SUPPORTING INFORMATION

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1. General.

Aldehydes were distilled prior to use for the elaboration of the iminoesters. Melting points were determined with a Reichert Thermovar hot plate apparatus and are uncorrected. Only the structurally most important peaks of the IR spectra (recorded on a Nicolet 510 P-FT and on a Jasco FTIR 4100) are listed. $^1$H NMR (300 MHz) and $^{13}$C NMR (75 MHz) spectra were obtained on a Bruker AC-300 using CDCl$_3$ as solvent and TMS as internal standard, unless otherwise stated. Optical rotations were measured on a Perkin Elmer 341 polarimeter. Low-resolution electron impact (EI) mass spectra were obtained at 70eV on a Shimadzu QP-5000 and high-resolution mass spectra were obtained on a Finnigan VG Platform. HRMS (EI) were recorded on a Finnigan MAT 95S. Microanalyses were performed on a Perkin Elmer 2400 and a Carlo Erba EA1108. Analytical TLC was performed on Schleicher & Schuell F1400/LS silica gel plates and the spots were visualized under UV light ($\lambda_c=254$ nm). For flash chromatography we employed Merck silica gel 60 (0.040-0.063 mm). Complexes were prepared according to the reported procedure (see text). All of the transformations performed with silver catalysts were performed in the absence of light.
2. General procedure for the synthesis of compounds 3 and 4 in the absence of AgOAc.
   Methyl ester L-proline hydrochloride (82.8 mg, 0.5 mmol) or L-4-hydroxyproline methyl ester hydrochloride (92.1 mg, 0.5 mmol), the corresponding alkene (0.5 mmol), the aldehyde (0.5 mmol) and triethylamine (90 μL, 0.55 mmol) were dissolved in toluene (3mL). The resulting mixture was stirred for times described in Table 1 and 2. Then the solvent was evaporated under reduced pressure and the residue was purified by flash chromatography (silica gel) to afford the corresponding product 3 or 4.

3. General procedure for the synthesis of compounds 3 and 4 in the presence of AgOAc.
   Methyl ester L-proline hydrochloride (82.8 mg, 0.5 mmol) or L-4-Hydroxyproline methyl ester hydrochloride (92.1 mg, 0.5 mmol), silver acetate (4.15 mg, 0.025 mmol), the corresponding alkene (0.5 mmol), the aldehyde (0.5 mmol) and triethylamine (90 μL, 0.55 mmol) were dissolved in toluene (3mL). The resulting suspension was stirred for the corresponding times (see Tables 1 and 2) avoiding the light exposure. Then the solvent was evaporated under reduced pressure. and the residue was purified by flash chromatography (silica gel) to afford the corresponding product 3 or 4.

4. Physical and spectroscopic data of compounds 3 and 4

   **(2S*,3S*,7aR*)-Dimethyl 3-[(E)-styryl]hexahydro-1H-pyrrolizine-2,7a-dicarboxylate 3a:**
   Pale orange needles, mp: 107-110°C; IR (neat) δmax 2985, 2939, 2305, 1714, 1691 cm⁻¹; ¹H NMR δH: 1.72–1.93 (m, 3H, CH₂CH₂N, CHHCO₂Me), 2.22 (deform. dd, J = 13.0, 12.8 Hz, 1H, CHHCHCO₂Me), 2.31 (deform. ddd, J = 8.6, 6.9 Hz, 1H, CHHCO₂Me), 2.64 (dd, J = 13.0, 6.7 Hz, 1H, CHHCHCO₂Me), 2.89 (deform. ddd, J = 11.2, 6.7, 2.3 Hz, 1H, CHHN), 3.10 (m, 1H, CHHN), 3.51-3.58 (m, 4H, CHCO₂Me, CHCO₂CH₂), 3.75 (s, 3H, CCO₂CH₃), 4.19 (dd, J = 10.4, 6.4 Hz, 1H, CHN), 5.98 (dd, J = 15.5, 10.4 Hz, 1H, CHCHN), 6.56 (d, J = 15.5 Hz, 1H, CHPH), 7.28-7.35 (m, 5H, ArH); ¹³C NMR δC: 28.0 (CH₂CH₂N), 36.5 (CH₂CO₂Me), 37.2 (CH₂CHCO₂Me), 48.8 (CH₂N), 50.0 (CHCO₂Me), 51.9 (CHCO₂CH₃), 52.6 (CCO₂CH₃), 67.4 (CHN), 76.4 (CCO₂Me), 125.7 (CHCHN), 126.7, 128.0, 128.7, 136.5 (ArC), 135.5 (CHPH), 172.2 (CHCO₂Me), 177.0 (CCO₂Me); MS (EI-GC) m/z: 329 (M⁺, 3%), 271 (19), 270 (100), 243 (13), 238 (21), 210 (17), 184 (40), 123 (10), 115 (10); Microanalysis calculated for C₁₉H₂₃NO₄: C, 69.3; H, 7.0; N, 4.3%; found: C, 69.5; H, 7.2; N, 4.5%.

