Supplementary Material

Flavacol and its Novel Derivative 3-*β*-hydroxy Flavacol from *Streptomyces* sp. Pv 4-95 after the Expression of Heterologous AdpA

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Physical data of 3-β-hydroxy flavacol (2): white solid; 1.2 mg; UV (31% ACN in H_2O + 0.1% FA) λ_{max} (log ε) 226 nm (1.92) and 326 nm (1.73); ^{1}H and ^{13}C NMR data, see Table 1; ESI-TOF-MS *m*/*z* 225.15903 $[M+H]^+$ (calc. for $C_{12}H_{20}N_2O_2$ 224.1519).

>OM763959.1 Streptomyces sp. strain Pv4-95 16S ribosomal RNA gene, partial sequence

TGCAAGTCGAACGATGAACCTCCTTCGGGAGGGGATTAGTGGCGAACGGGTGAGTAACACGTGGGCAATC
TGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATACGACTACCGACCGCATGGTCT
GGTGGTGGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGGGGTGATGGCCTA
CCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACT
CCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGG
ATGACGGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAG
CGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCG
TAAAGAGCTCGTAGGCGGCTTGTCACGTCGGATGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTCGA
TACGGGCAGGCTAGAGTTCGGTAGGGGAGATCGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAG
GAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCGATACTGACGCTGAGGAGCGAAAGCGTGGGGAGCG
AACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGTTGGGAACTAGGTGTGGGCGACATTCCACGTC
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ATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAG
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GTCGTCAGCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTTCTGTGTTGCCA
GCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGAC
GTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGAT
ACCGCGAGGTGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGA
AGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCCCTTGTGGGAGGGAATCGTCGA

Figure S1. Partial sequence of the *Streptomyces* sp. Pv4-95 16S ribosomal RNA gene.

