

Review of: "Synthesis and Antibacterial Screening of Cefradine Schiff Bases and Their Metal Salts"

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Potential competing interests: No potential competing interests to declare.

Abstract

"In general, low activities of most of the synthesised compounds were observed in comparison to cefradine, which can be linked to the unavailability of the free amino group of cefradine by its involvement in the synthesis of imine derivatives."

Comments:

1. Please change the metal salts to metal complexes or complexes.
2. The justification for why the compounds showed low activity is not clear.

Introduction

1. Please state the reason why you chose metal hydroxides and silver nitrate at the end of this section.

Experimental

1. Acetic acid is not a catalyst. You need to know the definition of catalyst. Please change it to the protonation agent (refer to the formation mechanism).
2. Please mention the mole ratio for the reaction.

Discussion

"Phenyl or phenyl with NMe_2/OMe groups as R_2 , so their activity might be attributed to lesser steric hindrance and increased availability of electrons at imine linkage."

Comments:

1. Phenyl (planarity) will contribute to the steric hindrance. Double the above statement.
2. Please study their lipophilicity and acidic/basic character. These properties will influence the activities.
3. In addition, most of these active compounds have Na or Ba as metal component. Please justify this observation.