   **(2S*,3S*,7aR*)-2-allyl 7a-methyl 2-methyl-3-[(E)-styryl]hexahydro-1H-pyrrolizine-2,7a-dicarboxylate 3b:** Brown-yellow solid, mp: 90-95°C; IR (neat) δmax 2983, 1720, 1699, 2310, 1270 cm⁻¹; ¹H NMR δH: 1.44 (s, 3H, CCH₃), 1.69-2.02 (m, 3H, CH₂CH₂N, CHHCO₂Me), 2.15-2.24 (m, 1H, CHHCO₂Me), 2.51 [d, J = 13.7 Hz, 1H, CHHC(CH₃)CO₂Allyl], 2.64 [d, J = 13.7 Hz, 1H, CHHC(CH₃)CO₂Allyl], 2.92-3.01 (m, 1H, CHHN), 3.08-3.16 (m, 1H, CHHN), 3.77 (s, 3H, CCO₂CH₃), 3.80 (d, J = 10.4, Hz, 1H, CHN), 4.43-4.45 (m, 2H, CO₂CH₂CHCH₂), 5.07 (dd, J = 10.4, 2.6, 1.2 Hz, 1H, CO₂CH₂CHCH₂), 5.19 (ddd, J = 17.2, 2.6, 1.2 Hz, 1H, CO₂CH₂CHCH₂), 5.75 (ddt, J = 17.2, 10.4, 5.9 Hz, 1H, CO₂CH₂CHCH₂), 5.95 (dd, J = 15.6, 10.4 Hz, 1H, CHCHN), 6.53 (d, J = 15.6 Hz, 1H, CHPH), 7.23-7.34 (m, 5H, ArH); ¹³C NMR δC: 23.5 (CCH₃), 27.5 (CH₂CH₃N), 39.2 (CH₂CO₂Me), 43.9 [CH₂C(CH₃)CO₂Allyl], 49.0 (CH₂N), 52.7 (CCO₂CH₃), 52.8 (CH₂-CH₂), 37.2 (CH₂CHCO₂Me), 48.8 (CH₂N), 50.0 (CHCO₂Me), 51.9 (CHCO₂CH₃), 52.6 (CCO₂CH₃), 67.4 (CHN), 76.4 (CCO₂Me), 125.7 (CHCHN), 126.7, 128.0, 128.7, 136.5 (ArC), 135.5 (CHPH), 172.2 (CHCO₂Me), 177.0 (CCO₂Me); MS (EI-GC) m/z: 329 (M⁺, 3%), 271 (19), 270 (100), 243 (13), 238 (21), 210 (17), 184 (40), 123 (10), 115 (10); Microanalysis calculated for C₁₉H₂₃NO₄: C, 69.3; H, 7.0; N, 4.3%; found: C, 69.5; H, 7.2; N, 4.5%.
55.5 (CO₂CH₃), 65.7 (CO₂CH₂CH₂H), 74.6 (CHN), 77.4 [C(CH₃)₂CO₂H₆], 118.6 (CO₂CH₂CH₂H), 126.1 (CHCHN), 126.7, 127.9, 128.7, 136.6 (ArC), 132.1 (CO₂CH₂CH₂H), 135.4 (CHPh), 174.4 (CO₂Allyl), 178.0 (CO₂Me); MS (EI- GC) m/z: 369 (M⁺, <1%), 310 (33), 243 (34), 185 (15), 184 (100), 115 (11); Microanalysis calculated for C₂₆H₂₅NO₇: C, 71.5; H, 7.4; N, 3.8%; found: C, 72.2; H, 7.1; N, 4.2%.

(3aS*,4S*,8aR*,8bR*)-methyl 2-methyl-1,3-dioxo-4-((E)-styryl)decahydropyrrolo[3,4-a]pyrroline-8a-carboxylate 3c: Sticky brown oil IR (neat) v_max 2360, 2341, 1699, 1265 cm⁻¹; ¹H NMR δ_H: 1.73-1.85, 1.95-2.08 (m, 2H, CH₂CH₂N), 2.31-2.40, 2.46-2.59 (m, 3H, CH₂CCO₂Me, CHHN), 2.97 (s, 3H, NCH₃), 3.08 (m, 1H, CHHN), 3.46 (deform. dd, J = 8.1 Hz, 1H, CHCHN), 3.81 (s, 3H, CO₂CH₃), 3.89 (d, J = 8.1 Hz, 1H, CHCCO₂Me), 4.20 (dd, J = 9.0, 8.1 Hz, 1H, CHN), 6.37 (dd, J = 15.6, 9.0 Hz, 1H, CHCHN), 6.76 (d, J = 15.6 Hz, 1H, CHPh), 7.21-7.42 (m, 5H, ArH); ¹³C NMR δ_C: 25.0 (NCH₃), 25.3 (CH₂CH₂N), 30.3 (CH₂CCO₂Me), 48.3 (CH₂N), 51.2 (CHCCO₂Me), 52.3 (CHCHCCO₂Me), 53.2 (CO₂CH₃), 64.6 (CHN), 78.9 (CO₂CH₃), 123.4 (CHCHN), 126.9, 128.1, 128.6, 136.7 (ArC), 135.9 (CHPh), 174.1, 176.7 (2xCON), 177.1 (CO₂Me); MS (EI-GC) m/z: 354 (M⁺, <1%), 296 (25), 295 (100), 243 (30), 242 (10), 228 (11), 184 (13), 115 (12), 91 (11); Microanalysis calculated for C₂₀H₂₂N₂O₄: C, 67.8; H, 6.3; N, 7.9%; found: C, 68.2; H, 6.3; N, 8.0%.

(3aS*,4S*,8aR*,8bR*)-methyl 2-methyl-1,3-dioxo-4-((E)-styryl)decahydropyrrolo[3,4-a]pyrroline-8a-carboxylate 3c’: Sticky brown oil; IR (neat) v_max 2370, 2328, 1715 cm⁻¹; ¹H NMR δ_H: 1.83-2.02 (m, 3H, CH₂CH₂N, CHHCCO₂Me), 2.72-2.81 (m, 1H, CHHCCO₂Me), 2.98 (s, 3H, NCH₃), 3.02-3.09 (m, 2H, CH₂N), 3.40 (d, J = 9.5 Hz, 1H, CHCCO₂Me), 3.56 (dd, J = 9.5, 7.5 Hz, 1H, CHCHN), 3.71 (s, 3H, CO₂CH₃), 4.42 (deform. dd, J = 7.5, 7.0 Hz, 1H, CHN), 6.32 (dd, J = 15.9, 7.0 Hz, 1H, CHCHN), 6.85 (d, J = 15.9 Hz, 1H, CHPh), 7.22-7.42 (m, 5H, ArH); ¹³C NMR δ_C: 25.0 (NCH₃), 25.3 (CH₂CH₂N), 36.3 (CH₂CCO₂Me), 49.3 (CH₂N), 51.1 (CHCCO₂Me), 52.7 (CHCHCCO₂Me), 57.1 (CO₂CH₃), 67.3 (CHN), 78.8 (CO₂CH₃), 125.3 (CHCHN), 126.7, 128.1, 128.6, 136.3 (ArC), 134.9 (CH₃), 172.1, 176.1 (2xCON), 176.3 (CO₂Me); MS (EI-GC) m/z: 354 (M⁺, <1%), 296 (31), 295 (100), 243 (28), 242 (11), 228 (15), 184 (12), 183 (10), 115 (14); Microanalysis calculated for C₂₀H₂₂N₂O₄: C, 67.8; H, 6.3; N, 7.9%; found: C, 68.6; H, 6.5; N, 8.1%.

