

Facilely construction a family of supramolecular gels with good antibiotic loading capacity

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Table S1. The critical gel concentrations and gelation behaviors of gelator in different solvents.

| Entry | Solvents | 2a | CGC at Room | 2b | CGC at Room | 2c | CGC at Room |
|-------|----------------------------------|------------------------|-------------|------------------------|-------------|------------------------|-------------|
| | | Temperature (mg/mL) | | Temperature (mg/mL) | | Temperature (mg/mL) | |
| 1 | Petroleum ether | I | | I | | I | |
| 2 | Cyclohexane | I | | I | | I | |
| 3 | Diether ether | I | | I | | I | |
| 4 | Ethyl acetate | I | | I | | I | |
| 5 | Dichloromethane | I | | I | | I | |
| 6 | Chloroform | I | | I | | I | |
| 7 | Acetone | I | | I | | I | |
| 8 | Acetonitrile | I | | I | | I | |
| 9 | Methanol | I | | I | | I | |
| 10 | Ethanol | P | | P | | G(10 mg/mL) | |
| 11 | Ethylene glycol | S | | S | | P | |
| 12 | Dimethyl sulfoxide | S | | S | | S | |
| 13 | PEG200 | | G(30 mg/mL) | | G(10 mg/mL) | | G(10 mg/mL) |
| 14 | PEG400 | | G(30 mg/mL) | | G(10 mg/mL) | | G(10 mg/mL) |
| 15 | H ₂ O | I | | I | | I | |
| 16 | Ethanol : H ₂ O (1:1) | I | | P | | P | |
| 17 | PEG200 : H ₂ O (1:1) | P | | G(10 mg/mL) | | G(5 mg/mL) | |

| Entry | Solvents | 2d CGC at Room | 2e CGC at Room | 2f CGC at Room |
|-------|----------------------------------|------------------------|------------------------|------------------------|
| | | Temperature (mg/mL) | Temperature (mg/mL) | Temperature (mg/mL) |
| 1 | Petroleum ether | I ^a | I | I |
| 2 | Cyclohexane | I | I | I |
| 3 | Diether ether | I | I | I |
| 4 | Ethyl acetate | I | I | I |
| 5 | Dichloromethane | I | I | I |
| 6 | Chloroform | I | I | I |
| 7 | Acetone | I | I | I |
| 8 | Acetonitrile | I | I | I |
| 9 | Methanol | G(5 mg/mL) | P | G(10 mg/mL) |
| 10 | Ethanol | G(10 mg/mL) | G(10 mg/mL) | G(9 mg/mL) |
| 11 | Ethylene glycol | P | P | P |
| 12 | Dimethyl sulfoxide | S | S | S |
| 13 | PEG200 | G(5 mg/mL) | G(10) | G(10) |
| 14 | PEG400 | G(10) | G(10) | G(10) |
| 15 | H ₂ O | G(1) | I | I |
| 16 | Ethanol : H ₂ O (1:1) | G(10) | P | G(5) |
| 17 | PEG200 : H ₂ O (1:1) | G(5) | G(5) | G(3) |

a) I: insoluble, if the gelator is completely insoluble in the solvent;

b) G: gel, if the gelator is able to gelate the solvent;

c) S: solution, if the gelator is completely soluble in the solvent;

d) P: precipitate, if the gelator dissolves after heating, and precipitates after cooling to room temperature

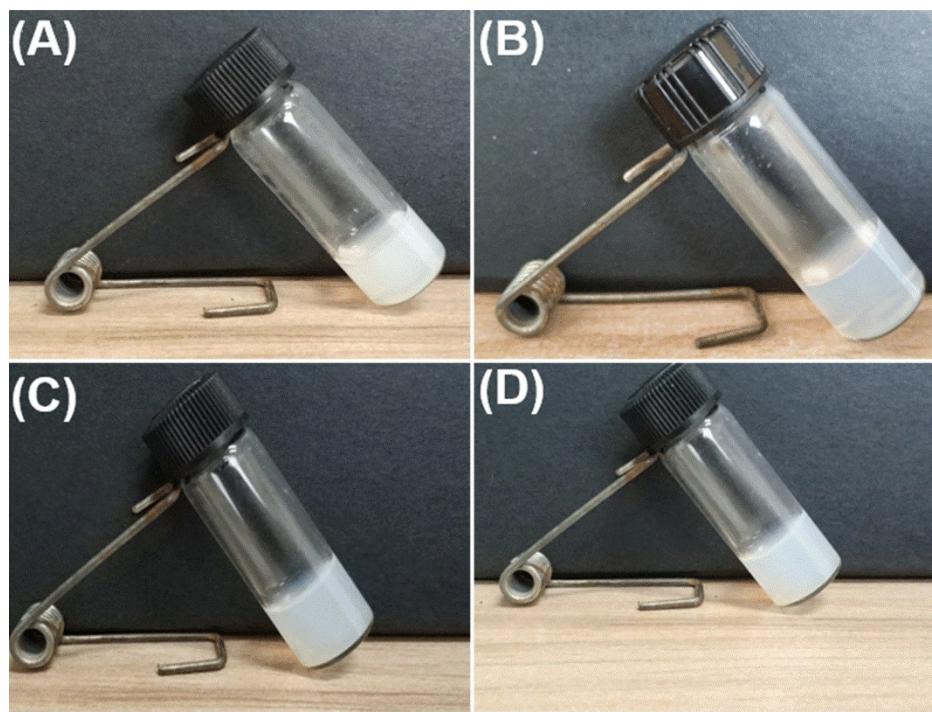


Fig. S1. (A), (B) were PEG200 gels prepared by 2a (30 mg/mL) and 2b (10 mg/mL) in PEG200, respectively; (C), (D) were PEG400 gels prepared by 2a (30 mg/mL) and 2b (10 mg/mL) in PEG400, respectively.

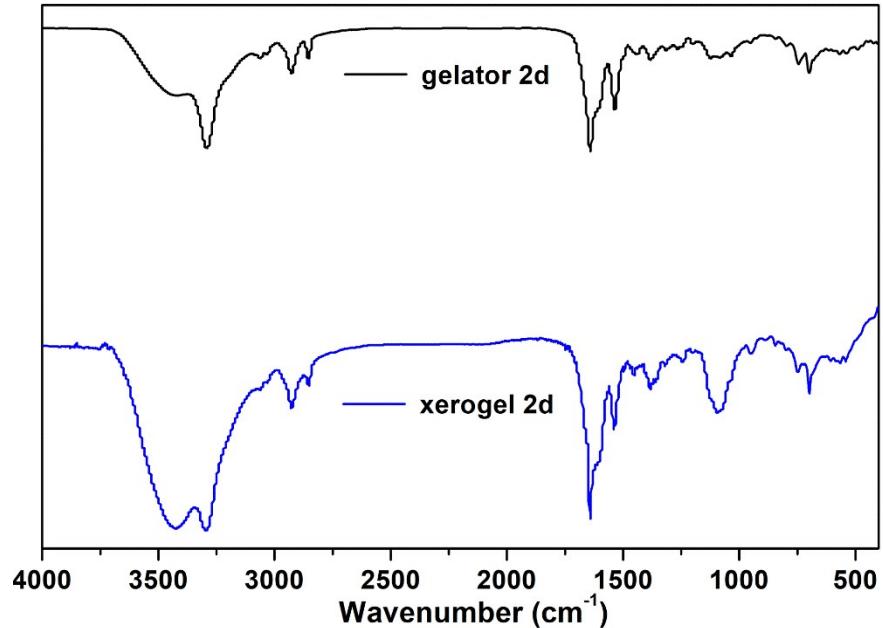


Fig. S2. FT-IR of gelator (**2d**) and xerogel (**2d**). The xerogel was obtained by dry **2d** hydrogel (3 mg/mL).

