Substituted Thiazoles V1. Synthesis And Antitumor Activity Of New 2- Acetamido and 2 or 3 – Propanamido – Thiazole Analogs

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Abstract

A novel series of 2 or 3 propanamido derivatives of 4 or 5 – substituted- thiazoles was designed and synthesized. Structure elucidation of the new synthesized compounds was attained by the use of H1 & C13 NMR, and Mass spectrometry. Compounds were subjected to NCI in vitro assessment for their antitumor activity, at asingle dose of 10 m of test compounds. Compounds bearing straight chain substitutent or 4-phenyl function proved to be more active than their branched or 4-methyl congeners. Compounds 37, 41 and 42 exhibited broad spectrum antitumor activity. Compounds 23 and 27 proved lethalt while compounds 18, 21, 32 and 37 showed remarkable GL values of 75.5, 69.3, 96.2 and 92.7% to the leulemia CCRF-CEM cell line, respectively.

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