

Supporting Information

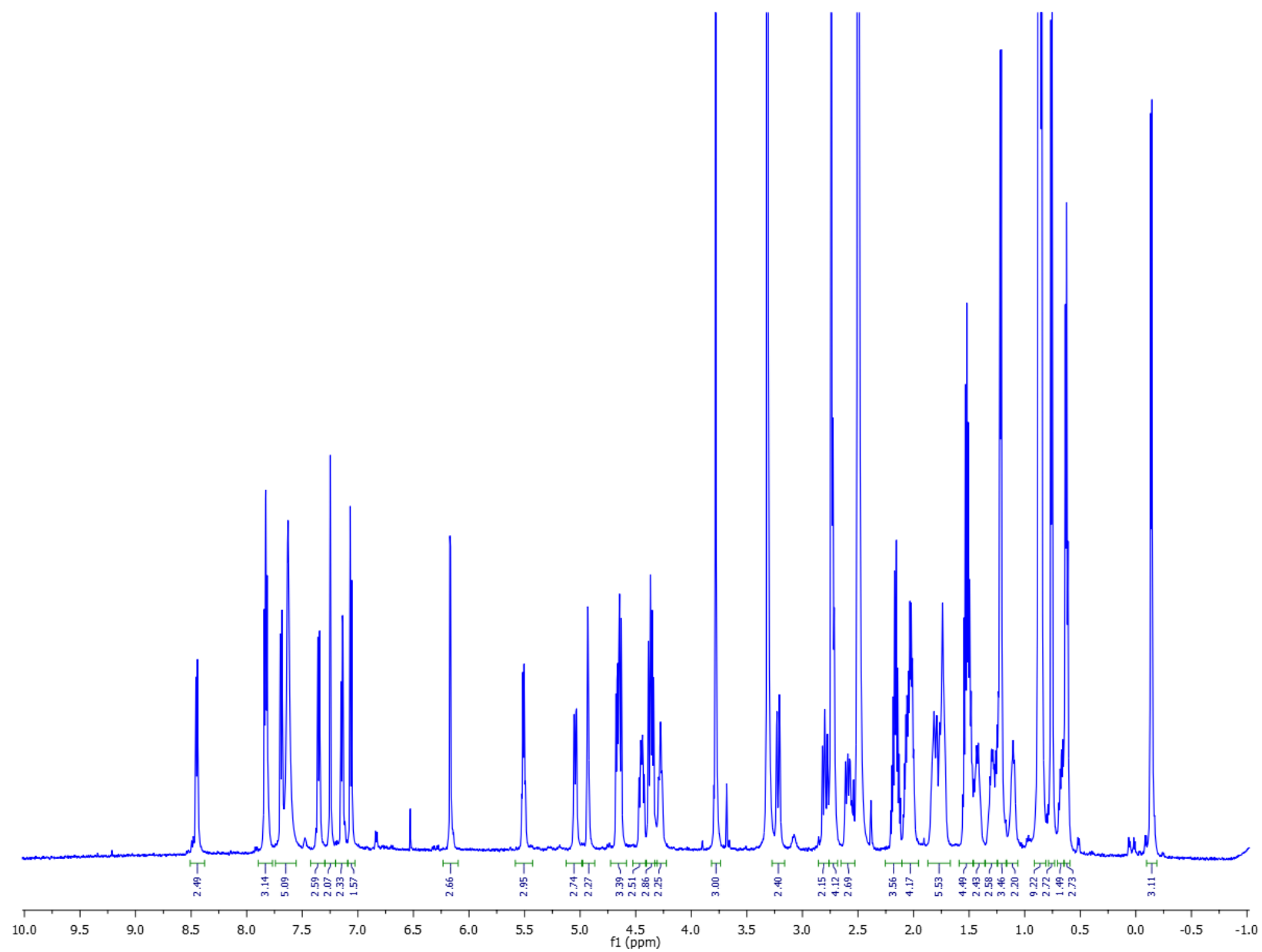
Kempopeptin C, A Novel Marine-Derived Serine Protease Inhibitor Targeting Invasive Breast Cancer

