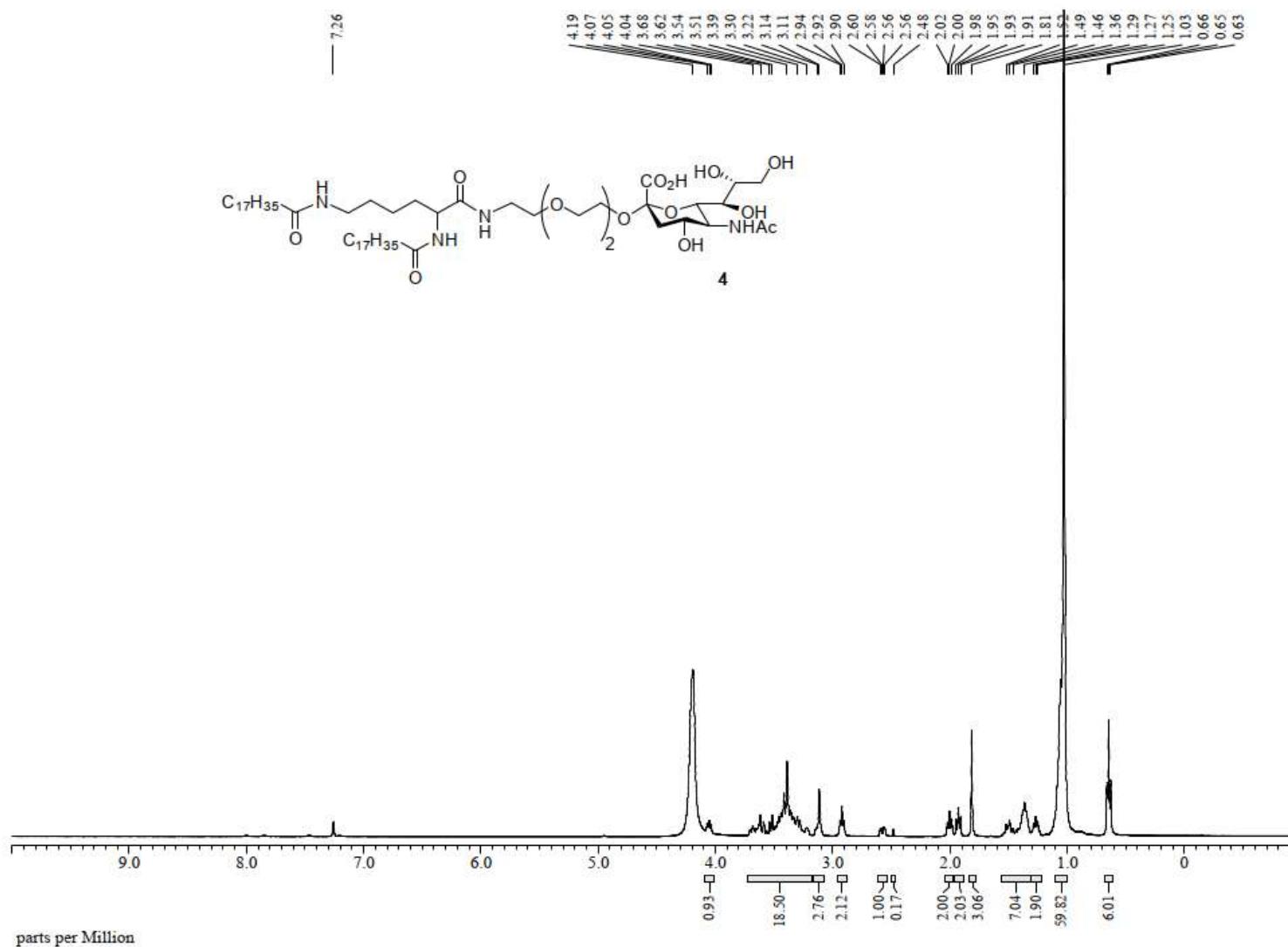
<sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>, 35°C) of compound 3



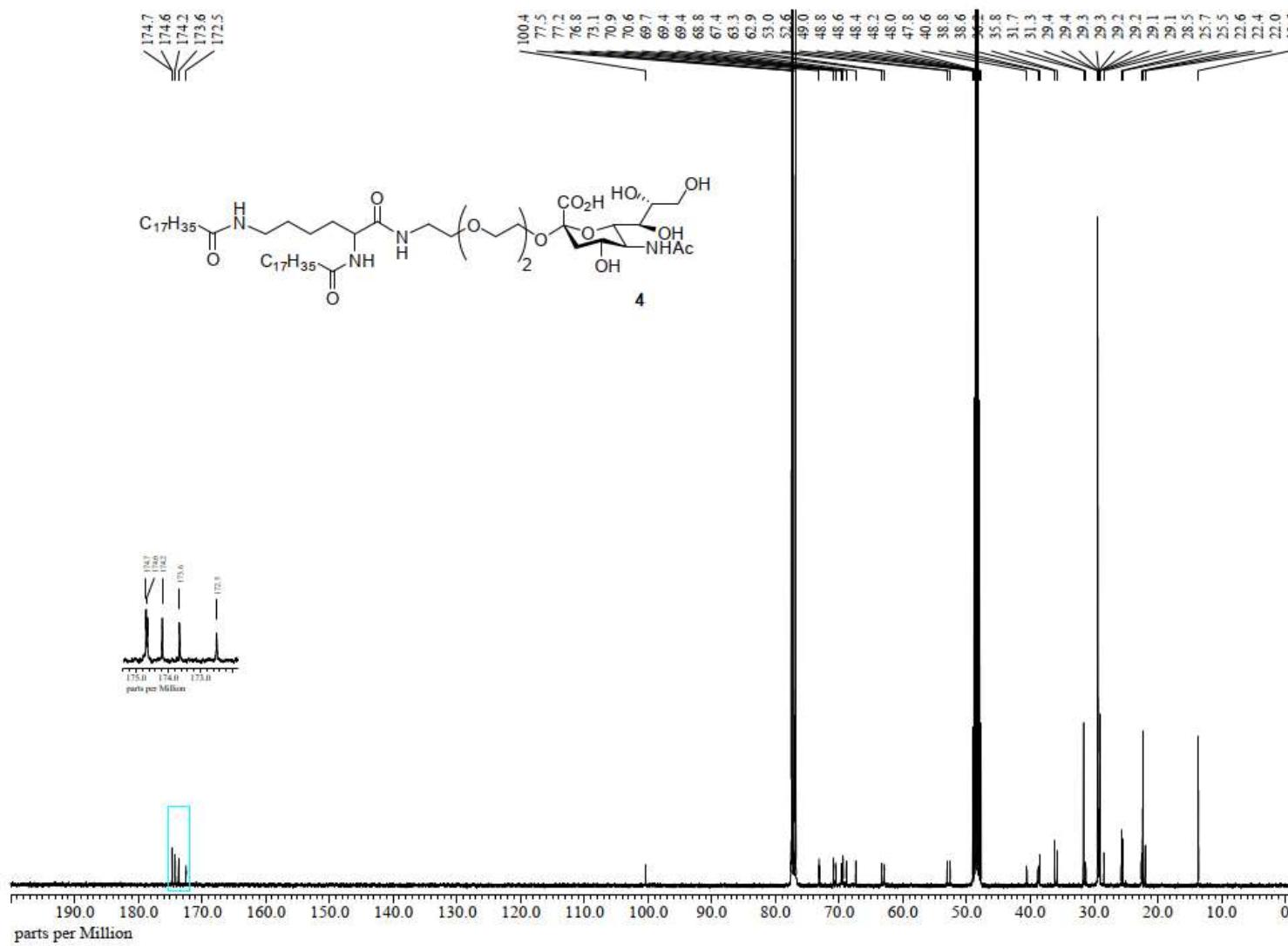
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ , 35°C) of compound 3



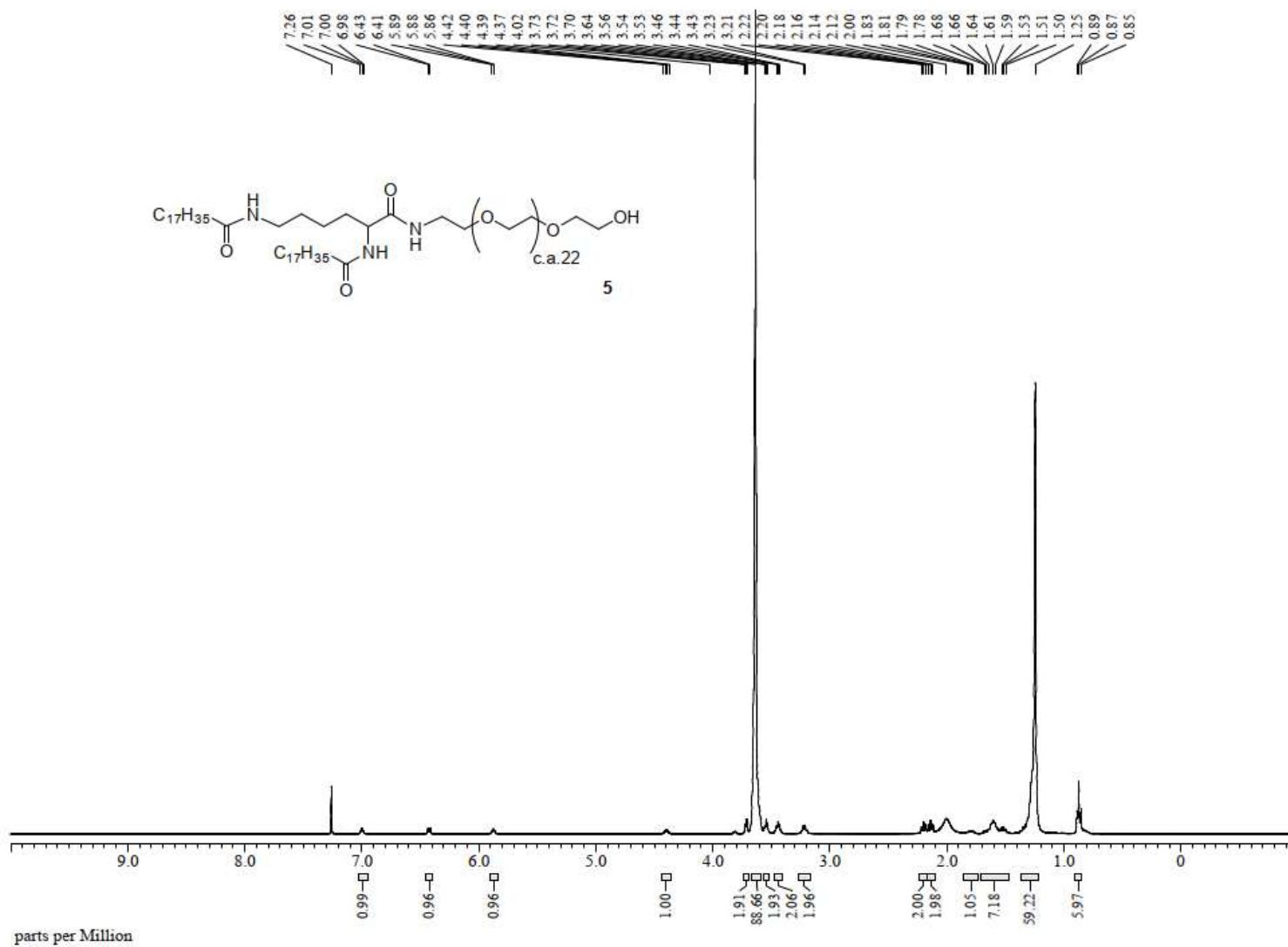
<sup>1</sup>H NMR spectrum (400 MHz, 2:1 CDCl<sub>3</sub>:CD<sub>3</sub>OD) of compound 4



