

Supporting Information

Table of Contents

- Figure S1.** ^1H NMR spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S2.** COSY spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S3.** HMBC spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S4.** NOESY spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S5.** Selective 1D-TOCSY spectrum of H2 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S6.** Selective 1D-TOCSY spectrum of H3 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S7.** Selective 1D-TOCSY spectrum of H8 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S8.** Selective 1D-TOCSY spectrum of H15 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S9.** Selective 1D-TOCSY spectrum of H18 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S10.** Selective 1D-TOCSY spectrum of H1' (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S11.** Selective 1D-TOCSY spectrum of H5' (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S12.** TOCSY spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .
- Figure S13.** Expanded HR-ESI-FT-MS of juvenimicin C (**1**).
- Figure S14.** CD spectrum of juvenimicin C (**1**) in methanol.
- Figure S15.** UV spectrum of juvenimicin C (**1**) in methanol.
- Figure S16.** ^1H -NMR spectrum of 5-*O*- α -L-rhamnosyltylactone (**2**).
- Figure S17.** HR-ESI-FT-MS of 5-*O*- α -L-rhamnosyltylactone (**2**).
- Figure S18.** Crystal structure of 5-*O*- α -L-rhamnosyltylactone (**2**).

Figure S1. ^1H NMR spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

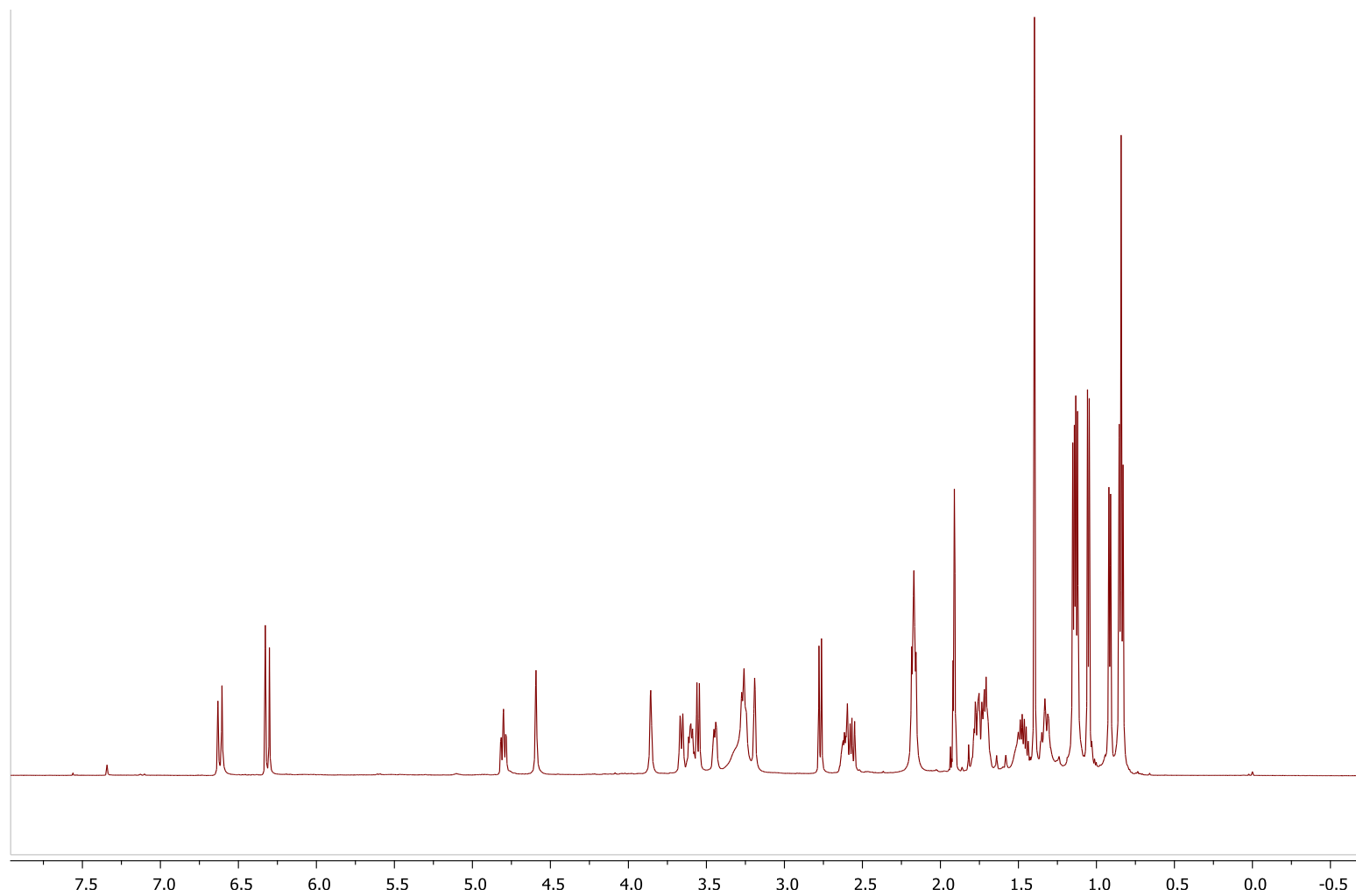


Figure S2. COSY spectrum (500 MHz) of juvenimicin C (1) in acetonitrile- d_3 .

