

Supporting Information for:

Solid-phase synthesis of azole-comprising peptidomimetics and coordination of a designed analog to Zn^{2+}

Aanchal Mohan, Allyson H. M. Koh, Gregory Gate, Anna L. Calkins, Kyra N. McComas, and Amelia A. Fuller

Department of Chemistry & Biochemistry, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053, United States

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Scheme S1. Synthesis of functionalized azole building blocks **1a** and **1b**. Procedures followed those reported in: Aditya, A.; Kodadek, T. *ACS Comb. Sci.* **2012**, *14*, 164–169.

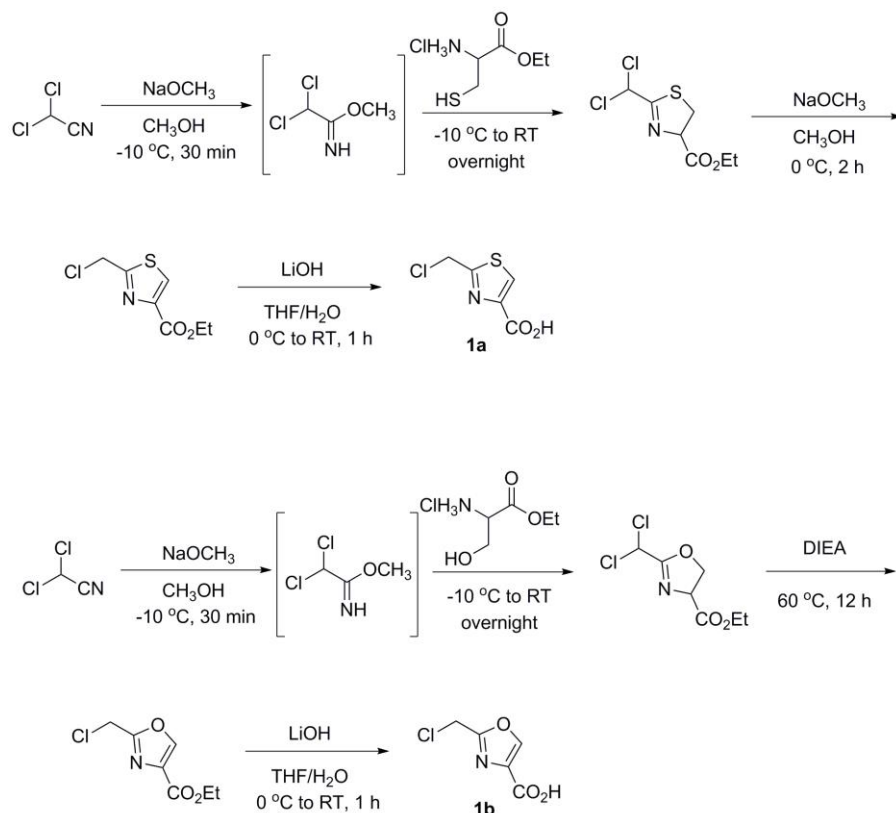
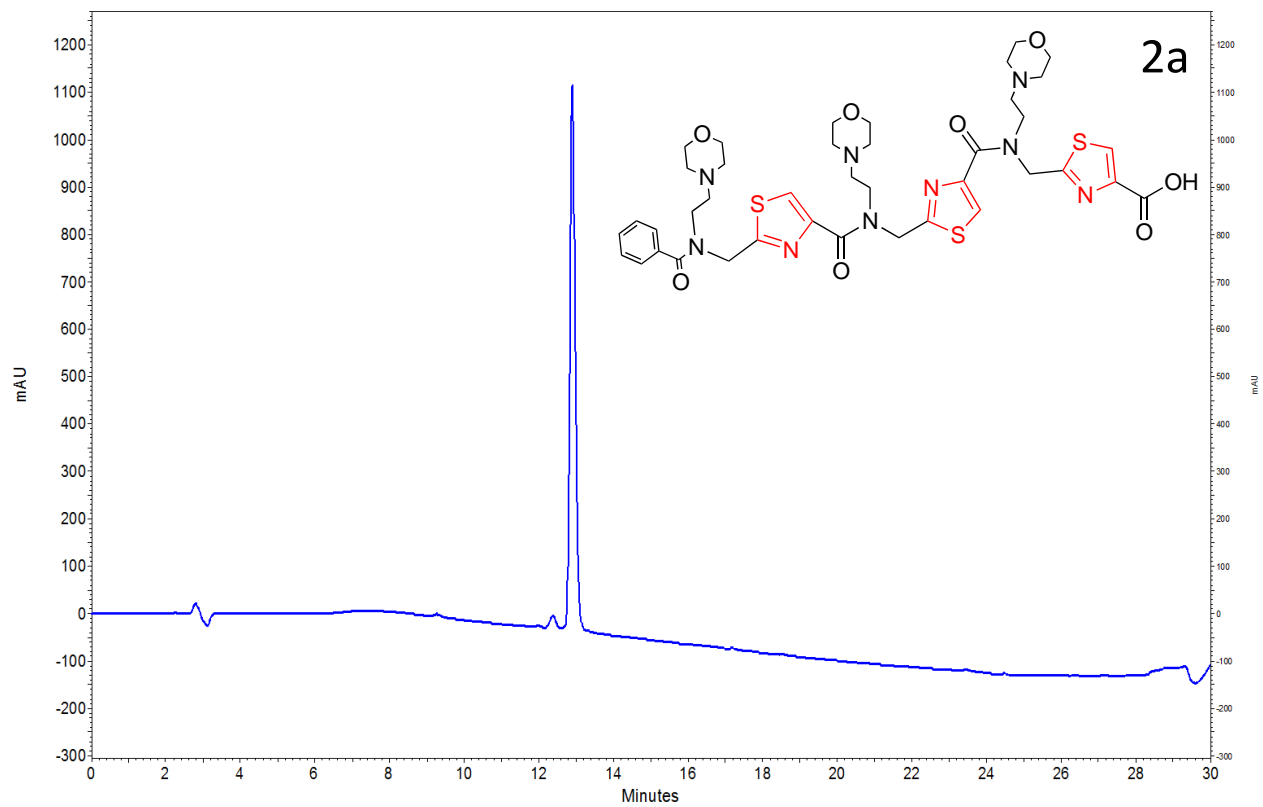
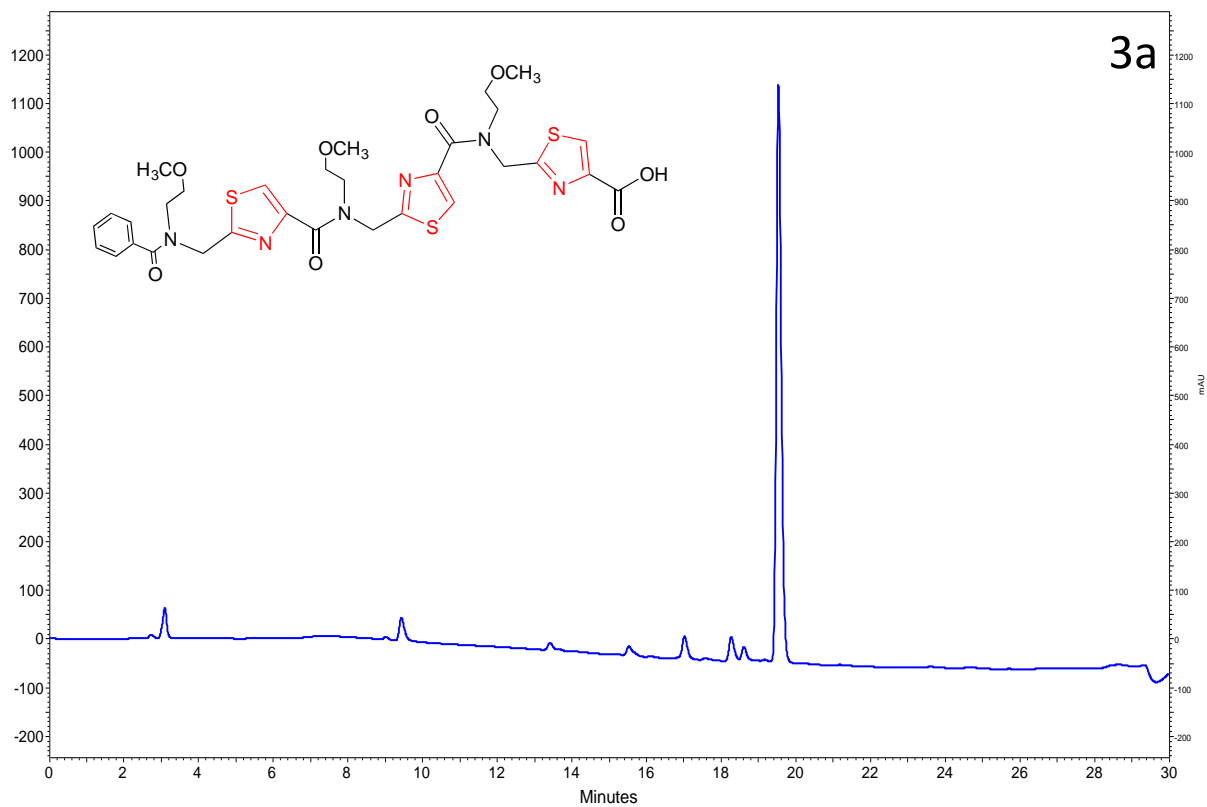
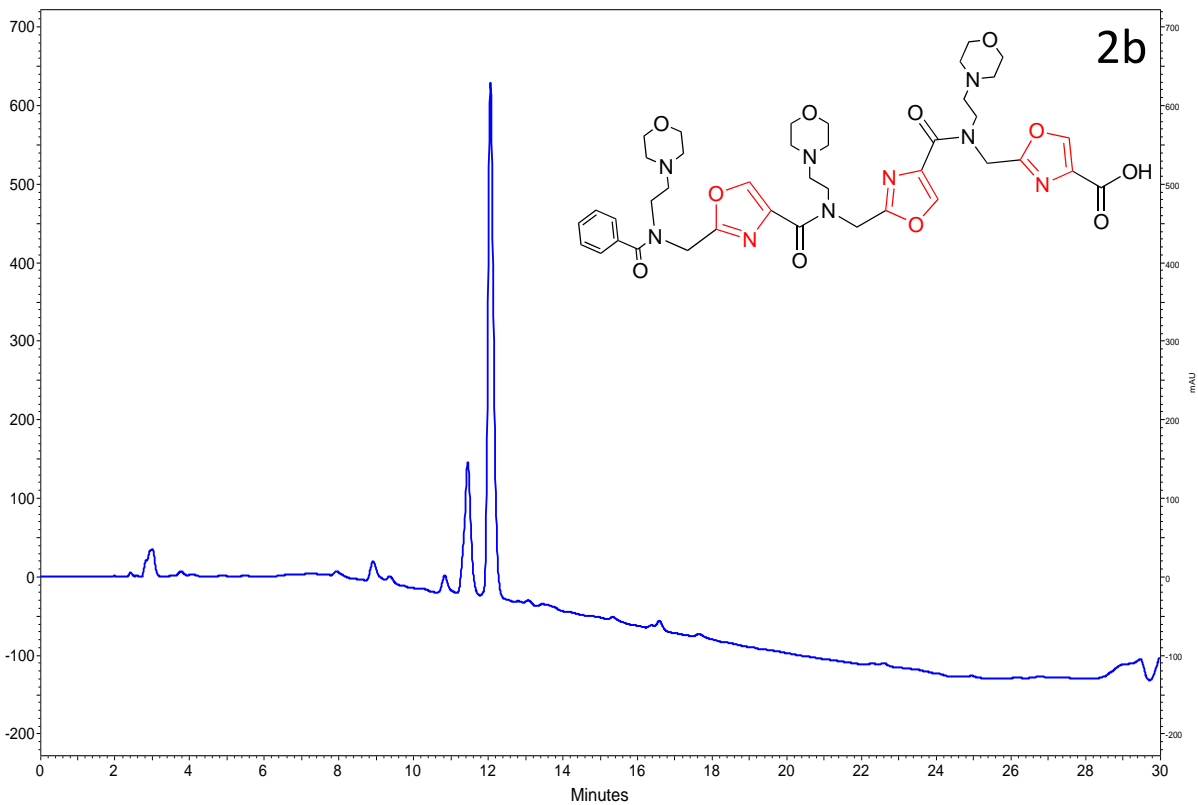
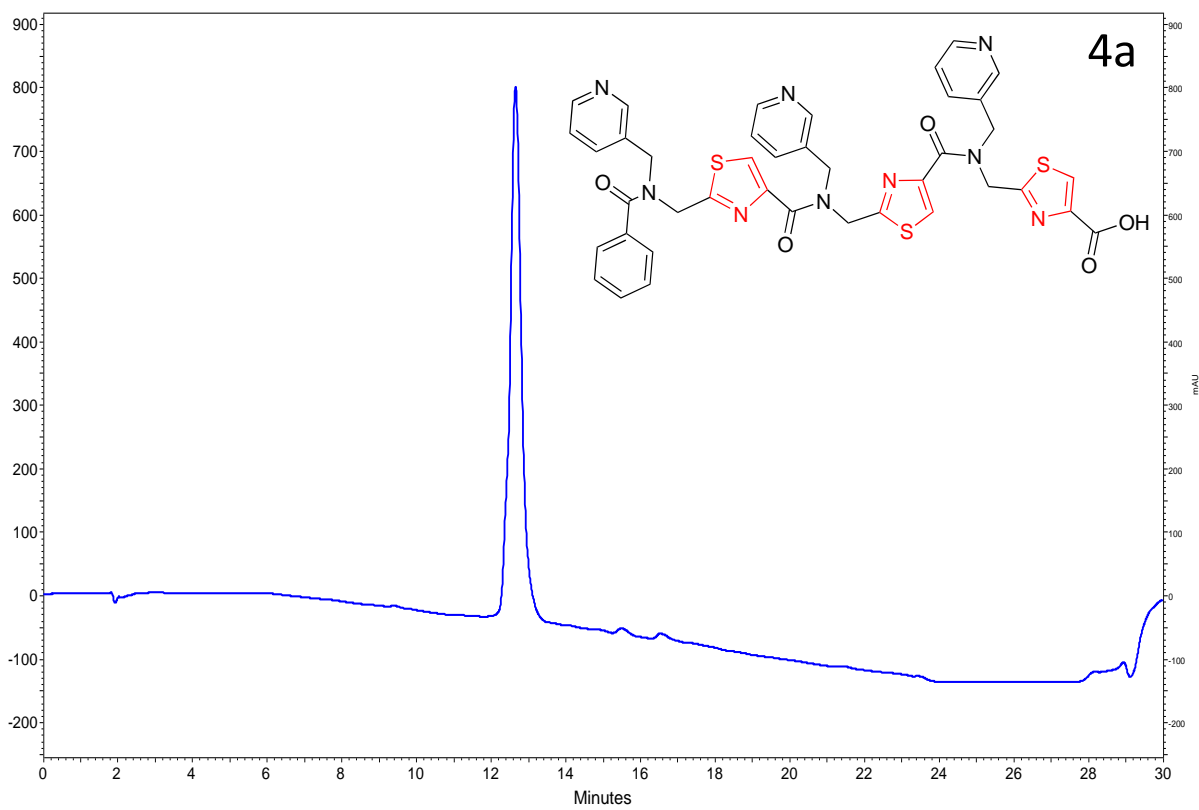
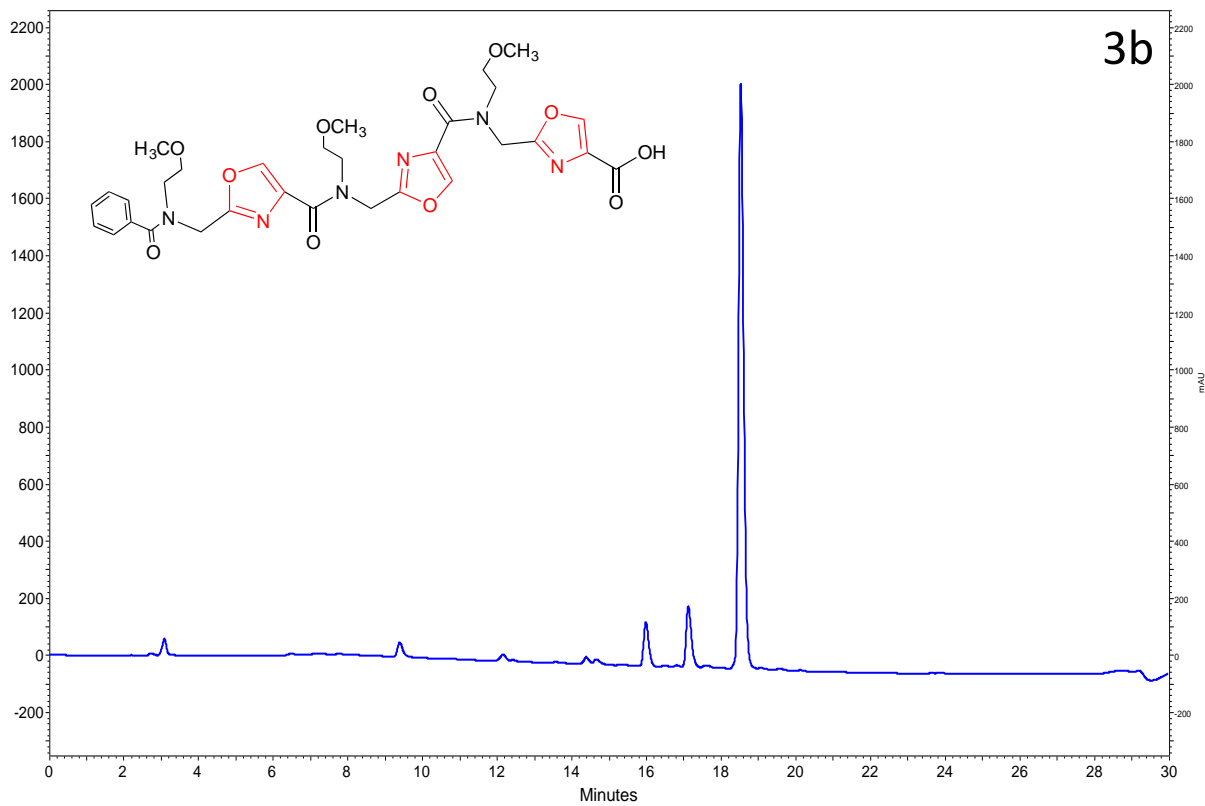