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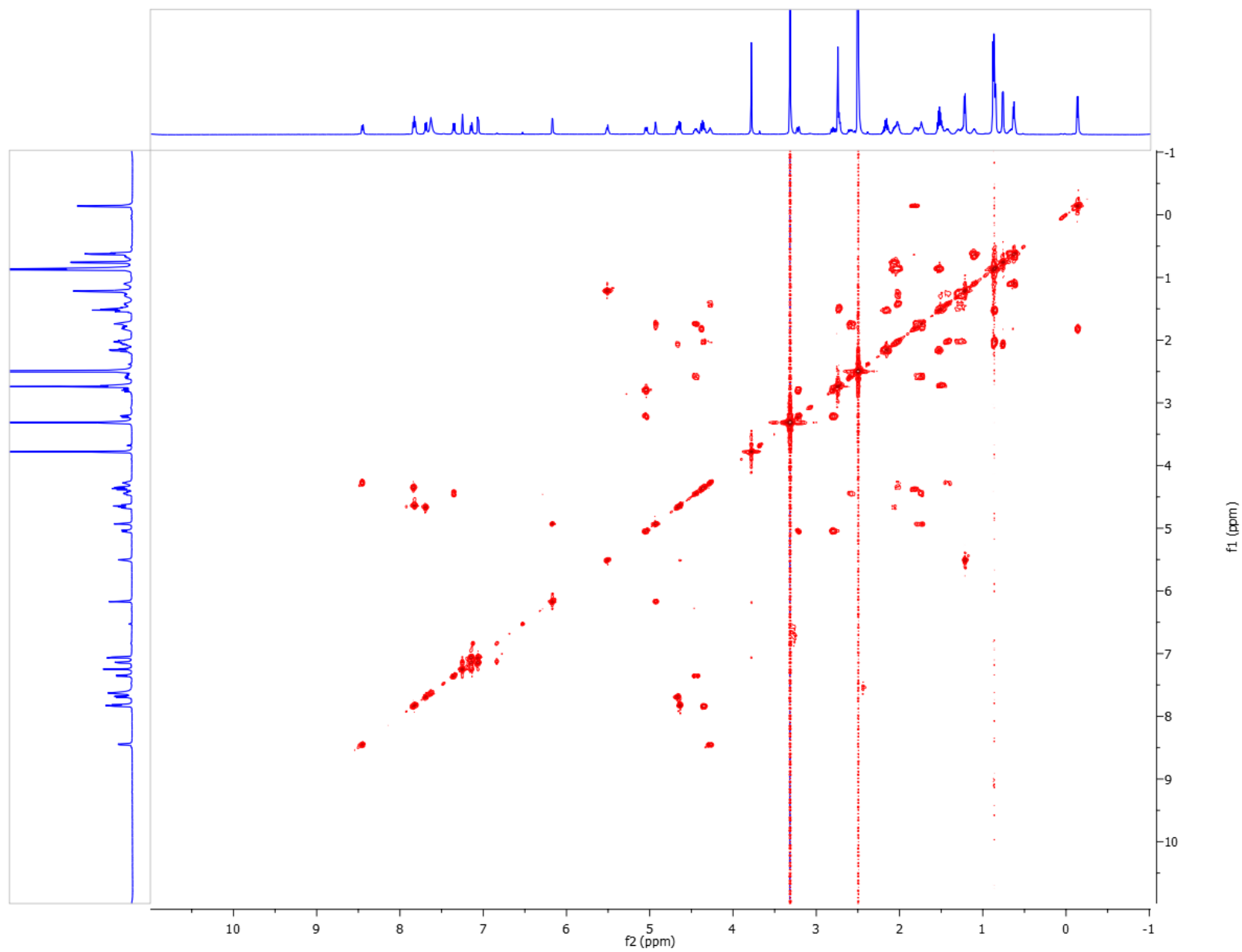
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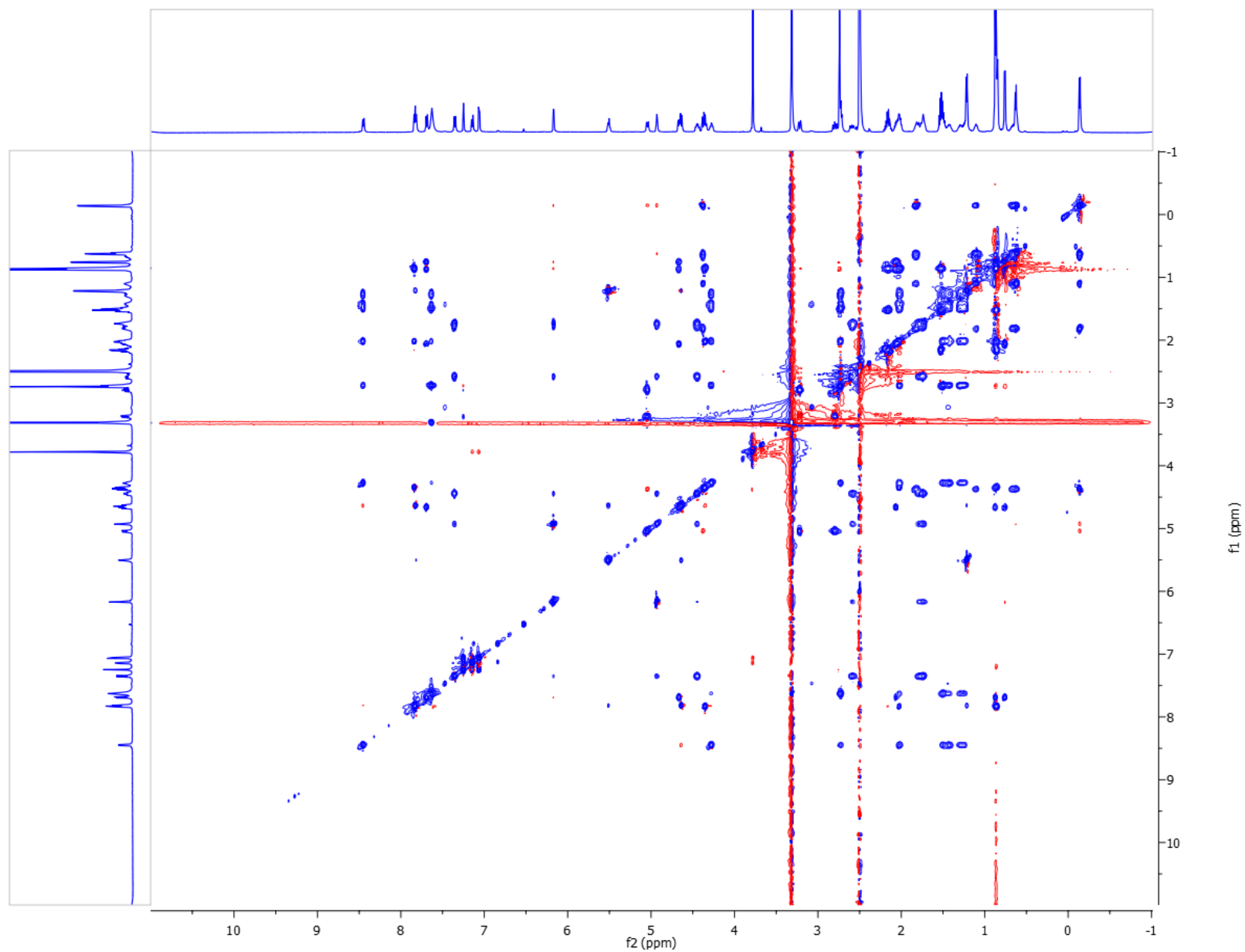
^1H NMR spectrum of kempopeptin C (**3**) in $\text{DMSO}-d_6$ (600 MHz)