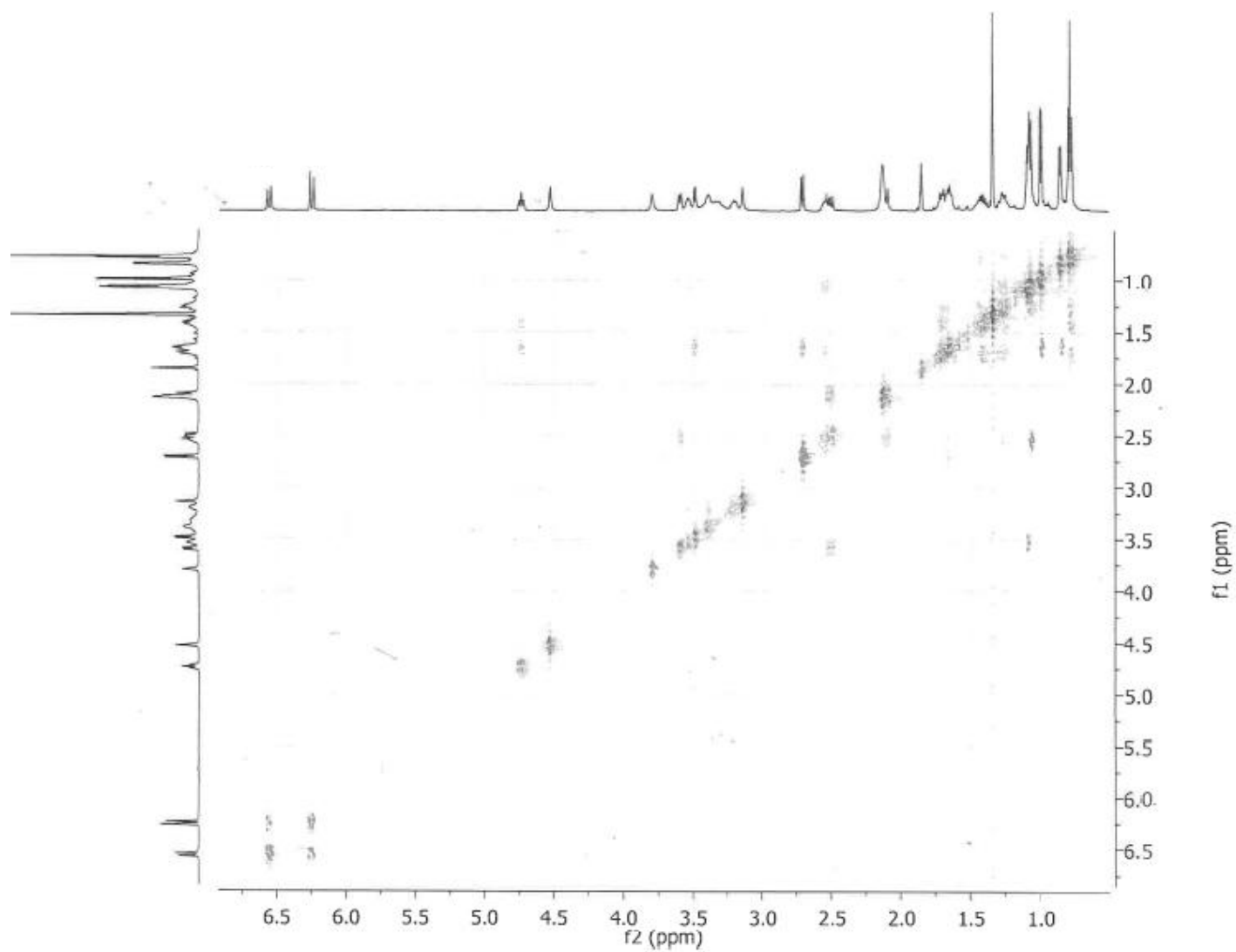


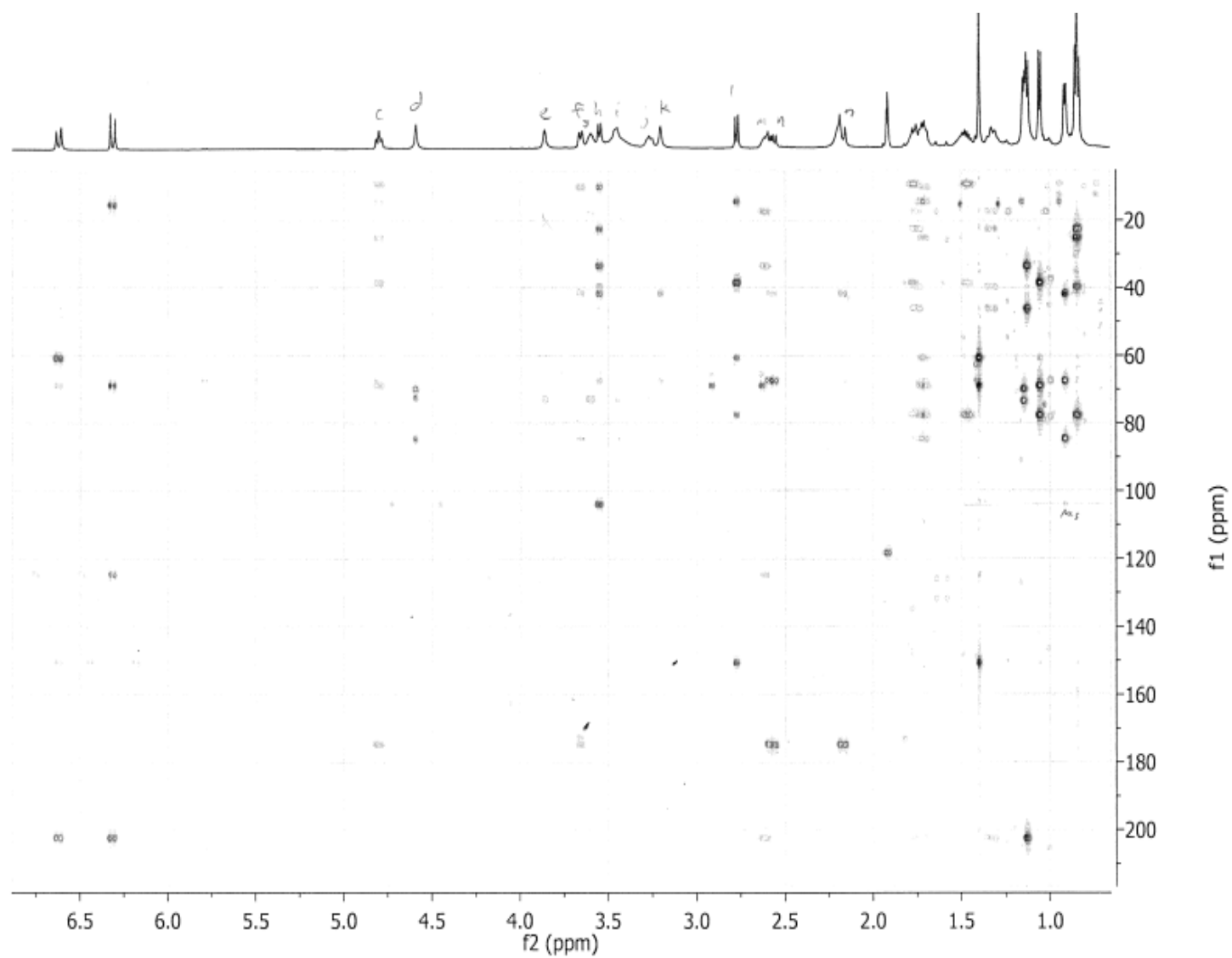
Figure S3. HMBC spectrum (500 MHz) of juvenimicin C (1) in acetonitrile- d_3 .

Figure S4. NOESY spectrum (500 MHz) of juvenimicin C (1) in acetonitrile- d_3 .

