



## Synthesis, Characterization and Anti-Bacterial Evaluation of Novel Benzo[b] Furan Analogs

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### ABSTRACT

*A series of novel benzofuran derivatives have been synthesized by interesting biological activities associated with Benzo[b]furan derivatives. These compounds have been characterized by IR, <sup>1</sup>HNMR, <sup>13</sup>C NMR, and mass spectral data. So we report here the synthesis, characterization and antibacterial evaluation of the newly synthesized benzo[b]furan derivatives. The newly prepared benzo[b]furan derivatives **7a-7o** were screened in-vitro at a concentration of 10 µg mL<sup>-1</sup> for antibacterial activity against bacterial strains viz., Staphylococcus aureus and Bacillus Subtilis (Gram positive bacteria), Escherichia coli and Klebsiella pneumonia (Gram negative bacteria). Among all the compounds, the benzo[b]furan derivatives **7h** exhibited excellent activity, compounds **7g** and **7m** displayed good activity, compounds **7e** and **7f** showed moderate activity compared with standard drug Gentamycin. When tested against all the tested bacterial strains.*

**Keywords:** Antibacterial activity, Benzo[b]furan derivatives, Gentamycin, Synthesis.

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