

アミノアクリジン系化合物の変異原性と 代謝活性化の影響

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The Effects of Metabolic Activation on the Mutagenicity of Aminoacridines

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Abstract: The mutagenic activity of a series of aminoacridines was examined by the preincubation method with and without mammalian metabolizing enzymes in *Salmonella* tester strains. Without metabolizing enzymes, three acridines having an amino substituent at position 9 showed high activity in *Salmonella typhimurium* TA1537 and TA1977, and other acridines with amino substituents at position 2 or 3 were mutagenic but were less effective than the 9-aminoanalogs. The liver microsomal enzymes generally deactivated acridine mutagenicity in TA1537, but created a broad spectrum of mutagenicity if tested by the reversion of TA1535, the strain detecting base-pair substitution mutagens, and TA1538, the strain detecting covalently bound frameshift mutagens.

抄録 アクリジン系化合物の誘導体を合成し、その変異活性について、化学構造との関連について検討した。同時に肝ミクロゾーム画分による代謝活性化との関連々係についても検討した。

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