

## Supplementary Information

### Exploration of lignin-binding synthetic polymers with pendant amino acids

Tomonari Tanaka,<sup>\*a</sup> Rika Hinohara,<sup>a</sup> Oscar Abraham Carias Duron,<sup>a</sup> Yuji Aso,<sup>a</sup>  
Naoko Kobayashi,<sup>b</sup> Kaori Saito,<sup>b</sup> Takashi Watanabe<sup>b</sup>

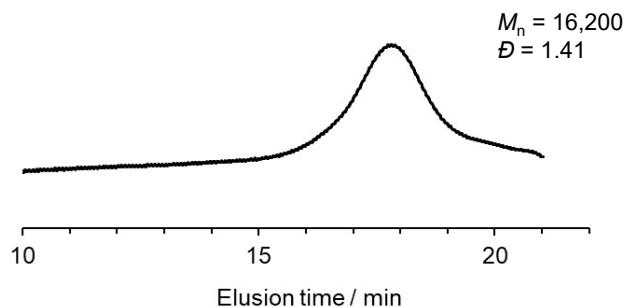
<sup>a</sup> Department of Biobased Materials Science, Graduate School of Science and Technology, Kyoto Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto 606-8585, Japan.

<sup>b</sup> Biomass Product Tree Industry-Academia Collaborative Research Unit, Research Institute for Sustainable Humanosphere, Kyoto University, Gokasho, Uji, Kyoto 611-0011, Japan.

