

SUPPLEMENTARY MATERIAL TO

Application of the redox system of *Nocardia corallina* B-276 in the enantioselective biotransformation of ketones and alcohols

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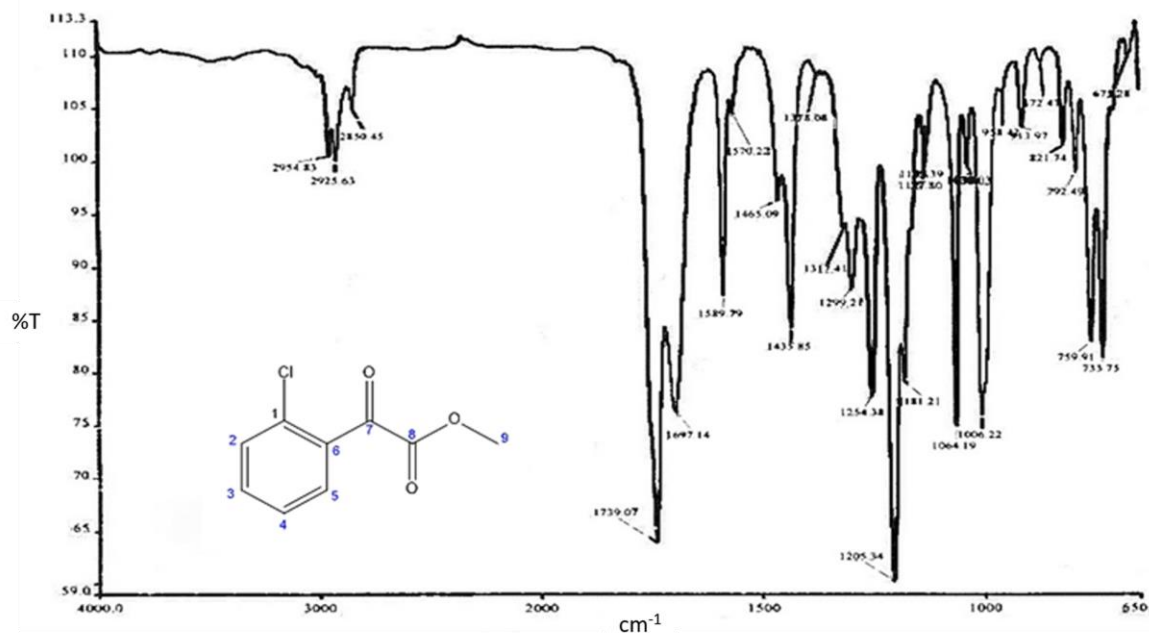


Figure S-1. IR spectrum of methyl (2-chlorophenyl)(oxo)ethanoate (3a).

