

Synthesis of 2-(4-benzyl-3-methyl-6-oxopyridazin-1(6H)-yl)acetohydrazide

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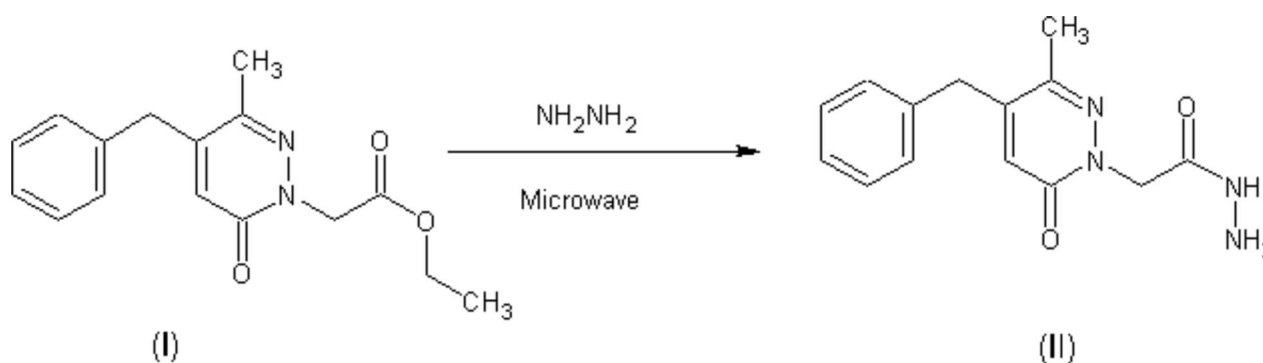
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Pyridazines are of chemical and biological interest. They have been reported to be anticonvulsive agents [1], [2]. Furthermore, BELLASIO et al. have described the antihypertensive effects of hydrazinopyridazine compounds [3]. In continuation of this line of investigation, we have synthesized compound (I); it will be subjected to further pharmacological investigations, especially tests of its anticancer activity.



To (0.86 g, 3 mmol) of ethyl (4-benzyl-3-methyl-6-oxopyridazin-1(6H)-yl)acetate (I), was added 10 ml of hydrazine hydrate. The mixture was placed in a pyrex tube which was then introduced into a Maxidigest MX 350 Prolabo microwave [4] monomode reactor and refluxed for 10 min on 60 w as irradiation power. After cooling, the product precipitates, and then is recrystallised in absolute ethanol, yield: 85 % of (II) solid.

Melting point: 197-200°C

IR (KBr, cm^{-1}): 3350 (NH), 1680, 1620 (C = O)

^1H NMR (300.14 MHz, CDCl_3) δ (ppm): 2.50 (s, 3H, CH_3), 2.53 (s, 2H, NH_2), 3.79 (s, 2H, CH_2), 4.84 (d, 2H, CH_2), 6.54 (s, 1H, H4), 7.31 (m, 5H, H aromatic), 7.73 (s, 2H, NH_2).

^{13}C NMR (75 MHz, CDCl_3) δ (ppm): 19.55 (CH_3), 38.82 (CH_2), 54.73 (CH_2), 127.77 (CH aromatic), 128.26 (CH aromatic), 129.48 (2 CH aromatic), 135.77, 146.50, 147.34, 161.09 (C=O), 168.32 (C=O).

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