## **Contents**

<b>1. SEC chromatogram.....</b>	<b>1</b>
<b>2. NMR spectra .....</b>	<b>2</b>

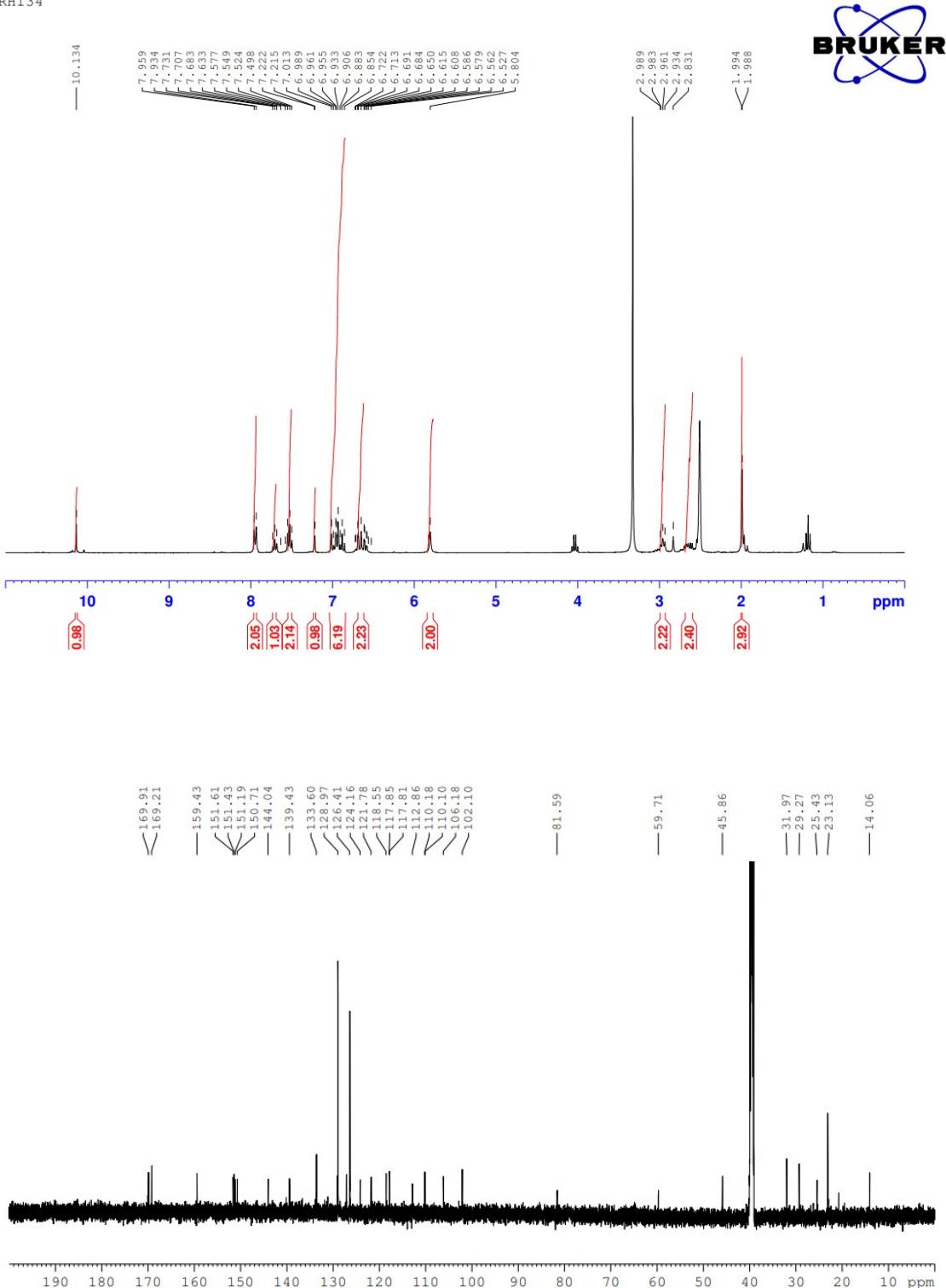
## 1. SEC chromatogram



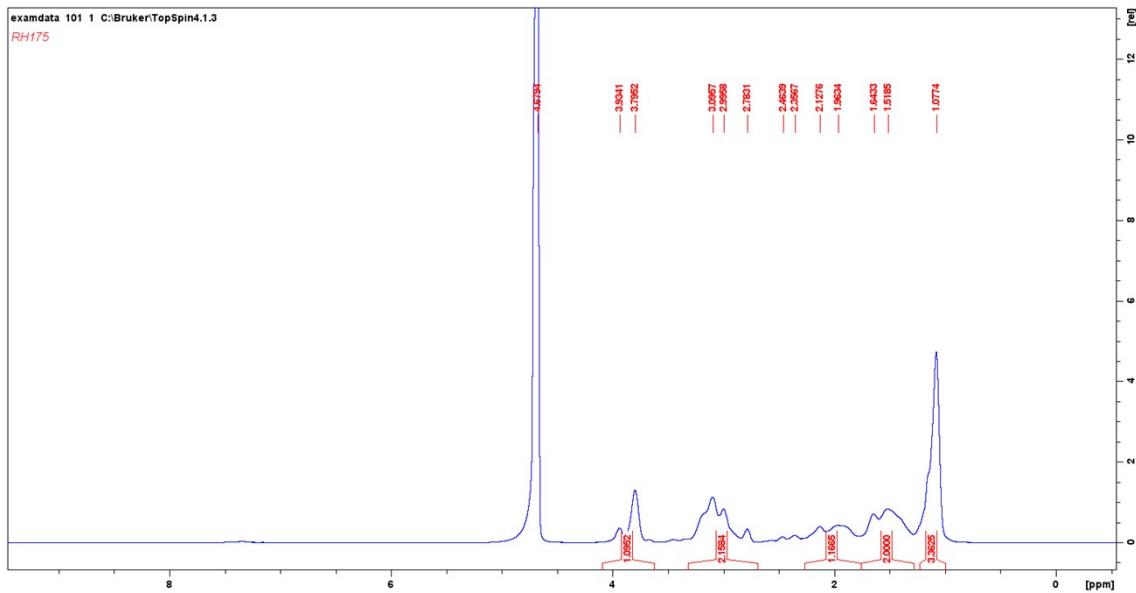
**Fig. S1** SEC chromatogram of NHS-polymer.

