

## Supporting Information

### A supramolecular topical gel derived from a non steroidal anti-inflammatory drug-fenoprofen capable of treating skin inflammation in mice

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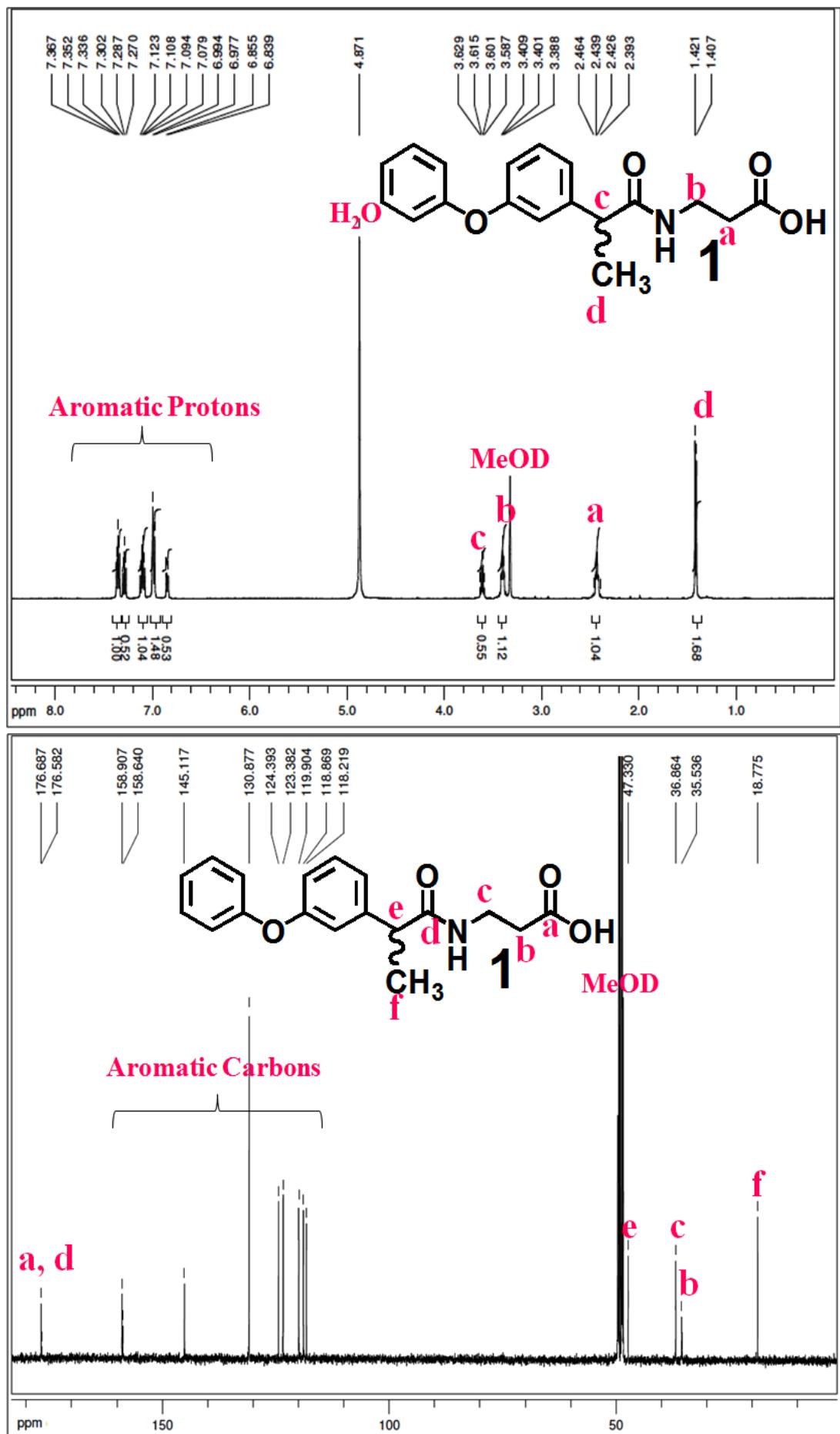


Figure S1:  $^1\text{H}$ -NMR and  $^{13}\text{C}$ -NMR spectra of **1** in MeOD.

