Supporting Information

Pitiamides A and B, Multifunctional Fatty Acid Amides from Marine Cyanobacteria

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Content

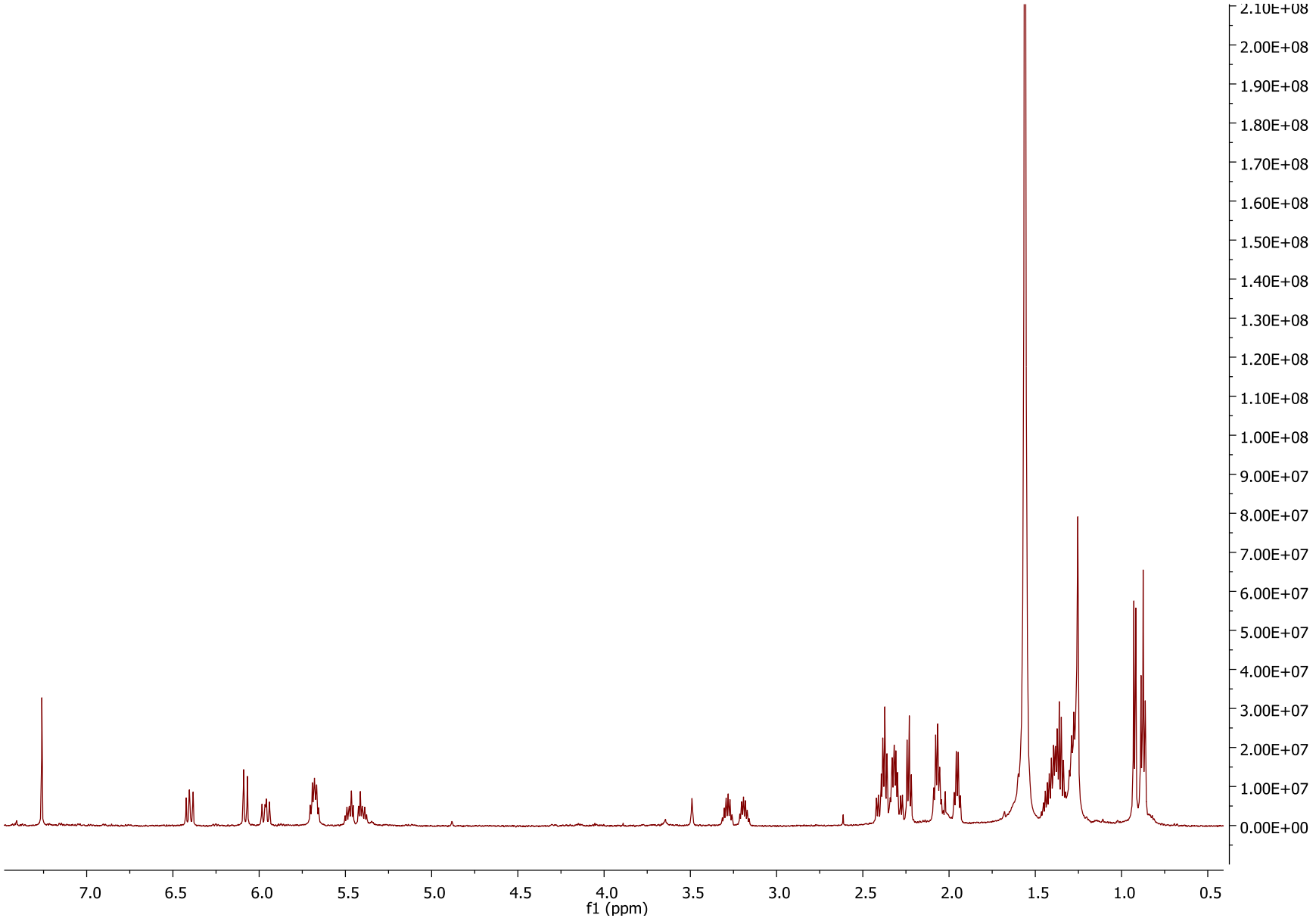


Fig. S1 ^{1}H NMR spectrum of 1*E*-pitiamide B (**1**) in $CDCl_3$ (600 MHz).

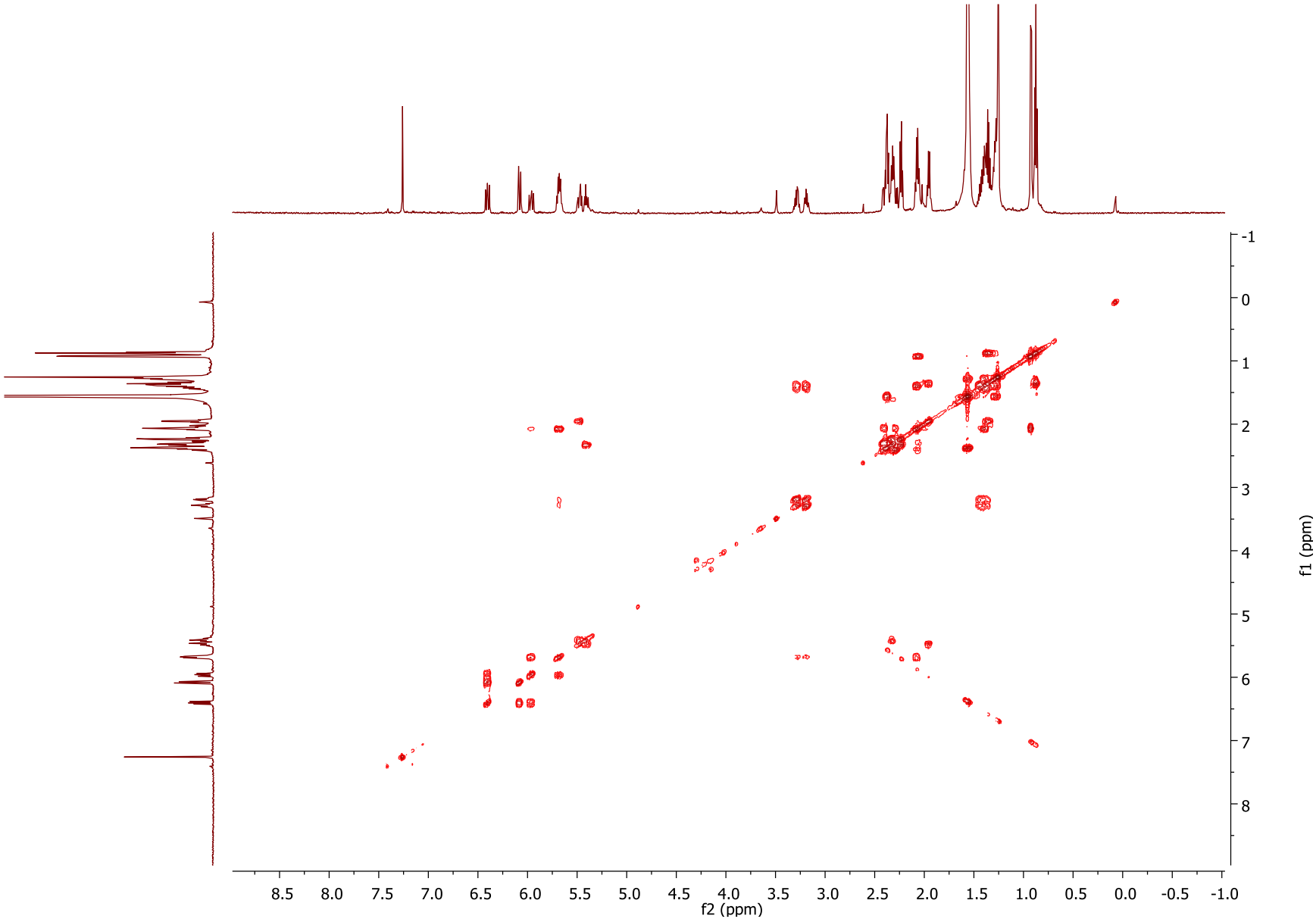


Fig. S2 COSY spectrum of 1*E*-pitiamide B (**1**) in $CDCl_3$ (600 MHz).

