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SUPPORTING INFORMATION

An Expedient and Practical Method for the Synthesis of a Diverse Series of Cyclopropane- α -Amino Acids and Amines.

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General Synthetic Methods. All cyclopropanation reactions using iodobenzene diacetate were run in flasks open to air, while diazo mediated cyclopropanations were run under argon atmospheres in anhydrous CH_2Cl_2 prepared by filtration through drying columns on a GlassContour system (Irvine, CA). Analytical thin-layer chromatography (TLC) was performed on pre-coated, glass-backed silica gel (Merck 60 F254). Visualization of the developed chromatogram was achieved by UV absorbance, aqueous cerium molybdate or ninhydrin (amino esters). Column chromatography was performed on 230-400 mesh silica gel (EM Science 60) according to standard techniques.¹ Solvent compositions for chromatography are listed as volume/volume ratios. Melting points were determined on a Thomas-Hoover melting point apparatus in open capillaries and are uncorrected. Infrared spectra were recorded on a Perkin Elmer Spectrum One FTIR Spectrometer equipped with a Golden Gate Diamond ATR. Only the most important and relevant IR frequencies are reported. High-resolution mass spectra (HRMS) were obtained from the Centre régional de spectrométrie de masse de l'Université de Montréal on a MS50 Kratos and are reported as m/e . Accurate masses are reported for the molecular ion (M^+) or a suitable fragment ion. Proton nuclear magnetic resonance (^1H NMR) spectra were recorded with AMX 300 Bruker (300 MHz) or AMX R 400 Bruker (400 MHz) spectrometers. Chemical shifts of ^1H NMR spectra are reported in parts per million (ppm) on the δ scale from an internal standard of residual chloroform (7.27 ppm). Data is reported as follows: chemical shift, multiplicity (s=singlet, d=doublet, t=triplet, q=quartet, qn=quintet, sept=septet, m=multiplet and br=broad), coupling constant in hertz (Hz) and integration). Carbon-13 nuclear magnetic resonance (^{13}C NMR) were recorded with AMX 300 Bruker (300 MHz) or AMX R 400 Bruker (400 MHz) spectrometers. Chemical shifts are reported in delta (δ) units, parts per million (ppm), relative to the central line of the triplet at 77.23 ppm for deuteriochloroform. ^{13}C NMR spectra were routinely run with broadband decoupling. Full assignment of chemical shifts was confirmed by DEPT experiments. Combustion analyses were performed by the Laboratoire d'analyse élémentaire de l'Université de Montréal.

Materials. [Rh(Octanoate)₂]₂, [Rh(OPiv)₂]₂, iodobenzene diacetate, zinc dust (<10 micron, 98+%) and the olefins (styrene, 1-vinyl naphthalene, 4-chlorostyrene, 4-phenyl-1-butene, indene, 1,2-dihydronaphthalene, methylene cyclopentane, cyclopentene, cyclohexene, cyclooctene, cyclooctadiene, 1,1-diphenyl ethene and α -methyl styrene) are commercially available. TBDPS protected 3-hydroxy styrene was prepared by Wittig olefination of the corresponding aldehyde.² Methyl or ethyl nitroacetate is also commercially available or can easily be prepared according to Koyama *et al.*³ respectively.

Characterization Data of Novel Cyclopropanes

Methyl 2-(1-naphthyl)-1-nitrocyclopropanecarboxylate (5b). The *E*- and *Z*-diastereomers are separable by column chromatography (eluent: 4-6% EtOAc/Hexane) (537 mg, 87%).

***E*-Methyl 2-(1-naphthyl)-1-nitrocyclopropanecarboxylate (5b).** White crystalline solid: M.p. 85-86 °C; *R*_f 0.61 (20% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 8.18 (dd, *J* = 8.2, 0.9 Hz, 1H), 7.83-7.90 (m, 2H), 7.52-7.63 (m, 2H), 7.44 (t, *J* = 7.7 Hz, 1H), 7.30 (dd, *J* = 7.1, 1.0 Hz, 1H), 4.17 (t, *J* = 9.9 Hz, 1H), 3.23 (s, 3H), 2.68 (dd, *J* = 9.2, 6.5 Hz, 1H), 2.35 (dd, *J* = 10.6, 6.5 Hz, 1H); ¹³C NMR (75 MHz, CDCl₃) δ 162.9, 133.5, 132.6, 129.2, 128.7, 128.4, 126.9, 126.4, 126.0, 125.1, 123.8, 71.9, 53.0, 32.4, 20.7; IR (film) 1743 (C=O), 1539 (NO₂), 1347, 1334, 1212, 1141 cm⁻¹; Elem. Anal. calcd (%) for C₁₅H₁₃NO₄ (271.28): C 66.41, H 4.83, N 5.16, found: C 66.40, H 4.90, N 5.18.

***Z*-Methyl 2-(1-naphthyl)-1-nitrocyclopropanecarboxylate (5b).** White crystalline solid: M.p. 110-111 °C; *R*_f 0.45 (20% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 8.12 (d, *J* = 7.6 Hz, 1H), 7.84 (t, *J* = 8.3 Hz, 2H), 7.50-7.62 (m, 2H), 7.34-7.44 (m, 2H), 3.97-4.03 (m, 1H), 3.99 (s, 3H), 2.96 (dd, *J* = 9.4, 6.8 Hz, 1H), 2.14 (dd, *J* = 9.9, 6.8 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃) δ 166.2, 133.8, 132.7, 129.8, 128.9, 127.4, 127.1, 126.5, 126.2, 125.2, 123.7, 72.3, 54.2, 32.2, 19.9; IR (film) 1741 (C=O), 1541 (NO₂), 1299, 1055 cm⁻¹; LRMS (APCI, Pos) calcd for C₁₅H₁₃NO₄ [M+H]⁺: 272.3 *m/z*, observed: 272.1 *m/z*.

