ABSTRACT

Sulfonamides are well thought-out as the antibacterial agents. Many types of sulfonamides have been prepared at present but only a few are used as drugs against different types of bacteria. The main work described here is the synthesis of parent compound *N*-(2,4-Dimethylphenyl)-4-toluenesulfonamide from 2,4-dimethyamine and tosyl chloride (or Toluene-4-sulphonyl chloride). Further the parent compound was treated with different alkyl/aryl halides and aromatic halides to produce butyl, pentyl, propyl, ethyl and benzyl derivatives. These synthesized compounds were also screened against different enzymes like α-Glucosidase, Lipoxygenase, Antityrosinase, Acetylcholinesterase and Butyrylcholinesterase and to evaluate their biological activities. The synthesized compounds showed good inhibition against α-Glucosidase and Lipoxygenase enzyme.