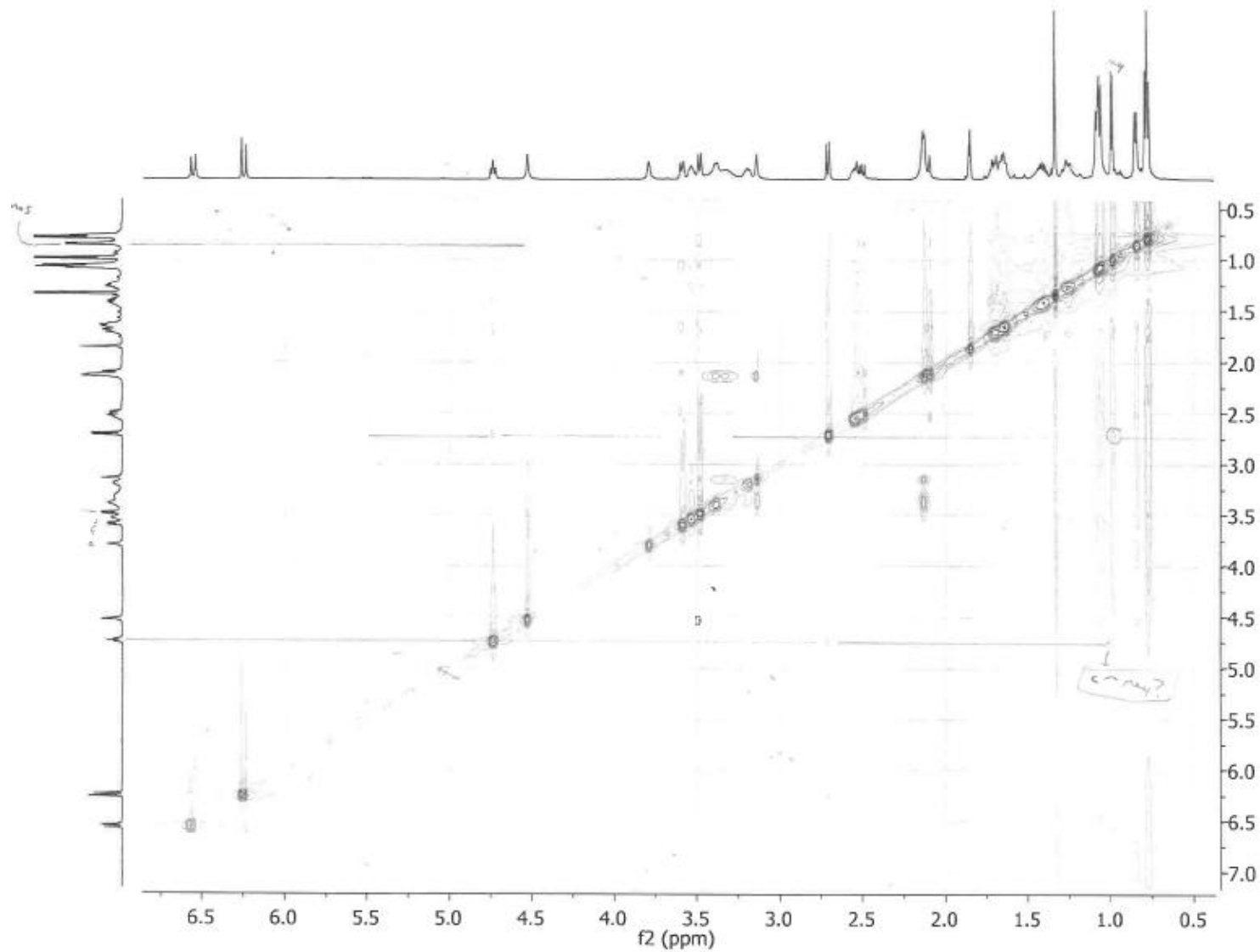


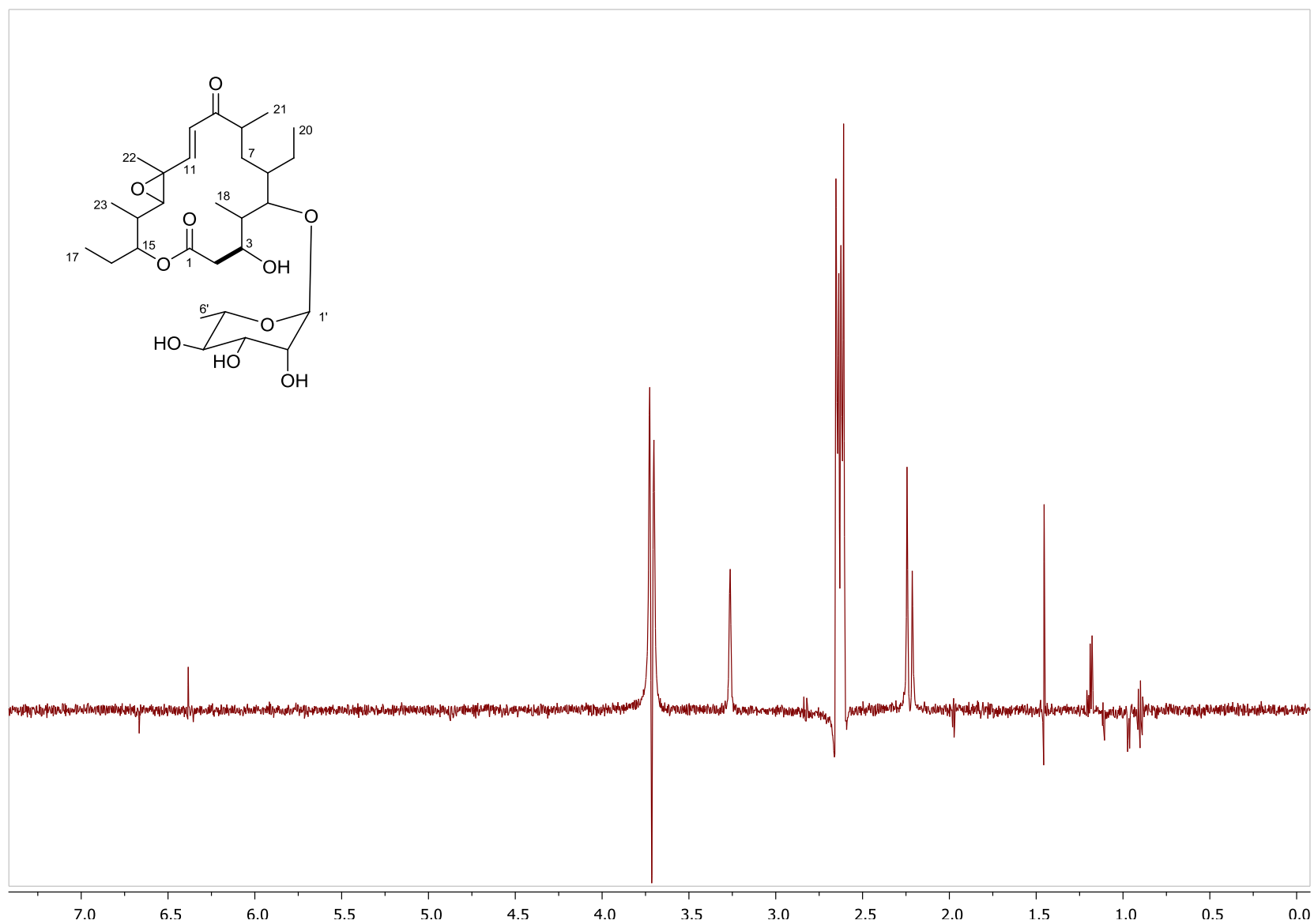
Figure S5. Selective 1D-TOCSY spectrum of H2 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

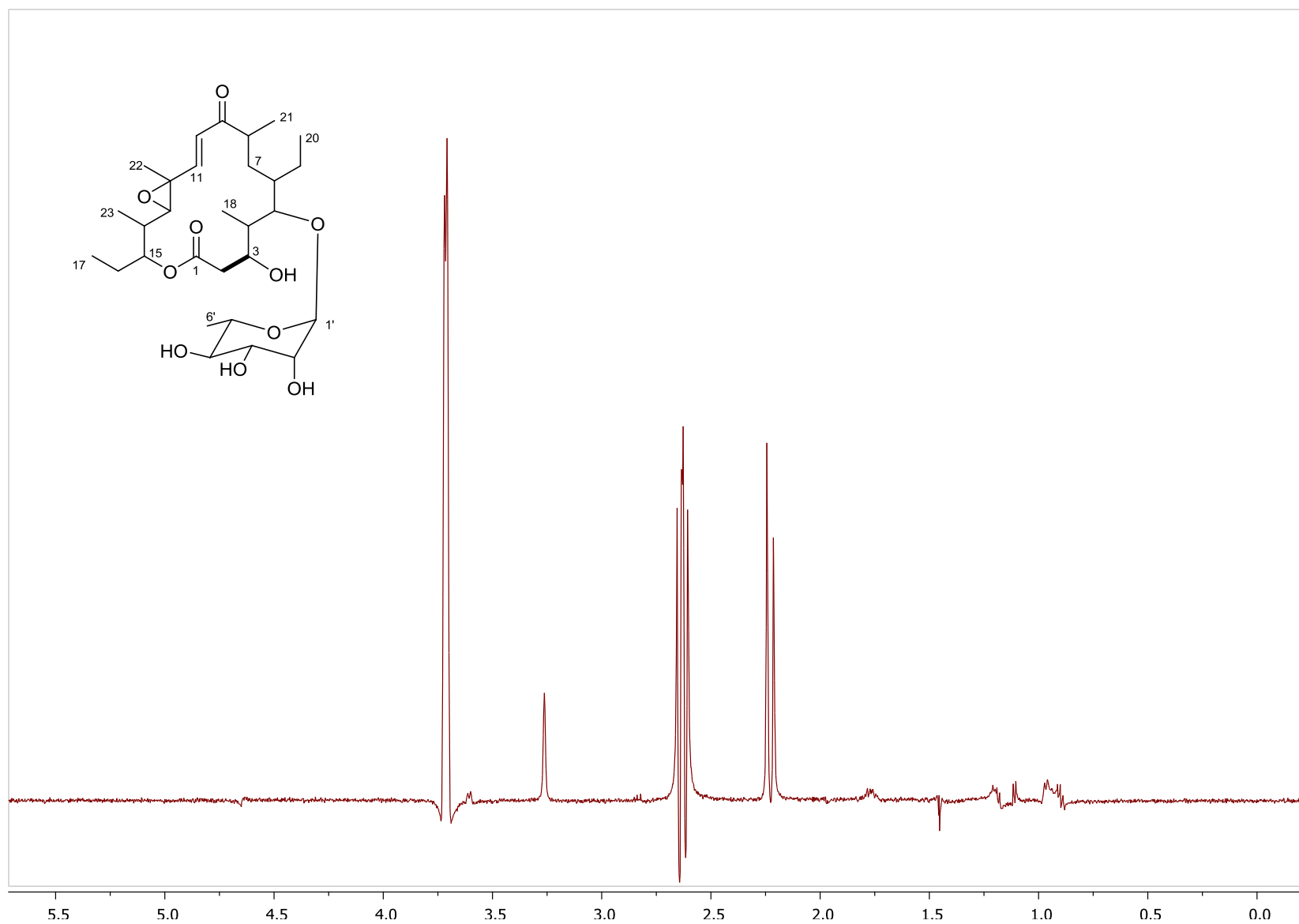
Figure S6. Selective 1D-TOCSY spectrum of H3 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

