

Supporting Information

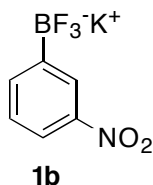
I. Experimental Procedures and Characterization Data

General. THF and ether were distilled from sodium metal/benzophenone ketyl under argon. CH_2Cl_2 was distilled from CaH_2 under argon. All other commercial reagents were used as received (Aldrich, Fischer Scientific Ltd. or BDH). All glassware were flame-dried and allowed to cool under a stream of dry nitrogen. All reactions were carried out under an atmosphere of nitrogen. Melting points are uncorrected. ^1H and ^{13}C NMR were recorded at 400 or 300 MHz and 100 or 75 MHz respectively on a Varian Unity 400 or Gemini 300 spectrometer. Proton chemical shifts were internally referenced to the residual proton resonance in CDCl_3 (δ 7.26) or CD_3OD (δ 3.31). Carbon chemical shifts were internally referenced to the deuterated solvent signals in CDCl_3 (δ 77.00) or CD_3OD (δ 49.00). Low resolution mass spectra were recorded on a Bell and Howell 21-490 spectrometer, and high resolution spectra were recorded on an AEI MS3074 spectrometer. Flash column chromatography on silica gel (60 Å, 230-400 mesh, obtained from Whatman Company or Toronto Research Chemicals, Inc.) was performed with reagent grade hexanes and ethyl acetate. Analytical thin-layer chromatography (TLC) was performed on pre-coated silica gel plates, (Alugram SIL G/UV₂₅₄ purchased from Rose Scientific Limited), visualized with a UV₂₅₄ lamp (Spectroline, Longlife Filter) and stained with 20% phosphomolybdic acid in ethanol. Solvent systems associated with R_f values and chromatography are reported as v/v ratios.

General Procedure for the Formation of the Potassium Trifluoroborate Salts

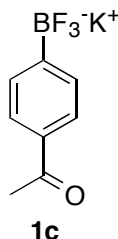
To a solution of the boronic acid (1 eq.) in a minimal amount of MeOH was added KHF_2 (4.5M in H_2O , 3.5 eq.). Almost instantaneously, a thick white ppt formed. The reaction mixture was stirred for 15 min at rt. The white ppt. was filtered off and recrystallized from acetonitrile to afford a white, crystalline solid. In the ^{13}C -NMR spectrum, the signal of the carbon *ipso*-substituted by the tetracoordinate boron was generally not observed.

Potassium 3-Nitrophenyltrifluoroborate (1b)



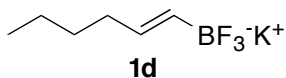
mp = 258-261 °C (acetonitrile); ^1H NMR (CD_3CN , 400 MHz) δ 8.25 (1H, s), 7.98 (1H, dd, $J = 8.0, 2.0$ Hz), 7.85 (1H, d, $J = 7.5$ Hz), 7.41 (1H, t, $J = 7.5$ Hz); ^{13}C NMR (CD_3CN , 125 MHz, 70 °C) δ 139.31, 129.12, 126.84, 122.00 (one signals absent); ^{11}B NMR (CD_3CN , 160 MHz) δ -0.77 (d, $J = 44$ Hz); ^{19}F NMR (CD_3CN , 376 MHz) δ 8.71 (d, $J = 53$ Hz); MS (FAB) m/z 190 (100, M^+), 174 (20); HRMS (FAB) m/z calcd. (M^+) 190.0287, found 190.0284. Anal. Calcd. for $\text{C}_6\text{H}_4\text{O}_2\text{BNF}_3\text{K}$: C, 31.47; H, 1.76. Found: C, 31.53; H, 1.66.

Potassium 4-Acetylphenyltrifluoroborate (1c)



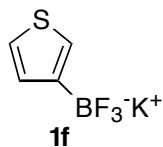
mp = >260 °C (acetonitrile); ^1H NMR (CD_3CN , 400 MHz) δ 7.77 (2H, d, $J = 8.0$ Hz), 7.55 (2H, d, $J = 8.0$ Hz), 2.52 (3H, s); ^{13}C NMR (CD_3CN , 125 MHz, 70 °C) δ 137.05, 133.34, 128.22, 27.43 (two signals absent); ^{11}B NMR (CD_3CN , 160 MHz) δ -0.63 (d, $J = 44$ Hz); ^{19}F NMR (CD_3CN , 376 MHz) δ 9.19 (d, $J = 40$ Hz); MS (FAB) m/z 187 (88, M^+), 183 (54), 91 (100), 59 (29); HRMS (FAB) m/z calcd. (M^+) 187.0542, found 187.0541. Anal. Calcd. for $\text{C}_8\text{H}_7\text{OBF}_3\text{K}$: C, 42.51; H, 3.12. Found: C, 42.71; H, 3.30.