(1R*,2R*,3S*,7aR*)-trimethyl 3-((E)-styryl)hexahydro-1H-pyrroline-1,2,7-tricarboxylate 3d: Sticky yellow oil; IR (neat) v_max 2965, 2915, 2306, 1715, 1713, 1699 cm⁻¹; ¹H NMR δ_H: 1.76-1.86 (m, 1H, CHHCHN), 1.93-2.03 (m, 1H, CHHCHN), 3.09 (deform. ddd, J = 10.8, 6.6, 6.5 Hz, 1H, CHH), 3.52 (deform. dd, J = 11.7 Hz, 1H, CHCCO₂Me), 3.58, 3.69 (s, 6H, 2xCHCO₂CH₃), 3.70 (s, 3H, CO₂CH₃), 4.02 (dd, J = 11.7, 8.2 Hz, 1H, CHCHN), 4.28 (dd, J = 10.4, 8.2 Hz, 1H, CHN), 5.96 (dd, J = 15.5, 10.4 Hz, 1H, CHCHN), 6.56 (d, J = 15.5 Hz, 1H, CHPh), 7.25-7.35 (m, 5H, ArH); ¹³C NMR δ_C: 27.6 (CH₂CH₂N), 35.8 (CH₂CCO₂Me), 48.8 (CH₂N), 52.1, 52.2 (2xCHCO₂Me), 52.4, 52.6, 53.6 (3xCO₂CH₃), 65.7 (CHN), 78.2 (CO₂Me), 125.3 (CHCHN), 126.7, 128.2, 128.7, 136.3 (ArC), 135.8 (CHPh), 171.1, 171.7 (2xCHCO₂Me), 174.1 (CO₂Me); MS (EI-GC) m/z: 387 (M⁺, <1%), 271 (19), 270 (100), 243 (13), 238 (21), 210 (17), 184 (40), 123 (10), 115 (10); Microanalysis calculated for C₂₃H₂₅NO₇: C, 76.5; H, 6.5; N, 3.6%; found: C, 76.4; H, 7.0; N, 3.9%.
(1S*,2S*,3S*,7aR*)-methyl 2-nitro-1-phenyl-3-((E)-styryl)hexahydro-1H-pyrrolizine-7a-carboxylate 3e: Sticky brown oil; IR (neat) νmax 3003, 2983, 2872, 1726, 1536 cm⁻¹; ¹H NMR δH: 1.86–2.10 (m, 3H, CH₂CH₂N, CHHCCO₂Me), 2.68–2.76 (m, 1H, CHHCCO₂Me), 2.92 (dd, J = 10.1, 6.7, 4.5 Hz, 1H, CHH), 3.25 (dd, J = 10.1, 7.5, 6.3 Hz, 1H, CHHN), 3.37 (s, 3H, CO₂CH₃), 4.17 (d, J = 11.3 Hz, 1H, CHHCCO₂Me), 4.79 (dd, J = 10.2, 7.9 Hz, 1H, CHN), 6.10 (dd, J = 11.3, 7.8 Hz, 1H, CH/NO₂), 6.14 (dd, J = 15.5, 10.3 Hz, 1H, CHCHN), 6.72 (d, J = 15.5 Hz, 1H, CHPh), 7.23–7.40 (m, 10H, ArH); ¹³C NMR δC: 27.4 (CH₂CH₂N), 35.5 (CH₂CCO₂Me), 48.6 (CH₃N), 52.1 (CO₂CH₃), 55.4 (CHCCO₂CH₃), 66.2 (CHN), 80.5 (CO₂CO₂Me), 91.9 (CHNO₂), 122.7 (CHCHN), 127.1, 127.3, 128.3, 128.6, 128.7, 128.9, 134.1, 135.8 (ArC), 138.3 (CHPh), 173.6 (CO₂Me); MS (EI-GC) m/z: 392 (M⁺, <1%), 243 (11), 185 (14), 184 (100), 156 (16); HRMS calculated for C₂₃H₂₄N₂O₄+1: 393.1814 found: 393.1800.

(1R*,2S*,3S*,7aR*)-methyl 1-nitro-2-phenyl-3-((E)-styryl)hexahydro-1H-pyrrolizine-7a-carboxylate 3e: Sticky brown oil; IR (neat) νmax 3015, 2979, 2872, 1725, 1530 cm⁻¹; ¹H NMR δH: 1.57–1.63 (m, 1H, CHHCH₂N), 1.96–2.02 (m, 2H, CHHCH₂N, CHHCCO₂Me), 2.46–2.52 (m, 1H, CHHCCO₂Me), 3.03 (ddd, J = 10.8, 8.7, 6.1 Hz, 1H, CHH), 3.13–3.19 (m, 1H, CHHN), 4.06 (dd, J = 11.6, 10.2 Hz, 1H, CHPh), 4.23 (ddd, J = 11.6, 7.6, 0.5 Hz, 1H, CHN), 5.94 (d, J = 10.2 Hz, 1H, CH/NO₂), 6.18 (dd, J = 15.9, 7.6 Hz, 1H, CHCHN), 6.44 (dd, J = 15.9, 0.5 Hz, 1H, CHPh), 7.24–7.40 (m, 10H, ArH); ¹³C NMR δC: 26.0 (CH₂CH₂N), 32.1 (CH₂CCO₂Me), 50.7 (CH₂N), 51.0 (CO₂CH₃), 53.6 (CHPh), 67.8 (CHN), 76.2 (CO₂CO₂Me), 97.1 (CHNO₂), 123.8 (CHCHN), 126.6, 127.9, 128.0, 128.2, 128.7, 129.2, 136.1, 136.2 (ArC), 136.4 (CHPh), 173.5 (CO₂CO₂Me); MS (EI-GC) m/z: 392 (M⁺, <1%), 243 (10), 185 (15), 184 (100), 156 (17), 115 (10); HRMS calculated for C₂₃H₂₄N₂O₄+1: 393.1814 found: 393.1806.

(1R*,2R*,3S*,7aS*)-methyl 1,2-bis(phenylsulfonyl)-3-((E)-styryl)hexahydro-1H-pyrrolizine-7a-carboxylatetricarboxylate 3f: Sticky pale yellow oil; IR (neat) νmax 2991, 2934, 1708, 1310, 1141 cm⁻¹; ¹H NMR δH: 1.99–2.05 (m, 2H, CH₂CH₂N), 2.14–2.22 (m, 1H, CHHCCO₂Me), 3.03–3.07 (m, 1H, CHHCCO₂Me), 3.14–3.21 (m, 1H, CHHN), 3.32–3.38 (m, 1H, CHHN), 3.87 (s, 3H, CO₂CH₃), 4.51 (d, J = 8.1 Hz, 1H, CHCCO₂Me), 4.71 (dd, J = 10.0, 8.2 Hz, 1H, CHN), 5.04 (deform dd, J = 8.2, 8.1 Hz, 1H, CHN), 6.20 (d, J = 15.7 Hz, 1H, CHPh), 6.47 (dd, J = 15.7, 10.0 Hz, 1H, CHCHN), 7.13–8.04 (m, 15H, ArH); ¹³C NMR δC: 25.6 (CH₂CH₂N), 35.1 (CH₂CCO₂Me), 49.1 (CH₂N), 53.1 (CHCCO₂CH₃), 65.7 (CHN), 73.7 [CH(SO₂Ph)CH₃], 74.5 [CH(SO₂Ph)CO₂CO₂Me], 78.8 (CO₂Me), 122.7 (CHCHN), 126.9, 128.3, 128.6, 128.9, 129.0, 129.6, 133.6, 133.9, 134.5, 135.9, 139.2, 141.5 (ArC), 136.7 (CHPh), 170.9 (CO₂Me); MS (EI-GC) m/z: 493 (10), 492 (11), 410 (10), 310 (11), 244 (31), 243 (100), 128 (15), 115 (17); HRMS calculated for C₂₅H₂₉NO₆S₂+1: 552.1514 found: 552.1548.