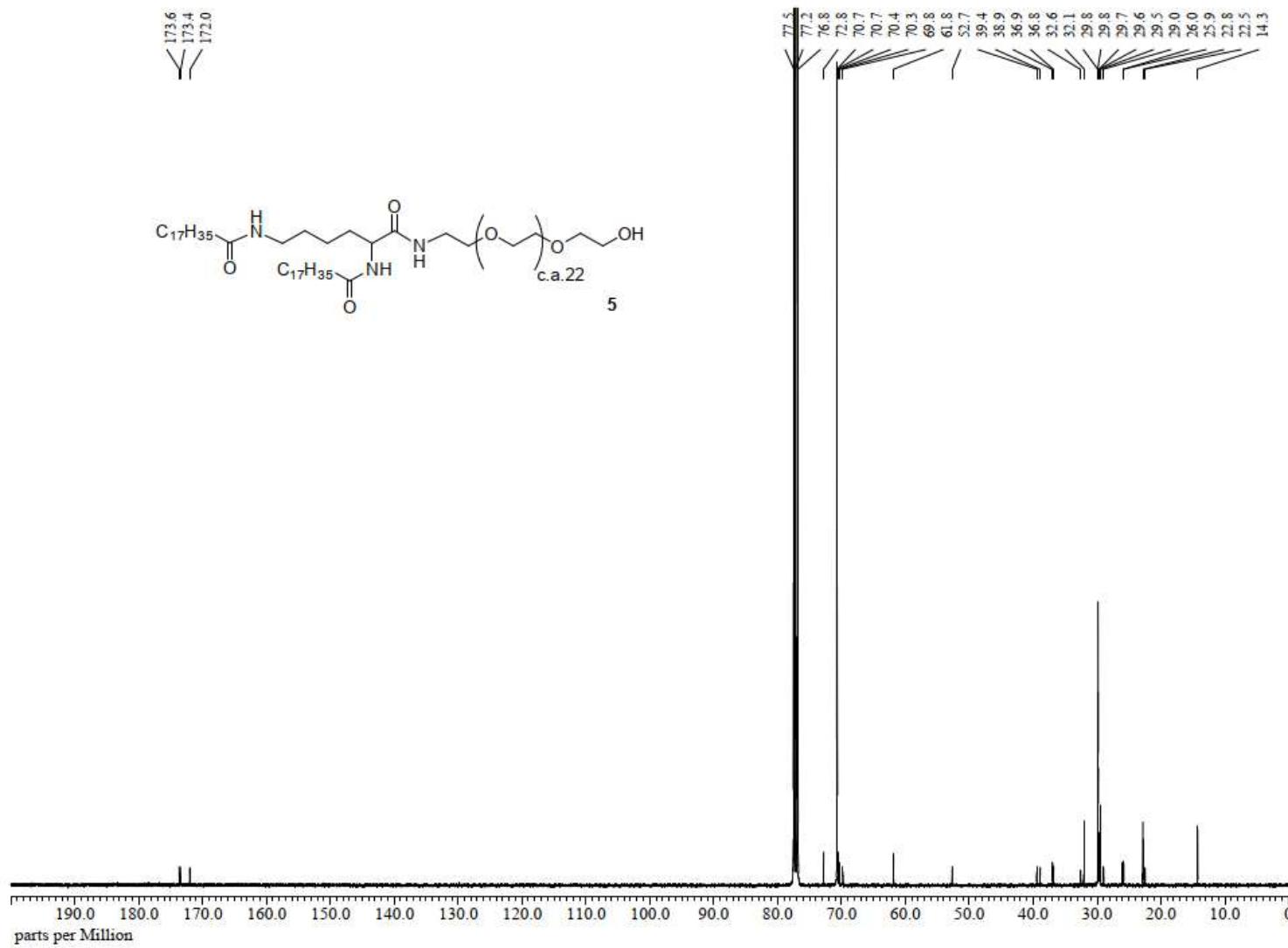
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (101 MHz, 2:1  $\text{CDCl}_3:\text{CD}_3\text{OD}$ ) of compound 4



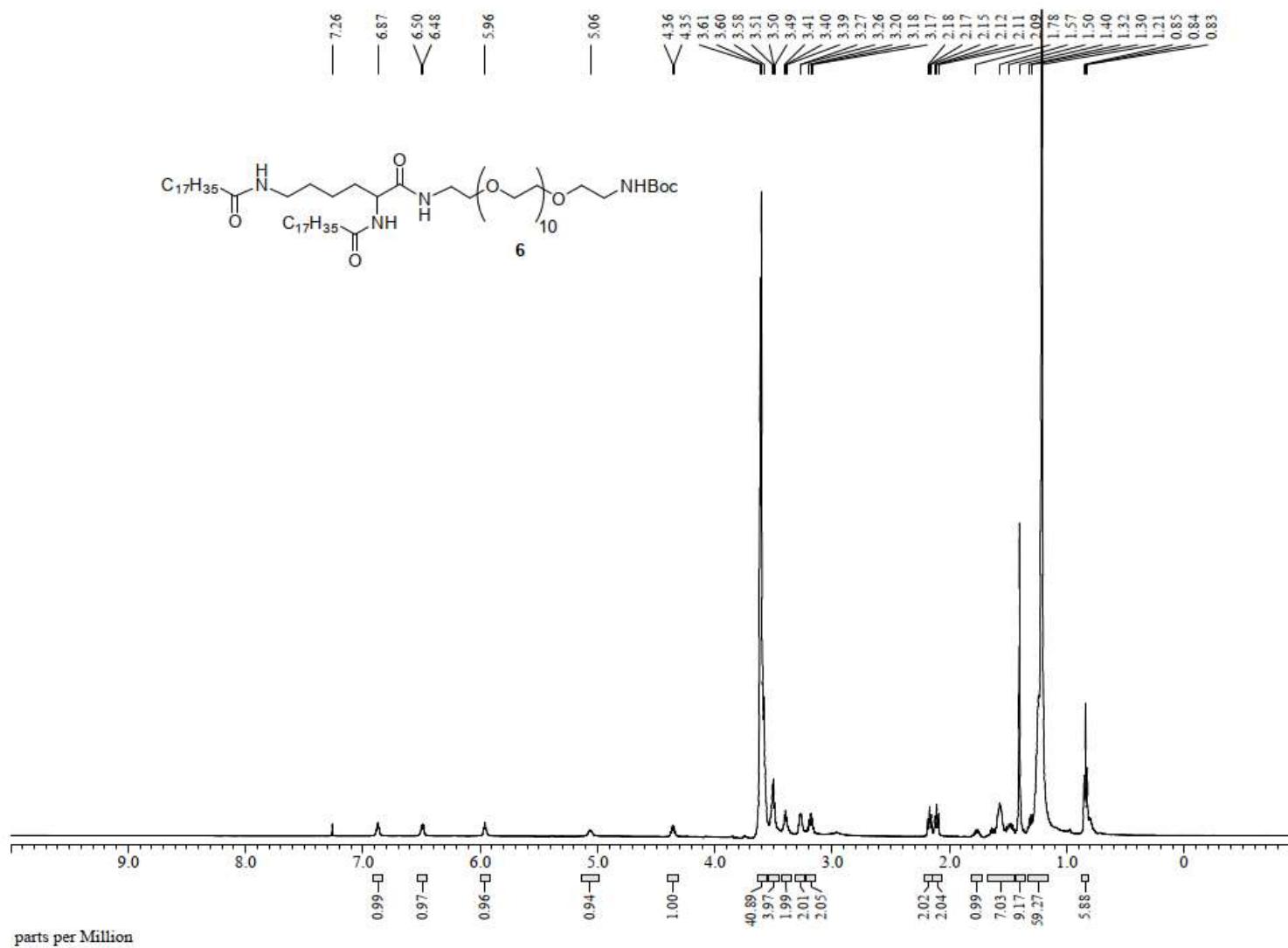
<sup>1</sup>H NMR spectrum (400 MHz, CDCl<sub>3</sub>) of compound 5