3-[(*tert*-butyldiphenylsilyl)oxy]phenyl-styrene (precursor to 5c). Isolated as a viscous, colorless oil (870 mg, 72%); *R*_f 0.46 (Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.83-7.86 (m, 4H), 7.41-7.53 (m, 6H), 7.11 (t, *J* = 7.8 Hz, 1H), 6.97-7.01 (m, 2H), 6.72-6.76 (m, 1H), 6.63 (dd, *J* = 17.6, 10.9 Hz, 1H), 5.60 (d, *J* = 17.6 Hz, 1H), 5.21 (d, *J* = 10.9 Hz, 1H), 1.23 (s, 9H); ¹³C NMR (75 MHz, CDCl₃) δ 156.0, 139.0, 136.8, 135.7, 133.1, 130.1, 129.4, 128.0, 119.5, 119.4, 117.5, 114.0, 26.8, 19.7; IR (film) 1578, 1485, 1429, 1279, 1112, 965 cm⁻¹. HRMS (EI⁺) calcd for C₂₄H₂₆SiO [M]⁺: 358.1753, observed: 358.1740.

Methyl 2-(3-{[*tert*-butyldiphenyl)silyl]oxy}phenyl)-1-nitrocyclopropane-carboxylate (5c). The *E* and *Z*-diastereomers are separable by column chromatography (eluent: 4-10% EtOAc/Hexane) (356 mg, 92%).

***E*-Methyl 2-(3-{[*tert*-butyldiphenyl)silyl]oxy}phenyl)-1-nitrocyclopropane-carboxylate (5c).** Viscous, colorless oil: *R_f* 0.83 (20% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.75 (d, *J* = 6.3 Hz, 4H), 7.39-7.50 (m, 6H), 7.03 (t, *J* = 8.3 Hz, 1H), 6.69-6.76 (m, 3H), 3.64 (t, *J* = 9.9 Hz, 1H), 3.48 (s, 3H), 2.23 (dd, *J* = 9.1, 6.6 Hz, 1H), 2.11 (dd, *J* = 10.7, 6.6 Hz, 1H), 1.16 (s, 9H); ¹³C NMR (75 MHz, CDCl₃) δ 162.4, 155.9, 135.7, 133.6, 132.9, 130.2, 129.4, 128.0, 121.2, 120.0, 119.8, 71.8, 53.1, 34.0, 26.7, 21.0, 19.6; IR (film) 1748 (C=O), 1545 (NO₂), 1350, 1114 cm⁻¹.

***Z*-Methyl 2-(3-{[*tert*-butyldiphenyl)silyl]oxy}phenyl)-1-nitrocyclopropane-carboxylate (5c).** Viscous, colorless oil: *R_f* 0.62 (20% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.69-7.73 (m, 4H), 7.37-7.47 (m, 6H), 7.01 (t, *J* = 8.3 Hz, 1H), 6.74 (d, *J* = 7.7 Hz, 1H), 6.65-6.67 (m, 2H), 3.88 (s, 3H), 3.34 (t, *J* = 9.5 Hz, 1H), 2.42 (dd, *J* = 9.2, 6.9 Hz, 1H), 1.91 (dd, *J* = 9.9, 6.9 Hz, 1H), 1.11 (s, 9H); ¹³C NMR (75 MHz, CDCl₃) δ 166.0, 156.0, 135.7, 132.93, 132.88, 132.76, 130.1, 129.7, 128.0, 121.3, 120.2, 120.1, 72.5, 53.9, 33.8, 26.7, 20.2, 19.7; IR (film) 1744 (C=O), 1546 (NO₂), 1428, 1283, 1153, 1113 cm⁻¹.

Methyl 1-nitro-2-(2-phenylethyl)cyclopropanecarboxylate (5e). The *E* and *Z*-diastereomers can be partially separated by column chromatography (eluent: 3-5% EtOAc/Hexane) (82 mg, 70%).

***E*-Methyl 1-nitro-2-(2-phenylethyl)cyclopropane-carboxylate (5e).** Clear, colorless oil: *R_f* 0.42 (10% EtOAc/Hexane); ¹H NMR (400 MHz, CDCl₃) δ 7.16-7.32 (m, 5H), 3.86 (s, 3H), 2.72-2.77 (m, 2H), 2.39-2.53 (m, 1H), 1.83-1.91 (m, 2H), 1.63-1.68 (m, 2H); ¹³C NMR (100 MHz, CDCl₃) δ 164.3, 140.6, 128.8, 128.6, 126.5, 70.5, 53.7, 34.9, 30.2, 30.0, 23.3; IR (film) 1745 (C=O), 1544 (NO₂), 1354, 1219, 1149 cm⁻¹; Elem. Anal. calcd (%) for C₁₃H₁₅NO₄ (249.27): C 62.64, H 6.07, N 5.62, found: C 62.49, H 6.09, N 5.60.

***Z*-Methyl 1-nitro-2-(2-phenylethyl)cyclopropanecarboxylate (5e).** Clear, colorless oil: *R_f* 0.36 (10% EtOAc/Hexane); ¹H NMR (400 MHz, CDCl₃) δ 7.15-7.31 (m, 5H), 3.83 (s, 3H), 2.75-2.81 (m, 2H), 2.12-2.17 (m, 1H), 1.80-1.83 (m, 2H), 1.68-1.72 (m, 1H), 1.52-1.58 (m, 1H); ¹³C NMR (100 MHz, CDCl₃) δ 166.6, 140.6, 128.8, 128.6, 126.5, 71.4, 53.8, 34.6, 30.4, 29.0, 22.5; IR (film) 1745 (C=O), 1543 (NO₂), 1439, 1304, 1156 cm⁻¹; HRMS (EI⁺) calcd for C₁₃H₁₅NO₄ [M]⁺: 249.1001, observed: 249.1007.

exo-Methyl 1-nitro-1a,2,3,7b-tetrahydro-1H-cyclopropa[a]naphthalene-1-carboxylate (5g). The *exo* and *endo*-diastereomers can be separated by column chromatography (eluent: 4-7% EtOAc/Hexane) (200 mg, 84%).

exo-Methyl 1-nitro-1a,2,3,7b-tetrahydro-1H-cyclopropa[a]naphthalene-1-carboxylate (5g). White crystalline solid: M.p. 73-74 °C; R_f 0.57 (20% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.36-7.39 (m, 1H), 7.20-7.26 (m, 2H), 7.05-7.08 (m, 1H), 3.66 (s, 3H), 3.35 (d, J = 10.6 Hz, 1H), 2.91-2.96 (m, 1H), 2.72-2.77 (m, 1H), 2.31-2.40 (m, 2H), 2.08-2.16 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 162.4, 134.6, 130.8, 128.75, 128.69, 128.1, 126.8, 73.2, 53.5, 32.7, 30.1, 25.2, 17.1; IR (film) 1744 (C=O), 1538 (NO_2), 1336, 1202, 1169 cm^{-1} ; Elem. Anal. calcd (%) for $\text{C}_{13}\text{H}_{13}\text{NO}_4$ (247.25): C 63.15, H 5.30, N 5.67, found: C 63.00, H 5.37, N 5.67.

