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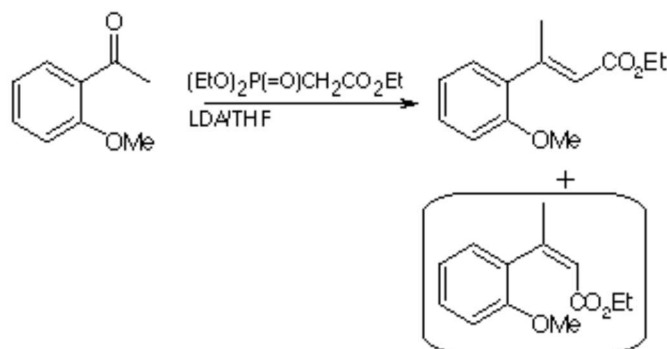
Ethyl (Z)-3-(2-Methoxyphenyl)-2-butenolate

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The synthetic procedure [1] has been presented elsewhere. Ethyl (Z)-3-(2-methoxyphenyl)-2-butenolate was obtained (1.63 g, 17%) as a colourless oil.

B.p. 159°/12 mmHg (Kugelrohr) (lit.[2] (E) and (Z)-mixture, 162-4°/16 mmHg

UV (ethanol) 272 (2982), 212 (19925) nm.

IR (film) 2985, 1723 (s, C=O), 1646, 1600, 1485, 1454, 1438, 1369, 1262, 1238(s), 1154(s), 1115, 1046(s), 738(s) cm⁻¹.

¹H-NMR (400 MHz, CDCl₃) 1.05 (3H, t, *J* 7.3 Hz, -OCH₂CH₃), 2.14 (3H, d, *J* 1.5 Hz, CH₃), 3.79 (3H, s, OCH₃), 3.96 (2H, q, *J* 7.3 Hz, -OCH₂CH₃), 5.95 (1H, q, *J* 1.5 Hz, =CH), 6.89 (1H, bd, *J* 8.2 Hz, H^{3'}), 6.92 (1H, ddd, *J* 7.5, 7.2, 1.0 Hz, H^{5'}), 7.01 (1H, dd, *J* 7.5, 1.9 Hz, H^{6'}), 7.29 (1H, ddd, *J* 8.2, 7.2, 1.9 Hz, H^{4'}). Stereochemistry confirmed by n.O.e. difference spectroscopy. Irradiation at 2.14 produced a 4% n.O.e. at 5.95. Irradiation at 5.95 produced a 6% n.O.e. at 2.14.

¹³C-NMR (100 MHz, CDCl₃) 13.91, 26.03, 55.49 (CH₃), 59.46, (CH₂), 110.7 (=CH); 116.9, 120.3, 128.0, 128.7 (CH), 130.4 (quat, C^{1'}), 153.1, 155.4 (quat), 165.6 (quat, C¹).

EI-MS 221(M⁺+1, 16%), 220 (M⁺, 94), 190 (40), 189 (100), 176 (20), 175 (100), 162 (37), 161 (98), 159 (76), 147 (31), 146 (16), 145 (46), 135 (20), 133 (68), 131 (100), 115 (61), 104 (21), 103 (55), 102 (19), 91 (90), 89 (33), 78 (35), 77 (77).

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References and Notes

1. Preceding article.
2. Scmitt, J. Suquet, M.; Comoy, P.; Boitard, J.; Callet, G.; Clim, T.; Le Meur, J. *Bull. Soc. Chim. Fr.* **1966**, *3*, 953.

Sample Availability: No sample available.

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