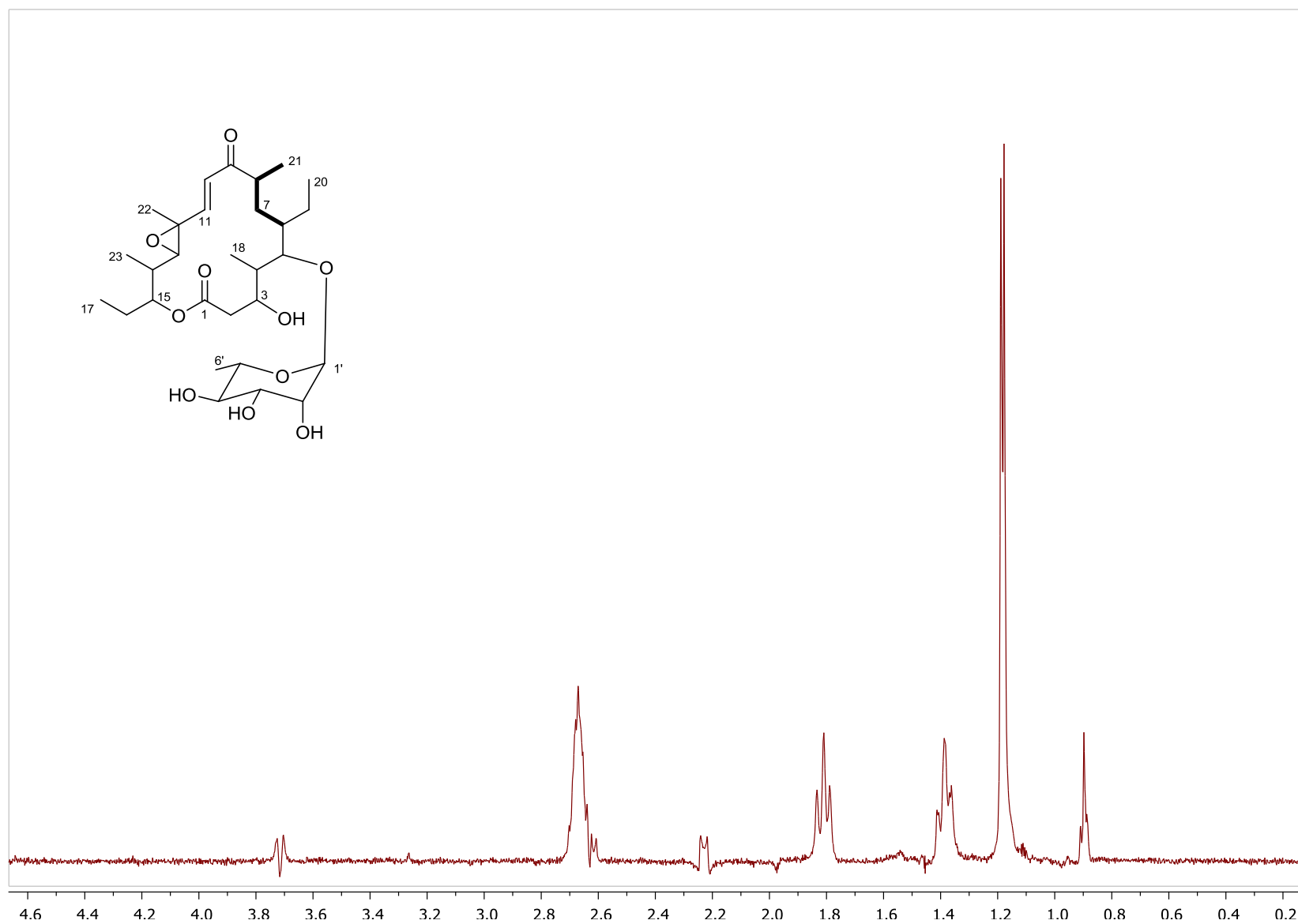
Figure S7. Selective 1D-TOCSY spectrum of H8 (500 MHz) of juvenimicin C (1) in acetonitrile- d_3 .

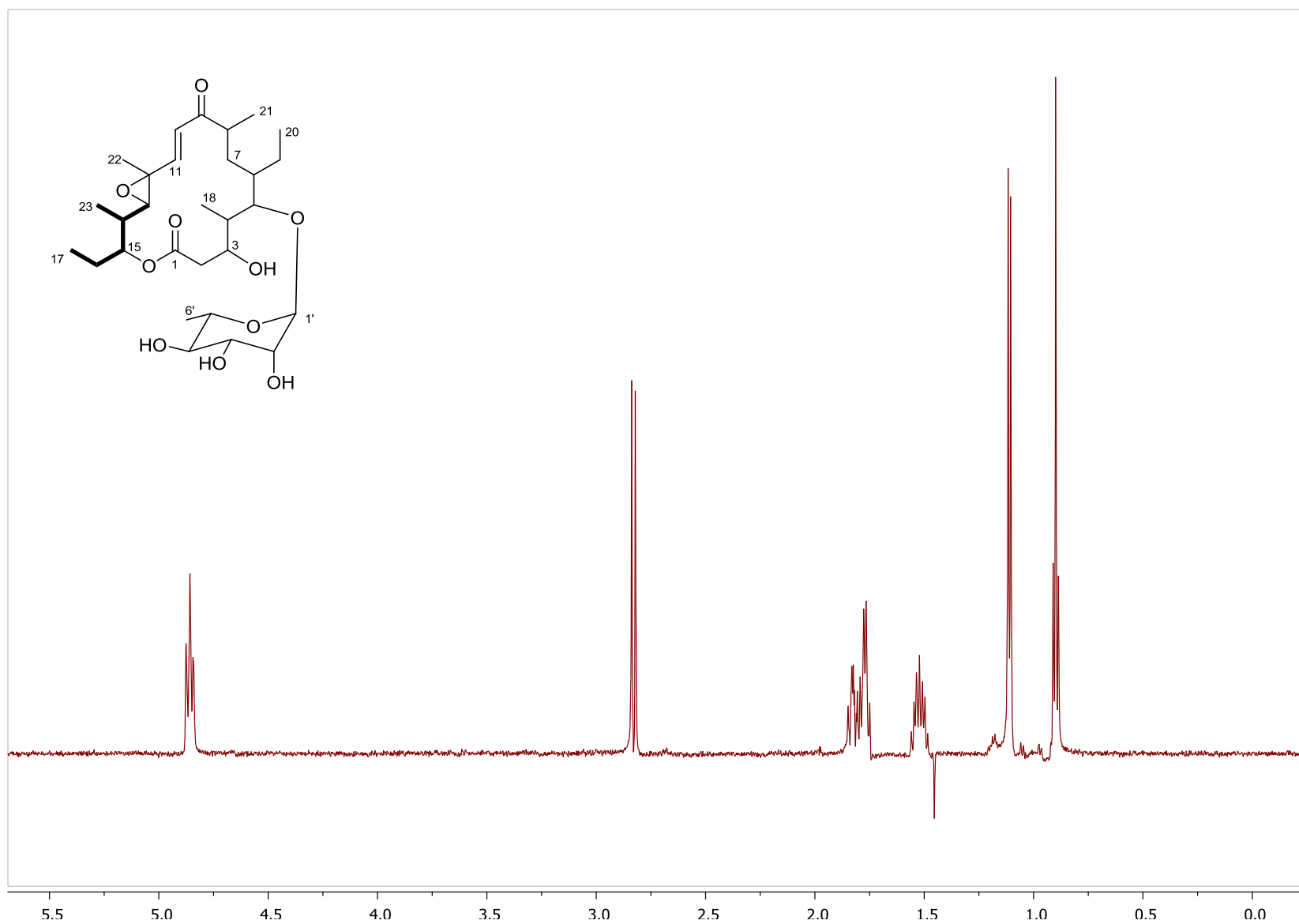
Figure S8. Selective 1D-TOCSY spectrum of H15 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

