

Electronic Supplementary Information for:

## **Chemically Triggered Release of 5-Aminolevulinic Acid from Liposomes**

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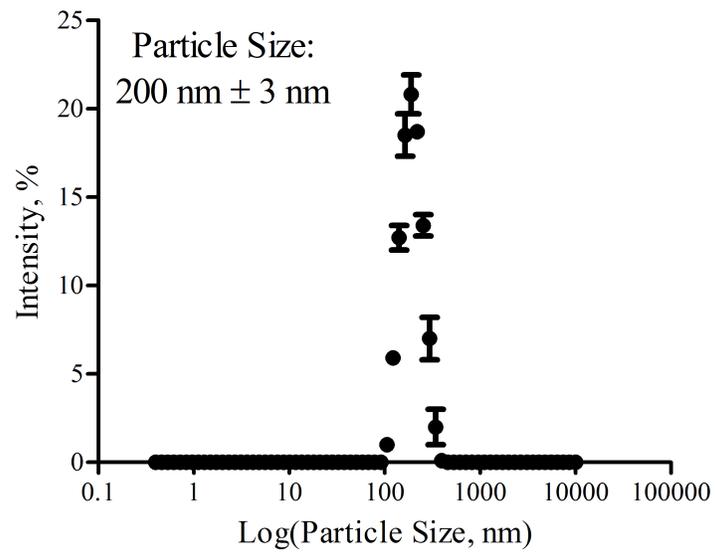
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### **Contents**

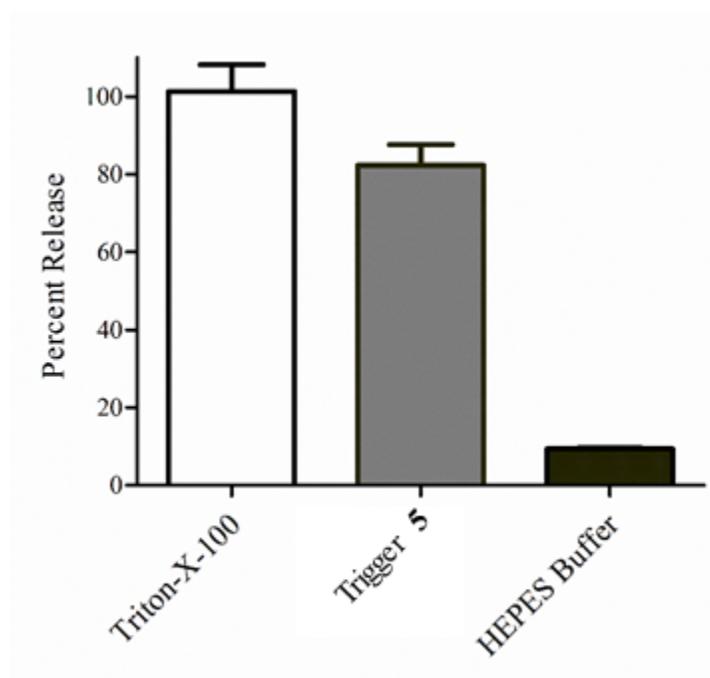
1. Supplementary Figures .....	2
2. <sup>1</sup> H and <sup>13</sup> C NMR data .....	12

## Supplementary Figures

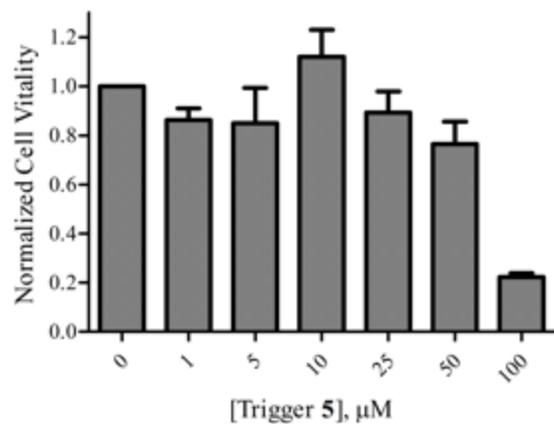
**Figure S1:** Dynamic light scattering shows an average particle size of  $200 \pm 3$  nm for liposomes composed of 67:28:8:5:1 DPPC:Cholesterol:DPPE-PEG<sub>2000</sub>:POPS:DiIC<sub>18</sub> encapsulating 5-ALA.