(1S*,2S*,3S*,7aS*)-methyl 1,2-bis(phenylsulfonyl)-3-((E)-styryl)hexahydro-1H-pyrrolizine-7a-carboxylatetricarboxylate 3f: Sticky yellow oil; IR (neat) νmax 2979, 2910, 1715, 1300, 1148 cm⁻¹; ¹H NMR δH: 2.02–2.17 (m, 3H, CH₂CH₂N, CHHCCO₂Me), 2.94–3.16 (m, 3H, CHHCCO₂Me, CH₂N), 3.83 (s, 3H, CO₂CH₃), 4.03 (deform dd, J = 4.3, 4.1 Hz, 1H, CH(SO₂Ph)CH₃), 4.38 (ddd, J = 8.4, 4.3 Hz, 1H, CHN), 5.06 (d, J = 4.1 Hz, 1H, CH(SO₂Ph)CO₂Me), 6.13–6.24 (m, 2H, CHCHN, CHPh), 7.14–7.90 (m, 15H, ArH); ¹³C NMR δC: 26.4 (CH₂CH₂N), 32.4 (CH₂CCO₂Me), 47.2 (CH₂N), 53.3 (CHCCO₂CH₃), 64.7 (CHN), 66.9 [CH(SO₂Ph)CH₃], 71.7 [CH(SO₂Ph)CCO₂Me], 79.8 (CO₂Me), 125.9 (CHCHN), 126.7, 128.2,
128.6, 128.9, 128.9, 129.3, 129.3, 134.2, 134.3, 135.7, 137.0, 138.5 (ArC), 135.2 (CHPh), 173.9 (CCO₂Me); MS (EI-GC) m/z: 551 (M⁺, <1%), 492 (15), 410 (10), 311 (10), 310 (10), 244 (25), 243 (100), 128 (11), 115 (21); HRMS calculated for C₂₉H₂₉NO₆S₂ +1: 552.1514 found: 552.1565.

(2S*,3S*,7aR*)-dimethyl 3-((E)-prop-1-en-1-yl)hexahydro-1H-pyrrolizine-2,7a-dicarboxylatetaricarboxylate 3g: Sticky brown oil: IR (neat) νmax 2985, 2939, 2305, 1714, 1691 cm⁻¹; ¹H NMR δH: 1.69 (d, J = 6.5 Hz, 3H, CHCH₂), 1.71–1.85 (m, 3H, CH₂CH₂N, CHHCO₂Me), 2.02-2.12 (m, 1H, CHHCO₂Me), 2.20-2.23 (m, 1H, CHHCHCO₂Me), 2.55 (dd, J = 13.2, 6.7 Hz, 1H, CHHCHCO₂Me), 2.79-2.87 (m, 1H, CHHN), 3.02-3.07 (m, 1H, CHHN), 3.41 (deform. ddd, J = 12.7, 7.5, 6.7 Hz, 1H, CHCO₂Me), 3.61 (s, 3H, CHCO₂CH₃), 3.72 (s, 3H, CCO₂CH₃), 3.99 (dd, J = 10.3, 7.5 Hz, 1H, CHN), 5.25 (dd, J = 15.0, 10.3 Hz, 1H, CHCHN), 5.68 (dq, J = 15.0, 6.5 Hz, 1H, CHMe); ²²C NMR δC: 17.9 (CHCH₃), 27.6 (CH₂CH₂N), 36.4 (CH₂CHCO₂Me), 37.1 (CH₂CO₂Me), 48.6 (CH₂N), 49.8 (CHCO₂Me), 51.7 (CHCO₂CH₃), 52.6 (CCO₂CH₃), 67.3 (CHN), 76.3 (CCO₂Me), 126.8 (CHCHN), 132.1 (CHMe), 172.5 (CHCO₂Me), 177.0 (CCO₂Me); MS (EI-GC) m/z: 267 (M⁺, <1%), 208 (100), 207 (10), 181 (25), 59 (10); Microanalysis calculated for C₁₄H₂₁NO₄: C, 62.9; H, 7.9; N, 5.2%; found: C, 63.3; H, 7.4; N, 5.4%.

(2S*,3R*,7aR*)-dimethyl 3-phenylhexahydro-1H-pyrrolizine-2,7a-dicarboxylate 3h: Sticky colorless oil; IR (neat) νmax 2900, 1718, 1687 cm⁻¹; ¹H NMR δH: 1.81–2.00 (m, 3H, CH₂CH₂N, CHHCO₂Me), 2.34-2.43 (m, 2H, CHHCO₂Me, CHHCHCO₂Me), 2.54-2.61 (m, 1H, CHHCHCO₂Me), 2.64-2.76 (m, 2H, CH₂N), 2.32 (s, 3H, CHCO₂CH₃), 3.76 (s, 3H, CCO₂CH₃), 3.88 (ddd, J = 13.0, 8.8, 7.4 Hz, 1H, CHCO₂Me), 4.73 (d, J = 8.8 Hz, 1H, CHN), 7.15-7.17, 7.25-7.28 (m, 5H, ArH); ²²C NMR δC: 28.3 (CH₂CH₃), 36.3 (CH₂CHCO₂Me), 36.7 (CH₂COCO₂Me), 47.2 (CH₂N), 51.4 (CHCO₂Me), 52.7 (CHCO₂CH₃), 52.5 (CCO₂CH₃), 67.3 (CHN), 76.1 (CCO₂Me), 127.9, 128.2, 129.3, 138.0 (ArC), 172.2 (CHCO₂Me), 177.3 (CCO₂Me); MS (EI-GC) m/z: 303 (M⁺, <1%), 245 (11), 244 (100), 226 (21), 218 (10), 217 (17), 185 (26), 77 (15); HRMS calculated for C₁₇H₂₁NO₄ +1: 304.1549 found: 304.1553.