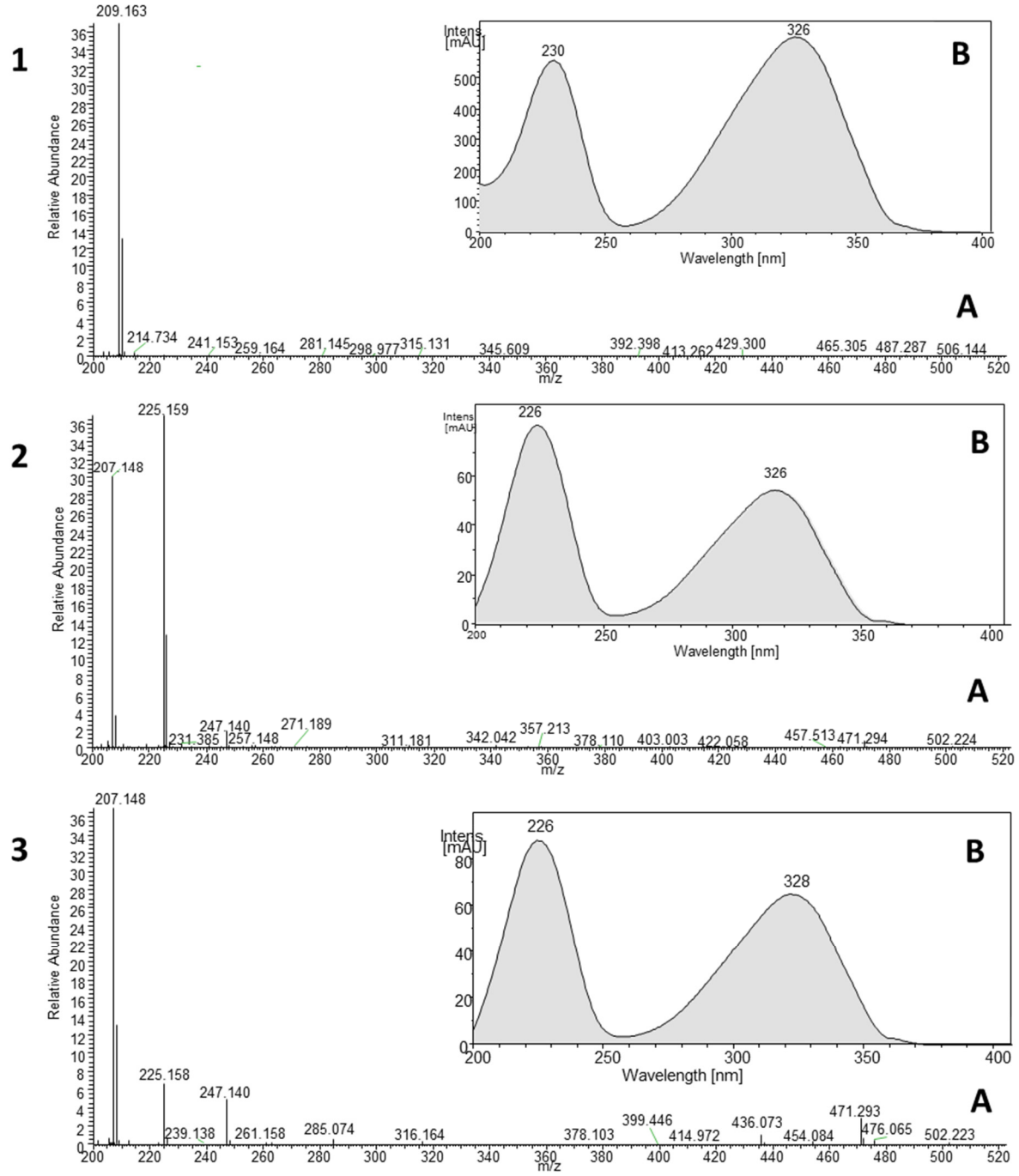

Figure S2. Analyses of identified peaks in the crude extract of *Streptomyces* sp. Pv 4-95adpA strain. (A) Mass spectrum and (B) UV spectrum of identified peaks corresponding to flavacol (1), 3-*β*-hydroxy flavacol (2) and a compound that could not be obtained (3).

