

Supporting Information

Methoxy-Substituted Hydroxychalcone Reduces Biofilm Production, Adhesion and Surface Motility of Acinetobacter baumannii by Inhibiting ompA Gene Expression

Dušan Ušjak, Miroslav Dinić, Katarina Novović, Branka Ivković, Nenad Filipović, Magdalena Stevanović, and Marina T. Milenković*

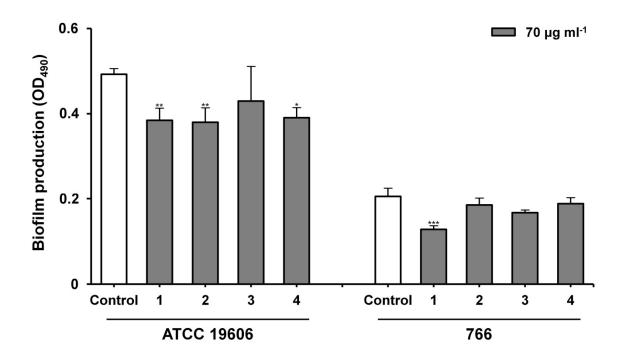
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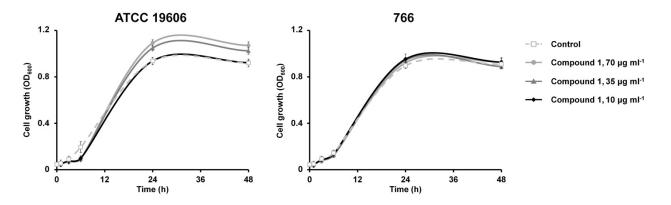
Dušan Ušjak,^a Miroslav Dinić,^b Katarina Novović,^b Branka Ivković,^c Nenad Filipović,^d Magdalena Stevanović,^d and Marina T. Milenković^{*,a}

^a Department of Microbiology and Immunology, University of Belgrade - Faculty of Pharmacy, Vojvode Stepe 450, 11221 Belgrade, Serbia ^bLaboratory for Molecular Microbiology, Institute of Molecular Genetics and Genetic Engineering, University of Belgrade, Vojvode Stepe 444/a, 11010 Belgrade, Serbia

^c Department of Pharmaceutical Chemistry, University of Belgrade - Faculty of Pharmacy, Vojvode Stepe 450, 11221 Belgrade, Serbia ^d Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Knez Mihailova 35/IV, 11000 Belgrade, Serbia ^{*} E-mail address for correspondence: <u>marinama@pharmacy.bg.ac.rs</u>



Supplementary Figure S1. Biofilm production of two *A. baumannii* strains treated with compounds **1-4**, each at 70 μ g ml⁻¹, compared to control, expressed as OD values of the extracted safranin dye at 490 nm. Data are presented as mean values of three experiments (± SD). *P < 0.05, **P < 0.01, ***P < 0.001 compared to the control group.



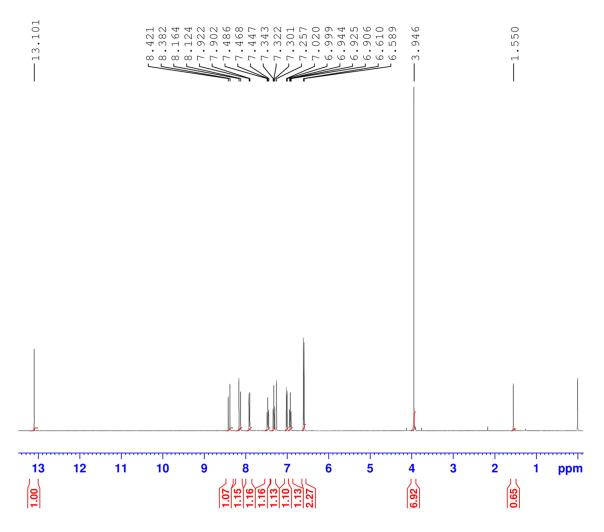
Supplementary Figure S2. Effects of compound 1 on *A. baumannii* cell growth at three different sub-MICs compared to control. Data are presented as mean values of three experiments (± SD).