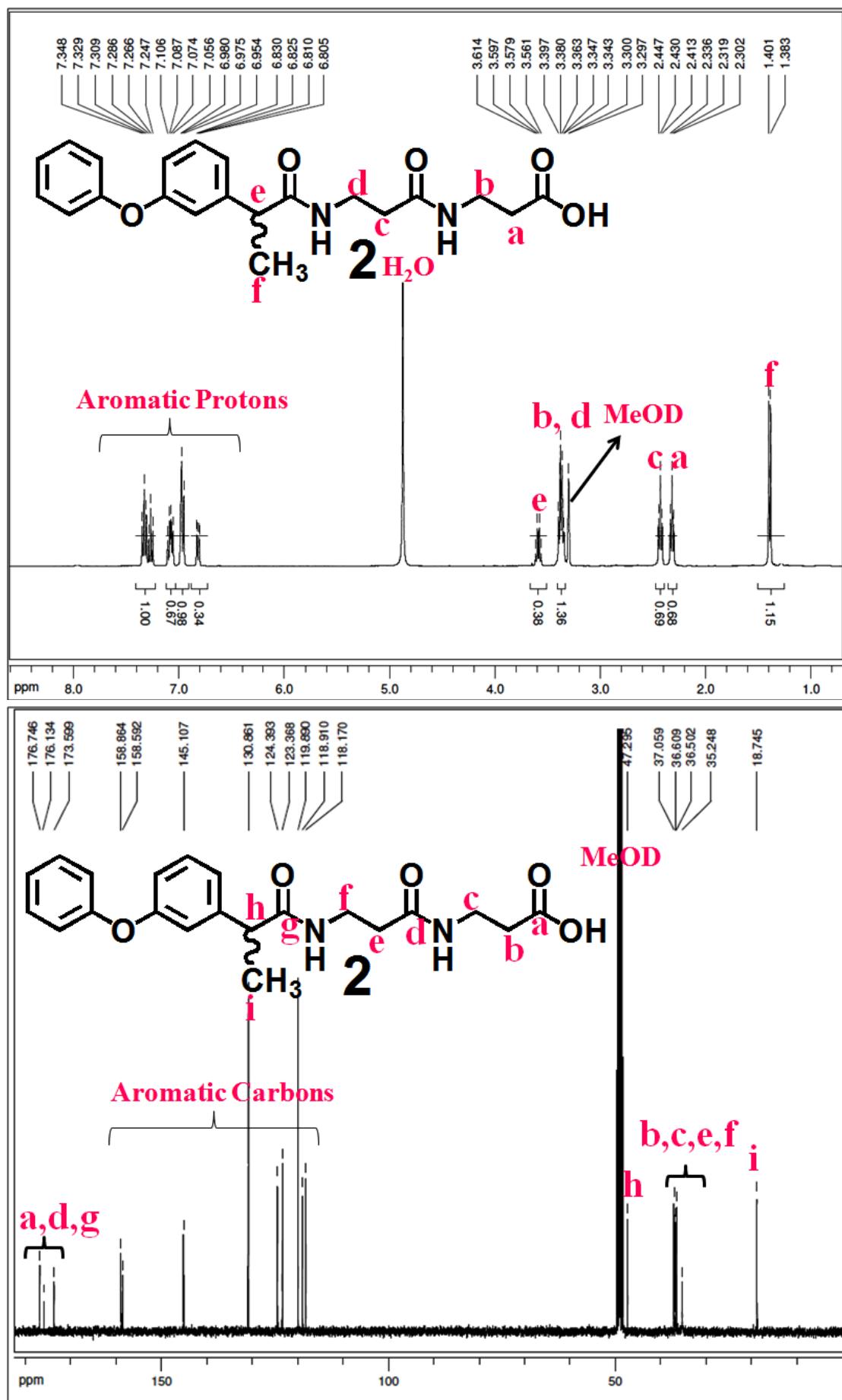