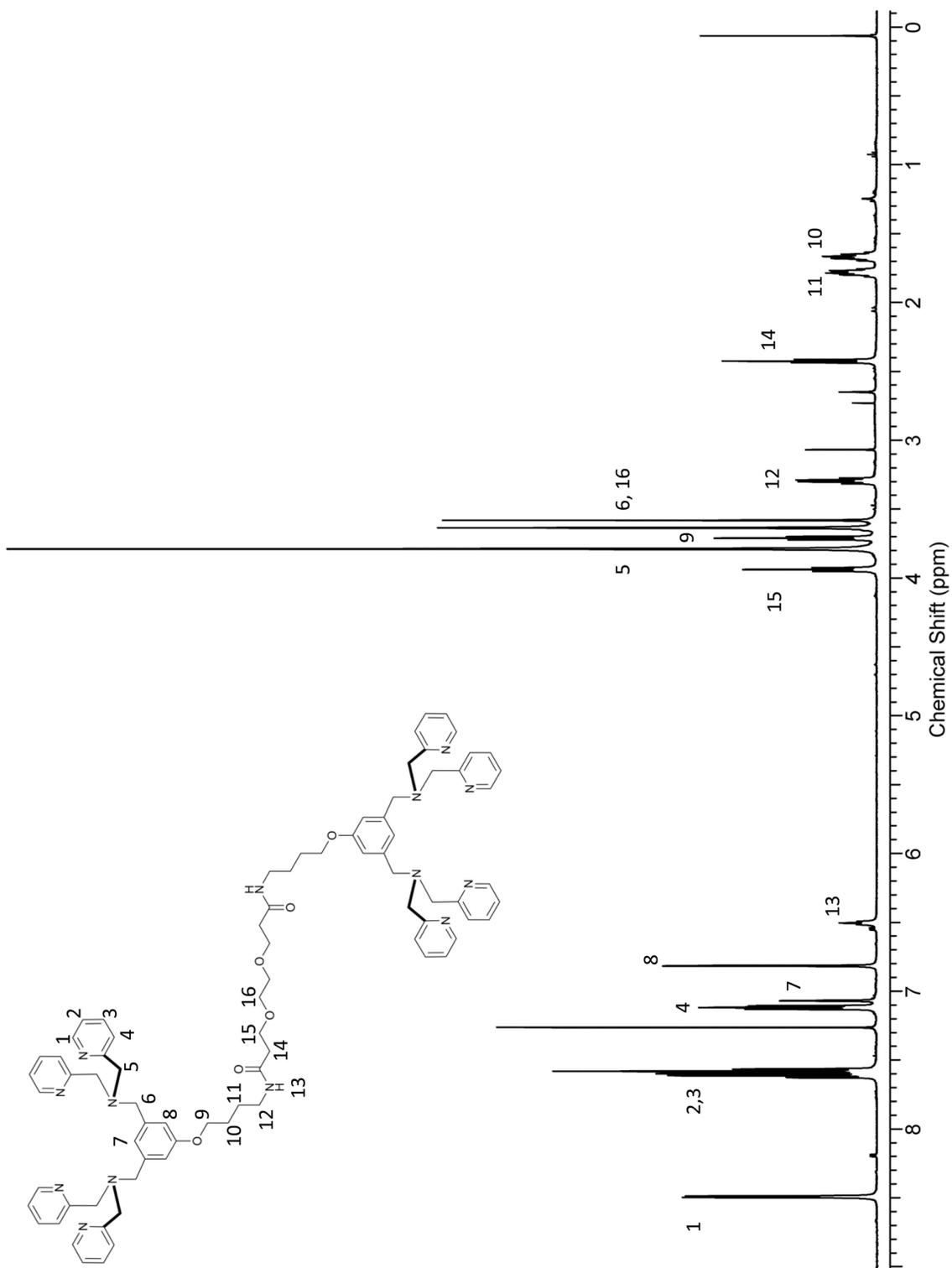
**Figure S2:** Dialysis experiments show <10 % release from liposomes (750  $\mu$ M total lipid; 67:28:8:5:1 DPPC:Cholesterol:DPPE-PEG<sub>2000</sub>:POPS:DiIC<sub>18</sub>) encapsulating 5-ALA after 24 hours at room temperature in HEPES buffer. Leakage of 5-ALA was measured using a dialysis apparatus under various conditions including exposure to HEPES buffer (10 mM HEPES, 137 mM NaCl, 3.2 mM KCl, pH 7.4; black), chemical trigger **5** (75  $\mu$ M; gray) or Triton-X-100 (20 % v/v, 50  $\mu$ L; white).