## 2. NMR spectra

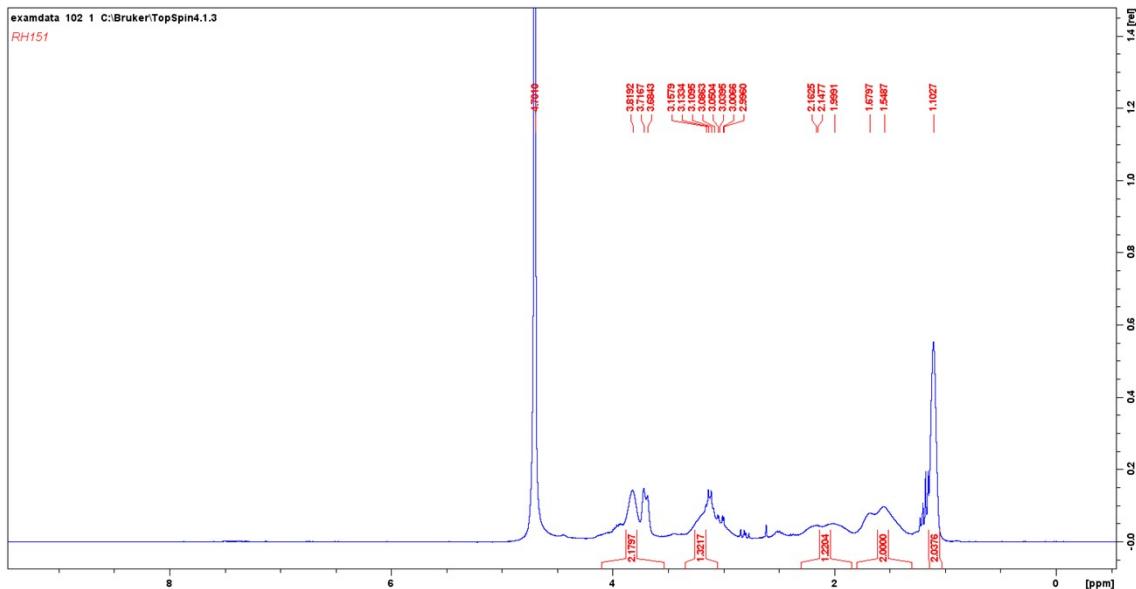
RH134



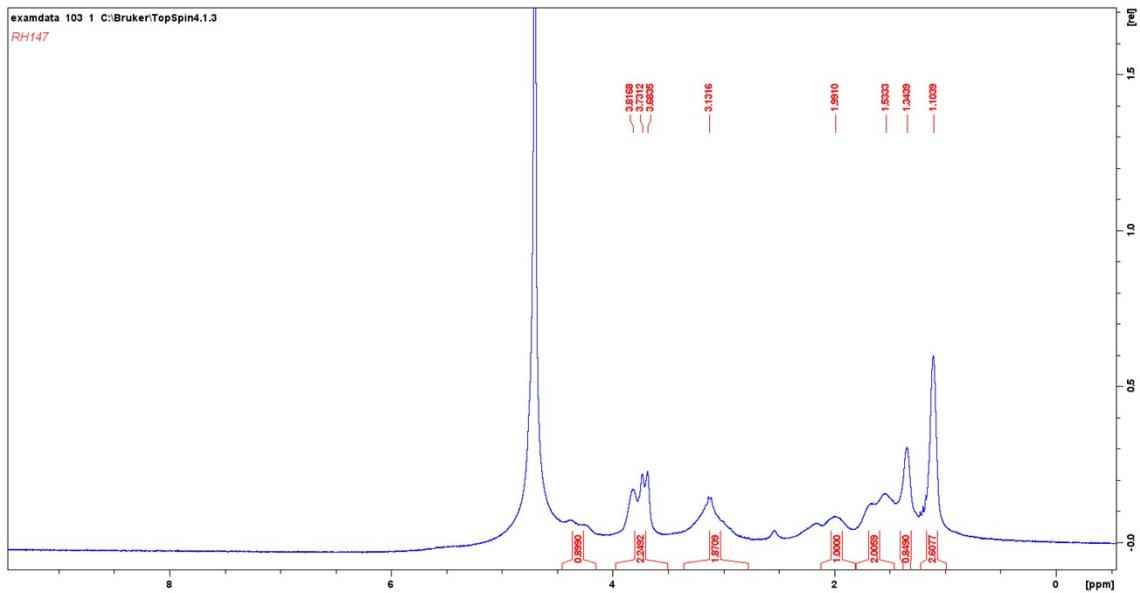
**Fig. S2**  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of fluorescein-bearing CTA in  $\text{DMSO}-d_6$ .



