

Synthesis of 2-[4-(2-chlorobenzyl)-3-methyl-6-oxypyridazin-1(6H)-yl]acetohydrazide

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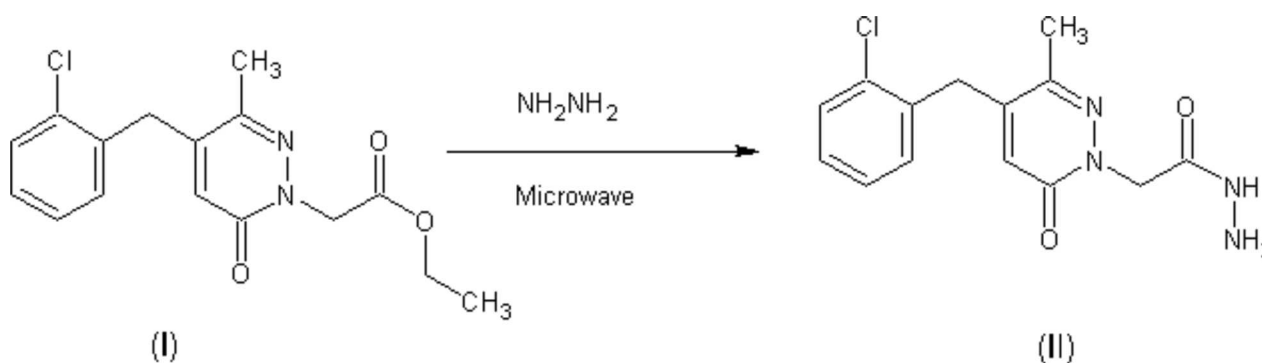
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Pyridazines are of chemical and biological interest. They have been reported to be anticonvulsive agents [1], [2]. Furthermore, BELLASIO et al. have described the antihypertensive effects of hydrazinopyridazine compounds [3]. In continuation of this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



To (0.96 g, 3 mmol) of ethyl [4-(2-chlorobenzyl)-3-methyl-6-oxypyridazin-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 : 80 % of (II) solid.

Melting point: 201-205°C

IR (KBr, cm^{-1}): 3352(NH), 1682, 1469, 1622 (C=O)

^1H NMR (300.14 MHz, CDCl_3) δ (ppm): 2.49 (s, 3H, CH_3), 3.97 (s, 2H, CH_2), 4.21 (s, 2H, NH_2), 4.52 (s, 2H, CH_2), 6.03 (s, 1H, H4), 7.53 (m, 4H, H aromatic), 9.24 (s, 2H, NH_2).

^{13}C NMR (75 MHz, CDCl_3) δ (ppm): 19.38 (CH_3), 35.6 (CH_2), 52.76 (CH_2), 126.98 (CH aromatic), 128.85 (CH aromatic), 130.25 (CH aromatic), 130.68 (CH aromatic), 132.6 (CH aromatic), 134.54, 135.43, 144.93, 146.03, 160.31 (C=O), 167.16 (C=O).

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