Spectral data of previously published compounds:

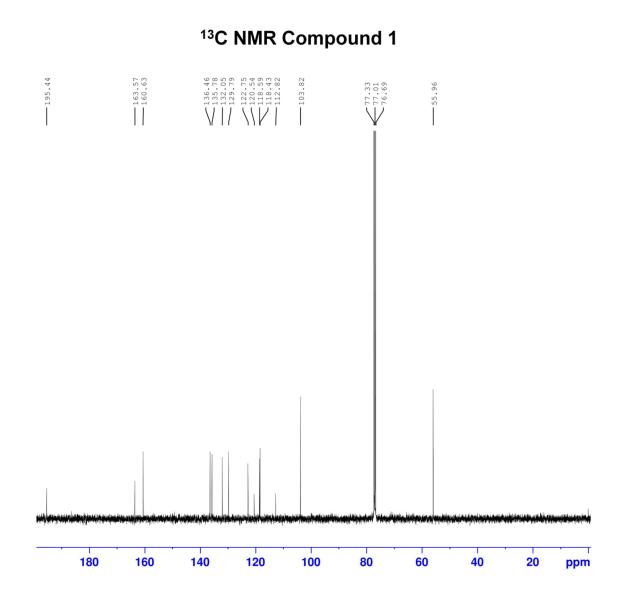
$(E) \hbox{-}1 \hbox{-} (2 \hbox{-} hydroxyphenyl) \hbox{-}3 \hbox{-} (2 \hbox{-} methoxyphenyl) \hbox{-} prop \hbox{-}2 \hbox{-} en \hbox{-}1 \hbox{-} one (\textbf{1})$

Yellow crystals, Yield: 89.05%, m.p. 101.4 °C . IR (ATR): 1637.1, 1599.4, 1570.5, 1487.2, 1463.2, 1338.9, 1301.8, 1250.1, 1161.4, 1107.8, 1022.7, 865.5, 804.2, 726.7, 662.8. ^aH NMR (400 MHz, CDCl₃): 12.93 (s, -OH, 1H); 8.25 (d, *J*=15.6, a, 1H); 7.94 (d, *J*=8, ArH-C(6'), 1H); 7.81 (d, *J*=15.6, b, 1H); 7.66 (d, *J*=8, ArH-C(6), 1H); 7.51 (t, *J*=8, ArH-C(4'), 1H); 7.43 (t, *J*=8, ArH-C(4), 1H); 7.03-6.92 (m, ArH-C(3), ArH-C(3'), ArH-C(5), ArH-C(5'), 4H); 3.95 (s, -CH₃, 3H). ³³C NMR (100 MHz, CDCl₃): 194.33; 163.61; 159.07; 141.14; 136.13; 132.18; 129.71; 129.66; 123.71; 120.87; 120.83; 120.24; 118.74; 118.57; 111.35; 55.62. HRMS (ESI) *m/z* calcd for C₁₆H₁₄O₃ [M]⁺ 254.281 found 254.900.

¹H NMR Compound 1

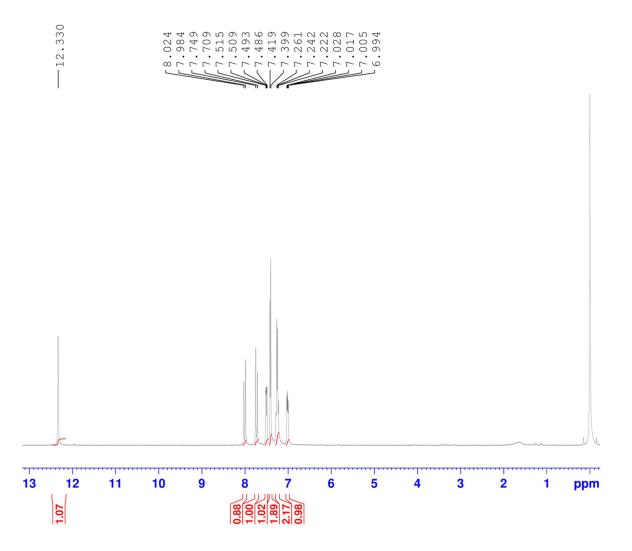


Supplementary Figure S3. ¹H NMR spectrum of compound 1.