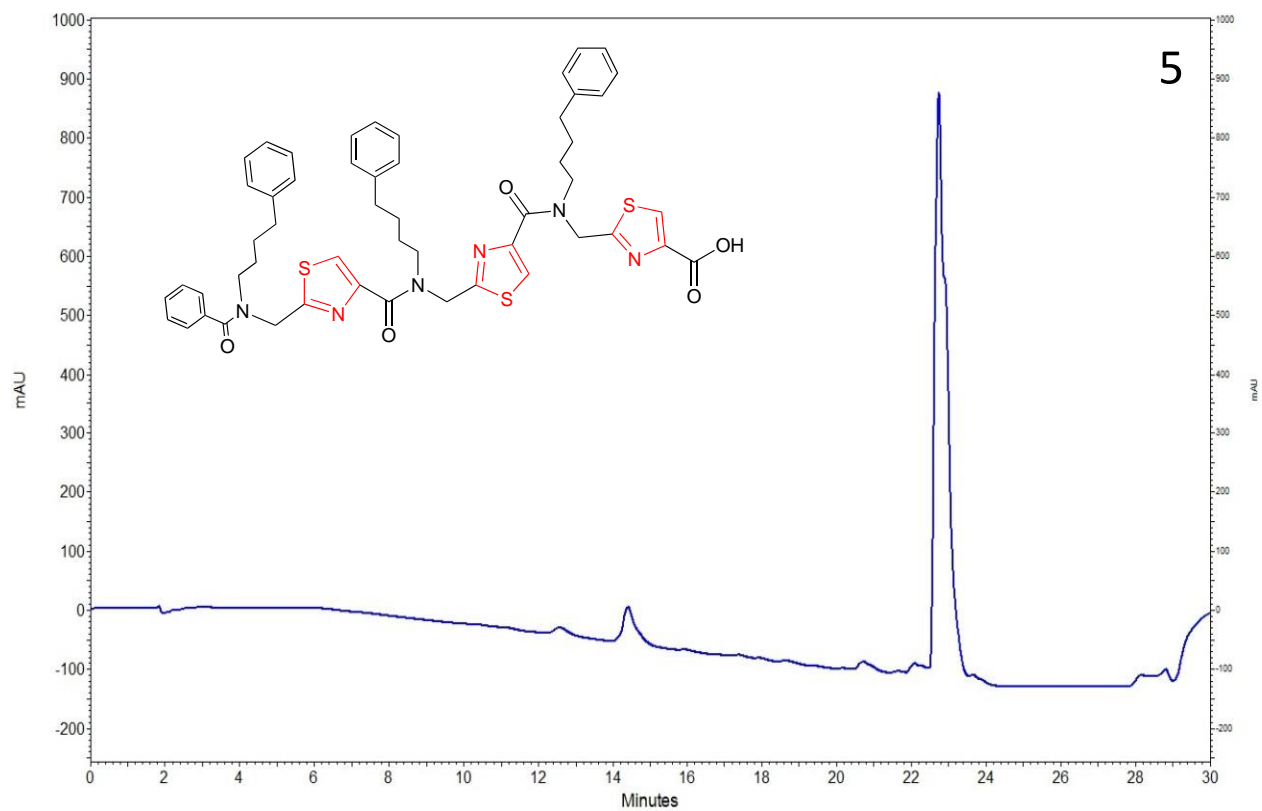
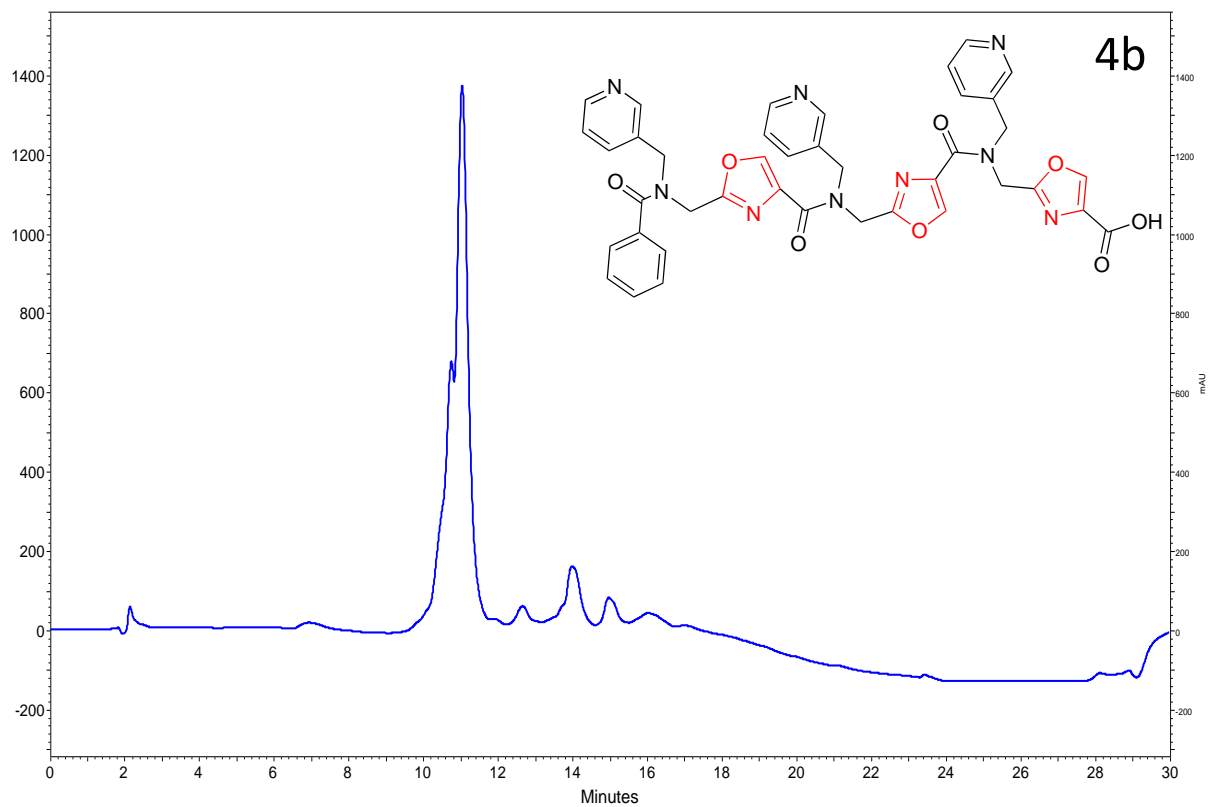
Figure S1. Crude analytical HPLC chromatograms

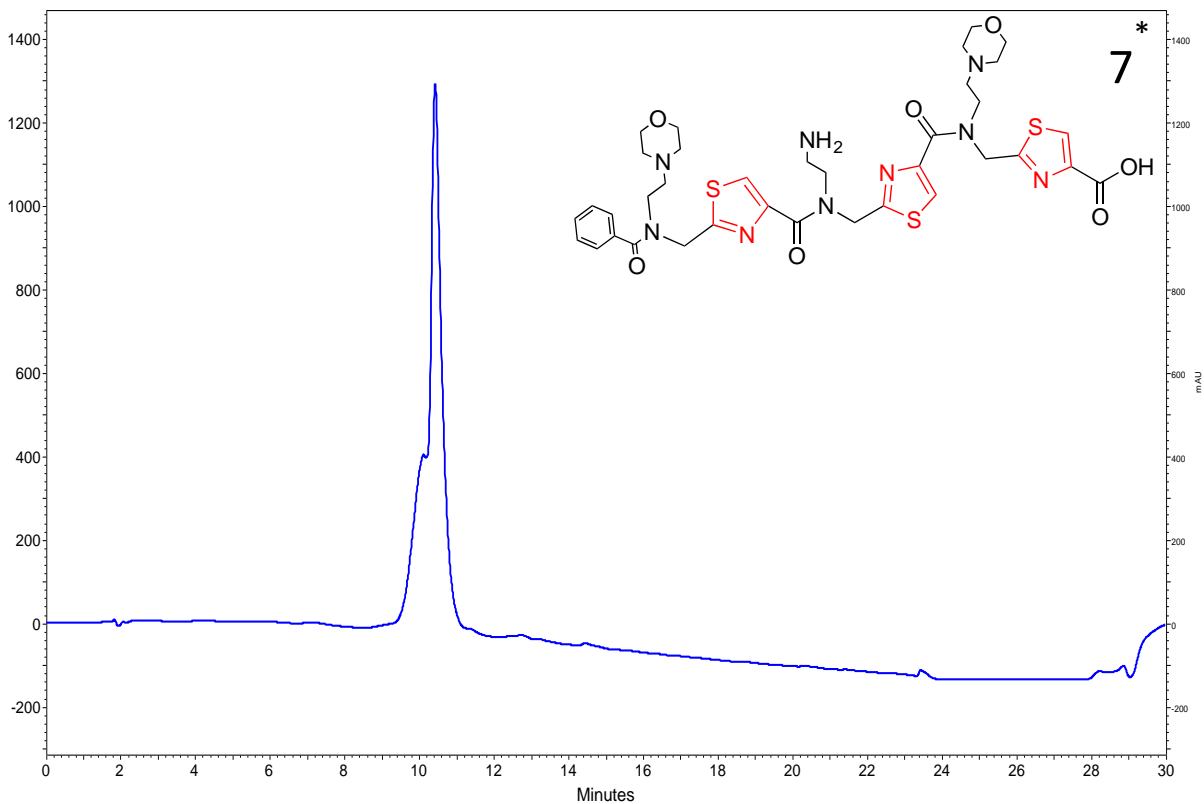
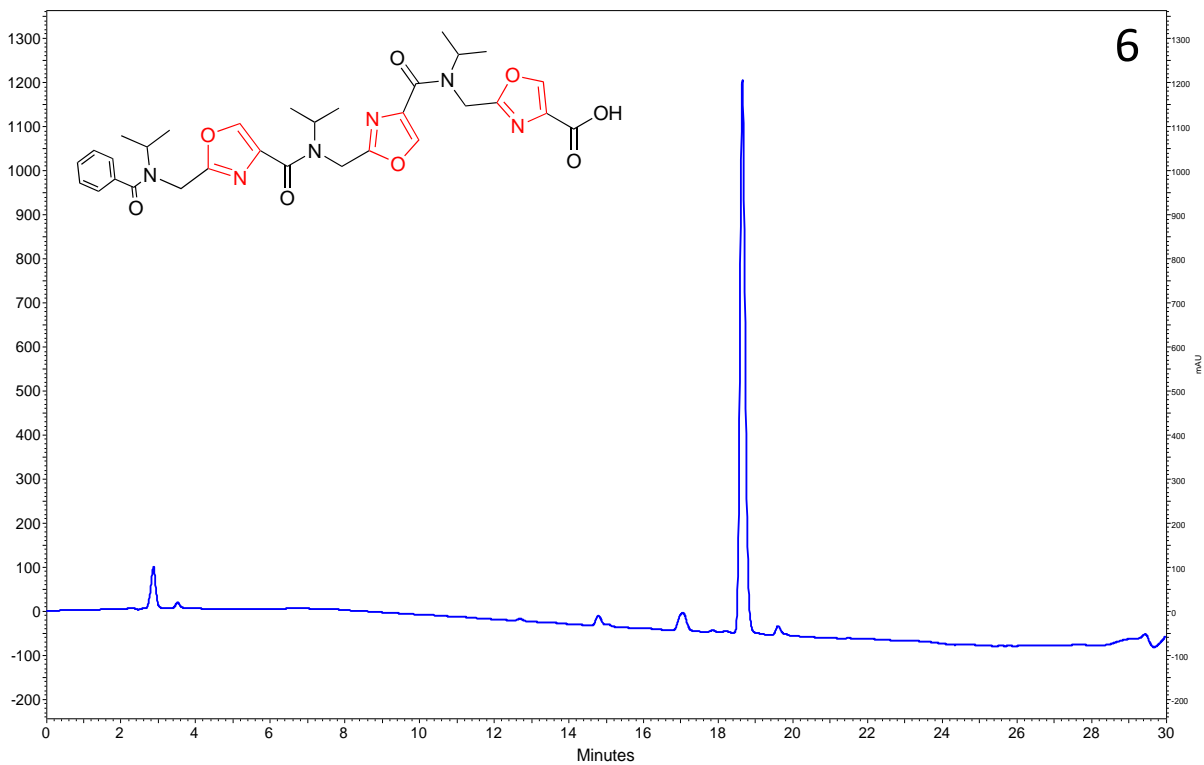
All Peaks were detected at 220 nm by RP-HPLC using 5-90% gradient of solvent B to solvent A.







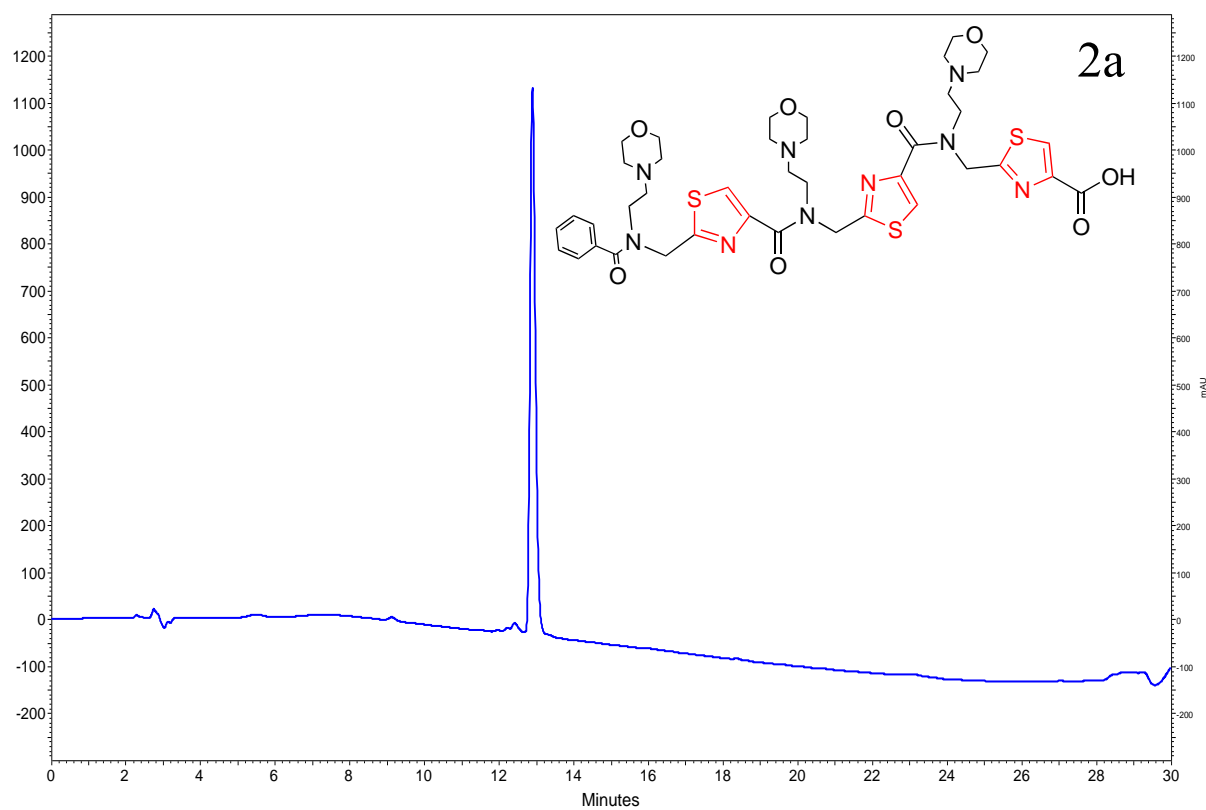


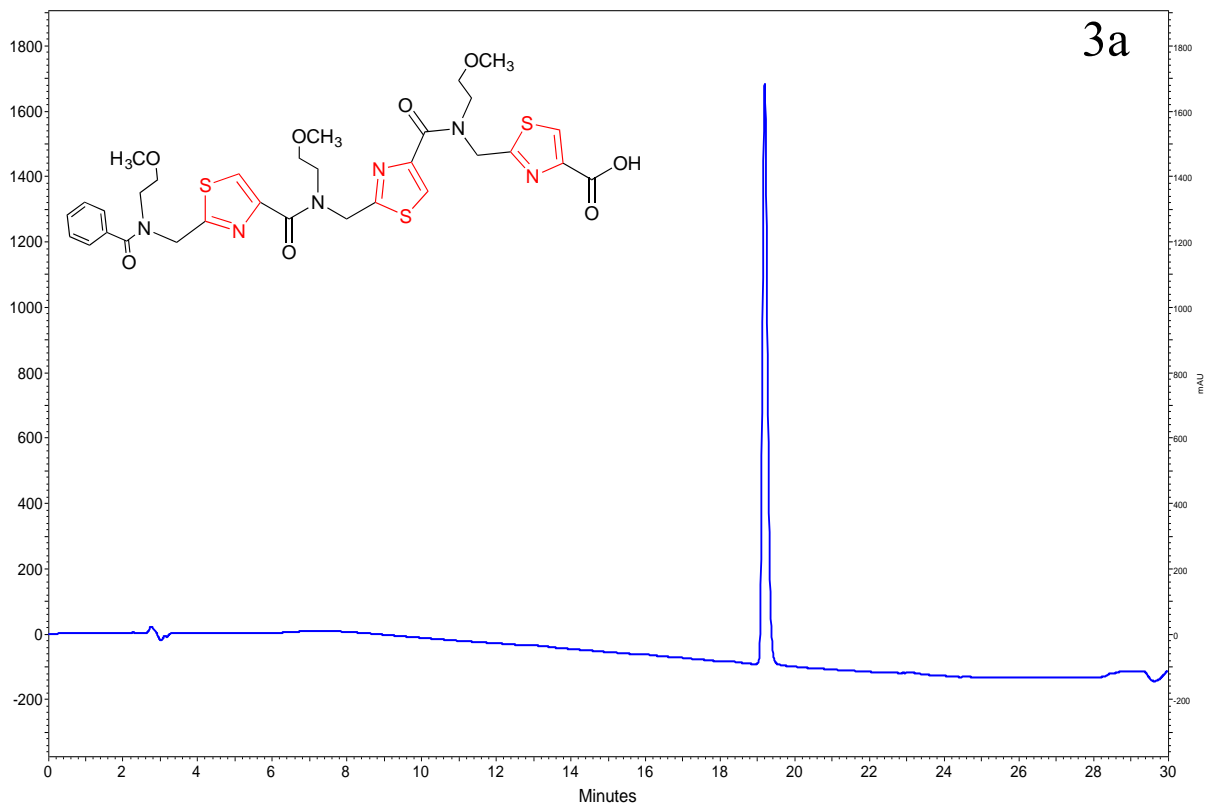
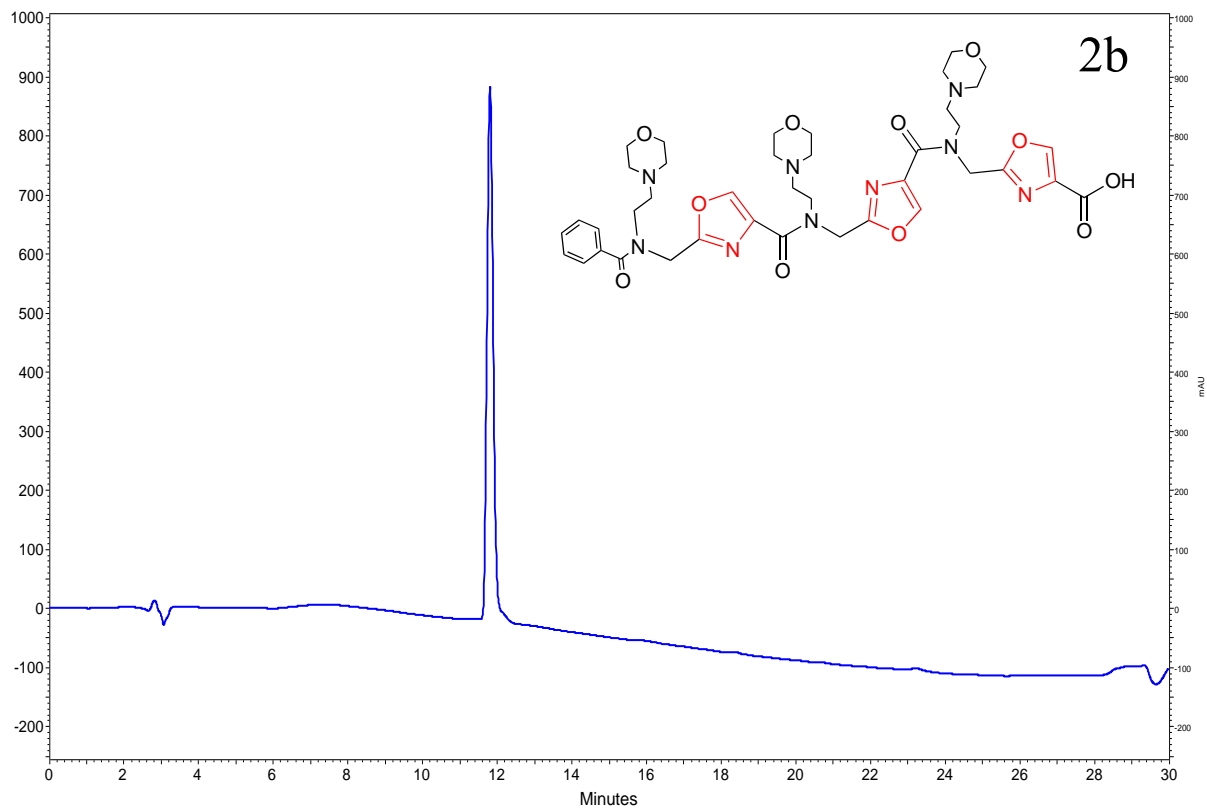


