Substituted Thiazoles V11. Synthesis And Antitumor Activity Of Certain 2-(Substituted Amino)-4-Phenyl-1,3-Thiazole Analogs

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Abstract

A novel series of 2-acetamido- or 2-propanamido-4-(4-substituted phenyl)-1,3-thiazoles (11-34) was designed and synthesized. Compounds were subjected to National Cancer Institute (NCI) in vitro assessment for their antitumor activity, at a single dose of 10M. Most of the investigated compounds exhibited broad-spectrum antitumor activity. Compounds 19 and 28 believed to be the most active members in this study, with MG-MID GI50, TGI, and LC50 values of 2.8, 11.4, 44.7, and 3.3, 13.1, 46.8, respectively. Compounds 19 and 28 proved to be nine and sevenfold more active than the standard antitumor drug 5-FU, respectively.

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