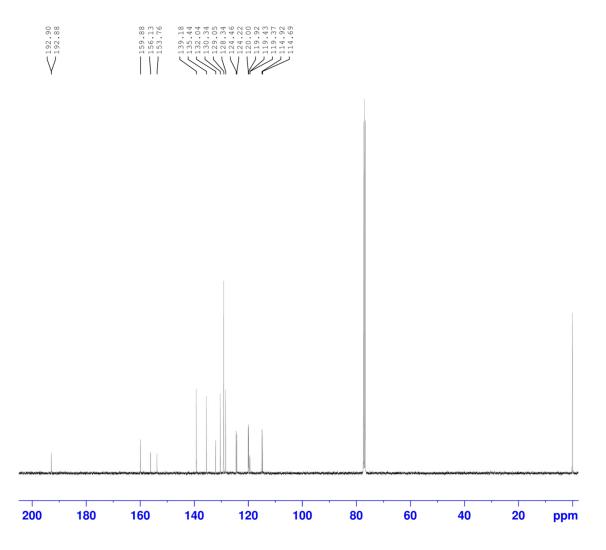
Supplementary Figure S4. ¹³C NMR spectrum of compound 1.

¹H NMR Compound 2



Supplementary Figure S5. ¹H NMR spectrum of compound 2.

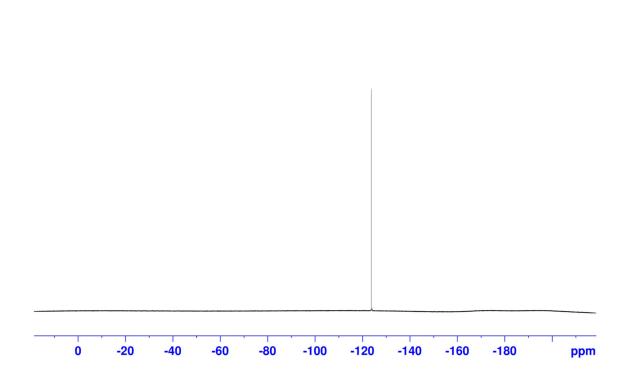
¹³C NMR Compound 2



Supplementary Figure S6. ¹³C NMR spectrum of compound 2.

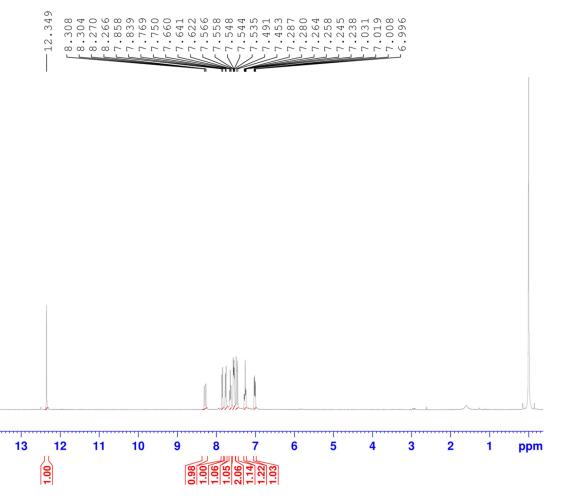
¹⁹F NMR Compound 2





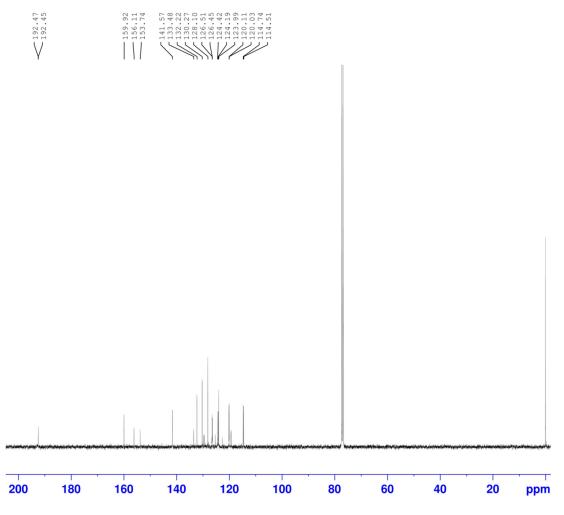
Supplementary Figure S7. ¹⁹F NMR spectrum of compound **2**.