Potassium (*E*)-1-Hexenyltrifluoroborate (1d)



mp = > 260 °C (acetonitrile); ^1H NMR (CD_3CN , 400 MHz) δ 5.74 - 5.64 (1H, m), 5.37 - 5.28 (1H, m), 2.03 - 1.94 (2H, m), 1.39 - 1.29 (4H, m), 0.90 (3H, t, $J = 7.0$ Hz); ^{13}C NMR (CD_3CN , 125 MHz, 70 °C) δ 137.56, 36.92, 33.56, 23.89, 14.97 (one signal absent); ^{11}B NMR (CD_3CN , 160 MHz) δ -0.70 (d, $J = 51$ Hz); ^{19}F NMR (CD_3CN , 376 MHz) δ 11.32 (d, $J = 63$ Hz); MS (FAB) m/z 151 (100, M^+), 91 (23); HRMS (FAB) m/z calcd. (M^+) 151.0906, found 151.0908.

Potassium 3-Thiophenetrifluoroborate (1f)

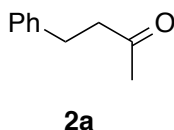


mp = 250-256 °C (acetonitrile); ^1H NMR (CD_3CN , 400 MHz) δ 7.23 - 7.18 (2H, m), 7.15 - 7.11 (1H, m); ^{13}C NMR (CD_3CN , 125 MHz, 70 °C) δ 152 - 149 (br), 133.30, 127.52, 125.06; ^{11}B NMR (CD_3CN , 160 MHz) δ -0.90 (br s); ^{19}F NMR (CD_3CN , 376 MHz) δ 13.35 (br s); MS (FAB) m/z 151 (100, M^+); HRMS (FAB) m/z calcd. (M^+) 151.0018, found 151.0014.

General Procedure for the Rhodium-Catalyzed Addition of Potassium Aryl- and Alkenyltrifluoroborates to Enones

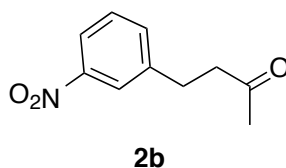
A suspension of the potassium trifluoroborate (2 mmol), $\text{Rh}(\text{acac})(\text{CO})_2$ (8 mg, 0.03 mmol) and dppf (17 mg, 0.03 mmol) in MeOH (6 mL) was stirred for 15 min at rt. Methyl vinyl ketone (84 μL , 1.00 mmol) and water (1 mL) were then added and the reaction mixture stirred at 50 °C for 16h. After cooling to rt, the reaction mixture was diluted with water (5 mL) and CH_2Cl_2 (20 mL). The layers were separated and the aq. layer extracted with CH_2Cl_2 (3 x 5 mL). The combined organic extracts were dried (MgSO_4), filtered and concentrated *in vacuo* to afford a clear, yellow oil. Silica gel chromatography (EtOAc/Hexanes) then afforded the desired product.

4-Phenylbutan-2-one (2a)



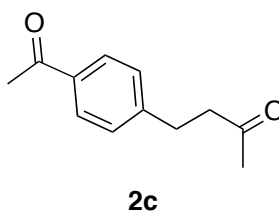
2a isolated as a clear, colourless oil: R_f = 0.43 (30% EtOAc/70% Hexanes); ^1H NMR (CDCl_3 , 400 MHz) δ 7.32 - 7.26 (2H, m), 7.23 - 7.17 (3H, m), 2.90 (2H, t, J = 7.5 Hz), 2.76 (2H, t, J = 8.0 Hz), 2.14 (3H, s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 207.71, 140.86, 128.35, 128.15, 125.96, 44.97, 29.88, 29.58.

