ABSTRACT

Due to broad spectrum of sulfonamide new series of sulfonamide derivative synthesized Sulphonamaide 3, N-(4-(N-(4-ethylphenyl)sulfamoyl)phenyl)acetamide was synthesized when 4-ethyl aniline and dagenan chloride combined in control pH. The pH of reaction maintains with aqueous sodium carbonate and formed the parent compound. Series of sulfamoyl derivatives5,7,9,11,13,15,17of N-(4(ethylphenyl)sulfamoyl)phenyl)acetamide were prepared in good yields by its reaction with different alkyl halides (4-bromobenzyl bromide, phenyl propyl bromide, phenyl ethyl iodide ,propyl bromide, 1-butyl bromide, 2-bromo pentane and 1-heptyl bromide) in the presence of DMF and LiH. These synthesized derivatives were further characterized by IR, ^{1}H-NMR and EIMS for structure verification. The antibacterial activity shows moderate result. The compound 3, 7 and 17 showed inhibition of all microbes which were under concern. Compound 5 showed no activity against any microbe.Compound 7is most potent against Escherichia coli with MIC value of 10.31 ± 1.14 μM whereas standard ciprofloxacin was 8.51 ± 1.07 μM.