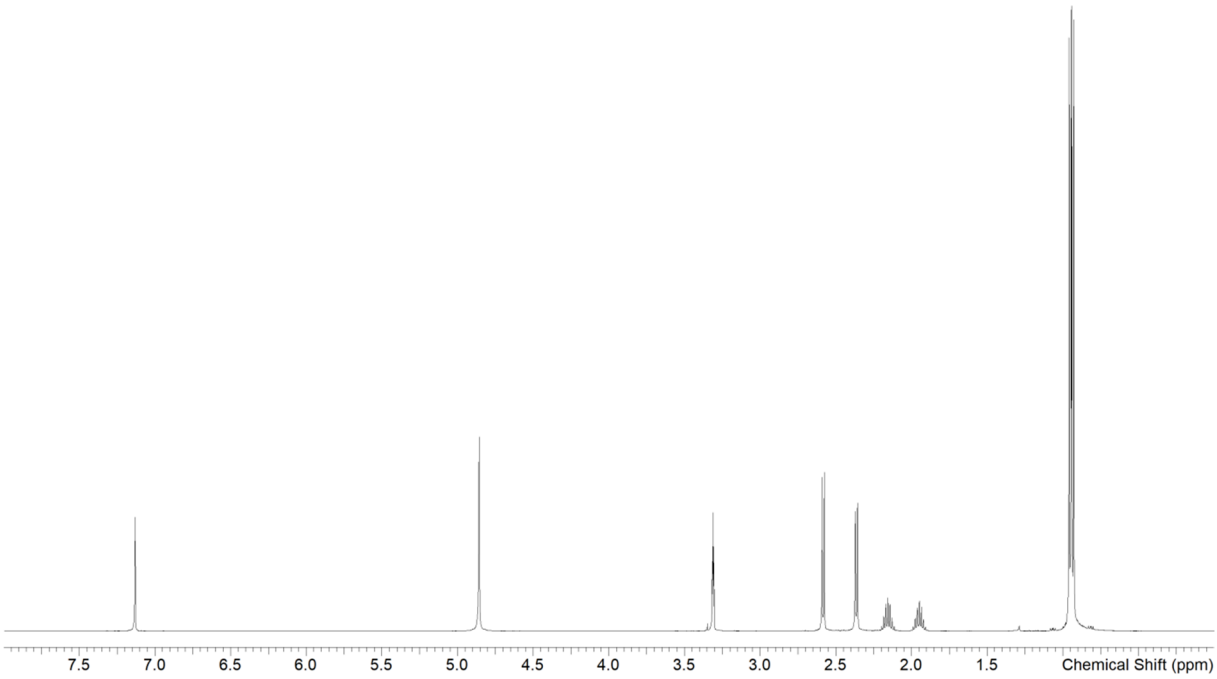

Figure S3. ^{1}H NMR spectrum (MeOD-*d4*, 500 MHz) of flavacol (1).

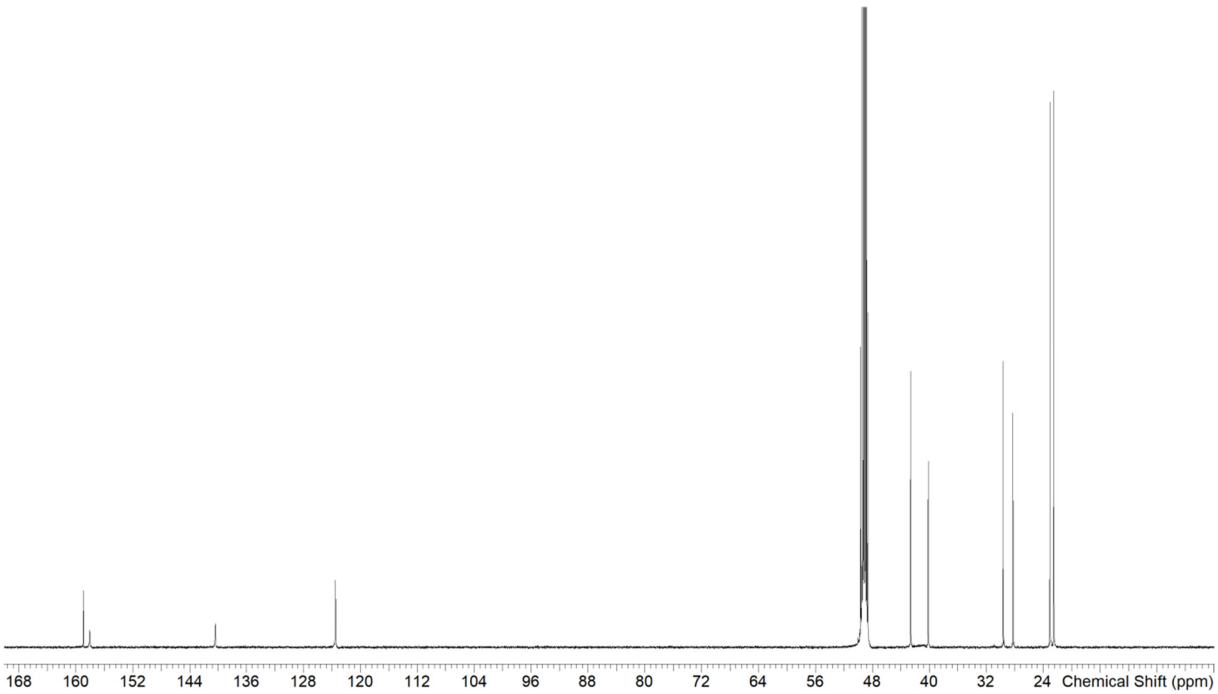

Figure S4. ^{13}C NMR spectrum (MeOD-*d4*, 125 MHz) of flavacol (1).