4-(3-Nitrophenyl)butan-2-one (2b)



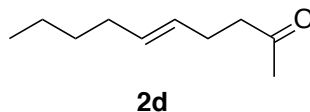
2b isolated as a clear, colourless oil: $R_f = 0.35$ (30% EtOAc/70% Hexanes); IR (film) ν 3110, 2978, 1720, 735, 701, 688; $^1\text{H NMR}$ (CDCl_3 , 300 MHz) δ 8.08 - 8.03 (2H, m), 7.56 - 7.40 (2H, m), 3.00 (2H, t, $J = 7.5$ Hz), 2.83 (2H, t, $J = 7.5$ Hz), 2.17 (3H, s); $^{13}\text{C NMR}$ (CDCl_3 , 100 MHz) δ 206.71, 143.05, 134.84, 129.34, 123.13, 121.34, 44.29, 30.04, 29.06; MS (EI) m/z 193 (1, M^+), 176 (11), 150 (17), 134 (36), 133 (100), 104 (28), 103 (48); HRMS (EI) m/z calcd. (M^+) 193.1739, found 193.0734.

4--(4-Acetylphenyl)butan-2-one (**2c**)



2c isolated as a clear, colourless oil: $R_f = 0.50$ (30% EtOAc/70% Hexanes); IR (film) ν 3115, 2986, 1715, 1695, 740, 720; $^1\text{H NMR}$ (CDCl_3 , 400 MHz) δ 7.83 (2H, d, $J = 8.0$ Hz), 7.23 (2H, d, $J = 8.0$ Hz), 2.90 (2H, t, $J = 7.5$ Hz), 2.75 (2H, d, $J = 7.5$ Hz), 2.52 (3H, s), 2.10 (3H, s); $^{13}\text{C NMR}$ (CDCl_3 , 100 MHz) δ 207.05, 197.55, 146.67, 135.11, 128.46, 128.40, 44.27, 29.39, 26.37; MS (EI) m/z 190 (1, M^+), 175 (100), 147 (26), 105 (29), 77 (17); HRMS (EI) m/z calcd. (M^+) 190.0994, found 190.0991. Anal. Calcd. for $\text{C}_{12}\text{H}_{14}\text{O}_2$: C, 75.77; H, 7.42. Found: C, 76.08; H, 6.95.

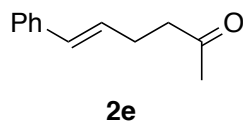
(*E*)-Dec-5-en-2-one (**2d**)



2d isolated as a clear, colourless oil: $R_f = 0.19$ (5% EtOAc/95% Hexanes); $^1\text{H NMR}$ (CDCl_3 , 400 MHz) δ 5.42 - 5.27 (2H, m), 2.42 (2H, t, $J = 7.5$ Hz), 2.19 (2H, q, $J = 7.0$ Hz), 2.07 (3H, s), 1.94 -

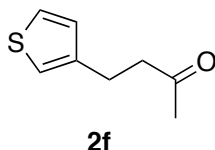
1.87 (2H, m), 1.30 - 1.18 (4H, m), 0.82 (3H, t, $J = 7.0$ Hz); ^{13}C NMR (CDCl_3 , 100 MHz) δ 208.23, 131.40, 128.04, 43.43, 32.02, 31.49, 29.73, 26.72, 22.00, 13.75.

(E)-6-Phenylhex-5-en-2-one (2e)



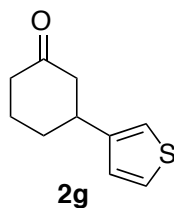
2e isolated as a clear, colourless oil: $R_f = 0.44$ (20% EtOAc/80% Hexanes); IR (film) ν 3120, 2998, 1720, 1662, 745, 703, 674; ^1H NMR (CDCl_3 , 400 MHz) δ 7.35 - 7.26 (4H, m), 7.20 (1H, tt, $J = 7.0, 1.5$ Hz), 6.40 (1H, d, $J = 16.0$ Hz), 6.19 (1H, dt, $J = 16.0, 7.0$ Hz), 2.57 (2H, t, $J = 7.0$ Hz), 2.46 (2H, q, $J = 7.0$ Hz), 2.13 (3H, s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 207.61, 137.16, 130.44, 128.60, 128.25, 126.82, 125.75, 42.78, 29.67, 26.82; MS (EI) m/z 174 (90, M^+), 131 (55), 117 (67), 115 (63), 104 (31), 91 (100); HRMS (EI) m/z calcd. (M^+) 174.1045, found 174.1040.

