

*Molecules* **1998**, *3*, M60

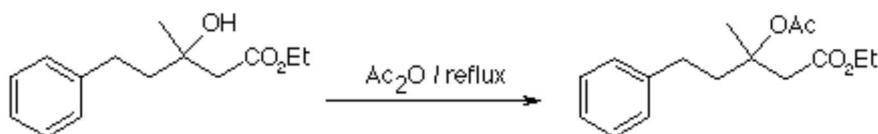
## Ethyl 3-Acetoxy-3-methyl-5-phenylpentanoate

Martin J. Stoermer\* and John T. Pinhey

Division of Organic Chemistry, School of Chemistry F11, The University of Sydney, N.S.W 2006, Australia.

\* Current address: Victorian College of Pharmacy, Monash University (Parkville Campus), 381 Royal Parade, Parkville, Victoria 3052, Australia. Phone: +61 3 990 39000, Fax: +61 3 99039582, e-mail: martin.stoermer@vcp.monash.edu.au, <http://synapse.vcp.monash.edu.au/martin/>

Received: 27 February 1998 / Published: 6 March 1998



The general part of the experimental section [1] has been presented elsewhere. Ethyl 3-hydroxy-3-methyl-5-phenylpentanoate (1.00 g, 4 mmol) was refluxed in acetic anhydride (15 ml) for 3 hours. Water (20 ml) was added and the mixture was refluxed for 10 minutes, cooled and extracted with ether (50 ml). The ether extract was washed with water (4x100 ml), brine (30 ml), dried (Na<sub>2</sub>SO<sub>4</sub>), filtered and evaporated under reduced pressure. The residue was purified by radial chromatography (ethyl acetate/light petroleum 5:95) to yield ethyl 3-acetoxy-3-methyl-5-phenylpentanoate (0.876 g, 74%) as a colourless oil.

B.p. 160°/1.5 mmHg (Kugelrohr)

UV (ethanol) 269 (173), 260 (250), 254sh (212), 249sh (157) nm.

IR (CDCl<sub>3</sub>) 1736(s, C=O), 1369, 1247(s), 1031, 761 cm<sup>-1</sup>.

<sup>1</sup>H-NMR (90 MHz, CDCl<sub>3</sub>) 1.22 (3H, t, *J* 7.1 Hz, CO<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 1.57 (3H, s, CH<sub>3</sub>), 1.95 (3H, s, CH<sub>3</sub>), 1.98-2.38 (2H, m, CH<sub>2</sub>), 2.38-2.83 (2H, s, CH<sub>2</sub>), 2.92 (2H, ABq, *J*<sub>gem</sub> 14.4 Hz, CH<sub>2</sub>), 4.07 (2H, q, *J* 7.1 Hz, CO<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>), 6.93-7.30 (5H, m, ArH).

<sup>13</sup>C-NMR (15 MHz, CDCl<sub>3</sub>) 14.02, 21.88, 23.96 (CH<sub>3</sub>), 29.80, 40.51, 42.41, 60.13, (CH<sub>2</sub>), 81.16 (quat, C3), 125.6, 128.2, 128.2 (CH), 141.4 (quat, C1'), 169.7 (quat, C=O), 170.0 (quat, C=O).

EI-MS 218(M<sup>+</sup>-AcOH, 29%), 173(16), 145(20), 144(56), 131(58), 130(22), 129(47), 105(10), 91(100).

*Acknowledgment:* The authors gratefully acknowledge financial support from the Australian Research Council and The University of Sydney.

### References and Notes

1. Moloney, M.G.; Pinhey, J.T.; Stoermer, M.J. "Vinyl Cation Formation by Decomposition of Vinyl-lead Triacetates. The reactions of Vinylmercury and Vinylin Compounds with Lead Tetraacetate." *J. Chem. Soc. Perkin Trans. 1* **1990**, *10*, 2645.

*Sample Availability:* No sample available.

©1998 MDPI. All rights reserved. *Molecules* website <http://www.mdpi.org/molecules/>