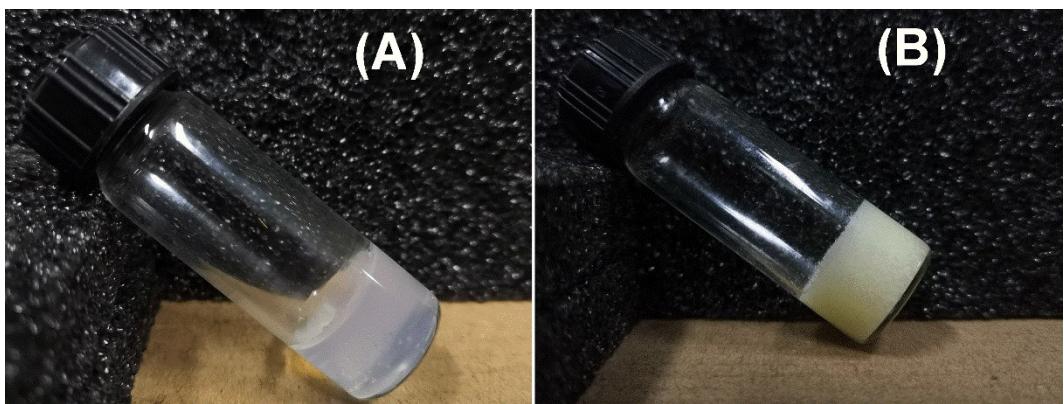
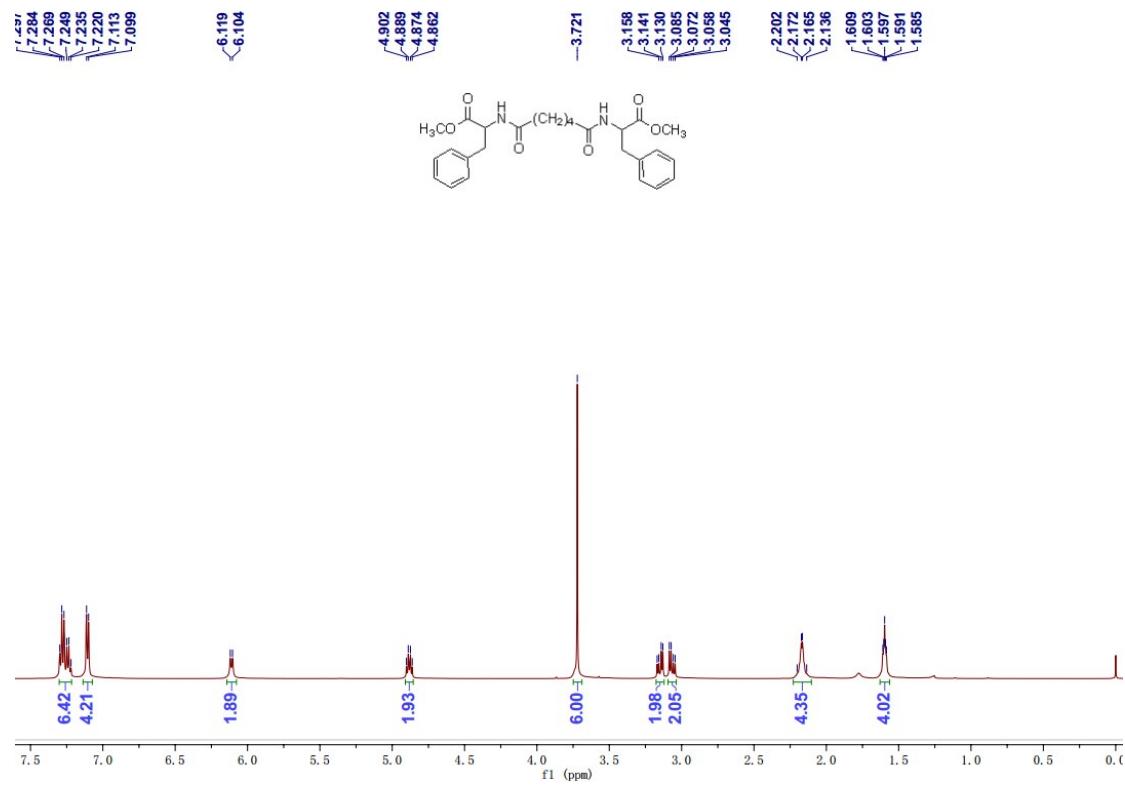


Fig. S3. (A), (B) were blank 2d gel and 2d gel with maximum antibiotic load prepared in PEG200 and H₂O, respectively.