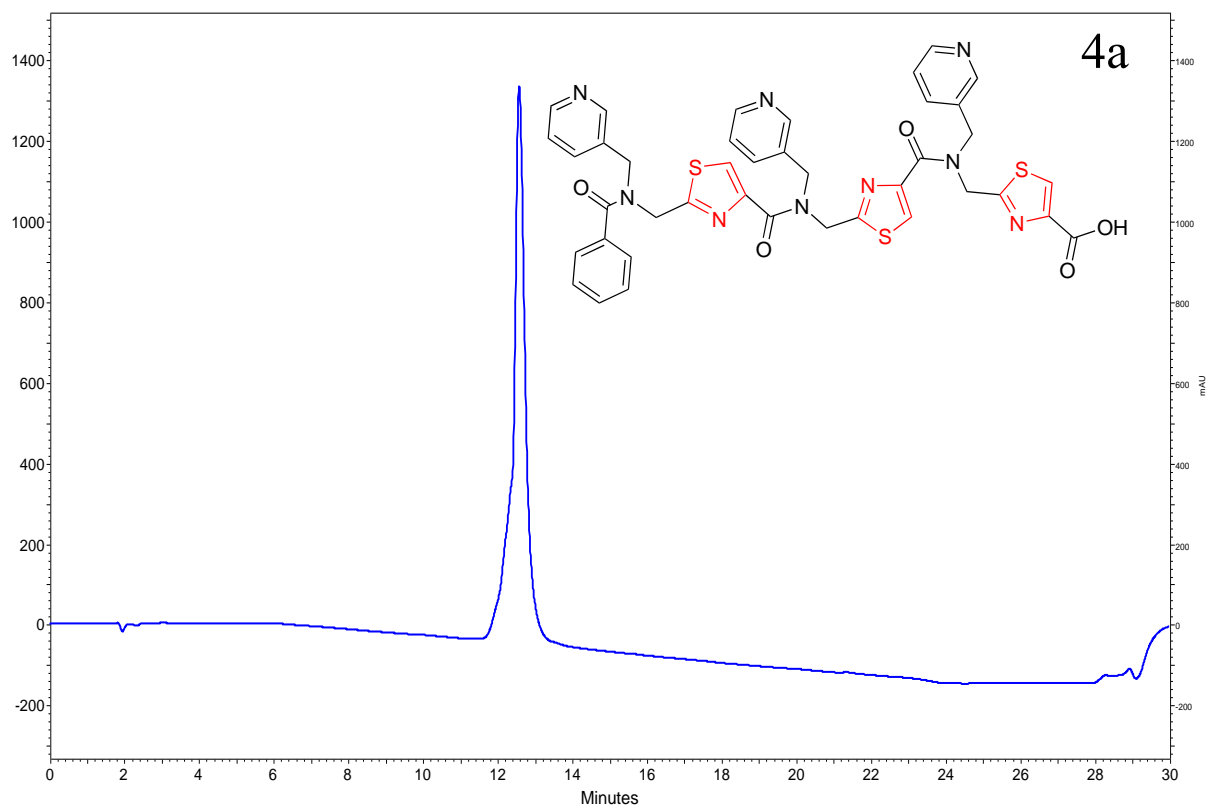
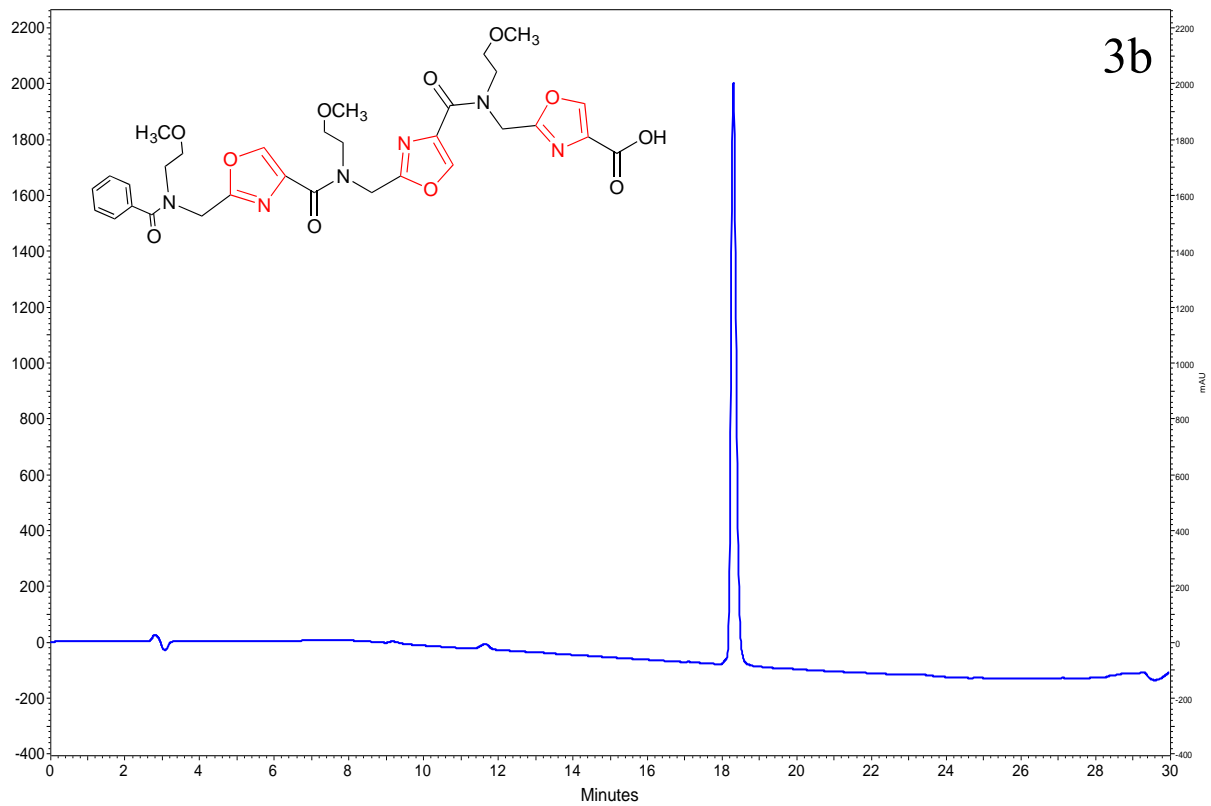
*The shoulder on the main peak was confirmed to be a partial separation of rotamers. The left and right sides of the peak were isolated in individual fractions. Re-injection of either fraction gave the same chromatogram seen above.

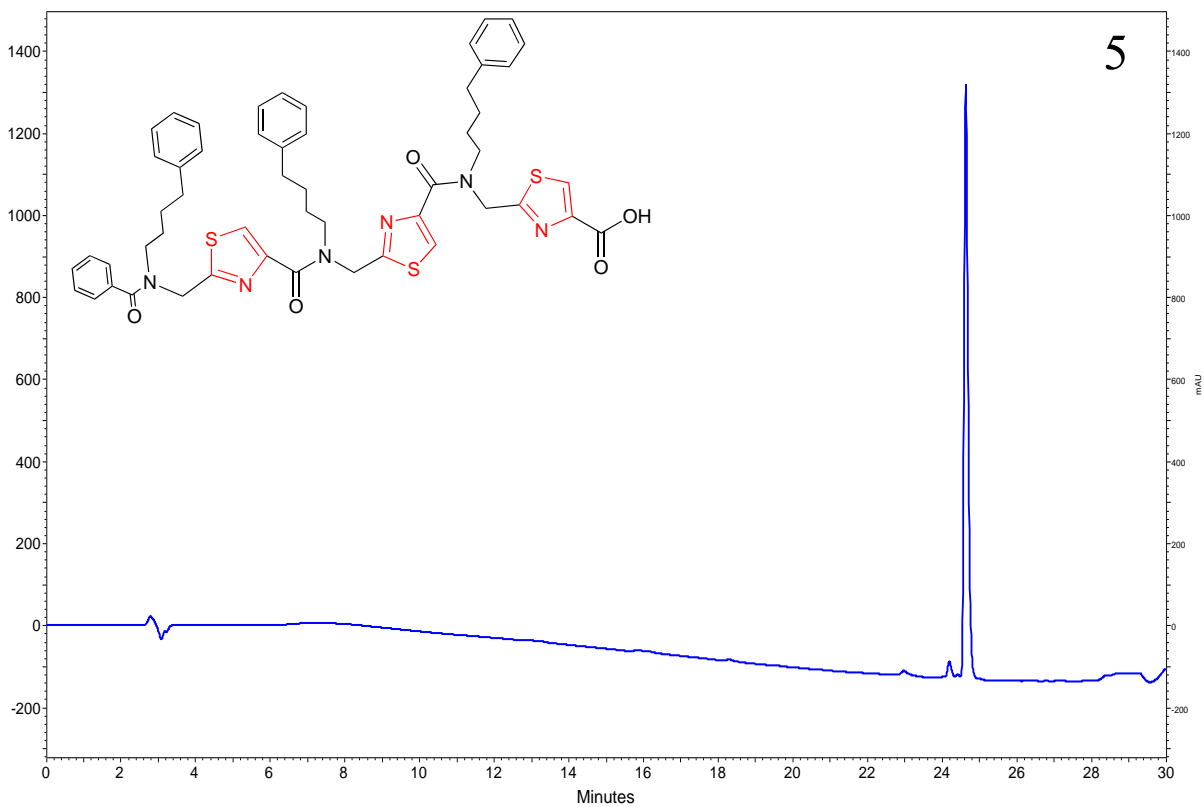
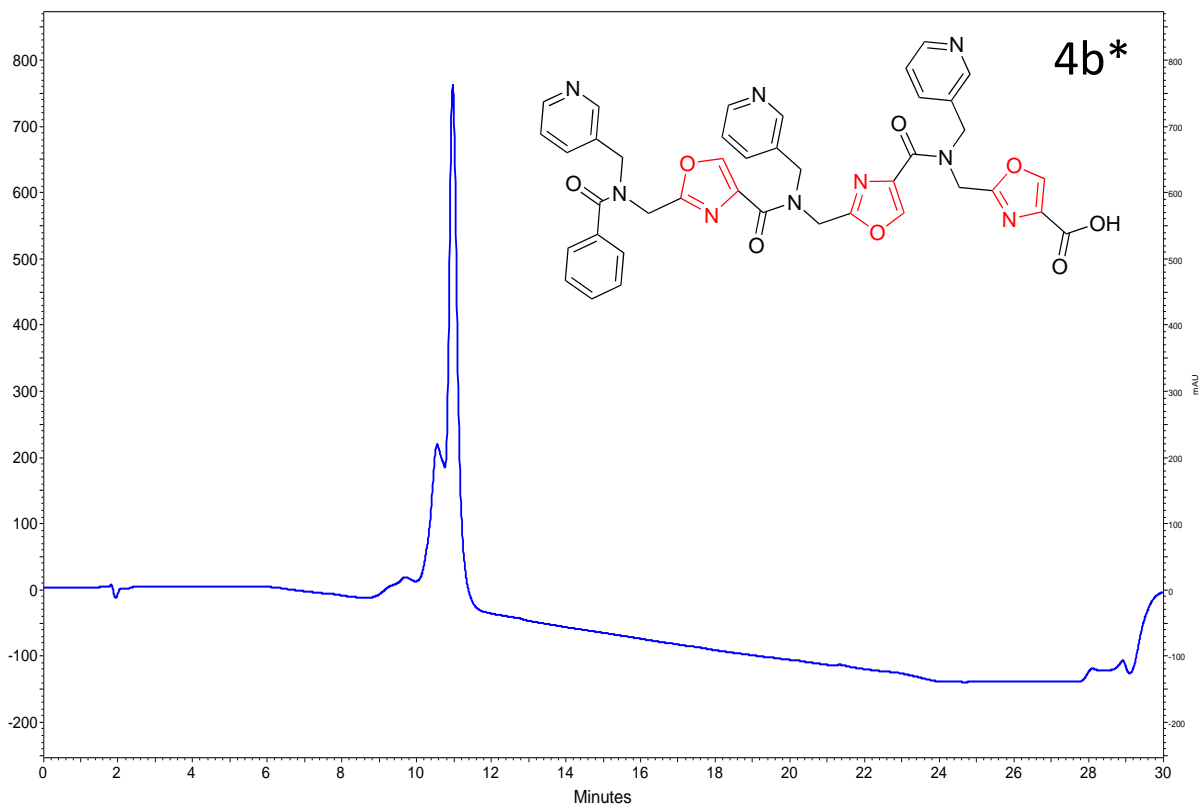
Analytical HPLC chromatograms of purified compounds

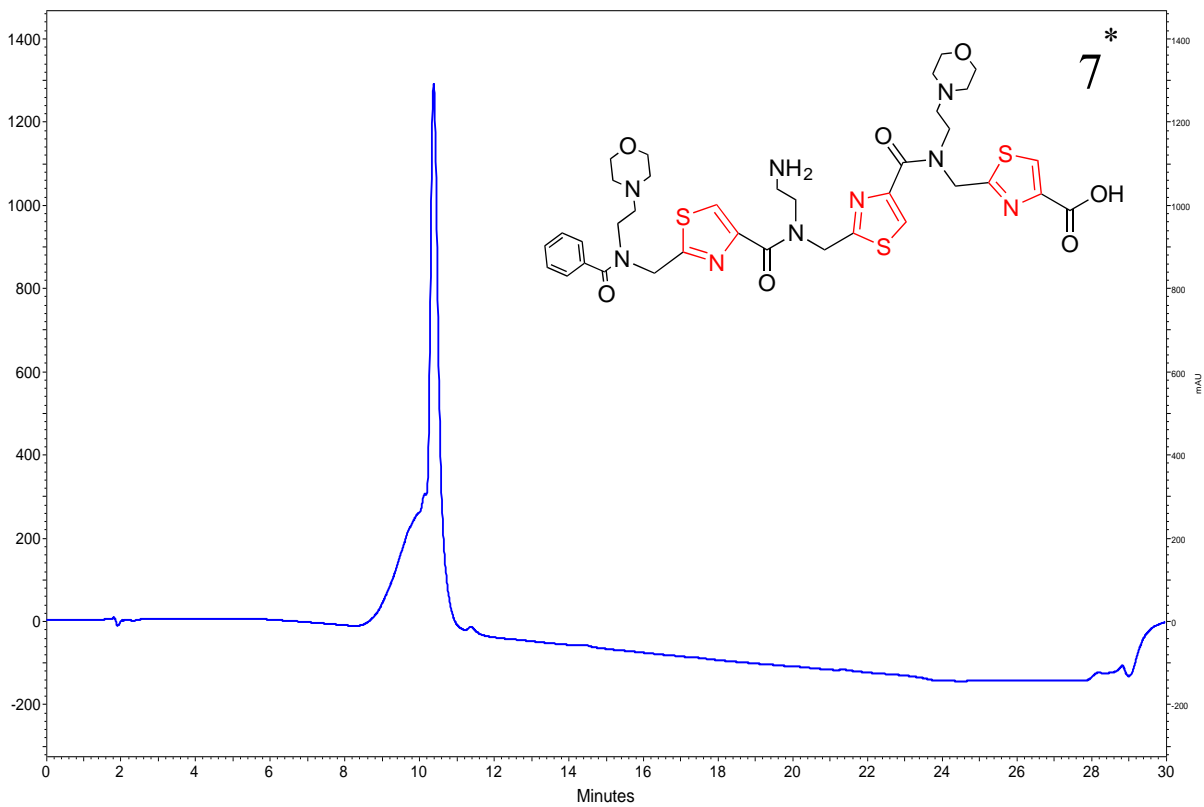
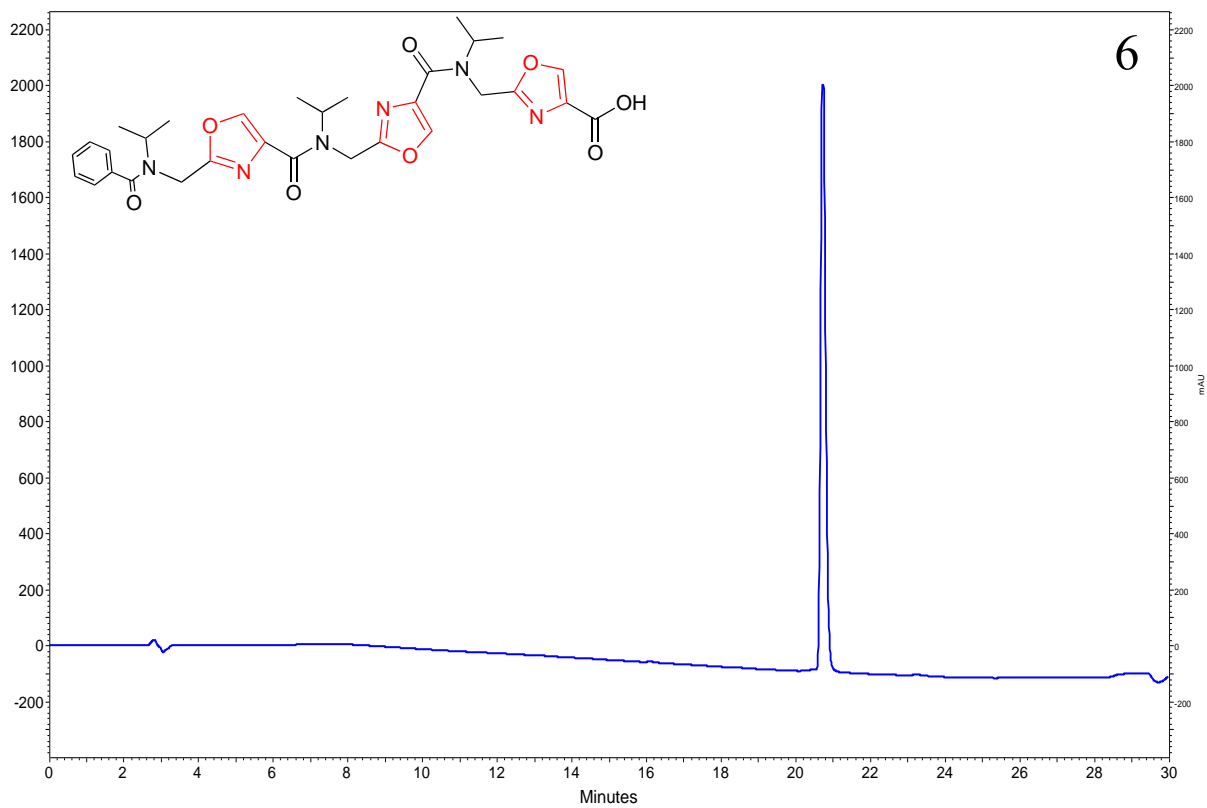
All Peaks were detected at 220 nm by RP-HPLC using 5-90% gradient of solvent B to solvent A.

