

Reactions with Hydrazonoyl Halides 63: Synthesis and Anticancer Activity of Some New 1,3,4-Thiadiazoles, 1,3,4-Selenadiazoles and 1,2,4-Triazolo[4,3-a]pyrimidines

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Abstract

2,3-Dihydro-1,3,4-thiadiazoles, 2,3-dihydro-1,3,4-selenadiazoles, and triazolino[4,3-*a*]pyrimidines containing benzoxazole or benzothiazole moieties were prepared from the reaction of each of ethyl 3-aza-3-(benzoxazol-2-ylamino)-2-chloroprop-2-enoate and ethyl 3-aza-3-(benzothiazolo-2-ylamino)-2-chloroprop-2-enoate with each of potassium thiocyanate, potassium selenocyanate, alkyl carbodithioate, and pyrimidine-2-thione derivatives. All the newly synthesized compounds were confirmed by elemental analysis, spectral data, and alternative route synthesis whenever possible. Some of the newly synthesized compounds were screened toward certain cancer tumors.

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