

研究简报

{苯基-[(吡啶-4-羰基)-氨基]-甲基}-膦酸二烷基酯的合成与波谱表征

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摘要 α -氨基膦酸及其衍生物作为天然氨基酸的含磷类似物, 具有多种生物活性, 它的合成与性质的研究引起人们的浓厚兴趣. 合成了一系列含磷化合物, 产物经元素分析、红外光谱、核磁共振、质谱鉴定, 并初步研究这些化合物的抗菌与抗肿瘤生物活性.

关键词 [\$\alpha\$ -氨基膦酸](#) [合成](#) [波谱表征](#) [生物活性](#)

分类号

Synthesis and Spectral Characterization of {Phenyl-[(pyridine-4-carbonyl)amino]methyl}phosphonic Acid Dialkyl Ester

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Abstract α -Aminophosphonic acids and their derivatives, as phosphorous analogs of amino acid, have attracted much attention because they show wide biological activities. In this paper, the title compounds, {phenyl-[(pyridine-4-carbonyl)amino]methyl}phosphonic acid dialkyl esters, were synthesized via Mannich reaction and peptide coupling reaction. Their structures were confirmed by elemental analysis, IR, ¹H NMR, ¹³C NMR and MS spectra, and the antibacterial and antitumor activities of these compounds were given in this paper.

Key words [\$\alpha\$ -aminophosphonic acid](#) [synthesis](#) [spectral characterization](#) [biological activity](#)

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