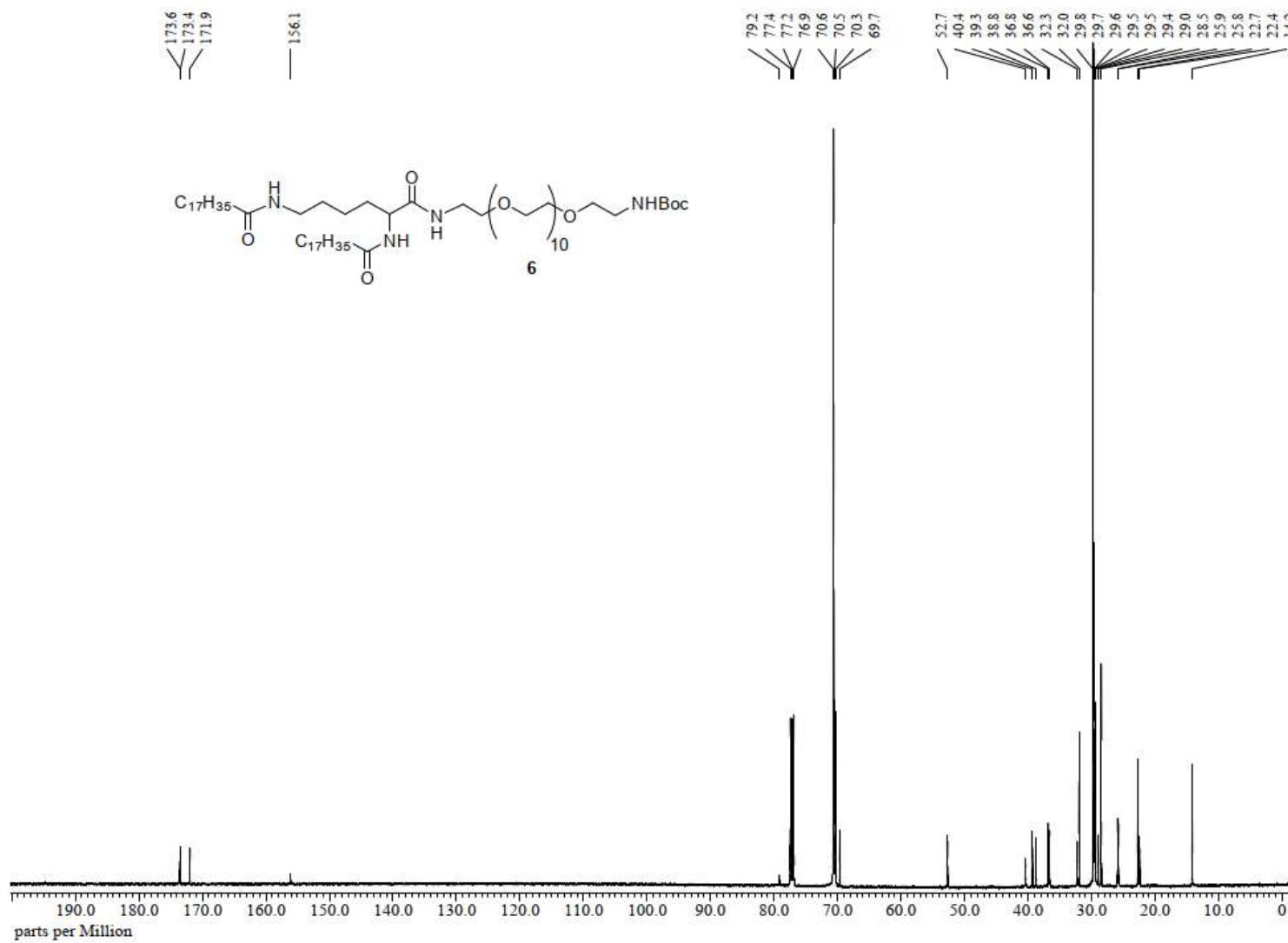
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (101 MHz,  $\text{CDCl}_3$ ) of compound 5



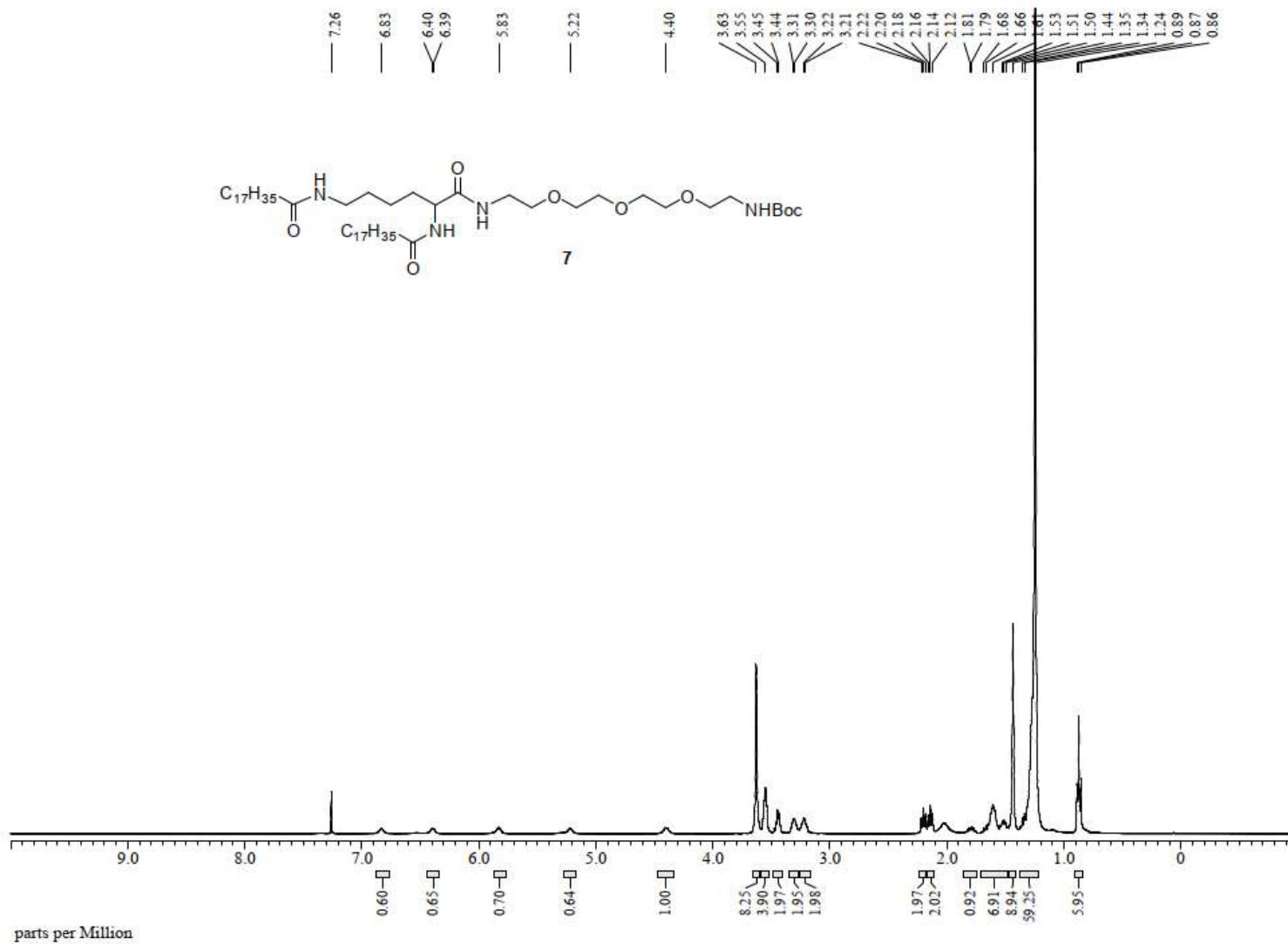
<sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound 6



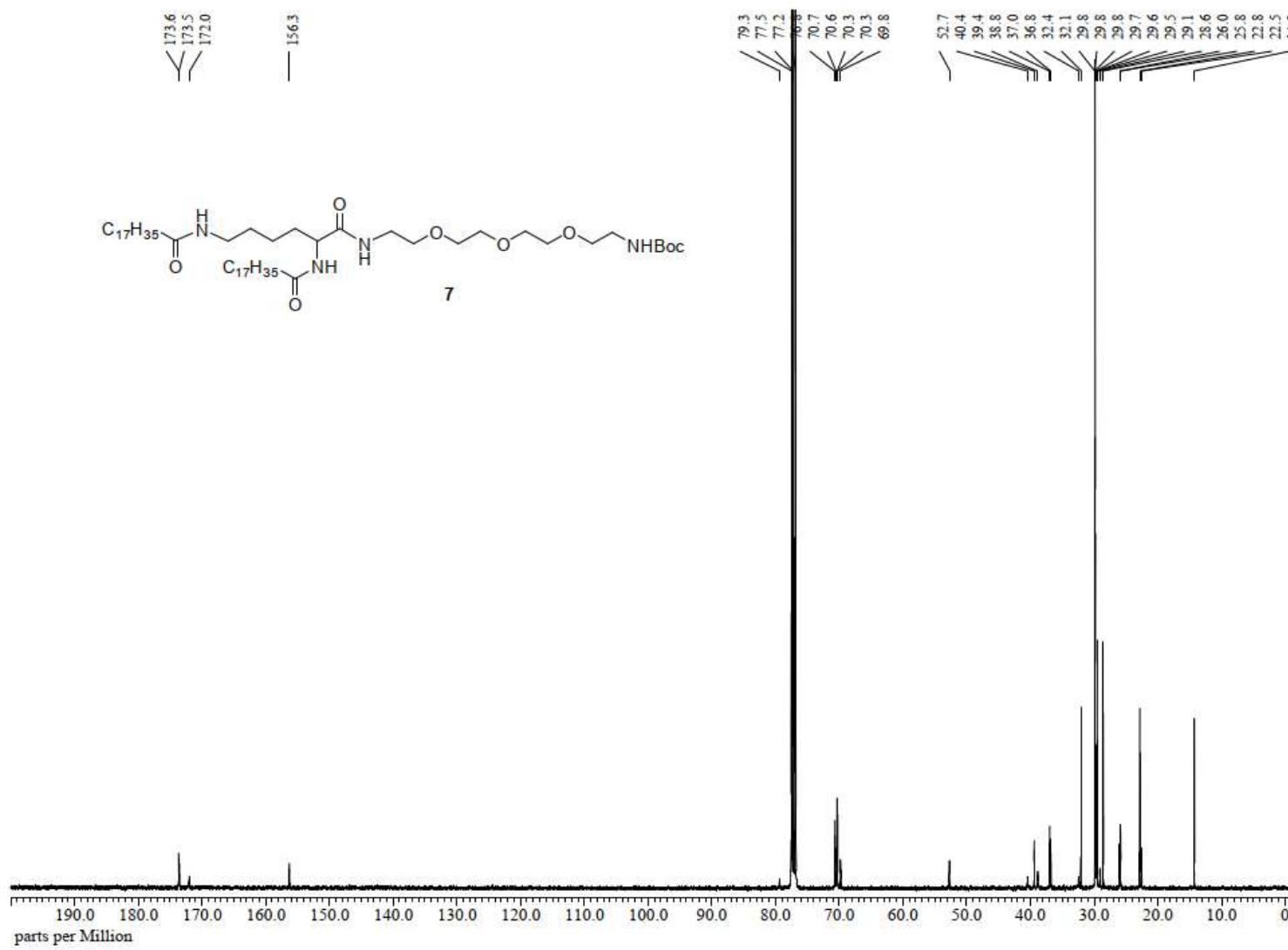
<sup>13</sup>C{<sup>1</sup>H} NMR spectrum (125 MHz, CDCl<sub>3</sub>) of compound 6