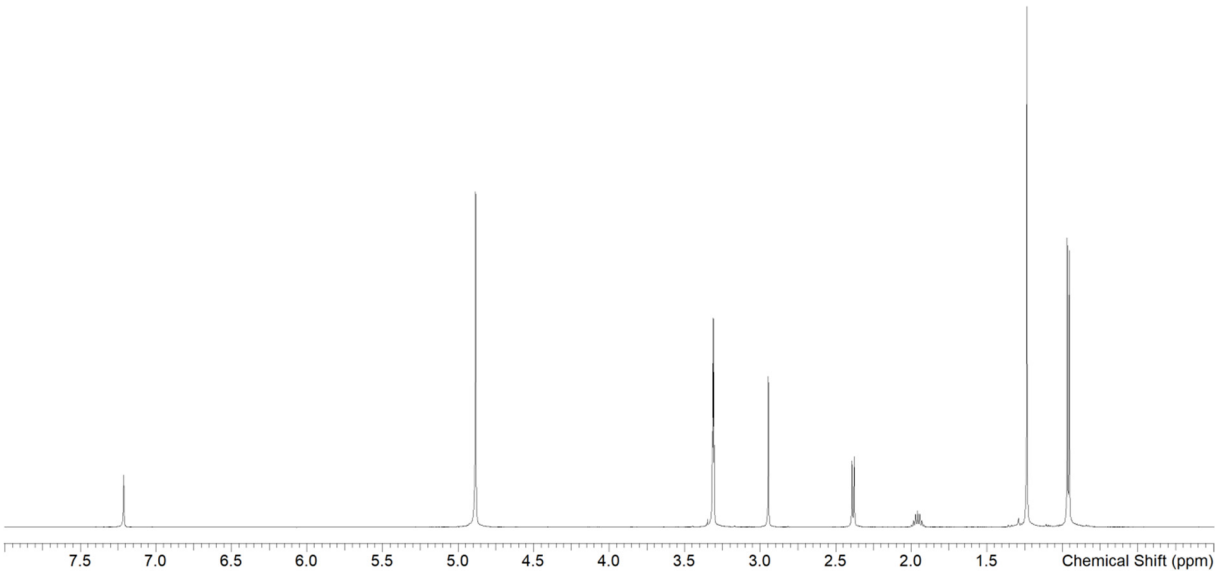

Figure S5. [1]H NMR spectrum (MeOD-*d4*, 500 MHz) of 3-*β*-hydroxy flavacol (2).