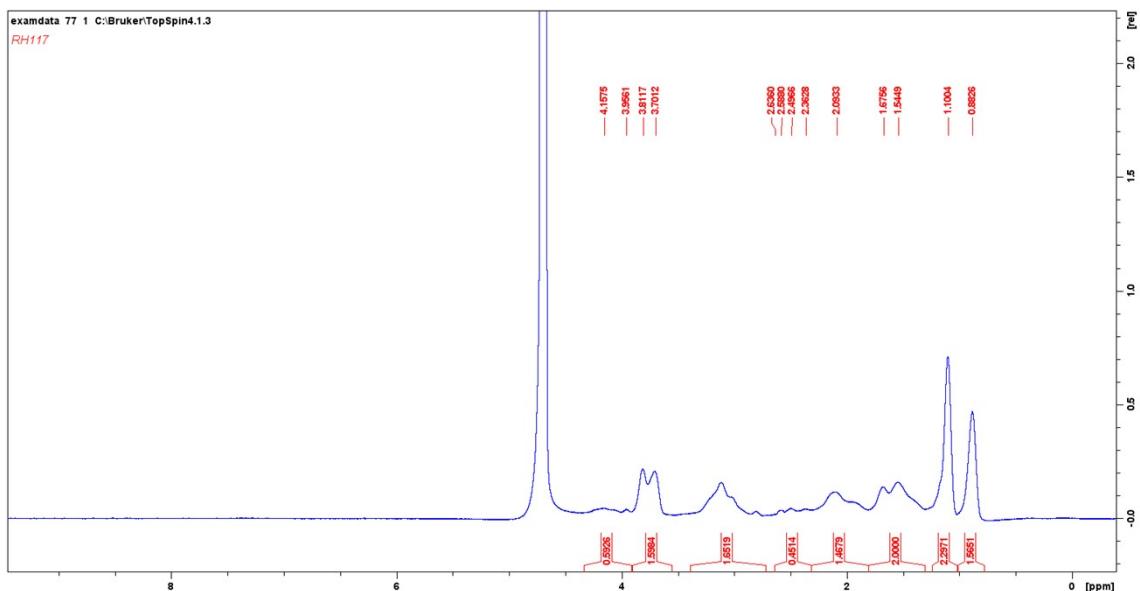
**Fig. S3**  $^1\text{H}$  NMR spectrum of **No AA** in  $\text{D}_2\text{O}$ .