Benzyl 6-nitrobicyclo[3.1.0]hexane-6-carboxylate (5i). White, waxy solid as an inseparable mixture (87:13) of *exo*- and *endo*-isomers (eluent: 3-5% EtOAc/Hexane) (200 mg, 81%).

exo-Benzyl 6-nitrobicyclo[3.1.0]heptane-6-carboxylate (5i). R_f 0.64 (20% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.30-7.43 (m, 5H), 5.29 (s, 2H), 2.61-2.63 (m, 2H), 1.94-2.17 (m, 4H), 1.58-1.68 (m, 1H), 0.74-0.83 (m, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 161.9, 134.6, 128.9, 128.8, 72.4, 68.5, 37.9, 27.0, 21.4.

endo-Benzyl 6-nitrobicyclo[3.1.0]hexane-6-carboxylate (5i). R_f 0.68 (20% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.30-7.43 (m, 5H), 5.22 (s, 2H), 2.44-2.46 (m, 2H), 1.94-2.17 (m, 4H), 1.68-1.81 (m, 1H), 0.82-0.93 (m, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 165.8, 134.7, 128.9, 128.5, 128.2, 75.0, 68.3, 37.5, 27.3, 21.7; IR (film) (*exo/endo* mix) 1733 (C=O), 1535 (NO_2), 1315, 1169 cm^{-1} ; LRMS (APCI, Neg) calcd for $\text{C}_{14}\text{H}_{15}\text{NO}_4$ [$\text{M}-\text{H}$] $^-$: 260.3 m/z , observed: 260.1 m/z .

Benzyl 7-nitrobicyclo[4.1.0]heptane-7-carboxylate (5k). Clear, colorless oil as an inseparable mixture (86:14) of *exo*- and *endo*-isomers (eluent: 3-5% EtOAc/Hexane) (137 mg, 39%).

exo-Benzyl 7-nitrobicyclo[4.1.0]heptane-7-carboxylate (5k). R_f 0.46 (10% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.33-7.45 (m, 5H), 5.33 (s, 2H), 2.35-2.39 (m, 2H), 1.91-1.96 (m, 4H), 1.06-1.34 (m, 2H), 0.92-1.04 (m, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ 162.0, 134.6, 128.9, 128.8, 128.7, 72.1, 68.4, 28.7, 20.2, 19.1.

endo-Benzyl 7-nitrobicyclo[4.1.0]heptane-7-carboxylate (5k). R_f 0.46 (10% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.33-7.45 (m, 5H), 5.22 (s, 2H), 2.38-2.42 (m, 2H), 2.00-2.11 (m, 4H), 1.06-1.34 (m, 2H), 0.92-1.04 (m, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ 166.8, 134.7, 128.9, 128.7, 128.1, 73.1, 68.3, 26.8,

20.1, 19.1; IR (film) (*exo/endo* mix) 1739 (C=O), 1538 (NO₂), 1337, 1167, 1111 cm⁻¹; LRMS (APCI, Neg) calcd for C₁₅H₁₇NO₄ [M-H]⁻: 274.3 *m/z*, observed: 274.1 *m/z*.

Benzyl 9-nitrobicyclo[6.1.0]nonane-9-carboxylate (5l). White, waxy solid as an inseparable mixture (80:20) of *exo*- and *endo*-isomers (eluent: 3-5% EtOAc/Hexane) (187 mg, 66%): M.p. 49-55 °C.

***exo*-Benzyl 9-nitrobicyclo[6.1.0]nonane-9-carboxylate (5l).** *R_f* 0.44 (10% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.32-7.41 (m, 5H), 5.29 (s, 2H), 2.08-2.26 (m, 4H), 1.57-1.71 (m, 4H), 1.34-1.51 (m, 4H), 1.11-1.23 (m, 2H); ¹³C NMR (75 MHz, CDCl₃) δ 162.1, 134.9, 128.72, 128.67, 128.5, 72.3, 68.1, 34.1, 28.2, 26.1, 22.8.

***endo*-Benzyl 9-nitrobicyclo[6.1.0]nonane-9-carboxylate (5l).** *R_f* 0.44 (10% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.32-7.41 (m, 5H), 5.24 (s, 2H), 2.08-2.14 (m, 4H), 1.90-1.93 (m, 4H), 1.57-1.71 (m, 4H), 1.11-1.23 (m, 2H); ¹³C NMR (75 MHz, CDCl₃) δ 166.6, 134.7, 128.7, 128.5, 128.1, 73.6, 68.1, 32.1, 26.2, 23.0; IR (film) (*exo/endo* mix) 1745 (C=O), 1531 (NO₂), 1350, 1164 cm⁻¹; LRMS (APCI, Neg) calcd for C₁₇H₂₁NO₄ [M-H]⁻: 302.4 *m/z*, observed: 302.1 *m/z*.

Benzyl 9-nitrobicyclo[6.1.0]non-4-ene-9-carboxylate (5m). Viscous, colorless oil as an inseparable mixture (74:26) of *exo*- and *endo*-isomers (eluent: 3-5% EtOAc/Hexane) (210 mg, 71%).

***exo*-Benzyl 9-nitrobicyclo[6.1.0]non-4-ene-9-carboxylate (5m).** *R_f* 0.46 (10% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.26-7.40 (m, 5H), 5.60-5.67 (m, 2H), 5.30 (s, 2H), 2.31-2.44 (m, 4H), 2.03-2.19 (m, 4H), 1.88-1.96 (m, 2H); ¹³C NMR (75 MHz, CDCl₃) δ 162.8, 134.8, 129.2, 128.8, 128.6, 128.2, 72.4, 68.1, 33.9, 26.2, 23.8.