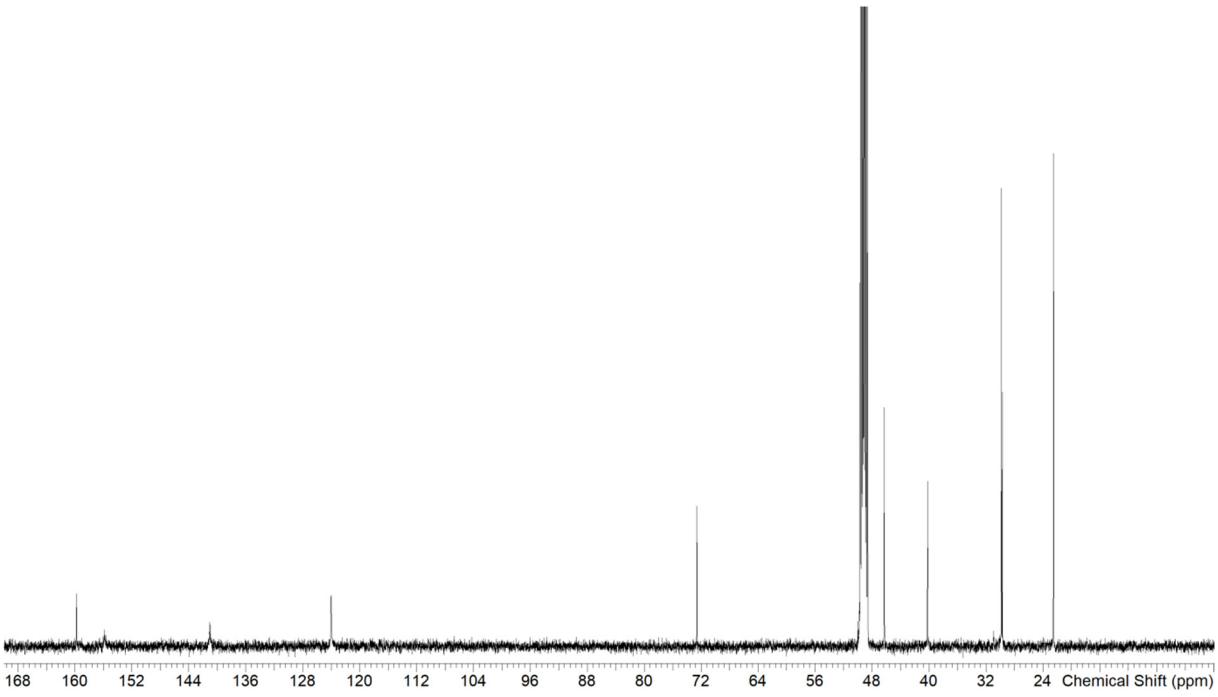

Figure S6. [13]C NMR spectrum (MeOD-*d4*, 500 MHz) of 3-*β*-hydroxy flavacol (2).