4-Thiophen-3-ylbutan-2-one (2f)



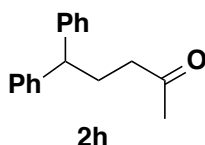
2f isolated as a clear, colourless oil: $R_f = 0.22$ (10% EtOAc/90% Hexanes); IR (film) ν 3102, 2923, 1717, 1361, 1162, 775 cm^{-1} ; ^1H NMR (CDCl_3 , 300 MHz) δ 7.22 (1H, dd, $J = 3.0$ Hz), 6.94 - 6.89 (2H, m), 2.89 (2H, t, $J = 8.0$ Hz), 2.73 (2H, t, $J = 8.0$ Hz), 2.12 (3H, s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 207.53, 140.99, 127.84, 125.35, 120.21, 44.00, 29.75, 23.96; MS (EI) m/z 154 (37, M^+), 111 (100), 97 (38); HRMS (EI) m/z calcd. (M^+) 154.0452, found 154.0449.

3-Thiophen-3-ylcyclohexanone (2g)



2g isolated as a clear, colourless oil: $R_f = 0.19$ (20% EtOAc/80% Hexanes); IR (film) ν 3402, 2938, 1711, 1223, 779 cm^{-1} ; ^1H NMR (CDCl_3 , 300 MHz) δ 7.29 (1H, dd, $J = 4.0$ Hz), 6.99 (2H, d, $J = 4.5$ Hz), 3.22 - 3.10 (1H, m), 2.74 - 2.64 (1H, m), 2.56 - 2.30 (3H, m), 2.22 - 2.05 (2H, m), 1.90 - 1.72 (2H, m); ^{13}C NMR (CDCl_3 , 100 MHz) δ 210.76, 145.33, 126.38, 125.88, 119.44, 48.44, 41.19, 39.77, 32.32, 24.97; MS (EI) m/z 180 (100, M^+), 137 (41), 124 (30), 123 (91), 110 (74); HRMS (EI) m/z calcd. (M^+) 180.0609, found 180.0605.

4,4-Diphenylbutan-2-one (2h)

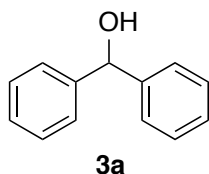


2h isolated as a clear, colourless oil: $R_f = 0.29$ (30% EtOAc/70% Hexanes); ^1H NMR (CDCl_3 , 300 MHz) δ 7.38 - 7.20 (10H, m), 4.65 (1H, t, $J = 7.5$ Hz), 3.22 (2H, d, $J = 7.5$ Hz), 2.11 (3H, s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 206.67, 143.77, 128.48, 127.60, 127.57, 127.54, 126.34, 49.55, 45.95, 30.50.

General Procedure for the Rhodium-Catalyzed Addition of Potassium Aryl- and Alkenyltrifluoroborates to Aldehydes

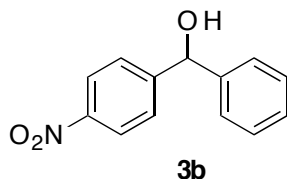
A suspension of the aldehyde (1 mmol), the potassium trifluoroborate (2 mmol), $\text{Rh}(\text{acac})(\text{CO})_2$ (0.03 mmol) and dppf (0.03 mmol) in a 1:1 mixture of DME/ H_2O (6 mL) was stirred at 80 $^\circ\text{C}$ for 16 h. The reaction mixture was then cooled to rt and diluted with benzene (20 mL). The layers were separated and the aqueous layer extracted with benzene (3 X 5 mL). The combined organic extracts were dried (MgSO_4), filtered and concentrated *in vacuo* to afford a clear, brown oil. Silica gel chromatography then afforded the desired product.

Diphenylmethanol (Benzhydrol) (3a)



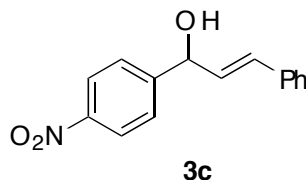
3a isolated as a clear, colourless, crystalline solid: mp = 65 - 66 °C (EtOAc/hexanes); R_f = 0.50 (30% EtOAc/70% Hexanes); ^1H NMR (CDCl_3 , 400 MHz) δ 7.42 - 7.24 (10H, m), 5.85 (1H, s), 2.22 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 143.78, 128.49, 127.57, 126.53, 76.26.