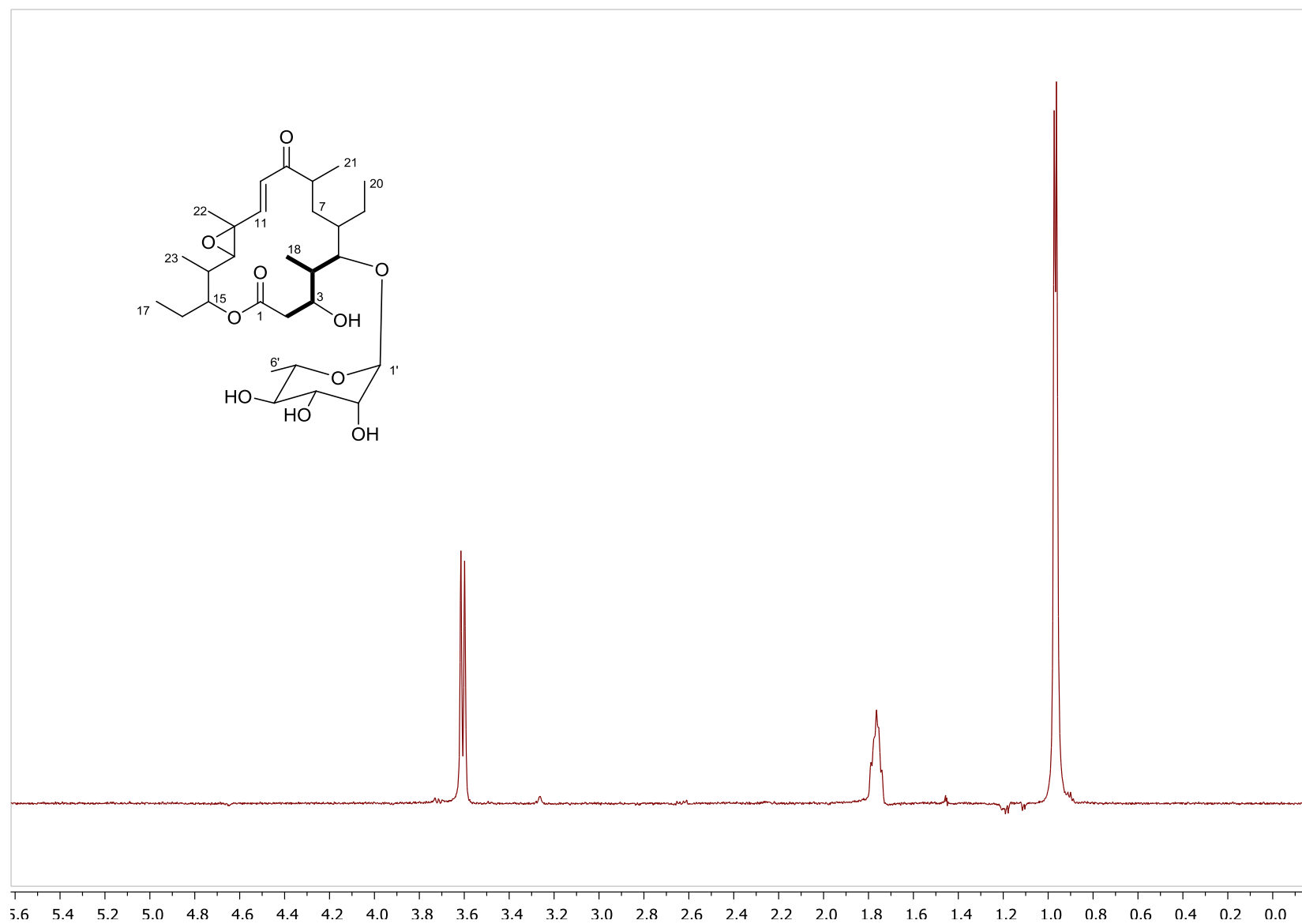
Figure S9. Selective 1D-TOCSY spectrum of H18 (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

Figure S10. Selective 1D-TOCSY spectrum of H1' (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

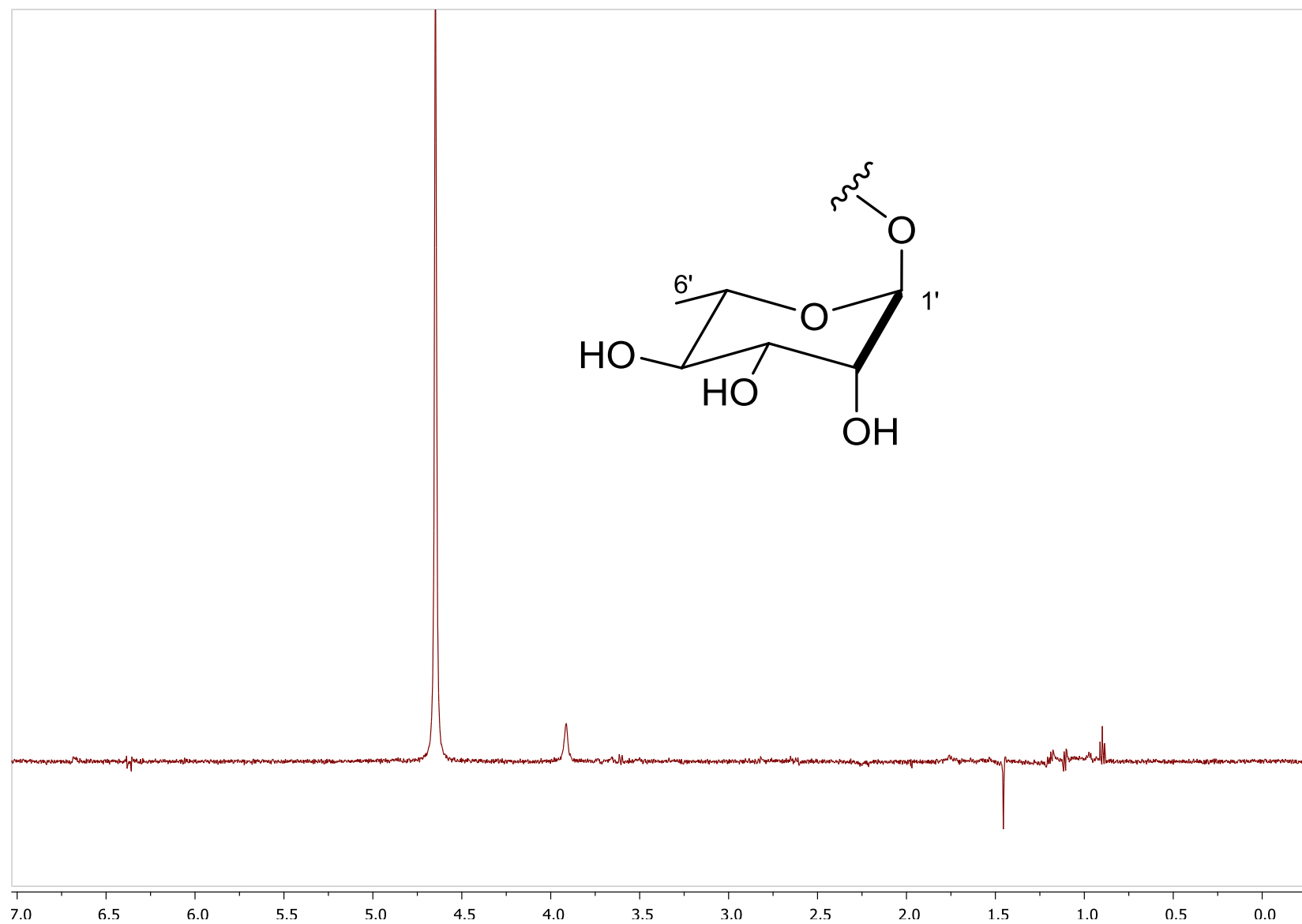


Figure S11. Selective 1D-TOCSY spectrum of H5' (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