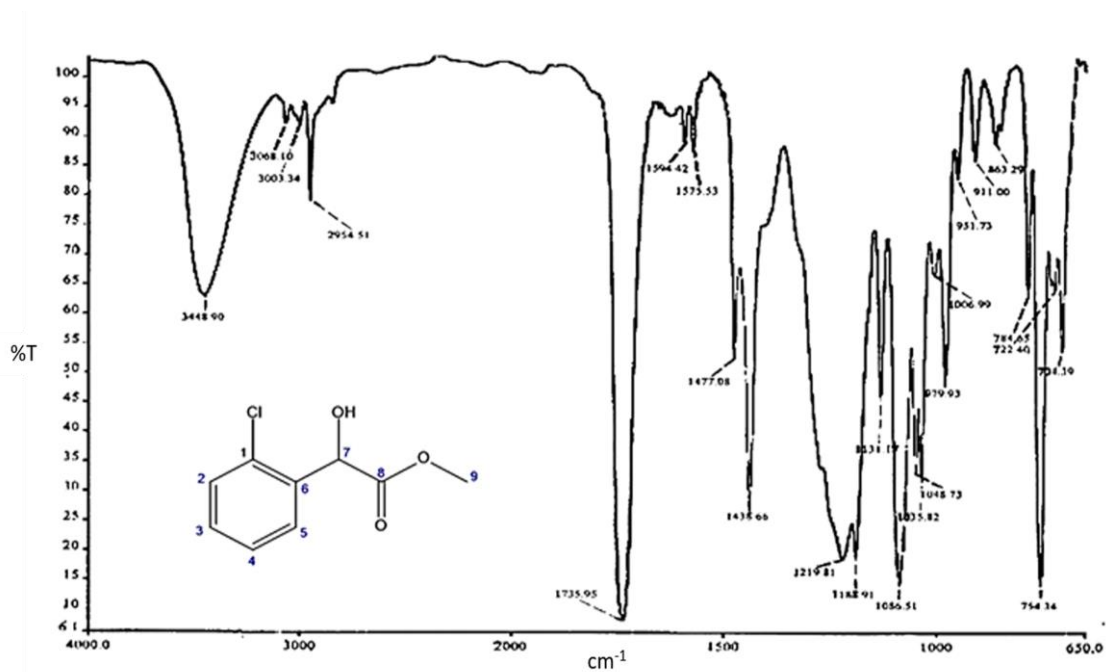


Figure S-2. IR spectrum of methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**)

The ^1H and ^{13}C NMR spectra of methyl (2-chlorophenyl)(oxo)ethanoate (**3a**)

^1H NMR (600 MHz, CDCl_3): δ 3.96 (s, 3H), 7.43 (m, 2H), 7.53 (ddd, J =8.0, 7.4, 1.7 Hz, 1H) and 7.77 (dd, J =7.7, 1.7 Hz, 1H) ppm.

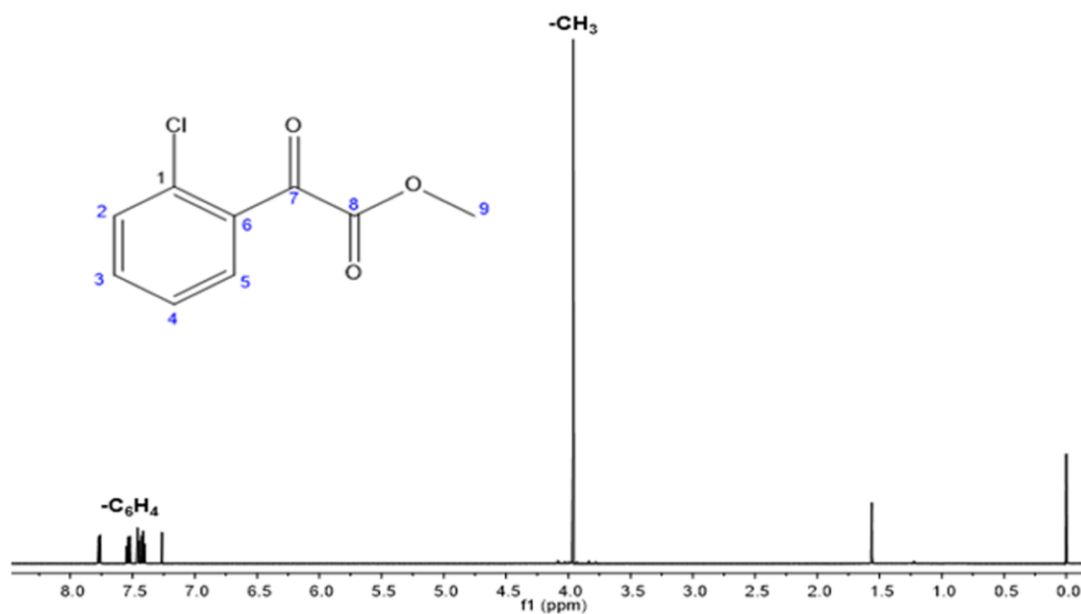


Figure S-3. NMR of ^1H spectrum of methyl (2-chlorophenyl)(oxo)ethanoate (**3a**), in CDCl_3

¹³C NMR (100 MHz, CDCl₃): δ 53.2 (C9), 127.2 (C4), 130.5 (C2), 131.6 (C5), 133.2 (C6), 133.9 (C1), 134.3 (C3), 163.4 (C8), 186.2 (C7) ppm.

