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# Indole-2-carboxamides as Potent Antibacterial Agents

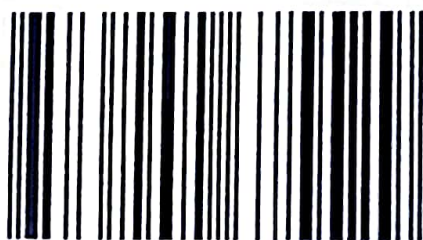
Design, Synthesis, Antimicrobial Evaluation and SAR  
Study of 5-Substituted Indole-2-carboxamides

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Indoles (indole-2-carboxamides) are known for their diverse biological activities. Inspired by diverse biological activities of indole-2-carboxamides and as a part of our ongoing interest toward the design and synthesis of novel, broad spectrum and potent heterocycles harboring indole nucleus as antimicrobial agents with fewer side effects, we have designed, synthesized and screened 5-arylindole-2-carboxamide derivatives against pathogenic Gram-negative bacteria and fungi. We designed 5-arylindole-2-carboxamides by using general structural motif of L-161,240 (LpxC inhibitors). While designing 5-arylindole-2-carboxamides, we retained phenyl ring and replaced Zn binding hydroxamic acid functionality with potential Zn binding amide functionality, oxazoline ring with the most privileged structural motif in the process of discovery of new drugs, the indole moiety. Design, synthesis, characterization & antimicrobial evaluation of 5-arylindole-2-carboxamides & its SAR study have been discussed in this book.



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# **Indole-2-carboxamides as Potent Antibacterial Agents**

**(Design, Synthesis, Antimicrobial Evaluation and SAR Study of 5-Substituted Indole-2-carboxamides)**

**By**

**FOR AUTHOR USE ONLY**

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