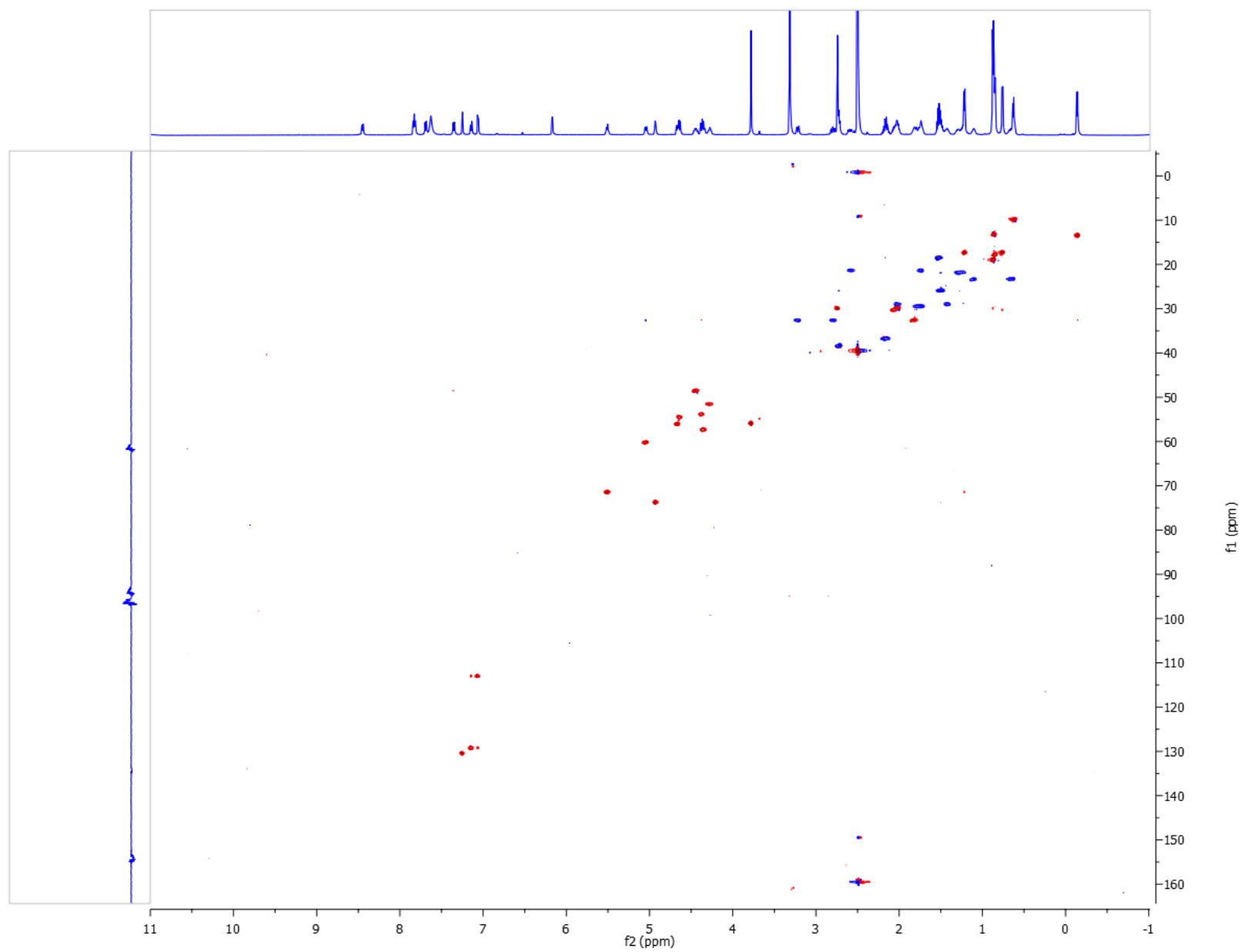
COSY spectrum of kempopeptin C (**3**) in DMSO- d_6 (600 MHz)



