

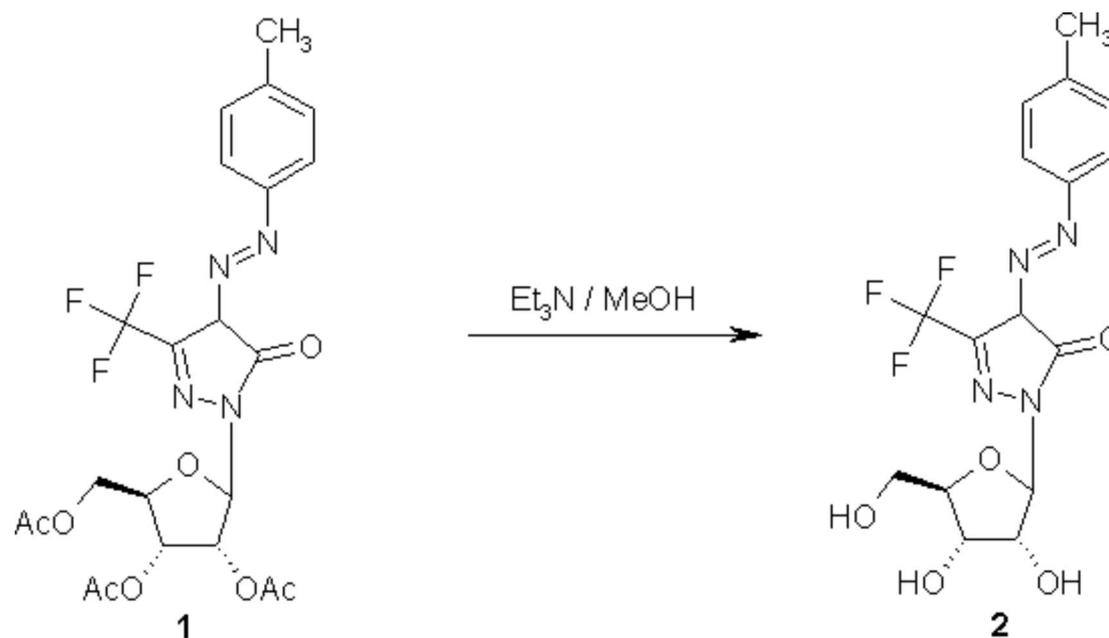
2-(b-D-Ribofuranosyl)-4-(p-tolylazo)-5-trifluoromethyl-2,4-dihydropyrazol-3-one

Abdelfattah Haikal*, Hussein F. Zohdi and Zahra Badi

Department of Chemistry, Faculty of Science, United Arab Emirates University, P.O.Box 17551 Al-Ain, UAE

E-mail: a.haikal@uaeu.ac.ae and hussain.zohdi@uaeu.ac.ae

Received: 16 June 2002 / Accepted: 30 September 2002 / Published: 11 March 2003

Keywords: Ribofuranose, Nucleosides, Dihydropyrazol-3-one

The desired compound **2** was obtained by complete deprotection of the acetylated nucleoside **1** [1] using triethylamine [2]. To a solution of **1** (0.8g, 1.5 mmol) in methanol (25 ml) was added triethylamine (2 ml). The mixture was stirred at room temperature and the reaction was followed by tlc. After complete deprotection (24 hours), the reaction mixture was evaporated and coevaporated with methanol (3 x 30 ml), then chromatographed over silica gel using CH₂Cl₂/MeOH (95:5 v/v) to give 0.55 g (90%) of **2** as yellow powder.

R_f: 0.30 (CH₂Cl₂/MeOH, 95/5 v/v).UV (λ_{max}, 95% ethanol): 384nmIR (KBr, cm⁻¹): 3414 (OH), 1662 (CO pyrazolone).

MS (m/z): 402.

¹H-NMR (250 MHz, DMSO-d₆): 2.38(s, 3H, CH₃); 2.40(s, 1H, CH); 3.73(dd, 1H, H-5' J_{5',4'}=2.4 Hz) 3.91-3.96(dd, 1H, H-5'' J_{5'',4''}=2.4 Hz); 4.23-4.24(m, 1H, H-4'); 4.53(t, 1H, H-3' J_{3',2'}=3.66 Hz); 4.75(t, 1H, H-2' J_{2',3'}=5.13 Hz); 5.94(d, 1H, H-1', J_{1',2'}=4.92 Hz); 7.21-7.37(m, 4H, aromatic CH).

¹³C-NMR (75 MHz, DMSO-d₆): 22.0(CH₃); 48.9(CH); 63.08(C-5'), 71.71(C-3'); 73.90(C-2'); 85.63(C-4'); 88.08(C-1'); 116.9 (2 aromatic carbons), 121.0, 122.0 (2 aromatic carbons), 130.4, 144.0 (2 quaternary aromatic carbons); 137.7(q, CF₃); 148.5(C=N); 173.5(CO).

References and Notes

1. Haikal, A.; Zohdi, H. F.; Badi, Z. *Molbank* **2003**, M0306.
2. Zohdi, H. F.; Haikal, A. *Molecules* **2001**, *6*, M263.

Sample Availability: Available from the authors and from MDPI

© 2003 [MDPI](http://www.mdpi.org). All rights reserved.