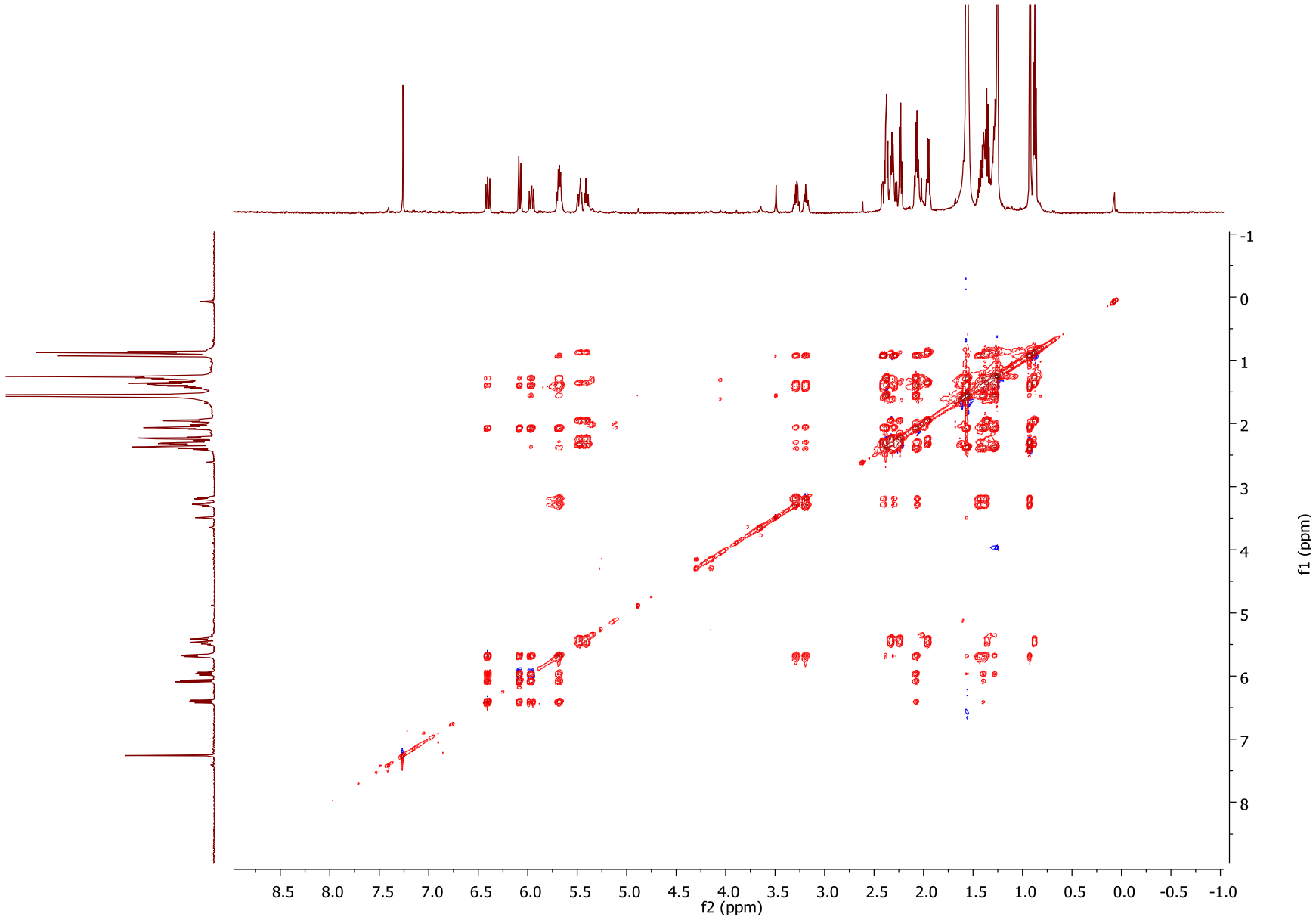


Fig. S3 TOCSY spectrum of 1*E*-pitiamide B (**1**) in $CDCl_3$ (600 MHz).

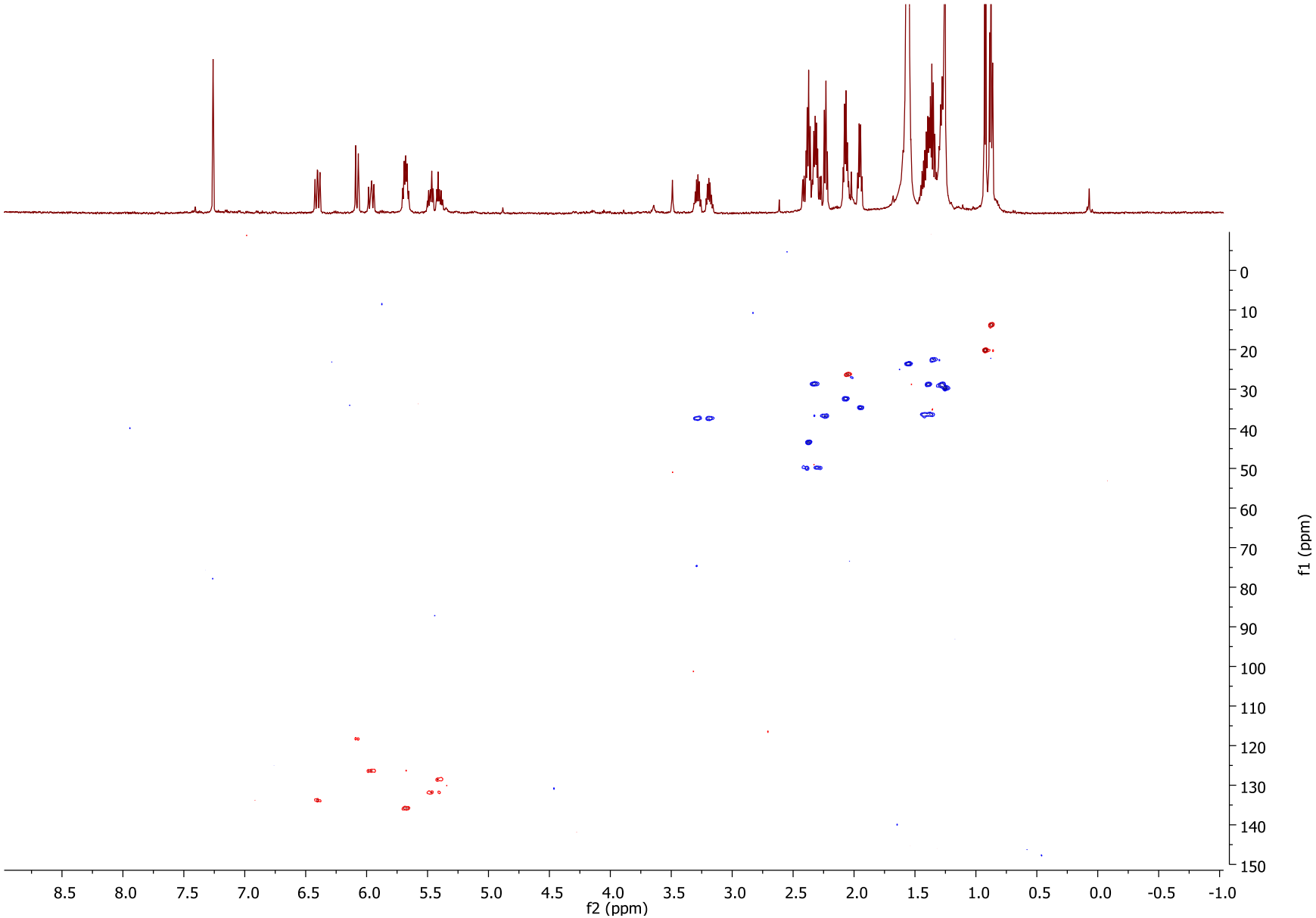


Fig. S4 HSQC spectrum of 1*E*-pitiamide B (**1**) in $CDCl_3$ (600 MHz).