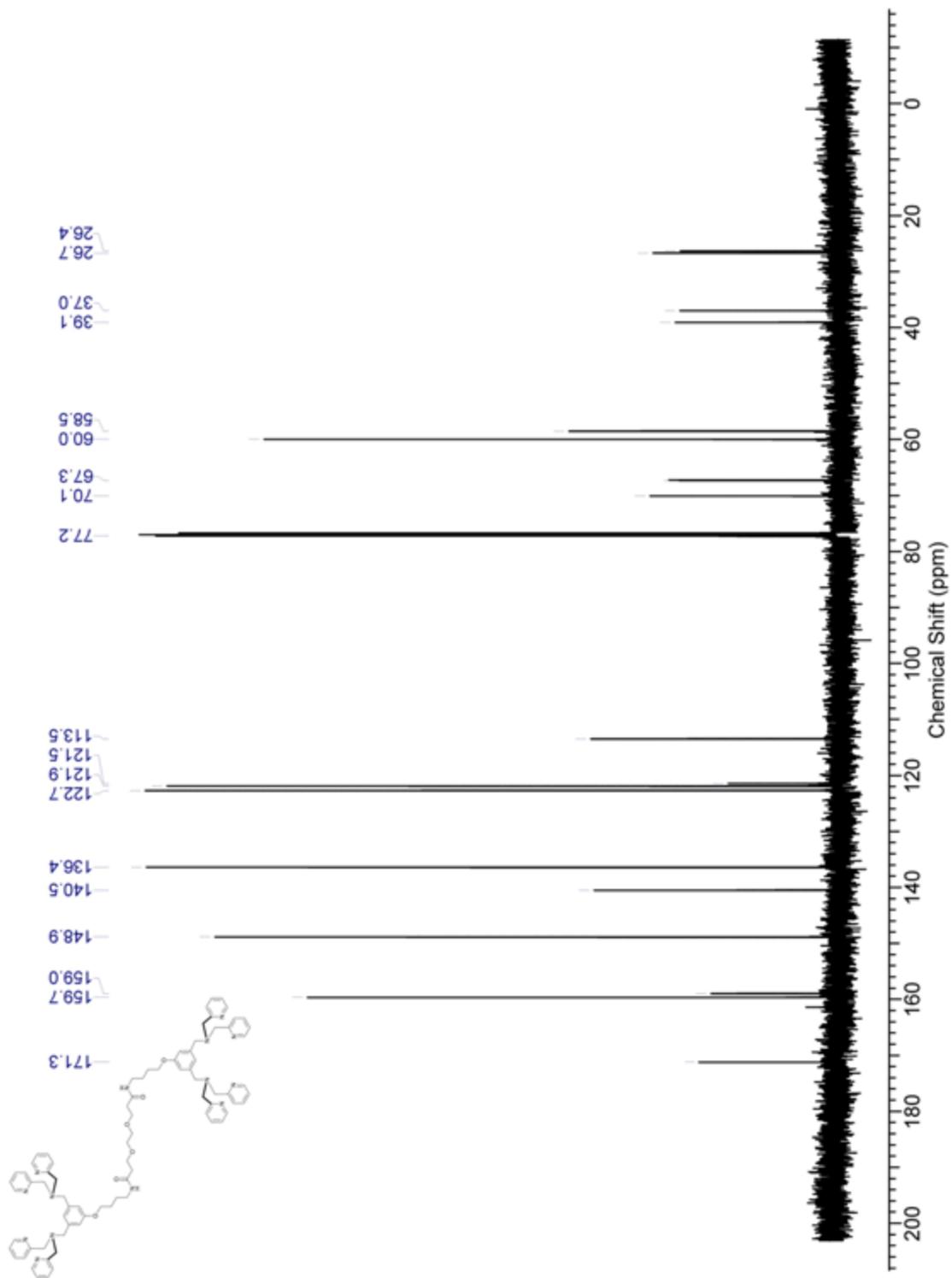
**Figure S3:** Cell viability of CHO-K1 cells treated with various concentrations of ZnBDPA chemical trigger **5** for 6 hours.



