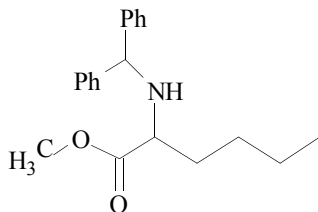


Supporting Information:

N-Diphenylmethylenenorleucine methyl ester



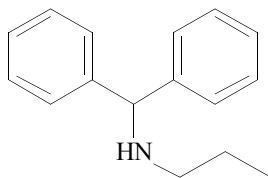
Norleucine methyl ester hydrochloride (1.0 g, 5.52 mmol) was dissolved in dry CH_2Cl_2 (20 ml). Benzophenone imine (1.0 g, 5.52 mmol) was added and the reaction mixture, fitted with a CaCl_2 drying tube, was stirred 16 hours. The solvent was then removed *in vacuo* and the residue dissolved into diethyl ether (200 ml) and filtered. The filtrate was washed with water (25 ml), dried over MgSO_4 and concentrated. The crude mixture was dissolved in methanol (10 ml) and acetic acid (0.5 ml). Sodium borohydride (418 mg, 11 mmol) was added and the reaction mixture was stirred for 48 hrs. The solution was concentrated, dissolved in CH_2Cl_2 (100 ml) and washed with saturated NaHCO_3 (2 x 15 ml). The organic phase was dried over MgSO_4 and concentrated. The clear oil was further purified on a silica gel column. An elution gradient of ethyl acetate/ hexane (0-50%) was used to give the protected amino acid as a clear oil (811 mg, 48%).

IR (CHCl_3) 3335, 1731, 1600, 1452 cm^{-1} ; ^1H NMR (250 MHz, CDCl_3) δ 7.14-7.48 (m, 10H), 5.25 (s, 1H, $\text{CH}(\text{Ph}_2)$), 3.69 (s, 3H, O- CH_3), 4.06 (dd, 1H, $J = 7.1$ Hz, 6.2 Hz, $\text{CH}\alpha$), 2.07 (bs NH), 1.58-1.64 (m, 2H, $\text{CH}_2\beta$), 1.24-1.48 (m, 4H, $\text{CH}_2\lambda$, $\text{CH}_2\delta$), 0.88 (t, 3H, $J = 7.3$ Hz, CH_3); ^{13}C NMR (62.5 MHz, CDCl_3) 176.2 ($\text{C}=\text{O}$), 144.4, 142.8, 132.3, 130.0, 128.4 (2C), 128.2 (2C), 127.6, 127.2, 127.0 (2C), 65.5, 59.1, 51.5, 33.6, 27.8, 22.4, 13.8; ESMS calcd for $\text{C}_{20}\text{H}_{25}\text{NO}_2$ (M+1) 312.42 found 312.18.

General Procedure for Preparation of Dpm Amines

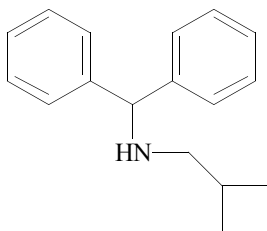
Diphenylmethanamine (460 mg, 2.5 mmol) was dissolved in a 1:1 mixture of THF/methanol (5 ml). Aldehyde (3 mmol) was added and the mixture was stirred at room temperature for 1 hour followed by addition of sodium cyanoborohydride (114 mg, 5 mmol) and the reaction mixture stirred for 24 hours. The solvents were removed *in vacuo*. The residue was dissolved in toluene (25 ml), washed with water (2 x 5 ml), dried over MgSO₄ and concentrated. The clear oils were further purified by silica gel chromatography with methylene chloride as an eluent.

Dpm-1-propylamine



Yield 62%; IR (CHCl₃) 3332, 1600, 1453 cm⁻¹; ¹H NMR (250 MHz, CDCl₃) δ 7.37 (d, 4H, *J* = 7.0 Hz), 7.22 (t, 4H, *J* = 7.0 Hz), 7.14 (d, 2H, *J* = 7.2 Hz), 4.77 (s, 1H), 2.50 (t, 2H, *J* = 7.1 Hz), 1.64 (bs, 1H), 1.48 (sextet, 2H, *J* = 7.2 Hz), 0.87 (t, 3H, *J* = 7.4 Hz); ¹³C NMR (62.5 MHz, CDCl₃) δ 144.3 (2C), 128.3 (4C), 127.2 (4C), 126.8 (2C), 67.5, 50.1, 23.3, 11.7; ESMS calcd for C₁₆H₂₀N (M+1) 226.33 found 226.14.

