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Benzyl-3-deoxy-3(phenethylamino) b-L-Xylopyranoside

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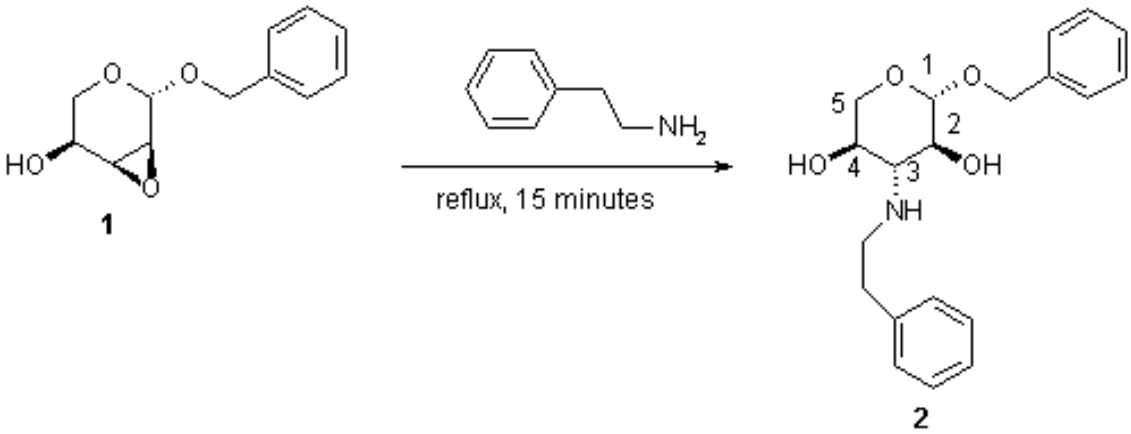

A mixture of benzyl 2,3-anhydro-b-L-ribopyranoside (**1**) [1] (0.88 g, 4 mmol) and phenethylamine (5 mL) was gently refluxed. After 15 minutes the mixture was cooled, and 10% aqueous ethanol (15 mL) added to precipitate the product. The resulting solid was filtered and recrystallized from 98% ethanol to provide benzyl-3-deoxy-3(phenethylamino)-b-L-xylopyranoside,(**2**), (1.2 g, 87%).

M.p. 179-181deg.C.

$[a]^D$ +44° (c 0.01, 1M HCl).

^{1}H NMR (200 MHz, Me_2SO-d_6) d 1.85 (bs, 1H, NH), 2.35 (t, J = 9.16, 8.00 Hz, 1H, H-3), 2.74 (m, 2H), 2.95-3.20 (m, 3H), 3.35 (m, 2H), 3.75 (dd, J = 4.52, 10.78 Hz, 1H, H-5e), 4.25 (d, J = 7.32 Hz, 1H, H-1), 4.54 (d, J = 12.37 Hz, 1H, -OC$\underline{H}_2$Ar), 4.77 (d, J = 12.37 Hz, 1H, -OC$\underline{H}_2$Ar), 4.90 (d, J = 5.66 Hz, 1H, -OH), 5.15 (d, J = 5.25 Hz, 1H, -OH).

^{13}C NMR (50.1 MHz, Me_2SO-d_6) d 38.82, 50.30, 65.15, 66.89, 69.40, 69.79, 72.28, 103.33 (C-1), 126.02, 127.64, 127.82, 128.41, 128.48, 128.84, 139.10, 140.77. Four signals for aromatic carbons overlapped.

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References and Notes

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Sample availability: 0.5 g.