Supporting information for:

A Multipolymer Reaction System for Selective Aerobic Alcohol Oxidation: Simultaneous Use of Multiple Different Polymer-Supported Ligands

Cecilia Wan Ying Chung and Patrick H. Toy*

Department of Chemistry, The University of Hong Kong, Pokfulam Road, Hong Kong, People’s Republic of China

phtoy@hku.hk

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General Procedures.  Commercially available reagents were used as received.  Tetrahydrofuran was purified using a Solv-Tek purification system employing activated Al\(_2\)O\(_3\).  All reactions were monitored by TLC analysis using GF\(_{254}\) silica gel coated plates.  Column chromatography was carried out using silica gel (300-400 mesh) at increased pressure.  \(^1\)H- and \(^{13}\)C-NMR spectra were recorded in CDCl\(_3\) on a Bruker DRX-300 or DRX-400 spectrometer operating at 300 or 400 MHz for \(^1\)H analysis and 100 or 75 MHz for \(^{13}\)C analysis.  Chemical shift data is expressed in ppm with reference to TMS.  HR EI-MS data was recorded on a Finnigan MAT 96 mass spectrometer.
Characterization data for 10a-r:

**Benzaldehyde (10a).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 7.51-7.67 (3H, m), 7.87-7.91 (2H, m), 10.03 (1H, s).

**4-Bromobenzaldehyde (10b).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 7.69 (2H, d, $J = 8.5$ Hz), 7.76 (2H, d, $J = 8.2$ Hz), 9.98 (1H, s).

**4-Nitrobenzaldehyde (10c).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 8.08 (2H, d, $J = 8.3$ Hz), 8.40 (2H, d, $J = 8.6$ Hz), 10.16 (1H, s).

**4-Methylbenzaldehyde (10d).** $^1$H-NMR (CHCl$_3$, 400 MHz): $\delta$ 2.44 (3H, s), 7.33 (2H, d, $J = 8.0$ Hz), 7.78 (2H, d, $J = 8.1$ Hz), 9.97 (1H, s).

**4-Methoxylbenzaldehyde (10e).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 3.90 (3H, s), 7.01 (2H, d, $J = 8.6$ Hz), 7.85 (2H, d, $J = 8.4$ Hz), 9.89 (1H, s).

**Piperonal (10f).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 6.08 (2H, s), 6.94 (1H, d, $J = 7.9$ Hz), 7.34 (1H, d, $J = 1.5$ Hz), 7.42 (1H, dd, $J = 7.9$, 1.5 Hz), 9.82 (1H, s).

**2-Bromobenzaldehyde (10g).** $^1$H-NMR (CHCl$_3$, 400 MHz): $\delta$ 7.43-7.47 (2H, m), 7.64-7.67 (1H, m), 7.91-7.93 (1H, m), 10.37 (1H, s).

**2-Nitrobenzaldehyde (10h).** $^1$H-NMR (CHCl$_3$, 400 MHz): $\delta$ 7.75-7.83 (2H, m), 7.96 (1H, dd, $J = 7.3$, 1.9 Hz), 8.13 (1H, dd, $J = 7.7$, 1.3 Hz), 10.43 (1H, s).

**2-Methylbenzaldehyde (10i).** $^1$H-NMR (CHCl$_3$, 300 MHz): $\delta$ 2.68 (3H, s), 7.26 (1H, d, $J = 7.5$ Hz), 7.36 (1H, t, $J = 7.3$ Hz), 7.48 (1H, td, $J = 7.6$, 1.5 Hz), 7.80 (1H, dd, $J = 7.6$, 1.4 Hz), 10.28 (1H, s).
2-Methoxybenzaldehyde (10j). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 3.93 (3H, s), 6.98-7.05 (2H, m), 7.56 (1H, td, \(J = 7.9, 1.8\) Hz), 7.83 (1H, dd, \(J = 7.7, 1.8\) Hz), 10.48 (1H, s).

2,4-Dimethoxybenzaldehyde (10k). \(^1\)H-NMR (CHCl\(_3\), 300 MHz): \(\delta\) 3.88 (3H, s), 3.91 (3H, s), 6.45 (1H, d, \(J = 2.2\) Hz), 6.55 (1H, dd, \(J = 8.9, 2.2\) Hz), 7.82 (1H, d, \(J = 8.7\) Hz), 10.29 (1H, s).

2,4,6-Trimethylbenzaldehyde (10l). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 2.32 (3H, s), 2.58 (6H, s), 6.90 (2H, s), 10.57 (1H, s).

2,6-Dichlorobenzaldehyde (10m). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 7.40 (3H, s), 10.37 (1H, s).

2,4,6-Trichlorobenzaldehyde (10n). \(^1\)H-NMR (CHCl\(_3\), 300 MHz): \(\delta\) 7.42 (2H, s), 10.43 (1H, s).

Thiophene-2-carbaldehyde (10o). \(^1\)H-NMR (CHCl\(_3\), 300 MHz): \(\delta\) 7.22 (1H, dd, \(J = 4.8, 3.8\) Hz), 7.76-7.80 (2H, m), 9.95 (1H, d, \(J = 1.2\) Hz).

Pyridine-3-carbaldehyde (10p). \(^1\)H-NMR (CHCl\(_3\), 300 MHz): \(\delta\) 7.50 (1H, dd, \(J = 7.8, 5.2\) Hz), 8.19 (1H, d, \(J = 6.6\) Hz), 8.86 (1H, d, \(J = 4.7\) Hz), 9.09 (1H, s), 10.13 (1H, s).

Cinnamaldehyde (10q). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 6.73 (1H, dd, \(J = 15.9, 7.7\) Hz), 7.44-7.51 (4H, m), 7.57-7.59 (2H, m), 9.72 (1H, d, \(J = 7.7\) Hz).

Geranial (10r). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 1.61 (3H, s), 1.69 (3H, s), 2.17 (3H, d, \(J = 1.2\) Hz), 2.19-2.26 (4H, m), 5.05-5.08 (1H, m), 5.89 (1H, d, \(J = 8.1\) Hz), 10.00 (1H, d, \(J = 8.1\) Hz).

Citronellal (10s). \(^1\)H-NMR (CHCl\(_3\), 400 MHz): \(\delta\) 0.97 (3H, d, \(J = 6.7\) Hz), 1.21-1.42 (2H, m), 1.60 (3H, s), 1.67 (3H, s), 1.98-2.12 (3H, m), 2.20-2.26 (1H, m), 2.38-2.46 (1H, m), 5.09 (1H, t, \(J = 6.4\) Hz), 9.76 (1H, s).
Benzaldehyde (10a) from 9t. \(^1\)H-NMR (CHCl\(_3\), 300 MHz): \(\delta\) 7.51-7.64 (3H, m), 7.87-7.90 (2H, m), 10.03 (1H, s).

Reference: