

ABSTRACT

The contemporary research project was initiated by the preparation of parent compound 5-((4-chlorophenoxy)methyl)-4-ethyl-4*H*-1,2,4-triazole-3-thiol(7) through the reaction of 2-(4-chlorophenoxy)acetohydrazide and Ethylisothiocyanate(5). This compound was further treated with 3-bromo-*N*-(2,6-dimethylphenyl)propanamide (8) in the presence of aprotic solvent using lithium hydride which work as activator to achieve 3-((5-((4-chlorophenoxy)methyl)-4-ethyl-4*H*-1,2,4-triazole-3-yl)thio)-*N*-(2,6-dimethylphenyl)propanamide (9). The structure of novel molecule was elucidated by ¹H-NMR, ¹³C-NMR and EI-MS spectral techniques. Triazoles expose a lot of pharmacological applications which include anti-bacterial, anti-cancer, anti-inflammatory, anticonvulsant, antioxidant, antimicrobial, antifungal and work as inhibitors of various enzymes.