

CHEMISTRY OF ISOQUINOLINEQUINONE ANTIBIOTICS

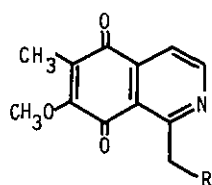
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Recently several naturally occurring isoquinolinequinones have been isolated from Actinomycetes and from marine sponges.¹⁾

We have described the isolation and structural elucidation of "dimeric" isoquinolinequinone antibiotics, saframycins and of "monomeric" antibiotics, mimosamycin and mimocin.²⁾

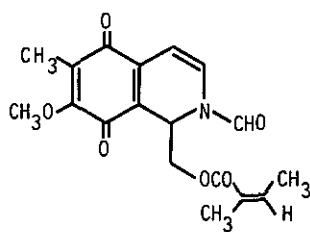
The results on the ceric ammonium nitrate(CAN) mediated synthesis of "monomeric" antibiotics(1-4) and the chemical properties of saframycin A(5) having the strongest antitumor activity among saframycins will be presented.



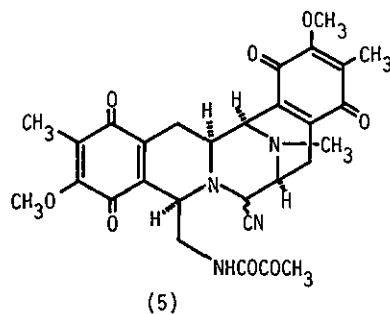
(1) R = NHCOCOCH₃

(2) R = OCO-CH(CH₃)-CH₃

(3) R = H



(4)



(5)

- 1) T.Arai and A.Kubo, "The Alkaloids" Vol.XXI, Academic Press, 1983, pp.55-100.
- 2) A.Kubo, S.Nakahara, R.Iwata, K.Takahashi, and T.Arai, Tetrahedron Lett., 3207 (1980) and references cited therein.