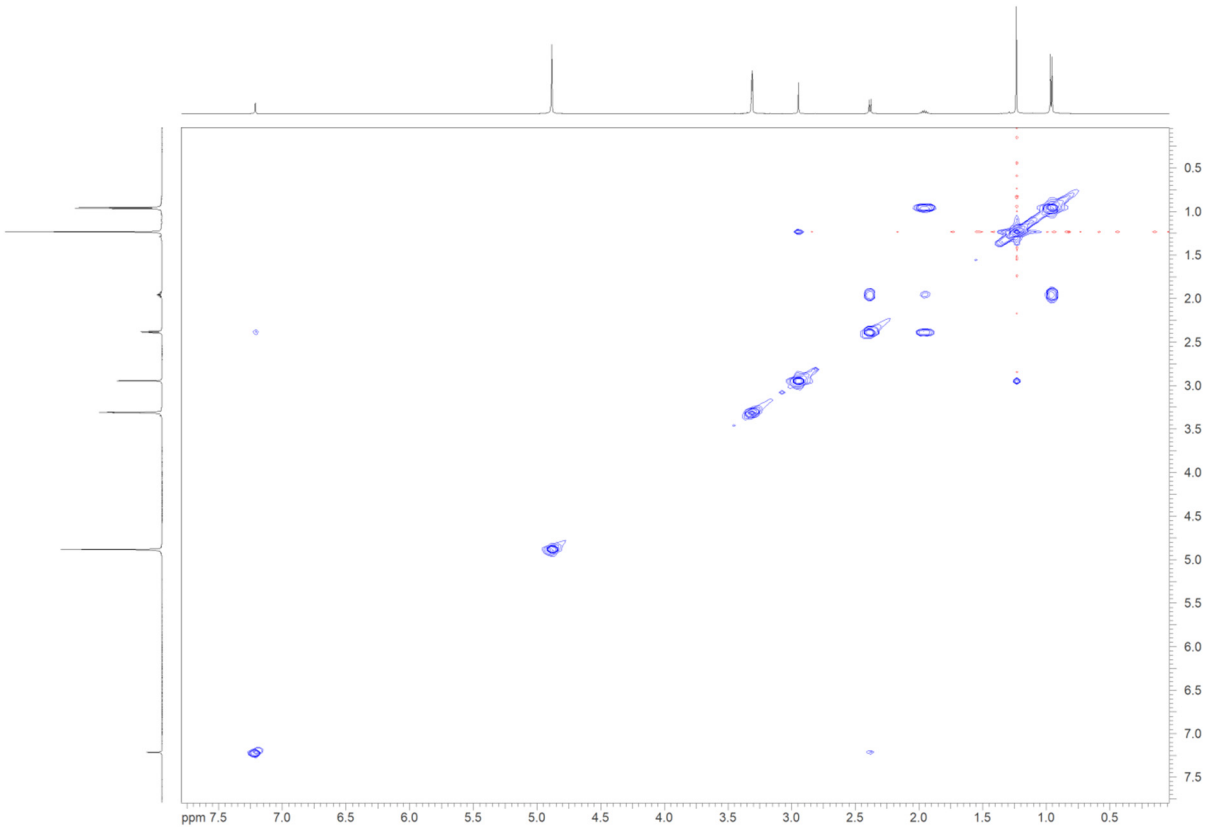

Figure S7. ^{1}H-^{1}H COSY spectrum (MeOD-*d4*, 500 MHz) of 3-*β*-hydroxy flavacol (2).

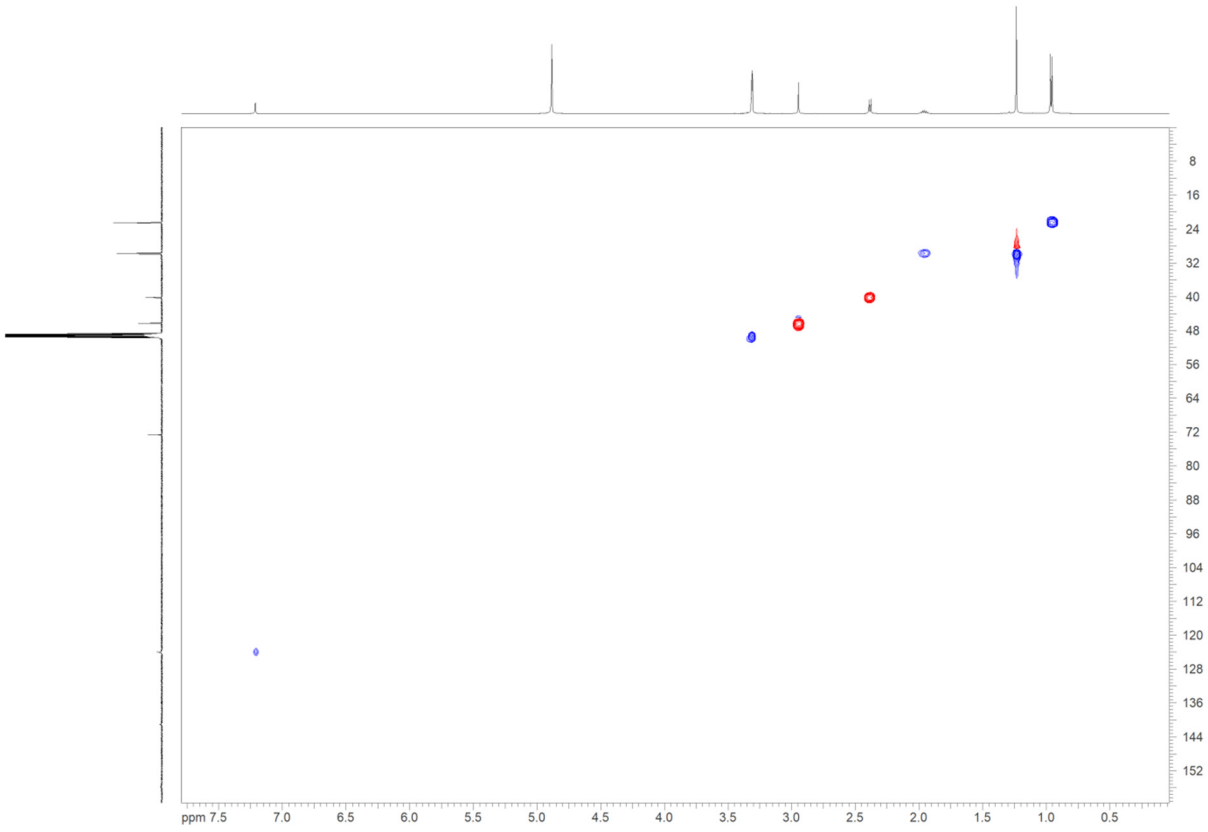

Figure S8. Edited-HSQC spectrum (MeOD-*d4*, 500 MHz) of 3-*β*-hydroxy flavacol (2).