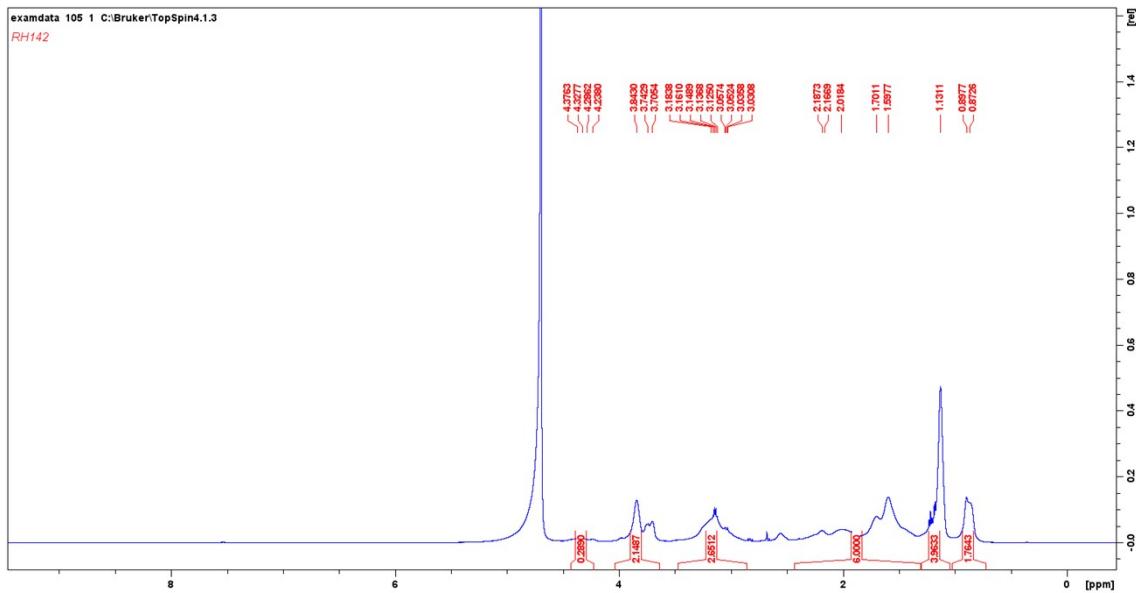
**Fig. S4**  $^1\text{H}$  NMR spectrum of **Gly29** in  $\text{D}_2\text{O}$ .



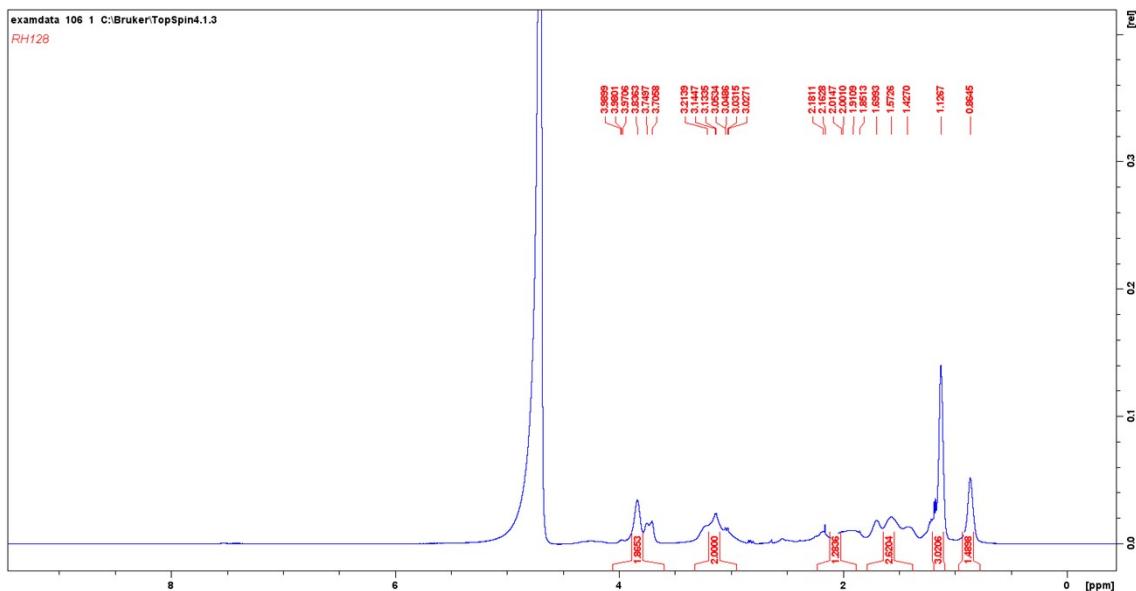
**Fig. S5**  $^1\text{H}$  NMR spectrum of **Ala28** in  $\text{D}_2\text{O}$ .