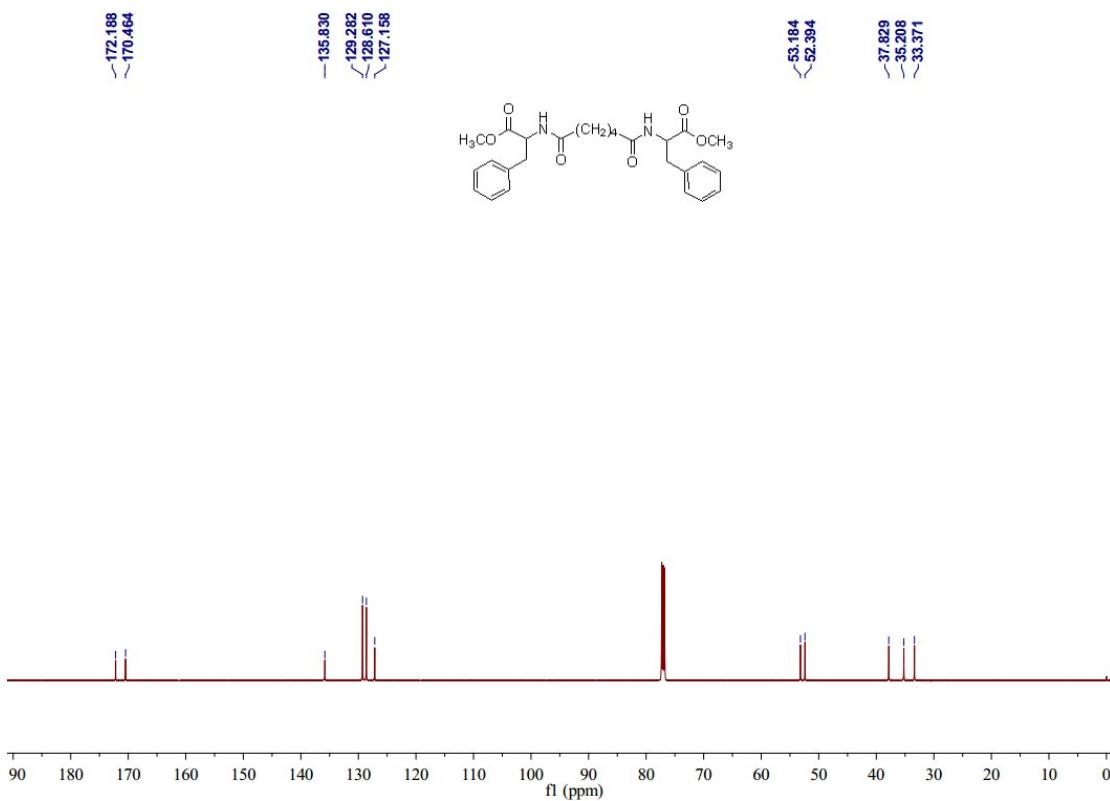


Fig. S5. ^{13}C NMR spectra of **1a**

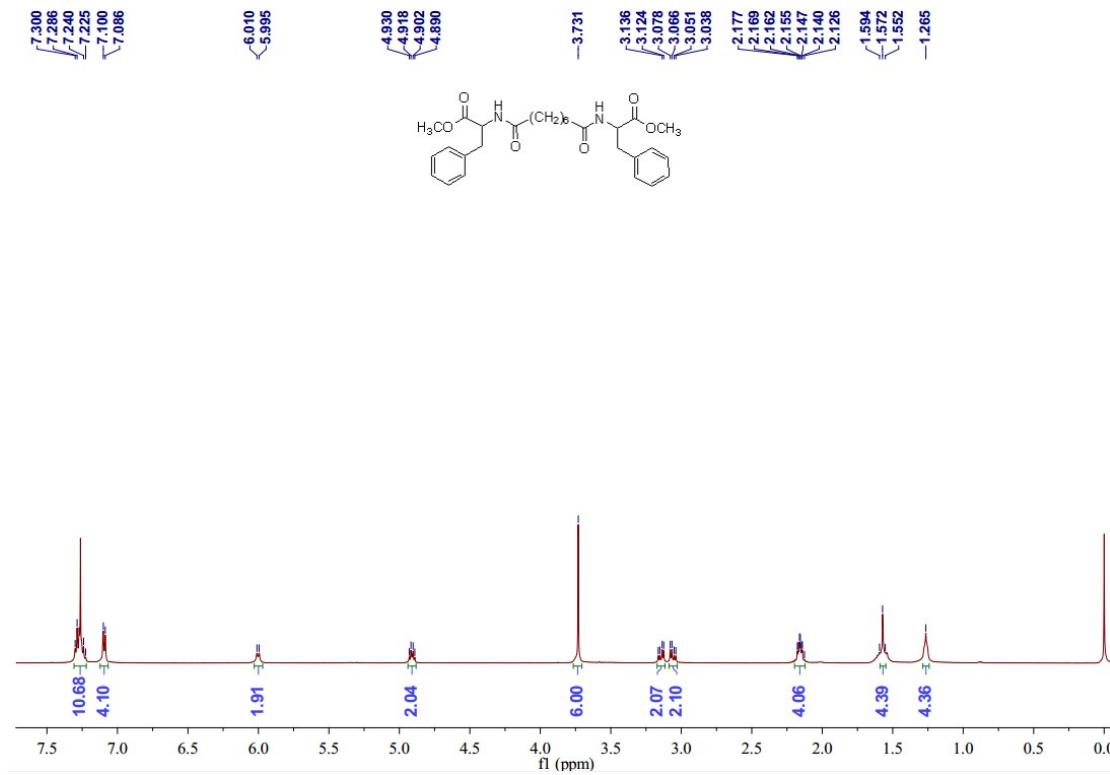


Fig. S6. ^1H NMR spectra of **1b**

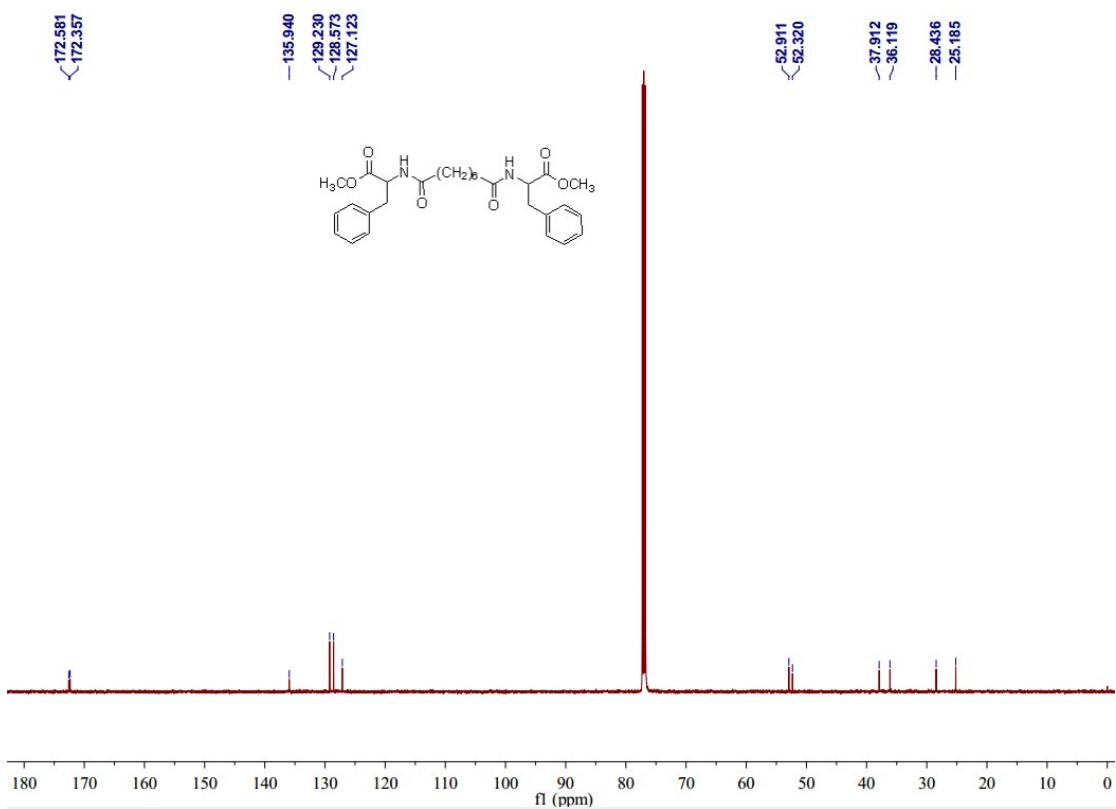


Fig. S7. ^{13}C NMR spectra of **1b**