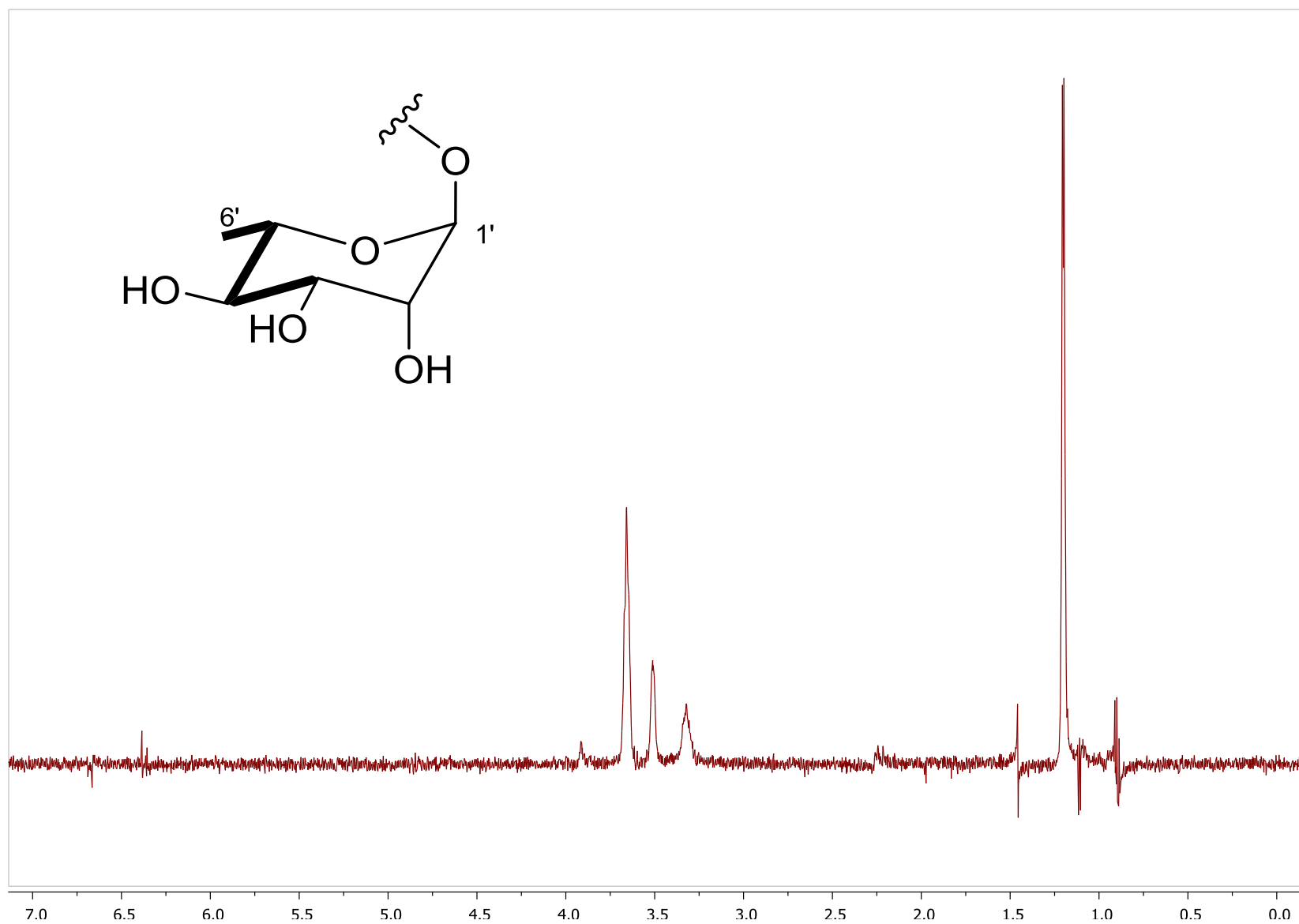


Figure S12. TOCSY spectrum (500 MHz) of juvenimicin C (**1**) in acetonitrile- d_3 .

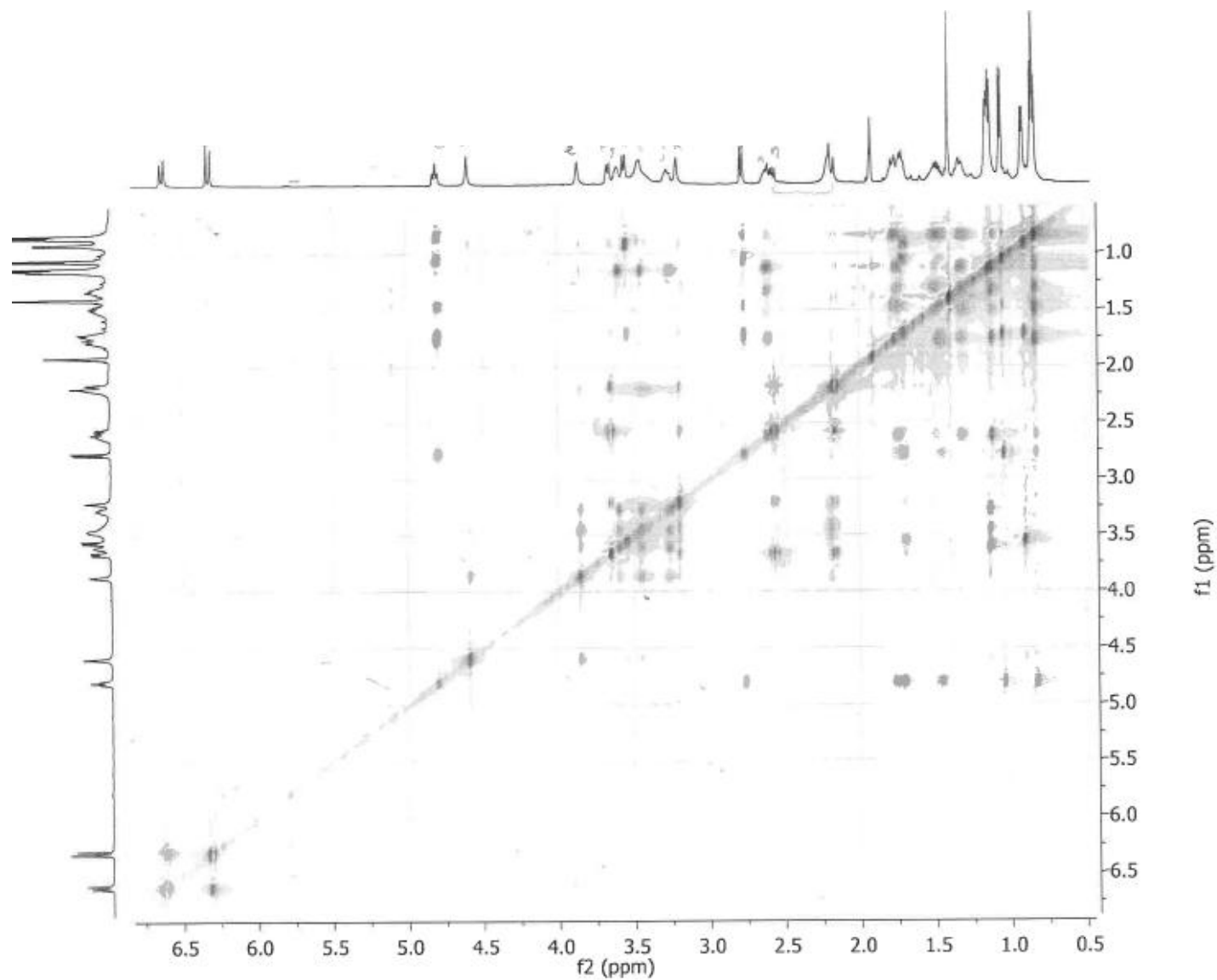


Figure S13. Expanded HR-ESI-FT-MS of juvenimicin C (1).

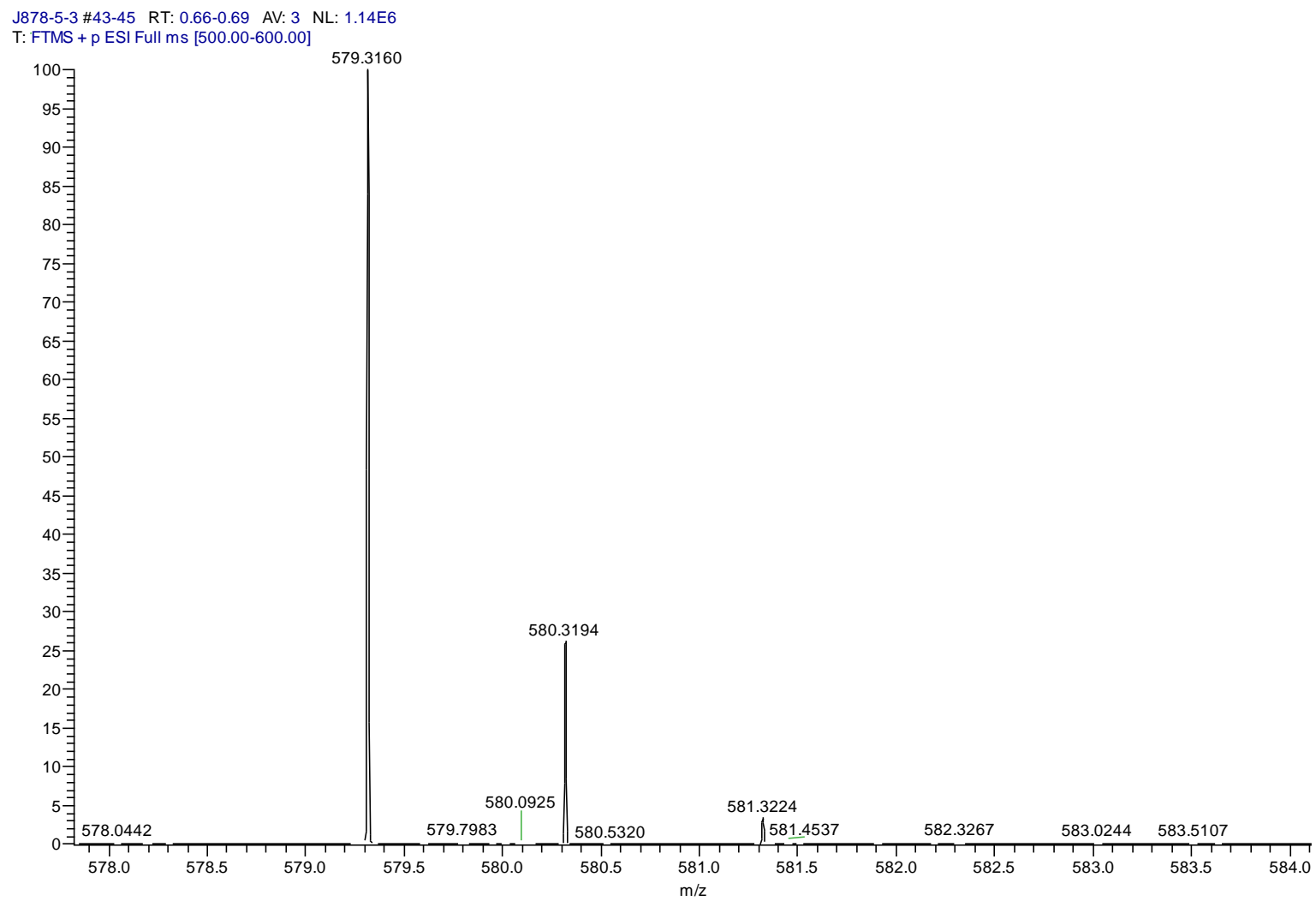


Figure S14. CD spectrum of juvenimicin C (1) in methanol.