(3R*,7aR*)-dimethyl 3-phenylhexahydro-1H-pyrrolizine-1,7a-dicarboxylate 3h': Sticky colorless oil; IR (neat) νmax 2935, 2903, 1720, 1705 cm⁻¹; ¹H NMR δH: 1.37–1.48 (m, 1H, CHHCO₂Me), 1.65-1.86 (m, 2H, CH₂CH₂N), 2.18 (ddd, J = 12.1, 6.7, 4.1 Hz, 1H, CHHCHPh), 2.26-2.34 (m, 1H, CHHCO₂Me), 2.41-2.55 (m, 3H, CHHCHPh, CH₂N), 3.72 (s, 3H, CHCO₂CH₃), 3.82 (s, 3H, CCO₂CH₃), 3.80 (dd, J = 12.1, 6.7 Hz, 1H, CHCO₂Me), 4.49 (dd, J = 12.8, 4.0 Hz, 1H, CHN), 7.27-7.45 (m, 5H, ArH); ²²C NMR δC: 25.8 (CH₂CH₃), 29.2 (CH₂CH₂N), 33.0 (CH₂COCO₂Me), 50.7 (CH₂N), 51.0 (CCO₂Me), 52.0 (CHCO₂CH₃), 52.9 (CCO₂CH₃), 64.8 (CHN), 76.4 (CCO₂Me), 127.7, 128.3, 128.9, 137.7 (ArC), 173.1 (CHCO₂Me), 175.5 (CCO₂Me); MS (EI-GC) m/z: 303 (M⁺, <1%), 245 (10), 244 (100), 243 (10), 227 (10), 226 (23), 217 (14), 185 (15), 77 (13); HRMS calculated for C₁₇H₂₁NO₄ +1: 304.1549 found: 304.1592.

(2S*,3S*,7aR*)-dimethyl 3-isobutylhexahydro-1H-pyrrolizine-2,7a-dicarboxylate 3i: Colorless oil; Rf 0.29 (n-hexane/ethyl acetate 7:3); IR (neat) νmax 2986, 2956, 2903, 1716, 1700 cm⁻¹; ¹H NMR δH: 0.93 [d, 6H, J = 6.0 Hz, CH(CH₃)₂], 1.35-1.41 [m, 2H, CHHCH₂N, CH(CH₃)₂], 1.52-1.62 (m, 1H, CHHCH₂N), 1.74-1.83, 1.87-1.94 (m, 2H, CH₂COCO₂Me), 2.22 (dd, J = 13.7, 5.4 Hz, 1H, CHHCHCO₂Me), 2.41 (ddd, J = 12.6, 8.4, 4.0 Hz, 1H, CHHCHCO₂Me), 2.57 (dd, J = 13.7, 9.1 Hz, 1H, CHHCHCO₂Me), 2.92-3.15 (m, 3H, CHN, CHHN, CHCO₂Me), 3.68 (s, 3H, CHCO₂CH₃), 3.73 (s, 3H, CCO₂CH₃); ²²C NMR δC: 22.9 [CH(CH₃)₂], 25.0 (CH₂CH₂N), 26.1
[CH(CH$_3$)$_2$], 35.8 (CH$_2$CHN) 37.8 (CH$_2$CO$_2$Me), 39.7 (CH$_2$CHCO$_2$Me), 47.4 (CH$_2$N), 48.6 (CHCO$_2$CH$_3$), 51.5 (CO$_2$CH$_3$), 52.9 (CHCO$_2$Me), 62.9 (CHN), 76.1 (CO$_2$Me), 176.2 (CHCO$_2$Me), 176.3 (CO$_2$Me); MS (EI-GC) m/z: 283 (M$^+$, <1%), 225 (15), 224 (100), 198 (14), 197 (35), 165 (21), 128 (11), 127 (10); Microanalysis calculated for C$_{13}$H$_{25}$NO$_4$: C, 63.6; H, 8.9; N, 4.9%; found: C, 63.5; H, 8.4; N, 5.1%.

(1S*,3R*,7aR*)-3-ethyl 1,7a-dimethyl hexahydro-1H-pyrrolizine-1,3,7a-tricarboxylate

3j: Sticky yellow oil; IR (neat) $\nu$$_{\text{max}}$ 2991, 2910, 1714, 1711, 1699 cm$^{-1}$; $^1$H NMR $\delta$H: 1.30 (t, $J$ = 7.1 Hz, 3H, CO$_2$CH$_2$CH$_3$), 1.41 (ddd, $J$ = 12.7, 11.4, 7.6 Hz, 1H, CHHCCO$_2$Me), 1.80-1.90 (m, 2H, CH$_2$N), 2.15 (ddd, $J$ = 12.7, 7.0, 4.8 Hz, 1H, CH/HCHCO$_2$Et), 2.32-2.47 (m, 2H, CHHCHCO$_2$Et, CHHCO$_2$Me), 2.52-2.61 (m, 1H, CHHN), 3.11-3.16 (m, 1H, CHHN), 3.59 (dd, $J$ = 12.2, 7.0 Hz, 1H, CHCO$_2$Me), 3.69 (s, 3H, CH$_2$CO$_2$CH$_3$), 3.76 (s, 3H, CO$_2$CO$_2$CH$_3$), 4.00 (dd, $J$ = 12.2, 4.8 Hz, 1H, CHCO$_2$Et), 4.24 (q, $J$ = 7.1 Hz, 2H, CO$_2$CH$_2$CH$_3$); $^{13}$C NMR $\delta$C: 14.3 (CO$_2$C$_2$H$_2$CH$_3$), 26.0 (CH$_2$CH$_2$N), 28.8 (CH$_2$CHCO$_2$Et), 32.4 (CH$_2$CO$_2$Me), 50.3 (CHCO$_2$Me), 51.4 (CO$_2$CH$_2$CH$_3$), 52.1 (CHCO$_2$CH$_3$), 52.9 (CO$_2$CH$_3$), 61.3 (CH$_2$N), 64.7 (CHN), 76.7 (CO$_2$Me), 169.9, 172.3, 174.7 (2xCO$_2$Me, CO$_2$Et); MS (EI-GC) m/z: 299 (M$^+$, <1%), 241 (14), 240 (100), 226 (21), 212 (23), 166 (10), 108 (21); HRMS calculated for C$_{23}$H$_{24}$N$_2$O$_4$: 1+; 300.1447 found: 300.1451.

