

Synthesis, structure and biological activity of some amidrazones

© Anton A. Evdokimov,^{*+} Anna S. Senina,⁺ Andrey V. Moskvin, Ilya A. Fridman,
Igor P. Yakovlev, and Svetlana V. Gurina

Department of Organic Chemistry. St. Petersburg State Chemical-Pharmaceutical Academy.

Professor Popov St., 14. St. Petersburg, 197376. Russia.

Phone: +7 (812) 234-11-38. E-mail: anton.evdokimov@pharminnotech.com,

anna.senina@pharminnotech.com

^{*}Supervising author; ⁺Corresponding author

Keywords: amidrazones, hydrazonoylchlorides, biological activity.

Abstract

Some amidrazone derivatives were synthesized and their structure was established with the help of modern physico-chemical methods of analysis (TLC, mass spectrometry, elemental analysis, ¹H NMR spectrometry and infrared spectroscopy). As starting compounds for the preparation of substituted amidrazones, hydrazonoylchlorides were used as the most available compounds. Antimicrobial activity was studied by the method of two-fold serial dilutions of the sample in the meat-broth and Sabouraud medium. As test cultures, microorganisms were used recommended by the State Pharmacopoeia of the Russian Federation XII. The resulting compounds had a pronounced antimicrobial activity.