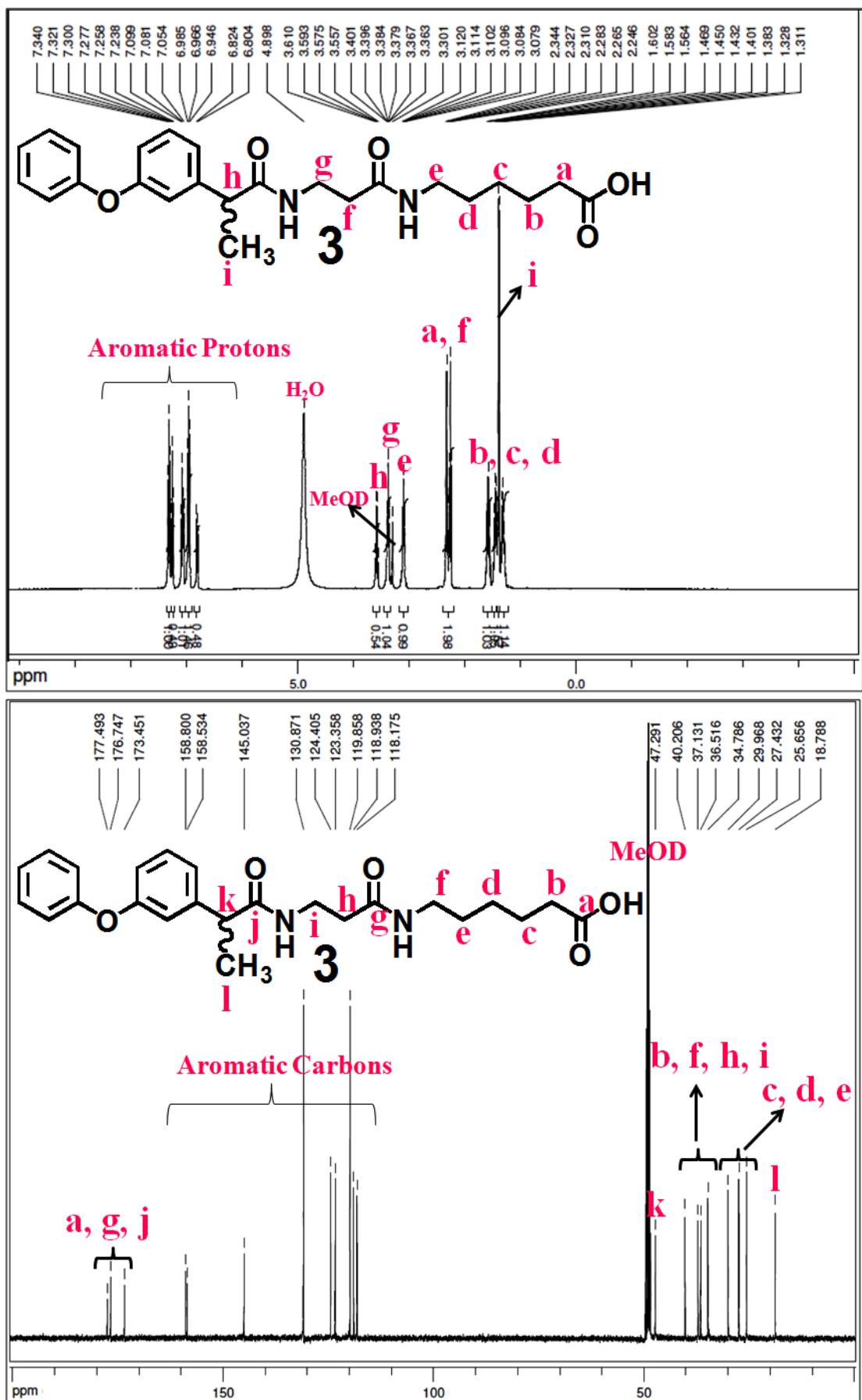