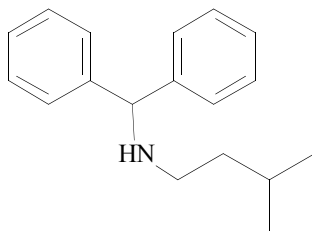
Dpm-isobutylamine



Yield 58%; IR (CHCl₃) 3332, 1598, 1493, 1453 cm⁻¹; ¹H NMR (250 MHz, CDCl₃) δ 7.41 (d, 4H, *J* = 7.0 Hz), 7.29 (t, 4H, *J* = 7.0 Hz), 7.21 (d, 2H, *J* = 7.2 Hz), 4.80 (s, 1H), 2.40 (d, 2H, *J* = 6.7 Hz), 1.80 (bs, 1H), 1.72-1.83 (m, 1H), 0.92 (d, 6H, *J* = 6.7 Hz); ¹³C NMR

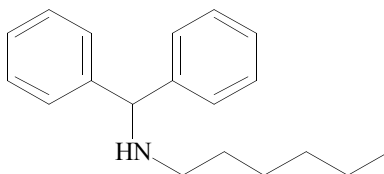
(62.5 MHz, CDCl₃) δ 144.2 (2C), 128.2 (4C), 127.2 (4C), 126.7 (2C), 67.5, 56.0, 28.4, 20.5 (2C); ESMS calcd for C₁₇H₂₂N (M+1) 240.36 found 240.14.

Dpm-3-methyl-butylamine



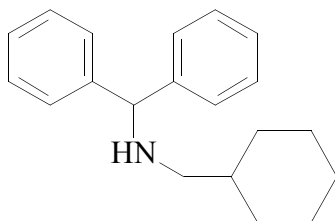
Yield 66%; IR (CHCl₃) 3332, 1599, 1453cm⁻¹ ¹H NMR (250 MHz, CDCl₃) δ 7.40 (d, 4H, $J = 7.0$ Hz), 7.28 (t, 4H, $J = 7.0$ Hz), 7.19 (d, 2H, $J = 7.1$ Hz), 4.81 (s, 1H), 2.57 (t, 2H, $J = 7.1$ Hz), 1.63 (9 peaks, 1H, $J = 6.9$ Hz), 1.42 (q, 2H, $J = 7.1$ Hz), 0.85 (d, 6H, $J = 6.8$ Hz); ¹³C NMR (62.5 MHz, CDCl₃) δ 144.0 (2C), 128.4 (4C), 127.3 (4C), 126.9 (2C), 67.6, 46.3, 39.1, 26.0, 22.6 (2C); ESMS calcd for C₁₈H₂₄N (M+1) 254.39 found 254.18.

Dpm-1-hexylamine



Yield 70%; IR (CHCl₃) 3332, 1600, 1451 cm⁻¹ ¹H NMR (250 MHz, CDCl₃) δ 7.38 (d, 4H, $J = 7.0$ Hz), 7.27 (t, 4H, $J = 7.0$ Hz), 7.19 (d, 2H, $J = 7.1$ Hz), 4.80 (s, 1H), 2.55 (t, 2H, $J = 7.1$ Hz), 1.70 (bs, 1H), 1.47-1.56 (m, 4H), 1.21-1.31 (m, 4H), 0.86 (t, 3H, $J = 7.0$ Hz); ¹³C NMR (62.5 MHz, CDCl₃) δ 144.4 (2C), 128.4 (4C), 127.3 (4C), 126.9 (2C), 67.6, 48.3, 31.7, 30.2, 27.0, 22.6, 14.0; ESMS calcd for C₁₉H₂₆N (M+1) 268.42 found 268.17.

Dpm-cyclohexylmethylamine



Yield 46%; IR (CHCl₃) 3332, 1600, 1450 cm⁻¹; ¹H NMR (250 MHz, CDCl₃) δ 7.40 (d, 4H, *J* = 7.7 Hz), 7.27 (t, 4H, *J* = 7.0 Hz), 7.20 (d, 2H, *J* = 7.2 Hz), 4.77 (s, 1H), 2.41 (t, 2H, *J* = 6.7 Hz), 1.66-1.79 (m, 5 H), 1.39-1.53 (m, 1H), 1.14-1.25 (m, 4H), 0.83-0.96 (m, 2H); ¹³C NMR (62.5 MHz, CDCl₃) δ 144.5 (2C), 128.3 (4C), 127.3 (4C), 126.8 (2C), 67.7, 55.0, 38.3, 31.4 (2C), 26.7, 26.0 (2C); ESMS calcd for C₂₀H₂₆N (M+1) 280.42 found 280.22.