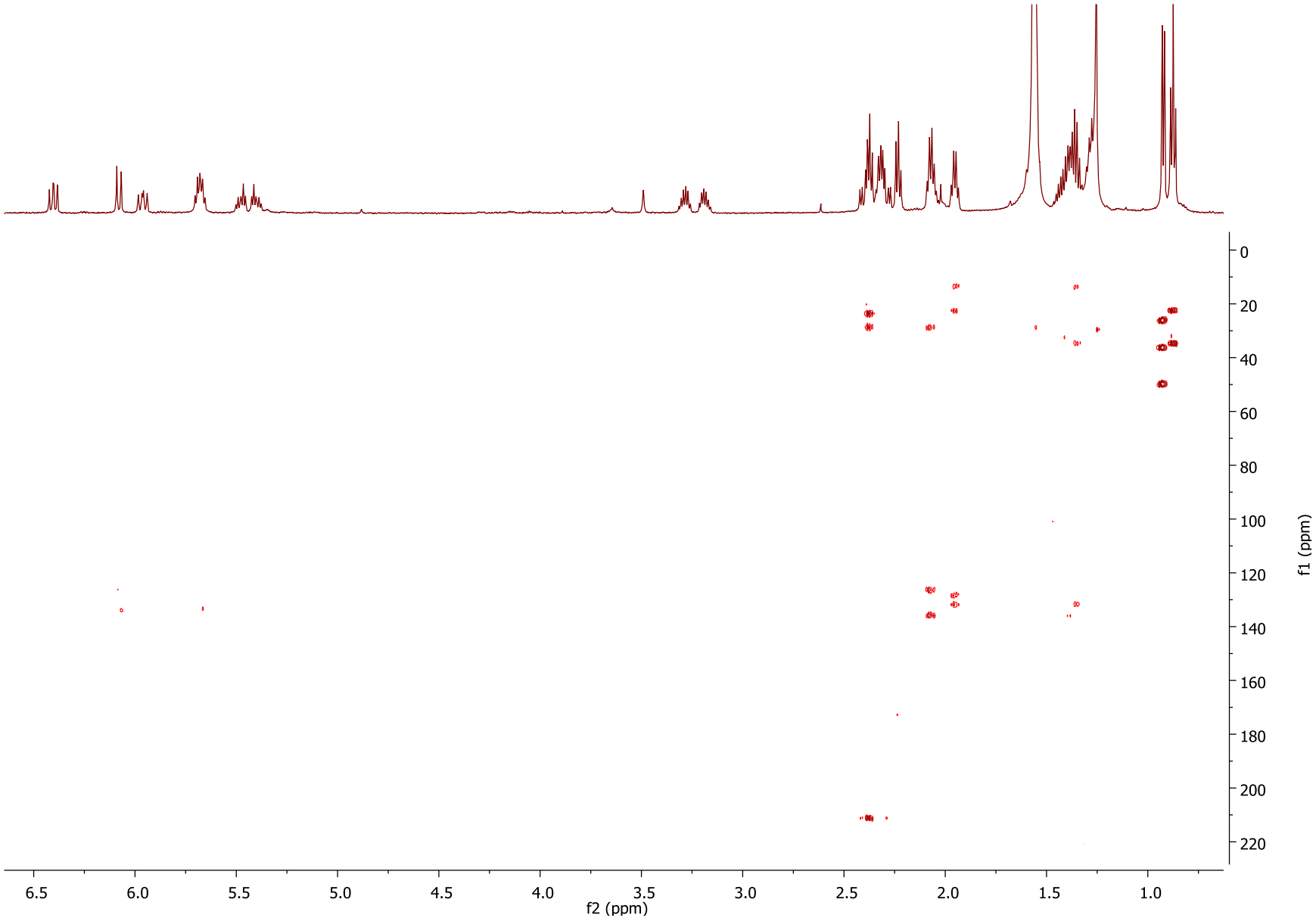


Fig. S5 HMBC spectrum of 1*E*-pitiamide B (**1**) in $CDCl_3$ (600 MHz).