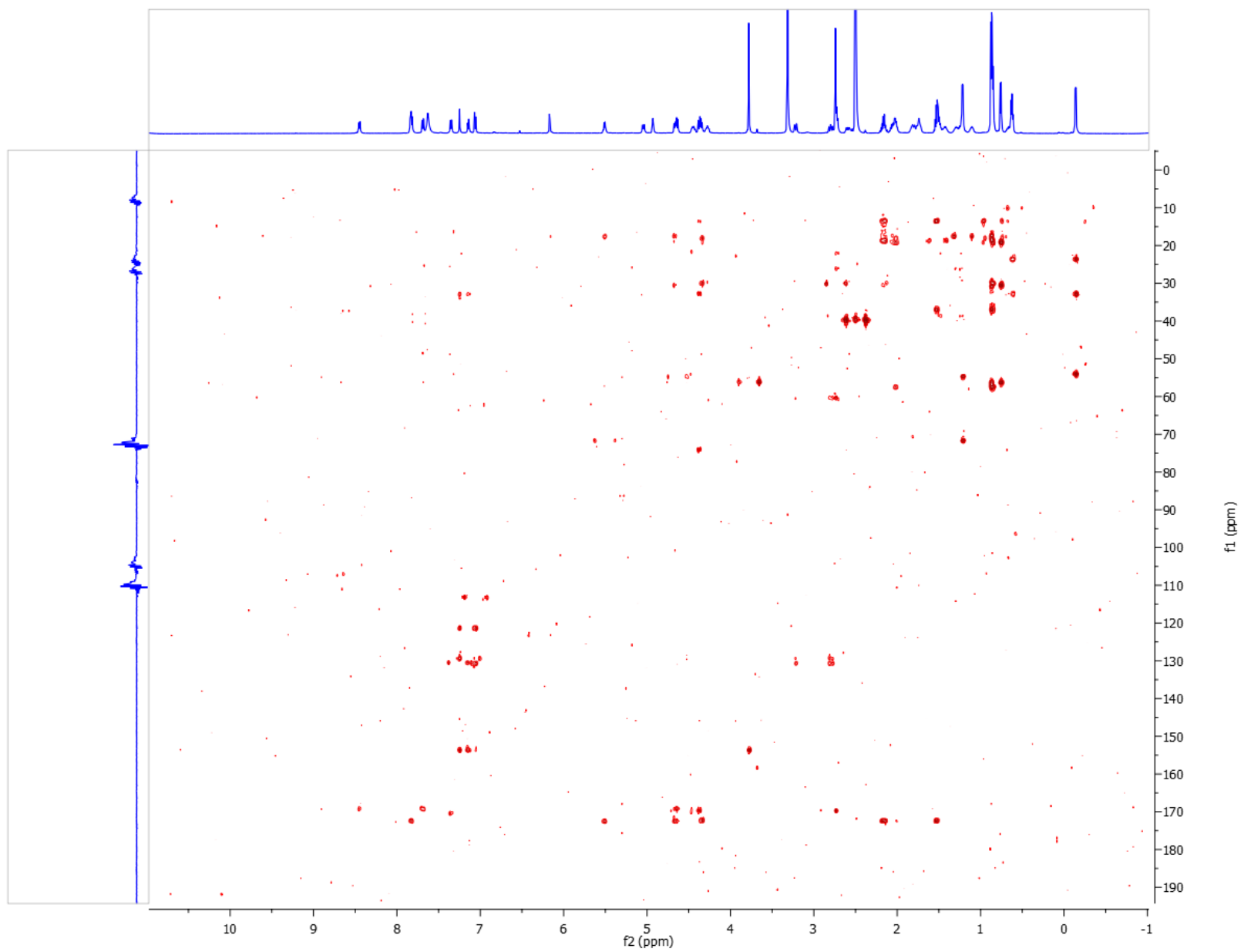
TOCSY spectrum of kempopeptin C (**3**) in DMSO- d_6 (600 MHz)



