



Synthesis and Antimicrobial Activity of 5-Bromo-7-Methoxybenzofuranyl-2-Carbonylazide Derivatives

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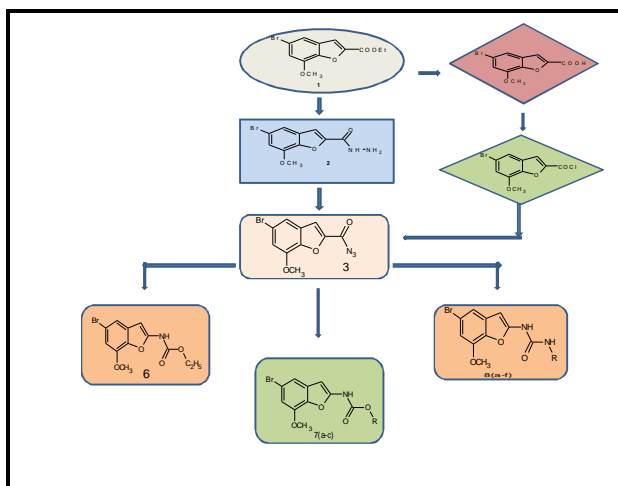
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ABSTRACT

In continuation to find pharmaceutically potent benzofuran derivatives, we undertook the synthesis of carbamates and carbamides involving 5-bromo-7-methoxybenzofuran nucleus. From the key intermediate 5-bromo-7-methoxy-1-benzofuran-2-carbonyl azide (**1**), we have synthesized a series of carbamates **6**, **7a-c** and carbamides/aryl ureas **8(a-f)** by treating with ethanol, phenols and aromatic primary amines respectively. The structures of all the compounds were confirmed by their spectral data. All the newly synthesized compounds were screened for antibacterial and antifungal activity using various organisms and are compared to standard drugs. Some of them exhibited encouraging results.

Graphical Abstract:



Scheme for the synthesis of 5-bromo-7-methoxy-1-benzofuran-2--carbamates **6**, **7a-c** and carbamides/aryl ureas **8(a-f)**.

Keywords: Benzofuran, Carbonyl azide, Carbamates, Carbamides, Antibacterial, Antifungal activity.