

# Synthesis, Characterization and Biological activity of some Adamantane containing Benzimidazoles

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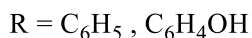
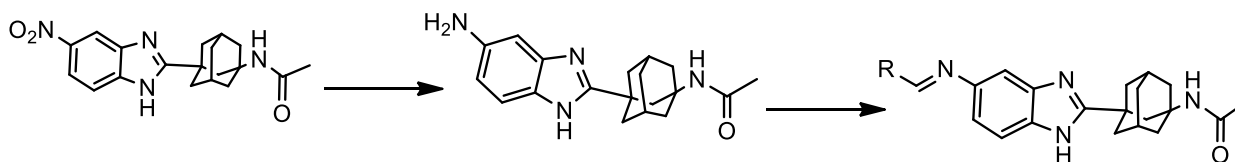
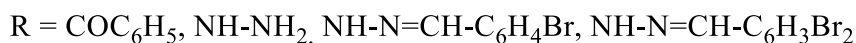
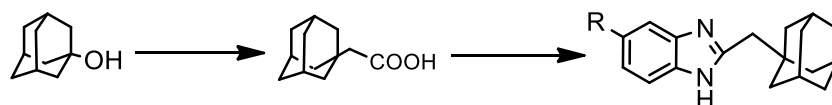
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The research concerns the synthesis of 2-(1-adamantylmethyl)-1H-benzimidazole 5-(6)-R-substituted products. 2-(1-adamantylmethyl)-1H-benzimidazole 5-(6)-benzophenone and 2-(1-adamantylmethyl)-1H-benzimidazole 5-(6)-carbohydrazide were synthesised, which reacted with aromatic aldehydes to give the corresponding Schiff base. During the research, the synthesis of N-3-(5-nitro-1H-benzimidazol-2-yl)adamantan-1-yl)acetamide was studied and the corresponding products were obtained by its conversion.



The structure of the obtained substances was determined using IR and  $^1\text{H}$  NMR spectroscopic methods. Test the biological activity of the obtained substances through the online program (PASS - Prediction of Activity Spectra for Substances).

### References:

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2. Kerietal R.S., Comprehensive Review in Current Developments of Benzimidazole –Based Medicinal Chemistry. *Chem. Biol. Drug. Des.* 2015, 86, 1, 19-65.