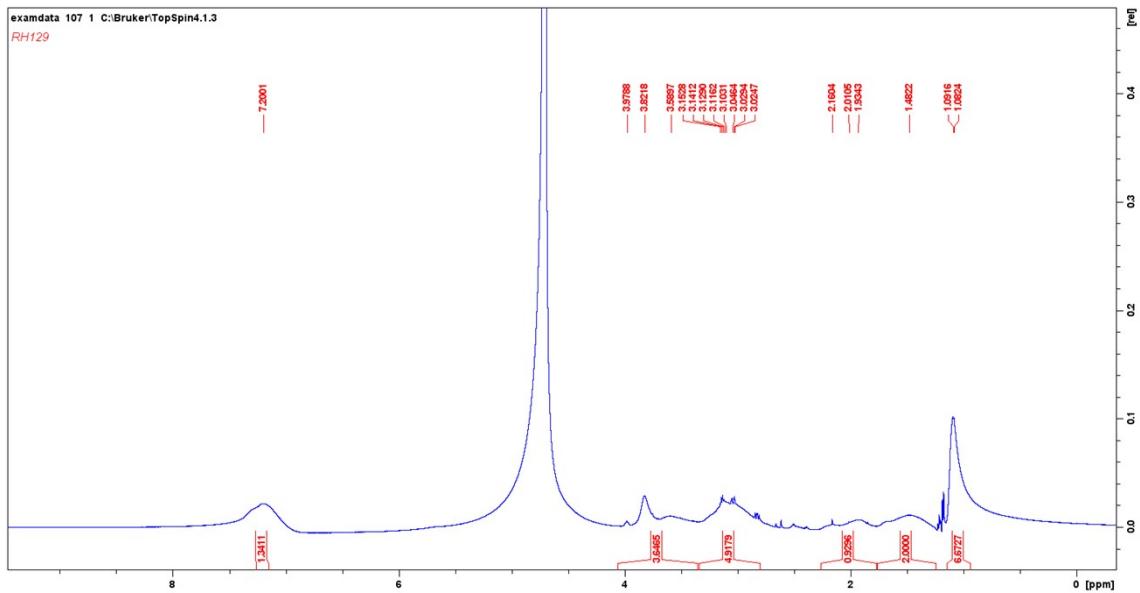
**Fig. S6**  $^1\text{H}$  NMR spectrum of **Val26** in  $\text{D}_2\text{O}$ .



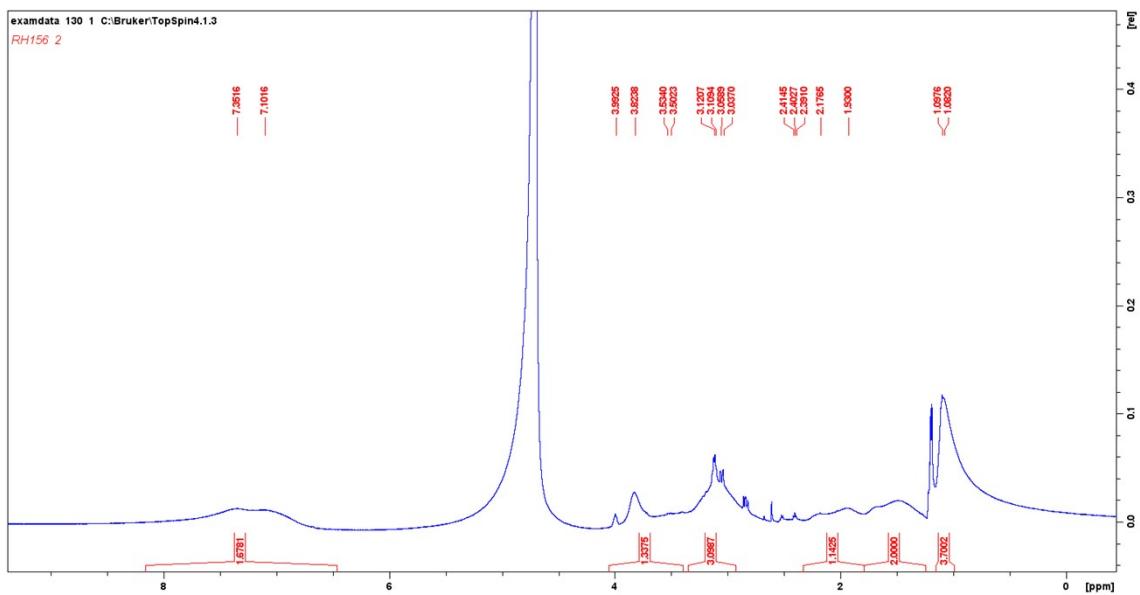
**Fig. S7**  $^1\text{H}$  NMR spectrum of **Leu29** in  $\text{D}_2\text{O}$ .