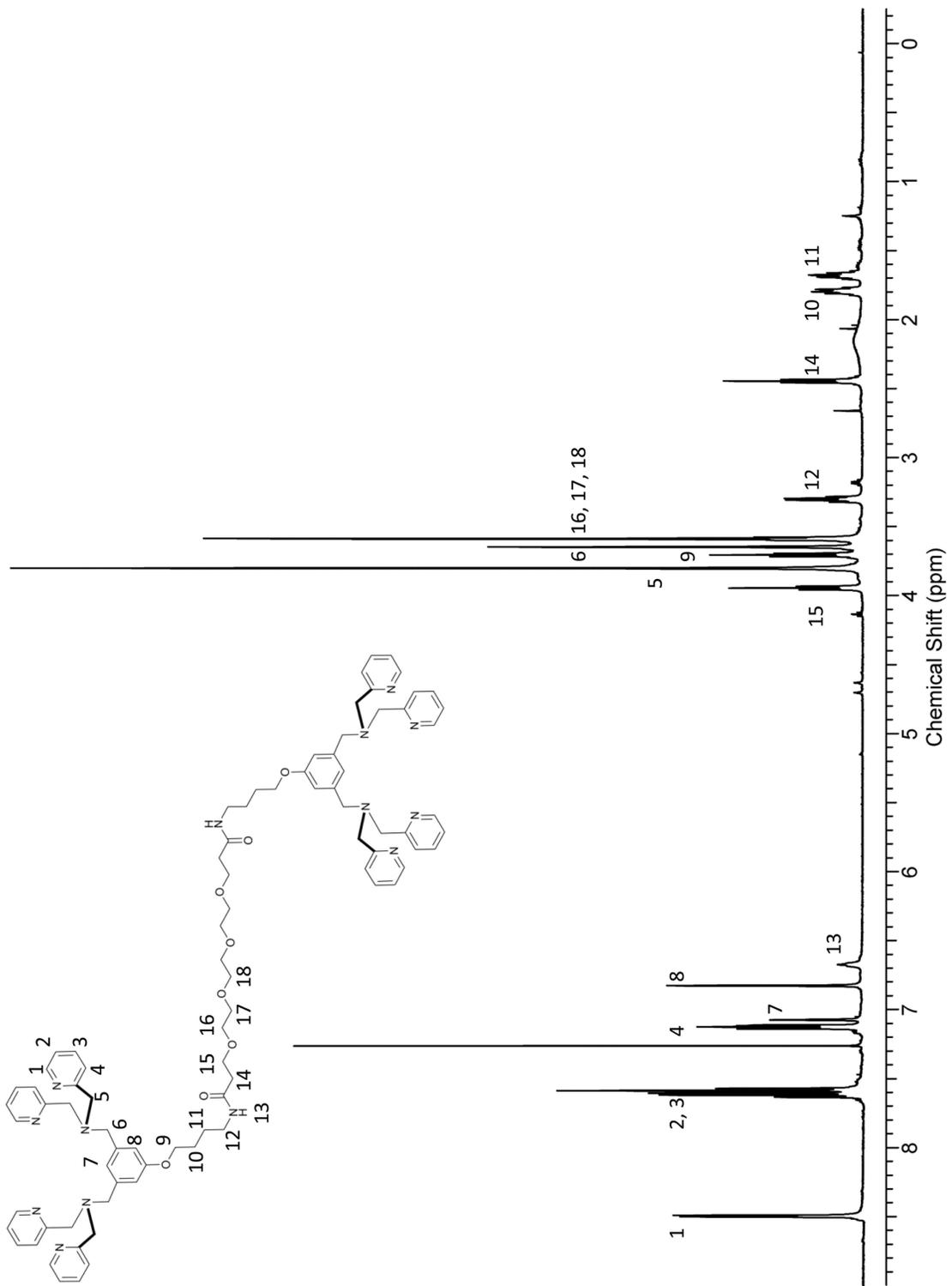
## 2. $^1\text{H}$ and $^{13}\text{C}$ NMR data