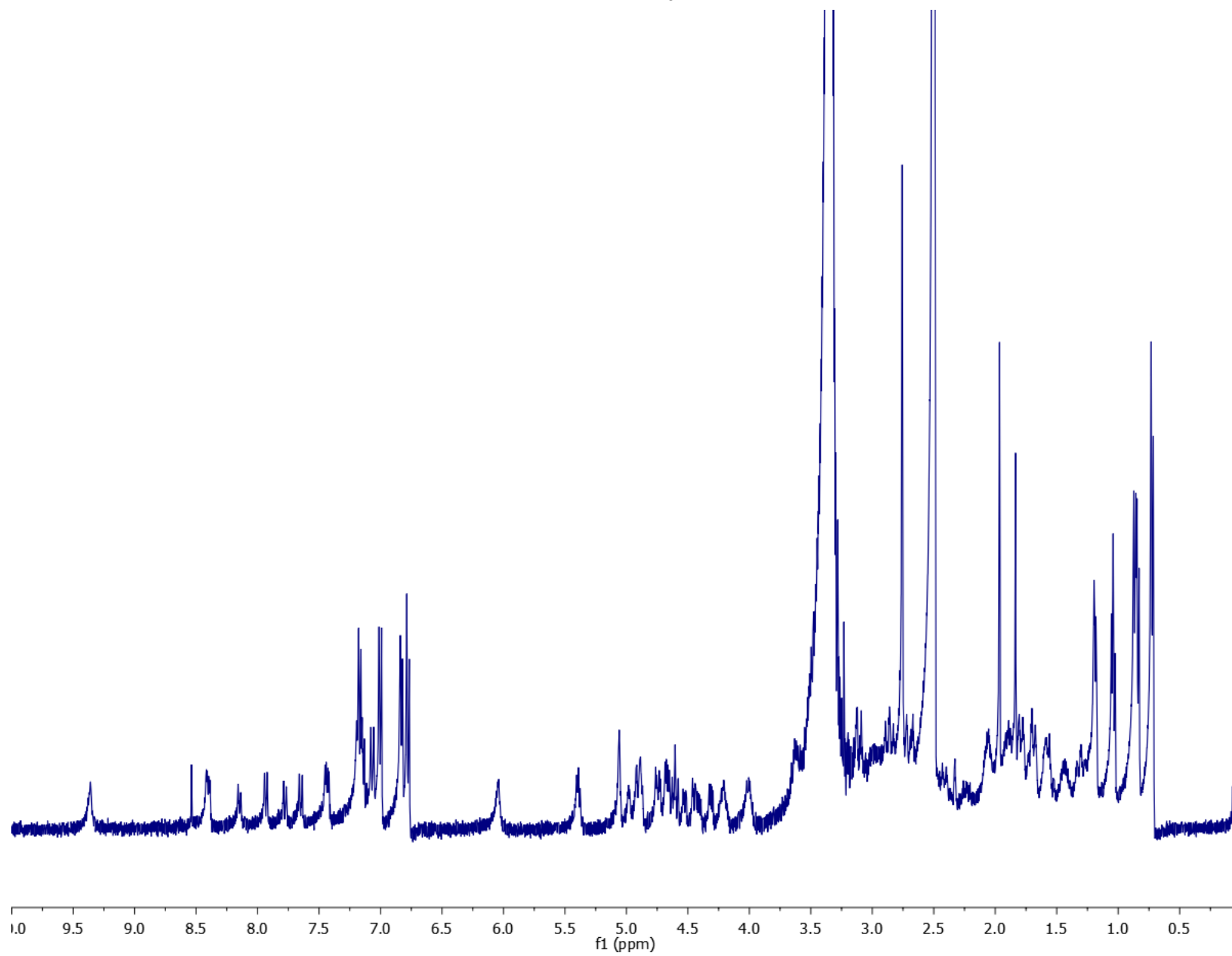
HSQC spectrum of kempopeptin C (**3**) in DMSO- d_6 (600 MHz)