(4-Nitrophenyl)phenylmethanol (3b)

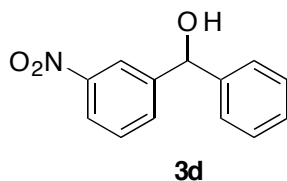


3b isolated as a pale, yellow solid: mp = 78 °C (EtOAc/hexanes); R_f = 0.40 (20% EtOAc/80% Hexanes); IR (film) ν 3400, 2998, 1518, 1345 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 8.11 (2H, d, J = 8.0 Hz), 7.51 (2H, d, J = 8.0 Hz), 7.35 - 7.25 (5H, m), 5.82 (1H, s), 2.98 (1H, s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 150.77, 146.93, 142.55, 128.77, 128.20, 126.94, 126.57, 123.50, 75.30; MS (EI) m/z 229 (13, M^+), 228 (51), 212 (11), 182 (15), 165 (25, 151 (26), 150 (38), 107 (52), 105 (100); HRMS (EI) m/z calcd. (M^+) 229.0739, found 229.0743. Anal. Calcd. for $\text{C}_{13}\text{H}_{11}\text{O}_3\text{N}$: C, 68.12; H, 4.84; N, 6.11. Found: C, 67.92; H, 4.60; N, 6.09.

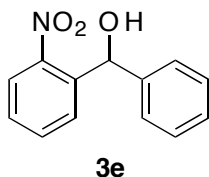
(E)-1-(4-Nitrophenyl)-3-phenylprop-2-en-1-ol (3c)



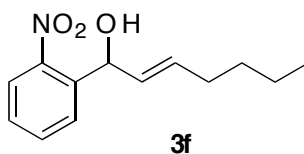
3c isolated as a clear, colourless oil: R_f = 0.30 (30% EtOAc/70% Hexanes); IR (film) ν 3423, 2996, 1518, 1346 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 8.21 (2H, d, J = 9.0 Hz), 7.60 (2H, d, J = 9.0 Hz), 7.40 - 7.25 (5H, m), 6.72 (1H, d, J = 16.0 Hz), 6.29 (1H, dd, J = 16.0, 7.0 Hz), 5.48 (1H, d, J = 7.0 Hz), 2.42 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 149.77, 147.30, 135.80, 132.20, 130.04, 128.66, 128.29, 126.93, 126.65, 123.74, 74.34; MS (CI) m/z 256 (27, MH^-), 255 (100, M^-), 253 (44); HRMS (CI) m/z calcd. (M^-) 255.0895, found 255.0883.

(3-Nitrophenyl)phenylmethanol (3d)

3d isolated as a pale, yellow oil: $R_f = 0.60$ (30% EtOAc/70% Hexanes); IR (film) ν 3406, 1528, 1351, 736, 703 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 8.28 (1H, m), 8.12 - 8.08 (1H, m), 7.70 (1H, d, $J = 7.5$ Hz), 7.48 (1H, t, $J = 8.0$ Hz), 7.37 - 7.28 (5H, m), 5.91 (1H, s), 2.52 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 145.74, 142.71, 132.42, 129.31, 128.89, 128.31, 126.59, 122.36, 121.25, 75.31; MS (CI) m/z 230 (24, MH^-), 229 (100, M^-); HRMS (CI) m/z calcd. (M^-) 229.0739, found 229.0734.

(2-Nitrophenyl)phenylmethanol (3e)

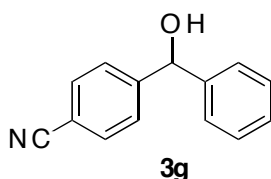
3e isolated as a pale, yellow oil: $R_f = 0.60$ (30% EtOAc/70% Hexanes); IR (film) ν 3396, 3032, 1526, 1302, 1179, 1019, 701 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 7.83 (1H, d, $J = 8.0$ Hz), 7.68 (1H, d, $J = 8.0$ Hz), 7.54 (1H, t, $J = 8.0$ Hz), 7.36 (1H, t, $J = 8.0$ Hz), 7.28 - 7.18 (5H, m), 6.32 (1H, s), 3.16 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 141.44, 138.36, 133.31, 129.19, 128.43, 128.33, 127.88, 126.84, 124.54, 71.25. MS (CI) m/z 230 (100, MH^-), 229 (M^-), 181 (11), 153 (7); HRMS (CI) m/z calcd. (M^-) 229.0739, found 229.0749.