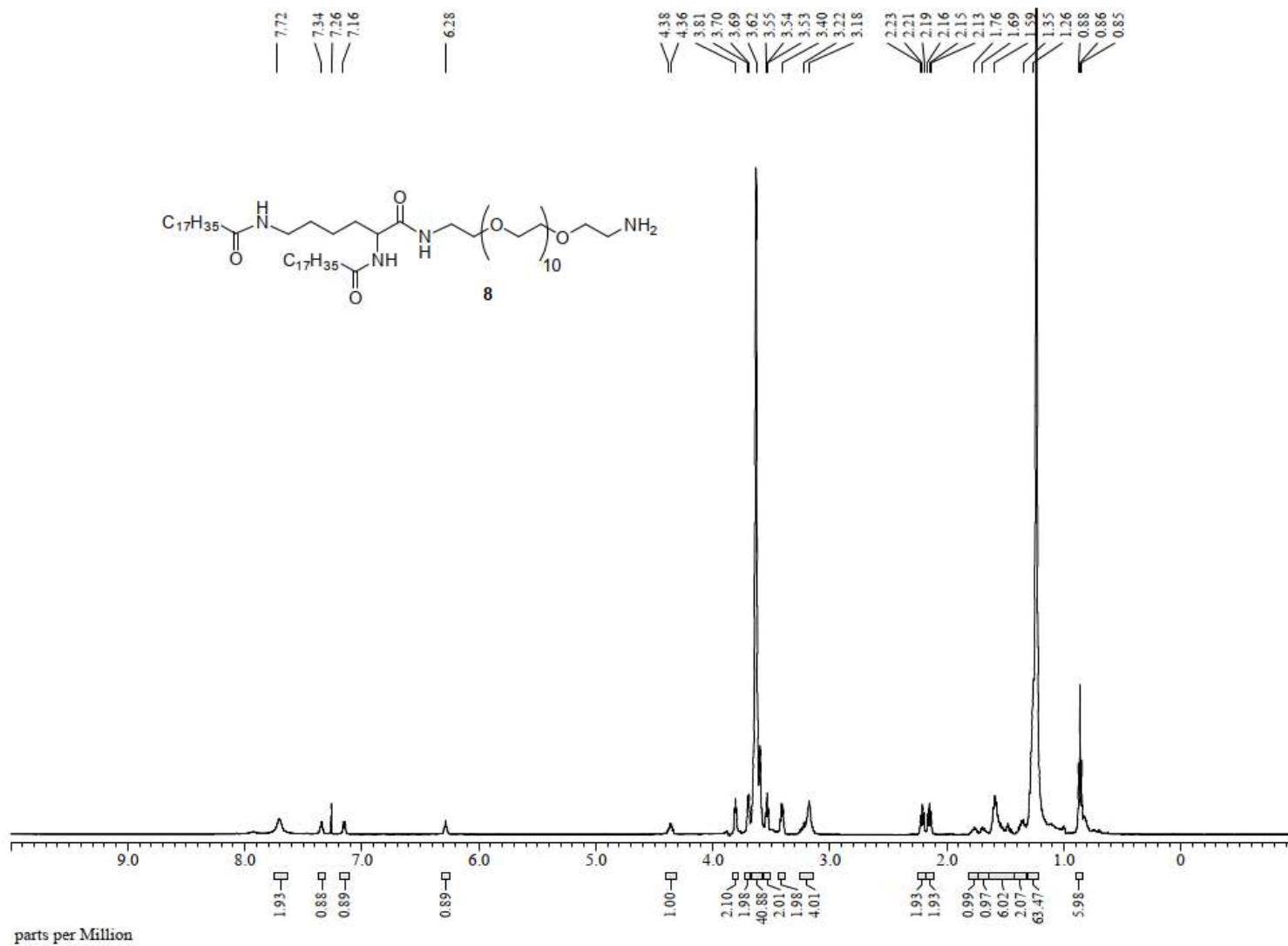
<sup>1</sup>H NMR spectrum (400 MHz, CDCl<sub>3</sub>) of compound 7



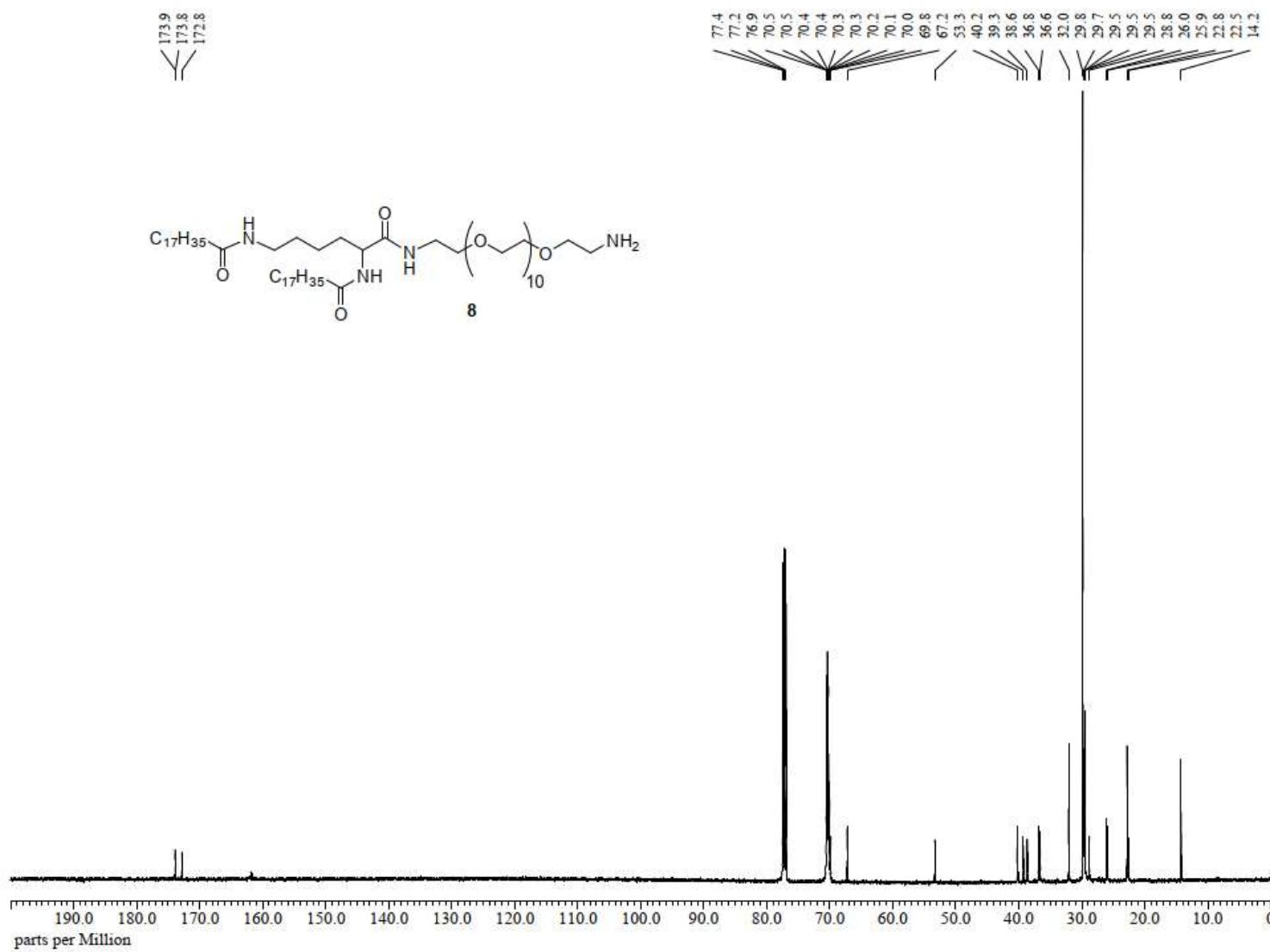
<sup>13</sup>C{<sup>1</sup>H} NMR spectrum (101 MHz, CDCl<sub>3</sub>) of compound 7