***endo*-Benzyl 9-nitrobicyclo[6.1.0]non-4-ene-9-carboxylate (5m).** *R_f* 0.39 (10% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.26-7.40 (m, 5H), 5.60-5.67 (m, 2H), 5.24 (s, 2H), 2.31-2.44 (m, 4H), 2.03-2.19 (m, 4H), 1.65-1.79 (m, 2H); ¹³C NMR (75 MHz, CDCl₃) δ 166.6, 134.7, 129.2, 128.8, 128.6, 128.2, 73.5, 32.1, 26.4, 24.1; IR (film) (*exo/endo* mix) 1738 (C=O), 1539 (NO₂), 1344, 1175, 1129 cm⁻¹; LRMS (APCI, Neg) calcd for C₁₇H₁₉NO₄ [M-H]⁻: 300.3 *m/z*, observed: 300.1 *m/z*.

Reduction Products

2-Hydroxyamino-4-phenyl-butyric acid methyl ester (10). White solid (57 mg, 79%): M.p. 82-83 °C; *R_f* 0.13 (30% EtOAc/Hexane); ¹H NMR (400 MHz, CDCl₃) δ 7.27-7.31 (m, 2H), 7.18-7.22 (m, 3H), 6.35 (s(*br*), 1H), 5.68 (s(*br*), 1H), 3.77 (s,

3H), 3.67 (dd, $J = 7.4, 6.5$ Hz, 1H), 2.66-2.73 (m, 2H), 1.89-1.98 (m, 2H); ^{13}C NMR (100 MHz, CDCl_3) δ 174.3, 140.9, 128.7, 128.6, 126.4, 64.7, 52.3, 32.2, 31.0; IR (film) 3276 (NH), 3167 (OH), 1746 (C=O), 1453, 1198, 1174 cm^{-1} ; HRMS (EI^+) calcd for $\text{C}_{11}\text{H}_{15}\text{NO}_3$ [$\text{M}]^+$: 209.1052, observed: 209.1057; Elem. Anal. calcd (%) for $\text{C}_{11}\text{H}_{15}\text{NO}_3$ (209.24): C 63.14, H 7.23, N 6.69, found: C 62.98, H 7.67, N 6.61.

2-Amino-4-phenyl-butyric acid methyl ester (11). White solid (52 mg, 74%): M.p. 54-56 $^{\circ}\text{C}$; R_f 0.18 (100% EtOAc); ^1H NMR (400 MHz, CDCl_3) δ 7.27-7.30 (m, 2H), 7.13-7.21 (m, 3H), 3.71 (s, 3H), 3.46 (dd, $J = 7.9, 5.2$ Hz, 1H), 2.67-2.79 (m, 2H), 2.03-2.12 (m, 1H), 1.81-1.90 (m, 1H), 1.55 (s(*br*), 2H); ^{13}C NMR (100 MHz, CDCl_3) δ 176.0, 141.2, 128.6, 128.5, 126.1, 53.8, 52.2, 36.1, 31.9; IR (film) 3381 (NH), 1734 (C=O), 1455, 1436, 1197, 1174 cm^{-1} ; HRMS (EI^+) calcd for $\text{C}_{11}\text{H}_{15}\text{NO}_2$ [$\text{M}]^+$: 193.1103, observed: 193.1100

4-Phenyl-butyric acid ethyl ester (13). Clear, colorless oil (69 mg, 81%): R_f 0.41 (2.5% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.29-7.32 (m, 2H), 7.18-7.28 (m, 3H), 4.13 (q, $J = 7.1$ Hz, 2H), 2.66 (t, $J = 7.6$ Hz, 2H), 2.33 (t, $J = 7.5$ Hz, 2H), 1.97 (pent. $J = 7.5$ Hz, 2H), 1.26 (t, $J = 7.1$ Hz, 3H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.7, 141.7, 128.7, 128.6, 126.2, 60.5, 35.3, 33.9, 26.8, 14.4; IR (film) 1733 (C=O), 1454, 1374, 1180, 1032 cm^{-1} .

E-Methyl 1-amino-2-(1-naphthyl)-1-cyclopropanecarboxylate (14b). Pale yellow solid (88 mg, 76%): M.p. 63-65 $^{\circ}\text{C}$; R_f 0.18 (50% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 8.02 (d, $J = 8.1$ Hz, 1H), 7.84 (d, $J = 7.7$ Hz, 1H), 7.74 (d, $J = 8.0$ Hz, 1H), 7.35-7.56 (m, 4H), 3.05 (s, 3H), 2.99 (t, 8.6 Hz, 1H), 2.44 (s(*br*), 2H), 2.15 (dd, $J = 7.9, 4.9$ Hz, 1H), 1.67 (dd, $J = 9.3, 4.9$ Hz, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.8, 133.5, 133.3, 133.2, 128.7, 127.5, 126.6, 126.2, 125.7, 125.4, 124.0, 51.6, 43.1, 35.0, 20.7; IR (solid) 3384, 3325 (NH), 1712 (C=O), 1321, 1055, 1033 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{15}\text{H}_{15}\text{NO}_2$ [$\text{M}+\text{H}]^+$: 242.3 m/z , observed: 242.1 m/z . Elem. Anal. calcd (%) for $\text{C}_{15}\text{H}_{15}\text{NO}_2$ (241.29): C 74.67, H 6.27, N 5.81, found: C 74.56, H 6.40, N 5.76.

E-Methyl 1-amino-2-[3-[[*tert*-butyl(diphenyl)silyl]oxy}phenyl] cyclopropane carboxylate (14c). Clear, colorless oil (106 mg, 74%): R_f 0.13 (50% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.69-7.73 (m, 4H), 7.33-7.43 (m, 6H), 6.94 (t, $J = 7.8$ Hz, 1H), 6.67-6.71 (m, 2H), 6.53-6.57 (m, 1H), 3.23 (s, 3H), 2.50 (t, $J = 8.7$ Hz, 1H), 2.14 (s(*br*), 2H), 1.77 (dd, $J = 7.9, 5.0$ Hz, 1H), 1.34 (dd, $J = 9.5, 5.0$ Hz, 1H), 1.10 (s, 9H); ^{13}C NMR (100 MHz, CDCl_3) δ 173.8, 155.3, 138.0, 135.7, 133.1, 130.0, 128.6, 127.9, 121.9, 120.7, 118.1, 51.5, 43.2, 36.1, 26.7, 20.0, 19.6; IR (film) 3380 (NH), 1720 (C=O), 1429, 1195, 702 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{27}\text{H}_{31}\text{NO}_3\text{Si}$ [$\text{M}+\text{H}]^+$: 446.6 m/z , observed: 446.1 m/z .