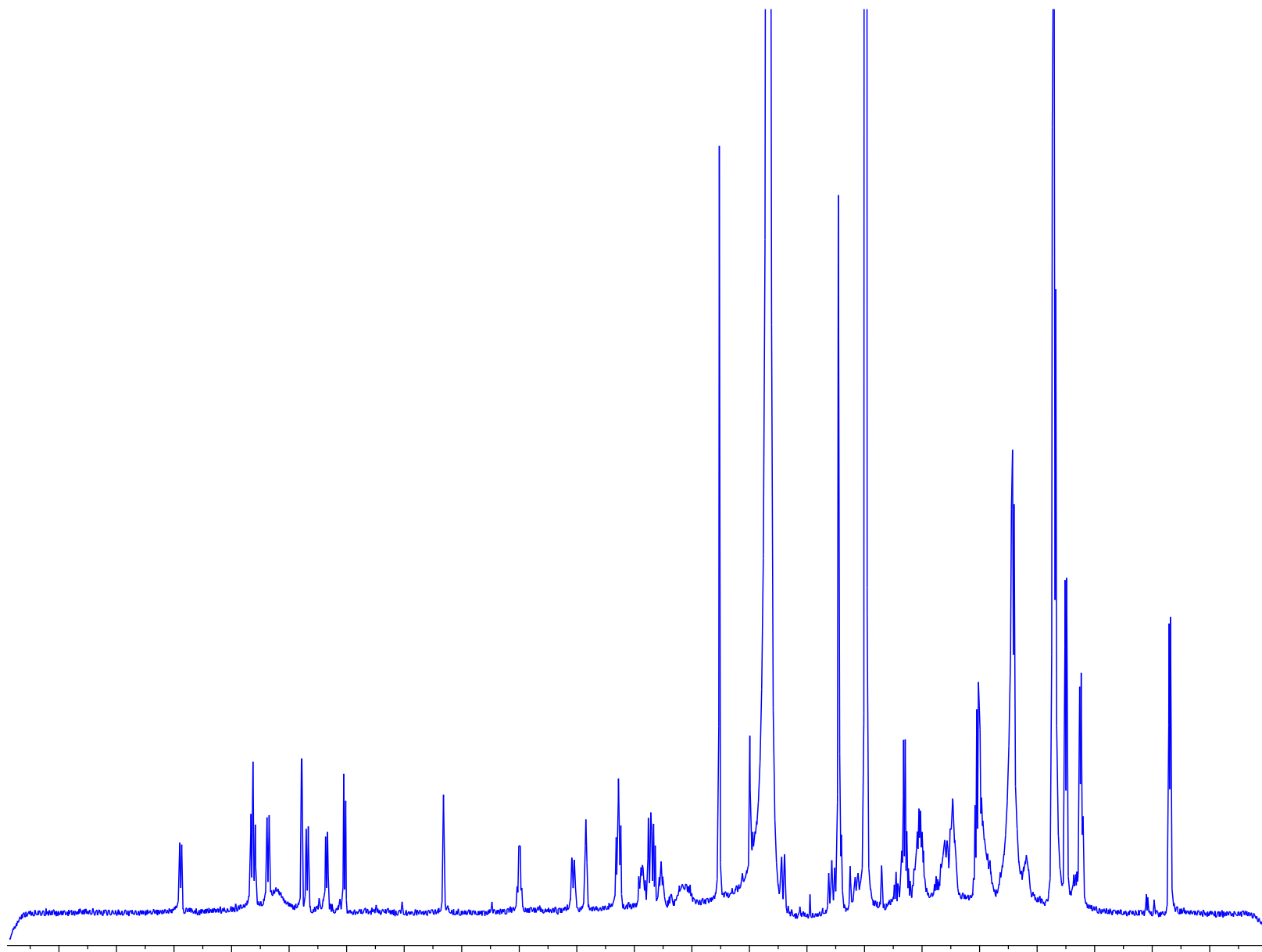
HMBC spectrum of kempopeptin C (**3**) in DMSO- d_6 (600 MHz)



