Supplementary Information

Microbial transformations of 4'-methylchalcones as efficient method of obtaining novel alcohol and dihydrochalcone derivatives with antimicrobial activity

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Fig S1. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4'-methyl- α , β -dihydrochalcone (**1a**)



Fig S2. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 4'-methyl- α , β -dihydrochalcone (**1a**)



Fig S3. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4'-methyl-4-methyl-α,β-dihydrochalcone (2a)



Fig S4. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 4'-methyl-4-methyl- α , β -dihydrochalcone (2a)



Fig S5. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4-methoxy-4'-methyl- α , β -dihydrochalcone (**3a**)



Fig S6. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 4-methoxy-4'-methyl- α , β -dihydrochalcone (3a)



Fig S7. ¹H-NMR (600 MHz, CDCl₃) spectrum of 2,4-dimethoxy-4'-methyl- α , β -dihydrochalcone (4a)



Fig S8. 13 C-NMR (150 MHz, CDCl₃) spectrum of 2,4-dimethoxy-4'-methyl- α , β -dihydrochalcone (4a)



Fig S9. FTIR-ATR spectrum of 2,4-dimethoxy-4'-methyl- α , β -dihydrochalcone (4a)



Fig S10. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4-ethyl-4'-methyl- α , β -dihydrochalcone (5a)



Fig S11. 13 C-NMR (150 MHz, CDCl₃) spectrum of 4-ethyl-4'-methyl- α , β -dihydrochalcone (5a)



Fig S12. FTIR-ATR spectrum of 4-ethyl-4'-methyl- α , β -dihydrochalcone (5a)



Fig S13. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4-ethoxy-4'-methyl- α , β -dihydrochalcone (6a)



Fig S14. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 4-ethoxy-4'-methyl- α , β -dihydrochalcone (6a)



Fig S15. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4'-methyl-4-nitro- α , β -dihydrochalcone (7a)



Fig S16. $^{13}\text{C-NMR}$ (150 MHz, CDCl₃) spectrum of 4'-methyl-4-nitro- α,β -dihydrochalcone (7a)



Fig S17. ¹H-NMR (600 MHz, CDCl₃) spectrum of 4-carboxy-4'-methyl-α,β-dihydrochalcone (8a)



Fig S18. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 4-carboxy-4'-methyl- α , β -dihydrochalcone (8a)



Fig S19. FTIR-ATR spectrum of 4-carboxy-4'-methyl- α , β -dihydrochalcone (8a)



Fig S20. ¹H-NMR (600 MHz, CDCl₃) spectrum of 3-(4-carboxyphenyl)-1-(4-methylphenyl)propan-1-ol (8b)



Fig S21. ¹³C-NMR (150 MHz, CDCl₃) spectrum of 3-(4-carboxyphenyl)-1-(4-methylphenyl)propan-1-ol (8b)



Fig S22. FTIR-ATR spectrum of 3-(4-carboxyphenyl)-1-(4-methylphenyl)propan-1-ol (8b)