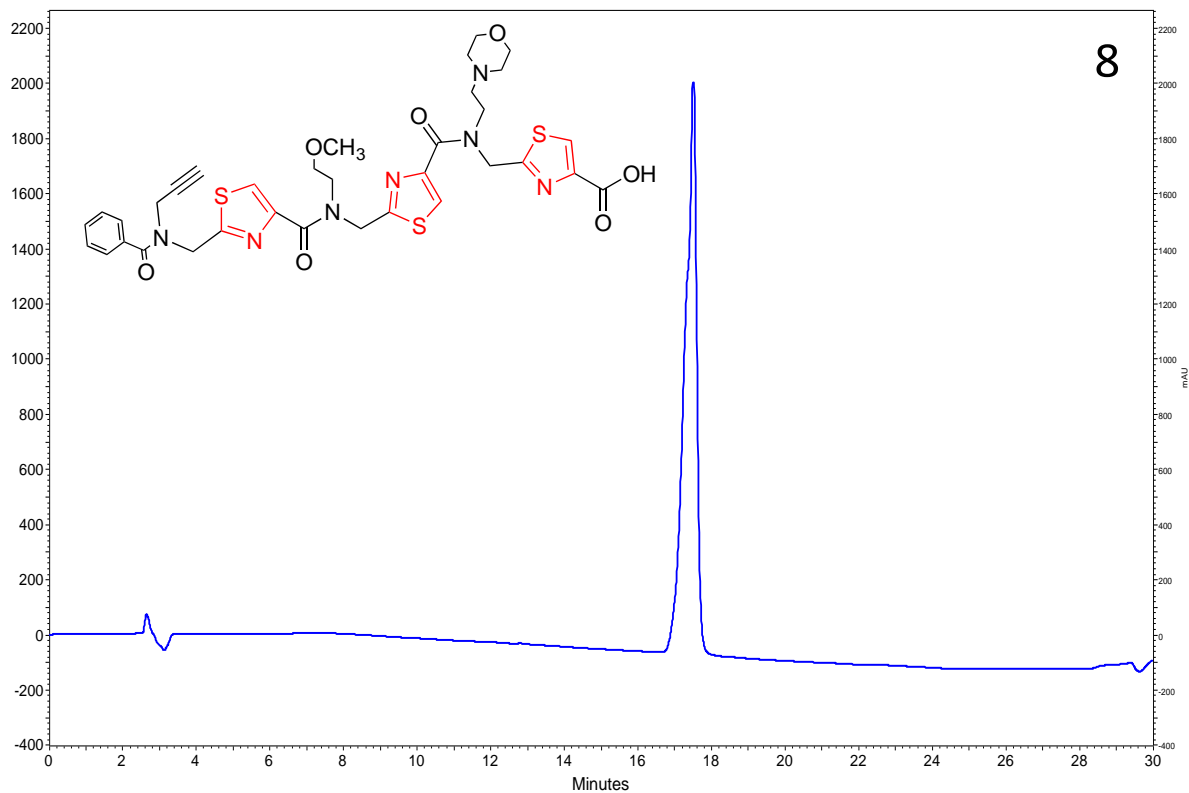






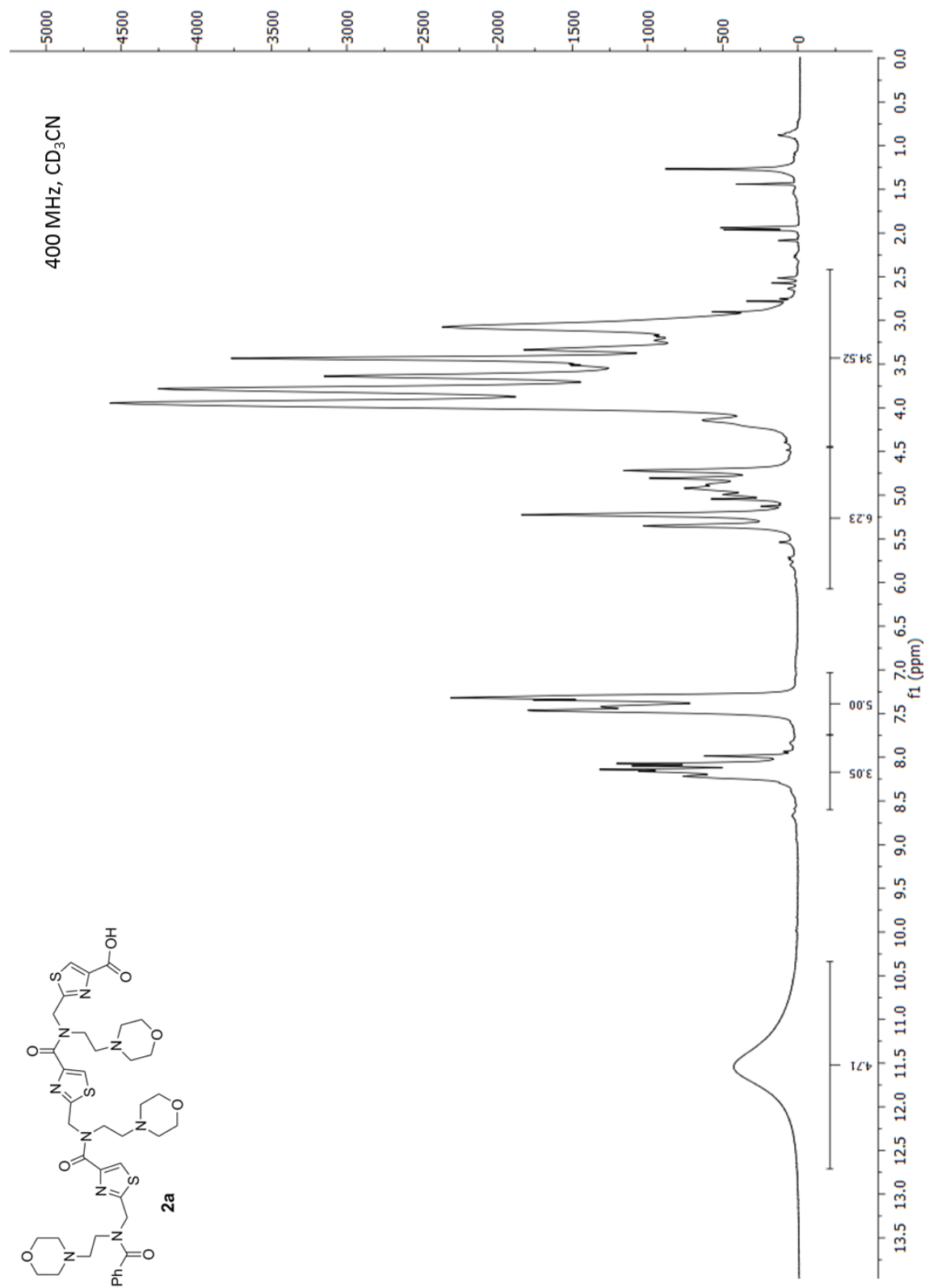


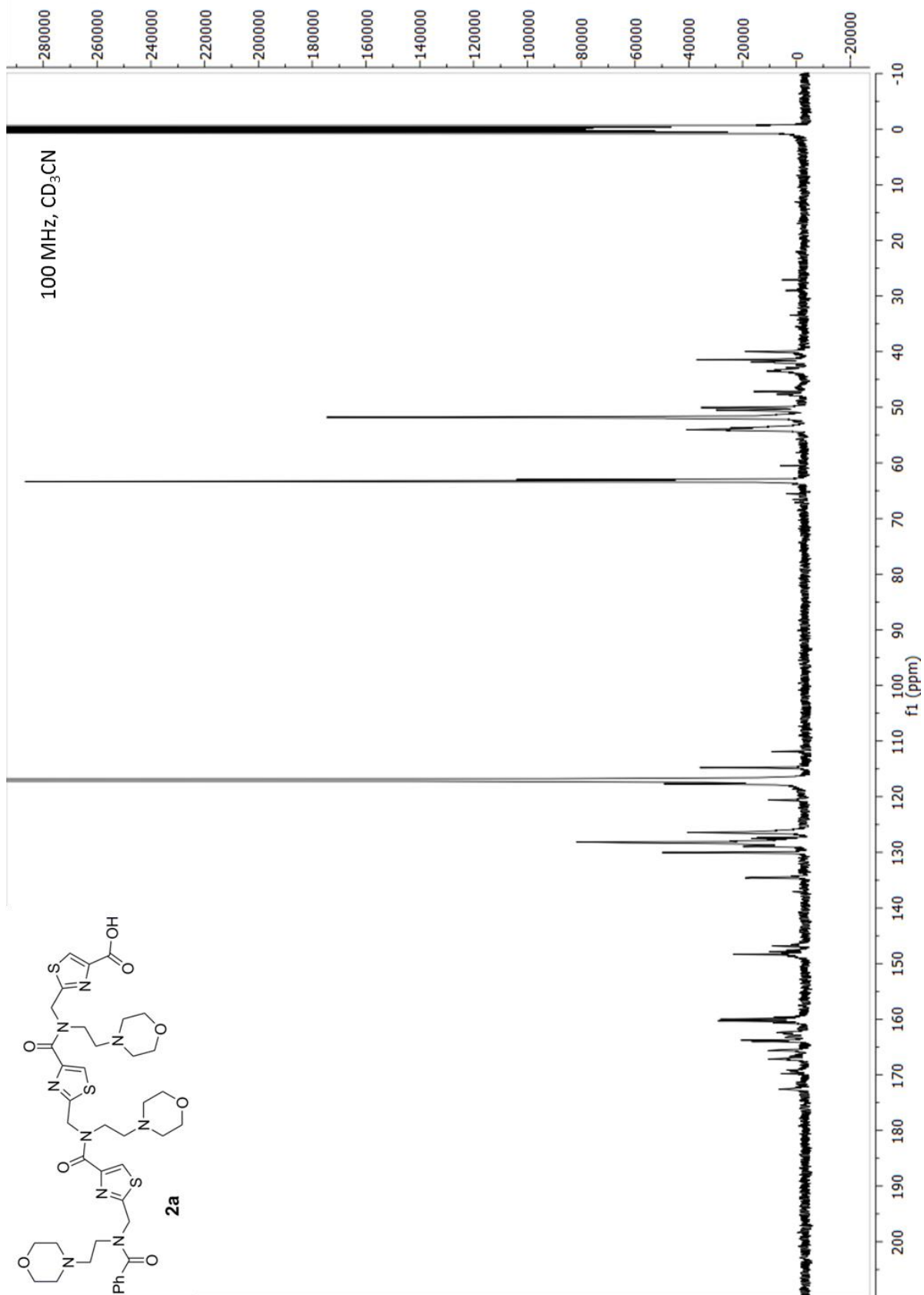


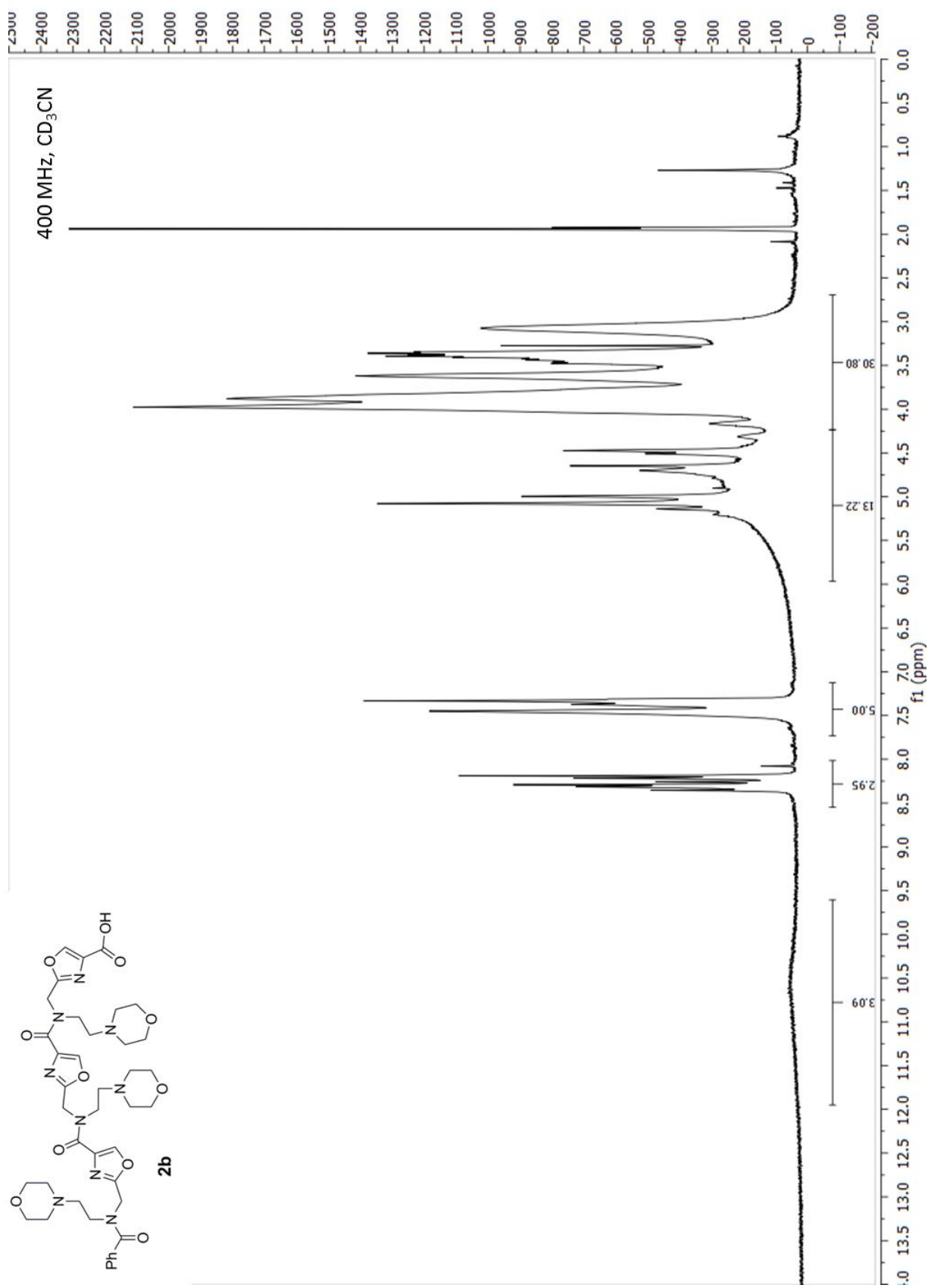


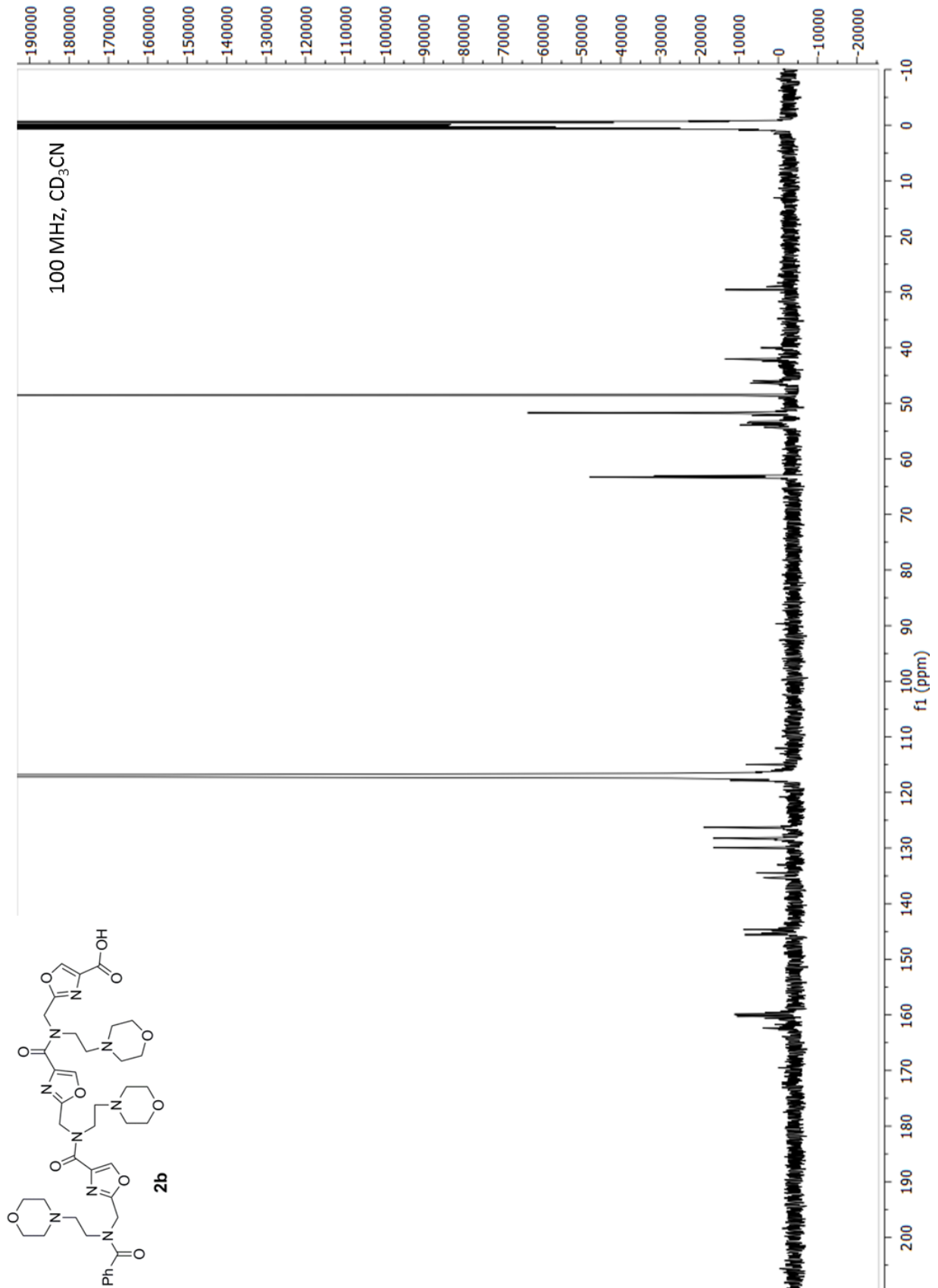
*The shoulder on the main peak was confirmed to be a partial separation of rotamers. The left and right sides of the peak were isolated in individual fractions. Re-injection of either fraction gave the same chromatogram seen above.