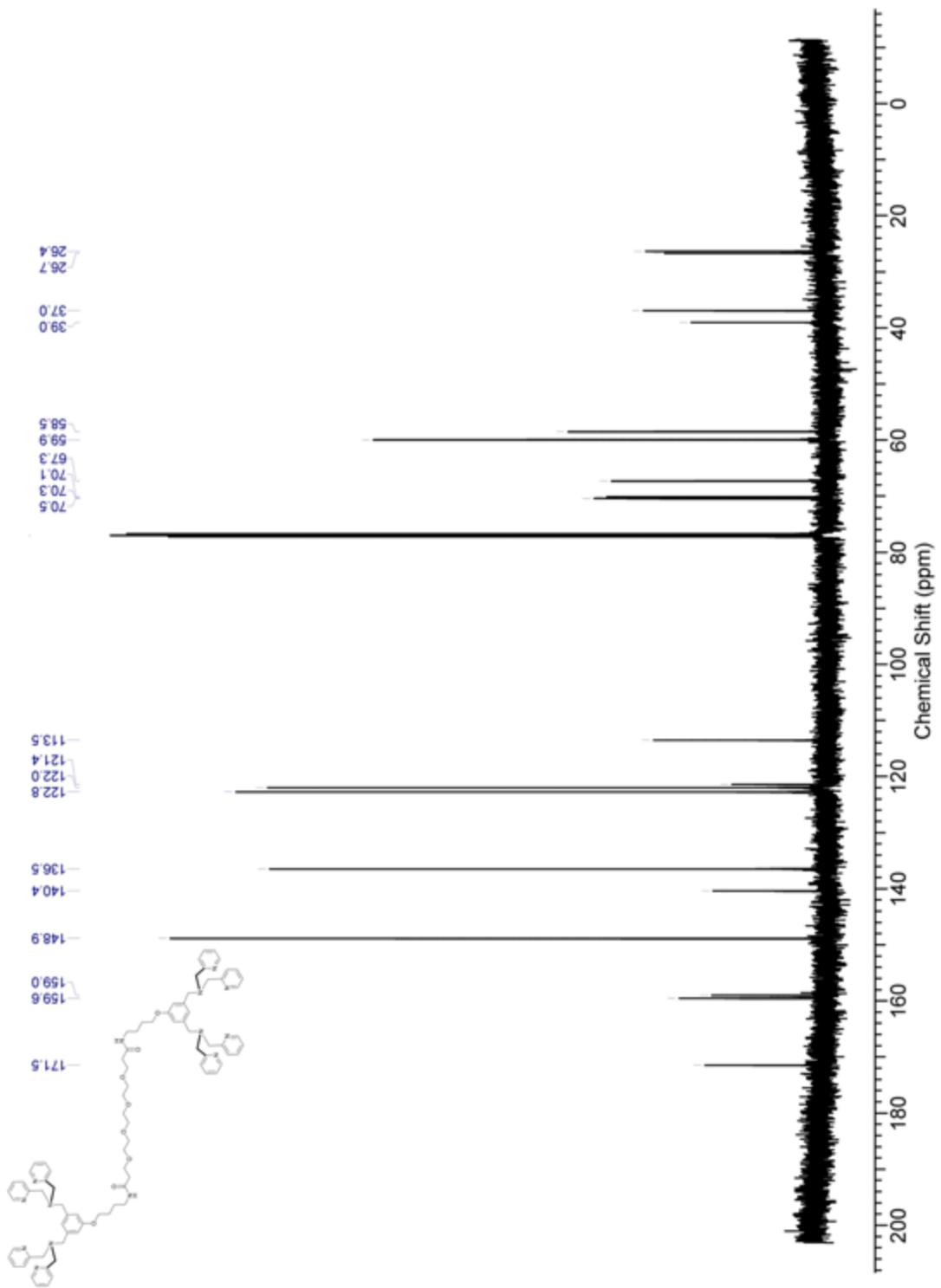
apo-2  $^1\text{H}$  NMR



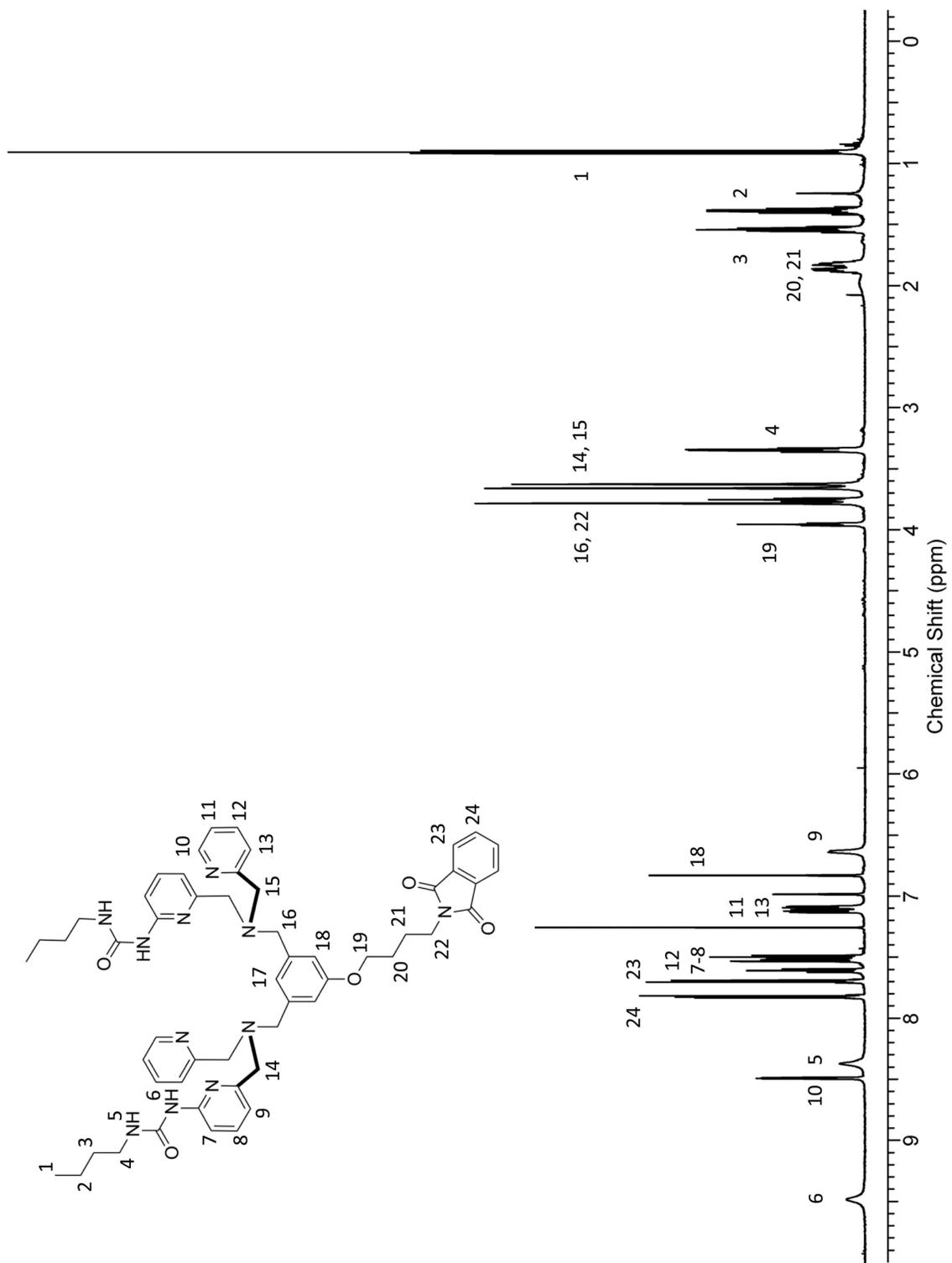