Figure S2:  $^1\text{H}$ -NMR and  $^{13}\text{C}$ -NMR spectra of **2** in MeOD.



**Figure S3:**  $^1\text{H}$ -NMR and  $^{13}\text{C}$ -NMR spectra of **3** in MeOD.

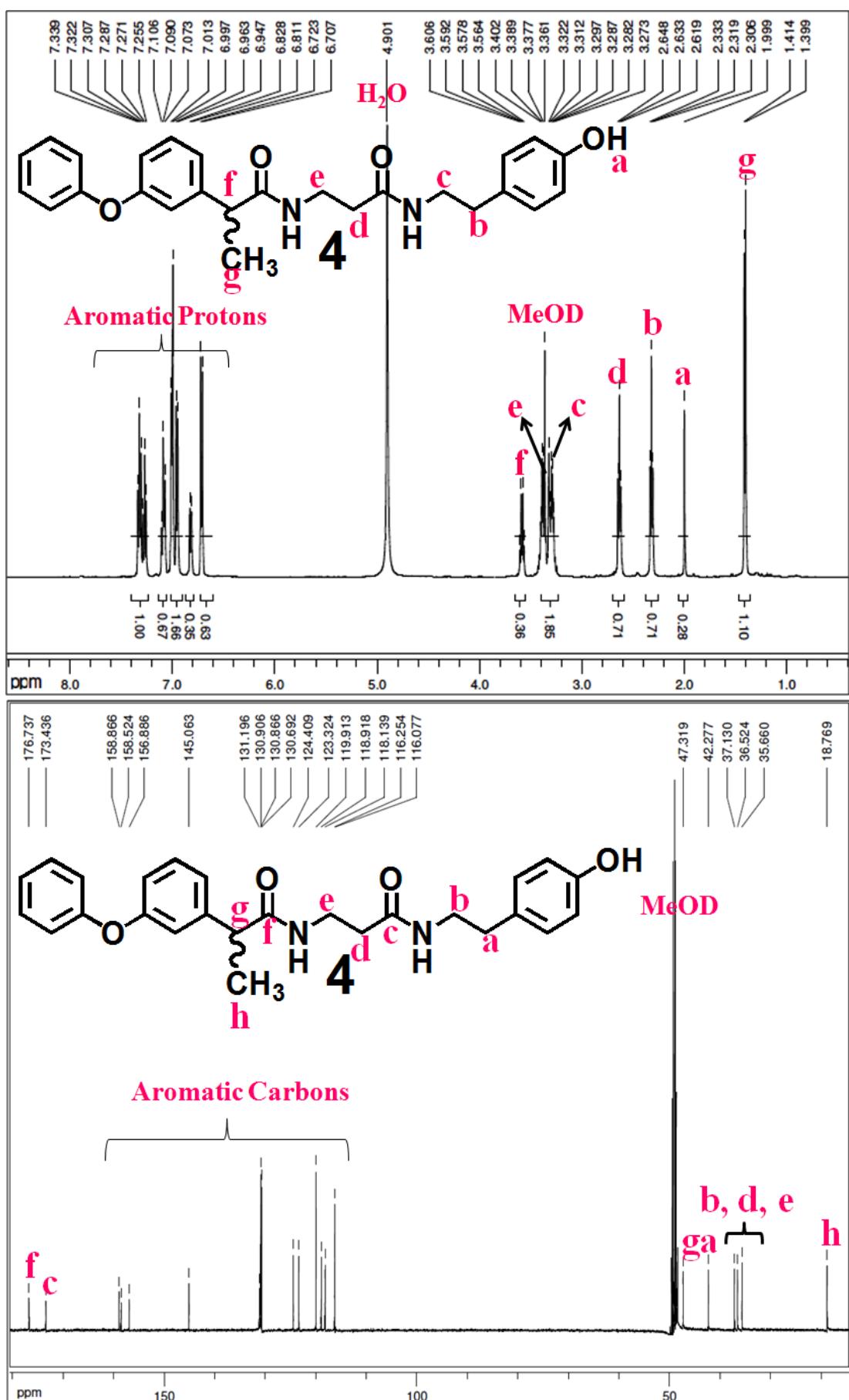
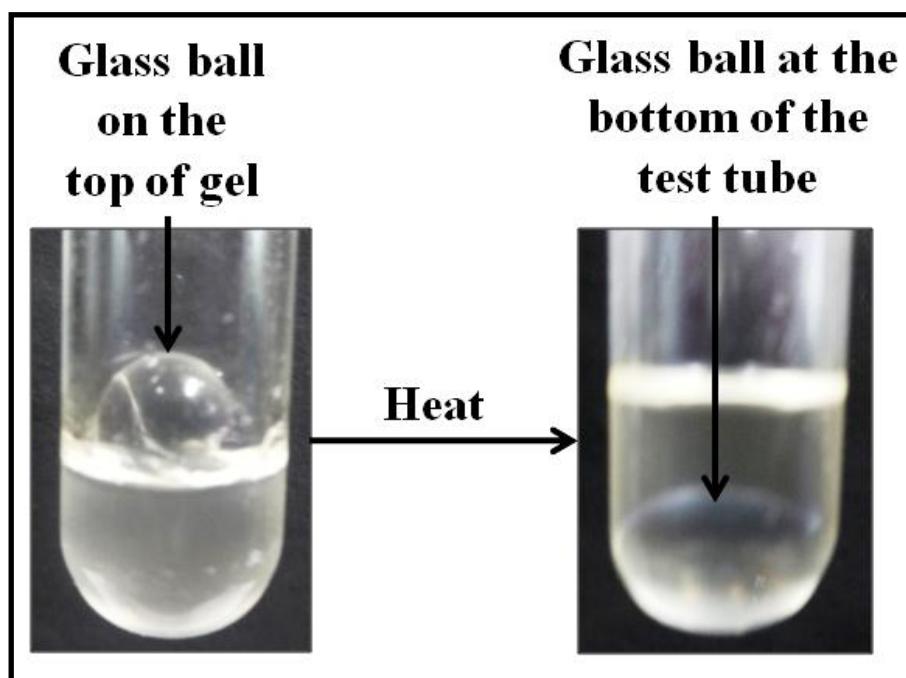