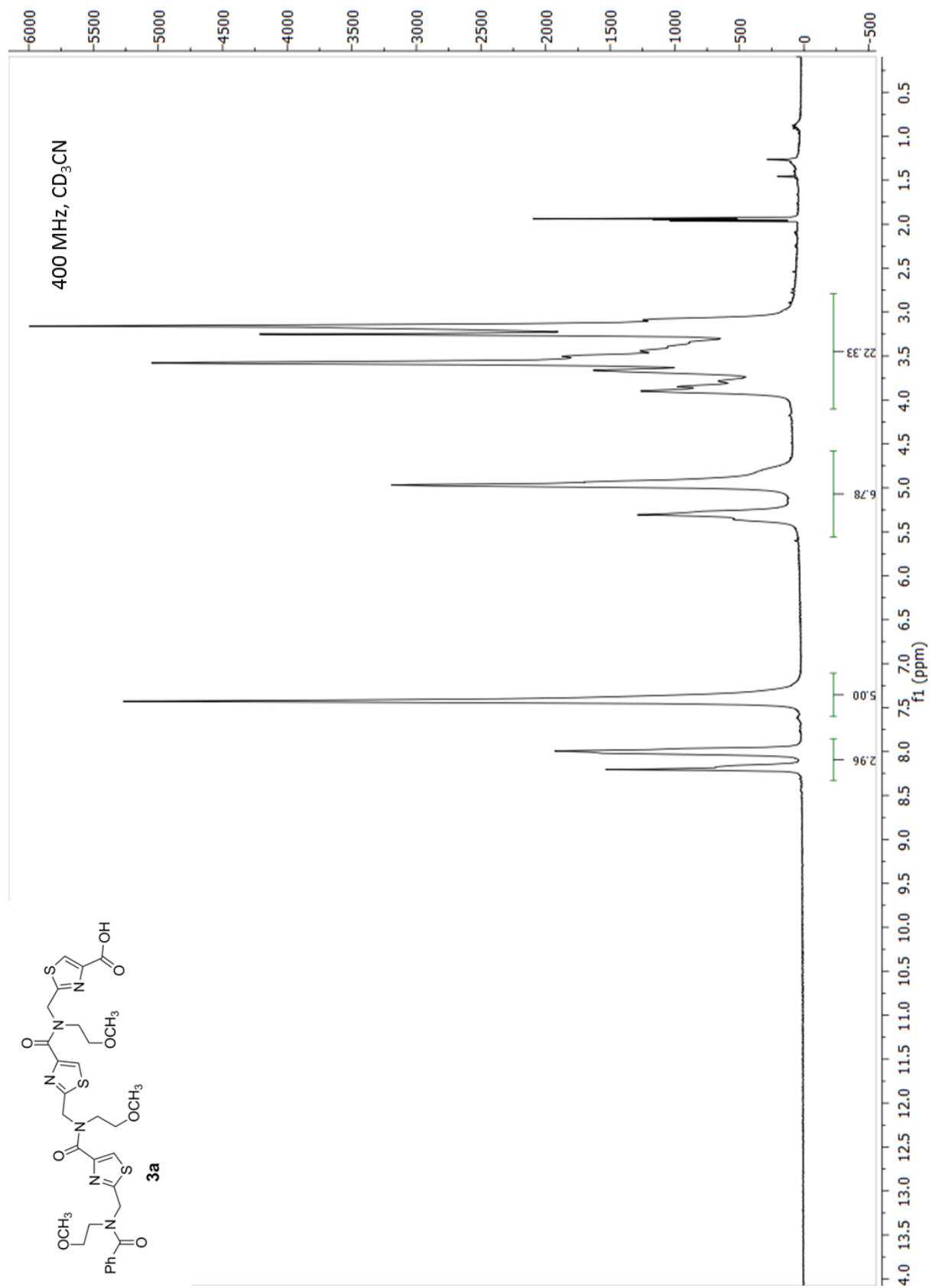
Figure S3. ^1H and ^{13}C NMR spectra

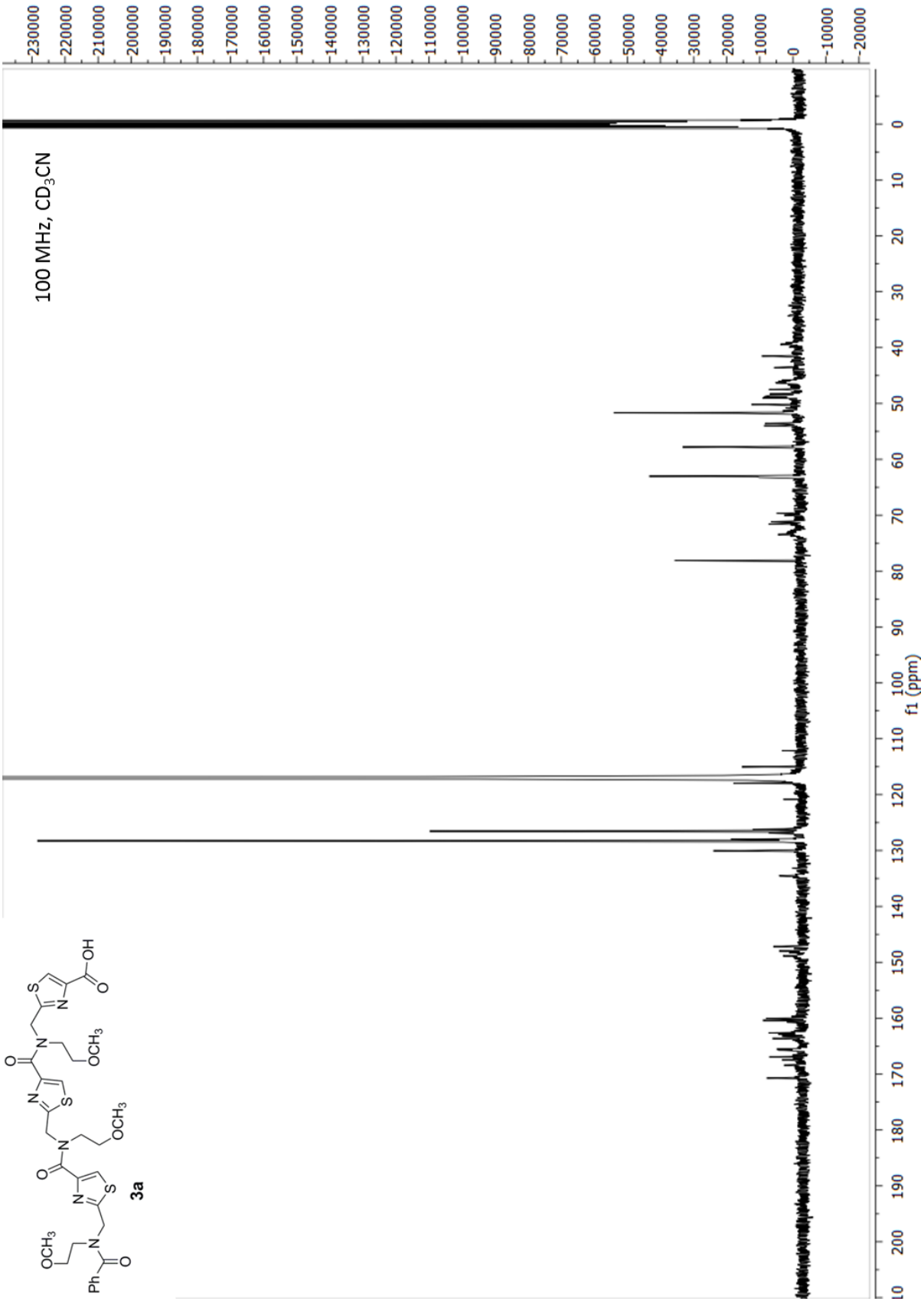


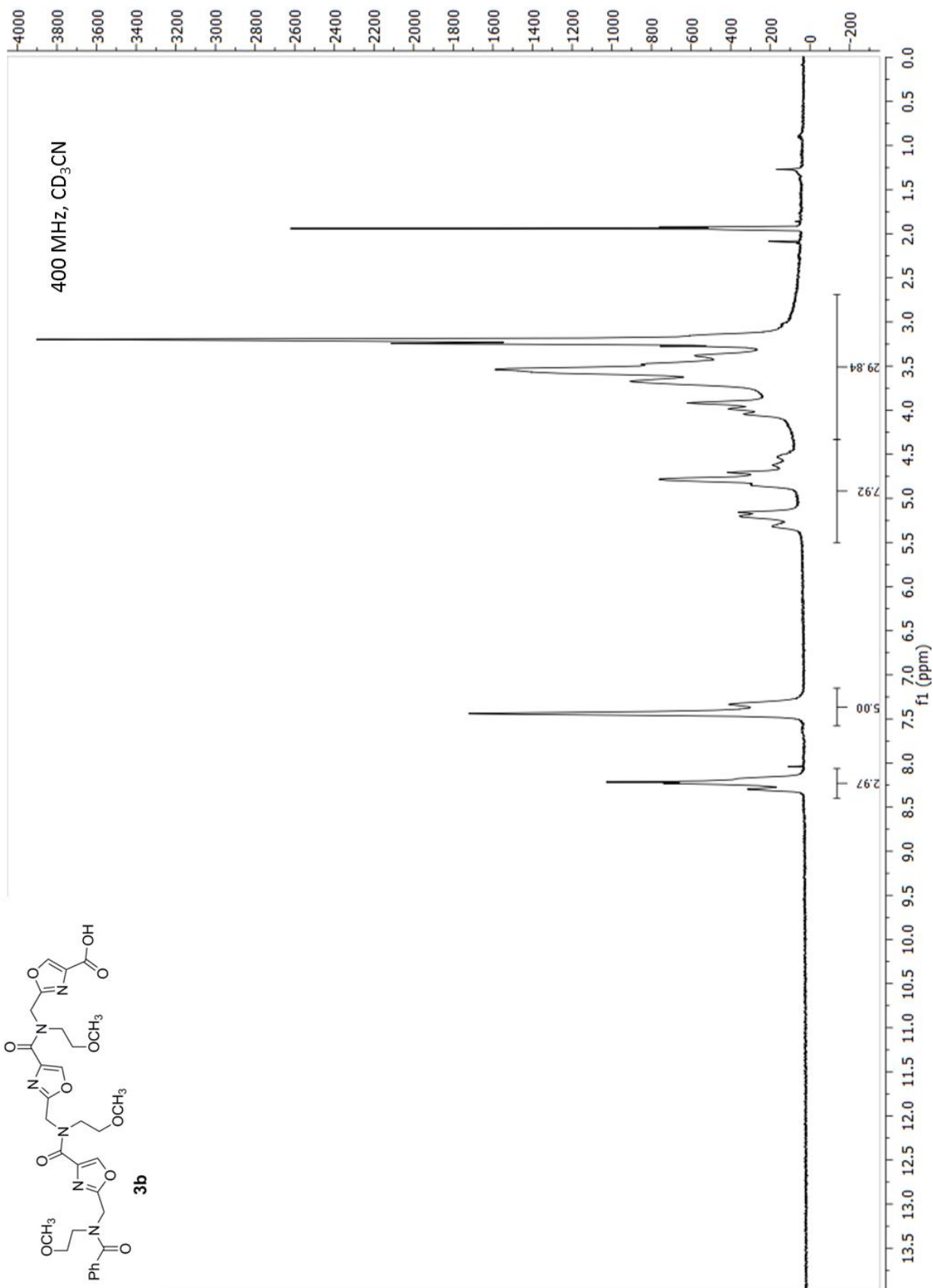
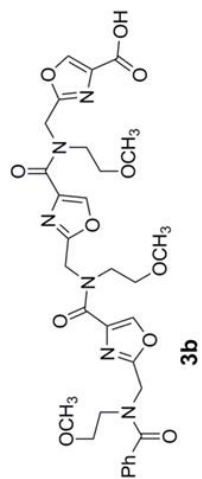


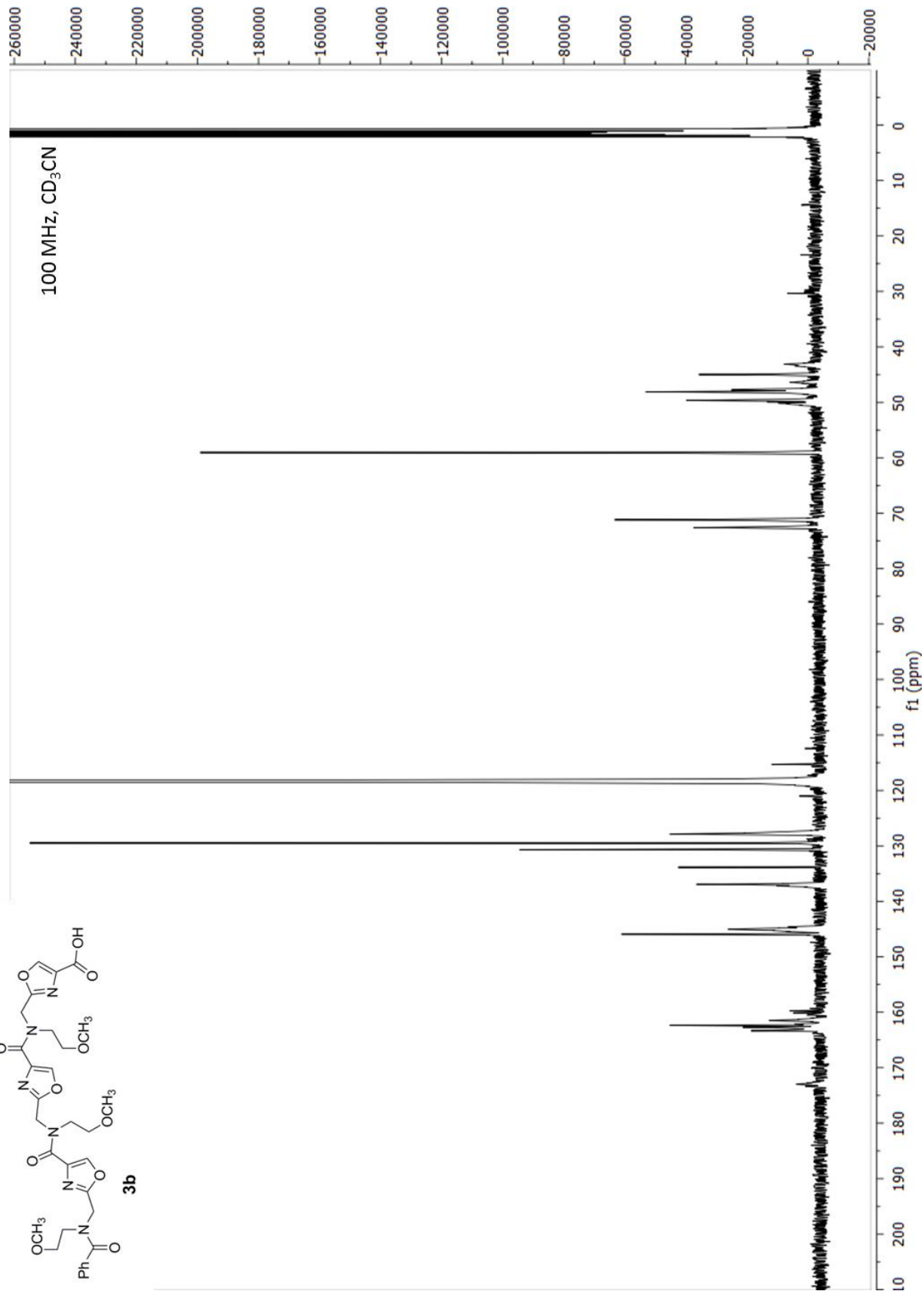
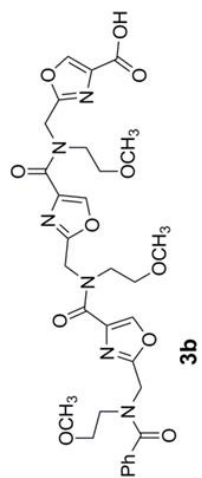