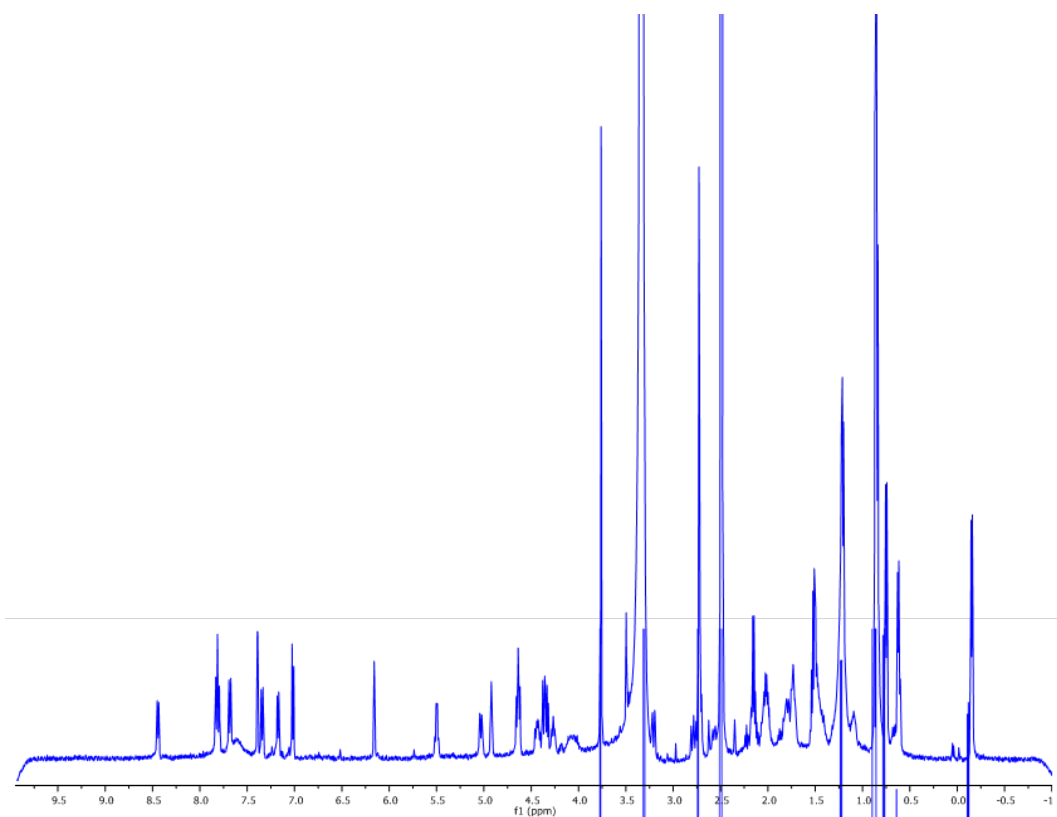
^1H NMR spectrum of kempopeptin A (**1**) in $\text{DMSO}-d_6$ (400 MHz)



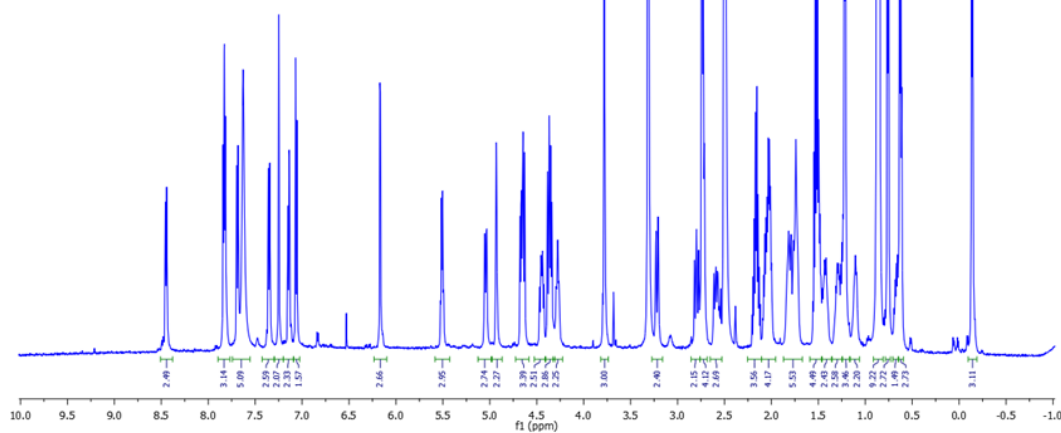
^1H NMR spectra of kempopeptins B (**2**) in $\text{DMSO}-d_6$ (600 MHz)



Comparison of ^1H NMR spectra of kempopeptins B (**2**) and C (**3**) in $\text{DMSO}-d_6$ (600 MHz)



kempopeptins B (**2**)



kempopeptins C (**3**)

