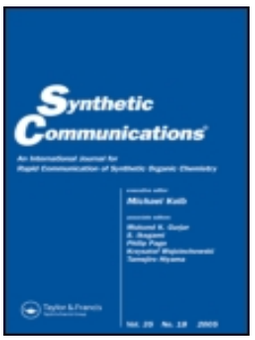

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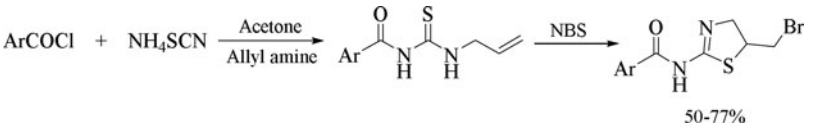
STRAIGHTFORWARD APPROACH TOWARD DIHYDROTHIAZOLES VIA INTRAMOLECULAR BROMOCYCLIZATION

Seyed Esmail Sadat-Ebrahimi,[1] Marzieh Ganjizadeh Zarj,[1] Setareh Moghimi,[2] Azadeh Yahya-Meymandi,[1] Mohammad Mahdavi,[2] Saman Arab,[2] Abbas Shafiee,[2] and Alireza Foroumadi[2]

[1]*School of Pharmacy, International Campus, Tehran University of Medical Sciences, Tehran, Iran*
[2]*Department of Medicinal Chemistry, Faculty of Pharmacy and Pharmaceutical Sciences Research Center, Tehran University of Medical Sciences, Tehran, Iran*

GRAPHICAL ABSTRACT



Abstract *An intramolecular bromonium ion–assisted cyclization with sulfur as an internal nucleophile is described. Starting from benzoyl chlorides, this method provides an easy procedure for the synthesis of dihydrothiazole derivatives in moderate to good yields.*

Keywords Benzoyl chloride; bromocyclization; dihydrothiazole; *N*-bromosuccinimide (NBS)

INTRODUCTION

The electrophilic addition of halogens to alkenes has been utilized by chemists since 1851.[1] The resulting intermediate exhibited considerable synthetic applications to access further functionality or complexity.[2] In particular, the nucleophilic attack to this reactive intermediate, the halonium electrophile, in an intra- or intermolecular fashion afforded an array of useful products. Halocyclization is a well-known intramolecular attack to halogen-activated double bonds for the construction of heterocyclic compounds[3] even with asymmetric induction.[4] In this protocol, different

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Address correspondence to Alireza Foroumadi, Department of Medicinal Chemistry, Faculty of Pharmacy and Pharmaceutical Sciences Research Center, Tehran University of Medical Sciences, Tehran, Iran. E-mail: aforoumadi@yahoo.com