

عنوان مقاله:

Synthesis of Novel Series of ۱-(۶-Hydroxy-۴-(۱H-indol-۳-yl)-۳,۶-dimethyl- ۴,۵,۶,۷-tetrahydro-۱H-indazol-۵-yl)ethan-۱-oneas Evaluations of their Antimicrobial Activity with Insilco Docking Study

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نویسندگان:

Milind Gaikwad - *Department of Chemistry, Dr. D.Y. Patil Arts, Commerce & Science College; Pimpri, Pune-۴۱۱۰۱۸, India*

Sunil Gaikwad - *Department of Chemistry, Dr. D.Y. Patil Arts, Commerce & Science Women College; Pimpri, Pune-۴۱۱۰۱۸, India*

Rahul Kamble - *Department of Chemistry, Amruteshwar ACS, College, Vinzar, Pune (MH), India-۴۱۲۲۱۳*

خلاصه مقاله:

This research study discusses the silico design, synthesis, and biological evaluation of novel effective phenyl, indole, ۳,۴-dimethyl substituted ۴,۵,۶,۷-tetrahydro-۱H-indazole derivatives. The novel multi- substituted indazole derivatives (۵A-۵J) was synthesized from the treatment of hydrazine hydrates in MeOH/H⁺ with multi substituted clohexanone derivatives (۴a-۴j). The final scaffold was characterized with the help of spectroscopic data such as IR, ۱H NMR, ۱۳C NMR, and mass spectra. The compound ۵A, ۵D, and ۵F shows excellent antibacterial activity and the compounds ۵B, ۵C, ۵H ۵I and ۵J exhibited moderate antibacterial activity against the S. aureus, Bacillus subtilis and E.Coli. Finally, the molecular docking studies shows that the compound ۵D and ۵F scaffolds display excellent bonding .mode of interactions with the active site of DNA gyrase ۱KZN enzyme

کلمات کلیدی:

Dihydro-multi substituted indazole, NH₂-NH₂-H₂O, Ph-NH₂-NH₂ Molecular docking, Antimicrobial activity

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