(2S,3S,6R,7aS)-dimethyl 6-hydroxy-3-((E)-styryl)hexahydro-1H-pyrrolizine-2,7a-dicarboxylate 4a: Brown needles, mp: 99-102°C; $[\alpha]_D^{20}$ = +81.2° (c 1, CH$_2$Cl$_2$); IR (neat) $\nu$$_{\text{max}}$ 3322, 2950, 2305, 1715, 1707 cm$^{-1}$; $^1$H NMR $\delta$H: 1.97 (dd, $J$ = 13.5, 4.8 Hz, 1H, CHHCCO$_2$Me), 2.42 (deform. dd, $J$ = 12.9, 12.3 Hz, 1H, CH/HCHCCO$_2$Me), 2.54-2.61 (m, 2H, CHHCHCO$_2$Me, CHHCO$_2$Me), 3.07-3.16 (m, 2H, CH$_2$N), 3.50-3.56 (m, 4H, CHCO$_2$Me, CHCO$_2$CH$_3$), 3.73 (s, 3H, CO$_2$CO$_2$CH$_3$), 4.21 (dd, $J$ = 10.3, 7.8 Hz, 1H, CHN), 4.56 (deform. dddd, $J$ = 5.1, 5.0, 4.8, 4.7 Hz, 1H, CHOH), 6.23 (dd, $J$ = 15.5, 10.4 Hz, 1H, CHHN), 6.51 (d, $J$ = 15.5 Hz, 1H, CHPh), 7.23-7.38 (m, 5H, ArH); $^{13}$C NMR $\delta$C: 36.9 (CH$_2$CO$_2$Me), 45.0 (CH$_2$CHCO$_2$Me), 50.5 (CHCO$_2$Me), 51.9 (CO$_2$CH$_3$), 52.7 (CHCO$_2$Me), 56.2 (CH$_2$N), 66.9 (CHN), 74.2 (CHOH), 75.9 (CO$_2$Me), 126.7, 128.0, 128.7, 136.7 (ArC), 127.5 (CHCHN), 136.7 (CHPh), 172.4 (CH$_2$CO$_2$Me), 176.5 (CO$_2$Me); MS (EI-GC) m/z: 345 (M$^+$, <1%), 269 (11), 268 (100), 243 (11), 241 (15), 209 (15), 126 (11), 105 (13); Microanalysis calculated for C$_{19}$H$_{23}$NO$_5$: C, 66.1; H, 6.7; N, 4.1%; found: C, 66.5; H, 7.0; N, 4.3%.

(2R,3R,6R,7aR)-dimethyl 6-hydroxy-3-((E)-styryl)hexahydro-1H-pyrrolizine-2,7a-dicarboxylate 4a*: Brown needles, mp: 95-97°C; $[\alpha]_D^{20}$ = +34.7° (c 1, CH$_2$Cl$_2$); IR (neat) $\nu$$_{\text{max}}$ 3396, 2944, 2315, 1717, 1698 cm$^{-1}$; $^1$H NMR $\delta$H: 2.06 (dd, $J$ = 14.0, 6.1 Hz, 1H, CHHCCO$_2$Me), 2.24 (dd, $J$ = 13.4, 11.7 Hz, 1H, CH/HCHCO$_2$Me), 2.50 (dd, $J$ = 14.0, 1.8 Hz, 1H, CHHCCO$_2$Me), 2.63 (dd, $J$ = 13.4, 7.0 Hz, 1H, CHHCHCO$_2$Me), 2.92 (dd, $J$ = 11.7, 2.5 Hz, 1H, CHHN), 3.50-3.53 (m, 4H, CHCO$_2$Me, CHCO$_2$CH$_3$), 3.76 (s, 3H, CO$_2$CO$_2$CH$_3$), 4.16 (dd, $J$ = 10.4, 7.4 Hz, 1H, CHN), 4.44 (m, 1H, CHOH), 5.87 (dd, $J$ = 15.6, 10.4 Hz, 1H, CHCHN), 6.57 (d, $J$ = 15.5 Hz, 1H, CHPh), 7.27-7.31 (m, 5H, ArH); $^{13}$C NMR $\delta$C: 36.9 (CH$_2$CO$_2$Me), 46.5 (CH$_2$CHCO$_2$Me), 50.7 (CHCO$_2$Me), 52.0 (CO$_2$CH$_3$), 53.0 (CHCO$_2$Me), 57.0 (CH$_2$N), 66.5 (CHN), 75.0 (CHOH), 75.5 (CO$_2$Me), 125.3 (CHCHN), 126.7, 128.2, 128.8, 136.3 (ArC), 136.0 (CHPh), 172.3 (CHCO$_2$Me), 177.3 (CO$_2$Me); MS (EI-GC) m/z: 345 (M$^+$, <1%), 269 (13), 268 (100), 243 (10), 241 (31), 209 (22), 105 (11), 59 (10); Microanalysis calculated for C$_{19}$H$_{23}$NO$_5$: C, 66.1; H, 6.7; N, 4.1%; found: C, 66.4; H, 6.9; N, 4.1%. 

56
(2S,3S,6R,7aS)-dimethyl 6-((tert-butyl(dimethyl)silyl)oxy)-3-((E)-styryl)hexahydro-1H-pyrrozine-2,7a-dicarboxylate 4b: Sticky orange oil; [α]D20 = +44.2° (c 1, CH2Cl2); IR (neat) νmax 3396, 2944, 2315, 1717, 1698 cm⁻¹; 1H NMR δH: 0.04 (s, 6H, OTBS), 0.81 (s, 9H, OTBS), 1.95 (dd, J = 13.0, 6.0 Hz, 1H, CHHCCO2Me), 2.28 (deform. dd, J = 13.2, 13.0 Hz, 1H, CHHCHCO2Me), 2.40-2.51 (m, 2H, CHHCHCO2Me, CHHCCO2Me), 2.8 (dd, J = 11.6, 4.7 Hz, 1H, CHHN), 3.20 (dd, J = 11.6, 5.4 Hz, 1H, CHHN), 3.49-3.56 (m, 4H, CHCO2Me, CH2CO2CH3), 3.74 (s, 3H, CO2CH3), 4.18 (dd, J = 10.5, 7.2 Hz, 1H, CHN), 4.56 (deform. dddd, J = 6.0, 5.4, 5.3, 4.7 Hz, 1H, CHOH), 5.85 (dd, J = 15.6, 10.5 Hz, 1H, CHCHN), 6.54 (d, J = 15.6 Hz, 1H, CHPh), 7.24-7.30 (m, 5H, ArH); 13C NMR δC: -4.8, -4.9 (OTBS), 18.2 (OTBS), 25.9 (OTBS), 37.5 (CH2CO2Me), 46.4 (CH2CH2CO2Me), 49.4 (CH2CO2Me), 51.9 (CO2CH3), 52.7 (CH2CO2Me), 56.3 (CH2N), 66.9 (CHN), 74.5 (CHOH), 74.7 (CO2Me), 125.4 (CHCHN), 126.7, 128.2, 128.7, 136.4 (ArC), 136.0 (CHPh), 171.9 (CHCO2Me), 176.9 (CO2Me); MS (EI-GC) m/z: 459 (M⁺, <1%), 327 (10), 268 (100), 267 (11), 243 (15), 242 (10), 241 (21), 209 (17), 208 (10), 160 (10), 105 (10); HRMS calculated for C25H27NO3Si +1: 460.2519 found: 460.2522.