(E)-1-(2-Nitrophenyl)hept-2-en-1-ol (3f)

3f isolated as a clear, colourless oil: $R_f = 0.70$ (30% EtOAc/70% Hexanes); IR (film) ν 3406, 2929, 1708, 1605, 1522, 1347, 1198, 971, 855, 700 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 8.15 (2H, d, $J = 9.0$ Hz), 7.51 (2H, d, $J = 8.5$ Hz), 5.84 - 5.75 (1H, m), 5.56 (1H, ddt, $J = 15.0, 7.5, 1.5$ Hz), 5.24

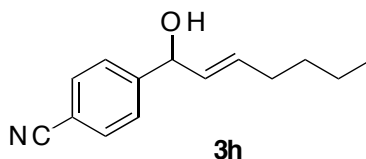
(1H, d, $J = 7.5$ Hz), 2.45 (1H, br s), 2.04 (2H, q, $J = 7.0$ Hz), 1.38 - 1.23 (4H, m), 0.86 (3H, t, $J = 7.0$ Hz); ^{13}C NMR (CDCl_3 , 100 MHz) δ 150.56, 134.49, 131.14, 130.41, 126.73, 124.19, 123.49, 74.33, 31.72, 30.95, 22.10, 13.76; MS (CI) m/z 236 (15, MH^-), 235 (100, M^-), 151 (28); HRMS (CI) m/z calcd. (M^-) 235.1208, found 235.1199.

4-(Hydroxyphenylmethyl)benzonitrile (**3g**)



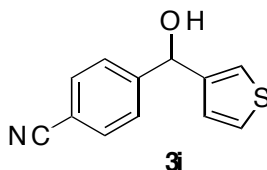
3g isolated as a clear, colourless oil: $R_f = 0.30$ (30% EtOAc/70% Hexanes); ^1H NMR (CDCl_3 , 400 MHz) δ 7.56 (2H, dt, $J = 8.5, 2.0$ Hz), 7.48 (2H, dt, $J = 8.0, 1.0$ Hz), 7.37 - 7.27 (5H, m), 5.80 (1H, d, $J = 3.5$ Hz), 2.97 (1H, d, $J = 3.5$ Hz); ^{13}C NMR (CDCl_3 , 100 MHz) δ 148.92, 142.71, 132.10, 128.69, 128.07, 126.91, 126.56, 118.72, 110.78, 75.37.

(*E*)-4-(1-Hydroxyhept-2-enyl)benzonitrile (**3h**)



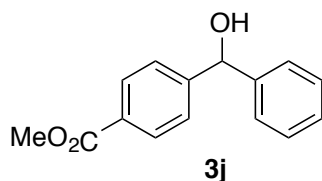
3h isolated as a clear, colourless oil: $R_f = 0.40$ (20% EtOAc/80% Hexanes); IR (film) ν 3425, 2928, 2229, 1608, 1406, 970, 831 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 7.58 (2H, d, $J = 8.5$ Hz), 7.45 (2H, d, $J = 8.5$ Hz), 5.79 - 5.72 (1H, m), 5.54 (1H, dd, 16.0, 7.0 Hz), 5.17 (1H, d, $J = 7.0$ Hz), 2.31 (1H, br s), 2.02 (2H, q, $J = 7.0$ Hz), 1.37 - 1.23 (4H, m), 0.85 (3H, t $J = 7.0$ Hz); ^{13}C NMR (CDCl_3 , 100 MHz) δ 148.61, 142.22, 134.28, 132.82, 132.12, 131.29, 126.69, 110.88; MS (EI) m/z 215 (8, M^+), 214 (17), 158 (100), 145 (59), 130 (47); HRMS (EI) m/z calcd. (M^+) 215.1310, found 215.1311.