Methyl 1-amino-2-(4-chlorophenyl)-1-cyclopropanecarboxylate (14d). The *E*- and *Z*-isomers were easily separated, affording the corresponding amino esters (92 mg, 76%).

***E*-Methyl 1-amino-2-(4-chlorophenyl)-1-cyclopropanecarboxylate (14d).** Pale yellow wax: M.p. 33-34 °C; *R_f* 0.14 (50% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.21 (d, *J* = 8.6 Hz, 2H), 7.11 (d, *J* = 8.7 Hz, 2H), 3.34 (s, 3H), 2.59 (t, *J* = 8.5 Hz, 1H), 2.19 (s(*br*), 2H), 1.94 (dd, *J* = 7.9, 5.1 Hz, 1H), 1.46 (dd, *J* = 9.4, 5.1 Hz, 1H); ¹³C NMR (75 MHz, CDCl₃) δ 173.5, 135.1, 132.5, 130.5, 128.2, 51.8, 43.5, 35.8, 20.3; IR (film) 3383 (NH), 1711 (C=O), 1284, 1182, 1132, 841 cm⁻¹; LRMS (APCI, Pos) calcd for C₁₁H₁₂NO₂Cl [M+H]⁺: 226.7 *m/z*, observed: 225.9, 227.9 *m/z*.

***Z*-Methyl 1-amino-2-phenylethyl-cyclopropanecarboxylate (14d).** Pale yellow oil: *R_f* 0.36 (50% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.28 (d, *J* = 8.5 Hz, 2H), 7.18 (d, *J* = 8.3 Hz, 2H), 3.76 (s, 3H), 2.77 (t, *J* = 7.6 Hz, 1H), 1.84 (dd, *J* = 9.6, 5.0 Hz, 1H), 1.56 (s(*br*), 2H), 1.40 (dd, *J* = 7.6, 4.9 Hz, 1H); ¹³C NMR (75 MHz, CDCl₃) δ 175.9, 134.5, 132.8, 130.7, 128.4, 52.7, 41.3, 32.7, 22.4; IR (film) 3385 (NH), 1718 (C=O), 1496, 1436, 1265, 1148, 834 cm⁻¹.

Methyl 1-amino-2-phenylethyl-cyclopropanecarboxylate (14e). The *E*- and *Z*-isomers were easily separated, affording the corresponding amino esters (104 mg, 93%).

***E*-Methyl 1-amino-2-phenylethyl-cyclopropanecarboxylate (14e).** Pale yellow oil: *R_f* 0.14 (50% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.25-7.30 (m, 2H), 7.14-7.20 (m, 3H), 3.67 (s, 3H), 2.53-2.73 (m, 2H), 1.95 (s(*br*), 2H), 1.72-1.92 (m, 2H), 1.30-1.40 (m, 1H), 1.20-1.26 (m, 1H), 1.08-1.13 (m, 1H); ¹³C NMR (100 MHz, CDCl₃) δ 175.4, 142.0, 128.7, 128.5, 126.0, 52.2, 40.4, 36.0, 32.4, 29.4, 23.2; IR (film) 3382 (NH), 1720 (C=O), 1436, 1312, 1153, 833 cm⁻¹; LRMS (APCI, Pos) calcd for C₁₃H₁₇NO₂ [M+H]⁺: 220.3 *m/z*, observed: 220.1 *m/z*.

***Z*-Methyl 1-amino-2-phenylethyl-cyclopropanecarboxylate (14e).** Pale yellow oil: *R_f* 0.37 (50% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.25-7.30 (m, 2H), 7.16-7.21 (m, 3H), 3.66 (s, 3H), 2.62-2.81 (m, 2H), 1.78-1.97 (m, 2H), 1.50 (s(*br*), 2H), 1.38-1.55 (m, 2H), 0.63 (dd, *J* = 7.0, 3.9 Hz, 1H); ¹³C NMR (100 MHz, CDCl₃) δ 177.3, 142.2, 128.8, 128.5, 126.0, 52.3, 39.4, 36.1, 29.6, 28.7, 23.4; IR (film) 3382 (NH), 1718 (C=O), 1436, 1195, 1149, 827 cm⁻¹; LRMS (APCI, Pos) calcd for C₁₃H₁₇NO₂ [M+H]⁺: 220.3 *m/z*, observed: 220.1 *m/z*.

***exo*-Ethyl 1-amino-1,1a,6,6a-tetrahydro-cyclopropa[*a*]-indene-1-carboxylate (14f).** Clear, colorless oil (156 mg, 79%); *R_f* 0.20 (60% EtOAc/Hexane); ¹H NMR (300 MHz, CDCl₃) δ 7.26-7.30 (m, 1H), 7.09-7.10 (m, 3H), 3.74-3.85 (m, 2H), 3.17-3.36 (m, 2H), 2.87 (dd, *J* = 6.8, 1.1 Hz, 1H), 2.26 (dt, *J* = 6.8, 1.3 Hz, 1H),

2.12 (s(*br*), 2H), 0.82 (t, $J = 7.1$ Hz, 3H); ^{13}C NMR (75 MHz, CDCl_3) δ 171.9, 145.2, 140.2, 126.6, 126.2, 124.9, 124.1, 60.5, 44.8, 41.7, 33.5, 32.9, 13.8; IR (film) 3375 (NH), 1724 (C=O), 1304, 1132 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{13}\text{H}_{15}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 218.3 m/z , observed: 218.1 m/z .

Methyl 1-amino-1,2,3,7b-tetrahydro-1H-cyclopropa[*a*]-naphthalene-1-carboxylate (14g). Clear, colorless oil (99 mg, 86%): R_f 0.23 (60% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.20-7.22 (m, 1H), 7.04-7.14 (m, 3H), 3.45 (s, 3H), 2.71-2.79 (m, 1H), 2.45-2.50 (m, 1H), 2.45 (d, $J = 9.4$ Hz, 1H), 1.96-2.19 (m, 5H); ^{13}C NMR (100 MHz, CDCl_3) δ 172.7, 138.1, 132.5, 129.9, 128.0, 126.5, 126.1, 51.8, 46.8, 31.5, 29.0, 27.9, 18.8; IR (film) 3374 (NH), 1725 (C=O), 1433, 1311, 1190, 1136, 744 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{13}\text{H}_{15}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 218.3 m/z , observed: 218.1 m/z .