¹H NMR Compound 3

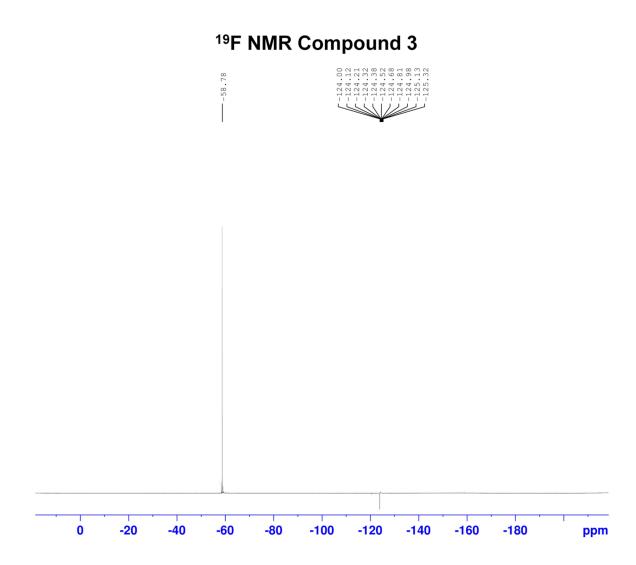


Supplementary Figure S8. ¹H NMR spectrum of compound 3.

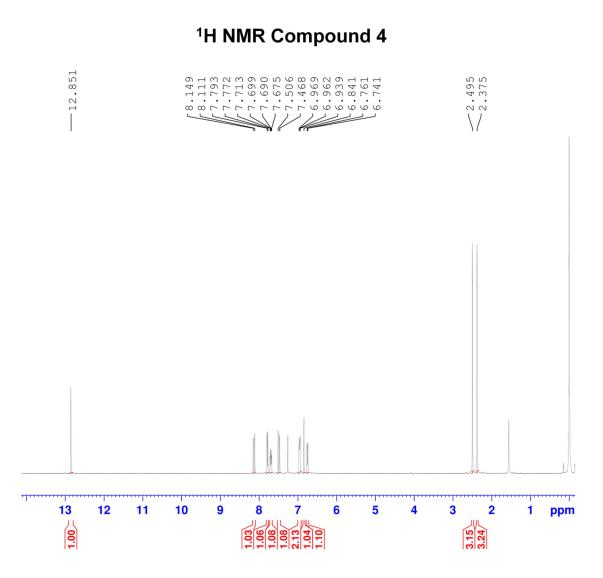
¹³C NMR Compound 3



Supplementary Figure S9. ¹³C NMR spectrum of compound 3.

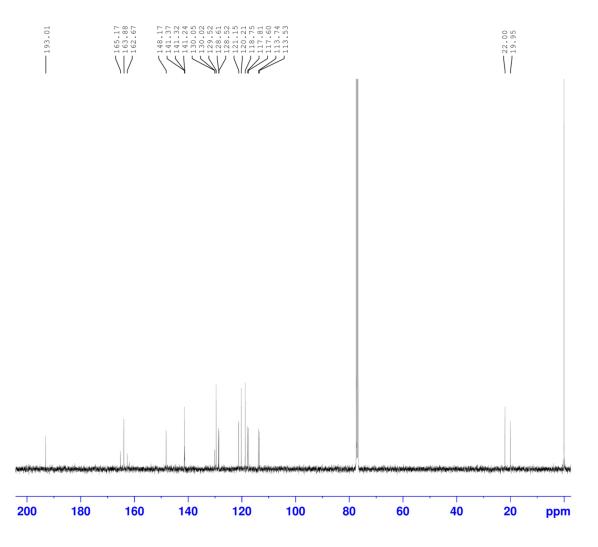


Supplementary Figure S10. ¹⁹F NMR spectrum of compound 3.



Supplementary Figure S11. ¹H NMR spectrum of compound 4.

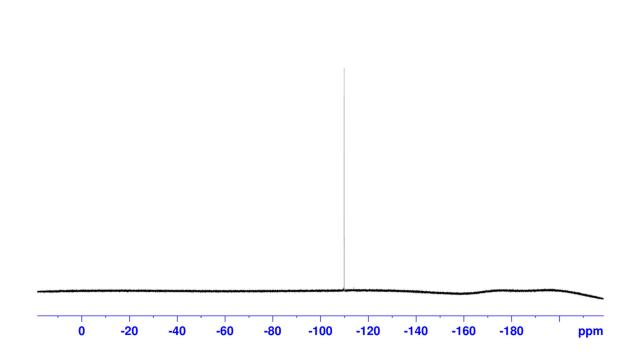
¹³C NMR Compound 4



Supplementary Figure S12. ¹³C NMR spectrum of compound 4.

¹⁹F NMR Compound 4





Supplementary Figure S13. ¹⁹F NMR spectrum of compound 4.