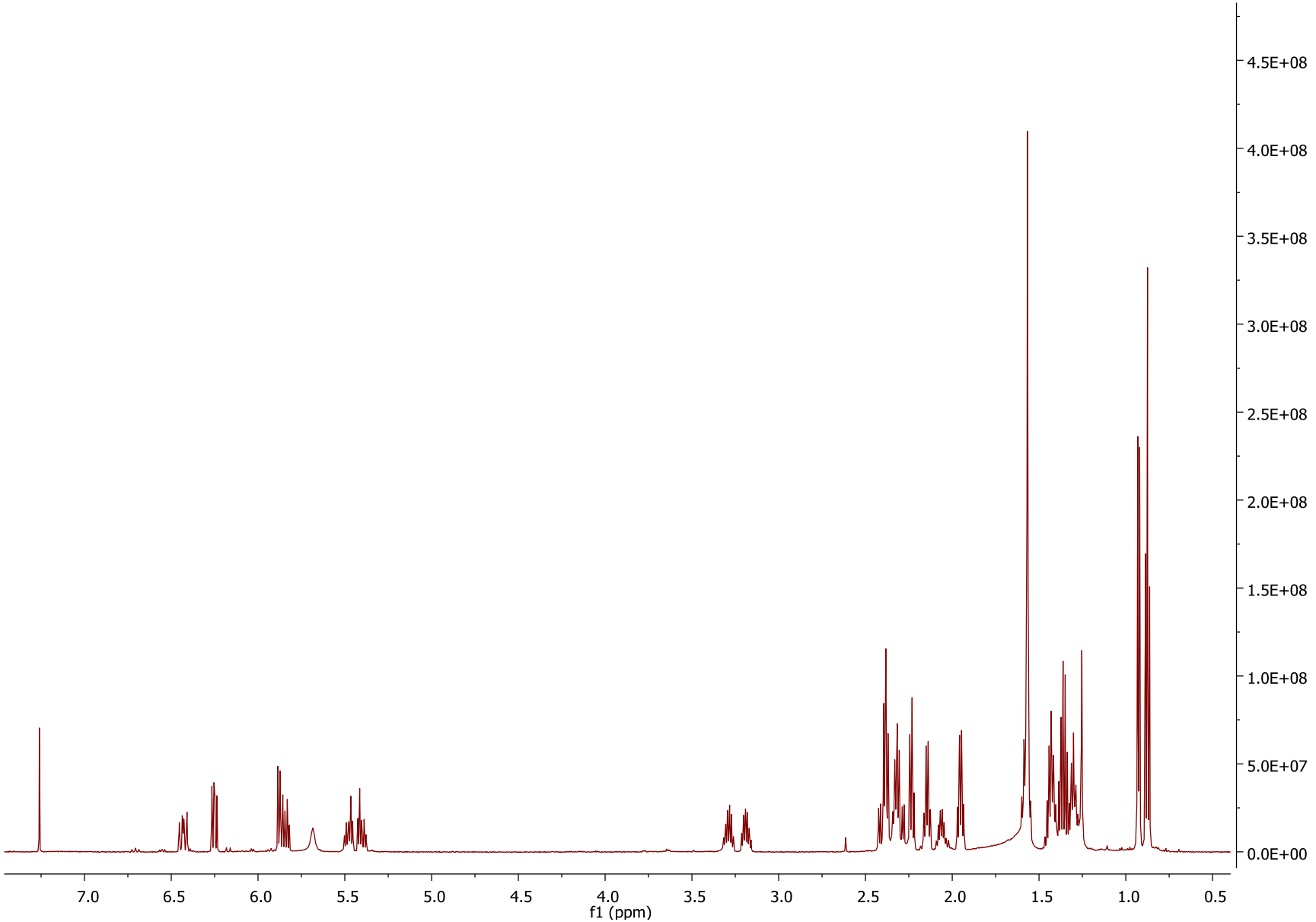


Fig. S6 ^{1}H NMR spectrum of 1*Z*-pitiamide B (**2**) in $CDCl_3$ (600 MHz).

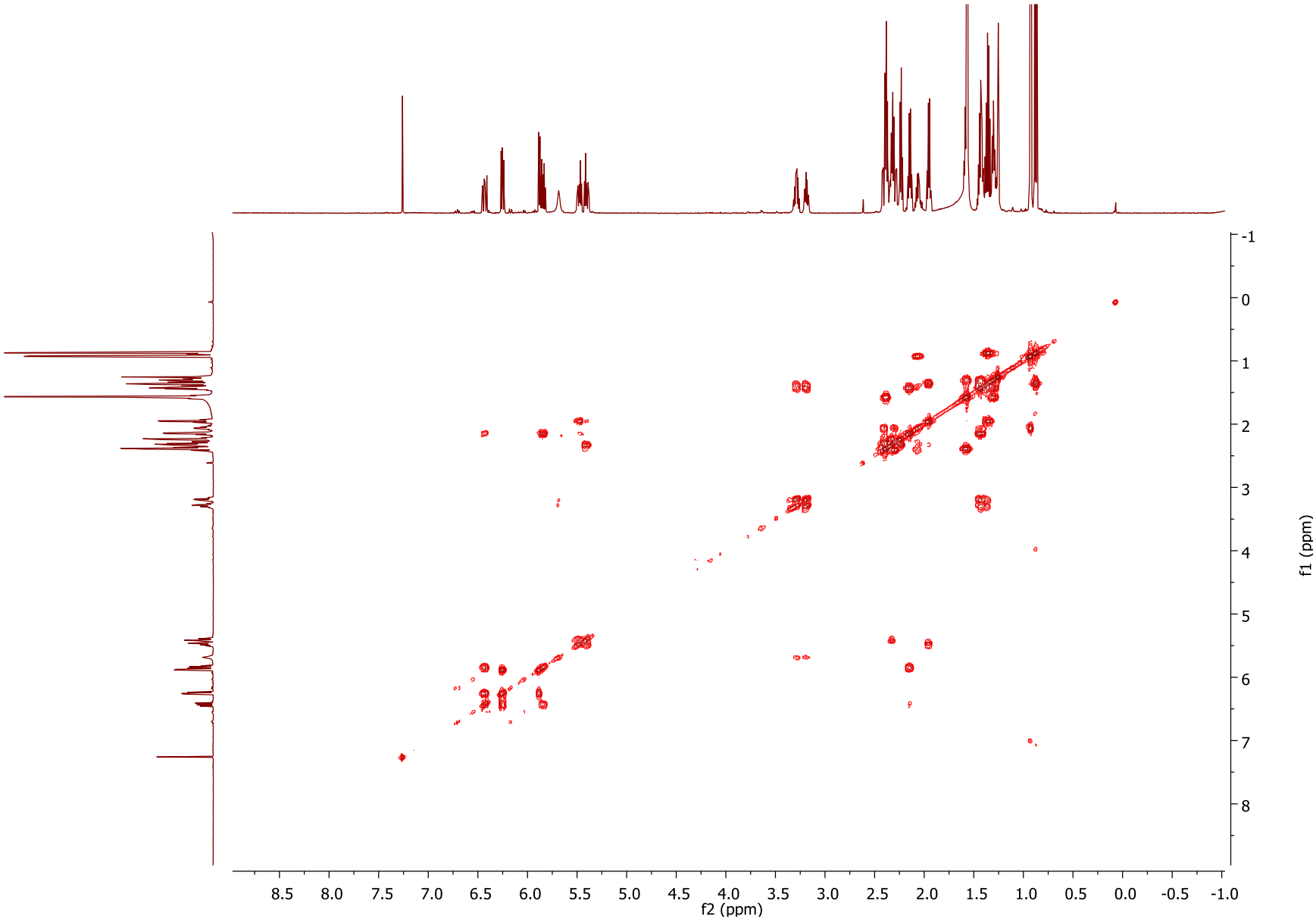


Fig. S7 COSY spectrum of 1*Z*-pitiamide B (**2**) in $CDCl_3$ (600 MHz).

