

SUPPORTING INFORMATION

Compound 2

Yield 77%; oil; $[\alpha]_D +12.4$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 5.4 (m, 2H, CH=CH), 4.9 (m, 1H, α -CH), 3.7 (s, 3H, OCH₃), 2.2-1.8 (m, 6H, CH₂CH, CH₂CH=CHCH₂), 1.5 (s, 18H, 2×(CH₃)₃C), 1.3 (m, 6H, 3×CH₂), 0.9 (t, *J*=7Hz, 3H, CH₃).

Compound 3

Yield 82%; oil; $[\alpha]_D -7.8$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 5.4 (m, 2H, CH=CH), 5.1 (br, 1H, OCONH), 4.3 (m, 1H, α -CH), 2.2-1.6 (m, 6H, CH₂CH=CHCH₂, CH₂CH), 1.5 (s, 9H, (CH₃)₃C), 1.3 (m, 6H, 3×CH₂), 0.9 (t, *J*=7Hz, 3H, CH₃).

Compound 4

Yield 84%; oil; $[\alpha]_D +3.6$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 5.4 (m, 2H, CH=CH), 4.6 (br, 1H, OCONH), 3.7-3.5 (m, 3H, CH₂OH, α -CH), 2.2-1.9 (m, 4H, CH₂CH=CHCH₂), 1.6-1.4 (m, 11H, CH₂CH, (CH₃)₃C), 1.3 (m, 6H, 3×CH₂), 0.9 (t, *J*=7Hz, 3H, CH₃); MS (FAB) *m/z* (%): 308 (12) [M+Na⁺], 286 (9) [M+H⁺], 230 (68), 186 (100). Anal. Calcd for C₁₆H₃₁NO₃: C, 67.33; H, 10.95; N, 4.91. Found: C, 67.09; H, 11.24; N, 4.82. Enantiomeric excess >95% was indicated by ¹H NMR and ¹⁹F NMR analysis of the corresponding Mosher ester.

Compound 5

Yield 63%; oil; $[\alpha]_D +1.8$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 5.4 (m, 2H, CH=CH), 4.7 (br, 1H, OCONH), 3.7 (m, 1H, α -CH), 3.4 (m, 4H, CH₂OCH₂), 2.2-1.9 (m, 4H, CH₂CH=CHCH₂), 1.7-1.2 (m, 31H, 11×CH₂, (CH₃)₃C), 0.9 (m, 6H, 2×CH₃); ¹³C NMR (200MHz, CDCl₃) δ 155.6 (CO), 130.3 and 128.8 (CH=CH), 79.0 ((CH₃)₃C), 72.3 and 71.4 (2×CH₂O), 50.1 (α -CH), 32.2-22.5 (CH₂CHNH, CH₂CH₂O, CH₂CH=CHCH₂, lipidic chain), 29.3 ((CH₃)₃C), 14.1 and 14.0 (2×CH₃); MS (FAB) *m/z* (%): 448 (7) [M+Na⁺], 426 (52) [M⁺], 326 (100).

Compound 6

Yield 100%; oil; $[\alpha]_D -1.4$ (*c* 1.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 5.4 (m, 2H, CH=CH), 3.4 (m, 4H, CH₂OCH₂), 3.0 (m, 1H, α -CH), 2.2-1.4 (m, 6H, CH₂CH=CHCH₂, CH₂CHNH), 1.3 (m, 22H, 11×CH₂), 0.9 (m, 6H, 2×CH₃).

Compound 7

Yield 68%; oil; $[\alpha]_D +4$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 6.5 (d, *J*=8Hz, 1H, CONH,), 5.3 (m, 2H, CH=CH), 4.1 (m, 2H, CH(OH)CO, α -CH), 3.4 (m, 4H, CH₂OCH₂), 2.7 (br, 1H, OH), 2.1-1.9 (m, 4H, CH₂CH=CHCH₂), 1.8-1.5 (m, 6H, CH(OH)CH₂, OCH₂CH₂, CH₂CHNH), 1.4-1.2 (m, 42H, 21×CH₂), 0.9 (m, 9H, 3×CH₃); ¹³C NMR (200MHz, CDCl₃) δ 173.3 (CO), 130.7 and 128.5 (CH=CH), 72.0 (CHOH), 71.9 and 71.5 (2×CH₂O), 48.5 (α -CH), 35.1-22.5 (CH₂CHNH, CH₂CH₂O, CH₂CH=CHCH₂, lipidic chain), 14.1-14.0 (3×CH₃).

Compound 8

Yield 57%; oil; $[\alpha]_D +3.1$ (*c* 0.5, CHCl₃); ¹H NMR (200MHz, CDCl₃) δ 7.1 (d, *J*=8Hz, 1H, CONH), 5.4 (m, 2H, CH=CH), 4.0 (m, 1H, α -CH), 3.4 (m, 4H, CH₂OCH₂), 2.9 (t, *J*=7Hz, 2H, CH₂CO), 2.1-1.9 (m, 4H, CH₂CH=CHCH₂), 1.8-1.5 (m, 6H, CH₂CH₂CO, OCH₂CH₂, CH₂CHNH), 1.4-1.1 (m, 42H, 21×CH₂), 0.9 (m, 9H, 3×CH₃); ¹³C NMR (200MHz, CDCl₃) δ 199.4 (COCONH), 159.7 (CONH), 130.9 and 128.2 (CH=CH), 71.5 (CH₂OCH₂), 49.0 (α -CH), 36.8 (CH₂CO), 31.9-22.3 (CH₂CH₂O, CH₂CH=CHCH₂, lipidic chain), 14.1-14.0 (3×CH₃); MS (FAB) *m/z* (%): 579 (24) [M+H⁺], 578 (100) [M⁺], 352 (12), 225 (18). Anal. Calcd for C₃₇H₇₁NO₃: C, 76.89; H, 12.38; N, 2.42. Found: C, 76.62; H, 12.56; N, 2.34.