

Evaluation of Mutagenic and Antimutagenic Activities of Some Biological Active Benzoxazoles in the Ames Test

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Abstract : Benzoxazoles are heterocyclic compounds that have a fused benzene and an oxazole ring. These heterocyclic compounds are reported to have antibacterial, antitubercular, antifungal, antiviral, antioxidant and anticancer activities. In this study, some benzoxazole derivatives that have broad antimicrobial and potent antitumoral activities, are investigated their mutagenic activities with using the Ames Test. The Ames test was conducted using Salmonella typhimurium TA98, TA100 and TA102 tester strains in the standard plate incorporation assay in the absence of liver S9 fraction. The results are evaluated using SPSS and none of the benzoxazole derivatives showed mutagenic activity using the Ames test in the absence of S9 liver fraction.

Keywords : benzoxazoles, ames test, mutagenic activity, antimutagenic activity, antitumoral activity

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