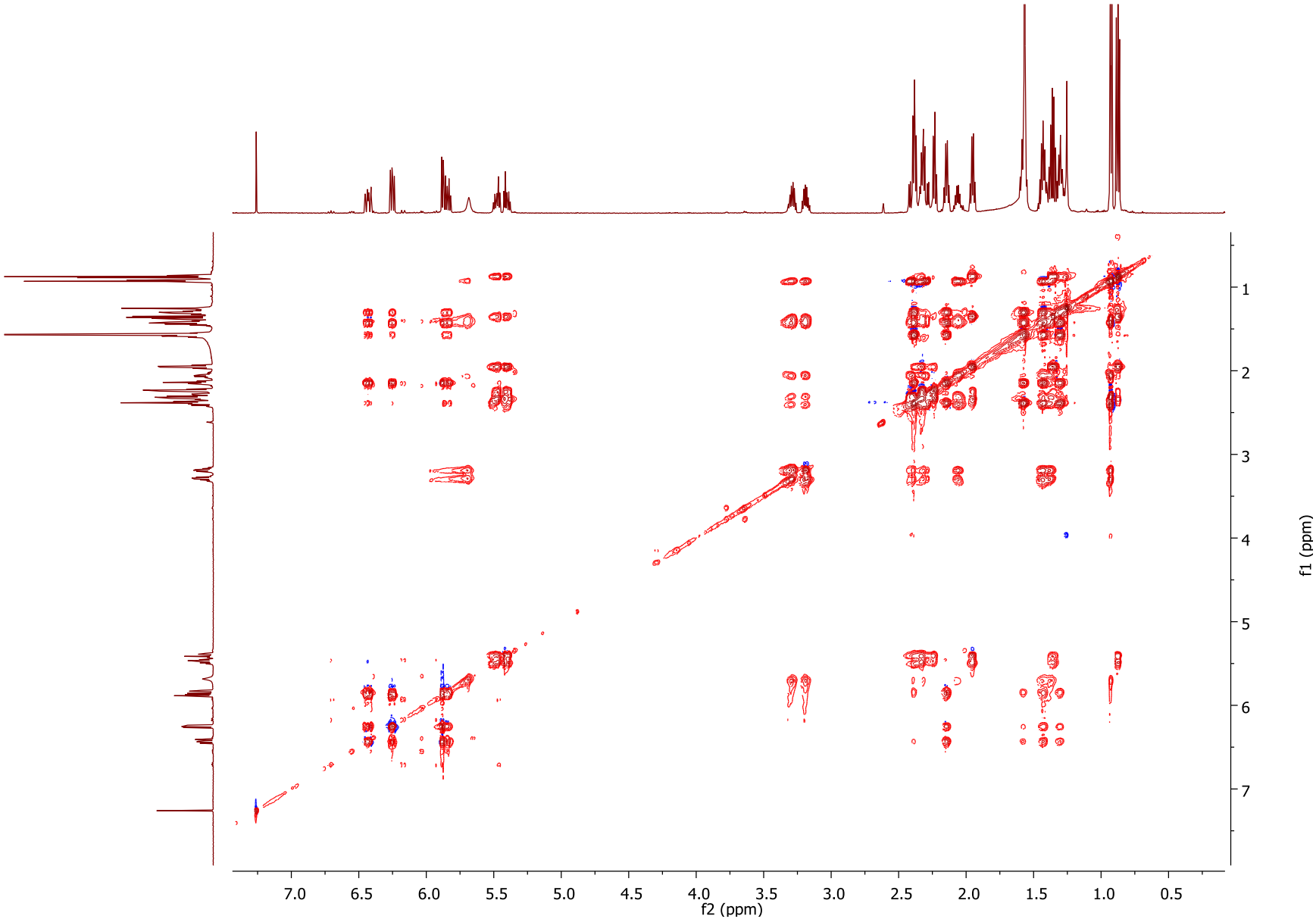


Fig. S8 TOCSY spectrum of 1*Z*-pitiamide B (**2**) in $CDCl_3$ (600 MHz).

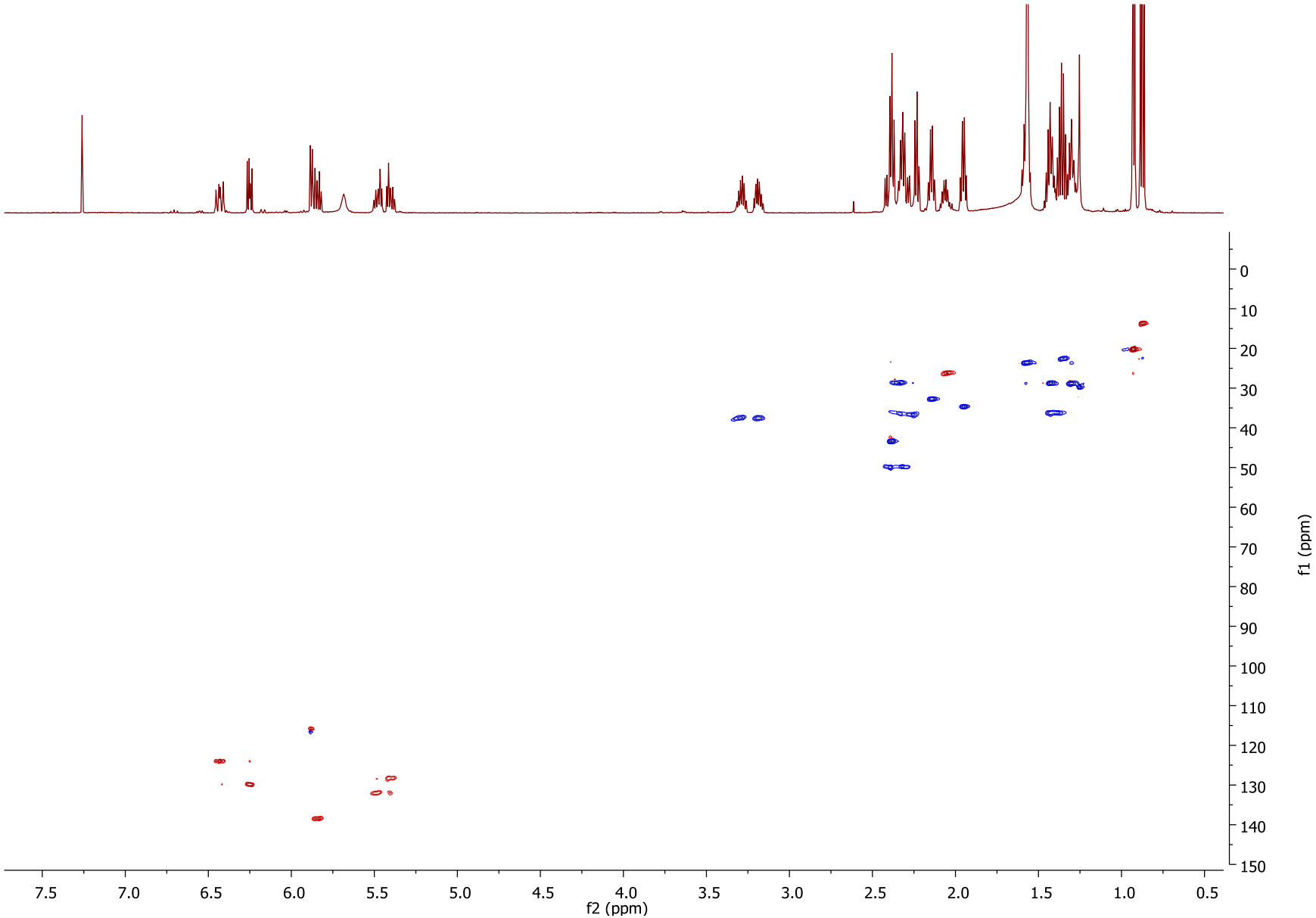


Fig. S9 HSQC spectrum of 1*Z*-pitiamide B (**2**) in $CDCl_3$ (600 MHz).