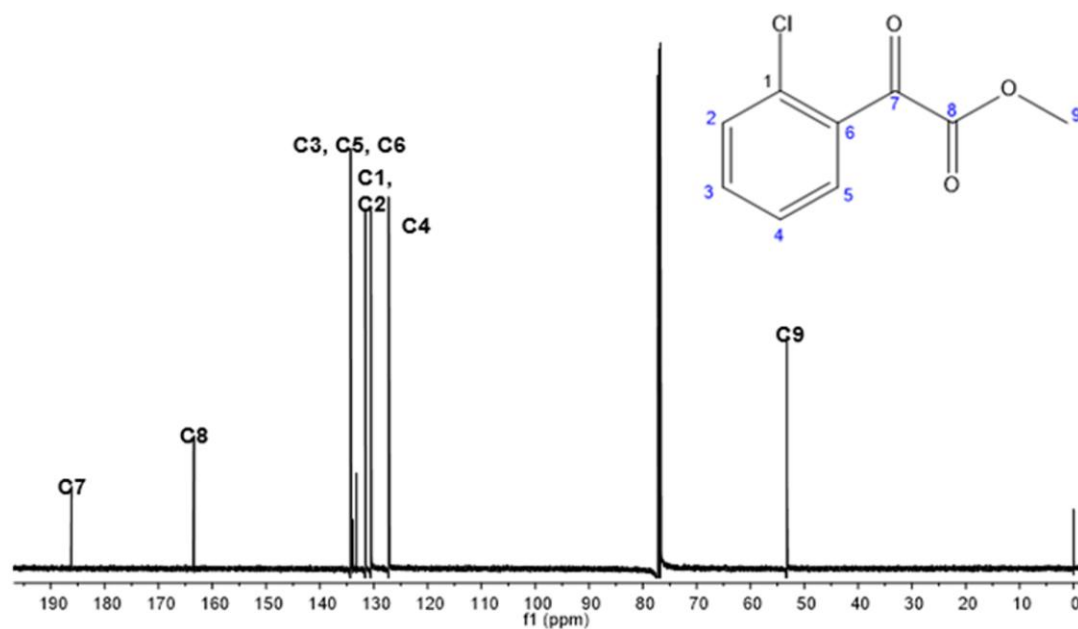


Figure S-41. NMR of ¹³C spectrum of methyl (2-chlorophenyl)(oxo)ethanoate (3a), in CDCl₃

The ^1H and ^{13}C NMR spectra of methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**)
 ^1H NMR (600 MHz, CDCl_3): δ 3.6 (d, $J = 5.1 \text{ Hz}$, 1H, -OH), 3.8 (s, 3H, - CH_3), 5.6 (d, $J =$
5.1 Hz, 1H, -CH) 7.3 (m, 2H) and 7.4 (m, 2H) ppm.