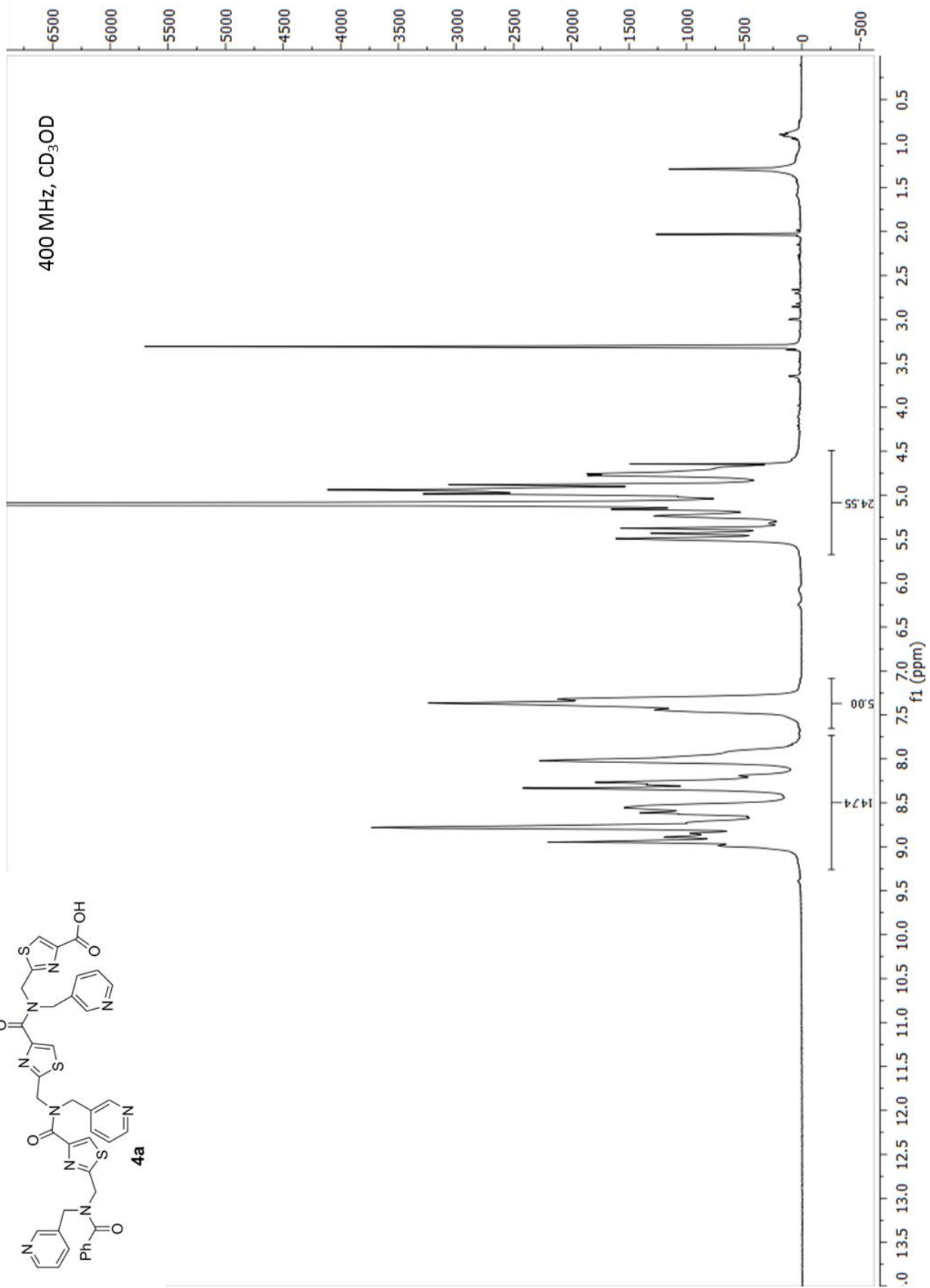
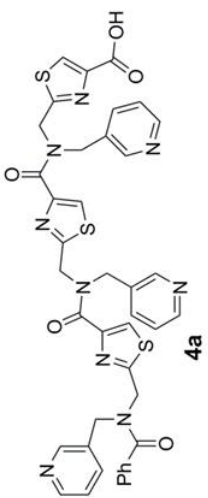


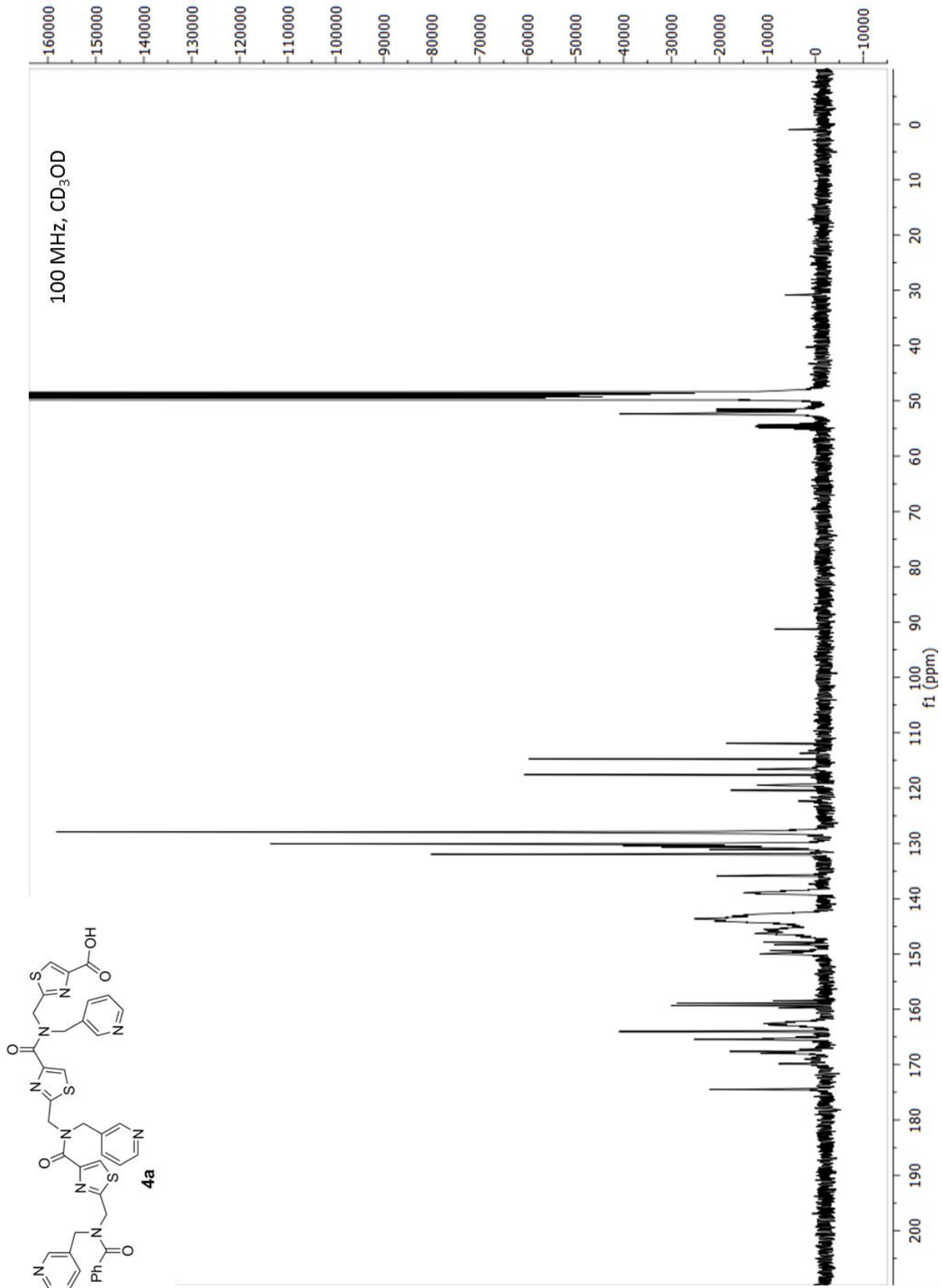


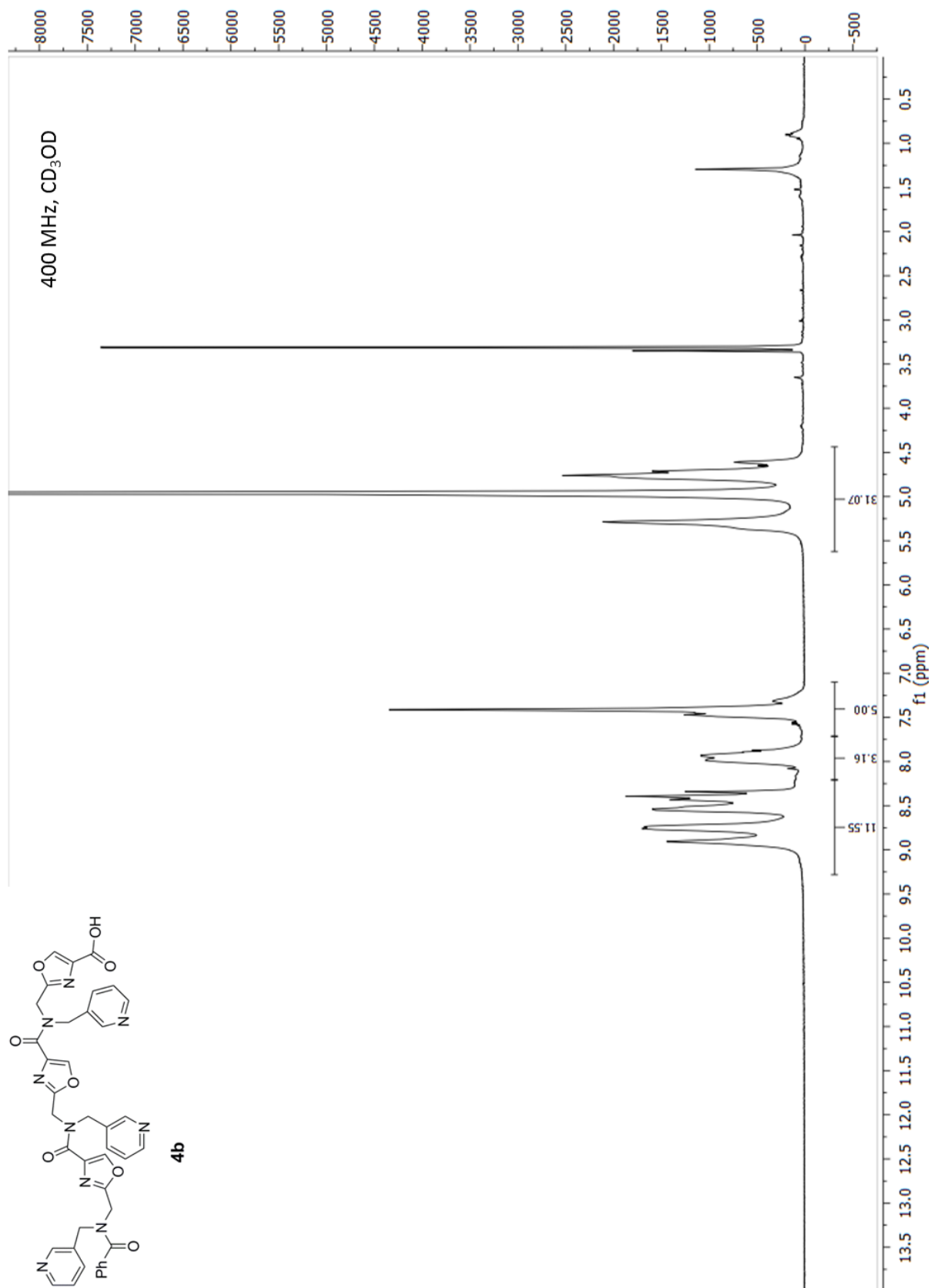


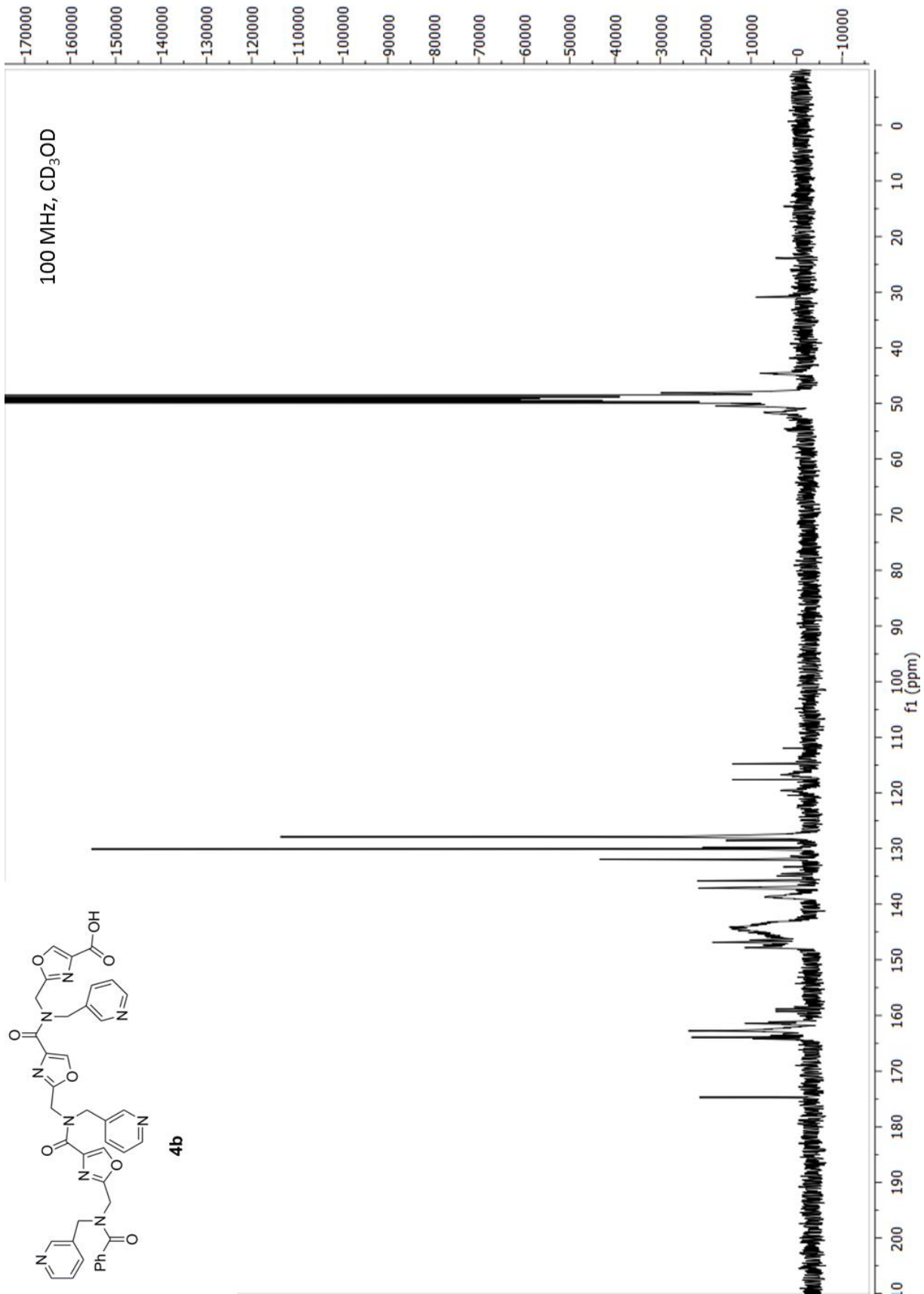


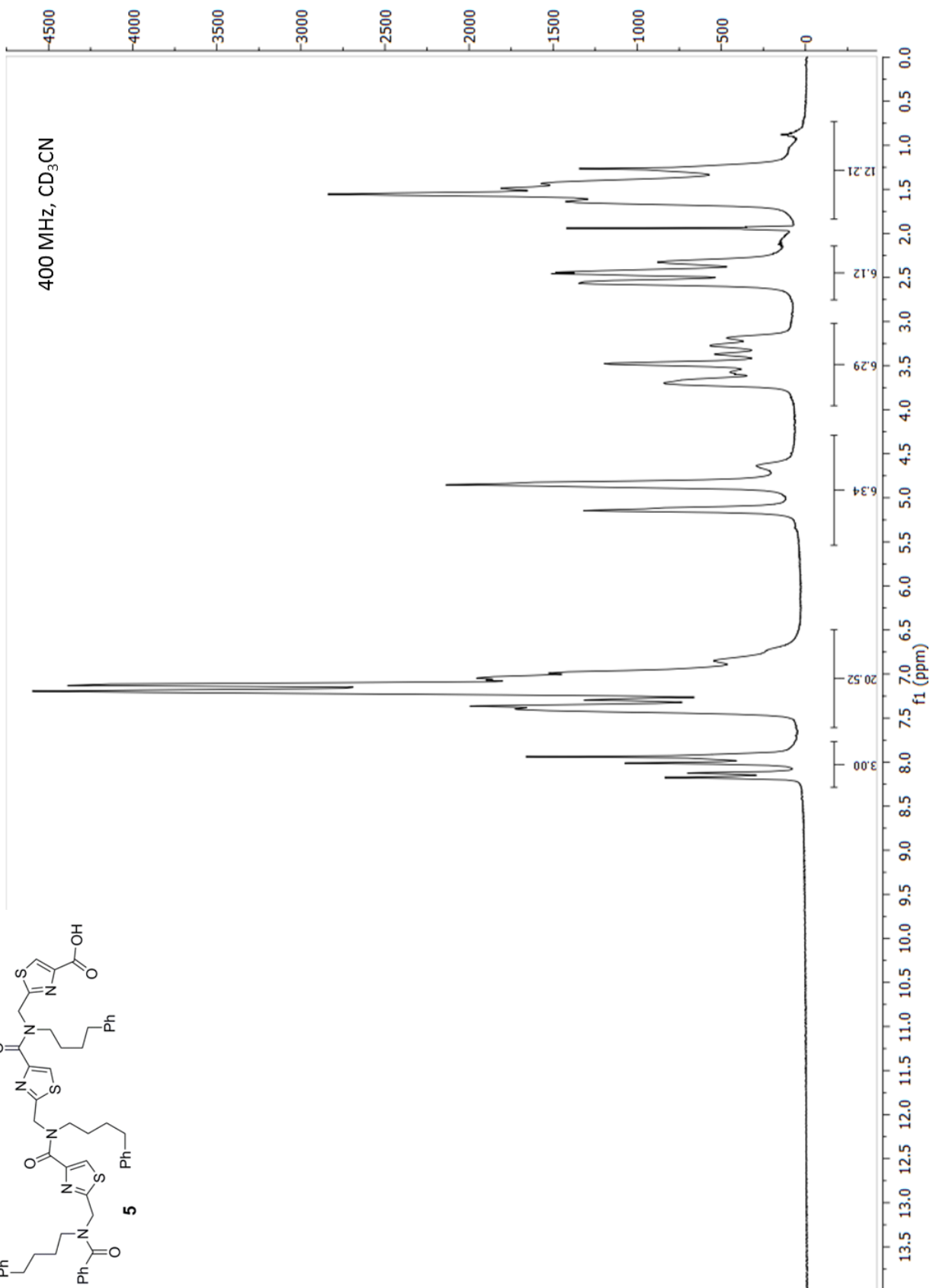
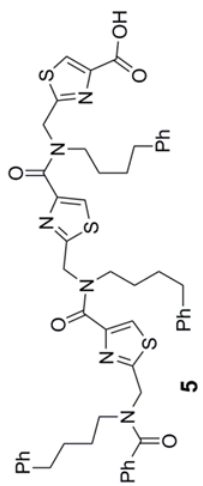


