

Synthesis of substituted *N*-(1-adamantil-1-carboxamido)- and *N*-(1-adamantilacetamido)-benzothiazoles

© Vladimir A. Ermokhin,^{†*} and Maria V. Makarova

Department of Organic, Bioorganic and Medical Chemistry. Samara State University. Akademik Pavlov St., 1. Samara, 443011. Russia. Phone: +7 (846) 334-54-59. E-mail: ermochin@mail.ru

*Supervising author; [†]Corresponding author

Keywords: adamantanecarboxylic acid, 2-aminobenzothiazole, 2-amino-4-phenylthiazole, riluzol.

Abstract

The synthesis of several *N*-adamantylcarboxamido compounds – drug analogs of riluzole is reported. *N*-adamantylcarboxamido-derivatives and *N*-(1-adamantilacetamido)-derivatives of heterocycles 2-aminobenzothiazole, 2-amino-6-methylbenzothiazole, 2-amino-6-nitrobenzothiazole, 2-amino-6-methoxy-benzothiazole, 2-amino-4-phenyl-thiazole were synthesized with a yield of target products from 54 to 72%. Synthesis was performed by reacting 1-adamantanecarbonyl chloride and 1-adamantilacetyl chloride with heterocycles in absolute benzene. Structure and purity of the synthesized compounds was confirmed by TLC, IR and ¹H NMR spectroscopy.