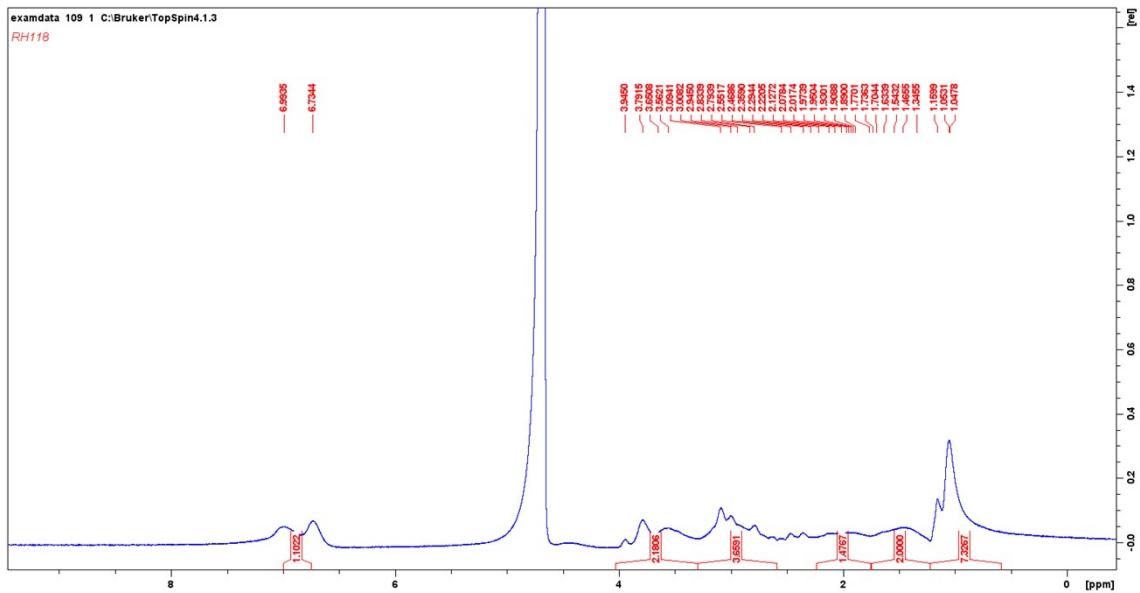
**Fig. S8**  $^1\text{H}$  NMR spectrum of **Ile25** in  $\text{D}_2\text{O}$ .



**Fig. S9**  $^1\text{H}$  NMR spectrum of **Phe27** in  $\text{D}_2\text{O}$ .



**Fig. S10**  $^1\text{H}$  NMR spectrum of **Trp29** in  $\text{D}_2\text{O}$ .



**Fig. S11**  $^1\text{H}$  NMR spectrum of Tyr22 in  $\text{D}_2\text{O}$ .