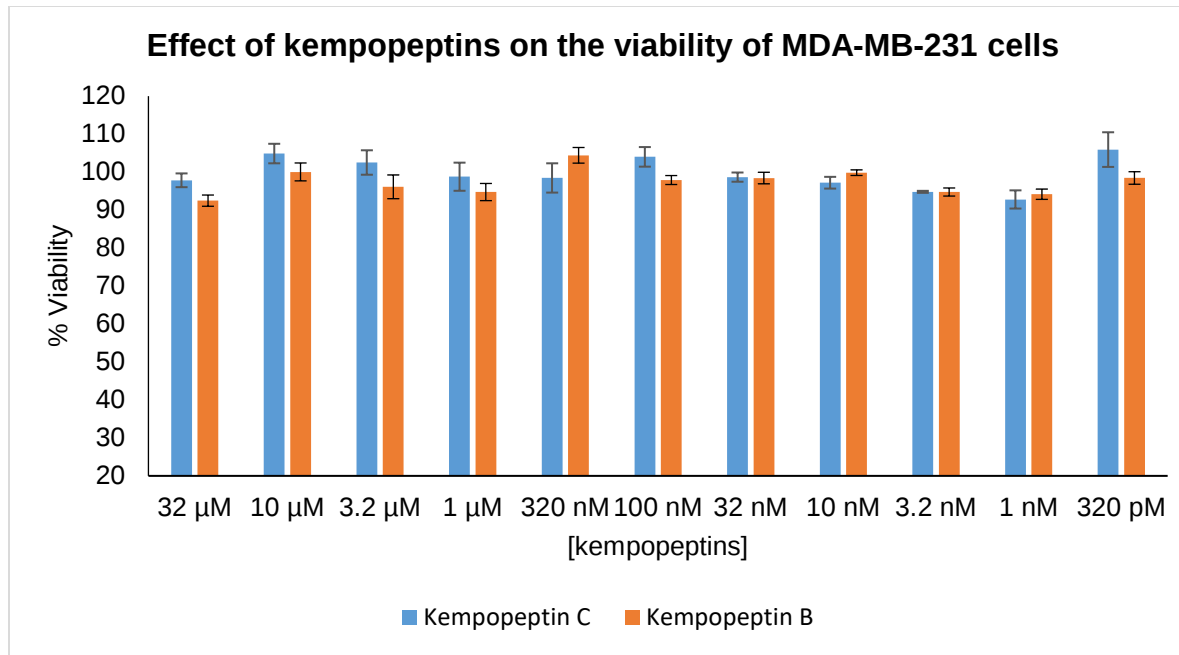


Figure S1. Effect of kempopeptins B and C (2) and (3) on the viability of MDA-MB-231 breast cancer cells.

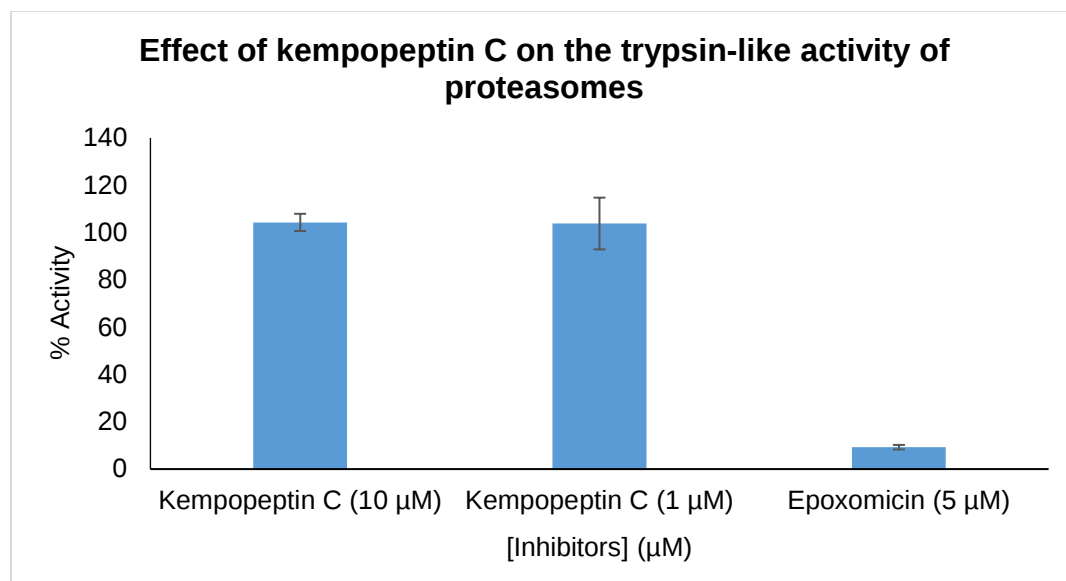


Figure S2. Effect of kempopeptin C (**3**) on the proteasome activity *in vitro* assessed using proteasome Glo trypsin-like activity assay (Promega).