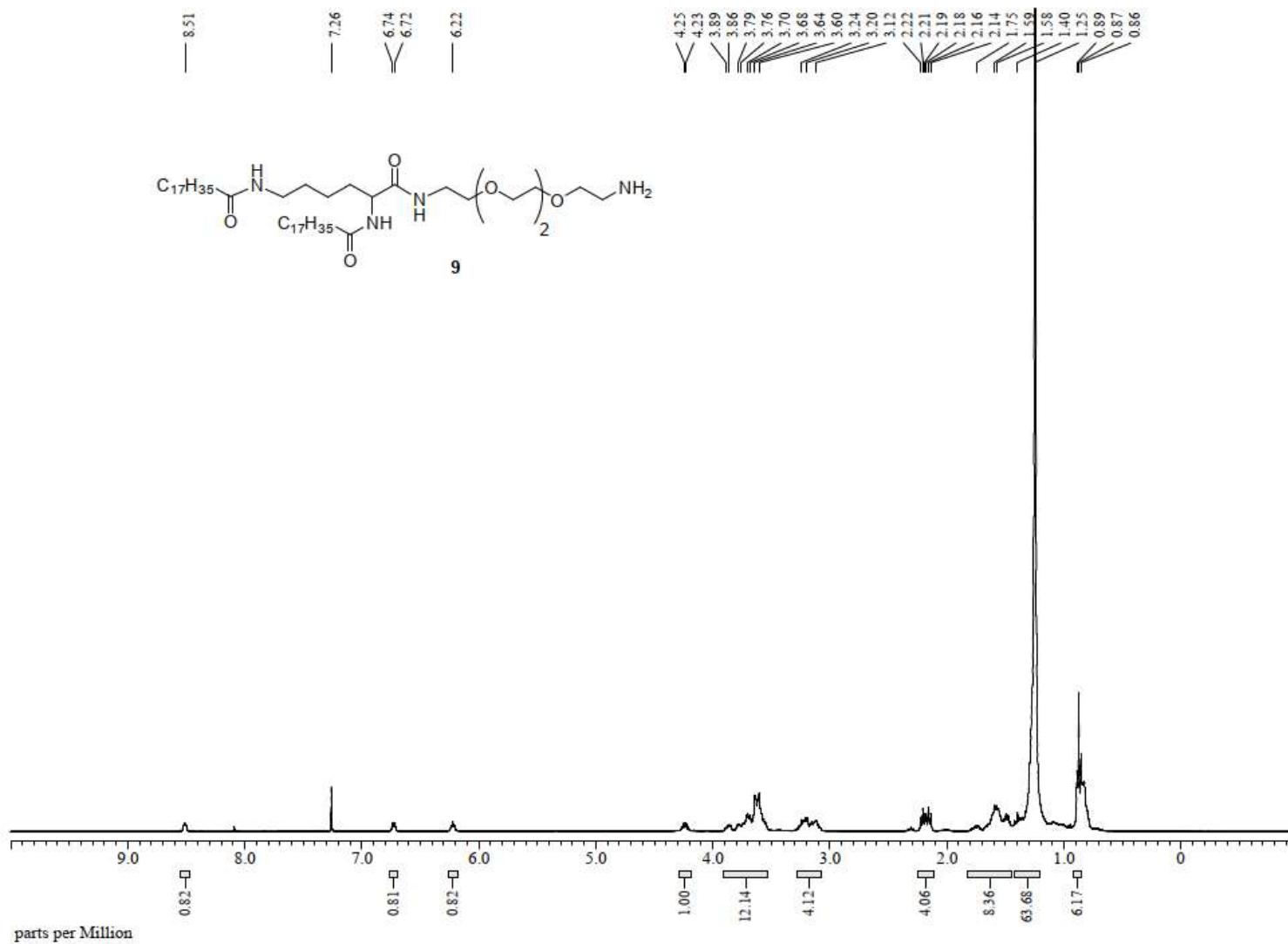
<sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound **8**



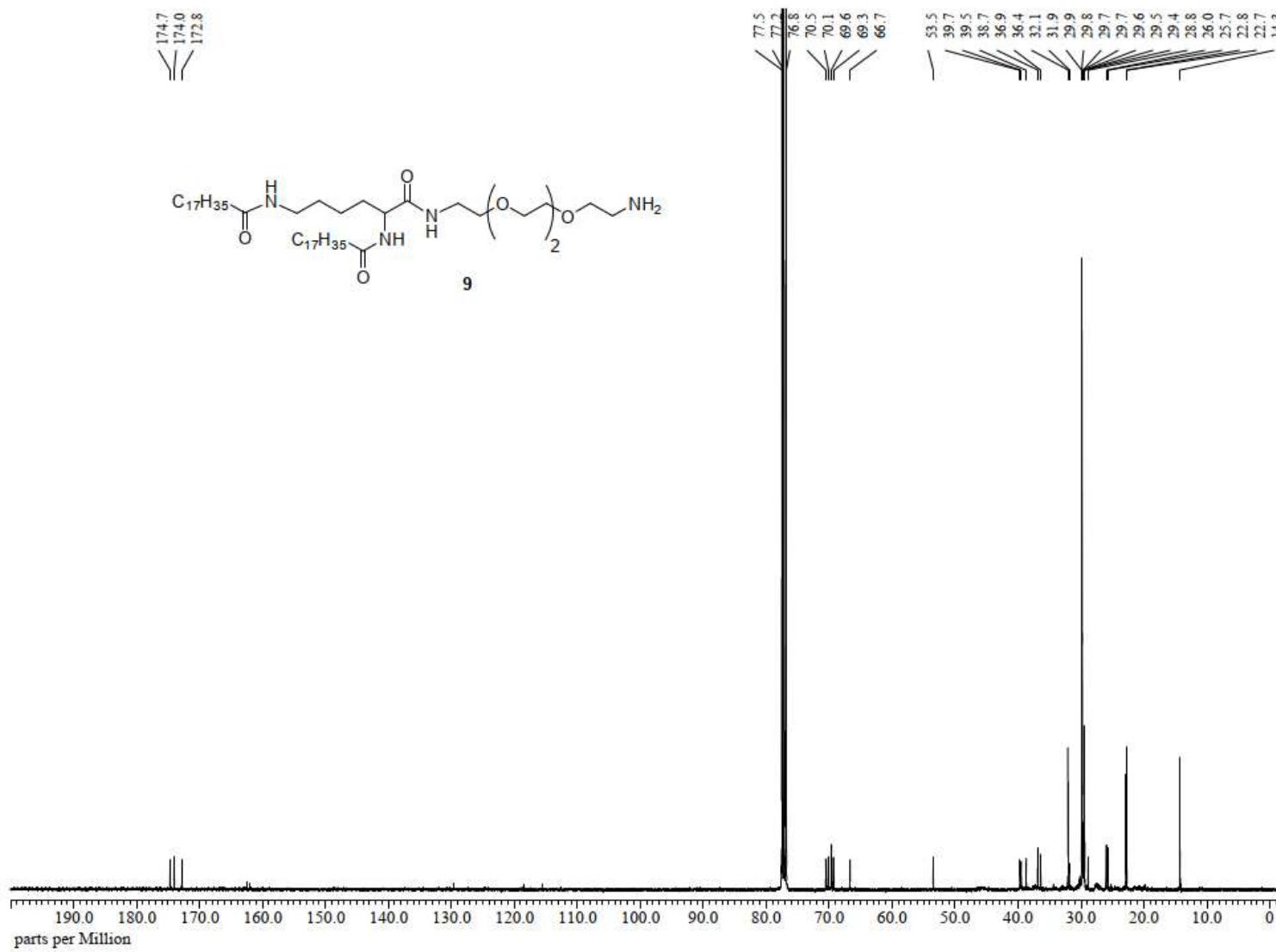
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of compound **8**



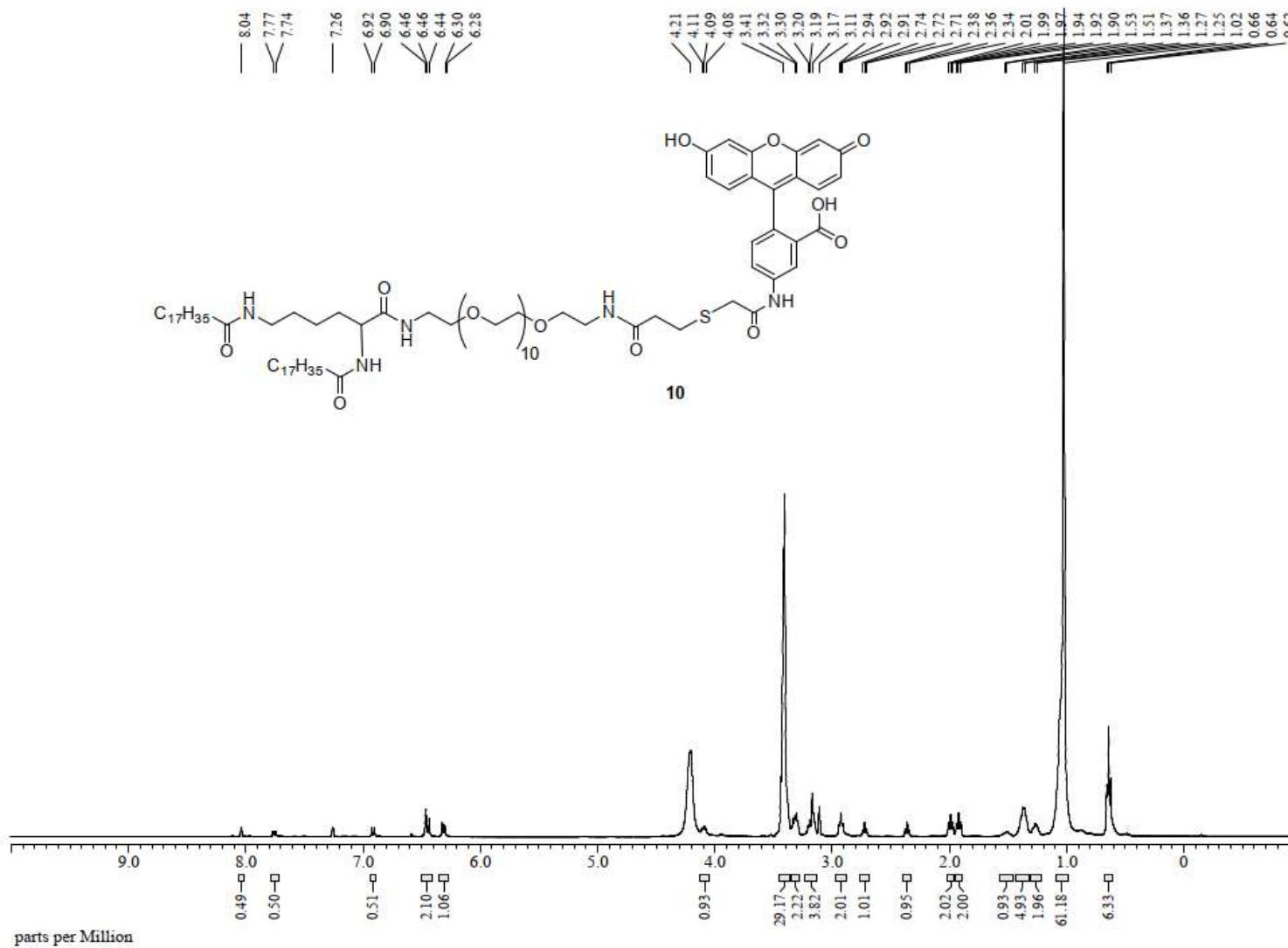
<sup>1</sup>H NMR spectrum (400 MHz, CDCl<sub>3</sub>) of compound 9