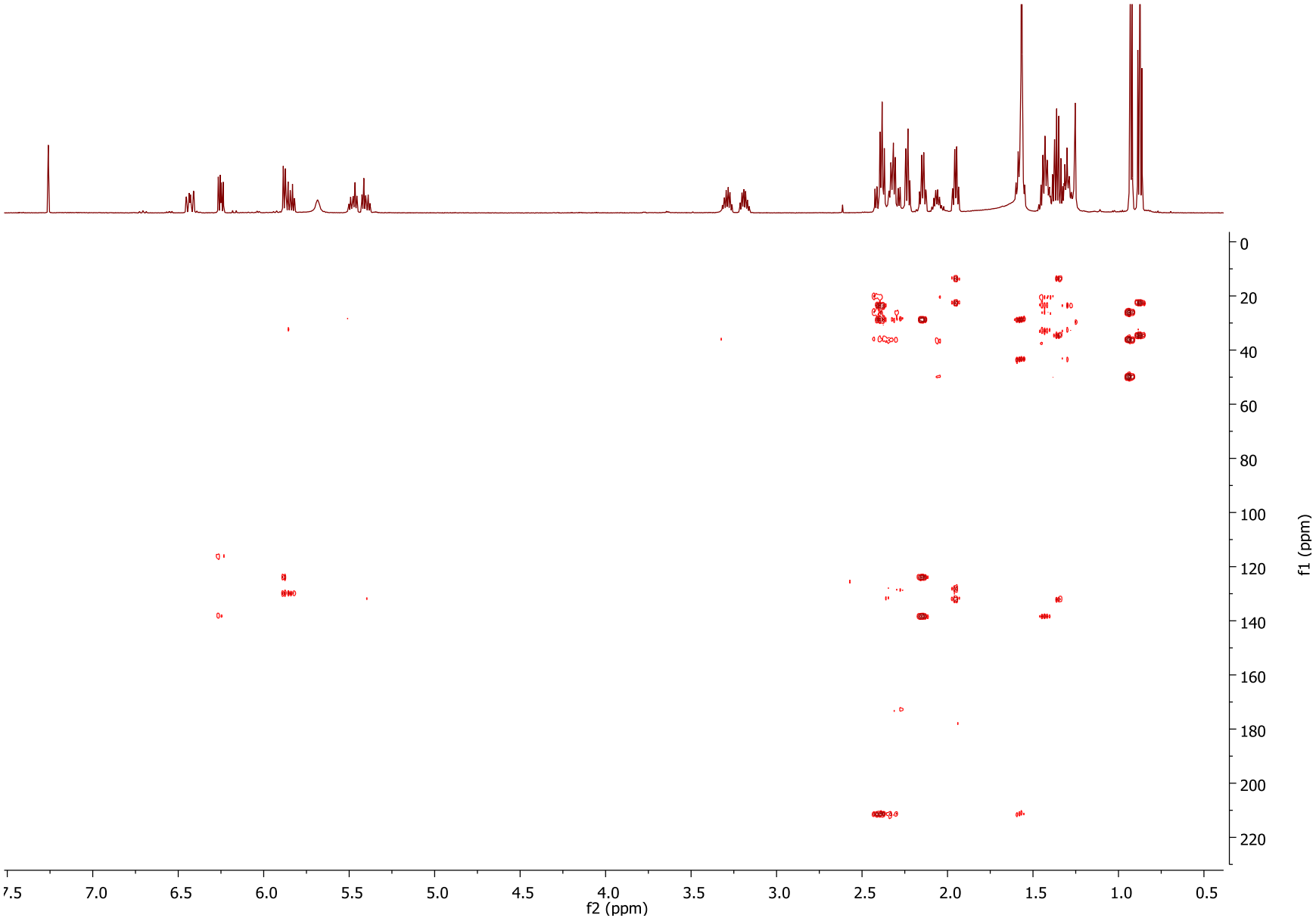


Fig. S10 HMBC spectrum of 1*Z*-pitiamide B (**2**) in $CDCl_3$ (600 MHz).

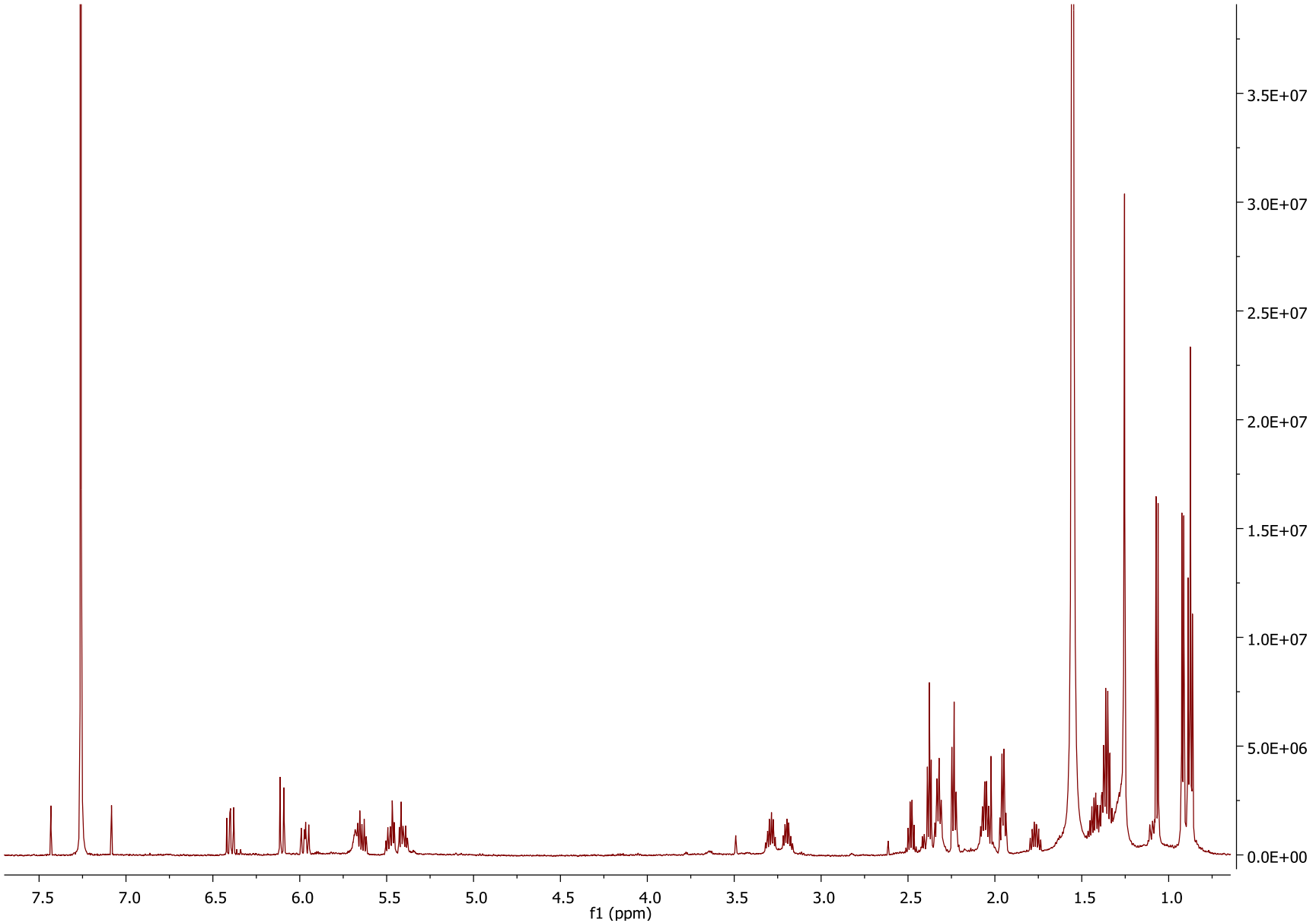


Fig. S11 ^{1}H NMR spectrum of pitiamide A in $CDCl_3$ (600 MHz).