apo-2  $^{13}\text{C}$  NMR



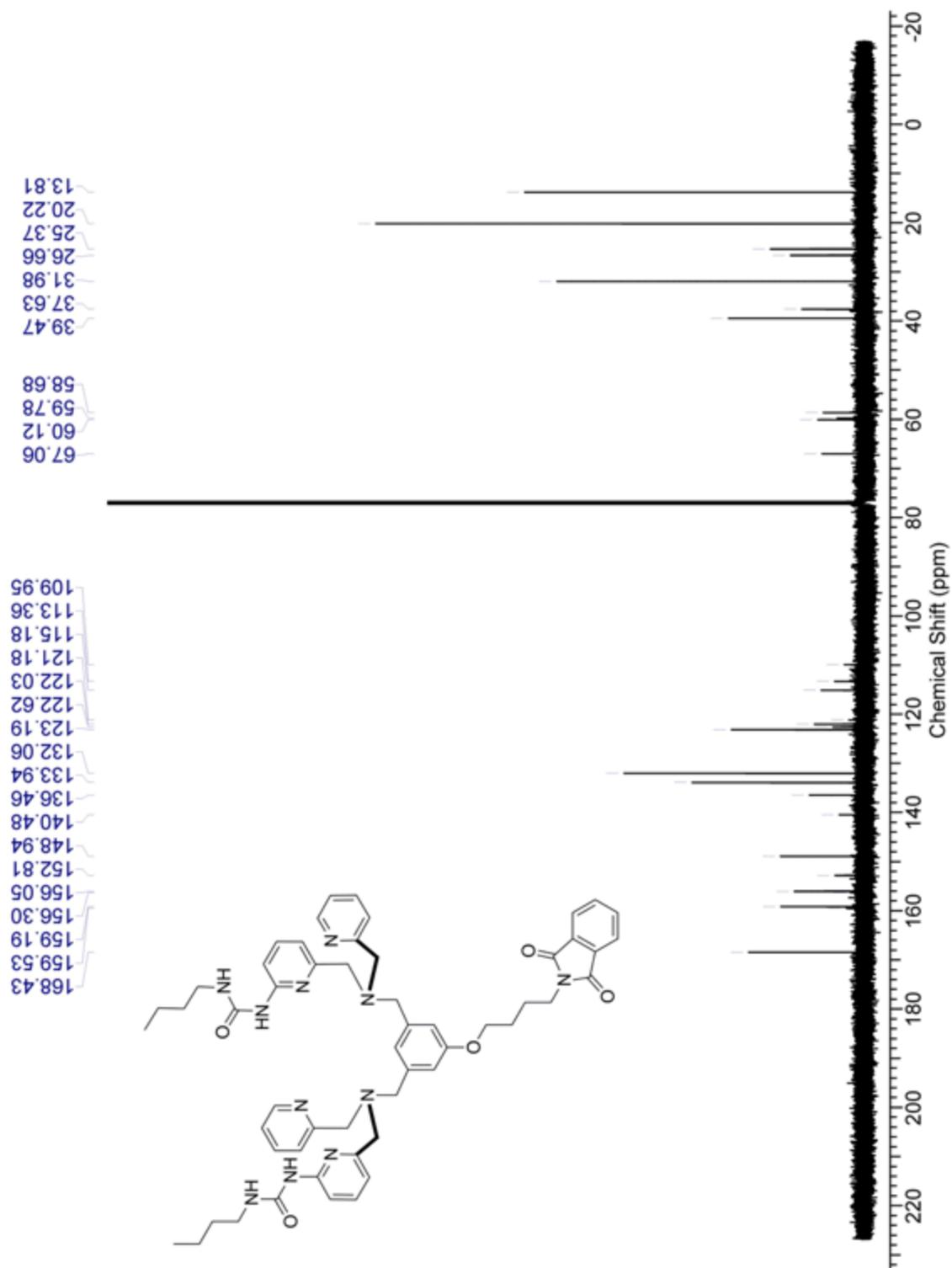
apo-3 <sup>1</sup>H NMR



