

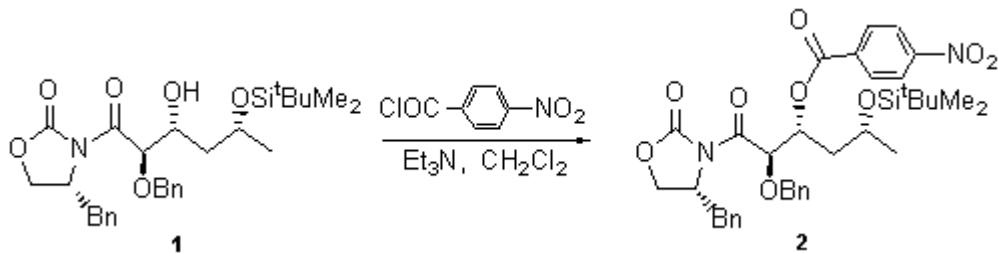
**Molecules** **2000**, *5*, M135

## 3-[5-(*tert*-Butyldimethylsilyloxy)-3-*p*-nitrobenzoyl-1-oxo-2-(phenylmethoxy)hexyl]-4-(phenylmethyl)-2-oxazolidinone

Margaret A. Brimble\* and Josephine S. O. Park

School of Chemistry, University of Sydney, Eastern Ave, Camperdown, NSW 2006, Australia. Fax: (+61 3) 9351 3329; E-mail: [m.brimble@auckland.ac.nz](mailto:m.brimble@auckland.ac.nz)

Received: 20 January 2000 / Accepted: 2 February 2000 / Published: 23 February 2000



A mixture of alcohol **1** (121 mg, 0.23 mmol) [1], triethylamine (48 l, 0.34 mmol) and *p*-nitrobenzoyl chloride (51 mg, 0.28 mmol) in dichloromethane (2 ml) was stirred for 2 h. at 30°C. The reaction mixture was poured into saturated aqueous sodium hydrogen carbonate (5 ml), extracted into ethyl acetate (2 x 10 ml), washed with water (2 x 5 ml) and dried over sodium sulfate. Removal of the solvent under reduced pressure and purification of the residue by flash chromatography, using light petroleum-ethyl acetate (8:2) as eluent afforded the title compound **2** (129 mg, 83%) as a colourless oil.

[a]D -41.34 (c 1.024, CHCl<sub>3</sub>).

IR (cm<sup>-1</sup>, neat): 1783s, 1729s, 1714s, 1386m, 1103m.

<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>): 0.01, 0.02 (6H, s, SiMe<sub>2</sub>), 0.85 (9H, s, Bu<sup>t</sup>), 1.21 (3H, d, J<sub>6',5'</sub> 6.0 Hz, H6'), 2.10-2.14 (2H, m, H4'), 2.62 (1H, dd, J<sub>gem</sub> 13.5 and J 9.5 Hz, CHCH<sup>A</sup>Ph), 3.15 (1H, dd, J<sub>gem</sub> 13.5 and J 3.3 Hz, CHCH<sup>B</sup>Ph), 3.76 (1H, dd, J<sub>gem</sub> 8.8 and J<sub>5A,4</sub> 8.8 Hz, H5<sup>A</sup>), 3.95-4.00 (1H, m, H5'), 4.06 (1H, dd, J<sub>gem</sub> 8.8 and J<sub>5B,4</sub> 2.5 Hz, H5<sup>B</sup>), 4.47-4.51 (1H, m, H4), 4.70 (2H, s, OCH<sub>2</sub>Ph), 5.55-5.60 (2H, m, H2', H3'), 7.15-7.42 (10H, m, Ph), 8.18 (2H, d, J 8.8 Hz, PhNO<sub>2</sub>), 8.27 (2H, d, J 8.8 Hz, PhNO<sub>2</sub>).

<sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>): -4.1, -3.9 (CH<sub>3</sub>, SiMe<sub>2</sub>), 18.8 (quat., CMe<sub>3</sub>), 24.0 (CH<sub>3</sub>, C6'), 25.5 (CH<sub>3</sub>, CMe<sub>3</sub>), 38.3 (CH<sub>2</sub>, CHCH<sub>2</sub>Ph), 41.5 (CH<sub>2</sub>, C4'), 56.2 (CH, C4), 66.3 (CH<sub>2</sub>, C5), 67.1 (CH, C5'), 73.5 (CH, C3'), 74.2 (CH<sub>2</sub>, OCH<sub>2</sub>Ph), 78.5 (CH, C2'), 124.2, 124.3, 128.1, 128.9, 129.2, 129.6, 130.1, 131.3, 131.5 [CH, 3 x Ph (last 5 peaks coincidental)], 135.5 (quat., CHCH<sub>2</sub>Ph), 135.7 (quat., OC=OC), 137.6 (quat., OCH<sub>2</sub>Ph), 151.4 (quat., CNO<sub>2</sub>), 153.6 (quat., C2) 164.0 (quat., OC=O), 170.7 (quat., C1').

CI-MS: (FAB, NBA matrix) 677 (MH<sup>+</sup>, 2%), 619 (4), 569 (MH<sup>+</sup>-HOCH<sub>2</sub>Ph, 1), 545 (MH<sup>+</sup>-HOSiMe<sub>2</sub>Bu<sup>t</sup>, 4), 224 (5), 178 (C<sub>10</sub>H<sub>12</sub>NO<sub>2</sub>, 6), 159 (C<sub>8</sub>H<sub>19</sub>OSi, 9), 150 (15), 136 (14), 91 (CH<sub>2</sub>Ph, 100), 73 (27).

Anal. calc. for C<sub>36</sub>H<sub>44</sub>N<sub>2</sub>O<sub>9</sub>Si MH<sup>+</sup> (Cl, NH<sub>3</sub>), 677.2901; found MH<sup>+</sup>, 677.2894.

### Reference

1. Brimble, M. A.; Park, J. S. O. *J. Chem. Soc. Perkin Trans. I* **2000**, 697-709.

Sample availability: available from the authors.

©2000 MDPI. All rights reserved. *Molecules* website [www.mdpi.org/molecules/](http://www.mdpi.org/molecules/)