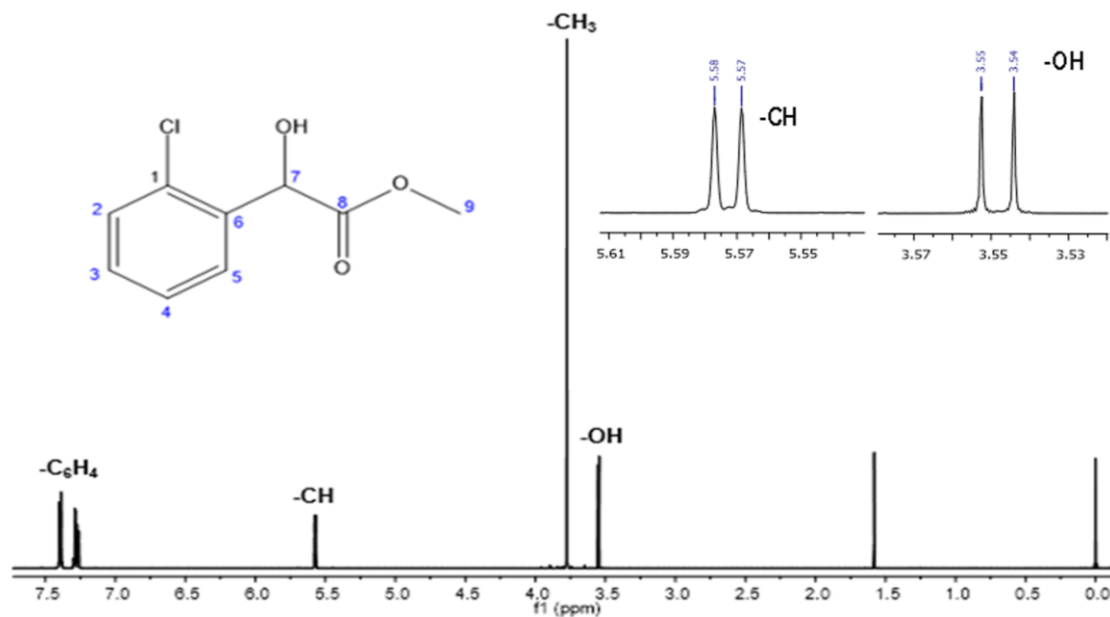


Figure S-5. NMR of ^1H spectrum of methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**), in CDCl_3

¹³C NMR (100 MHz, CDCl₃): δ 53.2 (C9), 70.3 (C7), 127.1 (C4), 128.8 (C2), 129.7(C5), 129.9 (C3), 133.41 (C1), 135.9 (C6), 173.7 (C8) ppm.

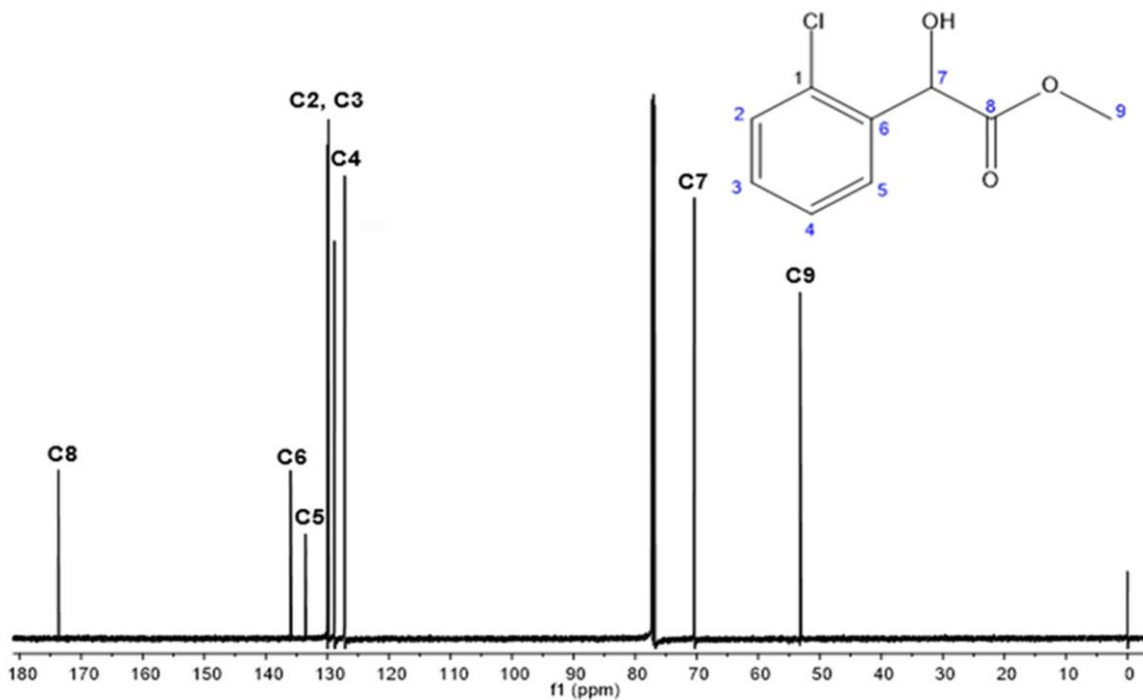


Figure S-6. NMR of ¹³C spectrum of methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**), in CDCl₃

The GC chromatograms of **3a** and **3b** with retention times of 4.6 and 6.1 minutes respectively with conditions reported on the Experimental Section.