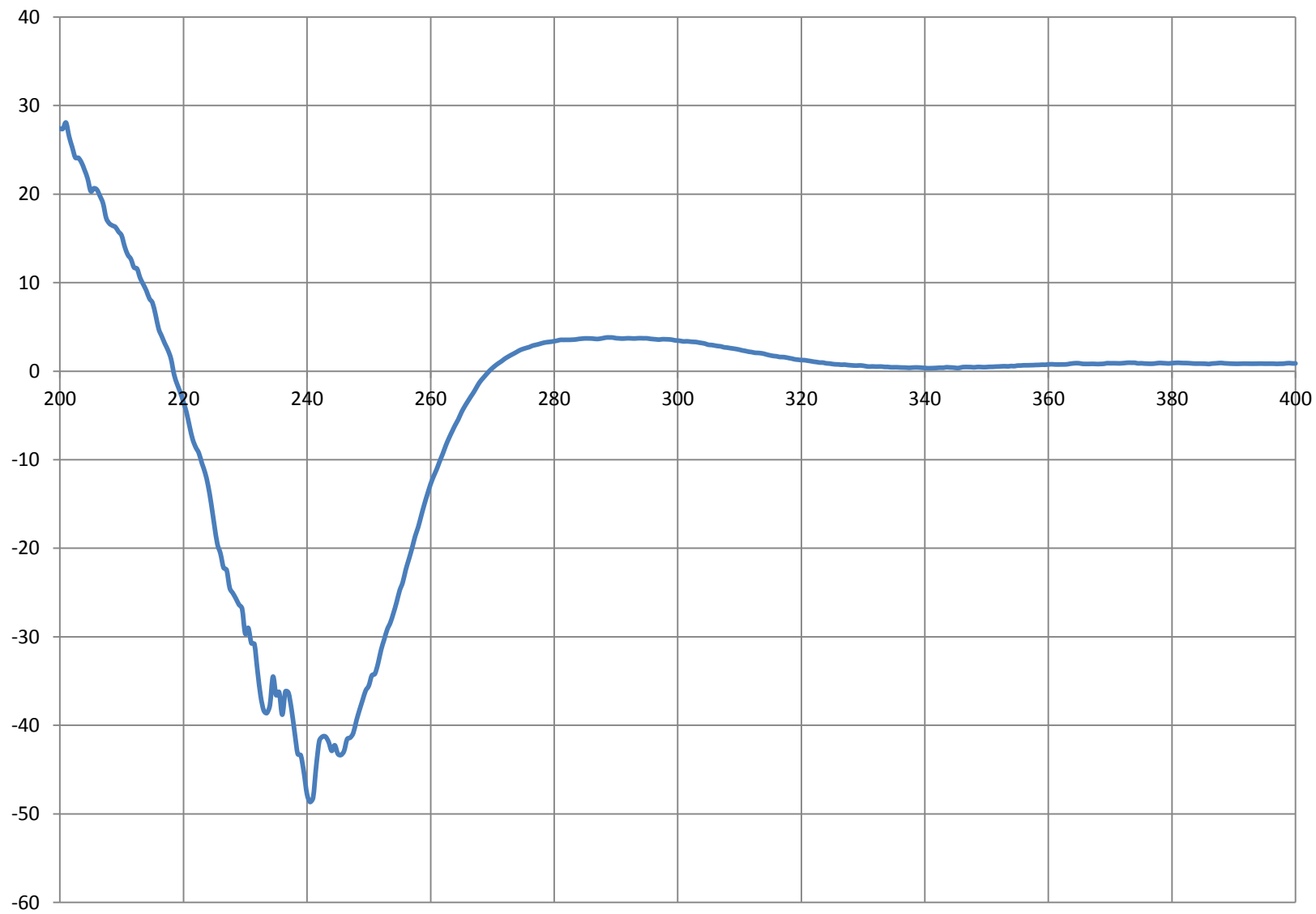


Figure S15. UV spectrum of juvenimicin C (1) in methanol.

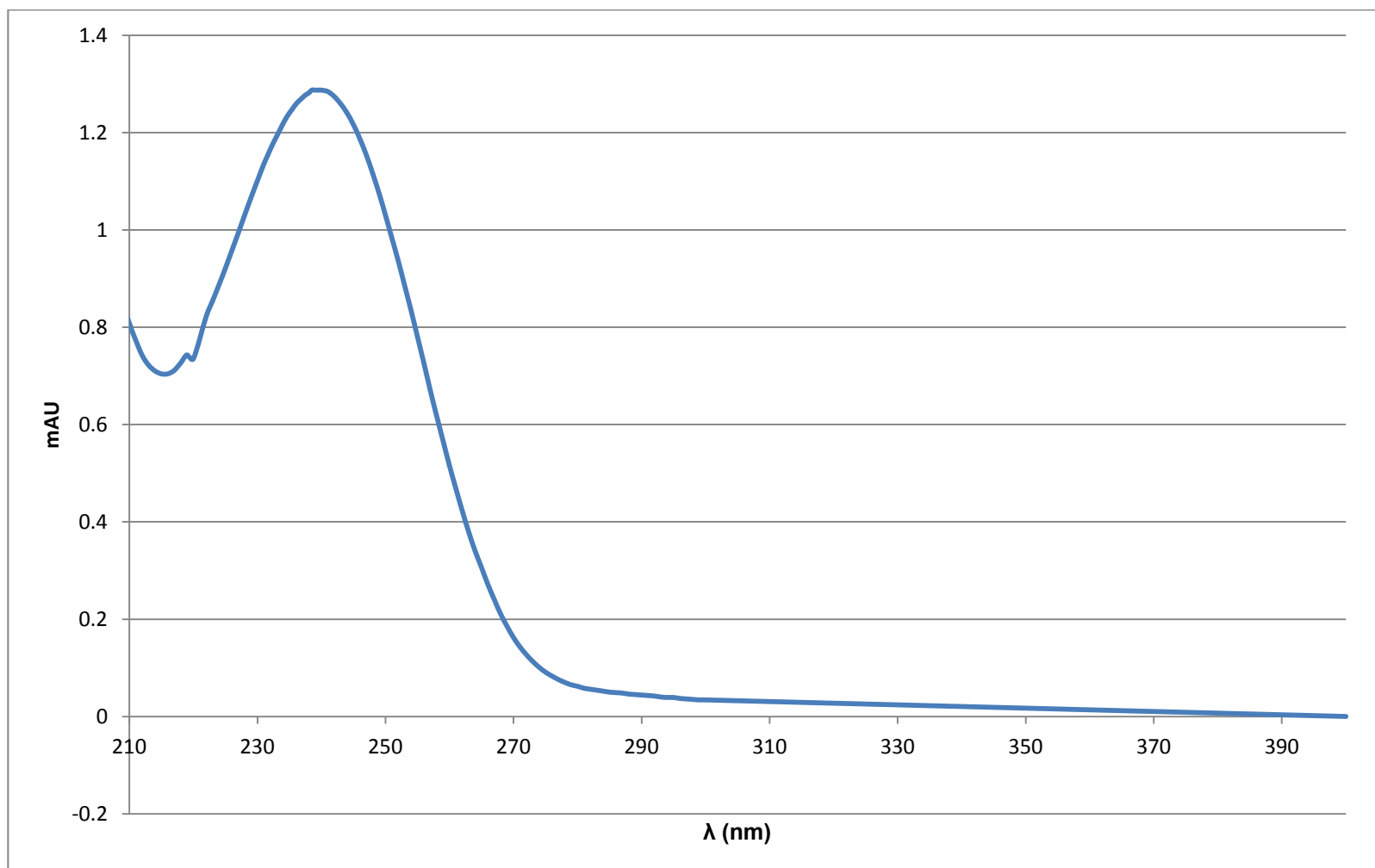


Figure S16. $^1\text{H-NMR}$ of 5-*O*- α -L-rhamnosyltylactone (**2**) in acetonitrile- d_3 .

