

5-Methoxy-1,3-dimethyl-1H-pyrazolo[4,3-e][1,2,4]triazine

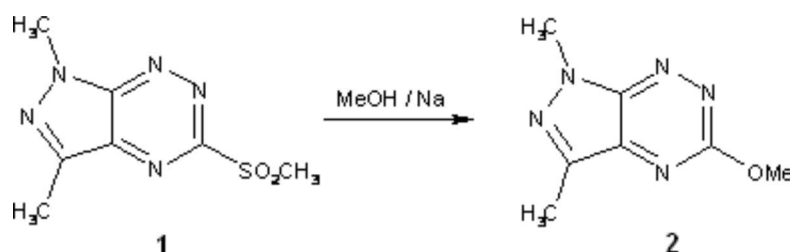
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O- and N-alkyl derivatives of pyrazolo[4,3-e][1,2,4]triazine, isolated from the cultural fluids of *Pseudomonas fluorescens* and *Nostoc spongiaeforme* exhibit antimicrobial and antitumor activity [1-2]. In this communication we report the synthesis of 5-methoxy-1,3-dimethyl-1H-pyrazolo[4,3-e][1,2,4]triazine (**2**) with the goal of performing structure-activity relationship studies.



To a solution of the sulfone **1** (145 mg, 0.5 mmol) in absolute methanol (10 ml) metal sodium (35 mg, 1.5 mmol) was added. The reaction mixture was heated at reflux for 30 min. After usual work-up compound **2** was purified by column chromatography (Merck, silica gel 230-400 mesh) using CHCl_3 as eluent. The 1,3-dimethyl-5-methoxy-1H-pyrazolo[4,3-e][1,2,4]triazine (**2**) was isolated in 96% yield.

Melting Point: 110°C.

$^1\text{H-NMR}$ (200 MHz, CDCl_3): δ = 2.59 (s, 3H); 4.20 (s, 3H); 4.24 (s, 3H).

IR (KBr, cm^{-1}): 2960; 1310; 1120; 1050.

MS- EI (m/z): 179[M^+].

Elemental Analysis: Calculated for $\text{C}_7\text{H}_9\text{N}_5\text{O}$: C, 46.93%; H, 5.02%; N, 39.10%. Found: C, 47.20%; H, 4.94%; N, 38.89%.

References:

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2. Hirata, K.; Nakagami, H.; Takashina, J.; Mahmud, T.; Kobayashi, M.; In, Y.; Ishida, T.; Miyamoto, K., *Heterocycles*, 1996, 43, 1513.

Sample Availability: Available from MDPI.

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