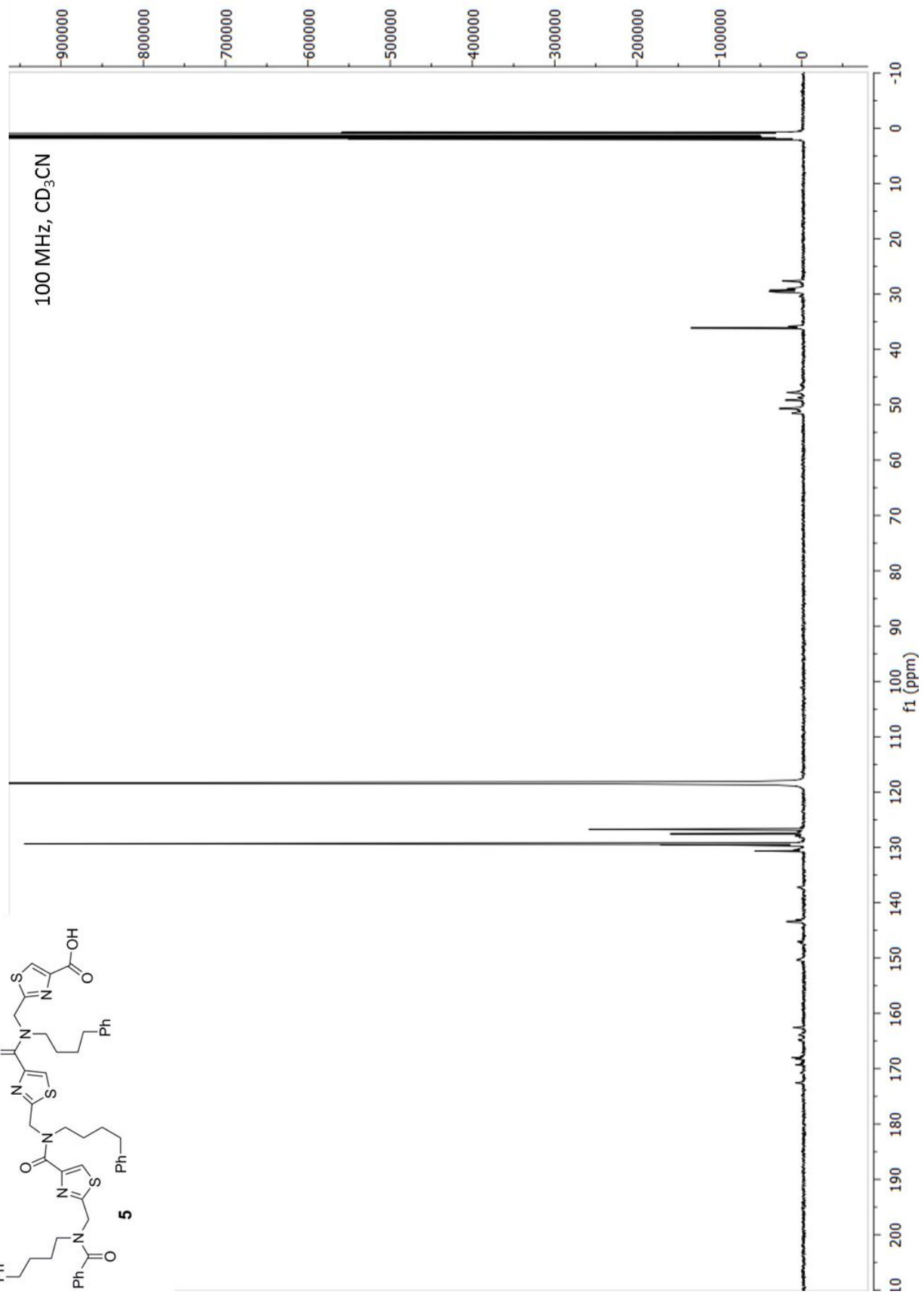
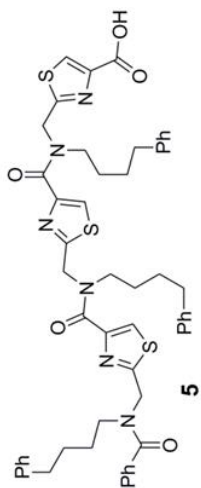


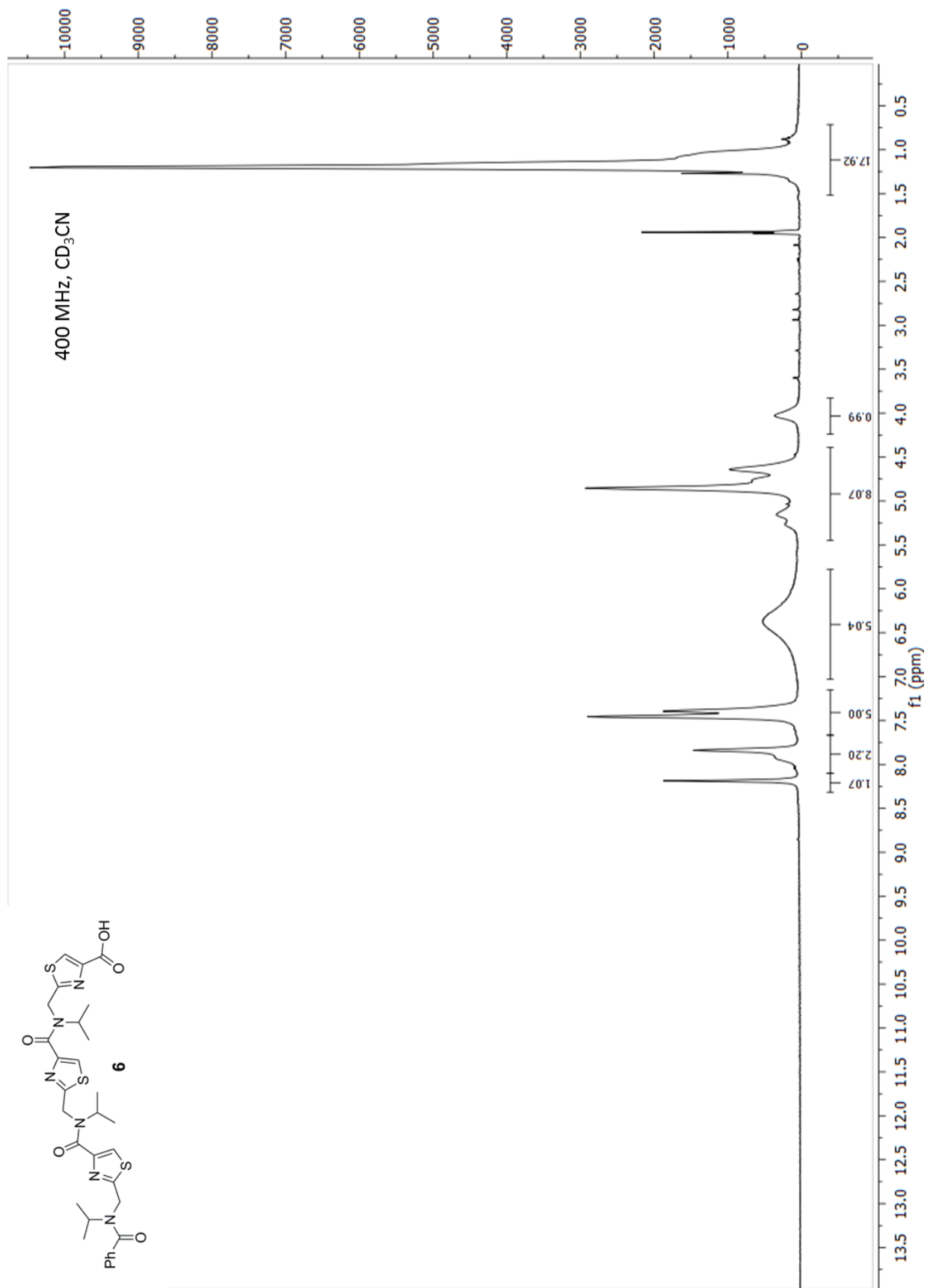
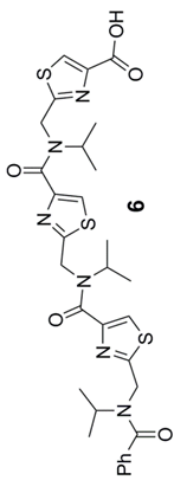