Figure S4:  $^1\text{H}$ -NMR and  $^{13}\text{C}$ -NMR spectra of **4** in MeOD.

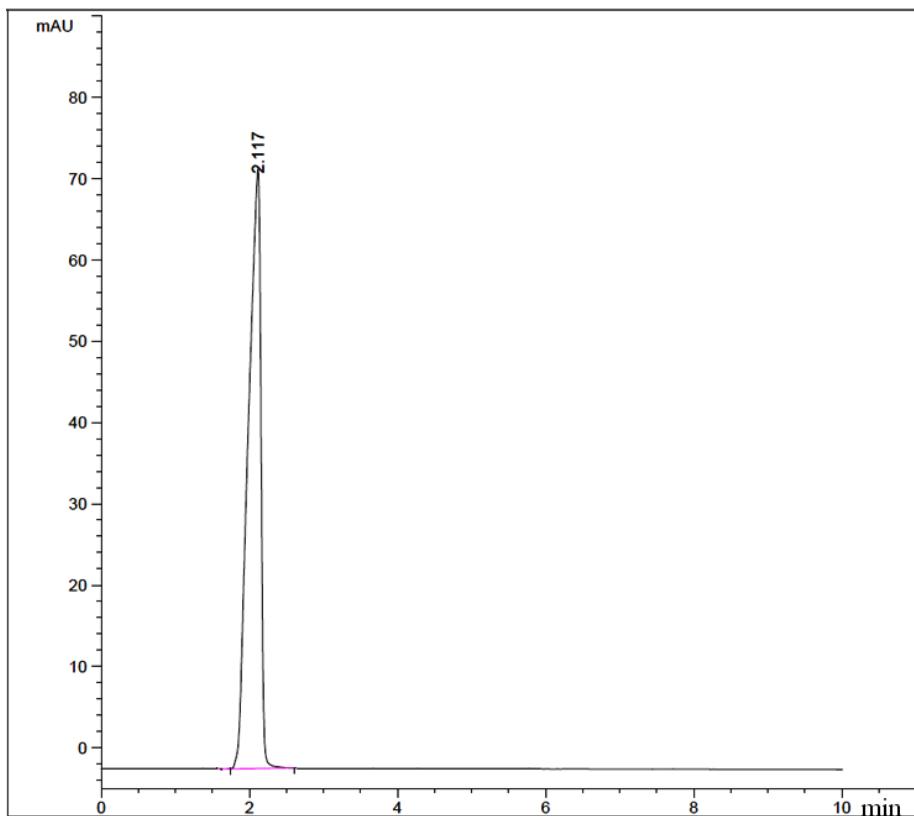
**Table S1:** Gelation data of fenoprofen derivatives **1-4**<sup>a</sup>.