(2S,3S,6R,7aS)-2-tert-butyl 7a-methyl 6-hydroxy-3-((E)-styryl)hexahydro-1H-pyrrozine-2,7a-dicarboxylate 4c: Sticky yellow oil; [α]D20 = -124.7° (c 1, CH2Cl2); IR (neat) νmax 2985, 2939, 2305, 1714, 1691 cm⁻¹; 1H NMR δH: 1.26 [s, 1H, CO2C(CHO)3], 1.94 (dd, J = 13.4, 5.1 Hz, 1H, CHHCCO2Me), 2.37 (deform. dd, J = 12.6, 12.3 Hz, 1H, CHHCHCO2Bu'), 2.50-2.59 (m, 2H, CHHCHCO2Bu', CHHCCO2Me), 3.08-3.15 (m, 2H, CH2N), 3.44 (ddd, J = 12.3, 7.5, 6.7 Hz, 1H, CHCO2Bu'), 3.72 (s, 3H, CO2CH3), 4.16 (dd, J = 10.4, 7.5 Hz, 1H, CHN), 4.54 (deform. dddd, J = 5.5, 5.3, 5.1, 4.9 Hz, 1H, CHOH), 6.24 (dd, J = 15.6, 10.4 Hz, 1H, CHCHN), 6.51 (d, J = 15.6 Hz, 1H, CHPh), 7.20-7.38 (m, 5H, ArH); 13C NMR δC: 28.2 [CO2C(CHO)3], 36.9 (CH2CO2Me), 45.2 (CH2CH2CO2Me), 51.2 (CO2CH3), 52.6 (CH2CO2Bu'), 56.0 (CH2N), 66.9 (CHN), 74.3 (CHOH), 75.7 (CO2Me), 80.9 [CO2C(CHO)3], 126.7, 127.9, 128.7, 136.6 (ArC), 127.7 (CHCHN), 134.9 (CHPh), 171.1 (CHCO2Bu'), 176.7 (CO2Me); MS (EI-GC) m/z: 387 (M⁺, <1%), 369 (11), 329 (10), 310 (15), 268 (30), 209 (100), 241 (11), 240 (17), 105 (12); Microanalysis calculated for C22H29NO5: C, 68.2; H, 7.5; N, 3.6%; found: C, 68.5; H, 7.3; N, 3.7%.

(2R,3R,6R,7aR)-2-tert-butyl 7a-methyl 6-hydroxy-3-((E)-styryl)hexahydro-1H-pyrrozine-2,7a-dicarboxylate 4c': Sticky brown oil; [α]D20 = +43.3° (c 1, CH2Cl2); IR (neat) νmax 3002, 2955, 2315, 1721, 1708 cm⁻¹; 1H NMR δH: 1.30 [s, 1H, CO2C(CHO)3], 2.03 (dd, J = 13.9, 6.1 Hz, 1H, CHHCCO2Me), 2.16 (dd, J = 13.4, 11.9 Hz, 1H, CHHCHCO2Bu'), 2.49 (dd, J = 14.0, 2.0 Hz, 1H, CHHCCO2Me), 2.58 (dd, J = 13.4, 6.9 Hz, 1H, CHHCHCO2Bu'), 2.91 (dd, J = 11.7, 2.5 Hz, 1H, CHHN), 3.37 (dd, J = 11.7, 5.4 Hz, 1H, CHHN), 3.49 (dd, J = 11.9, 7.4 Hz, 1H, CHCO2Bu'), 3.78 (s, 3H, CO2CH3), 4.11 (dd, J = 10.4, 7.4 Hz, 1H, CHN), 4.40 (m, 1H, CHOH), 5.88 (dd, J = 15.6, 10.4 Hz, 1H, CHCHN), 6.57 (d, J = 15.5 Hz, 1H, CHPh), 7.26-7.37 (m, 5H, ArH); 13C NMR δC: 28.2 [CO2C(CHO)3], 36.8 (CH2CO2Me), 46.5 (CH2CH2CO2Bu'), 51.4 (CO2CH3), 53.0 (CH2CO2Bu'), 57.1 (CH2N), 66.6 (CHN), 75.2 (CHOH), 75.5 (CO2Me), 81.1 [CO2C(CHO)3], 125.7 (CHCHN), 126.7, 128.2, 128.8, 136.0 (ArC), 136.3 (CHPh), 171.0 (CHCO2Bu'), 176.5 (CO2Me); MS (EI-GC) m/z: 387 (M⁺, <1%), 369 (10), 329 (10), 328 (11), 311 (15), 310 (13), 209 (100), 241 (13), 240 (21), 105 (10); Microanalysis calculated for C22H29NO5: C, 68.2; H, 7.5; N, 3.6%; found: C, 68.6; H, 7.4; N, 3.5%. 