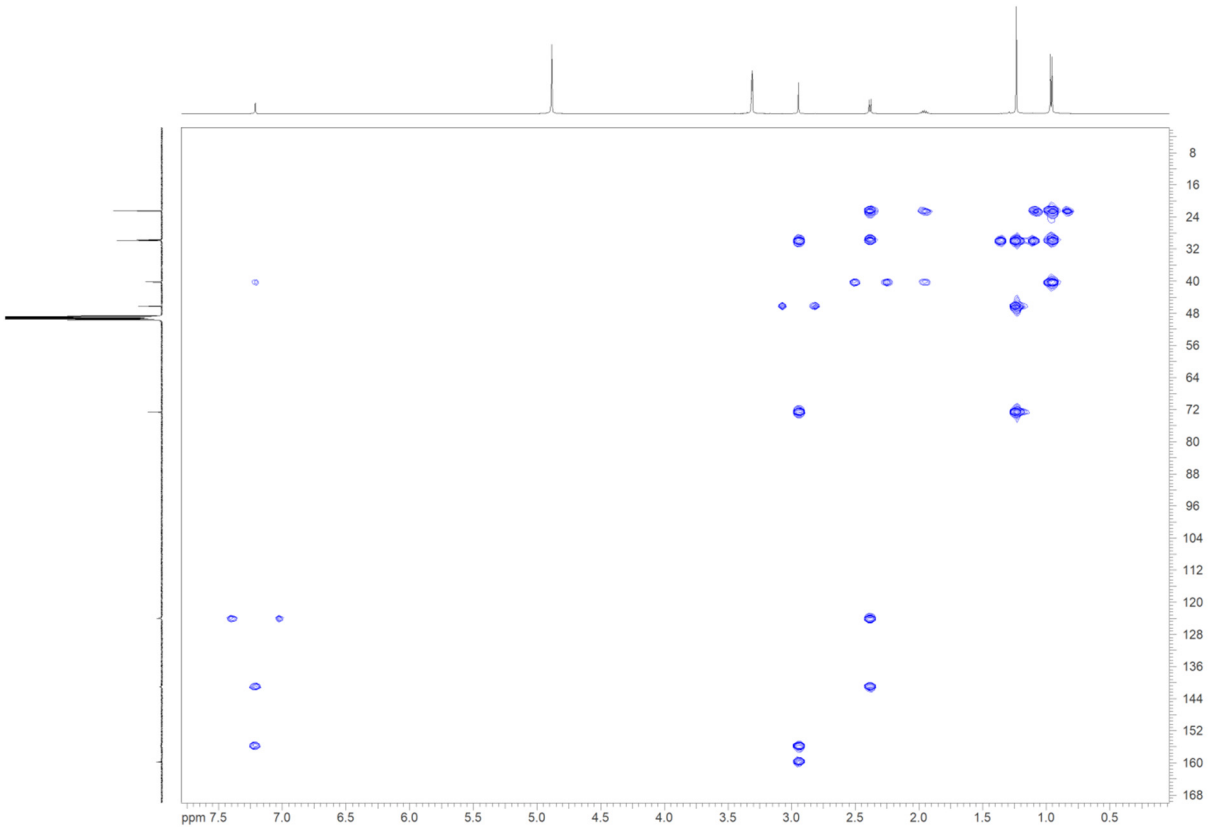

Figure S9. HMBC spectrum (MeOD-*d4*, 500 MHz) of 3-*β*-hydroxy flavacol (2).