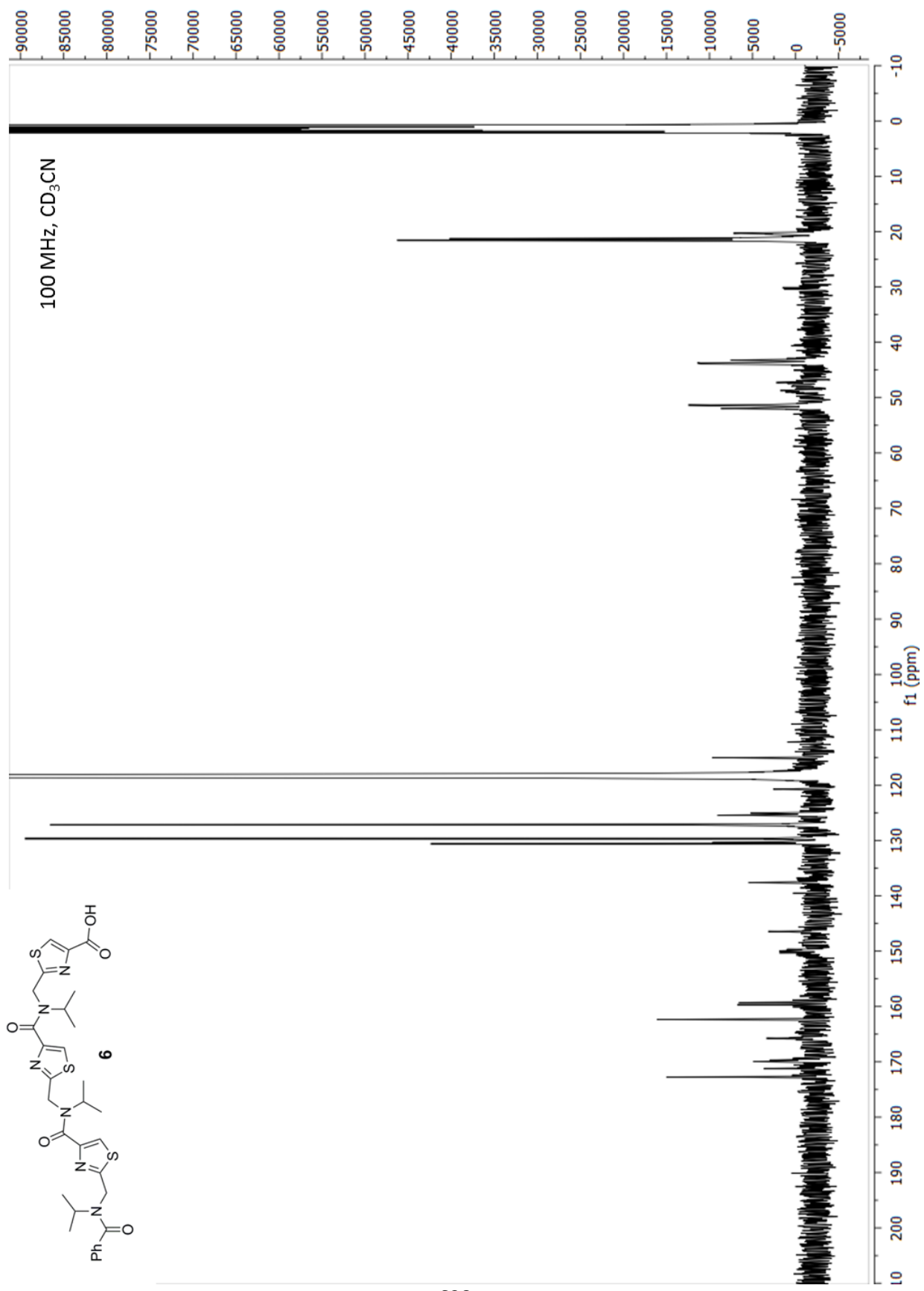


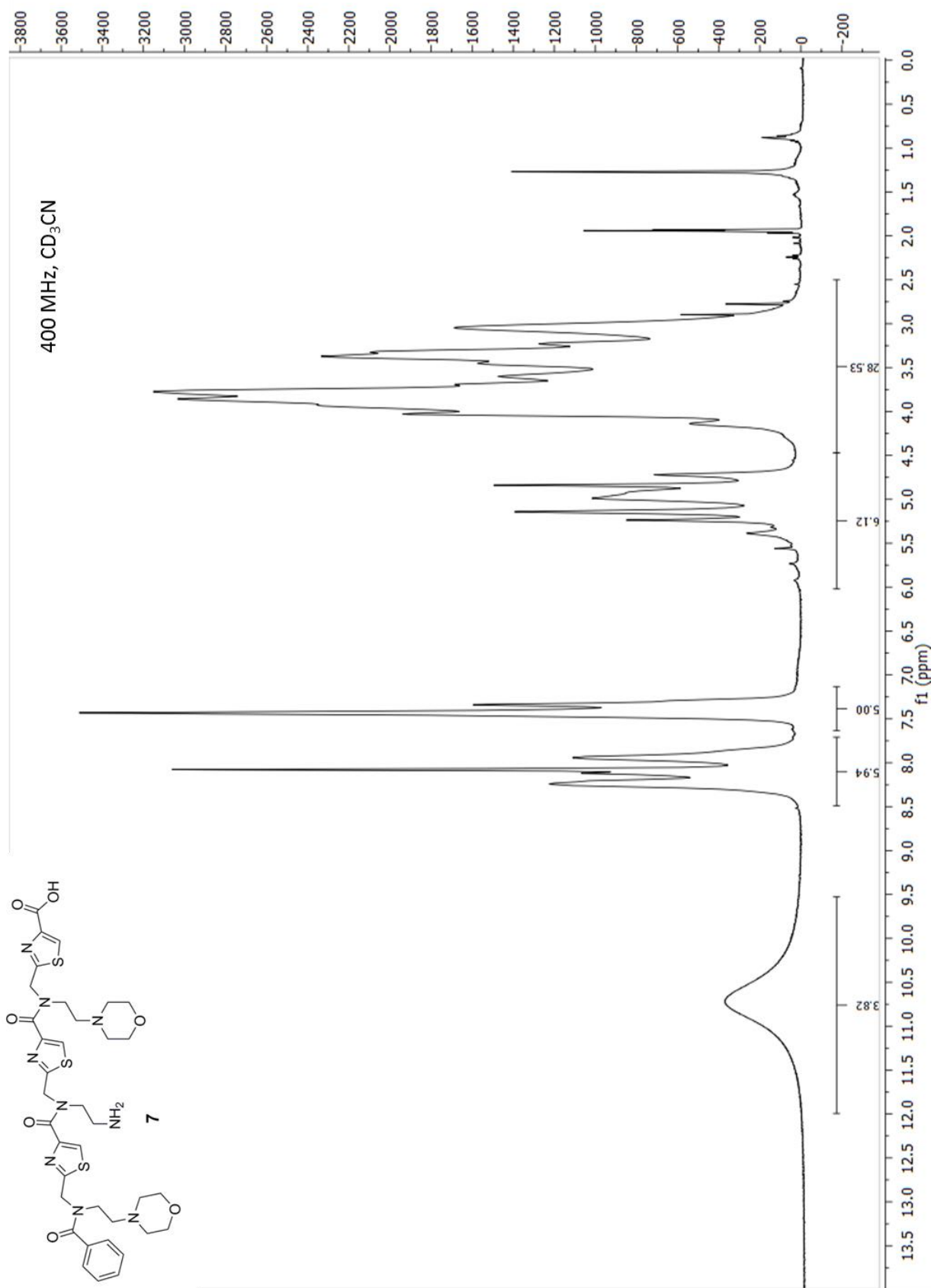


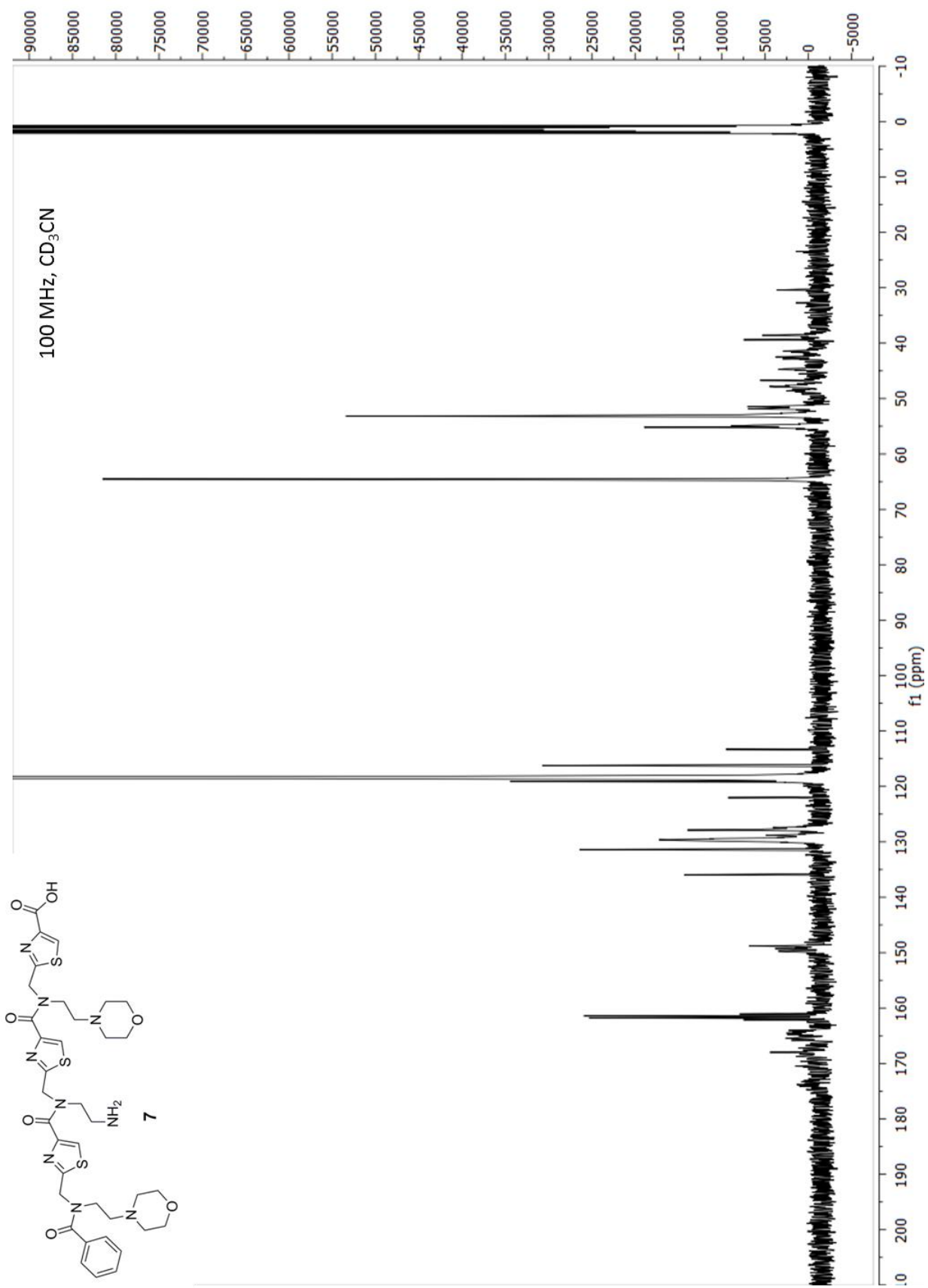


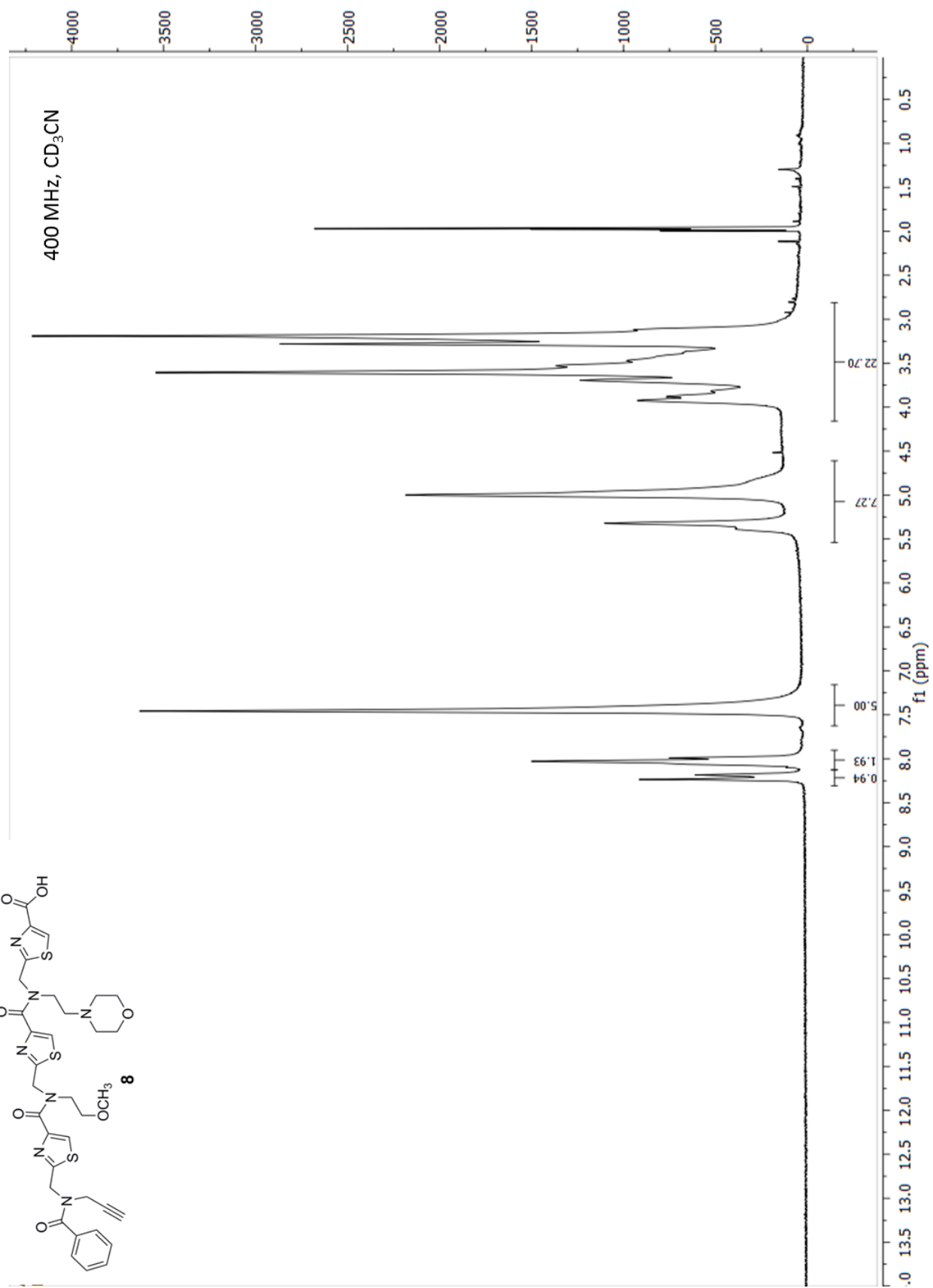
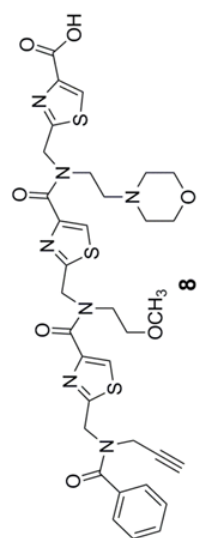


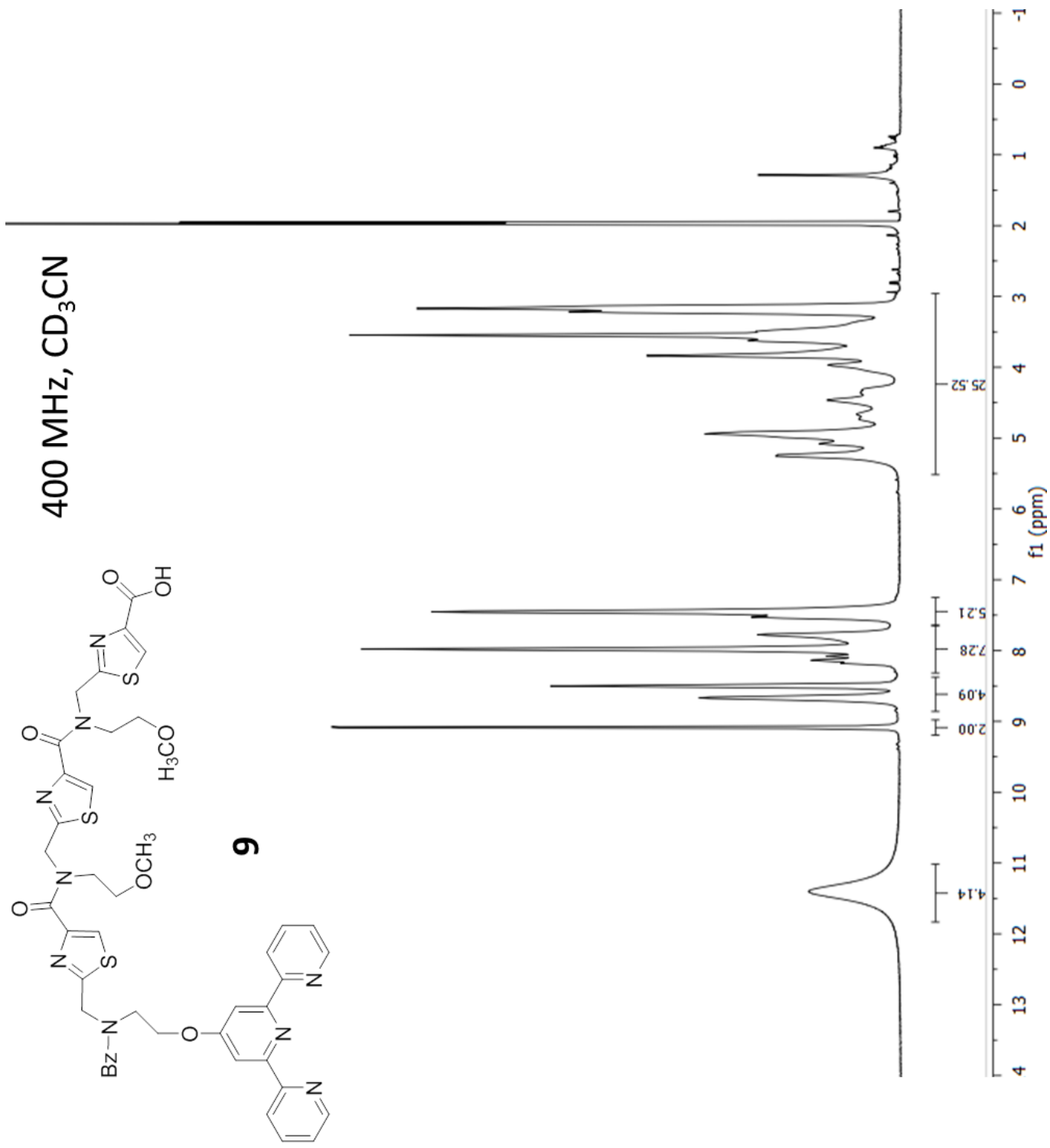


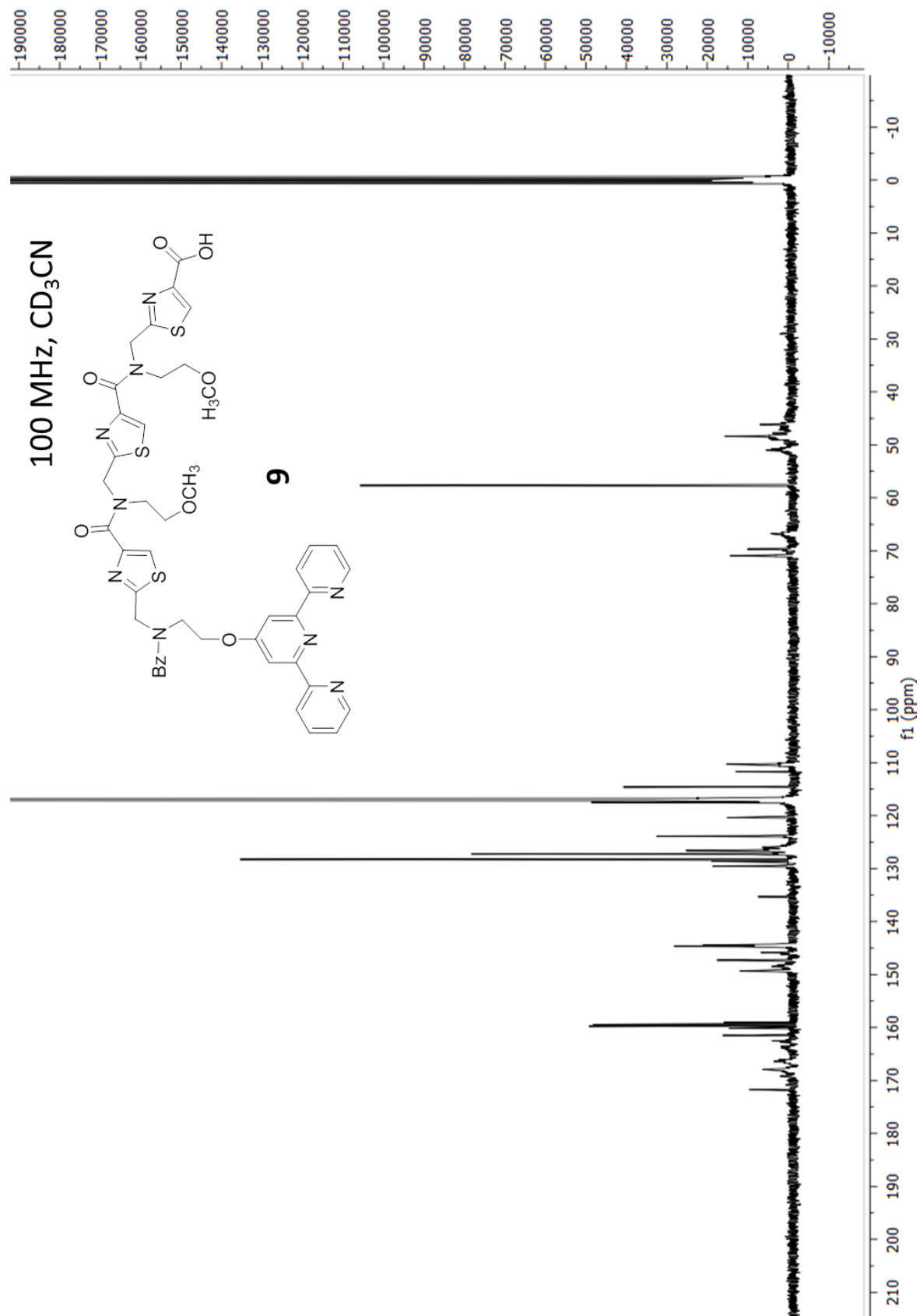












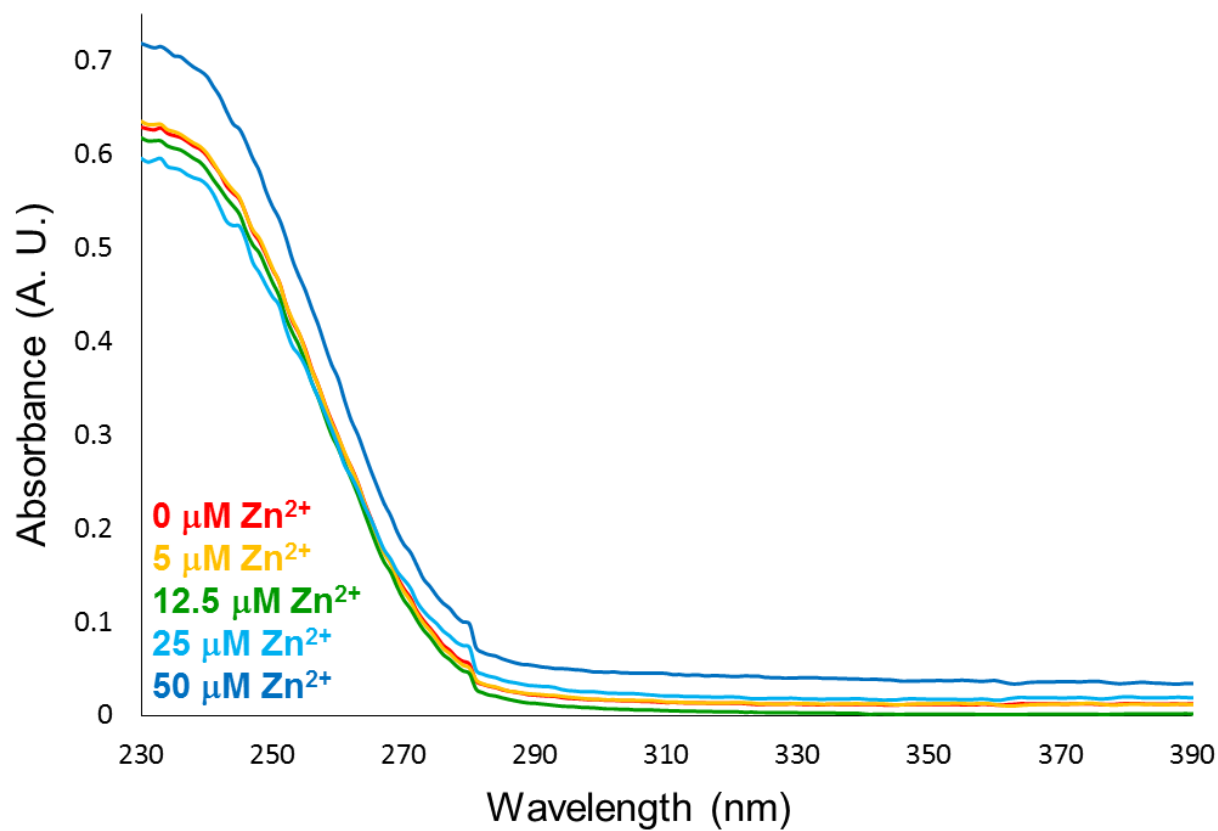


Figure S4. UV spectrum of 50 μM **3a** in the presence of increasing ZnCl_2 in 10 mM Tris buffer, pH 7.5.

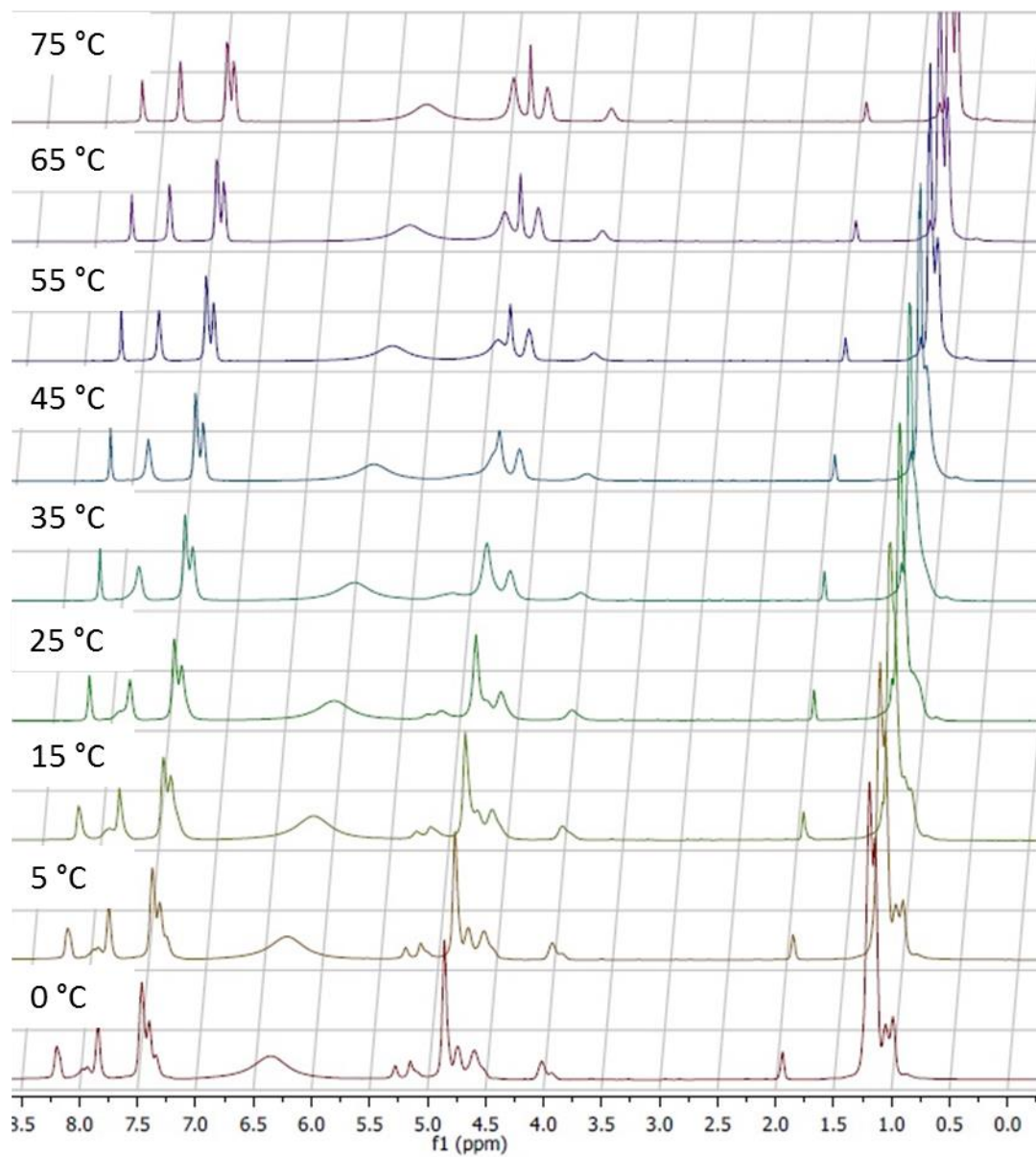


Figure S5. ^1H NMR temperature study of **6** in CD_3CN shows evidence of azole-peptide flexibility.