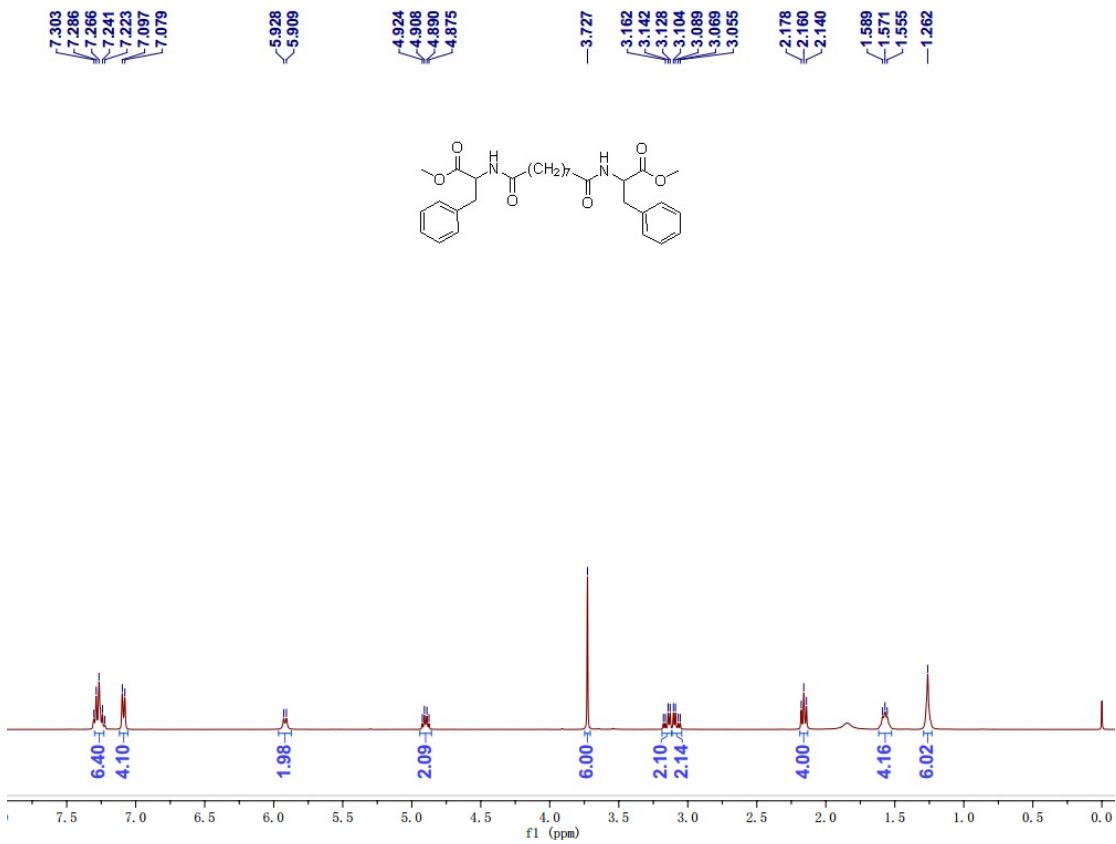


Fig. S8. ^1H NMR spectra of **1c**

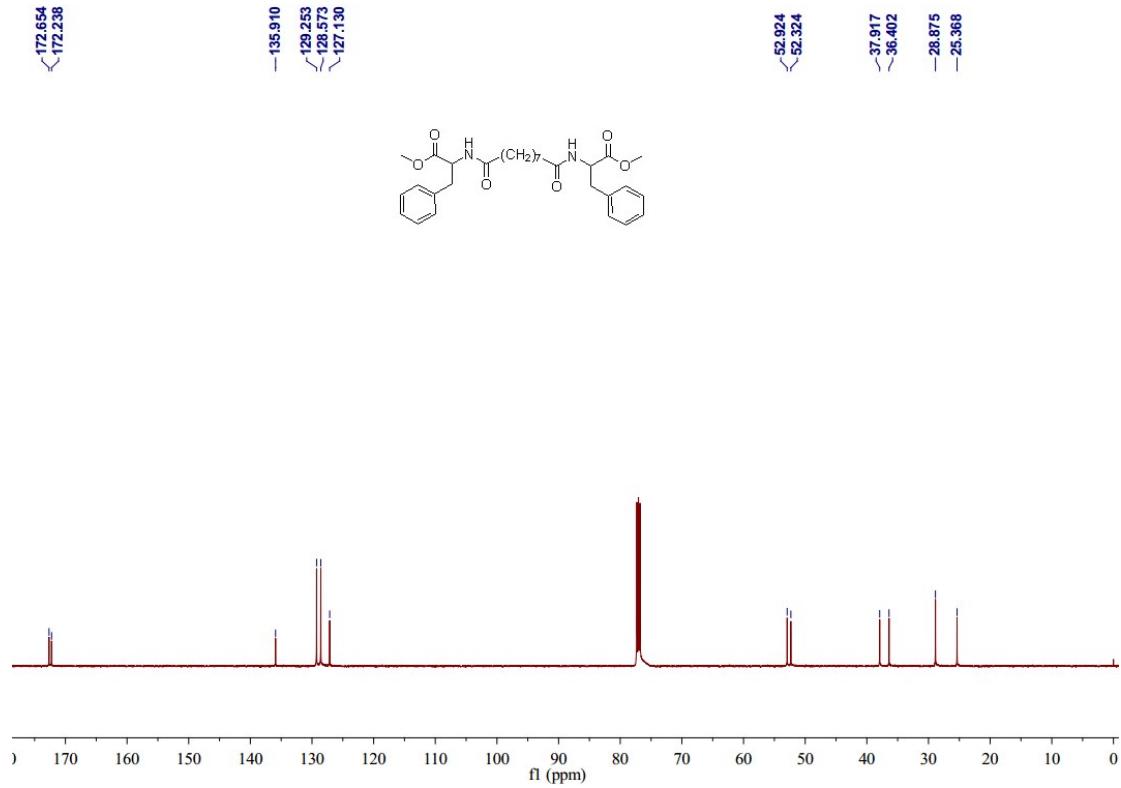


Fig. S9. ^{13}C NMR spectra of **1c**

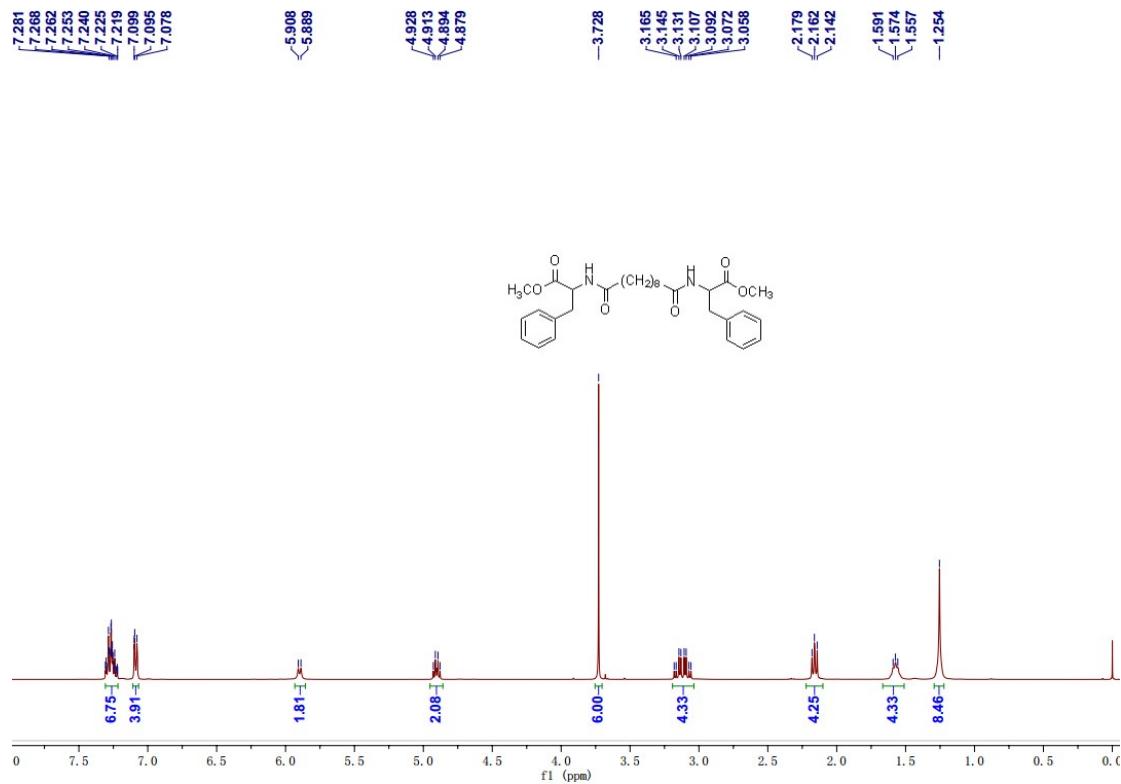
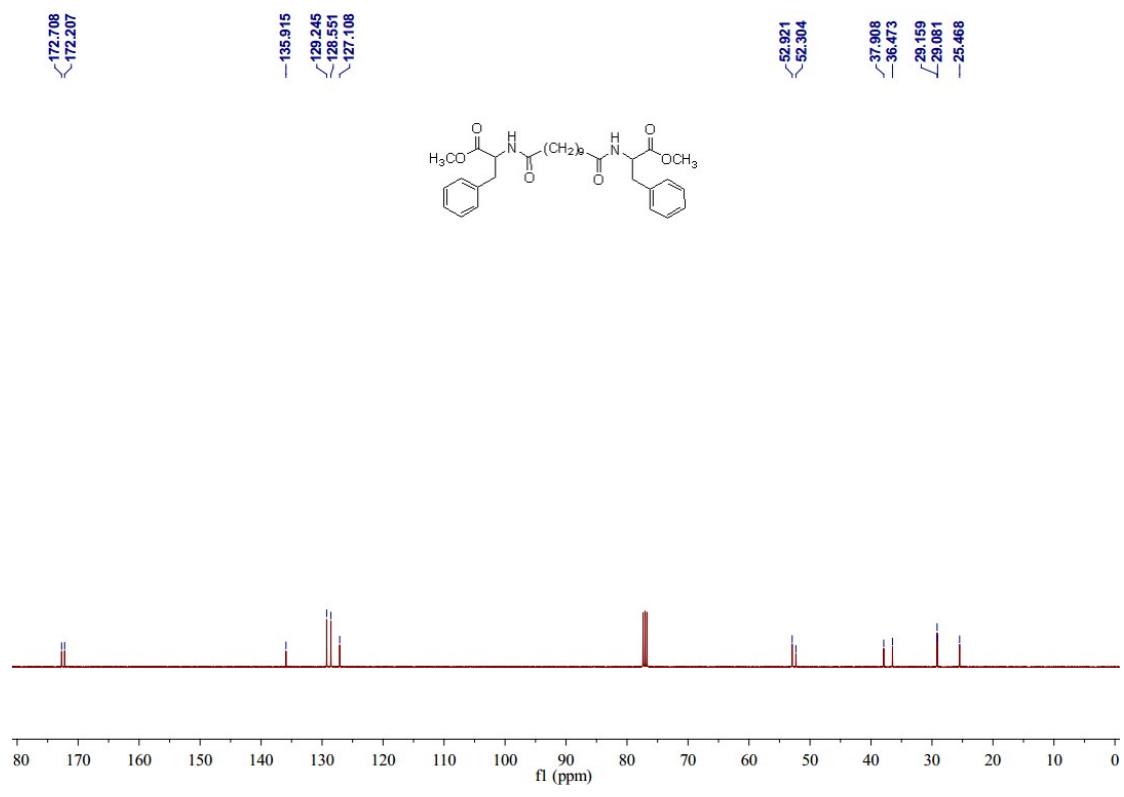
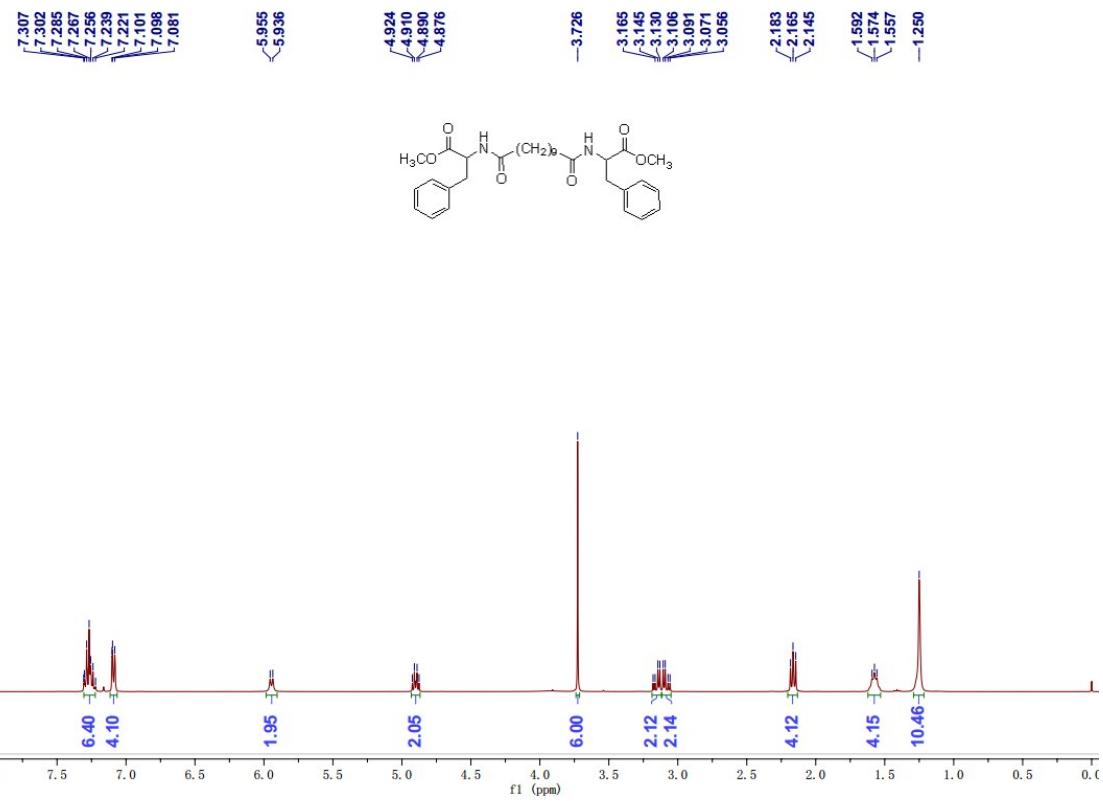