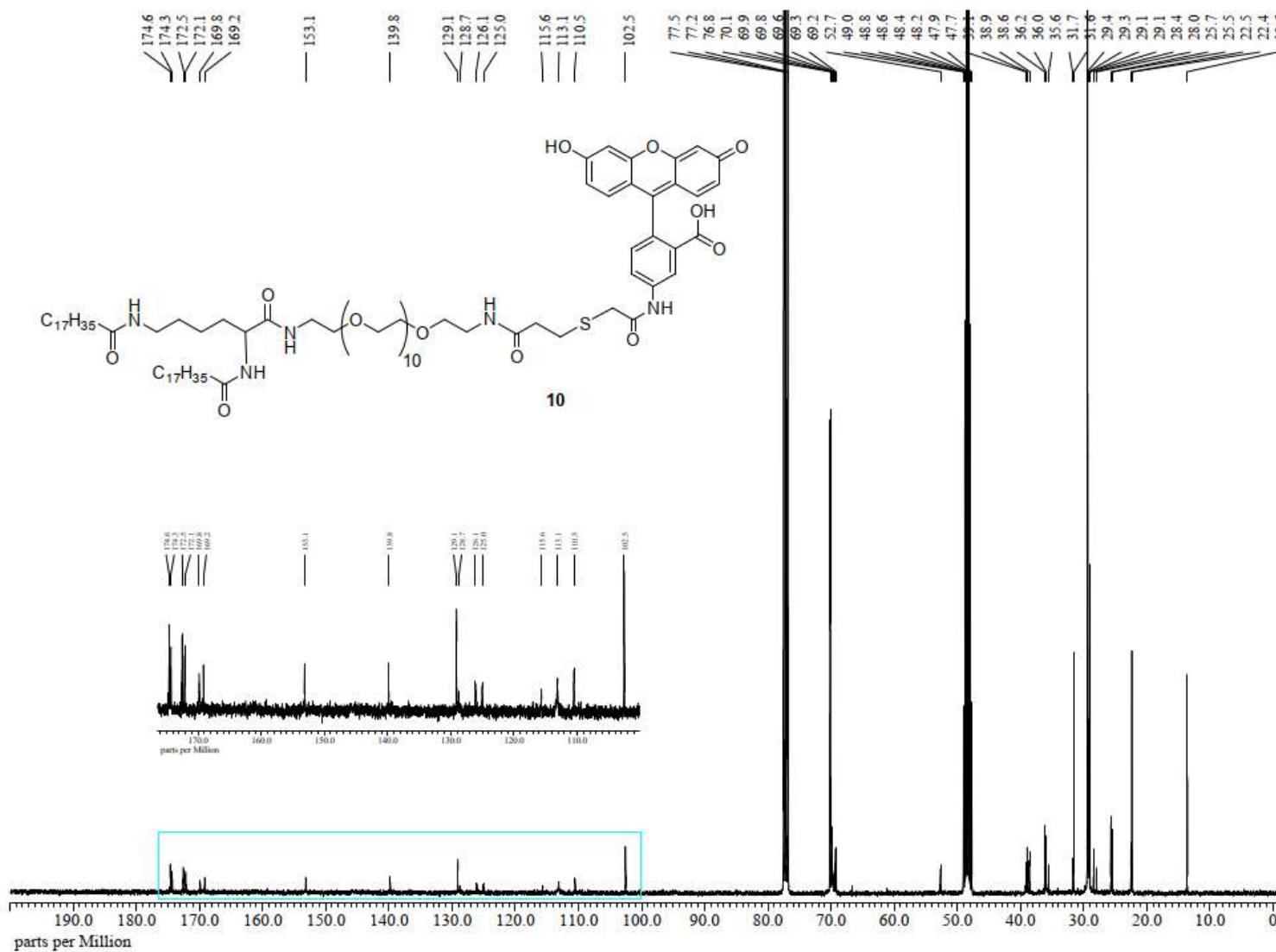
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (101 MHz,  $\text{CDCl}_3$ ) of compound **9**



<sup>1</sup>H NMR spectrum (400 MHz, 2:1 CDCl<sub>3</sub>:CD<sub>3</sub>OD) of compound **10**

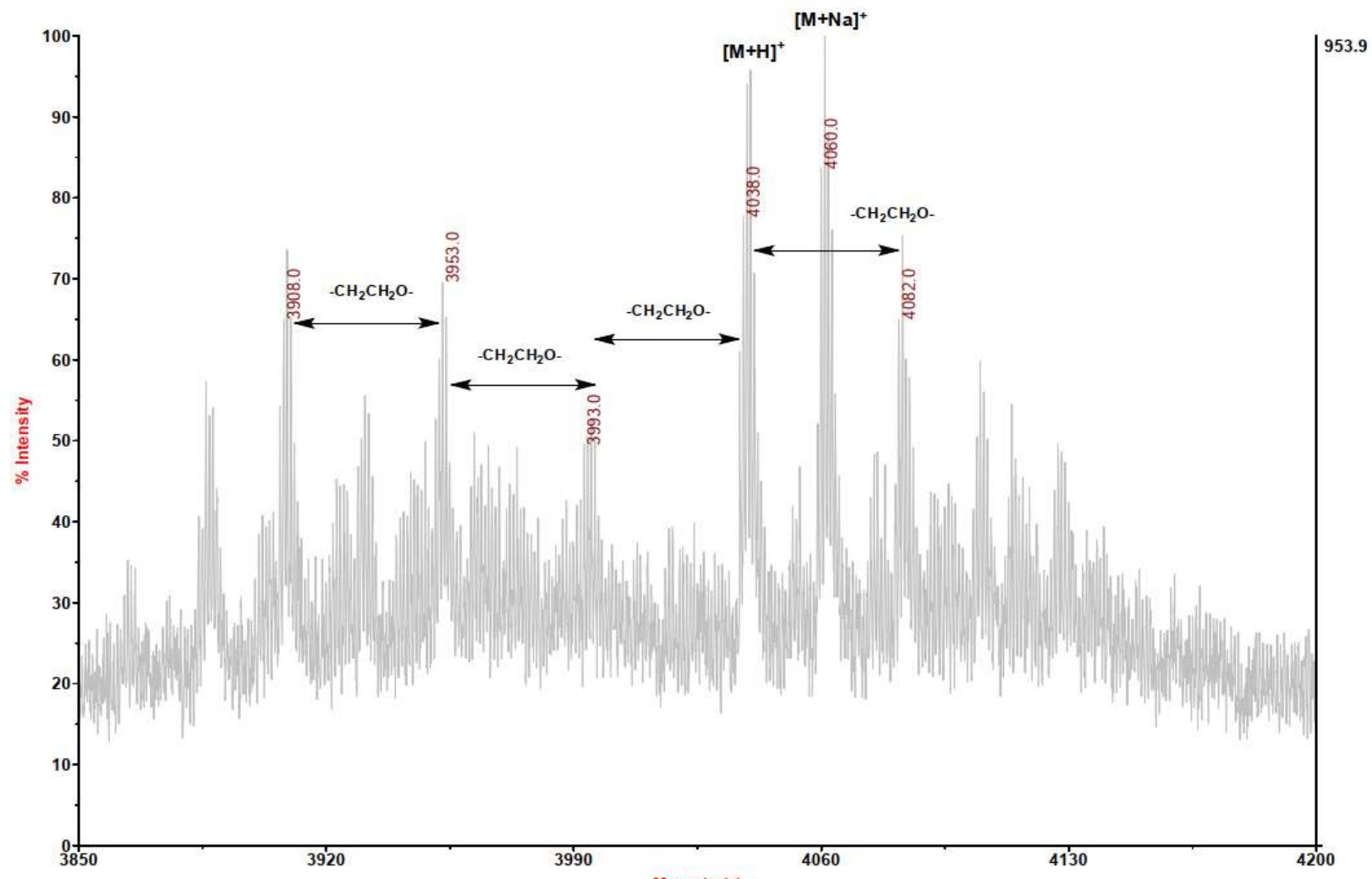


$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (101 MHz, 2:1  $\text{CDCl}_3:\text{CD}_3\text{OD}$ ) of compound **10**