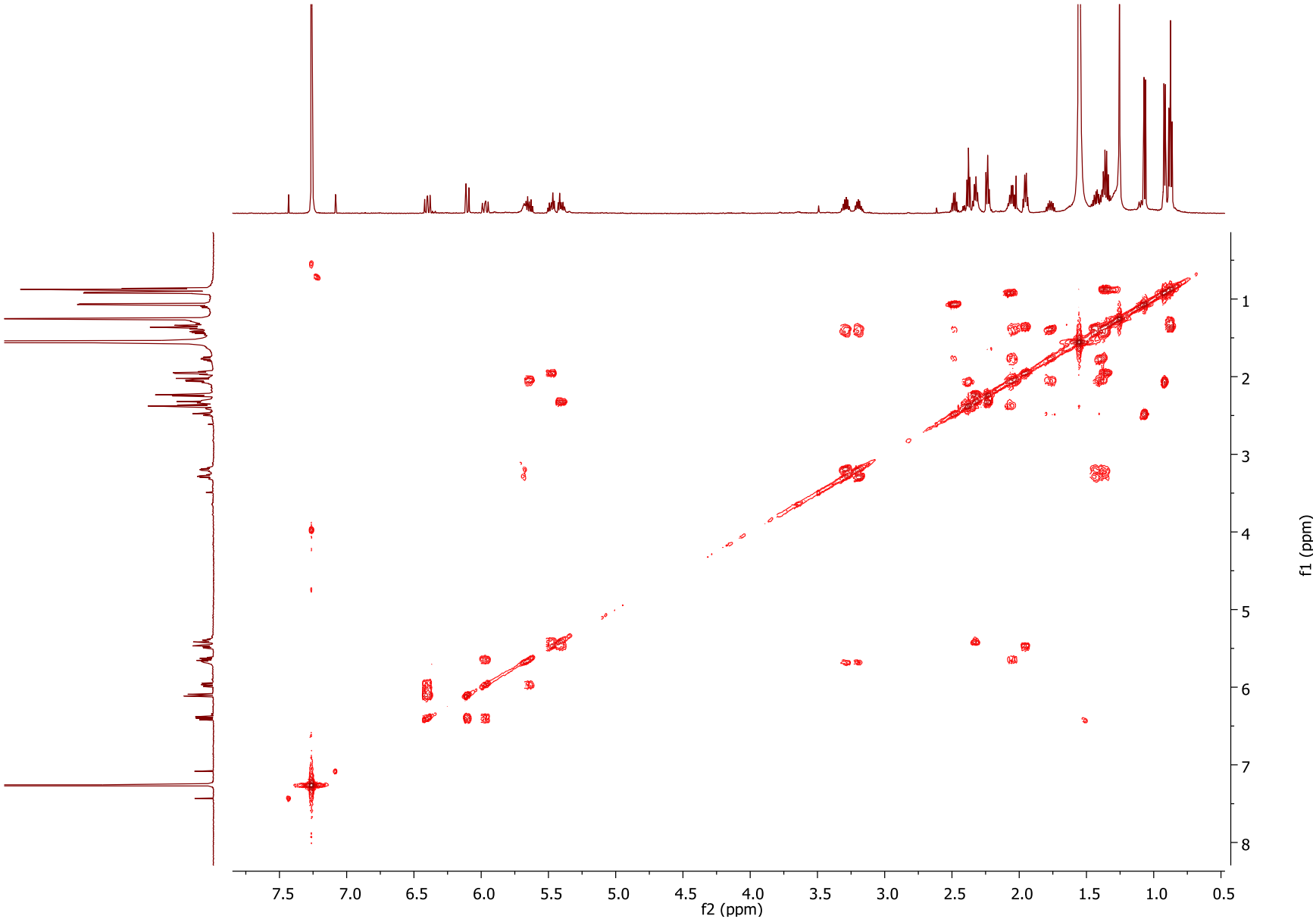


Fig. S12 COSY spectrum of pitiamide A in $CDCl_3$ (600 MHz).

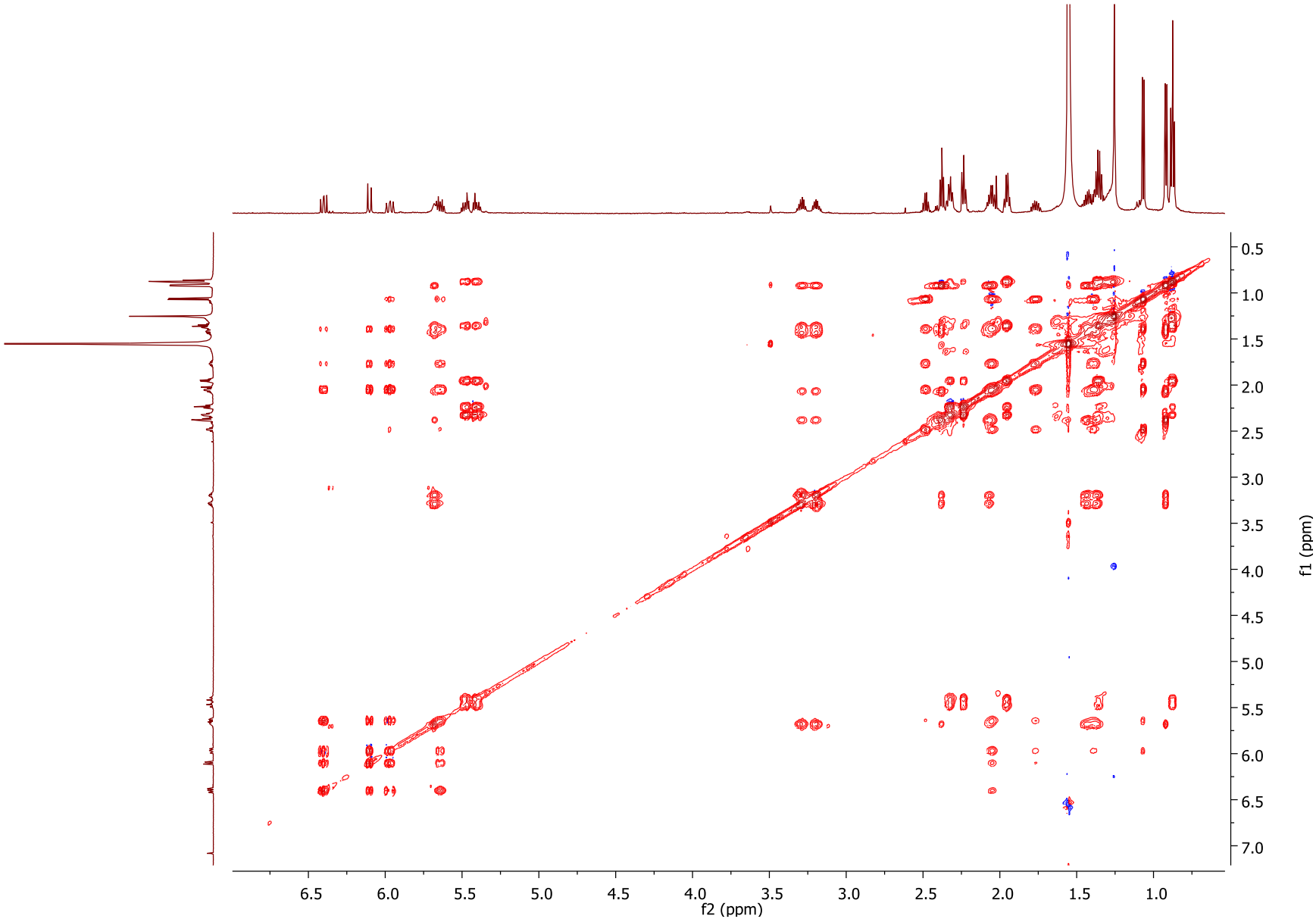


Fig. S13 TOCSY spectrum of pitiamide A in $CDCl_3$ (600 MHz).