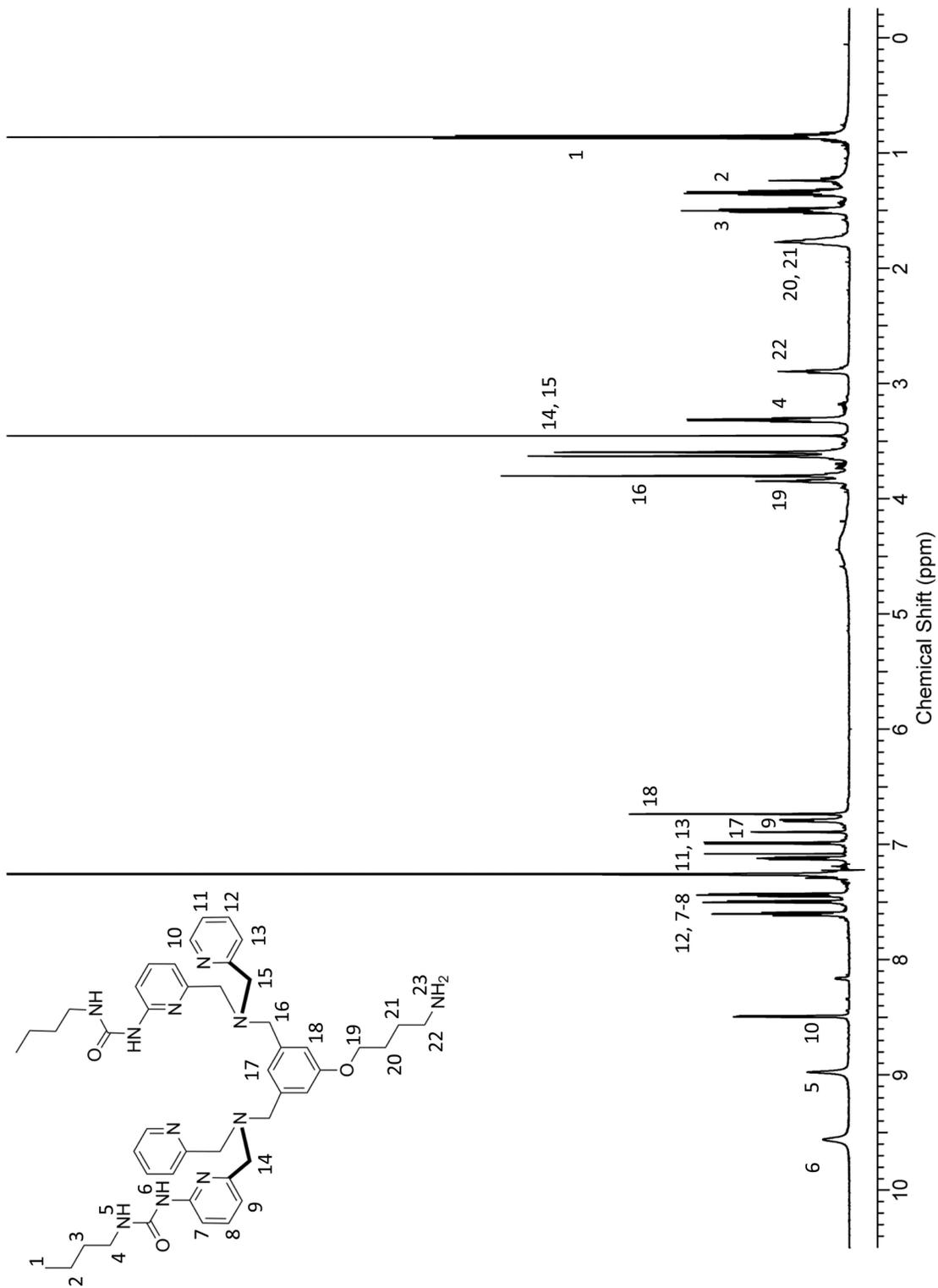
apo-3  $^{13}\text{C}$  NMR



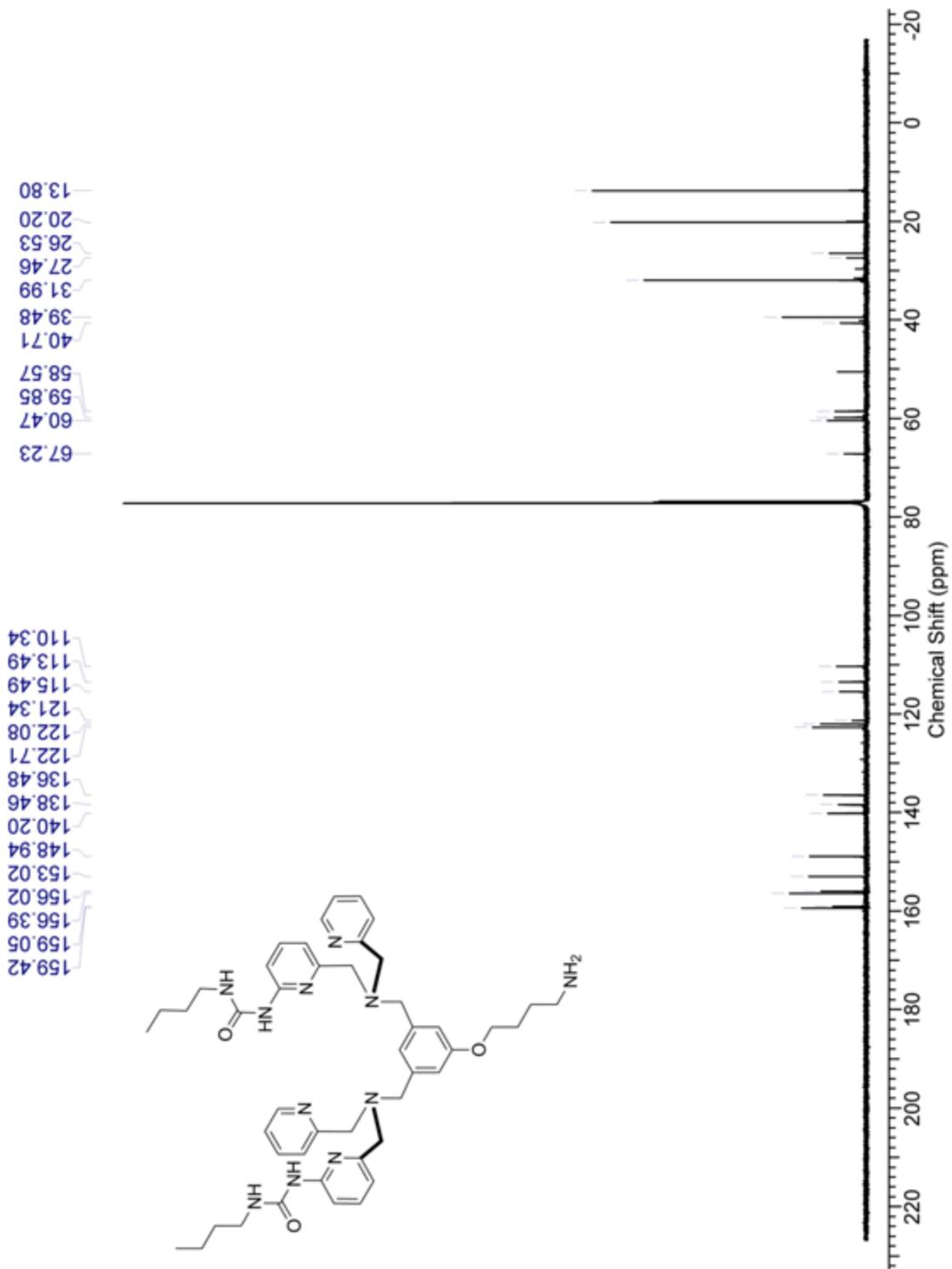
7  $^1\text{H}$  NMR



7  $^{13}\text{C}$  NMR



apo-4  $^1\text{H}$  NMR



apo-4  $^{13}\text{C}$  NMR