Fig. S10. ^1H NMR spectra of **1d**



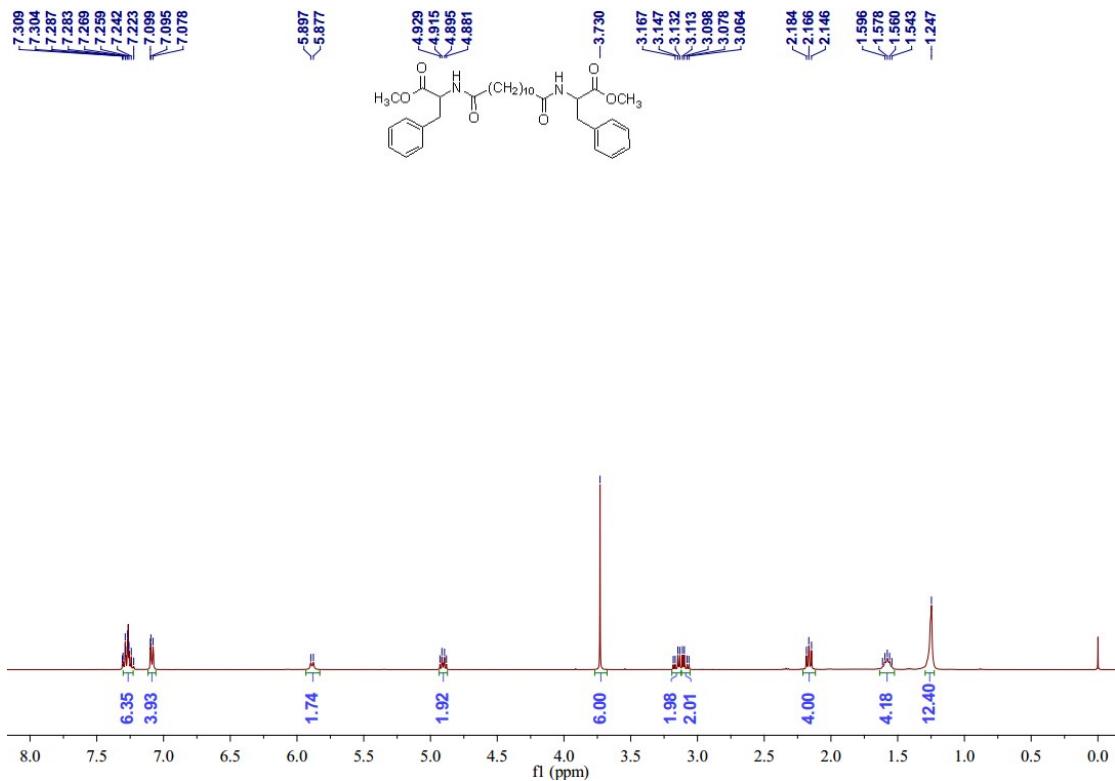


Fig. S13. ^1H NMR spectra of **1f**

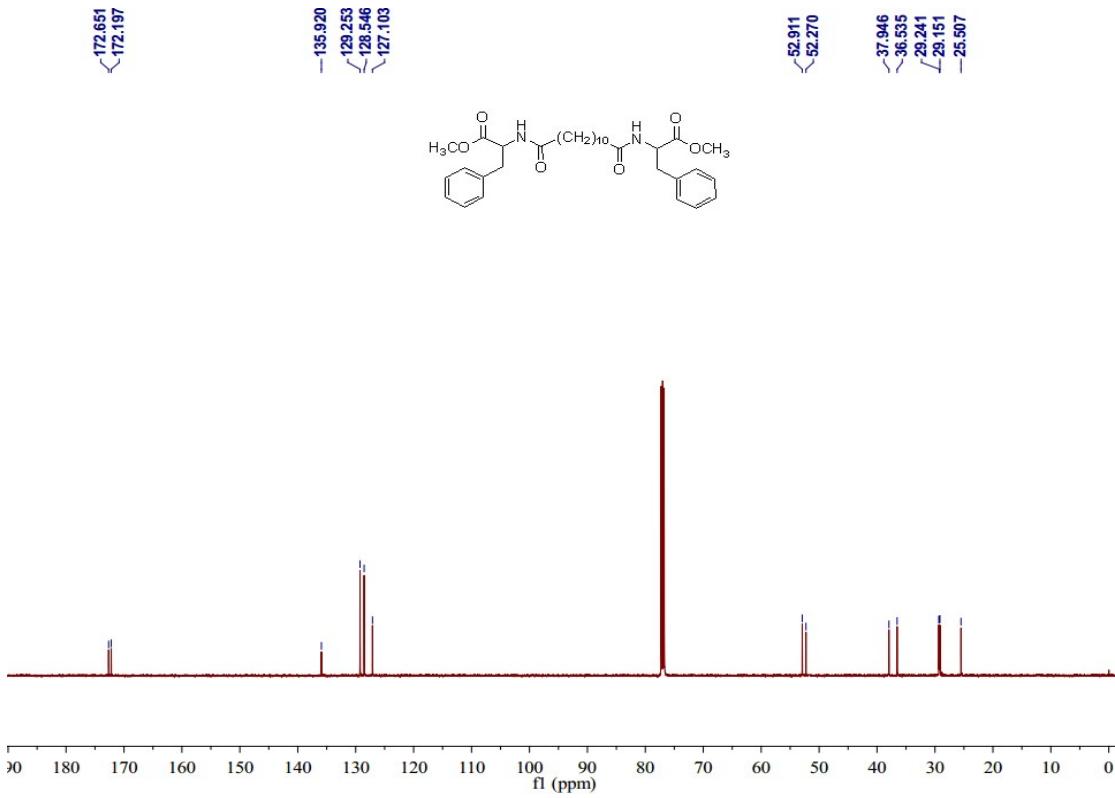
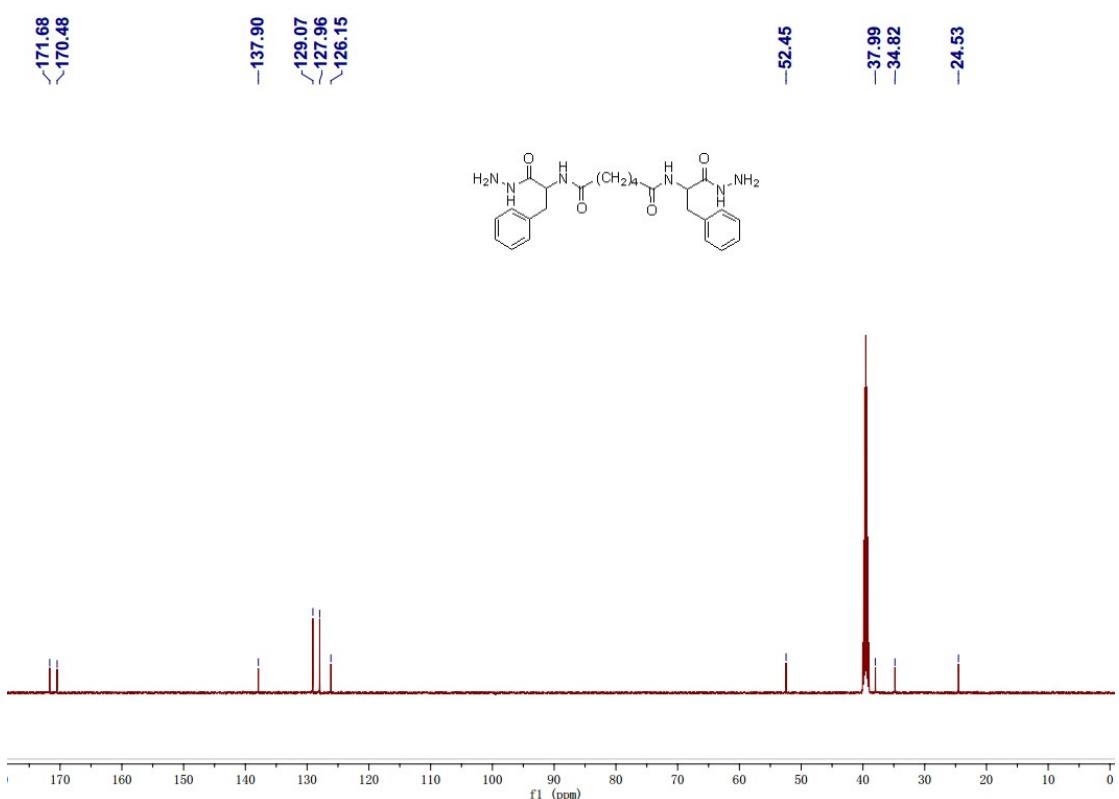
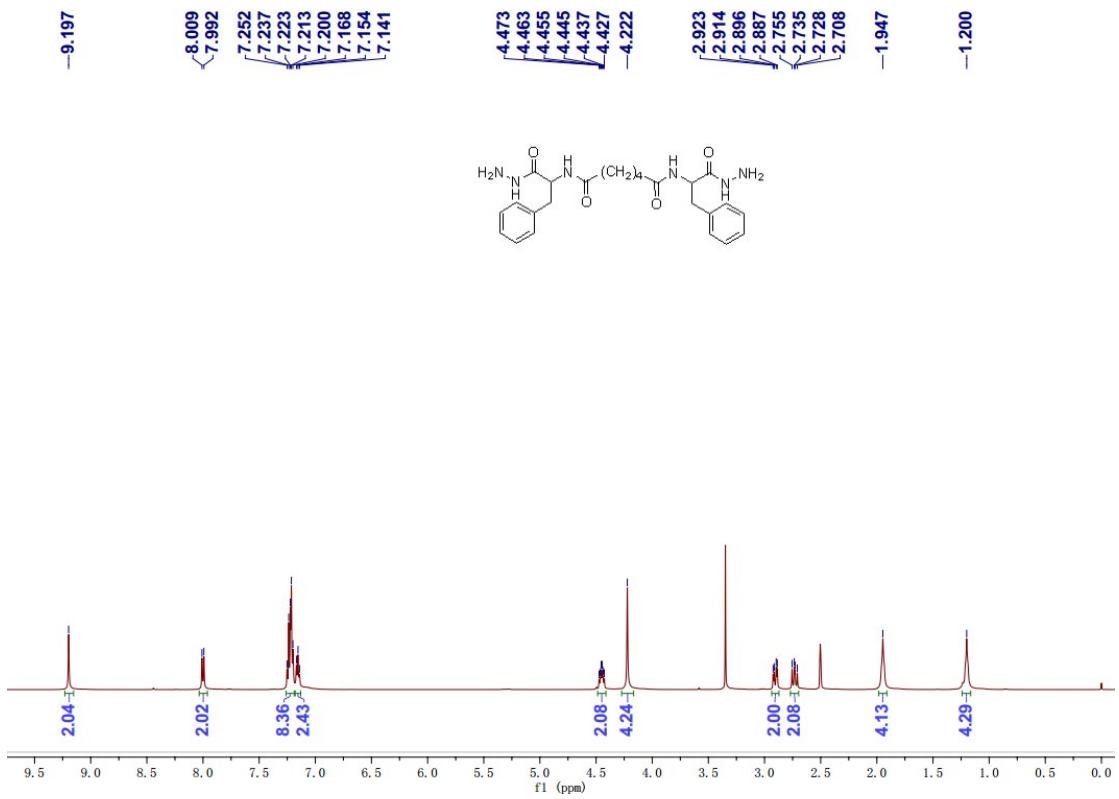


