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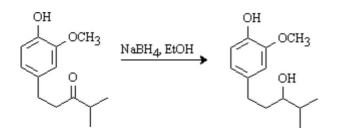
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# (±)-1-(4-Hydroxy-3-methoxyphenyl)-4-methyl-3-pentanol

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The discussion and purpose for the synthesis of this compound has been reported elsewhere [1]. To a cold (0°C) solution of 1-(4-hydroxy-3-methoxyphenyl)-4-methyl-3-pentanone (190 mg, 0.86 mmol) in EtOH (15 mL) was added sodium borohydride (40 mg, 1.1 mmol, 1.3 eq). The solution was stirred at 0°C for 30 min., then at room temperature for 1 h. 10% HCl (10 mL) was added and the solution was stirred at room temperature for 2 h. The solution was concentrated in vacuo and the aqueous residue was extracted with dichloromethane (3 x 10 mL). The organic fractions were combined, dried (MgSO4) and the solvent was evaporated in vacuo. Chromatography on silica gel (40% EtOAc / hexanes) afforded a white solid (172 mg, 90%).

mp: 55-56°C.

IR (KBr) cm<sup>-1</sup>: 3397 (OH).

<sup>1</sup>H-NMR (CDCl<sub>3</sub>) d: 0.92 (d, 6H, J=7.8 Hz, CH<sub>3</sub>), 1.69 (m, 3H, H-2 and H-4), 2.59 (m, 1H, H-1a), 2.78 (m, 1H, H-1b), 3.40 (broad m, 1H, H-3), 3.88 (s, 3H, OCH<sub>3</sub>), 5.47 (s, 1H, exchangeable with D<sub>2</sub>O, OH), 6.72 (m, 2H, ArH-2 and ArH-6), 6.84 (d, 1H, J=8.7 Hz, ArH-5).

<sup>13</sup>C-NMR (CDCl<sub>3</sub>) d: 17.4 (C-5a), 19.0 (C-5b), 32.4 (C-1), 33.9 (C-4), 36.4 (C-2), 56.1 (OCH<sub>3</sub>), 76.4 (C-3), 111.2 (ArC-2), 114.5 (ArC-5), 121.1 (ArC-6), 134.5 (ArC-1), 143.8 (ArC-4), 146.6 (ArC-3).

MS m/e (rel %): 224 [M+] (83), 163 (44), 138 (62), 137 (100), 134 (44).

Anal. calc. for C<sub>13</sub>H<sub>20</sub>O<sub>3</sub>: C 69.60, H 8.99; found: C 69.55, H 8.78.

# Acknowlegment

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# Reference

1. Plourde G.L. Tetrahedron Letters 2002, 43, 3597-3599.

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