Solvent/Compounds	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Water	P	CS	CS	P
Methylsalicylate	S	Gel MGC=3.0 wt %	S	S
Methylsalicylate And 1 % Menthol	S	Gel MGC=3.0 wt %	S	S

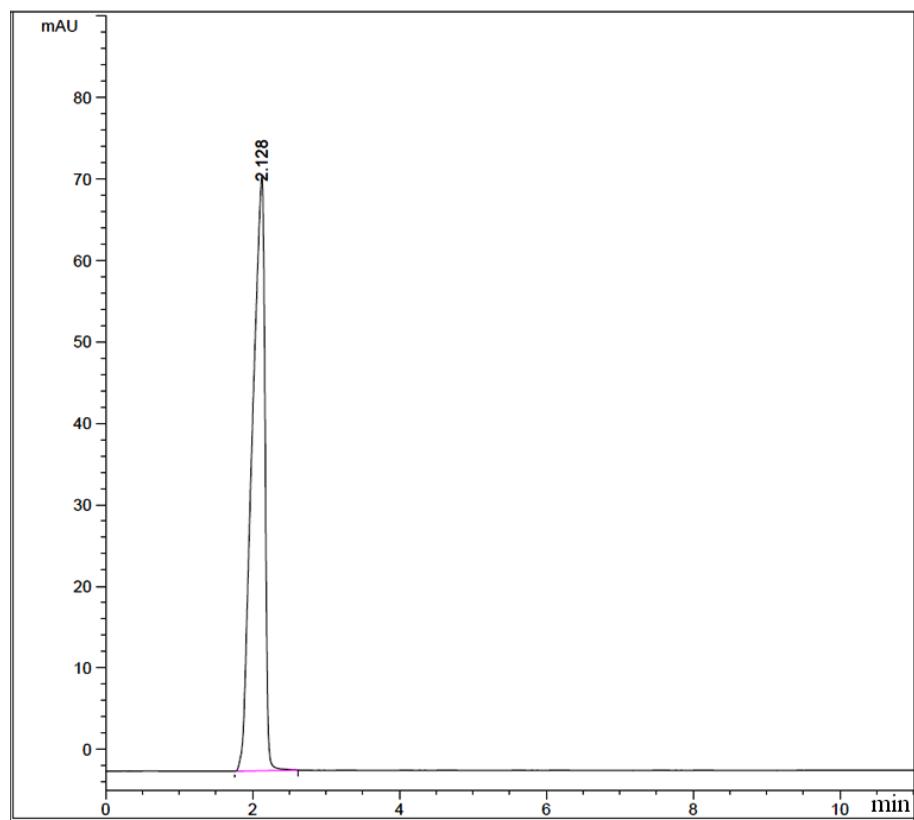
<sup>a</sup> P = Precipitate, S = Soluble, CS = Colloidal solution, MGC = minimum gelator concentration.