Fig. S14. ^{13}C NMR spectra of **1f**



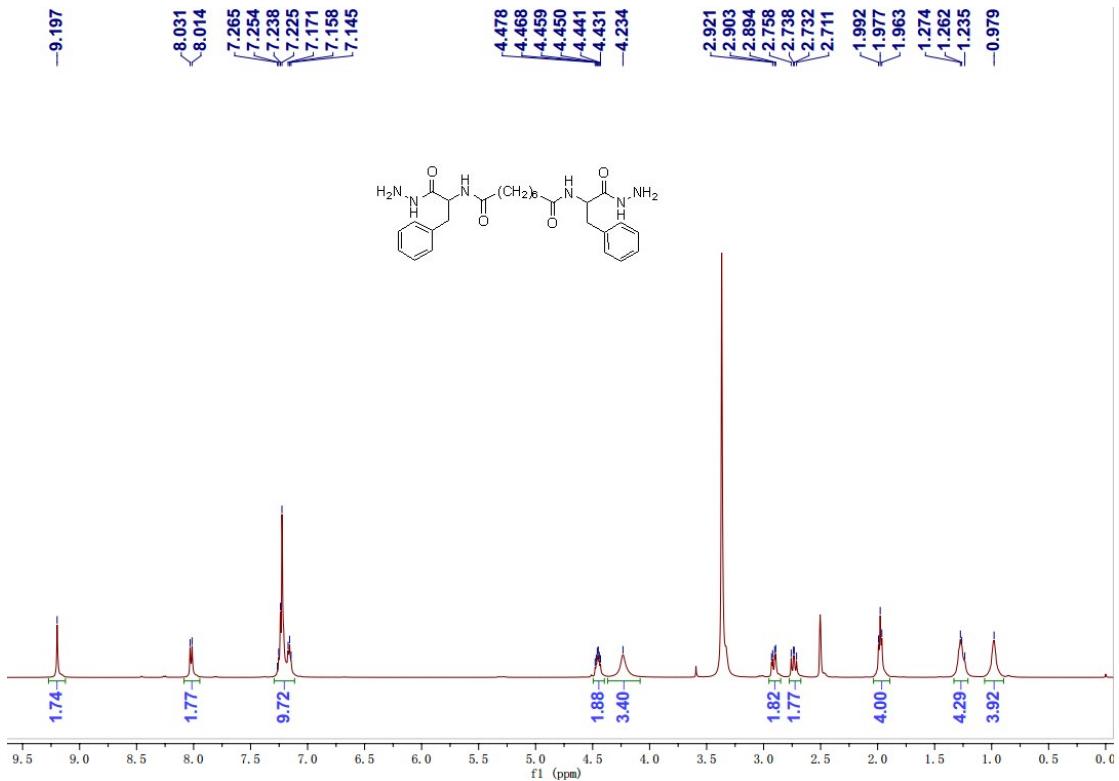


Fig. S17. ^1H NMR spectra of **2b**

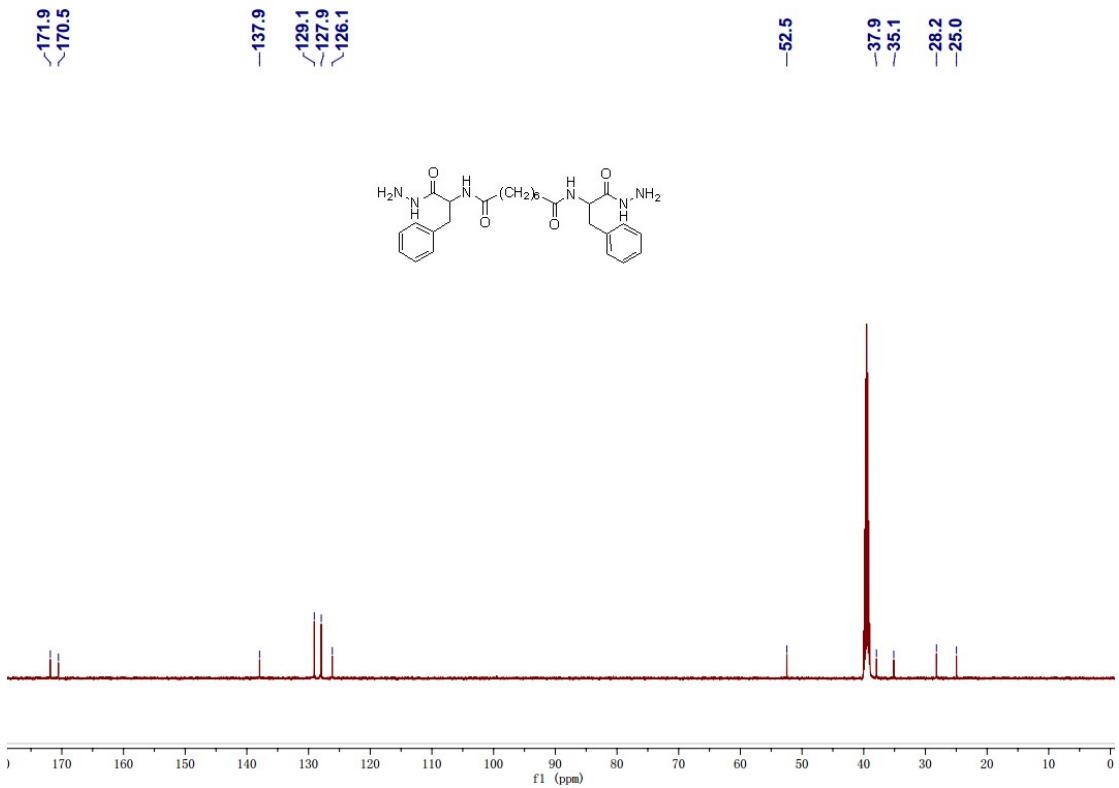


Fig. S18. ^1H NMR spectra of **2b**

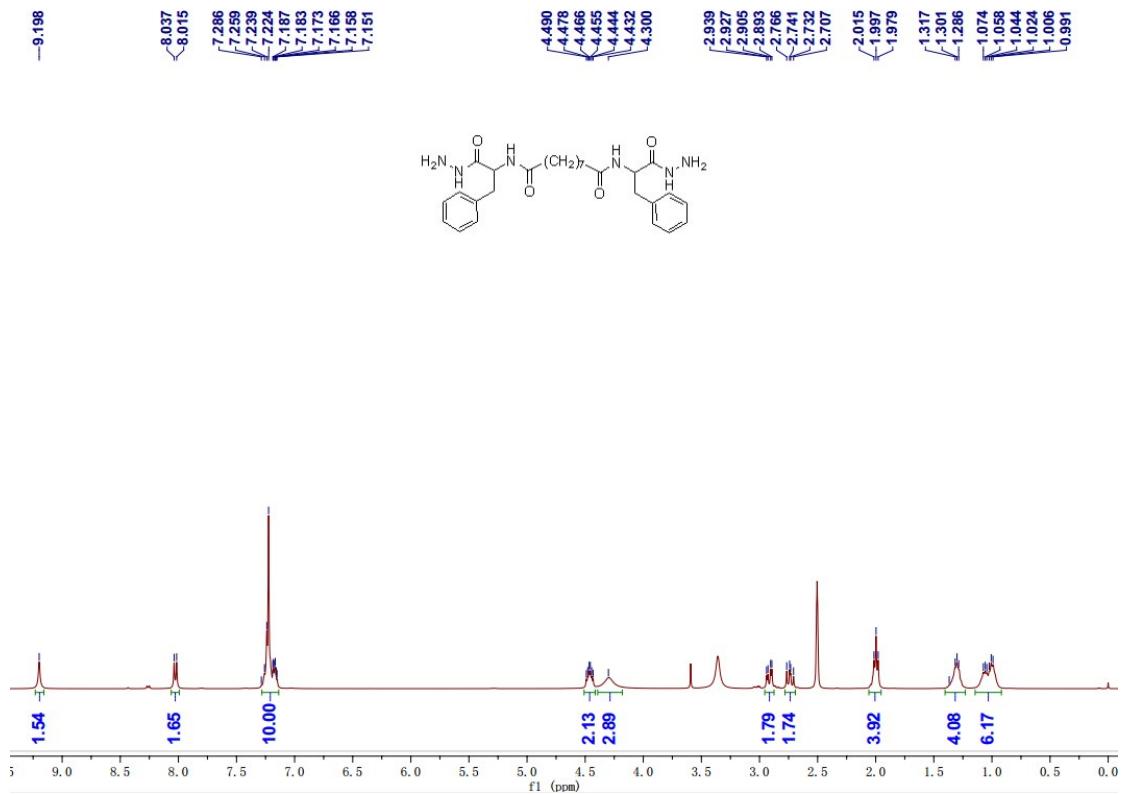