S7
(3aS,4S,7R,8aR,8bR)-methyl 7-hydroxy-2-methyl-1,3-dioxo-4-((E)-styryl)decahydropyrrolo[3,4-a]pyrrolizine-8a-carboxylate 4d: Sticky yellow oil; [α]_D^{20} = -78.1° (c 1, CH₂Cl₂); IR (neat) ν_max 3005, 2980, 2305, 1714, 1710, 1698 cm⁻¹; ¹H NMR δ_H: 2.31-2.41 (m, 1H, CHCH₂CO₂Me), 2.71-2.83 (m, 3H, CHHCCO₂Me, CH₂N), 2.97 (s, 3H, NCH₃), 3.52 (deform. dd, J = 8.5, 8.1 Hz, 1H, CHCON), 3.85 (s, 3H, CO₂CH₃), 3.95 (d, J = 8.1 Hz, 1H, CHCCO₂Me), 4.21 (deform. dd, J = 9.1, 8.5 Hz, 1H, CHN), 4.36 (m, 1H, CHOH), 6.23 (dd, J = 15.6, 9.1 Hz, 1H, CHCH₂N), 6.76 (d, J = 15.6 Hz, 1H, CHPh), 7.26-7.40 (m, 5H, ArH); ¹³C NMR δ_C: 26.1 (NCH₃), 37.3 (CH₂CCO₂Me), 52.3, 53.1, (2xCHCON), 54.4 (CCO₂CH₃), 55.1 (CH₂N), 65.7 (CHN), 75.3 (CHOH), 77.9 (CCO₂CH₃), 125.3 (CHCH₂N), 126.9, 128.2, 128.7, 135.7 (ArC), 136.0 (CHPh), 176.2, 176.3 (2xCON), 177.1 (CO₂Me); MS (EI-GC) m/z: 370 (M⁺, <1%), 352 (10), 312 (10), 293 (100), 243 (21), 210 (12), 182 (40), 115 (10); HRMS calculated for C₂₀H₂₂N₂O₅ +1: 371.1607 found: 371.1621.

5. NMR spectra
Electronic Supplementary Material (ESI) for Chemical Communications
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Electronic Supplementary Material (ESI) for Chemical Communications

This journal is © The Royal Society of Chemistry 2013
Differential nOe 4.82 ppm
Differential nOe 3.93 ppm

Differential nOe 4.08 ppm
Electronic Supplementary Material (ESI) for Chemical Communications
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6. X-Ray diffraction analysis of 3a

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) x

No syntax errors found CIF dictionary Interpreting this report

Datablock: x

Bond precision: C-C = 0.0070 Å Wavelength = 0.71073 Å

Cell:
- a = 10.254(17) Å
- b = 24.002(4) Å
- c = 14.842(2) Å
- alpha = 90°
- beta = 104.390(5)°
- gamma = 90°

Temperature: 297 K

Volume: 3538.3(10) Å³

Space group: P 21/n

Hall group: P 2yn

Mol. formula: C19 H23 N O4

Summary:
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- C19 H23 N O4
- 329.38 Å³

Dx, g cm⁻³: 1.237

Z: 8

Mu (mm⁻¹): 0.086

F(000): 1408.0

F(000)': 1408.70

h, k, l, max: 12, 28, 17

Nref: 6296

Tmin, Tmax: 0.988, 0.996

Correction method: MULTI-SCAN

Data completeness = 0.996 Theta(max) = 25.130

R(reflections) = 0.0691 (2144) wR²(reflections) = 0.1800 (6296)

S = 0.923 Npar = 437

The following ALERTs were generated. Each ALERT has the format test-name_ALERT_alert-type_alert-level.
Click on the hyperlinks for more details of the test.

**Alert level B**
- BINTA01_ALERT_3_B The value of Rint is greater than 0.10
- Rint given: 0.196
- PLAT036_ALERT_3_B Ratio Observed / Unique Reflections too Low .... 34 Perc.
- PLAT211_ALERT_2_B Check High Usq as Compared to Neighbors for 06
checkCIF/PLATON report

Structure factors have been supplied for datablock(s) x

THIS REPORT IS FOR GUIDANCE ONLY. IF USED AS PART OF A REVIEW PROCEDURE FOR PUBLICATION, IT SHOULD NOT REPLACE THE EXPERTISE OF AN EXPERIENCED CRYSTALLOGRAPHIC REFEREE.

No syntax errors found. CIF dictionary Interpreting this report

Datablock: x

Bond precision: C-C = 0.0060 A  Wavelength=0.71073

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  alpha=90  beta=94.567(4)  gamma=90

Temperature: 298 K

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<td>2</td>
</tr>
<tr>
<td>Mu (mm-1)</td>
<td>0.093</td>
<td>0.093</td>
</tr>
<tr>
<td>F000</td>
<td>368.0</td>
<td>368.0</td>
</tr>
<tr>
<td>F000'</td>
<td>368.19</td>
<td></td>
</tr>
<tr>
<td>h,k,lmax</td>
<td>13,7,16</td>
<td>13,7,16</td>
</tr>
<tr>
<td>Nref</td>
<td>3159[ 1750]</td>
<td>3131</td>
</tr>
<tr>
<td>Tmin,Tmax</td>
<td>0.991,0.997</td>
<td>0.928,0.997</td>
</tr>
<tr>
<td>Tmin’</td>
<td>0.965</td>
<td></td>
</tr>
</tbody>
</table>

Correction method- MULTI-SCAN

Data completeness- 1.79/0.99  Theta(max) - 25.060

R(reflections) - 0.0532(1784)  wR2(reflections) - 0.1415(3131)

S = 1.002  Npar= 229

The following ALERTS were generated. Each ALERT has the format
test-name ALERT alert-type alert-level.
Click on the hyperlinks for more details of the test.
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Alert level C
PLAT038_ALERT_3_C Poor Data / Parameter Ratio (Zmax < 38) .......... 7.64
PLAT239_ALERT_2_C Hirshfeld Test Diff for C1 -- C8 .......... 6.3
PLAT240_ALERT_2_C Check Low Queq as Compared to Neighbors for C8
PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds ............... 0.0060 Ang.
PLAT413_ALERT_2_C Short Inter H...H Contact H122 .. H6 .... 2.06 Ang.

Alert level G
PLAT007_ALERT_5_G Note: Number of Unrefined Donor-H Atoms .......... 1
PLAT791_ALERT_4_G Note: The Model has Chirality at C4 (Verify) S
PLAT791_ALERT_4_G Note: The Model has Chirality at C6 (Verify) S
PLAT791_ALERT_4_G Note: The Model has Chirality at C7 (Verify) S

0 ALERT level A = Most likely a serious problem - resolve or explain
0 ALERT level B = A potentially serious problem, consider carefully
5 ALERT level C = Check, ensure it is not caused by an omission or oversight
6 ALERT level D = General information/check it is not something unexpected

0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
3 ALERT type 2 Indicator that the structure model may be wrong or deficient
2 ALERT type 3 Indicator that the structure quality may be low
4 ALERT type 4 Improvement, methodology, query or suggestion
2 ALERT type 5 Informative message, check

PLATON version of 01/06/2013; check.def file version of 24/05/2013

Prob = 50
Temp = 298

NOMOVE FORCED

S44