



Antimicrobial Evaluation of Some New Methylene Based Schiff bases Containing Benzothiazole Derivatives

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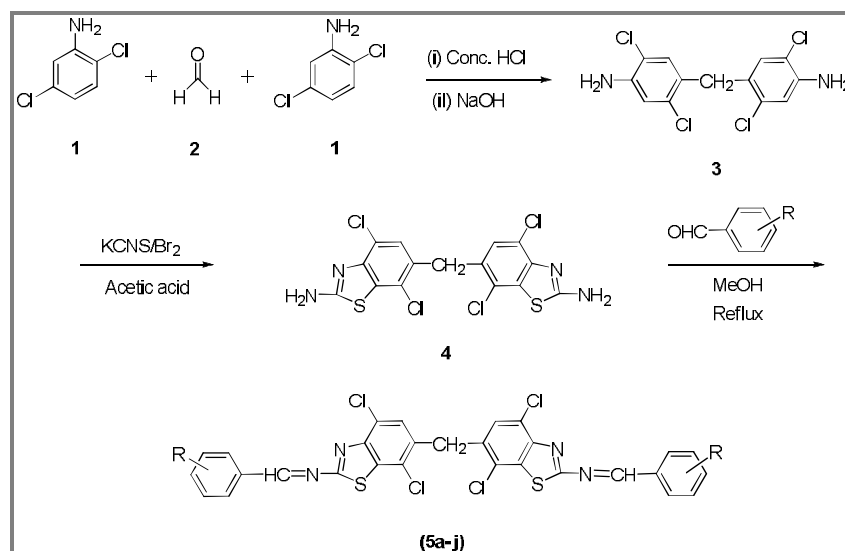
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ABSTRACT

In this study, a series of 6,6'-methylene bis (*N*-substituted benzylidene-4,7-dichloro benzo[*d*]thiazole-2-amine) have been synthesized by the condensation of 6,6'-methylene bis (4,7-dichloro benzo[*d*]thiazol-2-amine) and various substituted aromatic aldehydes. All the synthesized compounds were characterized by elemental analysis, IR spectra and ¹H NMR spectra. They were screened for in vitro antibacterial (*E. coli*, *P. aeruginosa*, *S. aureus*, *S. pyogenes*) and antifungal activities (*C. albicans*, *S. cerevisiae* and *A. clavatus*).

Graphical Abstract



Synthetic route for 6,6'-methylene bis (*N*-substituted benzylidene-4,7-dichloro benzo[*d*]thiazol-2-amine) from 2,5-dichloro aniline (**5a-j**).

Keywords: 4,4'-Methylene bis (2,5-dichloro aniline), Potassium thiocyanate, Bromine, Aromatic aldehydes, Antimicrobial activity.