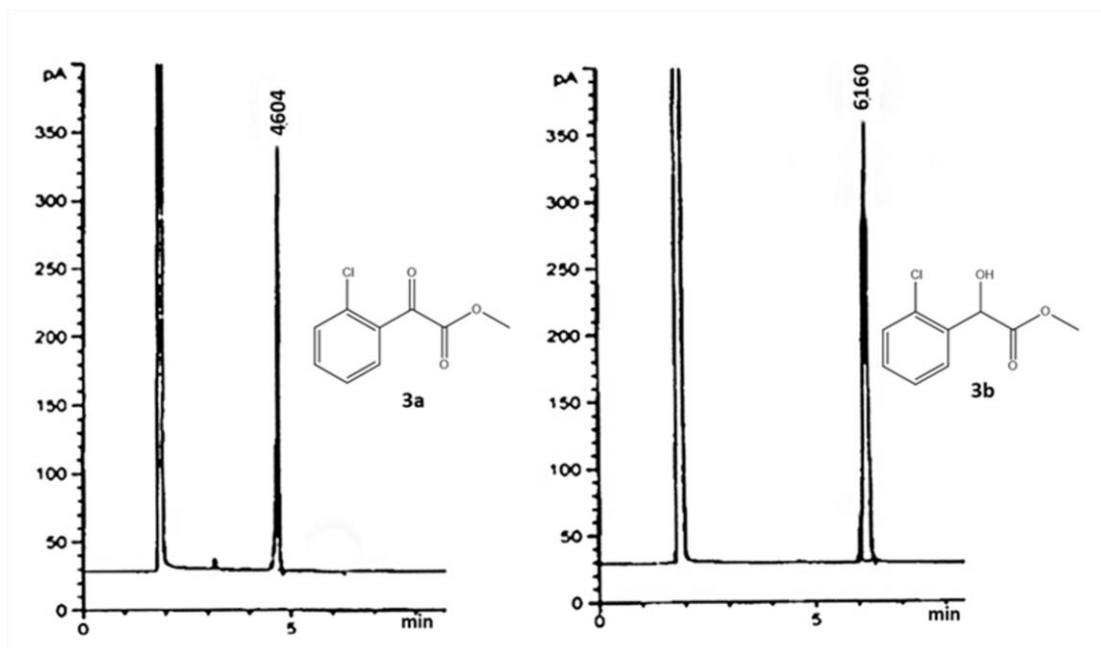


Figure S-7. GC chromatograms of methyl (2-chlorophenyl)(oxo)ethanoate (**3a**) and methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**)

The HPLC chromatogram of the mixture of **3a**, (*S*)-**3b** and (*R*)-**3b** with retention times of 7.0, 8.9 and 10.2 minutes respectively with conditions reported on the Experimental Section.

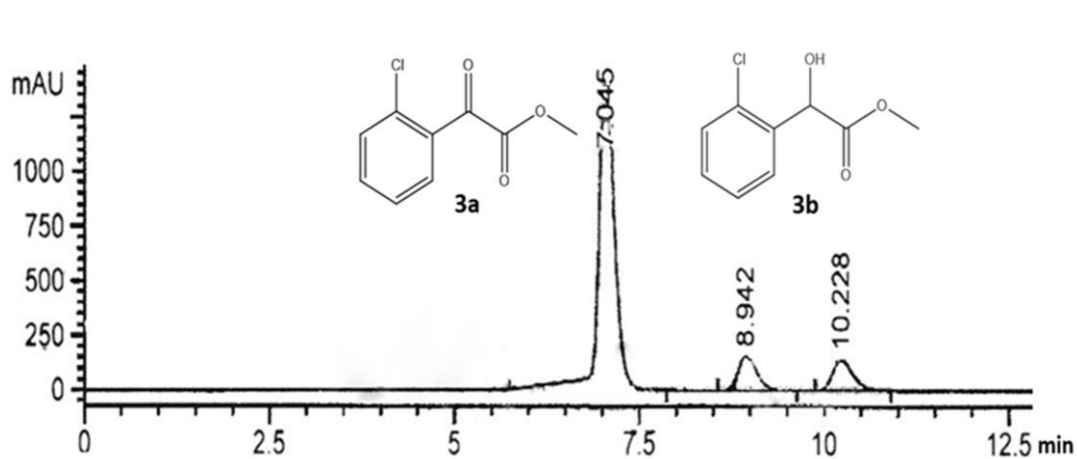


Figure S-8. HPLC chromatogram of mixture of methyl (2-chlorophenyl)(oxo)ethanoate (**3a**) and *rac*-methyl (2-chlorophenyl)(hydroxy)ethanoate (**3b**)