

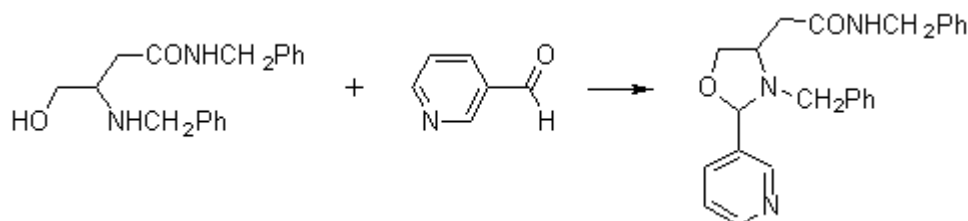
Molecules **2000**, *5*, M141

3-Benzyl-4-(N-benzylcarbamoylmethyl)-2-(3-pyridyl)-1,3-oxazolidine

Marina A. Tlekhusezh, Roman V. Makuilov and Larisa A. Badovskaya

Research Laboratory of Furan Chemistry, Kuban State Technological University, Moskovskaya st. 2, Krasnodar, 350072, Russian Federation; E-mail: strog@kuban.net

Received: 1 February 2000 / Accepted: 8 February 2000 / Published: 23 February 2000



The title compound was synthesized by the reaction of N-benzyl-3-benzylamino-4-hydroxybutanamide with 3-pyridinecarboxaldehyde using the procedure described in [1]. A mixture of N-benzyl-3-benzylamino-4-hydroxybutanamide (2.98 g, 0.01 mol), 3-pyridinecarboxaldehyde (nicotinaldehyde) (1.02 g, 0.01 mol), molecular sieves (Na-A, 20 g), p-TsOH (0.02 g) and dry chloroform (50 ml) was heated to reflux for 4 h. The reaction mixture was then filtered, and the solvent was evaporated. The residue was dissolved in ethyl acetate (10 ml) and cooled to 0 °C for crystallization of desired product. The crystals obtained was separated with filtration and recrystallized from ethanol to yield 3.33 g (86 %) of 3-benzyl-4-(N-benzylcarbamoylmethyl)-2-(3-pyridyl)-1,3-oxazolidine.

M.p. 93 °C (ethanol)

IR (vaseline oil, cm^{-1}): 3310 (N-H); 1650 (C=O); 1550 (N-H); 1605 (C=C).

^1H NMR (CDCl_3 , 250 MHz): 2.25, 2.31 (dd, dd, 2H, CH_2CO , $J = 16.0$ Hz); 2.41, 2.51 (d, d, 2H, NCH_2 , $J = 14.0$ Hz); 3.5 (m, 1H, NCH); 4.07, 4.26 (dd, dd, 2H, OCH_2); 6.23 (broad s, 1H, NH); 7.18 (m, 11H, Ph, 5-H Py); 7.72 (dd, 1H, 6-H Py); 8.20 (dd, dd, 2H, NHCH_2), 8.50 (dd, 2H, 2,4-H Py).

Anal. calcd. for $\text{C}_{24}\text{H}_{25}\text{N}_3\text{O}_2$ (387.48): C 74.51; H 6.62; N 10.78; Found: C 74.39; H 6.50; N 10.85.

References:

1. Tlekhusezh, M.A.; Badovskaya, L.A.; Tyukhteneva, Z.I. *Khimiya geterotsikl. Soedin. (Chemistry of Heterocyclic compounds, Russia)* **1996**, *5*, 711-716.

Sample availability: Available from authors and MDPI.

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