Supplemental Material

^{1}H NMR data for tertiary amines: All ^{1}H NMR spectra were taken in $CDCl_3$ at 250 or 400 MHz using Bruker AC-250 or AM-400 spectrometers. Data for these compounds is identical to that published in (a) Brown, A. R.; Rees, D. C.; Rankovic, Z.; Morphy, J. R. *J. Am. Chem. Soc.* **1997**, *119*, 3288, (b) Abbenhuis, R. A. T. M.; Boersma, J.; Van Koten, G. *J. Org. Chem.* **1998**, *63*, 4282 or (c) Landini, D.; Maia, A.; Rampoldi, A. *J. Org. Chem.* **1986**, *51*, 3187.

2-(4-Nitrobenzyl)-1,2,3,4-tetrahydroisoquinoline; δ 2.76 (t, 2H, J = 5.6 Hz), 2.93 (t, 2H, J = 5.6 Hz), 3.65 (s, 2H). 3.78 (s, 2H), 6.97-6.99 (m, 1H), 7.10-7.16 (m, 3H), 7.58 (d, 2H, J = 8.8 Hz), and 8.19 (d, 2H, J = 8.8 Hz).

2-Allyl-1,2,3,4-tetrahydroisoquinoline; δ 2.76 (t, 2H, J = 5.8 Hz), 2.93 (t, 2H, J = 5.8 Hz), 3.19 (d, 2H, J = 6.4 Hz), 3.65 (s, 2H), 5.19-5.31 (m, 2H), 5.89-5.98 (m, 1H), 7.00-7.03 (m, 1H), and 7.10-7.15 (m, 3H).

2-Methyl-1,2,3,4-tetrahydroisoquinoline; δ 2.56 (s, 3H), 2.86 (t, 2H, J = 5.6 Hz), 3.01 (t, 2H, J = 5.6 Hz), 3.75 (s, 2H), 7.00-7.04 (m, 1H), and 7.10-7.16 (m, 3H).

Ethyl 1-(4-Nitrobenzyl)-nipecotate; δ 1.24 (t, 3H, J = 7.2 Hz), 1.48-1.67 (m, 2H), 1.73-1.79 (m, 1H), 1.90-1.95 (m, 1H), 2.07-2.16 (m, 1H), 2.25-2.34 (m, 1H), 2.54-2.70 (m, 2H), 2.85-2.89 (m, 1H), 3.53-3.66 (m, 2H), 4.12 (q, 2H, J = 7.2 Hz), 7.50 (d, 1H, J = 8.4 Hz), and 8.17 (d, 2H, J = 8.4 Hz).

Ethyl 1-allylnipecotate; δ 1.25 (t, 3H, J = 7.2 Hz), 1.40-1.51 (m, 2H), 1.64-1.79 (m, 2H), 1.97-2.08 (m, 2H), 2.13-2.21 (m, 1H), 2.61-2.69 (m, 1H), 2.82-2.87 (m, 1H), 3.06 (d, 2H, J = 6.4 Hz), 4.12 (q, 2H, J = 7.2 Hz), 5.17-5.25 (m, 2H), and 5.82-5.98 (m, 1H).

Ethyl 1-methylnipecotate; δ 1.26 (t, 3H, J = 7.2 Hz), 1.76-1.82 (m, 2H), 2.00-2.28 (m, 3H), 2.39 (s, 3H), 2.71-2.89 (m, 3H), 3.07-3.12 (m, 1H), and 4.14 (q, 2H, J = 7.2 Hz).

1-(4-Nitrobenzyl)-4-phenylpiperazine; δ 2.63 (t, 4H, J = 4.8 Hz), 3.22 (t, 4H, J = 4.8 Hz), 3.67 (s, 2H), 6.87-6.95 (m, 2H), 7.24-7.30 (m, 3H), 7.55 (d, 2H, J = 8.4 Hz), and 8.20 (d, 2H, J = 8.4 Hz).

1-Allyl-4-phenylpiperazine; δ 2.62 (t, 4H, J = 5.2 Hz), 3.07 (d, 2H, J = 6.2 Hz), 3.22 (t, 4H, J = 5.2 Hz), 5.17-5.27 (m, 2H), 5.79-5.99 (m, 1H), 6.82-6.95 (m, 3H), and 7.23-7.30 (m, 2H).

1-Methyl-4phenyl-piperazine; δ 2.37 (s, 3H), 2.61 (t, 4H, J = 4.8 Hz), 3.23 (t, 4H, J = 4.8 Hz), 6.83-6.95 (m, 3H), and 7.24-7.30 (m, 2H).

***N*-Methyl proline *t*-butyl ester**; δ 1.47 (s, 9H), 1.72-2.15 (m, 4H), 2.25-2.32 (m, 1H), 2.41 (s, 3H), 2.81-2.87 (m, 1H), and 3.07-3.15 (m, 1H).

Allyldioctylamine; δ 0.85-0.91 (m, 6H), 1.25-1.35 (m, 20H), 1.61-1.69 (m, 4H), 2.65-2.74 (m, 4H), 3.38 (d, 2H, J = 6.6 Hz), 5.27-5.37 (m, 2H), and 5.95-6.12 (m, 1H).

Dioctylmethylamine; δ 0.86-0.90 (m, 6H), 1.25-1.35 (m, 20H), 1.65-1.75 (m, 4H), 2.54 (s, 3H), and 2.74 (t, 4H, J = 8.0 Hz).

^{1}H-NMR spectrum of the product obtained from the fifth use of *J*anda*J*el-REM