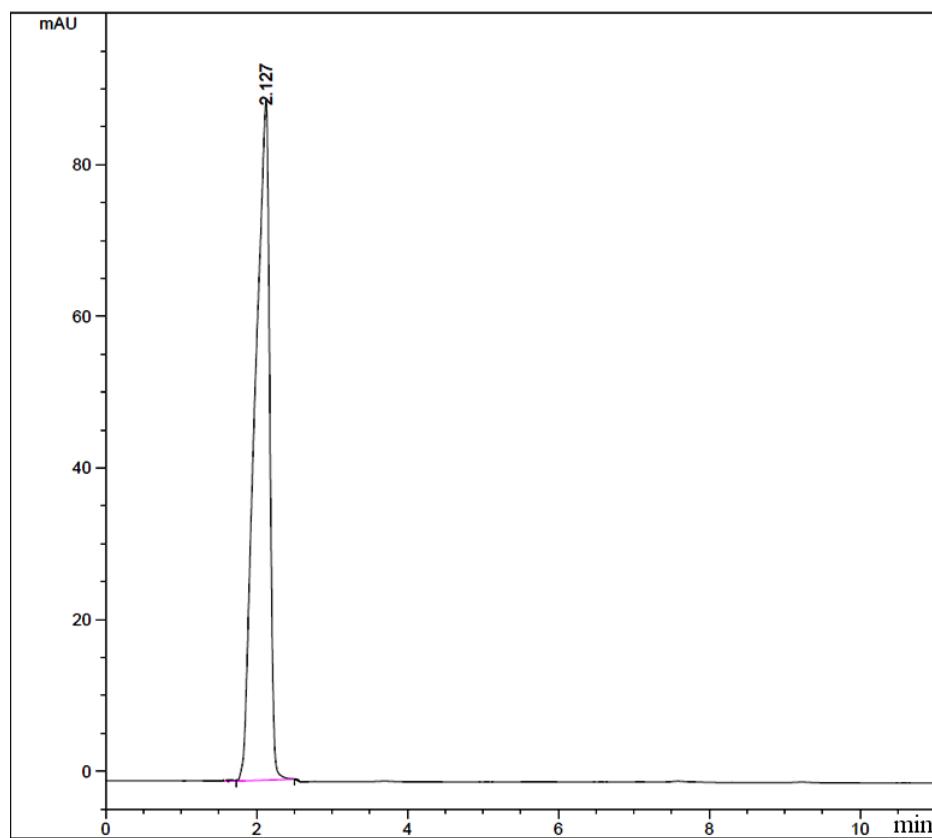
**Figure S5:** Dropping ball experiment for  $T_{\text{gel}}$  determination.



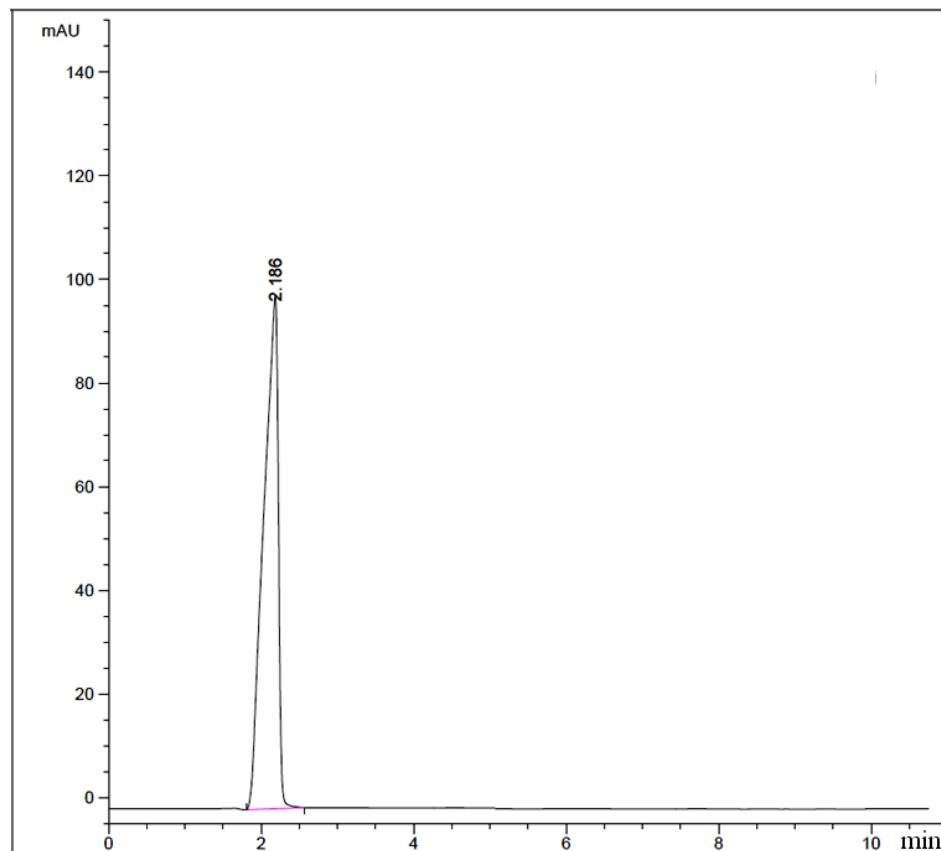
**Figure S6:** Standard HPLC trace of the gelator **2**.