Methy 1-aminospiro[2.4]heptane-1-carboxylate (14h). Clear, colorless oil (98 mg, 54%): R_f 0.16 (30% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 3.70 (s, 3H), 1.96-2.05 (m, 2H), 1.84 (s(*br*), 2H), 1.58-1.79 (m, 5H), 1.53 (d, $J = 4.5$ Hz, 1H), 0.88 (d, $J = 4.4$ Hz, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 175.7, 51.8, 43.5, 38.7, 32.5, 32.0, 29.6, 26.9, 26.3; IR (film) 3381 (NH), 1716 (C=O), 1287, 1197, 1132 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_9\text{H}_{15}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 170.2 m/z , observed: 170.1 m/z .

Benzyl 6-aminobicyclo[3.1.0]hexane-6-carboxylate (14i). Isolated as a separable mixture of *exo*- and *endo*-isomers (117 mg, 88%).

***exo*-Benzyl 6-aminobicyclo[3.1.0]hexane-6-carboxylate (14i).** Clear, colorless oil; R_f 0.42 (50% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.26-7.38 (m, 5H), 5.13 (s, 2H), 1.98 (s(*br*), 2H), 1.75-1.94 (m, 4H), 1.57-1.71 (m, 3H), 1.08-1.21 (m, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 172.4, 135.9, 128.7, 128.6, 128.5, 66.7, 43.5, 35.3, 26.2, 24.6; IR (film) 3374 (NH), 1722 (C=O), 1456, 1300, 1129, 1018, 699 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{14}\text{H}_{17}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 232.3 m/z , observed: 232.1 m/z .

***endo*-Benzyl 6-aminobicyclo[3.1.0]heptane-6-carboxylate (14i).** Pale yellow wax: M.p. 53-54 $^{\circ}\text{C}$; R_f 0.96 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.26-7.39 (m, 5H), 5.10 (s, 2H), 1.79-2.05 (m, 5H), 1.67-1.76 (m, 5H); ^{13}C NMR (75 MHz, CDCl_3) δ 175.6, 136.3, 128.8, 128.4, 128.2, 66.9, 43.1, 35.2, 26.4, 25.7; IR (film) 3386 (NH), 1700 (C=O), 1304, 1244, 1222, 1117, 730 cm^{-1} .

***exo*-Methyl 7-aminobicyclo[4.1.0]heptane-7-carboxylate (14j).** Pale, yellow oil (63 mg, 74%): R_f 0.23 (60% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 3.70 (s, 3H), 1.97 (s(*br*), 2H), 1.77-1.90 (m, 2H), 1.53-1.63 (m, 2H), 1.32-1.39 (m, 2H), 1.15-1.32 (m, 4H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.7, 51.7, 42.8, 26.5, 21.0,

18.7; IR (film) 3377 (NH), 1723 (C=O), 1435, 1318, 1164, 1101, 835 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_9\text{H}_{15}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 170.2 m/z , observed: 170.1 m/z .

Benzyl 7-aminobicyclo[4.1.0]heptane-7-carboxylate (14k). Pale yellow oil as a separable mixture of *exo*- and *endo*-isomers (82 mg, 87%).

***exo*-Benzyl 7-aminobicyclo[4.1.0]heptane-7-carboxylate (14k).** R_f 0.39 (40% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.31-7.40 (m, 5H), 5.16 (s, 2H), 2.06 (s(*br*), 2H), 1.80-1.89 (m, 2H), 1.60-1.67 (m, 2H), 1.37-1.40 (m, 2H), 1.15-1.30 (m, 4H); ^{13}C NMR (100 MHz, CDCl_3) δ 172.8, 136.1, 128.7, 128.6, 128.4, 66.5, 42.6, 26.4, 20.9, 18.7; IR (film) 3374 (NH), 1722 (C=O), 1456, 1309, 1161, 1098 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{15}\text{H}_{19}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 246.3 m/z , observed: 246.1 m/z .

***endo*-Benzyl 7-aminobicyclo[4.1.0]heptane-7-carboxylate (14k).** R_f 0.99 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.29-7.40 (m, 5H), 5.08 (s, 2H), 1.71-1.89 (m, 4H), 1.64-1.69 (m, 2H), 1.48-1.62 (m, 2H), 1.37-1.48 (m, 2H), 1.19-1.29 (m, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ 177.2, 136.3, 128.8, 128.4, 128.3, 66.8, 40.7, 24.1, 21.8, 18.3; IR (film) 3384 (NH), 1710 (C=O), 1456, 1240, 1161, 1133, 697 cm^{-1} .

Benzyl 9-aminobicyclo[6.1.0]nonane-9-carboxylate (14l). Clear, viscous oil as a separable mixture of *exo*- and *endo*-isomers (146 mg, >99%).

***exo*-Benzyl 9-aminobicyclo[6.1.0]nonane-9-carboxylate (14l).** R_f 0.46 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.26-7.37 (m, 5H), 5.14 (s, 2H), 2.14 (s(*br*), 2H), 1.58-1.76 (m, 8H), 1.29-1.39 (m, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.9, 136.3, 128.7, 128.3, 66.5, 41.8, 35.4, 29.1, 26.4, 21.4; IR (film) 3386 (NH), 1710 (C=O), 1454, 1298, 1142, 1104, 696 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{17}\text{H}_{23}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 274.4 m/z , observed: 274.1 m/z .

***endo*-Benzyl 9-nitrobicyclo[6.1.0]nonane-9-carboxylate (14l).** R_f 0.83 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.26-7.41 (m, 5H), 5.12 (s, 2H), 1.63-1.72 (m, 10H), 1.26-1.47 (m, 6H); ^{13}C NMR (75 MHz, CDCl_3) δ 177.3, 136.3, 128.7, 128.4, 128.3, 66.9, 40.8, 30.8, 28.8, 26.6, 21.2; IR (film) 3382 (NH), 1713 (C=O), 1455, 1250, 1165 cm^{-1} .

Benzyl 9-aminobicyclo[6.1.0]non-4-ene-9-carboxylate (14m). Clear, viscous oil as a separable mixture of *exo*- and *endo*-isomers (145 mg, 94%).