MALDI spectrum of compound 11

4700 Reflector Spec #1 MC=>TR[BP = 4061.0, 954]



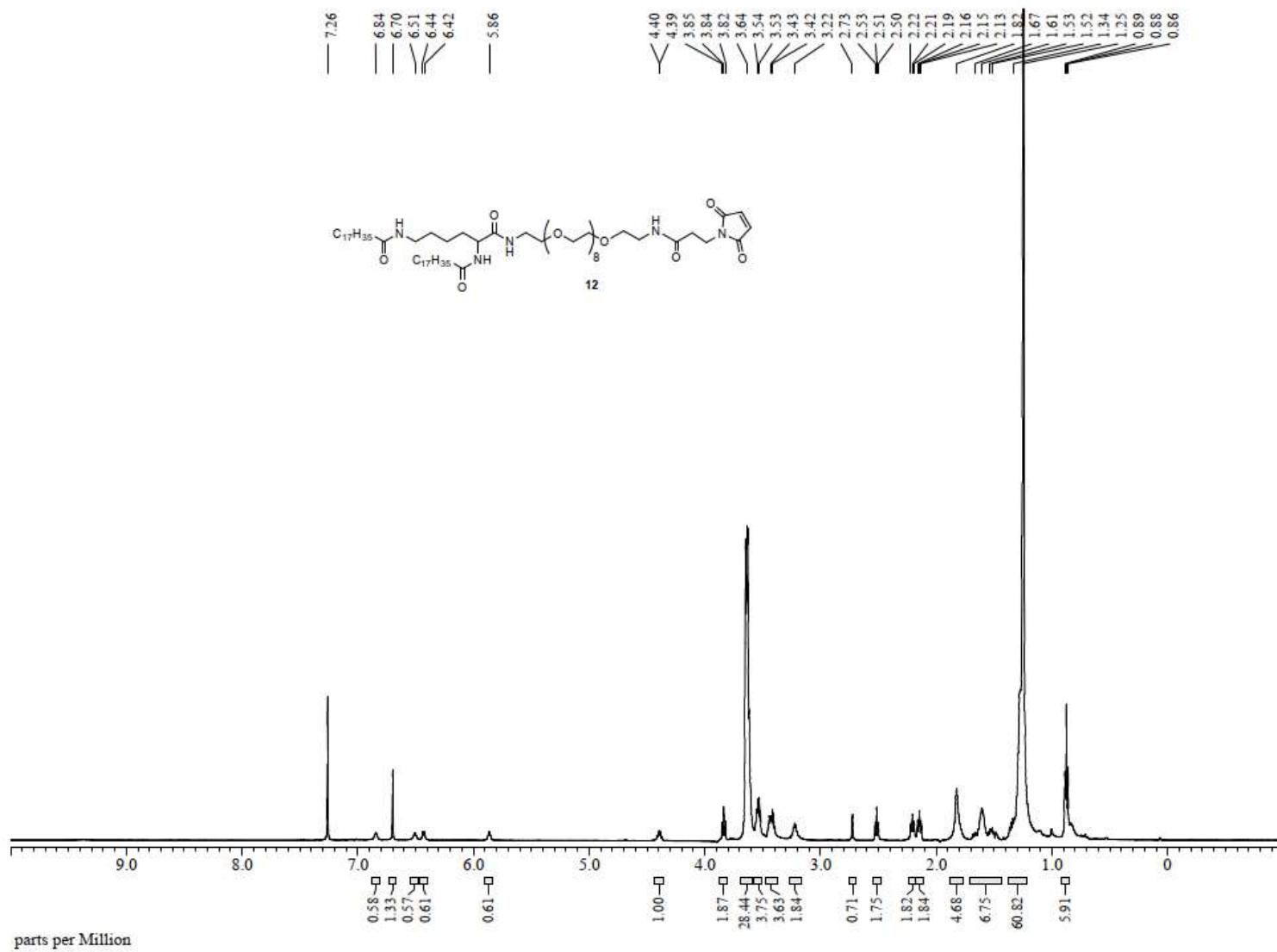
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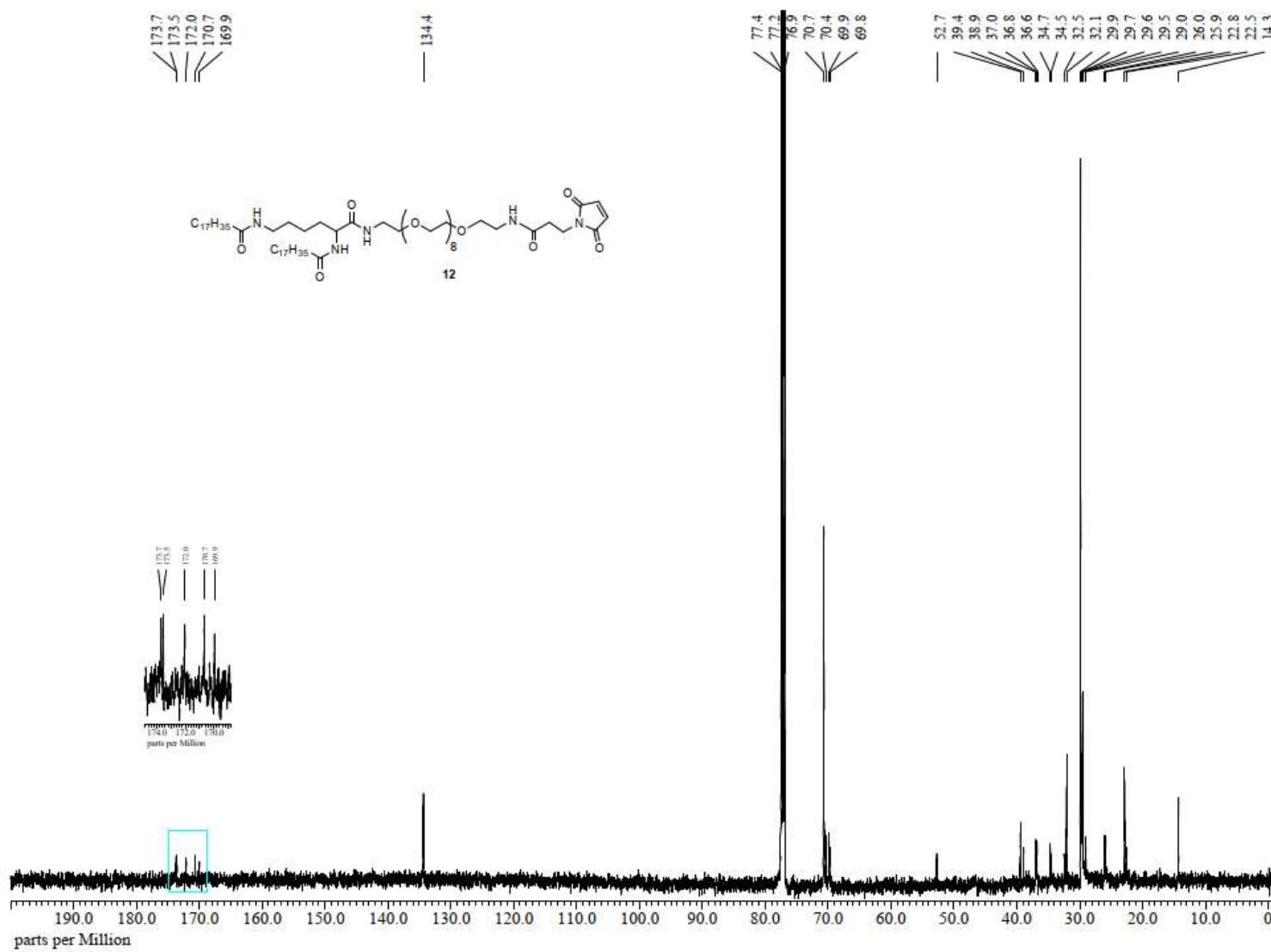
Trace: 4700 Reflector Spec #1 MC=>TR[BP = 4061.0, 954]

Index	Centroid Mass	Lower Bound	Upper Bound	Charge (z)	Height	Relative Intensity	Area (A)	S/N Ratio	Resolution	Isot
1	3886.01001	3885.59	3886.55	1	518	54.28	3556.62	23.10	9238.01	6083.51
2	3906.94751	3906.56	3907.53	1	507	53.15	2963.22	43.48	11082.31	18145.47
3	3930.99292	3930.61	3931.62	1	516	54.12	2894.64	23.99	9847.92	5965.64
4	3950.94434	3950.58	3951.47	1	503	52.71	2732.94	37.33	11412.60	13955.40
5	3961.91602	3961.40	3962.53	1	475	49.84	3083.24	15.64	12164.92	3076.49
6	3992.96533	3992.59	3993.52	1	471	49.33	3289.38	26.54	11485.38	8534.96
7	4037.00806	4036.50	4037.60	1	550	57.66	3833.99	47.18	11685.93	24268.70
8	4059.02905	4058.47	4059.57	1	489	51.30	4344.42	37.79	9080.17	26333.30
9	4075.93799	4075.65	4076.56	1	471	49.39	2738.79	23.30	11212.25	5866.40
10	4081.97388	4081.56	4082.58	1	611	64.03	5259.56	36.26	8609.56	13354.75
11	4104.95264	4104.52	4105.58	1	558	58.53	3609.50	25.48	12473.21	6659.27
12	4113.91797	4113.41	4114.40	1	484	50.79	2819.24	16.44	13373.50	2684.09

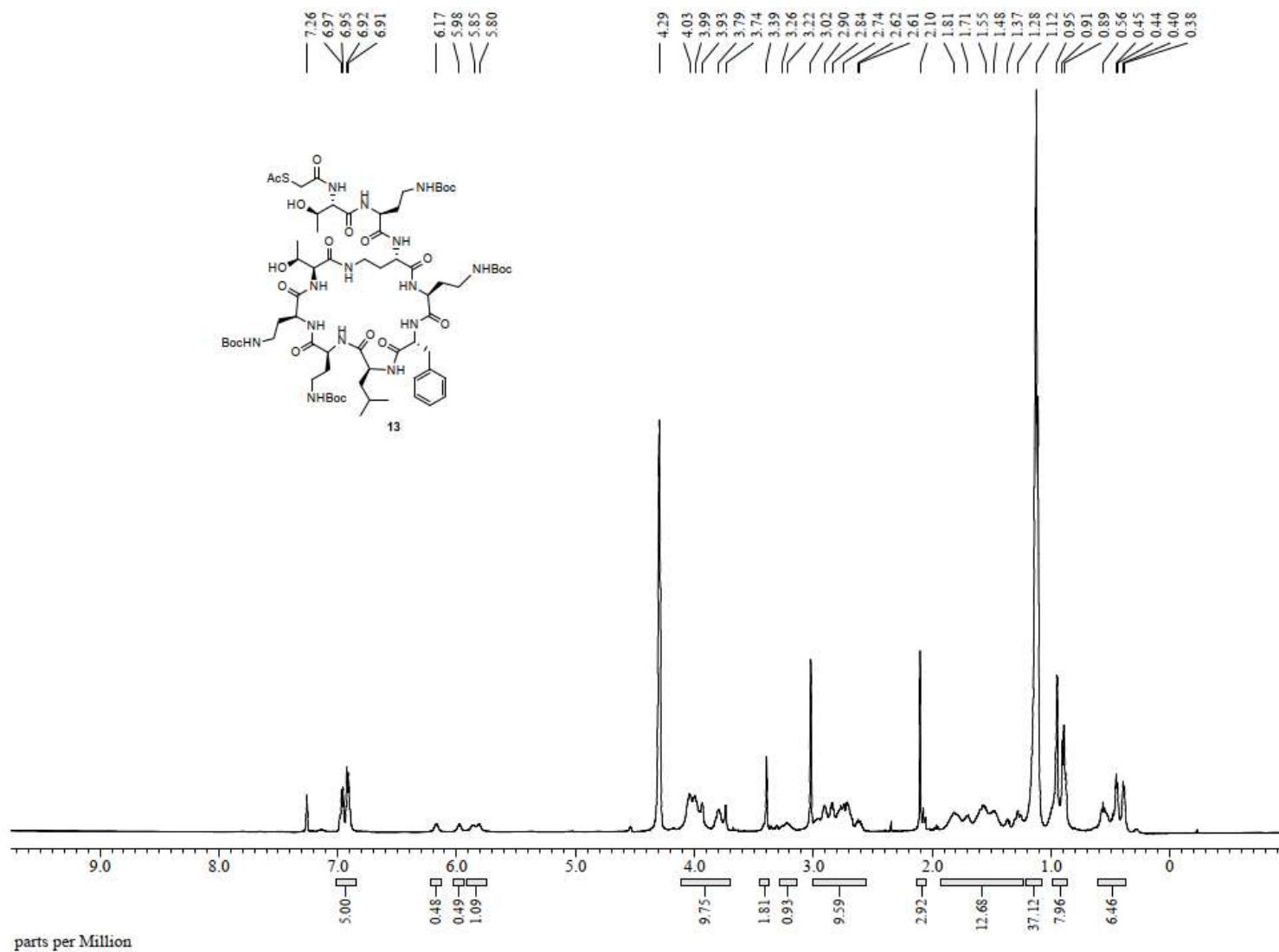
<sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound **12**