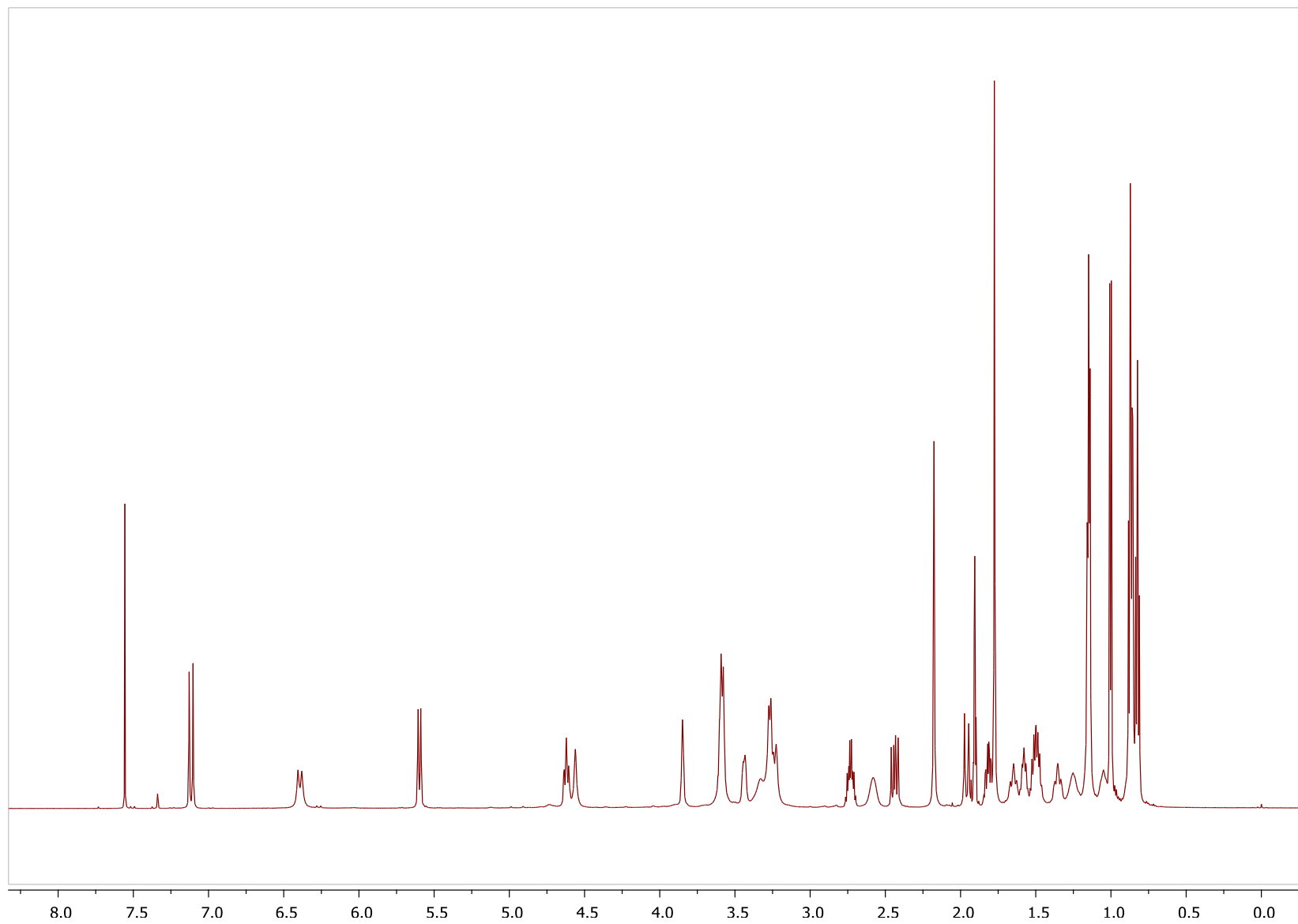


Figure S17. HR-ESI-FT-MS of 5-*O*- α -L-rhamnosylactone (**2**).

J878-6-12P-b #42-45 RT: 0.66-0.70 AV: 4 SB: 4 0.52-0.56 NL: 2.49E6
T: + c Full ms [150.00-800.00]

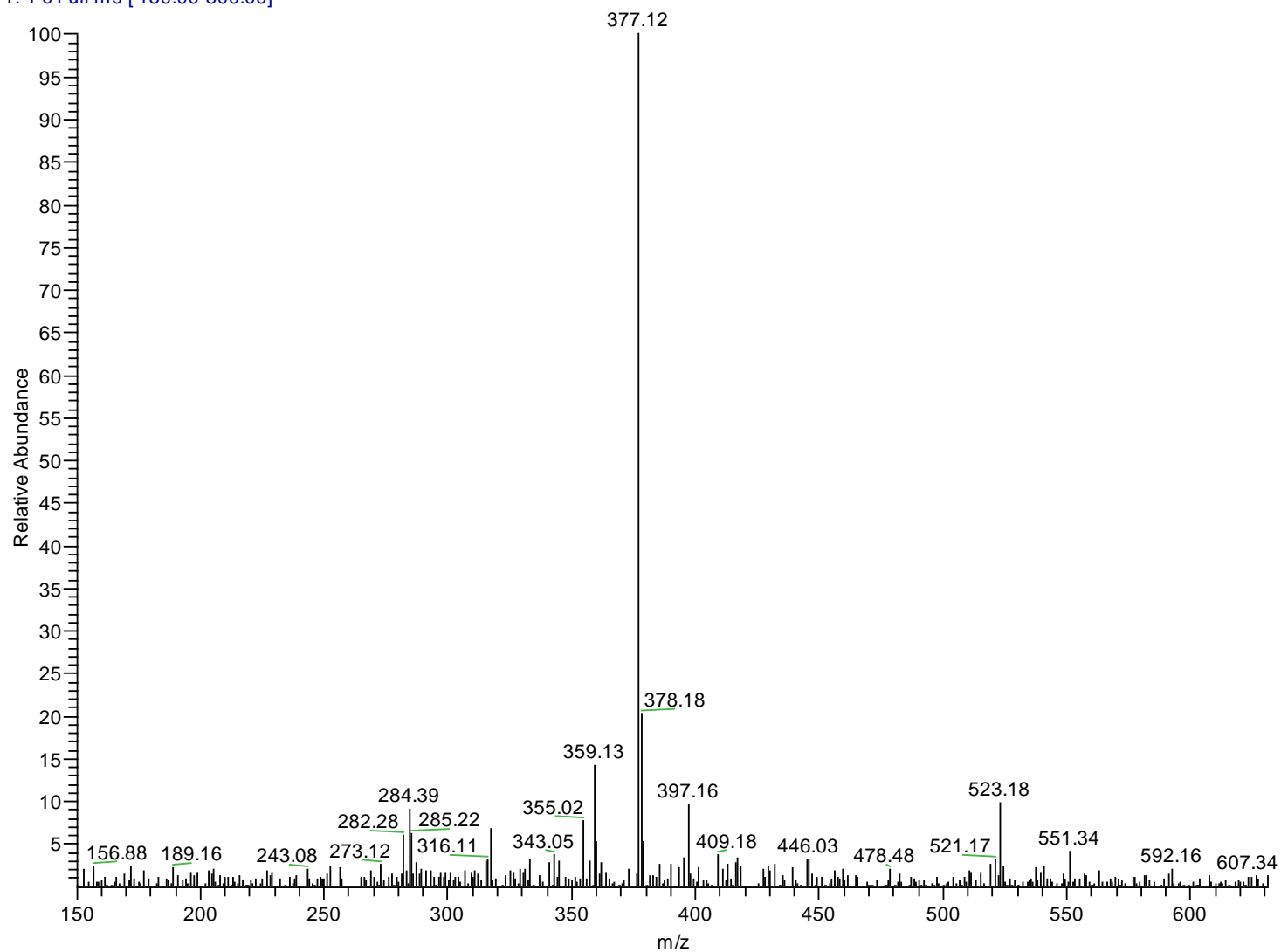


Figure S18. Crystal structure of 5-*O*- α -L-rhamnosylactone (**2**) depicting absolute stereochemistry.