***exo*-Benzyl 9-aminobicyclo[6.1.0]non-4-ene-9-carboxylate (14m)** R_f 0.31 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.27-7.38 (m, 5H), 5.52-5.62 (m, 2H), 5.16 (s, 2H), 2.41-2.49 (m, 2H), 2.06-2.18 (m, 4H), 1.93-2.04 (m, 2H), 1.81-1.90 (m, 2H), 1.46-1.53 (m, 2H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.6, 136.1,

129.3, 128.6, 128.4, 66.5, 42.3, 35.1, 26.9, 23.1; IR (film) 3377 (NH), 1713 (C=O), 1306, 1252, 1166, 1107 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{17}\text{H}_{21}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 272.4 m/z , observed: 272.1 m/z .

endo-Benzyl 9-aminobicyclo[6.1.0]non-4-ene-9-carboxylate (14m) R_f 0.81 (40% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.27-7.40 (m, 5H), 5.60-5.67 (m, 2H), 5.10 (s, 2H), 2.39-2.49 (m, 2H), 2.03-2.14 (m, 2H), 1.84-2.02 (m, 4H), 1.26-1.70 (m, 4H); ^{13}C NMR (75 MHz, CDCl_3) δ 177.5, 136.2, 129.5, 128.7, 128.4, 66.8, 40.0, 30.4, 27.0, 22.9; IR (film) 3379 (NH), 1711 (C=O), 1260, 1178, 1033 cm^{-1} .

1a-Methyl-10a-nitro-1,1a,2,10a-tetrahydro-8H,10H benzo[b]cyclopropa-[g][1,5]dioxonin-10-one (14n). White solid (68 mg, 70%): M.p. 67-68 $^\circ\text{C}$; R_f 0.44 (50% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.17-7.22 (m, 1H), 7.06-7.08 (m, 2H), 6.98 (d, J = 7.8 Hz, 1H), 6.36 (d, J = 14.3 Hz, 1H), 4.78 (d, J = 14.4 Hz, 1H), 4.41 (d, J = 10.1 Hz, 1H), 3.73 (d, J = 10.1 Hz, 1H), 1.98 (s(*br*), 2H), 1.84 (d, J = 4.9 Hz, 1H), 1.51 (s, 3H), 1.04 (d, J = 4.9 Hz, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 177.1, 158.6, 128.8, 127.8, 127.6, 124.4, 123.6, 84.3, 65.8, 43.3, 33.5, 29.6, 19.1; IR (film) 3377 (NH), 1717 (C=O), 1490, 1211, 1099, 769 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{13}\text{H}_{15}\text{NO}_3$ $[\text{M}+\text{H}]^+$: 234.3 m/z , observed: 234.1 m/z . Elem. Anal. calcd (%) for $\text{C}_{13}\text{H}_{15}\text{NO}_3$ (233.26): C 66.94, H 6.48, N 6.00, found: C 66.68, H 6.77, N 5.84.

Methyl 1-amino-2,2-diphenyl-1-cyclopropanecarboxylate (15a). Pale yellow oil (174 mg, 57%): R_f 0.35 (50% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.12-7.47 (m, 10H), 3.36 (s, 3H), 2.41 (d, J = 5.4 Hz, 1H), 1.80 (s(*br*), 2H), 1.76 (d, J = 5.4 Hz, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 173.7, 142.6, 140.8, 129.5, 128.9, 128.8, 128.5, 127.1, 126.8, 51.9, 46.2, 46.1, 25.7; IR (film) 3383 (NH), 1717 (C=O), 1494, 1447, 1202, 706 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{17}\text{H}_{17}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 268.3 m/z , observed: 267.9 m/z .

Methyl 1-amino-2-methyl-2-phenyl-1-cyclopropanecarboxylate (15b). Pale yellow oil (200 mg, 62%): R_f 0.18 (30% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.13-7.27 (m, 5H), 3.16 (m, 3H), 2.08 (d, J = 5.0 Hz, 1H), 1.99 (s(*br*), 2H), 1.57 (s, 3H), 1.04 (d, J = 5.0 Hz, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 174.5, 143.7, 128.7, 128.67, 128.2, 128.1, 126.3, 51.3, 45.5, 36.9, 26.5, 25.5, 22.8; IR (film) 3379 (NH), 1722 (C=O), 1440, 1197 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{12}\text{H}_{15}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 206.3 m/z , observed: 206.1 m/z .

Methyl 1-amino-2-phenyl-1-cyclopropanecarboxylate (16). The *E*- and *Z*-isomers were easily separated, affording the corresponding amino esters (108 mg, 66%).

E-Methyl 1-amino-2-phenyl-1-cyclopropanecarboxylate (16). White solid: M.p. 34 °C; R_f 0.18 (80% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.15-7.28 (m, 5H), 3.29 (s, 3H), 2.66 (t, J = 8.7 Hz, 1H), 2.20 (s(br), 2H), 1.99 (dd, J = 7.9, 5.0 Hz, 1H), 1.46 (dd, J = 9.5, 5.0 Hz, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 173.9, 136.6, 129.2, 128.1, 126.8, 51.7, 43.5, 36.5, 20.2; IR (film) 3375 (NH), 1718 (C=O), 1315, 1206, 1146, 698 cm^{-1} . LRMS (APCI, Pos) calcd for $\text{C}_{11}\text{H}_{13}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 192.2 m/z , observed: 192.1 m/z . Elem. Anal. calcd (%) for $\text{C}_{11}\text{H}_{13}\text{NO}_2$ (191.23): C 69.09, H 6.85, N 7.32, found: C 68.82, H 7.16, N 7.11.