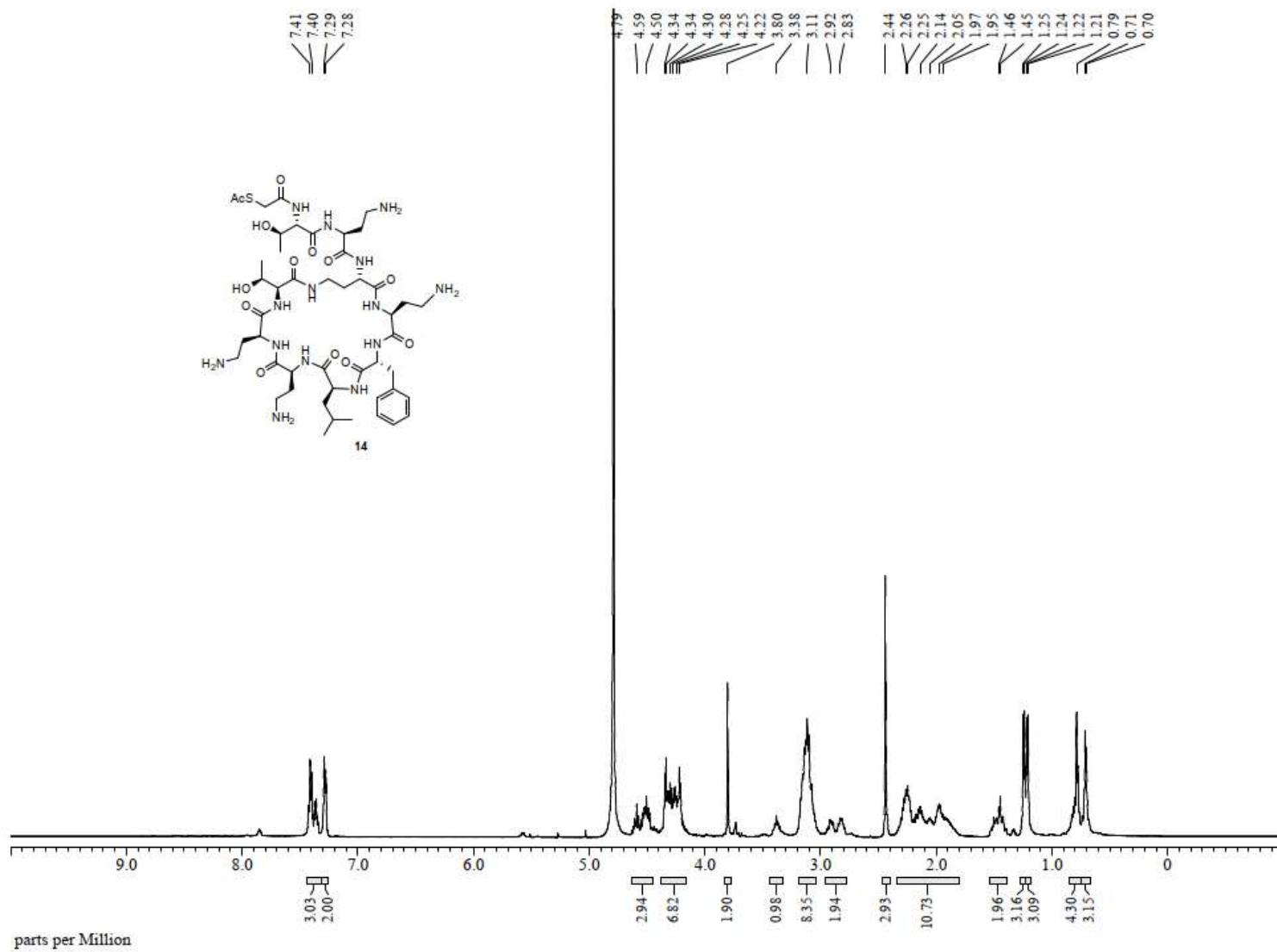
$^{13}\text{C}\{^1\text{H}\}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of compound **12**



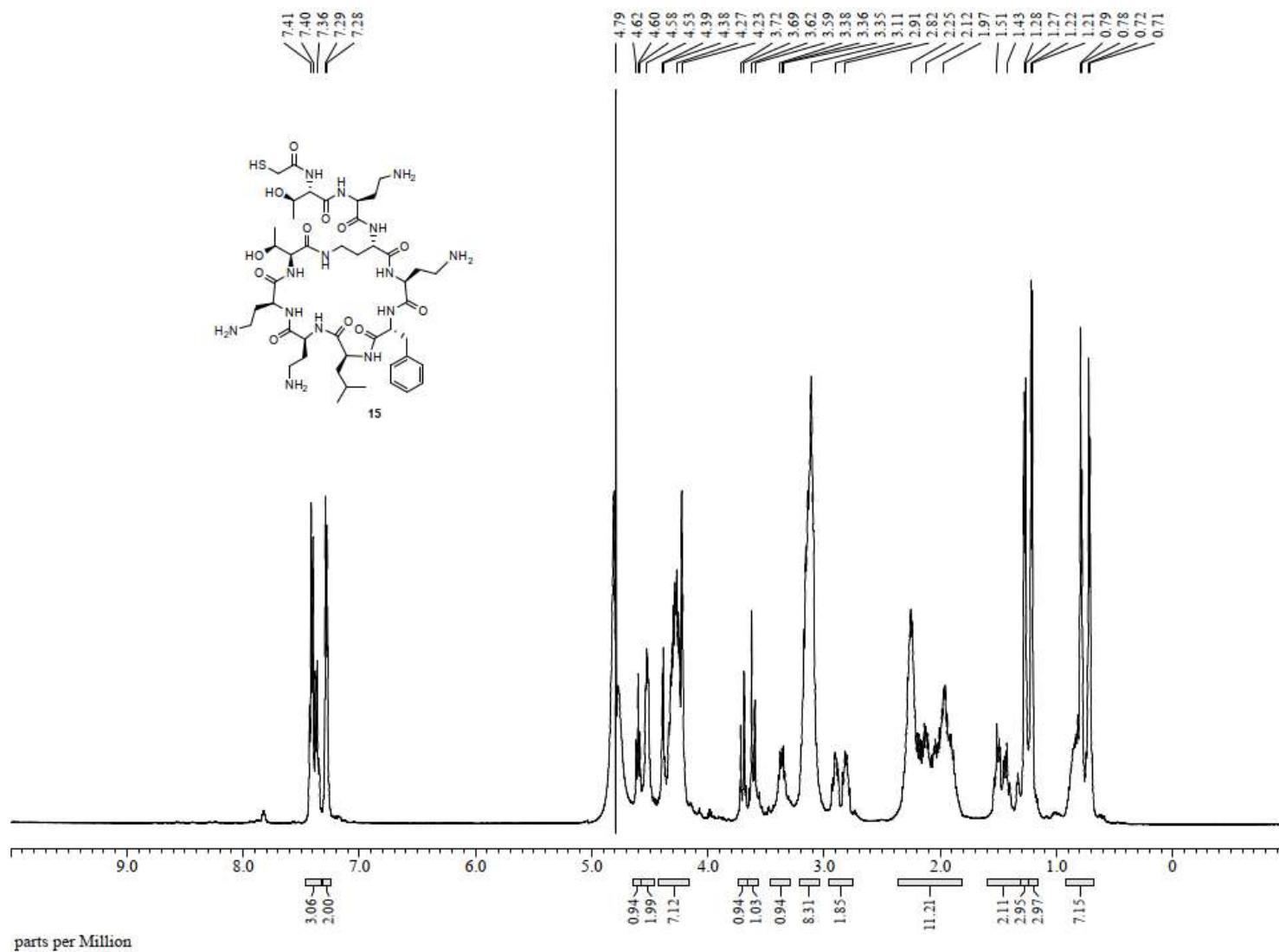
<sup>1</sup>H NMR spectrum (500 MHz, 1:1 CDCl<sub>3</sub>:CD<sub>3</sub>OD) of compound **13**



<sup>1</sup>H NMR spectrum (500 MHz, D<sub>2</sub>O) of compound **14**



<sup>1</sup>H NMR spectrum (500 MHz, D<sub>2</sub>O) of compound 15



<sup>1</sup>H NMR spectrum (400 MHz, 2:1 CDCl<sub>3</sub>:CD<sub>3</sub>OD) of compound **16**