(4-Hydroxythiophen-3-ylmethyl)benzonitrile (**3i**)



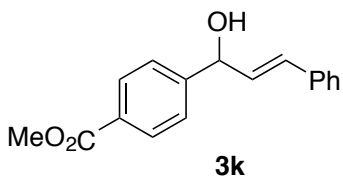
3i isolated as a clear, colourless oil: $R_f = 0.27$ (30% EtOAc/70% Hexanes); IR (film) ν 3418, 2229, 1608, 1412, 1149, 1037, 790, 750, 549 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 7.61 (2H, d, $J = 8.0$ Hz), 7.50 (2H, d, $J = 8.0$ Hz), 7.29 (1H, dd, $J = 5.0, 3.0$ Hz), 7.18 (1H, d, $J = 3.0$ Hz), 6.95 (1H, dd, $J = 5.0, 1.0$ Hz), 5.91 (1H, s), 2.81 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 148.42, 144.02, 132.21, 126.92, 126.82, 125.93, 122.30, 118.70, 111.12, 71.67; MS (EI) m/z 215 (42, M^+), 182 (16), 131 (18), 130 (42), 113 (24), 111(49), 104 (36), 91 (61), 85 (100); HRMS (EI) m/z calcd. (M^+) 215.0405, found 215.0404.

Methyl-4-(Hydroxyphenylmethyl)benzoate (3j)



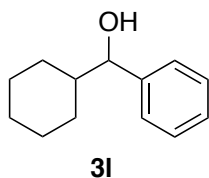
3j isolated as a clear, colourless crystalline solid: mp = 68 °C (EtOAc/hexanes); $R_f = 0.40$ (30% EtOAc/70% Hexanes); IR (film) ν 1720, 1436, 1283, 1114, 1017, 709 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 7.97 (2H, d, $J = 8.5$ Hz), 7.44 (2H, d, $J = 8.0$ Hz), 7.36 - 7.24 (5H, m), 5.84 (1H, s), 3.88 (3H, s), 2.74 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 166.92, 148.73, 143.23, 129.72, 129.11, 128.62, 127.86, 126.60, 126.28, 75.81, 52.05; MS (EI) m/z 242 (20, M^+), 137 (60), 105 (64), 86 (67), 84 (100); HRMS (EI) m/z calcd. (M^+) 242.0943, found 242.0935.

(E)-Methyl-4-(1-hydroxy-3-phenylallyl)benzoate (3k)



3k isolated as a clear, colourless oil: $R_f = 0.33$ (30% EtOAc/70% Hexanes); IR (film) ν 3480, 1714, 1295, 1104 cm^{-1} ; ^1H NMR (CDCl_3 , 400 MHz) δ 8.03 (2H, d, $J = 8.0$ Hz), 7.50 (2H, d, $J = 8.5$ Hz), 7.37 (2H, d, $J = 7.5$ Hz), 7.31 (2H, t, $J = 7.0$ Hz), 7.24 - 7.22 (1H, m), 6.68 (1H, d, $J = 16.0$ Hz), 6.33 (1H, dd, $J = 16.0, 7.0$ Hz), 5.43 (1H, d, $J = 7.0$ Hz), 3.91 (3H, s), 2.40 (1H, br s); ^{13}C NMR (CDCl_3 , 100 MHz) δ 166.91, 147.71, 136.19, 131.35, 130.78, 129.88, 129.40, 128.59, 127.99, 126.62, 126.16, 74.73, 52.08; MS (EI) m/z 268 (57, M^+), 253 (25), 209 (46), 193 (22), 164 (23), 163 (100), 131 (26), 105 (55); HRMS (EI) m/z calcd. (M^+) 268.1099, found 268.1112.

Cyclohexylphenylmethanol (3l)



31 isolated as a clear, colourless oil: $R_f = 0.45$ (20% EtOAc/80% Hexanes); ^1H NMR (CDCl_3 , 300 MHz) δ 7.38 - 7.24 (5H, m), 4.38 (1H, d, $J = 7.0$ Hz), 2.02 - 1.92 (1H, m), 1.85 - 1.72 (2H, m), 1.71 - 1.56 (3H, m), 1.43 - 1.34 (1H, m), 1.31 - 0.67 (5H, m); ^{13}C NMR (CDCl_3 , 75 MHz) δ 142.24, 128.17, 127.40, 126.62, 79.39, 44.95, 29.30, 28.81, 26.41, 26.08, 26.00.