Z-Methyl 1-amino-2-phenyl-1-cyclopropanecarboxylate (16). Pale yellow oil: R_f 0.52 (80% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 7.31-7.36 (m, 2H), 7.24-7.27 (m, 3H), 3.77 (s, 3H), 2.84 (t, J = 7.7 Hz, 1H), 1.85 (dd, J = 9.6, 4.9 Hz, 1H), 1.56 (s(br), 2H), 1.45 (dd, J = 7.6, 4.9 Hz, 1H); ^{13}C NMR (75 MHz, CDCl_3) δ 176.1, 135.8, 129.4, 128.4, 127.0, 52.6, 41.2, 33.4, 22.2; IR (film) 3388 (NH), 1718 (C=O), 1264, 1148 cm^{-1} .

trans-1-(2-nitrocyclopropyl)naphthalene (17b). Pale yellow solid (193 mg, 79%): M.p. 35-36 °C; R_f 0.55 (20% EtOAc/Hexane); ^1H NMR (300 MHz, CDCl_3) δ 8.08 (dd, J = 7.5, 0.6 Hz, 1H), 7.91 (dd, J = 7.0, 2.0 Hz, 1H), 7.84 (d, J = 8.3 Hz, 1H), 7.49-7.64 (m, 2H), 7.43 (t, J = 7.7 Hz, 1H), 7.27 (d, J = 7.1 Hz, 1H), 4.41-4.46 (m, 1H), 3.57-3.64 (m, 1H), 2.34-2.41 (m, 1H), 1.78-1.86 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 133.7, 132.5, 132.0, 128.9, 128.8, 127.0, 126.4, 125.3, 124.7, 123.5, 60.9, 27.7, 17.9; IR (film) 1534 (NO_2), 1356, 775 cm^{-1} ; LRMS (APCI, Pos) calcd for $\text{C}_{13}\text{H}_{11}\text{NO}_2$ $[\text{M}+\text{H}]^+$: 214.2 m/z , observed: 214.1 m/z .

trans-1-Chloro-4-(2-nitrocyclopropyl)benzene (17c). Clear, colorless oil (301 mg, 96%): R_f 0.53 (20% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.30 (d, J = 8.3 Hz, 2H), 7.07 (d, J = 8.4 Hz, 2H), 4.37-4.40 (m, 1H), 3.08-3.13 (m, 1H), 2.22-2.27 (m, 1H), 1.63-1.68 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 135.0, 133.7, 129.1, 128.2, 61.6, 28.8, 18.8; IR (film) 1539 (NO_2), 1496, 1364, 1093, 1012, 814 cm^{-1} ; HRMS (EI $^+$) calcd for $\text{C}_9\text{H}_8\text{NO}_2\text{Cl}$ $[\text{M}]^+$: 197.0244, observed: 197.0248.

trans-tert-Butyl 2-phenylcyclopropanecarbamate (18a). White crystalline solid (140 mg, 60%): M.p. 69-72 °C; R_f 0.38 (20% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.25-7.29 (m, 2H), 7.13-7.19 (m, 3H), 5.01 (s(br), 1H), 2.74 (s(br), 1H), 2.02-2.07 (m(br), 1H), 1.48 (s, 9H), 1.14-1.20 (m(br), 2H); ^{13}C NMR (75 MHz, CDCl_3) δ 156.5(br), 140.9, 128.4, 126.6, 126.1, 79.6(br), 32.6(br), 28.5, 25.1(br), 16.4; IR (film) 3363 (NH), 1683 (C=O), 1509, 1163 cm^{-1} ; HRMS (MAB) calcd for $\text{C}_{14}\text{H}_{19}\text{NO}_2$ $[\text{M}]^+$: 233.1416, observed: 233.1412; Elem. Anal. calcd (%) for $\text{C}_{14}\text{H}_{19}\text{NO}_2$ (233.31): C 72.07, H 8.21, N 6.00, found: C 71.71, H 8.42, N 5.92.

trans-tert-Butyl 2-(1-naphthyl)cyclopropanecarbamate (18b). Yellow oil (118 mg, 61%): R_f 0.34 (20% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 8.32 (d, J = 8.3 Hz, 1H), 7.86 (d, J = 7.9 Hz, 1H), 7.72-7.74 (m, 1H), 7.49-7.58 (m, 2H),

7.37-7.41 (m, 2H), 4.98 (s(*br*), 1H), 2.96-2.98 (m, 1H), 2.44-2.49 (m, 1H), 1.50 (s, 9H), 1.19-1.34 (m, 2H); ^{13}C NMR (100 MHz, CDCl_3) δ 156.7(*br*), 136.4, 133.8, 133.2, 128.7, 127.3, 126.1, 125.9, 125.7, 124.8, 124.4, 79.9(*br*), 31.0(*br*), 28.6, 23.0(*br*), 15.4; IR (film) 3330 (NH), 1693 (C=O), 1509, 1365, 1249, 1161, 775 cm^{-1} ; HRMS (MAB) calcd for $\text{C}_{18}\text{H}_{21}\text{NO}_2$ $[\text{M}]^+$: 283.1572, observed: 283.1569; Elem. Anal. calcd (%) for $\text{C}_{18}\text{H}_{21}\text{NO}_2$ (283.37): C 76.29, H 7.47, N 4.94, found: C 76.00, H 7.87, N 4.72.

***trans-tert*-Butyl 2-(4-chlorophenyl)cyclopropylcarbamate (18c).** White crystalline solid (223 mg, 67%): M.p. 122-123 $^{\circ}\text{C}$; R_f 0.48 (20% EtOAc/Hexane); ^1H NMR (400 MHz, CDCl_3) δ 7.21 (d, $J = 7.8$ Hz, 2H), 7.06 (d, $J = 7.9$ Hz, 2H), 4.90 (s(*br*), 1H), 2.66 (s(*br*), 1H), 1.99-2.03 (m(*br*), 1H), 1.45 (s, 9H), 1.10-1.14 (m(*br*), 2H); ^{13}C NMR (100 MHz, CDCl_3) δ 156.5(*br*), 139.4, 131.8, 128.5, 128.1, 79.8(*br*), 32.6(*br*), 28.6, 24.8(*br*), 16.3; IR (film) 3359 (NH), 1679 (C=O), 1505, 1496, 1251, 1156 cm^{-1} ; HRMS (MAB) calcd for $\text{C}_{14}\text{H}_{18}\text{NO}_2\text{Cl}$ $[\text{M}]^+$: 267.1026, observed: 267.1024.

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

¹H NMR (400 MHz, CDCl₃)

^{13}C NMR (400 MHz, CDCl_3)

13¹H NMR (300 MHz, CDCl₃)

^{13}C NMR (75 MHz, CDCl_3)

^{13}C NMR (100 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

¹H NMR (400 MHz, CDCl₃)

^{13}C NMR (100 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

¹H NMR (300 MHz, CDCl₃)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (75 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^1H NMR (300 MHz, CDCl_3)

^{13}C NMR (100 MHz, CDCl_3)

^{13}C NMR (100 MHz, CDCl_3)

^1H NMR (400 MHz, CDCl_3)

^{13}C NMR (100 MHz, CDCl_3)

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