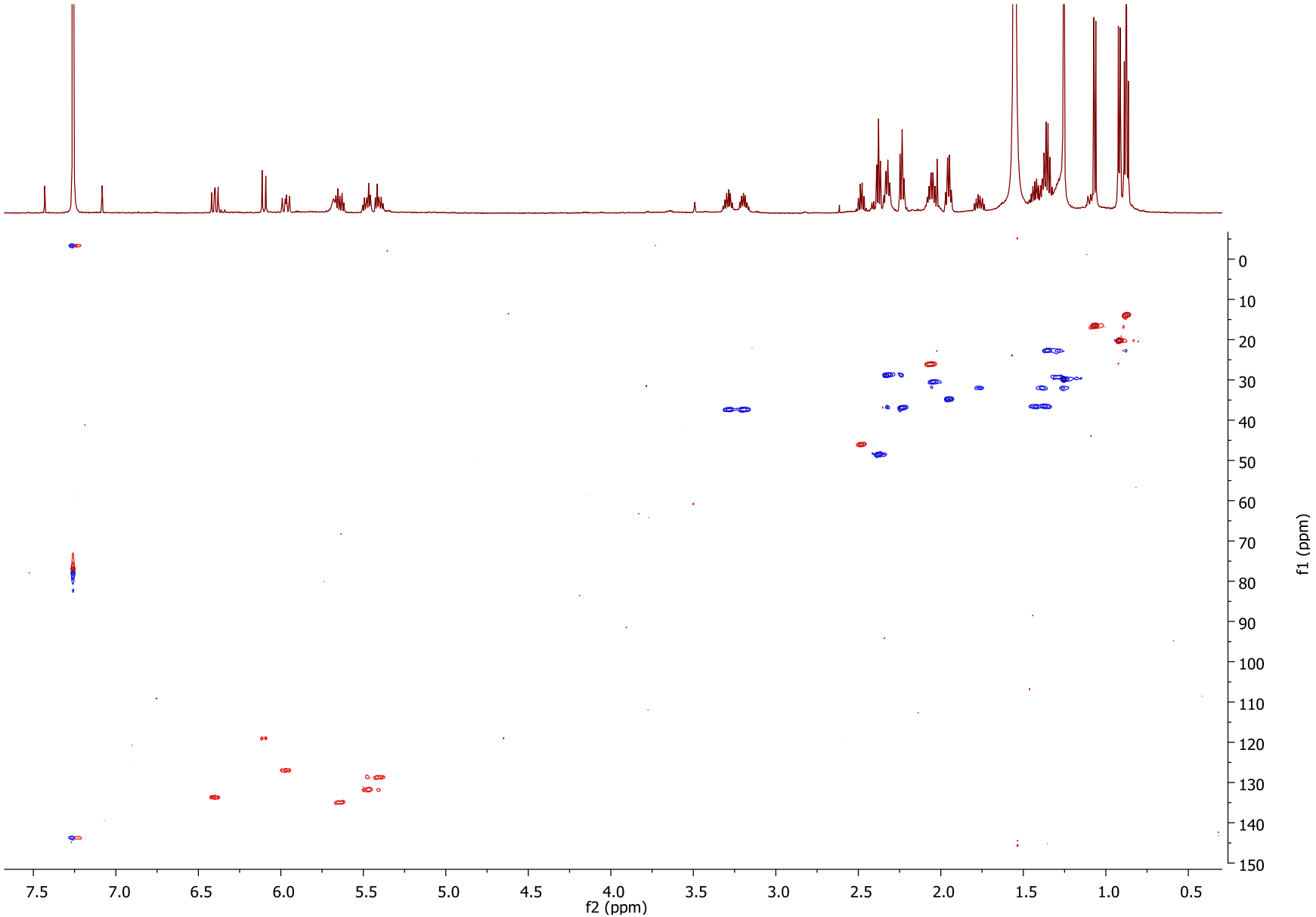


Fig. S14 HSQC spectrum of pitiamide A in $CDCl_3$ (600 MHz).

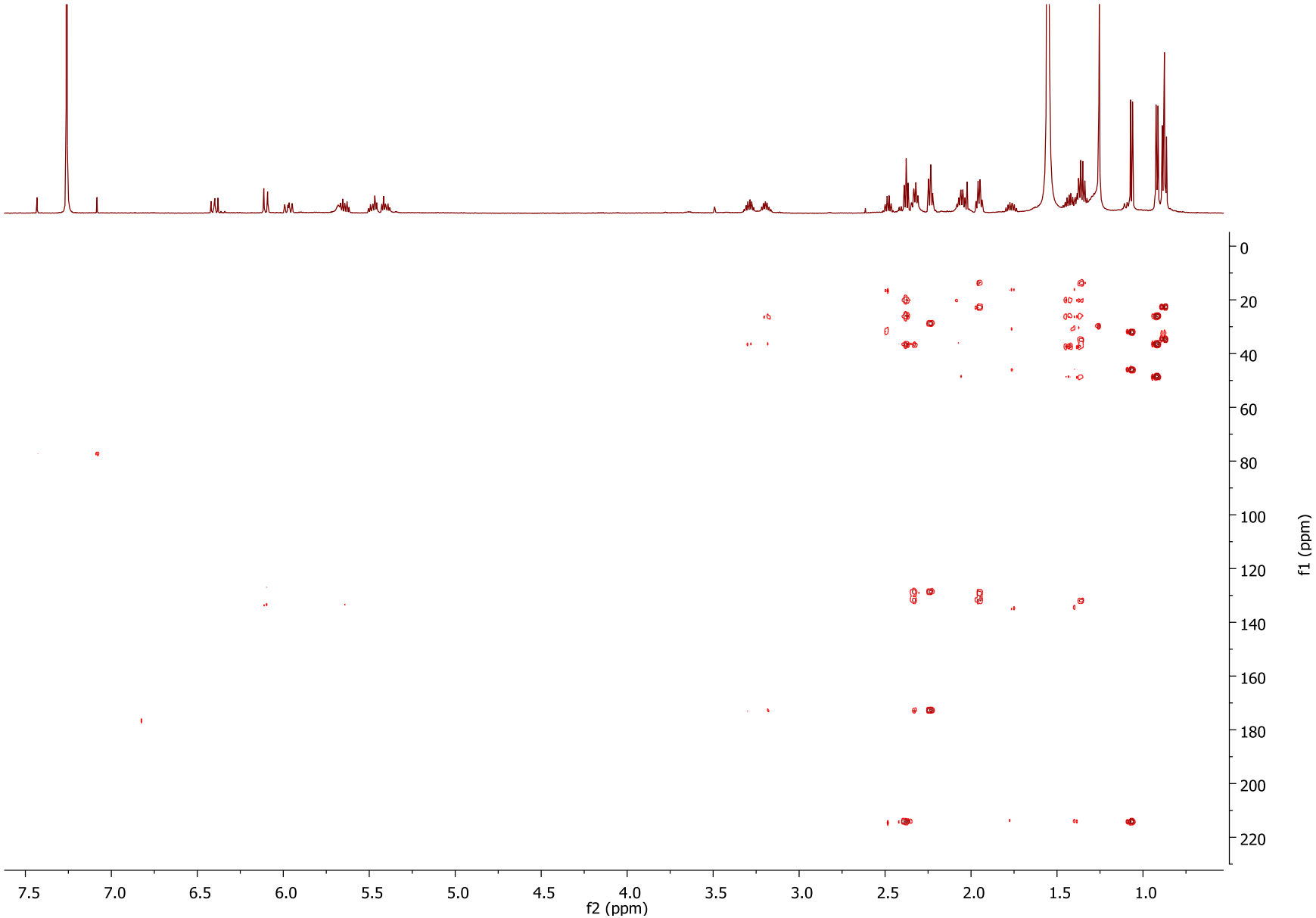
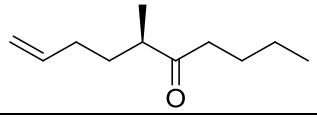
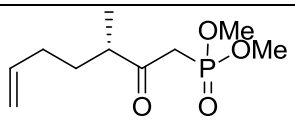


Fig. S15 HMBC spectrum of pitiamide A in $CDCl_3$ (600 MHz).

Table S1 Reported optical activity of model compounds with α-ketone stereocenter and similar structure scaffold.

Number	Structure	Specific Optical Rotation	Reference
1		$[\alpha]_D^{23}$ -17.9° (c 1.0, $CHCl_3$)	1
2		$[\alpha]_D^{23}$ +19.6° (*c* 1.9, $CHCl_3$)	2

1 *Young AJ, White MC.* Allylic C-H Alkylation of Unactivated a-Olefins: Serial Ligand Catalysis Resumed. Angew Chem Int Edit 2011; 50: 6824-6827.

2 *Ghosh AK, Gong G.* Total synthesis and revision of C6 stereochemistry of (+)-amphidinolide W. J Org Chem 2006; 71: 1085-1093.