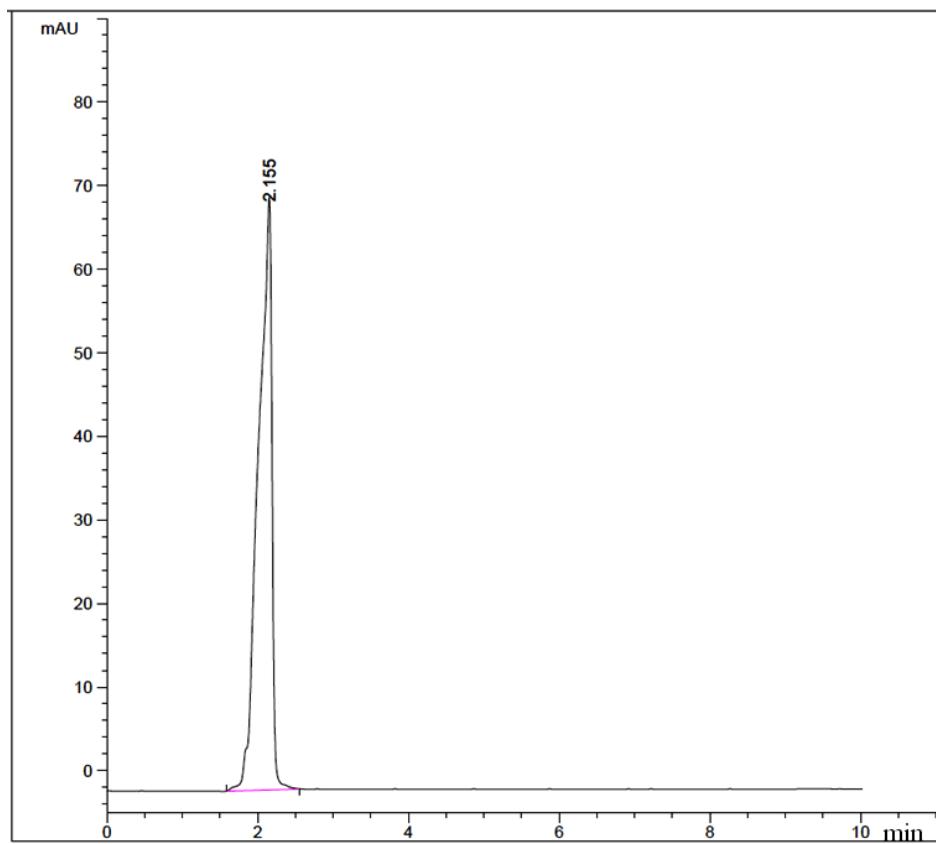
**Figure S7:** HPLC traces of gelator **2** after 72 h incubation with PBS at 37° C.



**Figure S8:** HPLC traces of gelator **2** after 72 h incubation with carboxypeptidase-Y at 25° C.



**Figure S9:** HPLC traces of gelator **2** after 72 h incubation with aminopeptidase at 25° C.



**Figure S10:** HPLC traces of gelator **2** after 72 h incubation with blood serum of BALB/c mouse at 37° C.