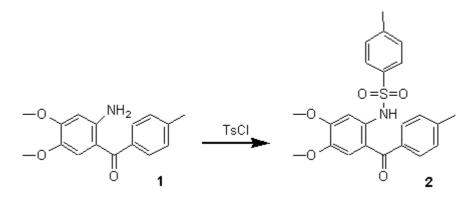
Molecules 2001, 6, M204

4,5-Dimethoxy-2-(4-methylbenzoyl)-1-(4-methylphenylsulfonylamido)benzene

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Received: 19 November 2000 / Accepted: 15 December 2000 / Published: 25 March 2001



For this synthesis, we propose a modification of the reaction procedure described in [1]. To a warm solution of amine **1** (2.06 g, 8 mmol) in acetone (70 mL), *p*-TsCl (3.5 g, 1.8 mmol) was added and the reaction mixture was heated to dissolve p-TsCl. After that, water (7 mL) and NaHCO₃ (1.70 g, 20 mmol) were added. The mixture was heated to reflux for 5 days. In order to separate product **2**, H₂O (25 mL) was added and the reaction mixture was concentrated to half its volume. The crystallization from acetone with charcoal gave titled compound (1.8 g, 53 %) as pale yellow crystals. The filtrate after separating compound **2** was diluted with water and extracted with ethyl acetate. The extracts were dried over Na₂SO₄, and solvent was evaporated. The residue was worked up as described above yielding the additional amount of the compound **2** (0.92 g, 27 %).

Total yield of compound 2 is 2.72 g (80 %).

M.p. 218 °C (acetone).

IR (Nujol): 1620 (C=O), 3280 (NH).

¹H NMR (CDCl₃, 80 MHz): 2.17 (3H, s, CH₃); 2,40 (3H, s, CH₃); 3.67 (3H, s, OCH₃); 3.97 (3H, s, OCH₃); 6.73 (1H, s, H_{Ar}); 6.93 (2H, d, J=8.8 Hz, H_{Ts}); 7.17 (4H, s, H_{Ar}); 7.30 (1H, s, H_{Ar}); 7.47 (2H, d, J=8.8 Hz, H_{Ts}); 10.07 (1H, s, NH)

Anal. calc. for C₂₃H₂₃NO₅S: C 64.94, H 5.41, N 3.29; found C 65.09, H 5,50, N 3.19.

Reference

1. Tietze, L.F.; Eicher, T. *Reactionen und Synthesen im organisch-chemischen Praktikum und Forschungslaboratorium* Georg Thieme Verlag Stuttgart, New York, **1991**.

Sample availability: available from the authors and MDPI.

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