Fig. S19. ^1H NMR spectra of **2c**

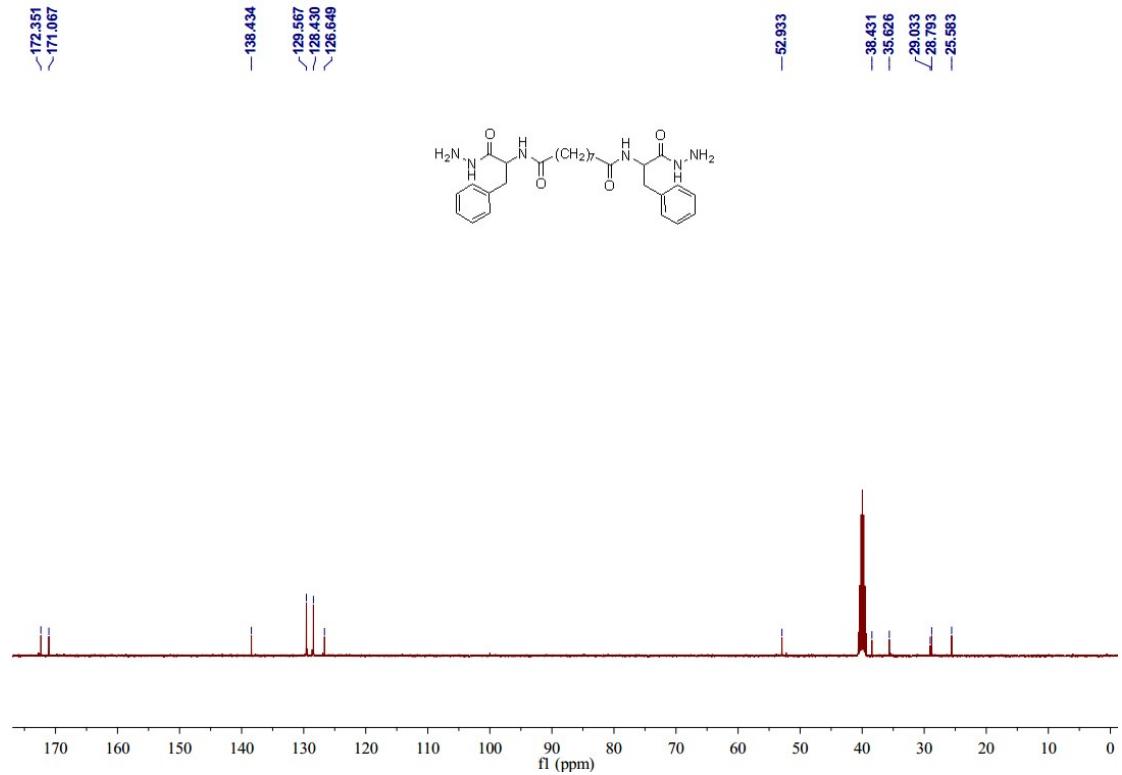


Fig. S20. ^{13}C NMR spectra of **2c**

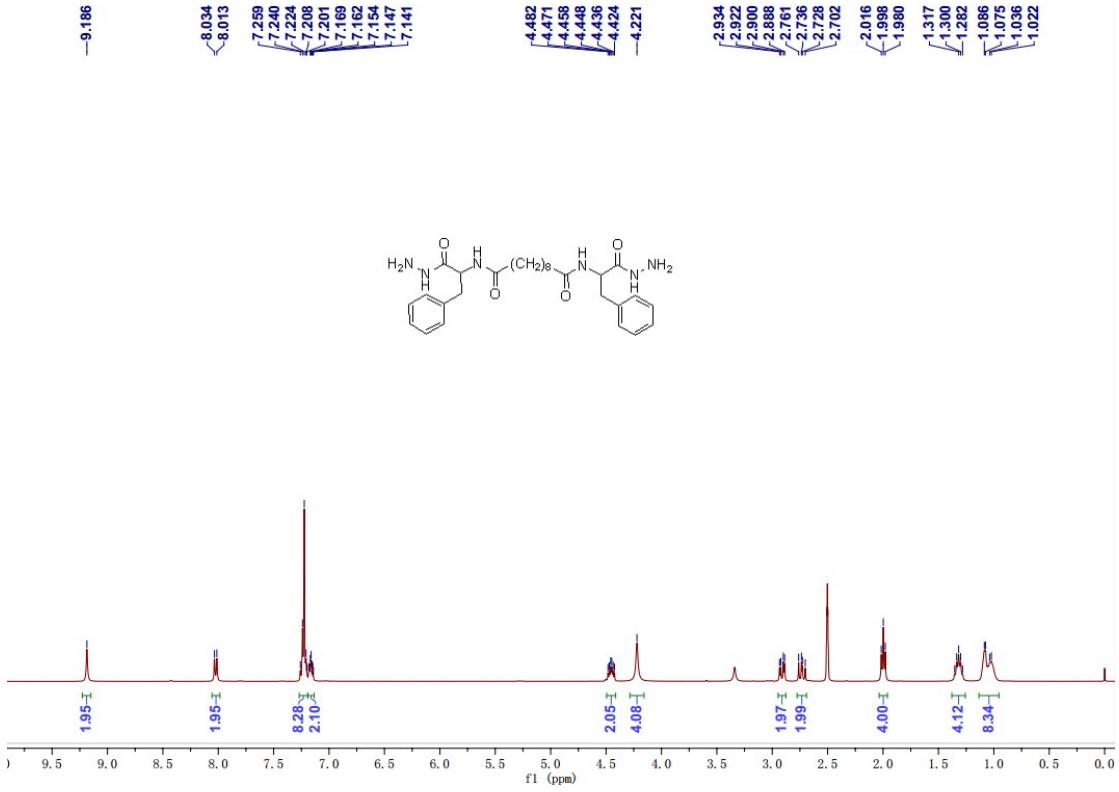


Fig. S21. ^1H NMR spectra of **2d**

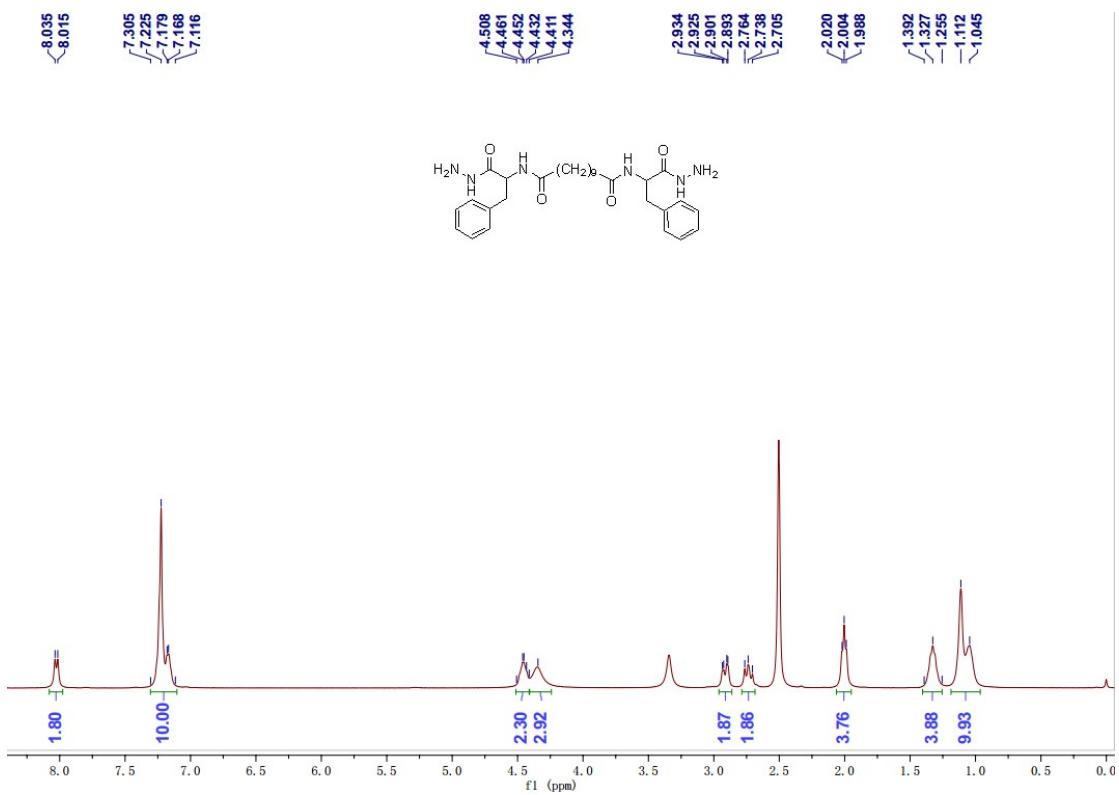


Fig. S22. ^1H NMR spectra of **2e**

