Supplemental information for

Isolation of antibiotic 3R,5R-dihydroxyhexanoate polymers from endophytic fungi

Nicholas J. Morehouse\textsuperscript{a}, Andrew J. Flewelling\textsuperscript{a}, John A. Johnson\textsuperscript{a}, and Christopher A. Gray\textsuperscript{a,b,*}

\textsuperscript{a}Department of Biological Sciences, University of New Brunswick, 100 Tucker Park Rd, Saint John, NB, E2L 4L5, Canada

\textsuperscript{b}Department of Chemistry, University of New Brunswick, 30 Dineen Dr, Fredericton, NB, E3B 5A3, Canada
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## Table S1. Positive mode ESI HRMS peaks corresponding to the increasing lengths of poly($3R,5R$-dihydroxyhexanoic acid) (1).

| Oligomer | Observed adduct | calcd m/z | Observed m/z | Δppm |
|----------|-----------------|-----------|--------------|-------|
| Trimer   | C_{18}H_{32}O_{10}Na^+ | 431.1909 | 431.1888 | -4.9 |
| Tetramer | C_{24}H_{42}O_{13}Na^+ | 561.2545 | 561.2521 | 4.3 |
| Pentamer | C_{30}H_{52}O_{16}Na^+ | 691.3180 | 691.3153 | -3.9 |
| Hexamer  | C_{36}H_{62}O_{19}Na^+ | 821.3816 | 821.3807 | -1.1 |
| Heptamer | C_{42}H_{72}O_{22}Na^+ | 951.4451 | 951.4454 | 0.3 |
| Octamer  | C_{48}H_{82}O_{25}Na^+ | 1081.5087 | 1081.5090 | 0.3 |
| Nonamer  | C_{54}H_{92}O_{28}Na^+ | 1211.5722 | 1211.5691 | -2.6 |
| Decamer  | C_{60}H_{102}O_{31}Na^+ | 1341.6357 | 1341.6306 | -3.8 |
| Undecamer | C_{66}H_{112}O_{34}Na^+ | 1471.6993 | 1471.6965 | -1.9 |
| Dodecamer | C_{72}H_{122}O_{37}Na^+ | 1601.7628 | 1601.7612 | -1.0 |
| 13-mer   | C_{78}H_{132}O_{40}Na^+ | 1731.8264 | 1731.8251 | -0.8 |
| 14-mer   | C_{84}H_{142}O_{43}Na^+ | 1861.8899 | 1861.8906 | 0.4 |
| 15-mer   | C_{90}H_{152}O_{46}Na^{2+} | 1007.4713 | 1007.4708 | -0.5 |
| 16-mer   | C_{96}H_{162}O_{49}Na^{2+} | 1072.5031 | 1072.5005 | -2.4 |
| 17-mer   | C_{102}H_{172}O_{52}Na^{2+} | 1137.5349 | 1137.5343 | -0.5 |
| 18-mer   | C_{108}H_{182}O_{55}Na^{2+} | 1202.5666 | 1202.5655 | -0.9 |
| 19-mer   | C_{114}H_{192}O_{68}Na^{2+} | 1267.5984 | 1267.5942 | -3.3 |
| 20-mer   | C_{120}H_{202}O_{61}Na^{2+} | 1332.6302 | 1332.6275 | -2.0 |
| 21-mer   | C_{126}H_{212}O_{64}Na^{2+} | 1397.6620 | 1397.6582 | -2.7 |
| 22-mer   | C_{132}H_{222}O_{67}Na^{2+} | 1462.6937 | 1462.6910 | -1.8 |
| 23-mer   | C_{138}H_{232}O_{70}Na^{2+} | 1527.7255 | 1527.7245 | -0.7 |
| 24-mer   | C_{144}H_{242}O_{73}Na^{2+} | 1592.7573 | 1592.7521 | -3.3 |
| 25-mer   | C_{150}H_{252}O_{76}Na^{2+} | 1657.7890 | 1657.7924 | 2.1 |
| 26-mer   | C_{156}H_{262}O_{79}Na^{2+} | 1722.8208 | 1722.8258 | 2.9 |
| 27-mer   | C_{162}H_{272}O_{82}Na^{2+} | 1787.8526 | 1787.8442 | -4.7 |
| 28-mer   | C_{168}H_{282}O_{85}^{2+} | 1830.9052 | 1830.8999 | -2.9 |
| 29-mer   | C_{174}H_{294}O_{88}^{2+} | 1895.9369 | 1895.9455 | 4.5 |
**Figure S1.** Inhibition of *Mycobacterium tuberculosis* (circles, dotted line) and *Staphylococcus aureus* (squares, dashed line) growth by poly(3R,5R-dihydroxyhexanoic acid. Data are shown as means of triplicate values (error bars represent standard deviations) with dose-response curves calculated by four parameter logistic regression.
Figure S2. $^1$H NMR spectrum (400 MHz) of poly(3R,5R-dihydroxyhexanoic acid) (1) in CD$_3$OD.
Figure S3. $^{13}$C NMR spectrum (100 MHz) of poly(3R,5R-dihydroxyhexanoic acid) (1) in CD$_3$OD.
Figure S4. $^1$H NMR spectrum (400 MHz) of 4R-hydroxy-6R-methyltetrahydropyran-2-one (2) in CDCl$_3$. 
Figure S5. $^{13}$C NMR spectrum (100 MHz) of 4$R$-hydroxy-6$R$-methyltetrahydropyran-2-one (2) in CDCl$_3$. 