Efficient One Pot Synthesis of Various Novel Triazole Substituted Pyrimidine Derivatives

Suresh seeka*‡, Sirrasu Narsimha*‡, T.Svaitha Jyostna*‡, N. Vasudeva Reddy*‡ and R. Koteshwar Rao*⁋

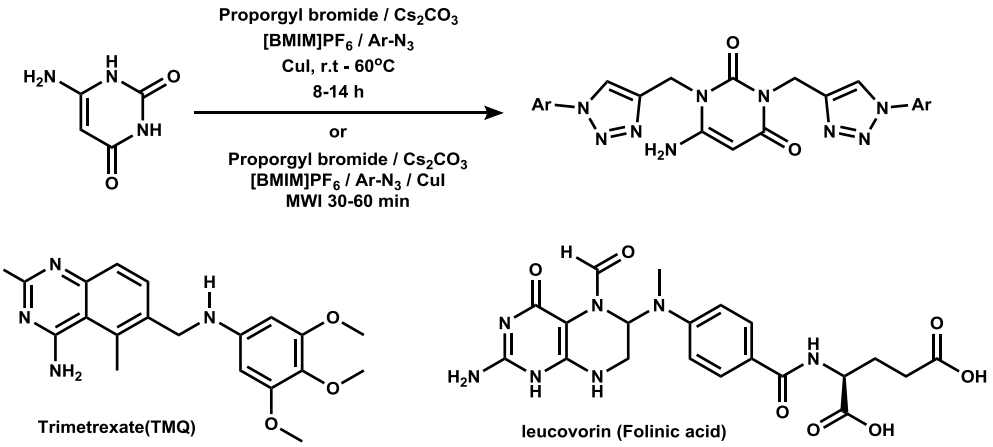
‡Department of Chemistry, University College of Science, Kakatiya University, Warangal, Telangana, India.

⁋Department of Chemistry, University College of Science, Saifabad, Osmania University, Hyderabad, Telangana, India.

Abstract

The substituted pyrimidine derivatives are very important structural motifs in the field of drug discovery and medicinal chemistry as they exhibit potent biological activity towards various drug receptors. [1] Many of the substituted pyrimidines are well known to treat several bacterial and viral diseases such as Trimetrexate (TMQ)[2], Trimethoprim (TMP)[3], Pyrimethamine,[4] leucovorin[5] and Piritrexim (PTX)[6]. The triazoles also very important as they play key role in synthesizing various pharmaceutically important molecules.[6]

In this work, we report the synthesis of novel, hybrid with combination of triazole and pyrimidine structural skeleton containing molecules through inexpensive and one pot method under thermal and microwave conditions. The bis triazole substituted pyrimidines were synthesized in moderate to good yields using copper catalysed click reaction.



References

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