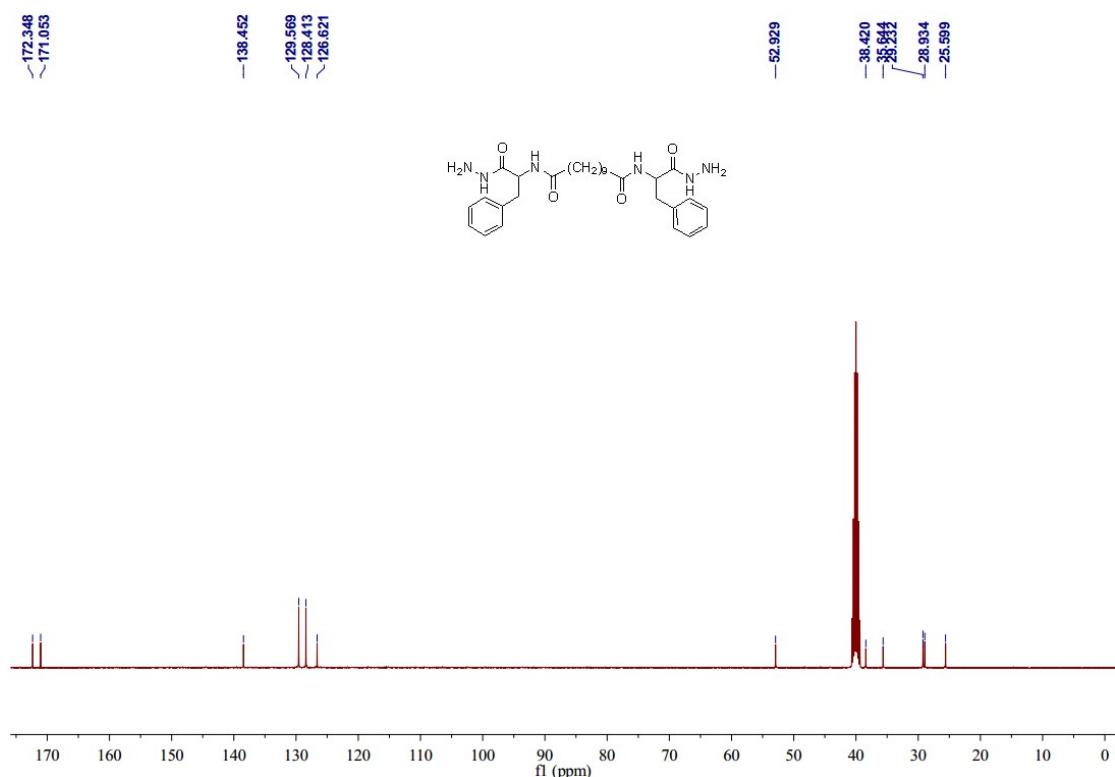


Fig. S23 ¹³C NMR spectra of **2e**

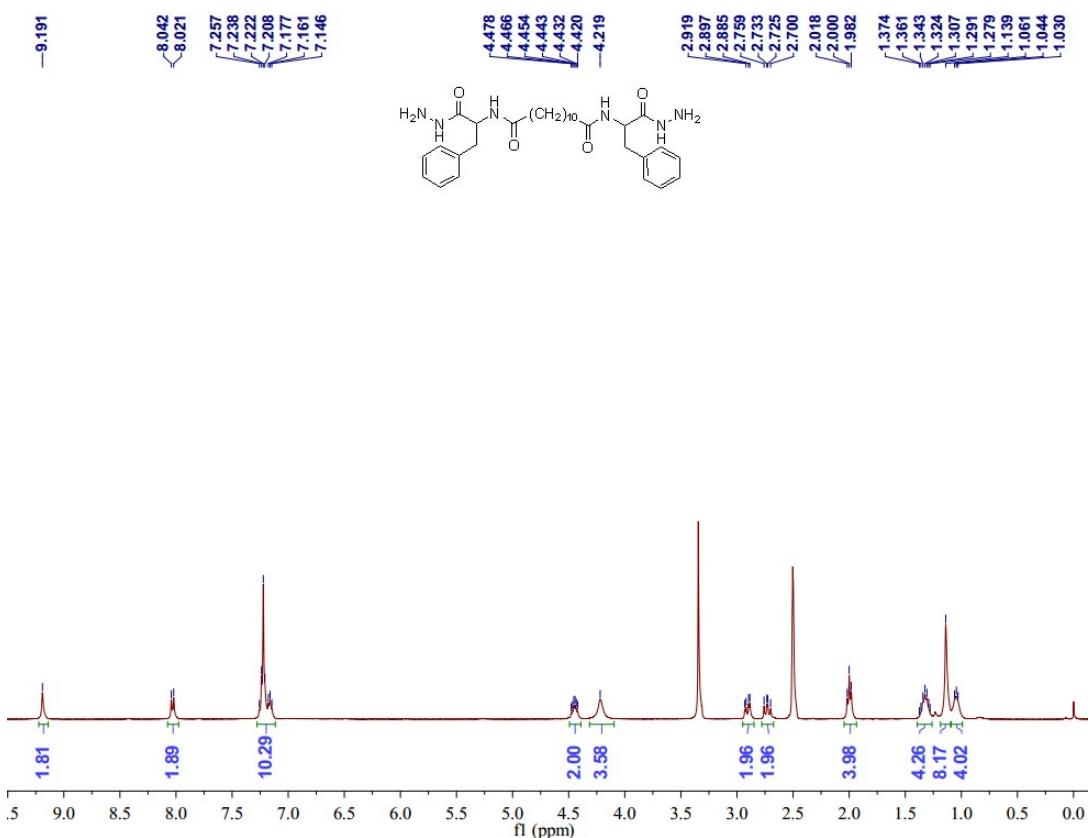


Fig. S24. ¹H NMR spectra of **2f**

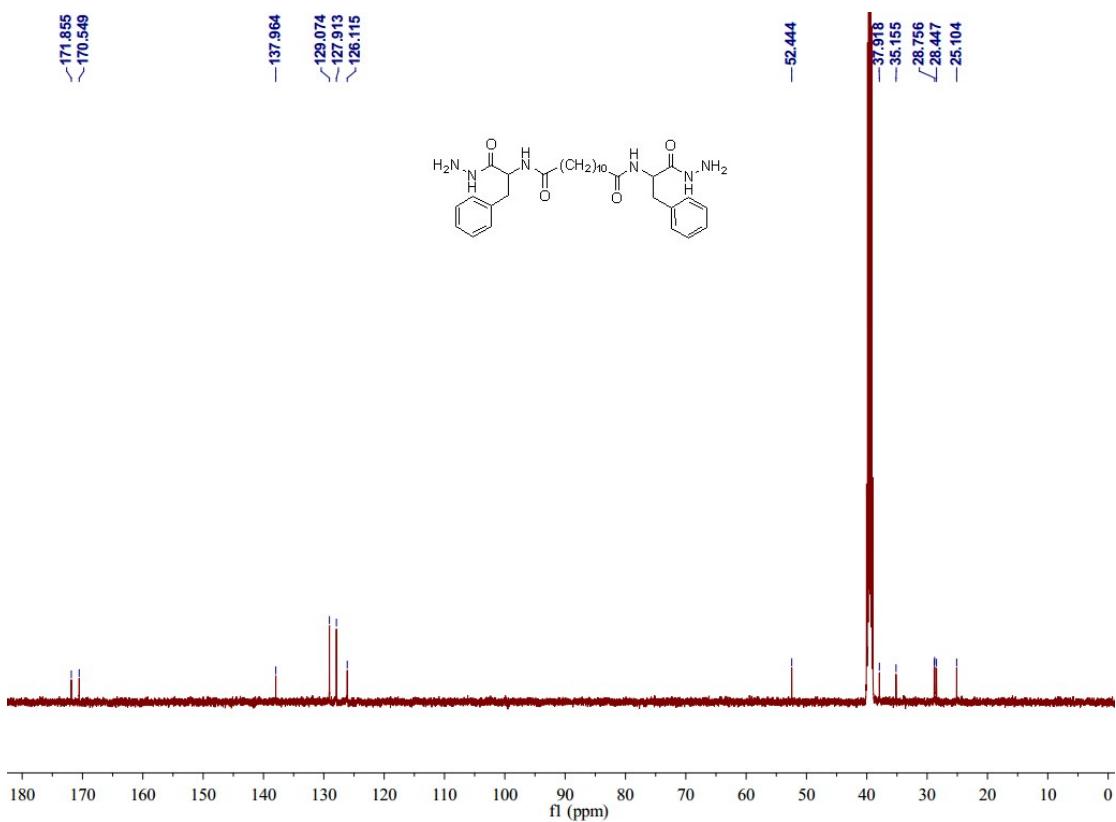


Fig. S23. ^{13}C NMR spectra of **2f**